

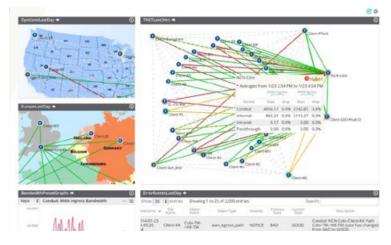
# Oracle SD-WAN Aware

Oracle SD-WAN Aware is a centralized management system enabling IT staff to configure, monitor, and analyze Oracle SD-WAN Edge. It reduces time and configuration errors associated with deploying Oracle SD-WAN appliances and provides access to detailed performance data correlated across the network. These capabilities deliver an easy-to-manage SD-WAN with unprecedented visibility into network and application performance.

# GAIN VISIBILITY INTO YOUR SD-WAN

By leveraging an intuitive graphical interface, Oracle SD-WAN Aware simplifies many common management tasks and eases the transition from configuration to monitoring. Users can define multiple layers of physical and geographical topologies, which act as a guide for configuration changes, and provide a visual overview of network performance plus a quick at-a-glance overview of network errors. The application can be easily customized through the use of multiple user-definable maps, dashboards, and reports.

A browser-accessed software solution, Oracle SD-WAN Aware runs within a VM on standard userprovided servers or in the cloud on Amazon Web Services (AWS). A single instance can manage and collect data from up to 256 Oracle SD-WAN Edge appliances along with the SD-WAN controller. Oracle SD-WAN Aware simplifies SD-WAN configuration and management, while also providing complete visibility into link and application performance.



Key Features

- Intuitive, centralized management system for Oracle SD-WAN hardware appliances
- Simplifies monitoring and troubleshooting an Oracle SD-WAN
- Fully customizable reports and graphs for easy network and application performance management
- Single point configuration with comprehensive networkwide audits to minimize errors

Figure 1. Oracle SD-WAN Aware's graphic user interface provides a visual overview of SD-WAN performance.



Oracle SD-WAN Aware analytics deliver the micro-details today's enterprise needs to quickly and easily uncover the root causes behind network issues, so more time can be redirected towards strategic initiatives. The powerful data can also be used for capacity planning and SLA enforcement. Oracle SD-WAN Aware enables you to configure, monitor, and analyze an Oracle SD-WAN with ease.

# CONFIGURE

The centralized configuration capabilities of Oracle SD-WAN Aware minimize the administrative effort and operational cost associated with managing an SD-WAN. Rather than configure each site individually and risk errors occurring if the two sides of a link don't match up, it lets you configure the network as a whole. This approach speeds up the process of configuration and dramatically reduces the chance for errors. Also, you can easily add a new site with the intelligent clone feature.

The configuration interface is easy to understand and uses the same look and feel as the on-appliance web interface, minimizing the learning curve for those familiar with the Oracle SD-WAN solution.

## **Configuration capabilities in Oracle SD-WAN Aware**

- Sites can be created and provisioned in a tree view or visually with the aid of network maps. These
  maps are later available to aid in monitoring the network and troubleshooting network errors.
- Default values and rules speed up the initial configuration process while making it simple to tailor the network behavior to align with a company's policies.
- More than 400 audit checks are performed as a configuration is built to ensure that errors are avoided before they impact network behavior. Interappliance dependencies are included in the audit to avoid inadvertent creation of conflicting configurations.
- Oracle SD-WAN Aware manages SD-WAN configurations from a central on-premises or cloud location. This central instance stages networkwide configuration changes and then simultaneously activates the new configuration in every Oracle SD-WAN appliance, ensuring the network configuration is in sync and minimizing any network downtime caused by configuration errors.
- Multiple configurations can be archived for easy rollback through the configuration change management feature.

### MONITOR

Oracle SD-WAN Aware's monitoring feature provides unprecedented visibility into the SD-WAN. Due to the comprehensive nature of the Oracle SD-WAN solution, data can be captured by tracking packets in each direction as they traverse every path in the SD-WAN without probes or injecting test data, providing the most granular and accurate view of network and application performance possible.



