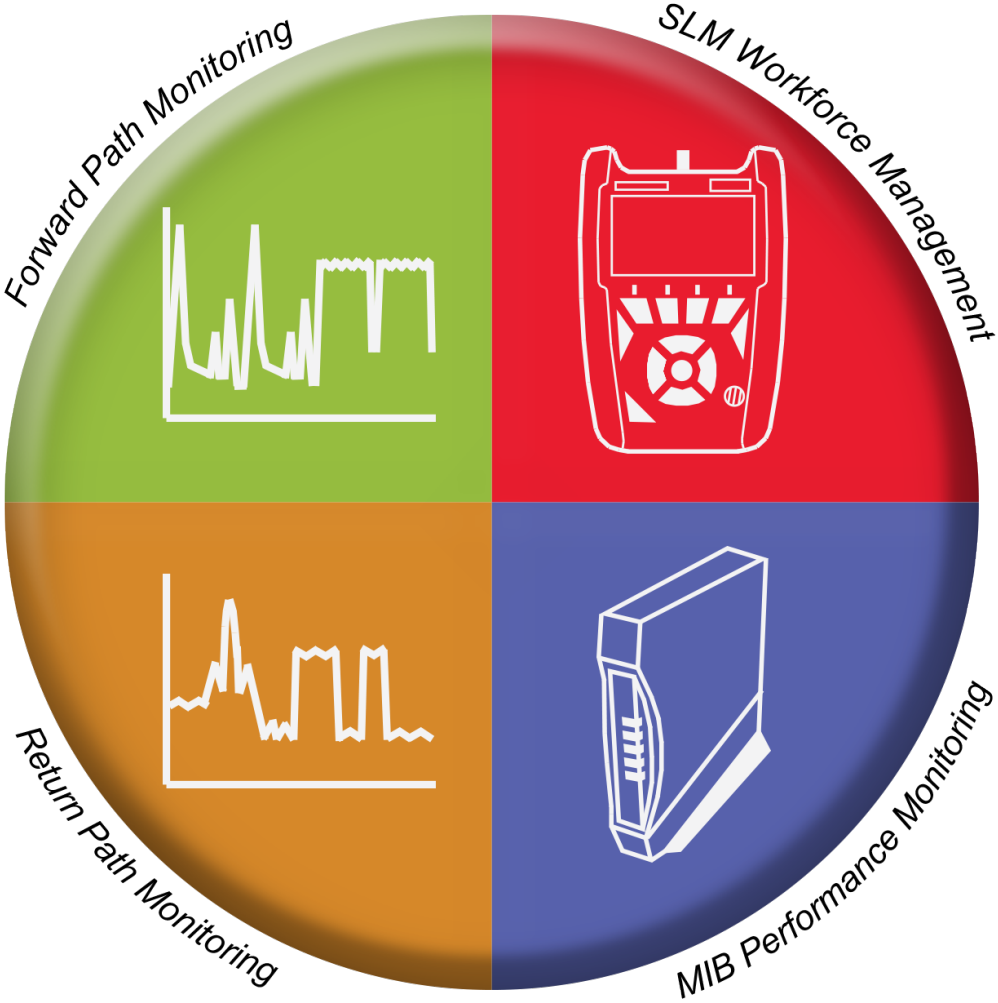
ViewPoint
Integrated Data Management System

Operation Manual
Version 2.9.0



innovative technology to keep you a ***step ahead***

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Putting Innovation Within Reach

Product innovation at Trilithic has always been characterized by one thing: it's practical. It makes life easier for customers. It's the natural result of listening to them. That philosophy has been the driving force behind the company's growth from its beginnings as a two-man engineering team in 1986 to its current position as a global manufacturer with more than 130 employees.

A privately held company, Trilithic broadened its original RF and microwave component product line by acquiring Filters manufacturer Cir-Q-Tel and instruments manufacturer Texscan, adding broadband solutions to the product line. The company also expanded operations to Thailand in 2001, to meet increasing demand for its products in the growing markets of Asia.

As new communications applications continue to emerge, part of Trilithic's business has evolved into managing change—helping customers respond quickly to market opportunities with innovative technology and individualized solutions. But the core value of Trilithic's business approach—listening to customers—hasn't changed. Keeping that focus intact will help provide better products in the long run and ensure continued growth for decades to come.

Trilithic is comprised of three major divisions:

Broadband Instruments

The company is best known for innovations in signal level measurement, leakage detection and reverse path maintenance—like the use of Digital Signal Processing (DSP) technology, which lets field technicians upgrade their signal analyzers by simply downloading firmware.

Emergency Alert Systems

Trilithic's EAS division is a leading supplier of homeland security government-mandated emergency alert systems for broadband and other communication system providers. As the communications industry continues its rapid evolution, Trilithic has begun offering comprehensive systems and services to address a wide variety of emergency alert system needs, including the design and architectural layout of complex analog and digital EAS networks.

XFTP

Trilithic's XFTP division offers a specialty line of field technical products for cable operators and technicians, as well as a line of products for installing electronics in the home of the future. The division brings together an experienced Trilithic team and a new group of exclusive distributors to provide popular products and services at an affordable price, without sacrificing quality or support.

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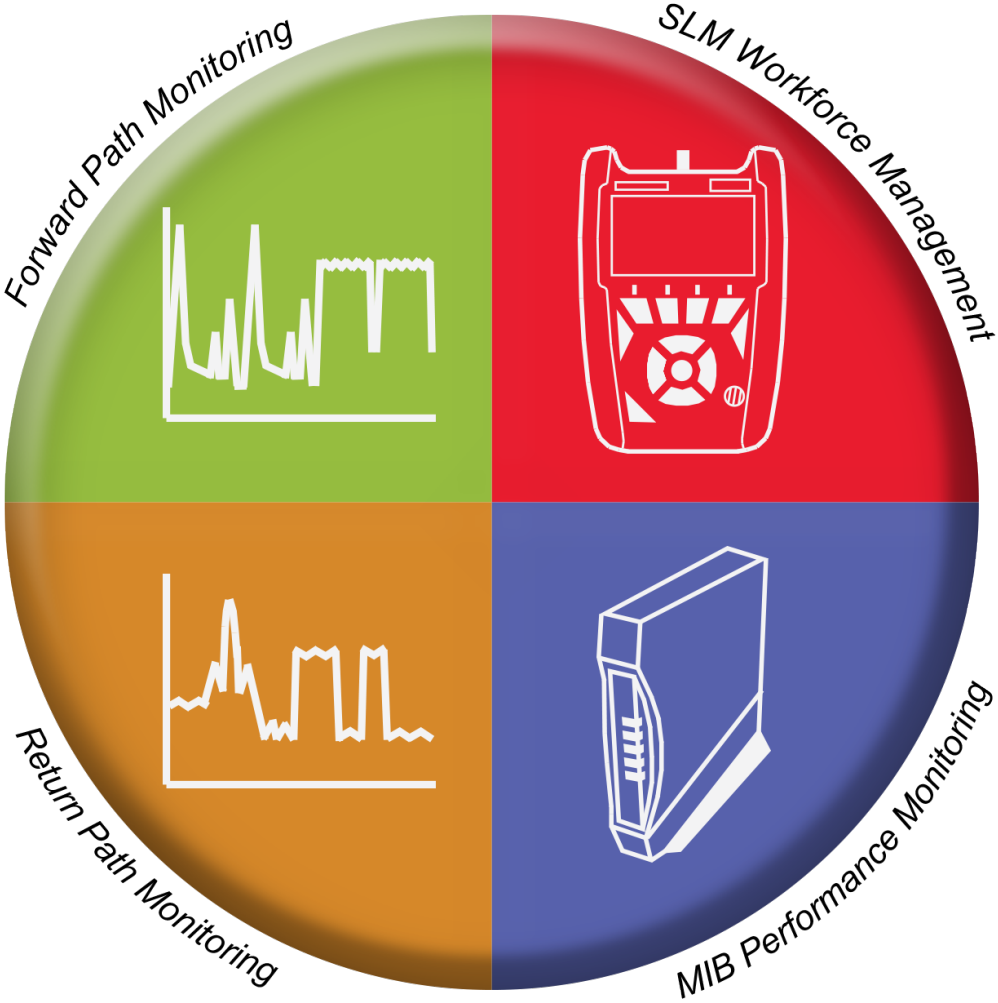

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Helpful Website

The following website contains general information which may be of interest to you:

http://www.trilithic.com

Trilithic's website contains product specifications and information, tips, release information, marketing information, frequently asked questions (FAQs), bulletins and other technical information. You can also check this website for product updates.

Trilithic technical support is available Monday through Friday from 8:00 AM to 5:00 PM EST. Callers in North America can dial 1-317-895-3600 or 1-800-344-2412 (toll free). International callers should dial 1-317-895-3600 or fax questions to 1-317-895-3613. You can also e-mail technical support at *support@trilithic.com*.

For quicker support response when calling or sending e-mail, please provide the following information:

- Your name and your company name
- The technical point of contact (name, phone number, e-mail)
- A detailed description of the problem you are having, including any error or information messages
- The serial number of the device or software that you are having problems with

How this Manual is Organized

Thank you for choosing the ViewPoint Integrated Data Management System. This manual is provided with the ViewPoint Integrated Server Package to help the user become better acquainted with the software and to become productive faster. Each section is written as though the user is familiar with the basic operation of the software and is broken into the following sections:

- Section I: The Basics – This section provides Trilithic contact information, describes how this operation manual is structured, and gives an overview of the software and its basic features. Before using the software, it is recommended that the user read this section for an overview of features, basic commands and other important details.
- Section II: Site Administration – This section includes instructions on how to use the site administration features of the ViewPoint Integrated Data Management System. This section includes instructions of how to manage organizational structures, groups, users, licenses, and site settings for administrators of the ViewPoint Integrated Data Management System.
- Section III: Device Setup – This section includes instructions on how to use the device setup features of the ViewPoint Integrated Data Management System. This section includes instructions on how to manage the organization tree folders, firmware packages, signal level meter device settings, and ethernet meter settings in the ViewPoint Integrated Data Management System.
- Section IV: Inventory Management – This section includes instructions on how to manage all inventory assets and devices that connect to the ViewPoint Integrated Data Management System, including meters, monitors, CMTSs, and modems.
- Section V: Reports – This section includes instructions on how to manage and run reports and node metrics for all devices connected to the ViewPoint Integrated Data Management System.
- Section VI: Appendix – This section includes supplemental information, including hardware specifications and software requirements for the ViewPoint Integrated Data Management System.

Conventions Used in this Manual

This manual has several standardized conventions for presenting information:

- Connections, menus, menu options, and user-entered text and commands appear in **bold**.
- Section names, web, and e-mail addresses appear in *italics*.

A NOTE is information that will be of assistance to you related to the current step or procedure.

A CAUTION alerts you to any condition that could cause a mechanical failure or potential loss of data.

A WARNING alerts you to any condition that could cause personal injury.

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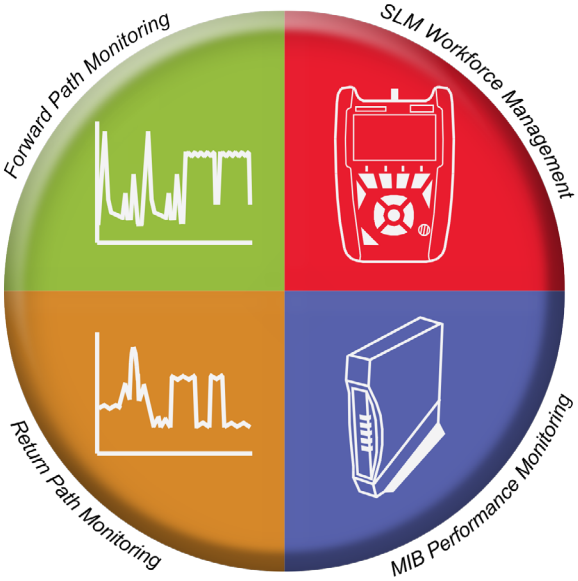
Unified Plant Management Solution

The ViewPoint Data Management System is the first ever server, software or hosted platform to unify testing, troubleshooting and monitoring of an entire MSO's plant operations into one comprehensive management solution.



The ViewPoint platform provides operations managers with a convenient, easy-to-use platform for verifying field operation compliance, monitoring the overall health of your forward and return path spectrum while displaying the real-time performance of all your MIB (management information base) devices. All of this information is displayed in a convenient, easy-to-use dashboard powered by an extensive selection of customizable reports.

This allows operators to consolidate reporting and get a better view of the overall health of the entire system, and allows the operator to proactively address problems before they happen.

Mobile Connectivity

The simplified web-based user interface of ViewPoint allows technicians and managers to quickly and easily seek out problem areas in the overall plant from any device with an Internet connection and a web browser.

ViewPoint features mobile reporting that allows you to view dashboards and reports anytime and anywhere. The user can create reports in the office using a PC or in the field from any portable smart device with an Internet connection.

With mobile connectivity, managers can see a quick view of their entire field operations at-a-glance, in near real-time without interrupting their normal work routine.

Extensive Field Tech Support

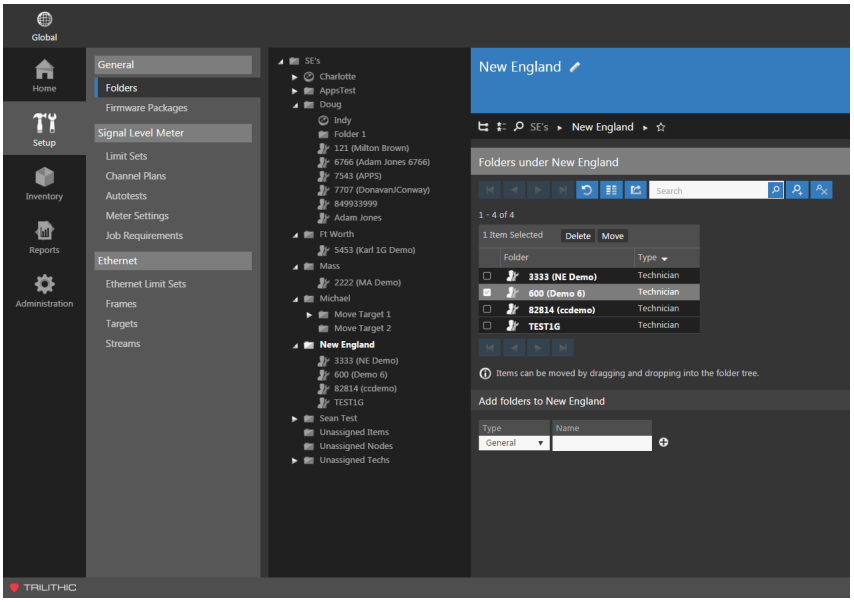
The ViewPoint system not only works for management, but is also designed with the technician in mind. Viewpoint provides an unlimited amount of connections for field users to upload job information and measurement data, view forward or return path measurement data and view nodes.

Technicians in the field also have the ability to use ViewPoint's customizable reports that can display a continuously updating dashboard with poorly performing nodes so they can always be targeting the most critical problem areas within your plant.

These Proactive Network Maintenance (PNM) features help to find and fix problems early, improve team communication, diagnose reoccurring problems over time, reduce truck rolls and improve service quality all while cutting operating costs.

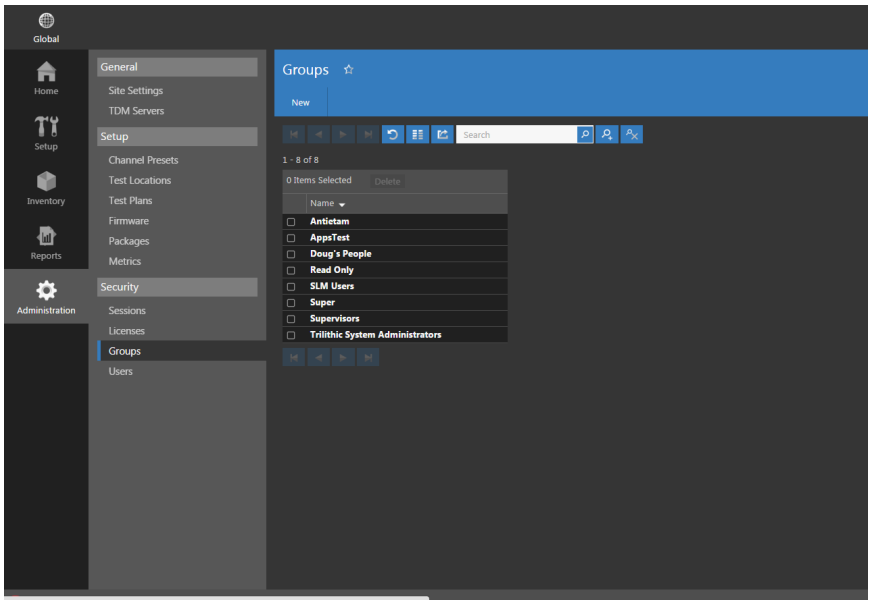
Organization Management

The organizational structure within the ViewPoint system provides supervisors with the ability to easily customize the software to match the MSO's operational structure. With customizable folders, areas, people, technicians, fiber nodes and return monitoring nodes the organizational possibilities are nearly endless. The user can quickly navigate within the organization using a "bread crumb" trail or an easy-to-use tree structure to navigate anywhere within the system in just a few clicks.



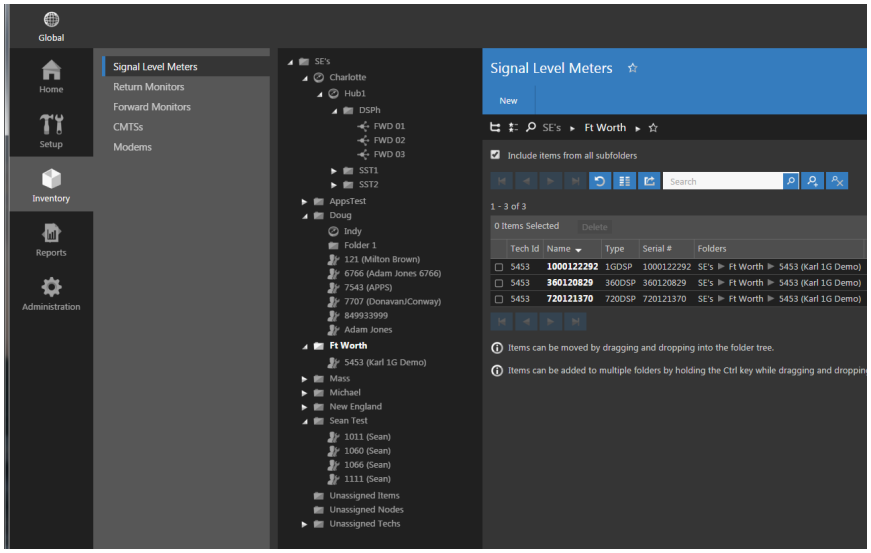
User & Groups Management

Comprehensive user management features allow supervisors to control user profile info, passwords, group membership and organizational access within ViewPoint. Additionally, supervisors can use group permission sets to control user access to specific features within ViewPoint including profile info, meter settings, jobs, reports, dashboards, metrics, live spectrum views, return monitors, watch lists, CMTS, modems, and site administration.



Asset Management

Within ViewPoint, supervisors have the ability to manage all of their Trilithic test, measurement and monitoring equipment. This allows you to easily keep track of your assets to determine which units are operating normally and identify those in need of upgrades or calibration that may affect their measurement accuracy.



Integrated Server Package Configuration Options

The following configurations are available for the ViewPoint Integrated Server:

Enterprise Edition	Economy Edition	Included User Licenses (Five per Module)	 WFM Module	 RPM Module	 MPI Module	 FPM Module
2011656001	2011694001	5	✓			
2011656002	2011694002	5		✓		
2011656003	2011694003	10	✓	✓		
2011656004	2011694004	5			✓	
2011656005	2011694005	10	✓		✓	
2011656006	2011694006	10		✓	✓	
2011656007	2011694007	15	✓	✓	✓	
2011656008	2011694008	5				✓
2011656009	2011694009	10	✓			✓
2011656010	2011694010	10		✓		✓
2011656011	2011694011	15	✓	✓		✓
2011656012	2011694012	10			✓	✓
2011656013	2011694013	15	✓		✓	✓
2011656014	2011694014	15		✓	✓	✓
2011656015	2011694015	20	✓	✓	✓	✓

A one-time user fee is required for each person (beyond the number of included user licenses) to login to the ViewPoint web browser interface. Users who connect to the ViewPoint WFM Module using a Trilithic field meter do not count toward this limitation.

Supported Devices

The following devices are supported in each ViewPoint Module:

	 WFM Module	 RPM Module	 MPI Module	 FPM Module
180 DSP	✓			
360 DSP	✓			
720 DSP	✓			
860 DSP	✓			
860 DSPh				✓
860 DSPi	✓			
1G DSP	✓			
9581 SST R4		✓		
9581 SST R5		✓		
Managed Information Base (MIB) Devices (via CMTS)			✓	

A one-time connection and configuration fee is required for each device connection to a ViewPoint module.

Device Connection Limits

The following device connection limits apply to each ViewPoint Module:

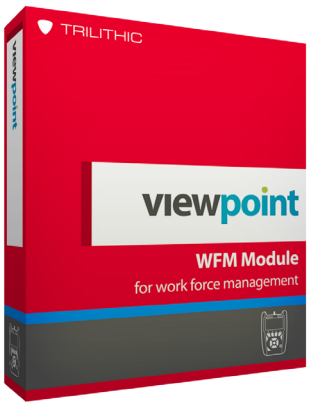
	 WFM Module	 RPM Module	 MPI Module	 FPM Module
Integrated Server Package - Enterprise Edition	5000	500	1,000,000	500
Integrated Server Package - Economy Edition	20	20	20	20
Stand-Alone Server Software	5000	500	1,000,000	500
Software as a Service (SaaS)	5000	500	1,000,000	500

A one-time connection and configuration fee is required for each device connection to a ViewPoint module.

Workforce Management (WFM) Module

Total Field Workforce Management

The ViewPoint WFM Module is a customizable software solution that unifies an entire MSO's field operations into one convenient dashboard. Managers now have access to easily verify installation certification compliance throughout the entire plant, by home, system, region, division and even at a corporate level.



These insights can help to identify both localized problems and high-level system issues to allow the operator to make decisions based on a clearer understanding of the impact to overall operations and the associated ROI.

Key Features & Benefits

- Enables management to view team reports through any web browser
- Consistent, efficient, and accountable quality assurance improves installation service quality, resulting in retainment of satisfied customers
- Improves installation technician performance with measurable results while eliminating costly rework
- Proactive and automated test processes save maintenance technicians' troubleshooting time, also cutting operational expenses
- Auto Test Apps speed up installation technicians' measurement and data collection time, thereby improving productivity

Monitor & Assess Field Efficiencies

Combining Trilithic's field meters with the ViewPoint WFM Module is designed to help drive standardization and consistency in the field and manage installation and troubleshooting.

The WFM Module provides managers an at-a-glance view of their total field operations in near real-time. This provides MSOs the ability to assess field efficiencies by monitoring and analyzing the health of their overall field operations.

Additionally, automated testing apps and certification processes eliminate mistakes, decrease installation, maintenance, and troubleshooting time.

Improve Performance & Productivity

By integrating with Trilithic's DSP series of meters and collecting data from technicians in the field, the ViewPoint WFM Module allows managers to distribute standardized testing requirements, channel plans, track field inventory, update firmware and distribute configuration packages.

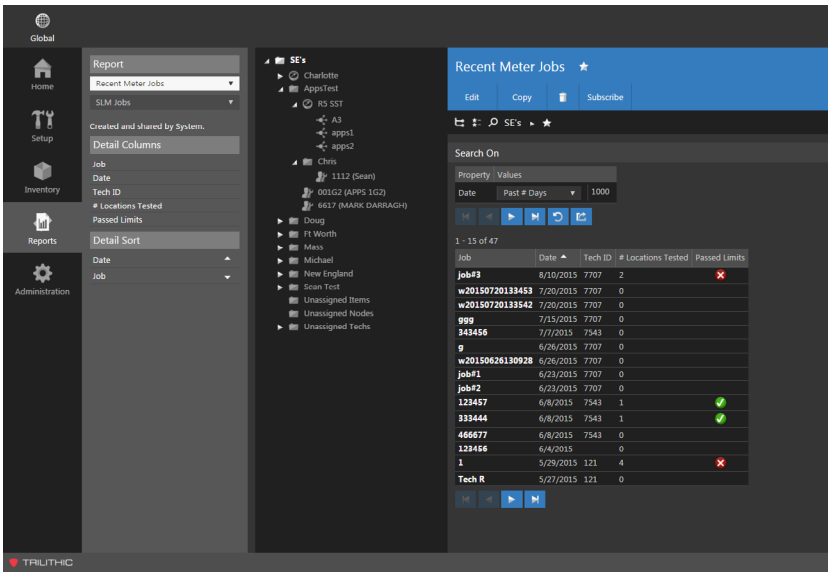
As a result, field operations managers are able to easily verify installation compliance and decrease operational expenses by ensuring that their technicians are performing the proper tests, to the proper standards and at the right place and time. The ViewPoint WFM Module provides data to help verify that consistent, efficient and quality installations are being performed, resulting in less churn and more satisfied customers.

Tracking technician performance provides additional benefits to managers, allowing them to compare results between each location in the system and potentially identifying techs who need additional training. This improves team performance, reduces truck rolls and improves service quality all while cutting operating costs.

The ViewPoint WFM Module displays all of this information in convenient easy-to-use dashboards. These dashboards and extensive customizable reports can be viewed from any device using a standard web browser.

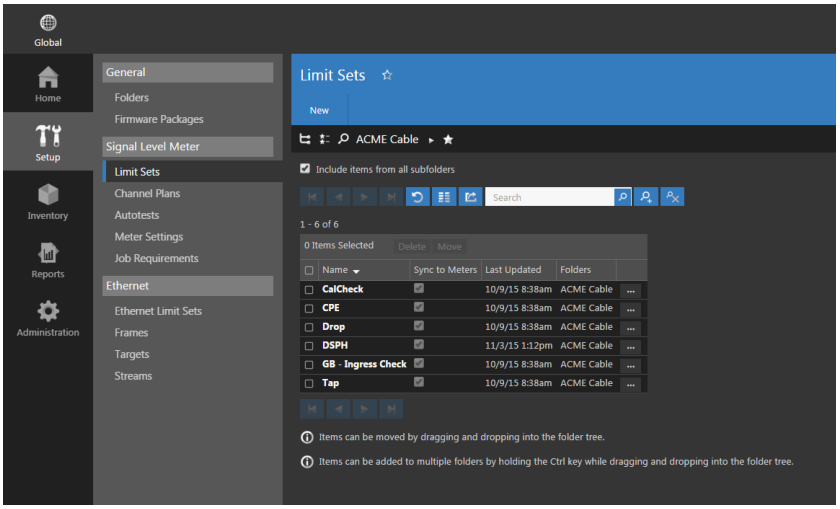
Meter Reports

Meter Reports provide a quick overview indicating which meters have specific measurement capabilities, when the last jobs were performed, and if they passed limits. A supervisor can drill down into specific meter data to ensure technicians are completing test jobs and see whether those jobs pass or fail at each location.

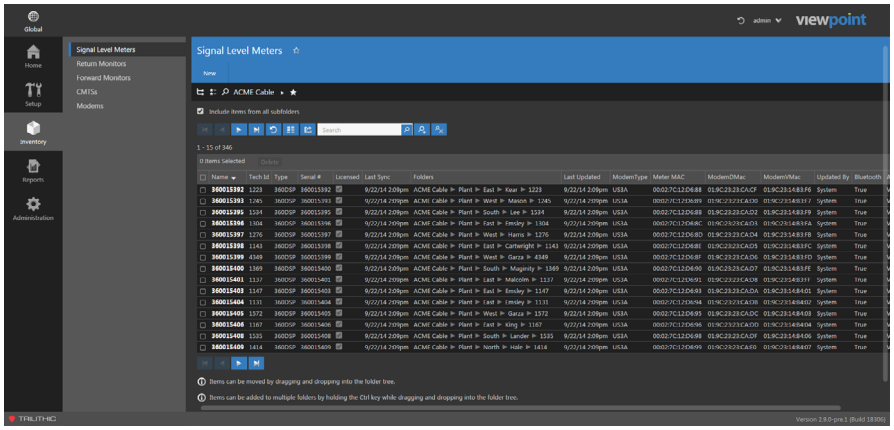


Meter Configuration

The WFM Module enables supervisors to make sure every technician's meter has the proper configuration files such as test locations, limit sets, channel presets, channel plans, autotests, test plans, meter settings and job requirements. This ensures that the right tests are done on the right channels with the correct limit sets, every time.



Meter Asset Management



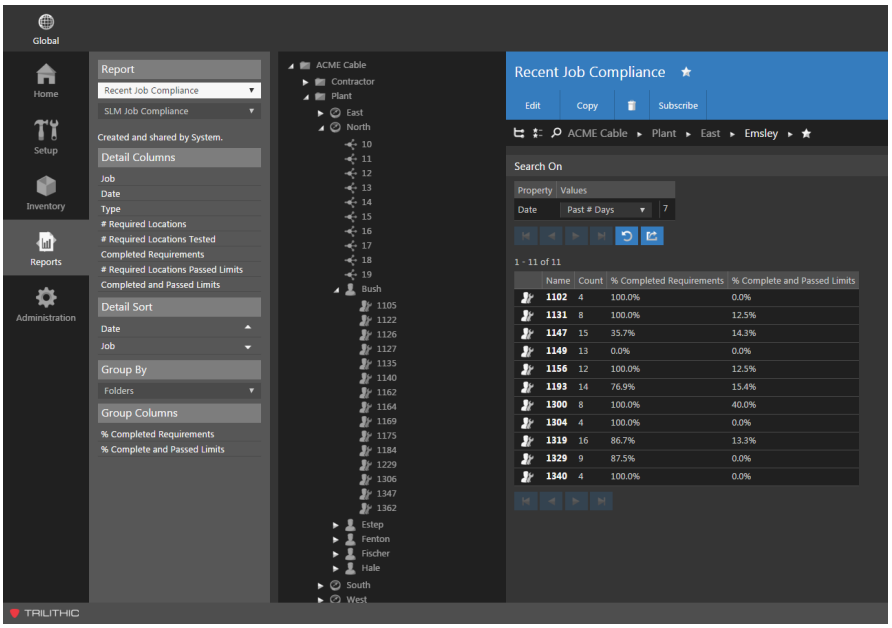
The WFM Module enables supervisors to manage their meter asset inventory by meter name, organization location, meter type, serial number, user name and last updated information. This allows you to easily keep track of your assets to determine which units are operating normally and identify those in need of upgrades or calibration that may affect their measurement accuracy.

Meter Test Reports

The Meter Test Report allows management to view any and all details of tests performed in the field by location and by technician. This at-a-glance report shows in basic graphic format what tests were performed, if they passed set limit criteria and the channel results. This report helps supervisors address any concerns in technician performance as well as provides history for that subscriber location for future troubleshooting.

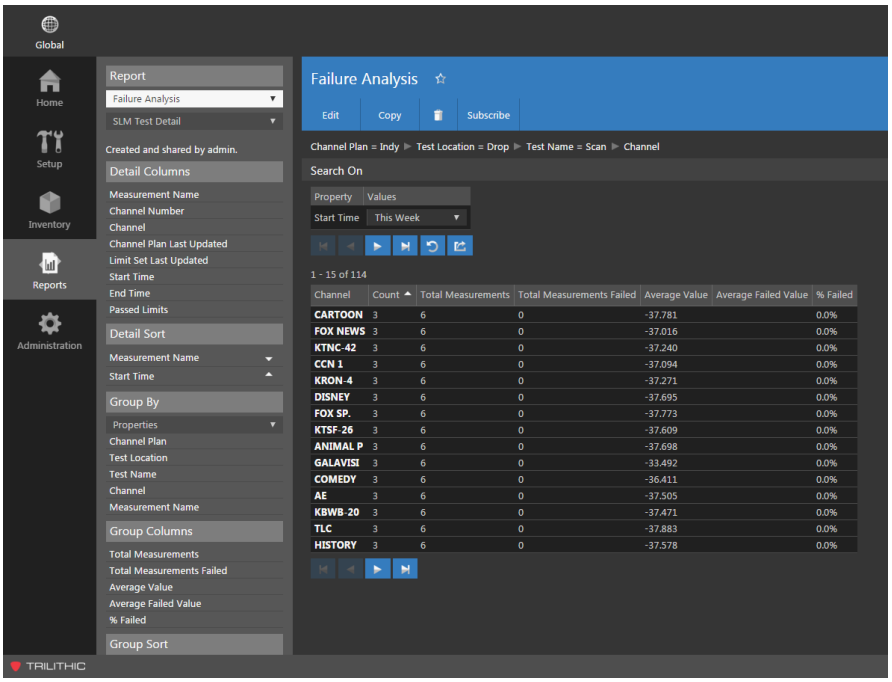
Job Reports

The Job Report allows management to create custom reports by Job. The reports can be based on many different attributes including; date, time, location, tech ID, required locations, test type, meter type, and passed/failed measurement results. This allows managers to analyze what is working on some jobs and what needs to be addressed on other jobs. Reports like this give managers the ability to address and improve productivity by proactively eliminating rework.



Channel Test Reports

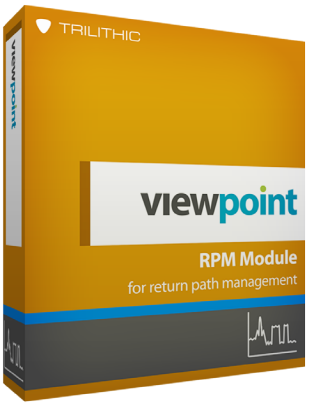
The Channel Test Report allows management to create custom reports by channel test details. The reports can be based on time, location, channel details, channel plan or failed measurement results. This report is used to analyze which tests are being performed, the specified testing standards being used and how many are passing those standards. Reports like this give managers the ability to address and improve productivity by proactively eliminating rework.



Return Path Management (RPM) Module

Unified Return Path Management

The ViewPoint Return Path Management (RPM) Module simplifies the management of your return path monitoring and maintenance. The RPM Module displays an entire system of 9581 SST Return Path Analyzers within one simplified dashboard that automatically displays each area's percent over the limit.



The RPM module gives the operator the flexibility to be used as a master report dashboard as well as give the technicians in the field a web portal to pull live views of active return nodes directly to their smart devices or PC.

Key Features & Benefits

- Unified web browser based interface with extensive reporting tools for all return path nodes in the system
- Automated dashboard enables management to view the entire system at a glance
- Greatly enhances maintenance efforts by easy identification of problem areas
- Automatically displays each area's percent over the limit
- Live views of active return nodes and all of the data for each node monitored by the system is captured and saved for historical analysis and trending
- Unlimited amount of connections for field users to view return nodes with no side effects
- Accessible via any smart device with a browser and broadband internet connection
- Profile interaction allows for multi-profile views or targeted profiles for unique data sets

Search and Trending Capabilities

The RPM module gives the manager or technician the ability to search on the "X" amount of worst nodes with customizable reports that continuously update, so you can always be targeting any problem areas within your plant.

Along with these extensive search capabilities, highlighting the specific trend of problems on a node can be useful in diagnosing reoccurring problems over any period of time.

Everyday Usage for the Field

The RPM Module not only works for management, but is also designed with the technician in mind. With the new unified web browser based interface, all nodes monitored by the platform can be accessed via any smart device with a browser and Internet connection.

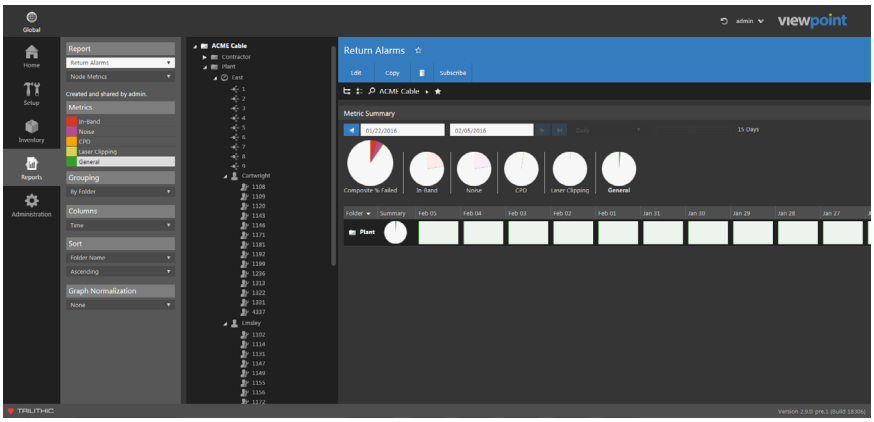
Measurement Profiles

The RPM Module imports and displays the measurement profiles that are used in the 9581 SST and allows you to name the profiles to match.

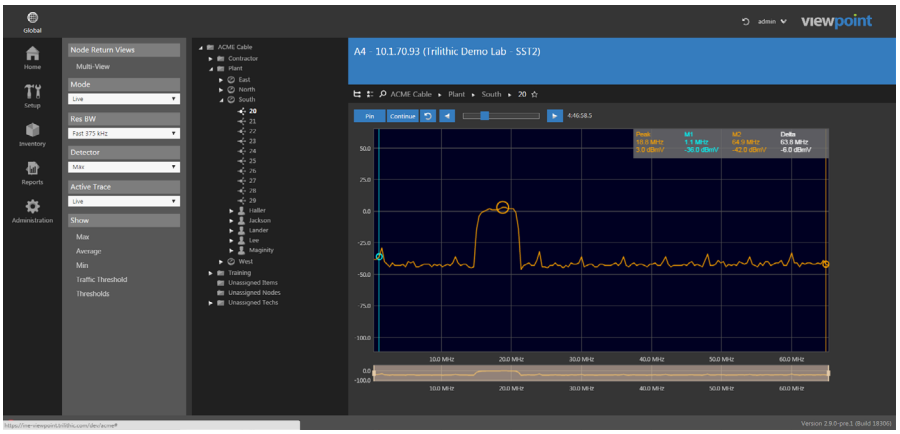
When trying to target an area of concern, the customizable dashboard can display any of the eight available profiles. This allows for each individual user to select and view the limits on any desired profiles in turn, customizing the look and feel of the dashboard to show the user what areas or nodes that are above the desired threshold.

Simplified Dashboard

The RPM Module provides a simple and intuitive color-coded dashboard that automatically displays each area's percent over the limit. This view also allows the user to customize their view with adjustments for which nodes to view, time span, and alarm thresholds, which greatly enhances maintenance efforts by easy identification of problem areas.



Live Return Path Spectrum

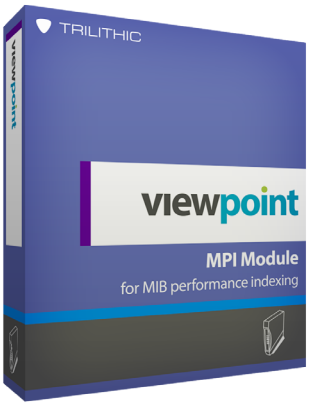


The RPM Module allows for an unlimited amount of connections for field users to view return nodes with no side effects. All of the data for each node is captured and saved for historical trending to replay the MAX, AVG, and MIN traces over any set period of time. This allows all team members to target any period of time to view the worst case ingress for further analysis and troubleshooting.

MIB Performance Indexing (MPI) Module

In-Depth MIB Monitoring & Analysis

The ViewPoint Management Information Base Performance Indexing (MPI) Module is specifically designed to provide the NOC (Network Operation Center) the capability to poll modems in real-time for up-to-date diagnostic information. This information is combined into one simplified dashboard that automatically displays each area's MIB Performance Index, or MPI.



The MPI module gives the operator the flexibility to be used as a master report dashboard, as well as gives the technicians in the field a web portal to pull live views of active modems directly to their smart devices or PC.

Key Features & Benefits

- Unified web browser based interface with extensive reporting tools for all MIB devices in the system
- Automated dashboard enables management to view the entire system at a glance
- Greatly enhances maintenance efforts by easy identification of problem areas
- Automatically displays each area's percent over the limit
- Live views of active MIB devices and all of the data for each device monitored by the system is captured and saved for historical analysis and trending
- Unlimited amount of connections for field users to view MIB devices with no side effects
- Accessible via any smart device with a browser and broadband internet connection
- Profile interaction allows for multi-profile views or targeted profiles for unique data sets

Search and Trending Capabilities

The MPI module gives the manager or technician the ability to search on the “X” amount of worst modems with customizable reports that continuously update, so you can always be targeting any problem areas within your plant.

Along with these extensive search capabilities, highlighting the specific trend of problems on a node can be useful in diagnosing reoccurring problems over any period of time.

Everyday Usage for the Field

The MPI Module not only works for management, but is also designed with the technician in mind. With the new unified web browser based interface, all modems monitored by the platform can be accessed via any smart device with a browser and internet connection. This allows all team members to target any period of time to view the modem test results for further analysis and troubleshooting.

Measurement Profiles

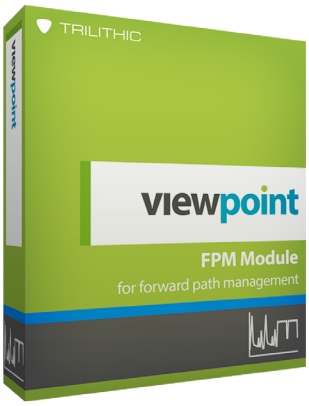
The MPI Module includes customizable measurement profiles for each user. When trying to target an area of concern, the customizable dashboard will display the alarm limits for the selected user profile. This allows for each individual user to set their own limits, and in turn customizes the look and feel of the dashboard to show the user what areas or modems that are above the desired thresholds.

Forward Path Management (FPM) Module

Continuous Forward Path Analysis

The ViewPoint Forward Path Management (FPM) Module simplifies the management of your forward path monitoring and maintenance. The FPM Module displays an entire system of 860 DSPh Remote Head-End Analyzers within one simplified dashboard that automatically displays each area's percent over the limit.

The FPM module gives the operator the flexibility to be used as a master report dashboard, as well as gives the technicians in the field a web portal to pull live views of active forward nodes directly to their smart devices or PC.



Key Features & Benefits

- Unified web browser based interface with extensive reporting tools for all forward path nodes in the system
- Automated dashboard enables management to view the entire system at a glance
- Greatly enhances maintenance efforts by easy identification of problem areas
- Automatically displays each area's percent over the limit
- Views of active forward nodes and all of the data for each node monitored by the system is captured and saved for historical analysis and trending
- Unlimited amount of connections for field users to view forward nodes with no side effects
- Accessible via any smart device with a browser and broadband internet connection
- Profile interaction allows for multi-profile views or targeted profiles for unique data sets

Search and Trending Capabilities

The FPM module uses the 860 DSPh to provide continuous visibility of signal quality to technicians for monitoring and troubleshooting in remote head-ends or other facilities where access is restricted or local technical personnel are not available.

The dashboard view within the FPM Module also allows you to monitor various measurement parameters including channel level, depth of modulation, FM deviation, hum, carrier-to-noise ratio, MER (modulation error ratio), and BER (bit error ratio).

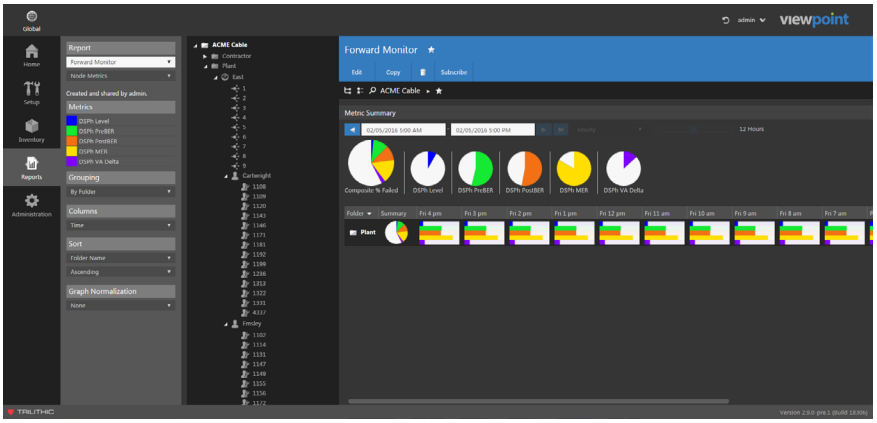
These extensive monitoring capabilities can be used to highlight specific trends or impairments affecting the forward path and can be useful in diagnosing reoccurring problems over any period of time.

Everyday Usage for the Field

The FPM Module not only works for management, but is also designed with the technician in mind. With the new unified web browser based interface, all forward path nodes monitored by the platform can be accessed via any smart device with a browser and internet connection. This allows all team members to target any period of time to view the modem test results for further analysis and troubleshooting.

Measurement Profiles

The FPM Module includes customizable measurement profiles for each user. When trying to target an area of concern, the customizable dashboard will display the alarm limits for the selected user profile. This customizes the look and feel of the dashboard to show the user what areas or modems that are above the desired thresholds.

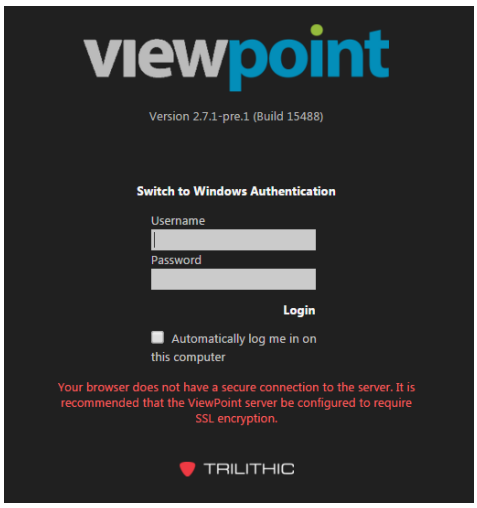


Connecting to ViewPoint

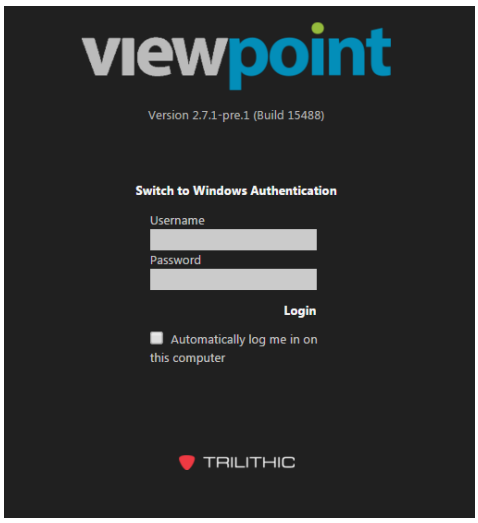
To view the ViewPoint server web interface, open your local web browser and enter the IP address or URL of the ViewPoint server into the address bar. The IP address or URL of the ViewPoint server will be provided by your local IT department.

The login window can be displayed as follows:

- **Un-Secured HTTP:// Connection** – This type of connection does not use SSL encryption to provide a secure connection to the server. An example of the login screen for this type of connection is shown below-left.
- **Secured HTTPS:// Connection** – This type of connection uses SSL encryption to provide a secure connection to the server. An example of the login screen for this type of connection is shown below-right.



Un-Secured HTTP:// Connection



Secured HTTPS:// Connection

CAUTION

In order to ensure the privacy of the information transmitted and received, it is recommended that the ViewPoint server be configured to require SSL encryption.

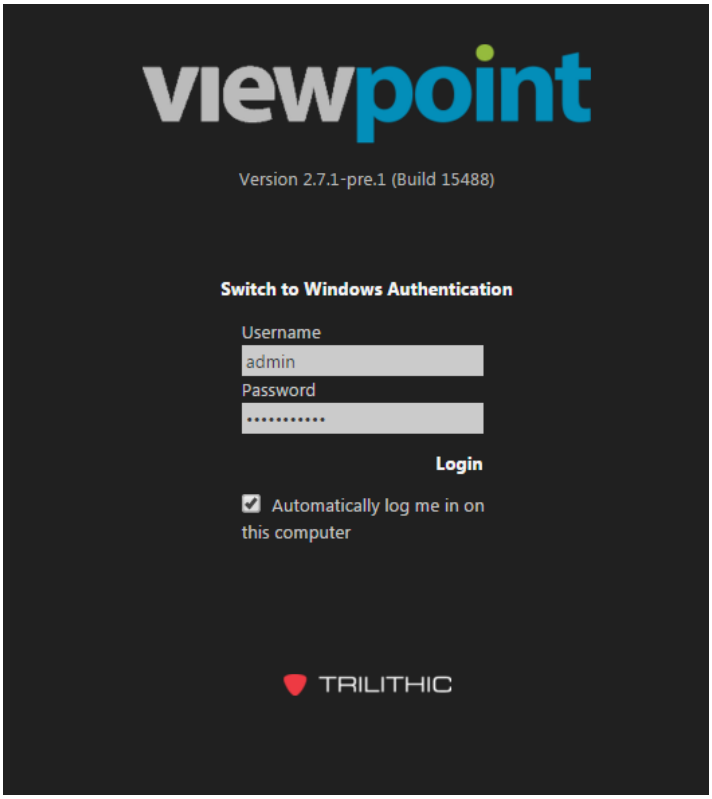
Initial Login

You should have received your username and password information from Trilithic Applications Engineering at the time of purchase.

If you need help logging in, contact Trilithic Applications Engineering 1-800-344-2412 or 317-895-3600 support@trilithic.com.

Enter your **Username** and **Password**. If you are the only user on the PC that you are using to access ViewPoint, select the **Automatically log me in on this computer** checkbox. This will allow the browser to remember your username and password and quickly log you into the system.

Once you have entered your account information, select the **Login** button or press the **Enter** button on your keyboard to proceed to the ViewPoint server interface.



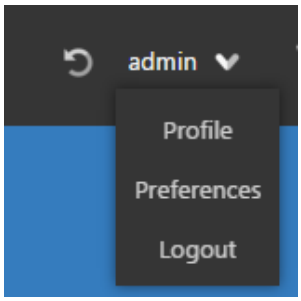
Once you have successfully logged on, the ViewPoint server will automatically display the last page that was viewed during your previous session.

NOTE

For Additional Help, Contact Trilithic Applications Engineering 1-800-344-2412 or 317-895-3600
support@trilithic.com or www.trilithic.com

Edit User Information

Before using the ViewPoint system for the first time, each new user account will need to enter their personal information (unless previously entered by an administrator). Select the **User Account Control** dropdown menu at the top right of the ViewPoint window, as shown in the image to the right.



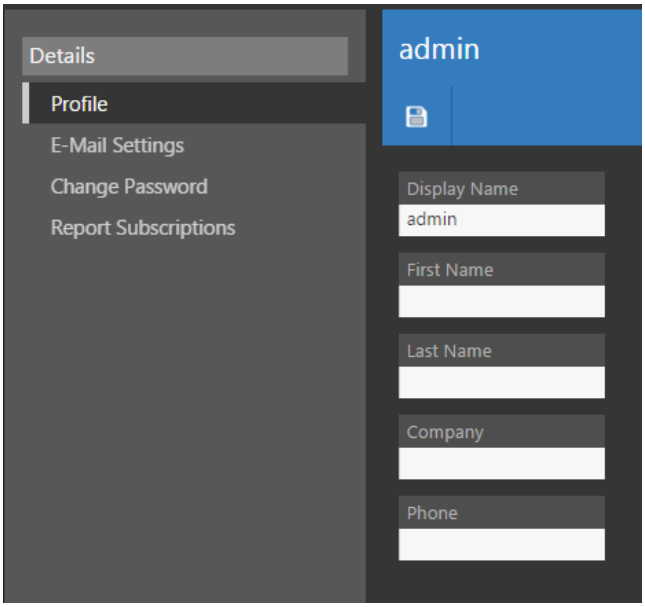
User Details Toolbar

To bring up the **User Details Toolbar**, select **Profile** from the **User Account Control** dropdown menu.

To navigate to a specific feature, simply select the corresponding feature from the **User DetailsToolbar** as shown in the image to the right.

The currently selected feature within the **User Details Toolbar** is always highlighted using white text on a dark gray box with a white bar. All other features within the screen will use gray text.

From the **User Settings Toolbar**, you can choose from any of the following features:

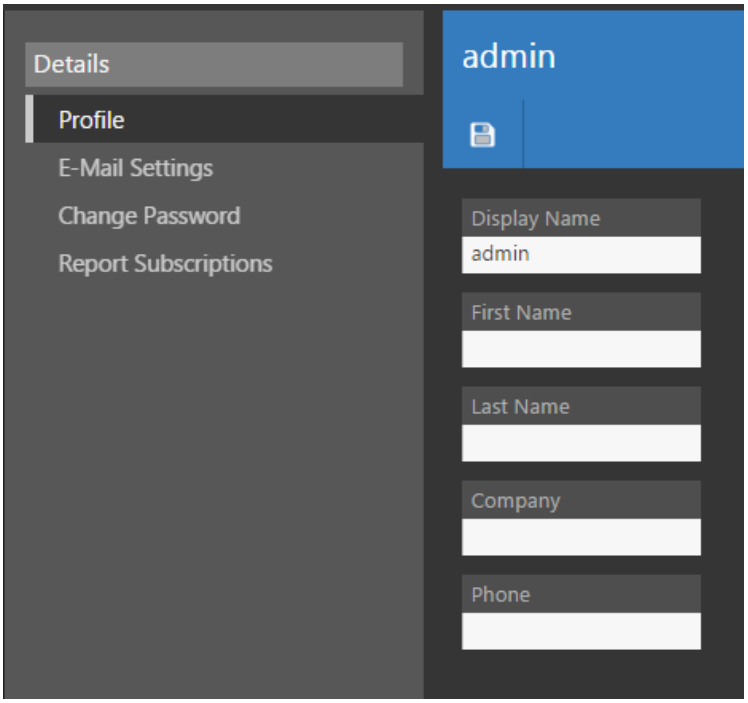


Profile	When selected, this feature provides the ability to edit the user profile for the currently logged in user.
E-Mail Settings	When selected, this feature provides the ability to edit the email address for the currently logged in user.
Change Password	When selected, this feature provides the ability to edit the change the password for the currently logged in user.
Report Subscriptions	When selected, this feature provides the ability to edit the report subscriptions for the currently logged in user.

NOTE

Some features are only available to System Administrators. Please contact your administrator for security changes.

User Profile



The **Profile** feature is used to manage the profile information for the current user.

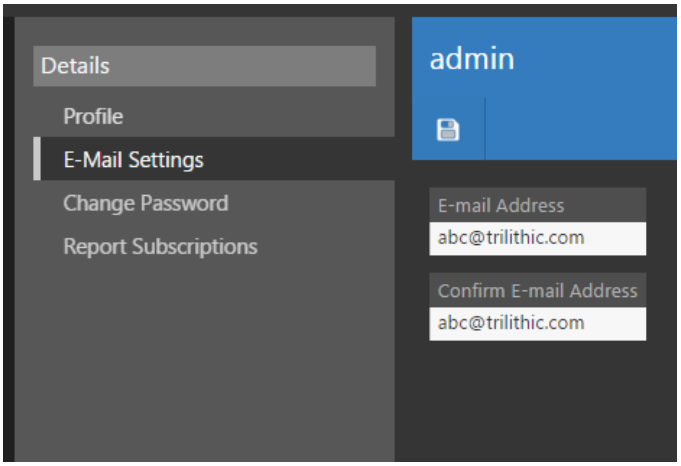
Select the **Profile** link from the **User Details Toolbar** to edit the following information, as shown in the image to the right.

- Display Name
- First Name
- Last Name
- Company
- Phone

For each user, enter as much information as needed to help identify which users are making changes within ViewPoint. This information is also important when creating reports, as it will be used to populate certain fields within reports.

Select the **Save** button to save the changes or navigate away from this page to exit without saving your changes.

E-Mail Settings



The **E-mail Settings** feature is used to manage the email address for the current user.

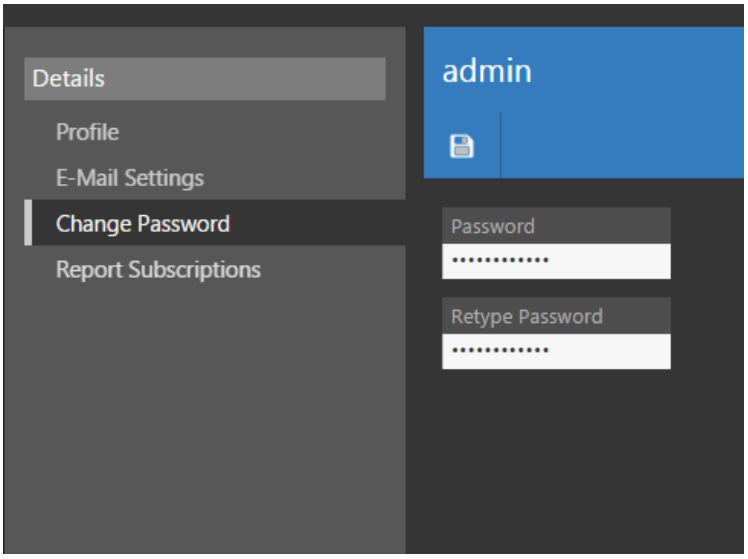
Select the **E-mail Settings** link from the **User Details Toolbar** to edit the email address, as shown in the image to the right.

Enter your email address and then retype the same address to verify they match.

Select the **Save** button to save the changes or navigate away from this page to exit without saving your changes.

Change Password

The **Change Password** feature is used to manage the password for the current user.



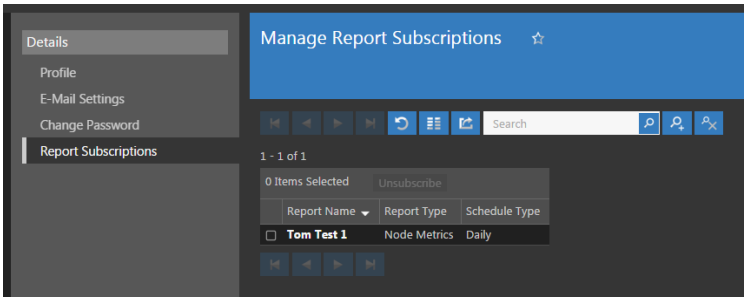
Select the **Change Password** link from the **User Details Toolbar** to edit the password, as shown in the image to the right.

Enter your password and then retype the same password to verify they match.

Select the **Save** button to save the changes or navigate away from this page to exit without saving your changes.

Report Subscriptions

The **Report Subscriptions** feature is used to manage the report subscriptions for the current user.



Select the **Report Subscriptions** link from the **User Details Toolbar** to edit the report subscriptions, as shown in the image to the right.

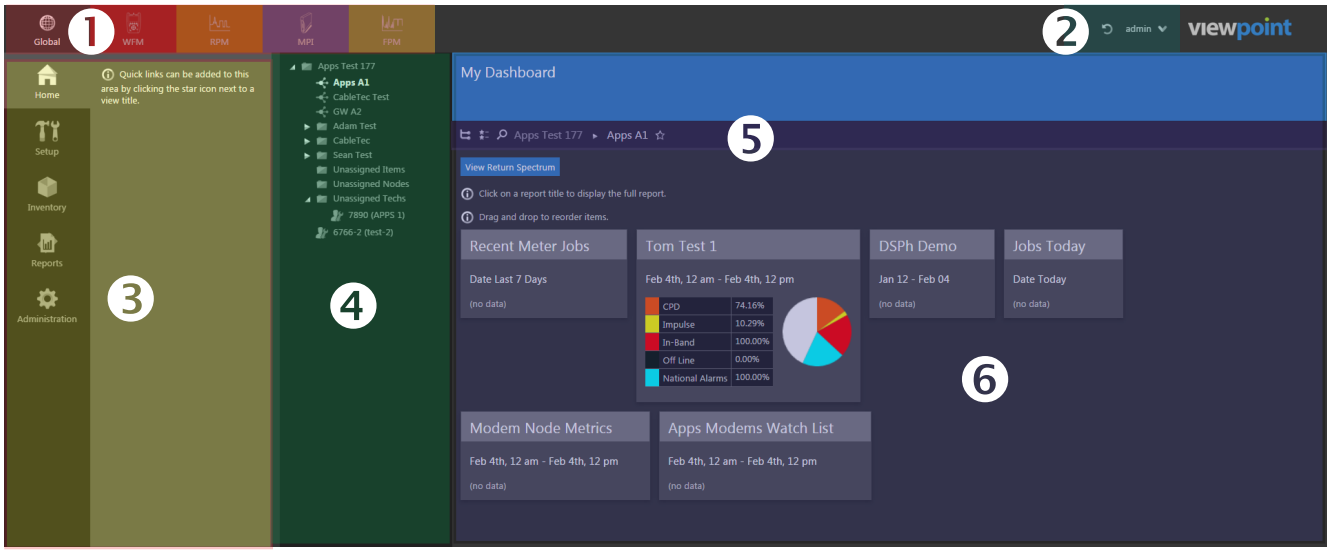
Add, delete, or edit the report subscriptions as necessary.

Select the **Save** button to save the changes or navigate away from this page to exit without saving your changes.

ViewPoint Interface Overview

The following image represents the typical ViewPoint web browser interface.

> NOTE
>
> ***The features that are displayed depend on which ViewPoint modules have been activated and the Group Features that have been assigned to the currently logged in user.***



There are five areas within the ViewPoint interface that you should become familiar with before using the software:

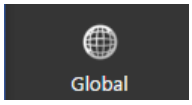
1. Module Filter Toolbar
2. User Account Control dropdown menu
3. Navigation & Settings
4. Organization Tree
5. Organization Toolbar
6. Data Display Area

Module Filter Toolbar

This area of the screen allows you to navigate to each ViewPoint module that is available to the current user.

NOTE

The Module Filter toolbar only allows access to modules within ViewPoint that are allowed within the group permissions for the currently logged in user.



The **Global** button provides access to the functions within all ViewPoint Modules.

The **WFM** button provides access to the functions within the WFM Module.

The **RPM** button provides access to the functions within the RPM Module.

The **MPI** button provides access to the functions within the MPI Module.

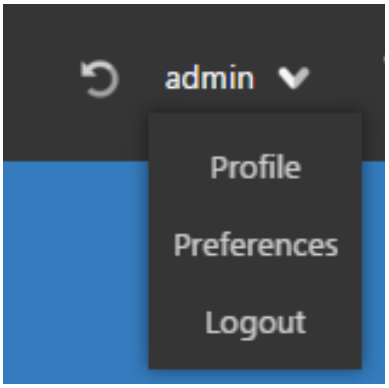
The **FPM** button provides access to the functions within the FPM Module.

NOTE

For the examples shown in this manual, the Module Filter toolbar has been set to Global to cover all the functionality in ViewPoint. Depending what module you have selected, the available features may vary.

User Account Control

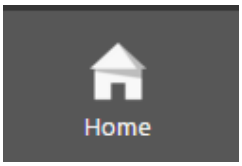
This area of the screen allows you to perform the following functions:



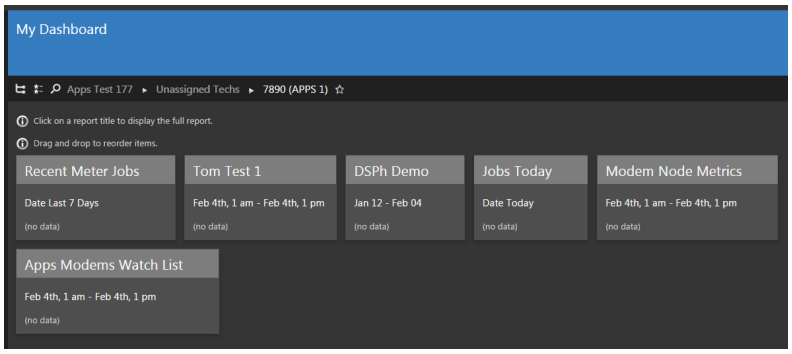
- Use the **Profile** link to adjust user details settings including; User Profile, E-Mail Settings, Change Password, and Report Subsciptions. See the **Edit User Information** section earlier in this chapter for more information.
- Use the **Preferences** link to adjust report and list items per page.
- Select the **Logout** link to logout of ViewPoint.

Navigation & Settings

This area of the screen allows you to perform the following functions:



The **Home** button provides access to the **My Dashboard** page, which includes a customized list of the current user's favorite ViewPoint features including:



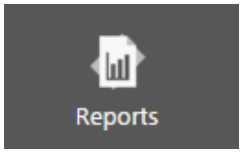
- Reports – Meters, Jobs, Meter Tests & Channel Test Summary
- Setup Items – Meters, Forward Monitors, Return Monitors, CMTS, Modems & Metrics
- Dashboards – Meters, Forward, Return & Modem Monitoring
- Watch Lists – Modem Monitoring

The **Setup** button provides access to several setup options in ViewPoint, including:

- General – Folders and Firmware Packages
- Signal Level Meter – Limit Sets, Channel Plans, Autotests, and Meter Settings
- Ethernet – Ethernet Limit Sets, Frames, Targets, and Streams

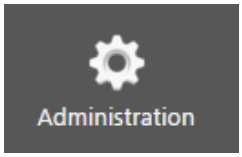
The **Inventory** button provides access to your plant's inventory of all devices connected to ViewPoint, including:

- Signal Level Meters
- Return Monitors
- Forward Monitors
- CMTSs
- Modems



The **Reports** button provides access to reports and metrics options in ViewPoint, including:

- Report
- Metrics
- Grouping
- Columns
- Sort
- Graph Normalization



The **Administration** button provides access to global server administration settings, including:

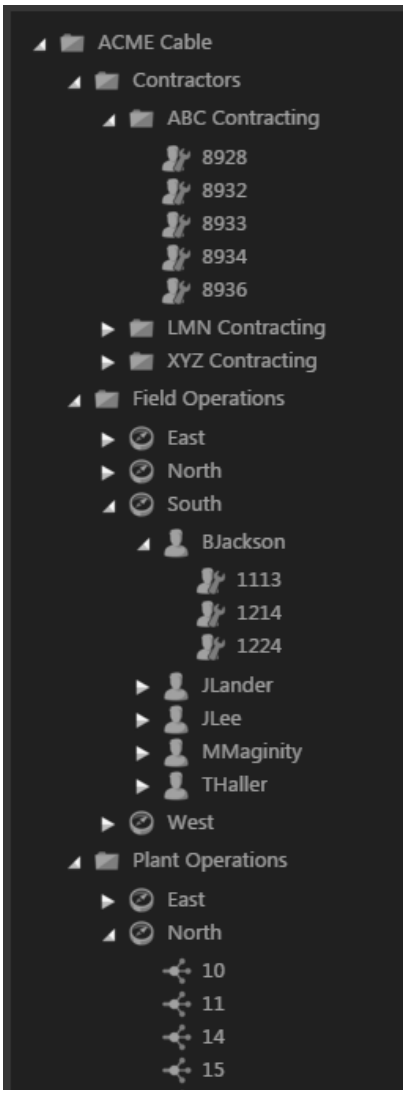
- General – Site Settings and TDM Servers
- Setup – Channel Presets, Test Locations, Test Plans, Firmware, Packages, and Metrics
- Security – Sessions, Licenses, Groups, and Users

Organization Tree

This area of the screen provides you with the ability to directly navigate to any location within your organization using a familiar and convenient tree style organization. Select the icon from the **Organization** toolbar to show/hide the Organization tree.

> NOTE ***The Organization tree only allows navigation to areas within the organizational hierarchy that have been assigned to the currently logged in user.***

The following types of items are displayed within the organization tree:



- The icon represents a Folder within the organization. This item can contain the following type of child items: Person, Area, Technician or Fiber Node.
- The icon represents a Person within the organization. This item can contain the following types of child items: Folder, Area, or Technician.
- The icon represents an Area within the organization. This item can contain the following types of child items: Folder, Person, Technician, or Fiber Node.
- The icon represents a Technician within the organization. This item cannot contain any child items.
- The icon represents a Fiber Node within the organization. This item cannot contain any child items. Selecting a Fiber Node from the organization tree will display the **Live** mode of the **Return Spectrum Display** as described in the following chapter.

To show/hide the contents included within an item, select the white arrow to the left of the item name. To navigate to a specific item within the organization, simply select the name of the item. The current location within the organization is always highlighted using white bold text. All other items within the tree will use gray text until selected.

Organization Toolbar

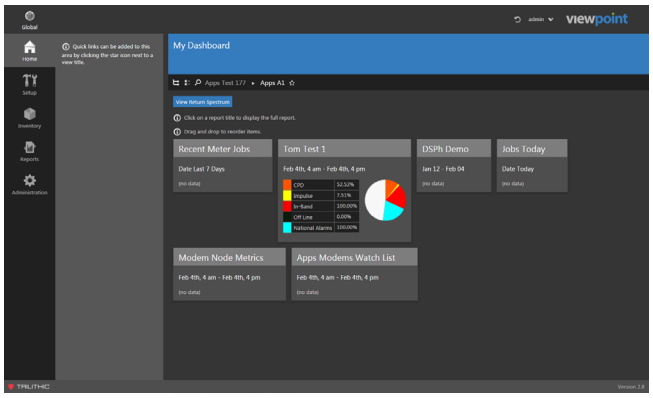
The **Organization** toolbar is displayed in the Data Display Area of the ViewPoint web browser interface, as shown in the following image.

NOTE

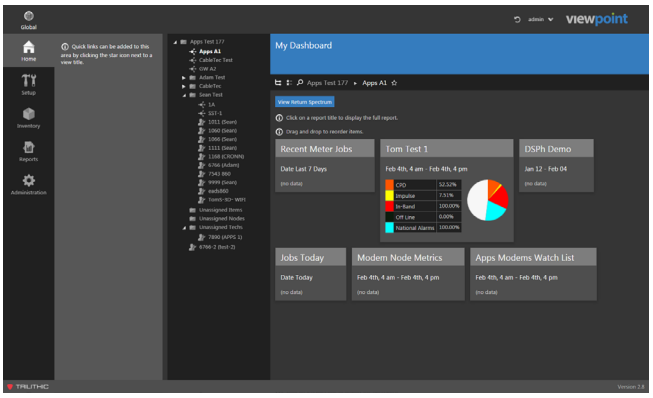
The Organization toolbar only allows navigation to areas within the organizational hierarchy that have been assigned to the currently logged in user.

Show/Hide Organization Tree

Select the icon to show/hide the organization tree as shown in the following images. This feature allows you to hide the organization tree in order to provide more space on the screen within the **Data Display Area**.



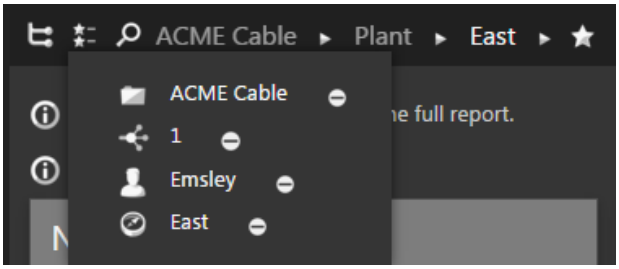
Organization Tree Hidden



Organization Tree Displayed

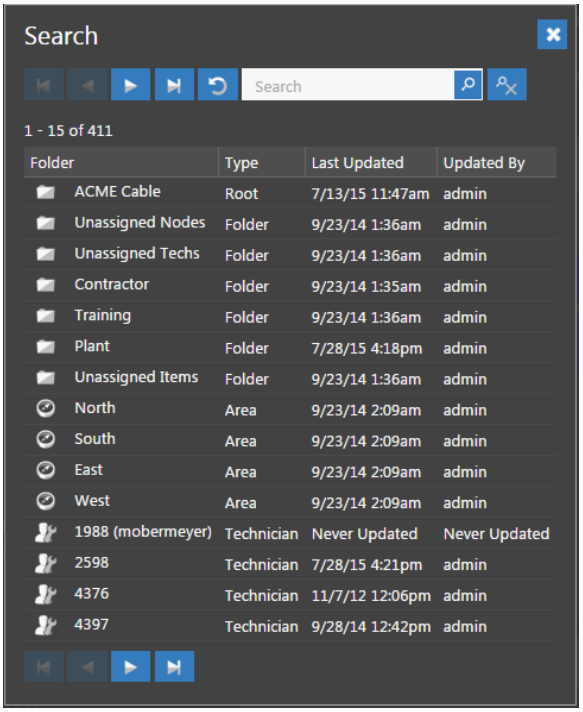
Favorites List

Use the icon to display a dropdown list of your favorite locations within the organization as shown in the image to the right. This favorites list is unique to each user account and can include any number of Folders, People, Areas, Technicians, & Fiber Nodes. To remove a favorite from the list, simply select the minus sign to the right of the favorite.

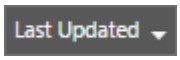


Organization Search

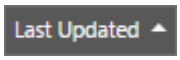
Use the icon to display a **Search** window to search for items within the organization. The default display is a results table of all of the items within your organization as shown in the image to the right. The results table features:



- Columns that can be sorted by **Organization**, **Type**, **Last Updated** & **Updated By**.
- Each column can be sorted by selecting the name of the column in the header row of the table. When the table is sorted by column, an up/down arrow is displayed to the right of the column name as follows:



Ascending order (a,b,c...) displays a down arrow



Descending order (z,y,x...) displays an up arrow

- A **Search** field that can be used to refine the items listed in the table. Enter a keyword and then select the icon or the **Enter** key on your keyboard.
- Page navigation controls that can be used to move between pages of the table. The following navigation controls are available:

First Page

Last Page

Previous Page

Next Page

Refresh Page

Clear Keyword Search

Creating Favorites

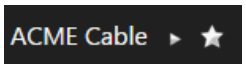
The Favorites feature is used to save locations within the organization to a favorites list. These items are displayed in the Favorites List described earlier in this section.

Select the icon to save the current location within the organization as one of your personal favorites. This location will now be available from the favorites list.

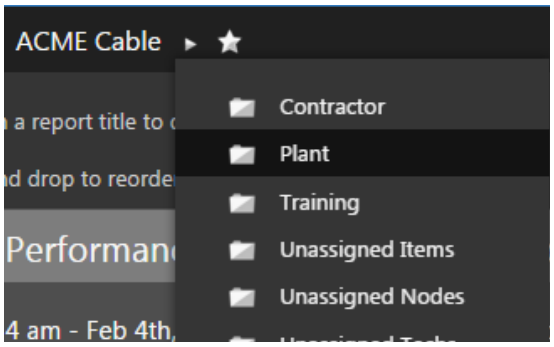
Select the icon to remove the current location within the organization from your personal favorites. This location will no longer be available from the favorites list.

Breadcrumb Trail Navigation

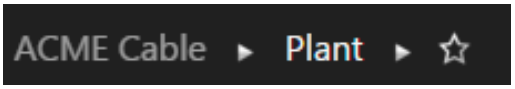
The Breadcrumb Trail Navigation feature is used to directly navigate to any item within the organization. In the example to the right, we are at the top of the organizational hierarchy known as “ACME CABLE”.



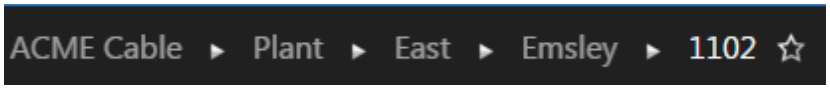
To navigate the organizational hierarchy of your system, select the ▶ icon to the right of the current location. A dropdown list is displayed that includes all of the items that are within that organizational item. Selecting any of the items in this list will make that item the current location within the organizational hierarchy. In this example, the “Plant” folder is selected.



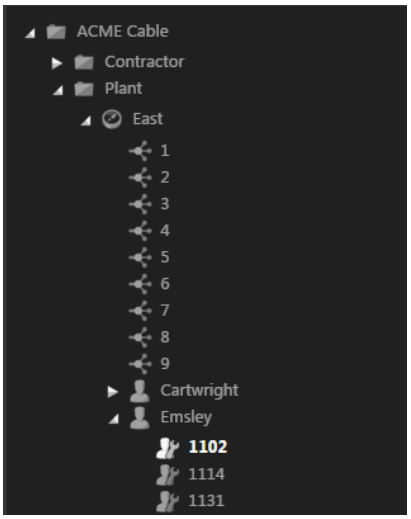
Once an item has been selected from the dropdown list, the Breadcrumb Trail Navigation feature will refresh to show the new current location within the organizational hierarchy. In this example, the current location has been updated to reflect the selection of the “Plant” folder.



Repeating this process will allow you to continue navigating deeper within the organizational hierarchy of your system until you reach the lowest item in the hierarchy as shown in the image below.



In the example image above, the lowest item in this area of the organizational hierarchy is item 1102. The **Organizational Tree** shown in the image to the right corresponds to the same location within the organizational hierarchy as the image shown above.



The current location within the organization is always highlighted using white bold text. All other items above the current location will use gray text until selected.

To navigate upward within the organizational hierarchy, you simply select any of the gray text links to the left of the current location. To navigate to within one of the organizational items higher in the hierarchy than the current location, simply select the ▶ icon to the right of the current location and choose the desired item from the dropdown list.

Data Display Area

This area of the screen is used to display data associated with the currently selected module and function. The details of the **Data Display Area** will be outlined for each module within its respective section later in this manual.

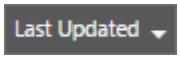
Types of Data Displays

- Tables
- Dashboards
- Watch Lists

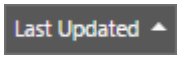
Table Display & User Tools

The Data Display Area commonly displays a table of data about the currently selected item. These tables may include any of the following user features:

- Columns that can be sorted by selecting the name of the column in the header row of the table. When the table is sorted by column, an up/down arrow is displayed to the right of the column name as follows:

  Ascending order (a,b,c...) displays a down arrow

  Descending order (z,y,x...) displays an up arrow

- A **Search** field that can be used to refine the items listed in the table. Enter a keyword and then select the  icon or the **Enter** key on your keyboard.

- Page navigation controls that can be used to move between pages of the table. The following navigation controls are available:

   First Page

   Last Page

   Previous Page

   Next Page

   Refresh Page

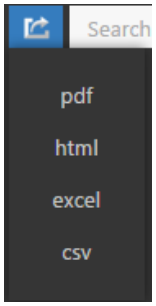
   Clear Keyword Search

   Select Columns

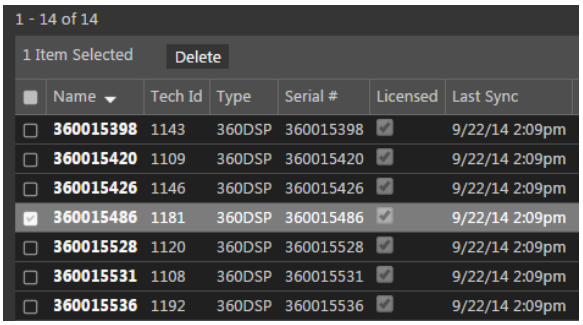
   Export to File

   Advanced Search

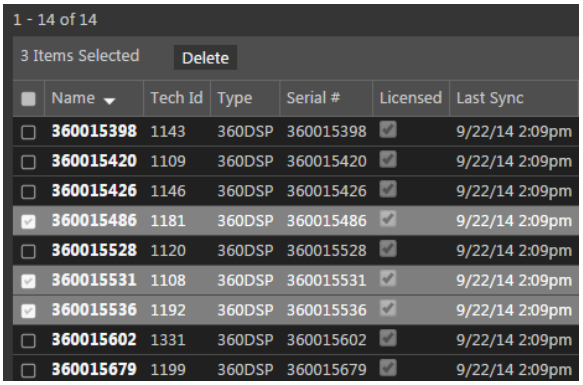
- The ability to save the currently displayed list of organizational items to **PDF**, **HTML**, **EXCEL** or **CSV** file formats by selecting any of the options shown in the image to the right.



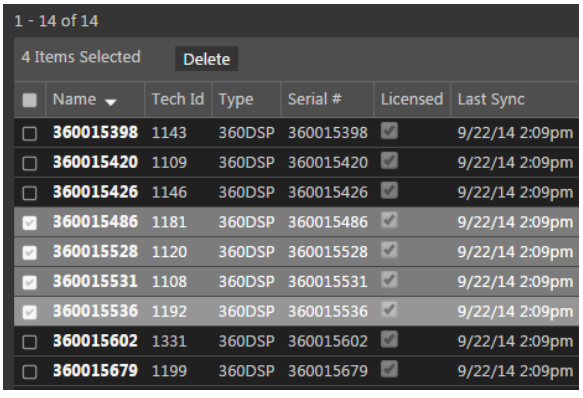
- Select Items within the Table
  - Single Items – Select the checkbox next to the item you want to select.



  - Multiple Items Not Grouped Together
    - Select the checkbox next to the first item and then press and hold the **Ctrl** key.
    - While holding down the **Ctrl** key, select each of the other checkboxes next to the items you want to select.

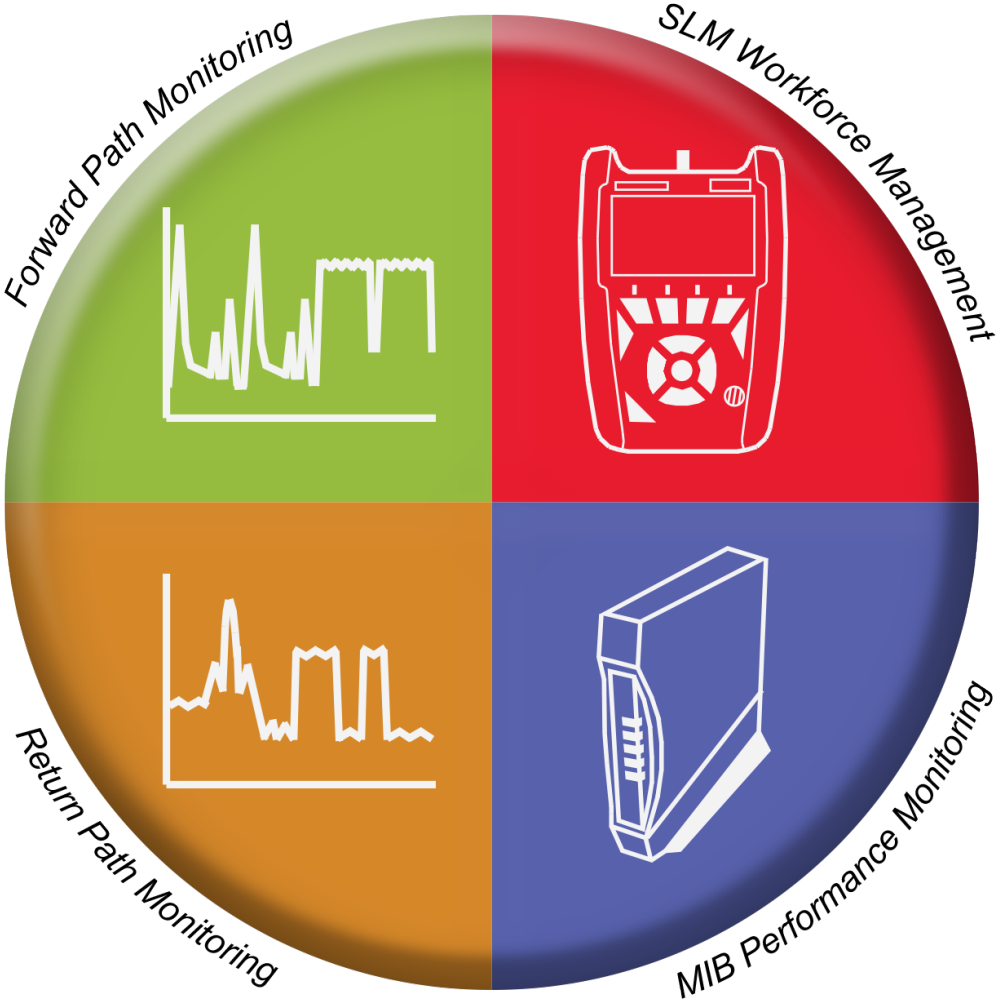


  - Multiple Items Grouped Together
    - Select the checkbox of the first item in the group and press and hold the **Shift** key.
    - While holding down the **Shift** key, select the last file in the group. This will select all files in-between the first and last files.



  - The total number of selected items will be displayed in the upper-left corner of the dashboard list view.
  - Clear Selections
    - Select the empty checkbox at the top of the table to clear all checkbox selections.

ViewPoint
Integrated Data Management System
Section II: Site Administration



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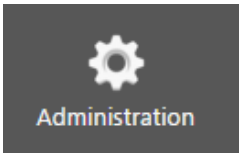
Overview

The **Administration** screen is used to manage the administration level settings of the ViewPoint system.

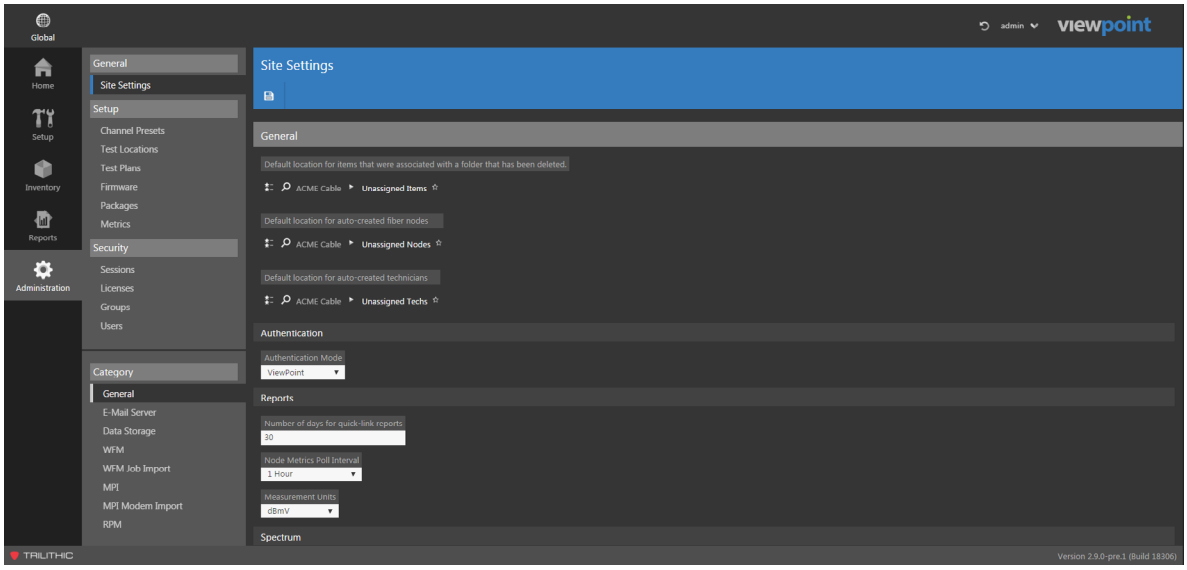
Select the **Administration** button from the **Navigations and Settings** toolbar as shown in the image to the right.



NOTE

The Administration Settings toolbar is only displayed when the current user is assigned to a group in which System Administration permissions have been granted.

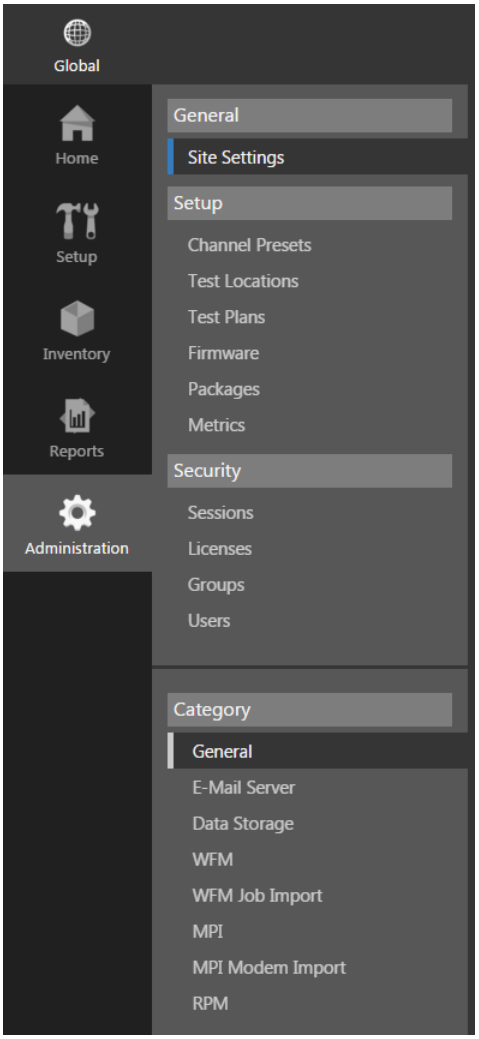
By default, the **Administration** screen will be displayed as shown in the image below.



Administration Settings Toolbar

To navigate to a specific feature within the **Administration** screen, simply select the corresponding feature from the **Administration Settings** toolbar as shown in the image to the right.

The currently selected feature within the **Administration Settings** toolbar is always highlighted using white text on a dark gray box with a blue bar. All other features within the screen will use gray text.



From the **Administration Settings** toolbar, you can choose from any of the following features:

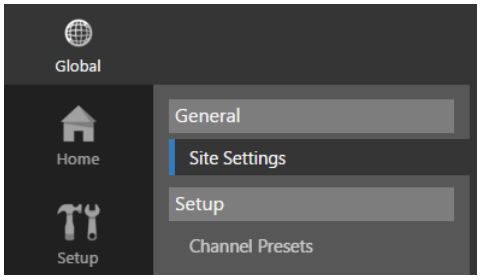
General	When selected, this feature provides the ability to manage a variety of site settings for the ViewPoint system.
Setup	When selected, this feature provides the ability to manage high-level organization setup such as test locations and test plans, firmware, and metrics within ViewPoint.
Security	When selected, this feature provides the ability to manage licenses, groups, and users within ViewPoint.

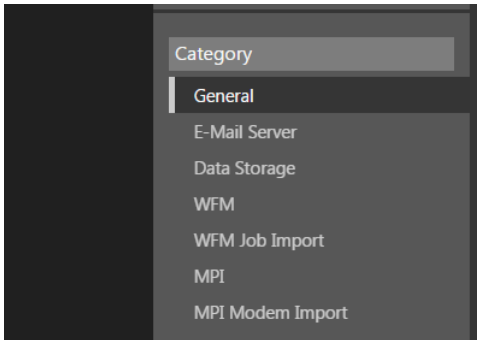
Overview

The **Site Settings** feature is used to manage the site settings of the ViewPoint system.

Select **General > Site Settings** from the **Administration Settings** toolbar as shown in the image to the right.

At the bottom of the **Administration Settings** toolbar, the **Category > General** section will be highlighted.



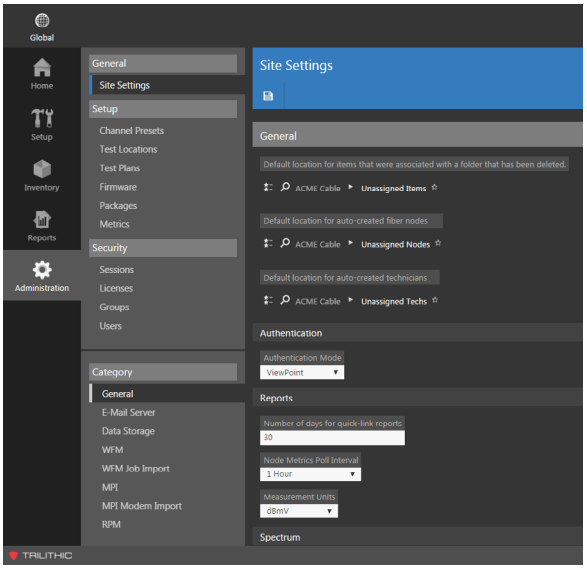


NOTE

The Administration Settings toolbar is only displayed when the current user is assigned to a group in which System Administration permissions have been granted.

From this screen, you can adjust the following site settings:

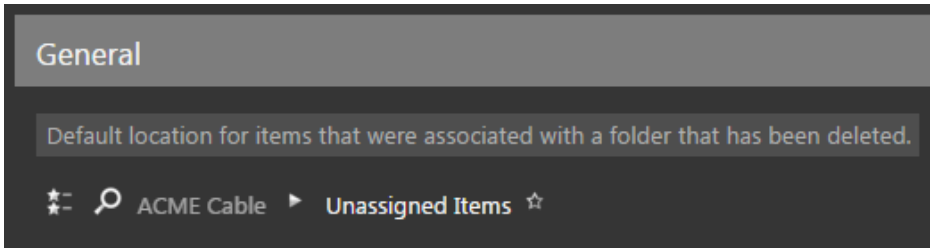
- Default location for items that were associated with a deleted folder
- Default location for auto-created fiber nodes
- Default location for auto-created technicians
- Authentication mode
- Quick-link report duration
- Node metrics polling rate
- Measurement units for reports
- Return spectrum display parameters



General

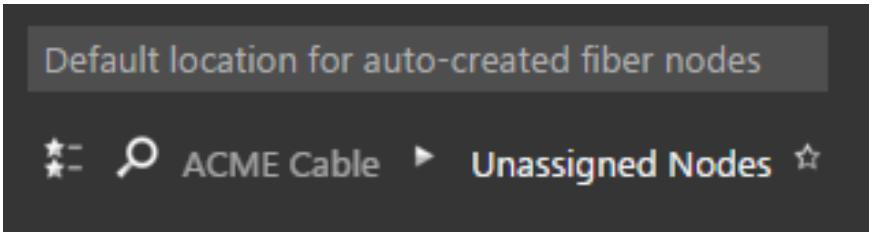
Default Location for Items that were Associated with a Deleted Folder

From the **General** area of the **Site Settings** screen, select the default location for items that were associated with a folder that has been deleted. If you make any changes, select the **Save** button before navigating away from the page.



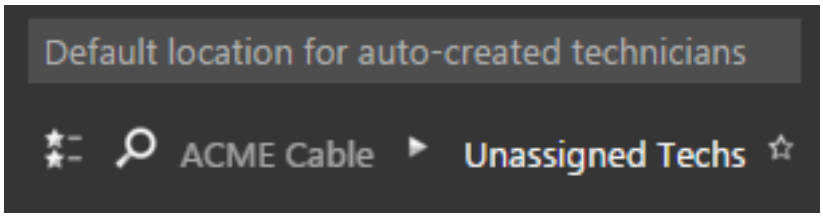
Default Location for Auto-Created Fiber Nodes

From the **General** area of the **Site Settings** screen, select the default location for auto-created fiber nodes. If you make any changes, select the **Save** button before navigating away from the page.



Default Location for Auto-Created Technicians

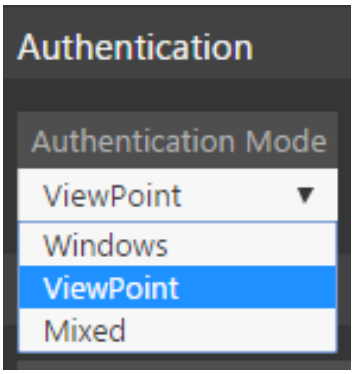
From the **General** area of the **Site Settings** screen, select the default location for auto-created technicians. If you make any changes, select the **Save** button before navigating away from the page.



Authentication Method

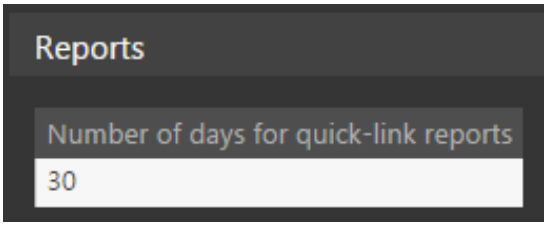
From the **Authentication** area of the **Site Settings** screen, select the default user authentication mode for logging into ViewPoint. If you make any changes, select the **Save** button before navigating away from the page.

- **ViewPoint** - This is the default user authentication mode for ViewPoint and uses the built in security of the ViewPoint interface for logging into the system.
- **Windows** - This user authentication mode for ViewPoint and uses Windows user credentials for logging into the system.
- **Mixed** - This mode allows for both types of authentication methods.



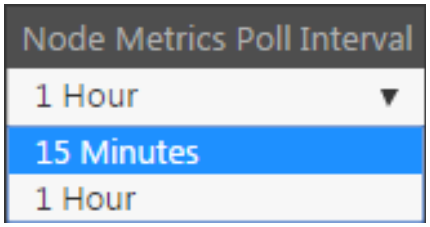
Quick-Link Report Duration

From the **Reports** area of the **Site Settings** screen, enter the number of days to make quick-link reports available to the users of the ViewPoint server. If you make any changes, select the **Save** button before navigating away from the page.



Node Metrics Polling Rate

From the **Reports** area of the **Site Settings** screen, select from a **15 Minute** or **1 Hour** polling interval for updating node performance data. If you make any changes, select the **Save** button before navigating away from the page.

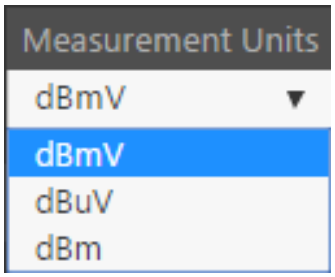


NOTE

Adjusting the polling rate can significantly affect server performance and should only be performed by a qualified administrator.

Measure Units

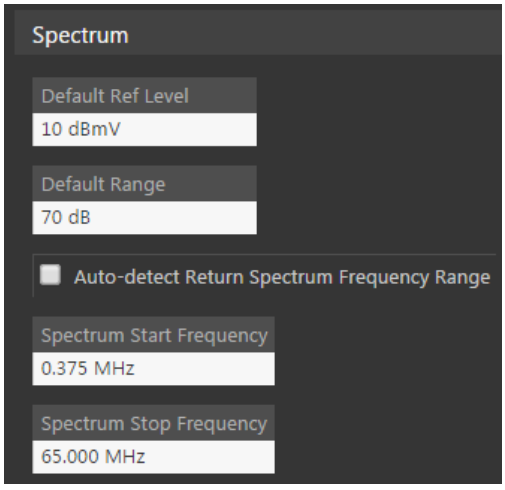
From the **Reports** area of the **Site Settings** screen, select the type of measurement unit to use in reports. If you make any changes, select the **Save** button before navigating away from the page.



Return Spectrum Display

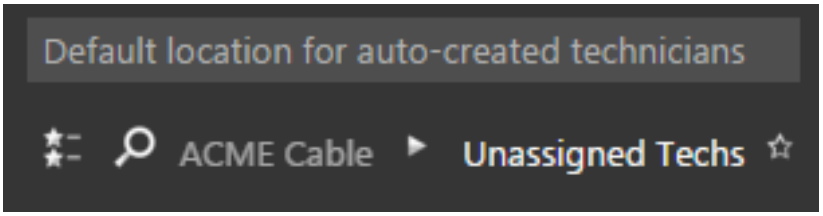
Perform the following steps to adjust the return spectrum display settings from the **Spectrum** area of the **Site Settings** screen:

1. Enter the **Default Reference Level** for return spectrum measurements.
2. Enter the **Default Range** for return spectrum measurements.
3. Select the **Auto-Detect Return Spectrum Frequency Range** checkbox, or uncheck the box and enter the start/stop frequencies.
4. If you make any changes, select the **Save** button before navigating away from the page.



Creating Favorites

The Favorites feature is used to save locations within the organization to a favorites list. These items are displayed in the Favorites List described in the previous section.

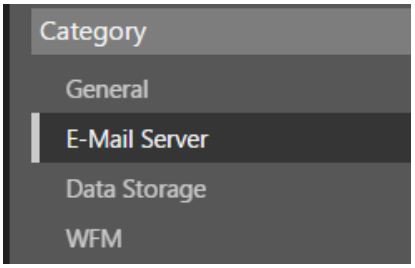


Select the ☆ icon to save the current location within the organization as one of your personal favorites. This location will now be available from the favorites list.

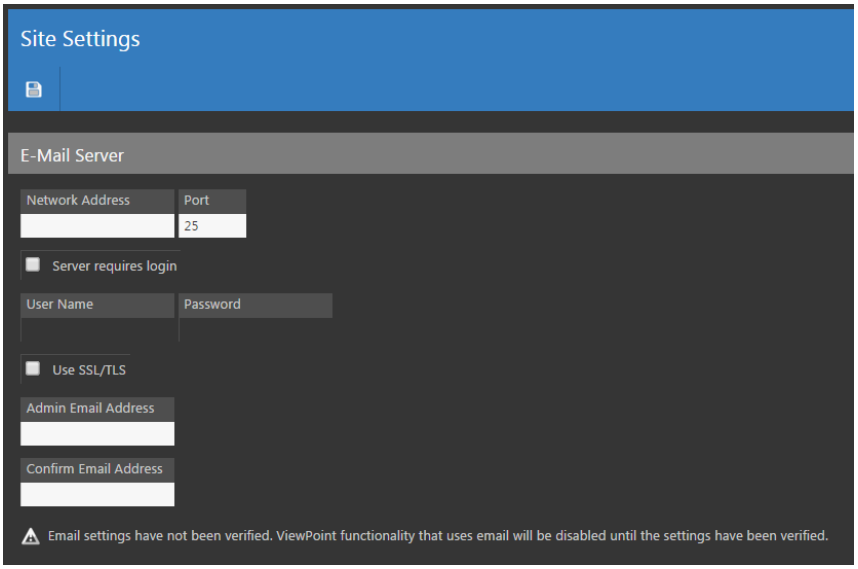
Select the ★ icon to remove the current location within the organization from your personal favorites. This location will no longer be available from the favorites list.

E-Mail Server Setup

Perform the following steps to set up your email server. This is necessary for reporting features and alerts.



1. At the bottom of the **Administration Settings** toolbar, select **Category > E-mail Server**.
2. The **E-Mail Server** screen will be displayed as shown in the image on the right.
3. Enter your network address and port information.
4. In necessary, select the **Server requires login** checkbox, and enter the user name and password.
5. Select the **Use SSL/TLS** checkbox, if necessary.
6. Enter the admin email address and retype in the box below to confirm.
7. Select the **Save** button to save the information.
8. ViewPoint will then verify the address and send you a confirmation email.
9. Click the link in the email to verify your address.



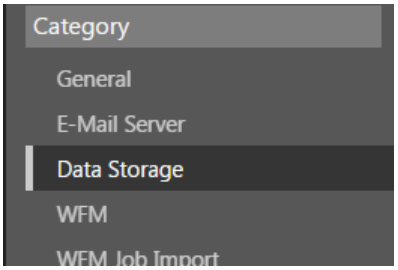
NOTE

Any ViewPoint functionality that uses email will be disabled until the admin email address has been verified.

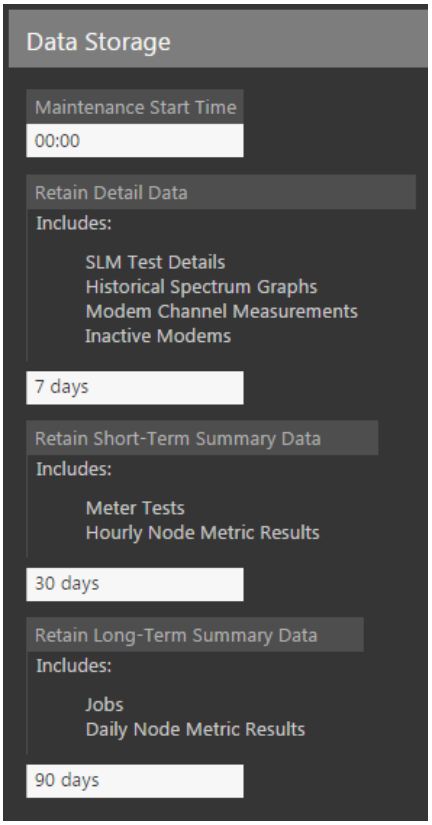
Data Storage

Data Storage Maintenance Settings

Perform the following steps to adjust the data maintenance settings of a data server.



1. At the bottom of the **Administration Settings** toolbar, select **Category > Data Storage**.
2. The **Data Storage** screen will be displayed as shown in the image on the right.
3. Enter the time of day to start server maintenance tasks in the **Maintenance Start Time** field.
4. Enter the number of days to retain detailed data of historical spectrum graphs and modem channel measurements in the **Retain Detail Data** field.
5. Enter the number of days to retain short-term summary data of hourly dashboard metric results in the **Retain Short-Term Summary Data** field.
6. Enter the number of days to retain long-term summary data of daily dashboard metric results in the **Retain Long-Term Summary Data** field.
7. If you make any changes, select the **Save** button before navigating away from the page.



NOTE

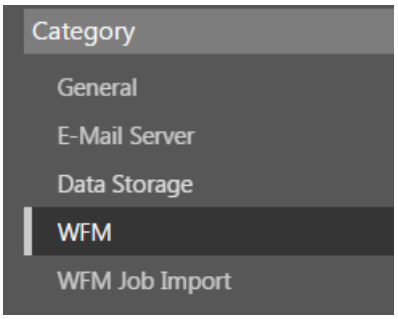
Adjusting the data maintenance settings can significantly reduce hard drive space and should only be performed by a qualified administrator.

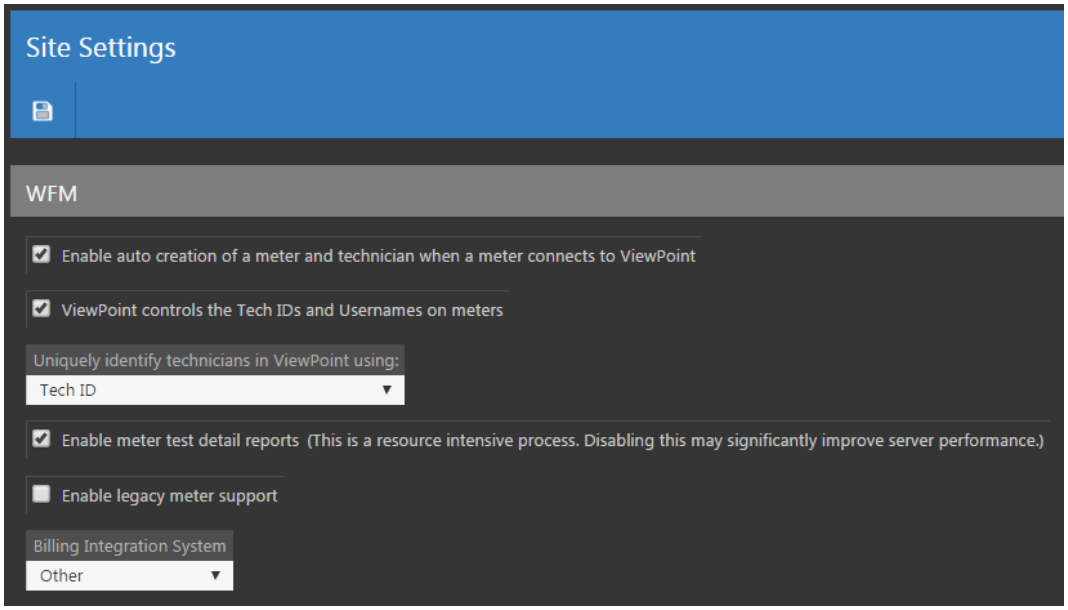
WFM

Meter Connections & Technician Controls

Perform the following steps to adjust the meter connection and technician settings:

1. At the bottom of the **Administration Settings** toolbar, select **Category > WFM**.
2. The **WFM** screen will be displayed as shown in the image below.



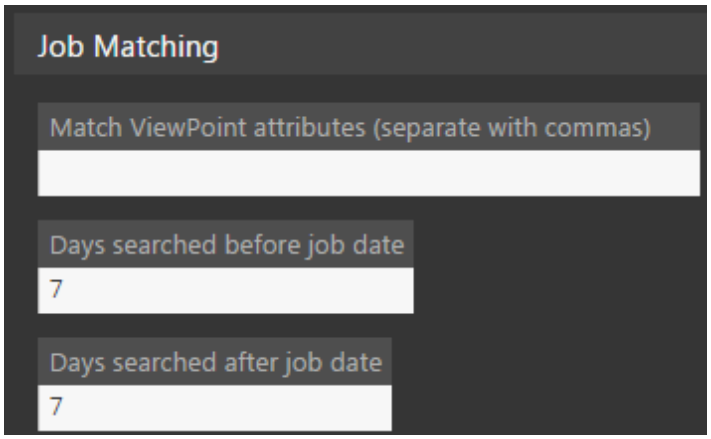


3. Select the following checkboxes to enable/disable these features:
    - Enable auto creation of a meter and technician when a meter connects to ViewPoint
    - ViewPoint controls the Tech IDs or Usernames on meters
4. Use the dropdown box to select either **Tech ID** or **Username** as the method to uniquely identify technicians in ViewPoint.

5. Select the following checkboxes to enable/disable these features:
    - Enable meter test detail reports. This is a resource intensive process. Disabling this may significantly improve server performance
    - Enable legacy meter support
6. Use the Billing Integration System dropdown box to select either **CSG, Amdocs**, or **Other** as the type of billing system to integrate with ViewPoint.
7. If you make any changes, select the **Save** button before navigating away from the page.

Job Matching

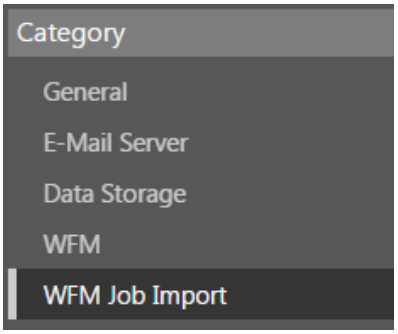
Perform the following steps to adjust the **Job Matching** settings of meter connections as shown in the image to the right:



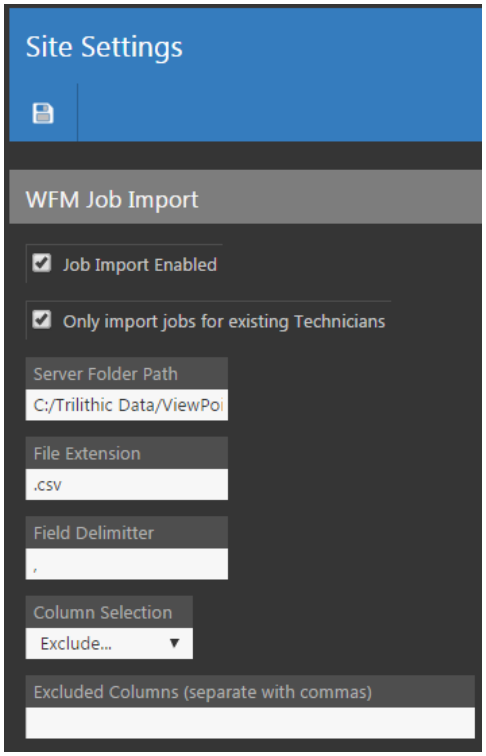
1. Enter the ViewPoint attributes to match with the data server (separated by commas) in the **Match ViewPoint Attributes** field.
2. Enter the number of days to search before a specified job date in the **Days Searched Before Job Date** field.
3. Enter the number of days to search after a specified job date in the **Days Searched After Job Date** field.
4. If you make any changes, select the **Save** button before navigating away from the page.

