Dynamic Network Manager User Guide - Ethernet E-Line

Version 7.1 Last Updated: October 2023



Table of Contents

| Switched E-Line Dynamic Network Manager overview | 3 |
|--|----|
| Features & benefits | 3 |
| Business rules for E-Line | 3 |
| Search, notification alert, documentation & help, interactive tour | 7 |
| Site activations | 9 |
| How to modify E-Line EVC bandwidth | 10 |
| Bandwidth utilization | 14 |
| DNM order summary | 17 |
| Diagnostics > Router commands | 18 |
| DNM order history | 22 |
| DNM order summary | 23 |
| Bulk operations | 24 |
| Bulk EVC description updates | 25 |
| Bulk bandwidth change transactions | 28 |
| Bulk subscriptions | 30 |
| Threshold alerting options | 31 |
| How to set up threshold alerting | 32 |
| How to set up 30 day daily average alerting | 33 |
| How to turn off utilization alerting | 34 |
| How to set up busy hours alerting | 35 |
| Unsubscribe from busy hours | 37 |
| Network Settings | 38 |
| Customer support & training | 39 |



Switched E-Line Dynamic Network Manager overview

Switched E-Line Dynamic Network Manager (DNM) enables you to make changes to your Switched E-Line EVC Speed.

Features & benefits

Following are the features and benefits of Switched E-Line Dynamic Network Manager:

- Schedule an EVC bandwidth change order up to one year in advance
- Make bandwidth changes in minutes through the Verizon Enterprise Center

Business rules for E-Line

The following business rules apply with E-Line Dynamic Network Manager:

- Available to existing and new customers, both customer-managed and those using Verizon Managed Services.
- Available for sites located globally
- Bandwidth for EVCs Ordered prior to Q42021 cannot be decreased below the original bandwidth the EVC was ordered at in the Contract
- Billing is based on the highest reserved bandwidth in a calendar day
- Ethernet Access must be provisioned to meet projected Ethernet EVC needs
- Application response time is within 60 minutes of request
- Service interruption time less than 15 minutes
- Customer entitlement to the tool required
- Incremental bandwidth rates are not discountable
- Capacity availability is first come first serve, no guarantee
- Standard change orders to the base line speed/circuit will have precedent over a Dynamic Bandwidth change. Thus, a Dynamic Bandwidth change order in progress will be overridden and end dated by the standard change order.
 - Recommendation to customer/account team: Customers should place a moratorium on dynamic bandwidth changes until the (increase or decrease) standard change order is completed to the base line bandwidth.
 - Customer doesn't lose enablement of the feature nor does the circuit lose its enablement.
- Below are detailed rules for bandwidth changes per day
 - 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. EBOD (Ethernet Bandwidth on Demand) speed changes can be made up until (but not after) 11:00 p.m. GMT.
 - Ability to Reverse Speed Change Requests: Within 60 minutes of making a speed upgrade (or downgrade) request, you can "correct" the request (as needed) by reversing the speed change request back to the original speed. After 60 minutes the speed change will be completed from a billing perspective. One speed correction is allowed during a 24-hour period.
 - Billing: Verizon will continue to bill 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.



Accessing Dynamic Network Manager

When you log into the Verizon Enterprise Center (VEC) home page to go to the Dynamic Network Manager (DNM) Dashboard page. It can be found under "Product Tools."

| l | Internet & Wired Communications | | | | What's new | Mobile app | Notifications |
|---|---------------------------------|----------------|--------------------|---------------------------|--------------|-------------|---------------|
| • | \checkmark | Orders Service | Repairs <u>Pro</u> | ductTools Billing Support | | Q | |
| | | | | Network Management | Product Too | ols Support | |
| | | | | Dynamic Network Manager | Guides & Tut | torials | |
| | | | | IP Performance Reporting | | | |
| | | | | Viewall | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Internet & Wired Communications workspace

View and manage additional accounts from your workspace. For details, go to Access Request >

- 1. Go to http://sso.verizonenterprise.com. The sign in page appears.
- 2. Enter your user name and password and Click Sign In.
- 3. Verizon Enterprise Center home page appears.
- 4. Click on Dynamic Network Manager, found under Product Tools.

Dashboard

The 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. 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.



Dynamic Network Manager User Guide – E-Line

| \checkmark | Home Network API | Reports | Report an Issue | 다 🕜 🛈 🛞 Hello, Ma earch | anjun. Q |
|---|---------------------------------------|--|-------------------|--|-------------|
| My Networks To view complete inventory navigate to Network | section available in top menu | | Last 30 days | Manage W | /idg |
| Service Activation | Private IP Sites | Private IP Circuit Circuit ID: C4029149 PVC: 6013801 | ts (Activate) | Circuit ID: C4029160 PVC: 6013855 | View All > |
| Private IP Sites (44) | 44 | TX 76102-2504 USA View Details | | TX 76102-2504 USA View Details | |
| Internet Sites (20) | 27 Completed | Circuit ID: C4029150 PVC: 6013802 800 w 7th ST Fortworth, TX 76102-2504 USA <u>View Details</u> | Activate | Circuit ID: C4029177 PVC: 6013854 1200 w 7th ST Fortworth, TX 76102-2504 USA View Details | Activate |
| | 8 Ready for Activation 9 Cancelled | Circuit ID: C4029148 PVC: 6013803 600 w 7th ST Fortworth, TX 76102-2504 USA View Details | Activate | Circuit ID: C4029187 PVC: 6013833 1000 w 7th ST Fortworth, TX 76102-2504 USA <u>View Details</u> | Activate |
| Needs Attention | Private IP Failed Orders | Private IP Circuit Order ID: 3369334 Circuit ID: C4029149 | ts View All > | | |
| Private IP Failed Orders (20) | 20 | Order Type: DBW Status: L2Failed <u>View Details</u> | Support | | |
| Internet Failed Orders (20) | Total | Order ID: 3369564 Circuit ID: C4029150 Order Type: DBW Status: L2Failed | View Milestones | | |
| E-Line Failed Orders (20) | 8 Order Failure (DPORT) | View Details Order ID: 3369578 Circuit ID: C4029148 Order Type: DBW Status: CMRCREATED View Details | (View Milestones) | | |

Select **Network** to see your Verizon Private IP, Internet Dedicated, Ethernet E-Line or Secure Cloud Interconnect (SCI) Services.

verizon

| Dynamic Network Manager | | Home Network | API Reports | |
|-------------------------|---------------------|--------------------|-------------|----------|
| | Private IP | Internet Dedicated | SCI | Ethernet |
| | View All | View All | View All | E-Line |
| | High Utilized Sites | Pending Activation | Microsoft | |
| | Pending Activation | | AWS | |
| | | | Oracle | |
| | | | Google | |
| | | | | |



The Dashboard displays a menu of your Verizon Enterprise Center entitled service choices. Choose Network to list the circuits or EVCs in inventory that you have permission to review.

