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Overview – Internet Dedicated Dynamic Network Manager

Dynamic Network Manager (DNM) enables you to review the configuration of your Internet Dedicated services and make changes to your port speeds.

Features and Benefits

The following are the features and benefits of Internet Dedicated Dynamic Network Manager: Make bandwidth changes in minutes through the Verizon Enterprise Center Schedule a port change order up to one year in advance Download a site detail report in Microsoft® Excel® Issue a specific set of Ping and Show commands on the Provider Edge (PE) Router

Components

Internet Dedicated Dynamic Network Manager consists of the following components:

- Looking Glass: Allows users to view the configuration information of their Internet Dedicated services. It is mainly a "view only" interface, but users are allowed to make certain nonbillable Layer 3 configuration changes to their Internet sites. Looking Glass also allows specific PING, Traceroute and Show commands to be issued for ad-hoc diagnostics.
- Dynamic Port (DPORT): Allows users to make service speed changes (up/down) to their Internet Dedicated services.

Note: Since DPORT enables price impacting changes, users require a specialized Verizon Enterprise Center (VE) entitlement or permission. Contact your Account Team for assistance with setting up these permissions.

Business Rules for Internet Dedicated Dynamic Port

The following business rules apply with Internet Dedicated Dynamic Port (DPORT):

- Available to both customer-managed and those using Verizon Managed Services.
- Available on direct connections, i.e. with an interface at a Verizon service edge router.
 DPORT is not supported on 3rd party Internet access or Broadband access.
- Available for services with Pricing Plan Tiered. Services with other Pricing Plans (e.g. Burstable Select) are not supportable for DPORT.
- Available for Internet Dedicated services with Ethernet hand-off. DPORT is not supported on services with TDM access (T1, NxT1, T3, OC-n).
- Available for services provisioned on Verizon's Current Platform. The circuit identifiers for these services begin with a C or E prefix. The Service IDs are numerical. DPORT is not supported on circuits with other prefixes.
- When you order a new Internet Dedicated service, you can order the service with a lower initial port speed than the maximum available speed on the Ethernet access. Once the service is installed, you can use DPORT to raise or lower the speed to the level you want.



- Unlimited Speed Change Requests: you can make more than one speed change request during a 24-hour period. Greenwich Mean Time (GMT) is used as the start/stop reference for a DNM 24 hour time period. DPORT speed changes can be made up until (but not after) 11:00 p.m. GMT.
- Billing: Verizon bills the Internet port charges prorated per day, i.e. in 24 hour minimum daily increments. The highest speed change request made during a 24 hour period will be the speed that is passed to billing for that day.
- Carry Over Speed: The last speed entered for the day will be the one that gets carried over to the next day and be in effect until a subsequent speed change.

The following restriction applies:

 DPORT is not supported on services with non-standard port speed which require a capacity check by the Verizon Network Planning team. Speed changes for these services need to be requested through the Verizon Sales team.

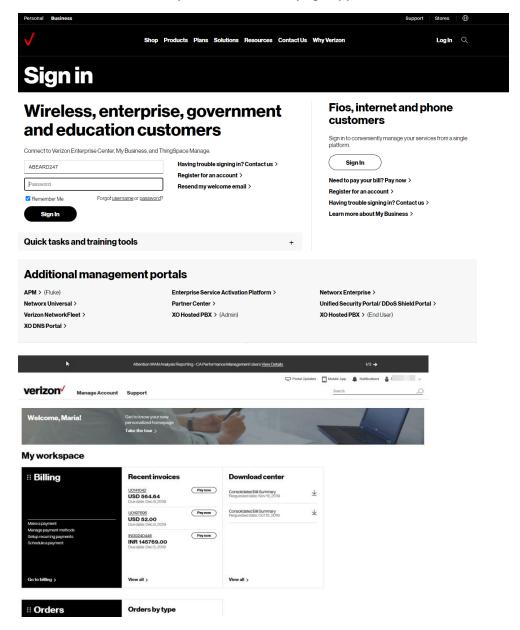
CPE configuration:

• It is important to modify your router configuration for Dynamic PORT in order to keep your router in sync.



Sign In to Verizon Enterprise Center

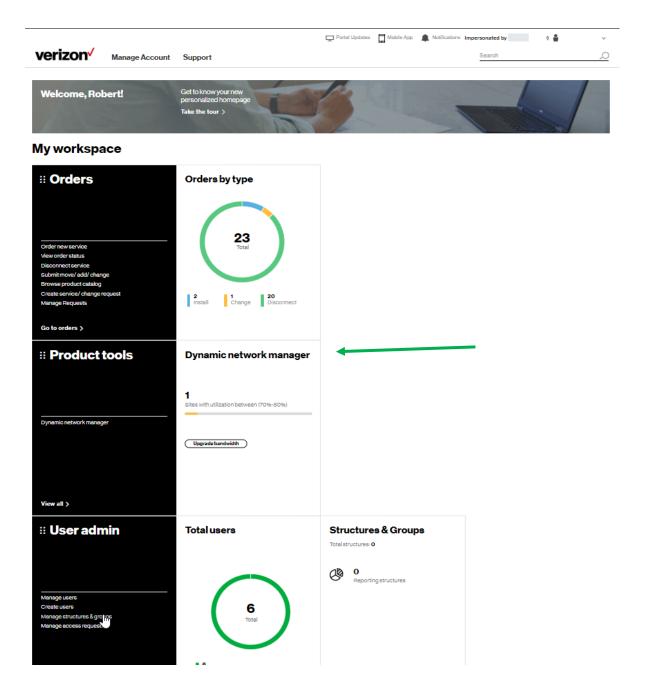
- 1. Go to https://sso.verizonenterprise.com/. The sign in page appears.
- 2. Enter your user name and password and Click Sign In.
- 3. The Verizon Enterprise Center home page appears.