WFM Job Import

Perform the following steps to adjust the WFM job import settings of meter connections:



1. At the bottom of the **Administration Settings** toolbar, select **Category > WFM Job Import**.
2. The **WFM Job Import** screen will be displayed as shown in the image below.
3. Select the **Job Import Enabled** checkbox to enable job imports from the data server. This checkbox must be selected to adjust the remaining job attributes, column header mapping, and inclusion/exclusion condition settings.



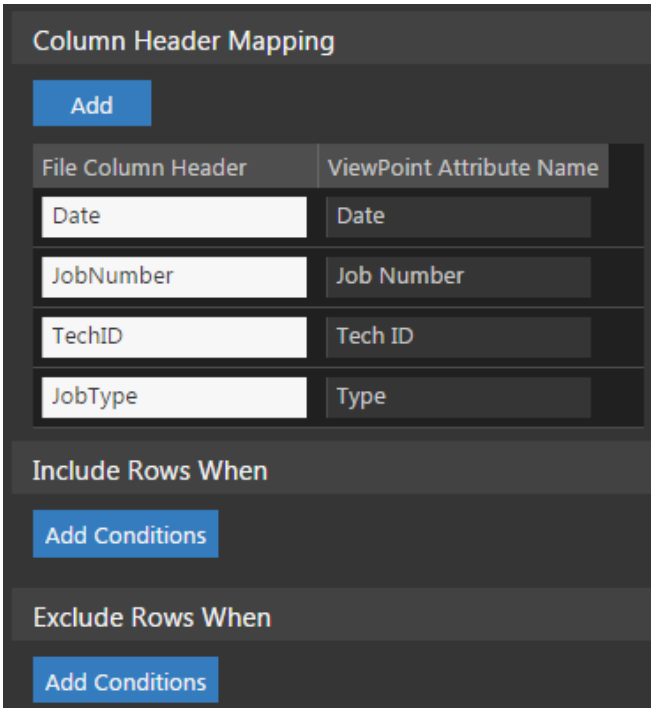
4. Select the **Only Import Jobs for Existing Technicians** checkbox to only import jobs for technicians who already exist in ViewPoint.
5. Enter the folder path on the data server where ViewPoint will look for a flat file to import in the **Server Folder Path** field.
6. Enter the file extension of the flat file to be imported into ViewPoint into the **File Extension** field.
7. Enter the type of field delimiter used in the flat file into the **Field Delimiter** field.
8. Use the **Column Selection** dropdown box to select from the following options:
    - **Include All** - This selection will include all of the job attributes columns from the flat file during import.
    - **Include Only** - This selection will include only the specified job attributes columns from the flat file during import. When this selection is made, enter the columns to import from the flat file (separated by commas) in the **Include Only Columns** field.

- **Exclude** - This selection will include all but the excluded job attributes columns from the flat file during import. When this selection is made, enter the columns to exclude from the flat file (separated by commas) in the **Exclude Columns** field.

9. If you make any changes, select the **Save** button before navigating away from the page.

Column Header Mapping

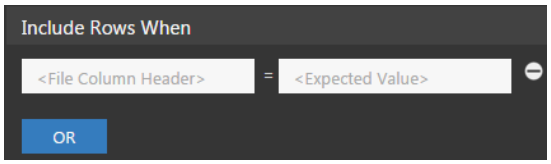
Perform the following steps to adjust the **Column Header Mapping** settings of meter connections as shown in the image to the right:



1. By default, the **Date**, **Job Number**, **Tech ID** and **Type** attributes from ViewPoint are used when mapping columns in the flat file on the data server. Enter the name of the column from the flat file that corresponds to each of these ViewPoint attributes.
2. Select the **Add** button to include additional ViewPoint attributes when mapping columns within the flat file. Enter both the name of the ViewPoint attribute and the name from the corresponding column header to map additional attributes.
3. If you make any changes, select the **Save** button before navigating away from the page.

Conditions for Inclusion

Perform the following steps to set conditional rules for always including rows that contain a specific value within a certain column of the flat file, as shown in the image to the right:



1. In the field on the left, enter the name for the column header from the flat file in which you want to match specific values for inclusion into the import. For example, you can enter “City” into this field for matching to a specific city within your system.
2. In the field on the right, enter the value within the specified column that you want to match for inclusion into the import. Using the same example of “City” for the column header, this field could be set to the specific city name. This would ensure that rows within the flat file that contain a specific city would always be included in the flat file import.
3. Select the **Or** button to set additional conditional rules in the same manner as described above.

NOTE

When a value has been entered into either field, an AND button appears. The filter only applies to a row when it passes every condition connected with an AND or any condition connected by an OR.

4. If you make any changes, select the **Save** button before navigating away from the page.

If a filter is specified, a row will be included ONLY if it has that value or if it passes any of the other OR conditions.

Conditions for Exclusion

Perform the following steps to set conditional rules for always excluding rows that contain a specific value within a certain column of the flat file as shown in the image to the right:

1. In the field on the left, enter the name for the column header from the flat file in which you want to match specific values for exclusion from the import. For example, you can enter “City” into this field for matching to a specific city within your system.
2. In the field on the right, enter the value within the specified column that you want to match for exclusion from the import. Using the same example of “City” for the column header, this field could be set to the specific city name. This would ensure that rows within the flat file that contain a specific city would always be excluded in the flat file import.
3. Select the **Or** button to set additional conditional rules in the same manner as described above.

NOTE

When a value has been entered into either field, an AND button appears. The filter only applies to a row when it passes every condition connected with an AND or any condition connected by an OR.

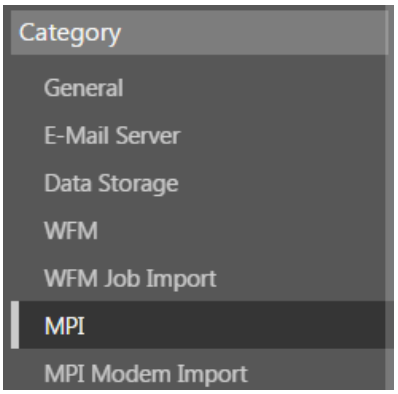
4. If you make any changes, select the **Save** button before navigating away from the page.

If a filter is specified, a row will be included ONLY if it has that value or if it passes any of the other OR conditions.

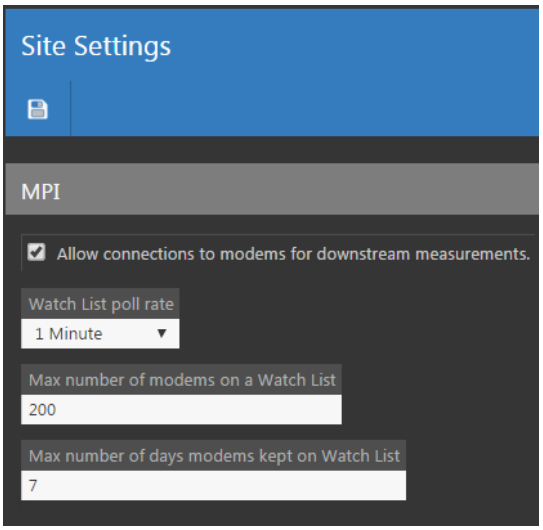
MPI

MPI Modem Polling & Watch Lists

Perform the following steps to adjust the MPI modem polling and watch lists settings:



1. At the bottom of the **Administration Settings** toolbar, select **Category > MPI**.
2. The **WFM** screen will be displayed as shown in the image below.
3. Select the checkbox to allow/disallow connections to modems for downstream measurements.
4. Use the dropdown box to select either **1 Minute** or **5 Minutes** as the polling rate for modems within a Watch List.
5. Enter the maximum number of modems to allow within a single Watch List.
6. Enter the maximum number of days that modems are kept on a Watch List.
7. If you make any changes, select the **Save** button before navigating away from the page.

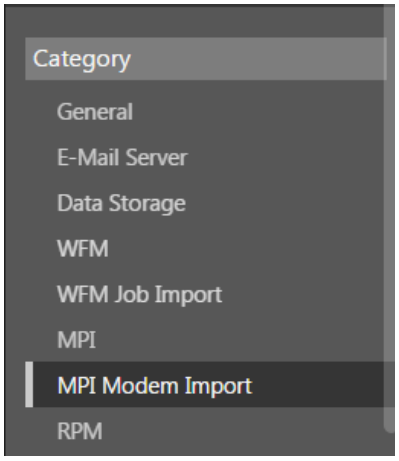


NOTE

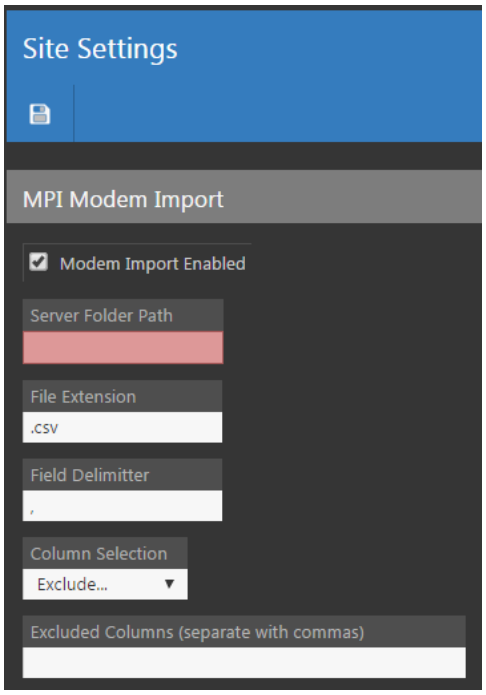
The Site Settings link of the Administration Settings toolbar is only displayed when the current user is assigned to a group in which System Administration permissions have been granted.

MPI Modem Import

Perform the following steps to adjust the MPI modem import settings of a CMTS:

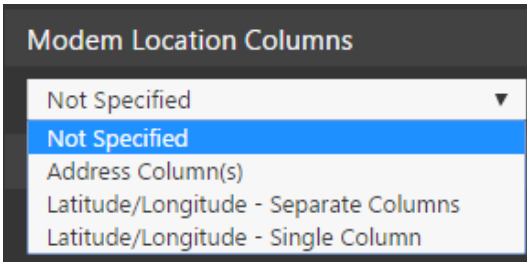


1. At the bottom of the **Administration Settings** toolbar, select **Category > MPI Modem Import**.
2. The **MPI Modem Import** screen will be displayed as shown in the image below.
3. Select the **Modem Import Enabled** checkbox to enable modem data imports from the CMTS. This checkbox must be selected to adjust the remaining modem attributes, column header mapping, and inclusion/ exclusion condition settings.
4. Enter the folder path on the data server where ViewPoint will look for a flat file to import in the **Server Folder Path** field.



5. Enter the file extension of the flat file to be imported into ViewPoint into the **File Extension** field.
6. Enter the type of field delimiter used in the flat file into the **Field Delimiter** field.
7. Use the **Column Selection** dropdown box to select from the following options:
   - **Include All** – This selection will include all of the modem attributes columns from the flat file during import.
   - **Include Only** – This selection will include only the specified modem attributes columns from the flat file during import. When this selection is made, enter the columns to import from the flat file (separated by commas) in the **Include Only Columns** field.
   - **Exclude** – This selection will include all but the excluded modem attributes columns from the flat file during import. When this selection is made, enter the columns to exclude from the flat file (separated by commas) in the **Exclude Columns** field.
8. If you make any changes, select the **Save** button before navigating away from the page.

Modem Location Columns



Perform the following steps to adjust the **Modem Location Columns** settings of a CMTS as shown in the image to the right:

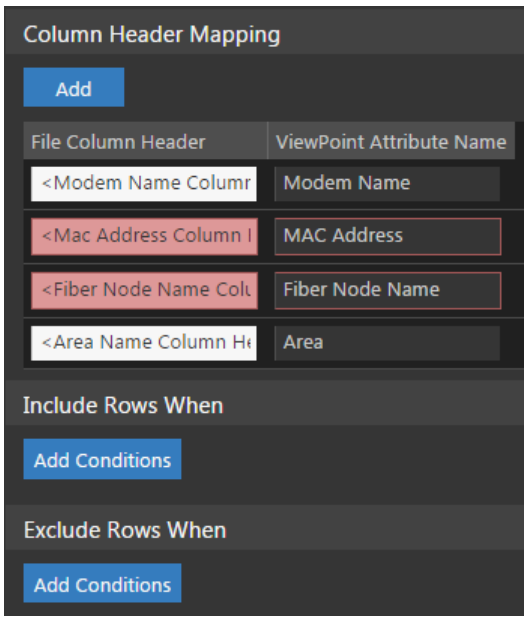
Use the **Modem Location Columns** dropdown box to select from the following options:

- **Not Specified** – This selection leaves the modem location columns unspecified.
- **Address Column(s)** – This selection allows you to add file column headers for the modem locations. Select the **Add** button to add additional headers. Drag and drop to reorder items. To ensure accurate placement of modems on a map, order the specific address colums in the same order used by the national postal service.
- **Latitude/Longitude - Separate Columns** – This selection allows you to separate the latitude/longitude coordinates in separate colums.
- **Latitude/Longitude - Single Column** – This selection allows combine the latitude/longitude coordinates in the same column. Select the **Longitude is listed first** checkbox, as necessary.

If you make any changes, select the **Save** button before navigating away from the page.

Column Header Mapping

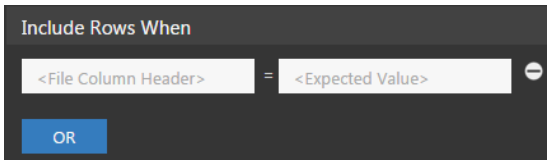
Perform the following steps to adjust the **Column Header Mapping** settings of a CMTS as shown in the image to the right:



1. By default, the **Modem Name**, **MAC Address**, **Fiber Node Name** and **Area** attributes from ViewPoint are used when mapping columns in the flat file on the CMTS. Enter the name of the column from the flat file that corresponds to each of these ViewPoint attributes.
2. Select the **Add** button to include additional ViewPoint attributes when mapping columns within the flat file. Enter both the name of the ViewPoint attribute and the name from the corresponding column header to map additional attributes.
3. If you make any changes, select the **Save** button before navigating away from the page.

Conditions for Inclusion

Perform the following steps to set conditional rules for always including rows that contain a specific value within a certain column of the flat file, as shown in the image to the right:



1. In the field on the left, enter the name for the column header from the flat file in which you want to match specific values for inclusion into the import. For example, you can enter “City” into this field for matching to a specific city within your system.
2. In the field on the right, enter the value within the specified column that you want to match for inclusion into the import. Using the same example of “City” for the column header, this field could be set to the specific city name. This would ensure that rows within the flat file that contain a specific city would always be included in the flat file import.
3. Select the **Or** button to set additional conditional rules in the same manner as described above.

NOTE

When a value has been entered into either field, an AND button appears. The filter only applies to a row when it passes every condition connected with an AND or any condition connected by an OR.

4. If you make any changes, select the **Save** button before navigating away from the page.

If a filter is specified, a row will be included ONLY if it has that value or if it passes any of the other OR conditions.

Conditions for Exclusion

Perform the following steps to set conditional rules for always excluding rows that contain a specific value within a certain column of the flat file as shown in the image to the right:

1. In the field on the left, enter the name for the column header from the flat file in which you want to match specific values for exclusion from the import. For example, you can enter “City” into this field for matching to a specific city within your system.
2. In the field on the right, enter the value within the specified column that you want to match for exclusion from the import. Using the same example of “City” for the column header, this field could be set to the specific city name. This would ensure that rows within the flat file that contain a specific city would always be excluded in the flat file import.
3. Select the **Or** button to set additional conditional rules in the same manner as described above.

NOTE

When a value has been entered into either field, an AND button appears. The filter only applies to a row when it passes every condition connected with an AND or any condition connected by an OR.

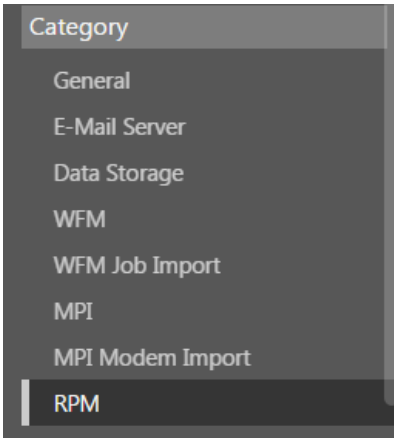
4. If you make any changes, select the **Save** button before navigating away from the page.

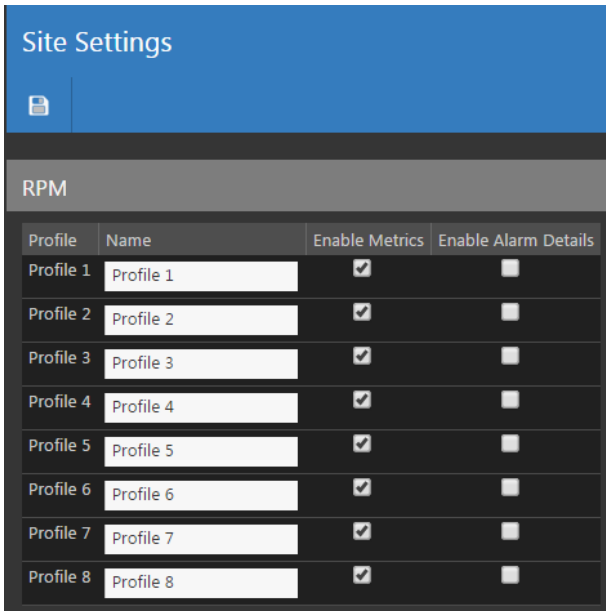
If a filter is specified, a row will be included ONLY if it has that value or if it passes any of the other OR conditions.

RPM

Perform the following steps to configure the monitor profile settings:

1. At the bottom of the **Administration Settings** toolbar, select **Category > RPM**.
2. The **RPM** screen will be displayed as shown in the image below.
3. Enter a name for each measurement profile into the **Name** field of the corresponding profile. This name will be used to identify the corresponding profile within ViewPoint.
4. Select the **Enable Metrics** checkbox to the right of each profile to enable metrics for the corresponding profile.
5. Select the **Enable Alarm Details** checkbox to the right of each profile to enable alarm details for the corresponding profile.
6. If you make any changes, select the **Save** button before navigating away from the page.

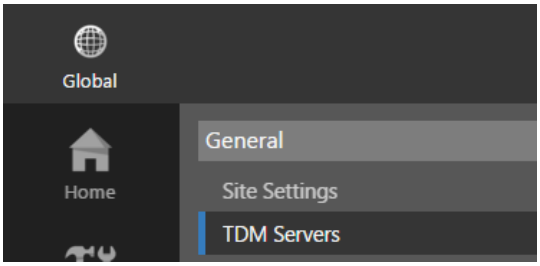




TDM Servers

The **TDM Servers** feature is used to manage TDM servers connected to the ViewPoint system.

Select **General > Site Settings** from the **Administration Settings** toolbar as shown in the image to the right.



NOTE

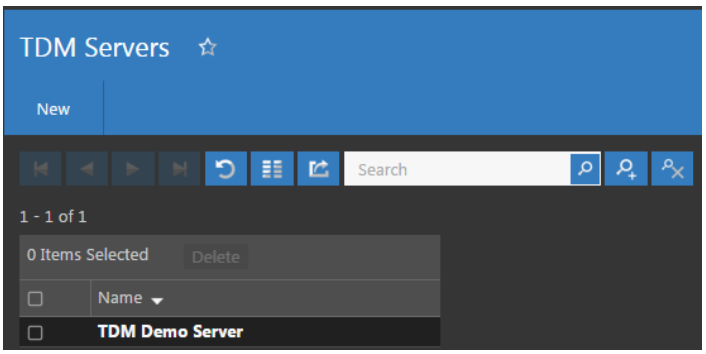
In order for the TDM Servers feature to appear, legacy meter support must be enabled in the Site Settings options. See Chapter 2: Site Settings, WFM for more detail.

TDM Servers Tables

The **TDM Servers** screen will be displayed as shown in the image to the right.

From this screen you can adjust the following site settings:

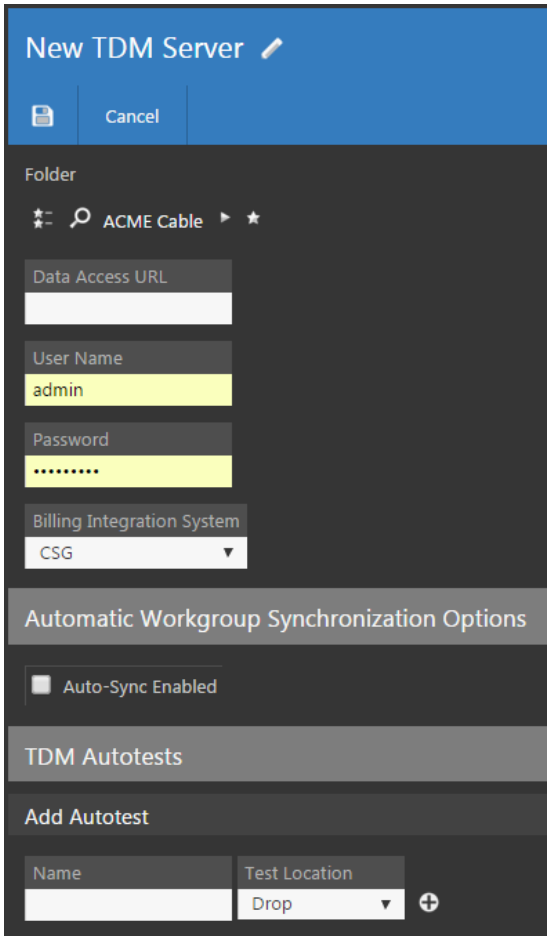
- View a list of TDM servers
- Create a new TDM server
- Edit a TDM server
- Delete a TDM server



Creating & Editing TDM Servers

Perform the following steps to create a new TDM server:

1. From the **TDM Servers** screen, select the **New** button.
2. Enter the name of the new TDM server and select **OK**.
3. The **New TDM Server** screen will be displayed as shown in the image to the right.
4. Use the Organization toolbar within the window to select the location within the organization for the new TDM server.
5. Enter the URL or IP Address of the new TDM server. This URL or IP Address must point to the TDM Data Access Site.
6. Enter the TDM server user name in the **User Name** field.
7. Enter the TDM server password in the **Password** field.
8. Use the **Billing Integration System** dropdown box to select either **CSG, AMDOCS** or **Other** as the type of billing system to integrate with the TDM server.
9. Select the **Save** button to add the new TDM server into ViewPoint.



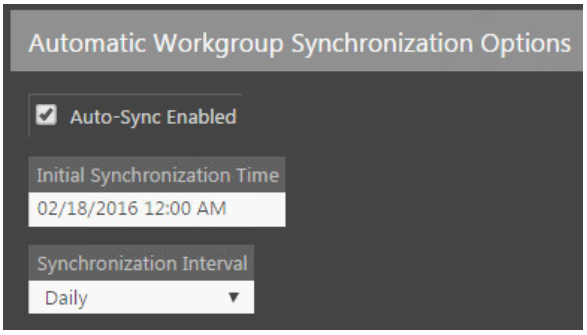
NOTE

To edit a TDM server, click the link of the name of the server, and make your changes. When finished, click the Save button

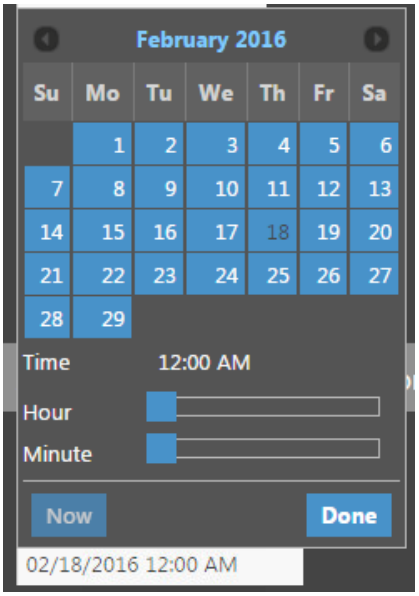
TDM Server Setup Details

Automatic Workgroup Synchronization Settings

From the **TDM Servers** screen, select the **Auto-Sync Enabled** checkbox to setup the automatic workgroup synchronization settings as shown in the image to the right:

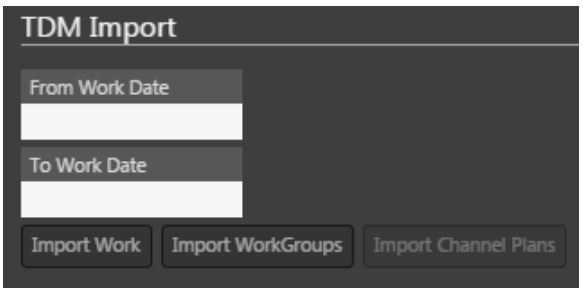


1. Select the **Initial Synchronization Time** field to display the time/date picker as shown in the image to the right.



   - Choose the date by clicking on the day in the calendar. To move forward/backward by month, use the left/right arrows located above the calendar.
   - Use the slide controls to adjust the time (hours/minutes).
   - Select the **Now** button to choose the current date/time for the initial synchronization.
   - Once you have selected the date/time for the initial synchronization, select the **Done** button.
2. Use the **Synchronization Interval** dropdown box to select from **Hourly**, **2 Hours**, **4 Hours**, **6 Hours**, **12 Hours**, **Daily** or **Weekly** synchronization intervals.
3. If you make any changes, select the **Save** button before navigating away from the page.

TDM Import

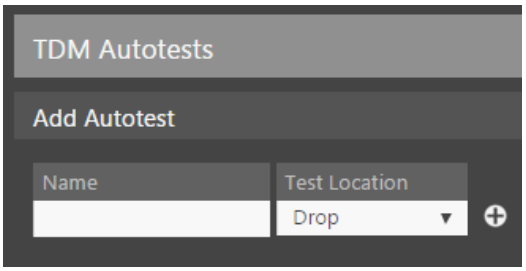


Perform the following steps to import data from a TDM server:

1. Select the **From Work Date** and **To Work Date** fields to select the start and end date for the TDM data import. The date picker will be displayed as shown in the image to the right. Choose the date by clicking on the day in the calendar. To move forward/ backward by month, use the left/right arrows located above the calendar.
2. Select the **Import WorkGroups** button to import the work groups from the TDM server. This should be selected before trying to import any channel plans or work from the TDM server.
3. Select the **Import Work** or **Import Channel Plans** button to import the corresponding types of data from the TDM server. This should always be done after importing the work groups from the TDM server. Otherwise, the work and channel plans will be placed within the organization at the location in which the TDM server is located.

TDM to ViewPoint Autotest Mapping

Perform the following steps to adjust the mapping of autotests within ViewPoint to those within the TDM server as shown in the image to the right:



1. By default, the **Outlet**, **Drop**, **Ground Block** and **Tap** autotest attributes from ViewPoint are mapped to the TDM autotest attributes of **CPE**, **Drop**, **Ingress,** and **Tap** respectively.
2. To map additional autotest locations, select the name of the autotest location in ViewPoint from the **Test Location** dropdown box.
3. Enter the name of the corresponding autotest location from the TDM server in the **Name** field.
4. Select the plus (+) button to add the autotest location mapping.
5. If you make any changes, select the **Save** button before navigating away from the page.

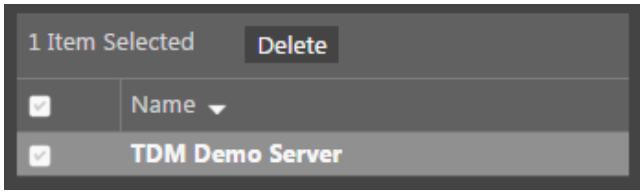
NOTE

An asterisk (*) can be used as a wildcard on Autotest Names so autotests with similar names can be mapped to the source ViewPoint location.

Deleting an Existing TDM Server

Perform the following steps to delete a TDM server from the system:

1. From the **TDM Servers** screen, select the checkbox to the left of each server to delete.
2. Once you have chosen the servers, select the **Delete** button.

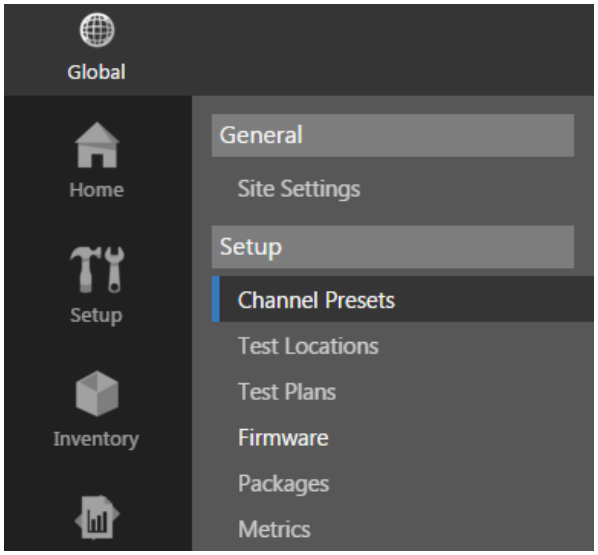


3. After selecting the **Delete** button, a **Confirm** window will be displayed.
    - When deleting five or less TDM servers, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the server(s) or select the **Cancel** button to return to the **TDM Servers** screen where the server(s) will still be displayed.
    - When deleting more than five TDM servers, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the server(s) or select the **Cancel** button to return to the **TDM Servers** screen where the server(s) will still be displayed.

Overview

The **Setup** feature is used to manage the more generalized settings of the ViewPoint system.

Select any of the features under **Setup** from the **Administration Settings** toolbar as shown in the image to the right.



NOTE

The Administration Settings toolbar is only displayed when the current user is assigned to a group in which System Administration permissions have been granted.

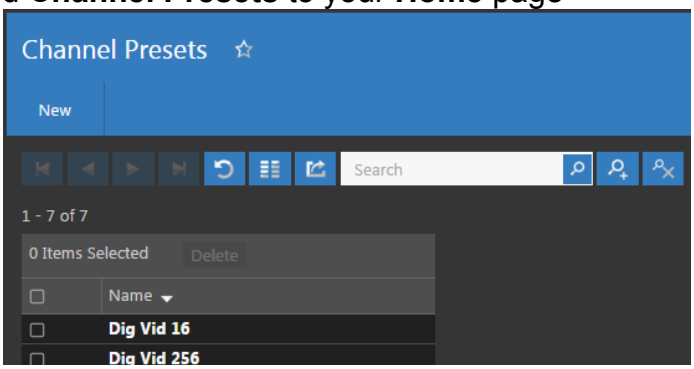
Channel Presets

Channel presets are used when creating a channel plan to quickly add a specific type of channel with user-defined settings. All Trilithic DSP family meters use channel presets.

Select **Setup > Channel Presets** from the **Administration Settings** toolbar as shown in the image above.

Select the ☆ icon at the top of the page to add **Channel Presets** to your **Home** page favorites.

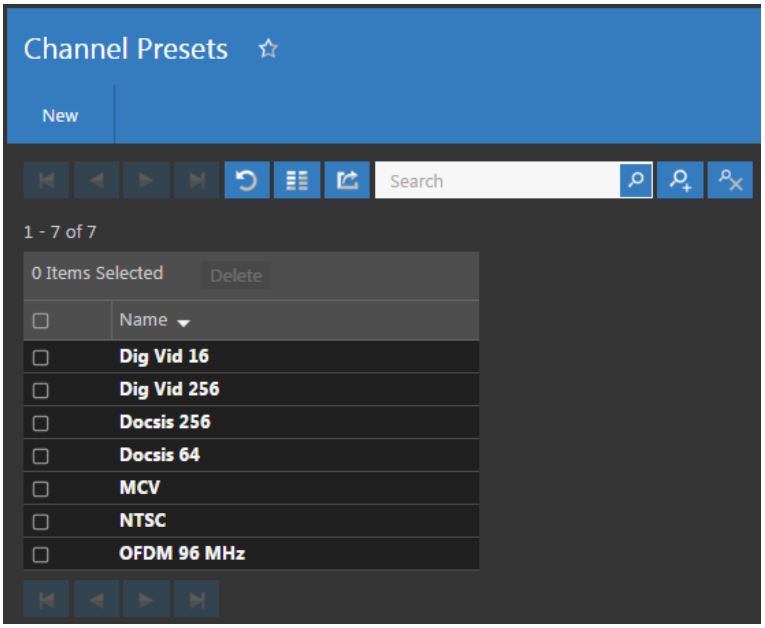
To remove **Channel Presets** from your **Home** page favorites, select the ★ icon.



Channel Presets Table

The **Channel Presets** screen will be displayed as shown in the image to the right. From this screen you can perform the following actions:

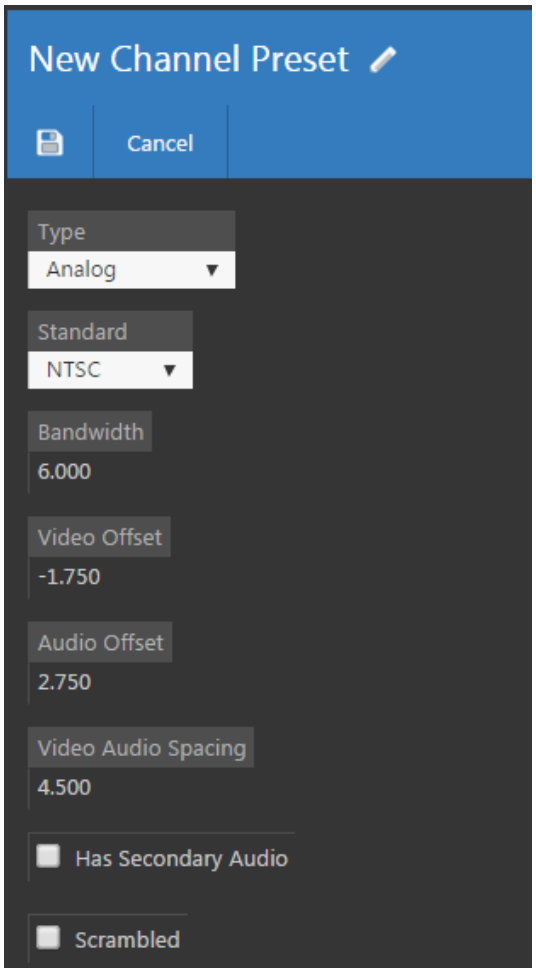
- View a list of channel presets
- Create new channel presets
- Edit an existing channel preset
- Copy an existing channel preset
- Delete an existing channel preset



Creating a New Channel Preset

Perform the following steps to create a new channel preset:

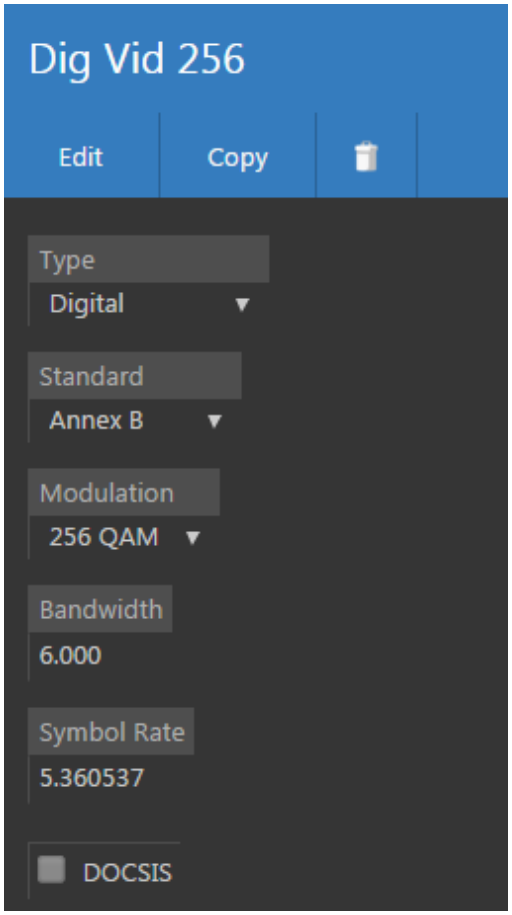
1. From the **Channel Presets** screen, select the **New** button.
2. Enter a name for the new channel preset and select **OK**.
3. The **New Channel Preset** screen will be displayed as shown in the image to the right.
4. Adjust the settings of the channel preset.
5. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the channel preset details screen where your changes will still be displayed.
6. The new channel preset should now appear in the **Channel Presets** table.



Editing an Existing Channel Preset

Perform the following steps to edit an existing limit set:

1. From the **Channel Presets** screen, select the name of the channel preset to edit and the channel preset details screen will be displayed as shown in the image to the right.
2. Select the **Edit** button to adjust the settings of the channel preset.
3. Adjust the settings of the channel preset.
4. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the channel preset details screen where your changes will still be displayed.



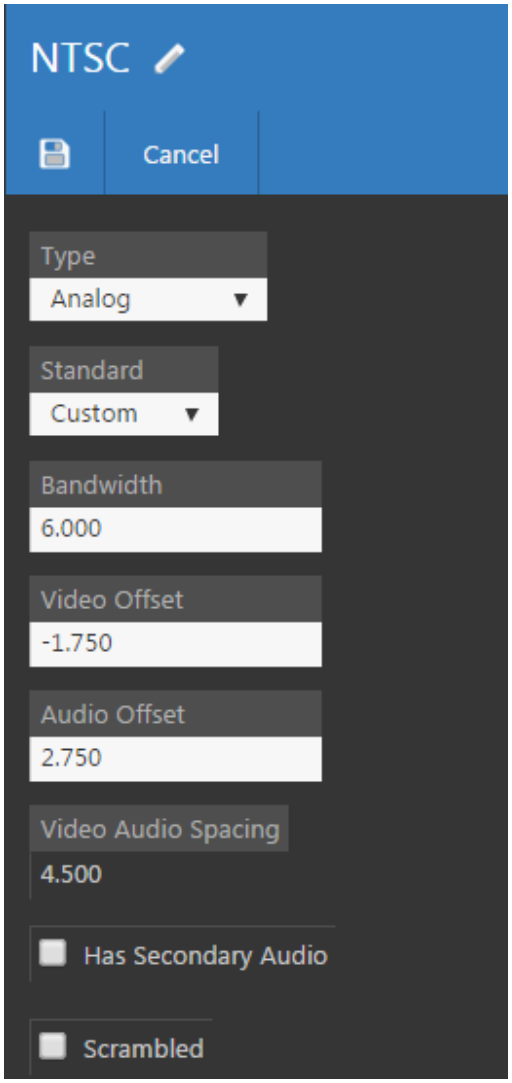
Channel Preset Setup Details

The following settings apply to each type of channel that can be selected when creating or editing a channel preset.

Analog Channels

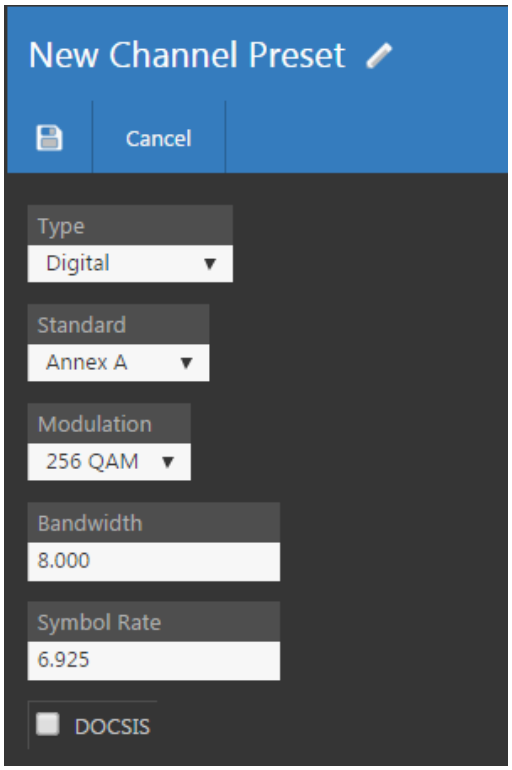
Perform the following steps to edit an analog channel preset:

1. Select **Analog** from the **Type** dropdown box.
2. The **Standard** setting is used to select the analog encoding standard. Select from the following standards:
   - **NTSC**
   - **PAL B/I/D/N/M/G/H/K**
   - **SECAM B/L/D/G/H/I/K**
   - **Custom**
3. The **Bandwidth**, **Video Offset**, **Audio Offset**, and **Video Audio Spacing** can only be adjusted when the Standard is set to Custom as shown in the image to the right. These are set based on the selected analog encoding standard.
4. If the analog encoding standard of the channel is set to **NTSC** and includes secondary audio, be sure the select the **Has Secondary Audio** checkbox.
5. If the channel is scrambled, be sure to select the **Scrambled** checkbox.



Digital Channels

Perform the following steps to edit a digital channel preset:



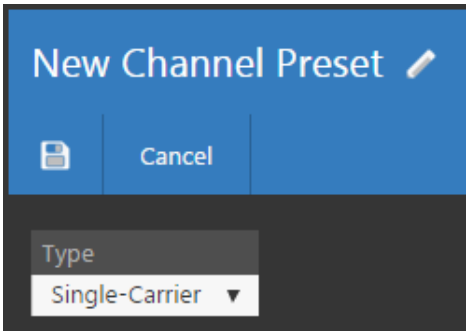
1. Select **Digital** from the **Type** dropdown box.
2. The **Standard** setting is used to select the digital encoding standard. Select from the following standards:
    - **Arbitrary**
    - **Annex A/B/C**
    - **DOCSIS 3.1**
3. If the digital encoding standard is set to **Annex A**, you can selected from the following channel settings:
    - Modulation: 256 QAM (default), Adjustable 16/32/64/128/256 QAM
    - Bandwidth: 8.000 MHz (default), Adjustable
    - Symbol Rate: 6.925 MHz (default), Adjustable
4. If the digital encoding standard is set to **Annex B**, you can selected from the following channel settings:
    - Modulation: 256 QAM (default), Adjustable 64/256 QAM
    - Bandwidth: 6.000 MHz (default), Fixed
    - Symbol Rate: 5.360537 MHz (default), Fixed
5. If the digital encoding standard is set to **Annex C**, you can selected from the following channel settings:
    - Modulation: 64 QAM (default), Fixed
    - Bandwidth: 6.000 MHz (default), Fixed
    - Symbol Rate: 5.274 MHz (default), Fixed

6. If the digital encoding standard is set to **Annex A**, **Annex B**, or **Annex C** the channel can be designated as a DOCSIS cable modem communication channel by selecting the **DOCSIS** checkbox. DOCSIS communication channels will appear within a list of DOCSIS channels that can be for cable modem logon/ testing.

Single-Carrier Channels

Perform the following steps to edit a single-carrier channel preset:

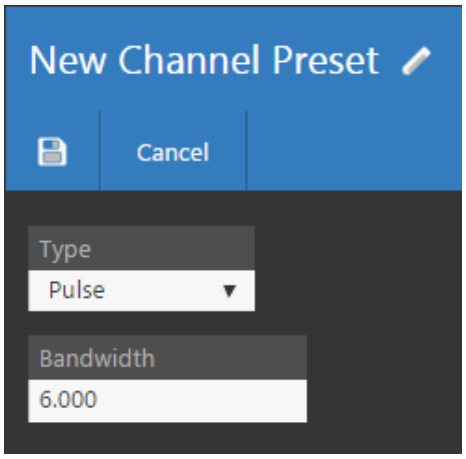
1. Select **Single-Carrier** from the **Type** dropdown box.
2. For single-carrier channels there is no further setup.



Pulse Channels

Perform the following steps to edit a pulse channel preset:

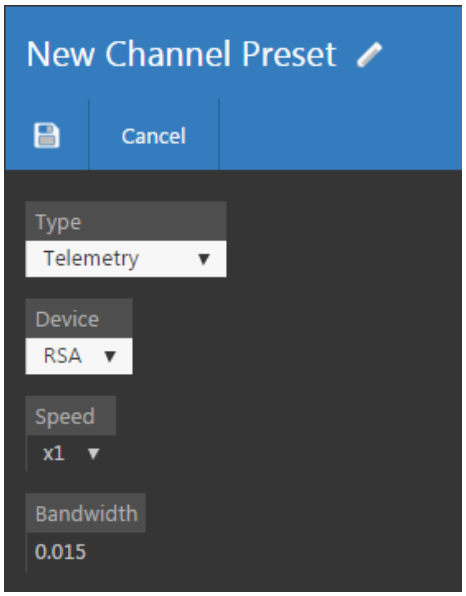
1. Select **Pulse** from the **Type** dropdown box.
2. Enter the frequency width of the pulse into the **Bandwidth** field.



Telemetry Channels

Perform the following steps to edit a telemetry channel preset:

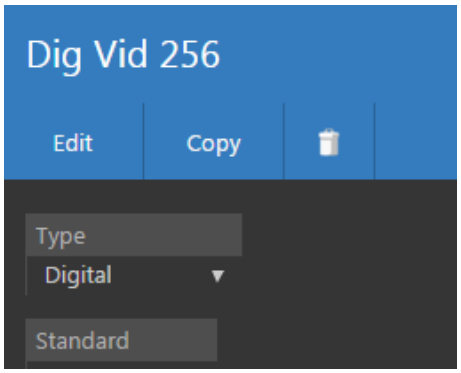
1. Select **Telemetry** from the **Type** dropdown box.
2. Select the type of device, **RSA** or **SST**.
3. For an SST, select the speed, as well.



Copying an Existing Channel Preset

Perform the following steps to copy an existing channel preset:

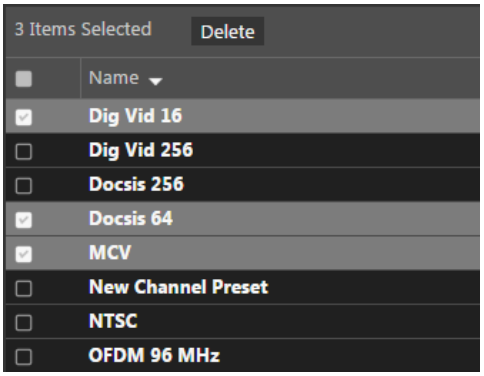
1. From the **Channel Presets** screen, select the name of the channel preset to copy and the channel preset details screen will be displayed as shown in the image to the right.
2. Select the **Copy** button.
3. Enter a new name for the copied channel preset and then select the **OK** button.
4. The copied channel preset should now appear with its new name in the **Channel Presets** table.



Deleting an Existing Channel Preset

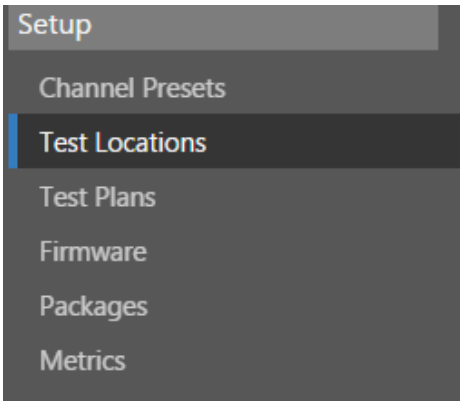
Perform the following steps to delete an existing channel preset:

1. From the **Channel Presets** screen, select the checkbox to the left of each channel preset to delete.
2. Once you have chosen the channel preset, select the **Delete** button.
3. After selecting the **Delete** button, a **Confirm** window will be displayed.



- When deleting five or less items, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **Channel Presets** screen where the item(s) will still be displayed.
- When deleting more than five items, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the item(s), or select the **Cancel** button to return to the **Channel Presets** screen where the item(s) will still be displayed.

Test Locations

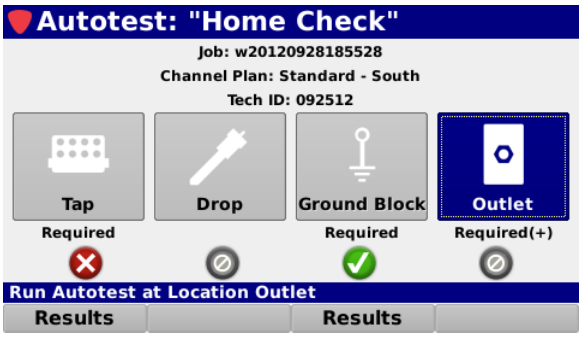


The **Test Locations** feature is used to manage the locations that are used for autotests. Test locations are used on the meter to indicate where the technician is currently performing an autotest. There are four locations available for autotesting on the meter. All Trilithic DSP family meters use test locations.

The default autotest locations **Tap, Drop, Ground Block**, and **Outlet** are shown in the meter screen capture shown in the image to the right.

The display name that is shown below each location icon can be customized to match your system. However, the meter icon and the ViewPoint name associated with each location cannot be changed.

Select **Setup > Test Locations** from the **Administration Settings** toolbar as shown in the image above.



NOTE

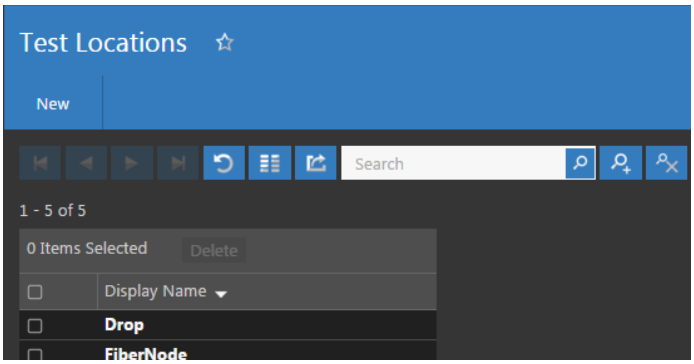
Before creating any autotests, be sure to customize the names of the test locations to match your system.

NOTE

The Administration Settings toolbar is only displayed when the current user is assigned to a group in which System Administration permissions have been granted.

Select the ☆ icon at the top of the page to add **Test Locations** to your **Home** page favorites.

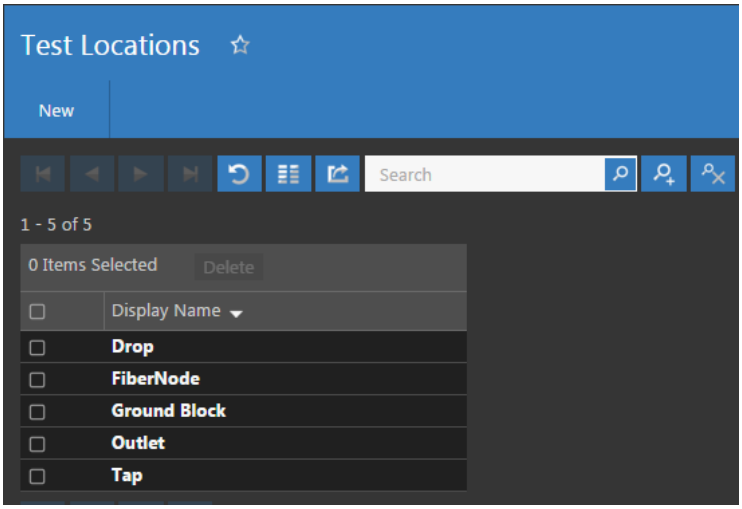
To remove **Test Locations** from your **Home** page favorites, select the ★ icon.



Test Locations Table

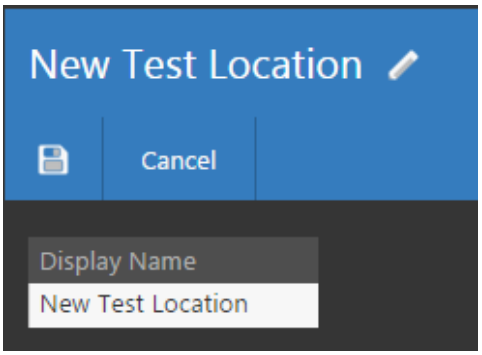
The **Test Locations** screen will be displayed as shown in the image to the right. From this screen you can perform the following actions:

- View a list of test locations
- Create new test locations
- Edit an existing test location
- Copy an existing test location
- Delete an existing test location



Creating a New Test Location

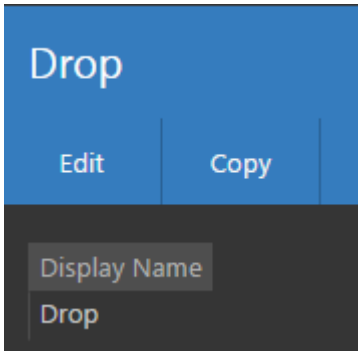
Perform the following steps to create a new test location:



1. From the **Test Locations** screen, select the **New** button.
2. Enter a name for the new test location and select **OK**.
3. The **New Test Location** screen will be displayed as shown in the image to the right.
4. Enter a meter **Display Name** for the new test location.
5. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the test plan details screen where your changes will still be displayed.
6. The new test location should now appear in the test locations list.

Editing an Existing Test Location

Perform the following steps to edit an existing test location:

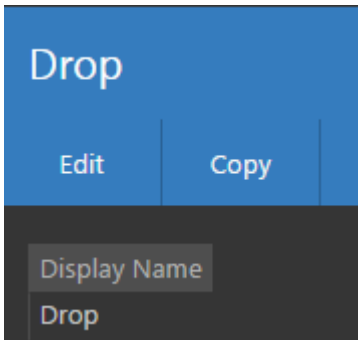


1. From the **Test Locations** screen, select the name of the test location to edit and the test location details screen will be displayed as shown in the image to the right.
2. Select the **Edit** button to adjust the settings of the test location.
3. Adjust the meter **Display Name**.
4. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.

- If you chose to save your changes, a file saved notice will appear at the top of the data display area.
- If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the test location details screen where your changes will still be displayed.

Copying an Existing Test Location

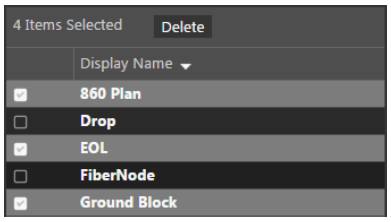
Perform the following steps to copy an existing test location:



1. From the **Test Locations** screen, select the name of the test location to copy and the test location details screen will be displayed as shown in the image to the right.
2. Select the **Copy** button.
3. Enter a new name for the copied test location and then select the **Save** button.
4. The copied test location should now appear with its new name in the **Test Locations** table.

Deleting an Existing Test Location

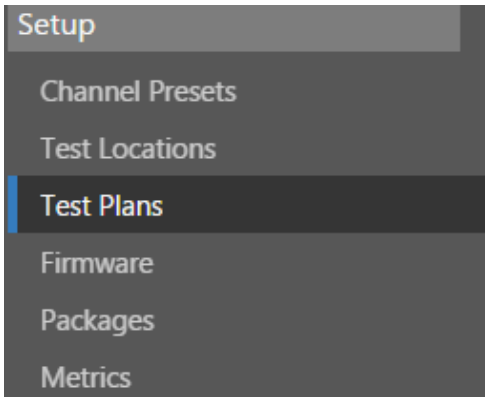
Perform the following steps to delete an existing test location:



1. From the **Test Locations** screen, select the checkbox to the left of each test location to delete.
2. Once you have chosen the test locations, select the **Delete** button.
3. After selecting the **Delete** button, a **Confirm** window will be displayed.
   - When deleting five or less items, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **No** button to return to the **Test Locations** screen where the item(s) will still be displayed.
   - When deleting more than five items, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the item(s), or select the **No** button to return to the **Test Locations** screen where the item(s) will still be displayed.

Test Plans (Original DSP Family)

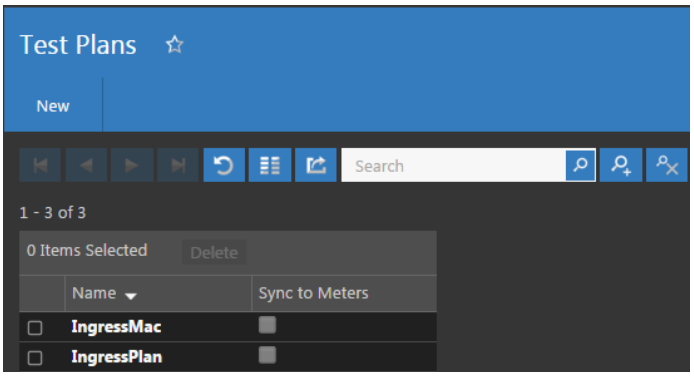
Test Plans are used to create an autotest macro that can automatically perform a series of tests at a single test location using a specific limit set. The following types of signal level meters use test plans; 860 DSP & 860 DSPi.



Select **Setup > Test Plans** from the **Administration Settings** toolbar as shown in the image to the right.

Select the ☆ icon at the top of the page to add **Test Plans** to your **Home** page favorites.

To remove **Test Plans** from your **Home** page favorites, select the ★ icon.



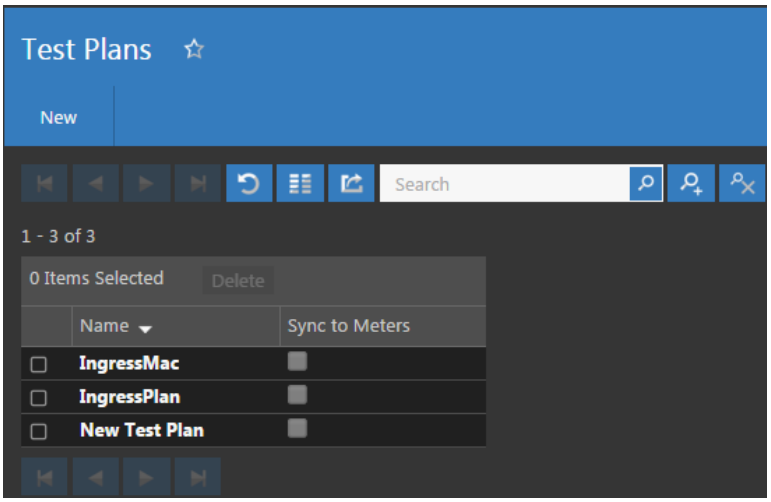
NOTE ***Before creating any test plans, be sure to customize the names of the test locations and limit sets to match your system.***

NOTE ***The Administration Settings toolbar is only displayed when the current user is assigned to a group in which System Administration permissions have been granted.***

Test Plans Table

The **Test Plans** screen will be displayed as shown in the image to the right. From this screen you can perform the following actions:

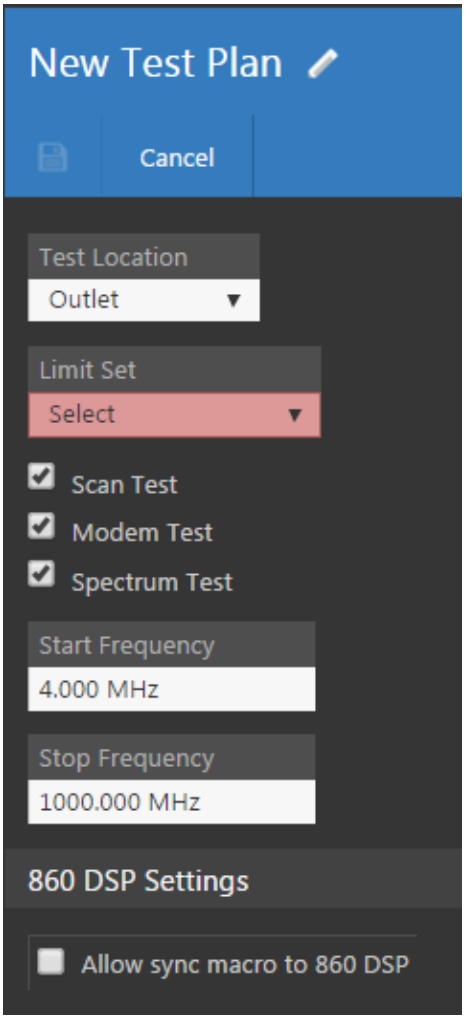
- View a list of test plans
- Create new test plans
- Edit an existing test plan
- Copy an existing test plan
- Delete an existing test plan
- Move an existing test plan from one location to another within the organization



Creating a New Test Plan

Perform the following steps to create a new test plan:

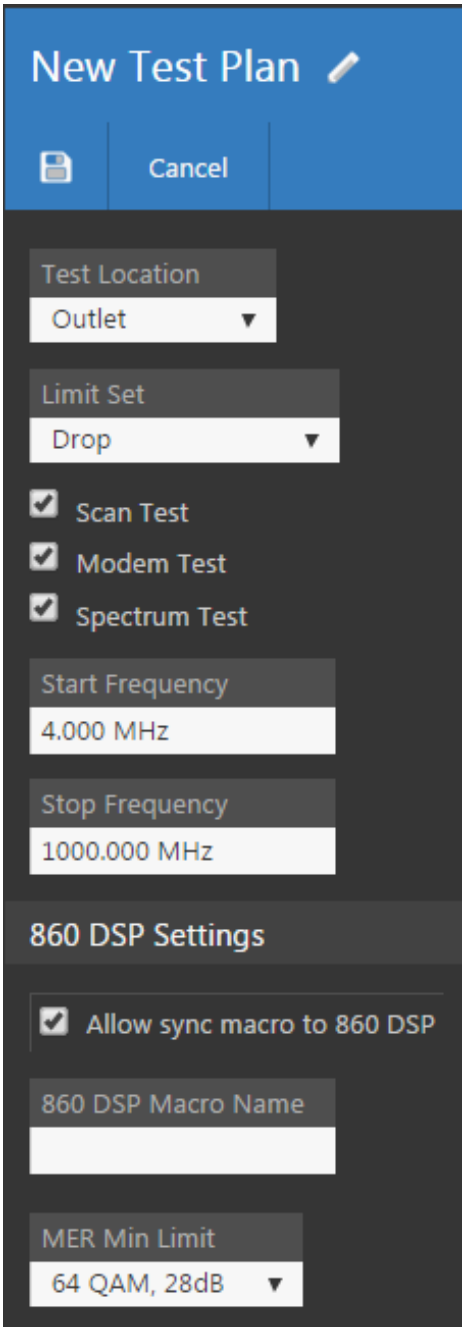
1. From the **Test Plans** screen, select the **New** button.
2. Enter a name for the new test plan and select **OK**.
3. The **New Test Plan** screen will be displayed as shown in the image to the right.
4. Adjust the settings of the test plan.
5. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the test plan details screen where your changes will still be displayed.
6. The new test plan should now appear in the **Test Plans** table.



Editing an Existing Test Plan

Perform the following steps to edit an existing test plan:

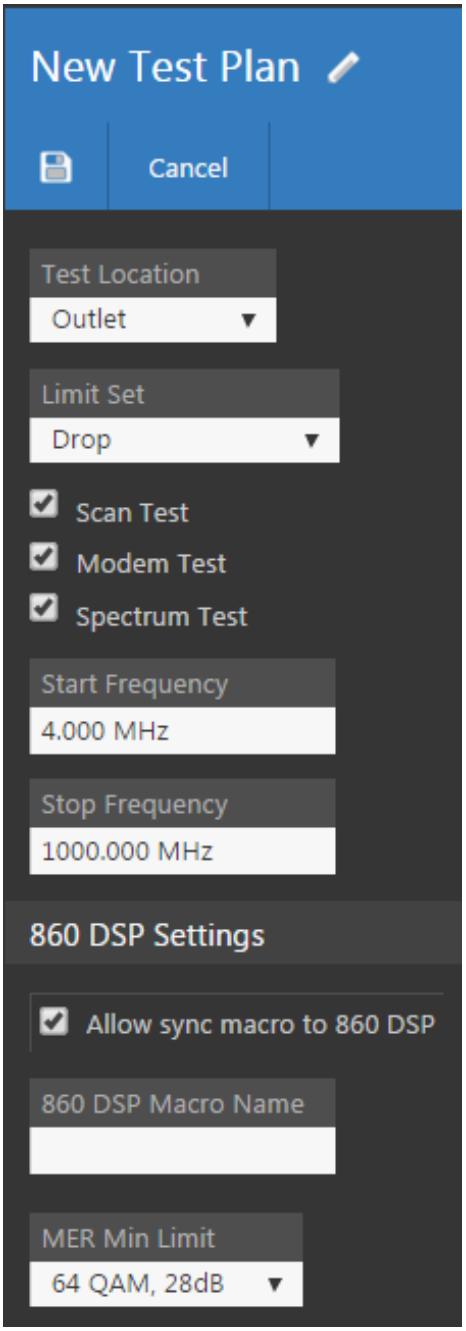
1. From the **Test Plans** screen, select the name of the test plan to edit and the test plan details screen will be displayed as shown in the image to the right.
2. Select the **Edit** button to adjust the settings of the test plan
3. Adjust the settings of the test plan.
4. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the test plan details screen where your changes will still be displayed.



Test Plan Setup Details

Perform the following steps when creating or editing a test plan.

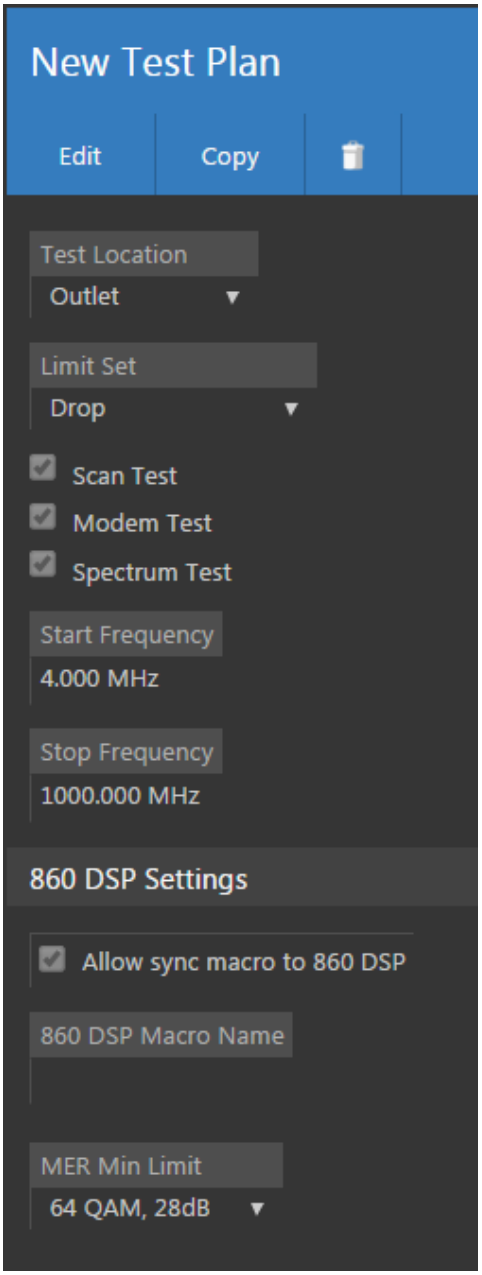
1. Select the location to be tested from the **Test Location** dropdown box.
2. Select the limit set to use during testing from the **Limit Set** dropdown box.
3. Select the **Scan Test**, **Modem Test** and/or **Spectrum Test** checkboxes to enable/disable the types of tests to be performed during testing.
4. If you would like to allow this test plan to be synchronized with 860 DSP and 860 DSPi meters, select the **Allow sync macro to 860 DSP** checkbox and enter the name of the macro in the **860 DSP Macro Name** field.
5. Select the MER minimum limit from the **MER Min Limit** dropdown box.



Copying an Existing Test Plan

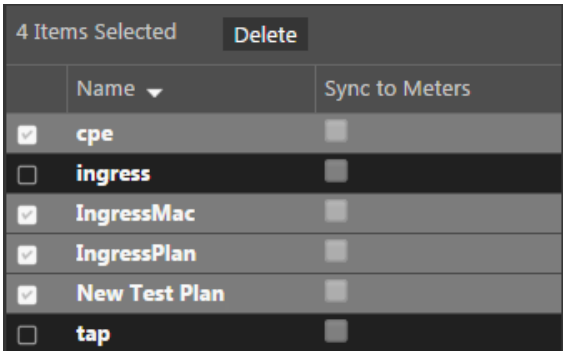
Perform the following steps to copy an existing test plan:

1. From the **Test Plans** screen, select the name of the test plan to copy and the test plan details screen will be displayed as shown in the image to the right.
2. Select the **Copy** button.
3. Enter a new name for the copied test plan and then select the **Save** button.
4. The copied test plan should now appear with its new name in the test plan table.



Deleting an Existing Test Plan

Perform the following steps to delete an existing test plan:



1. From the **Test Plans** screen, select the checkbox to the left of each test plan to delete.
2. Once you have chosen the test plan, select the **Delete** button.
3. After selecting the **Delete** button, a **Confirm** window will be displayed.
    - When deleting five or less items, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **No** button to return to the **Test Plans** screen where the item(s) will still be displayed.
    - When deleting more than five items, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the item(s) or select the **No** button to return to the **Test Plans** screen where the item(s) will still be displayed.

NOTE

To move test plans within folders of the organization, see Section III: Device Setup.

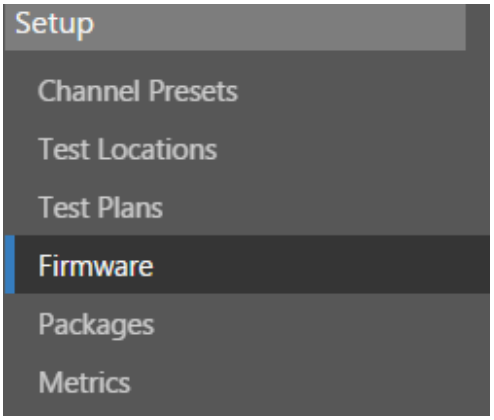
Firmware

The Firmware feature is used to manage all available firmware files for Trilithic meters.

Select **Setup > Firmware** from the **Administration Settings** toolbar as shown in the image to the right.

Select the ☆ icon at the top of the page to add **Firmware** to your **Home** page favorites.

To remove **Firmware** from your **Home** page favorites, select the ★ icon.



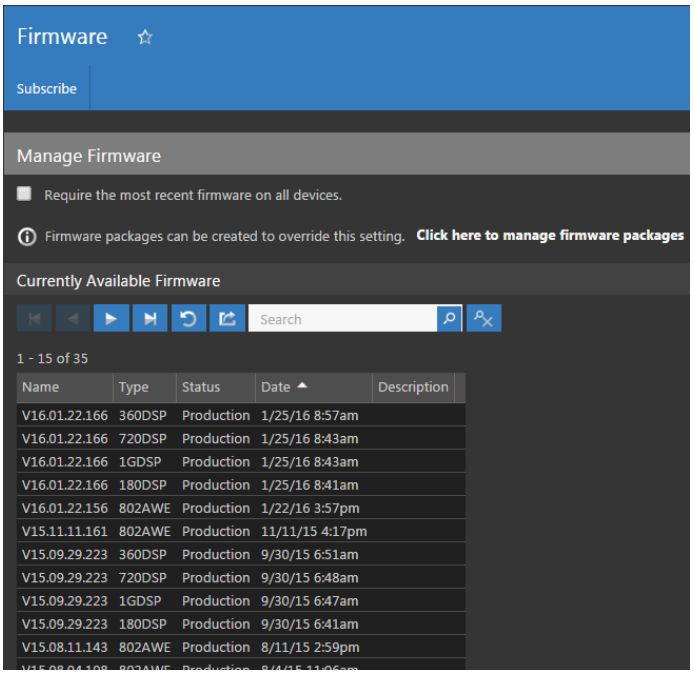
Firmware Table

The **Firmware** screen will be displayed as shown in the image to the right.

From this screen, you can see the most currently available firmware.

To require the most recent firmware on all devices, select the checkbox at the top of the screen.

To sync firmware to the latest versions on the Trilithic server, select the **Sync Now** button at the bottom of the screen.

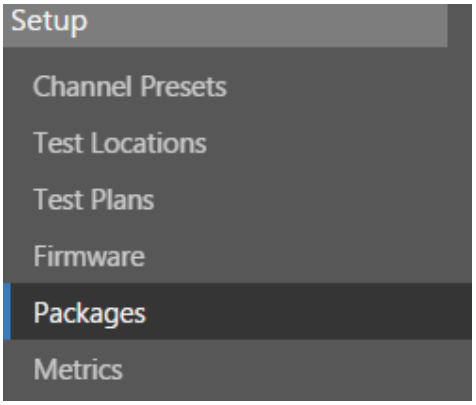


NOTE

The Administration Settings toolbar is only displayed when the current user is assigned to a group in which System Administration permissions have been granted.

Packages

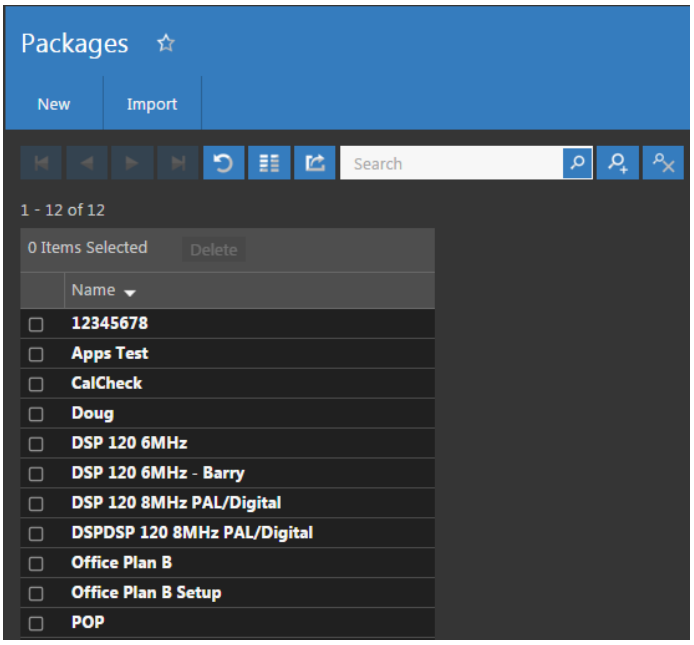
ViewPoint packages are used to transfer files to and from meters via USB flash drives. Using packages, you can import and export the following settings: channel plans, limit sets, autotests, and ethernet information.



Select **Setup > Packages** from the **Administration Settings** toolbar as shown in the image to the right.

Select the ☆ icon at the top of the page to add **Packages** to your **Home** page favorites.

To remove **Packages** from your **Home** page favorites, select the ★ icon.

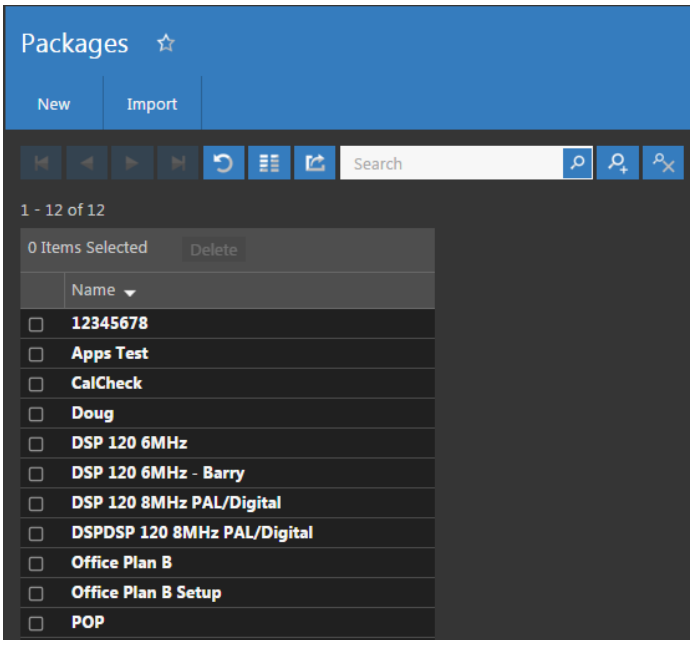


NOTE

The Administration Settings toolbar is only displayed when the current user is assigned to a group in which System Administration permissions have been granted.

Packages Table

The **Packages** screen will be displayed as shown in the image to the right.



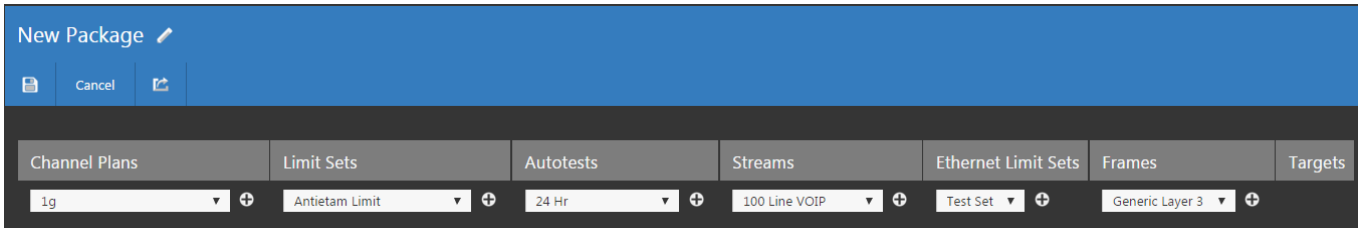
From this screen, you can perform the following actions:

- View a list of packages
- Create new packages
- Edit a package
- Copy a package
- Delete a package
- Import a package
- Export a package

Creating a Package

Perform the following steps to create a new package:

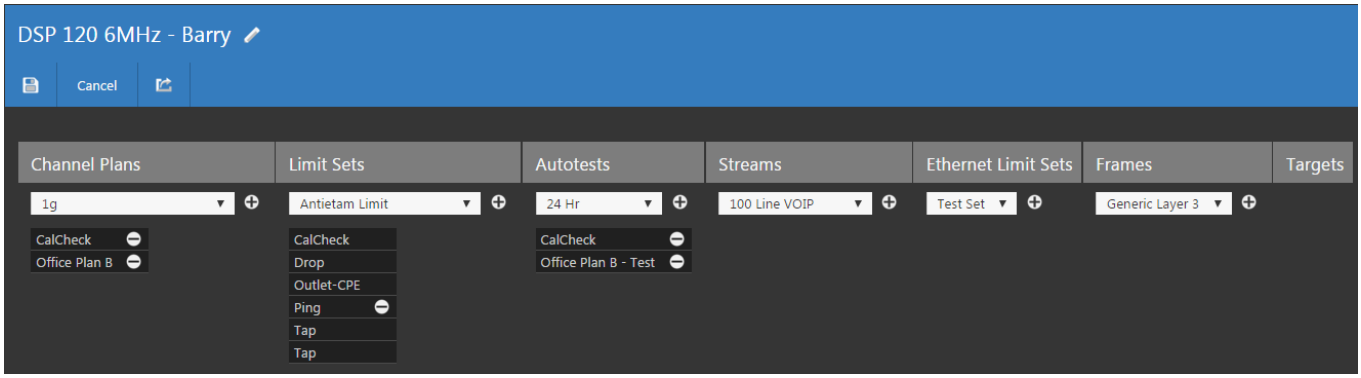
1. From the **Packages** screen, select the **New** button.
2. Enter a name for the package and select **OK**.
3. The **New Package** screen will be displayed as shown in the image below.
4. Adjust the settings of the package.
5. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the packages details screen where your changes will still be displayed.
6. The new package should now appear in the **Packages** table.



Editing a Package

Perform the following steps to edit a package:

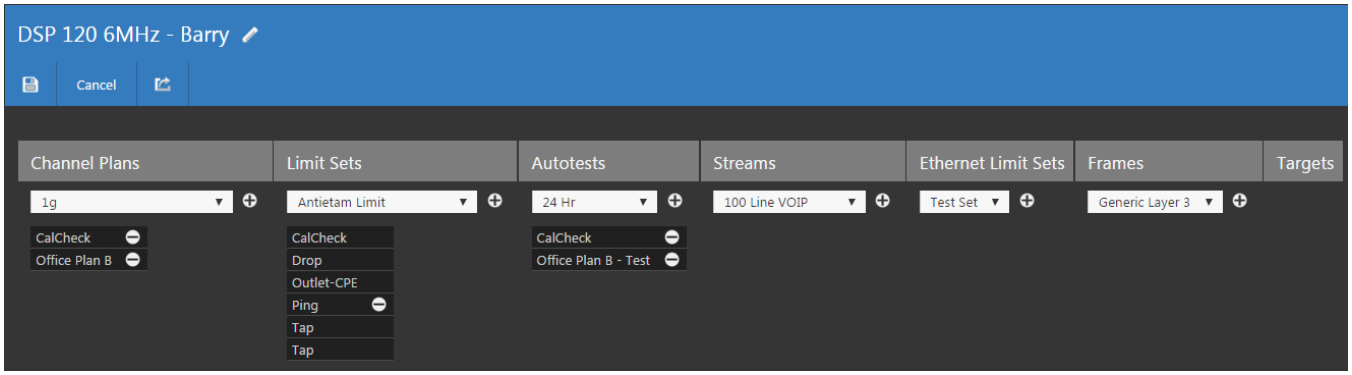
1. From the **Packages** screen, select the name of the package to edit and the package details screen will be displayed as shown in the image below.
2. Select the **Edit** button to adjust the settings of the package.
3. Adjust the settings of the package.
4. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the package details screen where your changes will still be displayed.



Package Setup Details

The following settings apply when creating or editing a package.

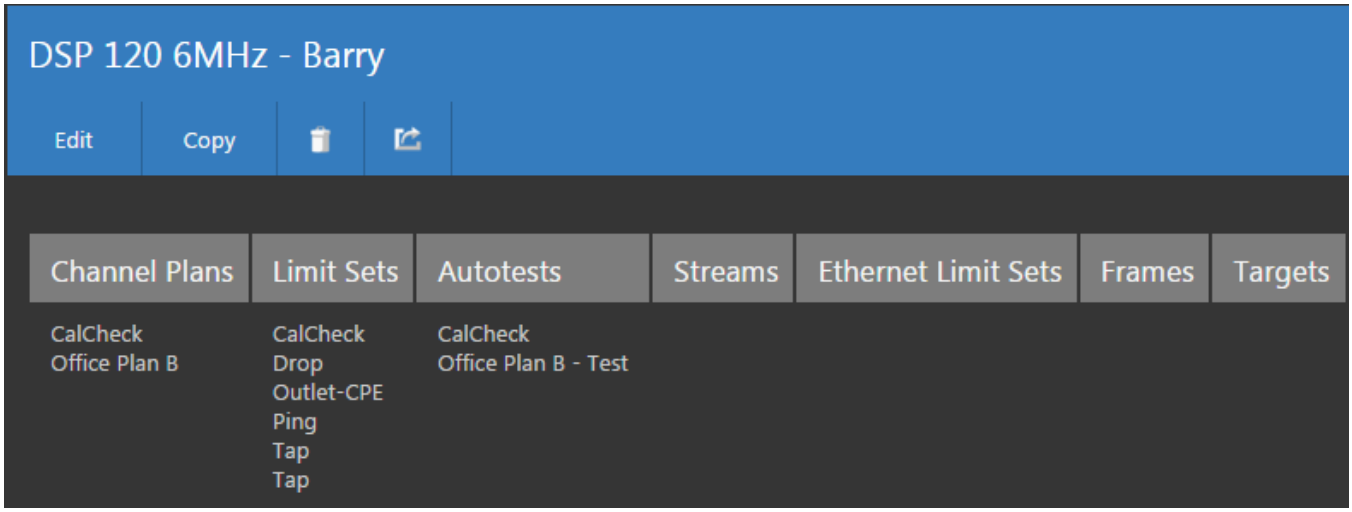
1. Select the channel plan from the **Channel Plans** dropdown box.
2. Select the limits set to use during testing from the **Limit Sets** dropdown box.
3. Select the autotests to use during testing from the **Autotests** dropdown box.
4. Select the ethernet streaming settings to use during testing from the **Streams, Ethernet Limit Sets, and Frames** dropdown boxes.
5. Select the +/- buttons to add and delete additional settings.



Copying a Package

Perform the following steps to copy a package:

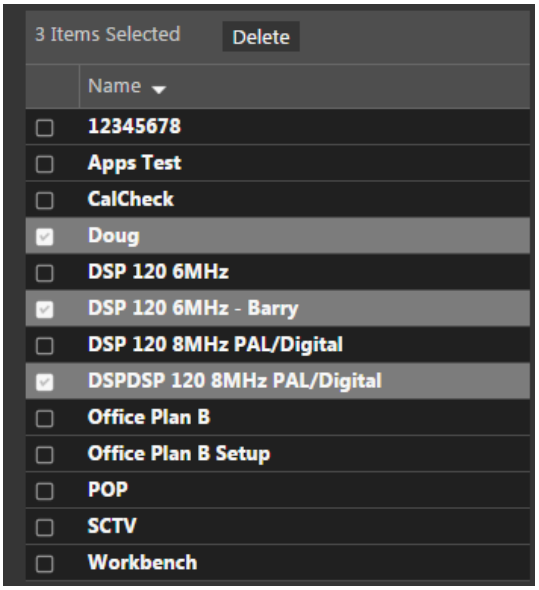
1. From the **Packages** screen, select the name of the package to copy and the packages details screen will be displayed as shown in the image below.
2. Select the **Copy** button.
3. Enter a new name for the copied package and then select the **Save** button.
4. The copied package should now appear with its new name in the packages table.



Deleting a Package

Perform the following steps to delete a package:

1. From the **Packages** screen, select the checkbox to the left of each package to delete.
2. Once you have chosen the package, select the **Delete** button.
3. After selecting the **Delete** button, a **Confirm** window will be displayed.
    - When deleting five or less items, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **No** button to return to the **Packages** screen where the item(s) will still be displayed.



    - When deleting more than five items, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the item(s) or select the **No** button to return to the **Packages** screen where the item(s) will still be displayed.

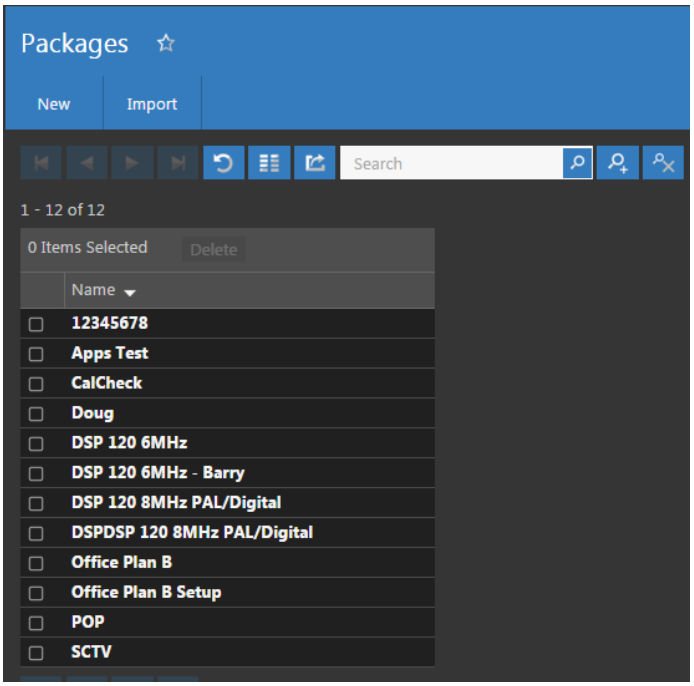
NOTE

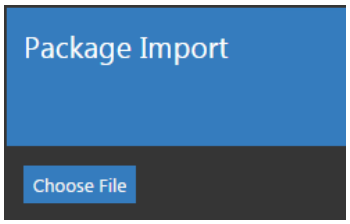
To move packages within folders of the organization, see Section III: Device Setup.

Importing a Package

Perform the following steps to import a package:

1. From the **Packages** screen, select the **Import** button as shown in the image to the right.
2. On the **Package Import** screen, select the **Choose File** button then navigate to where you saved the file on your computer or USB flash drive. It will have a .vpp extension.
3. Select **Open** to import the file.
4. The imported package should now appear in the packages table.





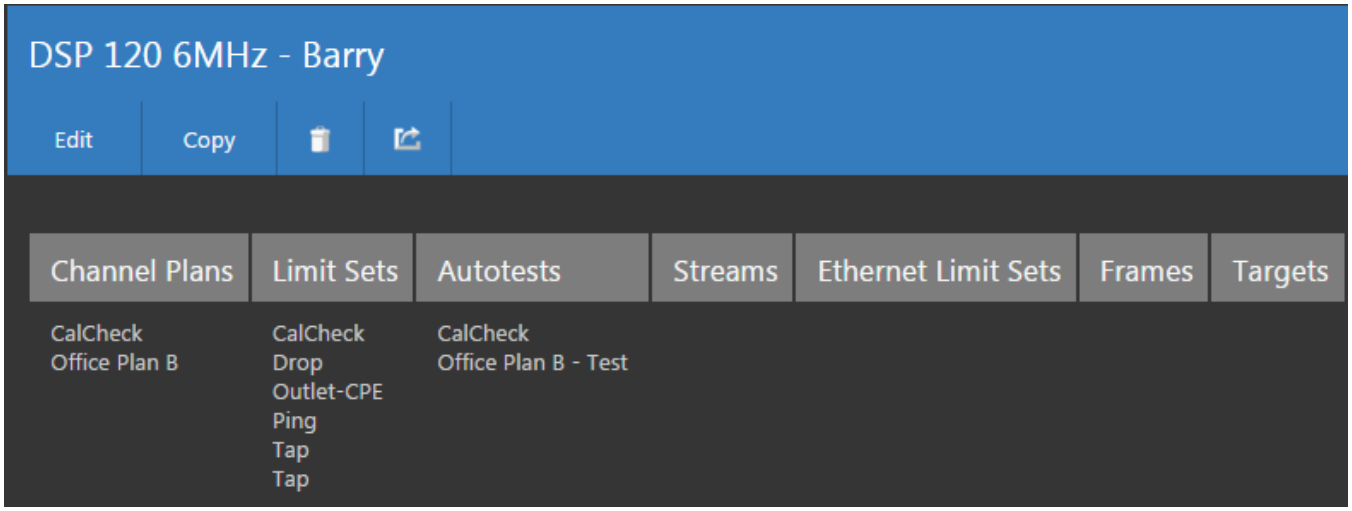
NOTE

For steps on exporting a package file from your meter, see your operation manual for the unit.

Exporting a Package

Perform the following steps to export a package from ViewPoint:

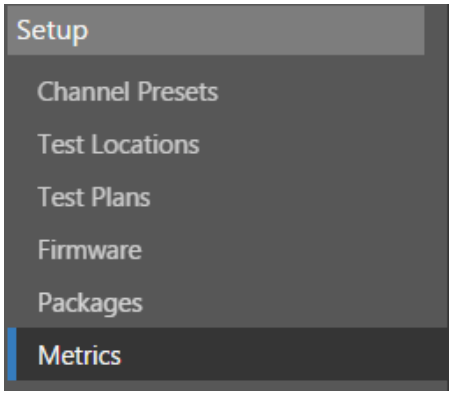
1. From the **Packages** screen, select the name of the package to export and the packages details screen will be displayed as shown in the image below.
2. Select the  button.
3. The file will be saved to your computer with a .vpp extension. Depending on your web browser settings, it will be saved to your desktop or Downloads folder.



Metrics

The **Metrics** feature is used to manage measurement metrics for 9581 SST, 860 DSPh, and MIB based units within the ViewPoint system.

Select **Setup > Metrics** from the **Administration Settings** toolbar as shown in the image to the right.



Select the ☆ icon at the top of the page to add **Metrics** to your **Home** page favorites.

To remove **Metrics** from your **Home** page favorites, select the ★ icon.

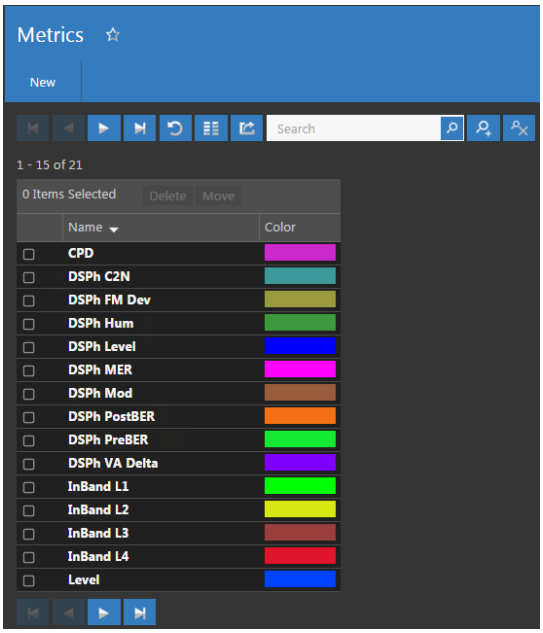
NOTE

The Administration Settings toolbar is only displayed when the current user is assigned to a group in which System Administration permissions have been granted.

Metrics Table

The **Metrics** screen will be displayed as shown in the image to the right. From this screen you can perform the following actions:

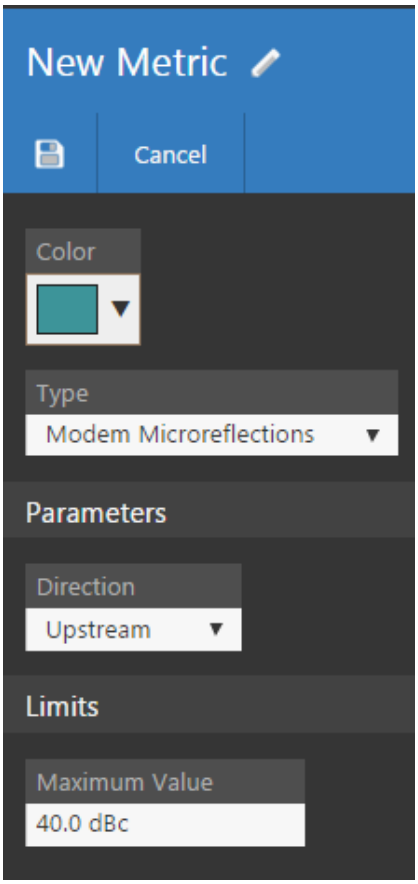
- View a list of metrics
- Create new metric
- Edit an existing metric
- Copy an existing metric
- Move an existing metric from one location to another within the organization
- Delete an existing metric



Creating a New Metric

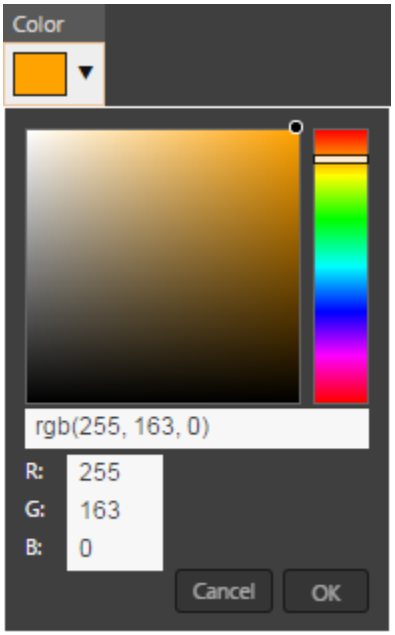
Perform the following steps to create a new metric:

1. From the **Metrics** screen, select the **New** button.
2. Enter a name for the new metric to be used on dashboards and select **OK**.
3. The new metric screen will be displayed as shown in the image to the right.
4. Adjust the settings of the metric.
5. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the metric details screen where your changes will still be displayed.



6. The new test plan should now appear in the **Metrics** table.Select the color that will represent this metric on dashboards from the **Color** dropdown box as shown in the image to the right.

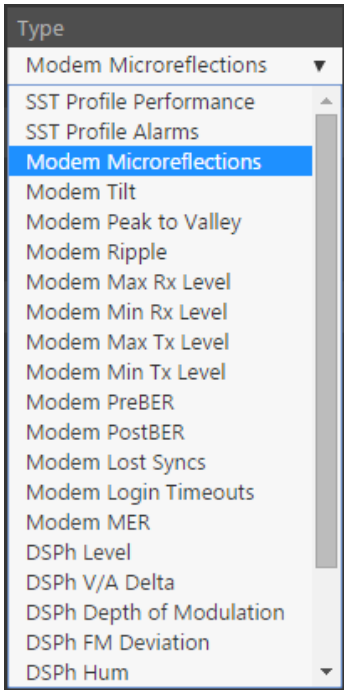
    - Use the vertical color bar at the right side of the dropdown menu to adjust the color family.
    - Once you have adjusted the color family, select the exact color by clicking within the color picker at the left side of the dropdown menu.
    - Optionally, enter the RGB values of the desired color in the corresponding fields at the bottom of the dropdown menu.
    - Select the **OK** button to change the color or the **Cancel** button to exit the color picker without changing the color.



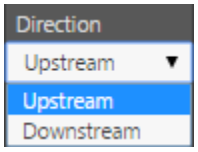
Modem Metrics

Perform the following steps to adjust the modem metrics:

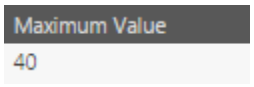
1. Select the **Type** dropdown box to choose from any of the modem metrics shown in the image to the right.

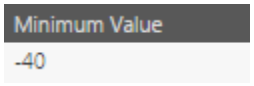


2. Select the **Direction** dropdown box to choose from either the **Upstream** or **Downstream** measurement direction. This feature is not available for certain types of metrics as shown in the table in the following section.



3. Enter the measurement limit value into either the **Maximum Value** or **Minimum Value** field.





4. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the metric details screen where your changes will still be displayed.
5. The new metric should now appear in the **Metrics** table.

Detailed Modem Metrics Settings

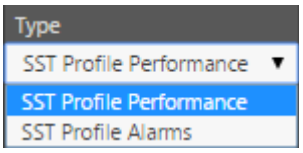
The following detailed settings are available when adjusting the modem metrics:

Type	Parameters	Value	Limits	Default Value
Modem Microreflections	Direction	Upstream	Maximum Value	40
		Downstream		
Modem Tilt	Equalization	Pre	Maximum Value	4.0 dB
		Post		
Modem Peak to Valley	Equalization	Pre	Maximum Value	4.0 dB
		Post		
Modem Ripple	Equalization	Pre	Maximum Value	4
		Post		
Modem Max Rx Level	Direction	Upstream	Maximum Value	60
		Downstream		
Modem Min Rx Level	Direction	Upstream	Minimum Value	-40
		Downstream		
Modem Max Tx Level	Direction	Upstream	Maximum Value	60
Modem Min Tx Level	Direction	Upstream	Minimum Value	-40
Modem PreBER	Direction	Upstream	Maximum Value	1e-7
		Downstream		
Modem PostBER	Direction	Upstream	Maximum Value	1e-7
		Downstream		
Modem Lost Syncs	N/A	N/A	Maximum Value	0
Modem Login Timeouts	N/A	N/A	Maximum Value	0
Modem MER	Direction	Upstream	Minimum QPSK	20
			Minimum 8 QAM	20
			Minimum 16 QAM	20
			Minimum 32 QAM	20
			Minimum 64 QAM	20
			Minimum 128 QAM	20
		Downstream	Minimum 64 QAM	20
			Minimum 256 QAM	20

9581 SST Metrics

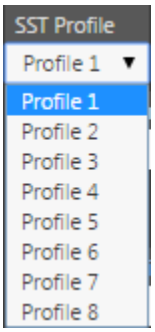
Perform the following steps to adjust the 9581 SST metrics:

1. Select the **Type** dropdown box to choose from any of the metrics shown in the image to the right.

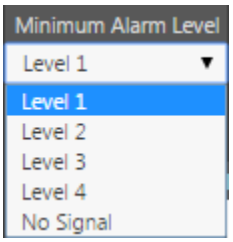


2. Select the **SST Profile** dropdown box to choose from one of eight measurement profiles as shown in the image to the right.

   The profiles can be adjusted in the **Administration>Site Settings>RPM** settings.



3. Select the **Minimum Alarm Level** dropdown box to choose from one of five alarm levels as shown in the image to the right. The **No Signal** selection is not available when **SST Profile Alarms** has been selected from the **Type** dropdown box.



4. Enter the maximum percent of time in alarm value into the **Maximum % Time in Alarm** field. This feature is not available for certain types of metrics as shown in the table in the following section.
5. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
   - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
   - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the metric details screen where your changes will still be displayed.
6. The new metric should now appear in the **Metrics** table.

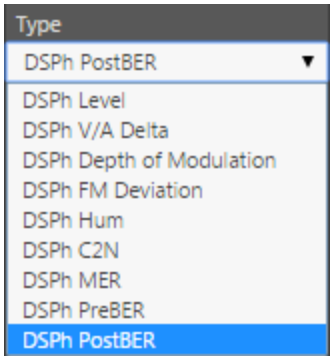
Detailed SST Metrics Settings

The following detailed settings are available when adjusting the SST metrics:

Type	Parameters	Value	Limits	Default Value
SST Profile Performance	SST Profle	Profile 1	N/A	N/A
		Profile 2		
		Profile 3		
		Profile 4		
		Profile 5		
		Profile 6		
		Profile 7		
		Profile 8		
	Minimum Alarm Level	Level 1	Maximum % Time in Alarm	50
		Level 2		50
		Level 3		50
		Level 4		50
		No Signal		100
SST Profile Alarms	SST Profle	Profile 1	N/A	N/A
		Profile 2		
		Profile 3		
		Profile 4		
		Profile 5		
		Profile 6		
		Profile 7		
		Profile 8		
	Minimum Alarm Level	Level 1	N/A	N/A
		Level 2		
		Level 3		
		Level 4		

860 DSPh Metrics

Perform the following steps to adjust the 860 DSPh metrics:

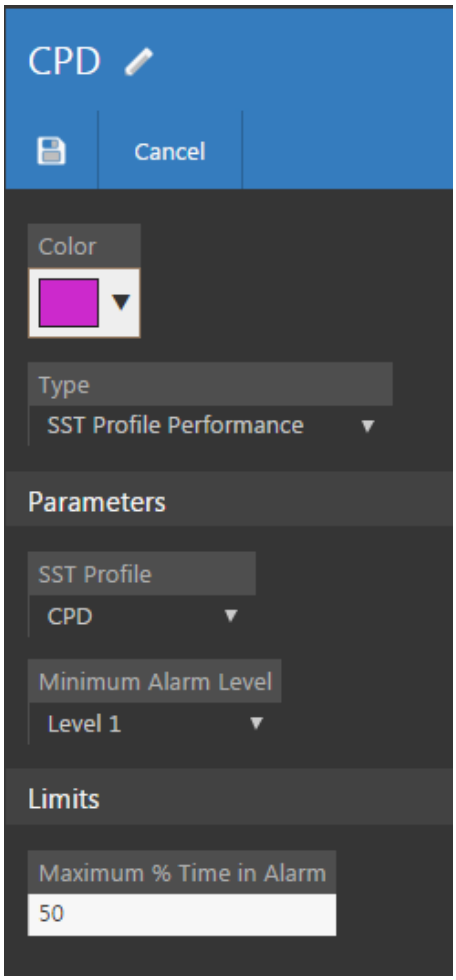


1. Select the **Type** dropdown box to choose from any of the metrics shown in the image to the right.
2. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the metric details screen where your changes will still be displayed.
3. The new metric should now appear in the **Metrics** table.

Editing an Existing Metric

Perform the following steps to edit an existing metric:

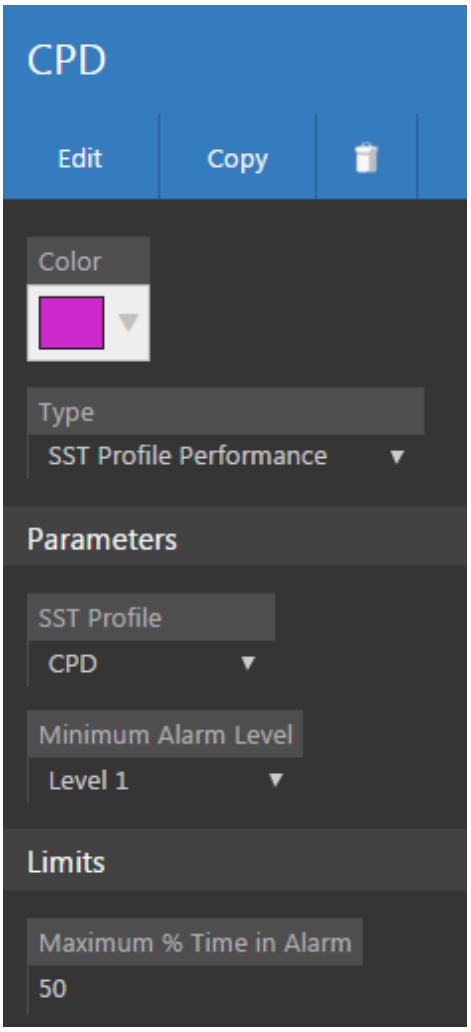
1. From the **Metrics** screen, select the name of the metric to edit and the metric details screen will be displayed as shown in the image to the right.
2. Select the **Edit** button to adjust the settings of the metric.
3. Adjust the settings of the metric.
4. Select the color that will represent this metric on dashboards from the **Color** dropdown box.
5. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the bottom of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the metric details screen where your changes will still be displayed.



Copying an Existing Metric

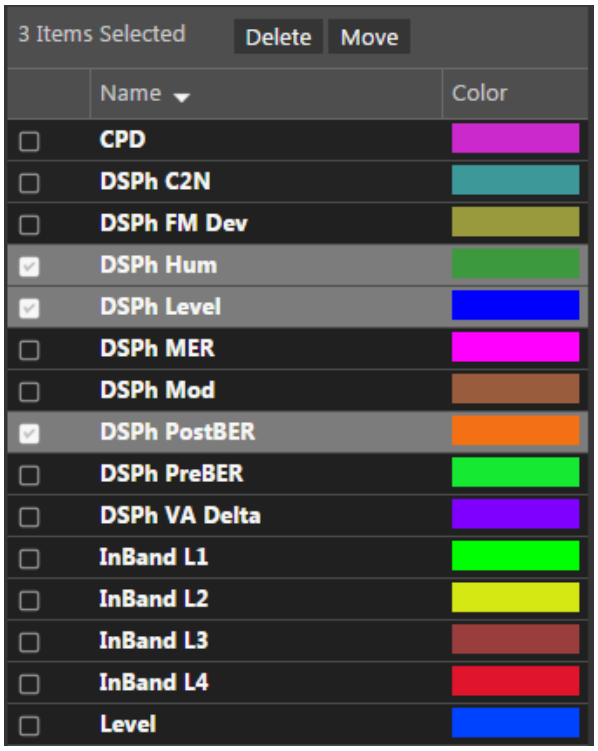
Perform the following steps to copy an existing metric:

1. From the **Metrics** screen, select the name of the metric to copy and the metric details screen will be displayed as shown in the image to the right.
2. Select the **Copy** button.
3. Enter a new name for the copied metric and adjust the settings for the metric as shown in *Creating a New Metric* earlier in this section.
4. Select the **Save** button and the copied metric should now appear with its new name in the **Metrics** table.



Deleting an Existing Metric

Perform the following steps to delete an existing metric:



1. From the **Metrics** screen, select the checkbox to the left of each metric to delete.
2. Once you have chosen the metric, select the **Delete** button.
3. After selecting the **Delete** button, a **Confirm** window will be displayed.
    - When deleting five or less items, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **No** button to return to the **Metrics** screen where the item(s) will still be displayed.
    - When deleting more than five items, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the item(s), or select the **No** button to return to the **Metrics** screen where the item(s) will still be displayed.

NOTE

To move metrics within folders of the organization, see Section III: Device Setup.

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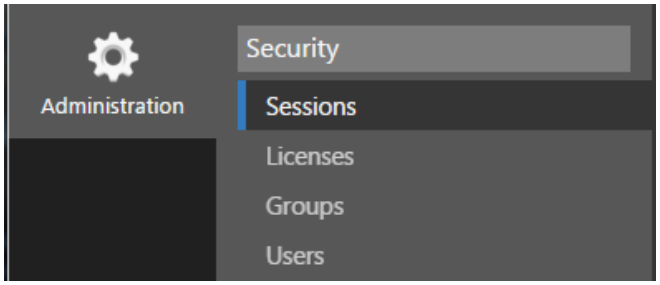
Overview

The **Security** feature is used to manage the licenses, groups, users, and permissions of the ViewPoint system.

Select any of the features under **Security** from the **Administration Settings** toolbar as shown in the image to the right.



NOTE

The Administration Settings toolbar is only displayed when the current user is assigned to a group in which System Administration permissions have been granted.

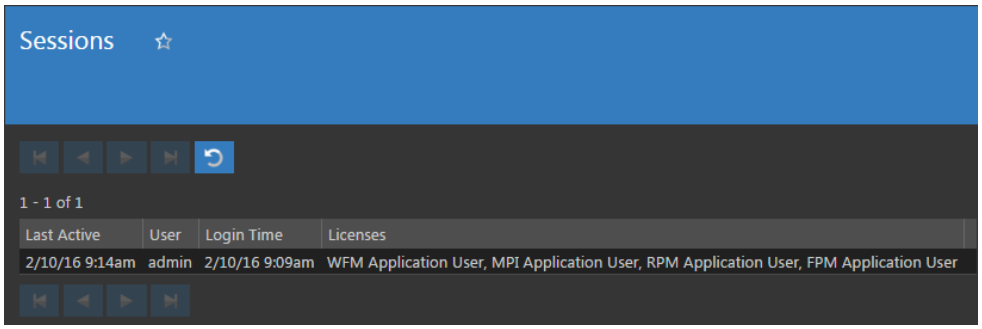
Sessions

Sessions are used to monitor activity on the ViewPoint system.

Select **Security > Sessions** from the **Administration Settings** toolbar as shown in the image to above.

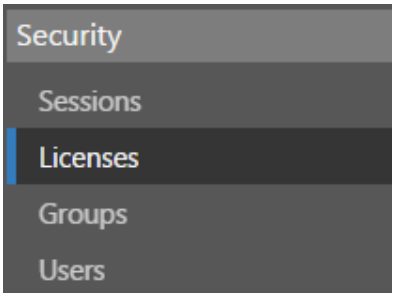
Select the ☆ icon at the top of the page to add **Sessions** to your **Home** page favorites.

To remove **Sessions** from your **Home** page favorites, select the ★ icon.



Licenses

The **Licenses** feature is used to manage licensing of the ViewPoint system.



Select **Security > Licenses** from the **Administration Settings** toolbar as shown in the image to the right.

Select the ☆ icon at the top of the page to add **Licenses** to your **Home** page favorites.

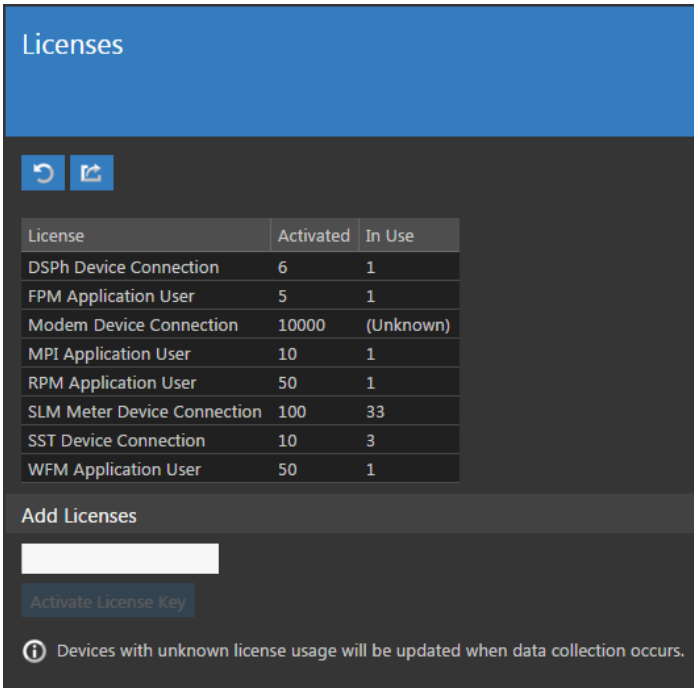
To remove **Licenses** from your **Home** page favorites, select the ★ icon.