| verizon | | | | Ļ (| 🕑 🥼 🕲 Hello, Anna 🗸 | |
|---|---------------------------------------|--|--|---|---------------------|--|
| Dynamic Network Mana | work Manager Home Network API Reports | | PI Reports | Search | Q | |
| E-Line | | | | | ≣ # ■ | |
| | | | | → Bulk Operations | ± Export ∑ Č, | |
| Service ID 17148 EVC ID 5880418 Billing ID BGW ID C10562 | 84645 8 225 | EVC Speed O Kbps EVC Max Bandwidth O Kbps | Description testing DNM description Entitlements | Actions ~ | + | |
| A Side | Z Side | Access Max Bandwidth O Kbps | EBOD | Activation Status • Ready for Traffic | | |
| NA | NA | | | Birth Certificate Health Test Progress ① | | |
| Service ID 1289 EVC ID 5781239 Billing ID BGW ID C10423 | 981268 9 394 | EVC Speed O Kbps EVC Max Bandwidth O Kbps | Description C1042394 Entitlements | Actions V Preferences Utilization Notifications | + | |
| A Side | ZSide (i) NA | Access Max Bandwidth 0 Kbps | | Activation Status Ready for Traffic Start | | |
| | | | | <u>↓</u> Birth Certificate Health Test Progress (i) | Live Chat | |

E-Line virtual circuit List after selection under Network Menu

Birth certificate: This option is for information only and allows users to download the initial details for the circuit. This includes the RFC 1564 test, if it exists, the initial activation of a circuit. It will provide the Activation date, user that activated the circuit, RFC 1564 test results if they exist. Current PVC / EVC Configuration and Traffic Utilization.

Health test: This option is for users to verify the health of the logical systems to ensure all systems are accurate. Users can use this option, if they are seeing order failures to run through to verify DNM that interact with DNM.



| Dynamic Network Mar | Nager H | forme Network Policy Manage | ment API Reports | | Search | 0 |
|---------------------|--|--------------------------------|--|--------------------------------------|--------|---|
| | Private IP | Public IP | sci | Ethernet | | |
| | Vew All High Utilized Sites Pending Activation | View All Pending Activation | View All Microsoft AWS Oracle Google | Access ELAN ELINE | | |
| | | Głobal Search | Notification Alert Do | Take the interactive tour Brow me | | |

Search, notification alert, documentation & help, interactive tour

Documentation & help, interactive tour

The documentation help screen provides links to self-service training materials, product user guides, help desk for each product.

| Documentation & Help | × |
|----------------------|---|
| | |
| Quick Links | + |
| VZ Tube | + |
| VEC Support | + |
| | |

Click on the "+" to open the details



| Documentation & Help | | | | | |
|----------------------|--------------------|---------------------------|---|--|--|
| Quick Links | | | _ | | |
| Private IP | Internet Dedicated | Secure Cloud Interconnect | | | |
| Help Desk | Help Desk | Help Desk | | | |
| (i) Service Guide | (i) Service Guide | (i) Service Guide | | | |
| E Welcome Kit | E Welcome Kit | E Welcome Kit | | | |
| DNM Activation | E-Line | Switched E-LAN | | | |
| (i) Service Guide | Help Desk | (i) Service Guide | | | |
| | (i) Service Guide | | | | |
| | | | | | |

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, E-Line, Secure Cloud Interconnect (SCI) and SDWAN Co Management (Versa)). You can refine your search further by accessing the "Filter" menu.

| | | All | Products 🗸 richardson | | | | | Q Search | | Searchresu | Its for richardson Brecord(s) found |
|-------------------|------------------------|---------|-----------------------|-------------|------------------------------|------------|-------|-----------|------------|--------------|-------------------------------------|
| Private IP 🙆 Inte | rnet Dedicated 🕲 E-LAN | 9 | | | | | | | | | |
| Private IP 2 roo | cord(s) | | | | | | | | | | Export List View Compact View |
| Circuit ID 🗸 | Service ID 🗸 | PVC 🗸 | VPN 🛩 | Description | Street v | City | State | Country - | Zip | Port Speed ~ | |
| C0133178 | 196853498 | 5935872 | VNS-170463823 | | 400 INTERNATIONAL PKWY | RICHARDSON | тх | USA | 75081-6606 | 10 Mbps | Ques . |
| C0233578 | 1461876187 | 6286290 | Vz-Test-8 | | 400 INTERNATIONAL PKWY | RICHARDSON | ТХ | USA | 75081-2805 | 1 Gbps | Open |

Search filter options



| Verizon ⁷ Dynamic Network Manager | Home | Network API Reports | Refine Search | | Sort | | | × | ^ |
|--|---------------------------------------|--|--|--------------------------------------|--------------------------|---|----------|---|---|
| Private IP | | | VPN VPN Description | Country | First First Second | ~ | Order By | ~ | l |
| Circuit ID W0V30609 Sentee ID PVC 5347682 VPN CNE-RF RASNOSTICKE ROAD R02 OTD CBR | | Encapsulation FR Traffic Rule GI Equipment IP 66.138.222.57 | Description State State Street Address Street Address Encapsulation Select | City City Zip Code Zip Code | Second | ~ | Order By | ~ | l |
| CircuitID W0V30618 Sentce ID PVC 5347720 VPN CNE-RF BASINGSTOKE ROAD R02 OTD GBR | | Encapsulation FR Traffic Rule Cl Equipment IP CE.337.50.5 | | | | | | | |
| Circuit ID W0V93727 Service ID PVC 1827940 VPN CNE-PIF | Port Speed 15 Mbps Realtime CAR | Encapsulation ETHERNET Traffic Rule | | | | | | | ~ |

Export

Export allows a user to export the current screen data to a CSV file. It will export the total list of E-Line EVCs that are displayed.

| E-Line | | | | | |
|---|-----------------|---|---|--|------------------------------|
| | | | | $\overline{\uparrow}$ | Bulk Operations 🛓 Export 🖓 🖒 |
| Service ID 171484645 EVC ID 5880418 Billing ID BGW ID C1056225 A Side | Z Side ● (j) | EVC Speed 0 Kpps EVC Base Standwrith 0 Kpps Access Max Bandwrith 0 Kpp | Description // tasting DNM description Extillements // (INC) | Actions Peterseas Utilization Kotilications Activations Activities Status PERForma | + |
| NA | NA | | | Left Gardificate Health Test | |

Site activations

Users can activate their network circuits and EVC's using DNM. Site Activation User Guide was developed specific for that function. Refer to the "?" on the top right section of the home page to pull open the documentation and step by step guide.



| Documentation & Help | | | | | | |
|----------------------|--------------------|---------------------------|---|--|--|--|
| Quick Links | | | _ | | | |
| Private IP | Internet Dedicated | Secure Cloud Interconnect | | | | |
| Help Desk | Help Desk | Help Desk | | | | |
| (i) Service Guide | (i) Service Guide | (i) Service Guide | | | | |
| E Welcome Kit | E Welcome Kit | E Welcome Kit | | | | |
| DNM Activation | E-Line | Switched E-LAN | | | | |
| (i) Service Guide | Help Desk | (i) Service Guide | | | | |
| | (i) Service Guide | | | | | |
| | | | | | | |

How to modify E-Line EVC bandwidth

Select Network to see your ELINE Services.

verizon

| Dynamic Network Manager | | Home Netwo | Home Network API Reports | | | | | | | |
|-------------------------|---------------------|--------------------|--------------------------|----------|--|--|--|--|--|--|
| | Private IP | Internet Dedicated | SCI | Ethernet | | | | | | |
| | View All | View All | View All | E-Line | | | | | | |
| | High Utilized Sites | Pending Activation | Microsoft | | | | | | | |
| | Pending Activation | | AWS | | | | | | | |
| | | | Oracle | | | | | | | |
| | | | Google | | | | | | | |
| | | | | | | | | | | |



