
Dashboard

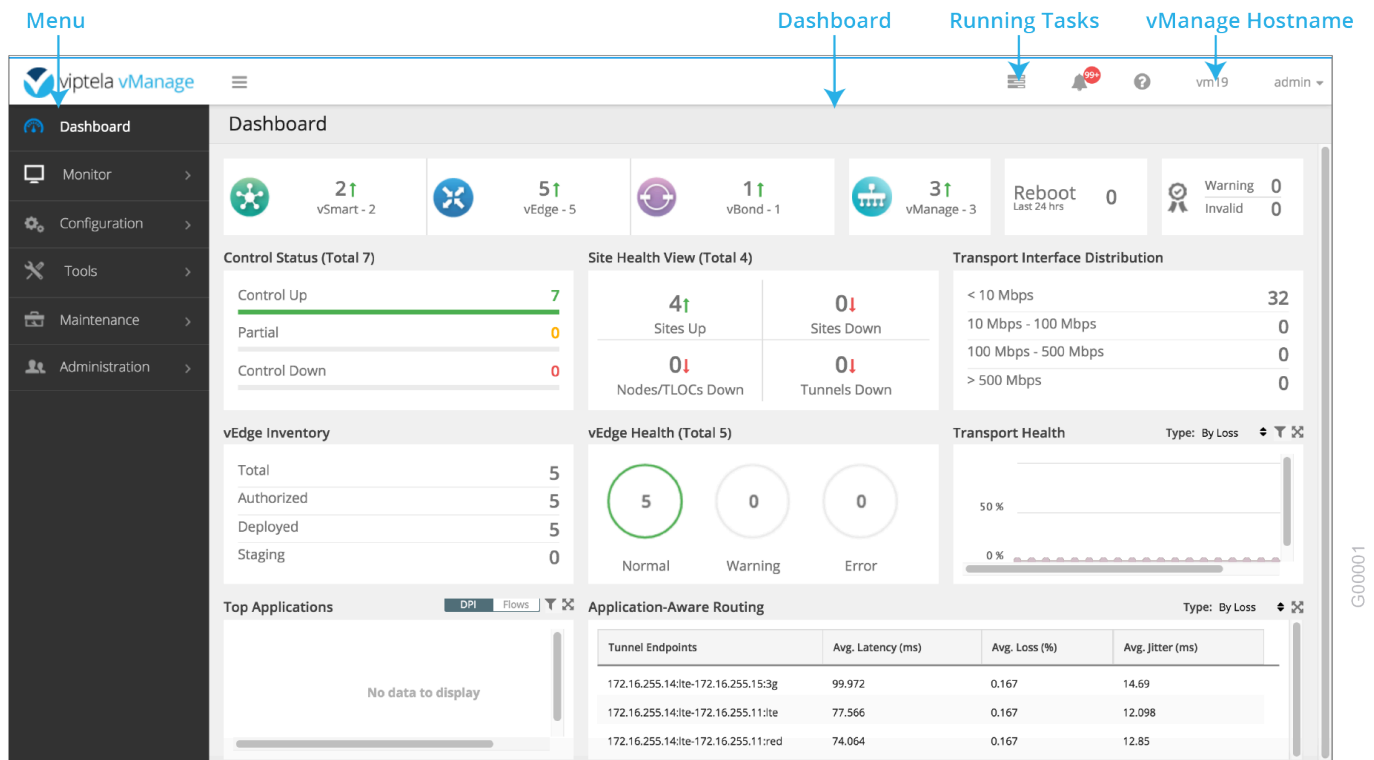
Use the dashboard screen to monitor, at a glance, the overall health of the Viptela overlay network.

Toolbar

The vManage toolbar is located at the top of the screen and to the right of the Viptela logo.

- To the right of the vManage icon and to the left of the toolbar, is the sidebar menu icon for collapsing and expanding the vManage menu. The vManage menu is closed by default.
- To the right are four tabs:
 - Tasks—Displays a list of all running tasks started from the vManage NMS. While the task is in progress, the Tasks tab displays a counter on the top. When the task is completed, the count itself disappears and is replaced by a red icon indicating that a task was performed.
 - Alarm bell—Displays the total count of all active alarms. Click on the alarm bell to see a list of all active and cleared alarms. To view details about any alarm, click the alarm to display its Alarms Details screen.
 - Help—Links to product help and software version information about the vManage NMS software.
 - Hostname—Hostname of the vManage NMS that you are logged into.
- Sign out—Button to sign out of the vManage server. Includes the Profile button to edit user-related options in your profile.





Device Pane

The Device pane, which runs across the top of the Dashboard screen, displays all control connections from the vManage NMS to the vSmart controllers, vEdge routers, and vBond orchestrators in the overlay network. It also displays the status of the vManage NMSs in the network.

For each device, the Device Pane shows:

- Total number of connections.
- Number of up connections.
- Number of down connections.

Click the number or the Up or Down arrow to display a table with detailed information for each connection. Click the More Actions icon to the right of each table row to access the Device Dashboard or Real Time view in the Monitor ► Network screen or to access the Tools ► SSH Terminal screen.

Reboot Pane

The Reboot pane displays the total number of reboots in the last 24 hours for all devices in the network, including soft and cold reboots and reboots that occurred as a result of power-cycling a device. Click the Reboot pane to open the



Reboot popup window which lists, for each reboot, the system IP and hostname of the device that rebooted, the time the reboot occurred, and the reason for the reboot. If the same device reboots more than once, each reboot option is reported separately.

