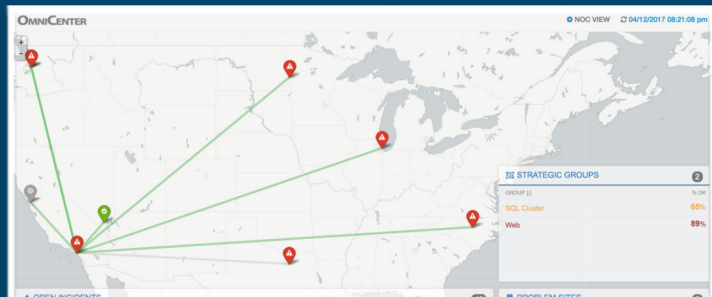


# OMNICENTER

## Enterprise-class Monitoring Made Easy

OmniCenter provides single-pane-of-glass dashboards for the entire IT enterprise, so you can keep track of infrastructure, applications, and cloud all on one beautifully crafted, award-winning screen. It's a self-contained virtual appliance with no clients, agents, or probes so rollouts are a snap.



### Live, Single-Pane-of-Glass Dashboard

OmniCenter continuously collects data from the entire IT landscape - apps, networks, cloud, VMs - and automatically creates unified, realtime, customizable dashboards. UI options can be anything from geo-maps to top-down lists

### Incident Management

OmniCenter automatically runs advanced IM functions to help eliminate false alarms and dramatically improve the signal-to-noise ratio of alerts.

### Root Cause Analysis

OmniCenter will automatically zoom in on the root cause of problems, and suppress any related alarms - this allows for efficient problem isolation and reduced noise.

### Event Correlation

String together events based upon conditional, sequential or uniquely patterned behavior and alert only on the existence of the string vs. the individual components.

### Anomaly Detection

Go beyond static thresholds to alert on any rapidly changing metric, or unexpected service level that particular day-of-week or day-of-month.

### Three-year Role-based Reporting

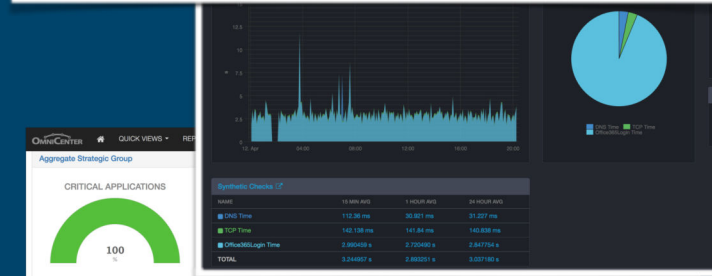
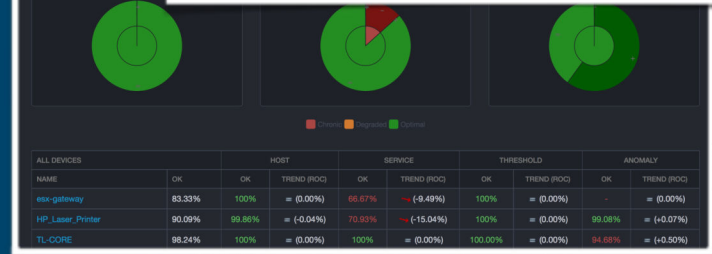
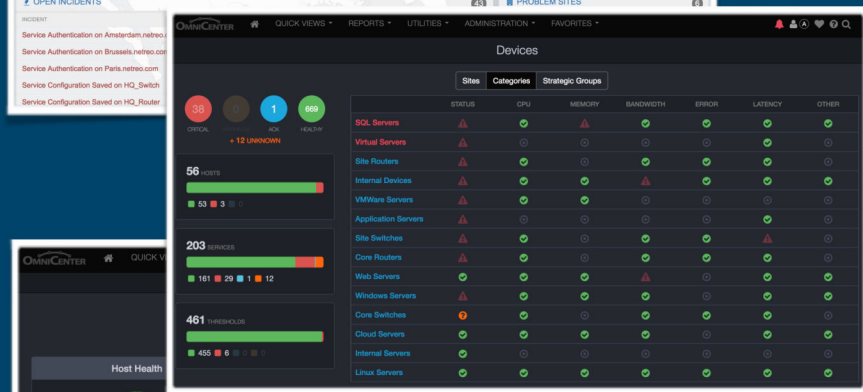
Scheduled ad-hoc, pre-configured, or customized automatic reporting with 3-yr historical data. Trending is extrapolated outward for capacity planning purposes.

