Performance Management Reporting
User Guide for IPMR

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Purpose

This guide provides Cox Business customers with steps on how to use the Internet Performance Management Reporting portal. The information in this document discusses user-level features for each of the portal views.

System Requirements

The Internet Performance Management Reporting portal supports the following internet browsers currently:

- Mozilla Firefox (versions 3.0 and higher)
- Google Chrome (versions 12 and higher)
- Apple Safari (versions 4 and higher)
- Internet Explorer (versions 8 and higher)

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Internet Performance Management - Getting Started

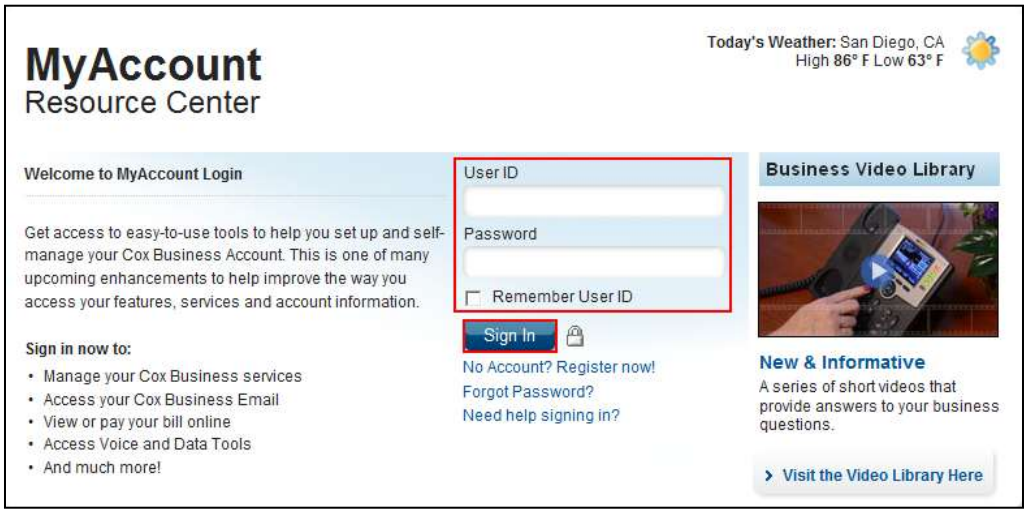
Cox Business Internet Performance Management Reporting (IPMR) service enables you to assess the performance of your circuits via a web-based portal.

The ***IPMR User Guide*** instructs you on how to access its portal to find information you need about your company's domains and circuits.

Let's begin by learning how to log in to the application.

Logging in

Figure 1. MyAccount Login page



Use the following steps to access PMR.

1. Open the **MyAccount** portal.
2. Enter your **User ID** and **Password** in the corresponding fields. (**Note**: As an option, you can click the **Remember User ID** checkbox to automatically populate the **User ID** field with your information the next time you log in.) If you forget your password, click the **Forgot Password?** link and follow the prompts.

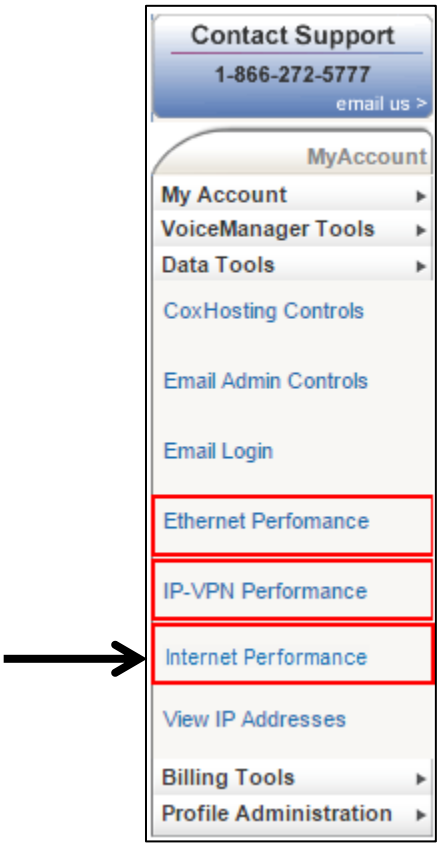
Note: If you forget your User ID, contact the Cox Business Customer Support Center.

3. Click the **Sign In** button.
   Result: The **MyAccount** page displays.

MyAccount Left Navigation Bar

Once you successfully log in to MyAccount, the main menu bar displays on the left side of the screen.

Figure 2. Internet Performance menu option

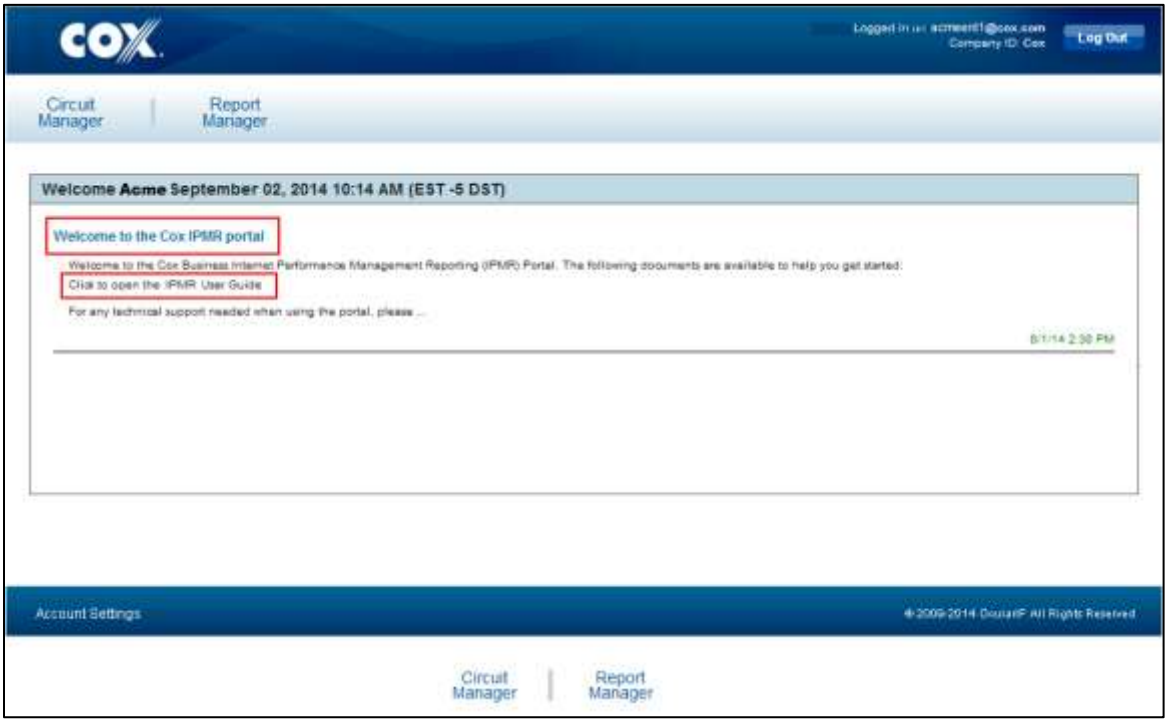


1. From the **Data Tools** menu on the left navigation bar, click the **Internet Performance** link. See Figure 2.
   Result: The **Welcome** page for the selected PMR type appears.