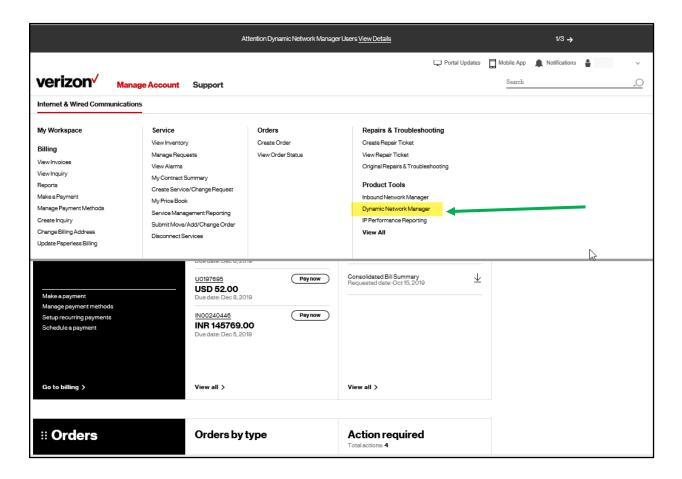
Accessing Dynamic Network Manager

Click Dynamic Network Manager on the Verizon Enterprise Center home page to go to the Dynamic Network Manager (DNM) Dashboard page





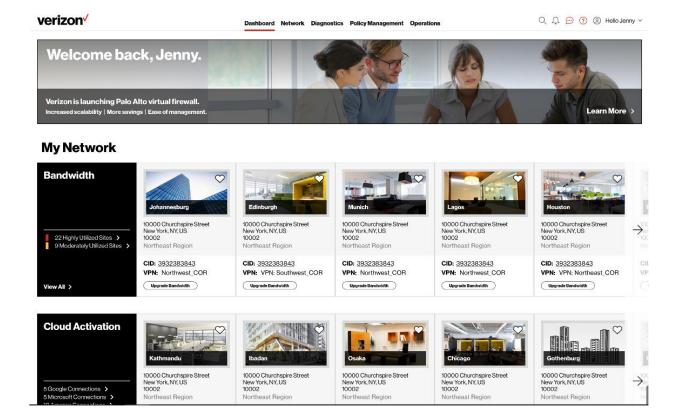
Alternative Verizon Enterprise Center Menu Access to DNM





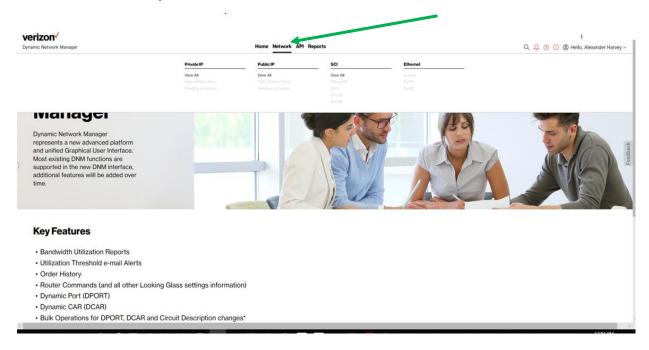
Dashboard

The Dynamic Network Manager (DNM) Dashboard presents users with circuits that might require immediate attention. The circuits are arranged by category in horizontal rows. These categories include circuits exhibiting high utilization (thus at risk for packet loss), New Activations, and so on. Dynamic Network Manager (DNM) includes artificial intelligence capability to allow it to learn over time which issues/circuits are of most interest to a user and adjust screen presentation around those preferences.



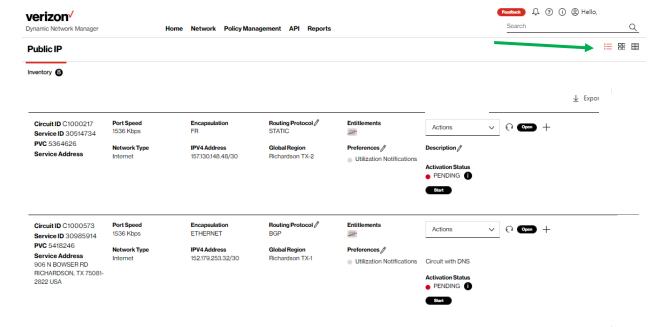


Select Network to see your Verizon IP Services.



