



## A Technical Overview

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## Highlights

- ▶ Automatically creates a dependency map of your entire Citrix Infrastructure.
- ▶ Eliminates the time it takes to correlate root-cause to elements in your environment by graphically representing all the connections between components in your Citrix infrastructure.
- ▶ Easily switch between data centers and farms to eliminate siloed architectures.
- ▶ Drill down to the host level and view specific metrics for each element in your environment.
- ▶ View end user experience metrics for different layers in your environment at a glance.

## Overview

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Topology View automatically creates a dependency map of your Citrix infrastructure, displaying health and data specific to the Citrix elements in your environment. It requires no manual set-up or scripting and adapts to new components as they are added. Then, as issues occur in your infrastructure the topology view will 'bubble up' these alerts allowing IT professionals to see the impacted elements at a glance. This single, macro view of your Citrix environment allows administrators to switch between different data centers and farms, breaking down traditional siloed architecture and allowing effective management and troubleshooting of your environment.

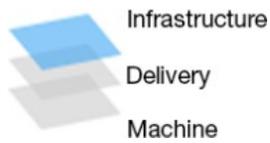
## A Dependency Map

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By building out a color-coded map of the Citrix infrastructure, Topology View eliminates the time it takes to correlate relationships between elements. It shows which elements are affecting other elements and how through color-coded connection lines and specific metrics. It also displays how end-users are being affected, or not affected by the health and status of elements in your environment. This provides administrators with the ability to understand the health of their Citrix XenApp or Citrix XenDesktop infrastructure end-to-end, and how the health of each component impacts other elements, and ultimately the end-user.

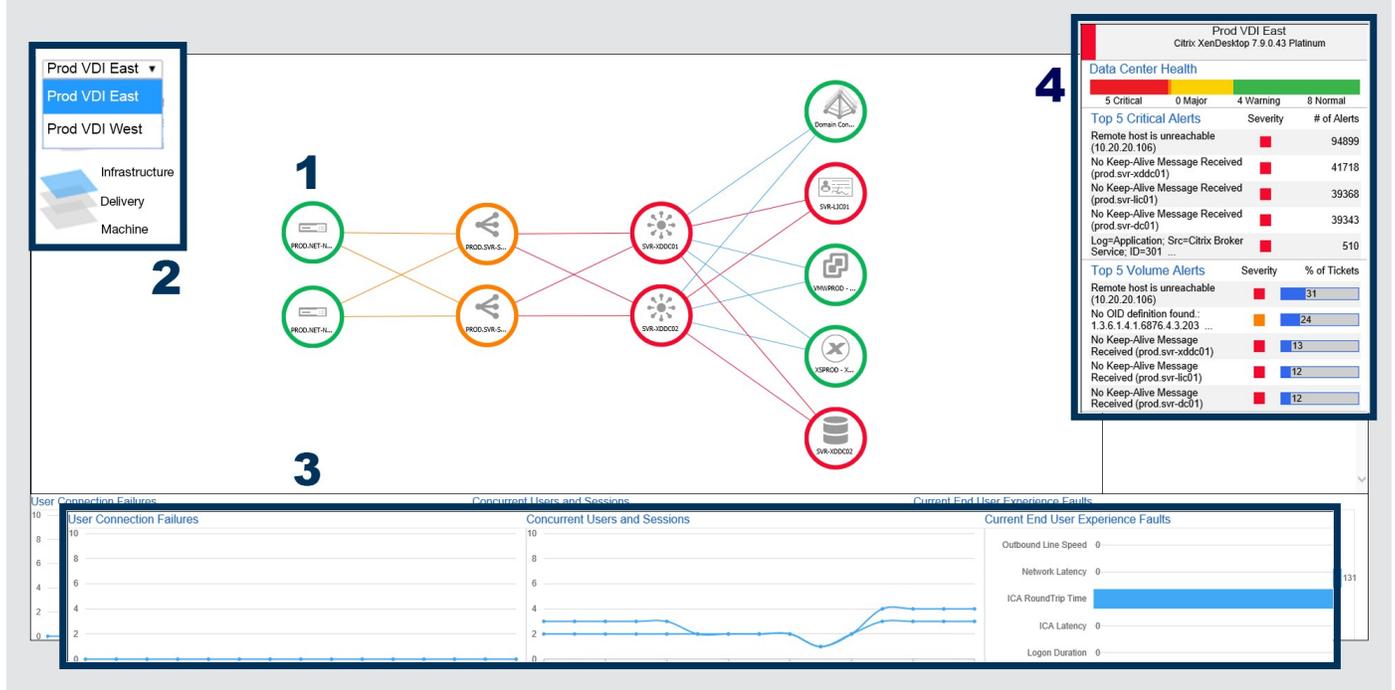
*The following sections detail each level of Topology View and the data points they provide.*