Welcome Panel

The **Welcome** panel opens for the type of service you select. In Figure 3, the **Welcome to the Cox IPMR Portal** page appears. When you click the link, a second dialog box appears that includes hyperlink(s) to commonly referenced documents, such as the User Guide.

Figure 3. Welcome page

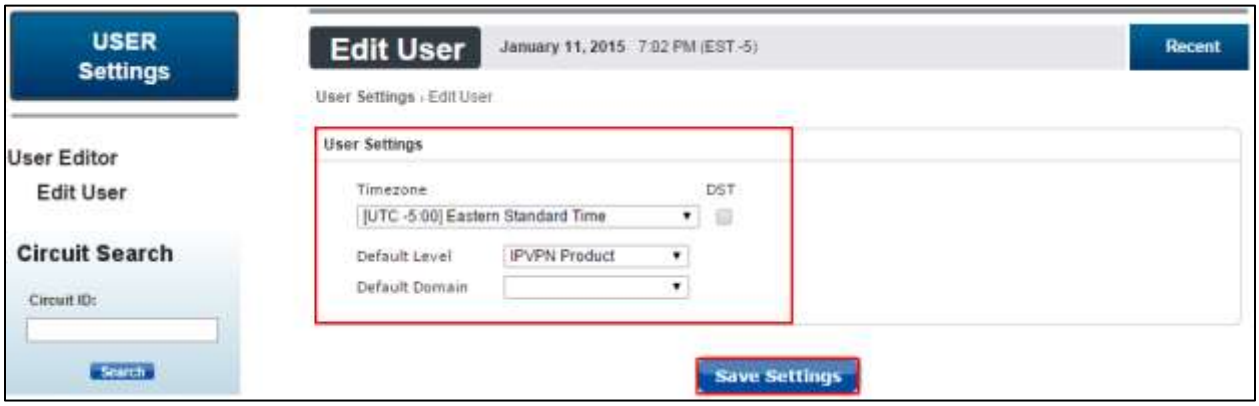


Account Settings

Use the Account Settings window to modify personal or account view information.

Note: The **Account Settings** link is in the lower left corner of every page.

Figure 4. Account Settings



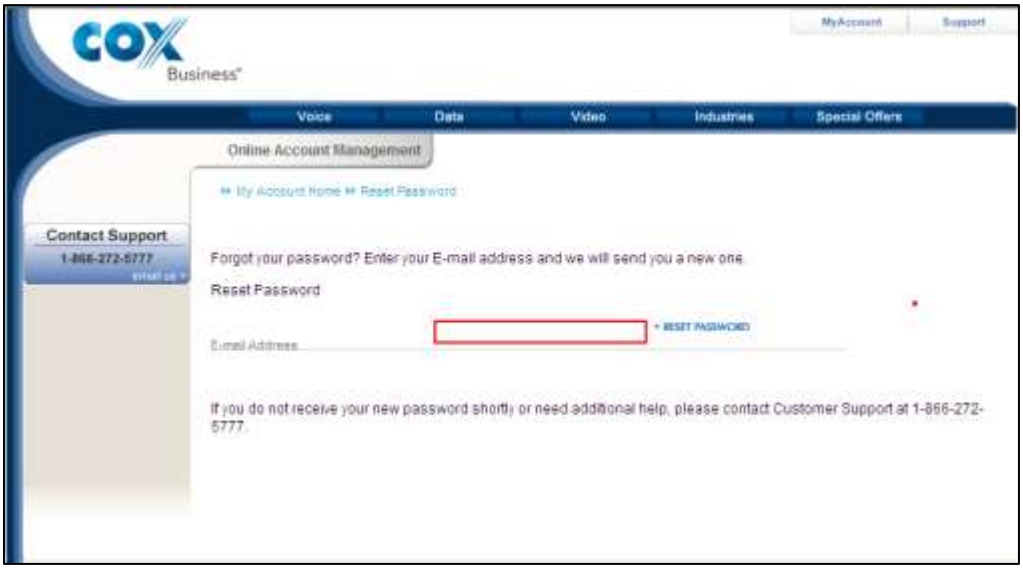
Use the following steps to modify your user settings.

1. From the **Welcome** page, click the **Account Settings** link in the lower left corner. **Result**: The **Edit User** window displays.
2. Change any **User Settings** field(s) as necessary. (**Note**: The field names are defined below.)
    - **Timezone**: reflects real-time data capture value (check the DST box to include Daylight Savings Time for that time zone)
    - **Default Level**: the option you choose to auto display when you log in to the system
    - **Default Domain**: the pre-selected area you want to view in the Overview Domain. For example, if the Default Domain value is “My Circuits,” all of the circuits in a domain will display
3. Click the **Save Settings** button.
4. Log out and log back in to confirm the new settings.

Retrieve Password

If you forget your MyAccount password, follow the steps below to reset and create a new one. If you forget your User ID, you must contact the Cox Business Customer Support Center.

Figure 5. Password Reset



Use the following steps to reset your password.

1. From the **MyAccount Sign-In** home page, click the **Forgot Password?** link located below the Password text field.
2. Enter your **E-mail Address** and click the **Reset Password** link.
   Result: A temporary password will be emailed to the address assigned to your username.

Internet Performance Management - Interface Overview

This section describes the headings found in the Internet Performance Management menu bar and discusses the functions of the Circuit Manager.

Menu Bar

The **Menu Bar** is located at the top of the window and contains links to Circuit Manager and Report Manager.

Figure 6. Menu Bar

Menu Column

The menu column for **Circuit Manager** and **Report Manager** depends on which link you click. (The default view is Circuit Manager.) If you click the **Circuit Manager** link, you will see details of the health and performance of circuits in a domain(s). If you click the **Report Manager** link in the menu bar, you will see the types of reports that are available in the menu column.

Internet Performance Management - Circuit Manager

Circuit Manager provides near real-time on-screen views or “profiles” of the health and performance of all circuits in a domain.