Click modify bandwidth in the action's menu.

| E | Line | | | | | | I | | ⊞ |
|---|--|--------|---------|--------------------------------|-------------------------|--|--------|----------|----|
| | | | | | | $\overline{\uparrow}$ Bulk Operations $\underline{\downarrow}$ | Export | ∇ | Ç, |
| | Service ID 171484645 EVC ID 5880418 | i. | | EVC Speed 0 Kbps | Description Description | Actions ~ | | + | - |
| | Billing ID BGW ID C1056225 | | | EVC Max Bandwidth 0 Kbps | Entitlements | View Details | | | |
| | A Side | Z Side | e (j | Access Max Bandwidth O Kbps | | View Utilization | | | |
| | NA | | NA | | | View Orders | | | |
| | | | | | | Pre-lest Validation Network Settings | • | | |

Modify bandwidth:

Select speed from drop down.

| Service ID 183766724 | EVC Speed | Description / | Modify Bandwidthy |
|---------------------------------|-----------------|---|---------------------------|
| EVCID 5936266 | 2 Mbps | company-specific search criteria | thous personality |
| Billing ID U0148875 | Max Bandwidth | Entitlements Ø | Preferences // |
| BGWID C1064220 | 100 Mbps | (8000) | Utilization Notifications |
| A Side Z Side | | | Activation Status |
| • 0 | | | PENDING |
| | | | Ref |
| RICHARDSON CAR | Ŷ | | - |
| Details Orders Utilization | | | |
| | | | |
| | | | |
| | | | |
| Modify Bandwidth | | | "Required Field |
| | | | |
| Circuit Settings | | | |
| | | 15 M 41 | |
| | 8 ¹⁰ | | |
| | 14 | | |
| | | | |
| | 2 | 21804 14 | |
| | | s maps - | |
| | 2 N | bps i i i i i i i i i i i i i i i i i i i | |
| | 8 | | |
| | | | |
| | 4 h | bps | |
| | 5 N | tos | |
| | | | |
| | 6 N | ops | |
| | 7 N | bps | |
| | | | |
| | 8 N | 200 | |
| Scheduling | 9 N | bps | |
| Schedule change to happen later | | | |
| | | | |
| | | | |
| Place Order Cancel | | | |
| | | | |

Place order for new speed.



Dynamic Network Manager User Guide – E-Line

| Service ID 183766724 EVC ID 5938266 Billing ID U0148875 BGW ID C1064220 A Side | Z Side • (j) | EVCSpeed 2 Mitps MaxBandwidth 100 Mitps | | Description / company-specific search criteria Entitements / Entities | Mostly Bandwidtw Preferences Utilization Notifications Activation Status • PENDING • | _ |
|--|-----------------|--|---|--|---|------------------|
| RICHARDSON | CARY | | | | Start | |
| | | | | | | |
| Details Orders Uti | ilization | | | | | |
| | | | | | | |
| Modify Bandwidth | | | | | | *Required Fields |
| Circuit Settings | | | | | | |
| Scheduling Schoole change to happ | on tate | (| 2 Maps v 2 Maps v 3 Maps 4 Maps 6 Maps 6 Maps 8 Maps 9 | | | |
| Can | | | | | | |

Scheduler: Users may optionally schedule changes out to a year in advance.

| Modify Bandwidth | | | | | | | | *Required Fields |
|---------------------------------|-------|---------|---------|--------|--------|-----|-------|--------------------------|
| Circuit Settings | | | | | | | | |
| | < | | Fet | 0 2022 | • | | > | 10 M 15 M 20 M 20 M 20 M |
| | Sun | Mon | Tue | Wed | | | Sat | |
| | | | 1 | 2 | 3 | 4 | 5 | 4 Mbps V |
| | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Current Speed |
| | 13 | 14 | 15 | 16 | 17 | 18 | 19 | SO M |
| | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 100 8 |
| | 27 | 28 | | 2 | | | | |
| | 6 | 2 | | 9 | | | | Port Speed |
| | | | ^ | | ^ | | | |
| | | | 07 | : | 13 | | | |
| | | | \sim | | \sim | | | |
| Scheduling | | Canc | el | | | Set | | Add to List of Jobs |
| Schedule change to happen later | 2/3/2 | 2022, 7 | 7:13 AN | 4 | | 1 | GMT - | -10:0 JAmerica/Adak 🗸 |
| Place Order Cancel | | | | | | | | |



Confirmation: Accept to complete the change request.





Bandwidth utilization

Users can view a chart displaying circuit utilization over a time period of 1 day through 30 days. The example below shows received and transmitted results for the Verizon Ethernet Virtual Connection (EVC). 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 EVC measurements and CE EVC Measurements should closely match.

Select View Utilization from the drop-down list for the specific E-Line site.

| Verizon V Dynamic Network Manager | | | Home Network API Reports | ے Search |
|---|-------------------|--|--|--|
| E-Line | | | | |
| | | | | → Bulk Operations |
| Service ID 171484645 EVC ID 5880418 Billing ID BGW ID C1056225 | | EVC Speed O Kbps EVC Max Bandwidth O Kbps | Description testing DNM description Entitlements | Actions View Details |
| A Side ● NA | z Side ① NA | Access Max Bandwidth O Kbps | | Modity Bandwidth View Utilization View Orders Pre-Test Validation Network Settings |

Utilization report will be displayed for the last 30 days with the option to pull specific date ranges to pull history for the last 12 months, starting as of January 2022.



- 1. Click on the utilization tab to view the utilization details.
- 2. By default, the daily summary utilization details will be shown.
- 3. To view 15 min interval usage, select and drag to specific duration so that 15 mins interval usage duration can be viewed.
- 4. Use the toggle buttons next to egress and ingress speed to view specific usage details (i.e., Only Egress or Ingress traffic).



There are different options you can change on the utilization reports page.

You can change the date range for the utilization reports by selecting the "Pick Date & Time" option, then select your date range from 1 day to 30 days.

| < | | Jur | n 2021 | • | | > | |
|-----|-----|--------|--------|--------|-----|-----|-------|
| Sun | Mon | Tue | Wed | Thu | Fri | Sat | |
| | | 1 | 2 | 3 | 4 | 5 | |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 | Lat |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 | |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 | |
| 27 | 28 | 29 | 30 | | | | |
| | | | | | | | |
| | | ^ | | ^ | | | 06/07 |
| | | 08 | • | 16 | | | |
| | | \sim | | \sim | | | |

You can change the display of stats from Kbps to Mbps.







You can export the report to PDF or excel spreadsheet by selecting the option in the drop down.



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.



Click on Reports tab, under Ethernet, Click on DNM order summary.



DNM Order Summary

Change the options underlined in Red to select the specific order summary range you require and click on the Search button. The report will be updated based on that criterion.