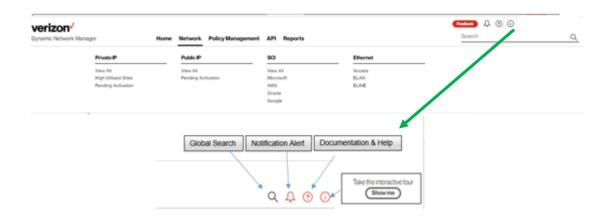
The Dashboard displays a menu of your Verizon Enterprise Center entitled IP services choices. Choose Network to search / list the circuits that you have permission to review.

Public IP circuit list after selection under Network Menu, shown in List view:

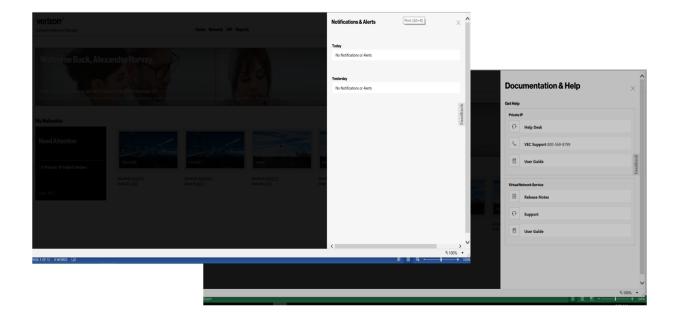




Search, Notification Alert, Documentation & Help, Interactive Tour



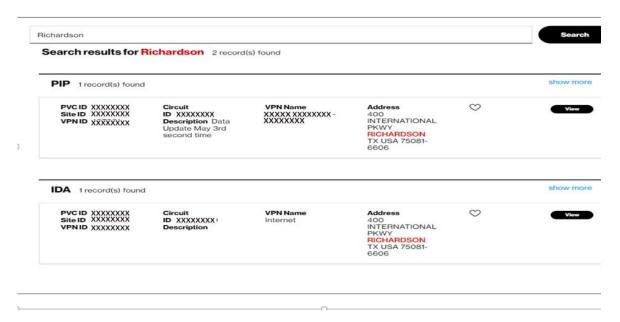
Notification Alerts, Documentation & Help



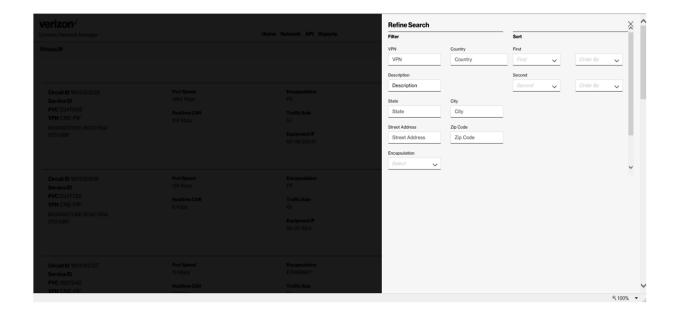


Search

Search allows users to look up circuits by circuit ID, service ID, VPN, or location. You can also display search results by Location for multiple service types (e.g. Private IP, Public IP, Secure Cloud Interconnect (SCI) and SDWAN Co Management (Versa)). You can refine your search further by accessing the "Filter" menu.



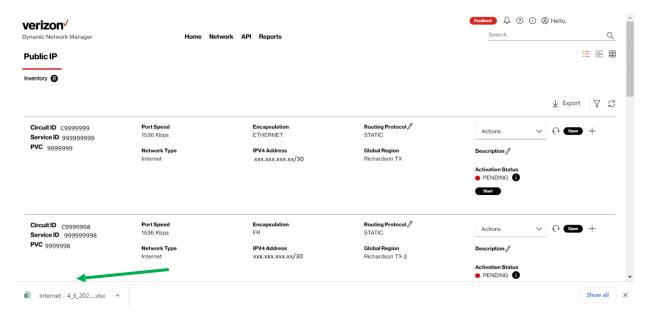
Search Filter Options





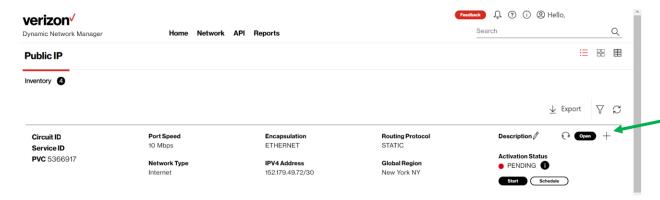
Export

Export allows a user to export the current screen data to a CSV file.



View Circuit Details

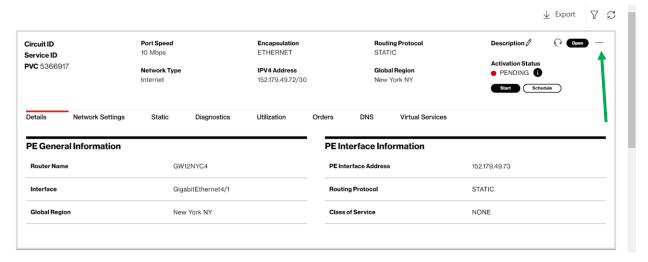
Click on the "add symbol" ("+") to view the details of the circuit.