In the Reboot popup window, click the Crashes tab to list, for all device crashes, the system IP and hostname of the device on which the crash occurred, the crash index, and the core time and filename.

Certificates Pane

The Certificates pane displays the state of all certificates on all controller devices, and it shows a count of all expired or invalidated certificates. Click the Certificates pane to open the Certificate Details popup window, which displays the hostname and system IP of the device on which the certificate is installed, the certificate serial number, and its expiration date and status.

Control Status Pane

The Control Status pane displays whether vSmart and vEdge devices are connected to the required number of vSmart controllers. Each vSmart controller must connect to all other vSmart controllers in the network. Each vEdge router must connect to the configured maximum number of vSmart controllers.

The Control Status pane shows three counts:

- Control Up—Total number of devices with the required number of operational control plane connections to a vSmart controller.
- Partial—Total number of devices with some, but not all, operational control plane connections to vSmart controllers.
- Control Down—Total number of devices with no control plane connection to a vSmart controller.

Click any row to display a table with device details. Click the More Actions icon to the right of each table row to access the Device Dashboard or Device Details view in the Monitor ► Network screen.

Site Health View Pane

The Site Health View pane displays the state of a site's data connections. When a site has multiple vEdge routers, this pane displays the state for the entire site, not for individual devices. The Site Health View pane displays three states:

- Full WAN Connectivity—Total number of sites where all BFD sessions on all vEdge routers are in the up state.
- Partial WAN Connectivity—Total number of sites where a TLOC or a tunnel is in the down state. These sites still have limited data plane connectivity.
- No WAN Connectivity—Total number of sites where all BFD sessions on all vEdge routers are in the down state. These sites have no data plane connectivity.



Click a row to display a popup window with detailed information on each site, node, or tunnel. Click the More Actions icon to the right of each table row to access the Device Dashboard or Real Time view in the Monitor ► Network screen or the Tools ► SSH Terminal screen.

Transport Interface Distribution

The Transport Interface Distribution pane displays interface usage in the last 24 hours for all vEdge interfaces in VPN 0. This includes all TLOC interfaces. Click a row to see details of interface usage.

vEdge Inventory Pane

The vEdge Inventory pane provides four counts:

- **Total**—Total number of vEdge routers whose authorized serial number has been uploaded on the vManage server. The serial number is uploaded in the Configuration ► Devices screen.
- **Authorized**—Total number of authorized vEdge routers in the overlay network. These are routers marked as Valid in the Configuration ► Certificates ► vEdge List screen.
- **Deployed**—Total number of deployed vEdge routers. These are routers marked as Valid that are now operational in the network.
- **Staging**—Total number of vEdge routers in staging state. These are routers you configure at a staging site before shipping them to the actual branch and making them a part of the overlay network. These routers do not take part in any routing decisions nor do they affect network monitoring through the vManage NMS.

Click any row to display a table with the hostname, system IP, site ID, and other details of each router.

vEdge Health Pane

The vEdge Health pane displays an aggregated view for each router state and a count of how many vEdge routers are in that state, thereby describing the health of the hardware nodes. The three states are:

- **Normal**—Number of routers with memory, hardware, and CPU in normal state. Using less than 70% of total memory or total CPU is classified as normal.
- **Warning**—Number of routers with memory, hardware, or CPU in warning state. Using between 70% and 90% of total memory or total CPU is classified as a warning.
- **Error**—Number of routers with memory, hardware, or CPU in error state. Using more than 90% of total memory or total CPU is classified as an error.

Click the number or the state to display a table with the last 12 or 24 hours of memory usage, CPU utilization, and hardware-related alarms, including temperature, power supply, and PIM modules. Click the More Actions icon to the right of each table row to access the Device Dashboard or Device Details view in the Monitor ► Network screen or the



Transport Health Pane

The Transport Health pane displays the aggregated average loss, latency, and jitter for all links and all combinations of colors (for example, all LTE-to-LTE links, all LTE-to-3G links).

From the Type drop-down, select loss, latency, or jitter.

Click the Filter icon to select a time period for which to display data.

Click the Expand icon to open the Transport Health pop-up window. This full-screen window displays a more detailed view of the same information. To display the information in tabular format, click the Details tab. You can change the displayed type and time period as described above.

Top Applications Pane

The Top Applications pane displays DPI and cflowd flow information for traffic transiting vEdge routers in the overlay network. When you first come to the Dashboard screen, the DPI tab is selected and the pane shows DPI flow information. To display cflowd flow information, click the Flows tab.

Click the Filter icon to select a time period for which to display data. From the VPN drop-down list, select a VPN to display DPI or cflowd information for all flows in that VPN.

Click the Expand icon to open the Top Applications pop-up window. This full-screen window displays a more detailed view of the same information. You can change the VPN and time period as described above.

Application-Aware Routing Pane

The Application-Aware Routing pane displays the 10 worst tunnels based on criteria you specify from the Type drop-down list, including loss, latency, and jitter. So, if you choose loss, this pane shows the ten tunnels with the greatest average loss over the last 24 hours.

Click any row to display a graphical representation of the data. Select a time period for which to display data or click Custom to display a drop-down for specifying a custom time period.

Click the Expand icon to open the Application-Aware Routing pop-up window. This full-screen window displays the 25 worst tunnels based on criteria you specify from the Type drop-down list, including loss, latency, and jitter.