There are two default profiles in the Circuit Manager: **Overview Profiles** and **Overview Domain**. Additional profiles that show performance-related data for circuits may be available in the Circuit Manager column. This is based on the settings that have been established by the Cox Internet Performance Management Reporting (IPMR) administrator(s) for your company and/or individual user permission levels.

Each profile contains links that you can click to view information about the health of a circuit and the amount of utilization and throughput circuits between points.

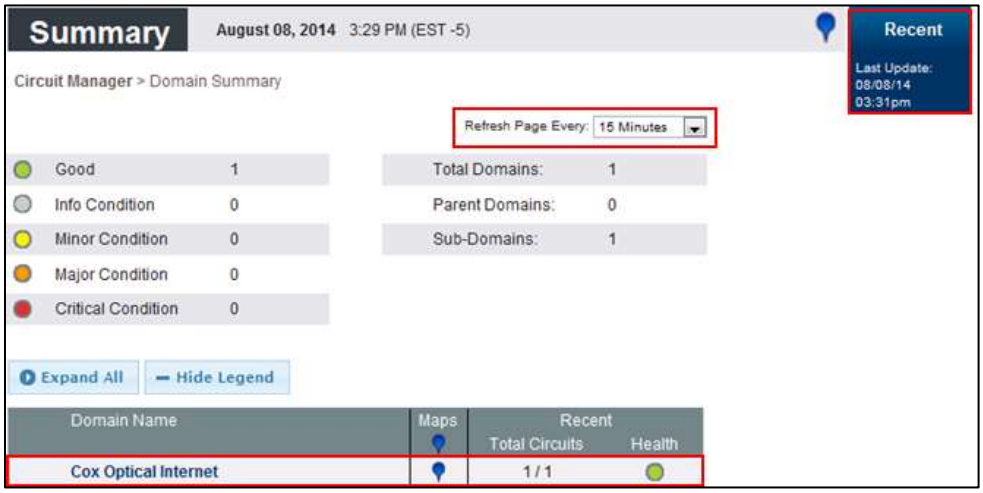
Figure 7. Menu column for Circuit Manager

Note: Enter a full or partial Circuit ID number in the search field to quickly locate a specific circuit by entering a full or partial **Circuit ID** value.

Overview Profiles

Domain Summary

Figure 8. Circuit Manager – Domain Summary window

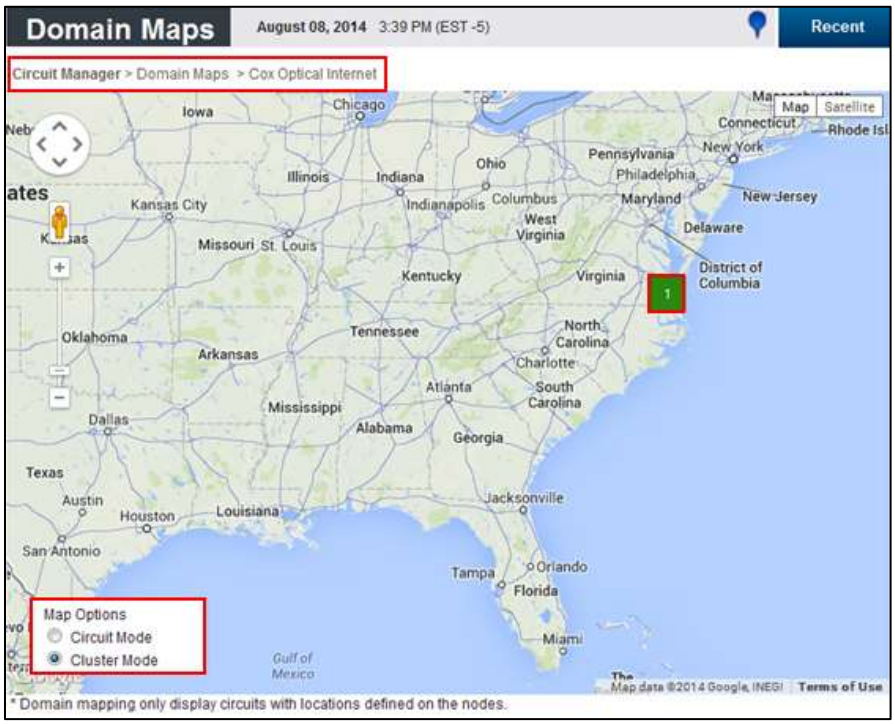


Domain Maps

Domain Maps allows you to view the geographic location, health and some performance data for your company's circuits. To enable the mapping function, the Cox Business IPMR administrator(s) configures the location of the circuit end points (latitude and longitude) when a circuit is added to the portal.

Figure 70 is an example the Cluster Mode Map Options that shows how many circuits are in geographic regions.

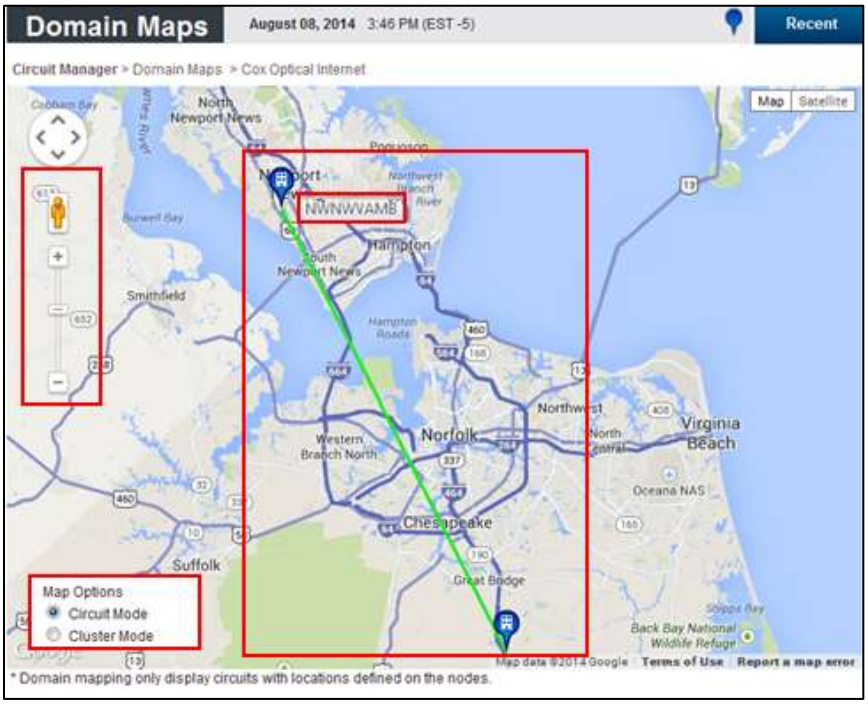
Figure 9. Domain Map – Cluster Mode



Use the steps below to view circuit information.