# Physical Layer



The infrastructure view below is the default, top-level perspective that displays the actual physical topology of the Citrix delivery infrastructure. The view dynamically shows the relationships of dependencies and provides data on each element.

Figure 1



1) Health status is displayed by color-coded circles and connection lines. Green represents healthy, orange represents warning, and red represents critical.

2) Easily switch views to different data centers or locations with the drop-down menu. Use the layer icons to drill-down to lower level logical components such as the delivery layer and machine catalog.

3) View information on user experience issues, and correlate them to issues in the delivery infrastructure and components.

4) View utilization metrics and alerts for each selected component. If no component is selected, this pane will show the health of the data center you're viewing.

From this high-level view (Figure 1) you can select any component from the screen to view specific details. The metrics on the right change to display information applicable to the component selected (Figure 1.4). The data displayed on Figure 2 is specific to the data center itself. This displays when no components are selected. Figure 3 shows data specific to a delivery controller.

**The data pane shows:**

- ▶ Citrix site data
- ▶ Specific component metrics such as:
  - ▶ CPU, memory, disk latency, bandwidth
- ▶ Storefront Store Health\*
- ▶ Service Health\*
- ▶ Delivery Controller Health\*
- ▶ Active Directory Health\*
- ▶ License Server Health\*
- ▶ PVS Server Health\*
- ▶ VMware/XenServer Hypervisor\*
- ▶ Health and Virtual Capacity\*
- ▶ SQL Server Health\*

Figure 2

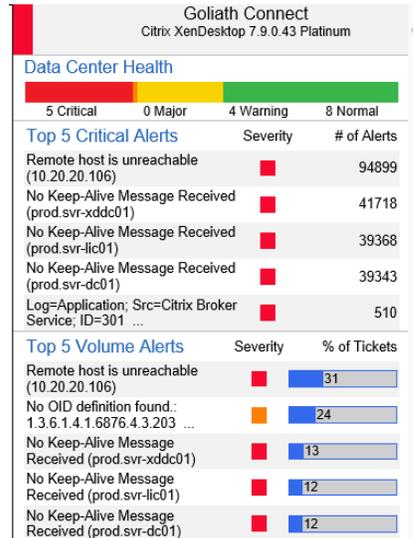
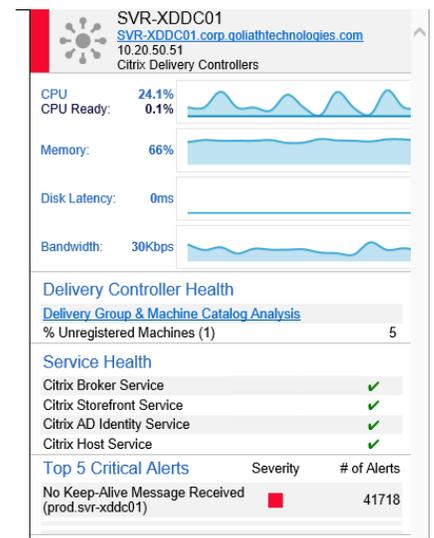