NOTE

The Administration Settings toolbar is only displayed when the current user is assigned to a group in which System Administration permissions have been granted.

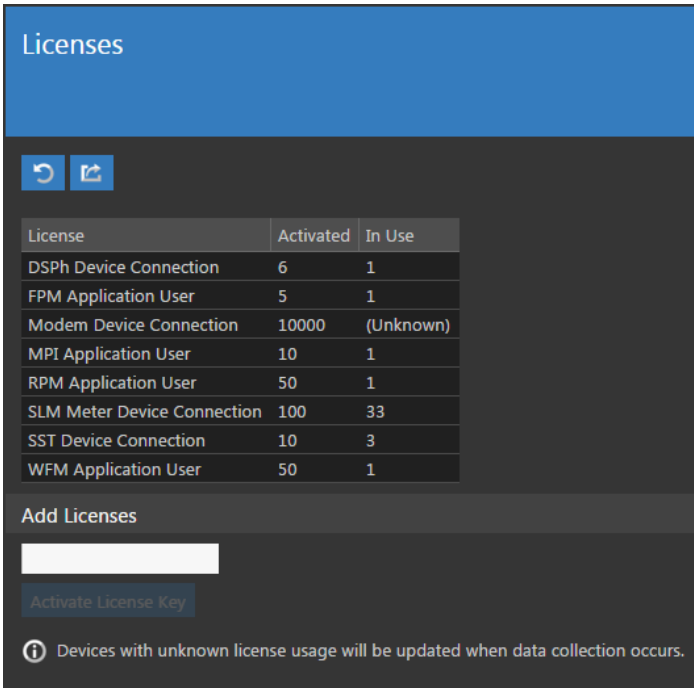
From this screen you can perform the following actions:

- View a list of user/hardware licenses
- Add new user/hardware licenses



License Management

Each module of the ViewPoint system includes both hardware and user licenses and the table shown in the image below provides the following information licensing information:



- **License** - This column includes the types of licenses that are available on the ViewPoint Server.
- **Activated** - This column includes the maximum number of simultaneous users/devices that are activated for connection to the corresponding module of the ViewPoint Server.
- **In Use** - This column includes the total number of users/devices that are simultaneously connected/ logged-in to the corresponding module of the ViewPoint Server. This number cannot exceed the total number of active licenses for each module.

NOTE

The number of users in ViewPoint is unlimited. However, if the number In Use equals or exceeds the number of Activated licenses, the next user that tries to log in will not be able to view data for the module that has no available licenses. Additional users will not be able to view data until the number In Use falls below the number of Active licenses or additional user licenses are added.

Adding a New License

To add a new user/hardware license, perform the following steps:

1. Obtain the desired license keys for the ViewPoint system from Trilithic.
2. Enter the license key into the provided field.
3. Select the **Activate License Key** button to apply the new licenses.

Hardware Licenses

The ViewPoint system includes the following types of hardware licenses that are assigned on a per device basis:

- **WFM Meter Connection License** – This license is for each individual meter that is connected for management using the **WFM Module**.
- **RPM Return Monitor Connection License** – This license is for each individual 9581 SST unit that is connected for monitoring using the **RPM Module**.
- **MPI Modem Connection License** – This license is for each individual modem that is connected for monitoring using the **MPI Module**.
- **FPM Forward Monitor Connection License** – This license is for each individual 860 DSPh that is connected for monitoring using the **FPM Module**.


NOTE

To release a hardware license, the connected device must be deleted from ViewPoint. This will disable any monitoring or syncing of the device and will remove any custom settings associated with the device.

User Licenses

Each user license is assigned on a per module basis and applies only to users that belong to a group in which permissions (other than None) have been selected for the corresponding Group Feature:

- **WFM Application User License** – This license is for each individual user that belongs to a group with permissions with access to the **WFM Module**.
- **RPM Application User License** – This license is for each individual user that belongs to a group with permissions with access to the **RPM Module**.
- **MPI Application User License** – This license is for each individual user that belongs to a group with permissions with access to the **MPI Module**.
- **FPM Application User License** – This license is for each individual user that belongs to a group with permissions with access to the **FPM Module**.

Groups

The **Groups** feature is used to manage the group permissions granted to users within the ViewPoint system.

Select **Security > Groups** from the **Administration Settings** toolbar as shown in the image to the right.

Select the ☆ icon at the top of the page to add **Groups** to your **Home** page favorites.

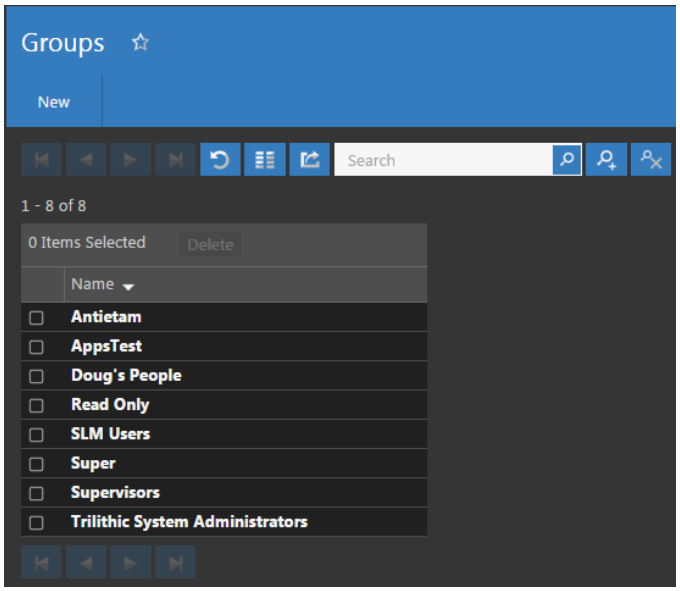
To remove **Groups** from your **Home** page favorites, select the ★ icon.

NOTE

The Administration Settings toolbar is only displayed when the current user is assigned to a group in which System Administration permissions have been granted.

Groups Table

The **Groups** screen will be displayed as shown in the image to the right. From this screen you can perform the following actions:



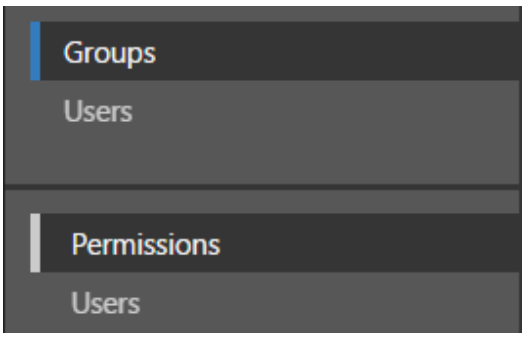
- View a list of groups
- Create new groups
- Edit an existing group
- Copy an existing group
- Delete an existing group

If Mixed or Windows authentication is enabled, ViewPoint assigns permissions to users based on their Windows Groups (only if they are Windows users in mixed mode). This is done by matching Windows group names to ViewPoint group names.

Creating & Editing Groups

Perform the following steps to create a new group:

1. From the **Groups** screen, select the **New** button.
2. Enter a name for the new group and select **OK**.
3. The **New Group** screen will be displayed as shown in the image on the next page. Also, at the bottom of the **Administration Settings** toolbar, the **Permissions** section will be highlighted as shown in the image to the right.



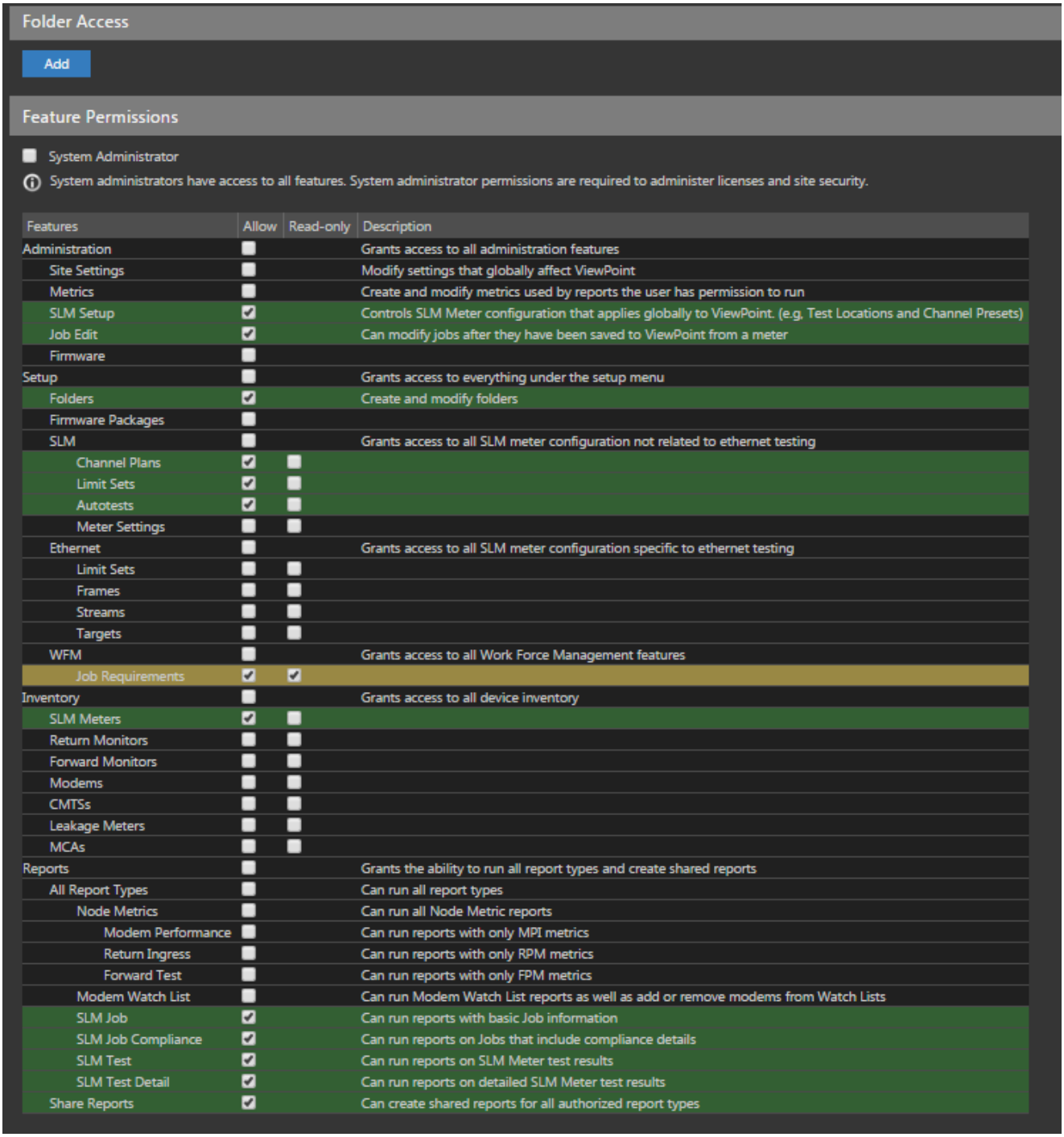
4. Adjust the permissions settings of the group.
5. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the group details screen where your changes will still be displayed.
6. The new group should now appear in the **Groups** table.

NOTE

Features related to specific modules are only displayed when the corresponding ViewPoint module has been activated.

NOTE

To edit permissions in an existing group, make your adjustments and select the Save button.



Group Feature Permissions

Permissions & User Licensing

Users that belong to a group in which permissions have been granted will require a user license for the corresponding module as follows:

- **WFM - Application User License** – This license is for each individual user that belongs to a group granted permission to access the **Meters** or **WFM** Group Feature Permissions.
- **RPM - Application User License** – This license is for each individual user that belongs to a group granted permission to access the **Metrics** or **RPM** Group Feature Permissions.
- **MPI - Application User License** – This license is for each individual user that belongs to a group granted permission to access the **Metrics** or **MPI** Group Feature Permissions.
- **FPM - Application User License** – This license is for each individual user that belongs to a group granted permission to access the **Metrics** or **FPM** Group Feature Permissions.


NOTE

For more information about user licensing for the ViewPoint Server, see the Licenses section, earlier in this chapter.

Group Feature Permissions Setup Details

The **Group Feature Permissions** screen provides control of permission settings for many features within the ViewPoint system.

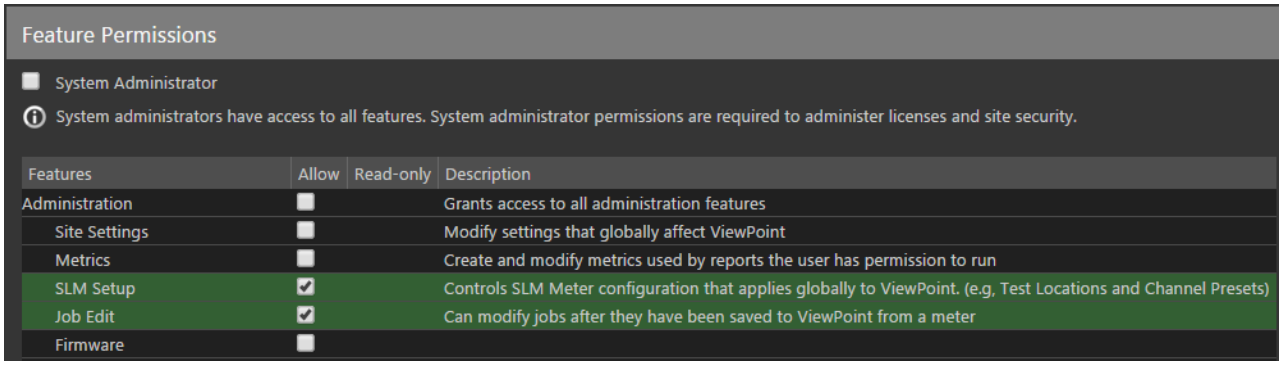
The following options are available when using group permissions:

- **Allow** - This option enables full access to this feature.
- **Read-Only** – This option will allow read-only access to this feature. This setting is not available for **Administration** and some **Setup** features.

If the **System Administrator** checkbox is selected, the group or user has access to all features. System Administrator permissions are required to administer licenses and site security.

Administration

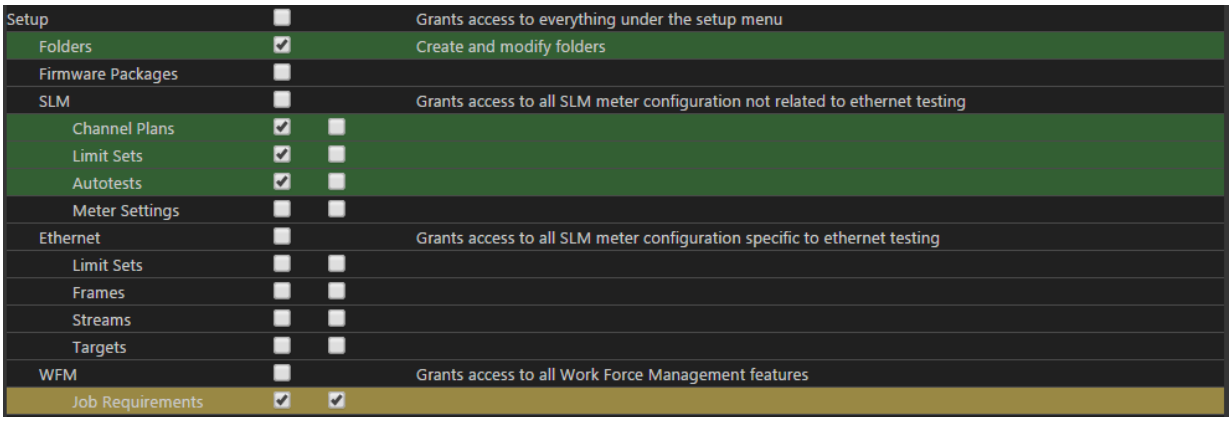
Along with allowing a group Sytem Administrator access, you also have the option to set permissions for Site Administration roles. These include: site settings, metrics, signal level meter setup, jobs, and firmware. The image below shows the permission settings available for the **Site Administration** features.



Device Setup

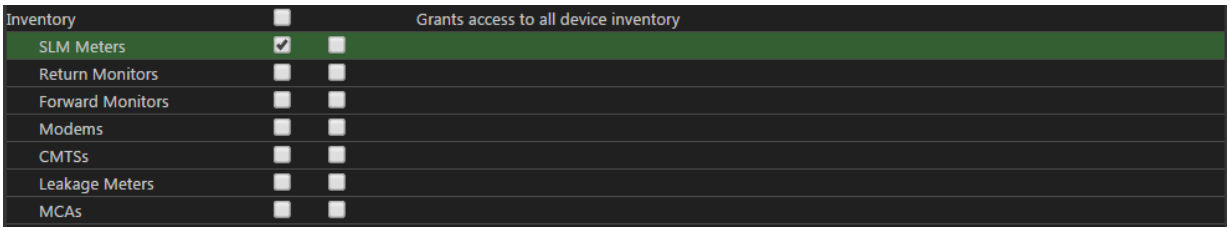
The ViewPoint system includes restrictions on user licenses for the **Setup** function within the **WFM Module**. These include: full Setup feature access, read-only access, creating organization folders, maintaining firmware packages, and signal level meter and ethernet device setup permissions. The image below shows the permission settings available for the **Setup** features.

If the **WFM** feature is selected, all users assigned to this group will require a **ViewPoint WFM User License** in order to login to ViewPoint.



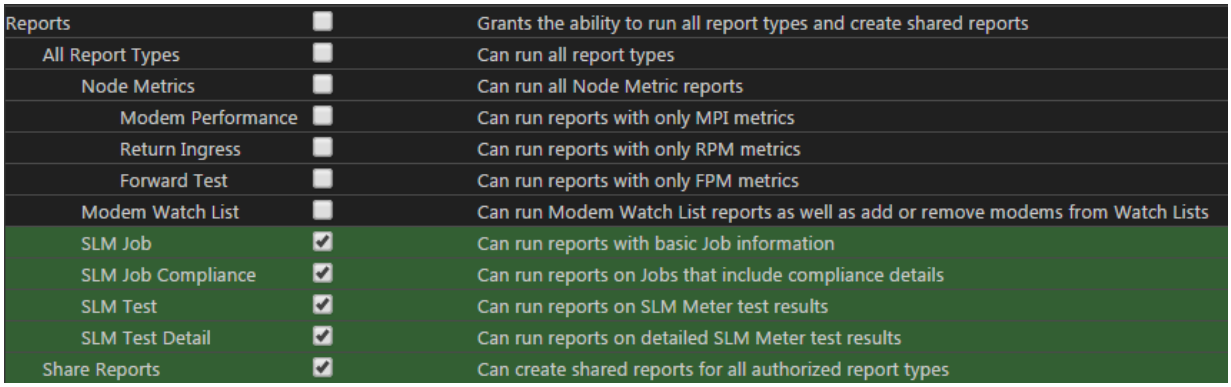
Inventory Management

The ViewPoint system includes restrictions on user licenses for the **Inventory** function. These include: full Inventory feature access, read-only access, and individual product category permissions. The image below shows the permission settings available for the **Inventory** features.



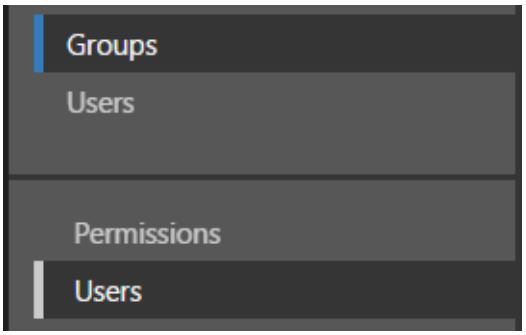
Reports

The ViewPoint system includes restrictions on user licenses for the **Reports** function. These include: full Reports feature access and individual report category permissions. The image below shows the permission settings available for the **Reports** features.



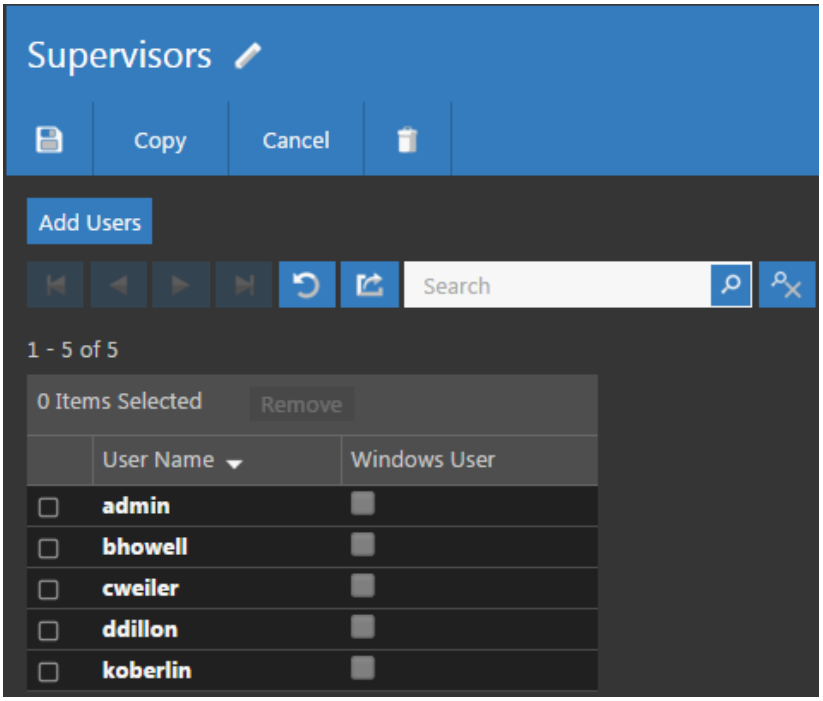
Group Users

The **Group Users** feature provides the ability to view which users are assigned to the currently selected group. Perform the following steps to view the users associated with the current group:



At the bottom of the **Administration Settings** toolbar, select **Users** as shown in the image to the right.

The **Group Users** screen by default displays a table of all of the users in the group as shown in the image below.

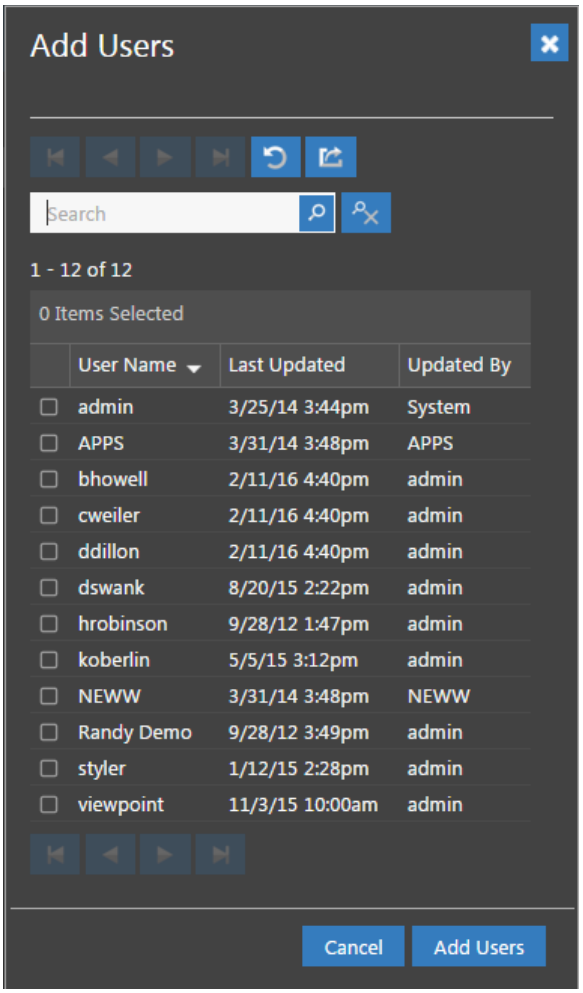


Add Users to a Group

Select the **Add Users** button from the **Group Users** screen of the current group.

The **Add Users** screen by default displays a table of available users within ViewPoint as shown in the image to the right.

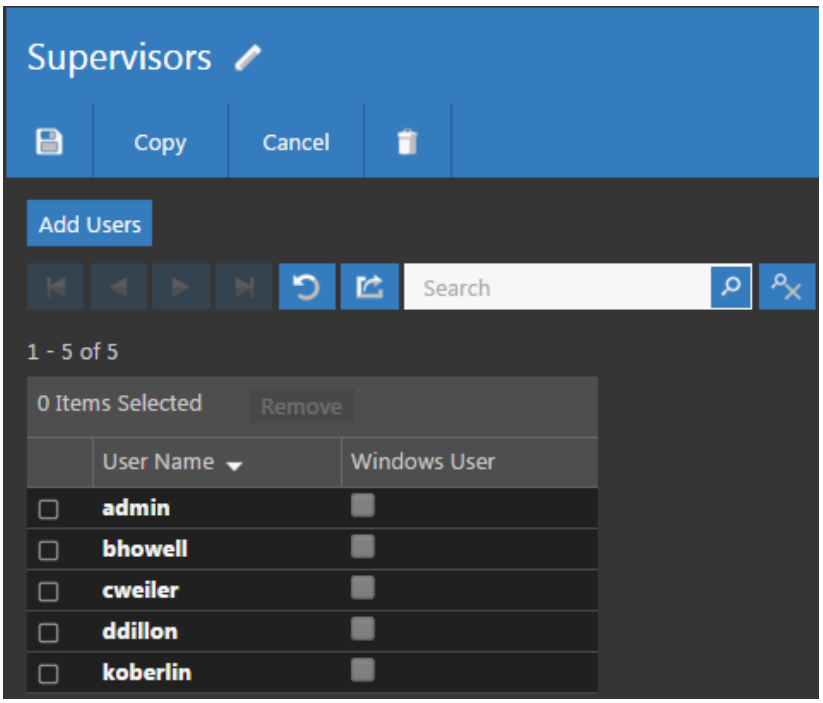
Once you have chosen the users to add to the group, select the **Add Users** button to add the user or select the **Cancel** button to exit without adding the users to the group.



Copying a Group

Perform the following steps to copy an existing group:

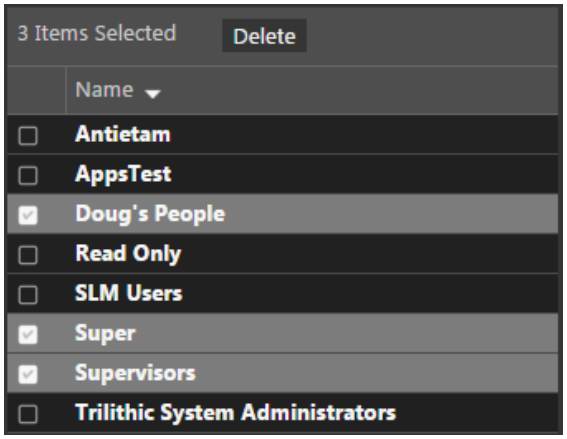
1. From the **Groups** screen, select the name of the group to copy and the group details screen will be displayed as shown in the image to the right.
2. Select the **Copy** button.
3. Enter a new name for the copied group and adjust the settings for the group as shown in *Creating and Editing Groups* earlier in this section.
4. Select the **Save** button and the copied group should now appear with its new name in the **Groups** table.



Deleting a Group

Perform the following steps to delete a group from the system:

1. From the **Groups** screen, select the checkbox to the left of each group to delete.
2. Once you have chosen the groups, select the **Delete** button.
3. After selecting the **Delete** button, a **Confirm** window will be displayed.
    - When deleting five or less items, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **No** button to return to the **Groups** screen where the item(s) will still be displayed.
    - When deleting more than five items, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the item(s) or select the **No** button to return to the **Groups** screen where the item(s) will still be displayed.



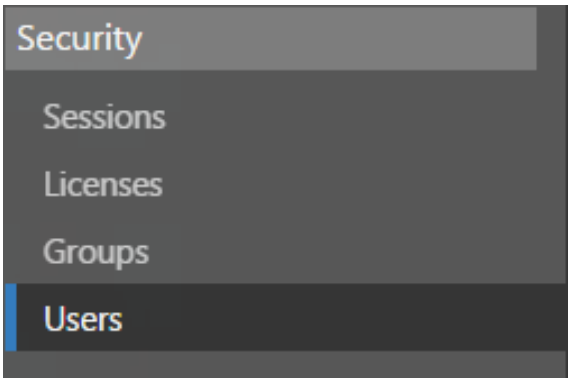
NOTE

To move groups within folders of the organization, see Section III: Device Setup.

Users

The **Users** feature is used to manage the users within the ViewPoint system.

Select **Security > Users** from the **Administration Settings** toolbar as shown in the image to the right.



Select the ☆ icon at the top of the page to add **Users** to your **Home** page favorites.

To remove **Users** from your **Home** page favorites, select the ★ icon.

NOTE

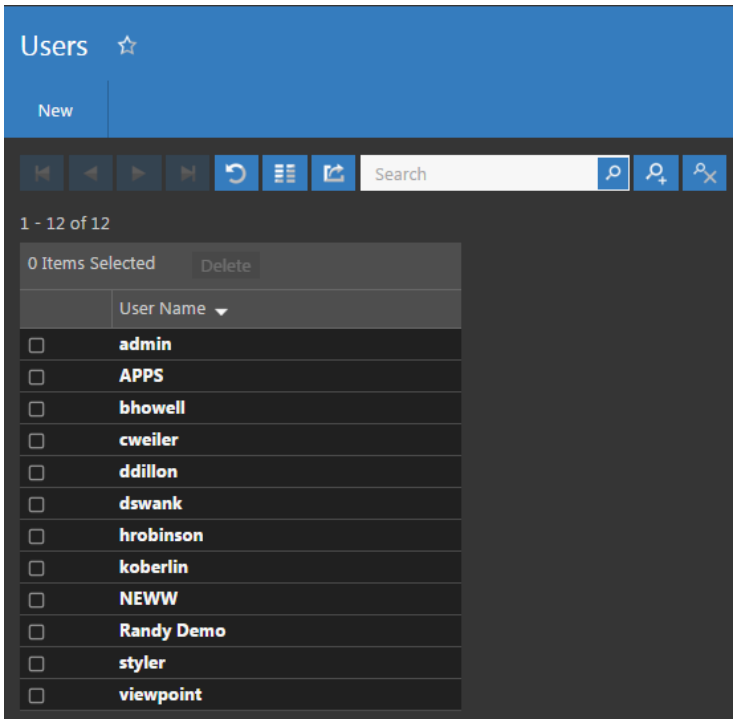
The Administration Settings toolbar is only displayed when the current user is assigned to a group in which System Administration permissions have been granted.

Users Table

The **Users** screen will be displayed as shown in the image to the right.

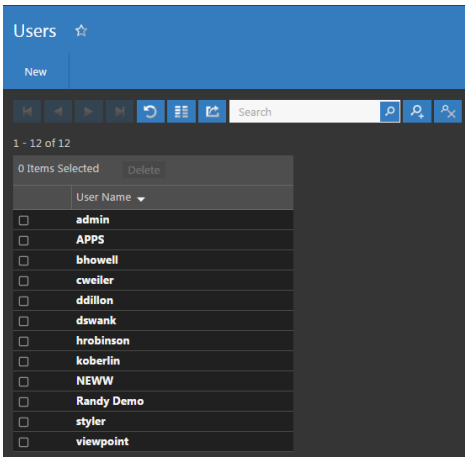
From this screen you can perform the following actions:

- View a list of users
- Create new users
- Edit existing users
- Delete an existing user

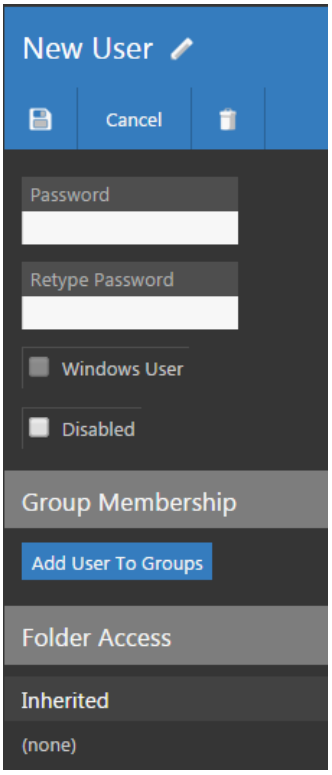


Creating & Editing Users

Perform the following steps to create a new user:



1. From the **Users** screen, select the **New** button.
2. Enter a name for the new user and select **OK**.
3. The **New User** screen will be displayed as shown in the image below.
4. Enter a new password in the **Password** and **Retype Password** fields. The password is obscured for security reasons.
5. To disable the account at any time, return to this page and select the **Disabled** checkbox.
6. To add the user to a group, select the **Add User to Groups** button.
7. To add the user to a organization folder, select the **Add** button under **Folder Access**.
8. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the user details screen where your changes will still be displayed.
9. The new user should now appear in the **User** table.

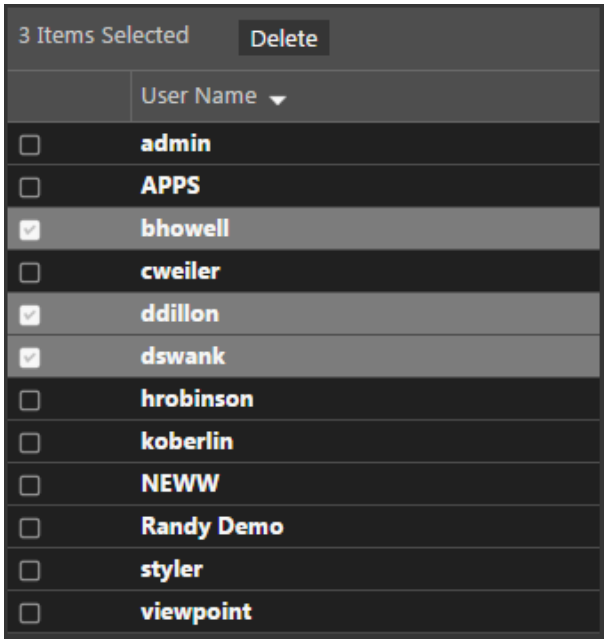


NOTE ***To edit a user, click the name of the user, and make your changes. When finished, click the Save button.***

Deleting a User

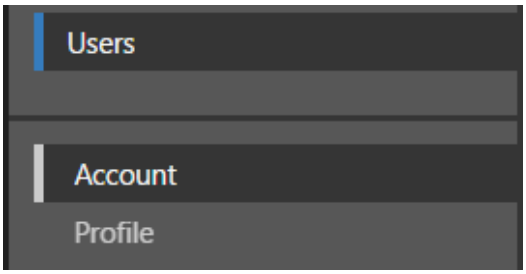
Perform the following steps to delete a user from the system:

1. From the **Users** screen, select the checkbox to the left of each user to delete.
2. Once you have chosen the users, select the **Delete** button.
3. After selecting the **Delete** button, a **Confirm** window will be displayed.
    - When deleting five or less users, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the user(s) or select the **No** button to return to the **Users** screen where the user(s) will still be displayed.
    - When deleting more than five users, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the user(s) or select the **No** button to return to the **Users** screen where the user(s) will still be displayed.



User Account

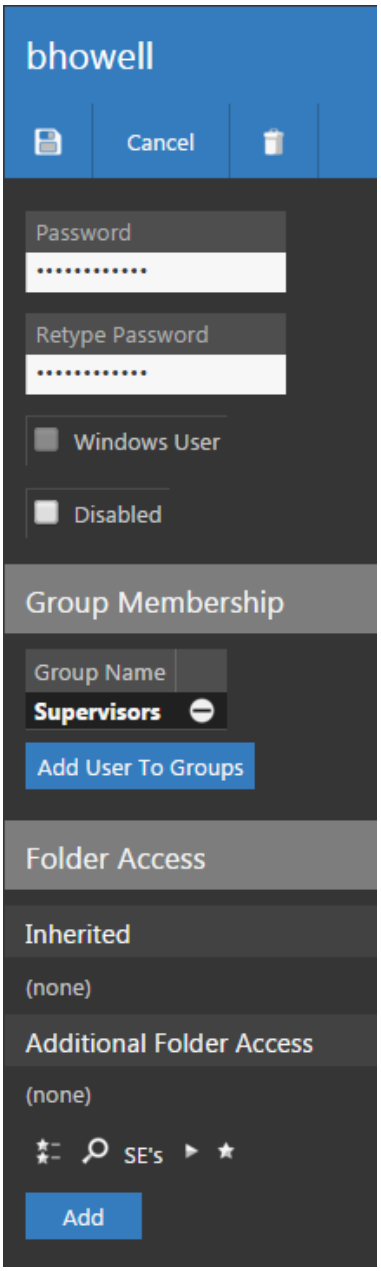
The **Account** feature is used to manage the account information for the current user.



At the bottom of the **Administration Settings** toolbar, the **Users > Account** section will be highlighted.

From the **User Account** screen, you can edit the following information, as shown in the image to the right.

- Password
- Group Membership
- Folder Access



Enter the user's password and then retype the same password to verify they match.

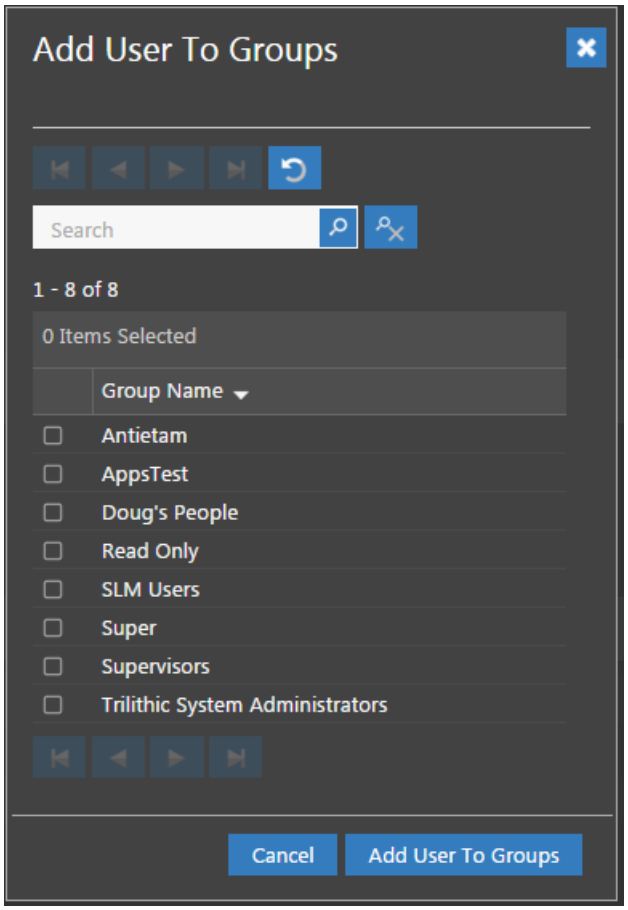
Select the **Save** button to save the changes or navigate away from this page to exit without saving your changes.

Group Membership

From the **Group Membership** area, select the **Add User To Groups** button to add the current user to groups.

The **Add User to Groups** screen displays a table of available groups within ViewPoint as shown in the image to the right.

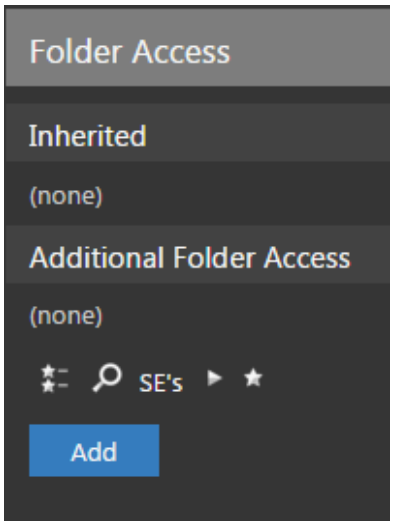
Once you have chosen the groups you want to add the user to, select the **Add User To Groups** button to add the user or select the **Cancel** button to exit without adding the user to the group.



NOTE

The group membership determines the permissions that apply to the selected user for each of the modules within the ViewPoint Server. For more information about groups, see Section II: Site Administration, Chapter 4: Security, Groups.

Folder Access



Use the **Folder Access** area to set the location within the organization for the selected user.

- **Inherited Folder Access** – This displays any locations inherited by the user from the groups assigned to that user.
- **Additional Folder Access** – This displays any locations within the organization that are specifically assigned to this user.

Use the Organization toolbar within the **Folder Access** area to select the organization location for the selected user and then select the **Add** button to add the selected location to the user account.

When finished making adjustments, select the **Save** button.

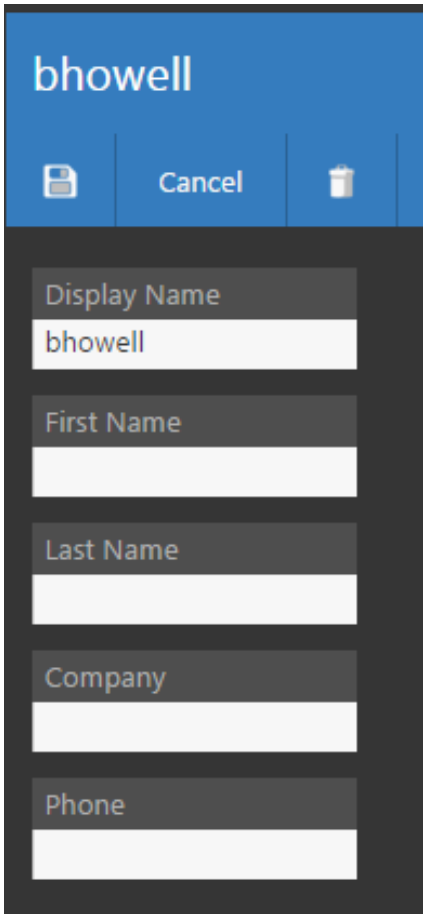
User Profile

The **Profile** feature is used to manage the profile information for the current user.

At the bottom of the **Administration Settings** toolbar, select **Users > Profile**.

From the **User Profile** screen, you can edit the following information, as shown in the image to the right.

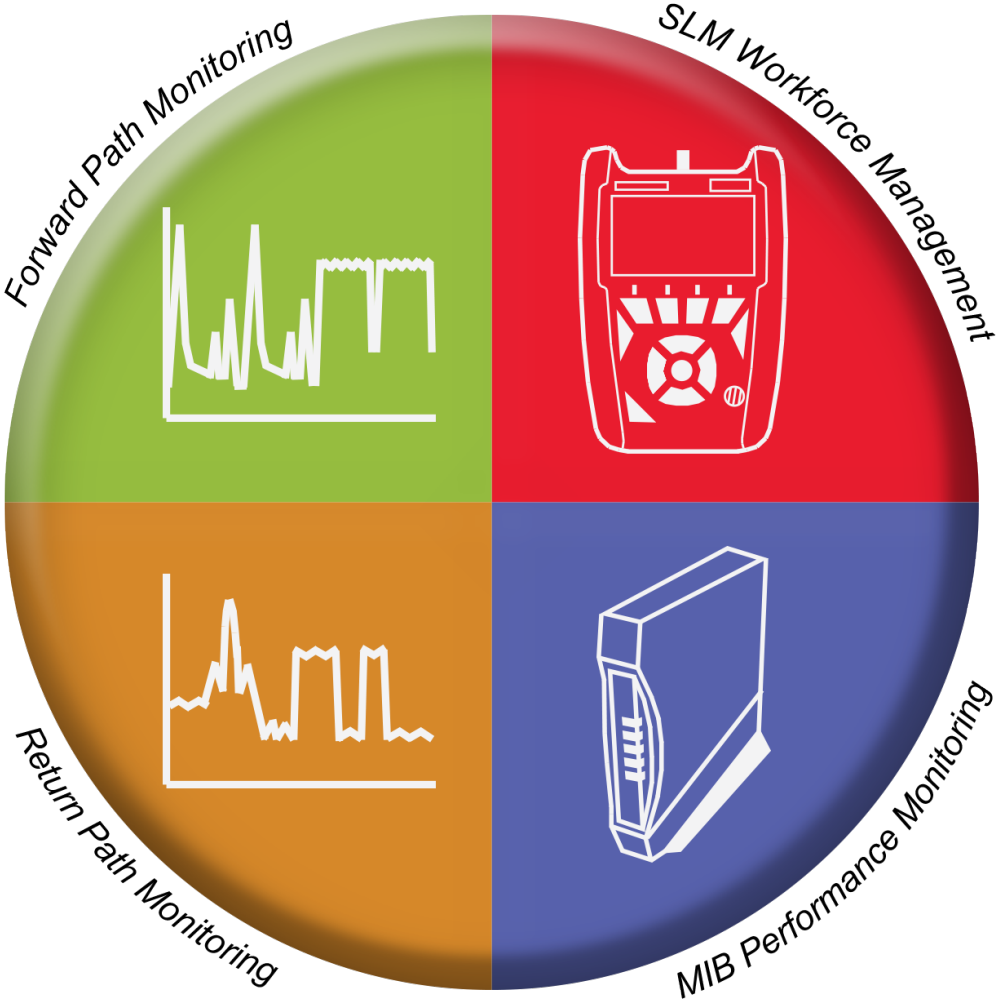
- Display Name
- First Name
- Last Name
- Company
- Phone



For each user, enter as much information as needed to help identify which users are making changes within ViewPoint. This information is also important when creating reports as it will be used to populate certain fields within reports.

Enter the user profile information and then select the **Save** button.

ViewPoint
Integrated Data Management System
Section III: Device Setup



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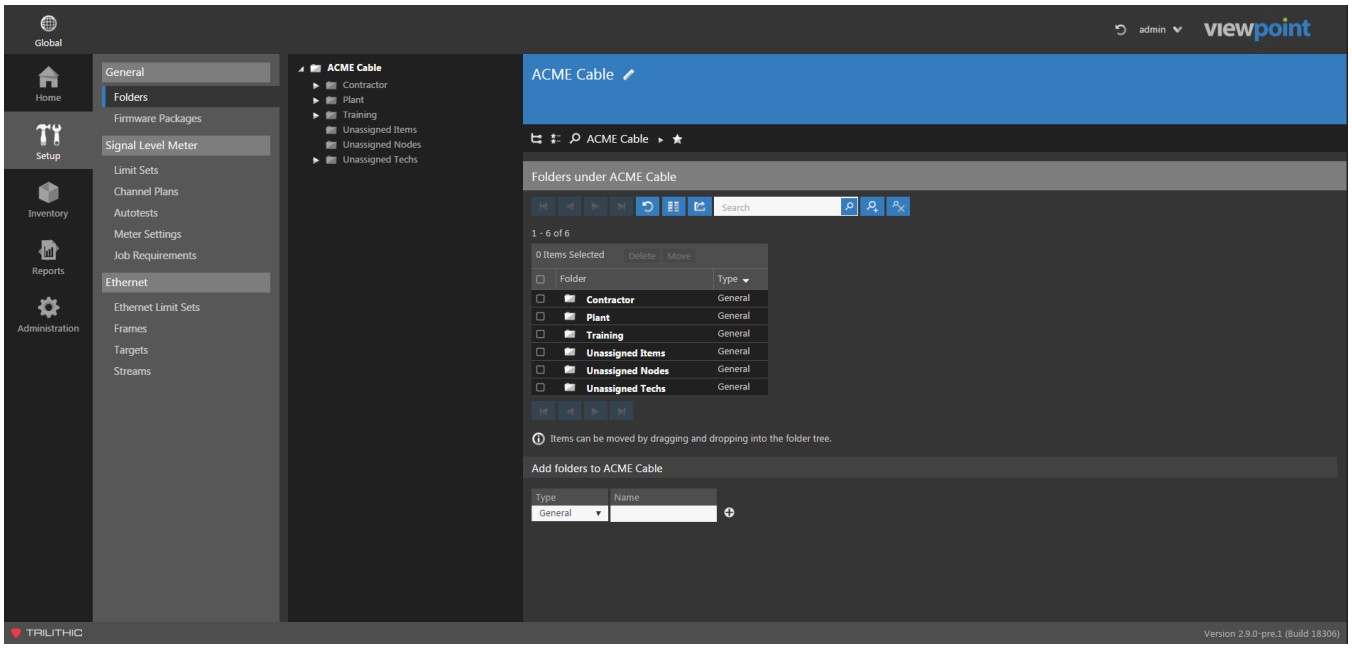
Overview

The **Setup** screen is used to manage the organization tree folders, firmware packages, signal level meter device settings, and ethernet settings within the ViewPoint system.

Select the **Setup** button from the **Navigations and Settings** toolbar as shown in the image to the right.

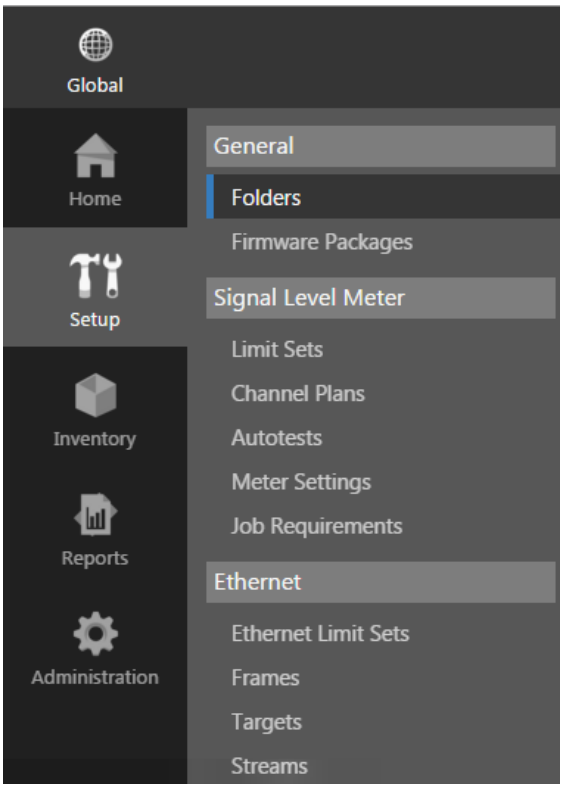
By default, the Setup screen will be displayed as shown in the image below.



Setup Settings Toolbar

To navigate to a specific feature within the **Setup** screen, simply select the corresponding feature from the **Setup Settings** toolbar as shown in the image to the right.

The currently selected feature within the **Setup Settings** toolbar is always highlighted using white text on a dark gray box with a blue bar. All other features within the screen will use gray text.



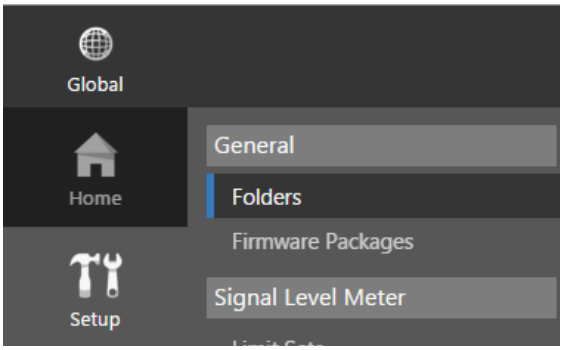
From the **Setup Settings** toolbar, you can choose from any of the following features:

General	When selected, this feature provides the ability to manage the organization tree and firmware packages within ViewPoint.
Signal Level Meter	When selected, this feature provides the ability to manage signal level meter device settings within ViewPoint.
Ethernet	When selected, this feature provides the ability to manage the ethernet device settings within ViewPoint.

Overview

The **General** feature is used to manage the organizational hierarchy of your system and firmware packages within the ViewPoint system.

Select any of the features under **General** from the **Setup Settings** toolbar as shown in the image to the right.



NOTE ***The Setup Settings toolbar is only displayed when the current user is assigned to a group in which System Administration permissions have been granted.***

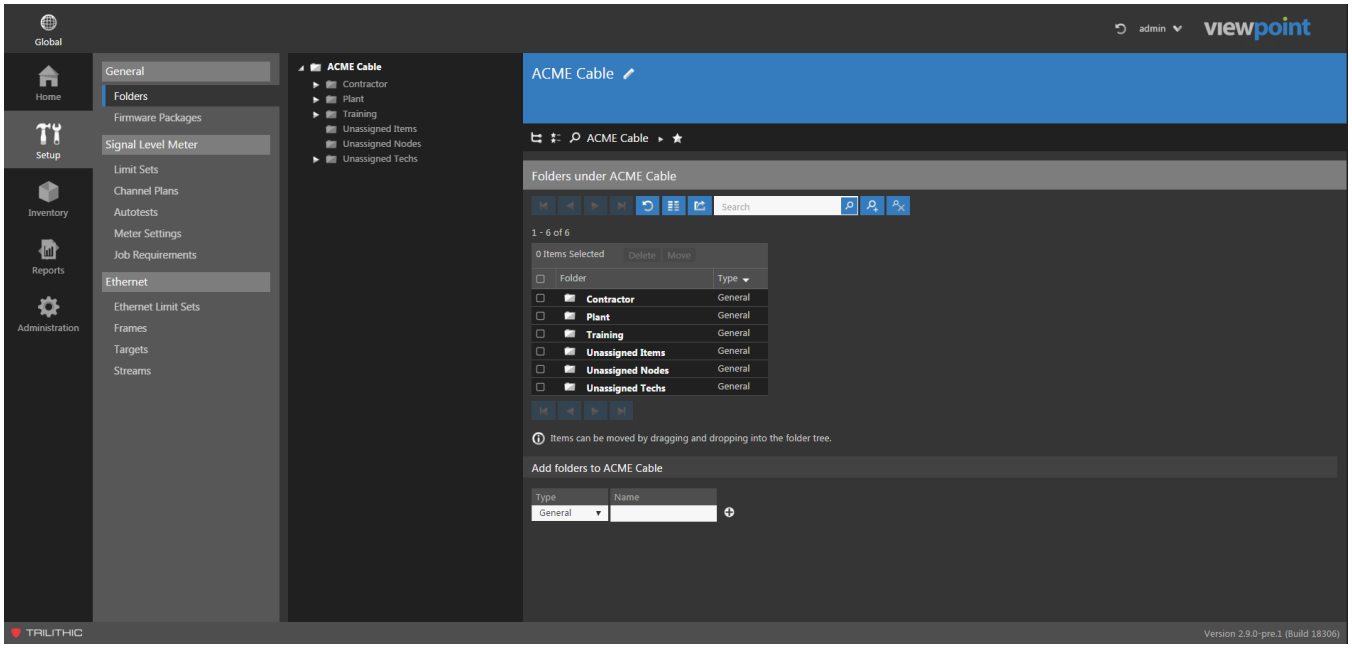
Folders

The **Folders** feature is used to manage the organizational hierarchy of your system within ViewPoint.

Select **General > Folders** from the **Setup Settings** toolbar as shown in the image below.

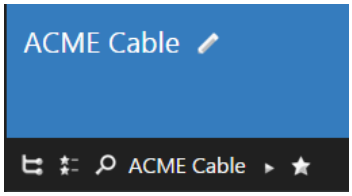
Select the ☆ icon at the top of the page to add **Folders** to your **Home** page favorites.

To remove **Folders** from your **Home** page favorites, select the ★ icon.



Entering the Organization Name

From the top of the organizational hierarchy, you can enter the name of the organization by selecting the  at the top of the **Folders** screen, as shown in the image to the right.

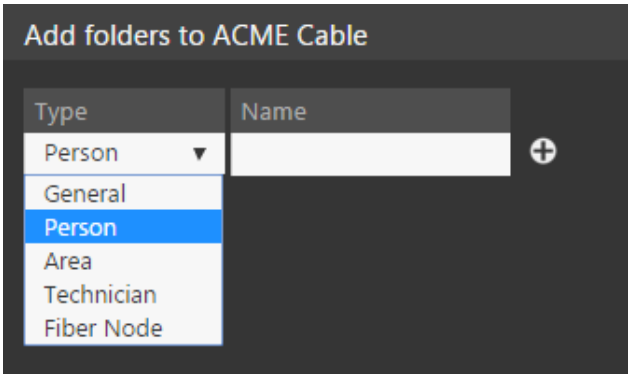


Once you have entered an organization name, select the **OK** button to save your changes.

Creating and Editing an Item within the Organization

Perform the following steps to add an item to the organizational hierarchy:

1. From the **Add Folders to...** area of the **Folders** screen, select the type of folder you want to add.
2. Enter the name of the folder in the **Name** field, and select the plus (+) icon to add it. A folder saved notice will appear at the top of the data display area.



3. You can add any of the following items from the **Type** dropdown box:
   - **General** – This item is a folder that can be used for general organization and grouping of like items. When **General** is selected from the dropdown box, enter the name of the folder in the empty field and then select the plus (+) icon to add the new folder. In the organization tree, this type of item is indicated by the  icon.
   - **Person** – This item represents people within your organization, like managers and back office personnel. When **Person** is selected from the dropdown box, enter the name of the folder in the empty field and then select the plus (+) icon to add the new folder. In the organization tree, this type of item is indicated by the  icon.


NOTE

Before adding a Person to your organization, you must first create a user account for this person in ViewPoint.

- **Area** – This item represents geographical areas within your organization like states, counties and cities. When **Area** is selected from the dropdown box, enter the name of the area in the empty field and then select the plus (+) icon to add the new area. In the organization tree, this type of item is indicated by the  icon.
- **Technician** – This item represents technicians within your organization, like installers and field personnel. In the navigation tree, this type of item is indicated by the  icon.
    - If you are creating a technician for a new meter, this can be done when creating the new meter. This process is described in **Section III: Device Setup**, Chapter 3: Meter Management, *Create a New Meter Connection* later in this manual.
    - If you are creating a technician for an existing meter, this can be done by editing an existing meter. This process is described in **Section III: Device Setup**, Chapter 3: Meter Management, *Edit an Existing Meter* later in this manual.
    - Otherwise, a technician can be manually created using a Tech ID. Enter the Tech ID of the technician in the empty field and then select the plus (+) icon to add the new technician. This Tech ID will be associated with a meter when a technician with the corresponding Tech ID syncs a meter with ViewPoint.

- **Fiber Node** – This item represents fiber nodes within your organization, like those monitored by the 9581 SST Return Path Analyzer or 860 DSPh Remote Headend Analyzer. In the organization tree, this type of item is indicated by the  icon.
    - New fiber node folders can be added from existing ports on the return monitor editor. This process is described in **Section IV: Inventory Management**, Chapter 3: Return Monitors, *Create a New Fiber Node* later in this manual.
    - New fiber node folders can be added from existing inputs on the forward monitor editor. This process is described in **Section IV: Inventory Management**, Chapter 3: Forward Monitors, *Edit an Existing Fiber Node* later in this manual.
    - Otherwise, a fiber node can be manually created. Enter the name of the fiber node in the empty field and then select the plus (+) icon to add the node.


NOTE

Before being able to add a new fiber node, a 9581 SST with at least one active input must be setup as a return path monitor for the ViewPoint server.


NOTE

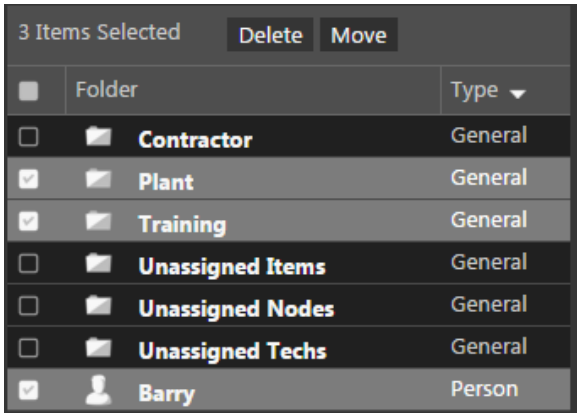
Before being able to add a new fiber node, an 860 DSPh with at least one active input must be setup as a forward path monitor for the ViewPoint server.


NOTE

To edit an existing item within the organization, navigate to the location within the organization where you would like to edit the item. Click the link for the item you would like to edit, make your changes, and click the Save button.

Deleting an Item within the Organization

Perform the following steps to delete an item from the organizational hierarchy:

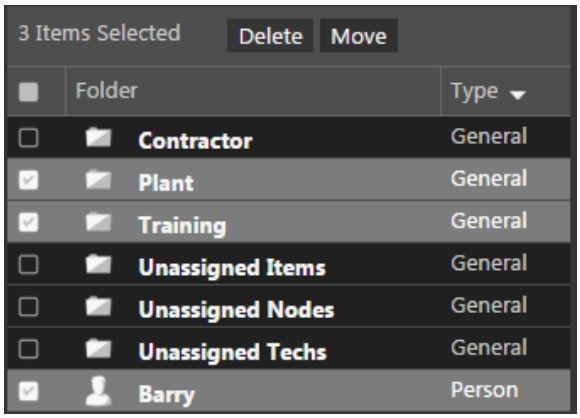


1. From the **Folders** screen, select the checkbox to the left of each item to delete.
2. Once you have chosen the items, select the **Delete** button.
3. After selecting the **Delete** button, a **Confirm** window will be displayed.
    - When deleting five or less items, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **No** button to return to the **Folders** screen where the item(s) will still be displayed.
    - When deleting more than five items, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the item(s) or select the **No** button to return to the **Folders** screen where the item(s) will still be displayed.

Moving an Item within the Organization

Perform the following steps to move an item from one place to another in the organizational hierarchy:

1. From the **Folders** screen, select the checkbox to the left of each item to move.
2. Once you have chosen the item(s), select the **Move** button.
3. After selecting the **Move** button, a window will be displayed as shown in the image to the right.

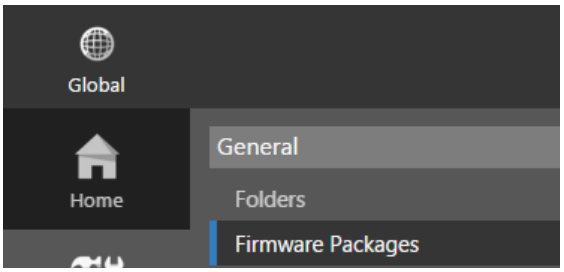


4. Use the Organization toolbar within the window to select a new location within the organization for the selected item(s).
5. Select the **OK** button to proceed with moving the item(s) or select the **Cancel** button to return to the **Folders** screen where the item(s) will still be displayed in its original location.

Firmware Packages

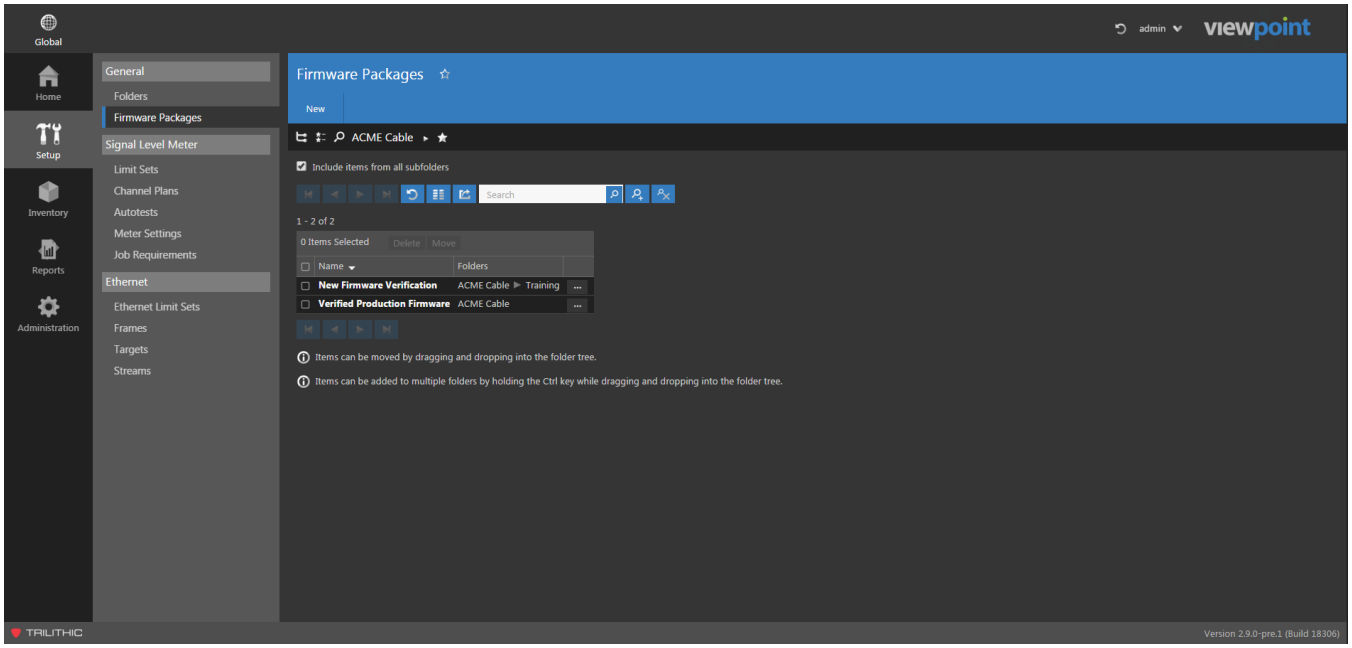
The **Firmware Packages** feature is used to manage the firmware package files within ViewPoint.

Select **General > Firmware Packages** from the **Setup Settings** toolbar as shown in the image to the right.



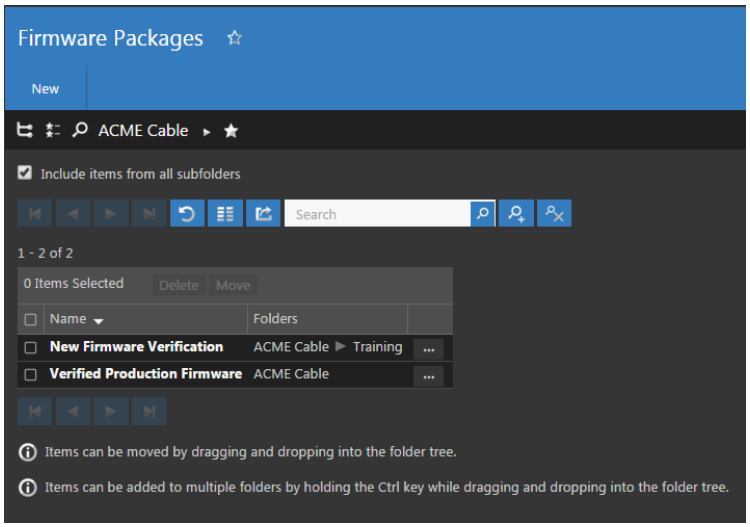
Select the ☆ icon at the top of the page to add **Firmware Packages** to your **Home** page favorites.

To remove **Firmware Packages** from your **Home** page favorites, select the ★ icon.



Firmware Packages Table

The **Firmware Packages** screen will be displayed as shown in the image to the right.



Select the **Include items from all subfolders** checkbox, to include all items.

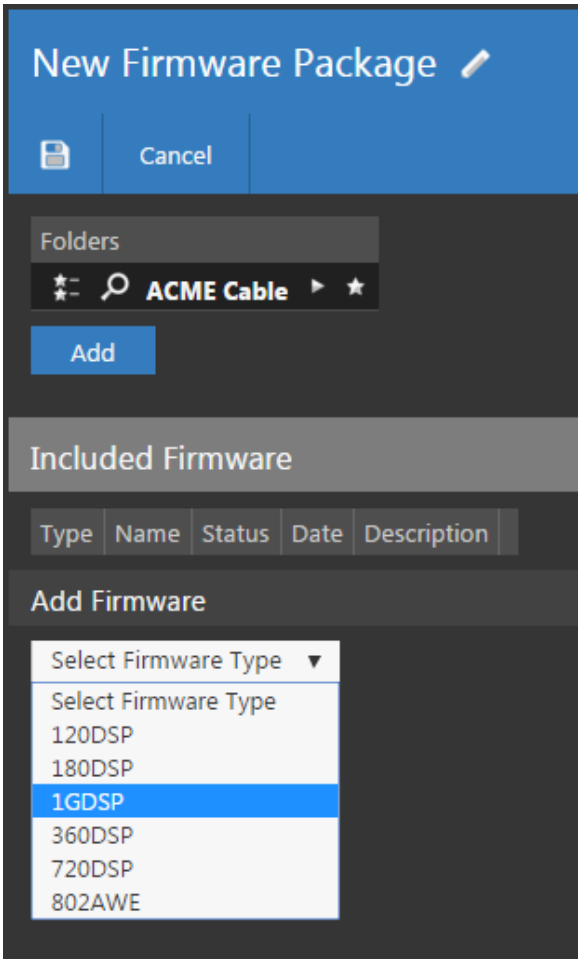
From this screen, you can perform the following actions:

- View a list of firmware packages
- Create new firmware packages
- Edit a firmware package
- Copy a firmware package
- Delete a firmware package
- Move a firmware package

Creating a Firmware Package

Perform the following steps to create a new firmware package:

1. From the **Firmware Packages** screen, select the **New** button.
2. Enter a name for the firmware package and select **OK**.
3. The **New Firmware Package** screen will be displayed as shown in the image to the right.
4. Adjust the settings of the firmware package.
5. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the firmware packages details screen where your changes will still be displayed.

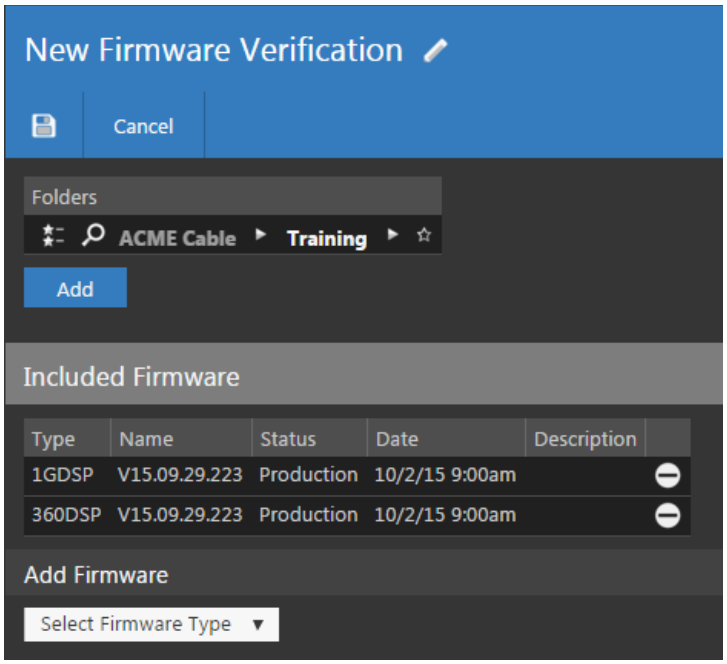


6. The new firmware package should now appear in the **Firmware Packages** table.

Editing a Firmware Package

Perform the following steps to edit a firmware package:

1. From the **Firmware Packages** screen, select the name of the firmware package to edit and the firmware package details screen will be displayed as shown in the image to the right.
2. Select the **Edit** button to adjust the settings of the firmware package.
3. Adjust the settings of the firmware package.
4. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.

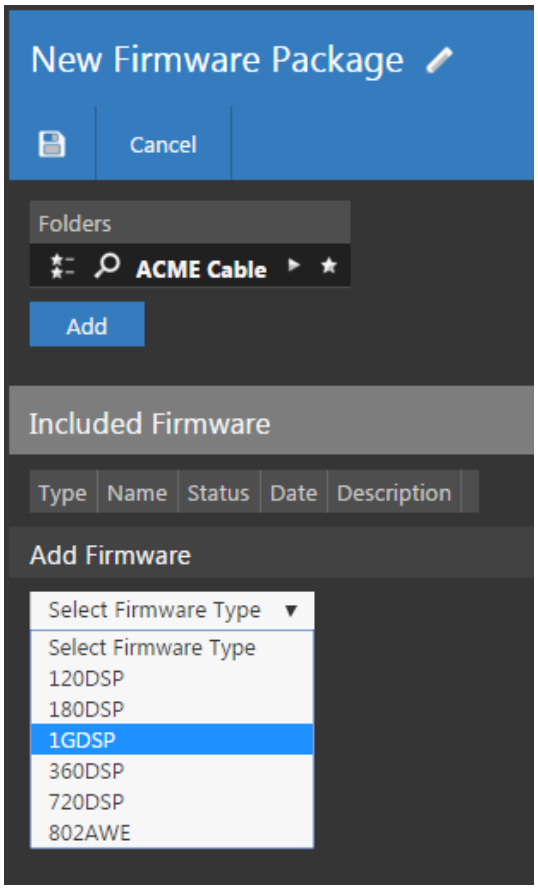


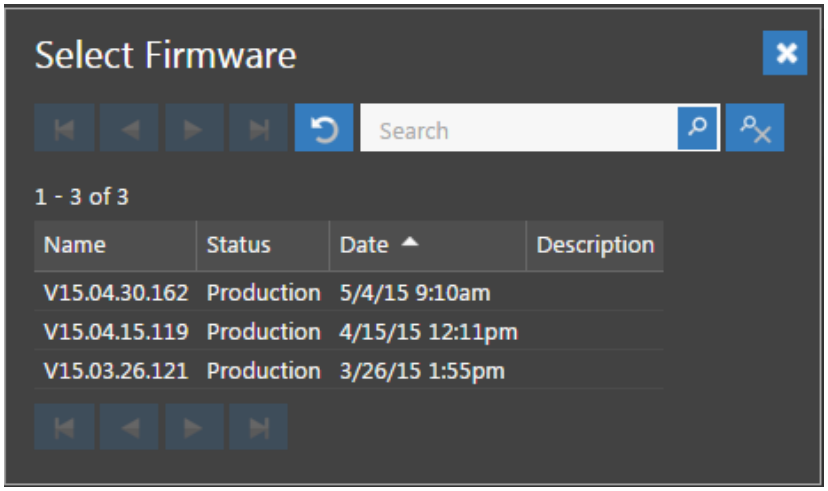
- If you chose to save your changes, a file saved notice will appear at the top of the data display area.
- If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the firmware package details screen where your changes will still be displayed.

Firmware Package Setup Details

The following settings apply when creating or editing a firmware package.

1. Select the **Add** button to add the firmware package to a new location in the organization tree. Use the Organization toolbar within the window to select a new location and select the **Add** button. The new location will appear in the **Folders** area.
2. Select the firmware type from the **Select Firmware Type** dropdown box.
3. From the **Select Firmware** screen, select the firmware you want to add. The firmware will appear in the **Included Firmware** area.

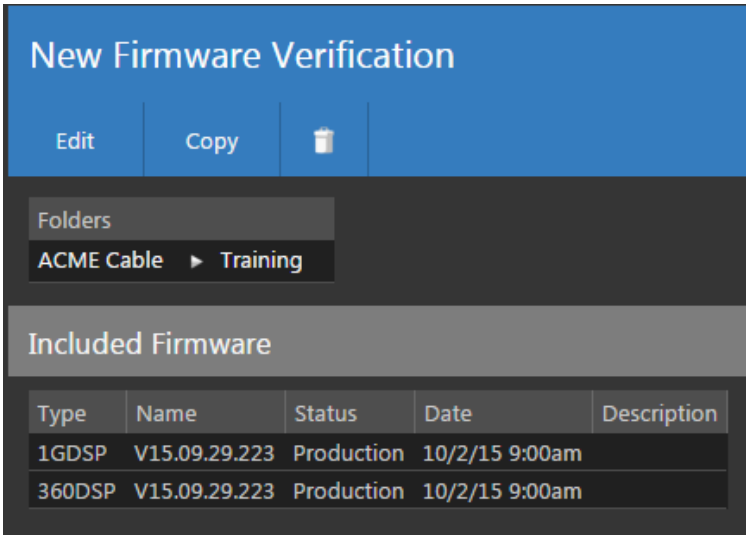




Copying a Firmware Package

Perform the following steps to copy a firmware package:

1. From the **Firmware Packages** screen, select the name of the firmware package to copy and the firmware packages details screen will be displayed as shown in the image to the right.
2. Select the **Copy** button.
3. Enter a new name for the copied firmware package and then select the **OK** button.
4. Select the **Save** button to save the firmware package.

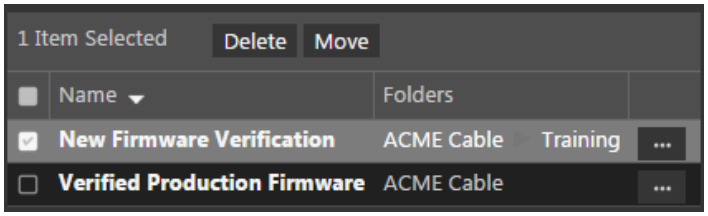


5. The copied firmware package should now appear with its new name in the firmware packages table.

Deleting a Firmware Package

Perform the following steps to delete a firmware package:

1. From the **Firmware Packages** screen, select the checkbox to the left of each firmware package to delete.
2. Once you have chosen the firmware package, select the **Delete** button.

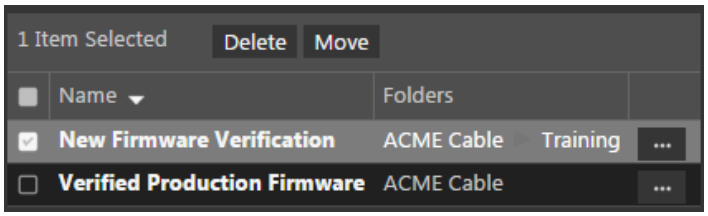


3. After selecting the **Delete** button, a **Confirm** window will be displayed.
    - When deleting five or less items, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **No** button to return to the **Firmware Packages** screen where the item(s) will still be displayed.
    - When deleting more than five items, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the item(s) or select the **No** button to return to the **Firmware Packages** screen where the item(s) will still be displayed.

Moving a Firmware Package within the Organization

Perform the following steps to move a firmware package from one place to another in the organizational hierarchy:

1. From the **Firmware Packages** screen, select the checkbox to the left of each item to move.
2. Once you have chosen the item(s), select the **Move** button.



3. After selecting the **Move** button, a window will be displayed as shown in the image to the right.
4. Use the Organization toolbar within the window to select a new location within the organization for the selected item(s).

5. Select the **OK** button to proceed with moving the item(s) or select the **Cancel** button to return to the **Firmware Packages** screen where the item(s) will still be displayed in its original location.

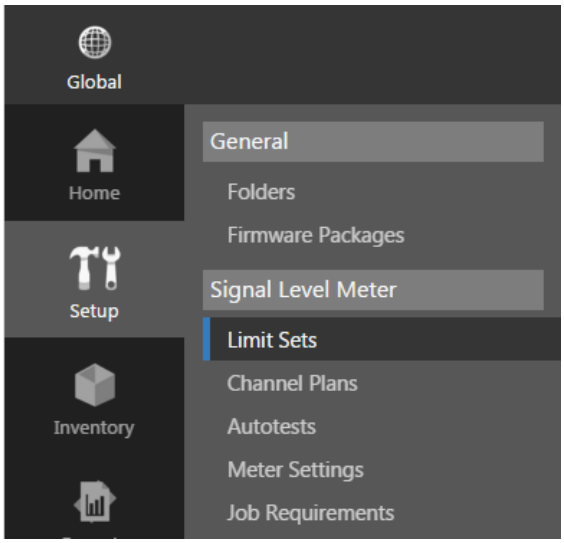
NOTE ***Items can also be moved by dragging and dropping them into the organization tree or by using the add/remove folder*** ... ***button.***

Signal Level Meter

Overview

The **Signal Level Meter** menu is used to manage meter settings within the ViewPoint system.

Select any of the features under **Signal Level Meter** from the **Setup Settings** toolbar as shown in the image to the right.



NOTE

The Setup Settings toolbar is only displayed when the current user is assigned to a group in which System Administration permissions have been granted.

Limit Sets

When the signal level meter performs an autotest or is used for troubleshooting, measurements are compared against limit sets. The results of the comparison are displayed as a pass/fail status for each measurement criteria that is included in the limit set.

On the meters, limit sets are required for autotesting and optional for troubleshooting. If you intend to use autotesting on the signal level meter, it is recommended that you first create at least one limit set for each test location. These limit sets can then be assigned to each location test plan in the channel plan.

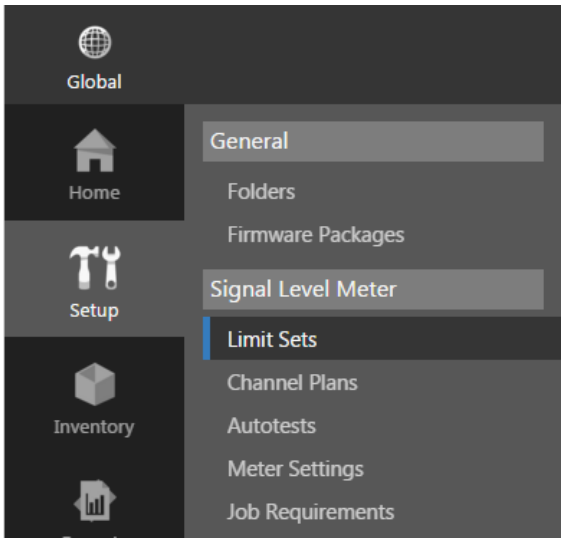
By default, ViewPoint includes five pre-configured limit sets that can be modified to match your system. The default limit sets can be matched with the default test locations as shown below:

Test Location	Limit Set
Tap	CalCheck
Drop	Drop
Ground Block	GB - Ingress Check
Tap	Tap
Outlet	CPE

Select **Signal Level Meter > Limit Sets** from the **Setup Settings** toolbar as shown in the image to the right.

Select the ☆ icon at the top of the page to add **Limit Sets** to your **Home** page favorites.

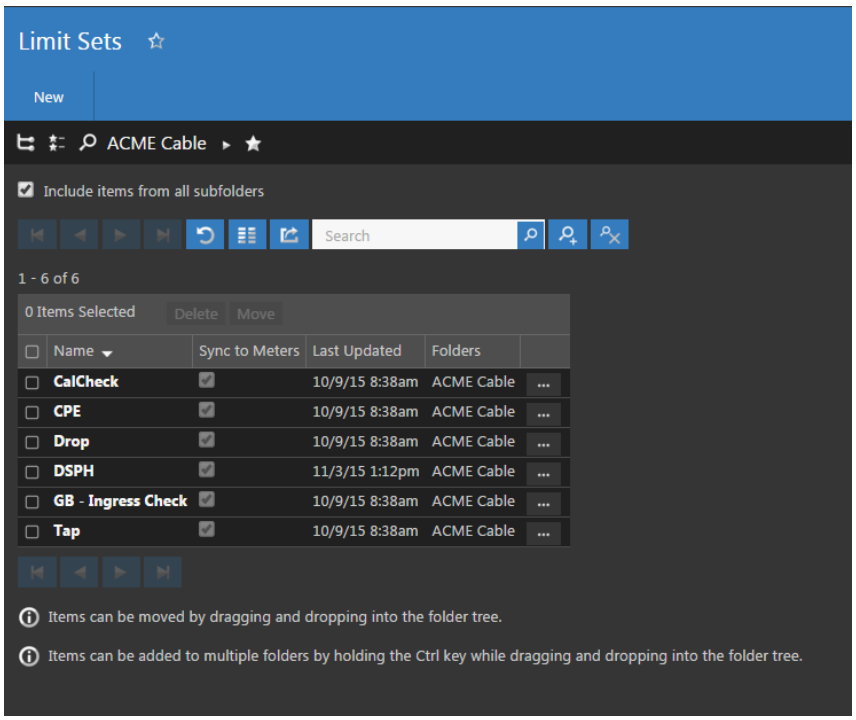
To remove **Limit Sets** from your **Home** page favorites, select the ★ icon.



Limit Sets Table

The **Limit Sets** screen will be displayed as shown in the image to the right. From this screen you can perform the following actions:

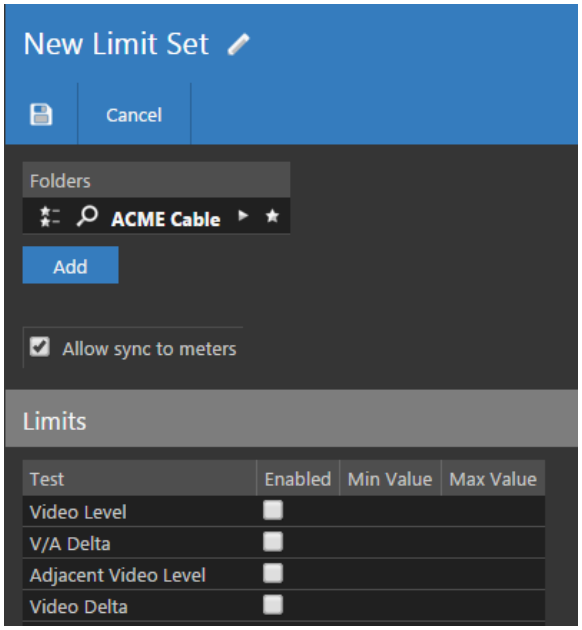
- View a list of limit sets
- Create new limit set
- Edit a limit set
- Copy a limit set
- Delete a limit set
- Move a limit set



Creating a New Limit Set

Perform the following steps to create a new limit set:

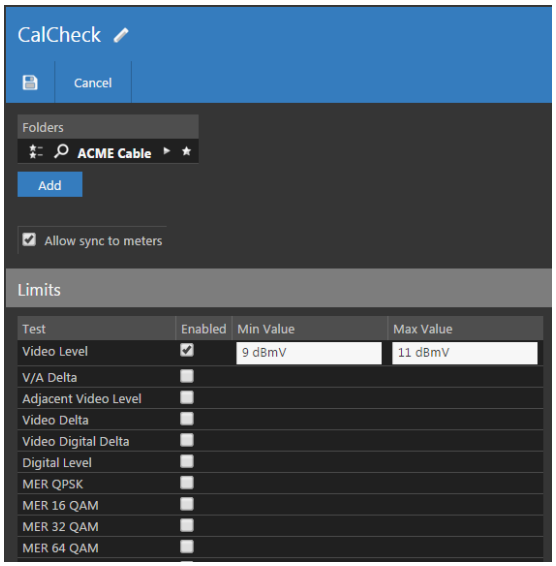
1. From the **Limit Sets** screen, select the **New** button.
2. Enter a name for the new limit set and select **OK**.
3. The **New Limit Set** screen will be displayed as shown in the image to the right.
4. Adjust the settings of the limit set.
5. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the limit set details screen where your changes will still be displayed.
6. The new limit set should now appear in the **Limit Sets** table.



Editing a Limit Set

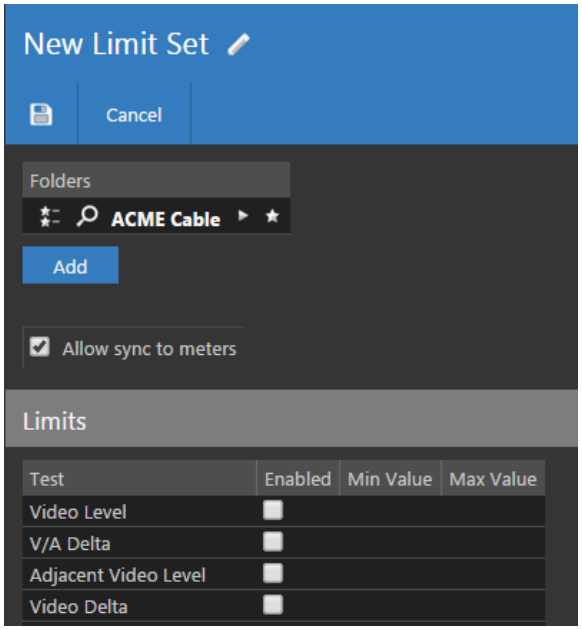
Perform the following steps to edit a limit set:

1. From the **Limit Sets** screen, select the name of the limit set to edit and the limit set details screen will be displayed as shown in the image to the right.
2. Select the **Edit** button to adjust the settings of the limit set.
3. Adjust the settings of the limit set.
4. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the bottom of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the limit set details screen where your changes will still be displayed.



Limit Set Setup Details

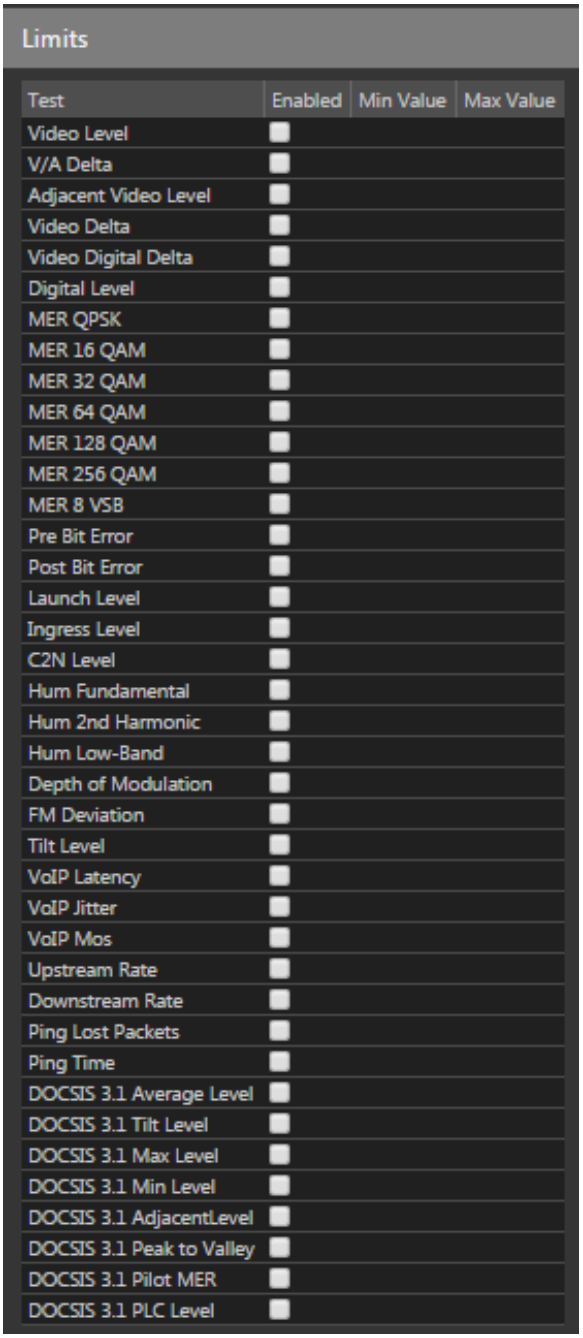
The following settings apply creating or editing a limit set.



1. Select the **Add** button to add the limit set to a new location in the organization tree. Use the Organization toolbar within the window to select a new location and select the **Add** button. The new location will appear in the **Folders** area.
2. If you would like to allow this limit set to be synchronized with meters, select the **Allow sync to meters** checkbox. This is enabled by default when creating a new limit set.
3. Select the **Enabled** checkbox next to each of the desired test limits.
4. Enter the **Min Value** and/or **Max Value** for the enabled test limits as follows:

    - **Video Level** – This sets the minimum and maximum analog video channel levels.
    - **Video Audio Delta** – This sets the minimum and maximum allowable video to audio level difference.
    - **Adjacent Video Level** – This sets the maximum level variation between any two adjacent video carriers.
    - **Video Delta** – This sets the maximum difference allowed between the lowest and highest levels measured for the analog video channels.
    - **Video Digital Delta** – This sets the maximum difference allowed between the lowest and highest levels measured for the digital video channels.
    - **Digital Level** – This sets the minimum and maximum digital video channel levels.
    - **MER QPSK** – This sets the minimum MER for digital video channels with QPSK Modulation.

- **MER 16 QAM** – This sets the minimum MER for digital video channels with 16 QAM Modulation.
- **MER 32 QAM** – This sets the minimum MER for digital video channels with 32 QAM Modulation.
- **MER 64 QAM** – This sets the minimum MER for digital video channels with 64 QAM Modulation.
- **MER 128 QAM** – This sets the minimum MER for digital video channels with 128 QAM Modulation.
- **MER 256 QAM** – This sets the minimum MER for digital video channels with 256 QAM Modulation.
- **MER 8 VSB** – This sets the minimum MER for digital video channels with 8 VSB Modulation.
- **Pre Bit Error** – This sets the maximum pre error correction bit errors.
- **Post Bit Error** – This sets the maximum post error correction bit errors.
- **Launch Level** – This sets the minimum and maximum cable modem launch levels.
- **Ingress Level** – This sets the maximum Return Path Ingress level.
- **C2N Level** – This sets minimum carrier to noise ratio.



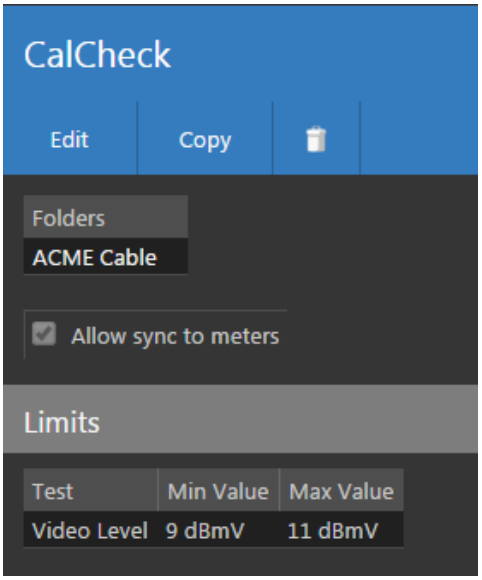
- **Hum Fundamental** – This sets maximum percentage of total hum for the fundamental hum frequency.
- **Hum 2nd Harmonic** – This sets maximum percentage of total hum for the 2nd harmonic hum frequency.
- **Hum Low-Band** – This sets maximum percentage of total hum for the low-band hum frequency.
- **Depth of Modulation** – This sets the minimum and maximum percentage depth of modulation.
- **FM Deviation** – This sets the minimum and maximum FM deviation.
- **Tilt Level** – This sets the minimum and maximum Tilt level.
- **VoIP Latency** – This sets the maximum upstream & downstream latency while performing a VoIP measurement.
- **VoIP Jitter** – This sets the maximum upstream & downstream jitter while performing a VoIP measurement.
- **VoIP MOS** – This sets the minimum upstream & downstream MOS (Mean Opinion Score) while performing a VoIP measurement.
- **Upstream Rate** – This sets the minimum upstream rate while performing a throughput measurement.
- **Downstream Rate** – This sets the minimum downstream transmission rate while performing a throughput measurement.
- **Ping Lost Packets** – This sets the maximum lost packet rate while performing a ping measurement.
- **Ping Time** – This sets the maximum ping time while performing a ping measurement.
- **DOCSIS 3.1 Average Level** – This sets the minimum and maximum DOCSIS 3.1 average level measurement.
- **DOCSIS 3.1 Tilt Level** – This sets the minimum and maximum DOCSIS 3.1 tilt level measurement.
- **DOCSIS 3.1 Max Level** – This sets the maximum DOCSIS 3.1 level measurement.

- **DOCSIS 3.1 Min Level** – This sets the minimum DOCSIS 3.1 level measurement.
- **DOCSIS 3.1 Adjacent Level** – This sets the maximum DOCSIS 3.1 adjacent level measurement.
- **DOCSIS 3.1 Peak to Valley** – This sets the maximum DOCSIS 3.1 peak to valley level measurement.
- **DOCSIS 3.1 Pilot MER**– This sets the minimum DOCSIS 3.1 pilot MER level measurement.
- **DOCSIS 3.1 PLC Level** – This sets the minimum and maximum DOCSIS 3.1 PLC level measurement.

Copying a Limit Set

Perform the following steps to copy an existing limit set:

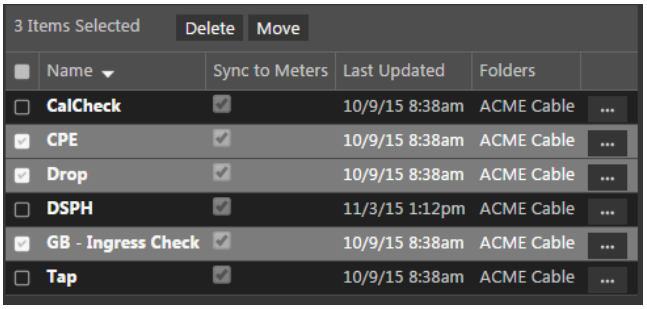
1. From the **Limit Sets** screen, select the name of the limit set to copy and the limit set details screen will be displayed as shown in the image to the right.
2. Select the **Copy** button.
3. Enter a new name for the copied limit set and then select the **OK** button.
4. Select the **Save** button to save the limit set.
5. The copied limit set should now appear with its new name in the **Limit Sets** table.



Deleting a Limit Set

Perform the following steps to delete a limit set:

1. From the **Limit Sets** screen, select the checkbox to the left of each limit set to delete.
2. Once you have chosen the limit sets, select the **Delete** button.
3. After selecting the **Delete** button, a **Confirm** window will be displayed.

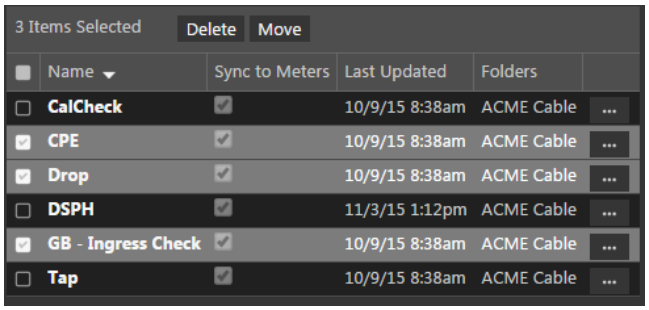


   - When deleting five or less items, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **No** button to return to the **Limit Sets** screen where the item(s) will still be displayed.
   - When deleting more than five items, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the item(s) or select the **No** button to return to the **Limit Sets** screen where the item(s) will still be displayed.

Moving a Limit Set in the Organization

Perform the following steps to move a limit set from one place to another in the organizational hierarchy:

1. From the **Limit Sets** screen, select the checkbox to the left of each item to move.
2. Once you have chosen the item(s), select the **Move** button.



3. After selecting the **Move** button, a window will be displayed as shown in the image to the right.
4. Use the Organization toolbar within the window to select a new location within the organization for the selected item(s).

5. Select the **OK** button to proceed with moving the item(s) or select the **Cancel** button to return to the **Limit Sets** screen where the item(s) will still be displayed in its original location.

NOTE

Items can also be moved by dragging and dropping them into the organization tree or by using the add/remove folder ... button.

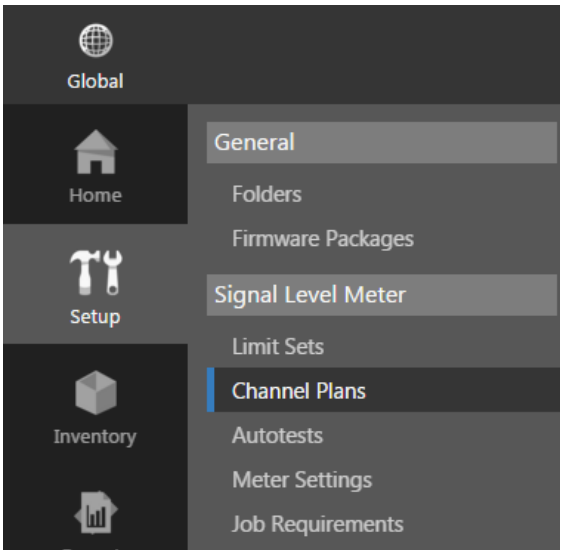
Channel Plans

When an signal level meter performs an autotest or is used for troubleshooting, the channel plan is used to tune and display each channel in the channel lineup.

Before creating a channel plan, you must first create at least one channel preset in order to add channels.

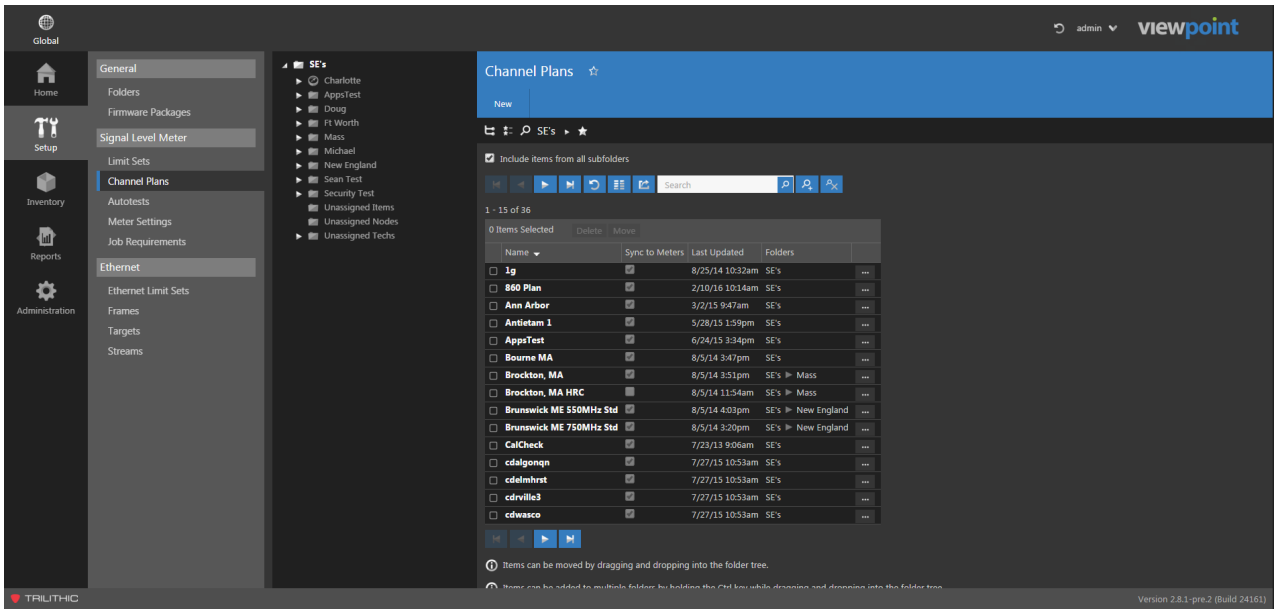
If you intend to use the channel plan for autotesting, it is recommended that you first create at least one limit set for each test location. These limit sets can then be assigned to each location test plan in the channel plan.

Select **Signal Level Meter > Channel Plans** from the **Setup Settings** toolbar as shown in the image to the right.



Select the ☆ icon at the top of the page to add **Channel Plans** to your **Home** page favorites.

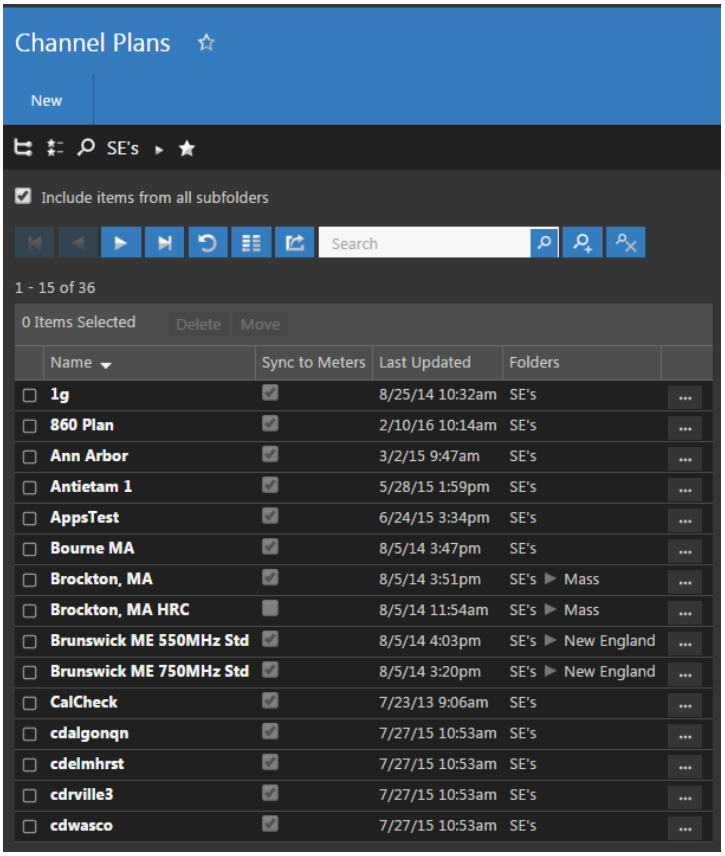
To remove **Channel Plans** from your **Home** page favorites, select the ★ icon.



Channel Plans Table

The **Channel Plans** screen will be displayed as shown in the image to the right. From this screen you can perform the following actions:

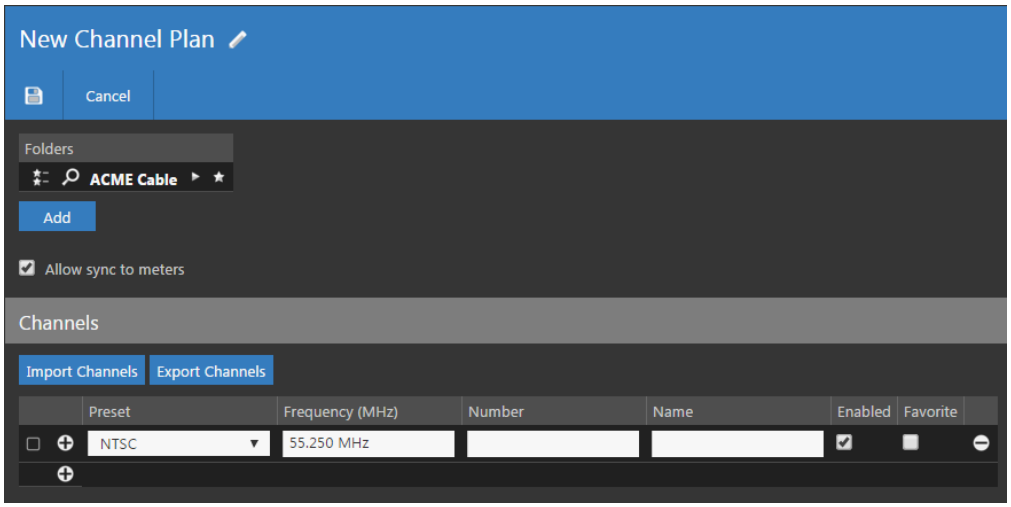
- View a list of channel plans
- Create new channel plan
- Edit a channel plan
- Copy a channel plan
- Delete a channel plan
- Move an existing channel plan
- Import a channel plan
- Export a channel plan



Creating a New Channel Plan

Perform the following steps to create a new channel plan:

1. From the **Channel Plans** screen, select the **New** button.
2. Enter a name for the new channel plan and select **OK**.
3. The **New Channel Plan** screen will be displayed as shown in the image below.

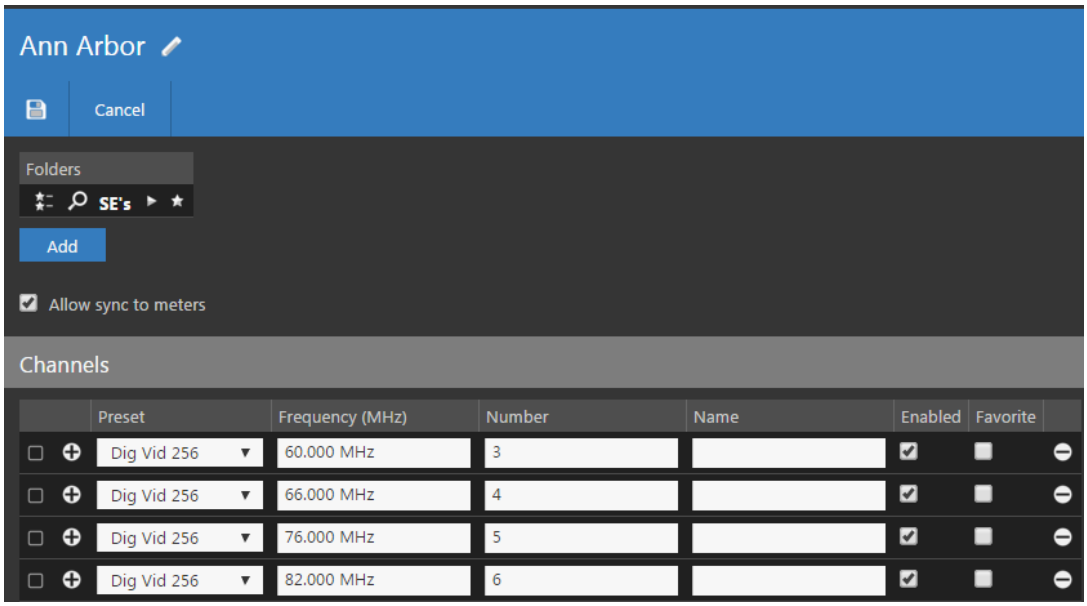


4. Adjust the settings of the channel plan.
5. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the channel plan details screen where your changes will still be displayed.
6. The new channel plan should now appear in the **Channel Plan** table.

Editing an Existing Channel Plan

Perform the following steps to edit an existing channel plan:

1. From the **Channel Plans** screen, select the name of the channel plan to edit and the channel plan details screen will be displayed as shown in the image below.
2. Select the **Edit** button to adjust the settings of the channel plan.
3. Adjust the settings of the channel plan.
4. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the channel plan details screen where your changes will still be displayed.



Channel Plan Setup Details

The following steps are used when creating or editing a channel plan.

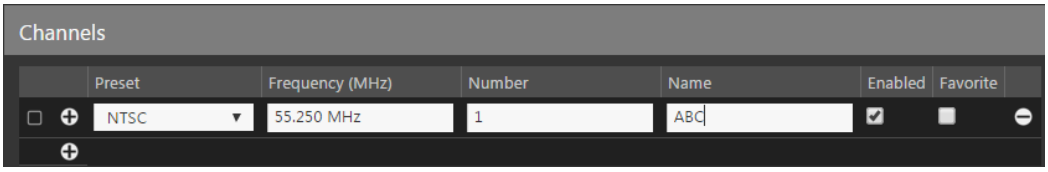
1. Select the **Add** button to add the limit set to a new location in the organization tree. Use the Organization toolbar within the window to select a new location and select the **Add** button. The new location will appear in the **Folders** area.
2. If you would like to allow this channel plan to be synchronized with meters, select the **Allow sync to meters** checkbox. This is enabled by default when creating a new channel plan.
3. Select the **Enabled** checkbox to the right of a channel in the channel plan to enable the corresponding channel. By default, any channels added to the channel plan will be enabled.
4. Select the **Favorite** checkbox to the right of a channel in the channel plan to add the corresponding channel as a favorite channel for quick access on the signal level meter.

First Channel Setup

Perform the following steps before adding channels to the channel plan.

1. Select the channel preset of the first channel in the channel plan.
2. Select the starting frequency of the channel plan.
3. Enter the starting channel number of the channel plan.

In our example, the first channel in the channel plan will be set to the preset channel NTSC at 55.250 MHz with a channel number of 1, as shown in the following image.