1. Click the **Circuit Manager** menu option in the left navigation bar.
2. Click the **Domain Summary** link.
3. Click the **blue map icon** in the table, shown in Figure 7, to open the mapping function. (**Note**: Domains that do not have an icon are not configured for mapping.)
   Result: A map appears that shows how many circuits in a domain are located in a particular geographic area.
4. Check that the **Cluster Mode radio button** is selected in the **Map Options** section. (It is typically the default choice.) See Figure 8.
5. Click the circuit number (for example, "1" in the figure above) repeatedly to zoom in on that circuit's specific location and view additional details about the circuit.
   Result: Building and cell tower icons (the nodes) appear and show the circuit line connection (displayed as a green line) between each. In addition, the **Map Option** radio button changes from **Cluster Mode** to the **Circuit Mode** setting. See Figure 9.

Figure 10. Domain Map – Circuit Mode



***Note**: The **Distance** field shows the aerial mileage between locations. It does not represent the actual fiber route mileage. When you double click the Distance line, the Circuit Details for the selected circuit are loaded. If there is more than one circuit between two locations, a drop-down menu appears. Here, you can select the circuit you want to view.

6. Hover over a node and click to view the Common Language Location Identifier Codes (CLLI, pronounced “silly”) location; e.g., NWNWVAMB shown in Figure 9. This term is used in the North American telecommunications industry to specify the location and function of telecommunications equipment.
7. Drag the figure icon, also referred to as the “yellow pegman”, (located above the zoom in / out bar) over a node to see the Google map street view, if available.

Circuit Health

The Circuit Health window displays a status of the circuit's condition within a domain. See Figure 10. It also provides information about the circuit, such as:

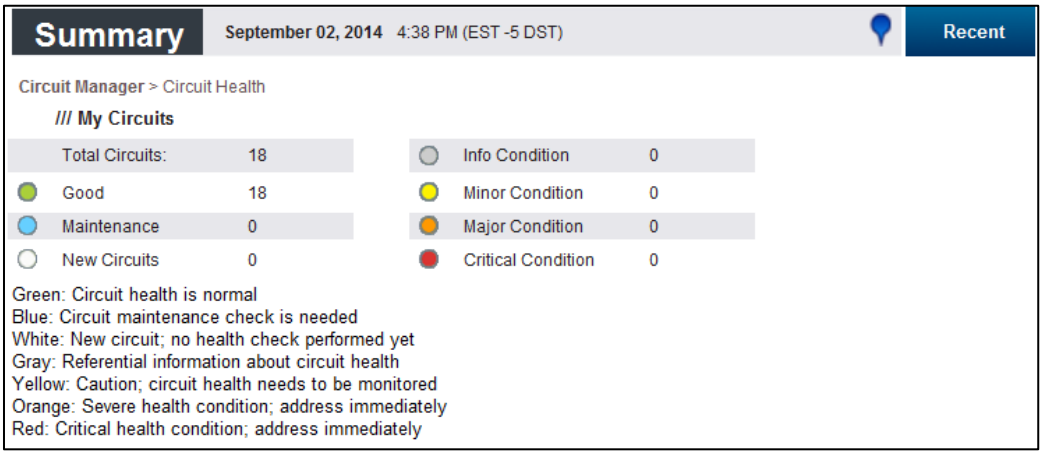
- the name of the domain to which the circuit belongs
- the circuit's identifier
- a description of the circuit (if provided)
- a visual representation (green line) of the health of the circuit between two nodes. See Figure 11 for a legend of line colors.

Figure 11. Circuit Health (sample)

Use the following steps to open and view the Circuit Health screen.

1. Click the **Circuit Health** link in the left menu bar.
   Result: The **Summary** page appears.
2. From the **Status** column, place your mouse over the connector symbol.
   Result: A dialog box displays the circuit's (color-coded) health status and the date and time that Ethernet and Utility Statistics were last updated. (**Note**: To ensure that information is up-to-date, the **Circuit Overview** profile page refreshes automatically every 60 seconds.)