Click on the Show More button to see the details.



| | | | Show Less | | |
|-----------------------------------|---|--|---------------------------------------|---|--|
| Show Ord | der Pending Order Failed | Order Completed | | | Enter Search Criteria |
| Order ID Circuit ID User ID | 3128835 C0178638 verizondnm@gmail.com | Status COMPLETED Order Type DBW | Port Speed 150 Mbps Change Type | Billing ID Scheduled Date [GMT] 2020/11/14 06:30:06 GMT | Billing Status BILLING NOTIFIED Status Date [GMT] 2020/11/14 06:30:06 GMT |
| Order ID Circuit ID User ID | 3127165 C0178638 verizondnm@gmail.com | Status COMPLETED Order Type DBW | Port Speed 200 Mbps Change Type | Billing ID Scheduled Date [GMT] 2020/11/11 20:30:07 GMT | Billing Status BILLING NOTIFIED Status Date [GMT] 2020/11/11 20:30:07 GMT |

Diagnostics > Router commands

DNM provides users with multiple router commands.

| Details | Network Settings | Static | Diagnostics | Utilization | Orders | DNS | Virtual Services |
|-----------|------------------|----------------------|-------------|-------------|--------|-----|------------------|
| Looking G | ilass | Router Comma | ands (i) | | | | |
| Router Co | mmands | Select Router Comman | nd | | | | |
| | | Select | | | | ~ | |
| | | | | | | | |

Ethernet access pre-activation test results and test (US only)

Verizon performs Ethernet Access Service Activation Test (Y.1564) prior to activation. Users can view results from Ethernet Access test:

Conditions:

- Encapsulation must be Ethernet.
- Region must be a US domestic circuit.
- Port Speed must be less than or equal to 1GB.

To view Test Results:

- 1. Click Router Commands under site details. The router commands section appears above site details.
- 2. Select the Ethernet Test Results from the router command drop-down list.

Tests performed for the Access Circuits will appear and can be viewed.



| Details | Network Setting | s Orders | Diagnostics | Utilization | Virtual Services | Cloud Services | Other VRF | | | | |
|----------------------|-----------------|----------------------|---------------|-------------|--------------------------|-----------------|--------------------|---|--|--|--|
| Router Co | ommands | Ethernet Test Result | | | | | | | | | |
| Ethernet Ethernet | Test Test | Event Activation | Sum Cd TOK | | History Key 053551764 | Date 21-JUN- | 21 07.22.05.681000 | + | | | |
| Result | | | | | | | | | | | |

Click on specific Ethernet test result to view details:

| nouter commanus | Ethernet Test Res | sult | | | | | | |
|-------------------------|-------------------|----------------------|------|---------|------|------|---------------------------|---|
| Ethernet Test | Event | Sum Cd | | History | Key | | Date | |
| Ethernet Test Result | Activation | ТОК | | 053551 | 764 | | 21-JUN-21 07.22.05.681000 | _ |
| | | | | | | | | |
| | Y1564 Service (| onfiguration Results | : OK | | | | | |
| | FAIL/PASS | | pass | pass | pass | pass | | |
| | | | | | | | | |
| | Duration (secs) | | 62 | 62 | 62 | 62 | | |
| | Frame Size | | 128 | 512 | 1518 | EMIX | | - |
| | Test Phase | | CIP | CIP | CIF | CIF | | |
| | Download PD | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Users can, in addition to the test performed by Verizon, perform additional Ethernet access test(s). The access circuit will be out of service during the test and test can only be done prior to circuit activation status being active.

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 a US domestic circuit.
- Port Speed must be less than or equal to 1GB.
- Circuit activation status cannot be active.

Submission of the Test Steps:

- 1. Click Router commands under site details. The router commands section appears above site details.
- 2. Select the Ethernet Test from the router command drop-down list.
- 3. Initiate the test.



| Create Docusses Protected Togological Protection Managed Protection Managed Protec | | | | | | | | | | |
|--|--|-------------------|--------------|-------------|------------------|----------------|-------------|------------------------------|---|---|
| Service 19 3005507 with an analysis of the former of the f | Circuit ID C0138656 | | Port Speed | | Encapsulatio | n | Se | rvice Type | Router Commands V | |
| The series Description We Each MARK VODALS Description We Make of URAN Description VM Make of URAN Description Point of URAN Descriptio | Service ID 136065507 | 7 | 10 Mops | | ETHERNET | | No | k Mahageo | | _ |
| Very Market SZEMARTUSANDOL Very Market Very Market Ver | VPN E2E-MAR17-US/ | A-NVDO143 | Realtime CAR | | Traffic Rule | | De | scription | Preferences // | |
| | VRF Name Vb68944: | E2EMAR17USANVDQ1 | O KDps | | GI | | de | scription1-test-25thNov test | Utilization Notifications Change Notifications | |
| Vindeses Since C runs Since C runs The week Settings C date C runs The week Settings C date C runs C dat | 43-etc | | | | Equipment II | P | En | titlements | | |
| The version of the ve | VPN Address | | | | 68.130.242.7 | 8 | ناهر | - Day 10 | Activation Status | |
| Datal Network Setting Orders Deposition Utilization Visual Services Other VIF | 750 WASHINGTON BLV STAMFORD, CT USA | /D | | | | | | | - Pendina | |
| Data Network Setting Odds Disposition Utilitation Cloud Services Other VEF | | | | | | | | | Retry Activation | |
| Revere Test Ethernet Test Ethernet Test Result Click Start Test. Disclaimer The test you are about to attempt for C0138656 is an intrusive test. The circuit will be out of service during the testing period.If you agree to this, please hit continue to proceed. Continue Cancel | Details Network | k Settings Orders | Diagnostics | Utilization | Virtual Services | Cloud Services | Other VRF | | | |
| Eternet Test Besult Click Start Test. Disclaimer The test you are about to attempt for C0138656 is an intrusive test. The circuit will be out of service during the testing period.If you agree to this, please hit continue to proceed. Continue Cancel | Router Commands | Etherno | et Test | | | | | | | |
| Click Start Test. Disclaimer The test you are about to attempt for C0138656 is an intrusive test. The circuit will be out of service during the testing period.If you agree to this, please hit continue to proceed. Continue Cancel | Ethernet Test | | itart Test | | | | | | | |
| Click Start Test. Disclaimer The test you are about to attempt for C0138656 is an intrusive test. The circuit will be out of service during the testing period.If you agree to this, please hit continue to proceed. Continue Cancel | Ethernet Test Result | lt | | | | | | | | |
| Click Start Test. Disclaimer The test you are about to attempt for C0138656 is an intrusive test. The circuit will be out of service during the testing period.If you agree to this, please hit continue to proceed. Continue Cancel | | | | | | | | | | |
| Disclaimer The test you are about to attempt for C0138656 is an intrusive test. The circuit will be out of service during the testing period.If you agree to this, please hit continue to proceed. Continue Cancel | Click Start | Test. | | | | | | | | |
| The test you are about to attempt for C0138656 is an intrusive test. The circuit will be out of service during the testing period.If you agree to this, please hit continue to proceed. Continue Cancel | Discl | laimer | | | | | | | | |
| Ine test you are about to attempt for C0138656 is an intrusive test. The circuit will be out of service during the testing period. If you agree to this, please hit continue to proceed. Continue Cancel | The ter | at you are al | a subta all | omet fo | - 0010065 | le en int | u joh jo to | at The size vit w | ill he | |
| out of service during the testing period.If you agree to this, please hit continue to proceed. | The tes | st you are at | bout to att | empt to | r C0138630 | o is an int | rusive te | st. The circuit w | iii be | |
| Continue Cancel | out of s | service durir | na the test | tina peri | od.lf vou ac | aree to thi | s. please | e hit continue to | | |
| Continue Cancel | | | | | | , | -, | | | |
| Continue Cancel | procee | ed. | | | | | | | No | |
| Continue Cancel | | | | | | | | | | |
| Continue | | | | | | | | | | |
| | | Continue | | Cancel |) | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

Click Continue.