Note: You can change the description for each circuit. Click on the "pencil" symbol near the Description. View the pop up. Enter the description that needs to be changed. Click on "save changes."

Upon clicking on the "add symbol" ("+"), you can review Verizon provider edge interface information and drill down to further details related to the circuit:





Click on the "minus symbol" ("-") to hide the details of the circuit.

Network Settings

This section contains

- Customer Edge (CE) and Provider Edge (PE) settings information.
- IP routing information
- Demarcation / Location information

Click on the "add symbol" ("+") to view the details of the circuit ID.

Click on the "Network Settings" tab to view PE and CE settings details of the circuit.



Details	Network Settings	IPv4 eBGP	Diagnostics	Utilization	Orders	DNS Virtual	Services	
PE Gene	ral Information				- 1/3	PE Interface Infor	mation	
Router Nar	me		GW2FFT3			PE Interface Address	139.4.77.109	
Interface			xe-2/3/1			Routing Protocol	BGP	
Global Reg	ion	11	Frankfurt Am Main HE	SSEN DEU		Class of Service	NONE	
IPv4 eBGI	P							
Location		Fr	rankfurt Am Main HESS	SEN DEU		Maximum Prefix	1000	
Description						MD5 Password		
Router		G	W2FFT3			Shutdown BGP?	No	
Router Local IP			W2FFT3 89.4.77.110			Shutdown BGP? Peer Address	No 139.4.77.110	
		13						

Edit IPv4 eBGP

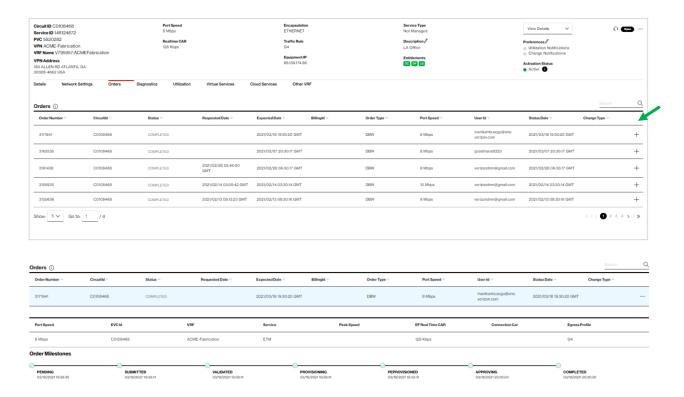
Address / Prefix	/0	Layer 2 Encapsulation	undefined undefined
Server Level			
ayer 1/2 Information			
CONNECTOR TYPE	LC	VLAN set to	300



DNM Order History

Users can review the details and the status of Dynamic Network Manager (DNM) orders per circuit.

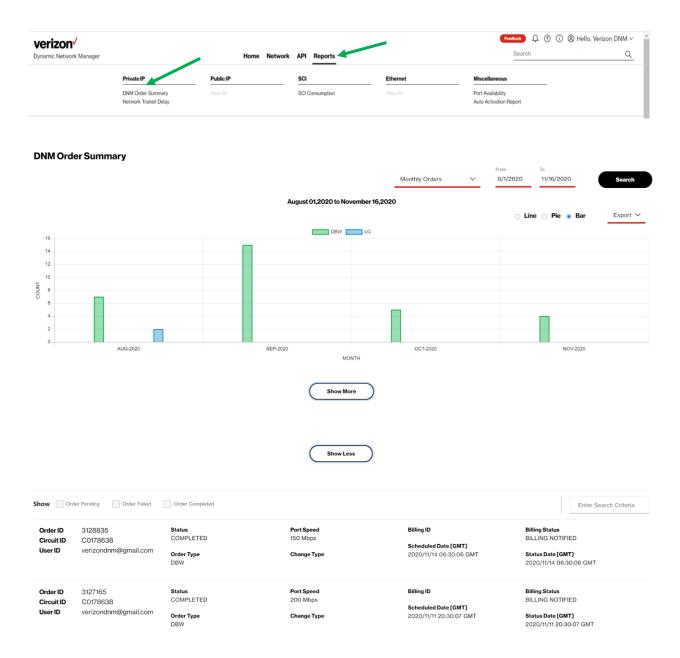
- 1. Click on "Orders"
- 2. Click on the "add symbol" ("+") to view the details of an order.





DNM Order Summary

This report allows users to see multiple circuit change activity versus single circuit events (shown in Order History). You can tailor the report to show a defined range of time and frequency of change orders. Results can be exported to PDF and Excel file formats.