Figure 12. Circuit Health Legend

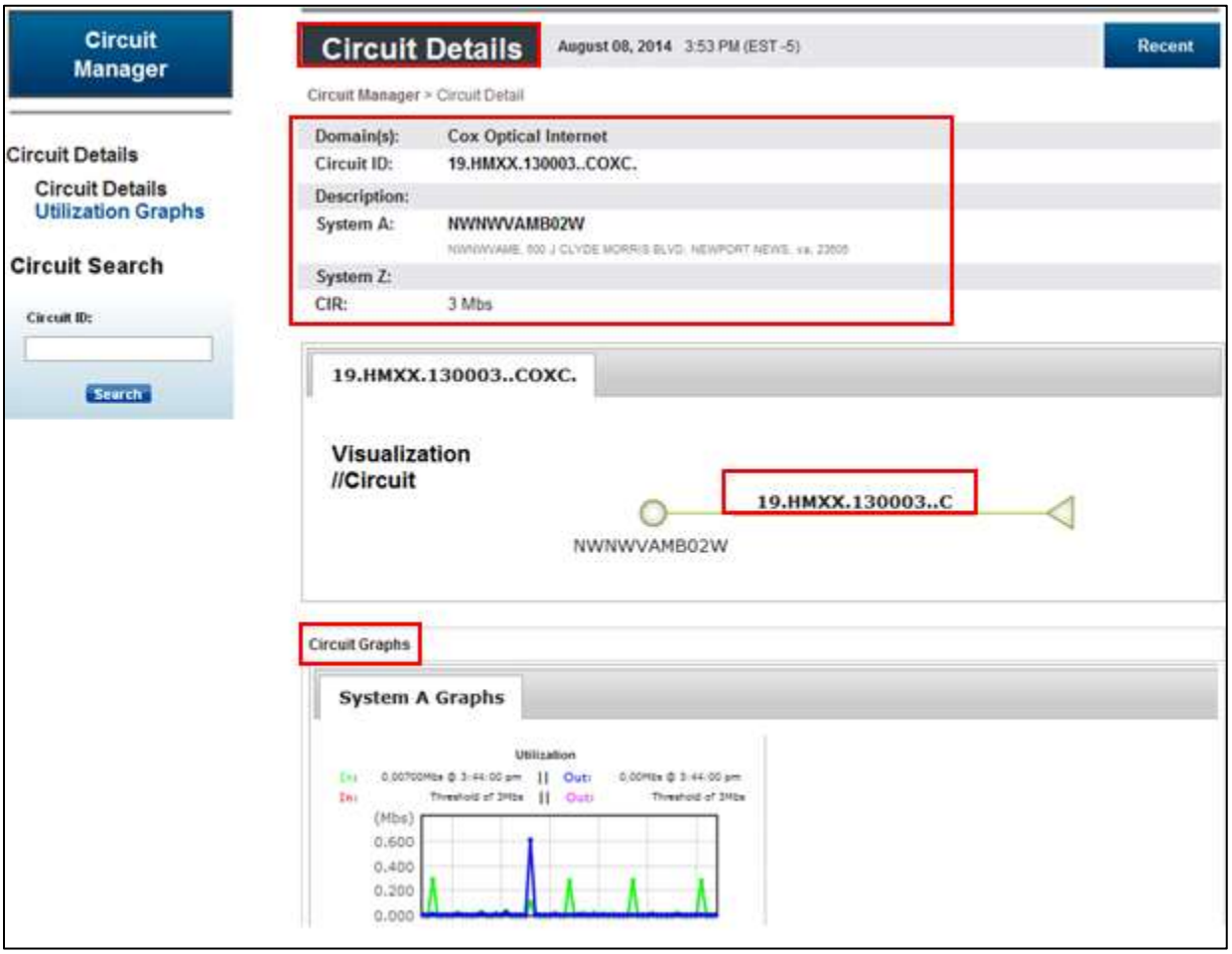


Circuit Details

Circuit Details are accessed by clicking the Circuit ID wherever it displays in the application. See Figure 12. It provides in-depth information about a circuit within a domain, such as:

- the domain to which the circuit belongs
- the circuit's identifier
- the identifiers and physical locations for a circuit's System A and System Z points; technically known as User Network Interfaces (UNIs)
- Committed Information Rate (CIR), the average transmission rate in megabits per second (Mbs) for a virtual circuit
- a visual representation of the health of the circuit between two points
- graph(s) that depict a point's (e.g., "System A") usage

Figure 13. Circuit Details (sample)



Use the steps below to access **Circuit Details**.

1. Click the **Circuit Health** menu option.
   Result: The **Circuit Health Summary** window appears.
2. Click the **Circuit ID** value in the **Visualization//Circuit** section to view charts and graphs related to that circuit.

Utilization Graphs

Utilization graphing allows you to customize graphs based on your needs. These graphs show port-level metrics such as Accepted Statistics (In/Out), Dropped Statistics (In/Out), and Computed Statistics (In/Out).

Figure 14. Utilization Graph (sample)

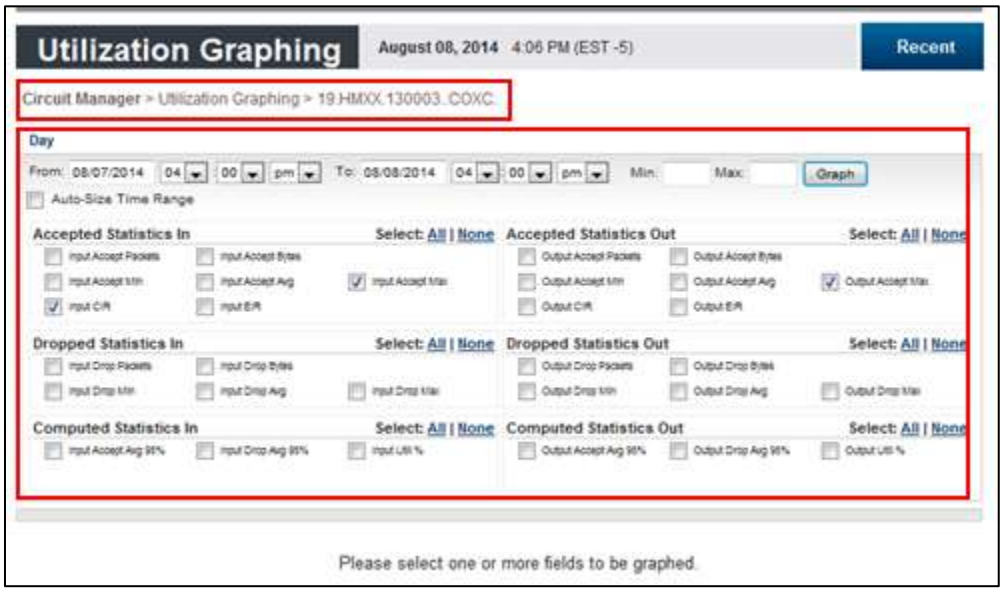
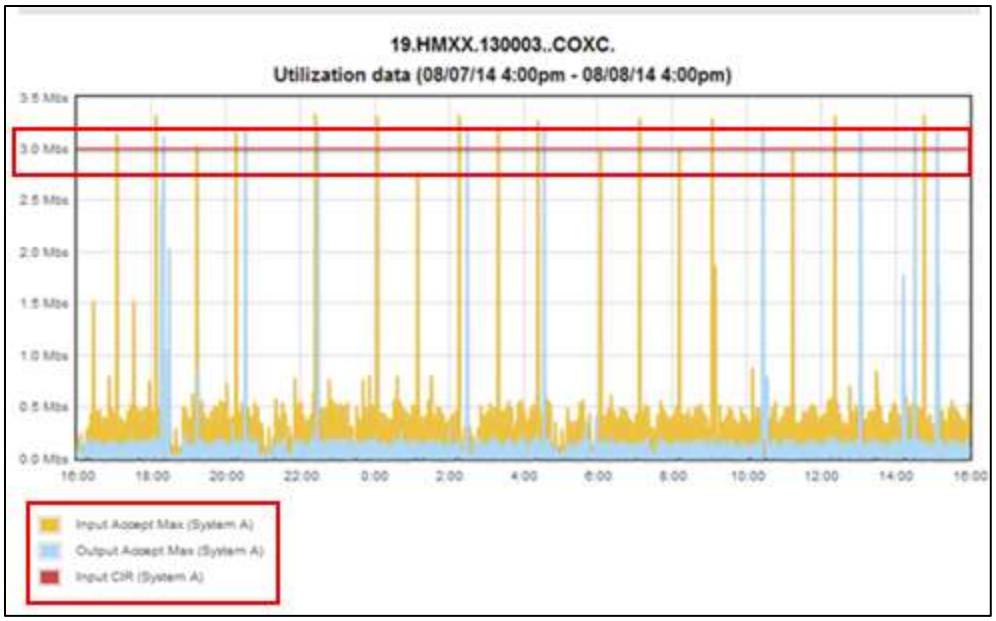


Figure 15. Utilization Graphing (sample)



The top portion of the Utilization Graphing section displays a time bar which allows you to select ranges of dates and times to drill down on specific usage intervals. The option to set a Minimum or Maximum (Min / Max) or to Auto-Size Time Range is available.