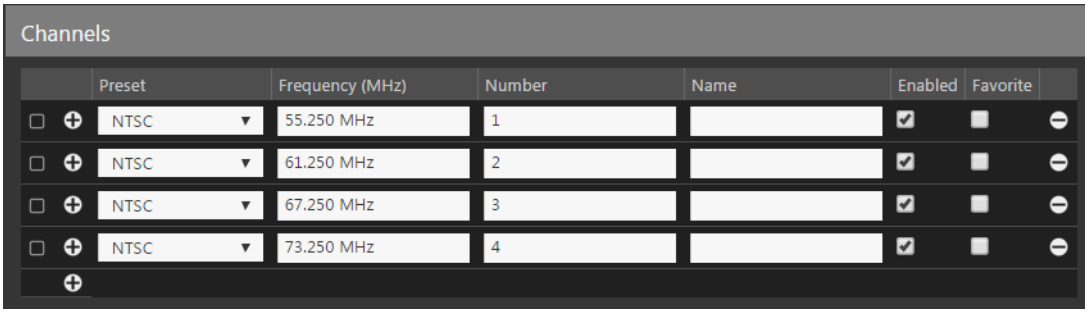
Add New Channels

When creating a new channel plan, it is recommended that you add channels to the end of the channel plan. This enables the ViewPoint Server software to automatically enter the center frequency and channel number of the added channels. ViewPoint does this by adding the center frequency of the previous channel in the channel plan to the bandwidth of the added preset channel.

Perform the following steps to add channels to the end of the channel plan:

1. Select the plus (+) icon at the bottom of the list.
2. The new channel is added at the end of the list, select the plus (+) icon again to add additional channels.

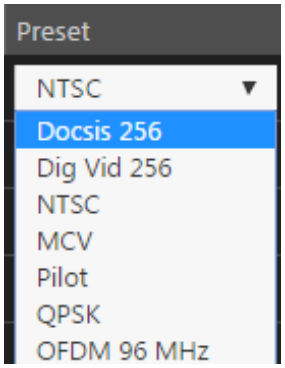
In our example, there have been four channels added to the channel plan. Each new channel was placed 6 MHz apart (bandwidth of the NTSC channel preset) and increased in channel number by one (1) for each added channel as shown in the following image.



Selecting a Channel Preset

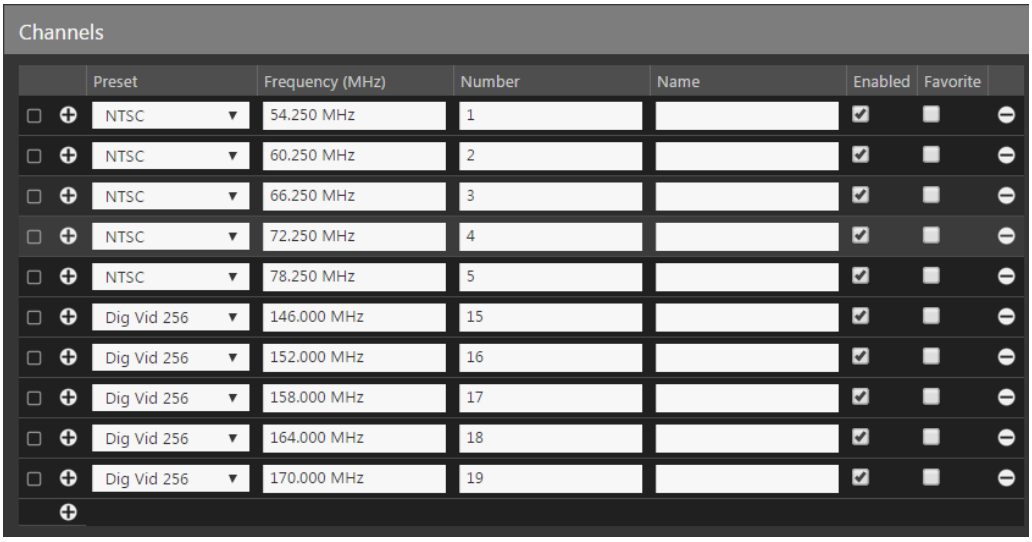
In our example, we have a total of five channels all using the same channel preset. The majority of channel plans include channels based on several different types of preset channels.

Perform the following steps to add more channels using a different channel preset:



1. Select the plus (+) icon at the bottom of the list.
2. The new channel is added at the end of the list, change the channel preset of this new channel.
3. The center frequency of the new channel will be adjusted based on the selected channel preset.
4. If you would like to create an empty area or “gap” in the channel lineup where no channels exist, increase the center frequency of the channel. Any channels added after this “gap” will be inserted based on the new center frequency and the bandwidth of the selected channel preset.
5. Select the plus (+) icon again to add additional channels with the new channel preset.

In our example, there have been five channels added to the channel plan. The channel number of the first new channel was changed to 15 and the center frequency was increased to 146.00 MHz. This leaves out 9 channels (6 thru 14) and creates a 67.75 MHz gap in the middle of the channel plan, as shown in the following image.



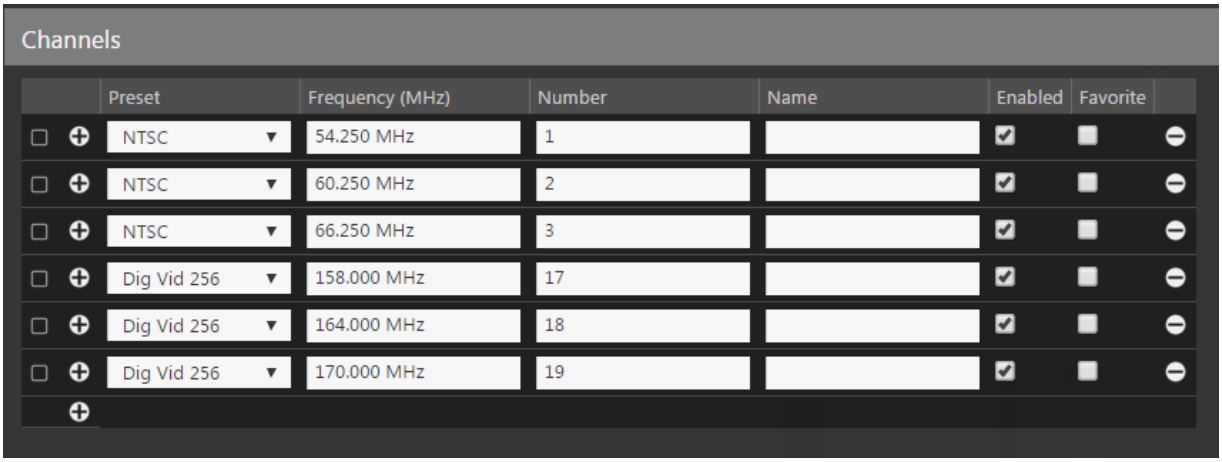
Deleting Existing Channels

In our example, we now have a total of ten channels using two different channel presets. Our example channel plan also includes an empty area or “gap” in the channel lineup where no channels exist.

Perform the following steps to remove channels from the middle of a channel plan:

1. To remove the channels, select the minus (-) icon to the right of each channel that needs to be removed. To delete multiple channels at once, select the checkbox to the left of the channel and then select the minus (-) icon.
2. The channel is removed from the list, select the minus (-) icon again to remove additional channels.

In our example, there have been four channels removed from the channel plan and the “gap” increases to 91.75 MHz as shown in the following image.



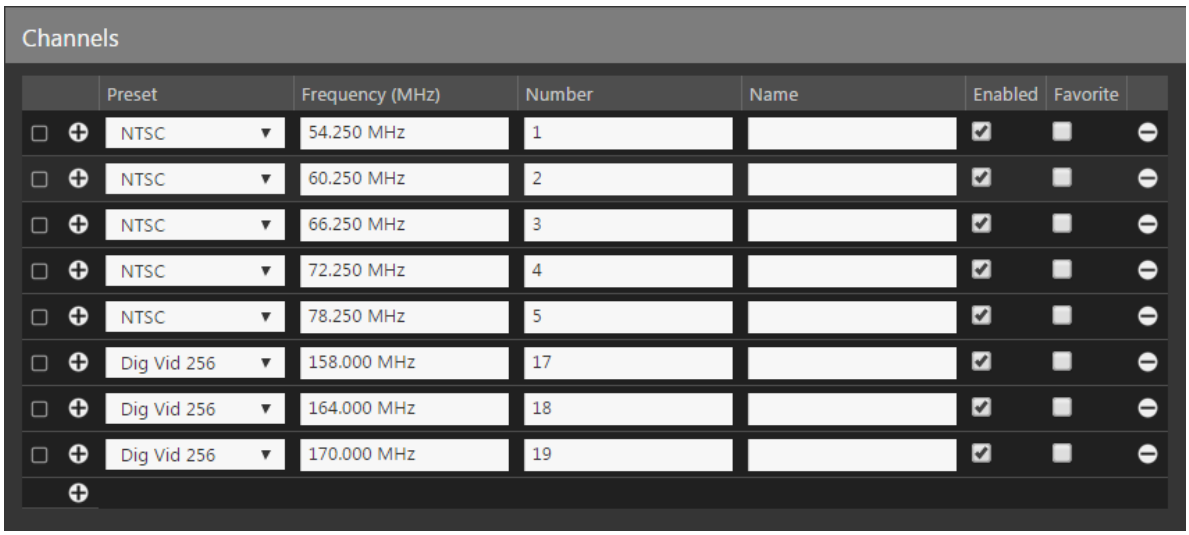
Inserting a Channel

In our example, our channel plan includes an empty space or “gap” in the channel plan where no channels exist. Additional channels can be inserted into this gap.

Perform the following steps to insert a new channel in the “gap” in the channel plan:

1. Select the plus (+) icon of the channel directly ***below*** the location in the channel plan where there is space for a new channel.
2. A new channel is inserted into the channel plan above the row you selected. The new channel uses the preset of the previous channel in the list and increases the channel number by one from the previous channel.
3. Adding a new channel where there isn’t sufficient space in the channel plan will result in a duplicate channel with the same frequency and channel number.

In our example, the plus (+) icon of channel 17 was selected in order to insert two new channels. These two channels used the same preset as channel 3 and increased the channel number by one (1) for each inserted channel.



Finishing the Channel Plan

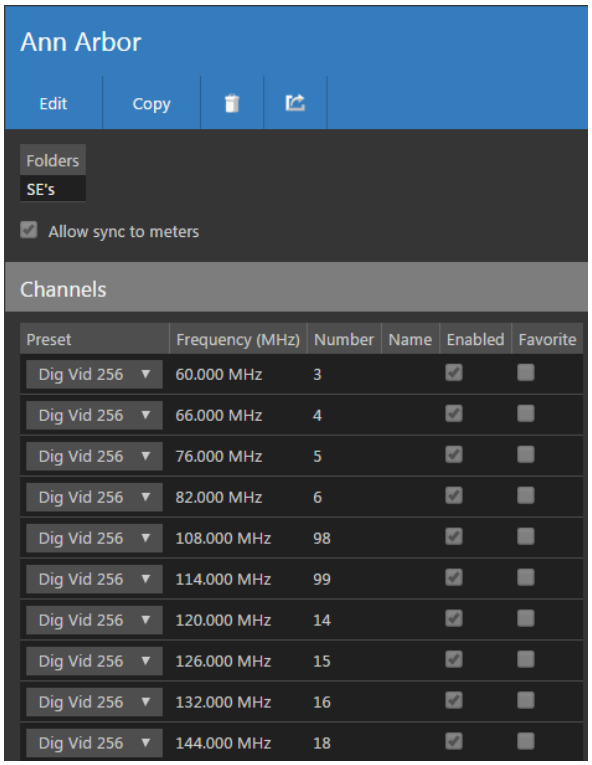
Once you have finished adding and removing channels, enter the name for each channel in your channel lineup and then de-select the **Enabled** checkbox if there are any channels that you would like to disable. Select the **Favorite** check box to add the channel to your favorites list for quick tuning on the meter.

Creating a Location Test Plan

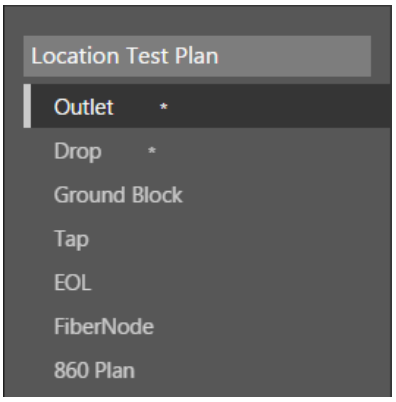
Autotesting with a signal level meter requires a test plan for each location. Each location in your system is shown on the left side of the channel plan edit screen. Each location test plan is a child of the channel plan and any changes made to the channel plan will be reflected in each location test plan.

Perform the following steps to configure the location test plans:

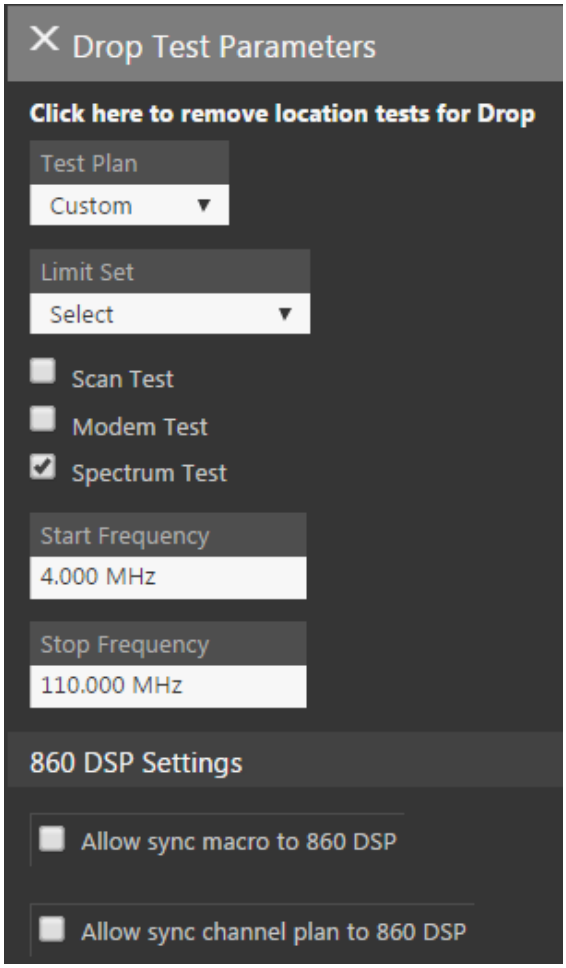
1. From the **Channel Plan** screen, select the name of the channel plan to edit.
2. The channel plan details screen will be displayed as shown in the image to the right.
3. Select the **Edit** button.



4. At the bottom of the **Setup Settings** toolbar, select the name of a location. For this explample, we'll use **Drop**.

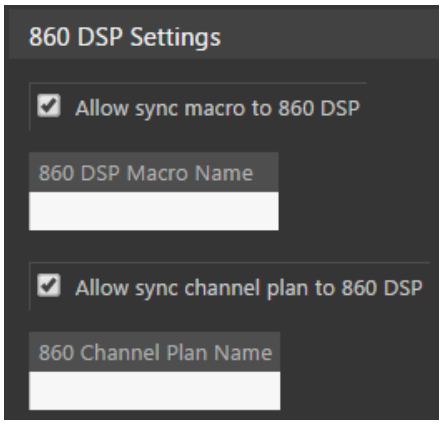


5. The **Drop Test Parameters** area will appear as shown in the image to the right.
6. Select the name of the test plan from the **Test Plan** dropdown box. The test plan is used when performing an autotest using an 860 DSP or 860 DSPi. All available test plans that correspond to the selected location will be displayed.
7. Select the name of the limit set from the **Limit Set** dropdown box. The limit set is used when performing an autotest at the selected location.
8. Select the **Scan Test** checkbox to allow the following types of tests for each channel type:
    - Analog Channels: Level, Tilt, and C/N
    - Digital Channels: Level, Tilt, MER, and BER



9. Select the **Modem Test** checkbox to allow modem testing of any selected DOCSIS cable modem communication channels.
10. Select the **Spectrum Test** checkbox to perform a return spectrum measurement and then enter the measurement start/stop frequencies as shown in the image above.

11. Select the **Allow sync macro to 860 DSP** checkbox to allow 860 DSP macro syncing and enter a name for the 860 DSP macro in the **860 DSP Macro Name** field, as shown in the image to the right.

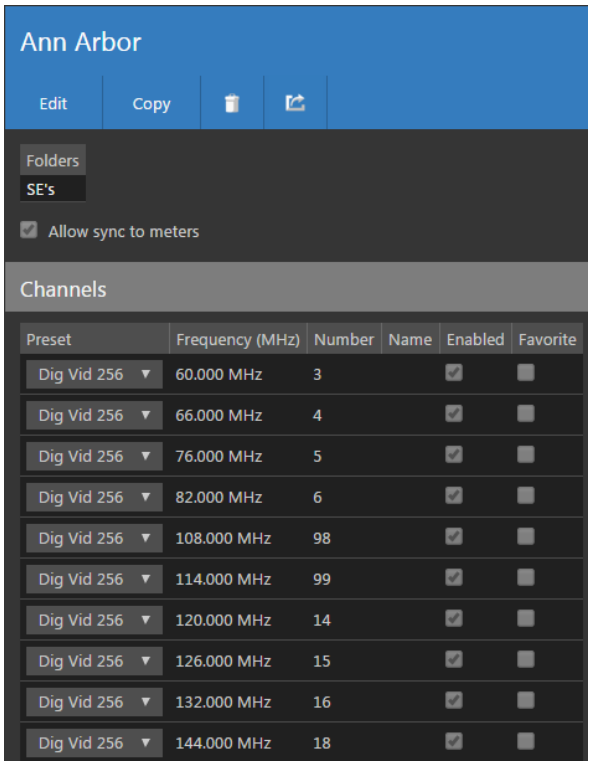


12. Select the **Allow sync channel plan to 860 DSP** checkbox to allow 860 DSP channel plan syncing and enter a name for the 860 DSP channel plan in the **860 DSP Channel Plan Name** field, as shown in the image to the right.
13. Select the checkboxes below each type of test to perform for each channel in the channel plan, as shown in the image below.
    - Analog Channels: Level, Tilt, Carrier-to-Noise (C2N), Depth of Modulation, FM Deviation, and Hum
    - Digital Channels: Level, Tilt, Hum, MER, and BER
    - Cable Modem Channels: Level, Tilt, Hum, MER, BER, and Docsis Login

Copying a Channel Plan

Perform the following steps to copy a channel plan:

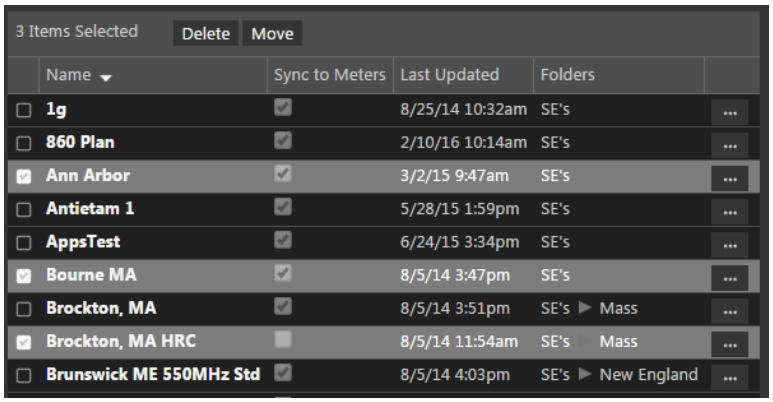
1. From the **Channel Plans** screen, select the name of the channel plan to copy and the channel plan details screen will be displayed as shown in the image to the right.
2. Select the **Copy** button.
3. Enter a new name for the copied channel plan and then select the **OK** button.
4. Select the **Save** button to save the channel plan.
5. The copied channel plan should now appear with its new name in the **Channel Plans** table.



Deleting a Channel Plan

Perform the following steps to delete a channel plan:

1. From the **Channel Plans** screen, select the checkbox to the left of each channel plan set to delete.
2. Once you have chosen the channel plan, select the **Delete** button.
3. After selecting the **Delete** button, a **Confirm** window will be displayed.

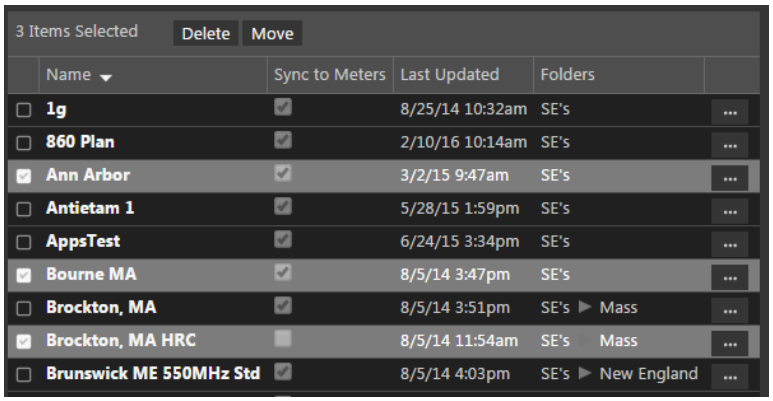


- When deleting five or less items, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **No** button to return to the **Channel Plans** screen where the item(s) will still be displayed.
- When deleting more than five items, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the item(s) or select the **No** button to return to the **Channel Plans** screen where the item(s) will still be displayed.

Moving a Channel Plan in the Organization

Perform the following steps to move a channel plan from one place to another in the organizational hierarchy:

1. From the **Channel Plans** screen, select the checkbox to the left of each item to move.
2. Once you have chosen the item(s), select the **Move** button.



3. After selecting the **Move** button, a window will be displayed as shown in the image to the right.

4. Use the Organization toolbar within the window to select a new location within the organization for the selected item(s).
5. Select the **OK** button to proceed with moving the item(s) or select the **Cancel** button to return to the **Channel Plans** screen where the item(s) will still be displayed in its original location.

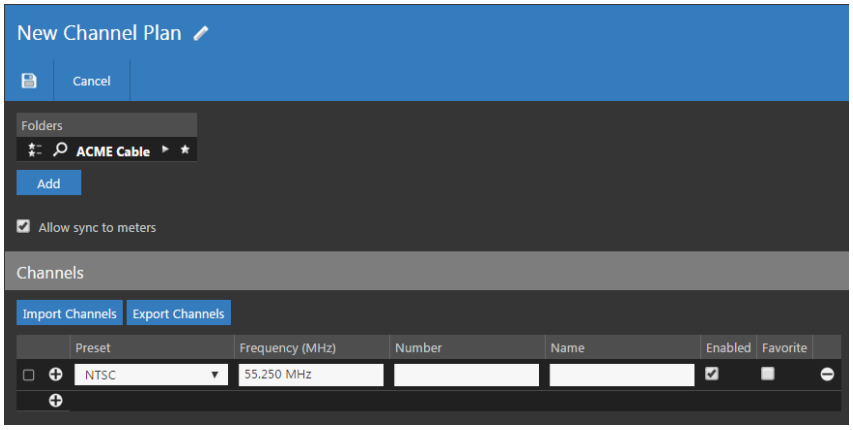
NOTE

Items can also be moved by dragging and dropping them into the organization tree or by using the add/remove folder ... button.

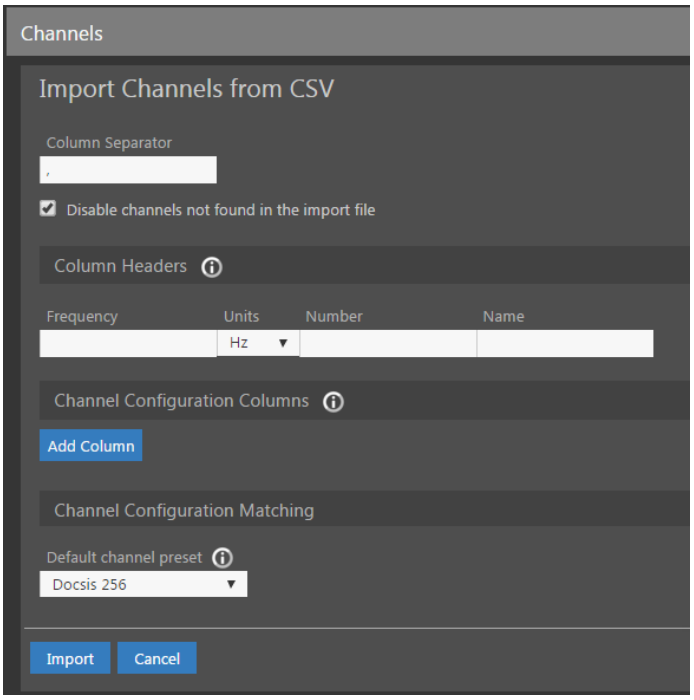
Importing a Channel Plan

Perform the following steps to import a channel plan from a csv file:

1. From the **Channel Plans** screen, select the **New** button.
2. Enter a name for the new channel plan and select **OK**.
3. The **New Channel Plan** screen will be displayed as shown in the image to the right.



4. Select the **Import Channels** button. The **Import Channels from CSV** area should appear.
5. In the **Column Separator** field, enter the separator type the .csv uses. Comma is the default.
6. Select the **Disable channels not found in the import file** checkbox, if necessary. This is enabled by default.
7. In the **Column Header** area, enter the headers for the channels to match the headers used in the csv file. If no headers are present in the file, column numbers can be used instead.



8. In the **Channel Cofiguration Columns** area, select the **Add Column** button to add any columns needed to uniquely define which presets are used for a given channel.
9. In the **Channel Configuration Matching** area, choose the default channel preset from the dropdown box.

10. When finished, select the **Import** button then navigate to where you saved the .csv file on your computer.
11. Select **Open** to import the file.
12. The new imported channel plan should now appear with in the **Channel Plans** table.

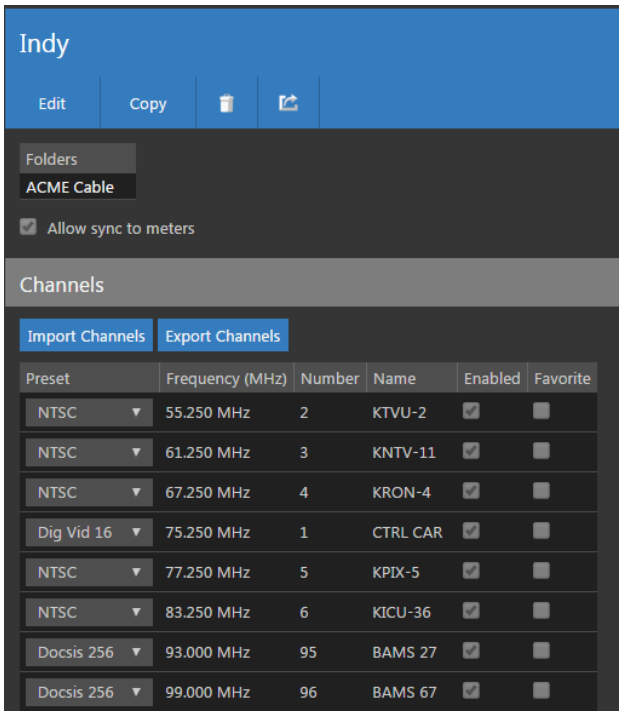
NOTE

You can also import channels to any existing channel plans from a .csv file using this method.

Exporting a Channel Plan

Perform the following steps to export a channel plan from ViewPoint:

1. From the **Channel Plans** screen, select the name of the channel plan to export and the channel plan details screen will be displayed as shown in the image to the right.
2. Select the **Export Channels** button.
3. The file will be saved to your computer with a .csv extension. Depending on your web browser settings, it will be saved to your desktop or Downloads folder.



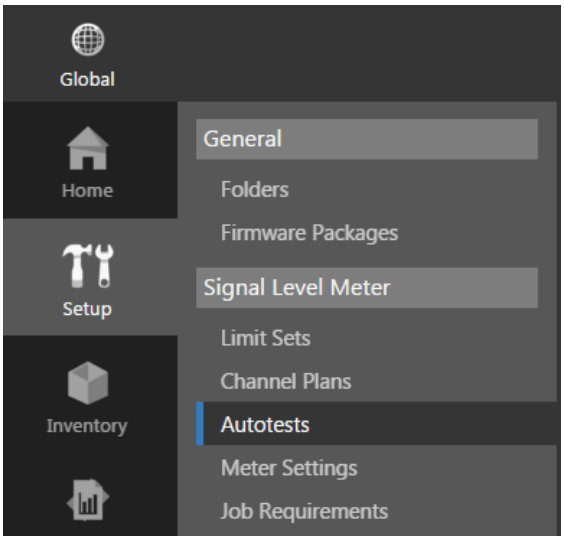
Autotests

Autotests are used on signal level meters to automatically perform a series of tests at multiple test locations using a specific channel plan and limit set. The following types of signal level meters use autotests; 180 DSP, 360 DSP, 720 DSP & 1G DSP.

If you intend to use autotesting on a signal level meter, you will first need to create an autotest.

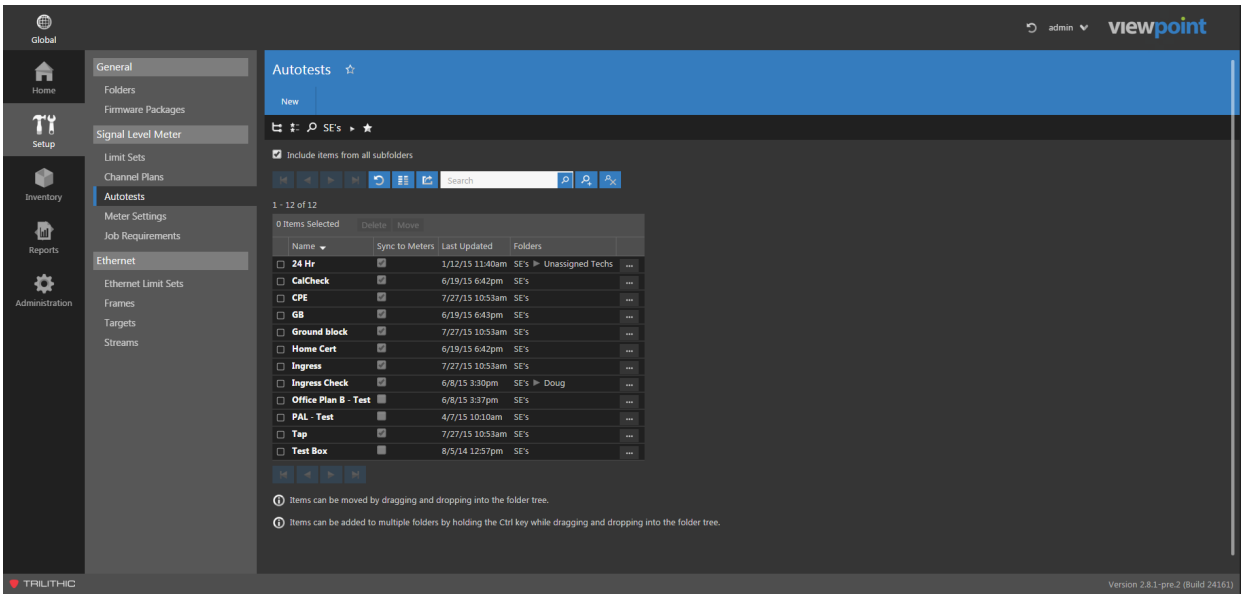
When creating an autotest, you can choose the locations that are allowed and required for testing as well as the locations where the technician can perform multiple tests.

Select **Signal Level Meter > Autotests** from the **Setup Settings** toolbar as shown in the image to the right.



Select the ☆ icon at the top of the page to add **Autotests** to your **Home** page favorites.

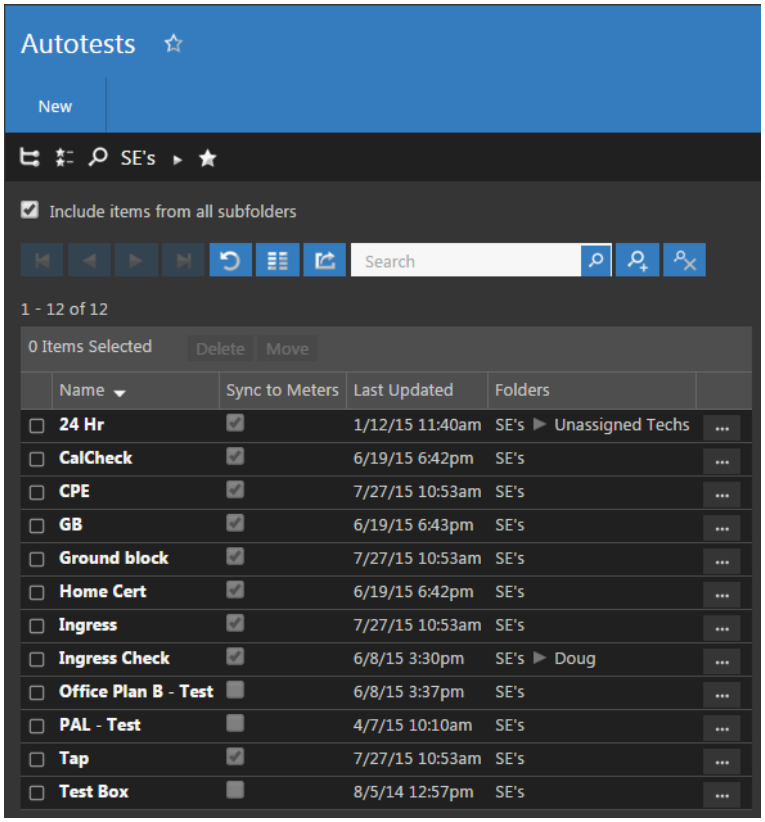
To remove **Autotests** from your **Home** page favorites, select the ★ icon.



Autotests Table

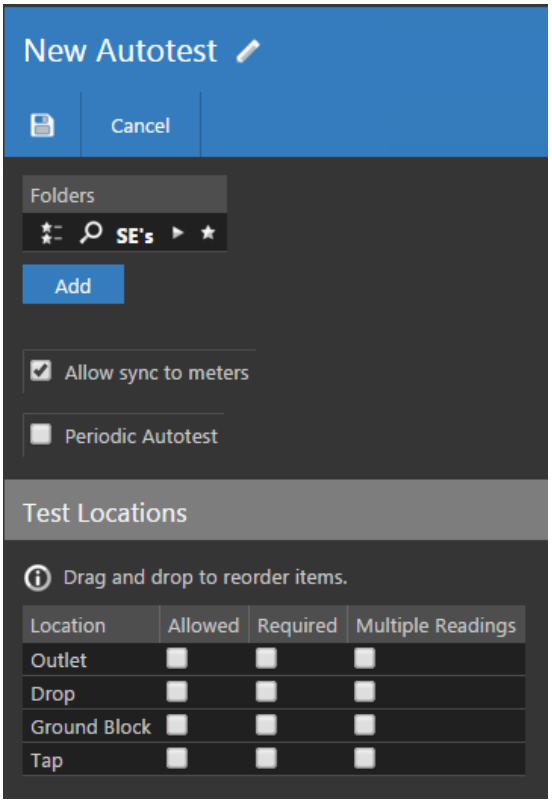
The **Autotests** screen will be displayed as shown in the image to the right. From this screen you can perform the following actions:

- View a list of autotests
- Create new autotests
- Edit an existing autotest
- Copy an existing autotest
- Delete an existing autotest
- Move an autotest



Creating a New Autotest

Perform the following steps to create a new autotest:

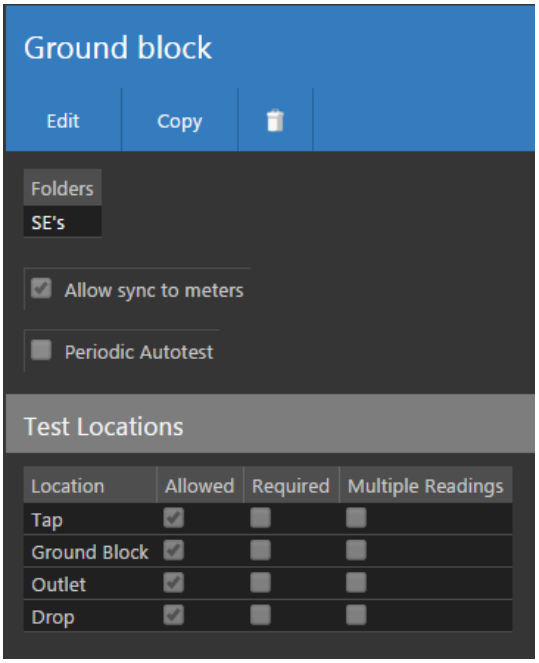


1. From the **Autotests** screen, select the **New** button.
2. Enter a name for the new autotest.
3. The **New Autotest** screen will be displayed as shown in the image to the right.
4. Adjust the settings of the autotest.
5. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the autotest details screen where your changes will still be displayed.
6. The new autotest should now appear in the **Autotests** table.

Editing an Autotest

Perform the following steps to edit an autotest:

1. From the **Autotests** screen, select the name of the autotest to edit and the autotest details screen will be displayed as shown in the image to the right.
2. Select the **Edit** button to adjust the settings of the autotest
3. Adjust the settings of the autotest.
4. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the bottom of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the autotest details screen where your changes will still be displayed.



Autotest Setup Details

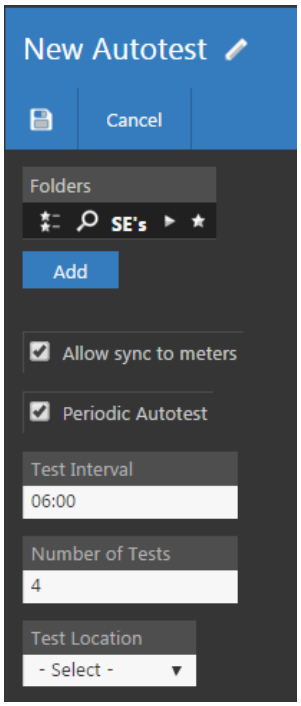
The following steps are used when creating or editing an autotest:

1. Select the **Add** button to add the autotest to a new location in the organization tree. Use the Organization toolbar within the window to select a new location and select the **Add** button. The new location will appear in the **Folders** area.
2. If you would like to allow this autotest to be synchronized with meters, select the **Allow sync to meters** check box. This is enabled by default when creating a new autotest.

Automatically Executed Periodic Autotest

Perform the following steps to setup an automatically executed periodic autotest:

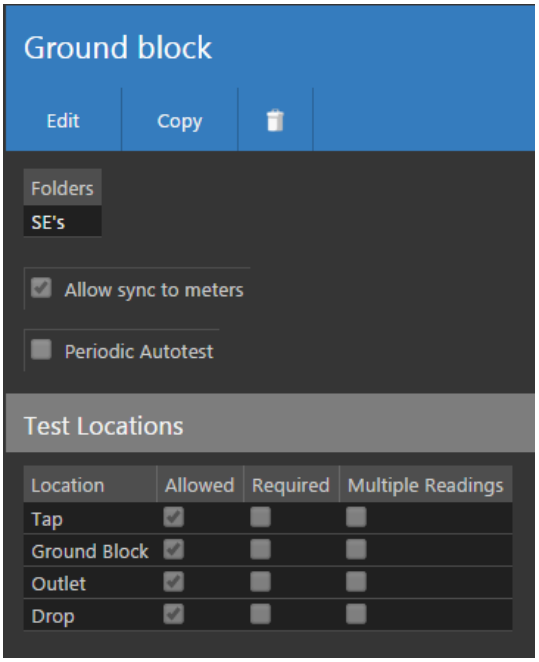
1. To enable the periodic autotest, select the **Periodic Autotest** checkbox as shown in the image to the right.
2. Select the **Test Interval** field to select the hours/minutes between tests.
3. Enter the total number of tests to perform in the **Number of Tests** field.
4. Select the location where the autotest will be performed from the **Test Location** dropdown box.



Manually Executed Autotest

Perform the following steps to setup a manually executed autotest:

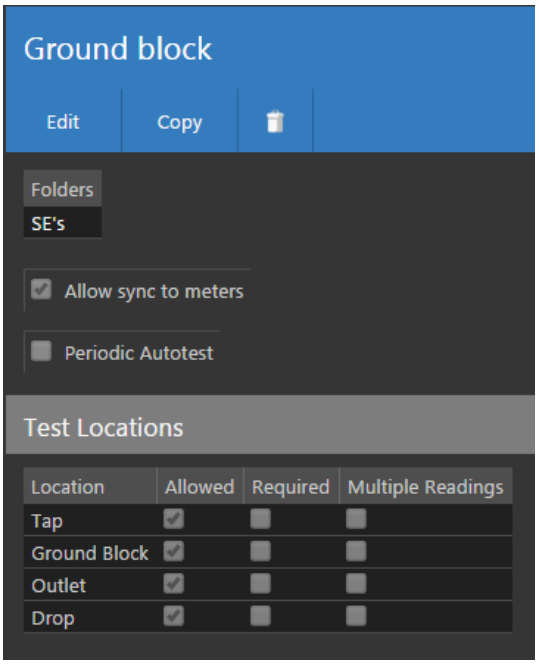
1. To allow locations for the autotest, select the **Allowed** checkbox next to the corresponding location.
2. To require locations for the autotest, select the **Required** checkbox next to the corresponding location.
3. To allow multiple readings at an allowed location, select the **Multiple Readings** checkbox next to the corresponding location.
4. To reorder the test locations, drag and drop the items.



Copying an Autotest

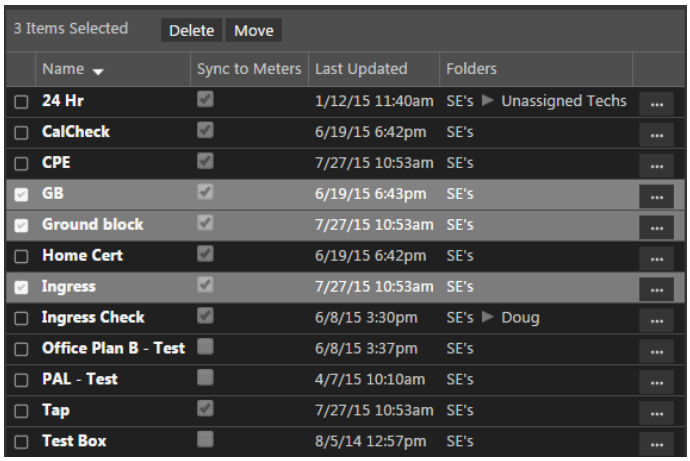
Perform the following steps to copy an autotest:

1. From the **Autotests** screen, select the name of the autotest to copy and the autotest details screen will be displayed as shown in the image to the right.
2. Select the **Copy** button.
3. Enter a new name for the copied autotest and then select the **OK** button.
4. Select the **Save** button to save the autotest.
5. The copied autotest should now appear with its new name in the **Autotest** table.



Deleting an Autotest

Perform the following steps to delete an autotest:

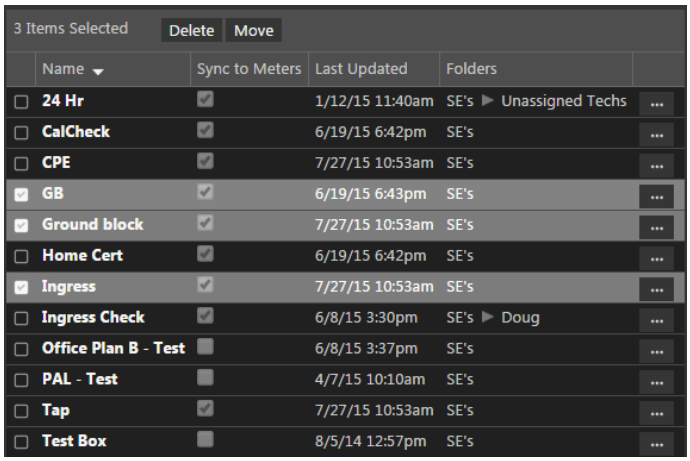


1. From the **Autotests** screen, select the checkbox to the left of each autotest to delete.
2. Once you have chosen the autotest, select the **Delete** button.
3. After selecting the **Delete** button, a **Confirm** window will be displayed.
    - When deleting five or less items, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **No** button to return to the **Autotests** screen where the item(s) will still be displayed.
    - When deleting more than five items, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the item(s) or select the **No** button to return to the **Autotests** screen where the item(s) will still be displayed.

Moving an Autotest in the Organization

Perform the following steps to move an autotest from one place to another in the organizational hierarchy:

1. From the **Autotests** screen, select the checkbox to the left of each item to move.
2. Once you have chosen the item(s), select the **Move** button.
3. After selecting the **Move** button, a window will be displayed as shown in the image to the right.



4. Use the Organization toolbar within the window to select a new location within the organization for the selected item(s).

5. Select the **OK** button to proceed with moving the item(s) or select the **Cancel** button to return to the **Autotests** screen where the item(s) will still be displayed in its original location.

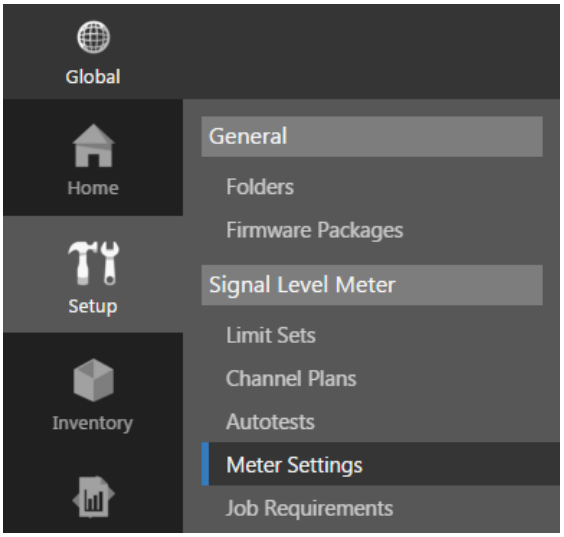
NOTE

Items can also be moved by dragging and dropping them into the organization tree or by using the add/remove folder ... button.

Meter Settings

To transfer meter configuration and user settings to a signal level meter, you will first need to create a Meter Settings file.

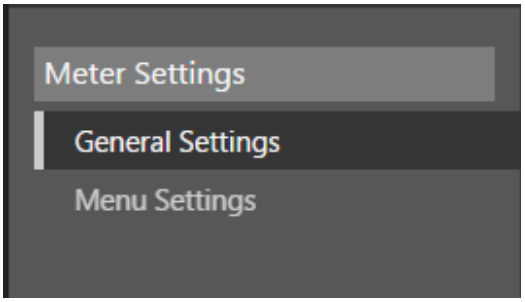
Select **Signal Level Meter > Meter Settings** from the **Setup Settings** toolbar as shown in the image to the right.



At the bottom of the **Setup Settings** toolbar, the **Meter Settings > General** section will be highlighed.

Select the ☆ icon at the top of the page to add **Meter Settings** to your **Home** page favorites.

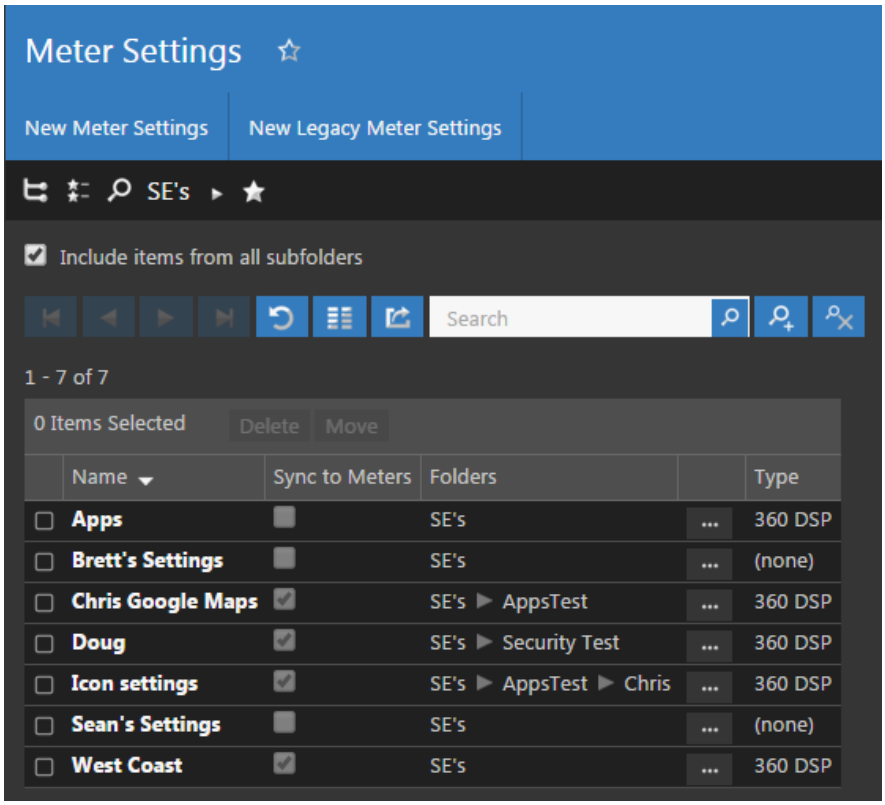
To remove **Meter Settings** from your **Home** page favorites, select the ★ icon.



Meter Settings Table

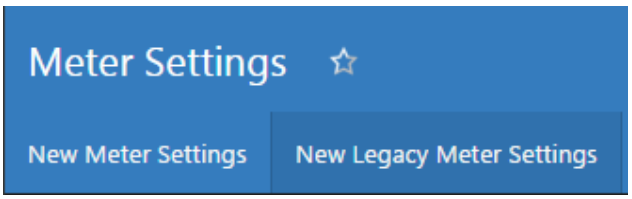
The **Meter Settings** screen will be displayed as shown in the image below. From this screen you can perform the following actions:

- View a list of meter settings files
- Create new meter settings files
- Edit an meter setting file
- Copy a meter setting file
- Delete a meter setting file
- Move a meter setting file

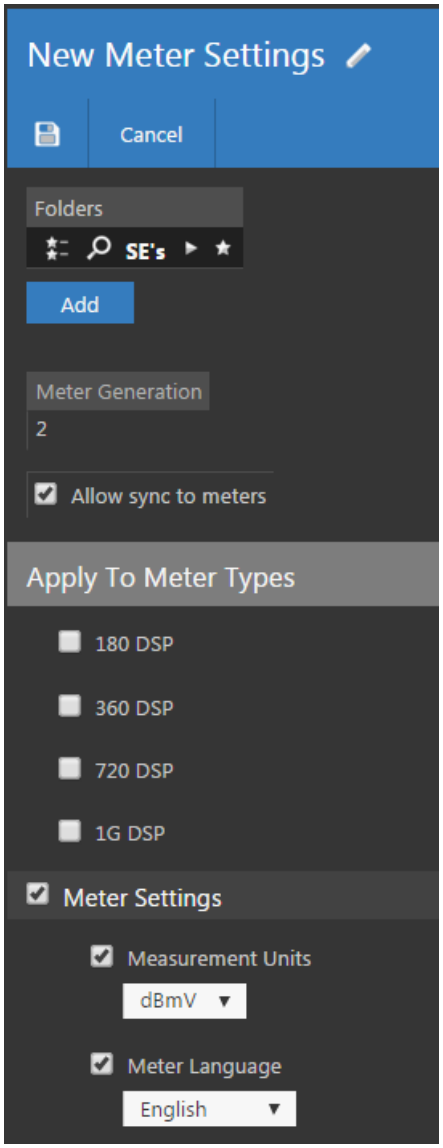


Creating a Meter Settings File

Perform the following steps to create a meter settings file:



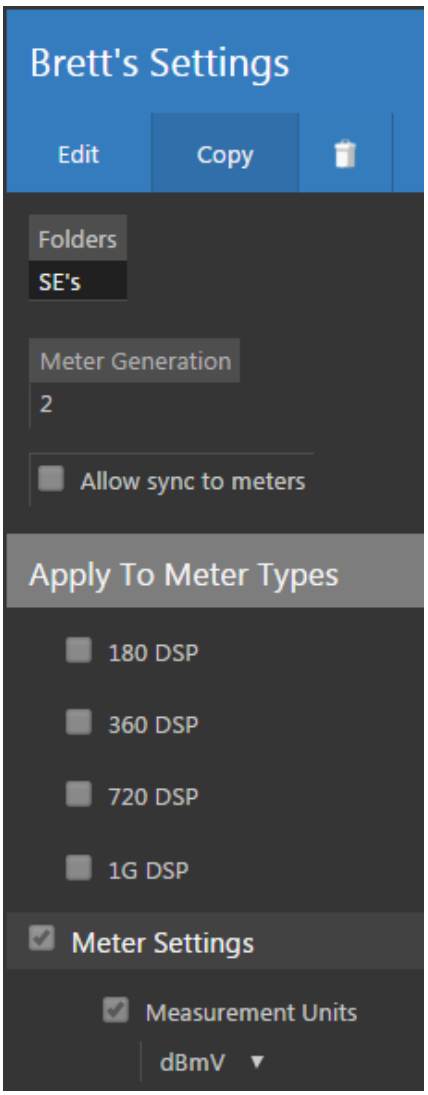
1. From the **Meter Settings** screen, select either the **New Meter Settings** or **New Legacy Meter Settings** button.
2. Enter a name for the new meter settings file.
3. The **New Meter Settings** screen will be displayed as shown in the image to the right.
4. Adjust the settings of the meter settings file.
5. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the meter settings details screen where your changes will still be displayed.
6. The new meter settings file should now appear in the **Meter Settings** table.



Editing an Existing Meter Settings File

Perform the following steps to edit an existing meter settings file:

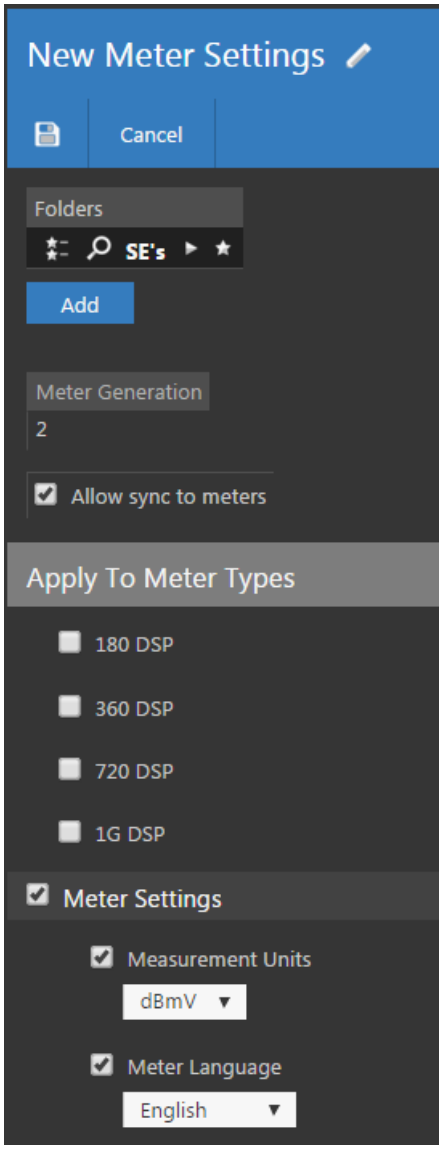
1. From the **Meter Settings** screen, select the name of the meter settings file to edit and the meter settings file details screen will be displayed as shown in the image to the right.
2. Select the **Edit** button to adjust the settings of the meter settings file.
3. Adjust the settings of the meter settings file.
4. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the bottom of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the meter settings details screen where your changes will still be displayed.



Meter Settings File Setup Details (New DSP Family)

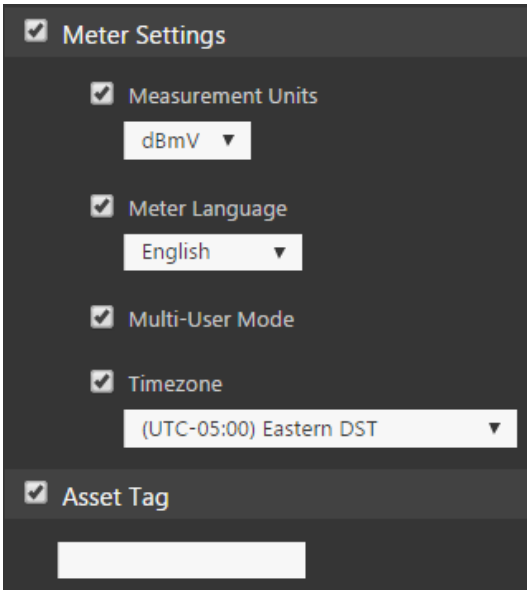
Perform the following steps when creating or editing a meter settings file for the new DSP family of signal level meters including; 180 DSP, 360 DSP, 720 DSP & 1G DSP:

1. Select the **Add** button to add the meter settings file to a new location in the organization tree. Use the Organization toolbar within the window to select a new location and select the **Add** button. The new location will appear in the **Folders** area.
2. If you would like to allow this meter settings file to be synchronized with meters, select the **Allow sync to meters** checkbox. This is enabled by default when creating a new meter settings file.
3. Select the checkbox that corresponds to the type of meter(s) to include in the meter settings file.



Meter Settings

Select the **Meter Settings** checkbox to include any of the following settings in the meter settings file. Otherwise, these settings will not be included in the meter settings file:



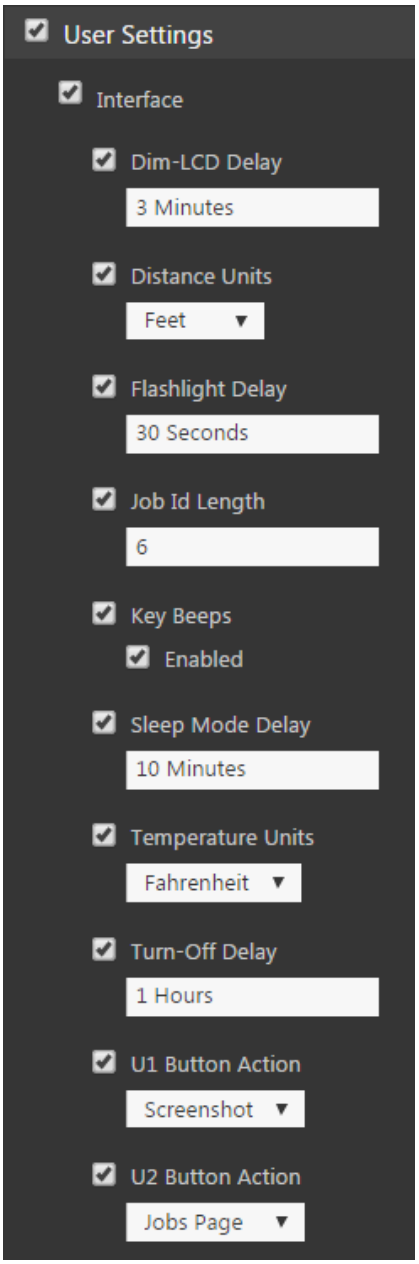
- **Measurement Units** – This setting is used to set the default measurement units. The default unit of measurement is **dBmV**, select from the following preset values; **dBuV**, **dBmV**, or **dBm**.
- **Meter Language** – This setting is used to set the display language of the meter. The default language is **English**, select from the following languages; **English**, **Spanish**, **Portuguese**, or **Chinese**.
- **Multi-User Mode** – This setting is used to control whether multiple user profiles are displayed when the meter is powered on. By default the **Multi-User Mode** is enabled. Disable to allow only one user profile.
- **Timezone** – This setting allows you to set the time zone of the meter. This is useful when using the instrument in areas that automatically adjust their local time based on Daylight Savings Time (DST).

Asset Tag

Select the **Asset Tag** checkbox to enter a company assigned asset identification number in the meter settings file.

Interface

When the **User Settings** checkbox is selected, select the **Interface** checkbox to include any of the following settings in the meter settings file. Otherwise, these settings will not be included in the meter settings file:

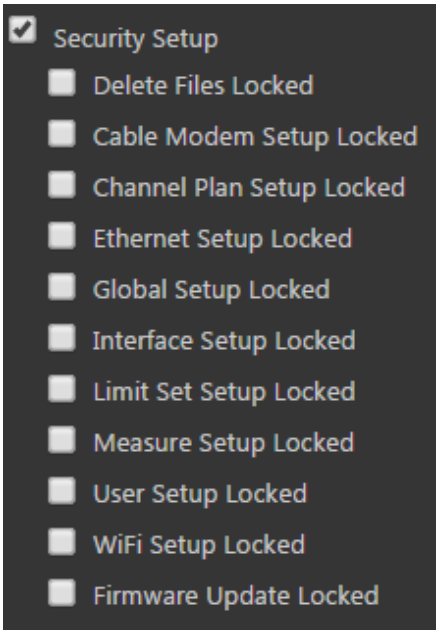


- **Dim-LCD Delay** – This setting is used to conserve power by automatically dimming the display screen backlight after the meter has been idle for a specified period of time. The default setting for the LCD dimming delay is 3 Minutes. The LCD dimming delay can be set from a minimum of one (1) minute up to a maximum of five (5) minutes.
- **Distance Units** – This setting is used to set the default distance measurement units to display on the meter. The default setting is feet.
- **Flashlight Delay** – This setting is used to conserve power by automatically turning off the LED flashlight after a specified period of time. The default setting for the flashlight delay is 30 seconds. The flashlight delay can be set from a minimum of 30 seconds up to a maximum of 180 seconds.
- **Job ID Length** – This setting is used to set the maximum number of characters to display for jobs on the meter. The default setting for the job ID length is 6 characters. The character length can be set from a minimum of 6 characters up to a maximum of 32 characters.
- **Key Beeps** – This setting is used to enable or disable keypad beeps for the internal speaker. The default setting is enabled.
- **Sleep Mode Delay** – This setting is used to conserve power by automatically enabling the sleep mode after the meter has been idle for a specified period of time. The default setting for the sleep mode delay is 10 Minutes. The sleep mode delay can be set from a minimum of one (1) minute up to a maximum of 60 minutes.

- **Temperature Units** – This setting is used to set the default temperature units to display on the meter. The default setting is Fahrenheit.
- **Turn-Off Delay** – This setting is used to conserve power by automatically turning off the device after the meter has been idle for a specified period of time. The default setting for the turn off delay is 1 hour. The turn off delay can be set from a minimum of one (1) hour up to a maximum of 24 hours.
- **U1 Button Action** - This setting is used to assign a custom action to the U1 button on the 1G DSP.
- **U2 Button Action** - This setting is used to assign a custom action to the U2 button on the 1G DSP.

Security Setup

When the **User Settings** checkbox is selected, select the **Security Setup** checkbox to restrict user access to any of the following items:

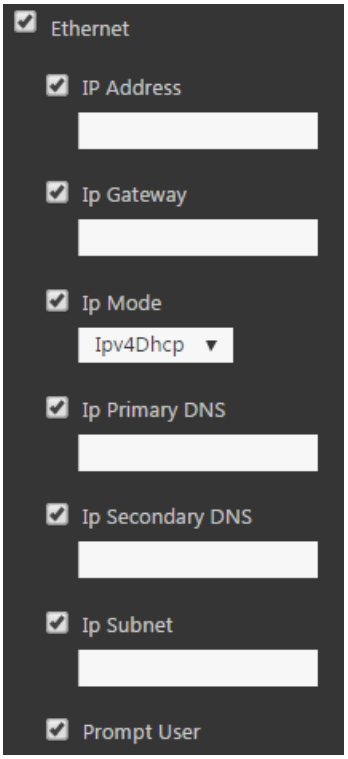


- **Delete Files Locked** – This setting prevents users from deleting any files on the meter.
- **Cable Modem Setup Locked** – This setting prevents users from modifying any cable modem settings on the meter. If this option is selected, default cable modem settings should be programmed to the meter as part of the same meter settings file.
- **Channel Plan Setup Locked** – This setting prevents users from modifying any channel plans on the meter. If this option is selected, at least one channel plan should be programmed to the meter as part of a package file.
- **Ethernet Setup Locked** – This setting prevents users from modifying any Ethernet settings on the meter. If this option is selected, default Ethernet settings should be programmed to the meter as part of the same meter settings file.

- **Global Setup Locked** – This setting prevents users from modifying any global settings on the meter including: Operating Level, Multi-User Settings, Direct to Tethered Mode, Auto Start Network, Language, Measurement Units, and Time zone. If this option is selected, the Multi-User Settings, Language, Measurement Units, and Time zone should be programmed to the meter as part of the same meter settings file.
- **Interface Setup Locked** – This setting prevents users from modifying any interface settings on the meter including: LCD Dimming Delay, Sleep Mode Delay, Turn Off Delay, Flashlight Delay, Keypad Beeps, Temperature Units, Distance Units, and Job/Workorder ID Length.
- **Limit Set Setup Locked** – This setting prevents users from modifying any limit sets on the meter. If this option is selected, at least one limit set should be programmed to the meter as part of a package file.
- **Measure Setup Locked** – This setting prevents users from modifying any measurement settings on the meter including; Analog Noise Bandwidth, Optimal Modulation, and Velocity of Propagation. If this option is selected, these settings should be programmed to the meter as part of the same meter settings file.
- **User Setup Locked** – This setting prevents users from modifying any user settings on the meter including; User Name, Company, and Tech ID. If this option is selected, the user settings should be programmed to the meter as part of the same meter settings file.
- **Wi-Fi Setup Locked** – This setting prevents users from modifying any Wi-Fi settings on the meter. If this option is selected, default Wi-Fi settings should be programmed to the meter as part of the same meter settings file.
- **Firmware Update Locked** – This setting prevents users from updating the firmware on the meter.

Ethernet Setup

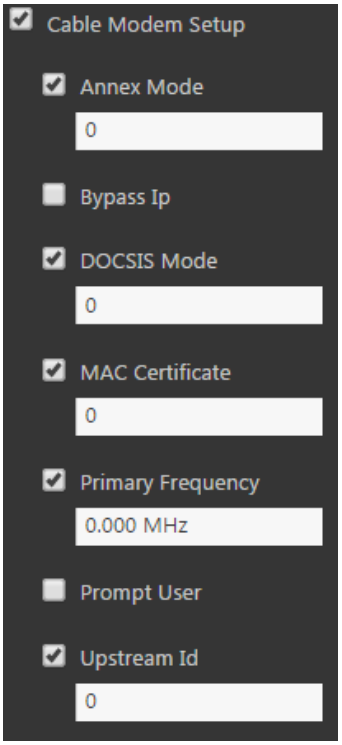
When the **User Settings** checkbox is selected, select the **Ethernet** checkbox to send Ethernet settings to the meter. This should always be selected if the **Ethernet Setup Locked** checkbox is selected in the **Security Setup** section.



- When **IP Mode** is set to **IPv4 Static**, the **IP Address** setting is used to set the IP address of the network connection.
- When **IP Mode** is set to **IPv4 Static**, the **IP Gateway** setting is used to set the gateway address of the network connection.
- The **IP Mode** setting is used to set which type of network connection to establish when logging into a network. The default setting for **IP mode** is **IPv4 DHCP**.
    - Select **IPv4 DHCP** to automatically obtain an IP address from a DHCP server. In this mode, the network settings cannot be adjusted and are populated with the text **Automatic**.
    - Select **IPv4 Static** to manually enter the network settings. In this mode, all of the network settings must be manually adjusted as shown in the following sections.
- When **IP Mode** is set to **IPv4 Static**, the **IP Primary DNS** setting is used to set the primary domain name server address of the network connection.
- When **IP Mode** is set to **IPv4 Static**, the **IP Secondary DNS** setting is used to set the secondary domain name server address of the network connection.
- When **IP Mode** is set to **IPv4 Static**, the **IP Subnet** setting is used to set the subnet address of the network connection.
- The **Prompt User** setting is used to prompt a user with the **Network Settings** window before connecting to a network. If **Ethernet Setup Locked** is selected in the **Security Setup** section, the user will not be prompted with the **Network Settings** window.

Cable Modem Settings

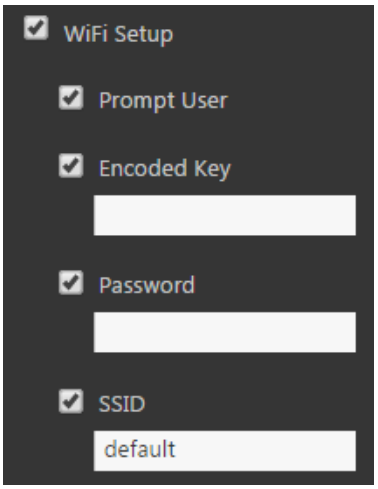
Select the **Cable Modem Setup** checkbox to send cable modem settings to the 360 DSP, 720 DSP & 1G DSP signal level meters. This setting does not apply to the 180 DSP. This should always be selected if the **Cable Modem Setup Locked** checkbox is selected in the **Security Setup** section.



- **Annex Mode** – This setting is used to set which cable modem annex to use.
- **Bypass IP** – This setting is used to set whether the cable modem obtains an IP address from the DHCP server when connecting.
- **DOCSIS Mode** – This setting is used to set the DOCSIS mode of the CMTS that the cable modem will connect to. The default setting is **Automatic**, enter the following values; **Automatic**, **DOCSIS 1.1**, **DOCSIS 2.0**, or **DOCSIS 3.0**.
- **MAC Certificate** – This setting is used to set which cable modem MAC address to use when connecting to the CMTS. The default setting is **Automatic**, select from the following preset values: **Automatic**, **MAC #1**, or **MAC #2**.
- **Primary Frequency** – This setting is used to set the primary cable modem frequency to use when connecting to the CMTS. The primary frequency can be set to a minimum of 000.000 MHz (Automatic) up to a maximum of 999.999 MHz.
- **Prompt User** – This setting is used to prompt a user with the **Network Settings** window before connecting to a network. If **Cable Modem Setup Locked** is selected in the **Security Setup** section, the user will not be prompted with the **Network Settings** window.
- **Upstream ID** – This setting is used to set the ID of the upstream channel of the CMTS that the cable modem will connect to. The default setting is **Automatic**. The upstream ID can be set to a minimum of 0 (Automatic) up to a maximum of 16.

Wi-Fi Settings

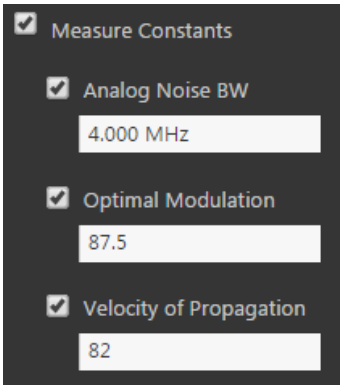
Select the **Wi-Fi Setup** checkbox to send Wi-Fi settings to the meter. This should always be selected if the **Wi-Fi Setup Locked** checkbox is selected in the **Security Setup** section.



- **Prompt User** – This setting is used to prompt a user with the **Network Settings** window before connecting to a network. If **Wi-Fi Setup Locked** is selected in the **Security Setup** section, the user will not be prompted with the **Network Settings** window.
- **Encoded Key** – This setting is used to enter the WPA and WPA2 key for a Wi-Fi network. This type of network authentication is used to provide enhanced security over Wi-Fi networks with WEP encryption.
- **Password** – This setting is used to enter the WEP password for a Wi-Fi network. This type of network authentication provides a less secure connection than Wi-Fi networks with WPA or WPA2 encryption.
- **SSID** – This setting is used to enter the name of the default Wi-Fi network.

Measurement Constants

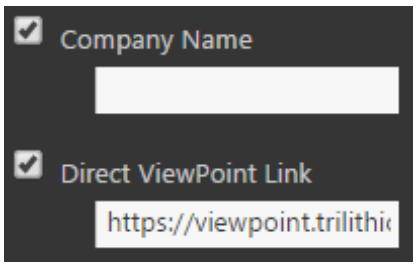
Select the **Measure Constants** check box to measurement constants to the meter. This should always be selected if the **Global Setup Locked** checkbox is selected in the **Security Setup** section.



- **Analog Noise BW** – This setting is used to set the noise bandwidth that is used when computing C/N for analog TV channels. The default setting is **4.000 MHz**. The analog noise bandwidth can be set to a minimum of 0.100 MHz up to a maximum of 9.000 MHz.
- **Optimal Modulation** – This setting is used to set the marker on the % modulation bar graph to compute signal level for analog channels with SECAM L modulation. The default setting is **87.5%**. The optimal modulation can be set to a minimum of 70.0% up to a maximum of 99.0%.

- **Velocity of Propagation** – This setting is used to set the propagation value for the cable under test. The default setting is **82.0%**. The velocity of propagation can be set to a minimum of 70.0% up to a maximum of 99.0%.

Company Name

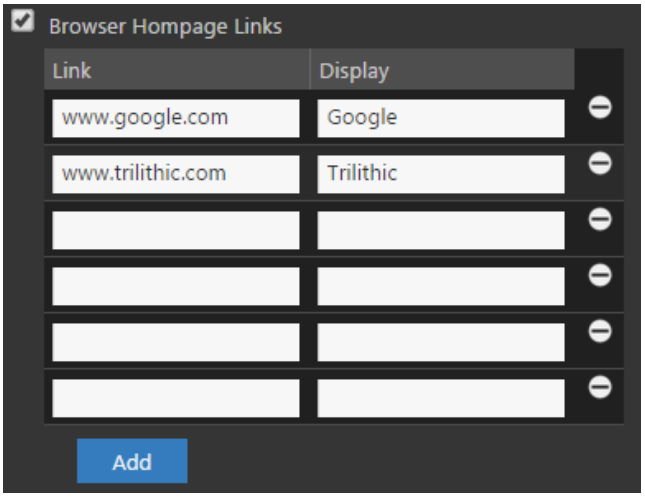


Select the **Company Name** checkbox to set the company name on the meter. This information is displayed on the welcome screen and is added to every data log, measurement, job, and autotest.

Direct ViewPoint Link

Select the **Direct ViewPoint Link** checkbox to save a direct link to ViewPoint on the meter. This information is displayed on the web browser home page.

Browser Homepage Links



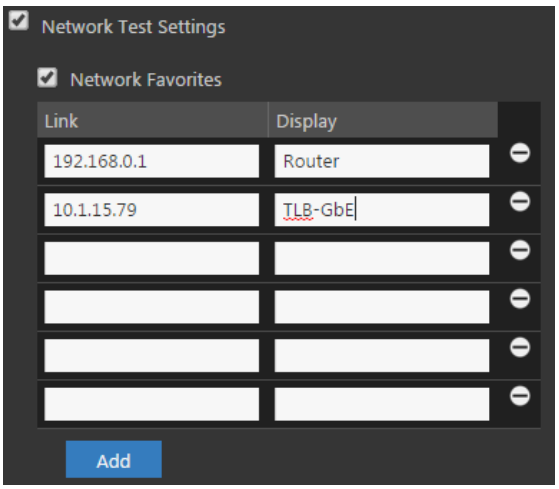
Select the **Browser Homepage Links** checkbox to set the links that are displayed on the meter web browser home screen.

- Up to six links can be displayed on the web browser home screen of the meter.
- To create a new link, select the **Add** button.
- For each link you can enter a custom URL or IP address in the **Link** field.
- For each link you can enter a custom name in the **Display** field that appears on the web browser home screen for each link.
- To remove a link, select the minus (-) icon to the right of the link.

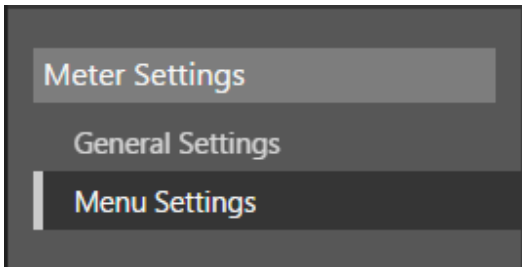
Network Testing Favorites Links

Select the **Network Test Settings** checkbox to set the links that are displayed on the meter Network Tests home screen.

- Up to six links can be displayed on the Favorites pop-up menu of the meter Network Tests screen.
- To create a new link, select the **Add** button.
- For each link you can enter a custom URL or IP address in the **Link** field.
- For each link you can enter a custom name in the **Display** field that appears on the home screen for each link.
- To remove a link select the minus (-) icon to the right of the link.



Menu Display Settings

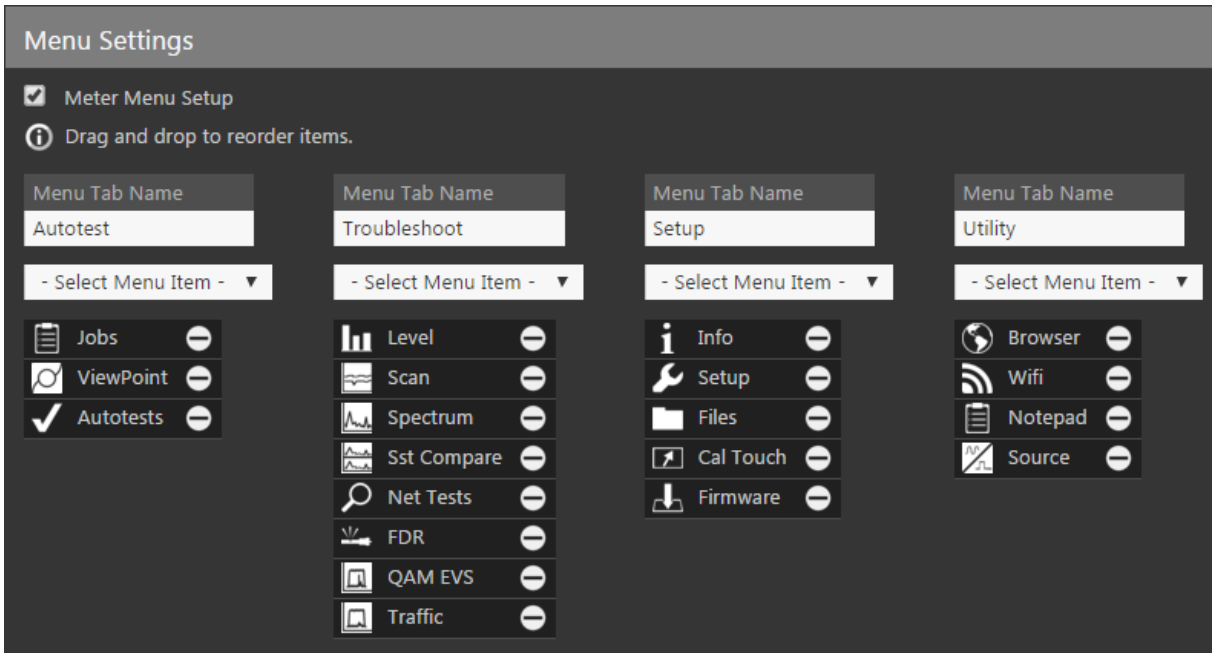


At the bottom of the **Setup Settings** toolbar, select the **Meter Settings > Menu Settings** section.

Select the **Meter Menu Settings** checkbox to include any of the following settings in the meter settings file. Otherwise, these settings will not be included in the meter settings file.

You can customize the new DSP family navigation menus to better fit the way your field technicians operate.

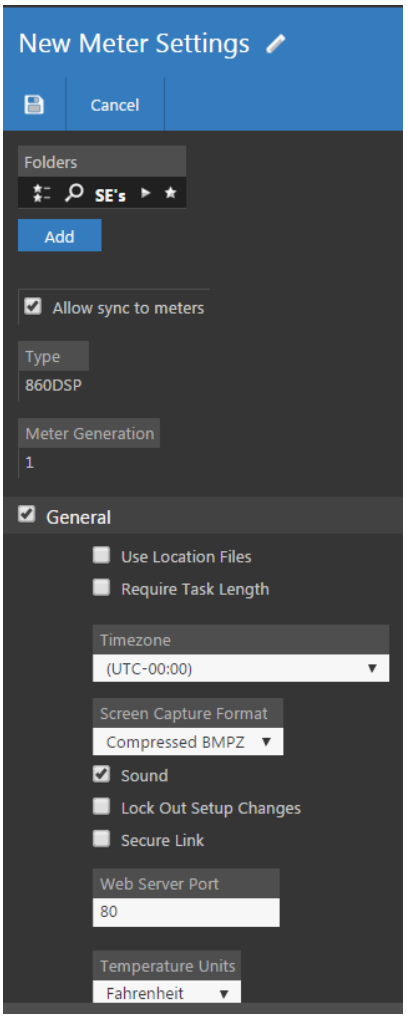
- Enter the names you wish to display into the four **Menu Tab Name** fields. The default tabs are **Autotest, Troubleshoot, Setup**, and **Utilty**.
- To reorder how the functions are displayed on the meter, drag and drop items.
- Up to 16 functions can be added to each menu tab by selecting the name of the function from the dropdown list below each function table.
- Select the minus (-) sign to the right of a function to delete that function from the screen of the meter.



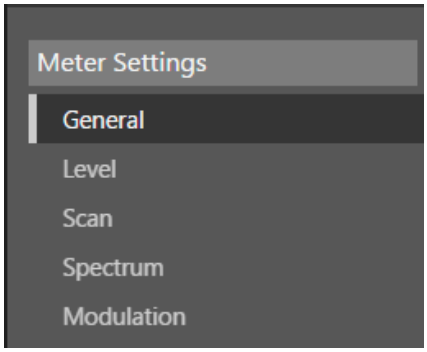
Meter Settings File Setup Details (Original DSP Family)

Perform the following steps when creating or editing a meter settings file for an original DSP family meter including the 860 DSP & 860 DSPi.

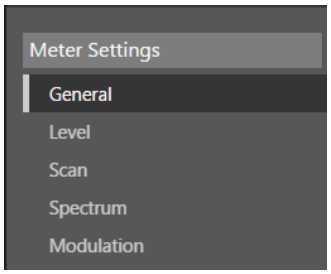
At the bottom of the **Setup Settings** toolbar, the **Menu Settings > General** section will be highlighted as shown in the image below.



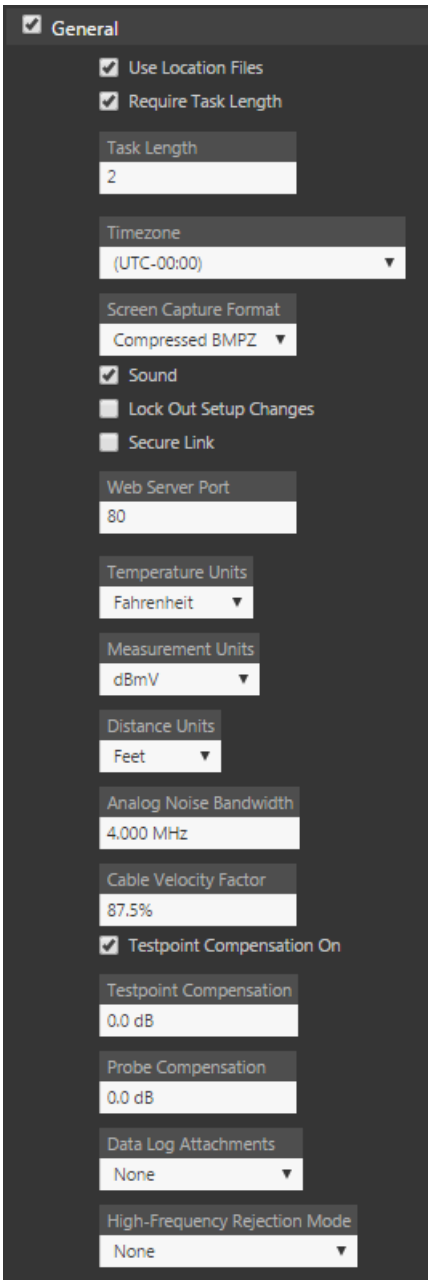
1. Select the **Add** button to add the meter settings file to a new location in the organization tree. Use the Organization toolbar within the window to select a new location and select the **Add** button. The new location will appear in the **Folders** area.
2. If you would like to allow this meter settings file to be synchronized with meters, select the **Allow sync to meters** checkbox. This is enabled by default when creating a new meter settings file.



General Setup Parameters



At the bottom of the **Setup Settings** toolbar, select the **Meter Settings > General** area and then select the **General** checkbox to include any of the following settings in the meter settings file. Otherwise, these settings will not be included in the meter settings file:



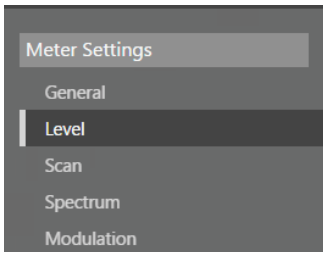
- **Use Location Files** – This settings is used to enable the use of location files on the meter.
- **Require Task Length** – Enables the ability to require a length for the task number.
- **Task Length** – This setting is used to set the maximum number of characters to display for tasks on the meter. The default setting for the task ID length is 6 characters. The character length can be set from a minimum of 2 characters up to a maximum of 15 characters.
- **Timezone** – This setting allows you to set the time zone of the meter. This is useful when using the instrument in areas that automatically adjust their local time based on Daylight Savings Time (DST).
- **Screen Capture Format** – This setting is used to adjust the file type of the screen captures captured on the meter. Select from **Compressed BMPZ**, **Direct LCD** or **Standard BMP**.
- **Sound** – This setting is used to enable or disable keypad beeps for the internal speaker. The default setting for sound is enabled.
- **Lock Out Setup Changes** – This setting is used to restrict user access to making setup changes to the meter.

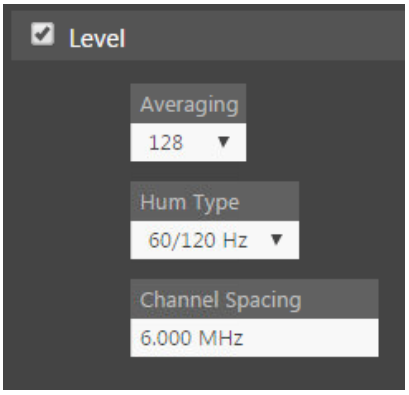
- **Secure Link** – This setting is used to restrict communications to a secure link. This setting uses the currently selected **Web Server Port** value.
- **Web Server Port** – This setting is used to set the web server communication port. When **Secure Link** is enabled, this setting will be fixed at its current value.
- **Temperature Units** – This setting is used to set the default temperature units to display on the meter. The default setting for Temperature Units is **Fahrenheit**.
- **Measurement Units** – This setting is used to set the default measurement units. The default unit of measurement is **dBmV**, select from the following preset values; **dBuV**, **dBmV**, or **dBm**.
- **Distance Units** – This setting is used to set the default distance measurement units to display on the meter. The default setting for Distance Units is **Feet**.
- **Analog Noise Bandwidth** – This setting is used to set the noise bandwidth that is used when computing C/N for analog TV channels. The default setting for the analog noise bandwidth is **4.000 MHz**. The analog noise bandwidth can be set to a minimum of 0.100 MHz up to a maximum of 9.000 MHz.
- **Cable Velocity Factor** – This setting is used to set the propagation value for the cable under test. The default setting for the velocity of propagation is **82.0%**. The velocity of propagation can be set to a minimum of 70.0% up to a maximum of 99.0%.
- **Testpoint Compensation On** – This setting allows you to enable and disable the constant offset that will be added to all measurements made in Level, QAM, Tilt, Scan, Spectrum Analyzer, C/N, and CSO/CTB Modes in order to have the unit automatically adjust the data to overcome test point losses. The default setting is **Disabled**.
- **Testpoint Compensation** – This setting allows you to set the constant offset for the test point that will be added to all measurements made in Level, QAM, Tilt, Scan, Spectrum Analyzer, C/N, and CSO/CTB Modes in order to have the unit automatically adjust the data to overcome test point losses. The default setting for the testpoint compensation is **0.0 dB**. The testpoint compensation can be set to a minimum of -40.0 dB up to a maximum of 40.0 dB.
- **Probe Compensation** – This setting allows you to set the constant offset for the test probe that will be added to all measurements made in Level, QAM, Tilt, Scan, Spectrum Analyzer, C/N, and CSO/CTB Modes in order to have the unit automatically adjust the data to overcome test point losses. The default setting for the probe compensation is **0.0 dB**. The probe compensation can be set to a minimum of -40.0 dB up to a maximum of 40.0 dB.

- **Data Log Attachments** – This setting allows you to choose whether to assign a location and/or task to any data logs that you wish to save. The default setting for data log attachments is **None**.
- **High-Frequency Rejection Mode** – This setting allows you to choose whether to select from normal or MW high-frequency rejection mode. The default setting for high-frequency rejection mode is **None**.

Level Measurement Parameters

At the bottom of the **Setup Settings** toolbar, select the **Meter Settings > Level** area and then select the **Level** checkbox to include any of the following settings in the meter settings file. Otherwise, these settings will not be included in the meter settings file:

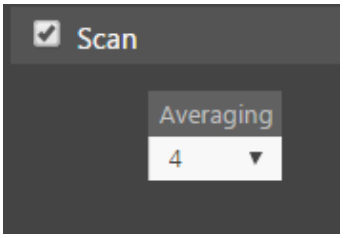




- **Averaging** – This setting is used to select the rate of averaging for single channel level measurements. The default setting for averaging is **128** times. The averaging can be set to **1**, **2**, **4**, **8**, **16**, **32**, **64**, **128**, **256**, **512** or **1024** times.
- **Hum Type** – This frequency is used when measuring power line related Hum. The default setting for the hum type is **60/120 Hz**. You can set the hum type to either **50/100 Hz** or **60/120 Hz**.
- **Channel Spacing** – This setting is used to select the frequency step sizes used when tuning by frequency. The default channel spacing is **6 MHz**.

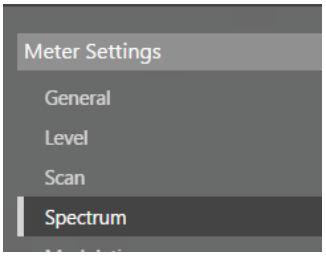
Scan Measurement Parameters

At the bottom of the **Setup Settings** toolbar, select the **Meter Settings > Scan** area and then select the **Scan** checkbox to include any of the following settings in the meter settings file. Otherwise, these settings will not be included in the meter settings file:

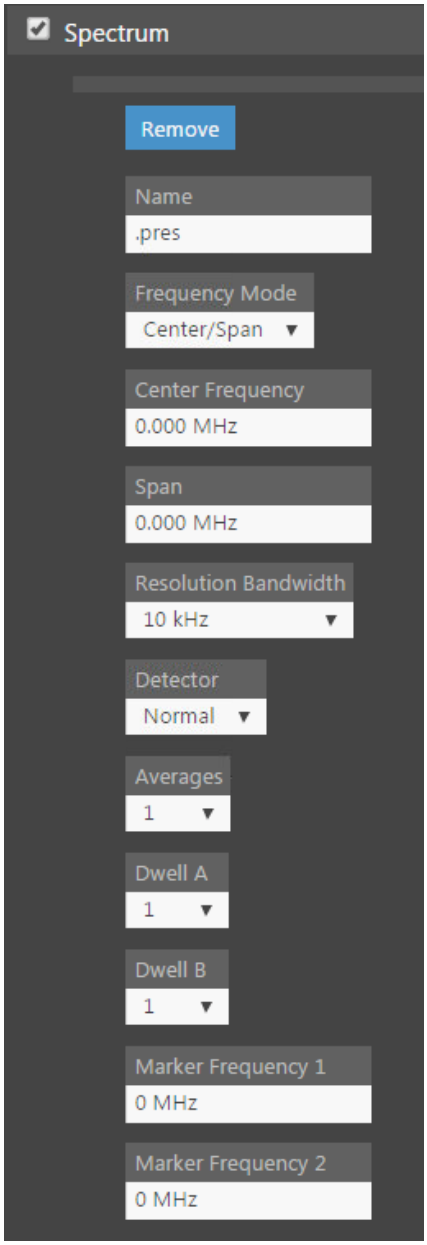


- **Averaging** – This setting is used to select the rate of averaging for channel scan measurements. The default setting for averaging is **4** times. The averaging can be set to **1**, **2**, **4**, **8**, **16**, **32**, **64**, **128**, **256**, **512** or **1024** times.

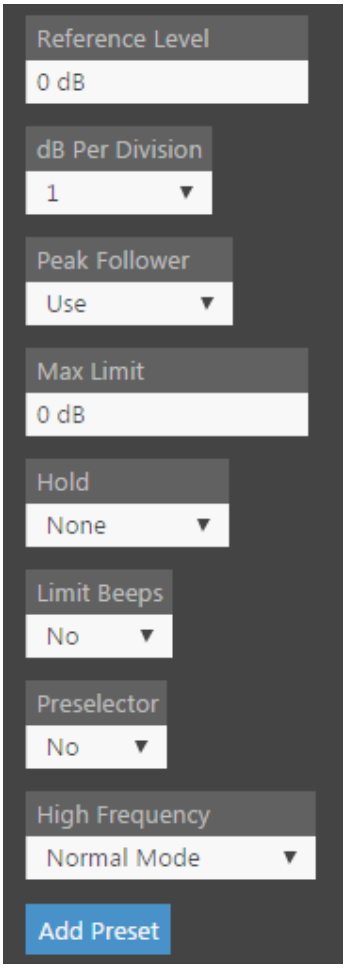
Spectrum Measurement Parameters



At the bottom of the **Setup Settings** toolbar, select the **Meter Settings > Spectrum** area and then select the **Spectrum** checkbox to include any of the following settings in the meter settings file. Otherwise, these settings will not be included in the meter settings file:

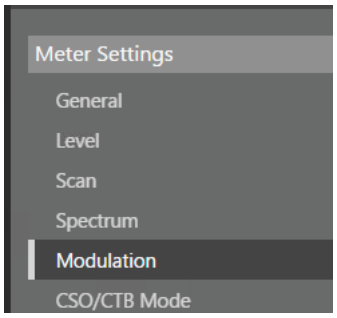


- **Name** – This setting is used to enter a name of the spectrum preset file. The file name should be followed by the suffix of ".pres".
- **Frequency Mode** – This setting is used to select the from one of the following frequency modes:
  - **Center/Span** – Enter the desired values into the **Center Frequency** and **Span** fields.
  - **Start/Stop** – Enter the desired values into the **Start Frequency** and **Stop Frequency** fields.
  - **Zero Span** – No frequency values need to be entered in this mode.
- **Resolution Bandwidth** – This setting is used to select from **10 kHz**, **30 kHz**, **100 kHz**, **300 kHz**, **1 MHz**, or **3 MHz** resolution bandwidths.
- **Detector** – This setting is used to select from the **Normal**, **Dwell A**, or **Dwell B** default detector types.
- **Averages** – This setting is used to select the number times to average the spectrum measurement when the Detector is set to Normal. You can select from **1**, **2**, **4**, **6**, **8**, **16**, **32**, **64**, **128** or **256** times.
- **Dwell A** – This setting is used to select the number times to average the spectrum measurement when the Detector is set to Normal. You can select from **1**, **2**, **4**, **6**, **8**, **16**, **32**, **64**, **128** or **256** times.



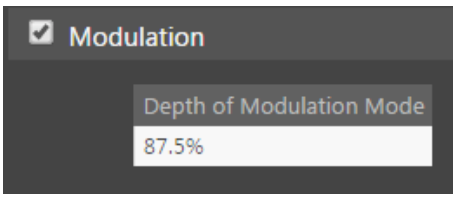
- **Dwell B** – This setting is used to select the number times to average the spectrum measurement when the Detector is set to Normal. You can select from **1**, **2**, **4**, **6**, **8**, **16**, **32**, **64**, **128** or **256** times.
- Marker Frequency 1 – This setting is used to set the frequency for marker 1. The default setting for the marker frequency is **0 MHz**.
- **Marker Frequency 2** – This setting is used to set the frequency for marker 2. The default setting for the marker frequency is **0 MHz**.
- **Reference Level** – This setting is used to set the reference level for the spectrum measurement. The default setting for the reference level is **0 dB**.
- **dB Per Division** – This setting is used to select from **1**, **2**, **5** or **10** dB per division vertical resolution.
- **Peak Follower** – This setting is used to enable/disable the peak measurement trace for the spectrum measurement.
- **Max Limit** – This settings is used to set the maximum limit for the spectrum measurement.
- **Hold** – This setting is used to select from **Local Min**, **Local Max**, **Global Min**, **Global Max** or **None** as hold types for the spectrum measurement.
- **Limit Beeps** – This setting is used to enable/disable beeps for the internal speaker for spectrum measurements above/below the current measurement limits.
- **Preselector** – This setting is used to enable/disable the preselector for the spectrum measurement.
- **High Frequency** – This setting is used to enable/disable the high-frequency rejection feature for the spectrum measurement.
- **Add Preset** – This button is used to create additional spectrum measurement files. After selecting this button, a new set of spectrum measurement settings will be created. Continue this process until you have created all of the necessary preset files.

Depth of Modulation Parameters



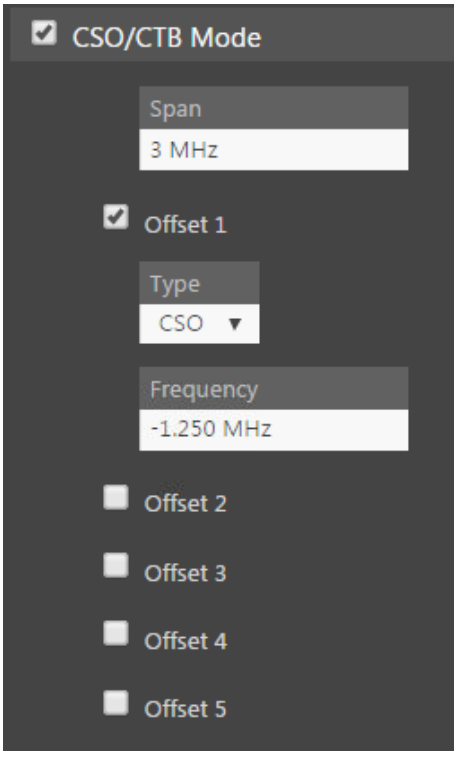
At the bottom of the **Setup Settings** toolbar, select the **Meter Settings > Modulation** area and then select the **Modulation** checkbox to include any of the following settings in the meter settings file. Otherwise, these settings will not be included in the meter settings file:

- **Depth of Modulation Mode** – This setting is used to select the optimal modulation of the depth of modulation measurements. The default setting for averaging is **87.5%**.



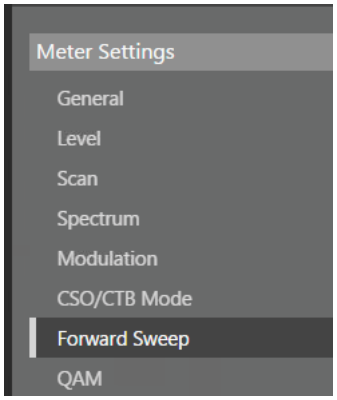
CSO/CTB Measurement Parameters

At the bottom of the **Setup Settings** toolbar, select the **Meter Settings > CSO/CTB Mode** area and then select the **CSO/CTB Mode** checkbox to include any of the following settings in the meter settings file. Otherwise, these settings will not be included in the meter settings file:



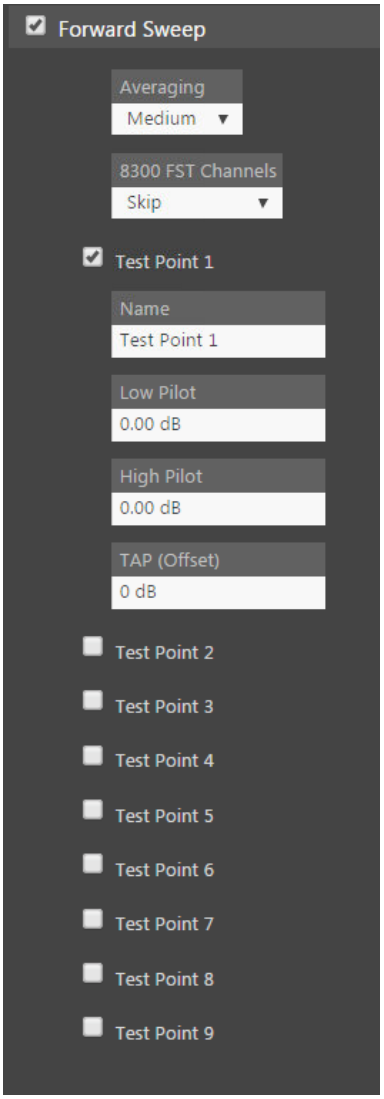
- **Span** – This setting allows you to set the total frequency span included in a CSO/CTB measurement. Set this greater than 2 times the largest CSO/CTB offset. The default span is set to **3 MHz**. The span can be set to a minimum of 3 MHz up to a maximum of 7 MHz.
- **Offset #1** to **Offset #5** – These checkboxes allows you to enable up to five offsets for the CSO/CTB measurement. The default setting for each offset is Disabled.
    - Select either CSO or CTB from the **Type** dropdown box.
    - Enter the frequency for the offset in the **Frequency** field.

Forward Sweep Parameters



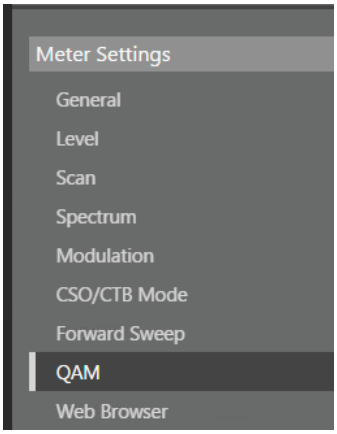
At the bottom of the **Setup Settings** toolbar, select the **Meter Settings > Forward Sweep** area and then select the **Forward Sweep** checkbox to include any of the following settings in the meter settings file. Otherwise, these settings will not be included in the meter settings file:

- **Averaging** – This setting is used to average the values of several consecutive sweeps to reduce display jitter. The default setting for the averaging is **Medium**. The averaging can be set to **Disabled**, **Low**, **Medium** or **High**.
- **8300 FST Channels** – This setting allows the user to skip or use the 8300A FST channels when using Sweep Mode.
    - When this is set to **Skip**, the meter will skip the 8300A FST channels that are defined in the channel plan while performing the sweep test.
    - When this is set to **Use**, the meter will use the 8300A FST channels that are defined in the channel plan while performing the sweep test.
- **Test Point 1** to **Test Point 9** – These checkboxes allows you to enable up to nine nodes or amplifier test points for the sweep measurement. The default setting for each offset is Disabled.
    - Enter the name of the test point into the **Name** dropdown box. Each name should be a designation for a type of node or amplifier you will be sweeping (“Acme 3”, ”Mega 5”). When sweeping, selecting the setup information stored under this name will set the instrument to the amplitude and coupler values that are appropriate for this device.



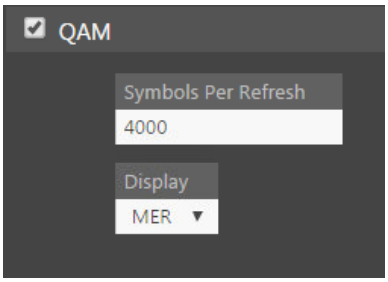
- The **Low Pilot** & **High Pilot** settings allows the user to set the sensitivity and display parameters of the instrument so that when amplifiers are set to the proper gain and tilt, the sweep trace coincides with the middle horizontal line of the sweep graph.
    - Enter the lowest carrier frequency marked as Tilt within the channel plan into the **Low Pilot** field.
    - Enter the highest carrier frequency marked as Tilt within the channel plan into the **High Pilot** field.
    - The values you enter should be the value AHEAD of the test point coupler. The coupler loss will be accounted for in the **TAP (Offset)** field.
- The **TAP (Offset)** setting is individually settable for each test point profile, and is included in the information the instrument uses to center the graph of an aligned amplifier to the center of the sweep display. This setting is the total loss in the connection between the amplifier, or node, test point and the input to the meter, and must include the coupling loss of the test point, and any pads or other in-line hardware. You should repeat this process to define all of the amplifier and node test points you will be connecting to before sweeping your distribution system.

QAM Measurement Parameters

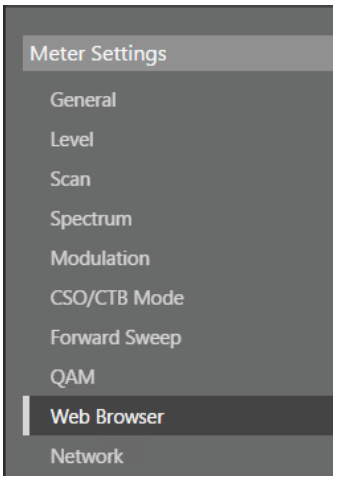


At the bottom of the **Setup Settings** toolbar, select the **Meter Settings > QAM** area and then select the **QAM** checkbox to include any of the following settings in the meter settings file. Otherwise, these settings will not be included in the meter settings file:

- **Symbols Per Refresh** – This setting allows you to set the number of symbols that are displayed on a constellation screen to make the constellation more or less dense. You can select from 1,000 to 30,000 Symbols, or DWELL (infinite symbols).
- **Display** – This setting allows you to select whether the instrument displays MER (dB) or EVM (%).

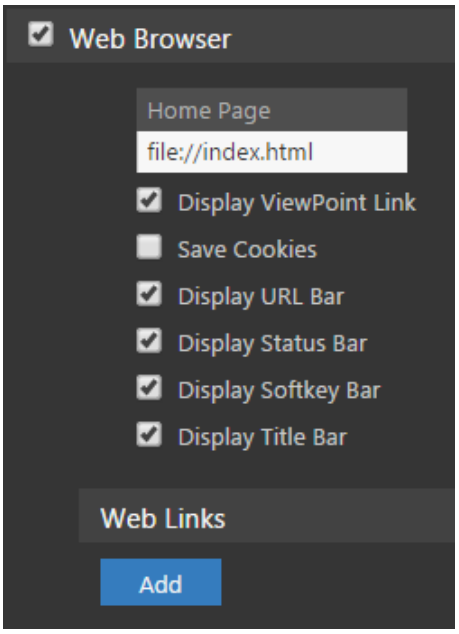


Web Browser Parameters

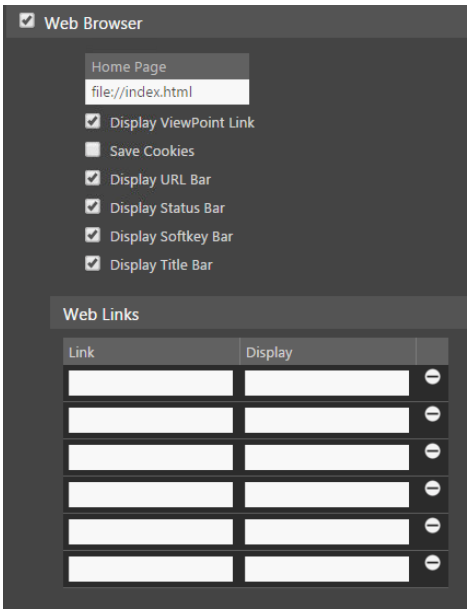


At the bottom of the **Setup Settings** toolbar, select the **Meter Settings > Web Browser** area and then select the **Web Browser** checkbox to include any of the following settings in the meter settings file. Otherwise, these settings will not be included in the meter settings file:

- **Display ViewPoint Link** – Select this option to display a ViewPoint link on the web browser home page.
- **Save Cookies** – Select this option to retain web page cookies.
- **Display URL Bar** – Select this option to display the URL bar on the browser.
- **Display Status Bar** – Select this option to display the status bar on the browser.
- **Display Softkey Bar** – Select this option to display the softkey bar on the browser.
- **Display Title Bar** – Select this option to display the title bar on the browser.

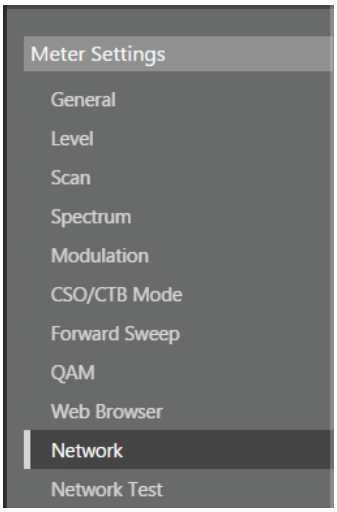


- **Web Links** – Select the **Add** button to get the links that are displayed on the meter web browser home screen.
    - Up to six links can be displayed on the web browser home screen of the meter.
    - To create a new link, select the **Add** button.
    - For each link you can enter a custom URL or IP address in the **Link** field.
    - For each link you can enter a custom name in the **Display** field that appears on the web browser home screen for each link.



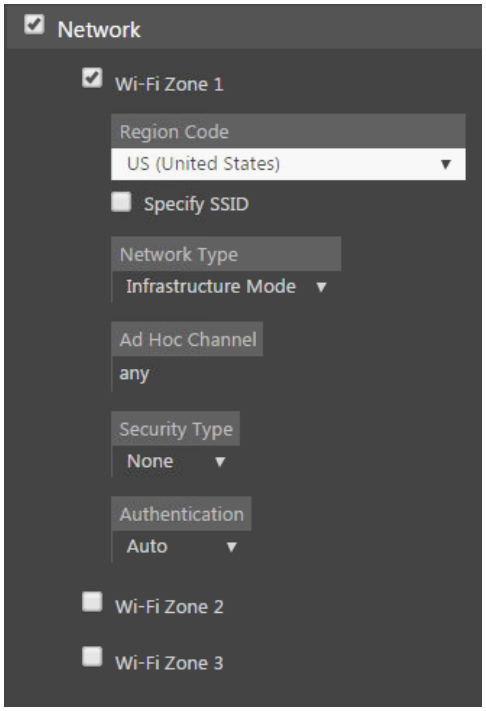
    - To remove a link, select the minus (-) icon to the right of the link.

Wi-Fi Network Connection Parameters



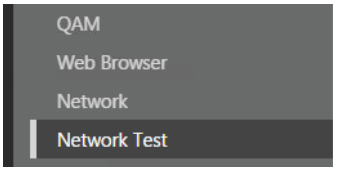
At the bottom of the **Setup Settings** toolbar, select the **Meter Settings > Network** area and then select the **Network** checkbox to include any of the following settings in the meter settings file. Otherwise, these settings will not be included in the meter settings file:

- **Wi-Fi Zone 1** to **Wi-Fi Zone 3** – These check boxes allow you to enable up to three different Wi-Fi zones on the meter. The default setting for each zone is Disabled.
- **Region Code** – This setting allows you to choose the Wi-Fi region code of the access point to connect to.
- **Specify SSID** – This setting allows you to enable/ disable the ability to enter the SSID of the access point to connect to.
- **SSID** – This setting allows you to enter the SSID of the access point to connect to.
- **Network Type** – This setting allows you to select from either **Infrastructure** or **Ad-Hoc** network types.
- **Ad Hoc Channel** – This setting allows you to enter the Ad-Hoc channel when the **Network Type** is set to **Ad-Hoc**.
- **Security Type** – This setting allows you to select from **WEP 64**, **WEP 128** or **WPA-PSK** security types. Selecting **None** will disable the wireless security.
- **Authentication** – This setting allows you to select from **Auto**, **Open** or **Shared** wireless authentication.
- **Key** – This setting allows you to enter the authentication key of the access point to connect to.