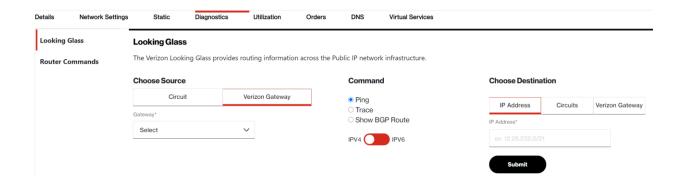




Diagnostics > Looking Glass

The Looking Glass provides routing information across the Public IP network infrastructure. Users can issue Ping, Traceroute and Show BGP Route commands to review network latencies and routing details between selectable network locations.

- 1. Click on the "add symbol" ("+") to view the details of the circuit ID.
- 2. Click on the "Diagnostics" tab to view the *Looking Glass* section and the *Router Commands* section. The *Looking Glass* section is displayed upon clicking in "Diagnostics."
- Select a command from the Command list (Ping, Trace, or Show BGP Route).
- 4. Select Source and Destination and make respective selection or entries.
- 5. Click Submit. The system displays the response from the router.



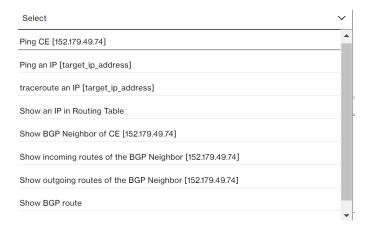
Diagnostics > Router Commands

Users can issue router commands to verify specifics in their network.

- Click Router Commands under Site Details. The Router Commands section appears above Site Details.
- 2. Select a command from the Select Router Command drop-down list.
- 3. Click Submit. The system displays the response from the router.







Diagnostics > Router Commands

Ethernet Access Pre Activation Test (US only)

Users can issue an Ethernet Access test prior to activating the circuit.

If all the below conditions are satisfied DNM allows the Ethernet Access Test and will display the Ethernet Access Test Results tab.

Conditions:

Encapsulation must be Ethernet

Region must be US domestic Circuit

Port Speed must be less than or equal to 1GB

Circuit Activation Status cannot be active

Submission of the Test Steps:

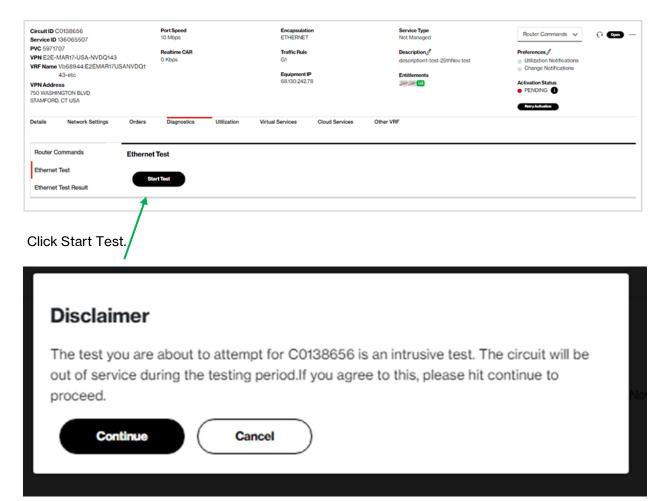
Click Router Commands under Site Details. The Router Commands section appears above Site Details.

Select the "Ethernet Test" from the Router Command drop-down list.

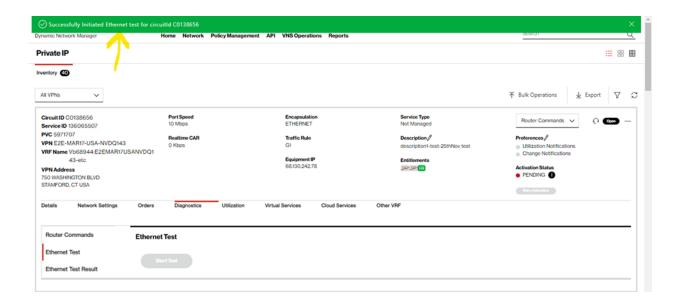
Initiate the Test



DNM Ethernet Tab

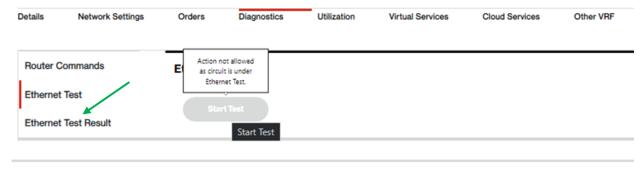






After Ethernet test is completed

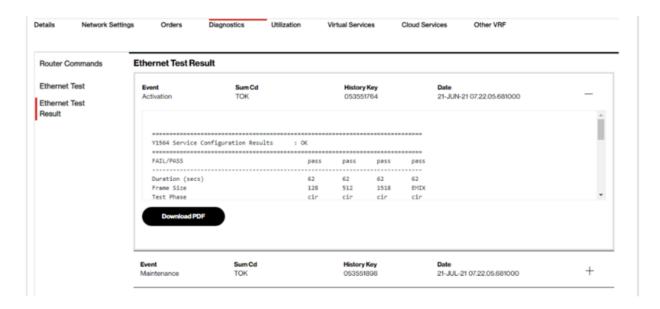
- Ethernet test results option will appear
- Click Ethernet Test Result.