The various sections of Utilization Graphing allow you to self-select metrics of interest based on a specified time period. Once the selections have been made and you click the **Graph** button, the graph will appear beneath the statistics selection template.

Accepted Statistics (In /Out)

The Accepted Statistics (In / Out) allows the users to view the following, in graphical format, when the corresponding box is checked:

Input / Output Accept Packets	Data points that visually reflect the amount of packets accepted for the selected time period
Input / Output Accept Bytes	Data points that visually reflect the amount of bytes accepted for the selected time period
Input / Output Accept Min	Data points that visually reflect the minimum amount of accepted packets for the selected time period
Input / Output Accept Avg	Data points that visually reflect the average amount of accepted packets for the selected time period
Input / Output Accept Max	Data points that visually reflect the maximum amount of accepted packets for the selected time period
Input / Output CIR	Straight line data point that visually reflects the Committed Information Rate
Input / Output EIR	Straight line data point that visually reflects the Excess Information Rate

The Dropped Statistics (In /Out)

The Dropped Statistics (In / Out) allows the users to view the following, in graphical format, when the corresponding box is checked:

Input / Output Drop Packets	Data points that visually reflect the amount of packets dropped for the selected time period
Input / Output Drop Bytes	Data points that visually reflect the amount of bytes dropped for the selected time period
Input / Output Drop Min	Data points that visually reflect the minimum amount of dropped packets for the selected time period
Input / Output Drop Avg	Data points that visually reflect the average amount of dropped packets for the selected time period
Input / Output Drop Max	Data points that visually reflect the maximum amount of dropped packets for the selected time period

The Computed Statistics (In /Out)

The Computed Statistics (In / Out) allows the users to view the following, in graphical format, when the corresponding box is checked:

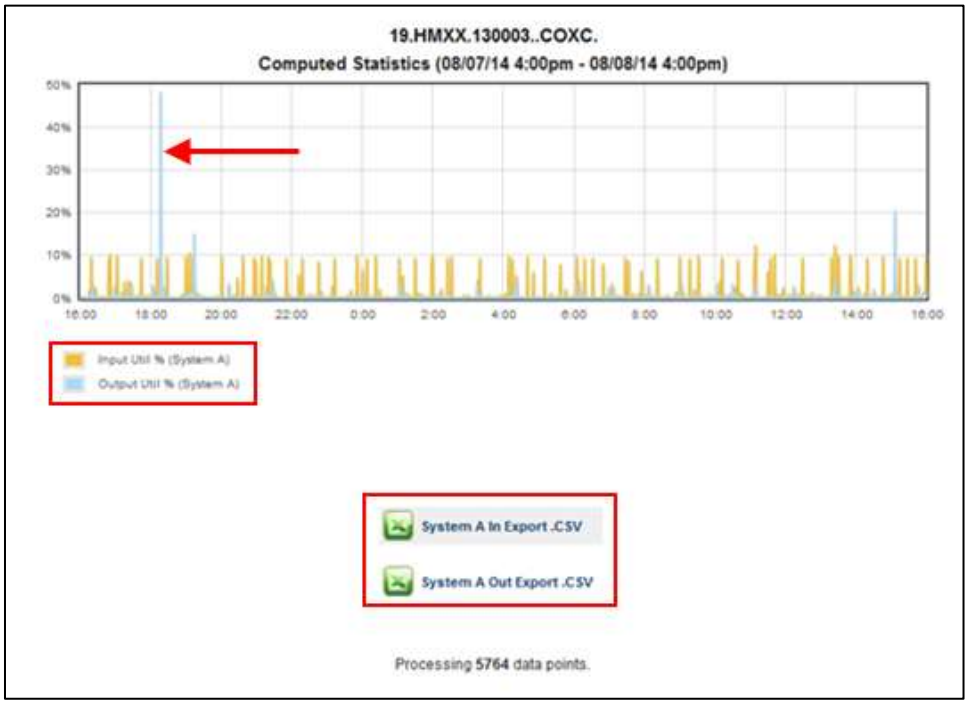
Input / Output Accept Avg 95%	Straight line data point that visually reflects the average 95th percentile of accepted for the selected time period
Input / Output Drop Avg 95%	Straight line data point that visually reflects the average 95th percentile of dropped for the selected time period
Input / Output Util%	(Utilization Percent)

You can select and graphically view byte data, utilization packet data and utilization data or any other combination of selections. For example, if you select Input CIR, Input Accept Max, and Output Accept Max, you will see a graph of the maximum amount of packets traversing the circuit for the selected time period, in addition to their CIR which should always be represented by a straight line.

Additionally, a customer signed up to burst could also select Input and Output Accept 95% to see their peak usage based on the 95th Percentile and the graph will appear underneath the existing graph.

For the one day period shown, the upstream usage peaked to around 50 percent shortly after 6 p.m. However, this customer is not a bursting customer and whether they selected Input and Output Accept 95% or Input and Output Util%, they would see the same data.

Figure 16. Upstream Usage graph (sample)



Internet Performance Management - Report Manager

The **Report Manager** heading provides a Report Summary menu bar that consists of the Report Manager, Queue Manager, and User Subscription links.

The **Performance Reports** heading includes a link to a Utilization Stats report (e.g., Circuit ID, Accept Min Rate, Accept Avg Rate, and Accept Max Rate) in an on-screen tabular format with the option to export the data, if desired.

The **Template Reports** provide usage information specifically related to the 95th percentile.

Figure 17. IPMR Report Manager left menu bar

Report Summary

Report Manager

The Report Manager tab allows you to create and manage reports as desired. As noted in Figure 17, Report Manager provides performance metrics based on the reporting of circuits in a specific domain.