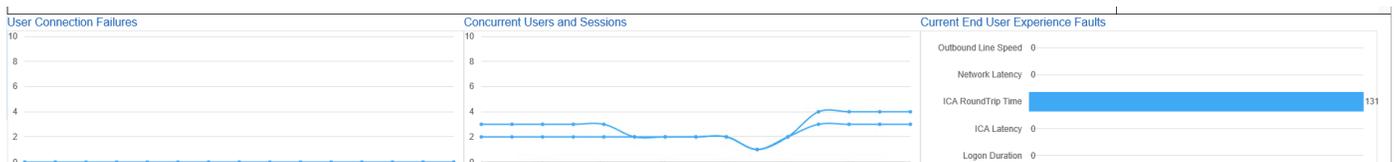
Figure 3



**The bottom pane shows user experience metrics for:**

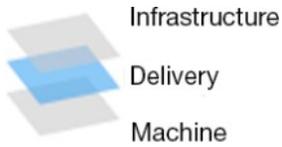
- ▶ User connection failures
- ▶ Concurrent users
- ▶ Outbound line speed
- ▶ Logon duration
- ▶ Network latency
- ▶ ICA RTT
- ▶ ICA latency

Figure 4



*\*To learn more about the specific metrics for each component please contact us (contact info pg. 8).*

# Delivery Layer



The delivery layer is displayed by selecting the second layer from the drill down layer icons. The site's delivery controllers and all the logical components associated with application delivery are presented here.

- Nodes map out in accordance to their workflow and relationship to the Citrix site to show connections and health of components for delivering applications or desktops to end users. For example: **Delivery Controller>Delivery Group>Machine Catalog>PVS/MCS**
- Charts displaying end user experience metrics such as concurrent users by delivery group, average logon duration, and Citrix Receiver versions being used.
- The information pane on the right displays the general health of the Citrix environment in context of the delivery layer:
  - ▶ Name of the Citrix Site & Health.
  - ▶ Citrix Site Version and License.
  - ▶ Delivery Group: Number of registered (unregistered machines), number of active sessions (disconnected sessions).
  - ▶ Machine Catalog: number of registered (unregistered machines), hosting info.
  - ▶ Top 5 alerts being triggered in the site based on criticality.
  - ▶ Top 5 alerts being triggered in the site based on volume.

*Note: Selecting a node will bring up the specific machine catalog for that element and display relevant metrics in the panel to the right (covered in the next section).*

Figure 5



# Machine Layer



The third layer drills down to the machine catalog layer. Which is accessed by clicking on an element in the delivery group layer. The machine view extends the delivery group view out to the hypervisor and host(s).

This provides insight into the health of the cluster as well as the individual host servers, allowing you to trace host level issues directly through to delivery resources and user sessions.

- 1) In addition to the delivery group elements, the machine layer displays Citrix PVS and/or MCS as well as the hypervisor resources and hosts.
- 2) The details on the right pane will update according to the selected node. Information displayed includes:
  - ▶ CPU, Memory, Disk IOPS, Logon Duration, ICA latency, ICA RTT, Network Latency, Bandwidth, Outbound line speed.
  - ▶ Delivery group metrics such as number of machines, sessions in use, and number of applications.
  - ▶ Number of machines in Machine Catalog
  - ▶ MCS Image Health by machine count, cache disk size, cache memory size
  - ▶ Hosting Unit Health by CPU count, disk size, memory
  - ▶ Hypervisor storage availability
  - ▶ Top 5 Critical Alerts for each component

Figure 6



# Topology View Features and Benefits

FEATURES	BENEFITS
Automated mapping setup, configuration and updates.	No manual setup and adapts to new components as they are added. This provides true end-to-end visibility for any scale environment.
Visibility into component relationships.	Understanding relationships is key for troubleshooting end user experience issues. Being able to see the connections between elements eliminates the time it takes to correlate the impact of issues on end users to root cause in your environment.
Drop-down menu for switching between sites and data centers.	Provides visibility into siloed architectures that would have otherwise required time consuming and error prone communications between departments.
View component specific information and end user experience metrics at a glance.	Gives administrators a fully functional troubleshooting tool so they can quickly assess the impact of component related conditions on an infrastructure wide scale.
Drill-down from physical components into logical components to identify root cause.	Topology View allows administrators to quickly find infrastructure issues at any point in the delivery process and then visualize and connect them back to end user experience.

# To see how Goliath can help you improve XenApp & XenDesktop end user experience:

Register for a demo: <https://goliathtechnologies.com/schedule-demo/>

Send us an email: [techinfo@goliathtechnologies.com](mailto:techinfo@goliathtechnologies.com)