Response from Test

Ethernet Access Test Results



Bandwidth Utilization

Users can view a high-level chart displaying peak circuit utilization figures per day over a time period of 1 day through 30 days. The example below shows the peak utilization figures for received and transmitted results taken from the Verizon Provider Edge (PE) port. Ingress/Received is what Verizon receives from a customer, and Egress/Transmitted is what Verizon sends to a customer. If you were to view the Customer Equipment (CE) port then you would see the opposite measurements. Verizon PE port measurements and CE port measurements should closely match.





- 1. Click on the utilization tab to view the utilization details.
- 2. By default the graphs display the data for the last 30 days.
- To enlarge the view for a specific time period, drag the start and stop date to the requested dates.
- 4. Use the toggle buttons next to Egress and Ingress speed to view specific usage details (i.e. Only Egress or Ingress traffic).
- 5. Use the Export function to download the traffic figures in table format.

Note: Detailed usage/utilization reporting for Internet Dedicated services is available in the Verizon Enterprise Center application "IP Performance Reporting (IPR)."

IPv4 eBGP Routing / Static Routes

If your service is configured for BGP routing, related configuration details are displayed under "Network Settings" and are also directly accessible under the tab "IPv4 eBGP". Users can submit certain changes, such as "Shutdown BGP."

If your service is configured for static routing, related configuration details are displayed under "Network Settings" and are also directly accessible under the tab "Static." Changes to static routing configuration are currently not supported in the Dynamic Network Manager tool.



Port Speed Changes: Dynamic Port (DPORT)

The Dynamic Port (DPORT) feature allows users to submit a change order online to raise/lower port speeds for entitled services. After an Internet Dedicated port is provisioned and has been entitled for DPORT, you can use the Dynamic Network Manager to adjust the port to a desired speed value.

After Verizon Enterprise Center entitlements for Dynamic Port are confirmed, you must initially wait 24 hours before the first change order can be issued. This is due to the IT processing time for the submitted entitlements/permissions.

DPORT for Internet Dedicated is only available for services that meet the following criteria:

- Provisioned on Verizon's Current Platform. These services have numeric service ID and circuit IDs with a "C" prefix,
- Ordered with pricing plan = Tiered,
- Installed with a standard speed, i.e. a speed that does not require a capacity check, and
- Ethernet circuit types

The entitlement status of a circuit is displayed on the circuit summary under "Entitlements":



Entitlement codes are:

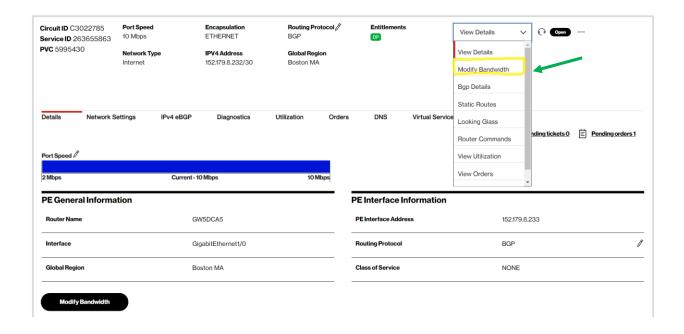
- DC = Dynamic CAR: this is not used with Internet Dedicated
- DP = Dynamic Port
- LG = Looking Glass

Please refer to the applicable rules for Internet Dynamic Port, which are provided above in section "Business Rules for Internet Dedicated Dynamic Port."

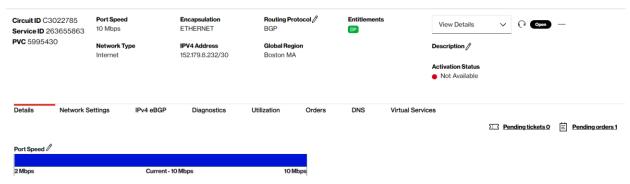
How to Modify Port Bandwidth

Click Modify Bandwidth in the Actions Menu (or in the Expanded Details view, bottom left of screen):



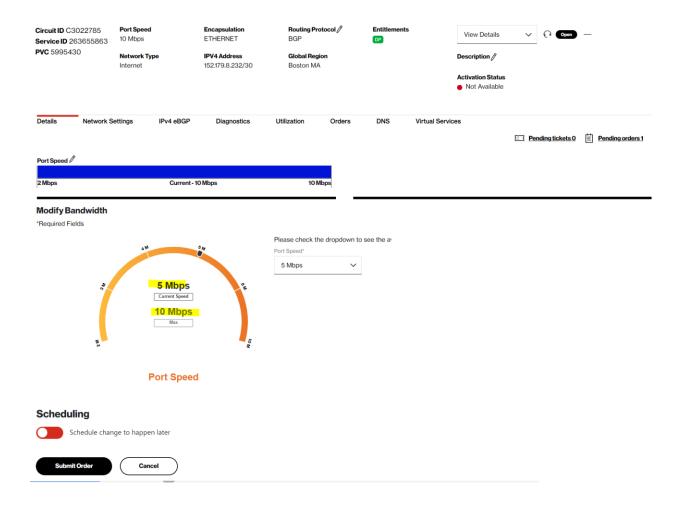


Review, if there are pending orders on the circuit. Pending orders must be completed first before you can submit a new bandwidth change request in the Dynamic Network Manager (DNM).