### Polling Methods Supported

- SNMP (v1,2 &3)
- WMI
- NetFlow
- S-Flow
- IPFIX
- Syslog/Event Log
- Serv Checks
- Web response
- Powershell
- REST API
- Simulated email
- SSH / Telnet

### Typical Baseline Statistics

- CPU
- Per-Process CPU
- Memory
- Per-Process Mem
- Latency / jitter
- bandwidth / errors
- Page load time
- Email round trip
- Call quality
- I/O
- Disc Space
- Traffic mix



OmniCenter is deployed on your choice of three appliance options: VMware virtual appliance (VA), Netreo-provided hardware-based, or (coming soon) a cloud-based appliance. Whichever you choose, it's completely self-contained. No agents, clients, probes, external databases, or hidden costs. In fact, there is no lifecycle footprint at all. Go ahead and focus on your business.

## 3 Appliance Choices:

1



### VMware-based VA

OmniCenter is offered as a web-downloadable OVF file to be implemented seamlessly to your ESX / ESXi environments, so you can take advantage of existing resources and roll it out on demand. In this scenario, High Availability is provided through built-in VMWare features such as vMotion and Site Recovery Manager (SRM).

#### Recommendations

- VMware vSphere 5.0 or later
- Intel or AMD processors
- Min 2.0 GHz w/ virtualization support
- SSD is recommended
- NFS-based datastores not supported
- Min datastore latency <10ms total

Max	RAM	vCPU	Disk
300	8GB	8	100GB
1,000	16GB	10	200GB
1,500	20GB	12	300GB
3,000	32GB	16	600GB

2



### Cloud-based (coming soon)

Coming Summer 2017 OmniCenter will provide the option to be deployed in our Amazon Web Services cloud presence, where it can easily be provisioned into your existing VPC.

Subsequent platforms to be supported are Azure in late 2017.

3



### Hardware-based

OmniCenter hardware appliances are available in a wide variety of sizes and capacities to handle almost any scaling requirement. All OmniCenter hardware appliances are equipped with Solid State Drives, gigabit ethernet interfaces, and redundant power supplies for maximum performance and reliability.

Our highest level of availability is achieved by also deploying an OmniCenter HA appliance. It operates as a hot standby and mirrors the primary OmniCenter to stay synchronized, and monitors the primary in realtime. Should the primary fail for any reason, it will assume alerting, reporting, and U/I functions.

Appliance	Max Devices	Size
200	500	1U
300	1,500	1U
400	2,500	1U
500	5,000	2U
600	7,500	2U
1000	12,500	4U
2000	20,000	4U

## Advantages

- Extreme uptime - 99.999%
- No clients, agents, probes or pollers
- Zero routine lifecycle maintenance
- No setup challenges
- OS designed exclusively to run OmniCenter
- Easy High-Availability (HA)

## Product Architecture and Workflow

OmniCenter runs a customized, hardened LAMP (Linux, Apache, MYSQL, PHP) architecture optimized for running OmniCenter.

### It starts with data collection

OmniCenter uses standards-based protocols and simulated transactions to poll all application and network elements of the IT environment every five minutes.

**SNMP (v1,2 &3)**  
**WMI**  
**NetFlow**  
**S-Flow**

**IPFIX**  
**Syslog/Event Log**  
**Serv Checks**  
**Web response**

**Powershell**  
**REST API**  
**Simulated email**  
**SSH / Telnet**



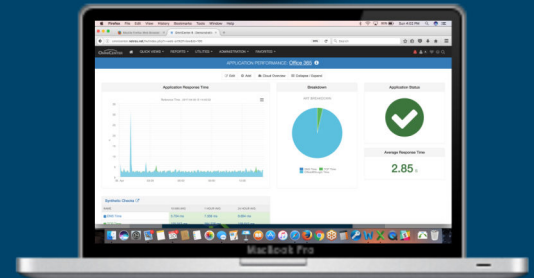
### Data processing

OmniCenter makes decisions on what to do with the data collected based upon both pre-set rules and intelligent logic



### Data recording

All polled data is recorded in an on-board round-robin database with 3 years archival



### Dashboards and Reports

Web-based UI presents all polled data points with custom, pre-configured, and ad hoc dashboard options.