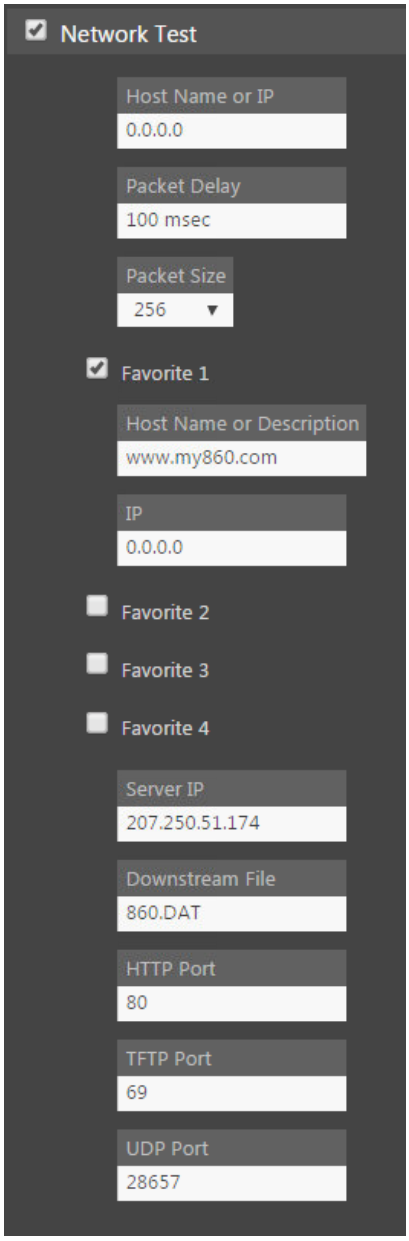


Network Test Parameters

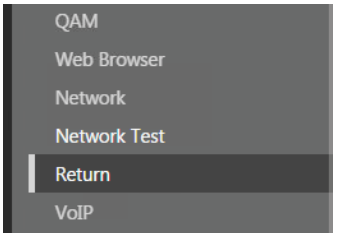
At the bottom of the **Setup Settings** toolbar, select the **Meter Settings > Network Test** area and then select the **Network Test** checkbox to include any of the following settings in the meter settings file. Otherwise, these settings will not be included in the meter settings file:



- **Host Name or IP** – This setting allows you to specify the IP address or URL of the ping test server.
- **Packet Delay** – This setting allows you to enter the maximum packet delay time for the ping test. The default packet delay is set to **100 msec**. The packet delay can be set to a minimum of 10 msec up to a maximum of 1000 msec.
- **Packet Size** – This setting allows you to choose the packet size for the ping test. The default setting for packet size is 256. The packet size can be set to **0**, **32**, **64**, **256**, **512**, **768** or **1024**.
- **Favorite 1** to **Favorite 4** – These check boxes allow you to enable up to four different ping test locations on the meter. The default setting for each favorite is Disabled.
    - Enter the name of the ping test location into the **Host Name or Description** field.
    - Enter the IP address or URL of the ping test location into the **Display** field.
- **Server IP** – This setting allows you to specify the IP address or URL of the throughput test server.
- **Downstream File** – This setting allows you to specify the name of the file to download from the throughput test server.
- **HTTP Port** – This setting allows you to specify the HTTP port of the throughput test server.
- **TFTP Port** – This setting allows you to specify the TFTP port of the throughput test server.
- **UDP Port** – This setting allows you to specify the UDP port of the throughput test server.

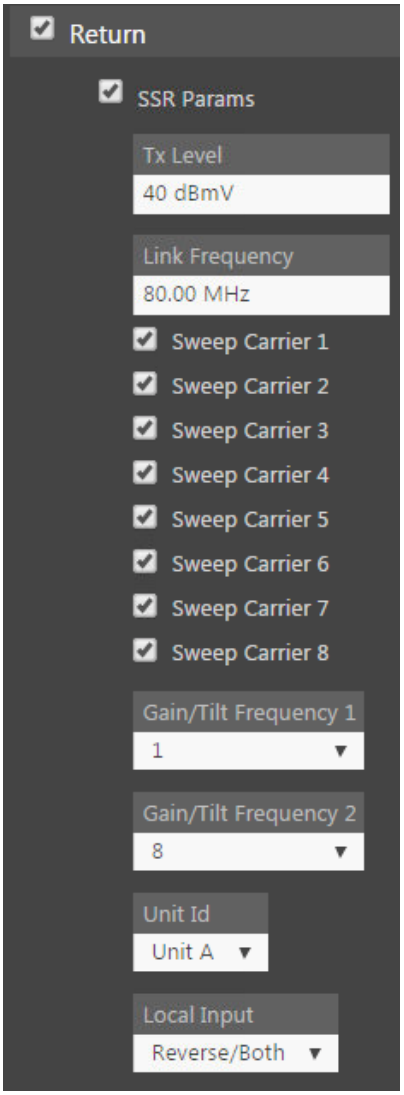


Return Test Parameters



At the bottom of the **Setup Settings** toolbar, select the **Meter Settings > Return** area and then select the **Return** checkbox to include any of the following settings in the meter settings file. Otherwise, these settings will not be included in the meter settings file.

SSR Params

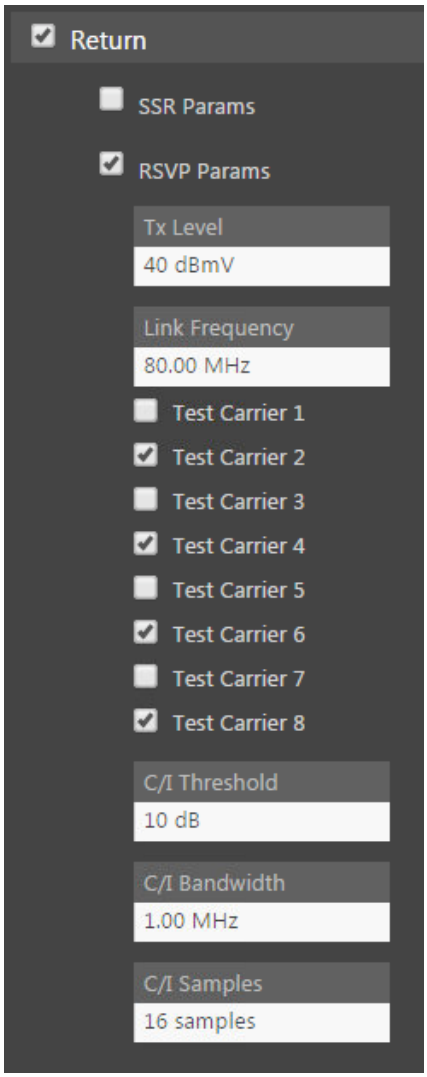


Select the **SSR Params** checkbox to include the following settings in the meter settings file. Otherwise, these settings will not be included in the meter settings file.

- **Tx Level** – This setting allows you to enter the return test carrier level. The default Tx level is set to **40 dBmV**. The link frequency can be set to a minimum of 20 dBmV up to a maximum of 55 dBmV.
- **Link Frequency** – This setting allows you to enter the return carrier link frequency. The default link frequency is set to **80.00 MHz**. The link frequency can be set to a minimum of 50 MHz up to a maximum of 92.00 MHz.
- **Sweep Carrier 1** to **Sweep Carrier 8** – These checkboxes allow you to enable up to eight different return test carriers on the meter. The default setting for each carrier is Enabled.
- **Gain/Tilt Frequency 1** – This setting is used to enter the first carrier number to use for gain and tilt calculations.
- **Gain/Tilt Frequency 2** – This setting is used to enter the second carrier number to use for gain and tilt calculations.
- **Unit ID** – This setting is used to select a unique unit ID for the meter. Each 9581 SST can communicate with up to six unique units at the same time.
- **Local Input** – This setting is used to select either the **Reverse/Both** or **SLM/Forward** input to be used when measuring local ingress. (This is used in compare mode only.)

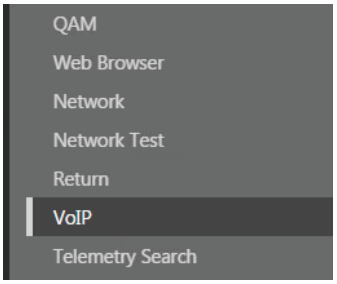
RSVP Params

Select the **RSVP Params** checkbox to include any of the following settings in the meter settings file. Otherwise, these settings will not be included in the meter settings file.

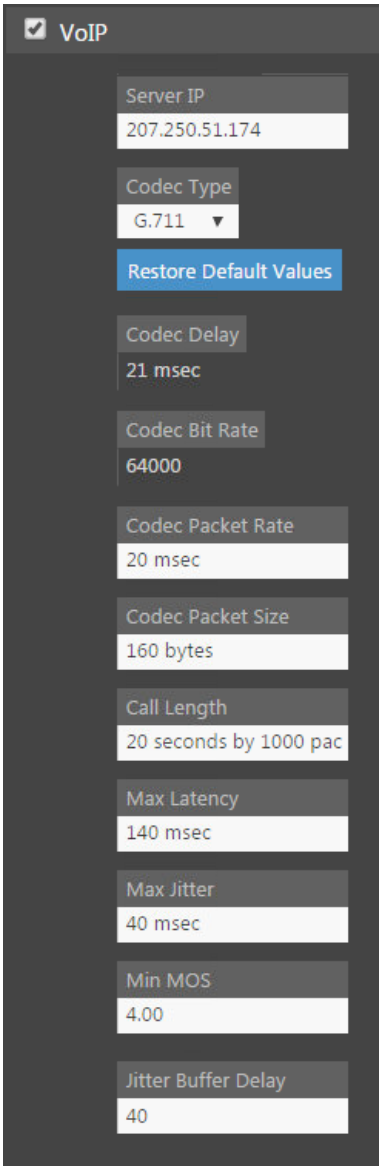


- **Tx Level** – This setting allows you to enter the return test carrier level. The default Tx level is set to **40 dBmV**. The link frequency can be set to a minimum of 20 dBmV up to a maximum of 55 dBmV.
- **Link Frequency** – This setting allows you to enter the return carrier link frequency. The default link frequency is set to **80.00 MHz**. The link frequency can be set to a minimum of 50 MHz up to a maximum of 92.00 MHz.
- **Test Carrier 1** to **Test Carrier 8** – These check boxes allow you to enable up to eight different return test carriers on the meter. The default setting for each carrier is Enabled.
- **C/I Threshold** – This setting is used to enter the minimum-carrier-to-ingress ratio to pass the test. The default C/I threshold is set to **10 dB**. The link frequency can be set to a minimum of 1 dB up to a maximum of 80 dB.
- **C/I Bandwidth** – This setting is used to enter the bandwidth used for the carrier-to-ingress calculation. The default C/I bandwidth is set to **1 MHz**. The C/I bandwidth can be set to a minimum of 0.10 MHz up to a maximum of 8.00 MHz.
- **C/I Samples** – This setting is used to enter the number of ingress scans used for the carrier-to-ingress calculation. The default C/I samples is set to **16**. The C/I samples can be set to a minimum of 8 up to a maximum of 16.

VoIP Test Parameters



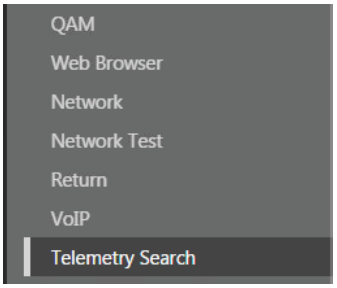
At the bottom of the **Setup Settings** toolbar, select the **Meter Settings > Return** area and then select the **Return** checkbox to include any of the following settings in the meter settings file.. Otherwise, these settings will not be included in the meter settings file:



- **Server IP** – This setting allows you to specify the IP address or URL of the VoIP test server.
- **Codec Type** – This field is fixed and uses the G.711 codec.
- **Codec Delay** & **Codec Bit Rate** – These settings will automatically change based on changes to the Packet Rate and Packet Size settings.
- **Code Packet Rate** – This setting allows you to enter the codec packet rate for the VoIP test. The default packet delay is set to **20 msec**. The codec packet rate can be set to a minimum of 20 msec up to a maximum of 250 msec.
- **Codec Packet Size** – This setting allows you to choose the codec packet size for the VoIP test. The default packet delay is set to **160 bytes**. The codec packet rate can be set to a minimum of 20 bytes up to a maximum of 1000 bytes.
- **Call Length** – This setting allows you to enter the call length for the VoIP test. The default call length is set to **41 seconds by 2050 packets**. The call length can be set to a minimum of 10 seconds by 500 packets up to a maximum of 120 seconds by 6000 packets.
- **Max Latency** – This setting allows you to enter the maximum latency for the VoIP test. The default maximum latency is set to **140 msec**. The maximum latency can be set to a minimum of 10 seconds by 500 packets up to a maximum of 120 seconds by 6000 packets.

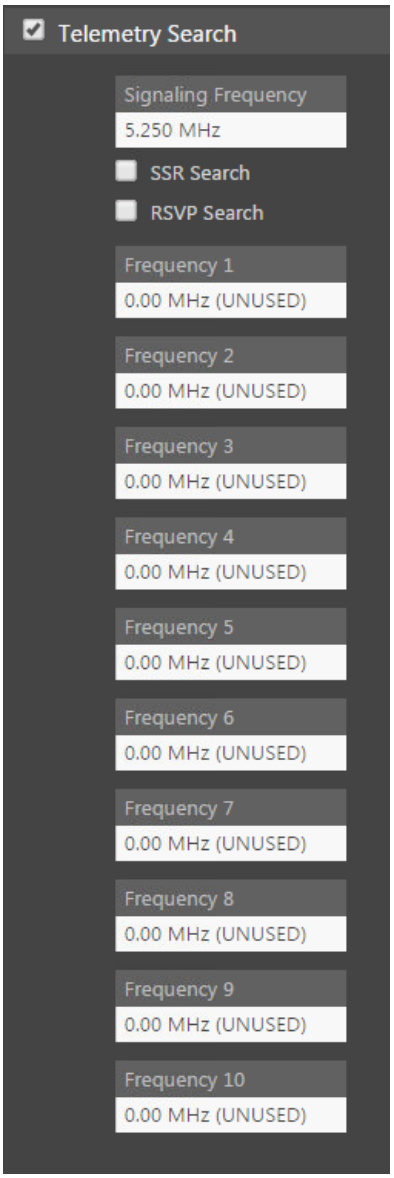
- **Max Jitter** – This setting allows you to enter the maximum jitter for the VoIP test. The default maximum jitter is set to **40 msec**. The maximum jitter can be set to a minimum of 0 msec up to a maximum of 400 msec.
- **Min MOS** – This setting allows you to enter the minimum mean opinion score (MOS) for the VoIP test. The default minimum MOS is set to **4.00**. The minimum MOS can be set to a minimum of 0.00 up to a maximum of 5.00.
- **Jitter Buffer Delay** – This setting allows you to enter the jitter buffer delay for the VoIP test. The default jitter buffer delay is set to **40**. The jitter buffer delay can be set to a minimum of 20 up to a maximum of 300.

Telemetry Search Parameters



At the bottom of the **Setup Settings** toolbar, select the **Meter Settings > Telemetry Search** area and then select the **Telemetry Search** checkbox to include any of the following settings in the meter settings file. Otherwise, these settings will not be included in the meter settings file.

These settings allow you to assign up to 10 link frequencies. There are two common methods for setting up a system with many 9581 SSTs.



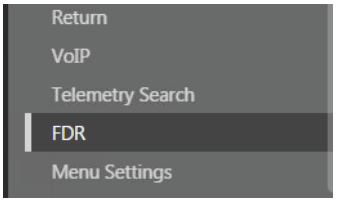
The first method uses a single common link frequency as follows:

- Enter a frequency in the **Signaling Frequency** field to use anywhere in your system.
- This method uses the SSR Mode or RSVP Mode Settings and Frequency 1 to Frequency 10 should be set to 0.00 MHz (UNUSED). This way all head end units transmit their telemetry data on a single frequency no matter what node you are on in your system.

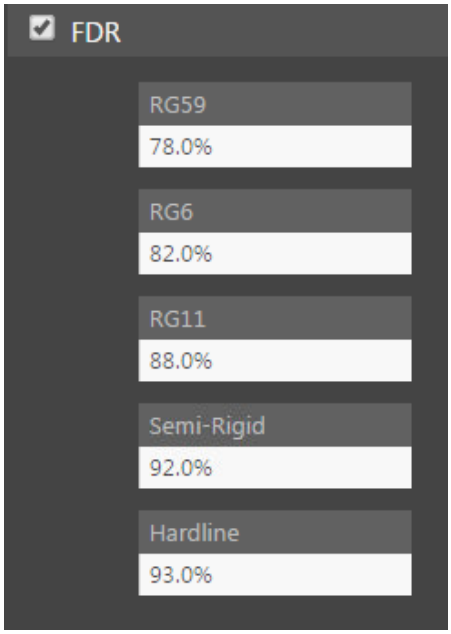
The second method uses different telemetry frequencies in different parts of your system as follows:

- Enter a frequency in the **Signaling Frequency** field to use anywhere in your system.
- Enter the return telemetry frequency into the Frequency 1 field and set Frequency 2 to Frequency 10 to 0.00 MHz (UNUSED).
- Select the SSR Search check box so the meter will signal the 9581 SST on the signaling telemetry frequency and search each data stream for this signal to appear. Once a signal is found, that telemetry frequency is made the current default frequency and the meter uses it.

FDR Test Parameters

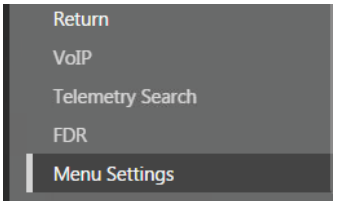


At the bottom of the **Setup Settings** toolbar, select the **Meter Settings > FDR** area and then select the **FDR** checkbox to include any of the following settings in the meter settings file. Otherwise, these settings will not be included in the meter settings file.



- **RG59** – This setting allows you to enter the velocity of propagation for RG59 cable. The default VoP for RG59 is set to **78.0%**. The VoP can be set to a minimum of 60.0% up to a maximum of 99.9%.
- **RG6** – This setting allows you to enter the velocity of propagation for RG6 cable. The default VoP for RG6 is set to **82.0%**. The VoP can be set to a minimum of 60.0% up to a maximum of 99.9%.
- **RG11** – This setting allows you to enter the velocity of propagation for RG11 cable. The default VoP for RG11 is set to **88.0%**. The VoP can be set to a minimum of 60.0% up to a maximum of 99.9%.
- **Semi-Rigid** – This setting allows you to enter the velocity of propagation for semi-rigid cable. The default VoP for semi-rigid is set to **78.0%**. The VoP can be set to a minimum of 60.0% up to a maximum of 99.9%.
- **Hardline** – This setting allows you to enter the velocity of propagation for hardline cable. The default VoP for hardline is set to **78.0%**. The VoP can be set to a minimum of 60.0% up to a maximum of 99.9%.

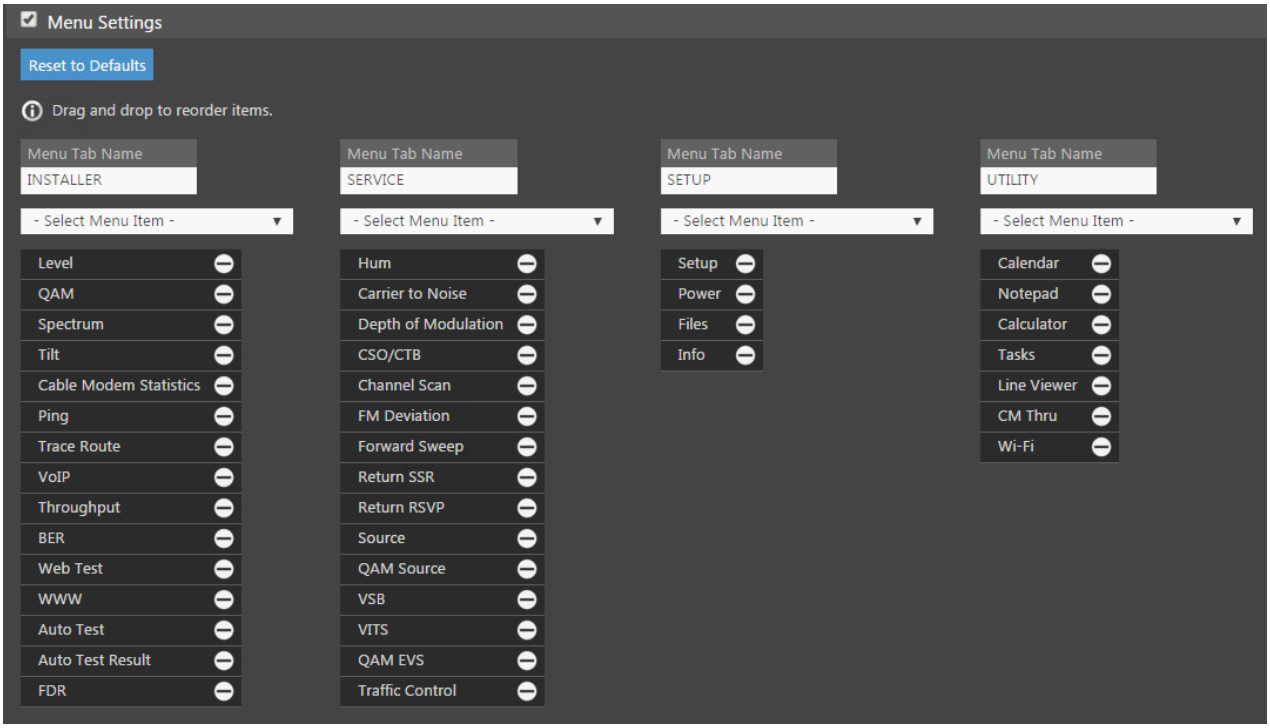
Menu Display Settings



At the bottom of the **Setup Settings** toolbar, select the **Meter Settings > Menu Settings** area and then select the **Menu Settings** checkbox to include any of the following settings in the meter settings file. Otherwise, these settings will not be included in the meter settings file.

You can customize the 860 DSP or 860 DSPi navigation menus to better fit the way your field technicians operate.

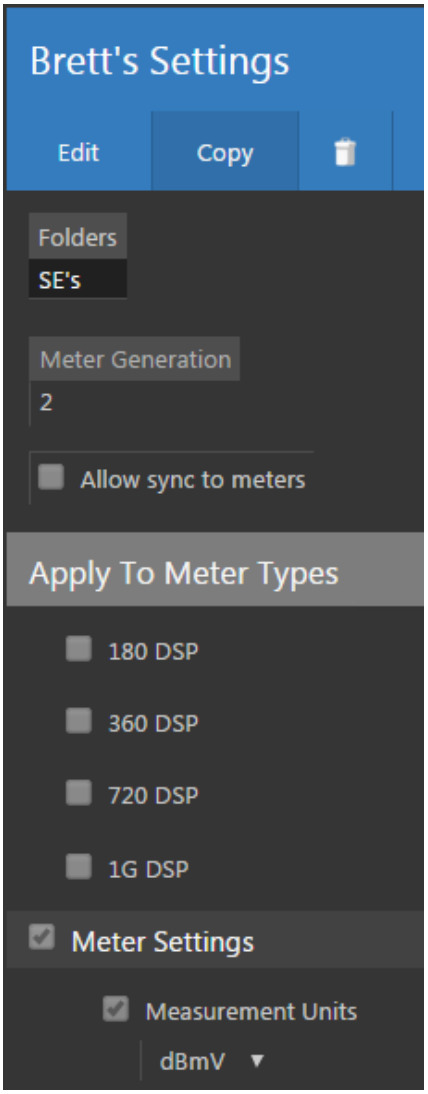
- Enter the name you wish to display into the four **Menu Tab Name** fields. The default tabs are **Installer**, **Service, Setup**, and **Utility**.
- To reorder how the functions are displayed on the meter, drag and drop items.
- Up to 16 functions can be added to each menu tab by selecting the name of the function from the dropdown list below each function table.
- Select the minus (-) sign to the right of a function to delete that function from the screen of the meter.
- Up to five user-defined macros can be added as shortcuts to any menu tab by selecting **Macro Shortcut 1** to **Macro Shortcut 5** from the function dropdown boxes.



Copying a Meter Settings File

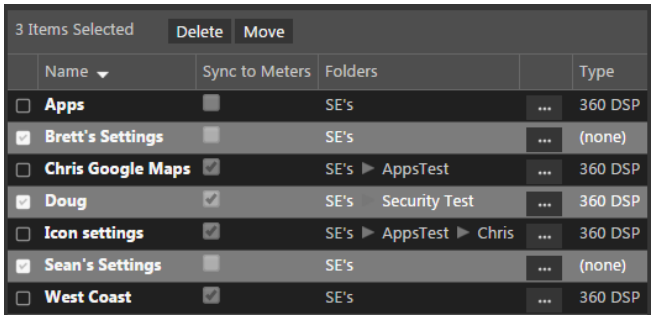
Perform the following steps to copy a meter settings file:

1. From the **Meter Settings** screen, select the name of the meter settings file to copy and the meter settings file details screen will be displayed as shown in the image to the right.
2. Select the **Copy** button.
3. Enter a new name for the copied meter settings file and then select the **OK** button.
4. Select the **Save** button to save the meter settings file.
5. The copied meter settings file should now appear with its new name in the **Meter Settings** table.



Deleting a Meter Settings File

Perform the following steps to delete a meter settings file:

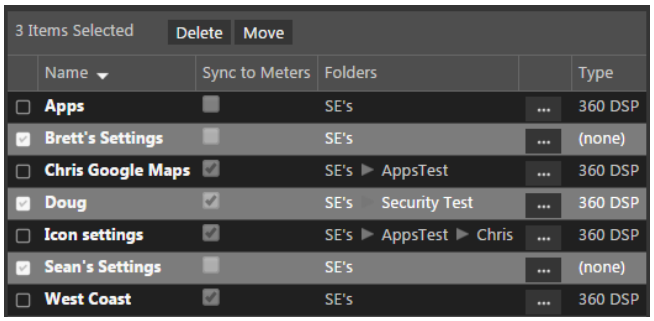


1. From the **Meter Settings** screen, select the checkbox to the left of each meter settings file to delete.
2. Once you have chosen the meter settings file, select the **Delete** button.
3. After selecting the **Delete** button, a **Confirm** window will be displayed.
    - When deleting five or less items, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **Meter Settings** screen where the item(s) will still be displayed.
    - When deleting more than five items, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **Meter Settings** screen where the item(s) will still be displayed.

Moving a Meter Settings File in the Organization

Perform the following steps to move a meter settings file from one place to another in the organizational hierarchy:

1. From the **Meter Settings** screen, select the checkbox to the left of each item to move.
2. Once you have chosen the item(s), select the **Move** button.
3. After selecting the **Move** button, a window will be displayed as shown in the image to the right.



4. Use the Organization toolbar within the window to select the a new location within the organization for the selected item(s).

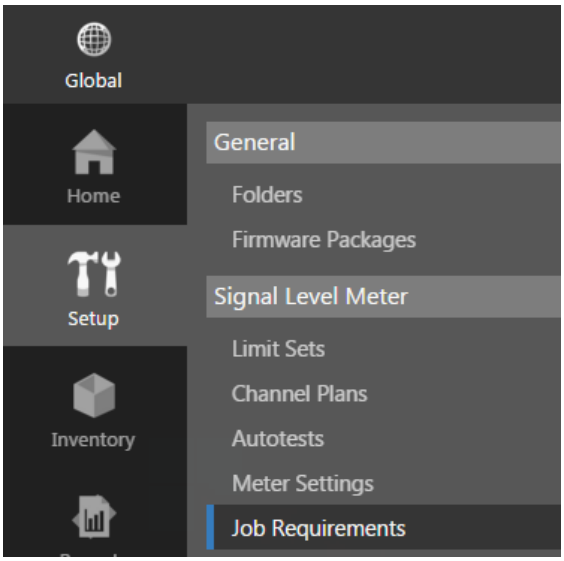
5. Select the **OK** button to proceed with moving the item(s) or select the **Cancel** button to return to the **Meter Settings** screen where the item(s) will still be displayed in its original location.

NOTE ***Items can also be moved by dragging and dropping them into the organization tree or by using the add/remove folder ... button.***

Job Requirements

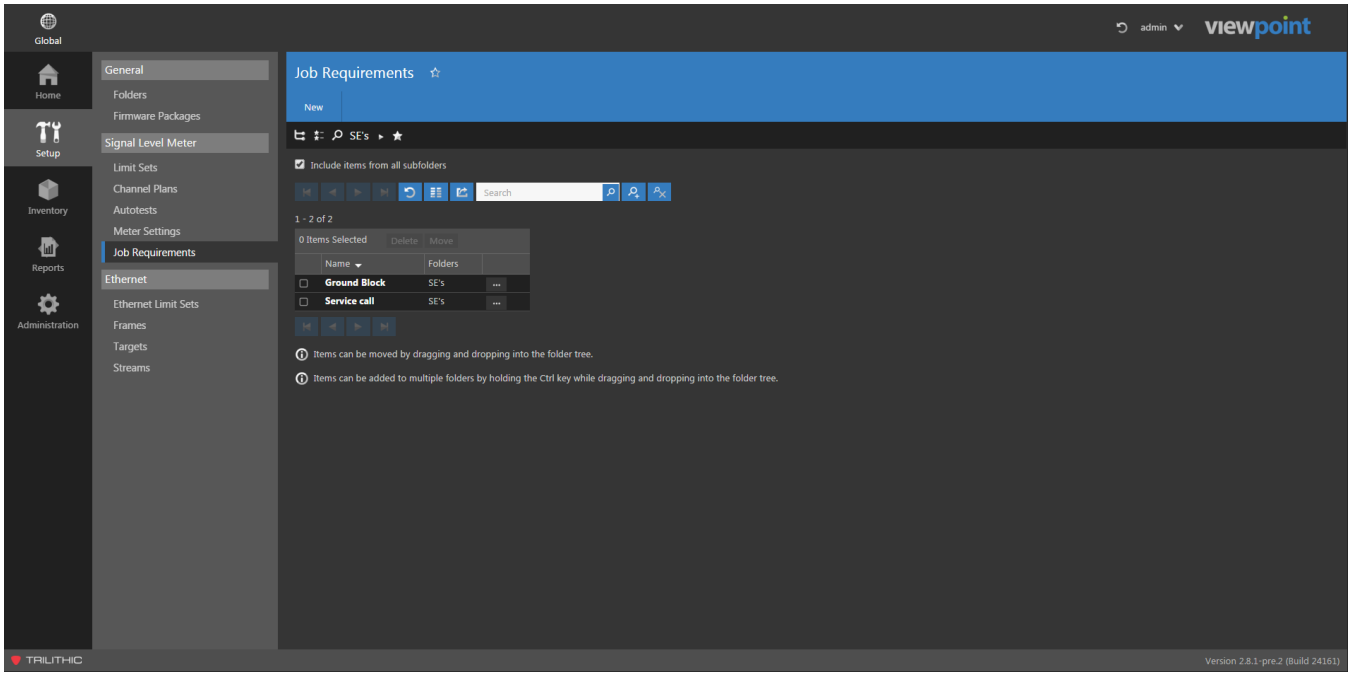
The meter uses job requirements to indicate which autotests are required for each type of job to be performed by the technician.

Select **Signal Level Meter > Job Requirements** from the **Setup Settings** toolbar as shown in the image to the right.



Select the ☆ icon at the top of the page to add **Job Requirements** to your **Home** page favorites.

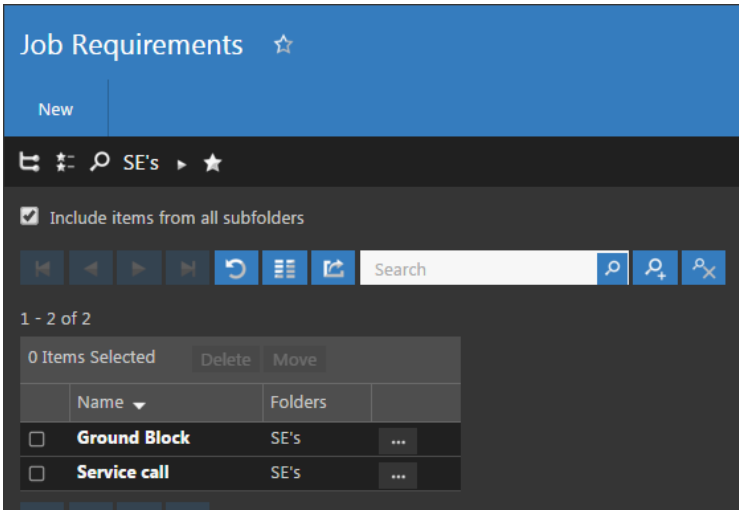
To remove **Job Requirements** from your **Home** page favorites, select the ★ icon.



Job Requirements Table

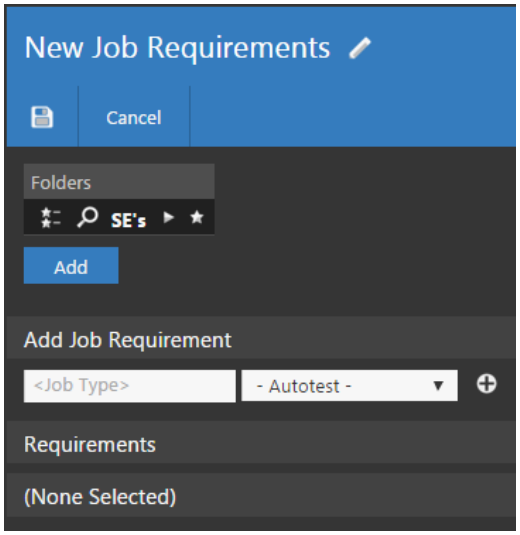
The **Job Requirements** screen will be displayed as shown in the image to the right. From this screen you can perform the following actions:

- View a list of sets of job requirements
- Create a new set of job requirements
- Edit a set of job requirements
- Copy a set of job requirements
- Delete a set of job requirements
- Move a set of job requirements



Creating a New Set of Job Requirements

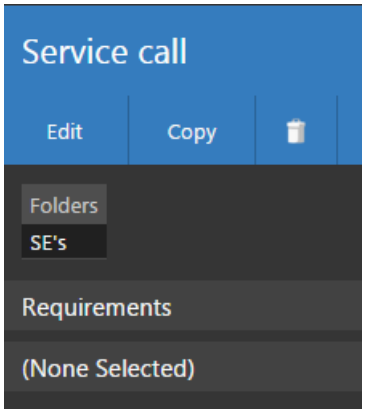
Perform the following steps to create a new set of job requirements:



1. From the **Job Requirements** screen, select the **New** button.
2. Enter a name for the new set of job requirements.
3. The **New Job Requirements** screen will be displayed as shown in the image to the right.
4. Adjust the settings of the job requirements.
5. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the job requirements details screen where your changes will still be displayed.
6. The new set of job requirements should now appear in the **Job Requirements** table.

Editing a Set of Job Requirements

Perform the following steps to edit a set of job requirements:

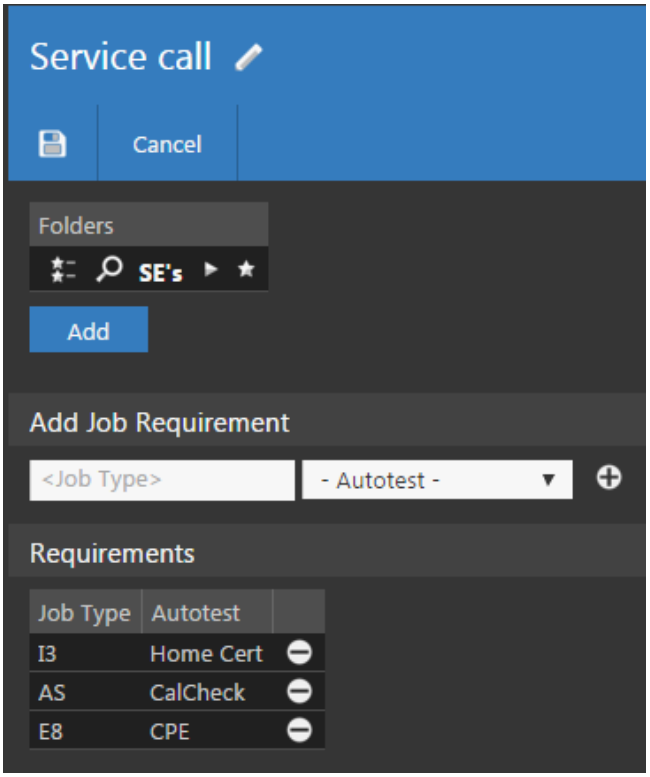


1. From the **Job Requirements** screen, select the name of the job requirements to edit and the job requirements details screen will be displayed as shown in the image to the right.
2. Select the **Edit** button to adjust the settings of the job requirements.
3. Adjust the settings of the job requirements.
4. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the job requirements details screen where your changes will still be displayed.

Job Requirements Setup Details

Perform the following steps when creating or editing a set of job requirements:

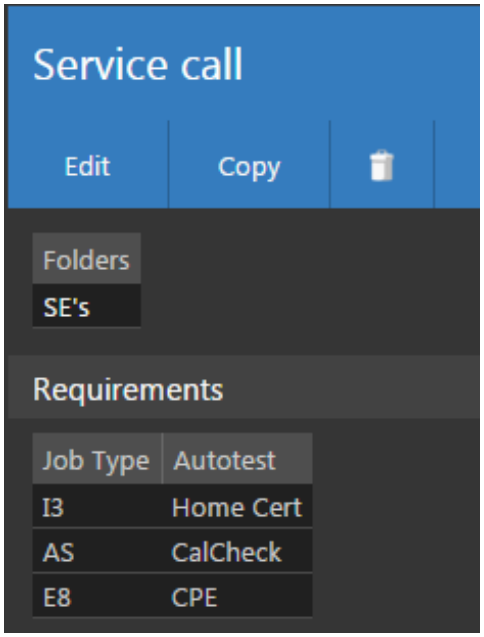
1. Select the **Add** button to add the job requirements to a new location in the organization tree. Use the Organization toolbar within the window to select a new location and select the **Add** button. The new location will appear in the **Folders** area.
2. Enter a unique name for this set of job requirements in the **<Job Type>** field.
3. From the dropdown box, select the name of the autotest that is required for the selected job type.
4. After entering the job type and selecting the autotest, select the plus (+) button to add the job type to this set of job requirements.



Copying a Set of Job Requirements

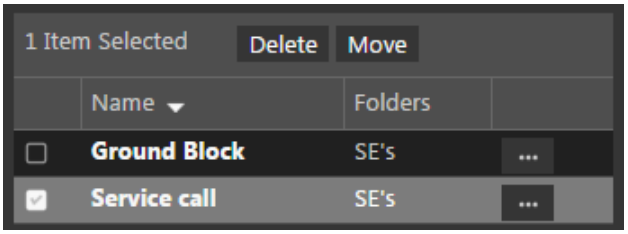
Perform the following steps to copy a set of job requirements:

1. From the **Job Requirements** screen, select the name of the job requirements to copy and the job requirements file details screen will be displayed as shown in the image to the right.
2. Select the **Copy** button.
3. Enter a new name for the copied set of job requirements and select the **OK** button.
4. Select the **Save** button to save the set of job requirements.
5. The copied set of job requirements should now appear with its new name in the **Job Requirements** table.



Deleting a Set of Job Requirements

Perform the following steps to delete a set of job requirements:

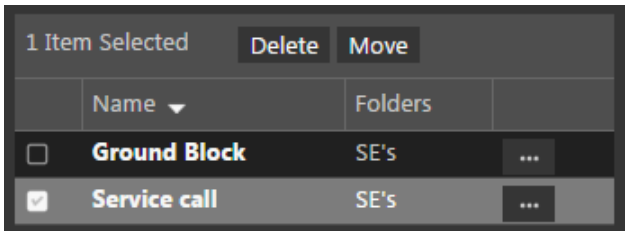


1. From the **Job Requirements** screen, select the checkbox to the left of each set of job requirements to delete.
2. Once you have chosen the job requirements, select the **Delete** button.
3. After selecting the **Delete** button, a **Confirm** window will be displayed.
    - When deleting five or less items, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **Job Requirements** screen where the item(s) will still be displayed.
    - When deleting more than five items, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **Job Requirements** screen where the item(s) will still be displayed.

Moving a Set of Job Requirements in the Organization

Perform the following steps to move a set of job requirements from one place to another in the organizational hierarchy:

1. From the **Job Requirements** screen, select the checkbox to the left of each item to move.
2. Once you have chosen the item(s), select the **Move** button.



3. After selecting the **Move** button, a window will be displayed as shown in the image to the right.

4. Use the Organization toolbar within the window to select the a new location within the organization for the selected item(s).
5. Select the **OK** button to proceed with moving the item(s) or select the **Cancel** button to return to the **Job Requirements** screen where the item(s) will still be displayed in its original location.

NOTE

Items can also be moved by dragging and dropping them into the organization tree or by using the add/remove folder ... button.

Chapter 4

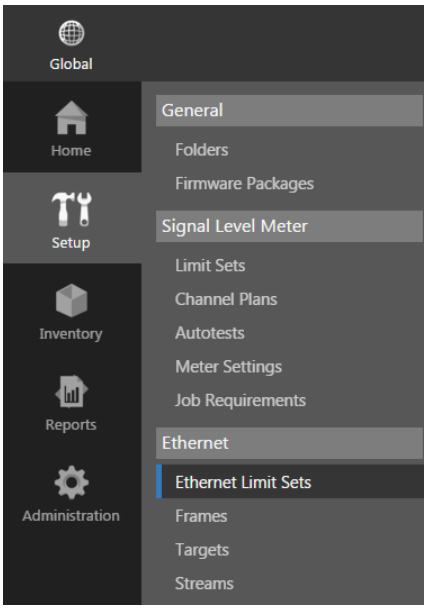
Ethernet Meter Setup

Overview

The **Ethernet** menu is used to manage configuration of meters for high-speed ethernet testing within the ViewPoint system.

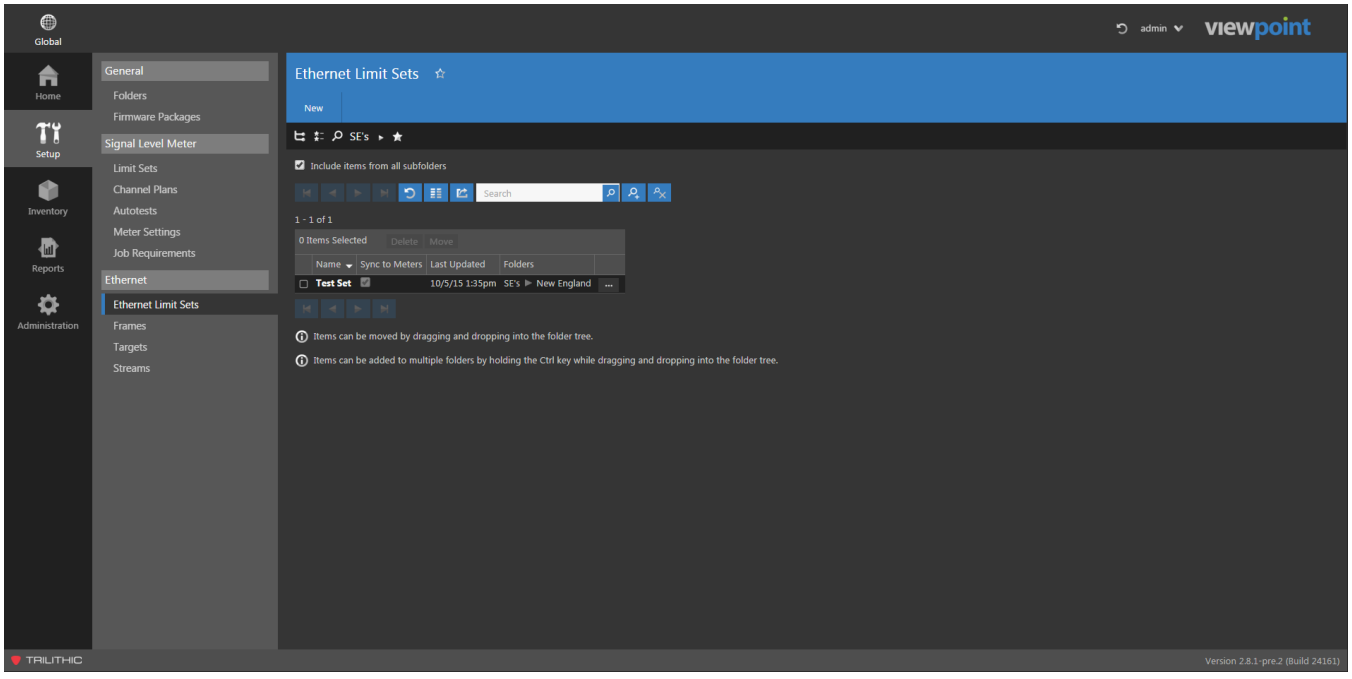
Select any of the features under **Ethernet** from the **Setup Settings** toolbar as shown in the image to the right.

By default, the **Ethernet** screen will be displayed as shown in the image below.



NOTE

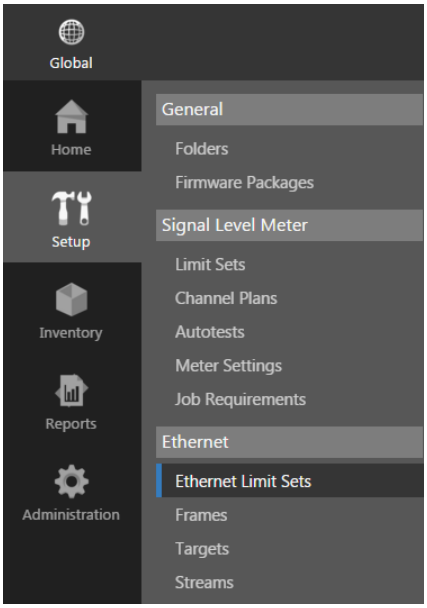
The Setup Settings toolbar is only displayed when the current user is assigned to a group in which System Administration permissions have been granted.



Ethernet Limit Sets

This feature is used to configure limit sets for high-speed ethernet testing with the 720 DSP & 1G DSP.

Select **Ethernet > Ethernet Limit Sets** from the **Setup Settings** toolbar as shown in the image to the right.



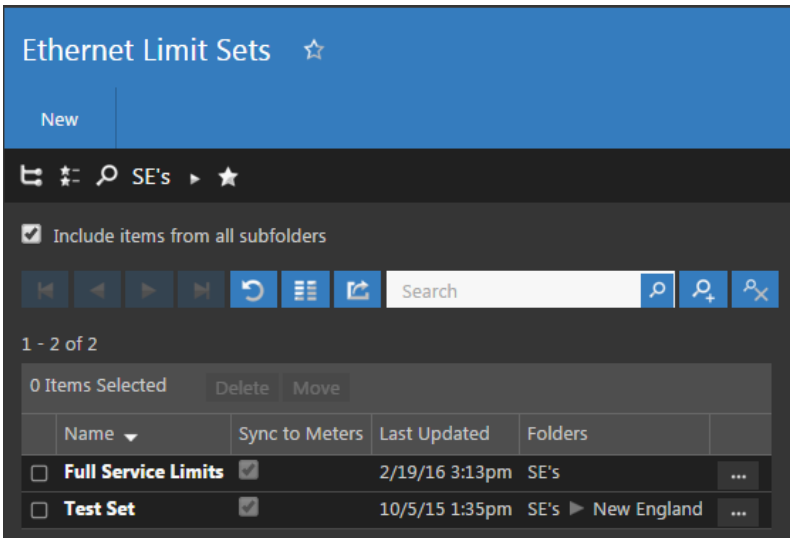
Select the ☆ icon at the top of the page to add **Ethernet Limit Sets** to your **Home** page favorites.

To remove **Ethernet Limit Sets** from your **Home** page favorites, select the ★ icon.

Ethernet Limit Sets Table

The **Ethernet Limit Sets** screen will be displayed as shown in the image below. From this screen you can perform the following actions:

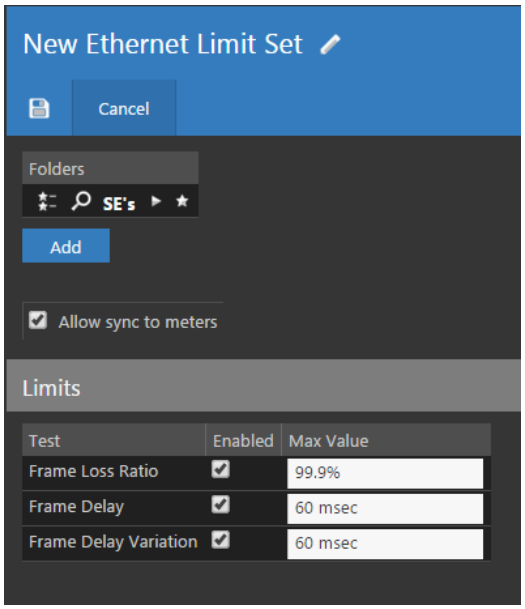
- View a list of ethernet limit sets
- Create new ethernet limit sets
- Edit an ethernet limit set
- Copy an ethernet limit set
- Delete an ethernet limit set
- Move an ethernet limit set



Creating a New Ethernet Limit Set

Perform the following steps to create a new ethernet limit set:

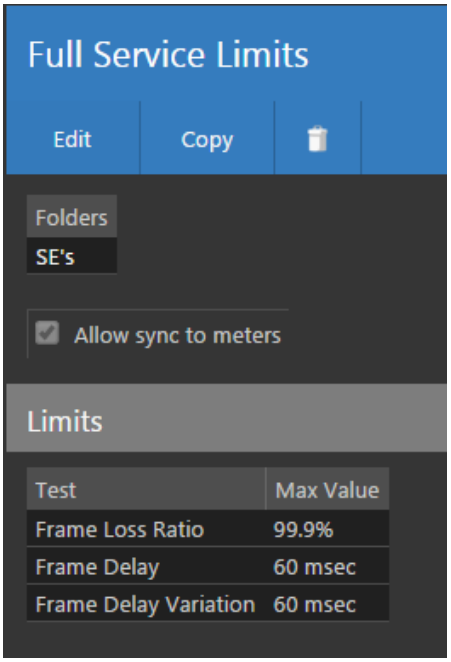
1. From the **Ethernet Limit Sets** screen, select the **New** button.
2. Enter a name for the new ethernet limit set.
3. The **New Ethernet Limit Set** screen will be displayed as shown in the image to the right.
4. Adjust the settings of the ethernet limit set.
5. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the ethernet limit set details screen where your changes will still be displayed.
6. The new ethernet limit set should now appear in the **Ethernet Limit Sets** table.



Editing an Ethernet Limit Set

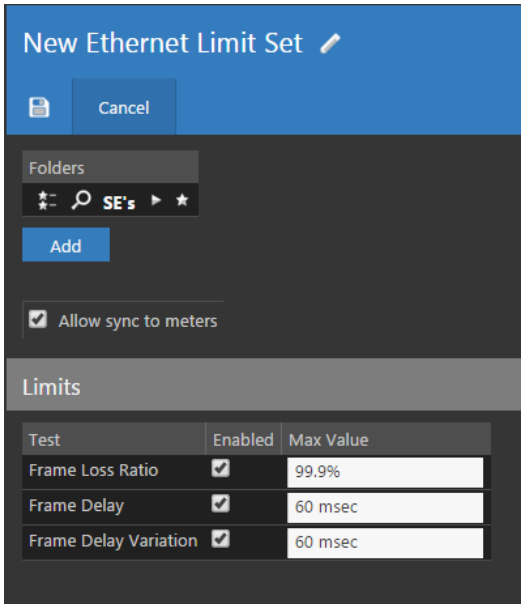
Perform the following steps to edit an ethernet limit set:

1. From the **Ethernet Limit Sets** screen, select the name of the ethernet limit set to edit and the ethernet limit set details screen will be displayed as shown in the image to the right.
2. Select the **Edit** button to adjust the settings of the ethernet limit set
3. Adjust the settings of the ethernet limit set.
4. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the bottom of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the ethernet limit set details screen where your changes will still be displayed.



Ethernet Limit Set Setup Details

Perform the following steps when creating or editing an ethernet limit set.

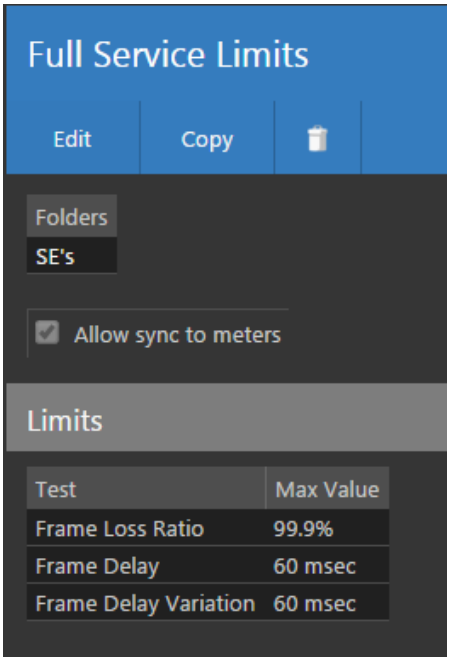


1. Select the **Add** button to add the ethernet limit set to a new location in the organization tree. Use the Organization toolbar within the window to select a new location and select the **Add** button. The new location will appear in the **Folders** area.
2. If you would like to allow this ethernet limit set to be synchronized with meters, select the **Allow sync to meters** checkbox. This is enabled by default when creating a new ethernet limit set.
3. Select the **Enabled** checkbox next to each of the desired test limits.
4. Enter the **Max Value** for the enabled test limits as follows:
    - **Frame Loss Ratio** – This sets the maximum allowable frame loss ratio.
    - **Frame Delay** – This sets the maximum allowable frame delay rate.
    - **Frame Delay Variation** – This sets the maximum allowable frame delay variation rate.

Copying an Ethernet Limit Set

Perform the following steps to copy an ethernet limit set:

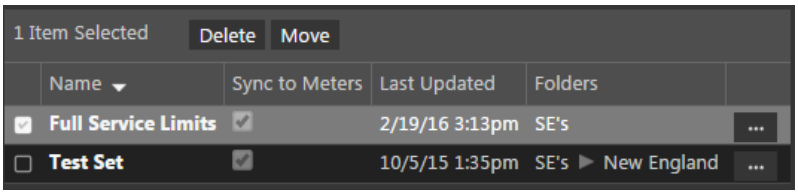
1. From the **Ethernet Limit Sets** screen, select the name of the ethernet limit set to copy and the ethernet limit set details screen will be displayed as shown in the image to the right.
2. Select the **Copy** button.
3. Enter a new name for the copied ethernet limit set and then select the **OK** button.
4. Select the **Save** button to save the ethernet limit set.
5. The copied ethernet limit set should now appear with its new name in the **Ethernet Limit Sets** table.



Deleting an Ethernet Limit Set

Perform the following steps to delete an ethernet limit set:

1. From the **Ethernet Limit Sets** screen, select the checkbox to the left of each ethernet limit set to delete.
2. Once you have chosen the ethernet limit sets, select the **Delete** button.
3. After selecting the **Delete** button, a **Confirm** window will be displayed.

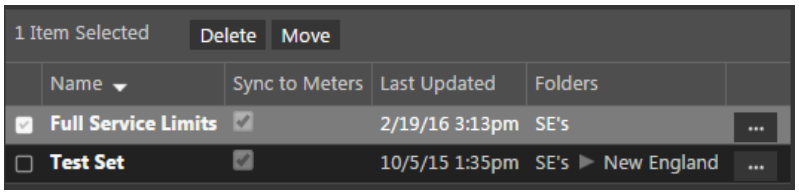


- When deleting five or less items, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **Ethernet Limit Sets** screen where the item(s) will still be displayed.
- When deleting more than five items, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **Ethernet Limit Sets** screen where the item(s) will still be displayed.

Moving an Ethernet Limit Set in the Organization

Perform the following steps to move an ethernet limit set from one place to another in the organizational hierarchy:

1. From the **Ethernet Limit Sets** screen, select the checkbox to the left of each item to move.



2. Once you have chosen the item(s), select the **Move** button.
3. After selecting the **Move** button, a window will be displayed as shown in the image to the right.

4. Use the Organization toolbar within the window to select a new location within the organization for the selected item(s).
5. Select the **OK** button to proceed with moving the item(s) or select the **Cancel** button to return to the **Ethernet Limit Sets** screen where the item(s) will still be displayed in its original location.

NOTE ***Items can also be moved by dragging and dropping them into the organization tree or by using the add/remove folder ... button.***

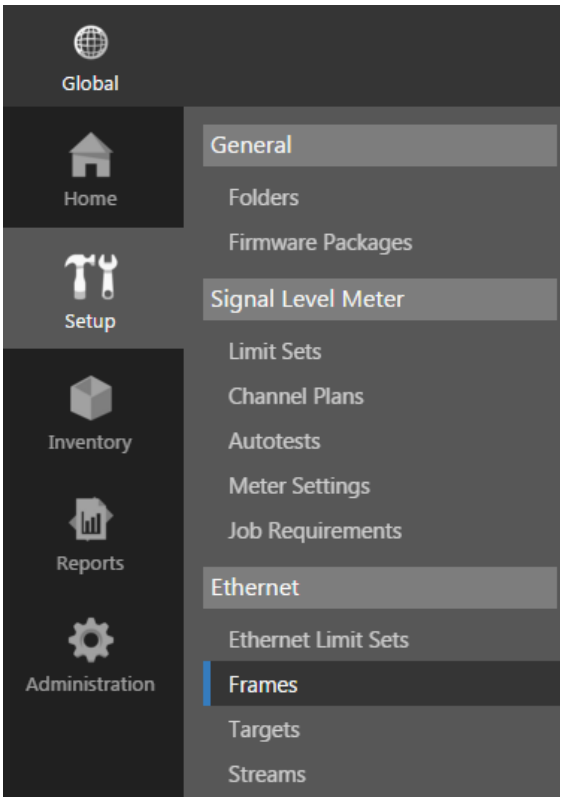
Frame Settings

This feature is used to configure frame settings for high-speed ethernet testing with the 720 DSP & 1G DSP.

Select **Ethernet > Frames** from the **Setup Settings** toolbar as shown in the image to the right.

Select the ☆ icon at the top of the page to add **Frames** to your **Home** page favorites.

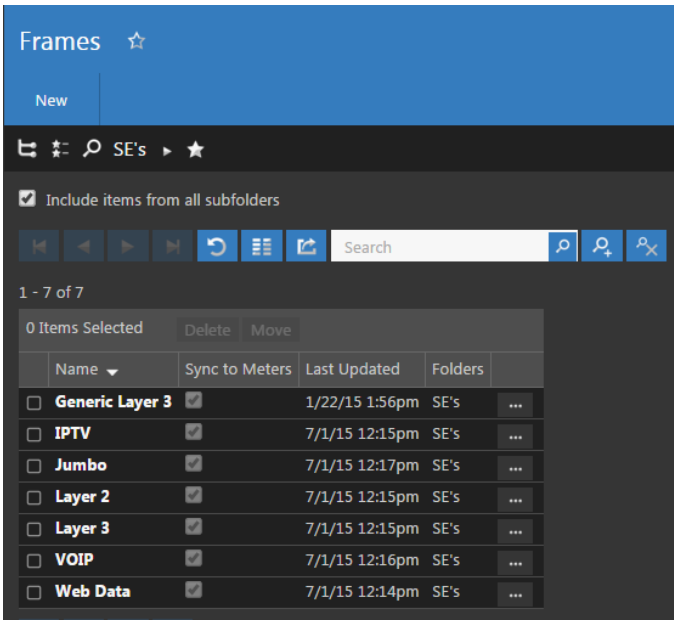
To remove **Frames** from your **Home** page favorites, select the ★ icon.



Frames Table

The **Frames** screen will be displayed as shown in the image below. From this screen you can perform the following actions:

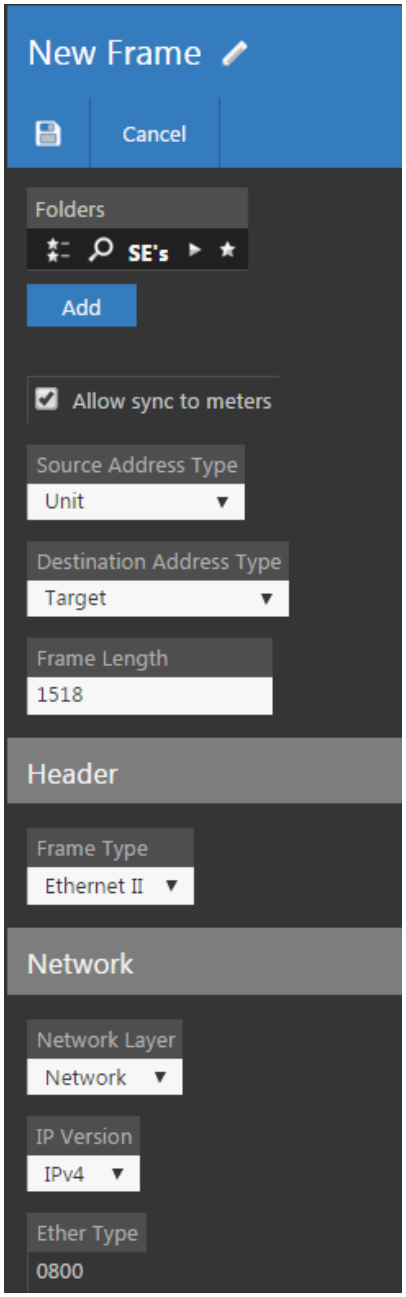
- View a list of ethernet frames
- Create new ethernet frames
- Edit an ethernet frame
- Copy an ethernet frame
- Delete an ethernet frame
- Move an ethernet frame



Creating a New Frame

Perform the following steps to create a new frame:

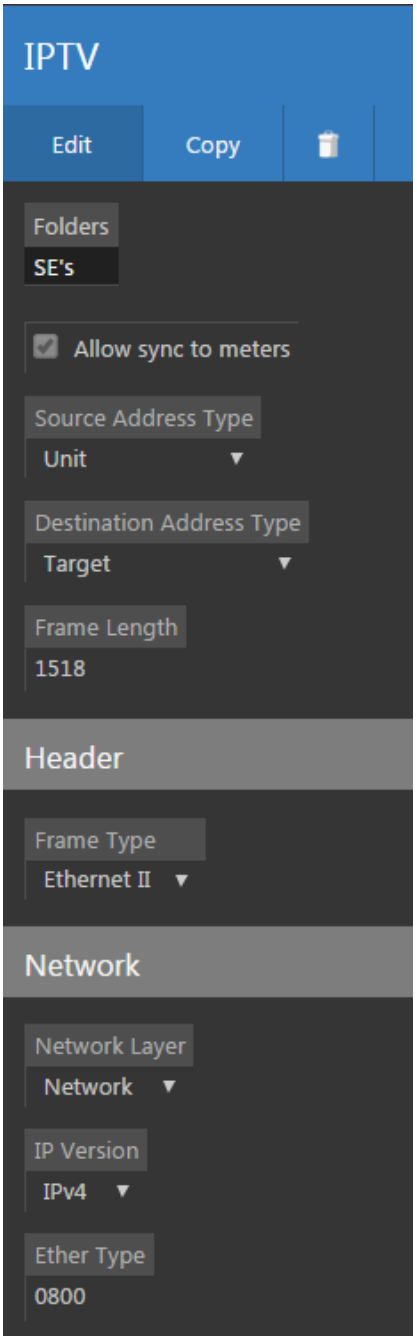
1. From the **Frames** screen, select the **New** button.
2. Enter a name for the new frame and select **OK**.
3. The **New Frame** screen will be displayed as shown in the image to the right.
4. Adjust the settings of the frame.
5. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the frame details screen where your changes will still be displayed.
6. The new frame should now appear in the **Frames** table.



Editing a Frame

Perform the following steps to edit a frame:

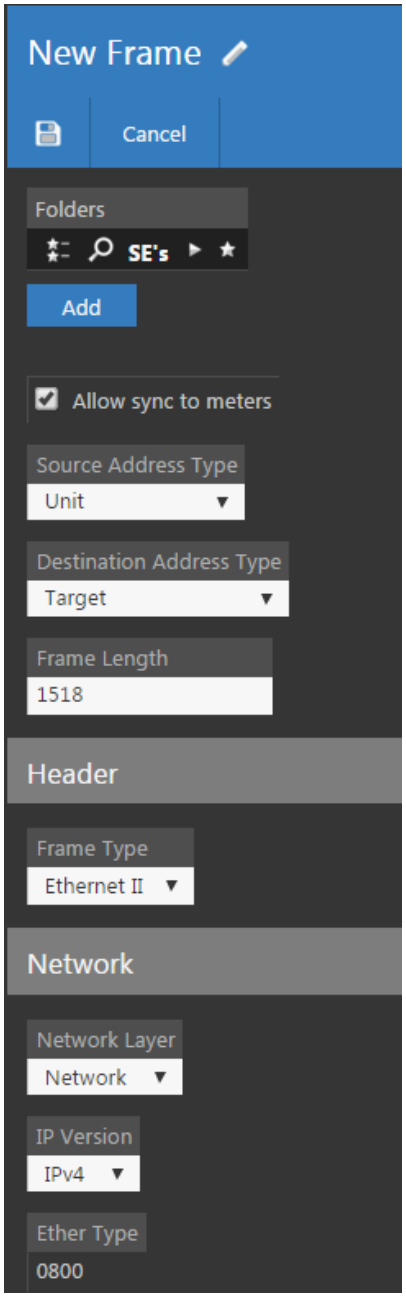
1. From the **Frames** screen, select the name of the frame to edit and the frame details screen will be displayed as shown in the image to the right.
2. Select the **Edit** button to adjust the settings of the frame.
3. Adjust the settings of the frame.
4. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the frame details screen where your changes will still be displayed.



Frame Setup Details

Perform the following steps when creating or editing a frame.

1. Select the **Add** button to add the limit set to a new location in the organization tree. Use the Organization toolbar within the window to select a new location and select the **Add** button. The new location will appear in the **Folders** area.
2. If you would like to allow this limit set to be synchronized with meters, select the **Allow sync to meters** checkbox. This is enabled by default when creating a new limit set.
3. Select the **Source Address Type** dropdown box to choose **Unit** or **Static**.
4. Select the **Destination Address Type** dropdown box to choose **Target** or **Static**.
5. Enter the frame length into the **Frame Length** field.



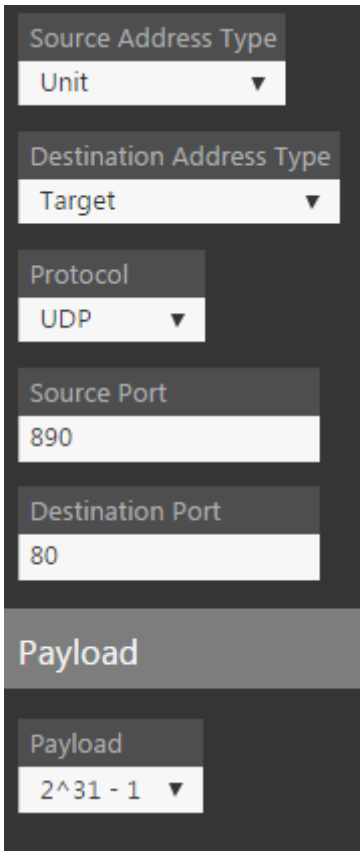
Header

1. Select the **Frame Type** dropdown box to choose **Ethernet II** or **802.3**.

Network

1. Select the **Network Layer** dropdown box to choose **Network** or **Arbitrary**.
2. Select the **IP Version** dropdown box to choose **IPv4** or **IPv6**.

3. Select the **Source Address Type** dropdown box to choose **Unit** or **Static**.
4. Select the **Destination Address Type** dropdown box to choose **Target** or **Static**.
5. Select the **Protocol** dropdown box to choose **UPD** or **TCP**.
6. Enter the source port into the **Source Port** field.
7. Enter the destination port into the **Destination Port** field.



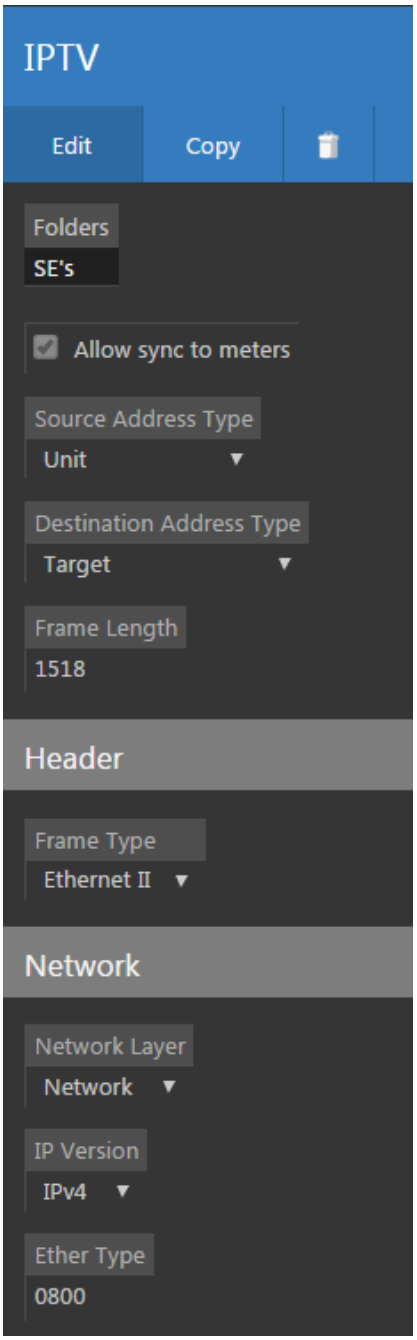
Payload

1. Select the **Payload** dropdown box to choose the payload from the available options.

Copying a Frame

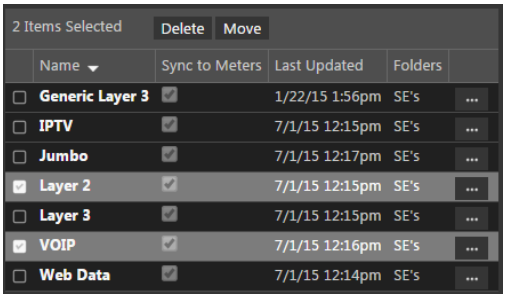
Perform the following steps to copy a frame:

1. From the **Frames** screen, select the name of the frame to copy and the frame details screen will be displayed as shown in the image to the right.
2. Select the **Copy** button.
3. Enter a new name for the copied frame and then select the **OK** button.
4. Select the **Save** button to save the frame.
5. The copied frame should now appear with its new name in the **Frames** table.



Deleting a Frame

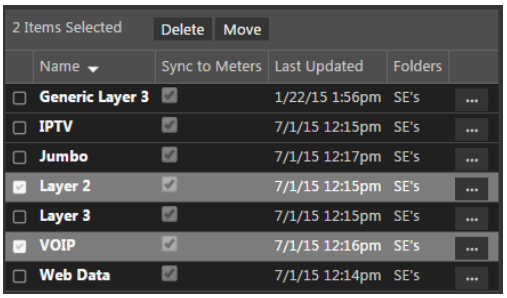
Perform the following steps to delete a frame:



1. From the **Frames** screen, select the checkbox to the left of each frame to delete.
2. Once you have chosen the frames, select the **Delete** button.
3. After selecting the **Delete** button, a **Confirm** window will be displayed.
    - When deleting five or less items, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **Frames** screen where the item(s) will still be displayed.
    - When deleting more than five items, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **Frames** screen where the item(s) will still be displayed.

Moving a Frame in the Organization

Perform the following steps to move a frame from one place to another in the organizational hierarchy:



1. From the **Frames** screen, select the checkbox to the left of each item to move.
2. Once you have chosen the item(s), select the **Move** button.
3. After selecting the **Move** button, a window will be displayed as shown in the image to the right.

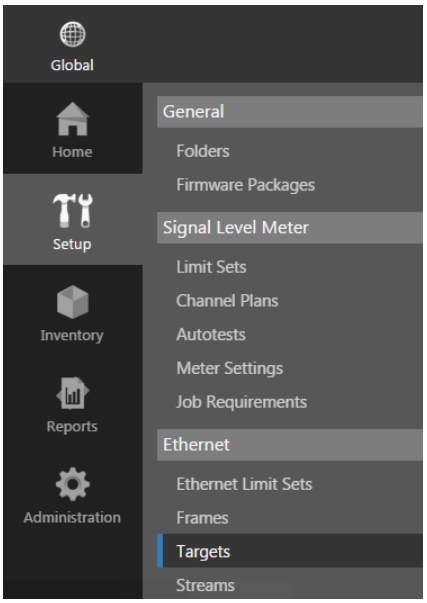
4. Use the Organization toolbar within the window to select a new location within the organization for the selected item(s).
5. Select the **OK** button to proceed with moving the item(s) or select the **Cancel** button to return to the **Frames** screen where the item(s) will still be displayed in its original location.

NOTE ***Items can also be moved by dragging and dropping them into the organization tree or by using the add/remove folder ... button.***

Target Settings

This feature is used to configure target settings for high-speed ethernet testing with the 720 DSP & 1G DSP.

Select **Ethernet > Targets** from the **Setup Settings** toolbar as shown in the image to the right.



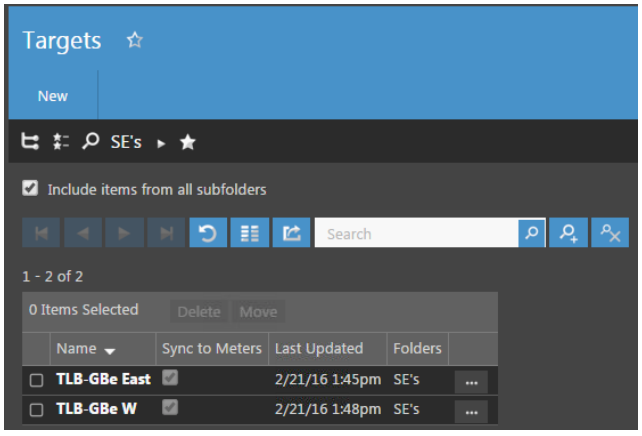
Select the ☆ icon at the top of the page to add **Targets** to your **Home** page favorites.

To remove **Targets** from your **Home** page favorites, select the ★ icon.

Targets Table

The **Targets** screen will be displayed as shown in the image below. From this screen you can perform the following actions:

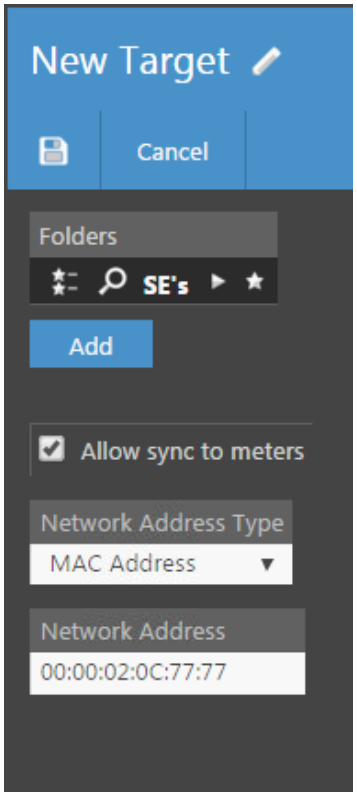
- View a list of ethernet targets
- Create new meter ethernet targets
- Edit a meter ethernet target
- Copy a ethernet target
- Delete a ethernet target
- Move a ethernet target



Creating a New Target

Perform the following steps to create a new target:

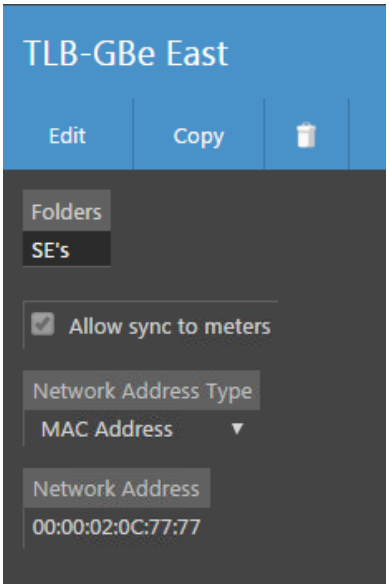
1. From the **Targets** screen, select the **New** button.
2. Enter a name for the new target.
3. The **New Target** screen will be displayed as shown in the image to the right.
4. Adjust the settings of the target.
5. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the target details screen where your changes will still be displayed.
6. The new target should now appear in the **Targets** table.



Editing a Target

Perform the following steps to edit a target:

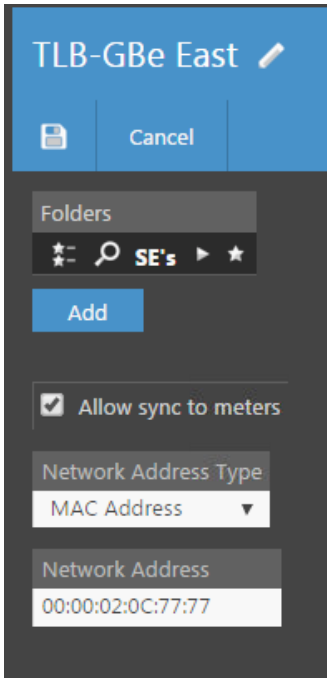
1. From the **Targets** screen, select the name of the target to edit and the target details screen will be displayed as shown in the image to the right.
2. Select the **Edit** button to adjust the settings of the target.
3. Adjust the settings of the target.
4. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the target details screen where your changes will still be displayed.



Target Setup Details

Perform the following steps when creating or editing a target.

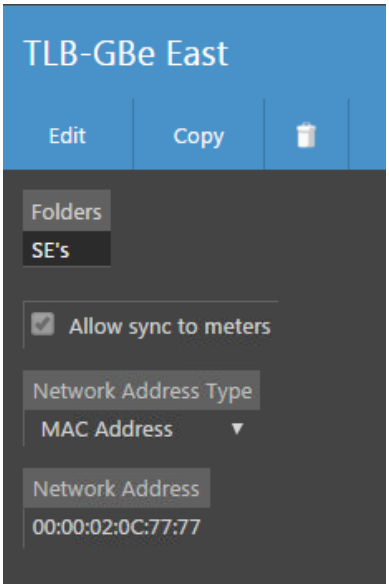
1. Select the **Add** button to add the target to a new location in the organization tree. Use the Organization toolbar within the window to select a new location and select the **Add** button. The new location will appear in the **Folders** area.
2. If you would like to allow this target to be synchronized with meters, select the **Allow sync to meters** checkbox. This is enabled by default when creating a new target.
3. Select the network address type to be used by the target from the **Network Address Type** dropdown box.
4. Enter the network address for the target in the **Network Address** field.



Copying a Target

Perform the following steps to copy a target:

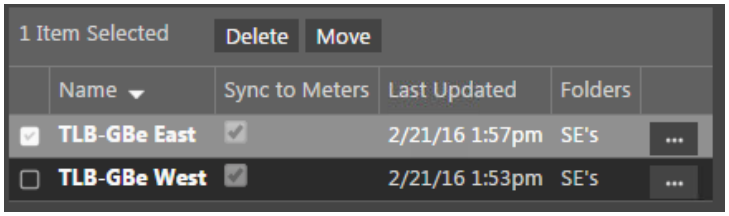
1. From the **Targets** screen, select the name of the target to copy and the target details screen will be displayed as shown in the image to the right.
2. Select the **Copy** button.
3. Enter a new name for the copied target and then select the **OK** button
4. Select the **Save** button to save the target.
5. The copied target should now appear with its new name in the **Targets** table.



Deleting a Target

Perform the following steps to delete a target:

1. From the **Targets** screen, select the checkbox to the left of each target to delete.
2. Once you have chosen the targets, select the **Delete** button.

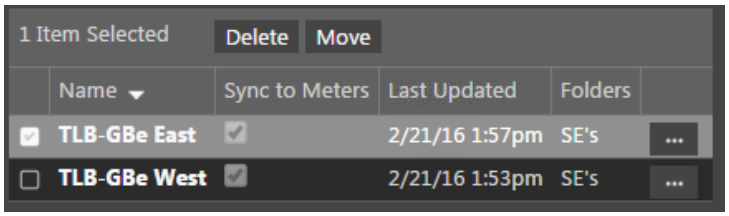


3. After selecting the **Delete** button, a **Confirm** window will be displayed.
    - When deleting five or less items, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **Targets** screen where the item(s) will still be displayed.
    - When deleting more than five items, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **Targets** screen where the item(s) will still be displayed.

Moving a Target in the Organization

Perform the following steps to move a target from one place to another in the organizational hierarchy:

1. From the **Targets** screen, select the checkbox to the left of each item to move.
2. Once you have chosen the item(s), select the **Move** button.



3. After selecting the **Move** button, a window will be displayed as shown in the image to the right.
4. Use the Organization toolbar within the window to select a new location within the organization for the selected item(s).

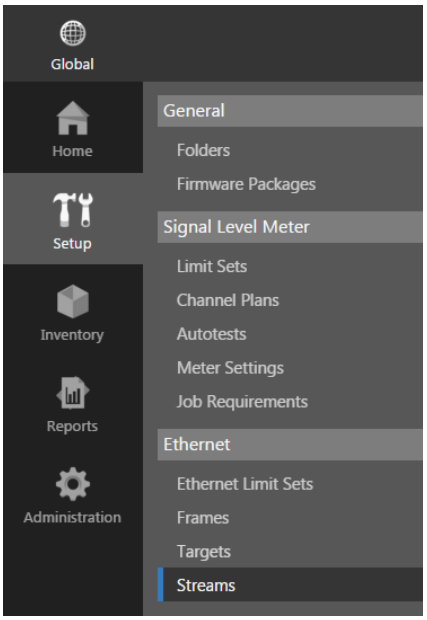
5. Select the **OK** button to proceed with moving the item(s) or select the **Cancel** button to return to the **Targets** screen where the item(s) will still be displayed in its original location.

NOTE ***Items can also be moved by dragging and dropping them into the organization tree or by using the add/remove folder*** ... ***button.***

Stream Settings

This feature is used to configure stream settings for high-speed ethernet testing with the 720 DSP & 1G DSP.

Select **Ethernet > Streams** from the **Setup Settings** toolbar as shown in the image to the right.



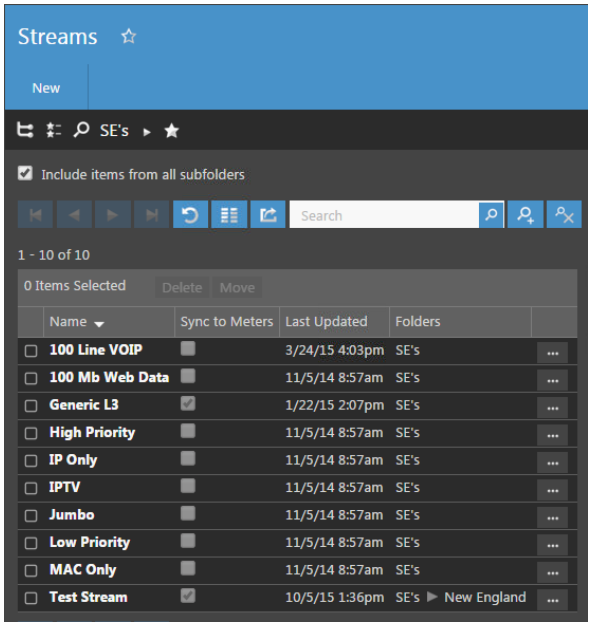
Select the ☆ icon at the top of the page to add **Streams** to your **Home** page favorites.

To remove **Streams** from your **Home** page favorites, select the ★ icon.

Streams Table

The **Streams** screen will be displayed as shown in the image below. From this screen you can perform the following actions:

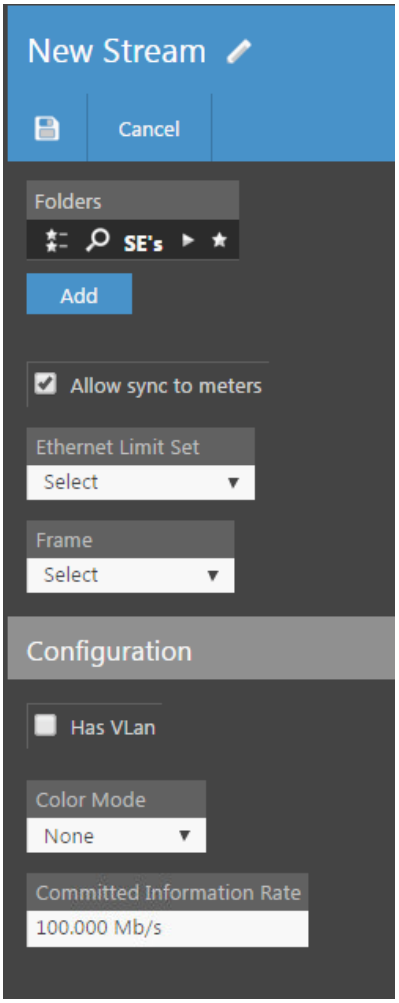
- View a list of ethernet streams
- Create new meter ethernet streams
- Edit an ethernet stream
- Copy an ethernet stream
- Delete an ethernet stream
- Move an ethernet stream



Creating a New Stream

Perform the following steps to create a new stream:

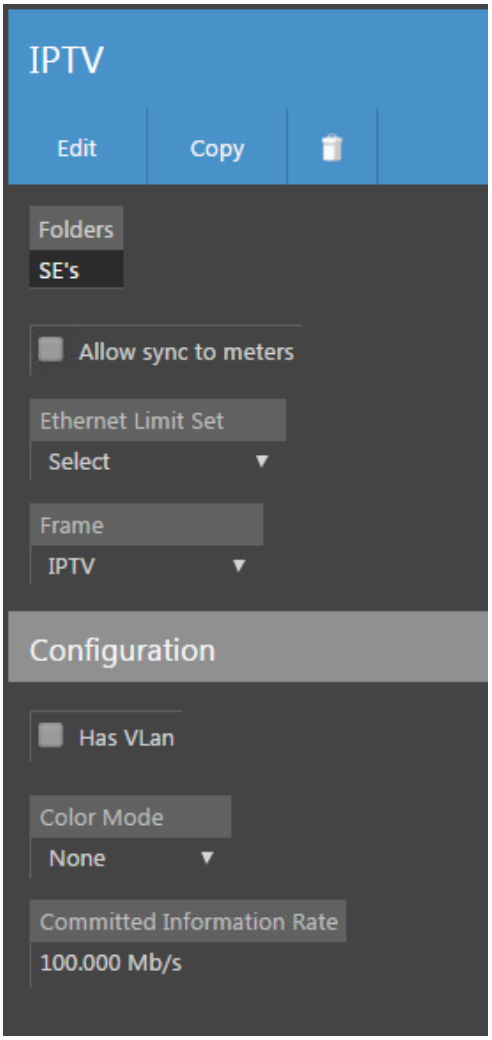
1. From the **Streams** screen, select the **New** button.
2. Enter a name for the new stream.
3. The **New Stream** screen will be displayed as shown in the image to the right.
4. Adjust the settings of the stream.
5. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the stream details screen where your changes will still be displayed.
6. The new stream should now appear in the **Streams** table.



Editing a Stream

Perform the following steps to edit a stream:

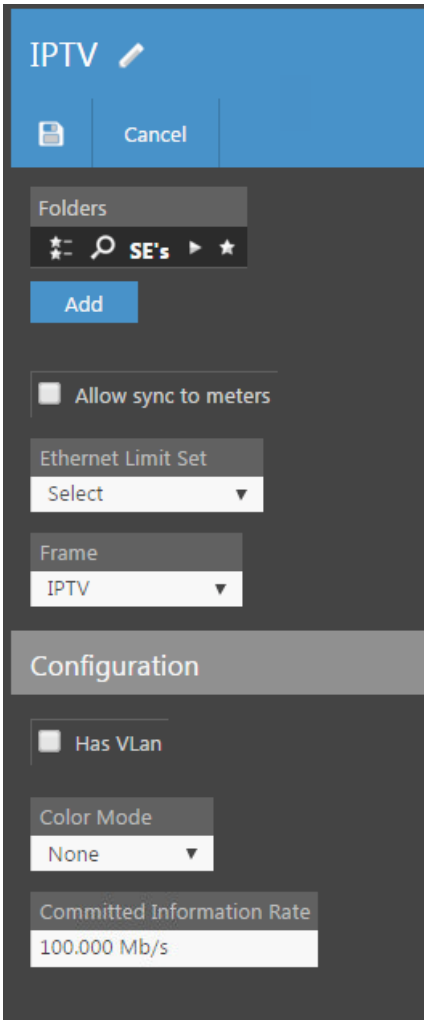
1. From the **Streams** screen, select the name of the stream to edit and the stream details screen will be displayed as shown in the image to the right.
2. Select the **Edit** button to adjust the settings of the stream.
3. Adjust the settings of the stream.
4. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the streams screen where your changes will still be displayed.



Stream Setup Details

Perform the following steps when creating or editing a stream.

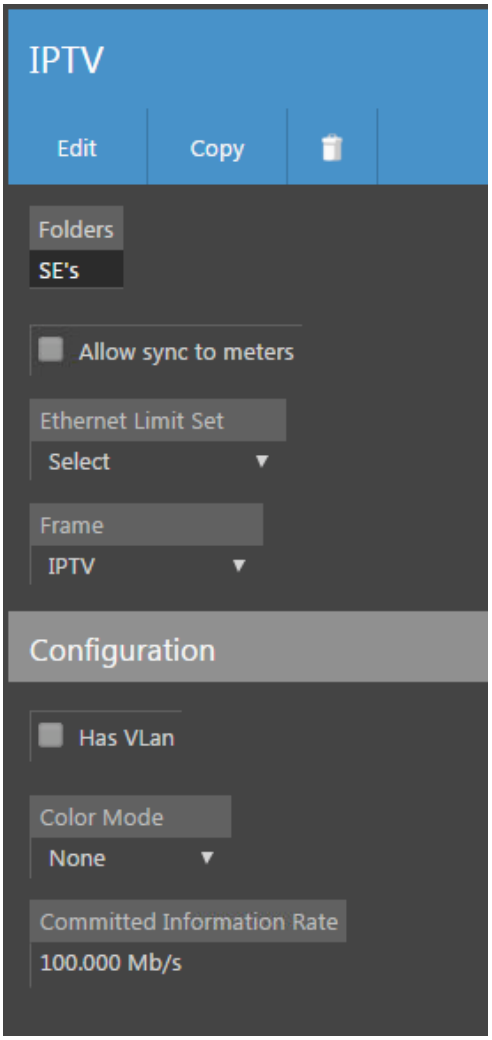
1. Select the **Add** button to add the stream to a new location in the organization tree. Use the Organization toolbar within the window to select a new location and select the **Add** button. The new location will appear in the **Folders** area.
2. If you would like to allow this stream to be synchronized with meters, select the **Allow sync to meters** checkbox. This is enabled by default when creating a new stream.
3. Select the ethernet limit set to use during testing from the **Ethernet Limit Set** dropdown box.
4. Select the frame to use during testing from the **Frame** dropdown box.
5. Select the **Has VLan** checkbox if the stream has VLAN and enter the ID in the **VLAN ID** field.
6. Select the **Color Mode** dropbox box to choose **Color Blind** or **Color Aware**.
7. In the **Committed Information Rate** field, enter the information rate.



Copying a Stream

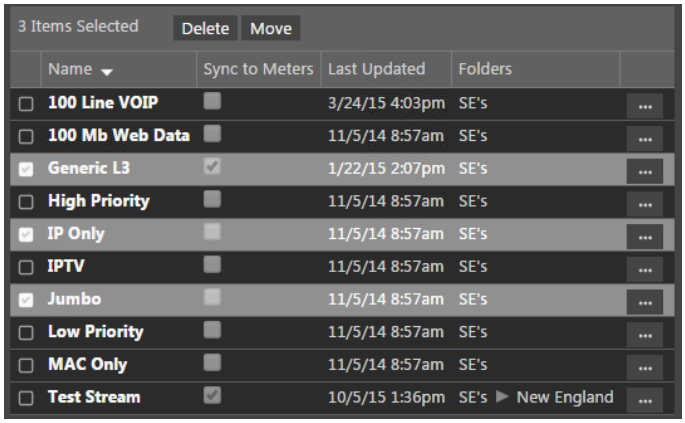
Perform the following steps to copy a stream:

1. From the **Streams** screen, select the name of the stream to copy and the stream details screen will be displayed as shown in the image to the right.
2. Select the **Copy** button.
3. Enter a new name for the copied stream and then select the **OK** button.
4. Select the **Save** button to save the stream.
5. The copied stream should now appear with its new name in the **Streams** table.



Deleting a Stream

Perform the following steps to delete a stream:

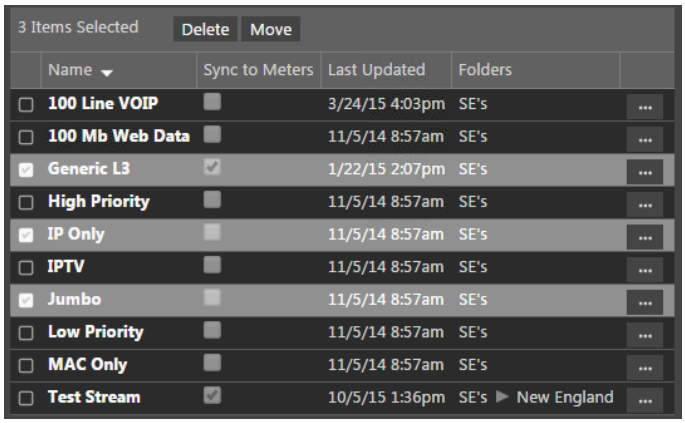


1. From the **Streams** screen, select the checkbox to the left of each stream to delete.
2. Once you have chosen the streams, select the **Delete** button.
3. After selecting the **Delete** button, a **Confirm** window will be displayed.
    - When deleting five or less items, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **Streams** screen where the item(s) will still be displayed.
    - When deleting more than five items, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **Streams** screen where the item(s) will still be displayed.

Moving a Stream in the Organization

Perform the following steps to move a steam from one place to another in the organizational hierarchy:

1. From the **Streams** screen, select the checkbox to the left of each item to move.
2. Once you have chosen the item(s), select the **Move** button.
3. After selecting the **Move** button, a window will be displayed as shown in the image to the right.
4. Use the Organization toolbar within the window to select a new location within the organization for the selected item(s).
5. Select the **OK** button to proceed with moving the item(s) or select the **Cancel** button to return to the **Streams** screen where the item(s) will still be displayed in its original location.



NOTE ***Items can also be moved by dragging and dropping them into the organization tree or by using the add/remove folder ... button.***

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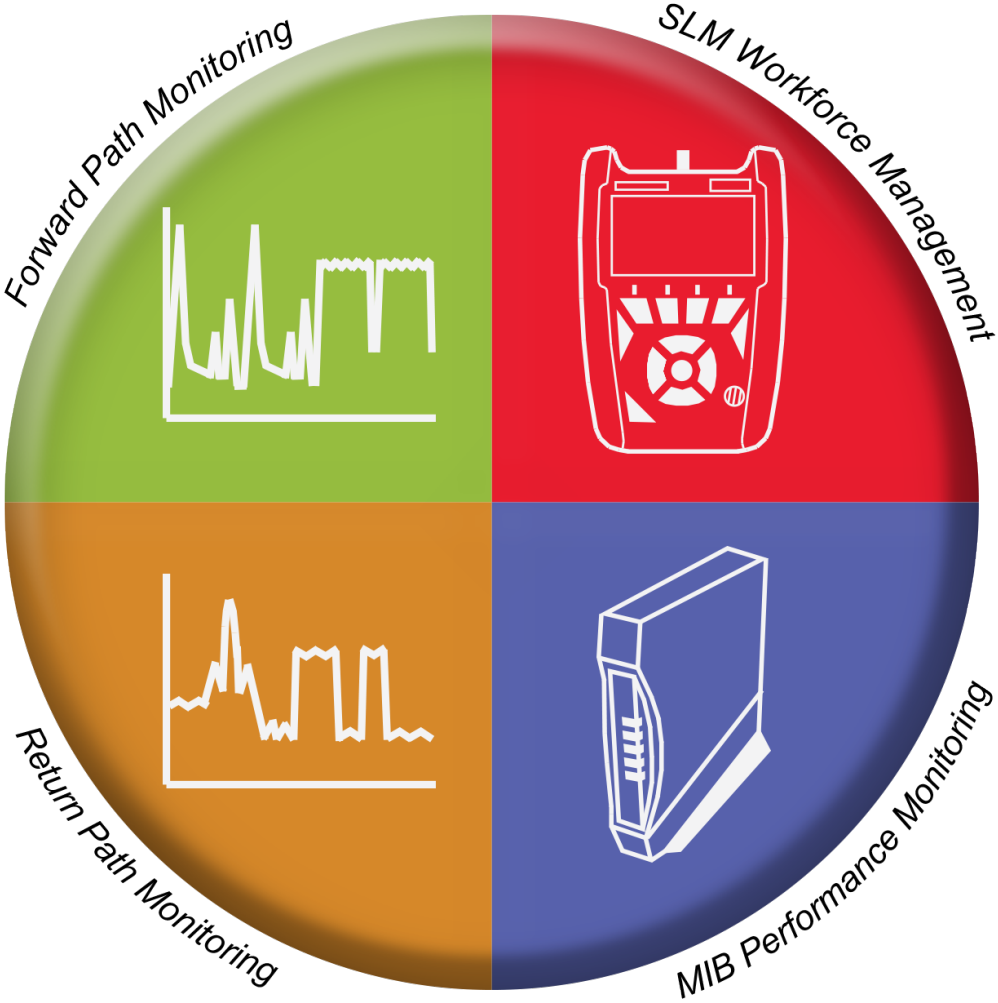
ViewPoint

Integrated Data Management System

Section IV: Inventory Management



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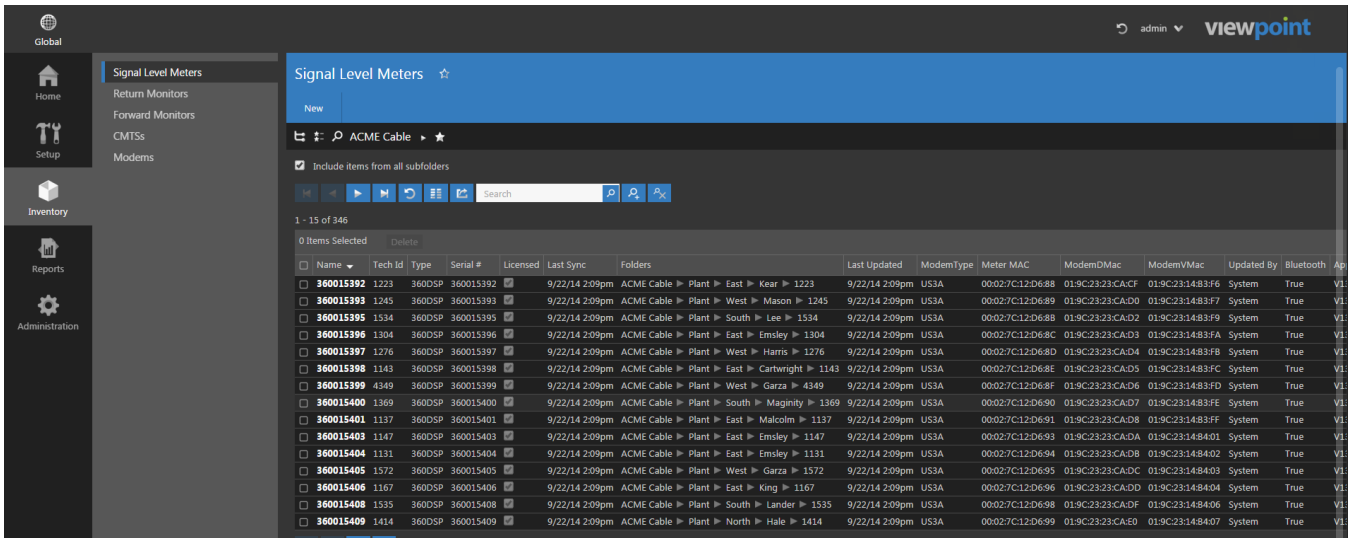
Overview

The **Inventory** screen is used to manage all inventory assets and devices that connect to the ViewPoint system.

Select the **Inventory** button from the **Navigations and Settings** toolbar as shown in the image to the right.

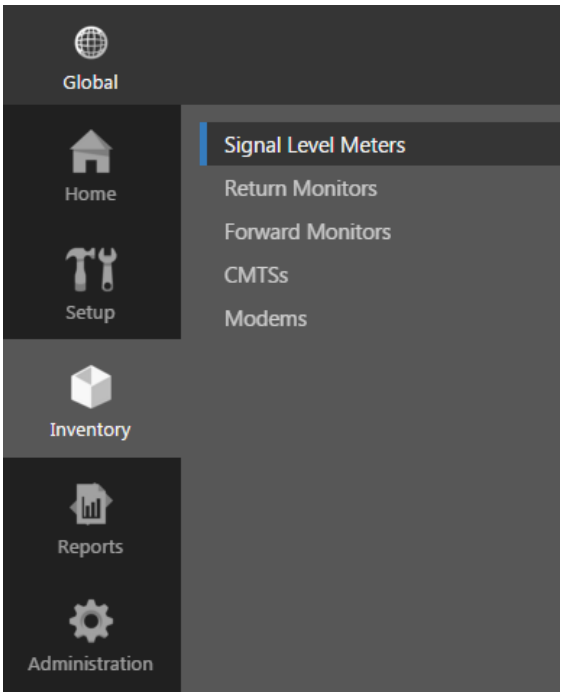
By default, the Inventory screen will be displayed as shown in the image below.



Inventory Settings Toolbar

To navigate to a specific feature within the **Inventory** screen, simply select the corresponding feature from the **Inventory Settings** toolbar as shown in the image to the right.

The currently selected feature within the **Inventory Settings** toolbar is always highlighted using white text on a dark gray box with a blue bar. All other features within the screen will use gray text.



From the **Inventory Settings** toolbar, you can choose from any of the following features:

Signal Level Meters	When selected, this feature provides the ability to manage all signal level meter inventory assets in the organization within ViewPoint.
Return Monitors	When selected, this feature provides the ability to manage all return monitor inventory assets in the organization within ViewPoint.
Forward Monitors	When selected, this feature provides the ability to manage all forward monitor inventory assets in the organization within ViewPoint.
CMTSs	When selected, this feature provides the ability to manage all CMTS inventory assets in the organization within ViewPoint.
Modems	When selected, this feature provides the ability to manage all modem inventory assets in the organization within ViewPoint.

Chapter 3

Meter Management

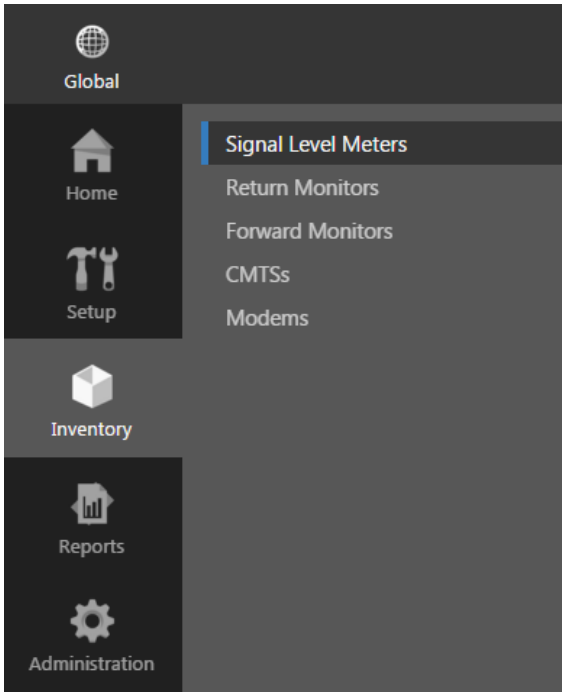
Overview

This feature is used to manage connections to and synchronization between signal level meters and the ViewPoint server.

Select **Signal Level Meters** from the **Inventory Settings** toolbar as shown in the image to the right.

Select the ☆ icon at the top of the page to add **Signal Level Meters** to your **Home** page favorites.

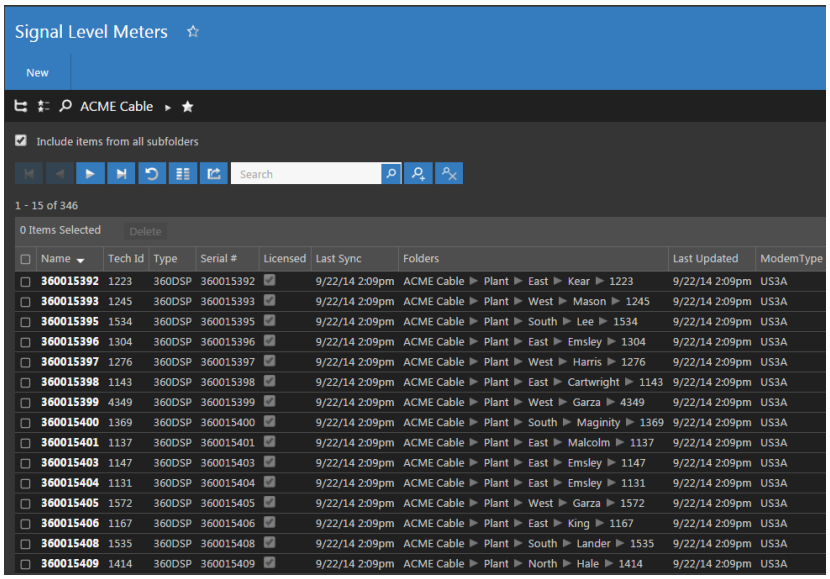
To remove **Signal Level Meters** from your **Home** page favorites, select the ★ icon.



Meters Table

The **Meters** screen will be displayed as shown in the image to the right. From this screen you can perform the following actions:

- View a list of signal level meters
- Create a new signal level meter
- Connect to a signal level meter
- Edit a signal level meter
- Delete a signal level meter
- Move a signal level meter



How ViewPoint Manages Meters & Technicians

There are two very important settings within the **Administration**, **General, Site Settings**, **WFM** screen that control how meters & technicians are managed by ViewPoint. These settings are as follows:

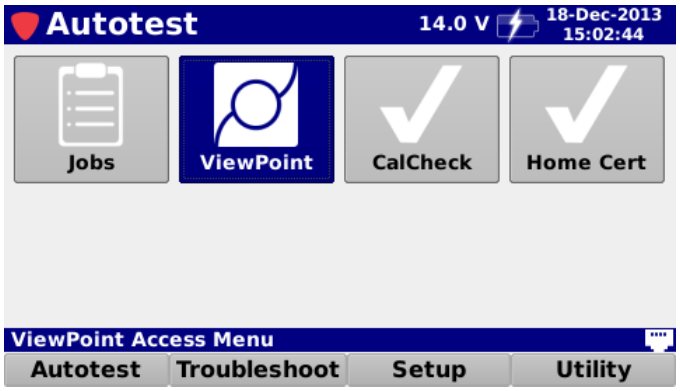
- The **Enable auto creation of a meter and technician when a meter connects to ViewPoint** checkbox controls how meters are added to ViewPoint.
    - **Not Selected** – Before initial connection of a meter to ViewPoint, the new meter and technician must be manually added to ViewPoint using the meter serial number and Tech ID. When manually adding the technician and meter to ViewPoint, a default location for the meter and technician can be selected using the Organization toolbar. If the meter is not manually added to ViewPoint before synchronization, the meter will display an unable to connect due to insufficient privileges message.
    - **Selected (default)** – During initial connection of the meter, the technician and meter will automatically be created by ViewPoint and they will be assigned to a user-specified location within the organization tree. The default location within the organization tree for new technicians is the **Unassigned Techs** folder. The new meter will be located directly below the technician within the organizational hierarchy.
- The **ViewPoint controls the Tech IDs and Usernames on meters** checkbox sets how the Tech IDs and Usernames on meters are treated when connecting to ViewPoint.
    - **Selected (default)** – The Tech ID and Usernames on the meters will be controlled by ViewPoint. When syncing with a meter, ViewPoint uses the meter serial number to match meters in the field to existing meters in ViewPoint. If ViewPoint determines that there have been manual changes made on a meter to the Tech ID or Username, ViewPoint will automatically replace the Tech ID and Username stored on the meter with the Tech ID and Username stored in ViewPoint for the meter.
    - **Not Selected** – The Tech ID and Usernames on the meter will not be controlled by ViewPoint. When syncing with a meter, ViewPoint will automatically update the Tech ID and Username stored within ViewPoint with the Tech ID and Username stored on the meter.


NOTE

For more information on WFM settings in ViewPoint, see the Section II: Site Administration, Chapter 2, WFM section.

Automatically Create a New Meter in ViewPoint

When the **Enable auto creation of a meter and technician when a meter connects to ViewPoint** checkbox is selected within the **Administration, General, Site Settings, WFM** screen, you will need to perform the steps outlined in the following sections to connect and automatically create a new meter and technician within ViewPoint.

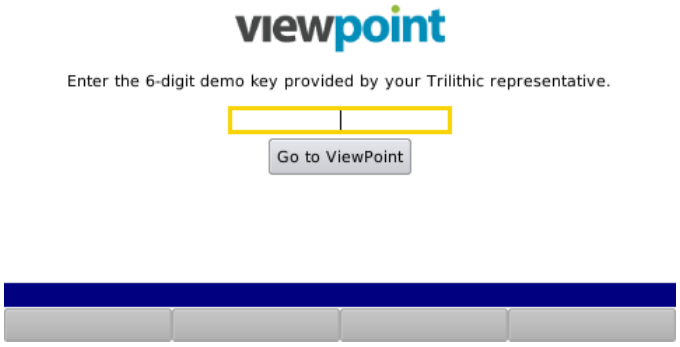


Before starting, the new DSP family meter must be connected to a network with an internet connection for communication with the ViewPoint server.

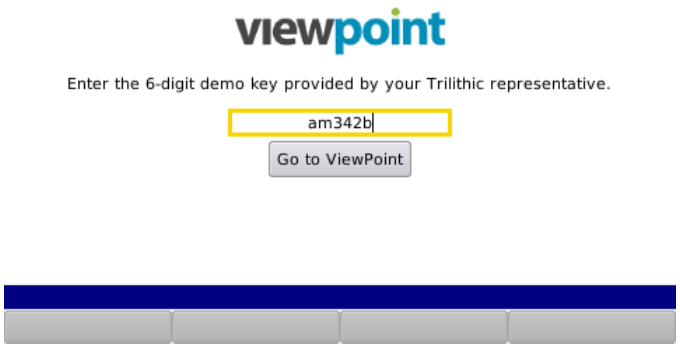
On the signal level meter, select the **Autotest** softkey and then select the **ViewPoint** icon as shown in the image to the right.

Initial Connection

Upon first use of the **ViewPoint** icon, the **ViewPoint** re-direct portal will be displayed as shown in the image to the right. This screen allows you to enter a secure key that is provided to your company upon successful registration and setup of your ViewPoint server with WFM Module.