After confirmation

Green bar will appear which states the Ethernet access test was successfully submitted.



| Successfully Initiated Ethernet test fo | or circuitld C0138656 | | | | | | | × |
|---|--|-------------------|--|----------------|---|---|----------|---|
| ynamic Network Manager | Home Network | Policy Management | API VNS Operation | s Reports | | Search | | Q |
| Private IP | | | | | | : | ≡ 88 | ⊞ |
| nventory 40 | | | | | | | | |
| All VPNs 🗸 | | | | | | $\overline{\uparrow}$ Bulk Operations $\underline{\downarrow}$ Export | ∇ | C |
| Circuit ID C0138656 Service ID 136065507 PVC 5971707 VPN E2E-MART7-USA-NVD0143 VRF Name Vb68944:E2EMAR17/USANVU 43-etc VPN Address 750 WJSHINGTON BLVD STAMFORD, CT USA | PortSpeed 10 Mbps Realtime CAR 0 Kbps | | Encapsulation ETHERNET Traffic Rule G1 Equipment IP 68:130.242.78 | | Service Type Not Managed Description/ description/ description/ test-25thNov test Entitements | Router Commands V C | 0jun | _ |
| Details Network Settings On | ders Diagnostics | Utilization | Virtual Services | Cloud Services | Other VRF | | | |
| Router Commands Eth | nernet Test | | | | | | | - |
| Ethernet Test Ethernet Test Result | | | | | | | | |
| | | | | | | | | - |

After the Ethernet test is completed.

- 1. Ethernet test results option will appear.
- 2. Click Ethernet test result.

| Details | Network Settings | Orders | Diagnostics | Utilization | Virtual Services | Cloud Services | Other VRF |
|---------------------------------------|-------------------------------|--|---|-------------|------------------|----------------|-----------|
| Router Co Ethernet T Ethernet T | mmands Test Test Result | E Action r as circu Ether Sta | ot allowed it is under net Test. rt Tost Start Test | | | | |

Click on specific Ethernet Test Result to view details:



Т

| Houter Commands | Ethernet Test Res | ult | | | | | | |
|-------------------------|-------------------|----------------------|------|---------|------|------|---------------------------|--|
| Ethernet Test | Event | Sum Cd | | History | Key | | Date | |
| Ethernet Test Result | Activation | ток | | 05355 | 1764 | | 21-JUN-21 07.22.05.681000 | |
| | | | | | | | | |
| | Y1564 Service C | onfiguration Results | : OK | | | | | |
| | FAIL/PASS | | pass | pass | pass | pass | | |
| | | | | | | | | |
| | Duration (secs) | | 62 | 62 | 62 | 62 | | |
| | Test Phase | | cir | cir | cir | cir | | |
| | Download PDF | | | | | | | |
| | | | | | | | | |

DNM order history

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

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

| Circuit ID C0108468 Service ID 146124672 PVC 5820282 VPN ACME-Fabrication VRF Name V795957ACM VPN Address 190 ALLEN RD ATLANTA, G 30028-4662 USA Details Network Set Orders () | EFabrication A tings Orders | Pet Speed 8 Mitos Realtime CAR 128 Mitos Diagnostics Utilization | Virtual Services | Encapsulat ETHERNE G4 Equipment 68/39/174/ Cloud Services Other | Son T IP B6 | Ser Not LA Enti Co | vice Type Managed scription / Office | | View Details | C 🖸 | D – |
|---|-----------------------------------|---|----------------------------|--|----------------------|--------------------------------|---|------------------------------------|-------------------------|-----------------|------------|
| Order Number 🗸 | CircuitId ~ | Status 🔻 | Requested Date 👻 | Expected Date 💎 | BillingId 🗁 | Order Type 🗁 | Port Speed 🗁 | User Id 🐨 | Status Date 🤝 | Change Type 🤝 | _ |
| 3171941 | C0108468 | COMPLETED | | 2021/03/18 19:30:20 GMT | | DBW | 8 Mbps | manikanta.segu@one. verizon.com | 2021/03/18 19:30:20 GMT | | + |
| 3165535 | C0108468 | COMPLETED | | 2021/03/07 20:30:17 GMT | | DBW | 8 Mbps | goodmans8323 | 2021/03/07 20:30:17 GMT | | + |
| 3161438 | C0108468 | COMPLETED | 2021/02/28 05:46:00 GMT | 2021/02/28 06:30:17 GMT | | DBW | 9 Mbps | verizondnm@gmail.com | 2021/02/28 06:30:17 GMT | | + |
| 3155935 | C0108468 | COMPLETED | 2021/02/14 03:05:42 GMT | 2021/02/14 03:30:14 GMT | | DBW | 10 Mbps | verizondnm@gmail.com | 2021/02/14 03:30:14 GMT | | + |
| 3155636 | C0108468 | COMPLETED | 2021/02/13 08:13:23 GMT | 2021/02/13 08:30:16 GMT | | DBW | 9 Mbps | verizondnm@gmail.com | 2021/02/13 08:30:16 GMT | | + |
| Show: 5 V Go to: | 1 / 4 | | | | | | | | | ≪ < ① 2 3 4 ; | > I » |



| tails Orders | Utilization | | | | | | | | | | |
|-------------------------------------|----------------|-------------------------|---------------------------------|------------------|---|--------------|--|--------------------|------------------------------------|------------------------------------|-------|
| ders | | | | | | | | | | Search | |
| Order Number V | CircuitId V | Status 🗸 | Created Date 🗸 | Scheduled Date V | Billingld 🗸 | Order Type 🖤 | Port Speed V | UserId 🔝 | Status Date 🖤 | Change Type ~ | |
| 2772857 | 5880418 | COMPLETED | | | HK00209984 | EBOD | 10 | | 2018/01/28 11:03:36 GMT | | - |
| 2750601 | 5880418 | COMPLETED | | | HK00209984 | EBOD | 50 | | 2017/10/02 12:43:44 GMT | | - |
| rder Mile | stone | | | | | | | | | | |
| Status: 🕢 | Success | Failed | Skipped () I | n progress | | | | | | | |
| J | | | | | | | | | | | |
| 0 | | >© | | >0 | | >@ |) | | >0 | | |
| SCHEDUL 08/23/2022 ETA 1 mins | ED 22:04:55 | SUBN 08/23/ ETA 1 | IITTED 2022 22:10:28 mins | V/ 08 E1 | ALIDATED 3/23/2022 22:10:45 7 A 1 mins | | Layer 2 08/23/2022 22 ETA 6 mins | :10:58 | Layer 3 08/23/20: ETA 5 min | 22 22:15:30 IS | |
| | | | | | | ତ | L2SUBMITTED 08/23/2022 22 ETA 5 mins | 10:58 View More | PROVISIO 08/23/202 ETA 2 min | NING 22 22:15:30 s <u>Vi</u> | ew M |
| | | | | | | େ | L2COMPLETEE 08/23/2022 22 ETA 1 mins | 15:30 View More | PEFAILED 08/23/202 ETA 3 min | 22 22:17:17 Is Vi | iew M |

DNM order summary

This report allows users to see multiple EVC change activity versus single EVC 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.