Issue alert

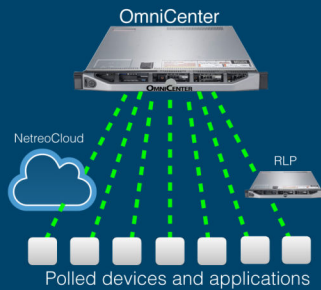


Take action



## Network Architecture

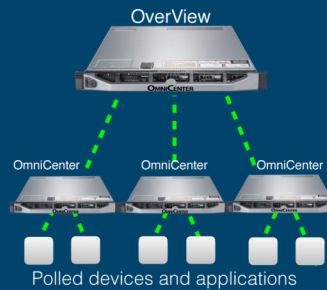
Most end-user environments utilize a **consolidated** platform, with a single OmniCenter appliance directly polling devices and applications along with limited remote polling from Remote Landing Points\* (RLPs) and NeteoCloud™. **Distributed** architectures, where multiple OmniCenter appliances are placed either in regional hubs or in end-user networks, may be a fit for very large global enterprises and MSPs. Combining selected elements of each is possible using our **Hybrid** architecture.



### Consolidated

A single OmniCenter appliance (and HA failover if desired) deployed in the network core and/or in collocated data center facilities. During setup, basic network data such as IP address, subnet mask, default gateway and SMTP gateway are entered. Any reachability issues (firewall rules or access control lists which disallow OmniCenter from polling desired components) are addressed, then the appliance is configured to poll from this central vantage point - and may also leverage NeteoCloud™ and Remote Landing Points\* (RLPs) to give a remote perspective. Multi-Tenant or logical divisions are possible, allowing for secure separation of access zones for separate companies or departments.

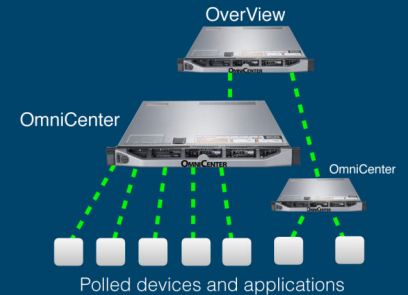
Pros	Cons
Simplicity	Requires connectivity
Small footprint	IP overlap
Supportability	Scaling limitations



### Distributed

In this scenario, OmniCenter appliances are deployed in networks which are closer to the devices and applications being polled. MSPs can deploy OmniCenters in actual customer networks. Very large global customers can deploy OmniCenters at regional hubs, eliminating the need to directly backhaul all polling traffic all the way to the core. Network issues can be simplified due to the embedded TLS-based VPN architecture built automatically by OmniCenter. At the core the user interface of all OmniCenters may be aggregated into a single screen with an OmniCenter Overview™. Future versions of Overview will also centralize reporting and routine administration.

Pros	Cons
Distributed processing	Complexity
No IP overlap	Larger footprint
No connectivity req	Additional support



### Hybrid

Hybrid environments are attractive alternatives to MSP (and very large global environments) that have either customers or regional hub locations of many different sizes. In this scenario, portions of both the Consolidated and Distributed architectures are applied on an as-needed basis, which allows for cost and complexity savings. Typically, larger end-user or hub locations would receive an OmniCenter, and in the interest of cost reduction smaller ones would be polled centrally by a centrally-located OmniCenter. Note that in order to 'roll up' the centrally-polled locations as well as the remotely polled ones, an OmniCenter Overview is typically required.

Pros	Cons
Best of all worlds	Dissimilar Implementation

## High-Availability (HA)

In Virtual Appliance implementations, HA is provided through built-in VMWare features such as vMotion and Site Recovery Manager (SRM). When using hardware appliances, basic availability is achieved via redundant SSD drives, fans, and power supplies to provide high mean-time-between-failures (MTBF).

True HA is achieved by also deploying an OmniCenter HA appliance, which constantly mirrors the primary OmniCenter in realtime to stay synchronized and operates in a hot standby mode. If the primary should fail for any reason, the HA system will immediately assume alerting, reporting, and U/I functions. The HA appliance can either be installed at the same location or at a separate location for geographic redundancy.