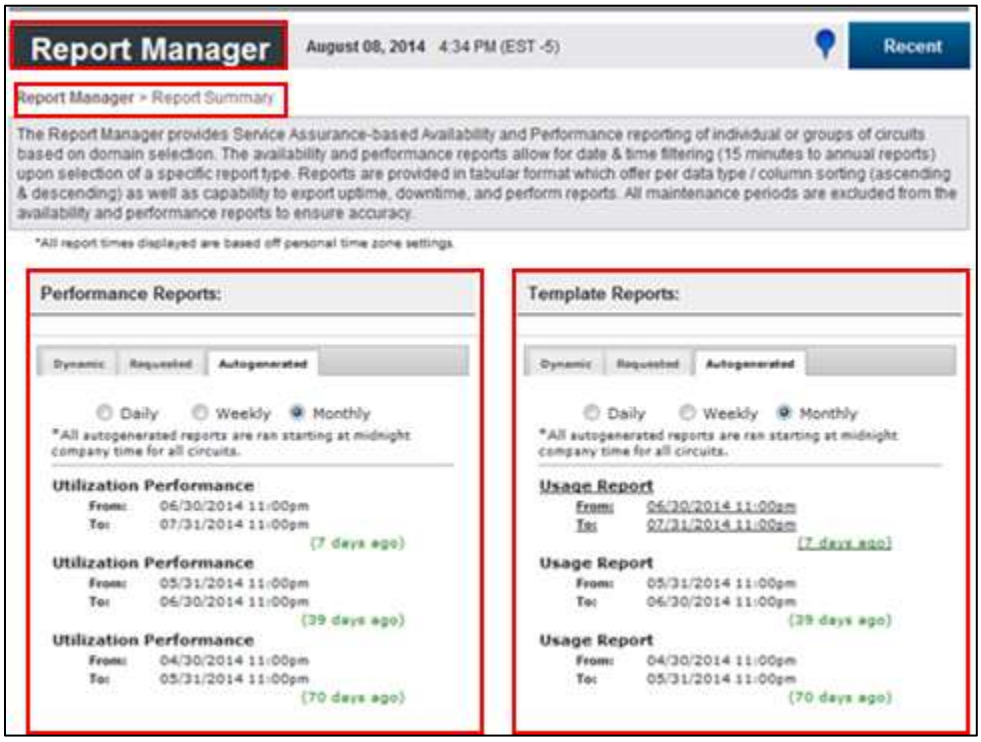
You can configure the reports based on date and time filtering as well as on-screen tabular data views or the option to export the data.

When you click one of the header tabs: Dynamic, Requested, or Autogenerated, hyperlink information appears that coincides with the selected tab.

Note: All Autogenerated reports are created at midnight company time for all circuits.

- Dynamic Reports can be viewed in near-real time.
- Requested Reports can be scheduled.
- Autogenerated allows usage data reports to be selected based on three categories – Daily, Weekly, and Monthly. Once selected, the appropriate date / time ranges are provided as hyperlink choices.

Figure 18. Report Manager



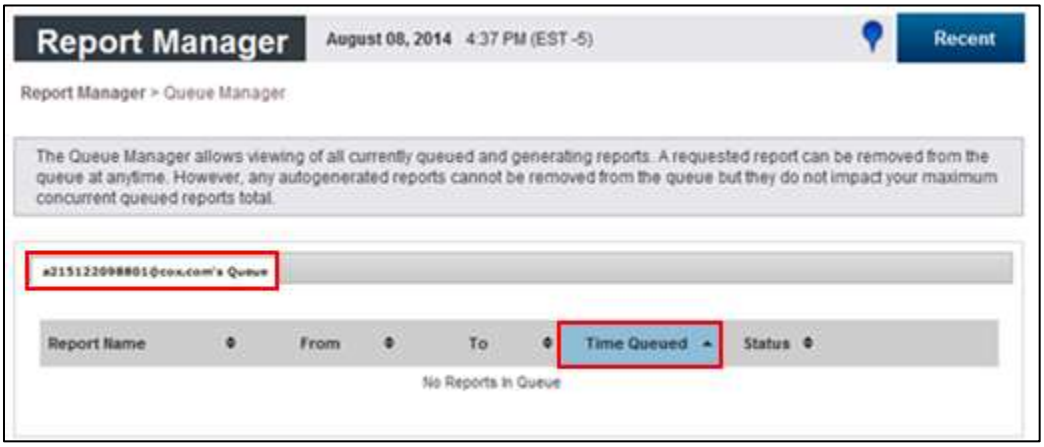
Use the following step to access Performance and Template Reports.

1. From the **Report Summary** sub-menu, click the **Report Manager** link.
   Result: The **Report Manager** window displays.

Queue Manager

The Queue Manager allows you to view all currently queued and generating reports. A requested report can be removed from the queue at any time. However, any Autogenerated reports cannot be removed from the queue, but they do not impact your maximum concurrent queued reports total.

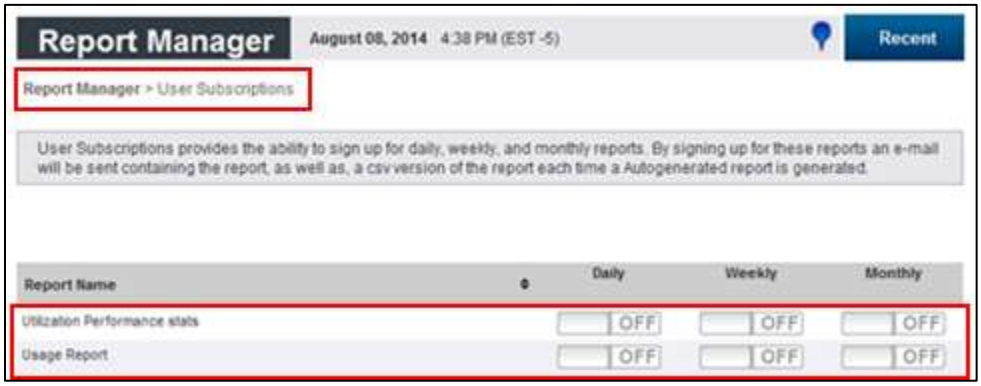
Figure 19. Queue Manager



User Subscriptions

User Subscriptions provide the ability to sign up for daily, weekly, and monthly reports. By signing up for these reports, an email will be sent containing the report, as well as a CSV version of the report each time an Autogenerated report is created. The default is set to disabled or OFF.