Select Reports, under the Ethernet option, select E-Line Order Summary.

| | Home Network API Reports | | | | | | | | |
|-----------------------|--------------------------|-------------------|----------------------|---------------|-------------|--|--|--|--|
| Private IP | Internet Dedicated | SCI | Ethernet | Activation | Utilities | | | | |
| Order Summary | Order Summary | Consumption | E-Line Order Summary | Bulk Pre-Test | Work Orders | | | | |
| Network Transit Delay | Network Transit Delay | Port Availability | E-LAN Order Summary | | MOS Score | | | | |
| Port Availability | | | | | | | | | |
| | | | | | | | | | |



DNM Order Summary Monthly Orders 8/1/2020 11/16/2020 August 01,2020 to November 16,2020 DBW LG 16 14 12 10 COUNT 8 2 AUG-202 SEP-2020 OCT-2020 NOV-2020 MONTH Show More

Modify the date ranges to see the change orders within that date Range, click search.

Click on the Show More button to see the individual orders within the date range selected.

Bulk operations

This Dynamic Network Manager (DNM) feature allows Users to submit multiple circuit changes at one time. There are two categories of DNM bulk changes: 1) Circuit descriptions, 2) Bandwidth (Ethernet Bandwidth on Demand EBOD) and 3) Bulk Subscriptions. Bulk change requests can be manually entered directly into the tool or via a DNM spreadsheet template (where applicable).

Tip: If you elect to use the DNM spreadsheet template to enter your circuits, you can first use DNM's Export function to download the EVC list you wish to modify and then copy/paste the appropriate values into the Bulk spreadsheet template fields.

Click on the bulk operations drop down to select the requested bulk activity.

| Ve Dyna | rrizon ^{,/} mic Network Manager | | Home Network PolicyManagement API Reports | | 0 | Search | | Q |
|-------------------|---|--------|---|----------------|---|-------------------------|------------|---|
| E-I | Line | | | | | | ∷ 8 | ⊞ |
| | | | | | | F Bulk Operations ↓ | Export 🛛 🏹 | S |
| | Service ID 171484645 EVCID 5880418 | | EVC Speed 0 Kbps | Description // | Actions v |] | + | |
| | Billing ID BGW ID C1056225 | | Max Bandwidth 0 Köps | Entitlements / | Preferences // Utilization Notifications | | | |
| | A Side | Z Side | | | Activation Status PENDING | | | |
| | NA | NA | | | Bark. | | | _ |



Bulk EVC description updates

This option allows changes to EVC descriptions (only). You can manually enter circuit information or enter it into a DNM spreadsheet template.

| verizon | | | | |
|--|--------------------------|---|-------------------------------------|--------------|
| Dynamic Network Manager | Home Network API Reports | | Q 📮 💿 🕕 🛞 Hello, Alexander Harvey ~ | |
| \leftarrow Bulk Operations | | | | |
| Create New Job Jobs in Progress Completed Jobs | | | | |
| Settings | | | "Required Field | |
| Select an Operation* | | | dback | \mathbf{N} |
| Circuit Description ~ | | | Fee | |
| Circuits | | | (Download Templata) | |
| Upload a list of Circuit IDs | | Enter a list of Circuit IDs.pvcID,descripition per line. EgrC12345,P12345,description | | |
| $\overline{\mathbf{T}}$ | - OR - | | | |
| Drop file here, or click to select from your compu | ter. | | 0/500 | |
| Upload | | | | |
| | | | € 100% ▼ | |
| | | | | |

Users would click on the download template.

| ×∄ | . 5- | e - 🖁 - | | | | | | | | CircuitDescrip | otionTempl | ate 1595246 | 260341 - Exc | el |
|-----|--------------|------------|----------------------|---------|---------|------------------------------------|------------|-----------------------|--------------------|----------------|------------------|--------------------------------|--------------|----|
| FI | LE HO | ME INSE | RT PAGE LAYO | UT FORM | IULAS I | DATA REV | VIEW VIE | N | | | | | | |
| Pas | Le Clipboard | at Painter | Calibri • B I U • | 11 • A | | = = € = = A | E Der Merg | o Text je & Center | Genera • \$ • 9 | l | Condit Format | ∉ onal Forma ing ▼ Table | Norma | l |
| G5 | | * E 🗦 | < 🗹 fx | | | | | | | | | | | |
| | А | В | С | D | E | F | G | Н | I. | J | К | L | М | |
| 1 | circuitId | pvcId | description | | | | | | | | | | | |
| 2 | 1 | 1 | description1 | | | | | | | | | | | |
| 3 | 2 | 2 | description2 | | | | | | | | | | | |
| 4 | 3 | 3 | description3 | | | | | | | | | | | |
| 5 | 4 | 4 | description4 | | | | L, | | | | | | | |
| 6 | 5 | 5 | description5 | | | | | | | | | | | |
| 7 | 6 | 6 | description6 | | | | | | | | | | | |
| 8 | 7 | 7 | description7 | | | | | | | | | | | |
| 9 | 8 | 8 | description8 | | | | | | | | | | | |
| 10 | 9 | 9 | description9 | | | | | | | | | | | |
| 11 | 10 | 10 | description10 | | | | | | | | | | | |
| 12 | 11 | 11 | description11 | | | | | | | | | | | |
| 13 | 12 | 12 | description12 | | | | | | | | | | | |
| 14 | 13 | 13 | description13 | | | | | | | | | | | |
| 15 | 14 | 14 | description14 | | | | | | | | | | | |
| 16 | 15 | 15 | description15 | | | | | | | | | | | |
| 1/ | 16 | 16 | description16 | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | |



- 1. Users would enter the BWG circuit ID in the circuit ID field, the EVC ID in the "PVC ID" field and related descriptions.
- 2. Users would save the template and drag and drop it into the DNM field.
- 3. Users would click upload.

| ç | | | | | | 9 |
|---|---|--|---|--------|-----|---|
| | Circuits | | | | | |
| | Selected circuits are listed below. You may mod | ify your circuit list before validating. Note that o | uplicate circuit IDs have been removed. | Search | Q | |
| ļ | Circuit ID | PVCID | Description | | | 0 |
| | c1056225 | 5880418 | test load | | / 🛛 | |
| | Viidale Start Over | | 0 | | | |

Tool will display the list of items being updated. The description field can be edited using the pencil on the far right or the update can be removed by hitting the "X" to remove the line item. Once completed, click validate.

| <u>Note</u> :To proce > Bulk Operat review and clii bandwidth chi confirmation. | red with validation, please navigate to PIP tions > Jobs InProgress , select the job , ick confirm. Orders to process the anges will be submitted only on |
|---|--|
| | |

Click confirm validation.



| Create New Job | Jobs in Progress | Completed Jobs | | |
|--------------------------|-------------------------------|----------------|---------|-------------------|
| Settings | | | | |
| Select an Operation* | | | | |
| Circuit Description | | | \sim | |
| Circuits | | | | |
| • c1056225 | \otimes | | | |
| | Execute Bulk Operation | Start Over | | |
| | | | | |
| Click execut | e bulk operation | | | |
| | | | | |
| Are you gure weat to ov | anto bully apportion? | | | |
| Confirm Order | | | | |
| Commentar | | | | |
| Click confirn | n order. | | | |
| | | | | |
| Verizon | laer | Home | Network | Policy Management |
| ← Bulk Opera | ations | | | |
| | | | | |
| Create New Job | Jobs in Progress | Completed Jobs | | |
| Create New Job Job Id | Jobs in Progress Date Created | Completed Jobs | Total C | Orders |

Order will progress through Jobs in Progress and Completed Jobs.