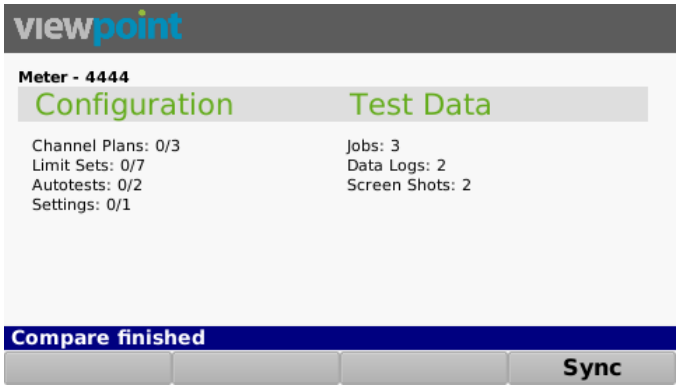
After you select the key entry field, use the **Virtual Keyboard** to enter the secure key. Once you have entered the secure key, select the **Go to ViewPoint** button as shown in the image to the right.



Data Synchronization

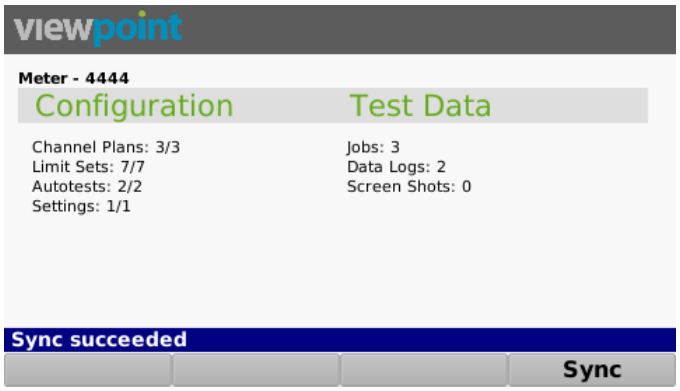
Once you have successfully connected, ViewPoint will automatically create a new meter and a technician for the currently logged in user.

Upon connecting, a comparison is made between the configuration files on the meter and what is currently available for the device in ViewPoint.



- The results of this comparison will be displayed on the meter screen as shown in the image to the right.
- The **Configuration** column includes the Channel Plans, Limit Sets, Autotests & Settings configuration files.
- The **Test Data** column includes the Jobs, Data Logs & Screen Shots test data files.

Select the **Sync** softkey to perform the following functions:



- Download all of the new/ updated configuration files to the meter
- Upload all of the test data files to the ViewPoint WFM Module
- Perform a new comparison and update the screen to show the updated configuration and test data on the meter
- When the sync is finished, the text **Sync succeeded** will be displayed in the **Message Bar** as shown in the image above.

NOTE ***Only Closed jobs and their associated data will be uploaded and deleted. Otherwise, the data is sent to the server but the job is still available for more testing.***

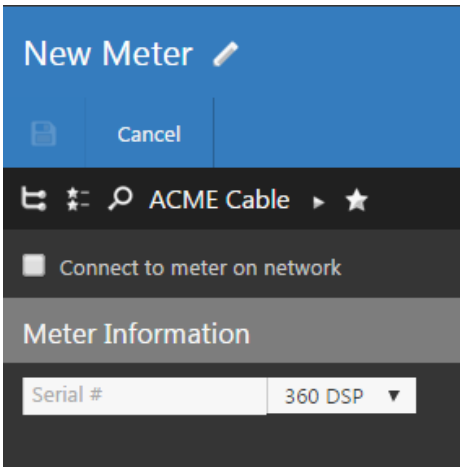
Manually Create a New Meter in ViewPoint

When the **Enable auto creation of a meter and technician when a meter connects to ViewPoint** checkbox is not selected within the **Administration, General, Site Settings, WFM** screen, you will need to perform the steps outlined in the following sections to manually create and connect a meter to ViewPoint.

Once the meter and technician have been manually added to ViewPoint, the meter will be able to synchronize with ViewPoint.

Perform the following steps to manually create a new meter in ViewPoint:

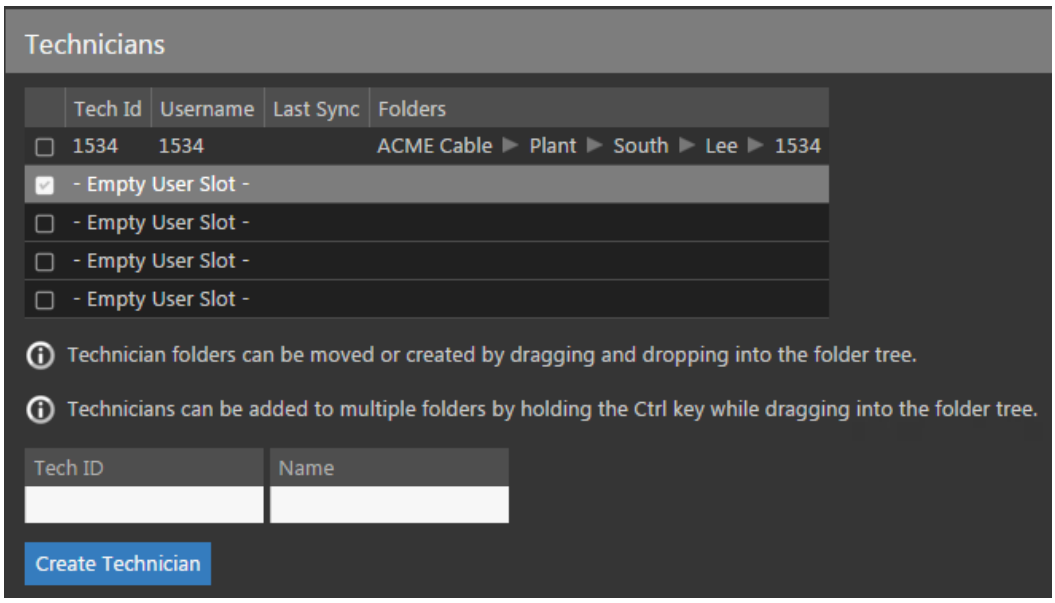
1. From the **Signal Level Meters** screen, select the **New** button.
2. The meter settings details screen will be displayed as shown in the image to the right.
3. Deselect the **Connect to meter on network** checkbox.
4. Select the default location for the meter and technician using the Organization toolbar.
5. Enter the meter serial number in the **Serial #** field.
6. Select the type of meter from the dropdown box.
7. Select the **Save** button to add the meter to ViewPoint. The new meter should now appear in the **Signal Level Meters** table.



NOTE

If the Connect to meter on network checkbox is selected, this message will be displayed: "Meter limitations do not allow connection and sync using HTTPS. Connection must be initiated by the meter."

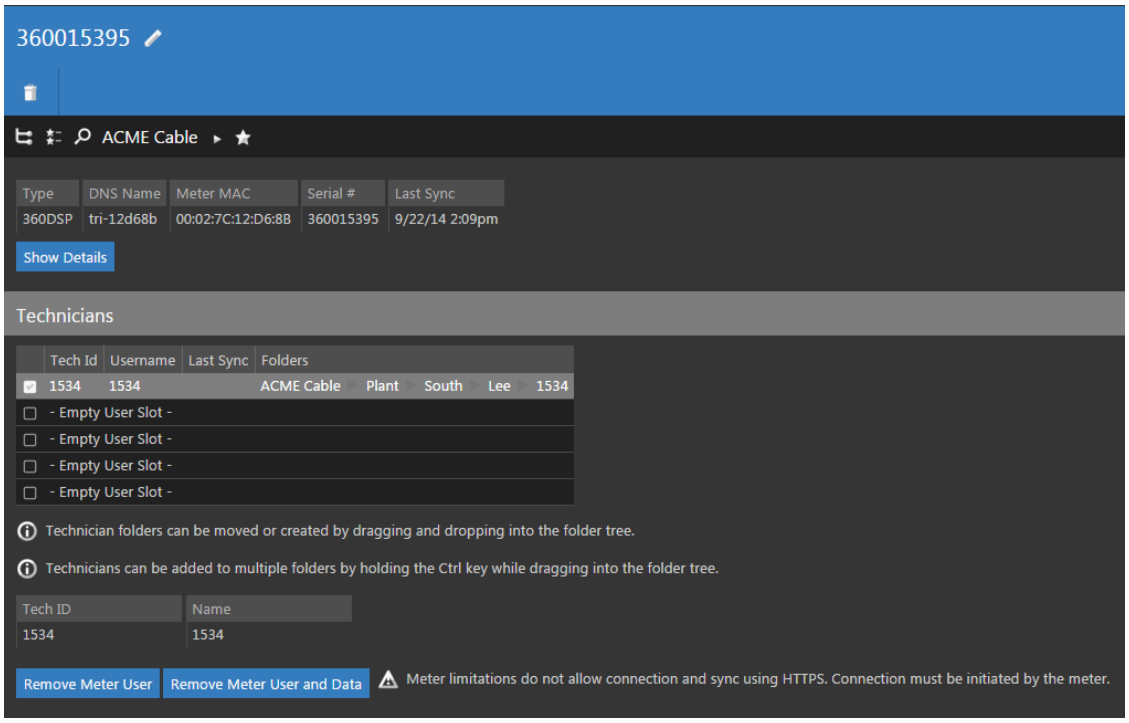
8. From the **Signal Level Meters** screen, select the name of the meter to edit and the meter details screen will be displayed as shown in the image below.
9. In the Technicians area, select the **Empty User Slot** checkbox.
10. Enter the technician ID of the selected user slot in the **Tech ID** field.
11. Enter the username of the selected user slot in the **Name** field.
12. Select the **Create Technician** button to add the technician information to ViewPoint.
13. Repeat steps 9 through 12 for each user slot being used on the meter.
14. Select the **Save** button to save the meter and technician information to ViewPoint. The meter can now be synchronized with ViewPoint as shown later in this section.



Removing a Meter User and Data

Perform the following steps to remove a meter user and data:

1. From the **Signal Level Meters** screen, select the checkbox to the left of the meter you want to remove the meter user and data.
2. Once you have chosen the meter, select the checkbox for the user you want to remove and select either the **Remove Meter User** or **Remove Meter User and Data** button, as shown in the image below.
3. After selecting the **Remove Meter User** or **Remove Meter User and Data** button, a **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **Meter** screen where the item(s) will still be displayed.

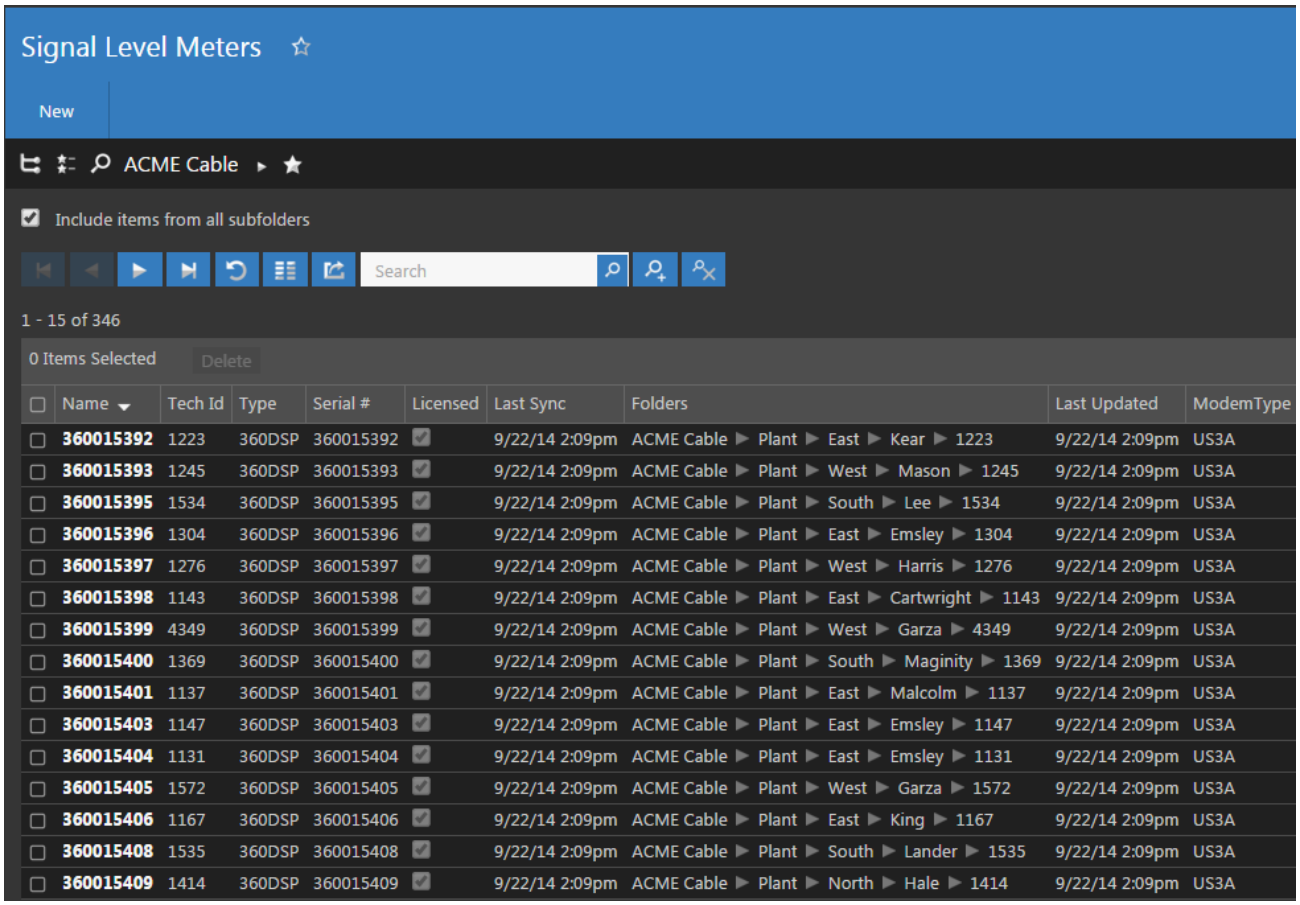


Meter Management Tools

Meter Users

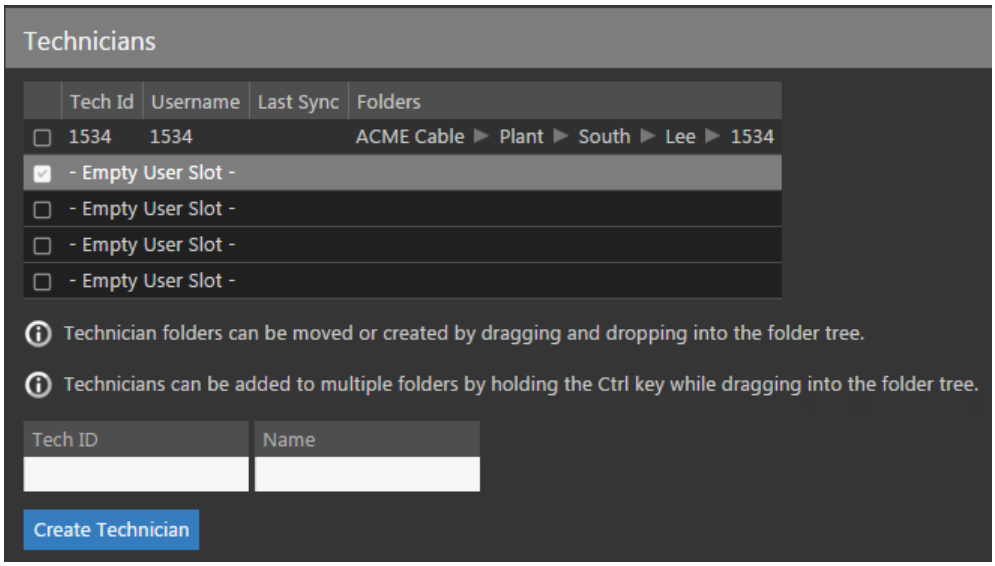
When a meter is connected to ViewPoint, the **Signal Level Meters** screen will display the user name that is currently logged in to the meter, along with the organization hierarchy, etc.

The meters can have up to five user profiles. To configure each user you must log in to the meter as each user and sync the meter to ViewPoint.



Name	Tech Id	Type	Serial #	Licensed	Last Sync	Folders	Last Updated	ModemType
360015392	1223	360DSP	360015392	☑	9/22/14 2:09pm	ACME Cable ▶ Plant ▶ East ▶ Kear ▶ 1223	9/22/14 2:09pm	US3A
360015393	1245	360DSP	360015393	☑	9/22/14 2:09pm	ACME Cable ▶ Plant ▶ West ▶ Mason ▶ 1245	9/22/14 2:09pm	US3A
360015395	1534	360DSP	360015395	☑	9/22/14 2:09pm	ACME Cable ▶ Plant ▶ South ▶ Lee ▶ 1534	9/22/14 2:09pm	US3A
360015396	1304	360DSP	360015396	☑	9/22/14 2:09pm	ACME Cable ▶ Plant ▶ East ▶ Emsley ▶ 1304	9/22/14 2:09pm	US3A
360015397	1276	360DSP	360015397	☑	9/22/14 2:09pm	ACME Cable ▶ Plant ▶ West ▶ Harris ▶ 1276	9/22/14 2:09pm	US3A
360015398	1143	360DSP	360015398	☑	9/22/14 2:09pm	ACME Cable ▶ Plant ▶ East ▶ Cartwright ▶ 1143	9/22/14 2:09pm	US3A
360015399	4349	360DSP	360015399	☑	9/22/14 2:09pm	ACME Cable ▶ Plant ▶ West ▶ Garza ▶ 4349	9/22/14 2:09pm	US3A
360015400	1369	360DSP	360015400	☑	9/22/14 2:09pm	ACME Cable ▶ Plant ▶ South ▶ Maginity ▶ 1369	9/22/14 2:09pm	US3A
360015401	1137	360DSP	360015401	☑	9/22/14 2:09pm	ACME Cable ▶ Plant ▶ East ▶ Malcolm ▶ 1137	9/22/14 2:09pm	US3A
360015403	1147	360DSP	360015403	☑	9/22/14 2:09pm	ACME Cable ▶ Plant ▶ East ▶ Emsley ▶ 1147	9/22/14 2:09pm	US3A
360015404	1131	360DSP	360015404	☑	9/22/14 2:09pm	ACME Cable ▶ Plant ▶ East ▶ Emsley ▶ 1131	9/22/14 2:09pm	US3A
360015405	1572	360DSP	360015405	☑	9/22/14 2:09pm	ACME Cable ▶ Plant ▶ West ▶ Garza ▶ 1572	9/22/14 2:09pm	US3A
360015406	1167	360DSP	360015406	☑	9/22/14 2:09pm	ACME Cable ▶ Plant ▶ East ▶ King ▶ 1167	9/22/14 2:09pm	US3A
360015408	1535	360DSP	360015408	☑	9/22/14 2:09pm	ACME Cable ▶ Plant ▶ South ▶ Lander ▶ 1535	9/22/14 2:09pm	US3A
360015409	1414	360DSP	360015409	☑	9/22/14 2:09pm	ACME Cable ▶ Plant ▶ North ▶ Hale ▶ 1414	9/22/14 2:09pm	US3A

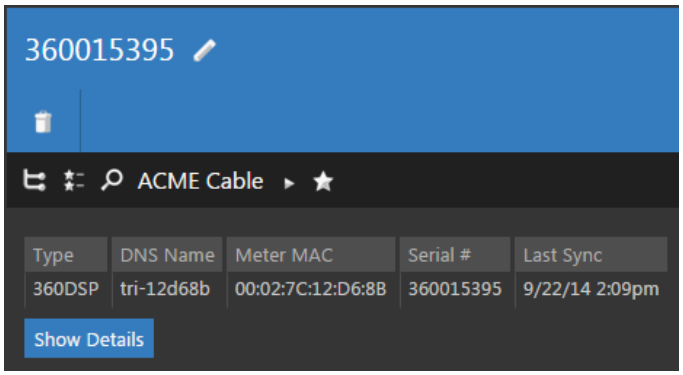
Only one profile can be connected at a time. After all of the users have logged in and connected to ViewPoint, select the name of the meter from the **Signal Level Meters** screen, and they will appear in the **Technicians** area, as shown in the image below.



Meter Information

Any time you select a meter from the meters list, you are able to view information about the meter. This information cannot be adjusted by the user, except where noted.

Select the name of the meter from the **Signal Level Meters** screen, and select the **Show Details** button as shown in the image to the right.



General Information

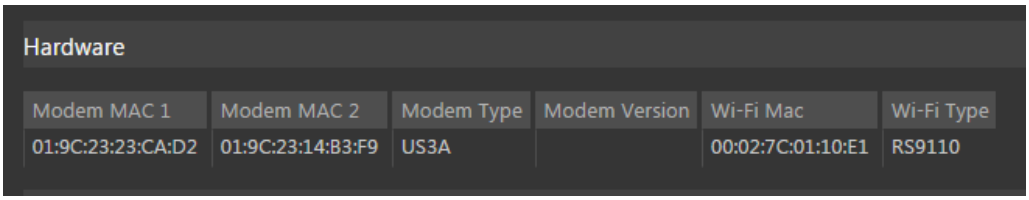
You can view the general meter information of the meter as shown in the image above.

- Meter Name (User Adjustable)
- Meter Type
- DNS Name
- Meter MAC Address
- Serial Number
- Last Sync Date

Hardware Information

You can view the following information about the meter hardware as shown in the image below.

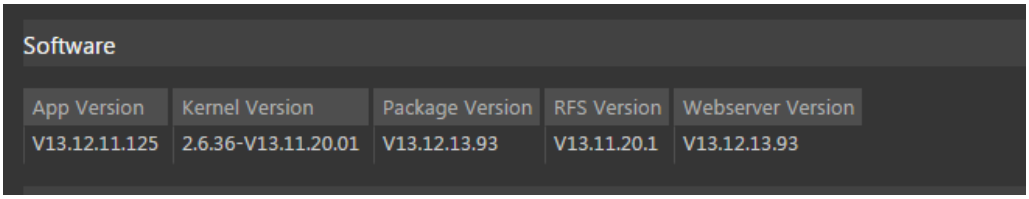
- Modem MAC 1
- Modem MAC 2
- Modem Type
- Modem Version
- Wi-Fi MAC
- Wi-Fi Type



Software Versions

You can view the following information about the meter software as shown in the image below.

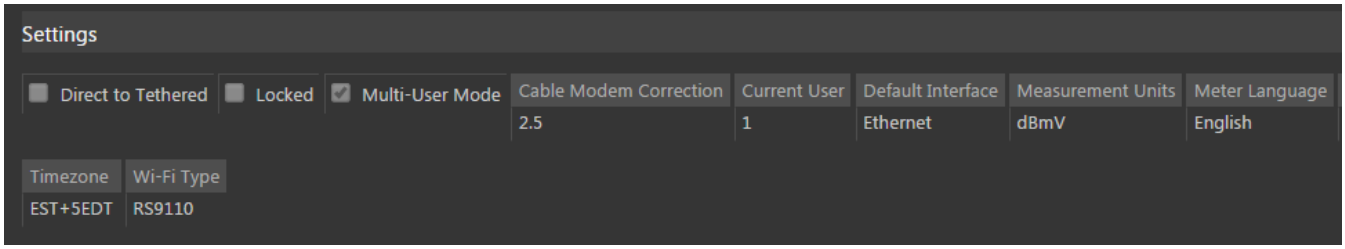
- App Version
- Kernel Version
- Package Version
- RFS Version
- Webserver Version



General Settings

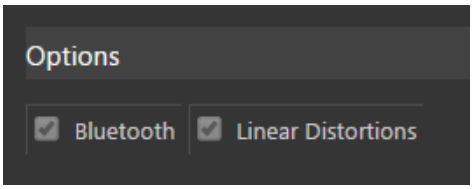
You can view the general settings of the signal level meter as shown in the image below.

- Direct to Tethered Status
- Locked Configuration Status
- Multi-User Mode Status
- Cable Modem Correction
- Current User Number
- Default Network Interface
- Measurement Units
- Meter Language
- Modem MAC 1
- Modem MAC 2
- Modem Serial Number
- Modem Version
- Operating Mode
- Timezone
- Wi-Fi Type



Installed Options

You can view the options that have been activated in the signal level meter as shown in the image to the right.

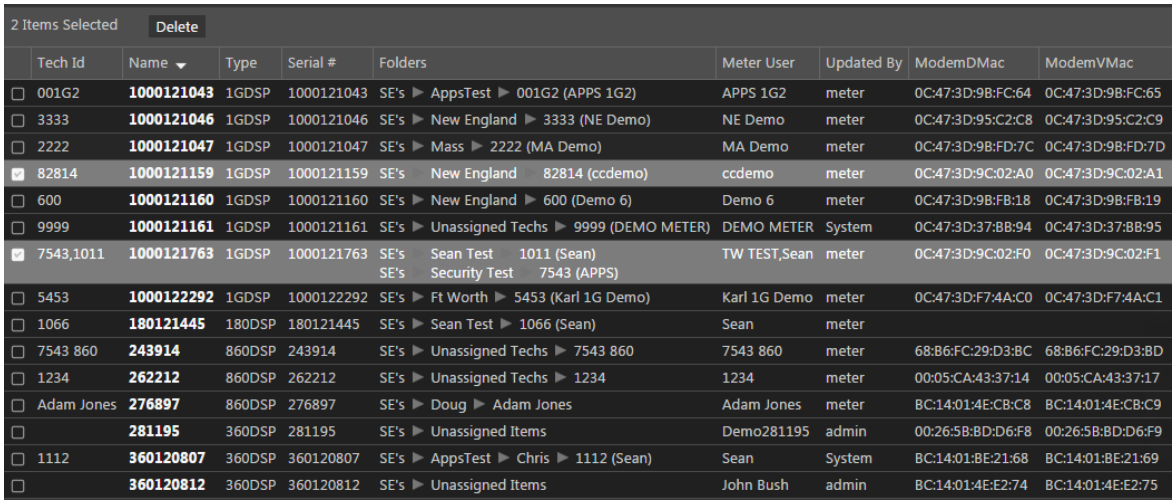


- Bluetooth Communications Adapter (BCA)
- Frequency Domain Reflectometer (FDR)
- Linear Distortions Testing (LDT)
- Forward Spectrum Analysis (FSA)
- Analog & Digital Hum (HUM)
- QAM Ingress Spectrum Analysis (QIS)
- Source Generator (SRC)
- QAM EVS (QIS)
- CM Sweep (CMS)
- TrafficControl Plus (TCP)

Deleting a Meter

Perform the following steps to delete a meter:

1. From the **Signal Level Meters** screen, select the checkbox to the left of each meter to delete.
2. Once you have chosen the meters, select the **Delete** button.
3. After selecting the **Delete** button, a **Confirm** window will be displayed.
    - When deleting five or less items, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **Streams** screen where the item(s) will still be displayed.
    - When deleting more than five items, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **Signal Level Meters** screen where the item(s) will still be displayed.

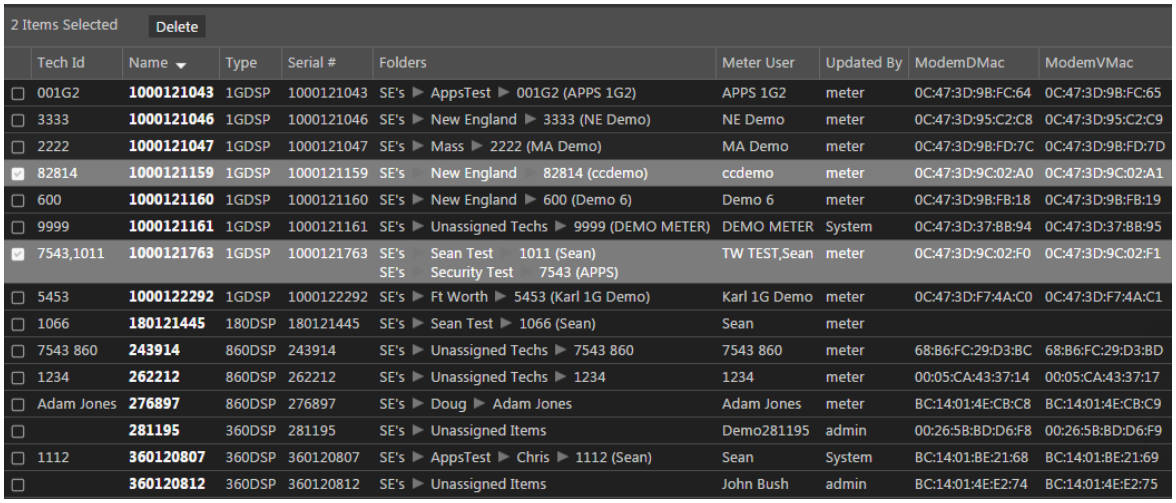


	Tech Id	Name	Type	Serial #	Folders	Meter User	Updated By	ModemDMac	ModemVMac
☐	001G2	**1000121043**	1GDSP	1000121043	SE's ▶ AppsTest ▶ 001G2 (APPS 1G2)	APPS 1G2	meter	0C:47:3D:9B:FC:64	0C:47:3D:9B:FC:65
☐	3333	**1000121046**	1GDSP	1000121046	SE's ▶ New England ▶ 3333 (NE Demo)	NE Demo	meter	0C:47:3D:95:C2:C8	0C:47:3D:95:C2:C9
☐	2222	**1000121047**	1GDSP	1000121047	SE's ▶ Mass ▶ 2222 (MA Demo)	MA Demo	meter	0C:47:3D:9B:FD:7C	0C:47:3D:9B:FD:7D
☑	82814	**1000121159**	1GDSP	1000121159	SE's New England 82814 (ccdemo)	ccdemo	meter	0C:47:3D:9C:02:A0	0C:47:3D:9C:02:A1
☐	600	**1000121160**	1GDSP	1000121160	SE's ▶ New England ▶ 600 (Demo 6)	Demo 6	meter	0C:47:3D:9B:FB:18	0C:47:3D:9B:FB:19
☐	9999	**1000121161**	1GDSP	1000121161	SE's ▶ Unassigned Techs ▶ 9999 (DEMO METER)	DEMO METER	System	0C:47:3D:37:BB:94	0C:47:3D:37:BB:95
☑	7543,1011	**1000121763**	1GDSP	1000121763	SE's Sean Test 1011 (Sean) SE's Security Test 7543 (APPS)	TW TEST,Sean	meter	0C:47:3D:9C:02:F0	0C:47:3D:9C:02:F1
☐	5453	**1000122292**	1GDSP	1000122292	SE's ▶ Ft Worth ▶ 5453 (Karl 1G Demo)	Karl 1G Demo	meter	0C:47:3D:F7:4A:C0	0C:47:3D:F7:4A:C1
☐	1066	**180121445**	180DSP	180121445	SE's ▶ Sean Test ▶ 1066 (Sean)	Sean	meter		
☐	7543 860	**243914**	860DSP	243914	SE's ▶ Unassigned Techs ▶ 7543 860	7543 860	meter	68:B6:FC:29:D3:BC	68:B6:FC:29:D3:BD
☐	1234	**262212**	860DSP	262212	SE's ▶ Unassigned Techs ▶ 1234	1234	meter	00:05:CA:43:37:14	00:05:CA:43:37:17
☐	Adam Jones	**276897**	860DSP	276897	SE's ▶ Doug ▶ Adam Jones	Adam Jones	meter	BC:14:01:4E:CB:C8	BC:14:01:4E:CB:C9
☐		**281195**	360DSP	281195	SE's ▶ Unassigned Items	Demo281195	admin	00:26:5B:BD:D6:F8	00:26:5B:BD:D6:F9
☐	1112	**360120807**	360DSP	360120807	SE's ▶ AppsTest ▶ Chris ▶ 1112 (Sean)	Sean	System	BC:14:01:BE:21:68	BC:14:01:BE:21:69
☐		**360120812**	360DSP	360120812	SE's ▶ Unassigned Items	John Bush	admin	BC:14:01:4E:E2:74	BC:14:01:4E:E2:75

Moving a Meter in the Organization

Perform the following steps to move a meter from one place to another in the organizational hierarchy:

From the **Signal Level Meters** screen, select the name of the meter you want to move and drag and drop it into the organizational tree.



2 Items Selected Delete

Tech Id	Name	Type	Serial #	Folders	Meter User	Updated By	ModemDMac	ModemVMac
001G2	**1000121043**	1GDSP	1000121043	SE's ▶ AppsTest ▶ 001G2 (APPS 1G2)	APPS 1G2	meter	0C:47:3D:9B:FC:64	0C:47:3D:9B:FC:65
3333	**1000121046**	1GDSP	1000121046	SE's ▶ New England ▶ 3333 (NE Demo)	NE Demo	meter	0C:47:3D:95:C2:C8	0C:47:3D:95:C2:C9
2222	**1000121047**	1GDSP	1000121047	SE's ▶ Mass ▶ 2222 (MA Demo)	MA Demo	meter	0C:47:3D:9B:FD:7C	0C:47:3D:9B:FD:7D
82814	**1000121159**	1GDSP	1000121159	SE's New England 82814 (ccdemo)	ccdemo	meter	0C:47:3D:9C:02:A0	0C:47:3D:9C:02:A1
600	**1000121160**	1GDSP	1000121160	SE's ▶ New England ▶ 600 (Demo 6)	Demo 6	meter	0C:47:3D:9B:FB:18	0C:47:3D:9B:FB:19
9999	**1000121161**	1GDSP	1000121161	SE's ▶ Unassigned Techs ▶ 9999 (DEMO METER)	DEMO METER	System	0C:47:3D:37:BB:94	0C:47:3D:37:BB:95
7543,1011	**1000121763**	1GDSP	1000121763	SE's Sean Test 1011 (Sean) SE's Security Test 7543 (APPS)	TW TEST,Sean	meter	0C:47:3D:9C:02:F0	0C:47:3D:9C:02:F1
5453	**1000122292**	1GDSP	1000122292	SE's ▶ Ft Worth ▶ 5453 (Karl 1G Demo)	Karl 1G Demo	meter	0C:47:3D:F7:4A:C0	0C:47:3D:F7:4A:C1
1066	**180121445**	180DSP	180121445	SE's ▶ Sean Test ▶ 1066 (Sean)	Sean	meter		
7543 860	**243914**	860DSP	243914	SE's ▶ Unassigned Techs ▶ 7543 860	7543 860	meter	68:B6:FC:29:D3:BC	68:B6:FC:29:D3:BD
1234	**262212**	860DSP	262212	SE's ▶ Unassigned Techs ▶ 1234	1234	meter	00:05:CA:43:37:14	00:05:CA:43:37:17
Adam Jones	**276897**	860DSP	276897	SE's ▶ Doug ▶ Adam Jones	Adam Jones	meter	BC:14:01:4E:CB:C8	BC:14:01:4E:CB:C9
	281195	360DSP	281195	SE's ▶ Unassigned Items	Demo281195	admin	00:26:5B:BD:D6:F8	00:26:5B:BD:D6:F9
1112	**360120807**	360DSP	360120807	SE's ▶ AppsTest ▶ Chris ▶ 1112 (Sean)	Sean	System	BC:14:01:BE:21:68	BC:14:01:BE:21:69
	360120812	360DSP	360120812	SE's ▶ Unassigned Items	John Bush	admin	BC:14:01:4E:E2:74	BC:14:01:4E:E2:75

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Chapter 4

Return Monitor Management

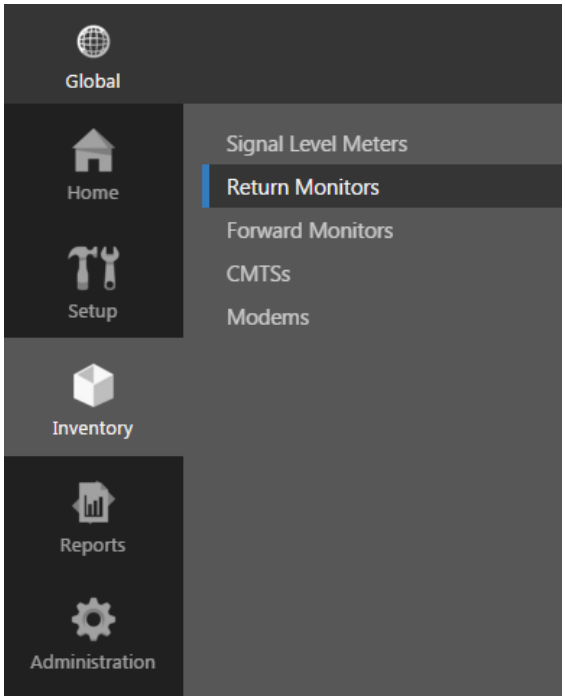
Overview

The **Return Monitors** feature is used to manage the 9581 SST return path analyzers within the ViewPoint system.

Select **Return Monitors** from the **Inventory Settings** toolbar as shown in the image to the right.

Select the ☆ icon at the top of the page to add **Return Monitors** to your **Home** page favorites.

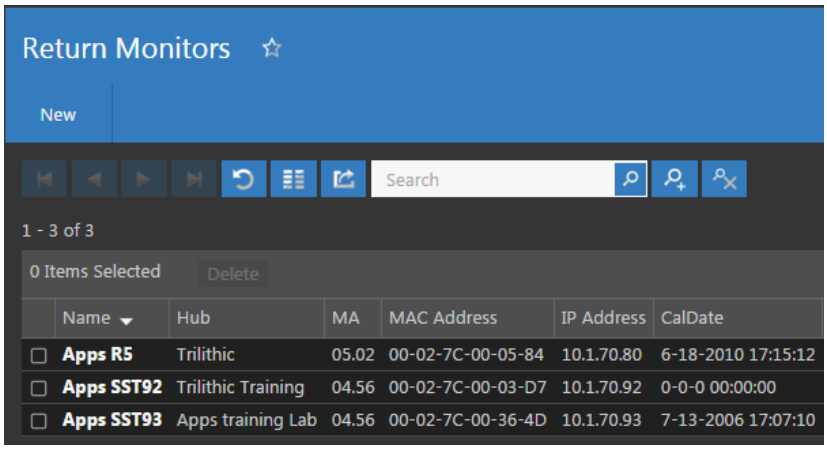
To remove **Return Monitors** from your **Home** page favorites, select the ★ icon.



Return Monitors Table

The **Return Monitors** screen will be displayed as shown in the image to the right. From this screen you can perform the following actions:

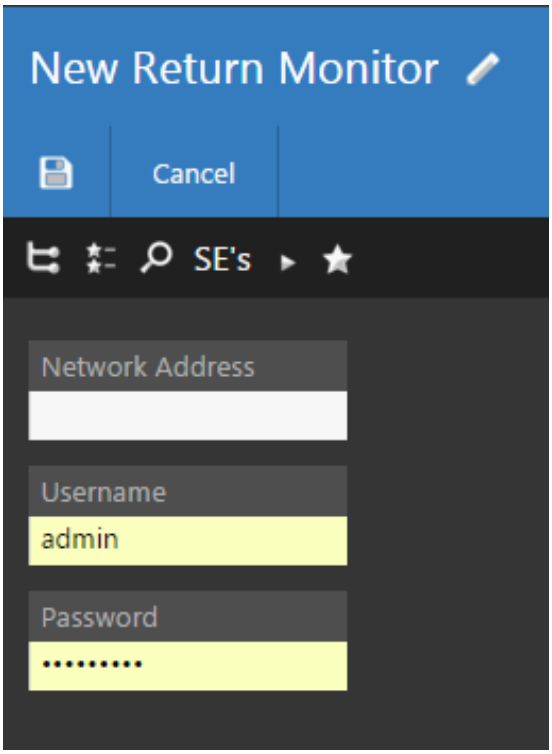
- View a list of return monitors
- Create a new return monitors
- Edit a return monitor
- Delete a return monitor



Creating a New Return Monitor

Perform the following steps to create a new return monitor:

1. From the **Return Monitors** screen, select the **New** button.
2. Enter a name for the new return monitor and select **OK**
3. The **New Return Monitor** screen will be displayed as shown in the image to the right.
4. Enter the network address of the 9581 SST that you want to connect to in the **Network Address** field.
5. Enter the **Username** and **Password** of the user profile to login to on the 9581 SST in the appropriate fields.
6. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.

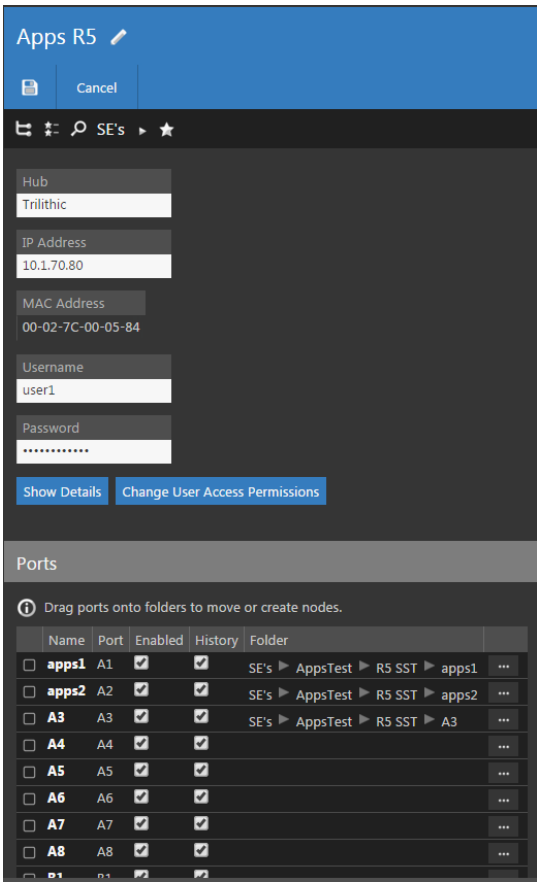


   - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
   - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the monitor details screen where your changes will still be displayed.
7. The new monitor should now appear in the **Return Monitors** table.

Editing a Return Monitor

Perform the following steps to edit a return monitor:

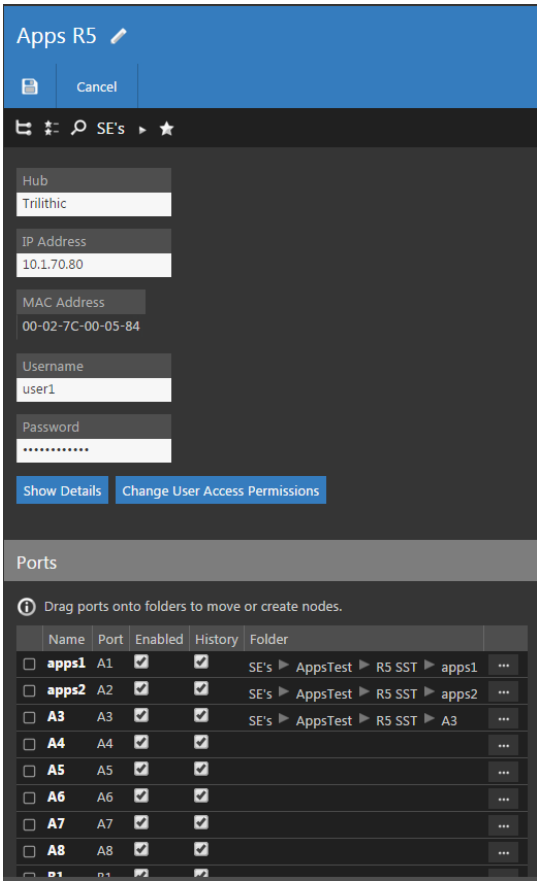
1. From the **Return Monitors** screen, select the name of the monitor to edit and the monitor details screen will be displayed as shown in the image to the right.
2. Select the **Edit** button to adjust the settings of the monitor.
3. Adjust the settings of the monitor.
4. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the monitor details screen where your changes will still be displayed.



Return Monitor Setup Details

Perform the following steps when creating or editing a return monitor.

1. After creating the return monitor in ViewPoint, the monitor details screen will be automatically populated with the **Hub, IP Address**, and **MAC Address** of the 9581 SST as shown in the image to the right.
2. Adjust the **Username** and **Password** fields as necessary.
3. Select the **Change User Access Permissions** button to add the monitor to a new location in the organization tree. Use the Organization toolbar within the window to select a new location.



Port Settings

Any time you select a monitor from the monitors list, you are able to view and edit information about each port of the monitor.

From the ports list, you can perform the following actions:

- To enable a port, select the **Enabled** checkbox of the corresponding port.
- To view the history of a port using the Dashboard function or Historical Mode of the Live Spectrum function, select the **History** checkbox of the corresponding port.
- Selecting the name of the corresponding port will display the **Live** mode of the **Return Spectrum Display** as described in the following chapter.

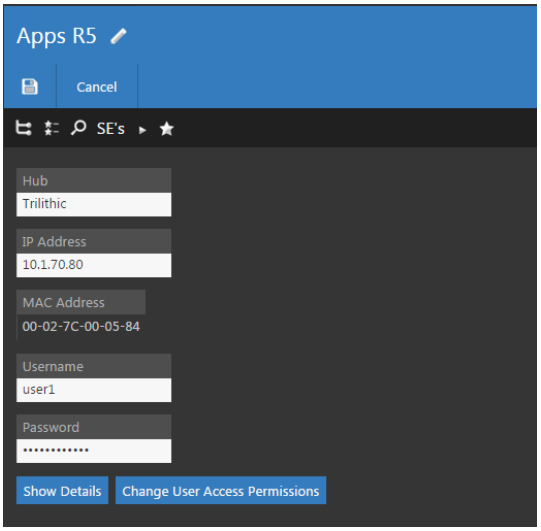
Be sure to select the **Save** button after making any changes.

NOTE ***Items can also be moved by dragging and dropping them into the organization tree or by using the add/remove folder*** ... ***button.***

Return Monitor Information

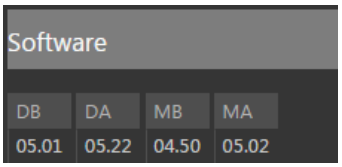
Any time you select a monitor from the monitors list, you are able to view information about the monitor. This information cannot be adjusted by the user, except where noted.

Select the name of the meter from the **Return Monitors** screen, and select the **Show Details** button as shown in the image to the right.



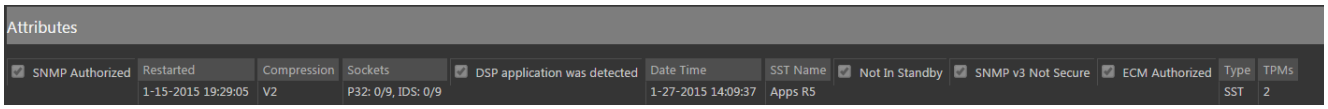
Software Versions

The software versions for the 9581 SST will be displayed as shown in the image to the right.



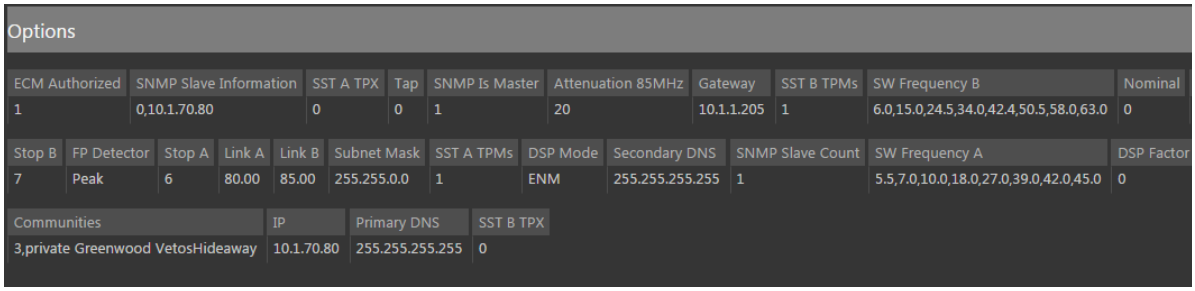
Attributes

The attributes for the 9581 SST will be displayed as shown in the image below.



Option Information

The options for the 9581 SST will be displayed as shown in the following image.



Options

ECM Authorized	SNMP Slave Information	SST A TPX	Tap	SNMP Is Master	Attenuation 85MHz	Gateway	SST B TPMs	SW Frequency B	Nominal
1	0,10.1.70.80	0	0	1	20	10.1.1.205	1	6.0,15.0,24.5,34.0,42.4,50.5,58.0,63.0	0

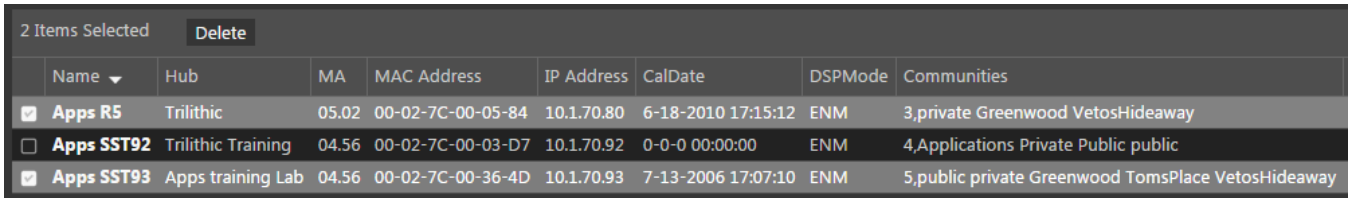
Stop B	FP Detector	Stop A	Link A	Link B	Subnet Mask	SST A TPMs	DSP Mode	Secondary DNS	SNMP Slave Count	SW Frequency A	DSP Factor
7	Peak	6	80.00	85.00	255.255.0.0	1	ENM	255.255.255.255	1	5.5,7.0,10.0,18.0,27.0,39.0,42.0,45.0	0

Communities	IP	Primary DNS	SST B TPX
3,private Greenwood VetosHideaway	10.1.70.80	255.255.255.255	0

Deleting a Return Monitor

Perform the following steps to delete a return monitor:

1. From the **Return Monitors** screen, select the checkbox to the left of each monitor to delete.
2. Once you have chosen the monitor, select the **Delete** button.
3. After selecting the **Delete** button, a **Confirm** window will be displayed.
    - When deleting five or less items, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **Return Monitors** screen where the item(s) will still be displayed.
    - When deleting more than five items, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **Return Monitors** screen where the item(s) will still be displayed.



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Chapter 5
Return Measurement Display

Overview

This feature is used to view the live or historical return spectrum measurement of specific fiber nodes within the organization. The Return Spectrum Display can be accessed using any of the following methods:

- Selecting a Fiber Node from the organization tree will display the **Live** mode of the **Return Spectrum Display** as described in the previous chapter.
- Selecting the **Live** link of the corresponding port will display the **Live** mode of the **Return Spectrum Display** as described in the previous chapter.
- Selecting the live return spectrum graph directly from the **Node Summary Display** will display the **Live** mode of the **Return Spectrum Display** as described in the previous chapter.
- Selecting a historical return spectrum graph directly from the **Node Summary Display** will display the **Historical** mode of the **Return Spectrum Display** as described in the previous chapter.

Live Spectrum Measurement Mode

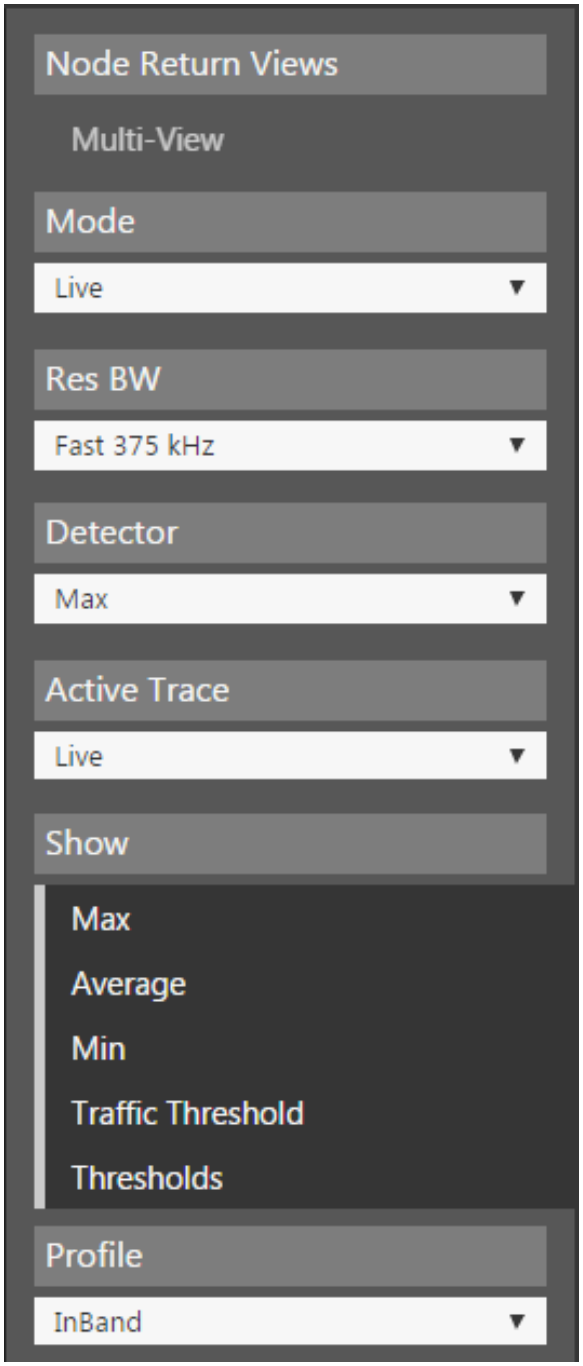
This display mode is shown when **Live** is selected from the **Mode** area of the **Live Spectrum Views** screen, as shown in the image below.

Live Spectrum Settings Toolbar

The settings shown in the following sections are accessible when viewing the live return spectrum measurement.

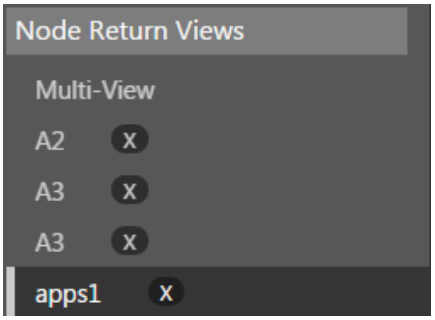
The following features are available and will be described in detail within the following sections:

- **Node Return Views** – This feature is used to display and choose from the nodes that are open within the spectrum measurement mode.
- **Display Mode** – This feature is used to choose from live or historical display modes. In the examples within this section, **Mode** is set to **Live**.
- **Resolution Bandwidth** – This feature is used to select the resolution bandwith for the live spectrum measurement.
- **Detector** – This feature is used to select the detector type for the live spectrum measurement.
- **Active Trace** – This feature is used select the active trace for the live spectrum measurement.
- **Show** – This feature is used to select the types of traces to show for the live spectrum measurement.
- **Profile**– This feature is used to select the return monitor threshold profiles to show for the live spectrum measurement.



Node Return Views

The **Node Return Views** area of the **Live Spectrum Settings** toolbar is used to select which return spectrum display to show on the screen.



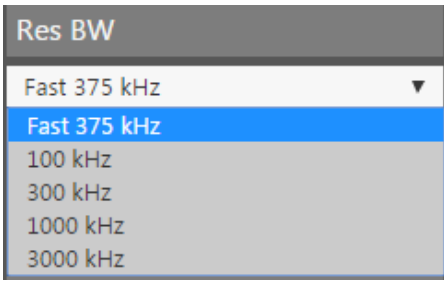
When multiple fiber node return spectrum displays have been opened, each of the node names will appear in this list as shown in the image to the right.

To close a node, select the **X** to the right of the node name.

Select **Multi-View** to display the **Return Spectrum Multi-view** screen for all of the open return spectrum displays on one screen.

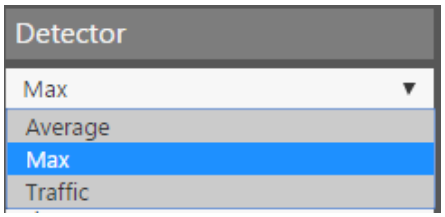
Resolution Bandwidth

The **Res BW** area of the **Live Spectrum Settings** toolbar is used to select the resolution bandwidth of the live return spectrum measurement. The recommended setting of the resolution bandwidth is **Fast 375 kHz**. The resolution bandwidth refers to the IF filter bandwidth of the 9581 SST return spectrum analyzer. RBW defines the smallest frequency difference of two adjacent signals that can be distinguished by the return spectrum analyzer. Therefore, the narrower the RBW is set, the better the frequency resolution of the analyzer. Narrower RBWs require more measurement time.



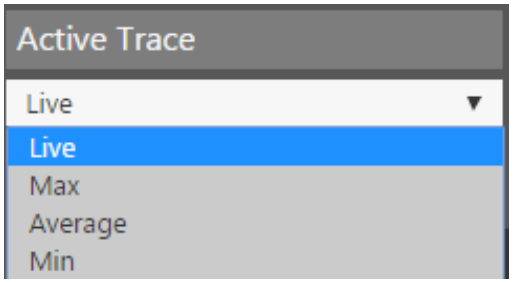
Detector

The **Detector** area of the **Live Spectrum Settings** toolbar is used to select the signal detection type of the live return spectrum measurement. The following types of detectors can be selected.



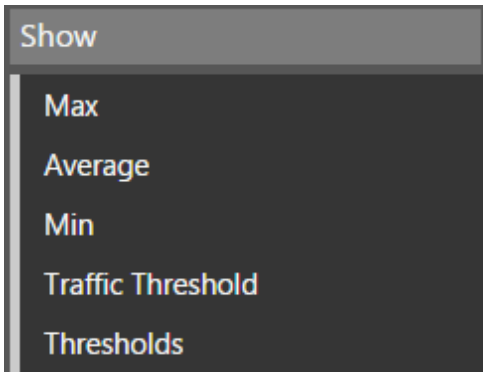
- **Average** – This displays the average signal in the return spectrum.
- **Max** – This displays the maximum signal in the return spectrum.
- **Traffic** – This displays the continuous live traffic in the return spectrum.

Active Trace



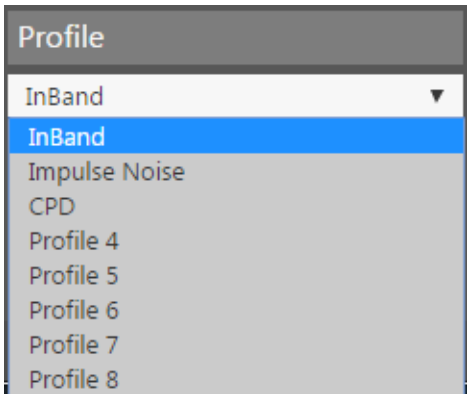
The **Active Trace** area of the **Live Spectrum Settings** toolbar is used to select which of the live return spectrum measurement traces to make active. You can set the active trace to the **Live**, **Max**, **Average** or **Min** traces. The active trace will be displayed in yellow within the live return spectrum measurement. All other traces within the live return spectrum measurement will be displayed in green. The selection of the active trace will also determine which measurement data is displayed in the upper-right corner of the return spectrum display.

Show Traces



The **Show** area of the **Live Spectrum Settings** toolbar is used to select which of the live return spectrum measurement traces to display. Any combination of the **Max**, **Average**, **Min**, **Traffic Threshold** and **Thresholds** traces can be displayed within the live return spectrum measurement.

Threshold Profiles

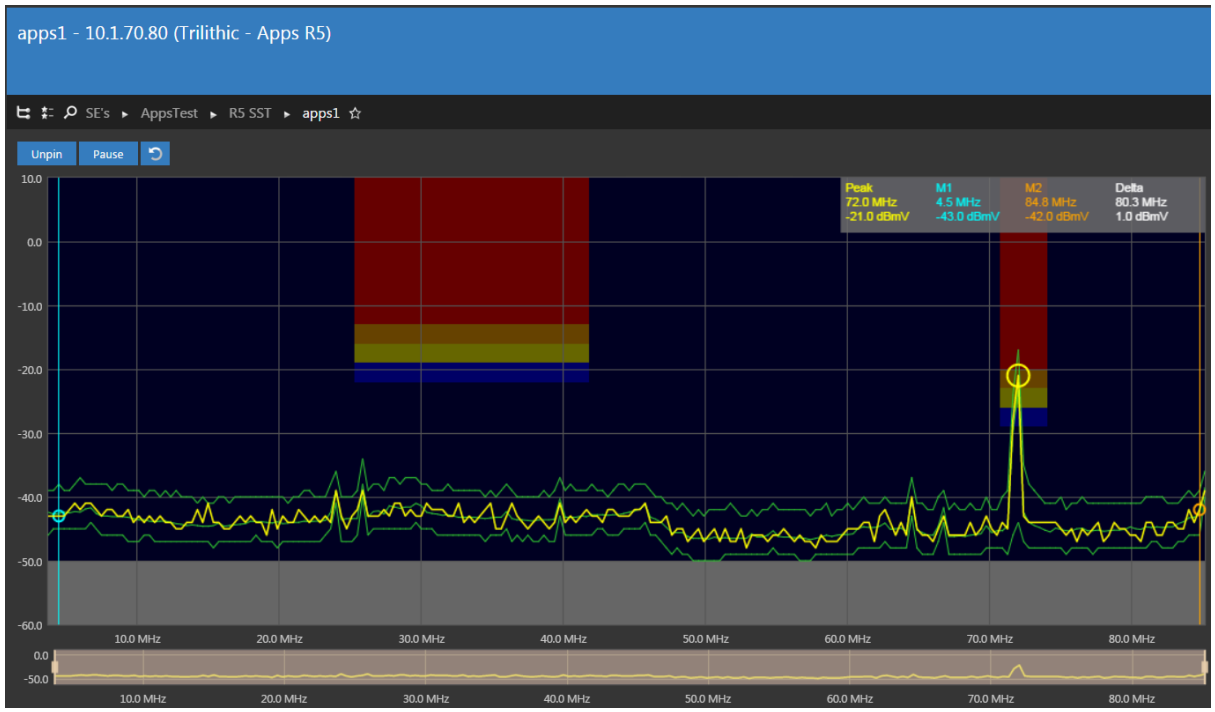


When **Thresholds** has been selected from the **Show** area, the **Profile** area of the **Live Spectrum Settings** toolbar will be displayed as shown in the image to the right. Select any one of the eight available threshold profiles to display within the live return spectrum measurement.

Using Live Spectrum Graphs

This type of spectrum graph is used to display the live spectrum measurement as shown in the following image.

The active trace will be highlighted in yellow while all other traces will be highlighted in green. The peak level measurement on the active trace is highlighted with a yellow circle. The frequency and level values at the peak location of the active trace are shown in the upper-right corner of the live spectrum.



Live Spectrum Features

The buttons at the top of the live spectrum display can be used as follows:

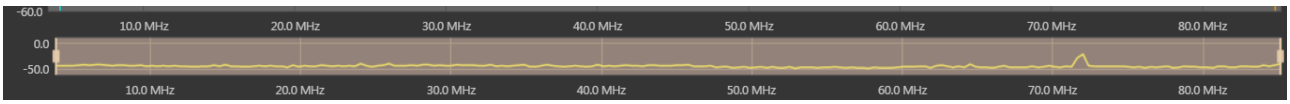
- **Pin/Unpin** – Select this button to add/remove the node from the **Node Return Views** area of the **Live Spectrum Settings** toolbar.
- **Pause/Continue** – Select this button to pause/continue the live stream. When paused, you can use the time scrollbar to preview the last few minutes.
- **Reset** – Select this button to reset the **Max, Avg, Min,** and **All** measurements.

The mouse can be used to control the following features of the live spectrum:

- Use the mouse to hover over and display a set of green cross hairs to pinpoint exact levels and frequencies at the location of the mouse pointer.
- Use the mouse to select and drag either of the on-screen markers Marker 1 is highlighted in light blue and Marker 2 is highlighted in orange. The peak level measurement on the active trace of each marker is highlighted with a circle. The frequency and level values of the active trace at the marker locations are shown in the upper-right corner of the live spectrum. The frequency and level delta between the markers is also displayed in the upper-right corner of the live spectrum.
- Select the up/down arrows in the upper-left corner of the graph to change the maximum amplitude value that is displayed on the graph.
- Select the up/down arrows in the lower-left corner of the graph to change the minimum amplitude value that is displayed on the graph.

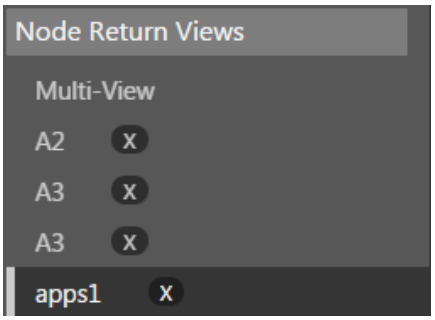
The frequency span tool is located directly below the return spectrum, as shown in the image below, and is used to display a static view of the full return spectrum and to adjust the following:

- Click and hold the left mouse button over the zoom handles and then drag the mouse to adjust the frequency span. The tan area between the zoom handles represents the current span of the display.
- Click and hold the left mouse button anywhere in the tan area between the zoom handles and then drag the mouse to adjust the center frequency of the span to the left or right.
- Double-click the left mouse button anywhere in the tan area between the zoom handles to toggle between a 2 MHz and full span.



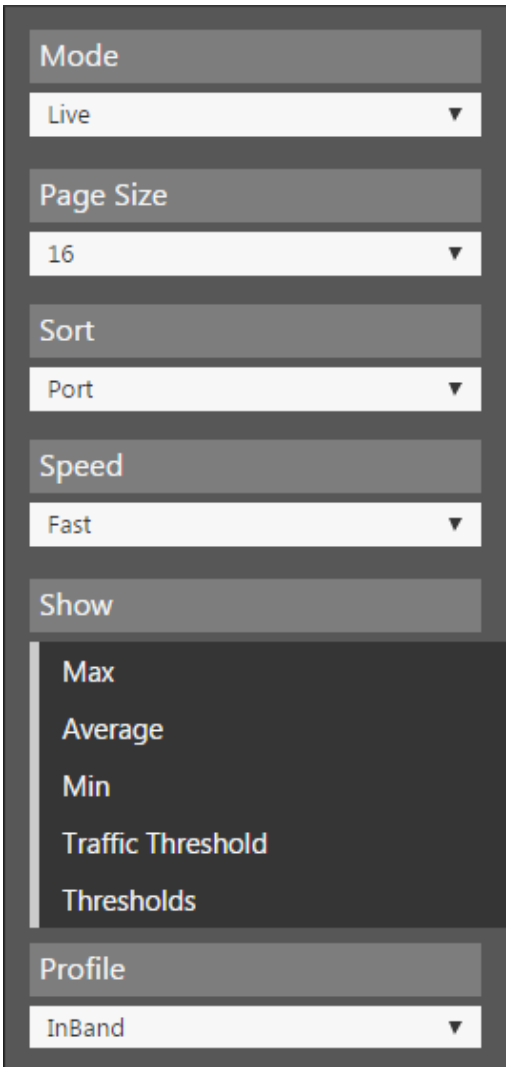
Live Multi-Spectrum Display Mode

This display mode is shown when **Live** is selected from the **Mode** area of the **Live Spectrum Views** screen, and **Multi-View** is selected in the **Node Return View** area (with multiple nodes open) as shown in the images to the right and below.



Live Multi-Spectrum Settings Toolbar

The settings shown in the following sections are accessible when viewing the live multi-spectrum display mode.

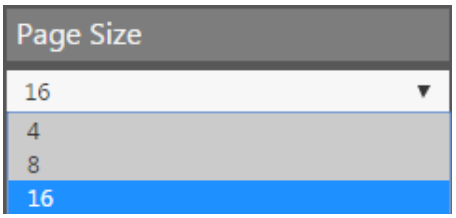


The following features are available and will be described in detail within the following sections:

- **Mode** – This feature is used to choose from live or historical display modes. In the examples within this section, **Mode** is set to **Live**.
- **Page Size** – This feature is used to select the number of nodes to display within the live multi-spectrum display mode.
- **Sort** – This feature is used to select how the displayed nodes will be sorted for the live multi-spectrum display mode.
- **Speed** – This feature is used to select the speed of the return measurement for the live multi-spectrum display mode.
- **Show** – This feature is used to select the types of traces to show for the live multi-spectrum display mode.
- **Profile**– This feature is used to select the return monitor threshold profiles to show for the live multi-spectrum measurement.

Page Size

The number of nodes displayed on each page of the live multi-spectrum display mode are controlled from within the **Page Size** area of the **Live Multi-Spectrum Settings** toolbar as shown in the image to the right. Select from **4**, **8** or **16** nodes per page.



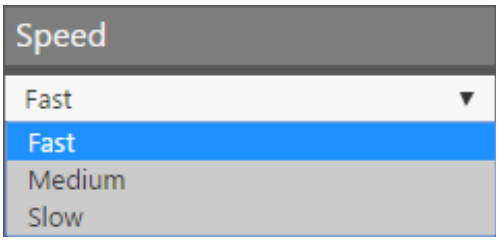
Sort

The order of displayed nodes on each page of the live multi-spectrum display mode is controlled from within the **Sort** area of the **Live Multi-Spectrum Settings** toolbar as shown in the image to the right.

- Select **None** to display the nodes in the order in which they were opened.
- Select **Port** to display the nodes in alphabetical order by the name of the port.

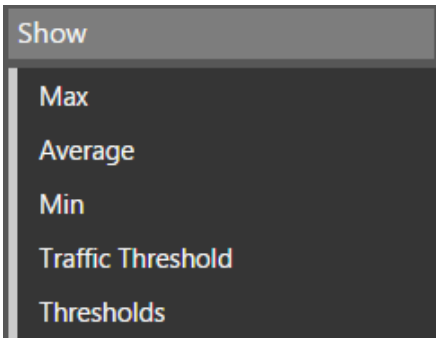
Speed

The speed of each live spectrum displayed on the live multi-spectrum display mode is controlled from within the **Speed** area of the **Live Multi-Spectrum Settings** toolbar as shown in the image to the right. Select from **Fast**, **Medium** or **Slow** for the speed of each live spectrum.



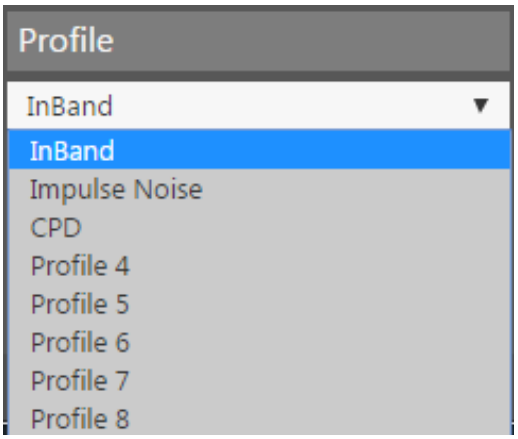
Show Traces

The **Show** area of the **Live Multi-Spectrum Settings** toolbar is used to select which of the live return spectrum measurement traces to display. Any combination of the **Max**, **Average**, **Min**, **Traffic Threshold** and **Thresholds** traces can be displayed within the live multi-spectrum display mode.



Threshold Profiles

When **Thresholds** has been selected from the **Show** area, the **Profile** area of the **Live Multi-Spectrum Settings** toolbar will be displayed as shown in the image to the right. Select any one of the eight available threshold profiles to display within the live multi-spectrum display mode.



Using Live Multi-Spectrums

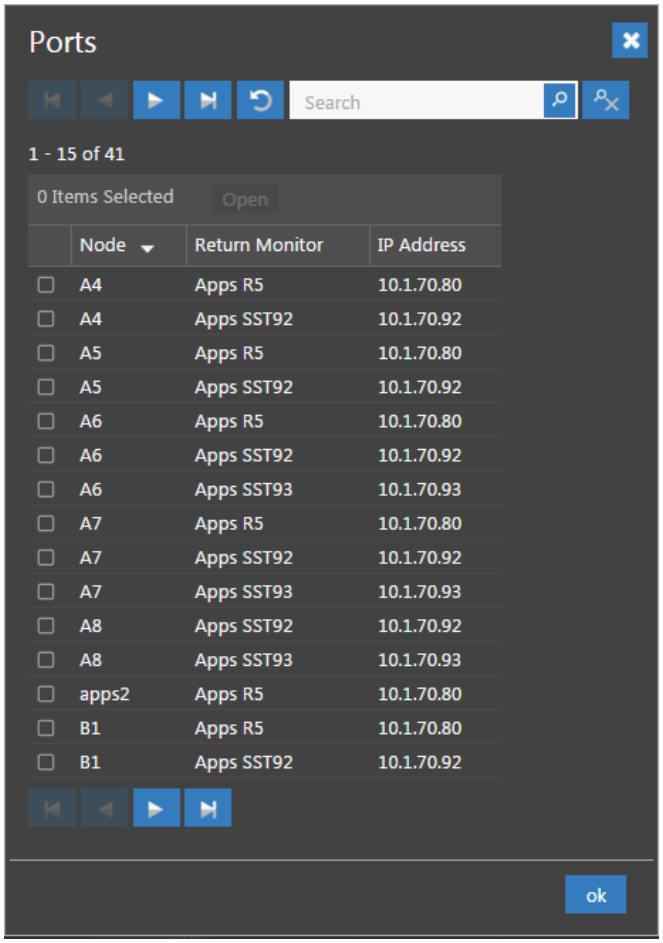
The settings shown in the following sections are accessible when viewing the live multi-spectrum display mode. Selecting a single spectrum graph from this display will take you back to the Live Spectrum for that node.

Opening Nodes

To open nodes, select the **Open** button from the live multi-spectrum display. The **Ports** window will be displayed as shown in the image to the right.

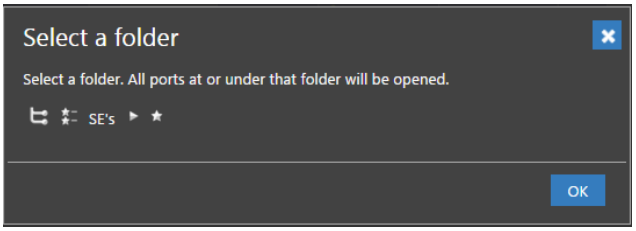
Choose the nodes from the list and then select the **Open** or **OK** button to display the nodes.

The new nodes will be displayed in the live multi-spectrum display.



Open Nodes by Organization

To open a group of nodes within a single location within the organization, select the **Open by Folder** button from the live multi-spectrum display. The **Select a folder** window will be displayed as shown in the image to the right.



Use the Organization toolbar to choose the organization location and select the **OK** button to display the nodes.

All of the nodes within that organizational location will be displayed in the live multi-spectrum display.

Pausing Nodes

To pause the display for all nodes, select the **Pause** button at the top of the live multi-spectrum display. To continue live view, select the **Continue** button.

Closing Nodes

To close a single node, select the **Close** button below the corresponding node. To close all of the nodes that are currently displayed, select the **Close All** button.

Historical Spectrum Measurement Mode

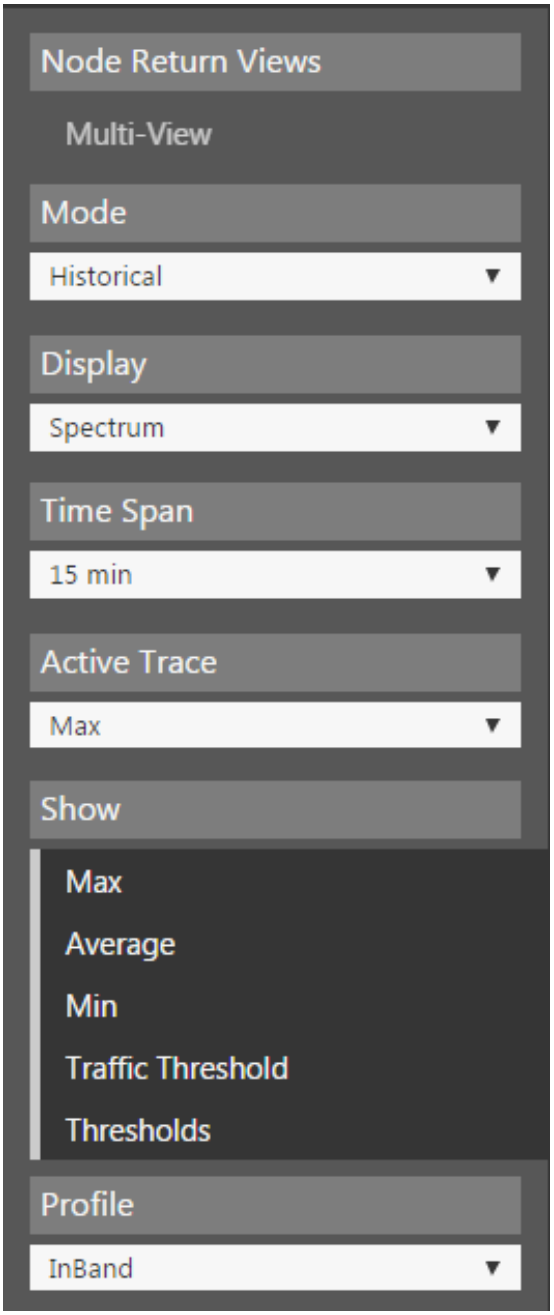
This display mode is shown when **Historical** is selected from the **Mode** area of the **Historical Spectrum Views** screen, as shown in the image below.

Historical Spectrum Settings Toolbar

The settings shown in the following sections are accessible when viewing the historical return spectrum measurement.

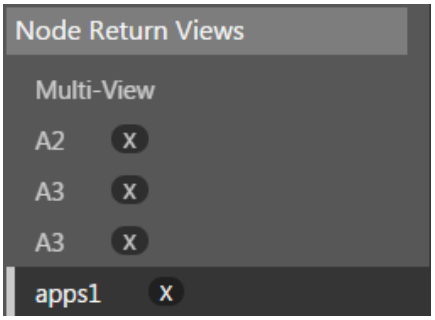
The following features are available and will be desribed in detail within the following sections:

- **Node Return Views** – This feature is used to display and choose from the nodes that are open within the spectrum measurement mode.
- **Display Mode** – This feature is used to choose from live or historical display modes. In the examples within this section, **Mode** is set to **Historical**.
- **Display Type** – This feature is used to choose from spectrum or waterfall display types. In the examples within this section, **Display** is set to **Spectrum**.
- **Time Span** – This feature is used to select the time span for the historical spectrum measurement.
- **Active Trace** – This feature is used select the active trace for the historical spectrum measurement.
- **Show** – This feature is used to select the types of traces to show for the historical spectrum measurement.
- **Profile**– This feature is used to select the return monitor threshold profiles to show for the historical spectrum measurement.



Node Return Views

The **Node Return Views** area of the **Historical Spectrum Settings** toolbar is used to select which return spectrum display to show on the screen.



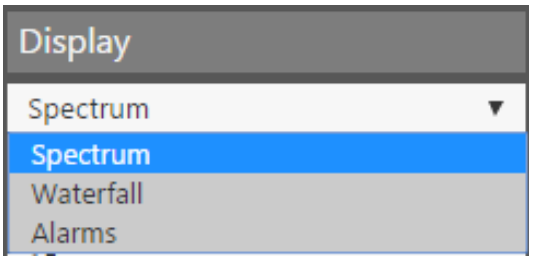
When multiple fiber node return spectrum displays have been opened, each of the node names will appear in this list as shown in the image to the right.

To close a node, select the **X** to the right of the node name.

Select **Multi-View** to display the **Return Spectrum Multi-view** screen for all of the open return spectrum displays on one screen.

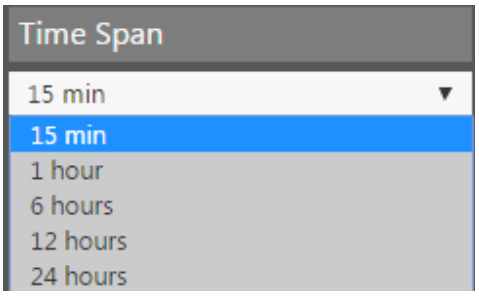
Display Type

The **Display** area of the **Historical Spectrum Settings** toolbar is used to select which type of the historical return graph to display, as shown in the image to the right. Select from **Spectrum, Waterfall**, or **Alarms**.

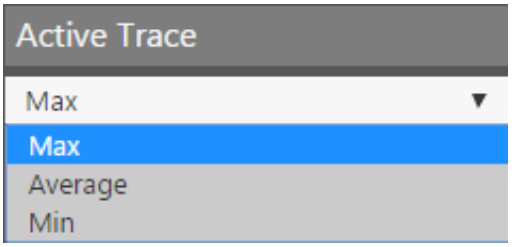


Time Span

The time span for historical return spectrum is controlled from within the **Time Span** area of the **Historical Spectrum Settings** toolbar as shown in the image to the right. Select from **15 min**, **1 hour**, **6 Hours**, **12 Hours** or **24 hours** time spans.

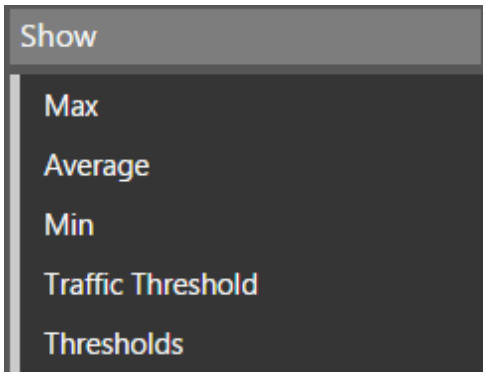


Active Trace



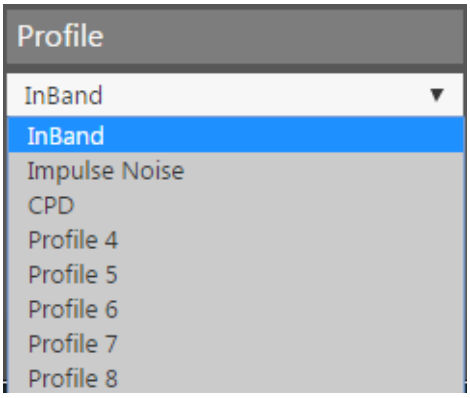
The **Active Trace** area of the **Historical Spectrum Settings** toolbar is used to select which of the historical return spectrum measurement traces to make active. You can set the active trace to the **Max**, **Average** or **Min** traces. The active trace will be displayed in white within the historical return spectrum measurement. All other traces within the historical return spectrum measurement will be displayed in purple. The selection of the active trace will also determine which measurement data is displayed in the upper-right corner of the return spectrum display.

Show Traces



The **Show** area of the **Historical Spectrum Settings** toolbar is used to select which of the historical return spectrum measurement traces to display. Any combination of the **Max**, **Average**, **Min**, **Traffic Threshold** and **Thresholds** traces can be displayed within the historical return spectrum measurement.

Threshold Profiles



When **Thresholds** has been selected from the **Show** area, the **Profile** area of the of the **Historical Spectrum Settings** toolbar will be displayed as shown in the image to the right. Select any one of the eight available threshold profiles to display within the historical return spectrum measurement.

Using Historical Spectrum Graphs

This type of spectrum graph is used to display the historical spectrum measurement during the selected **Time Span** as shown in the following image.

The active trace will be highlighted in white while all other traces will be highlighted in purple. The peak level measurement on the active trace is highlighted with a white circle. The frequency and level values at the peak location of the active trace are shown in the upper-right corner of the historical spectrum.

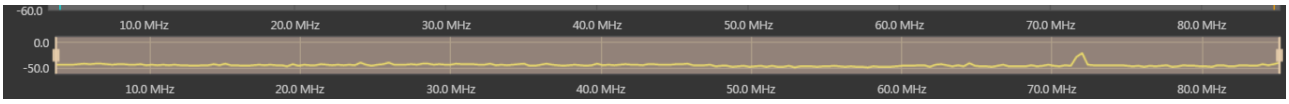
Historical Spectrum Features

The mouse can be used to control the following features of the historical spectrum:

- Use the mouse to hover over and display a set of green cross hairs to pinpoint exact levels and frequencies at the location of the mount pointer.
- Use the mouse to select and drag the on-screen marker that is displayed in light blue. The peak level measurement on the active trace of the marker is highlighted with a light blue circle. The frequency and level values of the active trace at the marker location are shown in the upper-right corner of the historical spectrum.
- Select the up/down arrows in the upper-left corner of the graph to change the maximum amplitude value that is displayed on the graph.
- Select the up/down arrows in the lower-left corner of the graph to change the minimum amplitude value that is displayed on the graph.

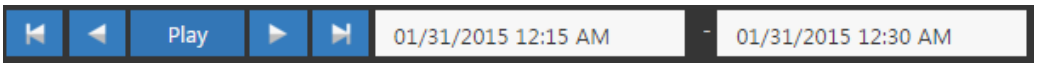
The frequency span tool is located directly below the return spectrum, as shown in the image below, and is used to display a static view of the full return spectrum and to adjust the following:

- Click and hold the left mouse button over the zoom handles and then drag the mouse to adjust the frequency span. The tan area between the zoom handles represents the current span of the display.
- Click and hold the left mouse button anywhere in the tan area between the zoom handles and then drag the mouse to adjust the center frequency of the span to the left or right.
- Double-click the left mouse button anywhere in the tan area between the zoom handles to toggle between a 2 MHz and full span.

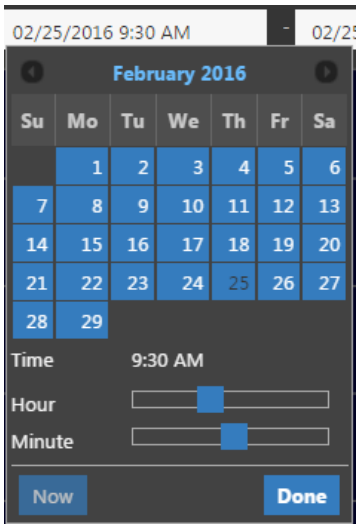


Adjusting the Measurement Duration

The time controls are shown at the top of the historical spectrum as shown in the following image.



To choose the start and end date/time of the time span displayed by the historical spectrum, select the date/time field to the left for the start date/time and the date/time field to the right for the end date/time. The date/time picker calendar will be displayed as shown in the image to the right.

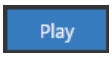


- The current day is marked in gray. You can quickly choose the current day by selecting the **Now** button.
- Use the gray arrows in each of the upper corners to move the calendar backward and forward one month at a time.
- Adjust the date by selecting the corresponding day from the calendar. Use the hour and minute adjustment sliders to select the time.
- Once you have chosen the date/time, select the **Done** button.

Each of the navigation buttons within this area (when displayed) will adjust the end date/time of the historical spectrum as follows:

Start Time – Select this button to adjust the measurement period backward to the start time.

Previous Time Duration – Select this button to adjust the measurement period backward in time by the currently selected **Time Span**. If the start time is ahead of the current date/time by less time than the **Time Span**, the start time will be set to the start date/time.



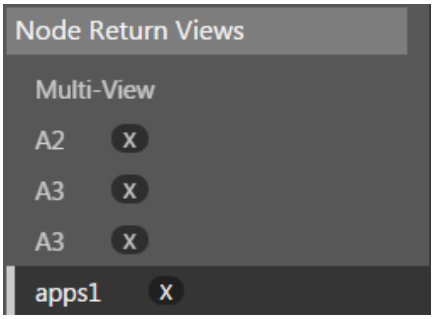
Play – Select this button to play a sequence of measurements starting with the current time and moving forward by increments equal to the selected **Time Span**.

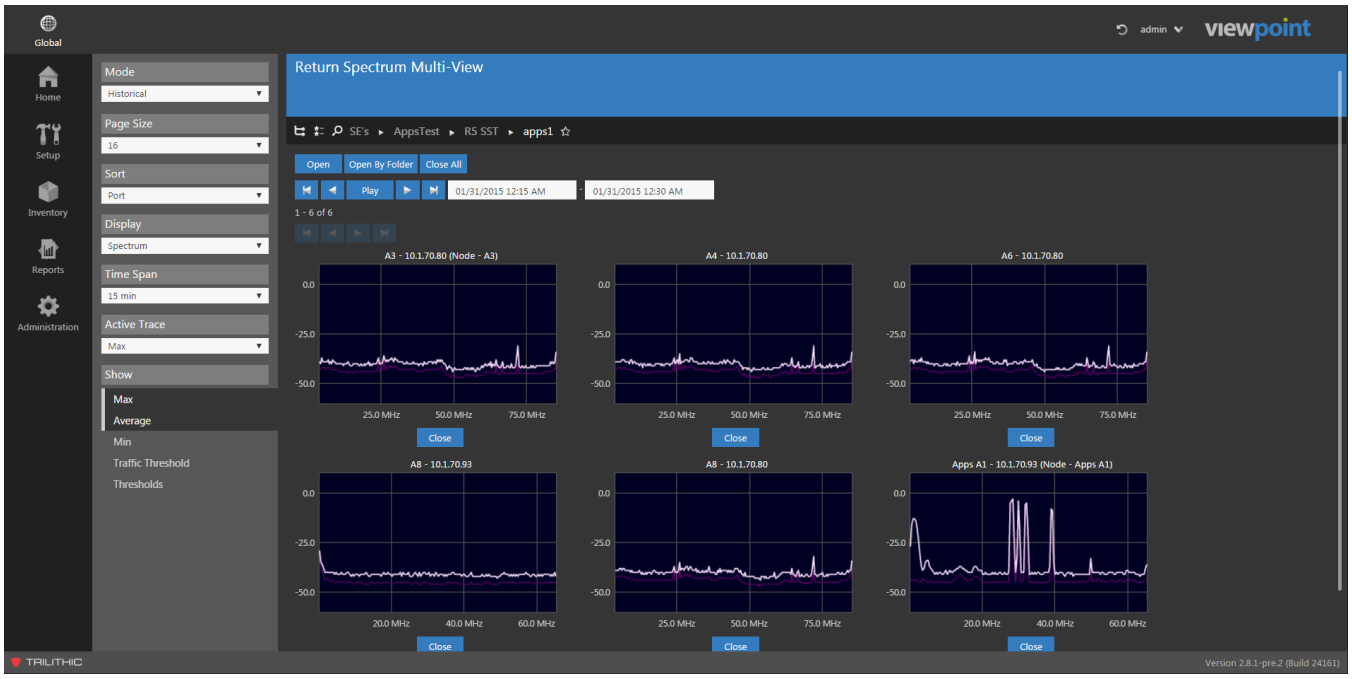
Next Time Duration – Select this button to adjust the measurement period forward in time by the currently selected **Time Span**. If the end time is behind the current date/time by less time than the **Time Span**, the end time will be set to the end date/time.

End Time – Select this button to adjust the measurement period forward to the end time.

Historical Multi-Spectrum Display Mode

This display mode is shown when **Historical** is selected from the **Mode** area of the **Historical Spectrum Views** screen, and **Multi-View** is selected in the **Node Return View** area (with multiple nodes open) as shown in the images to the right and below.



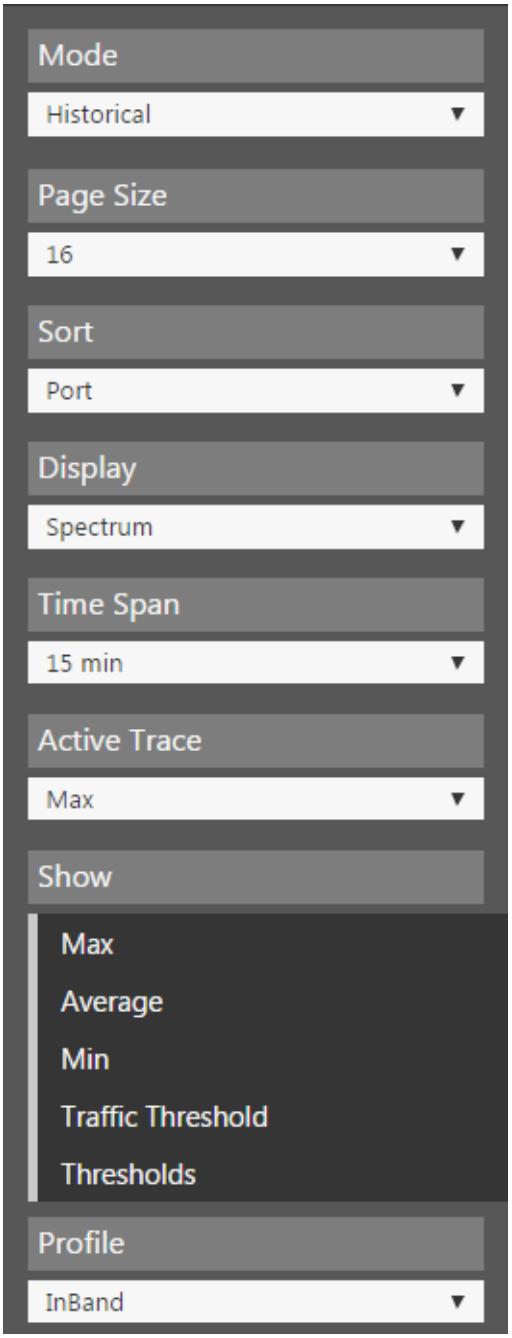


Historical Multi-Spectrum Settings Toolbar

The settings shown in the following sections are accessible when viewing the historical multi-spectrum display mode.

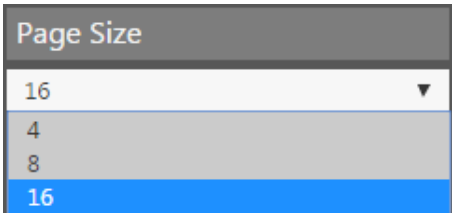
The following features are available and will be described in detail within the following sections:

- **Mode** – This feature is used to choose from live or historical display modes. In the examples within this section, **Mode** is set to **Historical**.
- **Page Size** – This feature is used to select the number of nodes to display within the historical multi-spectrum display mode.
- **Sort** – This feature is used to select how the displayed nodes will be sorted for the historical multi-spectrum display mode.
- **Display Type** – This feature is used to choose from spectrum or waterfall display types. In the examples within this section, **Display** is set to **Spectrum**.
- **Time Span** – This feature is used to select the time span for the historical multi-spectrum display mode.
- **Active Trace** – This feature is used select the active trace for the historical multi-spectrum display mode.
- **Show** – This feature is used to select the types of traces to show for the historical multi-spectrum display mode.
- **Profile** – This feature is used to select the return monitor threshold profiles to show for the historical multi-spectrum measurement.



Page Size

The number of nodes displayed on each page of the historical multi-spectrum display mode are controlled from within the **Page Size** area of the **Historical Multi-Spectrum Settings** toolbar as shown in the image to the right. Select from **4**, **8** or **16** nodes per page.



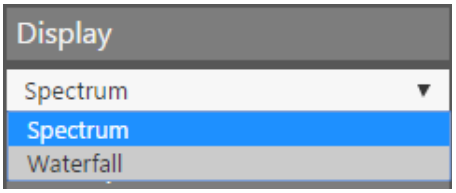
Sort

The order of displayed nodes on each page of the historical multi-spectrum display mode is controlled from within the **Sort** area of the **Historical Multi-Spectrum Settings** toolbar as shown in the image to the right.

- Select **None** to display the nodes in the order in which they were opened.
- Select **Port** to display the nodes in alphabetical order by the name of the port.

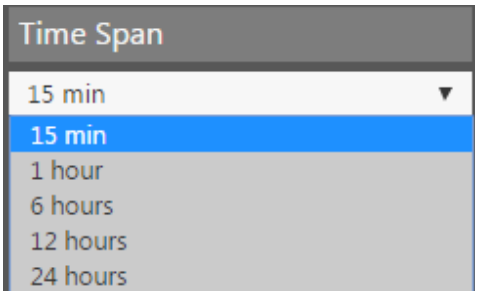
Display Type

The **Display** area of the **Historical Multi-Spectrum Settings** toolbar is used to select which type of the historical return graph to display, as shown in the image to the right. Select from **Spectrum** or **Waterfall**.



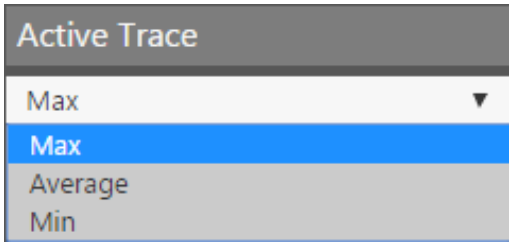
Time Span

The time span for historical multi-spectrum display mode is controlled from within the **Time Span** area of the **Historical Multi-Spectrum Settings** toolbar as shown in the image to the right. Select from **15 min**, **1 hour**, **6 Hours**, **12 Hours** or **24 hours** time spans.



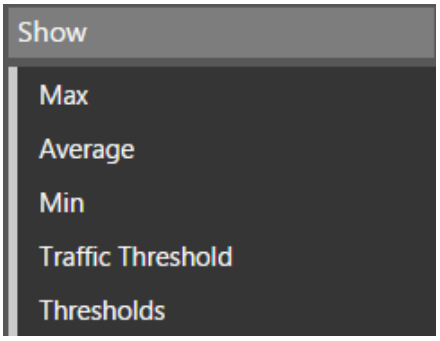
Active Trace

The **Active Trace** area of the **Historical Multi-Spectrum Settings** toolbar is used to select which of the return spectrum measurement traces to make active. You can set the active trace to the **Max**, **Average** or **Min** traces. The active trace will be displayed in white within the each return spectrum measurement. All other traces within each return spectrum measurement will be displayed in purple.



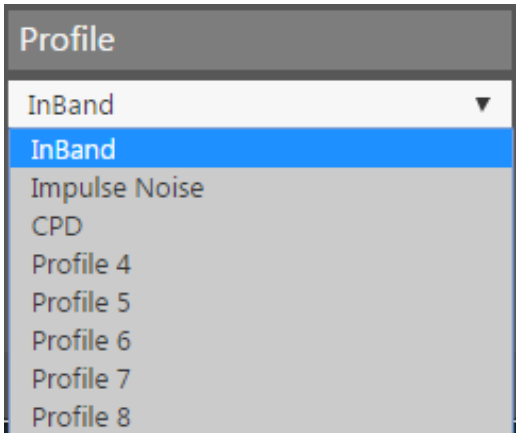
Show Traces

The **Show** area of the **Historical Multi-Spectrum Settings** toolbar is used to select which of the return spectrum measurement traces to display. Any combination of the **Max**, **Average**, **Min**, **Traffic Threshold** and **Threshold** traces can be displayed within the historical multi-spectrum display mode.



Threshold Profiles

When **Thresholds** has been selected from the **Show** area, the **Profile** area of the of the **Historical Multi-Spectrum Settings** toolbar will be displayed as shown in the image to the right. Select any one of the eight available threshold profiles to display within the historical multi-spectrum display mode.



Using Historical Multi-Spectrums

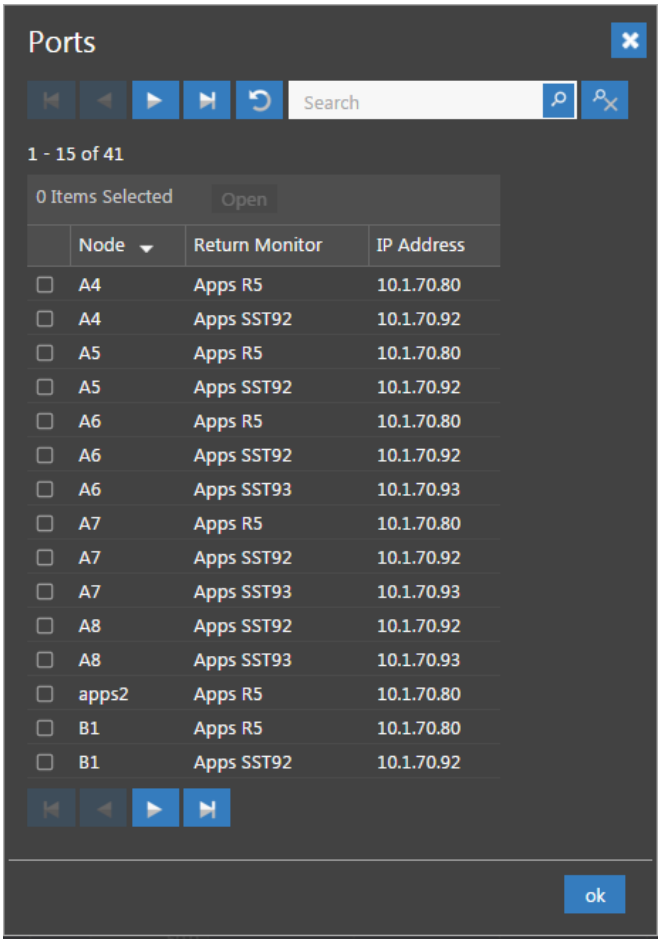
The settings shown in the following sections are accessible when viewing the historical multi-spectrum display mode. Selecting a single spectrum graph from this display will take you back to the Historical Spectrum for that node.

Opening Nodes

To open nodes, select the **Open** button from the historical multi-spectrum display. The **Ports** window will be displayed as shown in the image to the right.

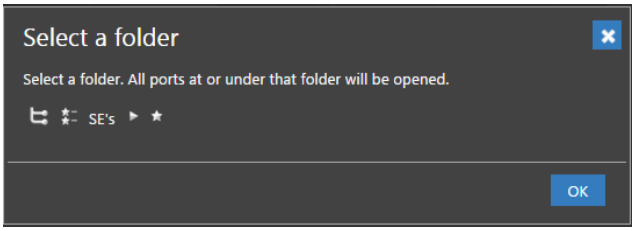
Choose the nodes from the list and then select the **Open** or **OK** button to display the nodes.

The new nodes will be displayed in the historical multi-spectrum display.



Open Nodes by Organization

To open a group of nodes within a single location within the organization, select the **Open by Folder** button from the historical multi-spectrum display. The **Select a folder** window will be displayed as shown in the image to the right.

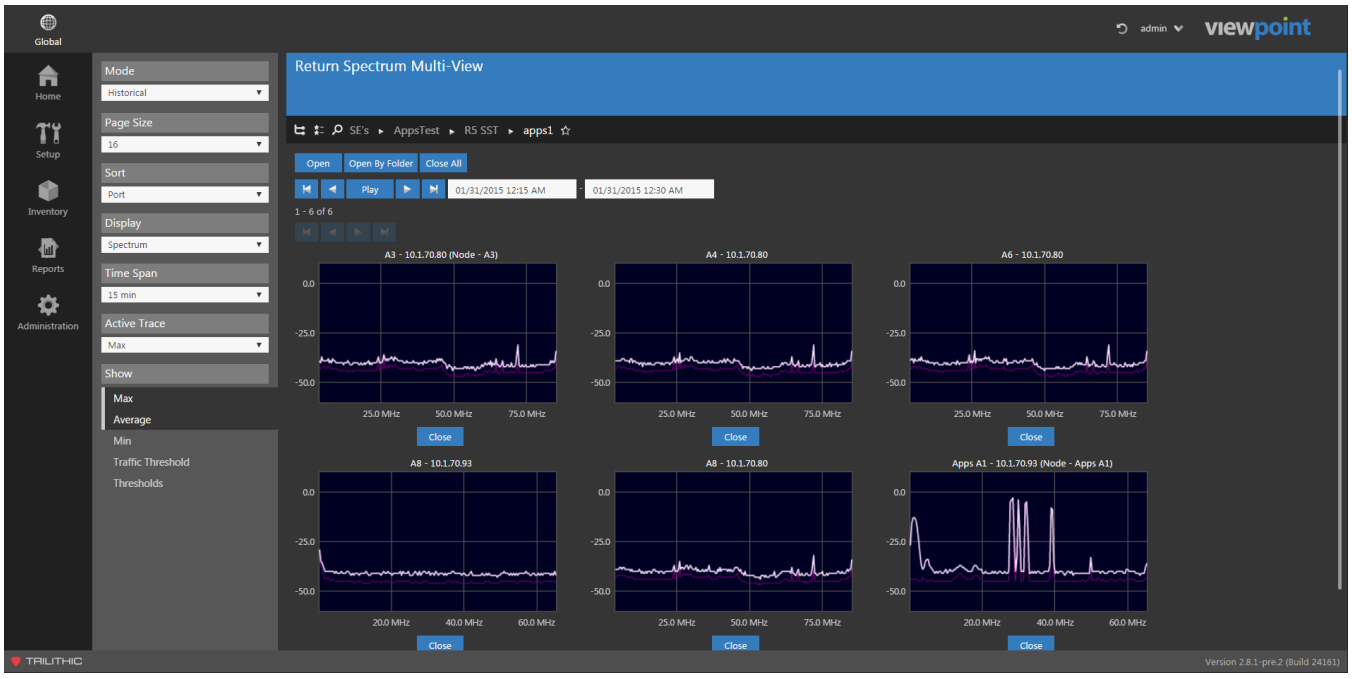


Use the Organization toolbar to choose the organization location and select the **OK** button to display the nodes.

All of the nodes within that organizational location will be displayed in the historical multi-spectrum display.

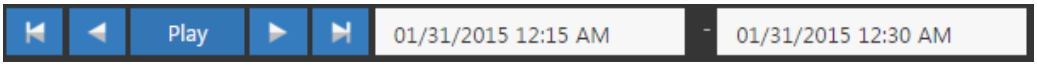
Closing Nodes

To close a single node, select the **Close** button below the corresponding node. To close all of the nodes that are currently displayed, select the **Close All** button.

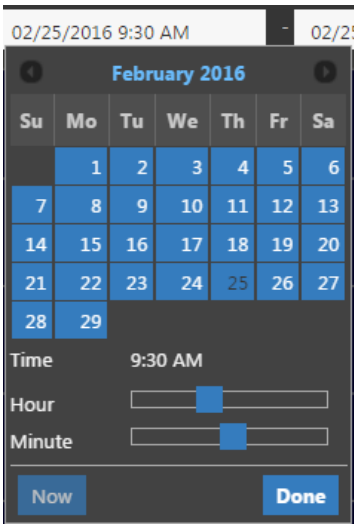


Adjusting the Measurement Duration

The time controls are shown at the top of the historical multi-spectrum display as shown in the following image.



To choose the start and end date/time of the time span displayed by the historical multi-spectrum display, select the date/time field to the left for the start date/time and the date/time field to the right for the end date/time. The date/time picker calendar will be displayed as shown in the image to the right.

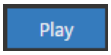


- The current day is marked in gray. You can quickly choose the current day by selecting the **Now** button.
- Use the gray arrows in each of the upper corners to move the calendar backward and forward one month at a time.
- Adjust the date by selecting the corresponding day from the calendar. Use the hour and minute adjustment sliders to select the time.
- Once you have chosen the date/time, select the **Done** button.

Each of the navigation buttons within this area (when displayed) will adjust the end date/ time of the historical multi-spectrum display as follows:

Start Time – Select this button to adjust the measurement period backward to the start time.

Previous Time Duration – Select this button to adjust the measurement period backward in time by the currently selected **Time Span**. If the start time is ahead of the current date/time by less time than the **Time Span**, the start time will be set to the start date/time.



Play – Select this button to play a sequence of measurements starting with the current time and moving forward by increments equal to the selected **Time Span**.

Next Time Duration – Select this button to adjust the measurement period forward in time by the currently selected **Time Span**. If the end time is behind the current date/time by less time than the **Time Span**, the end time will be set to the end date/time.

End Time – Select this button to adjust the measurement period forward to the end time.

Historical Waterfall Measurement Mode

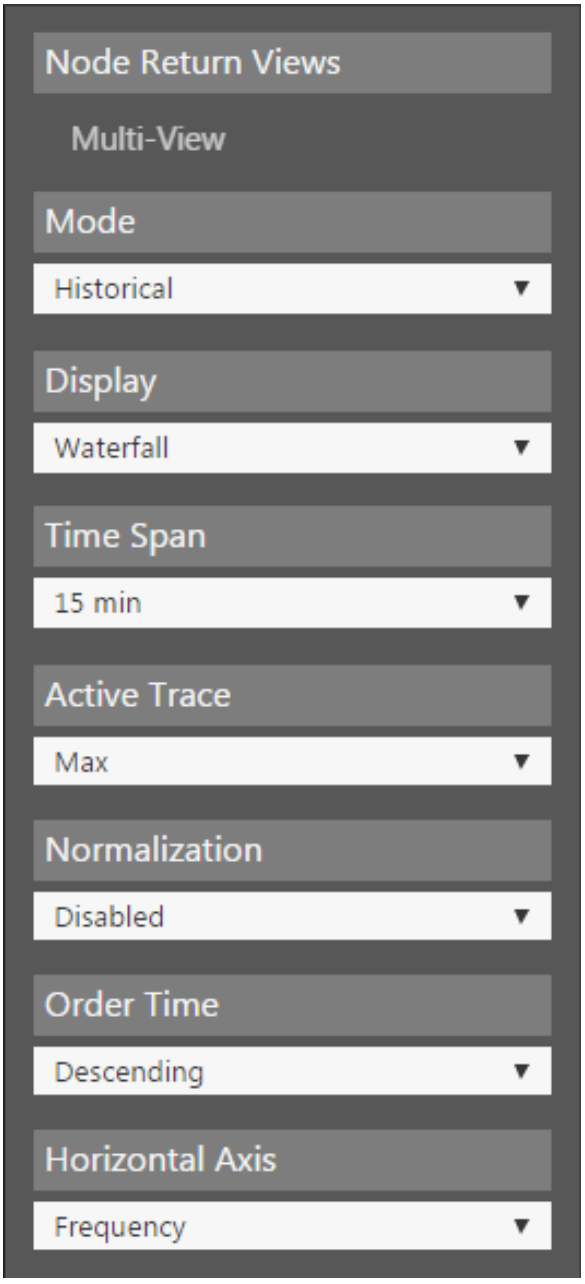
This display mode is shown when the following conditions occur:

- **Historical** has been selected from within the **Mode** area of the **Live Spectrum Settings** or **Historical Spectrum Settings** toolbar.
- **Waterfall** has been selected from within the **Display** area of the **Historical Spectrum Settings** toolbar.
- **Show All** has not been selected from within the **Live Spectrums** area of the **Historical Spectrum Settings** toolbar.

An example of this type of measurement mode is shown in the image below.

Historical Waterfall Settings Toolbar

The settings shown in the following sections are accessible when viewing the historical waterfall measurement mode.

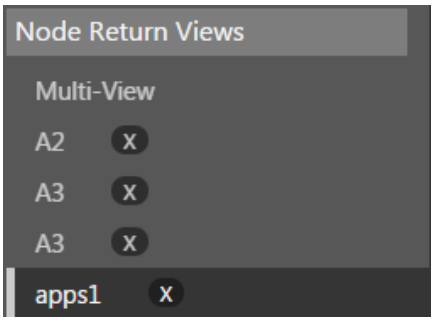


The following features are available and will be described in detail within the following sections:

- **Node Return Views** – This feature is used to display and choose from the nodes that are open within the historical waterfall measurement mode.
- **Mode** – This feature is used to choose from live or historical display modes. In the examples within this section, **Mode** is set to **Historical**.
- **Display Type** – This feature is used to choose from spectrum or waterfall display types. In the examples within this section, **Display** is set to **Waterfall**.
- **Time Span** – This feature is used to select the time span for the historical waterfall measurement mode.
- **Active Trace** – This feature is used select the active trace for the historical waterfall measurement mode.
- **Normalization** – This feature is used to enable or disable normalization for the historical waterfall measurement mode.
- **Order Time** – This feature is used adjust how time is displayed for the historical waterfall measurement mode.
- **Horizontal Axis** – This feature is used to adjust the horizontal axis of the historical waterfall measurement mode.

Node Return Views

The **Node Return Views** area of the **Historical Waterfall Settings** toolbar is used to select which waterfall display to show on the screen.