Upon clicking on "Modify Bandwidth", you can review the current bandwidth settings and select new values from the respective dropdown menus:

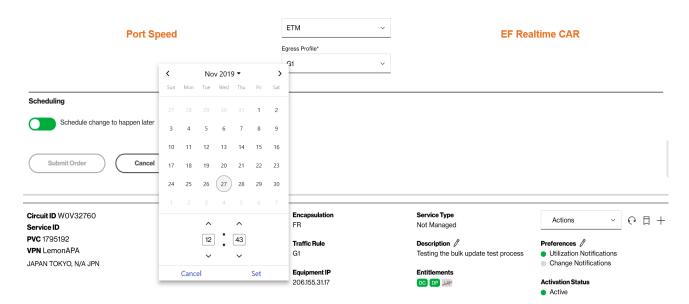




The dropdown menu for the port speed is specific to the service and includes the eligible speeds for change requests in the Dynamic Network Manager (DNM). These port speeds are included in the respective service contract together with their respective monthly recurring charge. Please contact your Verizon account team if you wish to upgrade or downgrade to a speed that is not included in the dropdown.

Scheduler: User may optionally schedule port changes out to a year in advance





Note: Users cannot change or remove scheduled orders in the Dynamic Network Manager (DNM) portal. Please open a ticket (see below), if you want to remove a scheduled order in the DNM.



Order Confirmation Pop-Up:

Confirm Your Order

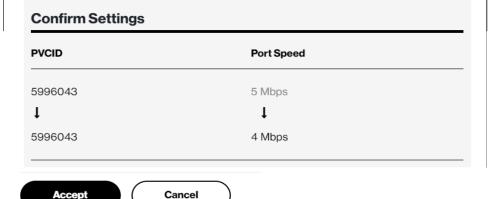
You acknowledge that by submitting this order, the monthly charges billed to this account may increase or decrease, in accordance with your contract and the changes you have made to your network bandwidth.

Note that these changes may impact your network performance if they are not in accordance with the technical and business rules.

Depending on your traffic profile, the actual bandwidth available to you may be reduced due to related Ethernet protocol overhead. You must apply bandwidth shaping policies at your CE egress to prevent packet loss due to the Ethernet protocol overhead used within the Company Network.

If your Customer Edge (CE) router is not managed by Verizon, please be sure to implement any corresponding CE configuration changes. If your CE router is managed by Verizon, please be aware that your requested changes may take up to 72 hours before the CE routers are manually updated by Verizon.

Click "Accept" below to acknowledge your acceptance of these changes to your account.





You acknowledge that by submitting this order, the monthly charges billed to this account may increase or decrease, in accordance with your contract and the changes you have made to your network bandwidth. Note that these changes may impact your network performance if they are not in accordance with the technical and business rules.

Depending on your traffic profile, the actual bandwidth available to you may be reduced due to related Ethernet protocol overhead. You must apply bandwidth shaping policies at your CE egress to prevent packet loss due to the Ethernet protocol overhead used within the Company Network.



If your Customer Edge (CE) router is not managed by Verizon, please be sure to implement any corresponding CE configuration changes. If your CE router is managed by Verizon, please be aware that your requested changes may take up to 72 hours before the CE routers are manually updated by Verizon.

Click "Accept" below to acknowledge your acceptance of these changes to your account.

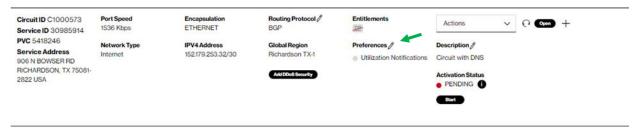
Note for Ethernet Access

Ethernet Access goes from the customer premise to the nearest Layer 2 device. A Network to Network Interface (NNI) connects the Layer 2 device to the nearest Internet Dedicated Provider Edge over a shared interface. The bandwidth on the NNI is not reserved. In the event the NNI or Provider Edge device has reached capacity it will not be possible to increase your Ethernet Port speed. You will however be able to lower the speed. The dropdown menu on Dynamic Port will reflect the port speeds available based on the amount of bandwidth on the NNI. If the NNI or Provider Edge has been capped you will need to engage your Verizon account team (or the Verizon Enterprise Help Desk) to enable submission of an order to increase bandwidth. As part of the ordering process your Ethernet Port will be migrated to an NNI with sufficient bandwidth to support the higher port speed. There will be no change in the Circuit ID; it will remain the same.

How to Setup Threshold Alerting

Threshold Alerting allows customers to set up Utilization Bandwidth alerts. Customers can choose which circuit to enable threshold alerting as well as the percentage of utilization from 30% up to 90%. They can decide to alert daily, weekly or monthly based on their preferences. Follow these steps to activate threshold alerting on your specific sites.