Updated description will appear on the EVC detail page.

04/21/2022 08:15:50



2371

4

| E-Line | | | |
|--|------------|--|---|
| | | | |
| Service ID 17148464 EVC ID 5880418 Billing ID BGW ID C1056225 | 15 | EVC Speed O Kibps Max Bandwidth O Kibps | Description // testing DNM description |
| A Side | ZSide ① | | - |
| NA | NA | | |

Note: EVC (circuit id) information submitted via spreadsheet for <u>any</u> DNM bulk change request must be entered in a DNM spreadsheet template format. If data does not match the template format provided, the sheet will not be uploaded.

Bulk bandwidth changes transactions

Users can set up bandwidth changes on multiple E-Line EVC's at one time, following the step-by-step process to complete the notifications. Users have two options for making bulk changes.

Upload an excel spreadsheet with custom speeds for each change or multiple changes with pre-set speed.

| 35 | Completed Jobs | |
|----|----------------|--|
| | | |
| | | |
| | | |
| | | |



Bulk subscriptions

Users can use the bulk subscriptions to update the threshold alerting on multiple EVC's at one time.

Click on Bulk Subscriptions

Hereit Bulk Operations Hereit Bulk Operations Second Sec Create New Job Jobs in Progress Completed Jobs Settings Select an Operation* Select \sim Bandwidth - Upload excel with custom speeds Bandwidth - Change with pre-set speeds Circuit Description Bulk Subscription

User will be provided with the following options:

,

| \leftarrow | Bulk Subso | cription | I | | | |
|--------------|---------------------|----------|---------------------|--------------|------------------------|--|
| Utilia | zation Notification | ns | | | | |
| Select | VPN to Subscribe | | | | | |
| Se | lect | ~(| UnSubscribe 30 Days | \mathbf{X} | UnSubscribe Busy Hours | |
| | Select | | | | | |
| | Ethernet E-line | | | | | |

Select Ethernet E-Line from the dropdown.

1) List of available circuits will be display to add threshold alerting

Or if threshold alerting needs to be removed, click on either Unsubscribe 30 Days or Unsubscribe Busy Hours depending on the type of alerting that was setup.



| Utilizat | Ion Notifications N to Subscribe The E-line | | |
|----------|---|---------|--|
| ircui | Circuit ID | PVC | |
| | C1056225 | 5880418 | |
| | C1042394 | 5781239 | |
| | C1043728 | 5781374 | |
| | C1064220 | 5936266 | |
| | C1064219 | 5936264 | |
| | C1064218 | 5936263 | |
| | C0113530 | 5838039 | |

To add threshold Alerting in bulk, click on each circuit from the list to set up either 30 days alerting or Busy hours. To understand the different options, refer to the Threshold alerting options section.

Threshold alerting options

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. Utilization alerting is a user selected option. The tool will notify the user who has subscribed to the alert only. The alert will come via email to the specific user.

There are two types of Utilization alerting to choose from:

- 1) Busy Hours. This allows each circuit to be set up to alert when the circuit utilization exceeds the selected percentage. The user is provided the option to select the following options:
 - a) Alerting time period average: Day, Week, or Month. The Utilization statistics are summed together and averaged over this time period.
 - b) Busy Hours: User chooses the busy hours for the given circuit
 - c) Days to monitor: Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday.
 - d) Time Zone: User is allowed to select the time zone for that circuit.
 - e) Alerting Percentage: User selects the percentage, 60, 70, 80% when the average exceeds this percentage an alert is provided.



Users will select the specific criteria. Based on the selections, the utilization statistics will be averaged and alert if the value exceeds the given alert percentage value.

Example: Circuit C123456 is in New York. User selects these options:

- a) Alert average of weekly.
- b) Busy hours of 7 am to 6 pm.
- c) Days to monitor: Monday through Friday.
- d) Time zone of EST.
- e) Alerting percentage of 80%.

Tool will average the utilization statistics weekly for this circuit. The utilization data will be pulled for all 5 minutes increments within the 7 am to 6 pm EST for Monday through Friday. If the average for the week exceeds 80% an email alert will be sent to the user who subscribed to the alerts.

2) 30 Days or Daily Average. This is the daily average of the sum of the utilization statistics captured for the 30 days for each 5-minute increment within a 24-hour day.

Example: All utilization data is summed together for the full month, for every 5-minute increment and averaged for the number of days. If the average exceeds the percentage selected the tool will alert the user who subscribes to the alert.

How to set up threshold alerting

From the circuit listing page:

| E-Line | | | | | ≣ ‰ ⊞ |
|---|---------------|--|--|--|---------------|
| | | | | | ± Export ∑ ¢, |
| Service ID 171484645 EVC ID 5880418 Billing ID BGW ID C1056225 | | EVC Speed O Klaps Max Bandwidth O Klaps | Description // testing DNM description Entitlements // | Actions V Preferences // Utilization Notifications | + |
| A Side | Z Side (1) | | | Activation Status PENDING | |
| NA | NA | | | Start | |

Next to the preferences, Click on pencil.

Click the Utilization Notifications button to change it from red to green.

Choose from the drop down the type of utilization alerting preferred.

- 1) Busy Hours.
- 2) 30 Days (30 Daily Average).



| Preferences for | × | |
|----------------------|-------------------------|---|
| Utilization Not | fications | • |
| Alert when or above: | Select V of utilization | |
| E-mail: | a 30 % ie.verizon.com | |
| Recurrence: | ⊂ 40 % kly OMonthly | |
| | 50 % | |
| | 60 % | |
| | 70 % | |
| Close | 80 % | |
| | 90 % | |

How to set up 30 day daily average alerting

Select alert percentage from drop down box.

| Preferences for | × | |
|----------------------|----------------------------|--|
| Utilization Not | ifications | |
| Alert when or above: | 70 % 🗸 of utilization | |
| E-mail: | anna.beard@one.verizon.com | |
| Recurrence: | ODaily OWeekly OMonthly | |
| | | |
| Close | | |
| | | |

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

Click on subscribe, click close.



Dynamic Network Manager User Guide – E-Line

| Circuit ID C1000573 Service ID 30985914 | Port Speed 1536 Kbps | Encapsulation ETHERNET | Routing Protocol 🖉 BGP | Entitlements | Actions v Q Que + |
|---|--------------------------|-----------------------------------|---|--|---|
| VC 5418246 Service Address 906 N BOWSER RD RICHARDSON, TX 75081- 2822 USA | Network Type Internet | IPV4 Address 152:179:253:32/30 | Global Region Richardson TX-1 MidDoos Scariby | Preferences / Utilization Notifications | Description // Circuit with DNS Activation Status |
| | | | | | Blart . |

Utilization notification will display green as active.