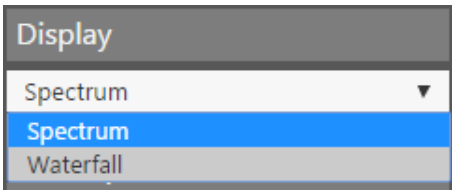
When multiple fiber node waterfall displays have been opened, each of the node names will appear in this list as shown in the image to the right.

To close a node, select the **X** to the right of the node name.

Select **Multi-View** to display the **Return Spectrum Multi-view** screen for all of the open return waterfall displays on one screen.

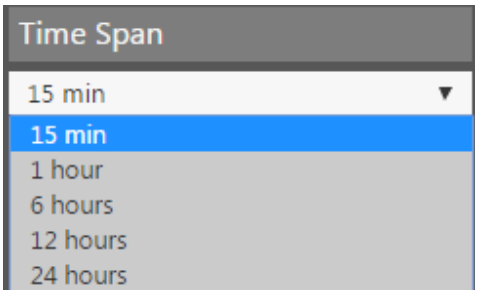
Display Type

The **Display** area of the **Historical Waterfall Settings** toolbar is used to select which type of the historical return graph to display, as shown in the image to the right. Select from **Spectrum** or **Waterfall**.



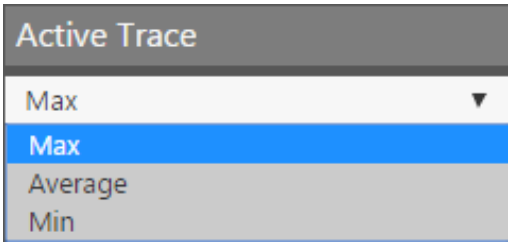
Time Span

The time span for historical waterfall is controlled from within the **Time Span** area of the **Historical Waterfall Settings** toolbar as shown in the image to the right. Select from **15 min**, **1 hour**, **6 Hours**, **12 Hours** or **24 hours** time spans.

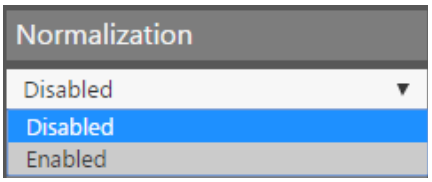


Active Trace

The **Active Trace** area of the **Historical Waterfall Settings** toolbar is used to select which of the historical waterfall measurement traces to make active. You can set the active trace to the **Max**, **Average** or **Min** traces.

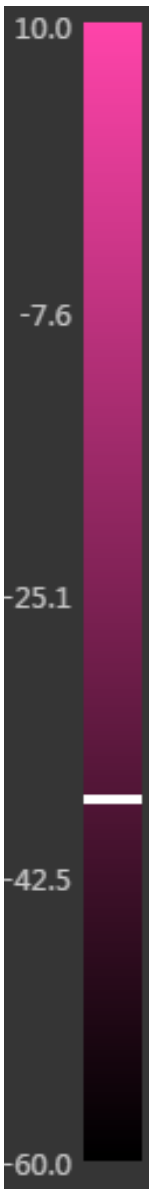


Normalization

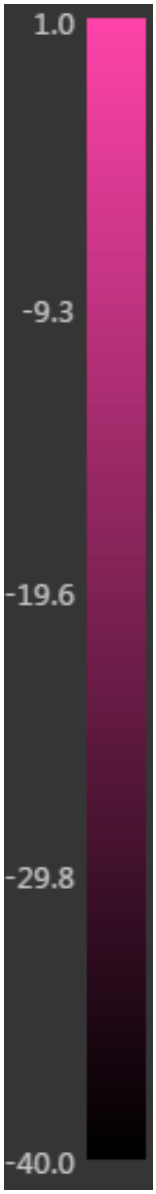


The **Normalization** area of the **Historical Waterfall Settings** toolbar is used to enable/disable normalization of the historical waterfall.

- **Disabled** – The level measurement scale will display the default minimum and maximum level values for the waterfall. The minimum level will be set to -60.0 dBmV and the maximum level will be set to 10.0 dBmV.
- **Enabled** – The level measurement scale will be adjusted to display the average minimum and maximum level values measured during the selected **Time Span** of the waterfall.
    - The minimum level of the level measurement scale will be set to the minimum average value during the selected **Time Span**.
    - The maximum level of the level measurement scale will be set to the maximum average value during the selected **Time Span**.
- In the example images shown to the right, the minimum and maximum average values of the level measurement scale have been adjusted for normalization:
    - The minimum level of the level measurement scale will be adjusted from -60.0 dBmV (default) to -40.0 dBmV which is the minimum average value during the selected **Time Span**.
    - The maximum level of the level measurement scale will be adjusted from 10.0 dBmV (default) to 1.0 dBmV which is the maximum average value during the selected **Time Span**.

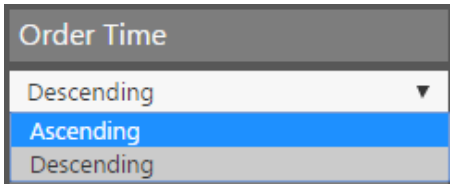


Default



Adjusted

Order Time By

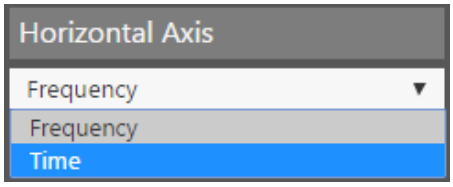


The **Order Time** area of the **Historical Waterfall Settings** toolbar is used to select the order in which time is displayed for the waterfall.

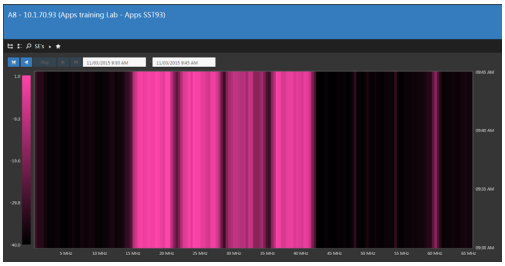
- Ascending
  - When the **Horizontal Axis** is set to **Frequency**, the beginning of the **Time Span** will be displayed at the top of the waterfall and the end of the **Time Span** at the bottom of the waterfall.
  - When the **Horizontal Axis** is set to **Time**, the beginning of the **Time Span** will be displayed at the left side of the waterfall and the end of the **Time Span** at the right side of the waterfall.
- Descending
  - When the **Horizontal Axis** is set to **Frequency**, the beginning of the **Time Span** will be displayed at the bottom of the waterfall and the end of the **Time Span** at the top of the waterfall.
  - When the **Horizontal Axis** is set to **Time**, the beginning of the **Time Span** will be displayed at the right side of the waterfall and the end of the **Time Span** at the left side of the waterfall.

Horizontal Axis

The **Horizontal Axis** area of the **Historical Waterfall Settings** toolbar is used to select the data type to display for the horizontal axis of the waterfall. You can select either **Frequency** or **Time** to be displayed on the horizontal axis.



- When the **Horizontal Axis** is set to **Frequency**, the frequency span will be displayed along the horizontal axis (bottom) of the waterfall and the **Time Span** along the vertical axis (right side) of the waterfall.
- When the **Horizontal Axis** is set to **Time**, the **Time Span** will be displayed along the horizontal axis (bottom) of the waterfall and the frequency span along the vertical axis (right side) of the waterfall.



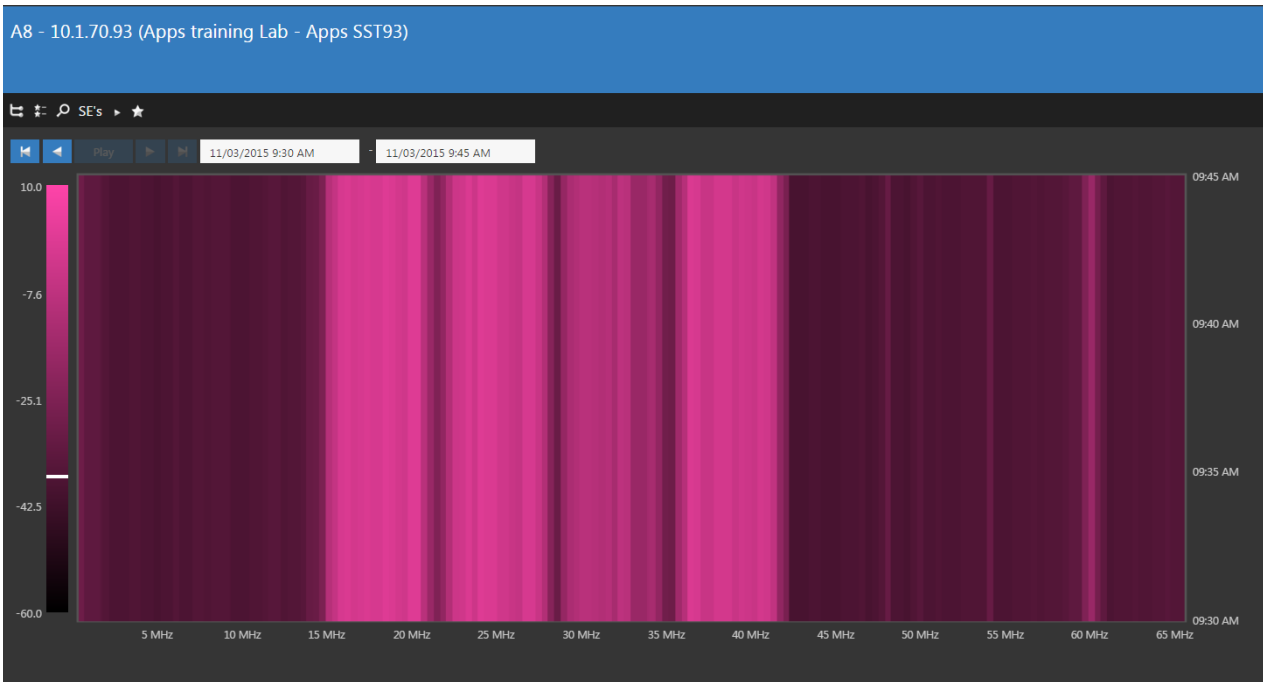
Horizontal Axis = Frequency

Horizontal Axis = Time

Using Historical Waterfall Graphs

This type of historical waterfall graph is used to display the results of the historical waterfall measurement during the selected **Time Span** as shown in the following image.

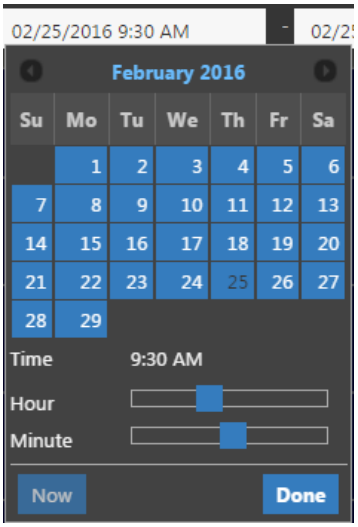
Use the mouse to hover over the waterfall graph, the location of the mouse will pinpoint a frequency and time. The level measurement scale will show a level line to mark the level at the frequency and time indicated by the mouse location.



Adjusting the Measurement Duration

The time controls are shown at the top of the waterfall display as shown in the following image.

To choose the start and end date/time of the time span displayed by the waterfall display, select the date/time field to the left for the start date/time and the date/time field to the right for the end date/time. The date/time picker calendar will be displayed as shown in the image to the right.

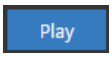


- The current day is marked in blue. You can quickly choose the current day by selecting the **Now** button.
- Use, the gray arrows in each of the upper corners to move the calendar backward and forward one month at a time.
- Adjust the date by selecting the corresponding day from the calendar. Use the hour and minute adjustment sliders to select the time.
- Once you have chosen the date/time, select the **Done** button.

Each of the navigation buttons within this area (when displayed) will adjust the end date/ time of the historical waterfall as follows:

Start Time – Select this button to adjust the measurement period backward to the start time.

Previous Time Duration – Select this button to adjust the measurement period backward in time by the currently selected **Time Span**. If the start time is ahead of the current date/time by less time than the **Time Span**, the start time will be set to the start date/time.



Play – Select this button to play a sequence of measurements starting with the current time and moving forward by increments equal to the selected **Time Span**.

Next Time Duration – Select this button to adjust the measurement period forward in time by the currently selected **Time Span**. If the end time is behind the current date/time by less time than the **Time Span**, the end time will be set to the end date/time.

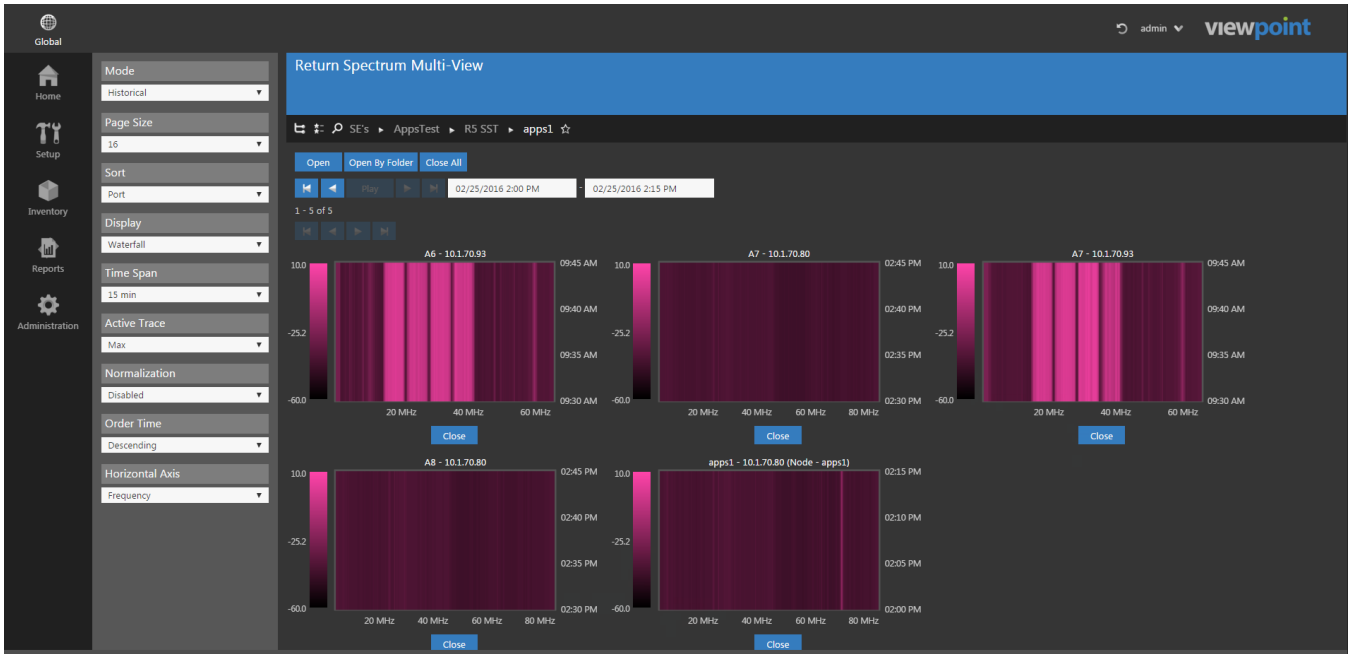
End Time – Select this button to adjust the measurement period forward to the end time.

Historical Multi-Waterfall Display Mode

This display mode is shown when the following conditions occur:

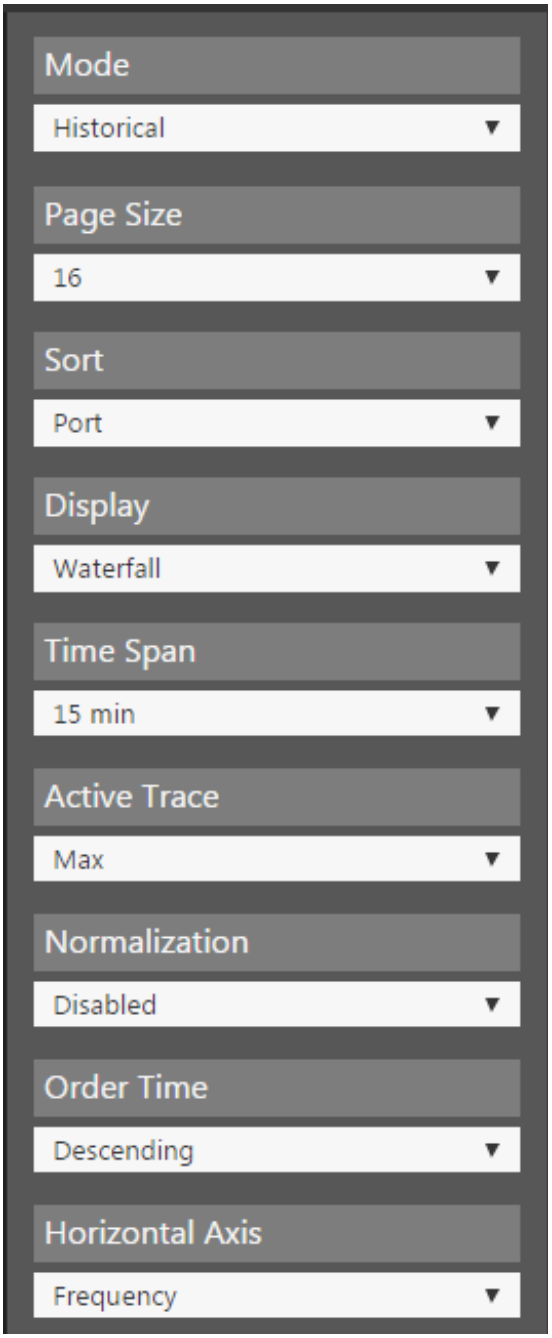
- **Historical** has been selected from within the **Mode** area of the **Live Spectrum Settings** or **Historical Spectrum Settings** toolbar.
- **Waterfall** has been selected from within the **Display** area of the **Historical Spectrum Settings** toolbar.
- **Multi-View** has been selected from within the **Node Return Views** area of the **Historical Waterfall Settings** toolbar.

An example of this type of measurement mode is shown in the image below.



Historical Multi-Waterfall Settings Toolbar

The settings shown in the following sections are accessible when viewing the historical multi-waterfall display mode.

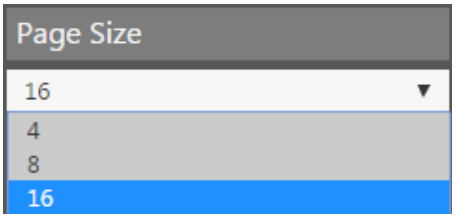


The following features are available and will be described in detail within the following sections:

- **Mode** – This feature is used to choose from live or historical display modes. In the examples within this section, **Mode** is set to **Historical**.
- **Page Size** – This feature is used to select the number of nodes to display within the historical multi-waterfall display mode.
- **Sort** – This feature is used to select how the displayed nodes will be sorted for the historical multi-waterfall display mode.
- **Display Type** – This feature is used to choose from spectrum or waterfall display types. In the examples within this section, **Display** is set to **Waterfall**.
- **Time Span** – This feature is used to select the time span for the historical multi-waterfall display mode.
- **Active Trace** – This feature is used select the active trace for the historical multi-waterfall display mode.
- **Normalization** – This feature is used to enable or disable normalization for the historical multi-waterfall display mode.
- **Order Time** – This feature is used adjust how time is displayed for the historical multi-waterfall display mode.
- **Horizontal Axis** – This feature is used to adjust the horizontal axis of the historical multi-waterfall display mode.

Page Size

The number of nodes displayed on each page of the historical multi-waterfall display mode are controlled from within the **Page Size** area of the **Historical Multi-Waterfall Settings** toolbar as shown in the image to the right. Select from **4**, **8** or **16** nodes per page.



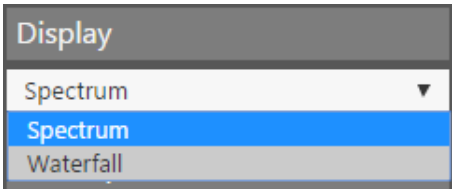
Sort

The order of displayed nodes on each page of the historical multi-waterfall display mode is controlled from within the **Sort** area of the **Historical Multi-Waterfall Settings** toolbar as shown in the image to the right.

- Select **None** to display the nodes in the order in which they were opened.
- Select **Port** to display the nodes in alphabetical order by the name of the port.

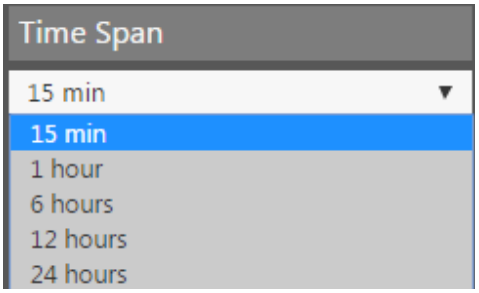
Display Type

The **Display** area of the **Historical Multi-Waterfall Settings** toolbar is used to select which type of the historical return graph to display, as shown in the image to the right. Select from **Spectrum** or **Waterfall**.



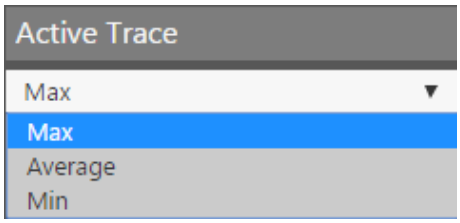
Time Span

The time span for the historical waterfalls is controlled from within the **Time Span** area of the **Historical Multi-Waterfall Settings** toolbar as shown in the image to the right. Select from **15 min**, **1 hour**, **6 Hours**, **12 Hours** or **24 hours** time spans.



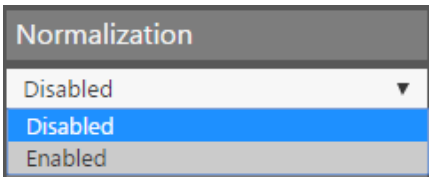
Active Trace

The **Active Trace** area of the **Historical Multi-Waterfall Settings** toolbar is used to select which of the historical waterfall measurement traces to make active. You can set the active trace to the **Max**, **Average** or **Min** traces.

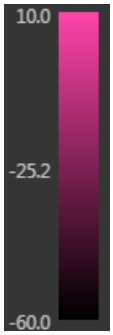


Normalization

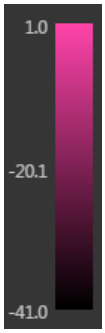
The **Normalization** area of the **Historical Multi-Waterfall Settings** toolbar is used to enable/disable normalization of the historical waterfalls.



- **Disabled** – The level measurement scale will display the default minimum and maximum level values for the waterfalls. The minimum level will be set to -60.0 dBmV and the maximum level will be set to 10.0 dBmV.
- **Enabled** – The level measurement scale will be adjusted to display the average minimum and maximum level values measured during the selected **Time Span** of the waterfalls.
    - The minimum level of the level measurement scale will be set to the minimum average value during the selected **Time Span**.
    - The maximum level of the level measurement scale will be set to the maximum average value during the selected **Time Span**.
- In the example images shown to the right, the minimum and maximum average values of the level measurement scale have been adjusted for normalization:
    - The minimum level of the level measurement scale will be adjusted from -60.0 dBmV (default) to -41.0 dBmV which is the minimum average value during the selected **Time Span**.
    - The maximum level of the level measurement scale will be adjusted from 10.0 dBmV (default) to 1.0 dBmV which is the maximum average value during the selected **Time Span**.

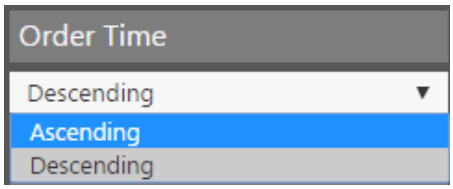


Default



Adjusted

Order Time By

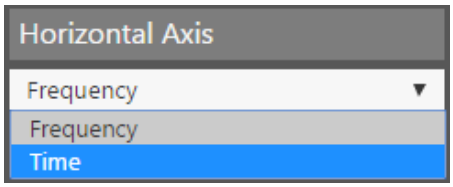


The **Order Time** area of the **Historical Multi-Waterfall Settings** toolbar is used to select the order in which time is displayed for the waterfalls.

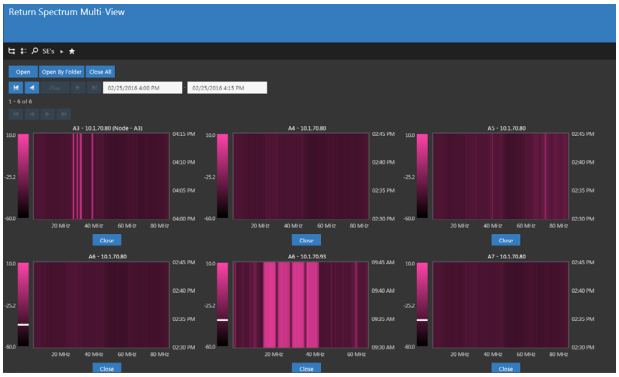
- Ascending
  - When the **Horizontal Axis** is set to **Frequency**, the beginning of the **Time Span** will be displayed at the top of the waterfall and the end of the **Time Span** at the bottom of the waterfall.
  - When the **Horizontal Axis** is set to **Time**, the beginning of the **Time Span** will be displayed at the left side of the waterfall and the end of the **Time Span** at the right side of the waterfall.
- Descending
  - When the **Horizontal Axis** is set to **Frequency**, the beginning of the **Time Span** will be displayed at the bottom of the waterfall and the end of the **Time Span** at the top of the waterfall.
  - When the **Horizontal Axis** is set to **Time**, the beginning of the **Time Span** will be displayed at the right side of the waterfall and the end of the **Time Span** at the left side of the waterfall.

Horizontal Axis

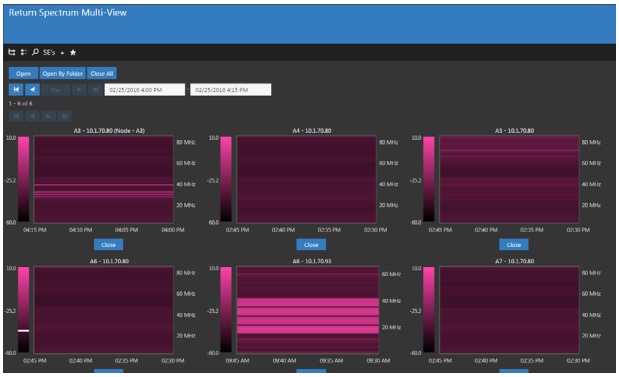
The **Horizontal Axis** area of the **Historical Multi-Waterfall Settings** toolbar is used to select the data type to display for the horizontal axis of the waterfalls. You can select either **Frequency** or **Time** to be displayed on the horizontal axis.



- When the **Horizontal Axis** is set to **Frequency**, the frequency span will be displayed along the horizontal axis (bottom) of the waterfalls and the **Time Span** along the vertical axis (right side) of the waterfalls.
- When the **Horizontal Axis** is set to **Time**, the **Time Span** will be displayed along the horizontal axis (bottom) of the waterfalls and the frequency span along the vertical axis (right side) of the waterfalls.



Horizontal Axis = Frequency



Horizontal Axis = Time

Using Historical Multi-Waterfalls

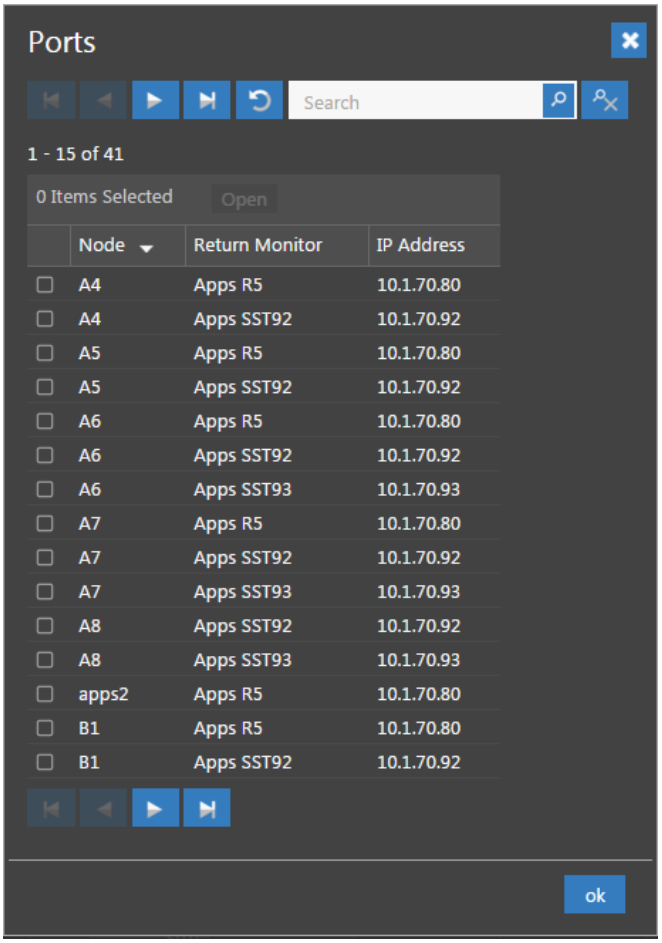
The settings shown in the following sections are accessible when viewing the historical multi-waterfall display mode. Selecting a single waterfall graph from this display will take you back to the Historical Waterfall for that node.

Opening Nodes

To open nodes, select the **Open** button from the multi-waterfall display. The **Ports** window will be displayed as shown in the image to the right.

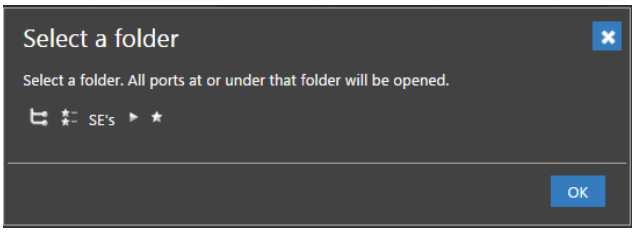
Choose the nodes from the list and then select the **Open** or **OK** button to display the nodes.

The new nodes will be displayed in the multi-waterfall display.



Open Nodes by Organization

To open a group of nodes within a single location within the organization, select the **Open by Folder** button from the multi-waterfall display. The **Select a folder** window will be displayed as shown in the image to the right.

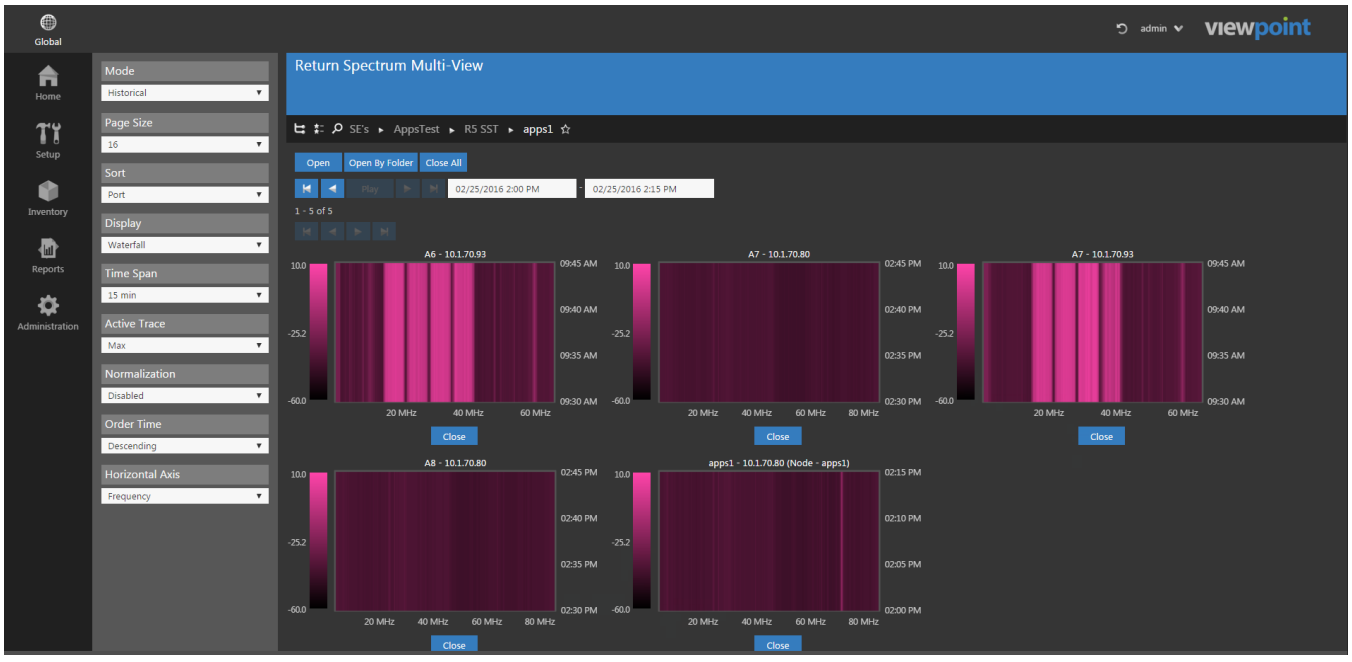


Use the Organization toolbar to choose the organization location and select the **OK** button to display the nodes.

All of the nodes within that organizational location will be displayed in the multi-waterfall display.

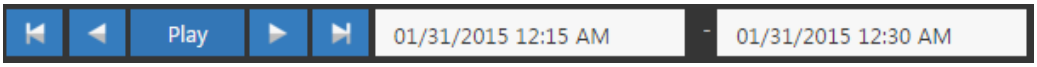
Closing Nodes

To close a single node, select the **Close** button below the corresponding node. To close all of the nodes that are currently displayed, select the **Close All** button.

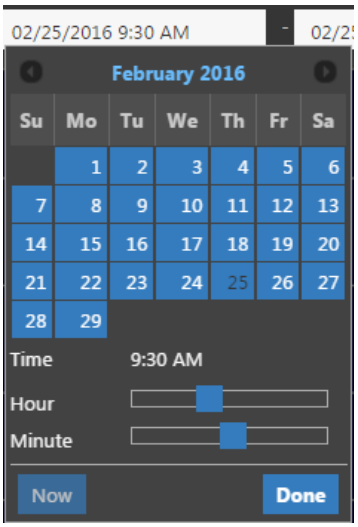


Adjusting the Measurement Duration

The time controls are shown at the top of the multi-waterfall display as shown in the following image.



To choose the start and end date/time of the time span displayed by the multi-waterfall display, select the date/time field to the left for the start date/time and the date/time field to the right for the end date/time. The date/time picker calendar will be displayed as shown in the image to the right.

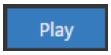


- The current day is marked in blue. You can quickly choose the current day by selecting the **Now** button.
- Use, the gray arrows in each of the upper corners to move the calendar backward and forward one month at a time.
- Adjust the date by selecting the corresponding day from the calendar. Use the hour and minute adjustment sliders to select the time.
- Once you have chosen the date/time, select the **Done** button.

Each of the navigation buttons within this area (when displayed) will adjust the end date/time of the historical multi-waterfall display as follows:

Start Time – Select this button to adjust the measurement period backward to the start time.

Previous Time Duration – Select this button to adjust the measurement period backward in time by the currently selected **Time Span**. If the start time is ahead of the current date/time by less time than the **Time Span**, the start time will be set to the start date/time.



Play – Select this button to play a sequence of measurements starting with the current time and moving forward by increments equal to the selected **Time Span**.

Next Time Duration – Select this button to adjust the measurement period forward in time by the currently selected **Time Span**. If the end time is behind the current date/time by less time than the **Time Span**, the end time will be set to the end date/time.

End Time – Select this button to adjust the measurement period forward to the end time.

Chapter 5
Forward Monitor Management

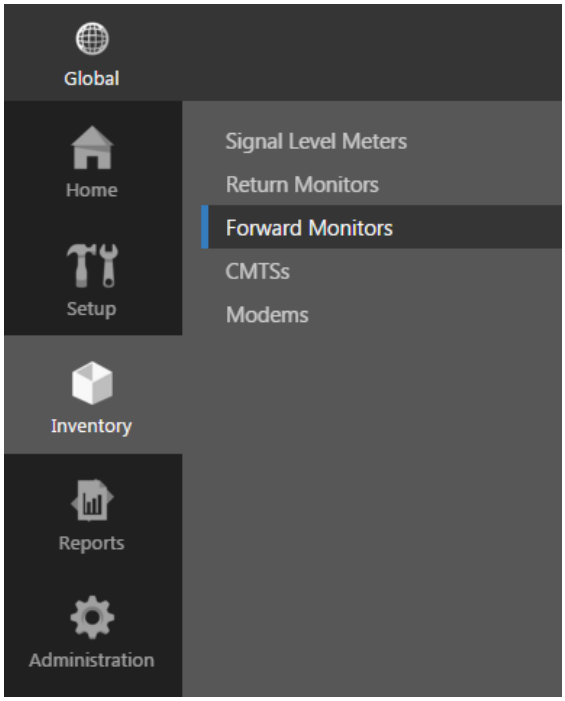
Overview

The **Forward Monitors** feature is used to manage the 860 DSPh forward path headend analyzers within the ViewPoint system.

Select **Forward Monitors** from the **Inventory Settings** toolbar as shown in the image to the right.

Select the ☆ icon at the top of the page to add **Forward Monitors** to your **Home** page favorites.

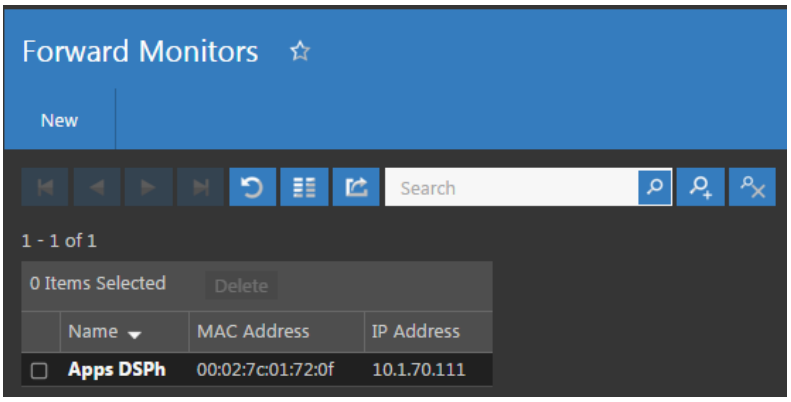
To remove **Forward Monitors** from your **Home** page favorites, select the ★ icon.



Forward Monitors Table

The **Forward Monitors** screen will be displayed as shown in the image to the right. From this screen you can perform the following actions:

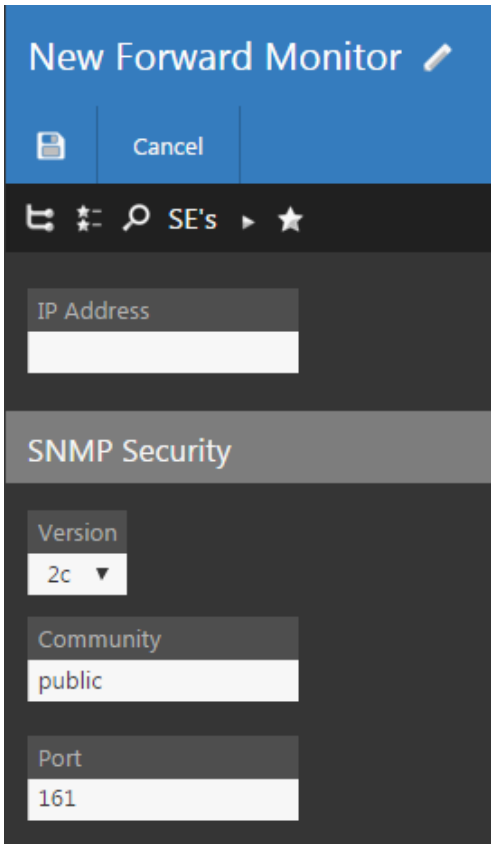
- View a list of forward monitors
- Create a new forward monitors
- Edit a forward monitor
- Delete a forward monitor



Creating a New Forward Monitor

Perform the following steps to create a new forward monitor:

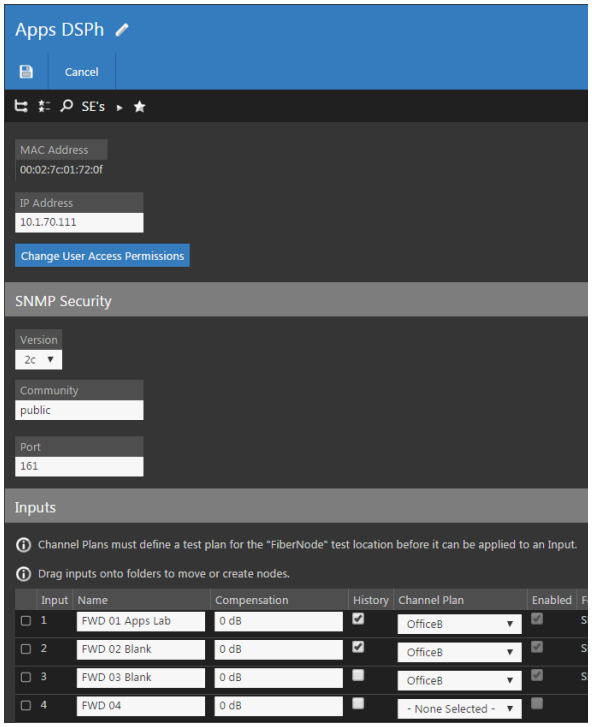
1. From the **Forward Monitors** screen, select the **New** button.
2. Enter a name for the new forward monitor and select **OK.**
3. The **New Forward Monitor** screen will be displayed as shown in the image to the right.
4. Enter the IP address of the 860 DSPh you want to connect to in the **IP Address** field.
5. In the **SNMP Security** area, select the version from the **Version** dropdown box.
6. Enter the community name in the **Community** field.
7. Enter the port number in the **Port** field.
8. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the monitor details screen where your changes will still be displayed.
9. The new monitor should now appear in the **Forward Monitors** table.



Editing a Forward Monitor

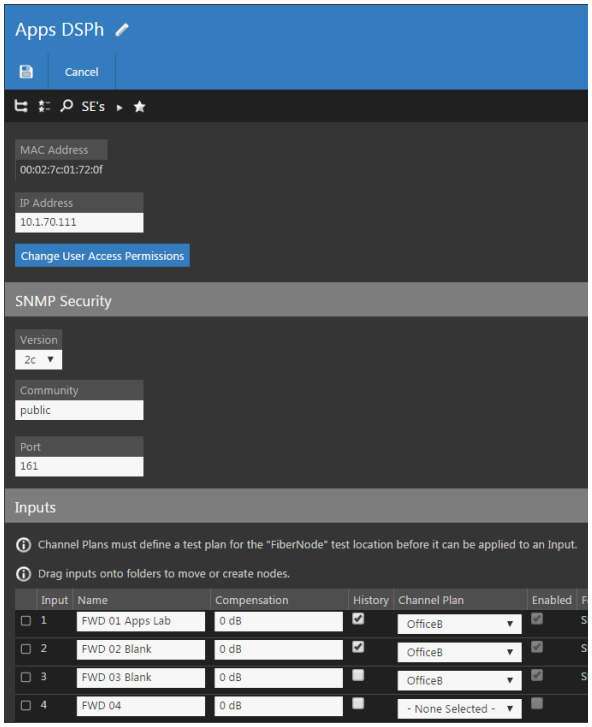
Perform the following steps to edit a forward monitor:

1. From the **Forward Monitors** screen, select the name of the monitor to edit and the monitor details screen will be displayed as shown in the image to the right.
2. Select the **Edit** button to adjust the settings of the monitor.
3. Adjust the settings of the monitor.
4. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the monitor details screen where your changes will still be displayed.



Forward Monitor Setup Details

Perform the following steps when creating or editing a forward monitor.



1. After creating the return monitor in ViewPoint, the monitor details screen will be automatically populated with the **IP Address** and **MAC Address** of the 860 DSPh, as shown in the image to the right.
2. Select the **Change User Access Permissions** button to add the monitor to a new location in the organization tree. Use the Organization toolbar within the window to select a new location.
3. Adjust the **SNMP Security** area as necessary.

Input Settings

Any time you select a monitor from the monitors list, you are able to view and edit information about each input of the monitor.

From the inputs list, you can perform the following actions:

- To enable an input, select the **Enabled** checkbox of the corresponding input.
- To view the history of an input using the Dashboard function or Historical Mode of the Live Spectrum function, select the **History** checkbox of the corresponding input.
- To change the channel plan for an input, select the **Channel Plan** dropdown box.

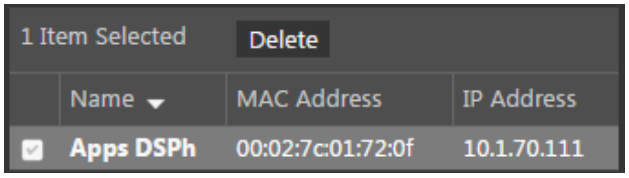
Be sure to select the **Save** button after making any changes.

NOTE ***Items can also be moved by dragging and dropping them into the organization tree or by using the add/remove folder*** ... ***button.***

Deleting a Forward Monitor

Perform the following steps to delete a forward monitor:

1. From the **Forward Monitors** screen, select the checkbox to the left of each monitor to delete.
2. Once you have chosen the monitor, select the **Delete** button.



3. After selecting the **Delete** button, a **Confirm** window will be displayed.
    - When deleting five or less items, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **Forward Monitors** screen where the item(s) will still be displayed.
    - When deleting more than five items, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **Forward Monitors** screen where the item(s) will still be displayed.

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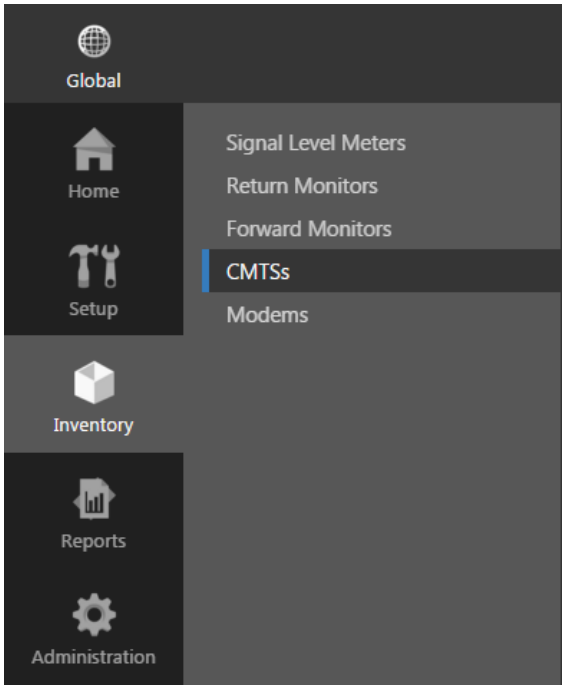
Overview

The **CMTS** feature is used to manage the CMTSs within the ViewPoint system.

Select **CMTSs** from the **Inventory Settings** toolbar as shown in the image to the right.

Select the ☆ icon at the top of the page to add **CMTSs** to your **Home** page favorites.

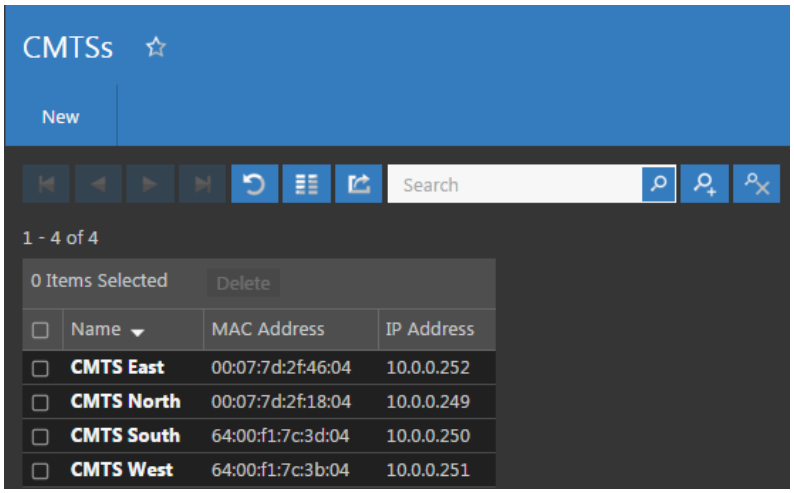
To remove **CMTSs** from your **Home** page favorites, select the ★ icon.



CMTSs Table

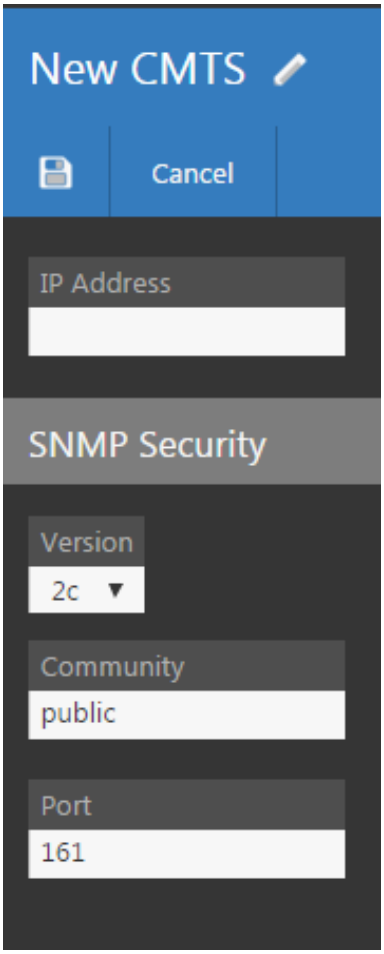
The **CMTSs** screen will be displayed as shown in the image to the right. From this screen you can perform the following actions:

- View a list of CMTSs
- Create a new CMTS
- Edit a CMTS
- Delete a CMTS



Creating a New CMTS

Perform the following steps to create a new CMTS

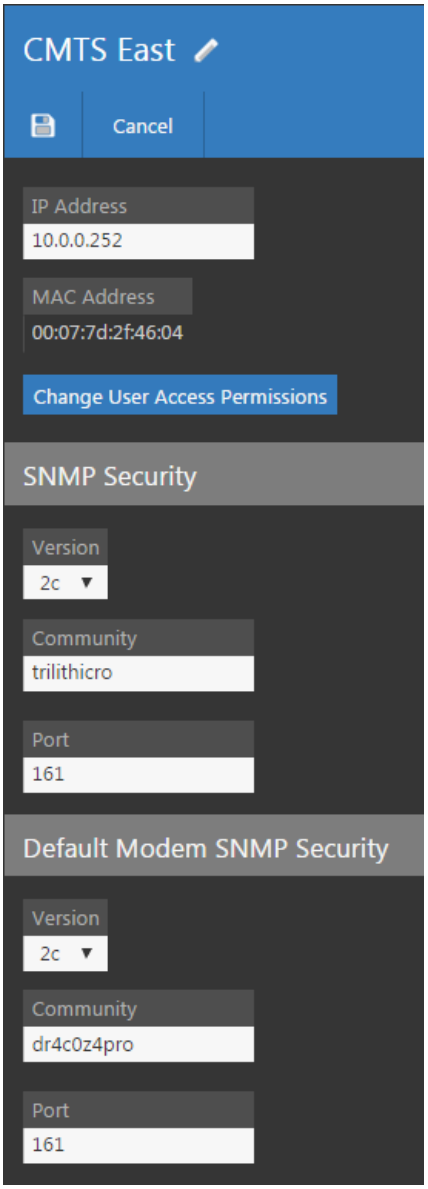


1. From the **CMTSs** screen, select the **New** button.
2. Enter a name for the new CMTS and select **OK.**
3. The **New CMTS** screen will be displayed as shown in the image to the right.
4. Enter the IP address of the CMTS you want to connect to in the **IP Address** field.
5. In the **SNMP Security** area, select the version from the **Verison** dropdown box.
6. Enter the community name in the **Community** field.
7. Enter the port number in the **Port** field.
8. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the monitor details screen where your changes will still be displayed.
9. The new CMTS should now appear in the **CMTSs** table.

Editing a CMTS

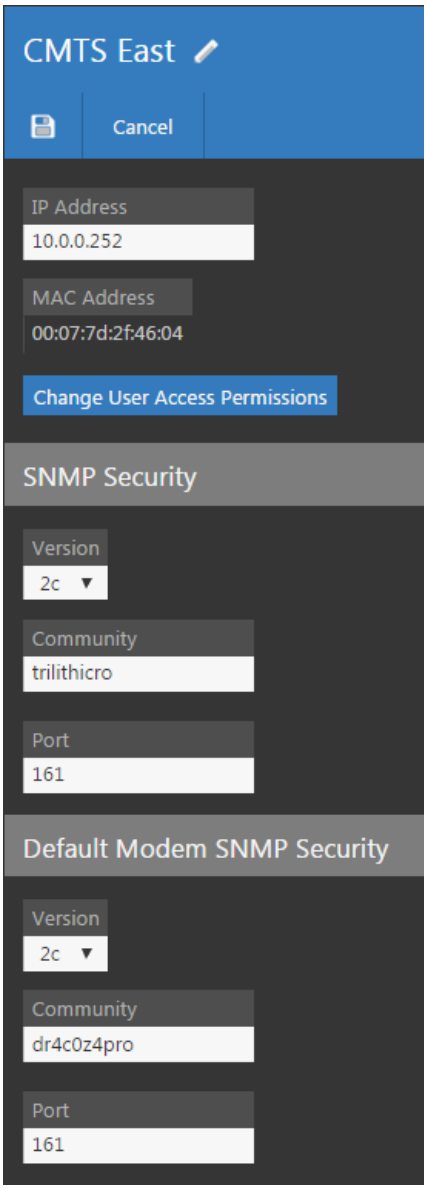
Perform the following steps to edit a CMTS:

1. From the **CMTSs** screen, select the name of the CMTS to edit and the CMTS details screen will be displayed as shown in the image to the right.
2. Select the **Edit** button to adjust the settings of the CMTS.
3. Adjust the settings of the CMTS.
4. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the CMTS details screen where your changes will still be displayed.



CMTS Setup Details

Perform the following steps when creating or editing a CMTS.



Info

At the bottom of the **Inventory Settings** toolbar, the **Info** section will be highlighted.

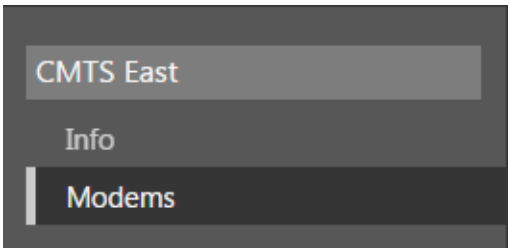
1. After creating the CMTS in ViewPoint, the CMTS details screen will be automatically populated with the **IP Address** and **MAC Address** of the CMTS, as shown in the image to the right.
2. Select the **Change User Access Permissions** button to add the CMTS to a new location in the organization tree. Use the Organization toolbar within the window to select a new location.
3. Adjust the **SNMP Security and Default Modem SNMP Security** areas as necessary.

Be sure to select the **Save** button after making any changes.

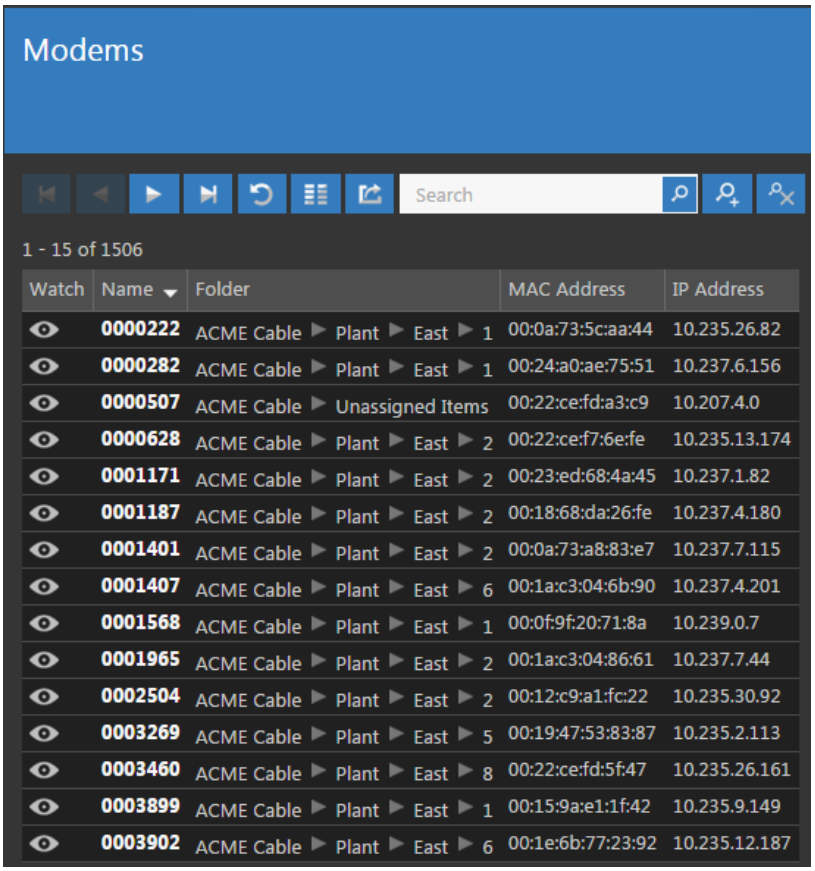
Modems

You can view all modems assigned to each CMTS in this section.

At the bottom of the **Inventory Settings** toolbar, select the **Modems** section as shown in the image to the right.



The Modems screen will be displayed, as shown in the image below.



Watch	Name	Folder	MAC Address	IP Address
	0000222	ACME Cable ▶ Plant ▶ East ▶ 1	00:0a:73:5c:aa:44	10.235.26.82
	0000282	ACME Cable ▶ Plant ▶ East ▶ 1	00:24:a0:ae:75:51	10.237.6.156
	0000507	ACME Cable ▶ Unassigned Items	00:22:ce:fd:a3:c9	10.207.4.0
	0000628	ACME Cable ▶ Plant ▶ East ▶ 2	00:22:ce:f7:6e:fe	10.235.13.174
	0001171	ACME Cable ▶ Plant ▶ East ▶ 2	00:23:ed:68:4a:45	10.237.1.82
	0001187	ACME Cable ▶ Plant ▶ East ▶ 2	00:18:68:da:26:fe	10.237.4.180
	0001401	ACME Cable ▶ Plant ▶ East ▶ 2	00:0a:73:a8:83:e7	10.237.7.115
	0001407	ACME Cable ▶ Plant ▶ East ▶ 6	00:1a:c3:04:6b:90	10.237.4.201
	0001568	ACME Cable ▶ Plant ▶ East ▶ 1	00:0f:9f:20:71:8a	10.239.0.7
	0001965	ACME Cable ▶ Plant ▶ East ▶ 2	00:1a:c3:04:86:61	10.237.7.44
	0002504	ACME Cable ▶ Plant ▶ East ▶ 2	00:12:c9:a1:fc:22	10.235.30.92
	0003269	ACME Cable ▶ Plant ▶ East ▶ 5	00:19:47:53:83:87	10.235.2.113
	0003460	ACME Cable ▶ Plant ▶ East ▶ 8	00:22:ce:fd:5f:47	10.235.26.161
	0003899	ACME Cable ▶ Plant ▶ East ▶ 1	00:15:9a:e1:1f:42	10.235.9.149
	0003902	ACME Cable ▶ Plant ▶ East ▶ 6	00:1e:6b:77:23:92	10.235.12.187

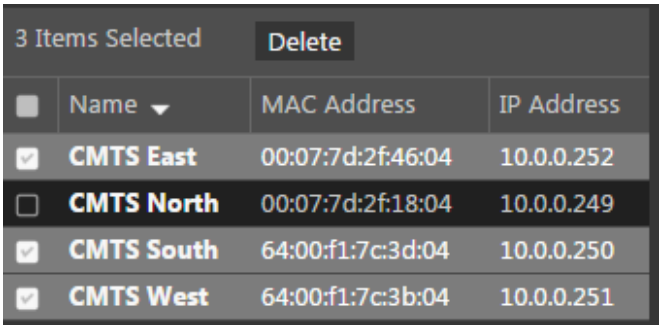
NOTE

Selecting the modems on this screen will take you to the Inventory > Modems area, as detailed in the next chapter.

Deleting a CMTS

Perform the following steps to delete a CMTS:

1. From the **CMTSs** screen, select the checkbox to the left of each CMTS to delete.
2. Once you have chosen the CMTSs, select the **Delete** button.
3. After selecting the **Delete** button, a **Confirm** window will be displayed.



   - When deleting five or less items, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **CMTSs** screen where the item(s) will still be displayed.
   - When deleting more than five items, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **CMTSs** screen where the item(s) will still be displayed.

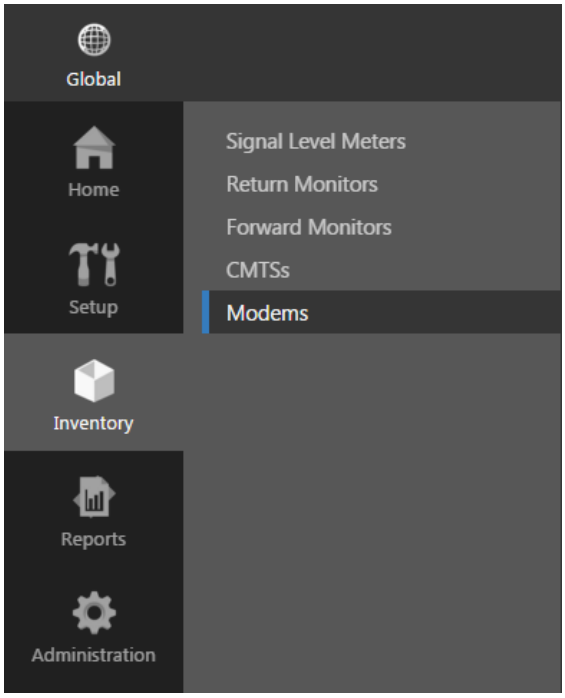
Overview

The **Modems** feature is used to manage the modems within the ViewPoint system.

Select **Modems** from the **Inventory Settings** toolbar as shown in the image to the right.

Select the ☆ icon at the top of the page to add **Modems** to your **Home** page favorites.

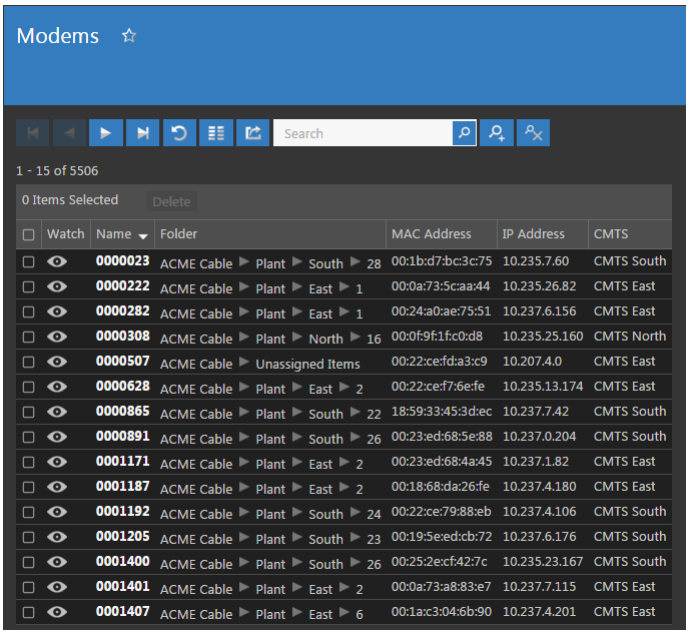
To remove **Modems** from your **Home** page favorites, select the ★ icon.



Modems Table

The **Modems** screen will be displayed as shown in the image to the right. From this screen you can perform the following actions:

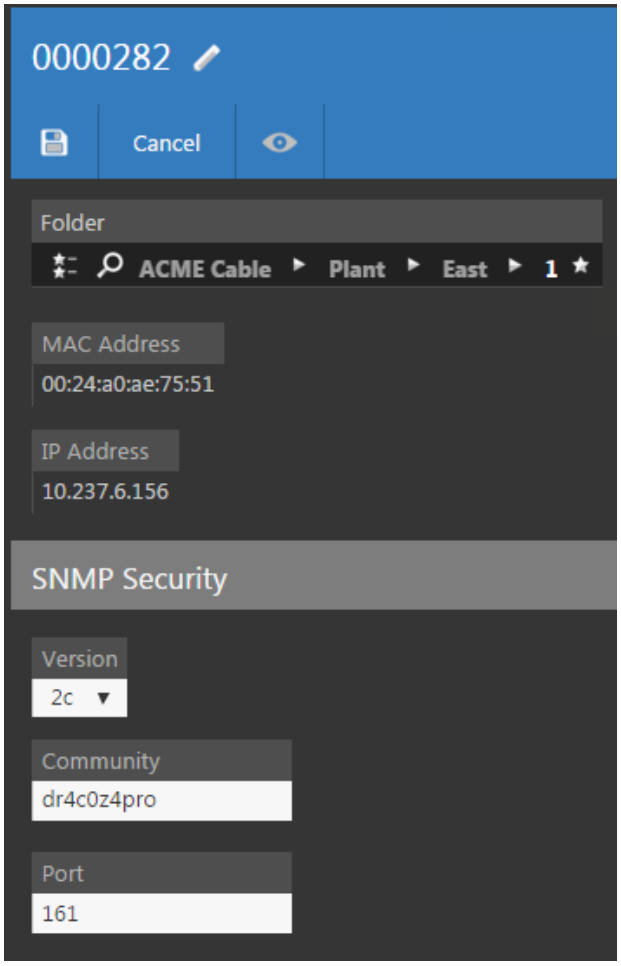
- View a list of modems
- Edit a modem
- Delete a modem



Editing a Modem

Perform the following steps to edit a modem:

1. From the **Modems** screen, select the name of the modem to edit and the modem details screen will be displayed as shown in the image to the right.
2. Select the **Edit** button to adjust the settings of the modem.
3. Adjust the settings of the modem.
4. Once you have made changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
    - If you chose to save your changes, a file saved notice will appear at the top of the data display area.
    - If you chose to cancel your changes, a cancellation notification window will be displayed. Select the **Yes** button to proceed with cancelling your changes or select the **No** button to return to the modem details screen where your changes will still be displayed.

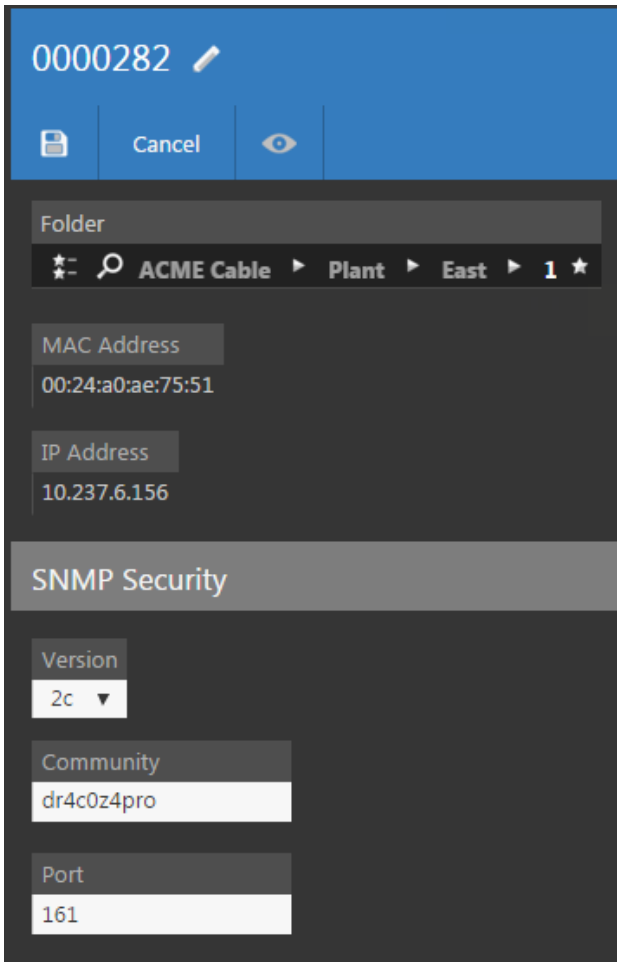


Modem Setup Details

Perform the following steps when editing a modem.

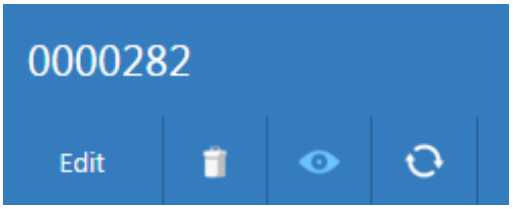
1. After connecting the modem to ViewPoint, the modem details screen will be automatically populated with the **IP Address** and **MAC Address** of the modem, as shown in the image to the right.
2. Adjust the **SNMP Security** area as necessary.

Be sure to select the **Save** button after making any changes.



Add to Watchlist

At the top of the modem details screen, you can select the **Add to Watchlist** icon to add the current modem to a watchlist report, as shown in the image to the right. You can also do this for individual modems on the **Modems** screen.



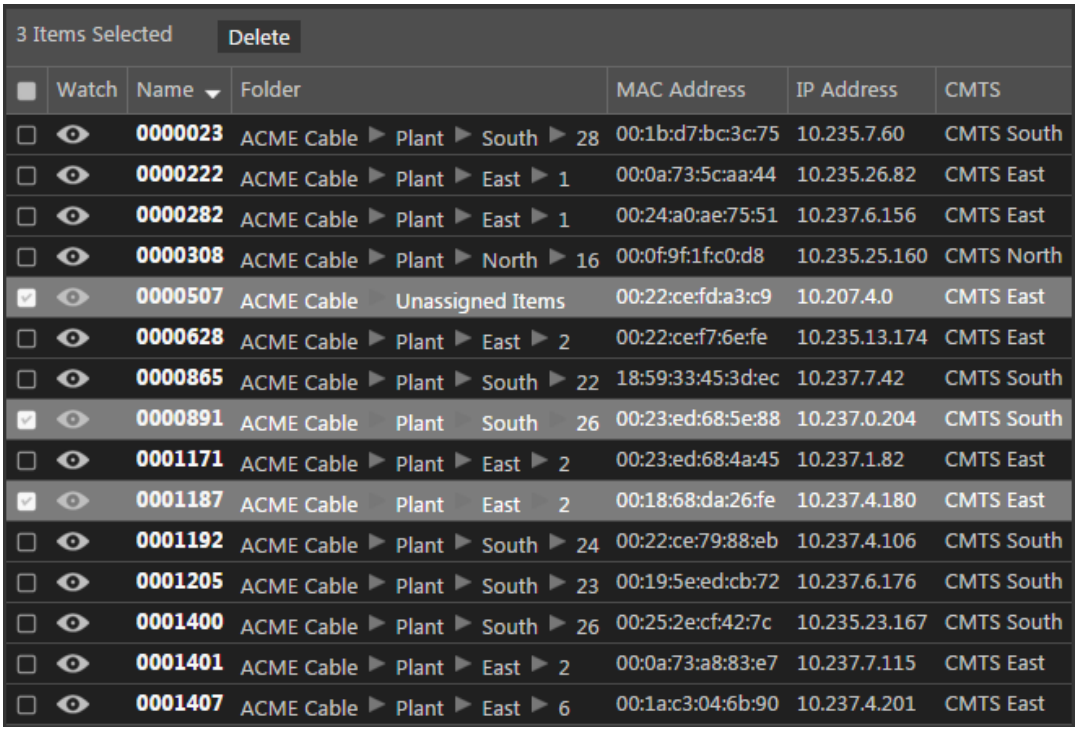
You can also refresh the watchlist after 7 days.

Watchlist reports are detailed in ***Section V: Reports***.

Deleting a Modem

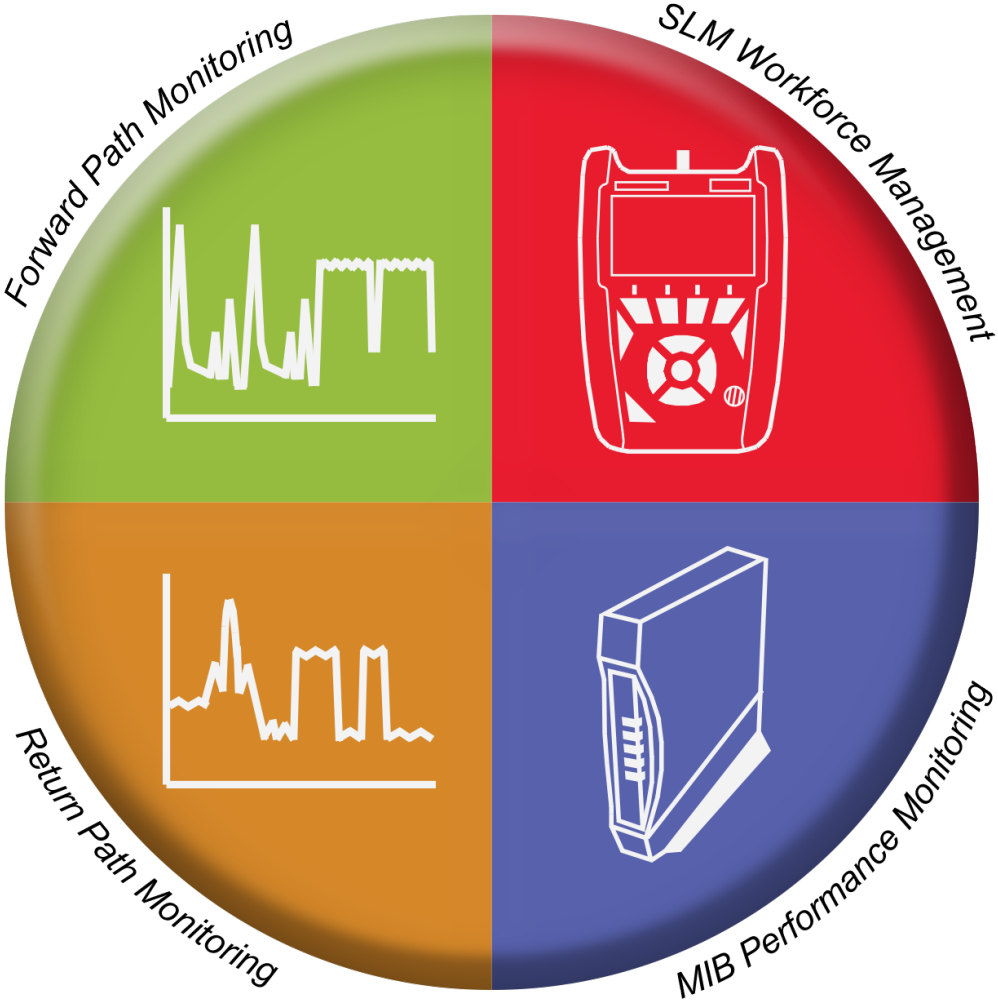
Perform the following steps to delete a modem:

1. From the **Modems** screen, select the checkbox to the left of each modem to delete.
2. Once you have chosen the modems, select the **Delete** button.
3. After selecting the **Delete** button, a **Confirm** window will be displayed.
    - When deleting five or less items, a normal **Confirm** window will be displayed. Select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **Modems** screen where the item(s) will still be displayed.
    - When deleting more than five items, a special **Confirm** window will be displayed. Type “DELETE” in the empty field and select the **Delete** button to proceed with deleting the item(s) or select the **Cancel** button to return to the **Modems** screen where the item(s) will still be displayed.



Watch	Name	Folder	MAC Address	IP Address	CMTS
	0000023	ACME Cable ▶ Plant ▶ South ▶ 28	00:1b:d7:bc:3c:75	10.235.7.60	CMTS South
	0000222	ACME Cable ▶ Plant ▶ East ▶ 1	00:0a:73:5c:aa:44	10.235.26.82	CMTS East
	0000282	ACME Cable ▶ Plant ▶ East ▶ 1	00:24:a0:ae:75:51	10.237.6.156	CMTS East
	0000308	ACME Cable ▶ Plant ▶ North ▶ 16	00:0f:9f:1f:c0:d8	10.235.25.160	CMTS North
	0000507	ACME Cable Unassigned Items	00:22:ce:fd:a3:c9	10.207.4.0	CMTS East
	0000628	ACME Cable ▶ Plant ▶ East ▶ 2	00:22:ce:f7:6e:fe	10.235.13.174	CMTS East
	0000865	ACME Cable ▶ Plant ▶ South ▶ 22	18:59:33:45:3d:ec	10.237.7.42	CMTS South
	0000891	ACME Cable Plant South 26	00:23:ed:68:5e:88	10.237.0.204	CMTS South
	0001171	ACME Cable ▶ Plant ▶ East ▶ 2	00:23:ed:68:4a:45	10.237.1.82	CMTS East
	0001187	ACME Cable Plant East 2	00:18:68:da:26:fe	10.237.4.180	CMTS East
	0001192	ACME Cable ▶ Plant ▶ South ▶ 24	00:22:ce:79:88:eb	10.237.4.106	CMTS South
	0001205	ACME Cable ▶ Plant ▶ South ▶ 23	00:19:5e:ed:cb:72	10.237.6.176	CMTS South
	0001400	ACME Cable ▶ Plant ▶ South ▶ 26	00:25:2e:cf:42:7c	10.235.23.167	CMTS South
	0001401	ACME Cable ▶ Plant ▶ East ▶ 2	00:0a:73:a8:83:e7	10.237.7.115	CMTS East
	0001407	ACME Cable ▶ Plant ▶ East ▶ 6	00:1a:c3:04:6b:90	10.237.4.201	CMTS East

ViewPoint
Integrated Data Management System
Section V: Reports



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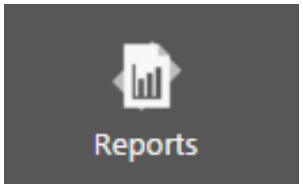
Overview

The **Reports** screen is used to create reports based on information synchronized between signal level meters and the ViewPoint system.

The **Reports** tool is used to create the following types of reports:

- SLM Job
- SLM Job Compliance
- SLM Tests
- SLM Test Detail
- Modem Watch List
- Node Metrics

Each of these reports can be fully customized as shown in the following sections with any number of search items, display columns, groupings, and group display columns.



Select the **Inventory** button from the **Navigations and Settings** toolbar as shown in the image to the right.

Reports Table

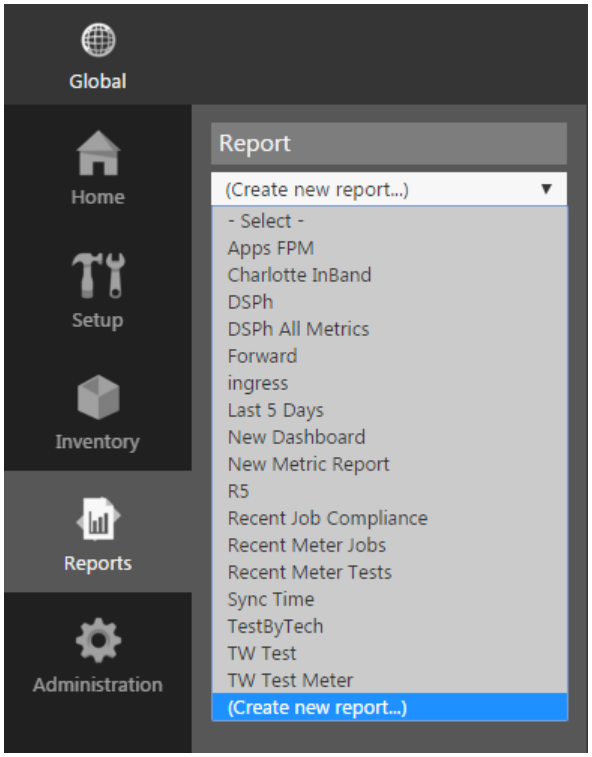
The **Reports** screen will be displayed as shown in the image to the right. From this screen you can perform the following actions:

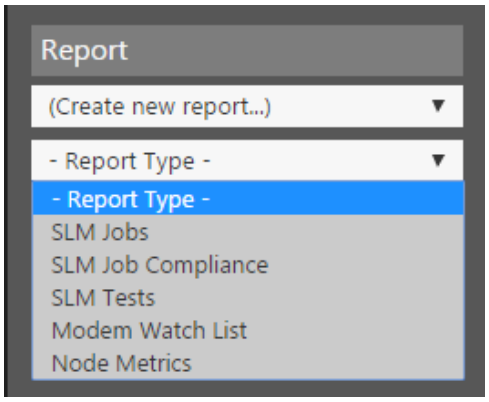
- Create & edit reports
- Run reports
- Copy reports
- Delete reports

Creating & Editing Reports

Perform the following steps to create a new report:

1. From the **Reports** screen, select **(Create New Report...)** from the dropdown box.
2. Then from the **Report Type** dropdown box, select one of the following:
    - **SLM Jobs** – This type of report searches all data fields related to jobs created on a signal level meter.
    - **SLM Job Compliance** – This type of report searches all data fields related to job compliance created on a signal level meter.
    - **SLM Tests** – This type of report searches all data fields related to tests created on a signal level meter.
    - **Modem Watch Lists** – This type of report searches all data fields related to watch lists created for modems.
    - **Node Metrics** – This type of report searches all data fields related to node metrics in a plant.
3. Enter a name for the new report and select **OK**.
4. Once you have finished making these changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.
5. Select from the options outlined in the following sections to complete the setup of the each type of report.





Report Settings Toolbar

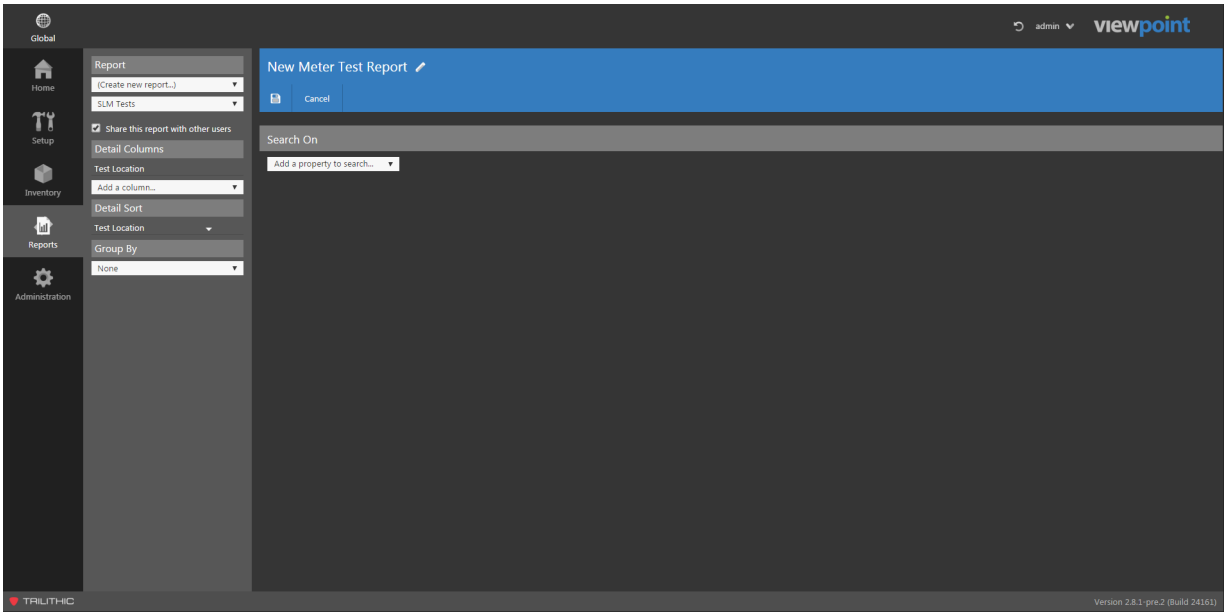
Search

The **Search** feature is required when creating reports and is used to select what properties to search for when running the report. To adjust the search properties of the report, you need to adjust the **Search On** feature in the **Reports** screen and also options for how the information is displayed in the **Report Settings** toolbar, as shown in the image below.

Search On

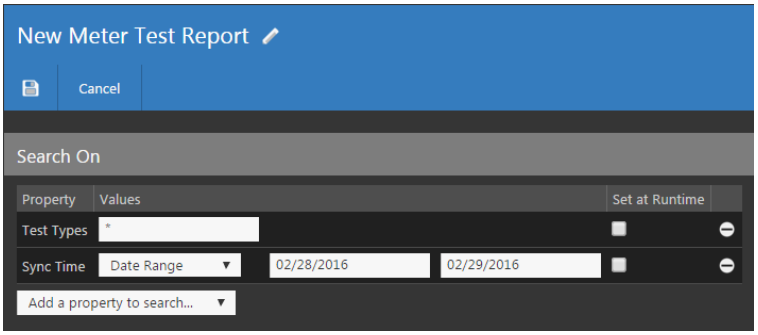
To add a search property, select the desired search property from the **Search On** dropdown box.

- The search properties that are shown are dependent on the type of report that was selected when creating the report.
- Multiple search properties can be added to allow searches of various types of data fields in the same report.
- Each search property is displayed and searched in the order in which it was added to the report.



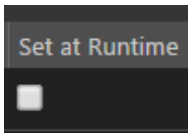
Once you have selected **Search On** properties for the report, the **Search On** properties will appear in the reports screen as follows. Enter a specific search term in the **Values** field that will be searched for every time a user runs this report. In this example, the search is being done on all types of tests synced in the last few days. The asterisk (*) can be used as a wildcard to return “All” results for a specific search field.

- Displayed in the **Search On** table as shown in the image to the right.



Set at Runtime

To allow custom searches by each user at runtime of the report, leave the **Values** field blank and select the **Set at Runtime** checkbox of corresponding search property.



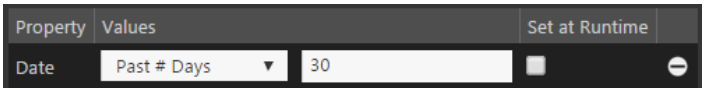
Alphanumerical Values

The **Values** field can be used to enter a custom text string or number value to be searched for when running the report. Any numbers, letters, or characters can be entered into this type of field.

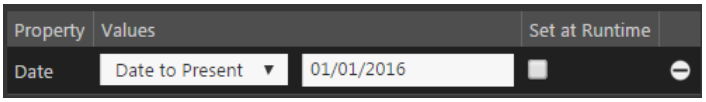
Date Values

The **Values** field can be used to enter a specific period of time to be searched for when running the report. The following types of date searches can be performed:

- If the **Values** field is set to **Today**, **Yesterday**, **This Week**, **Last Week**, **This Month**, **Last Month**, **This Year** or **Last Year** as shown in the image to the right, there are no other search criteria required.

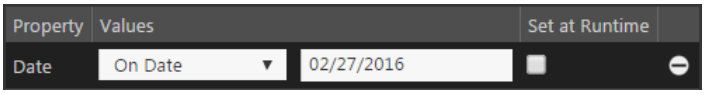


- If the **Values** field is set to **Past Number of Days** as shown in the image to the right, enter the number of days in the search field.



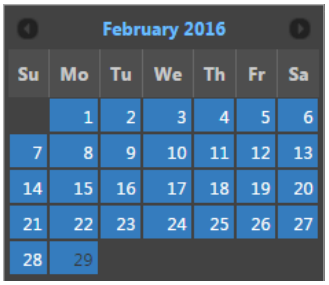
- If the **Values** field is set to **Date to Present** as shown in the image to the right, enter the starting date of the range in the search field.

- If the **Values** field is set to **Date Range** as shown in the image to the right, enter the starting and ending dates of the range in the search field.



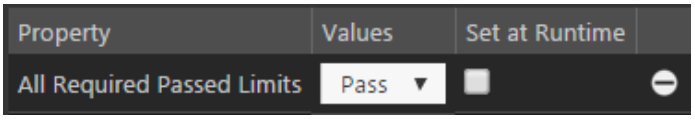
- If the **Values** field is set to **On Date**, **On or Before**, or **On or After** as shown in the image to the right, enter the exact date, start date, or end date in the search field.

For fields that require you to enter a specific date, select the **Values** field below the selected type of date search. A calendar will be displayed as shown in the image to the right with the current day marked in gray. Use the gray arrows in each of the upper corners to move the calendar backward and forward. Select the date from the calendar and the corresponding **Values** field will update to reflect the new date.



Numerical Data Values

The **Values** field can be used to enter a specific numerical value to be searched for when running the report. The following types of numerical data searches can be performed:

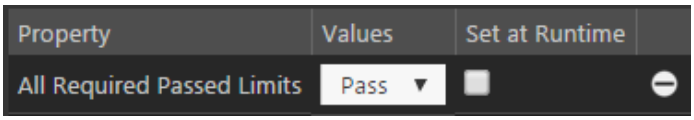


- If the **Values** field is set to **Range** as shown in the image to the right, enter the start and end values of the numerical range.

- If the **Values** field is set to **Less Than, Less Than or Equal, Greater Than, Greater Than or Equal or Equals** as shown in the image to the right, enter the corresponding value to search for.

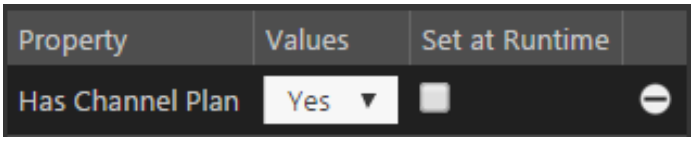
Pass/Fail Values

The **Values** field can be used to enter pass and fail conditions to be searched for when running the report. After adding a pass/fail search property to the report, select either **Pass** or **Fail** from the **Values** field as shown in the image to the right.



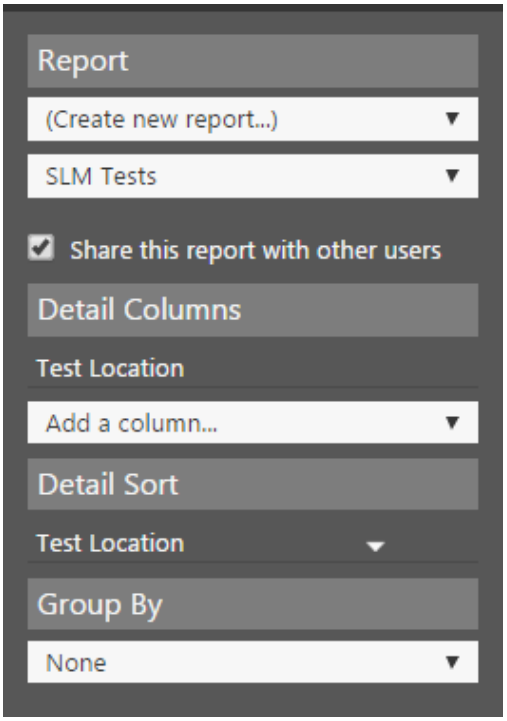
Yes/No Values

The **Values** field can be used to enter yes and no conditions to be searched for when running the report. After adding a yes/no search property to the report, select either **Yes** or **No** from the **Values** field as shown in the image to the right.



Grouping Search Results

The **Grouping** feature is optional when creating reports and is used to group similar types of data together when running the report. To add groups to the report, select the **Group By** dropdown box from the **Report Settings** toolbar as shown in the image to the right.

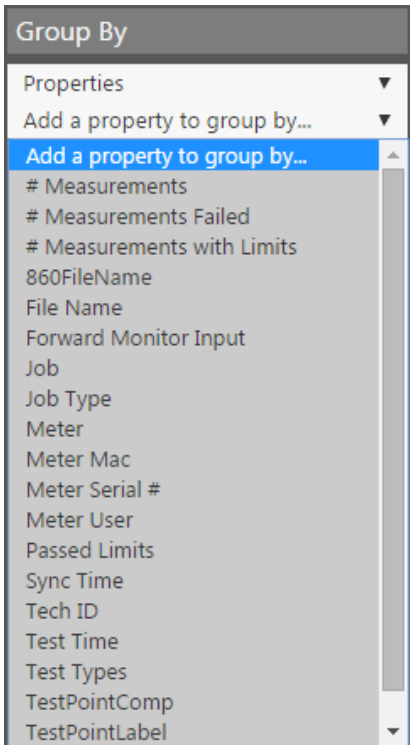


Group by Folders

To group all search results by location within the organization, select **Folders** from the **Group By** dropdown box. This grouping will appear above any other **Group By** settings defined by the user.

Group By Properties

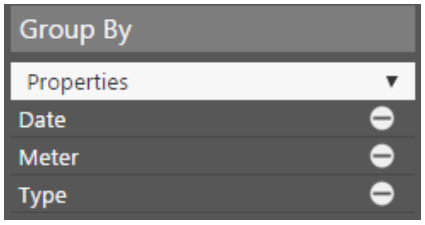
To add a group, select **Properties** from the **Group By** dropdown box and then select the desired property to group by from the **Add a property to group by...** dropdown box as shown in the image to the right.



- The displayed properties to group by are dependent on the type of report that was selected when creating the report.
- Multiple properties to group by can be added for grouping of various types of data fields in the same report.
- Each grouping property is displayed and grouped in the order in which it was added to the report.

Once you have selected **Group By** properties for the report, the **Group By** settings will appear in the **Report Settings** toolbar.

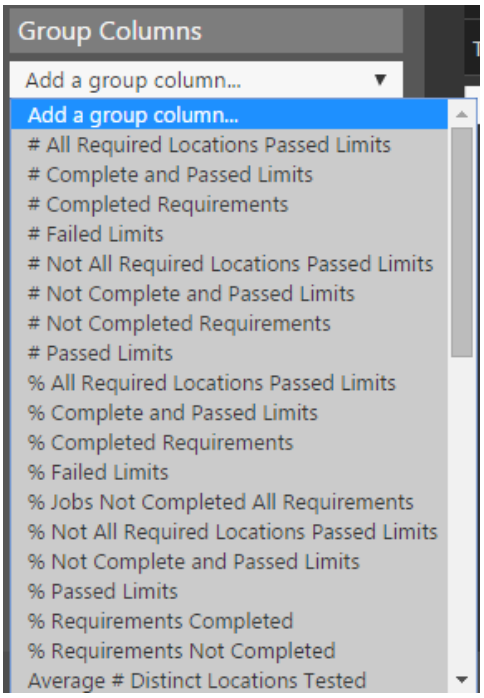
- Displayed in the **Group By** table as shown in the image to the right. The order of the grouping can be adjusted by dragging and dropping the items.



In this example, the grouping is being done by **Date**, **Meter**, and **Type**.

Group Columns

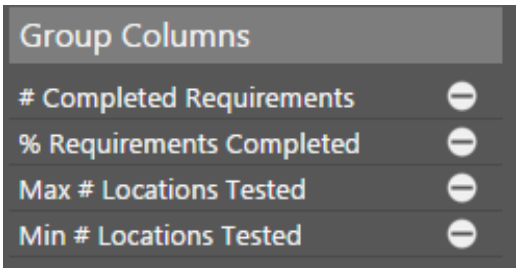
To add group columns to the report, select the **Group Columns** dropdown box from the **Report Settings** toolbar as shown in the image to the right. This feature is used to select what types of aggregate test data to display with each group after running a report. Multiple group columns can be created for each report and they will be displayed in the order in which they were selected.



Each level of grouping in the report from the top level to the last group at the bottom level will display the same group columns. This allows you view summary results for each group as you drill down from top to bottom through the grouped test results.

Once you have selected **Group Columns** properties for the report, the **Group Columns** properties will appear in the **Report Settings** toolbar as follows.

- Displayed in the **Group Columns** table as shown in the image to the right. The order of the grouping can be adjusted by dragging and dropping items.

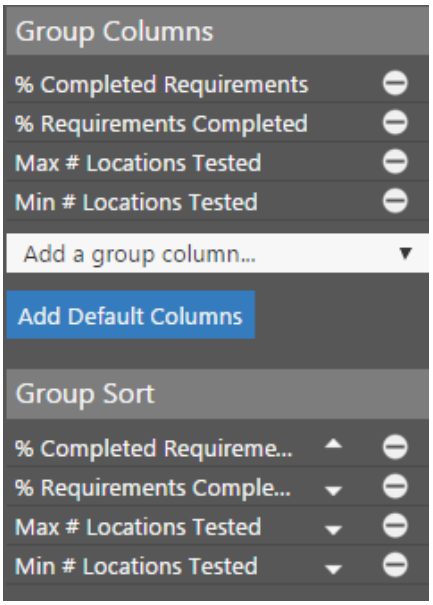


In this example, the columns displayed with each group are **# Completed Requirements**, **% Requirements Completed**, **Max Locations Tested** and **Min Locations Tested**.

Group Sorting

Once you have selected **Group Columns** for sorting, the **Group Sort** properties will appear in the **Report Settings** toolbar as follows. Group Sort allows you to reorder the group columns.

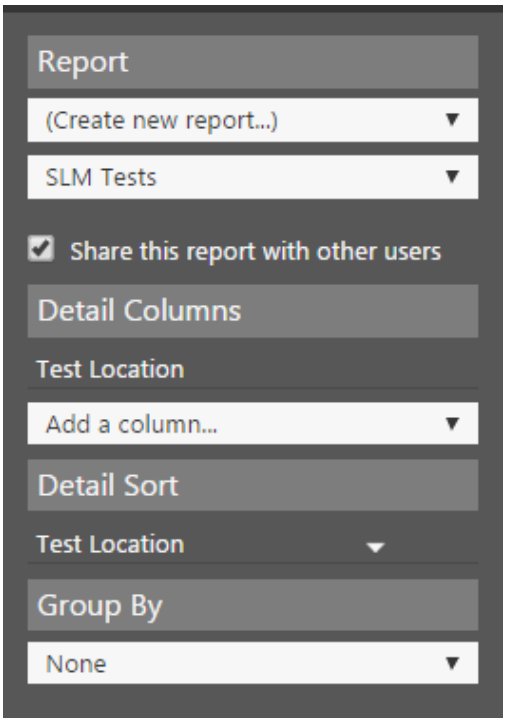
- Displayed in the **Group Sort** table as shown in the image to the right. The order of the sorting can be adjusted by dragging and dropping items.



In this example, the **% Completed Requirements** column is sorted in ascending order and the **% Requirements Completed** column is sorted in descending order. To toggle the ascending/ descending sort order, simply select the arrow to the right of each group sorting property.

Search Result Details Columns

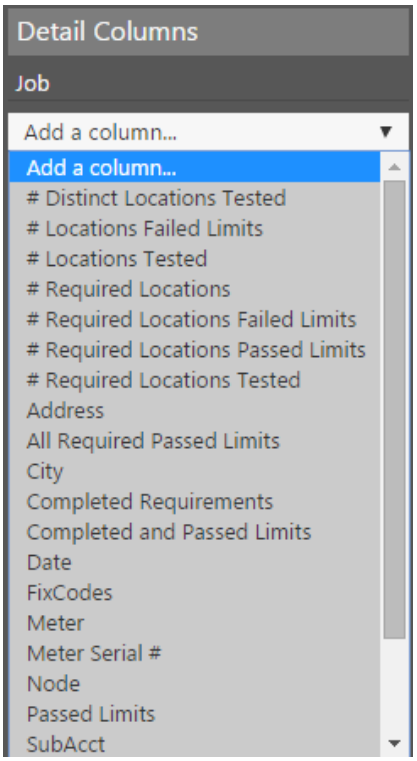
The **Details** feature is required when creating reports and is used to select which detailed search result columns to display when running the report.



Details Columns

To add a details column, select the column from the **Details Column** dropdown box as shown in the image to the right.

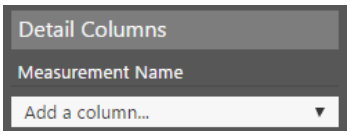
- Multiple details columns can be added to display multiple types of data fields in the same report.
- Each details column is displayed in the order in which it was added to the report.
- By default, one details column is included in the report based on the type of report that was selected when creating the report. The default columns for each type of report are as follows:
  - **SLM Jobs** – Job Number
  - **SLM Job Compliance** – Job Number
  - **SLM Tests** – Test Location
  - **SLM Test Detail** – Measurement Range



SLM Job Report

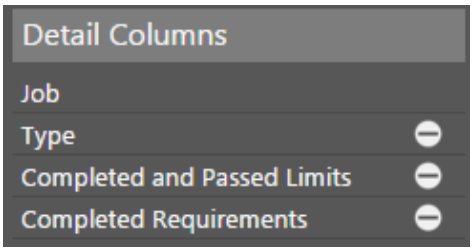
SLM Job Compliance

SLM Test Report



SLM Test Detail

Once you have selected **Details Columns** properties for the report, the **Details Columns** settings will appear in the **Report Settings** toolbar as follows.

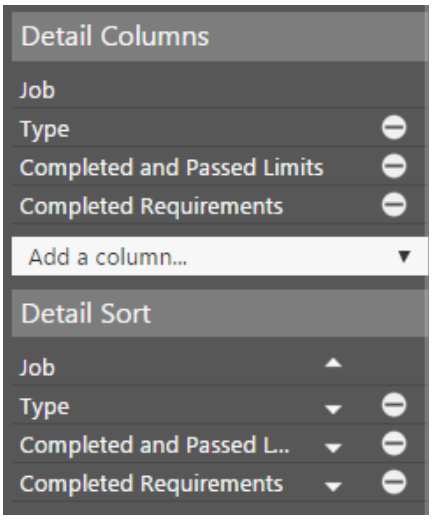


- Displayed in the **Details Columns** table as shown in the image to the right. The order of the grouping can be adjusted by dragging and dropping items.

In this example, the details being displayed are the **Job** (default required), **Type**, **Complete and Passed Limits** and **Completed Requirements**.

Details Columns Sorting

Once you have selected **Details Columns** for sorting, the **Details Sort** properties will appear in the **Report Settings** toolbar as follows. Details Sort allows you to reorder the details columns.



- Displayed in the **Detail Sort** table as shown in the image to the right. The order of the sorting can be adjusted by dragging and dropping items.

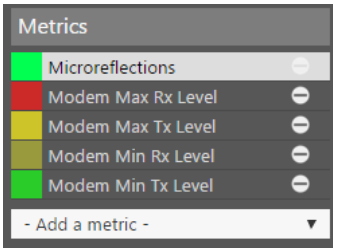
In this example, the **Job** column is sorted in ascending order and the **Type** column is sorted in decending order. To toggle the ascending/descending sort order, simply select the arrow to the right of each detail sorting property.

Modem Watch Lists

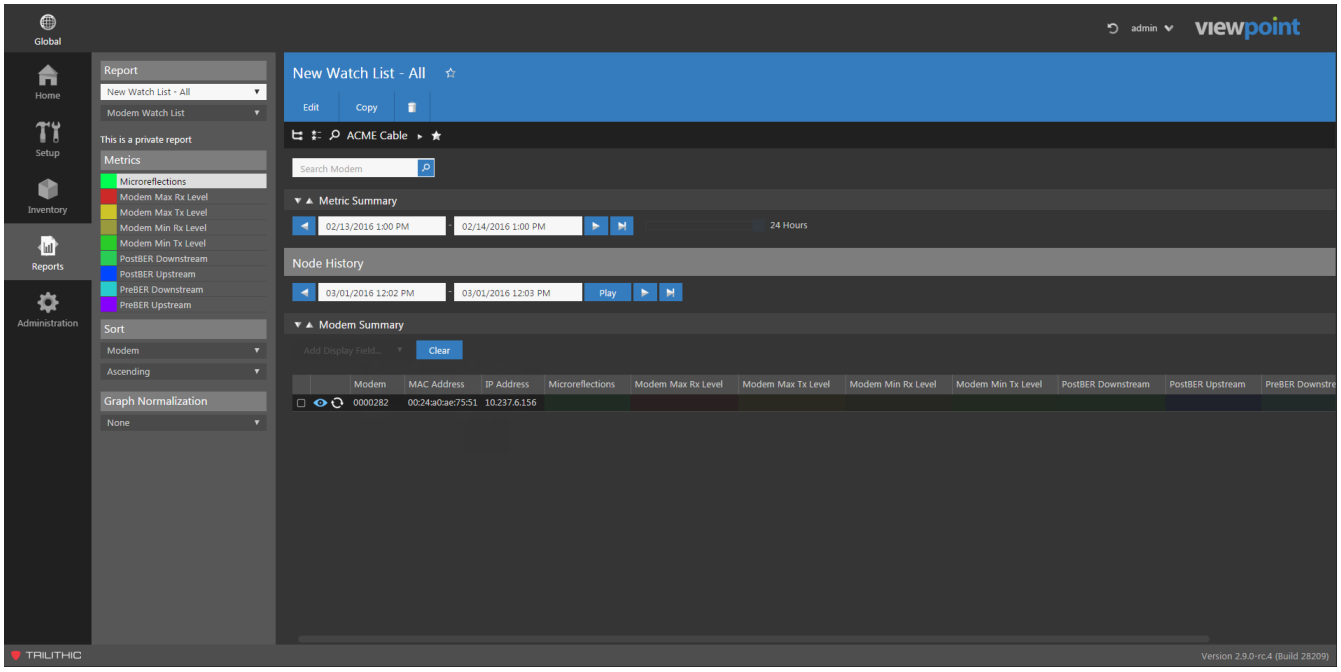
Similar to meter reports, the **Modem Watch List** feature is used to create reports to detail the metrics of the modems in your organization and is used to select what report results are displayed.

Metrics

To add metrics columns, select the metric from the **Add a metric** dropdown box as shown in the image to the right.

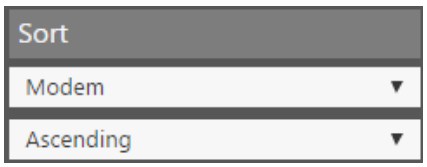


Metrics are managed in the Administration Settings. See ***Section II: Site Administration, Chapter 3: Setup, Metrics*** for more information.



Sort

To sort the watchlist columns, select **Modem** or **Metric** and **Ascending** or **Descending** from the **Sort** dropdown boxes as shown in the image to the right.

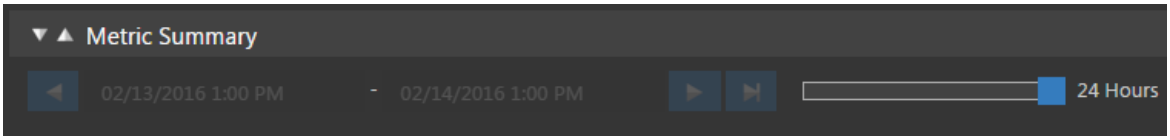


Graph Normalization

To normalize the watchlist graph, select **Metric** or **None** from the **Graph Normalization** dropdown box as shown in the image to the right.

Time Frame

To adjust the time frame for the watchlist, select the time slider from the **Modem Watch List** screen. You can choose between **1** and **24** hours as shown in the image below.

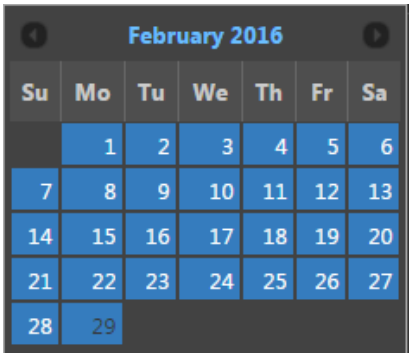


When finished making changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving.

Adjusting the Time Frame

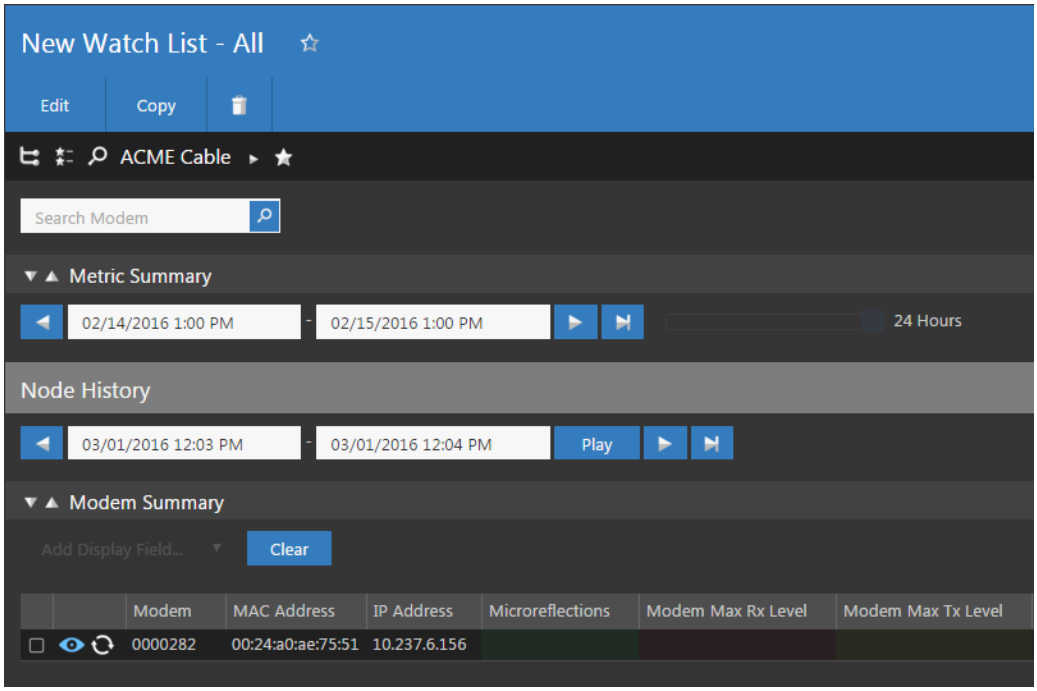
Perform the following steps to adjust the watch list time frame for the metrics summary and node history:

- To choose the date/time of the time frame displayed by the watch list, select the date/time fields. The date/time picker calendar will be displayed as shown in the image to the right.



  - The current day is marked in gray. To choose the current day at any time, select the **Now** button.
  - Use the gray arrows in each of the upper corners to move the calendar backward and forward one month at a time.
  - Adjust the date by selecting the corresponding day from the calendar.
  - Adjust the time using the time adjustment slider.
  - Select the **Done** button to accept the chosen date and time.

The modems included in the watch list will appear in the table below.



Time Controls

Each of the time buttons within this area (when displayed) will adjust the date/time of the watch list as follows:

Previous Time Duration – Select this button to adjust the measurement period backward in time by the currently selected **Duration**.

Next Time Duration – Select this button to adjust the measurement period forward in time by the currently selected **Duration**. If the selected **End Time** is behind the current date/time by less time than the **Duration**, the **End Time** will be set to the current date/time.

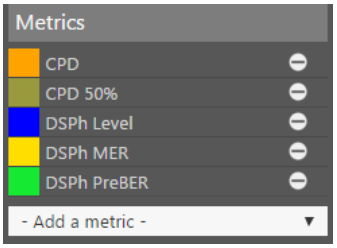
Current Time & Date – Select this button to set the **End Time** of the dashboard to the current date/time.