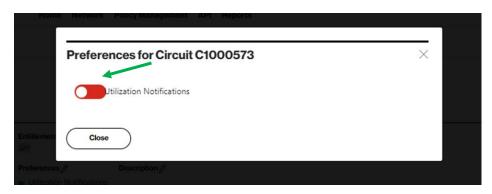
From the Circuit listing page



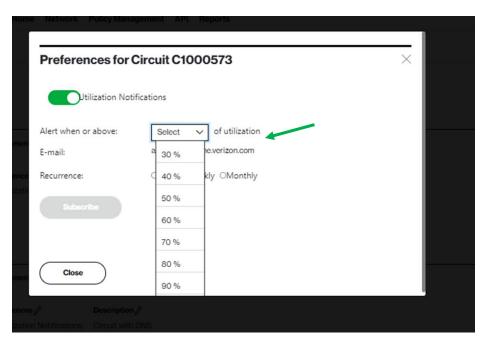
Next to the preferences, Click on pencil



How to Setup Threshold Alerting

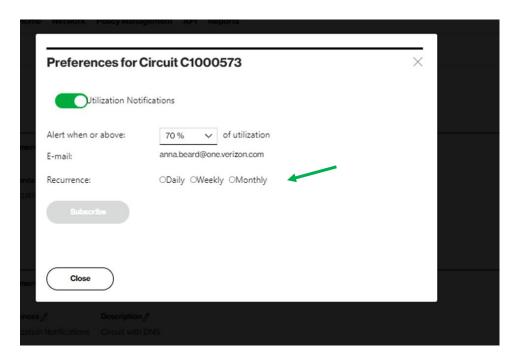


Click Utilization Notifications button to change it from Red to Green



Select Alert Percentage from drop down box





Select how often you want to be alerted; Daily, Weekly or Monthly.

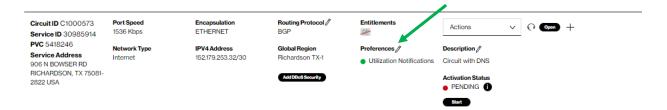
Click on Subscribe

Click Close

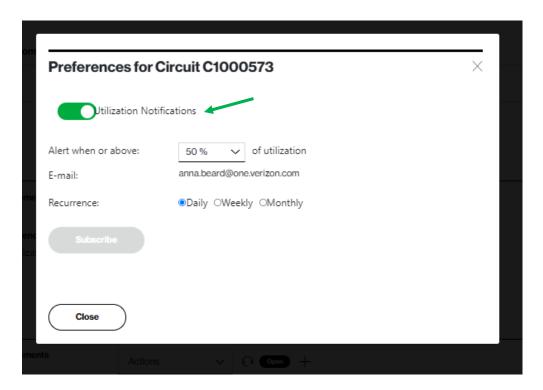


Utilization Notification will display Green as active.

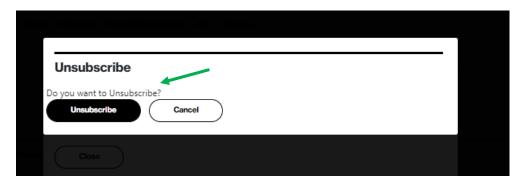
To turn the notifications off, just start from the beginning, click on the Pencil next to Preferences







Click on Green Button next to Utilization Notifications



Click on Unsubscribe

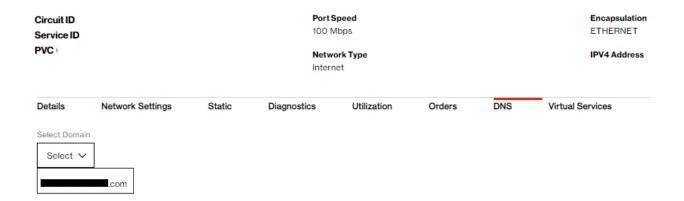


It will confirm Unsubscribe is Successful, Click close



DNS

DNS = Domain Name System. This tab/functionality is not available yet. It shall enable users to view and edit DNS zone files for Internet domains that are associated with an Internet Dedicated service. Associated domains will be displayed in a dropdown.



Open Quick (Trouble) Ticket

Click the Headphone icon under Site Details. The Create Quick Ticket pop-up appears.



- 1. When you open a ticket, the Service ID for which you are viewing in the Site Details automatically populates. Enter a different Service ID, if applicable.
- 2. Click Next to verify service and enter the ticket information.



Customer Support & Training

Customer Support

Contact customer support for product and general platform questions or errors.

Contact your account team with any account specific questions on equipment or service, pricing information, or adding additional users to the Verizon Enterprise Center.

Click on your name in the top right corner of the screen. Click Contact Us & Send Feedback.

- U.S. Call 1.800.569.8799 (M-F 9 AM 6 PM ET)
- Live Chat: Icon located in Verizon Enterprise Center, Networx and Calnet Portals
- EMEA Customers: 00 800 4321 5432 or customer-care-emea@intl.verizon.com
- APAC Customers: apac.vec.support@intl.verizon.com

Training

Go to https://customertraining.verizon.com to enroll in training or to download user and other reference guides. Log in with an existing login or create a new one.

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