How to turn off utilization alerting

To turn the notifications off, just start from the beginning, click on the pencil next to preferences.

| Incuit ID C1000573 Port iervice ID 30985914 1536 VC 5418246 Netw iervice Address Netw 06 N BOWSER RD Inter 10CHARDSON, TX 75081- 822 USA | Speed Kbps rork Type net | Encapsulation ETHERNET IPV4 Address 152:179:253:32/3 it C10000 | B 30 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 | outing Protocol GP Iobal Region ichardson TX-1 Add20065couldy | Entitlements | Actions Description & Circuit with DNS Activation Status • PENDING • CIM | ~ | ᡣ ∞ + |
|--|-----------------------------------|--|---|---|--|---|---|-------|
| VC 5418246 srvice Address D6 N BOWSER RD CHARDSON, TX 75081- 122 USA Preferences | for Circu | IPV4 Address 152179.253.32/3 it C10000 | 30 R | Iobal Region ichardson TX-1 AMIEDES Reactly | Proforce is P Utilization Notifications | Description / Circuit with DNS Activation Status • PENDING • Clent | | |
| Preferences | for Circu | it C1000 | 0573 | Add DDoS Scourity | | Activation Status PENDING | | |
| Preferences | for Circu | it C1000 |)573 | | | 3at | | |
| Preferences | for Circu | it C1000 | 0573 | | | × | | |
| Preferences | for Circu | it C1000 | 0573 | | | × | | |
| Preferences | for Circu | it C1000 |)573 | | | \times | | |
| | | | | | | | | |
| | | | | | | | | |
| Utilizatio | on Notification | | | | | | | |
| | | | | | | | | |
| Alert when or abov | /e: 5 | 0% ~ | of utiliza | ation | | | | |
| E-mail: | anr | na.beard@one | e.verizon.c | om | | | | |
| Recurrence: | ٥ | aily OWeek | ly OMon | thly | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Close | | | | | | | | |
| \subseteq | | | | | | | | |
| nts | Actions | \sim 6 | O Open | + _ | | | | |

Click on the green button next to utilization notifications.

Click on unsubscribe.



| Unsubscribe | / |
|---------------------------------|--------------------------------------|
| Circuit ID C1000573 Close | Message Unsubscription Successful |
| Close | |

It will confirm unsubscribe is successful, click close.

How to set up busy hours alerting



Users will select busy hours from the drop down.



| Preferences for Ci | rcuit C0232107 | > |
|--------------------------------------|--|--------|
| Utilization Notifi | ications | |
| Alert Mode: | Busy Hours 🗸 | |
| Busy Hours: | Start Time: Stop Time: 9:00 AM 5:00 PM | |
| Busy Days: | Monday x Tuesday x Wednesday x Thursday x Friday x | ×∨ |
| Time Zone: | Select | \sim |
| Threshold: | Select | ~ |
| Alert Calculation Window: E-mail: | ○ Daily ○ Weekly ● Monthly anna.beard@one.verizon.com | |

The system has default most common values.

Click the utilization notifications button to change it from red to green.

Users should select actual values for each selection option as needed for their circuit.

Once all selections are complete the subscribe button will appear. Click on the subscribe button.

| Subscription Succes | sful | | | |
|---------------------|------------|---------------|---------------------|----------------|
| Circuit ID C0231451 | Port Speed | Encapsulation | Routing Protocol // | Entitlements 🖉 |

Tool will return a subscription successfully when active.

If one of the options needs to be changed.



| Preferences for Ci | rcuit C0232107 | |) |
|---------------------------|----------------------------|------------------|----|
| Utilization Notifi | cations | | |
| Alert Mode: | Busy Hours V | | |
| | Start Time: | Stop Time: | |
| Busy Hours: | 9:00 AM | 5:00 PM | |
| Busy Days: | Monday x Tuesday x Wednesd | lay x Thursday x | ×∨ |
| Time Zone: | CAT-Central African Time V | | ~ |
| Threshold: | 30 | | ~ |
| Alert Calculation Window: | ⊙Daily | Monthly | |
| E-mail: | anna.beard@one.verizon.com | | |
| | Update Unsubscri | be | |

Change the specific option(s) that requires to be changed.

Click on update.



Tool will return the green bar with the subscription successful.

Unsubscribe from busy hours





Users will select busy hours from the drop-down menu.



| Preferences for Ci | rcuit C0232107 | × |
|--------------------------------------|--|---|
| Utilization Notifi | cations | |
| Alert Mode: | Busy Hours V | |
| Busy Hours: | Start Time: Stop Time: 9:00 AM 5:00 PM | |
| Busy Days: | Monday x Tuesday x Wednesday x Thursday x Friday x | |
| Time Zone: | CAT-Central African Time | / |
| Threshold: | 30 | / |
| Alert Calculation Window: E-mail: | ○ Daily | _ |
| | Update Unsubscribe | |

User will select the unsubscribe button.

| Subscription Succes | sful | | | |
|---------------------|------------|---------------|---------------------|-----------------|
| Circuit ID C0231451 | Port Speed | Encapsulation | Routing Protocol // | Entitlements // |

Tool will respond with a successful subscription.

Network Settings

This section contains both Provider Edge (PE) settings information. You can view the Network Information, Demarcation information for both the A side and Z side.

| E-L | ine | | | | | := | 88 🗉 |
|-----|---|-----|--|--|---|------------|------|
| | | | | | → Bulk Operation | s 🛓 Export | 7 ¢ |
| | Service ID 171484645 EVC ID 5880418 Billing ID BGW ID C1056225 | | EVC Speed O Kips EVC Max Bendwidth O Kips | Description // testing DNM description Extitements / | Network Settings✓ Preterences Ø Utilization Notifications | - | - |
| | ASide Z | • ① | Access Max Bandwidth O Ktops | | Activation Status PENDING | | |
| | | | | | y Birth Certificate Health Test | | |

1. From the Actions Menu, select the Network Settings option. The tool will display the Network information and Demarcation information.



Dynamic Network Manager User Guide - E-Line

| etwork Information | | | | |
|---------------------|-----------|---------------------|-----------|--|
| BGW ID | | C1056225 | C1056225 | |
| PQ Instance ID | | 171484645 | | |
| Provisioned Date | | NA | | |
| | A End | | Z End | |
| A Access Circuit ID | E4021124 | Z Access Circuit ID | E4020856 | |
| A PQ Instance ID | 171483889 | Z PQ Instance ID | 171483891 | |
| Address | NA | Address | NA | |
| Port Speed | | Port Speed | | |
| EVC Configuration | NA | EVC Configuration | NA | |
| VLAN ID | NA | VLAN ID | NA | |
| | | | | |

| Amarcation Information | | | | |
|-------------------------------|-------------------------------|--|--|--|
| A End Demarcation Information | Z End Demarcation Information | | | |
| Site | Site | | | |
| Site Type | Site Type | | | |
| Address | Address | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

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.

Training

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

Proprietary & Confidential Statement: This document and the information disclosed within, including the document structure and contents, are confidential and the proprietary property of Verizon and are protected by patent, copyright and other proprietary rights. Any disclosure to a third party in whole or in part in any manner is expressly prohibited without the prior written permission of Verizon.