Node Metrics

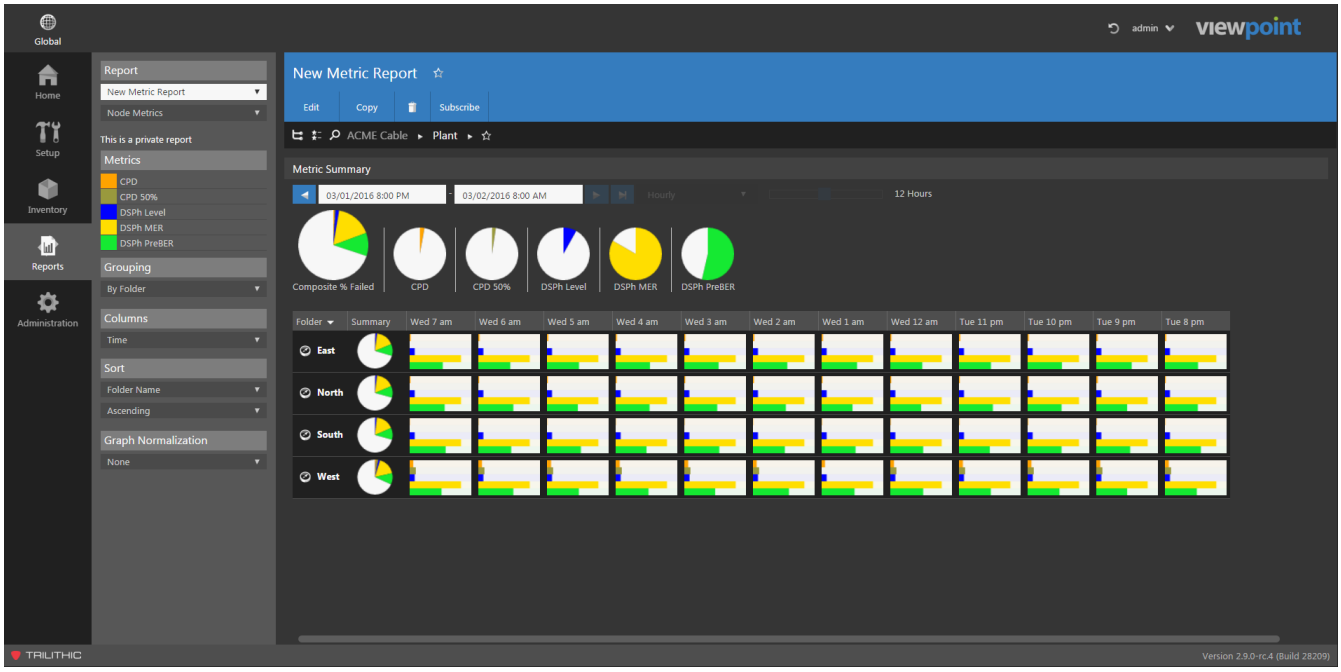
Similar to meter reports and watch lists, the **Node Metrics** feature is used to create reports to detail the metrics of the nodes in your organization and is used to select what report results are displayed.

Metrics

To add metrics columns, select the metric from the **Add a metric** dropdown box as shown in the image to the right.



Metrics are managed in the Administration Settings. See ***Section II: Site Administration, Chapter 3: Setup, Metrics*** for more information.



Grouping

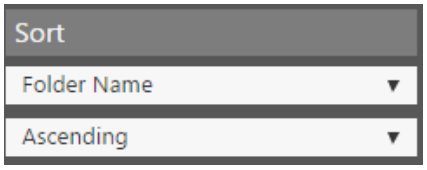
To sort the node metrics columns by folder in the organization tree, select **Folder** from the **Grouping** dropdown box as shown in the image to the right.

Columns

To choose from time or metrics based display types, select **Time** or **Metrics** from the **Columns** dropdown box as shown in the image to the right.

Sort

To sort the node metrics columns, select **Folder Name; Metrics,Summary; Metrics, Most Recent;** or **Ascending** or **Descending** from the **Sort** dropdown boxes as shown in the image to the right.



Graph Normalization

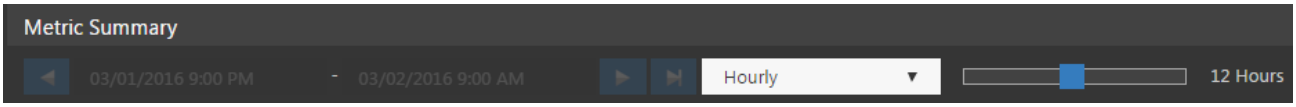
To normalize the node metrics graph, select **By Metric** or **None** from the **Graph Normalization** dropdown box as shown in the image to the right.

Time Frame

When editing metrics, make sure to select the **Edit** button. When finished making changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving. The metrics will then update in the dashboard.

To adjust the time frame for the metrics, select the time slider from the **Node Metrics** screen. You can choose between **1** and **24** hours as shown in the image below.

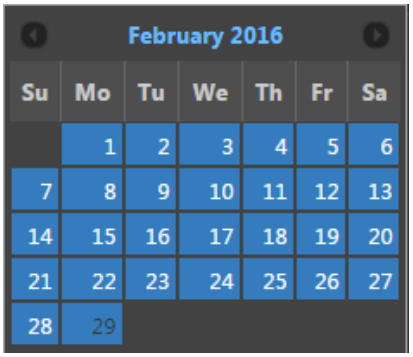
To adjust the time scale, select **Hourly** or **Daily** from the dropdown box.



Adjusting the Time Frame

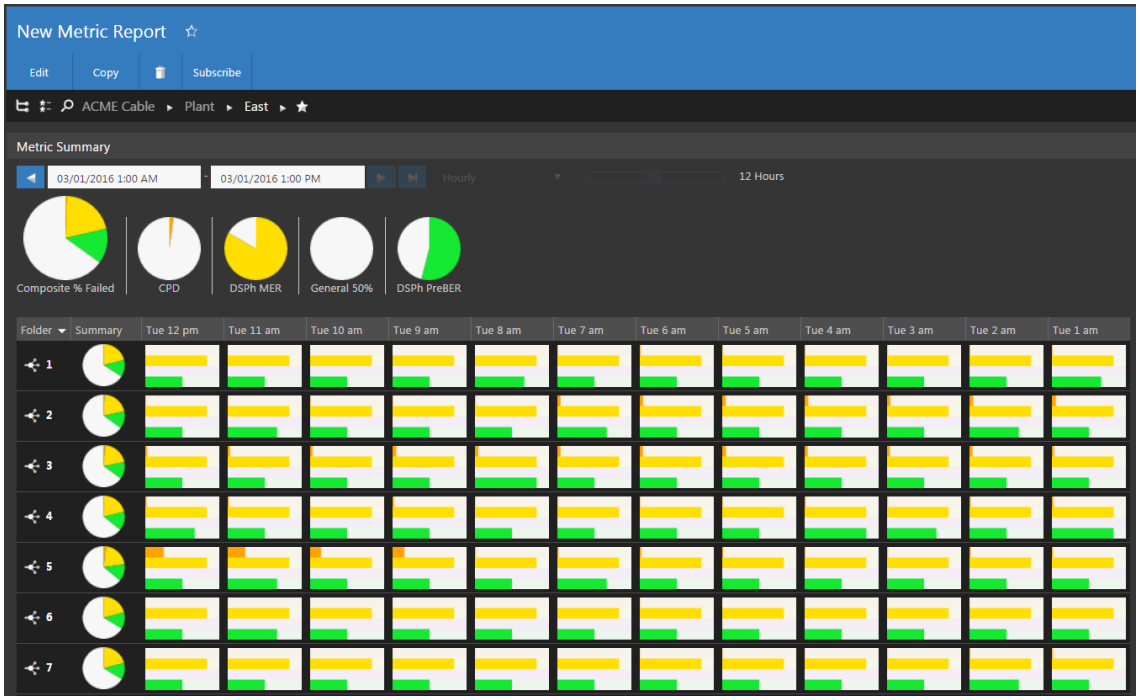
Perform the following steps to adjust the node metrics time frame for the metrics summary:

- To choose the date/time of the time frame displayed by the node metrics, select the date/time fields. The date/time picker calendar will be displayed as shown in the image to the right.



  - The current day is marked in gray. To choose the current day at any time, select the **Now** button.
  - Use the gray arrows in each of the upper corners to move the calendar backward and forward one month at a time.
  - Adjust the date by selecting the corresponding day from the calendar.
  - Adjust the time using the time adjustment slider.
  - Select the **Done** button to accept the chosen date and time.

The node metrics will appear as shown in the image below. We'll cover metric dashboards in more detail in the following chapter.



Time Controls

Each of the time buttons within this area (when displayed) will adjust the date/time of the node metrics as follows:

Previous Time Duration – Select this button to adjust the measurement period backward in time by the currently selected **Duration**.

Next Time Duration – Select this button to adjust the measurement period forward in time by the currently selected **Duration**. If the selected **End Time** is behind the current date/time by less time than the **Duration**, the **End Time** will be set to the current date/time.

Current Time & Date – Select this button to set the **End Time** of the dashboard to the current date/time.

Detailed Report Settings

The following sections provide an outline of the detailed settings that are available when creating reports in the ViewPoint system.

SLM Jobs and SLM Job Compliance Reports

The following settings are available when **SLM Jobs or SLM Job Compliance** was selected when creating the report. All measurement results can optionally be grouped by Folders.

Data Fields		Search On	Actions when Selected for Search On	Detail Columns	Group By
Job					
Select any of the following types of search items from the Job drop down menu:					
Job	Range	✓	Enter the beginning and ending search values	✓	✓
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Job Details					
Type		✓	Enter the type of job that was performed	✓	✓
Tech ID		✓	Enter the technician ID	✓	✓
Sub Account		✓	Enter the subscriber account number for the job	✓	✓
Address		✓	Enter the address where the job was performed	✓	✓
City		✓	Enter the city where the job was performed	✓	✓
Zip		✓	Enter the zip code where the job was performed	✓	✓
Fix Codes		✓	Enter the fix codes for the job	✓	✓
Node		✓	Enter the node where the job was performed	✓	✓
User Edited		✓	Select True or False condition	✓	

Data Fields		Search On	Actions when Selected for Search On	Detail Columns	Group By
Date					
Select any of the following types of search items from the Date drop down menu:					
Date	Today	✓	No further action needed	✓	✓
	This Week				
	This Month				
	This Year				
	Yesterday				
	Last Week				
	Last Month				
	Last Year				
	Past # Days		Enter the past number of days		
	Date to Present		Enter a start date for the search		
	Date Range		Enter a start and end date for the search		
	On Date		Enter the exact day for the search		
	On or Before		Enter the date for the search to start before		
	On or After		Enter the date for the search to start after		
Locations Tested					
Select any of the following types of search items from the Locations Tested drop down menu:					
Locations Tested	Range	✓	Enter the beginning and ending search values	✓	✓
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Additional Group Columns					Average
					Maximum
					Minimum
					Total

Data Fields		Search On	Actions when Selected for Search On	Detail Columns	Group By
Locations Failed Limits					
Select any of the following types of search items from the Locations Failed Limits drop down menu:					
Locations Failed Limits	Range	✓	Enter the beginning and ending search values	✓	✓
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Additional Group Columns					Average
					Maximum
					Minimum
					Total
Distinct Locations Tested					
Select any of the following types of search items from the Distinct Locations Tested drop down menu:					
Distinct Locations Tested	Range	✓	Enter the beginning and ending search values	✓	✓
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Additional Group Columns					Average
					Maximum
					Minimum
					Total
Required Locations					
Select any of the following types of search items from the Required Locations drop down menu:					
Required Locations	Range	✓	Enter the beginning and ending search values	✓	✓
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Additional Group Columns					Average
					Maximum
					Minimum
					Total

Data Fields		Search On	Actions when Selected for Search On	Detail Columns	Group By
Required Locations Tested					
Select any of the following types of search items from the Required Locations Tested drop down menu:					
Required Locations Tested	Range	✓	Enter the beginning and ending search values	✓	✓
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Additional Group Columns					Average
					Maximum
					Minimum
					Total
Required Locations Failed Limits					
Select any of the following types of search items from the Required Locations Failed Limits drop down menu:					
Required Locations Failed Limits	Range	✓	Enter the beginning and ending search values	✓	✓
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Additional Group Columns					Average
					Maximum
					Minimum
					Total
Required Locations Passed Limits					
Select any of the following types of search items from the Required Locations Passed Limits drop down menu:					
Required Locations Passed Limits	Range	✓	Enter the beginning and ending search values	✓	✓
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Additional Group Columns					Average
					Maximum
					Minimum
					Total

Data Fields	Search On	Actions when Selected for Search On	Detail Columns	Group By
Completed Requirements				
Completed Requirements	✓	Select True or False condition	✓	✓
Additional Group Columns				#
				# Not
				%
				% Not
All Requirements Passed Limits				
All Requirements Passed Limits	✓	Select True or False condition	✓	✓
Additional Group Columns				#
				# Not
				%
				% Not
Complete and Passed Limits				
Complete and Passed Limits	✓	Select True or False condition	✓	✓
Additional Group Columns				#
				# Not
				%
				% Not

SLM Test Reports

The following settings are available when **SLM Tests** was selected when creating the report. All measurement results can optionally be filtered and grouped by Folders.

Data Fields		Search On	Actions when Selected for Search On	Display Columns	Group By
Test Information					
Test Location		✓	Enter the name of the test location	✓	✓
Tech ID		✓	Enter the technician ID	✓	✓
Meter User		✓	Enter the name of the meter user	✓	✓
Meter MAC		✓	Enter the meter MAC number	✓	✓
Job		✓	Enter the job number	✓	✓
Job Type		✓	Enter the job type	✓	✓
Test Type		✓	Enter the test type	✓	✓
Pass/Fail		✓	Select Pass or Fail condition	✓	✓
Failed Type		✓	Enter the failure type	✓	✓
Forward Monitor Input		✓	Enter the number of the forward monitor input	✓	✓
Test Time					
Select any of the following types of search items from the Test Time drop down menu:					
Test Time	Today	✓	No further action needed	✓	✓
	This Week				
	This Month				
	This Year				
	Yesterday				
	Last Week				
	Last Month				
	Last Year				
	Past # Days		Enter the past number of days		
	Date to Present		Enter a start date for the search		
	Date Range		Enter a start and end date for the search		
	On Date		Enter the exact day for the search		
	On or Before		Enter the date for the search to start before		
	On or After		Enter the date for the search to start after		
Sync Time					

Data Fields		Search On	Actions when Selected for Search On	Display Columns	Group By
Select any of the following types of search items from the Sync Time drop down menu:					
Sync Time	Today	✓	No further action needed	✓	✓
	This Week				
	This Month				
	This Year				
	Yesterday				
	Last Week				
	Last Month				
	Last Year				
	Past # Days		Enter the past number of days		
	Date to Present		Enter a start date for the search		
	Date Range		Enter a start and end date for the search		
	On Date		Enter the exact day for the search		
	On or Before		Enter the date for the search to start before		
	On or After		Enter the date for the search to start after		
Measurements					
Select any of the following types of search items from the Measurements drop down menu:					
Measurements	Range	✓	Enter the beginning and ending search values	✓	✓
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Additional Group Columns					Average
					Maximum
					Minimum
					Total
Measurements with Limits					

Data Fields		Search On	Actions when Selected for Search On	Display Columns	Group By
Select any of the following types of search items from the Measurements with Limits drop down menu:					
Measurements with Limits	Range	✓	Enter the beginning and ending search values	✓	✓
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Additional Group Columns					Average
					Maximum
					Minimum
					Total
Measurements Failed					
Select any of the following types of search items from the Measurements Failed drop down menu:					
Measurements Failed	Range	✓	Enter the beginning and ending search values	✓	✓
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Additional Group Columns					Average
					Maximum
					Minimum
					Total

SLM Test Detail Reports

The following settings are available when **SLM Test Detail** was selected when creating the report.

Data Fields		Search On	Actions when Selected for Search On	Display Columns	Group By
Measurement Name		✓	Enter the name of the measurement	✓	✓
Test Name		✓	Enter the name of the test	✓	✓
Location Name		✓	Enter the name of the location	✓	✓
Start Time					
Select any of the following types of search items from the Start Time drop down menu:					
Start Time	Today	✓	No further action needed	✓	✓
	This Week				
	This Month				
	This Year				
	Yesterday				
	Last Week				
	Last Month				
	Last Year				
	Past # Days		Enter the past number of days		
	Date to Present		Enter a start date for the search		
	Date Range		Enter a start and end date for the search		
	On Date		Enter the exact day for the search		
	On or Before		Enter the date for the search to start before		
	On or After		Enter the date for the search to start after		

Data Fields		Search On	Actions when Selected for Search On	Display Columns	Group By
End Time					
Select any of the following types of search items from the End Time drop down menu:					
End Time	Today	✓	No further action needed	✓	✓
	This Week				
	This Month				
	This Year				
	Yesterday				
	Last Week				
	Last Month				
	Last Year				
	Past # Days		Enter the past number of days		
	Date to Present		Enter a start date for the search		
	Date Range		Enter a start and end date for the search		
	On Date		Enter the exact day for the search		
	On or Before		Enter the date for the search to start before		
	On or After		Enter the date for the search to start after		
Minimum Limit					
Select any of the following types of search items from the Minimum Limit drop down menu:					
Minimum Limit	Range	✓	Enter the beginning and ending search values	✓	✓
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Additional Group Columns					Average
					Maximum
Maximum Limit					
Select any of the following types of search items from the Maximum Limit drop down menu:					
Maximum Limit	Range	✓	Enter the beginning and ending search values	✓	✓
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Additional Group Columns					Average
					Minimum

Data Fields		Search On	Actions when Selected for Search On	Display Columns	Group By
Limit Set					
Has Limit Set		✓	Select Yes or No condition	✓	
Limit Set Is Latest		✓	Select True or False condition	✓	
Limit Set		✓	Enter the name of the limit set	✓	✓
Limit Set Organization		✓	Enter the name of the limit set organization	✓	✓
Limit Set Last Updated					
Select any of the following types of search items from the Limit Set Last Upload drop down menu:					
Limit Set Last Upload	Today	✓	No further action needed	✓	✓
	This Week				
	This Month				
	This Year				
	Yesterday				
	Last Week				
	Last Month				
	Last Year				
	Past # Days		Enter the past number of days		
	Date to Present		Enter a start date for the search		
	Date Range		Enter a start and end date for the search		
	On Date		Enter the exact day for the search		
	On or Before		Enter the date for the search to start before		
	On or After		Enter the date for the search to start after		
Total Measurements					
Select any of the following types of search items from the Total Measurements drop down menu:					
Total Measurements	Range	✓	Enter the beginning and ending search values	✓	✓
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Additional Group Columns					Total
					% Failed
					% Passed

Data Fields		Search On	Actions when Selected for Search On	Display Columns	Group By
Total Measurements Failed					
Select any of the following types of search items from the Total Measurements Failed drop down menu:					
Total Measurements Failed	Range	✓	Enter the beginning and ending search values	✓	✓
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Additional Group Columns					Total
					% Failed
					% Passed
Total Measurements Failed Min					
Select any of the following types of search items from the Total Measurements Failed Min drop down menu:					
Total Measurements Failed Min	Range	✓	Enter the beginning and ending search values	✓	✓
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Additional Group Columns					Total
					% Failed Min
					% Passed Min
Total Measurements Failed Max					
Select any of the following types of search items from the Total Measurements Failed Max drop down menu:					
Total Measurements Failed Max	Range	✓	Enter the beginning and ending search values	✓	✓
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Additional Group Columns					Total
					% Failed Max
					% Passed Max

Data Fields		Search On	Actions when Selected for Search On	Display Columns	Group By
Total Value					
Select any of the following types of search items from the Total Value drop down menu:					
Total Value	Range	✓	Enter the beginning and ending search values	✓	✓
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Additional Group Columns					Total
					Average
Total Value Failed					
Select any of the following types of search items from the Total Value Failed drop down menu:					
Total Value Failed	Range	✓	Enter the beginning and ending search values	✓	✓
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Additional Group Columns					Total
					Average
Total Value Failed Max					
Select any of the following types of search items from the Total Value Failed Max drop down menu:					
Total Value Failed Max	Range	✓	Enter the beginning and ending search values	✓	✓
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Additional Group Columns					Total
					Average

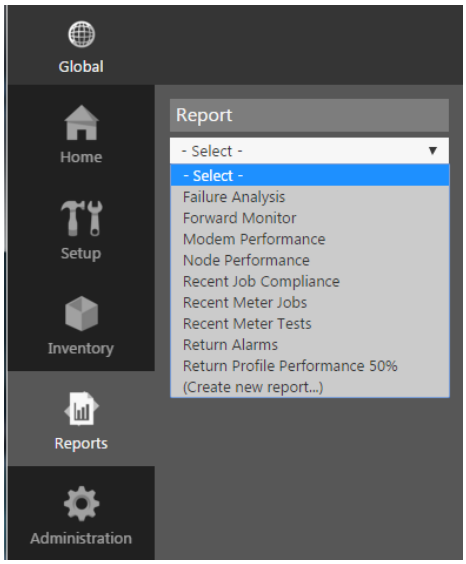
Data Fields		Search On	Actions when Selected for Search On	Display Columns	Group By
Total Value Failed Min					
Select any of the following types of search items from the Total Value Failed Min drop down menu:					
Total Value Failed Min	Range	✓	Enter the beginning and ending search values	✓	✓
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Additional Group Columns					Total
					Average
Channel Information					
Channel		✓	Enter the name of the channel	✓	✓
Channel Type		✓	Enter the name of the channel type	✓	
Channel Center Frequency		✓	Enter the center frequency of the channel	✓	
Channel Center Frequency					
Select any of the following types of search items from the Channel Center Frequency drop down menu:					
Channel Center Frequency	Range	✓	Enter the beginning and ending search values	✓	✓
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Additional Group Columns					Maximum
					Minimum
Channel Number					
Select any of the following types of search items from the Channel Number drop down menu:					
Channel Number	Range	✓	Enter the beginning and ending search values	✓	
	Less Than		Enter a value to search less than		
	Less Than or Equal		Enter a value to search less than or equal to		
	Equals		Enter a value to search equal to		
	Greater Than or Equal		Enter a value to search greater than or equal to		
	Greater Than		Enter a value to search greater than		
Additional Group Columns					Maximum
					Minimum

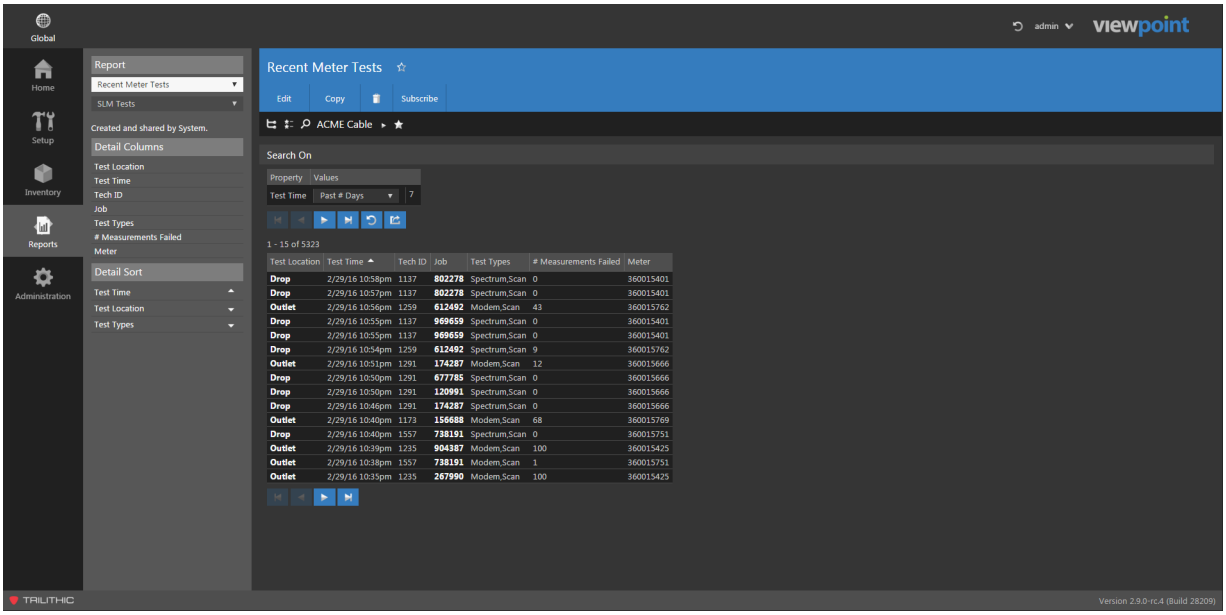
Data Fields		Search On	Actions when Selected for Search On	Display Columns	Group By
Channel Plan Information					
Has Channel Plan		✓	Select Yes or No condition	✓	
Channel Plan Is Latest		✓	Select True or False condition	✓	
Channel Plan		✓	Enter the name of the channel plan	✓	✓
Channel Plan Organization		✓	Enter the name of the channel plan organization	✓	✓
Channel Plan Updated By		✓	Enter the name of the user that last updated the channel plan	✓	
Channel Plan Last Updated					
Select any of the following types of search items from the Channel Plan Last Updated drop down menu:					
Channel Plan Last Updated	Today	✓	No further action needed	✓	✓
	This Week				
	This Month				
	This Year				
	Yesterday				
	Last Week				
	Last Month				
	Last Year				
	Past # Days		Enter the past number of days		
	Date to Present		Enter a start date for the search		
	Date Range		Enter a start and end date for the search		
	On Date		Enter the exact day for the search		
	On or Before		Enter the date for the search to start before		
	On or After		Enter the date for the search to start after		

Running a Report

Perform the following steps to run an existing report from the **Reports** screen:

1. From the **Reports** screen, select the name of the report from the **Reports** dropdown box as shown in the image to the right.
2. Once you have entered the report, it will run automatically and display a list of results as shown in the image below.
3. If the desired report requires a user to enter search criteria, a search field will be provided as shown in the image to the right. Enter the desired values in the search field and the report will automatically refresh to display the corresponding search results.
4. See the examples shown in the following sections for more information on how the report settings affect the final output of the report.

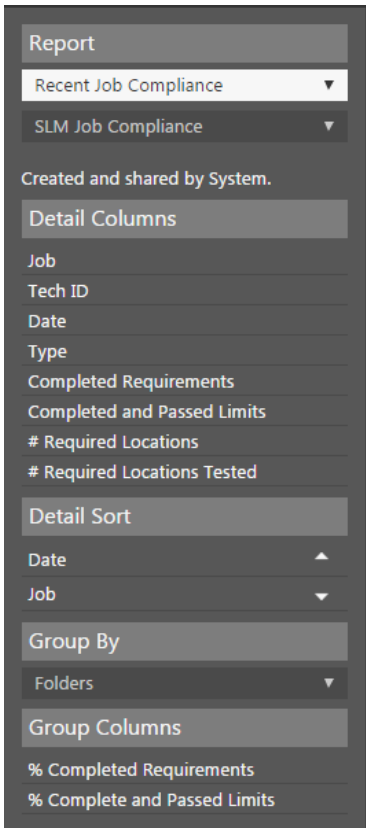




Example Reports

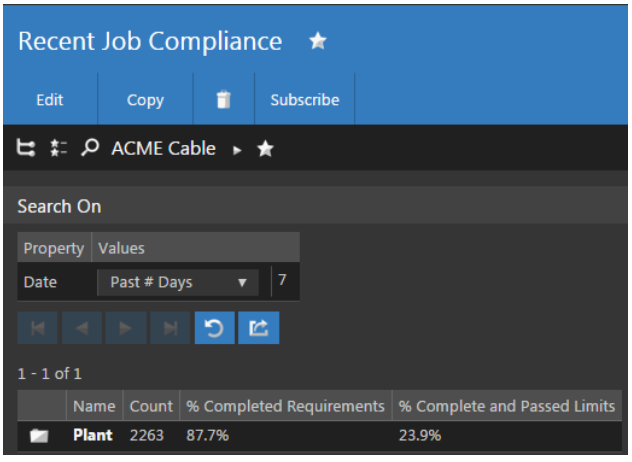
In this example, we will use a **Recent Job Compliance** report that is configured with the settings shown in the image to the right.

Since this report is a type of **SLM Job Report,** the results will display a count of the jobs included in each grouping.



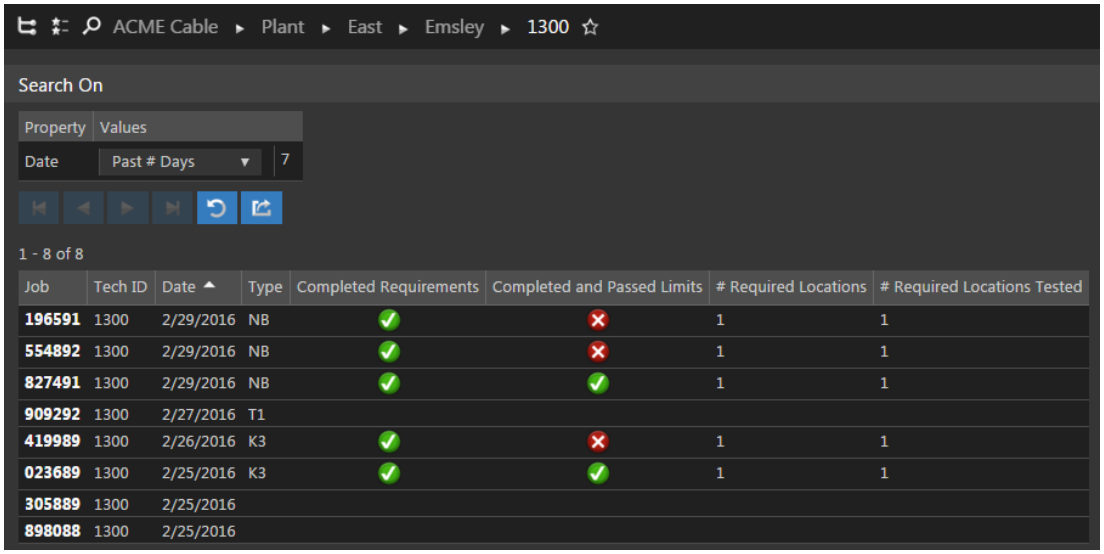
In this example, the report is grouped by organization. The results will be displayed starting with the top level of the organization all the way down to the bottom of the organization, with the current organizational level displayed at the top of the table.

At each level of the grouping, the results table will also display the **% Completed Requirements** and **% Complete and Passed Limits** columns that are selected as shown in the report settings summary table above.



Name	Count	% Completed Requirements	% Complete and Passed Limits
East	774	85.3%	27.3%
North	338	81.1%	24.7%
South	333	90.0%	17.7%
West	818	91.8%	23.0%

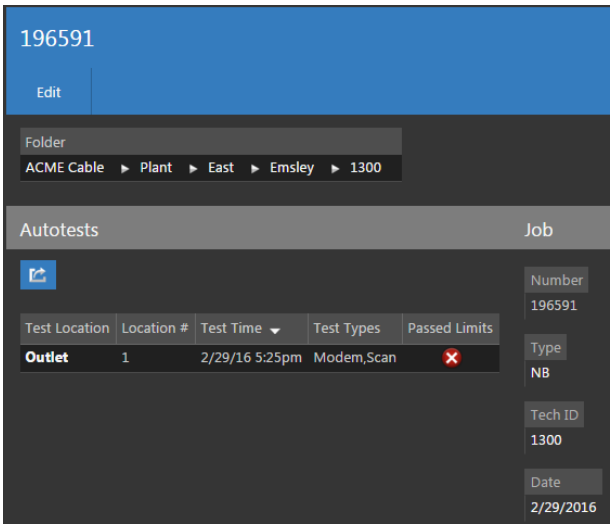
After you have navigated through the organizational levels, you will reach a level where the technicians with jobs reside. After selecting the technician, a list of the jobs will be displayed. In this example, you can see the jobs listed for Technician 1300, as shown below.



Job	Tech ID	Date	Type	Completed Requirements	Completed and Passed Limits	# Required Locations	# Required Locations Tested
196591	1300	2/29/2016	NB	✓	✗	1	1
554892	1300	2/29/2016	NB	✓	✗	1	1
827491	1300	2/29/2016	NB	✓	✓	1	1
909292	1300	2/27/2016	T1				
419989	1300	2/26/2016	K3	✓	✗	1	1
023689	1300	2/25/2016	K3	✓	✓	1	1
305889	1300	2/25/2016					
898088	1300	2/25/2016					

The job results table is sorted by date (ascending) and displays the **Tech ID**, **Date, Type**, **Completed Requirements**, **Completed and Passed Limits**, **Required Locations** and **Required Locations Tested** columns based on the settings shown in the report settings summary table on the previous page.

To view the details of a job, select the job number from the first column of the table. The job details will be displayed as shown in the image to the right.

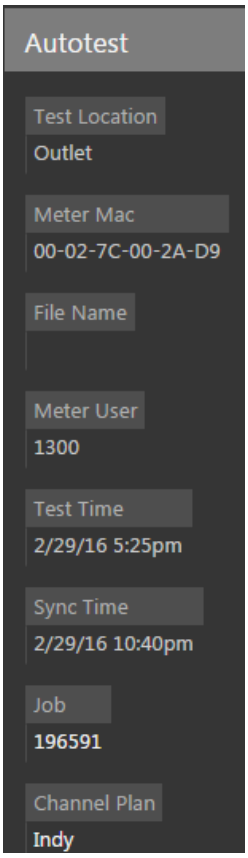


This screen will display the following information:

- Current location of the job within the organization, if sorted by organization.
- Autotest information including; **Test Location**, **Location Number**, **Test Time, Test Types,** and **Pass/Fail**.
- Job information including; **Job Number**, **Meter Type**, **Tech ID**, **Job Creation Date**, **Meter Serial Number**, **Subscriber Account Number**, **Fix Codes**, **Zip Code**, **City**, **Address**, and **Node**.

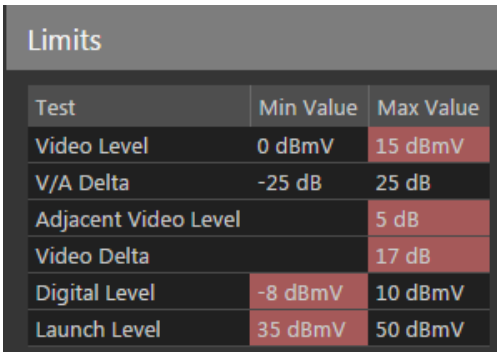
- Summary test information including the number of; **Locations Failed Limits**, **Required Locations Failed Limits**, **Completed Requirements**, **Complete and Passed Limits**, **Required Locations**, **All Required Passed Locations**, **Required Locations Tested**, **Distinct Locations Tested**, **Locations Tested**, and **Required Locations Passed Limits**.

To view the test results at a specific test location, select the location name from the **Test Location** column of the **Autotests** area. The test results page will display the following information:



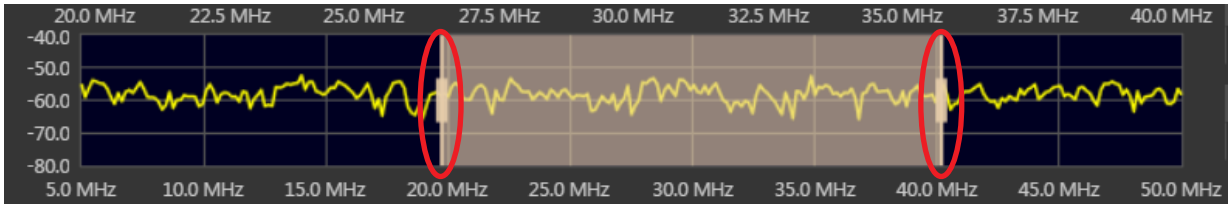
- General
  - **Test Location**
  - **Meter MAC**
  - **Meter User**
  - **Test Time**
  - **Sync Time**
  - **Job Number**
  - **Channel Plan**

- **Limit Set** information including its name and all of the minimum and maximum measurement limits that were enabled during the channel scan autotest. Any failing limits will be highlighted in red as shown in the image to the right. The following limits may appear if they have been enabled in the limit set that was used during the autotest:

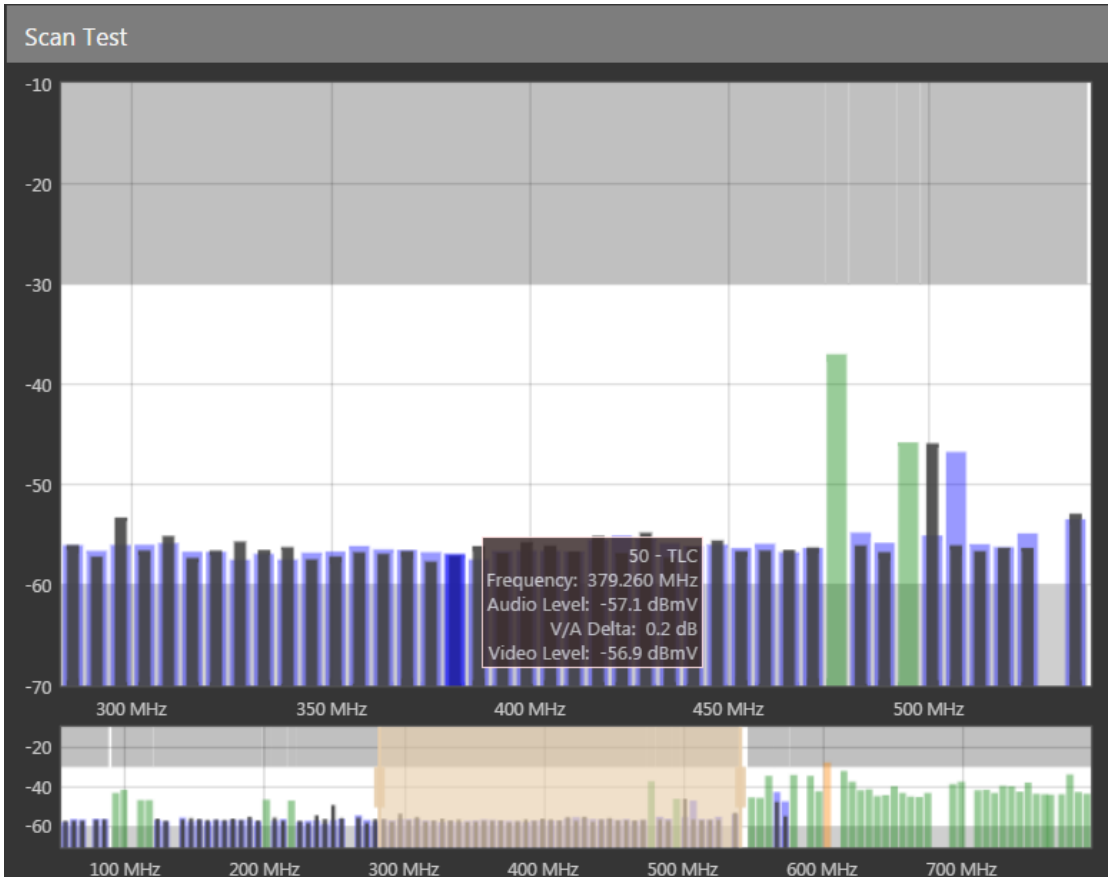


- **Return Spectrum** test results including the maximum ingress level limits that were enabled during this autotest. Any failing limits will be highlighted in red.
    - **Spectrum Limit** – This area is located above the **Return Spectrum Graph** and is used to display the measurement limits of the return spectrum test as shown in the image below. Within the **Return Spectrum Graph**, any failing limits will be indicated by an area shaded in dark red.
    - **Return Spectrum Graph** – This is located in the middle of the **Spectrum** area and is used to display the results of the measurements performed during the return spectrum test. In this area, the following controls are available:
        - Use the mouse to hover over and display a set of green cross hairs to pinpoint exact levels and frequencies.
        - Select the up/down arrows in the upper left corner of the graph to change the maximum amplitude value that is displayed on the graph.
        - Select the up/down arrows in the lower left corner of the graph to change the minimum amplitude value that is displayed on the graph.

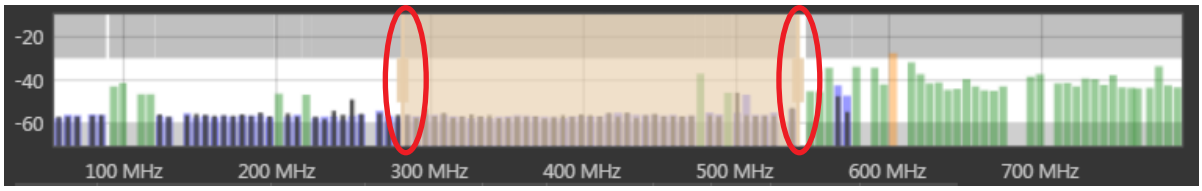
- **Frequency Span Tool** – This area is located directly below the **Return Spectrum Graph** and is used to display a static view of the full return spectrum test and to adjust the following:
    - **Frequency Span** – Click and hold the left mouse button over the zoom handles and then drag the mouse to adjust the span as shown in the following image. The tan area between the zoom handles represents the current span of the display.
    - **Center Frequency** – Click and hold the left mouse button anywhere in the tan area between the zoom handles and then drag the mouse to adjust the center frequency of the span to the left or right.
    - **Toggle Frequency Span** – Double-click the left mouse button anywhere in the tan area between the zoom handles to toggle between a 2 MHz and full span.



- **Scan Test** results for the selected autotest. This area is split into three distinct areas as follows:
    - **Scan Bar Graph** – This is located at the top of the **Scan Test** area and is used to display the results of the measurements performed during the scan test. In this area, use the mouse to hover over any channel to display an information window for the selected channel as shown below.
        - **Analog Channels** – These channels are shown as blue or red vertical bars based on their pass/fail status, where pass = blue and fail = red. Analog channels also include a dark gray vertical bar within their outline that represents the audio level of the channel.
        - **Digital Channels** – These channels are shown as green or yellow vertical bars based on their pass/fail status, where pass = green and fail = yellow.
        - **High/Low Level Limits** – The area above and below the high/low level limits are shaded in light gray as shown in the following image.



- **Bar Graph Zoom Tool** – This area is located directly below the **Scan Bar Graph** and is used to display a static view of the full channel scan frequency spectrum and to adjust the following;
  - **Frequency Span** – Click and hold the left mouse button over the zoom handles and then drag the mouse to adjust the span as shown in the following image. The tan area between the zoom handles represents the current span of the display.
  - **Center Frequency** – Click and hold the left mouse button anywhere in the tan area between the zoom handles and then drag the mouse to adjust the center frequency of the span to the left or right.
  - **Toggle Frequency Span** – Double-click the left mouse button anywhere in the tan area between the zoom handles to toggle between a 2 MHz and full span.



- **Scan Test Details List** – This is located at the bottom of the **Scan Test** area and is used to display a detailed list of the channels and their measurement results. Any failing measurements will be highlighted in red as shown in the image below.

Type	Frequency (MHz)	Number	Name	Level	V/A Delta	C2N	MER	Pre BER	Post BER
Analog	55.250	2	KTVU-2	10.5	14.5				
Analog	61.250	3	KNTV-11	11.6	14.9				
Analog	67.250	4	KRON-4	11.7	14.6				
Analog	77.250	5	KPIX-5	10.3	14.7				
Analog	83.250	6	KICU-36	10.3	14.4				
Digital	93.000	95	BAMS	5.5					
Digital	99.000	96	BAMS 27	5.0			35.8	1e-10	1e-10
Digital	111.000	98	BAM 5	5.6					
Digital	117.000	99	BAM 22	6.1					

- **Modem Test** results for the selected autotest as shown in the image to the right. This area is used to display the results of the modem measurements performed during the autotest. Any failing measurements will be highlighted in red.

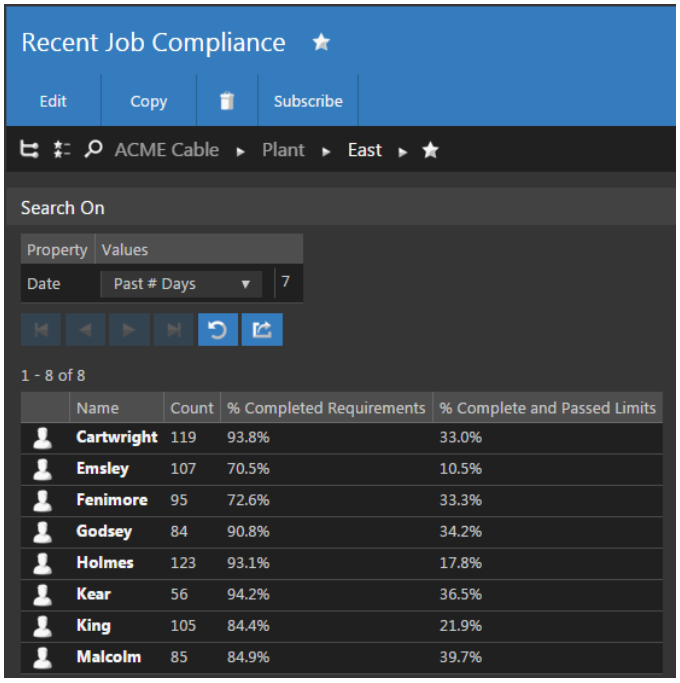
Modem Test

Frequency (MHz)	Type	Id	Launch Level	Digital Level	MER
705.000	Downstream			1.4	33.5
30.600	Upstream	1	43.1		

Copying a Report

Perform the following steps to copy a report:

1. From the **Reports** screen, select the name of the report to copy and the report details screen will be displayed as shown in the image to the right.
2. Select the **Copy** button.
3. Enter a new name for the copied report and then select the **OK** button.
4. Select the **Save** button to save the report.
5. The copied report should now appear with its new name in the reports list.



Deleting a Report

Perform the following steps to delete a report from the system:

1. From the **Reports** screen, select the name of the report to delete and the report details screen will be displayed as shown in the image to the right.
2. Select the **Delete** button.
3. After selecting the **Delete** button, a **Confirm** window will be displayed. Select the **OK** button to proceed with deleting the item or select the **Cancel** button to return to the **Reports** screen where the item will still be displayed.

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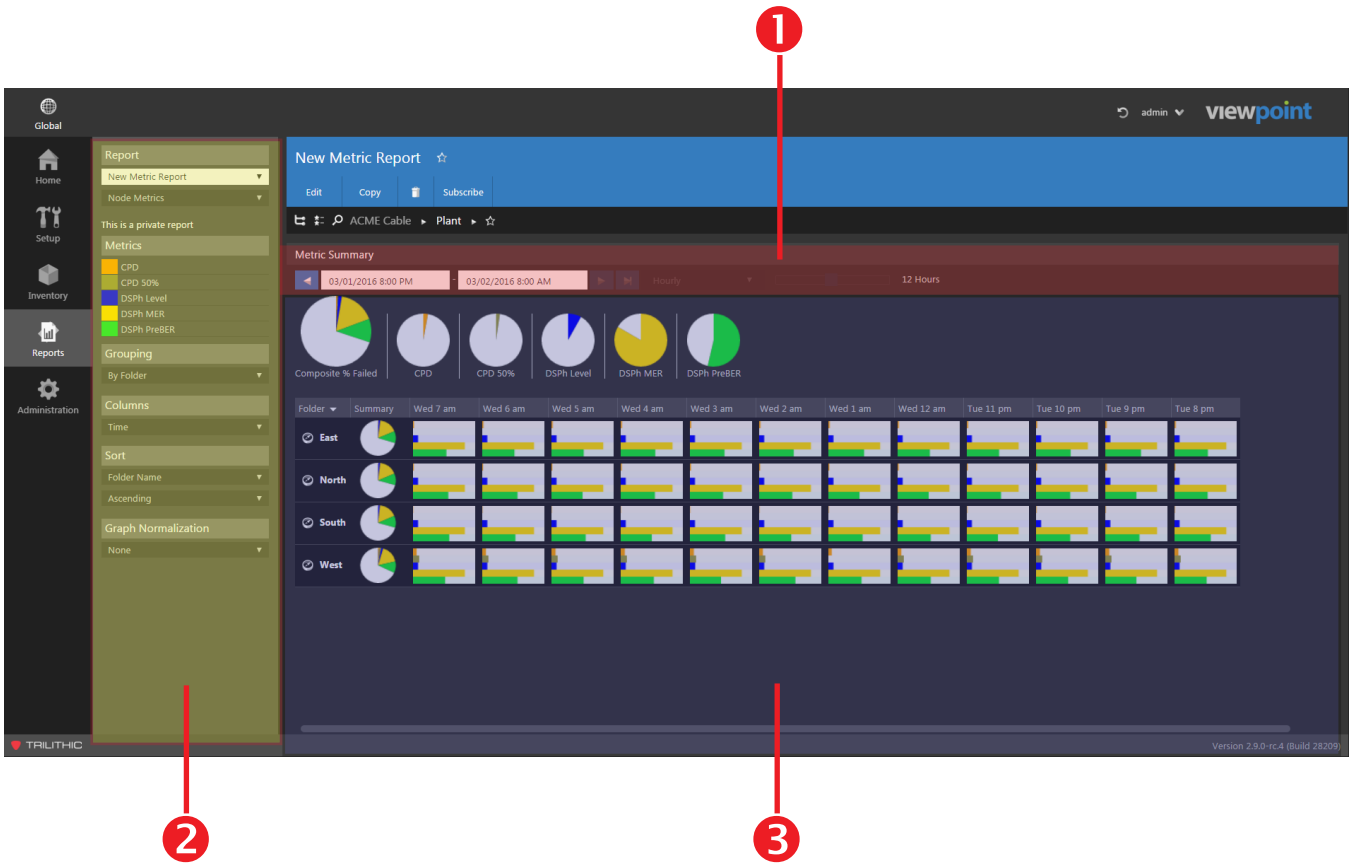
Overview

In the previous chapter, we covered the Reporting features of ViewPoint and gave an overview of Node Metrics. In this chapter we will go into more detail into the node metrics dashboards and show some examples.



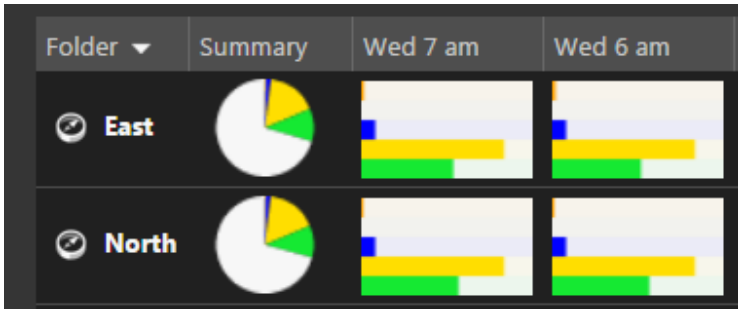
There are three areas within the metrics dashboard that you should become familiar with, the operation of each of these areas is described in the following sections:

1. Time Navigation Menu
2. Report Settings Toolbar
3. Measurement Metrics Dashboard

Time Navigation Menu

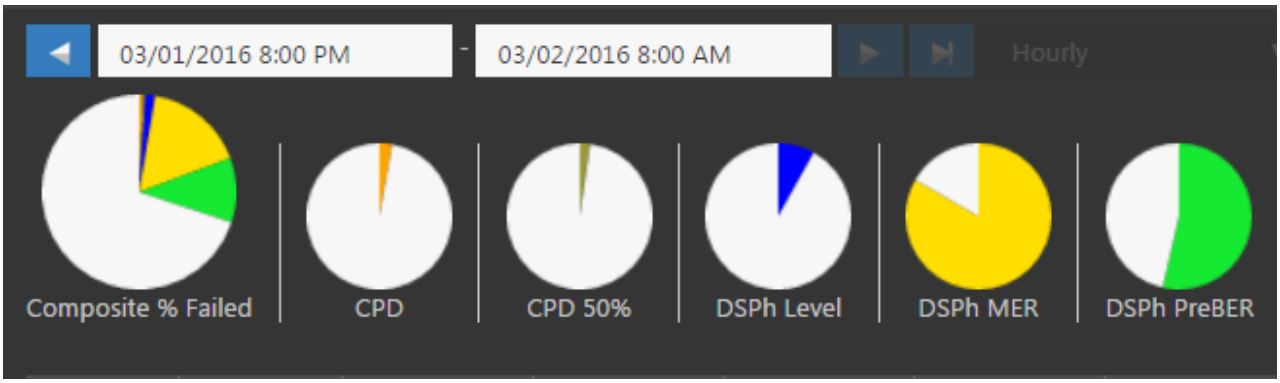
Each dashboard is a collection of measurement metrics displayed graphically over a specified time period. In this section, we will discuss how to adjust the time span of the dashboard.

When **Columns** is set to **Time** in the **Report Settings** toolbar, the last measurement period of the **Time Span** is located directly to the right of the **Summary** pie graph for each item within the dashboard, as shown in the image to the right.



The header row at the top of the table displays the start time of each time period. In this example, the last measurement period of the **Time Span** that is displayed on the dashboard is from 7 AM to 6 AM on Wednesday.

The start/end time of the dashboard will be displayed at the top of the **Composite Metrics** area, as shown in the image below.



Hourly Time Scale

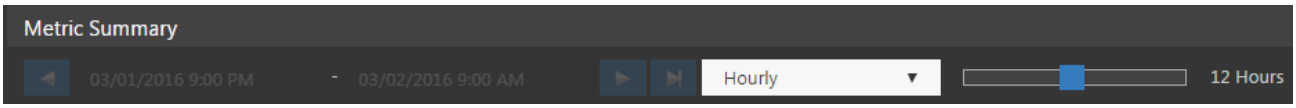
When the **Time Scale** dropdown box is set to **Hourly**, the time frame can be adjusted as shown in the following sections.

Time Frame

When editing metrics, make sure to select the **Edit** button. When finished making changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving. The metrics will then update in the dashboard.

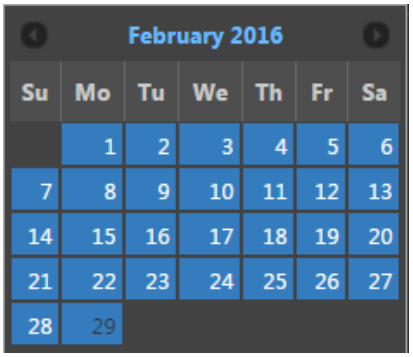
To adjust the time frame for the metrics, select the time slider from the **Node Metrics** screen. You can choose between **1** and **24** hours as shown in the image below.

To adjust the time scale, select **Hourly** from the dropdown box.



Adjusting the Time Frame

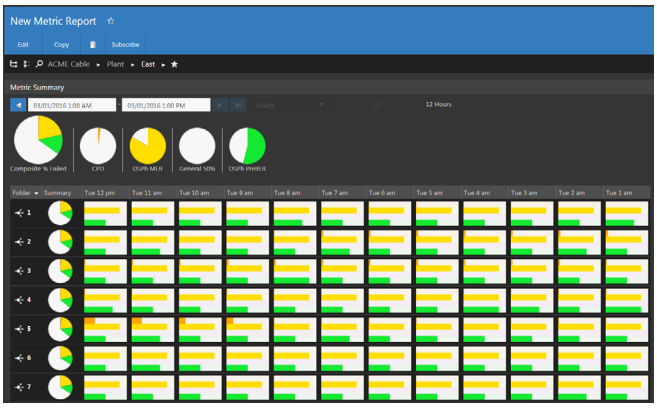
Perform the following steps to adjust the node metrics time frame for the metrics summary:



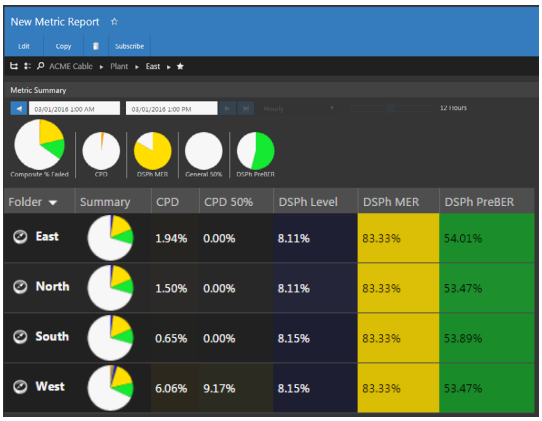
- To choose the date/time of the time frame displayed by the node metrics, select the date/time fields. The date/time picker calendar will be displayed as shown in the image to the right.
    - The current day is marked in gray. To choose the current day at any time, select the **Now** button.
    - Use the gray arrows in each of the upper corners to move the calendar backward and forward one month at a time.
    - Adjust the date by selecting the corresponding day from the calendar.
    - Adjust the time using the time adjustment slider.
    - Select the **Done** button to accept the chosen date and time.

The node metrics will appear as shown in the following image. Depending whether you have **Time** or **Metrics** selected in the **Columns** area of the **Report Settings** toolbar, you could see either of these screens.

We'll discuss more on the differences of these modes later in this chapter.



Columns Set to Time



Columns Set to Metrics

Time Controls

Each of the time buttons within this area (when displayed) will adjust the date/time of the node metrics as follows:

Previous Time Duration – Select this button to adjust the measurement period backward in time by the currently selected **Duration**.

Next Time Duration – Select this button to adjust the measurement period forward in time by the currently selected **Duration**. If the selected **End Time** is behind the current date/time by less time than the **Duration**, the **End Time** will be set to the current date/time.

Current Time & Date – Select this button to set the **End Time** of the dashboard to the current date/time.

Daily Time Scale

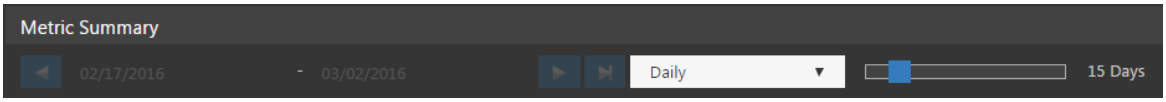
When the **Time Scale** dropdown box is set to **Daily**, the time frame can be adjusted as shown in the following sections.

Time Frame

When editing metrics, make sure to select the **Edit** button. When finished making changes, select the **Save** button to save your changes or select the **Cancel** button to exit without saving. The metrics will then update in the dashboard.

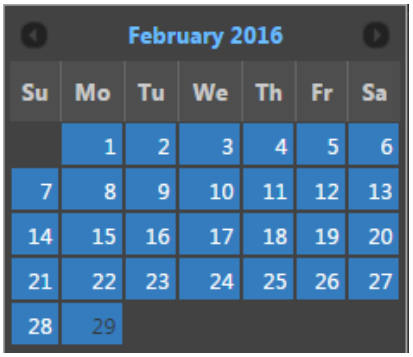
To adjust the time frame for the metrics, select the time slider from the **Node Metrics** screen. You can choose between **1** and **90** days as shown in the image below.

To adjust the time scale, select **Daily** from the dropdown box.



Adjusting the Time Frame

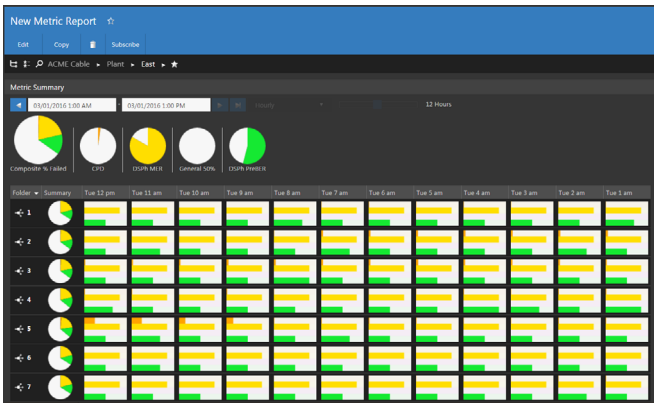
Perform the following steps to adjust the node metrics time frame for the metrics summary:



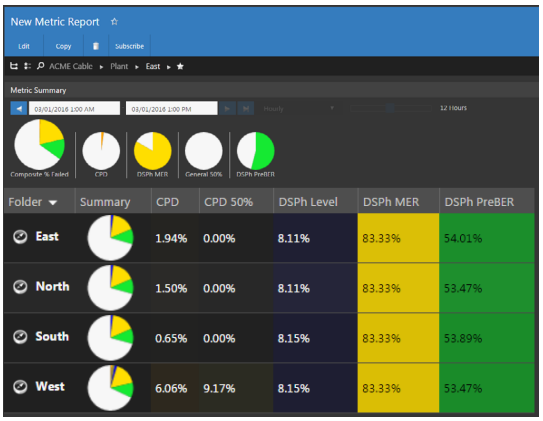
- To choose the date/time of the time frame displayed by the node metrics, select the date/time fields. The date/time picker calendar will be displayed as shown in the image to the right.
    - The current day is marked in gray. To choose the current day at any time, select the **Now** button.
    - Use the gray arrows in each of the upper corners to move the calendar backward and forward one month at a time.
    - Adjust the date by selecting the corresponding day from the calendar.
    - Adjust the time using the time adjustment slider.
    - Select the **Done** button to accept the chosen date and time.

The node metrics will appear as shown in the following image. Depending whether you have **Time** or **Metrics** selected in the **Columns** area of the **Report Settings** toolbar, you could see either of these screens.

We'll discuss more on the differences of these modes later in this chapter.



Columns Set to Time



Columns Set to Metrics

Time Controls

Each of the time buttons within this area (when displayed) will adjust the date/time of the node metrics as follows:

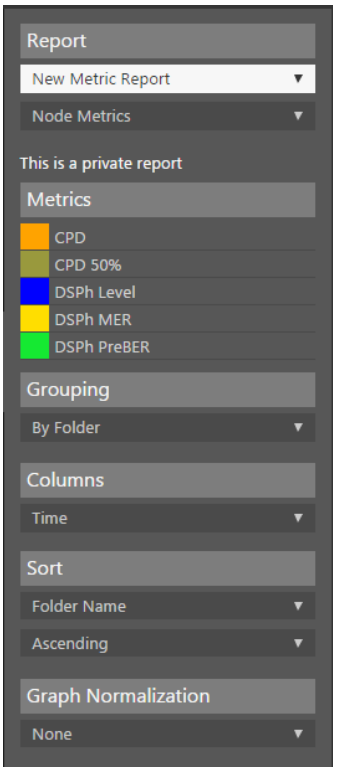
Previous Time Duration – Select this button to adjust the measurement period backward in time by the currently selected **Duration**.

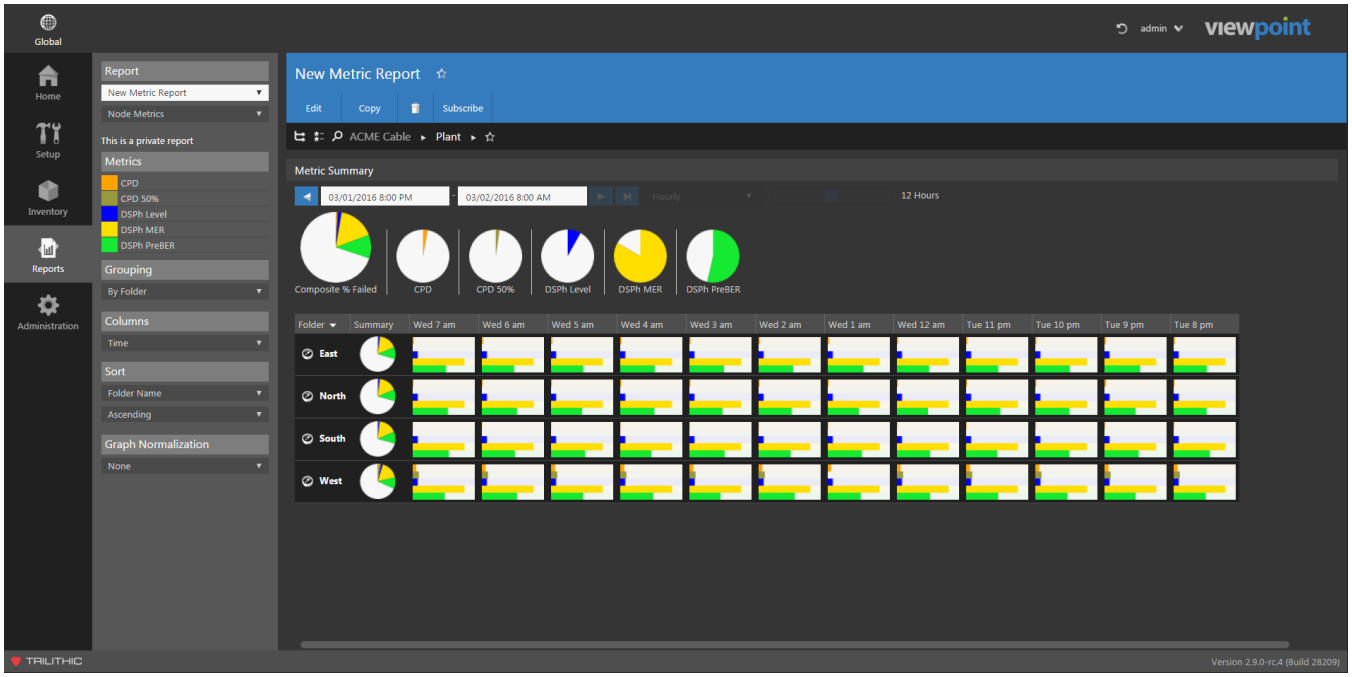
Next Time Duration – Select this button to adjust the measurement period forward in time by the currently selected **Duration**. If the selected **End Time** is behind the current date/time by less time than the **Duration**, the **End Time** will be set to the current date/time.

Current Time & Date – Select this button to set the **End Time** of the dashboard to the current date/time.

Report Settings Toolbar

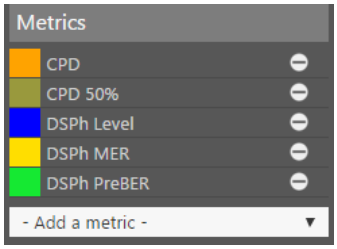
Earlier in **Section V: Reports**, we discussed the **Report Settings** toolbar to create and view reports. In this section, we'll cover how to use the toolbar when creating and viewing node metrics dashboards, as shown in the image on the right and below.





Metrics

To add metrics columns, select the metric from the **Add a metric** dropdown box as shown in the image to the right.



Metrics are managed in the Administration Settings. See ***Section II: Site Administration, Chapter 3: Setup, Metrics*** for more information.

Selecting Metrics

Each metric can be individually selected from the **Report Settings** toolbar. The Composite Metrics and Individual Item Metrics areas of the dashboard will only show the selected metric. Select the composite pie chart from the Composite Metrics area of the dashboard to display all metrics.

Grouping

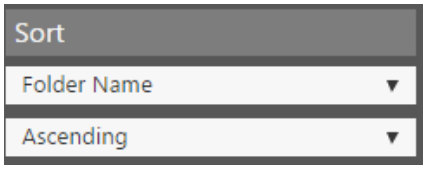
To sort the node metrics columns by folder in the organziation tree, select **Folder** from the **Grouping** dropdown box as shown in the image to the right.

Columns

To choose from time or metrics based display types, select **Time** or **Metrics** from the **Columns** dropdown box as shown in the image to the right.

Sort

To sort the node metrics columns, select **Folder Name; Metrics,Summary; Metrics, Most Recent;** or **Ascending** or **Descending** from the **Sort** dropdown boxes as shown in the image to the right.



Graph Normalization

To normalize the node metrics graph, select **By Metric, Scale to Fit,** or **None** from the **Graph Normalization** dropdown box as shown in the image to the right.

Node Metrics Display Modes

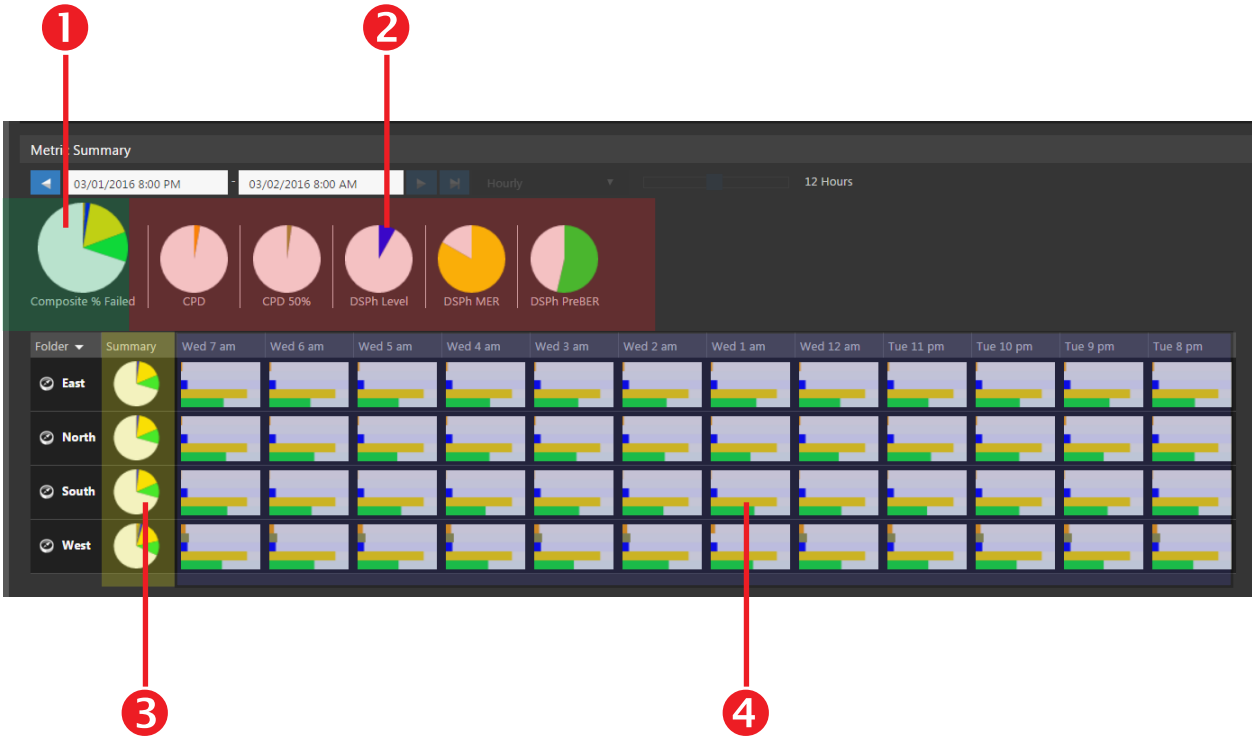
Within the **Node Metrics** screen, there are different types of display modes based on several different conditions as described in the following sections.

Organization Displayed by Time

This display mode is shown when the following conditions occur:

- **By Folders** has been selected from within the **Grouping** area of the **Report Settings** toolbar.
- **Time** has been selected from within the **Columns** area of the **Report Settings** toolbar.

An example of this type of node metrics report is shown in the image below.



This type of node metrics display mode includes the following types of metric graphs:

1. **Composite Metrics** – This pie graph respresents the composite total of the **Average Metrics** within the dashboard. When viewing a location within an organization that doesn't include fiber nodes, this pie graph will not be displayed.
2. **Average Metrics** – These pie graphs represent the average amount of time a single metric has been in/out of alarm for all rows within the dashboard over the selected **Duration**. When viewing a location within an organization that doesn't include fiber nodes, these pie graphs will not be displayed.
3. **Summary Metrics** – This pie graph represents the average time in/out of alarm for the metrics within the current row of the dashboard over the selected **Duration**. When viewing a location within an organization that doesn't include fiber nodes, this pie graph will not be displayed.
4. **Time Period Metrics** – These bar graphs will be shown in all columns and rows of the dashboard and represent the total percentage of time in/out of alarm for each metric over the selected **Time Scale**.
    - This bar graph displays either of the following types of information for each time period based on the current location within the organization:
        - When viewing a location within an organization that includes fiber nodes, the average metric values will be displayed.
        - When viewing fiber nodes within an organizational location, the actual metric values will be displayed for that node.
    - Each row of the dashboard can display the following items based on the current location within the organization:
        - When viewing a location within an organization that includes fiber nodes, the name of the organization location will be displayed in the **Folder** column. Selecting the name of the location will allow you to drill down through the organization.
        - When viewing fiber nodes within an organizational location, the name of the fiber nodes will be displayed in the **Folder** column. Selecting the name of the fiber node will take you to the **Node Summary Display**.
        - When viewing a location within an organization that doesn't include fiber nodes, the name of the organization location will be displayed in the **Folder** column but none of the measurement time periods will display a bar graph.

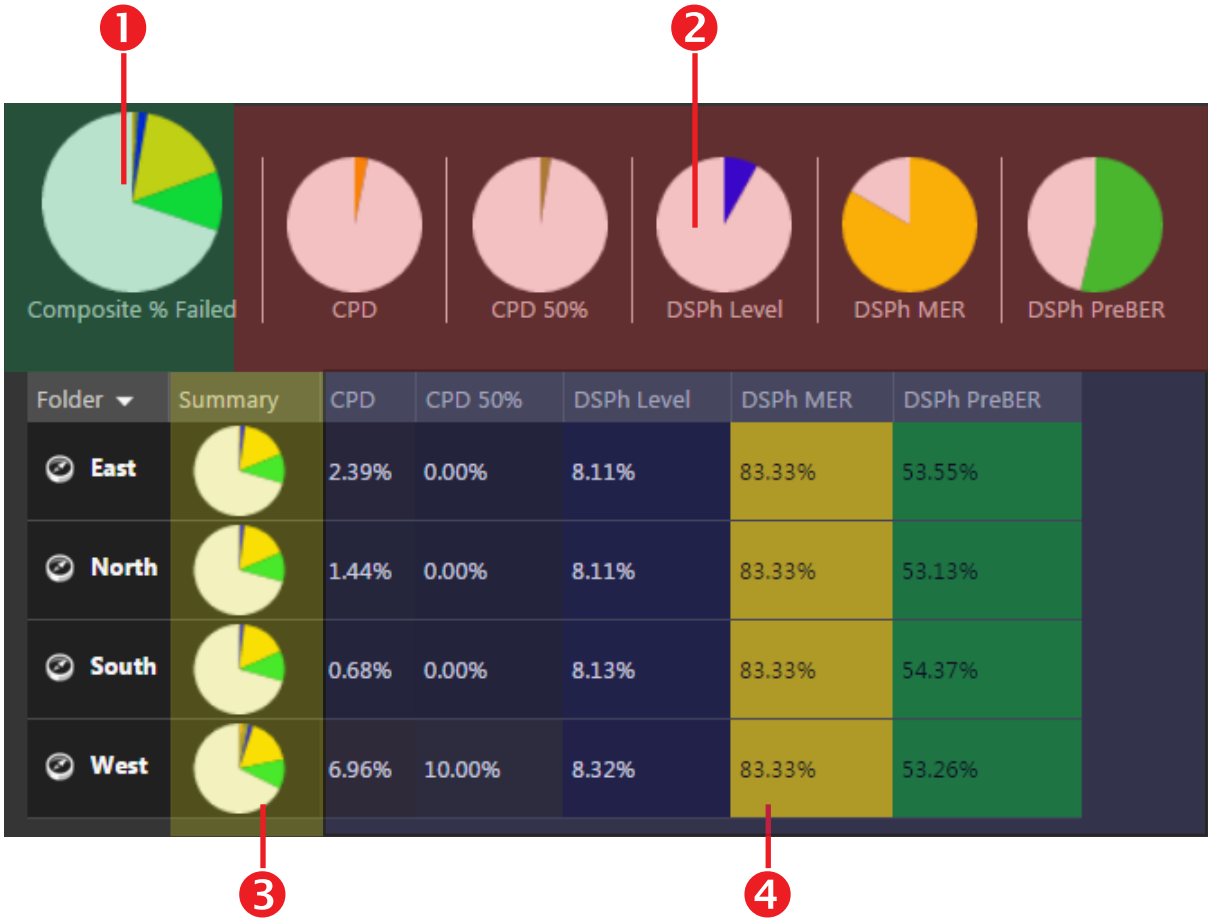
- Each column represents a single measurement time period within the selected duration of the dashboard.
    - When viewing a location within an organization that doesn't include fiber nodes, none of the measurement time periods will display a bar graph.
    - If a measurement time period within any row of the dashbord does not include a bar graph, this means that there wasn't a measurement during that time period.

Organization Displayed by Summary

This display mode is shown when the following conditions occur:

- **By Folders** has been selected from within the **Grouping** area of the **Report Settings** toolbar.
- **Metrics** has been selected from within the **Columns** area of the **Report Settings** toolbar.

An example of this type of node metrics report is shown in the image below.



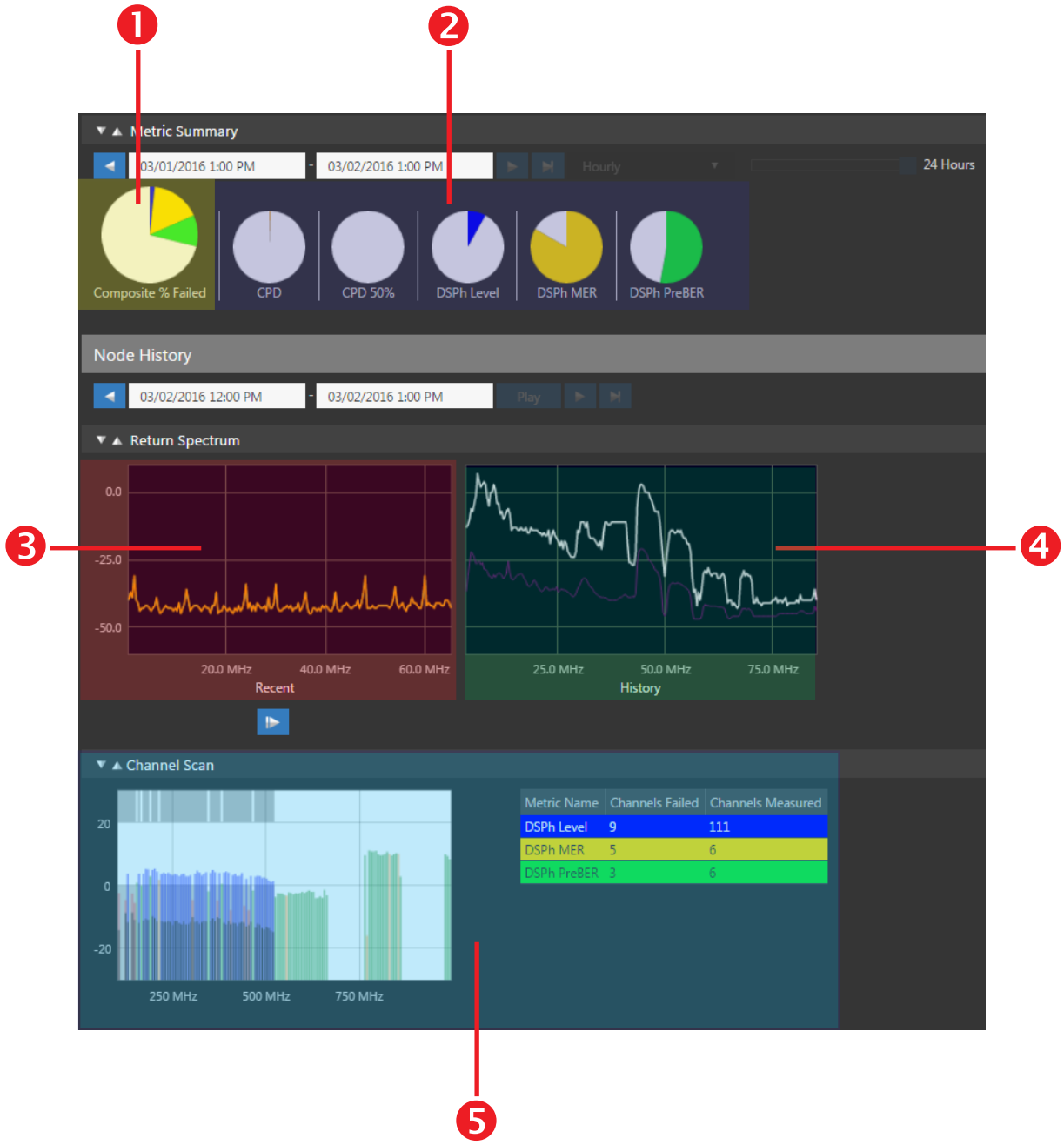
This type of dashboard display mode shows the following types of metric graphs:

1. **Composite Metrics** – This pie graph respresents the composite total of the **Average Metrics** within the dashboard. When viewing a location within an organization that doesn't include fiber nodes, this pie graph will not be displayed.
2. **Average Metrics** – These pie graphs represent the average amount of time a single metric has been in/out of alarm for all rows within the dashboard over the selected **Duration**. When viewing a location within an organization that doesn't include fiber nodes, these pie graphs will not be displayed.
3. **Summary Metrics** – This pie graph represents the average time in/out of alarm for the metrics within the current row of the dashboard over the selected **Duration**. When viewing a location within an organization that doesn't include fiber nodes, this pie graph will not be displayed.
4. **Metrics Summary** – These summary heat maps will be shown in all columns and rows of the dashboard and represent the average time in alarm for the metrics within the current row of the dashboard over the selected **Duration**.
    - This summary heat map displays the average metric values based on the current location within the organization:
    - Each row of the dashboard can display the following items based on the current location within the organization:
        - When viewing a location within an organization that includes fiber nodes, the name of the organization location will be displayed in the **Folder** column. Selecting the name of the location will allow you to drill down through the organization.
        - When viewing fiber nodes within an organizational location, the name of the fiber nodes will be displayed in the **Folder** column. Selecting the name of the fiber node will take you to the **Node Summary Display**.
        - When viewing a location within an organization that doesn't include fiber nodes, the name of the organization location will be displayed in the **Folder** column but none of the metrics will display a metric value.

- Each column represents a single metric within the dashboard.
    - The name of the metric will be displayed in the header row above each column.
    - Each metric is shaded using the color that represents that metric.
    - Lower values will be represented by the darkest color (red=red/gray) with the most amount of gray shading. A value of 0% will be indicated by the darkest color with the most amount of gray shading.
    - Higher values will be represented by the brightest color (red=red) with the least amount of gray shading. A value of 100% will be indicated by the brightest color with no gray shading.

Node Summary Display Mode

This display mode is shown when an individual fiber node has been selected from within the node metrics report. An example of this type of report is shown in the image below.



This type of display mode shows the following types of graphs:

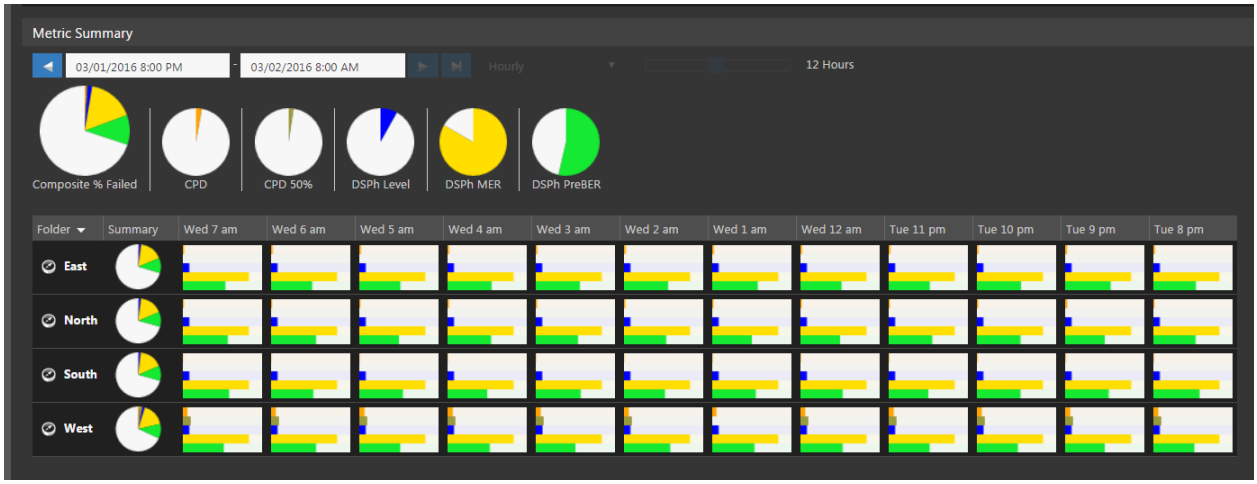
1. **Composite Metrics** – This pie graph respresents the composite total of the **Average Metrics** within the dashboard.
2. **Average Metrics** – These pie graphs represent the average amount of time a single metric has been in/out of alarm for this node over the selected **Duration**.
3. **Live Return Spectrum** – This area is used to display a snapshot of the current return spectrum for this node.
    - Select the play button below the return spectrum graph to display a live view of the return spectrum within the current dashboard view.
    - Selecting the return spectrum graph directly from the **Node Summary Display** will display the **Live** mode of the **Return Spectrum Display** as described in the following chapter.
4. **Historical Spectrum** – This area is used to display a snapshot of historical return spectrum measurements performed within the last hour of the dashboard **Duration**. Selecting any of the historical return spectrum graphs will display the **Historical** mode of the **Return Spectrum Display** as described in the following chapter.
5. **Channel Scan Metrics** – This graph is used to display a snapshot of the current channel scan for this node.


NOTE

The Node Summary Display Mode will also display measurement data from 860 DSPh units and modems that are assigned to the selected fiber node. For more information on the types of data that can also be displayed on this dashboard, see the MPI or FPM Module sections later in this manual.

Metric Graphing Details

Each graph within a dashboard displays the percentage of time in/out of alarm for metrics included in the dashboard. Within the dashbord there are several types of graphs that are displayed. The graphs displayed in the following image represent a typical dashboard display. All of the examples shown in the following sections represent actual data from this dashboard.



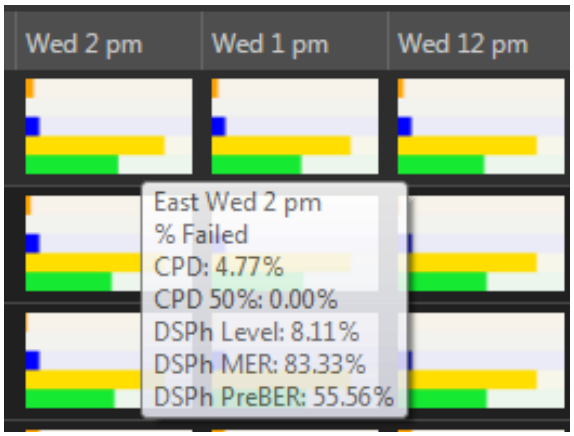
In the dashboard shown above, the **Graph Normalization** is set to **None** and **Columns** is set to **Time**. The following sections will go into more detail on how the graph normalization setting affects the display of each type or graph.

Individual Metrics Display

The type of display for metrics within the **Individual Item Metrics** area of the dashboard can be changed by selecting either **Time** or **Metrics** from the **Columns** area of the **Reports Settings** toolbar, as shown in the following sections.

Displayed by Time

The metrics bar graphs are located within the **Individual Item Metrics** area of the dashboard. This type of display is shown when **Columns** is set to **Time** within the **Report Settings** toolbar. An example of this type of bar graph is shown in the image below.



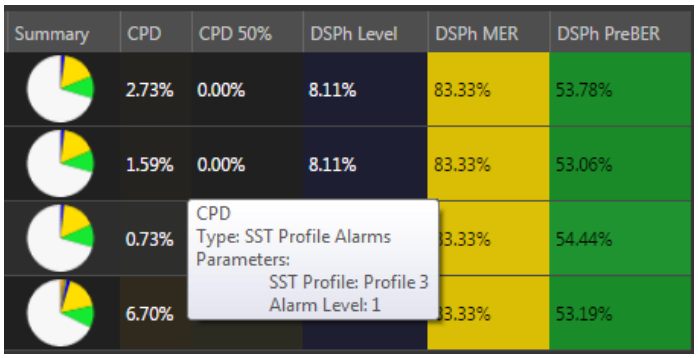
- These bar graphs represent the total percentage of time in/out of alarm for each metric over the selected **Time Scale**.
- The total number of bar graphs on each row of the dashboard corresponds to the selected **Time Frame**.
- If you move the mouse over the graph, a hover text window will be displayed. This window displays the total amount of time in alarm for each metric over the selected **Time Scale**.

The following rules apply to this bar graph when **Graph Normalization** is set to **None**:

- Since each metric is monitored 100% of the time, the total percentage of time in and out of alarm over the selected **Time Scale** is 100%.
- The white areas within each graph represents the Total % of time not in alarm over the selected **Time Scale**.
- The shaded areas within each graph represents the Total % of time in alarm over the selected **Time Scale**.

Displayed by Metrics

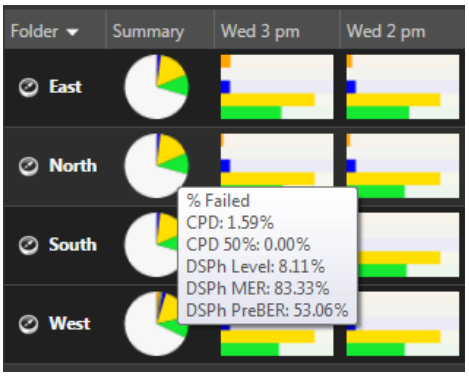
The summary heat map is located within the **Individual Item Metrics** area of the dashboard. This type of display is shown when **Columns** is set to **Metrics** within the **Report Settings** toolbar. An example of this type of heat map is shown in the image below.



- These heat maps represent the average time in alarm for the metrics within the current row of the dashboard over the selected **Time Span**.
- The included metrics are displayed as individual columns within the dashboard.
- If you move the mouse over the heat map, a hover text window will be displayed. This window displays general information for the metrics within this column.
- Each metric is shaded using the color that represents that metric. Lower values will be represented by the lightest shading and higher values will be represented by the darkest shading.

Item Summary Metrics

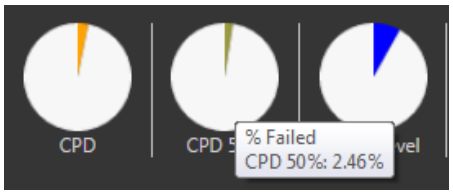
This type of pie graph is located at the left side of each row (item) in the **Organizational Metrics** area of the dashboard. An example of this type of graph is shown in the image below.



- These graphs represent the average time in/out of alarm for the metrics within the current row of the dashboard over the selected **Duration**.
- If you move the mouse over the graph, a hover text window will be displayed. This window displays the average amount of time in alarm for each metric over the selected **Duration**.

Average Metrics

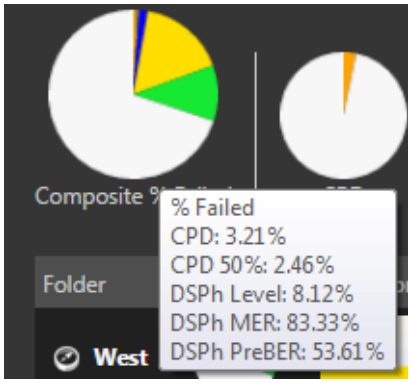
This type of pie graph is located at the right side of the **Organizational Metrics** area of the dashboard. An example of these types of graphs are shown in the image below.



- These graphs represent the average amount of time a single metric has been in/out of alarm for all rows within the dashboard over the selected **Duration**.
- These graphs are only shown when **Grouping** is set to **By Folder** within the **Report Settings** toolbar.
- If you move the mouse over the graph, a hover text window will be displayed. This window displays the average amount of time a single metric has been in alarm for all rows within the dashboard during the current time period.

Composite Metrics

This type of pie graph is located at the left side of the **Organizational Metrics** area of the dashboard. An example of this type of graph is shown in the image below.

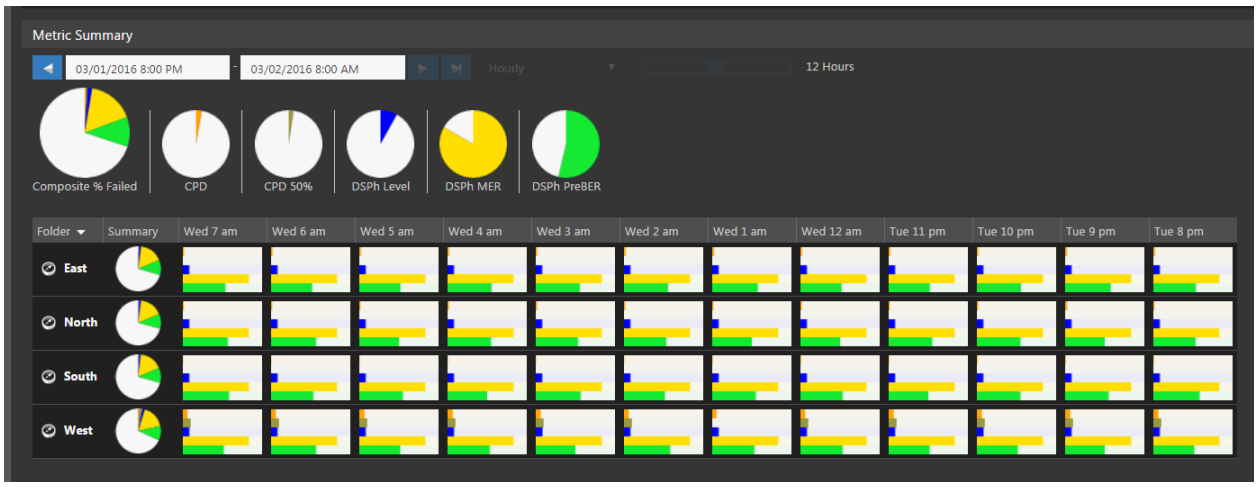


- This graph respresents the **Composite Total** of the **Average Metrics** and is larger in size than the other pie graphs within the dashboard.
- The total % of time represented by this graph is the number of metrics multiplied by 100% of time per metric. There are five metrics within the example dashboard. So, the total percentage of time shown within this graph is 500% (5 metrics x 100% of time per metric).
- This graph is only shown when **Grouping** is set to **By Folder** within the **Report Settings** toolbar.
- If you move the mouse over the graph, a hover text window will be displayed. This window displays the average amount of time in alarm for each of the **Average Metrics** during the current time period.

How Normalization Affects Metric Graphs

The normalization for metrics on the dashboard are controlled from within the **Normalization** area of the **Dashboard Settings** toolbar as shown in the image to the right.

When normalization is set to **None**, the dashboard will appear similar to the example image shown below. In this example, none of the graphs are normalized and will be displayed as described in the previous section.

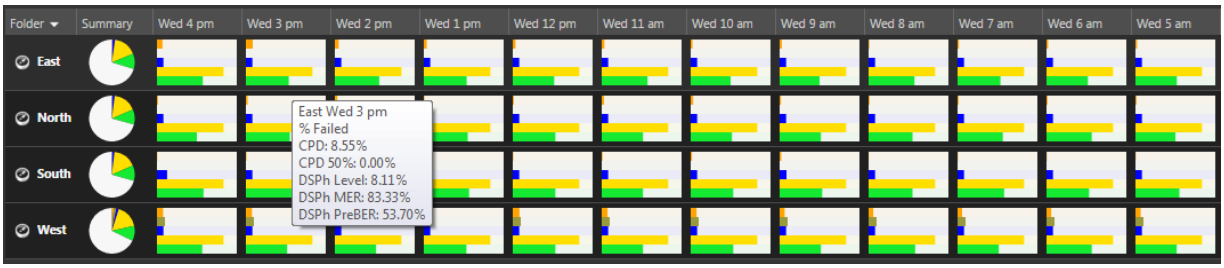


In the following sections, we will discuss how normalization affects the display of each of the types of graphs described in the previous section.

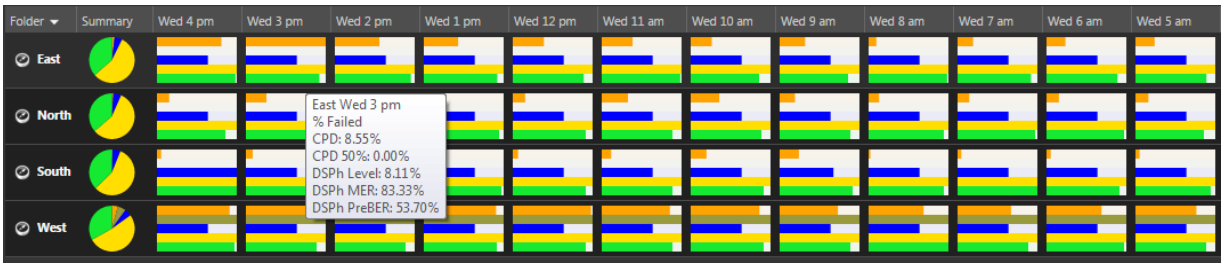
Individual Metrics Displayed by Time

In this section we will discuss how normalization affects the display of the **Individual Metrics** bar graphs when **Display** is set to **By Time** within the **Dashboard Settings** toolbar. The following images represent the same **Individual Metrics** bar graphs using each of the three types of normalization.

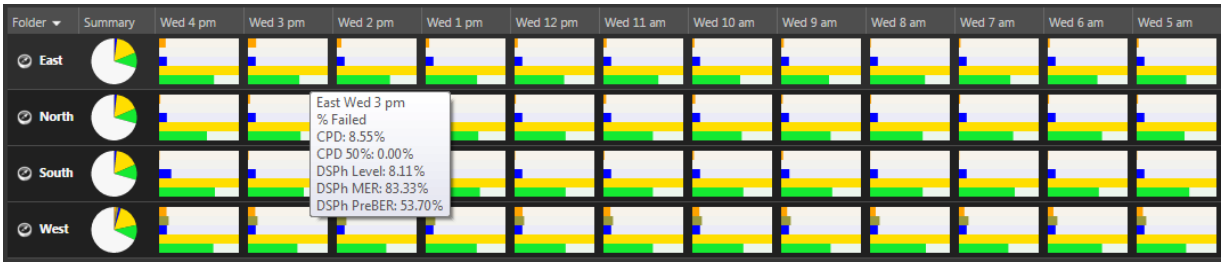
Notice that the hover text window displayed for each of these images operates independently of the type of normalization and always displays the actual percentage of time each metric was in alarm.



None



By Metric



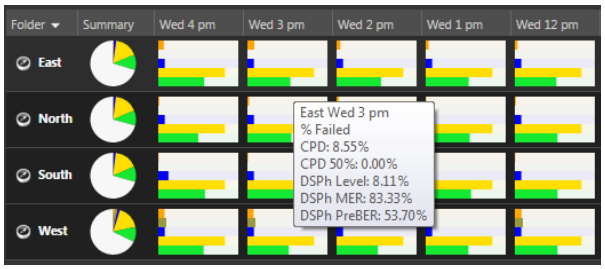
Scaled to Fit

Normalize By Metric

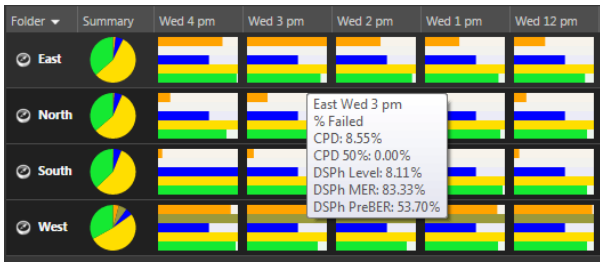
When normalization is set to **By Metric**, the bar graph for a metric within the time period with the largest value will be scaled upward to 100% from its non-normalized value. The bar graphs for other time periods within the same row will be scaled upward in proportion to the largest value of the metric.

In the example images shown below, we will focus on the **CPD** metric (orange shading) in the first row of the dashboard:

- The **Duration** of the dashboard is from 4 PM to 4 AM.
- The largest value for the **CPD** metric within the first row of the dashboard was 8.55% of the time in alarm for the time period from 3 PM to 4 PM.
- The **CPD** metric 8.55% will be scaled upward to 100% of the bar graph width for the 3 PM to 4 PM time period. This equates to a scaling factor of 11.70 times (100% / 8.55%) the original value.
- The **CPD** metric for the other time periods within this row will be scaled upward using the same scaling factor as the time period with the largest value.
    - In this example, the **CPD** metric was measured to be 7.83% during the time period from 2 PM to 3 PM.
    - Using the same scaling factor from the time period with the largest value, the bar graph of this time period would be normalized to 91.61% (11.70 x 7.83%) of the bar graph width.
- The metrics within each row of the dashboard will be normalized individually. In this example, the **DSPh Level** metric was also scaled to 100% of the bar graph width during the same 3 PM to 4 PM time period. This was done because the largest value for the **DSPh Level** metric was measured to be 8.11%.



None



By Metric

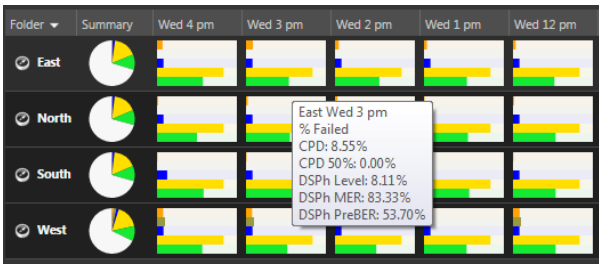
Normalize by Scale to Fit

When normalization is set to **Scale to Fit**, the bar graph for a metric within each time period with the largest value will be scaled upward to 100% from its non-normalized value. The bar graphs for other metrics within the same time period will be scaled upward in proportion to the value of the largest metric. Each time period within the dashboard will be normalized separately.

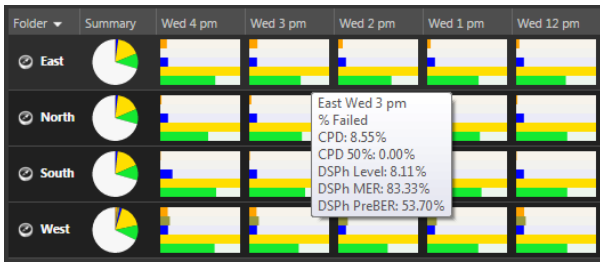
This method of normalization essetially acts as a zoom effect for each bar graph, making metrics with smaller values more visible by scaling them in proportion to the other metrics within the same bar graph.

In the example images shown below, we will focus on the **DSPh MER** metric (yellow shading) in the fourth row of the dashboard:

- The largest value for the **DSPh MER** metric within the fourth row of the dashboard was 83.33% of the time in alarm for the time period from 3 PM to 4 PM.
- The **DSPh MER** metric of 83.33% will be scaled upward to 100% of the bar graph width for the 3 PM to 4 PM time period. This equates to a scaling factor of 1.20 times (100% / 83.33%) the original value.
- The other metrics within this time period will be scaled upward using the same scaling factor as the metric with the largest value.
    - In this example, the **CPD** metric was measured to be 8.55% during the time period from 3 PM to 4 PM.
    - Using the same scaling factor from the metric with the largest value, the bar graph for the **CPD** metric would be normalized to 10.26% (1.20 x 8.55%) of the bar graph width.
- In this example, the **DSP PreBER** metric was also scaled to 100% of the bar graph width during the same 3 PM to 4 PM time period. This was done because the largest value for the **DSP PreBER** metric was measured to be 53.70%.



None

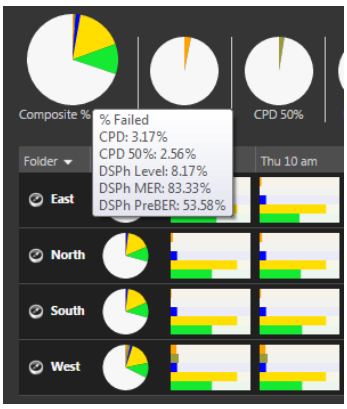


Scale to Fit

Summary & Composite Metrics

In this section we will discuss how normalization affects the display of the **Summary Metrics** and **Average Metrics** pie graphs. The following images represent the same pie graphs using each of the three types of normalization.

Notice that the hover text window displayed for each of these images operates independently of the type of normalization and always displays the actual percentage of time each metric was in alarm.

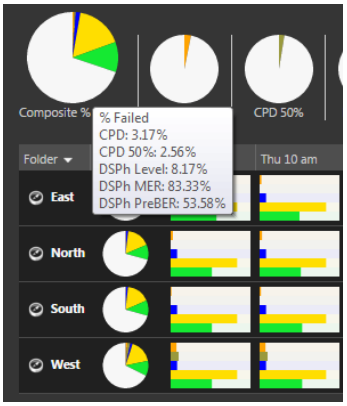


None

Normalize By Metric

When normalization is set to **By Metric**, the **Summary Metrics** and **Average Metrics** pie graphs are normalized to show what proportion of failures there are for each metric in relation to each other.

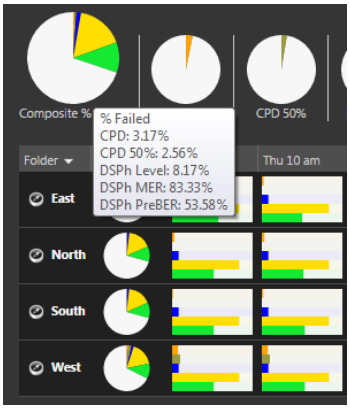
This method of normalization essentially acts as a zoom effect for the pie graph, making metrics with smaller values more visible by scaling them in proportion to the other metrics within the same pie graph.



By Metric

Normalize by Scale to Fit

When normalization is set to **Scale to Fit**, the pie graphs in the **Summary Metrics** area are not affected. These graphs will be displayed in the same manner as they would if the normalization was set to **None**.



Scale to Fit

Average Metrics

The pie graphs in the **Average Metrics** area are not affected by the normalization settings. These graphs will be displayed in the same manner no matter what normalization is used.

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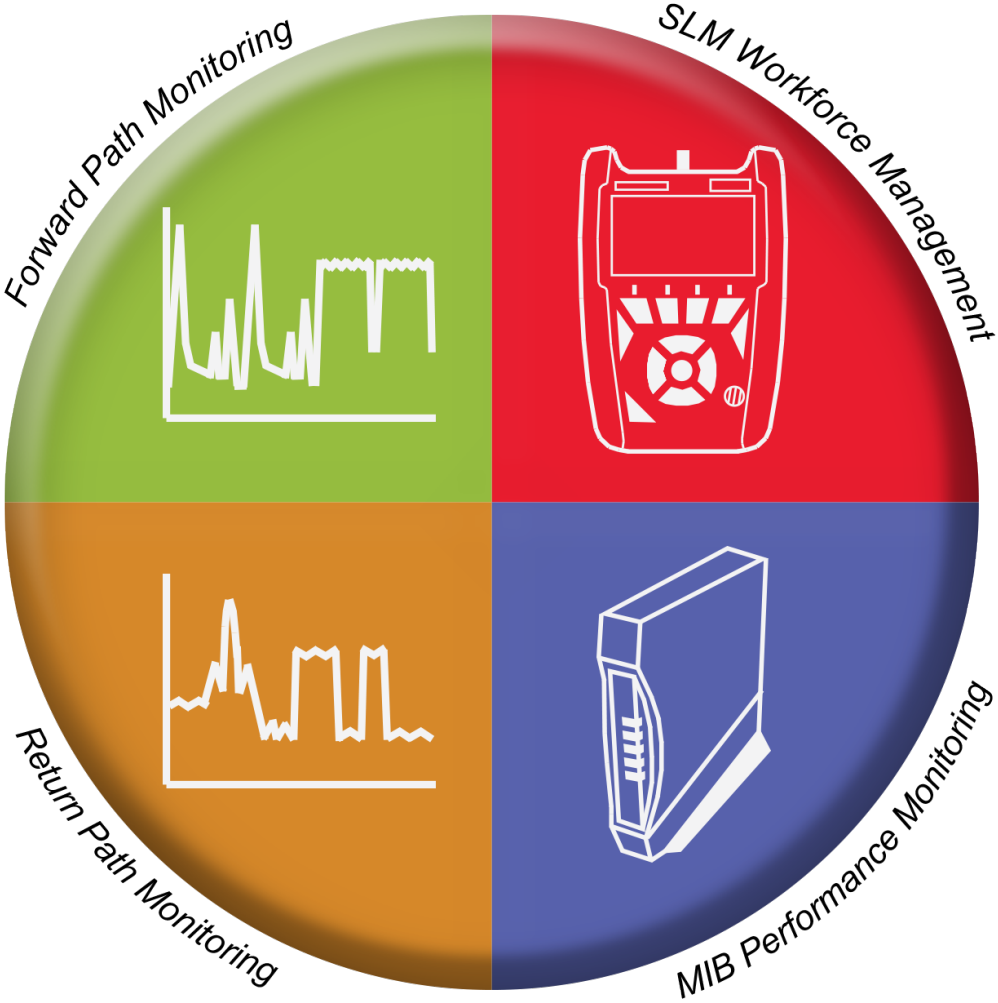
ViewPoint
Integrated Data Management System
Section VI: Appendix



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Integrated Server Package Specifications

The following hardware specifications apply to the ViewPoint Integrated Server Package.

	Enterprise Edition	Economy Edition
Hardware Manufacturer	Dell	Dell
Model	R520	R210 II
Server Rack Height	2U - 3.50 in (8.89 cm)	1U - 1.75 in (4.45 cm)
Microsoft Windows Server Software	2012 R2 Standard Edition	2012 R2 Foundation Edition
Microsoft SQL Server Software	2012 Standard Edition	2012 Standard Edition
Microsoft SQL User Client Access Licenses (CALs)	Five (5)	Five (5)
Processor	Two (2) Intel Xeon E5-2420 (1.90 GHz, 15 MB Cache)	One (1) Intel Celeron G530 (2.40 GHz, 2 MB Cache)
Memory	32 GB (1600 MHz)	4 GB (1600 MHz)
Storage	Four (4) 1 TB SATA (7200 RPM) Two (2) 500 MB (7200 RPM)	One (1) 500 MB (7200 RPM)
Power Supply	Dual Redundant (750 Watt x 2)	Single (750 Watt x 1)
3 Year Warranty (Provided by Dell)	Next business day, parts and labor, on-site response	
Maintenance & Support	Included for first year of ownership, after first year of ownership a yearly maintenance & support fee applies.	

A backup storage system is also recommended for prevention of data loss.

Prerequisite Supporting Software

The following supporting software packages are prerequsites for the installation of the ViewPoint software.

✓ - Included
⃠ - Not Included

	Microsoft Windows Server Software (2012 R2 Standard)	Microsoft SQL Server Software (2012 Standard)	SQL User Licenses
Integrated Server Package - Enterprise Edition	✓	✓	Five (5)
Integrated Server Package - Economy Edition	✓	✓	Five (5)
Stand-Alone Server Software	⃠	⃠	⃠
Software as a Service (SaaS)	✓	✓	Five (5)

ViewPoint Stand-Alone Server Software does not include Windows Server and SQL Server Software. This software is required for proper operation of the ViewPoint Stand-Alone Server Software and must be provided by the end-user.

Stand-Alone Server Software Requirements

The following requirements must be met when installing the ViewPoint Stand-Alone Software on customer owned hardware.

	Minimum Requirements
Microsoft Windows Server Software	2008 Standard Edition (x86-64) or Higher
Microsoft SQL Server Software	2008 Workgroup Edition or Higher
Processor	Dual Core (1.40 GHz)
Storage	300 GB (RAID Level 5 or 10)
Memory	4 GB
Other Optional Components	Optical Drive, Video Adapter, Monitor, Keyboard & Mouse

A backup storage system is also recommended for prevention of data loss.

ViewPoint Stand-Alone Server Software does not include Windows Server and SQL Server Software. This software is required for proper operation of the ViewPoint Stand-Alone Server Software and must be provided by the end-user.

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TRILITHIC

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