Figure 20. User Subscriptions

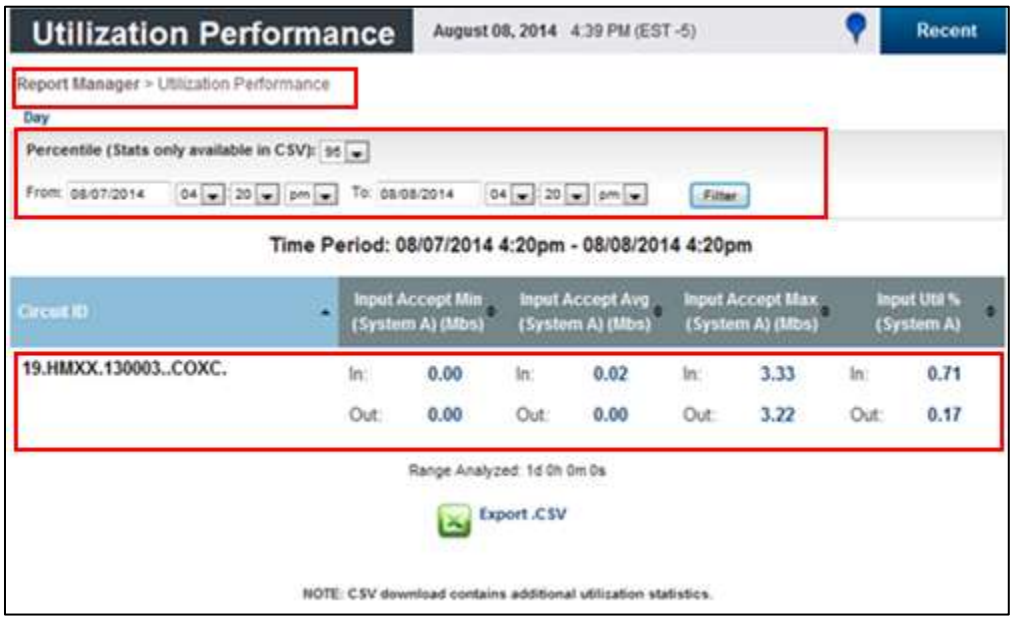


Performance Reports

Utilization Stats

The Utilization Stats report includes minimum, average, maximum accepted throughput (In / Out), and average utilization over a specified period of time with the 95th percentile metrics as the default which can be exposed by exporting the CSV.

Figure 21. Utilization Stats Report (sample)



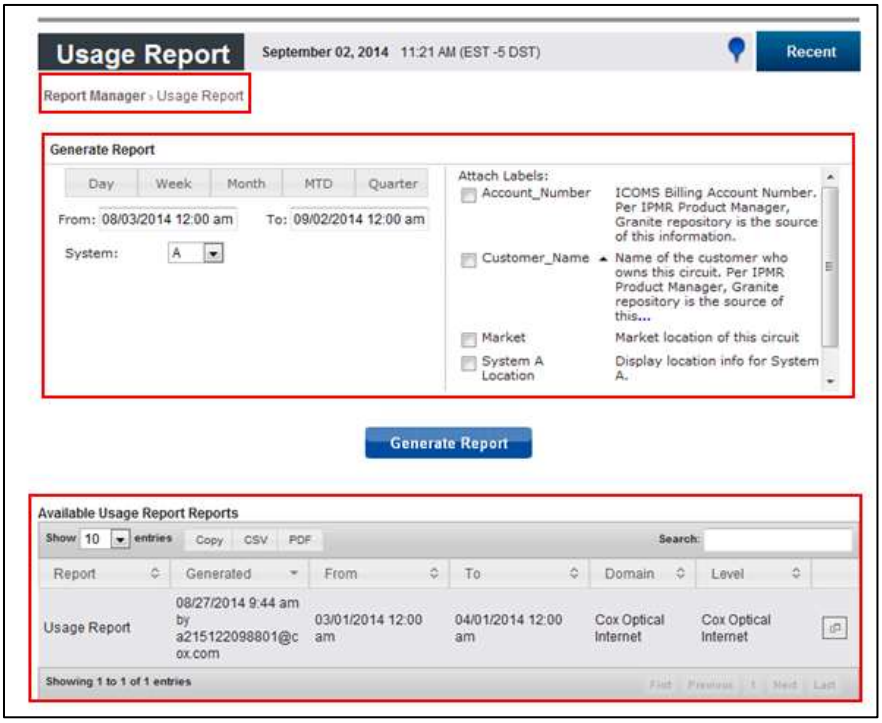
1. From the **Report Manager** menu, click the **Utilization stats** link to access the report.
2. (Optional) Click the **Export** button at the bottom of the page to view the metrics associated with the UNI for each circuit.

Template Reports

Usage Report

As was stated earlier, the Template Reports provide usage information specifically related to the 95th percentile

Figure 22. Usage Report (sample)



1. From the **Report Manager** menu, click the **Usage Report** link to access the report.
2. Select the **System** or "point" for which you want to see usage. In Figure 21, System "A" has been selected from the drop-down menu.
3. From the **Attach Labels** section, check the box(es) to include the types of information you want to see on the report.
4. Click the **Generate Report** button.
   Result: The data appears at the bottom of the window.

Network Performance Measurement Points

Change Product Views with PMR

Should you wish to change the type of product you are currently viewing, click the link in the upper right side of the toolbar. A list appears that displays the services you are currently subscribed to in the portal.

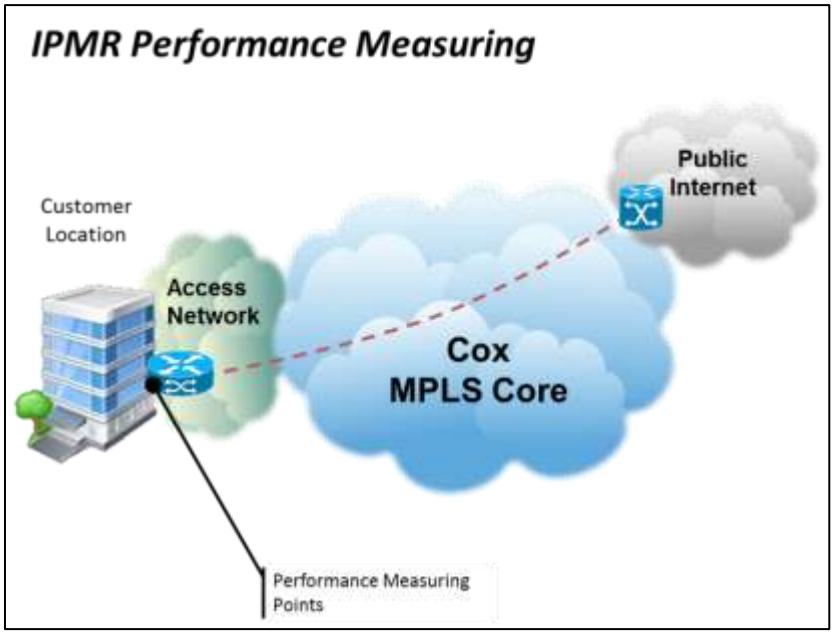
Figure 23. Product View Drop-down Menu

Understanding Network Performance Measuring Points

Internet Performance Measurements

Internet Performance Measurements for network performance statistics are measured at the Cox-provided demarcation device, which is typically a router.

Figure 24. IPMR Performance Measuring depiction



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