Figure 2. Report showing connection status

#### **Key Business Benefits**

- Gain visibility into SD-WAN performance.
- Simplify common network management tasks.
- Easily transition from configuration to monitoring.
- Quickly uncover the root causes of network issues with analytics.
- Leverage powerful data for capacity planning and SLA enforcement.

Oracle SD-WAN Aware collects performance data from Oracle SD-WAN appliances throughout the network and stores it in a single database. This central database offers a correlated view of application performance across the network, so you can compare link and application performance between different locations.

Configurable dashboards enable users to customize displays, creating views that fit how they perceive their network. For example, geographically-based dashboards display the performance of individual regions and Quality of Service (QoS)-based dashboards call out the performance of select mission-critical applications. As a result, the information important to an organization is always on display while tool tips and drill downs provide quick access to more detailed information.

# Monitoring capabilities in Oracle SD-WAN Aware

- Fully customizable graphic and text reports can be saved and added to various dashboards, enabling the network to be viewed from different perspectives.
- Color-coding and visual cues to network performance make it easy to quickly assess network
  performance. In addition, network maps and graphs are interactive allowing the user to zoom into
  plot lines or mouse over charts to see more detailed information.
- Logical or geographically oriented maps show current and historical views of network traffic with visual indications of bandwidth usage.
- The ability to replay traffic patterns over specific time frames makes it easy to see where data is flowing and how an Oracle SD-WAN creates and deconstructs dynamic paths in response to application demand.
- Networkwide events and alerts can be centrally collected and reported via the Oracle SD-WAN Aware platform, simplifying the integration of an Oracle SD-WAN into the network monitoring ecosystem. Plus, all raw data points can be exported as .csv files for further analysis or importation into other systems.

# ANALYZE

Oracle SD-WAN detects network issues as they occur and automatically routes traffic in real time around failed links and onto links that provide the quality necessary to ensure peak application performance. While this capability doesn't prevent failed links or high latency and jitter, it prevents those factors from impacting the availability and quality of applications that run across the SD-WAN. Organizations are no longer constantly reacting to network problems in crisis mode; they are confident that the Oracle SD-WAN solution will enable their business operations to continue.

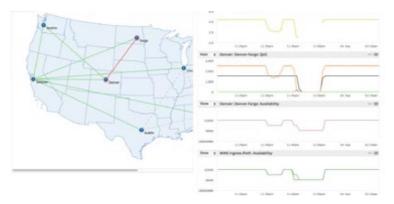


Figure 3. Detailed analytics for WAN traffic

Network issues may not be a crisis, but they still need to be reported and corrected. Oracle SD-WAN Aware is an ideal tool to help IT staff do that. Events from throughout the SD-WAN are displayed on graphical maps and tables. In addition, current and historical reports are available to support fault detection, troubleshooting, network and capacity planning, ROI analysis, and SLA confirmation.

## Sample analysis performed by Oracle SD-WAN Aware

- Performance statistics show the quality of each link and path in the network so that poor performing links can be highlighted and reported to service providers. Consistently poor performing links are highlighted, and the information is made available to network administrators so that alternative providers can be considered.
- Reports and maps assist with capacity planning by showing bandwidth usage on each link. Links approaching saturation are detected and additional bandwidth can be added.
- Traffic displays and reports help discover applications using bandwidth or identify applications using more bandwidth than anticipated, so those problems can be identified and corrected.
- Traffic pattern replays identify when network services are in peak demand or dynamic paths are being created and deconstructed, enabling IT staff to understand usage patterns in the network across time and geography.

## Specifications

ORACLE SD-WAN AWARE	ORACLE SD-WAN AWARE FOR AWS
<ul> <li>VMware Hypervisor ESXi 5.1.0 or higher</li> <li>Minimum 4 Core, 3 GHz processor</li> <li>Minimum 8GB RAM</li> <li>Only locally attached storage is supported</li> </ul>	<ul> <li>Packaged as 64-bit Amazon Machine Image (AMI)</li> <li>The size and configuration of the Oracle SD- WAN will determine the Oracle SD-WAN Aware EC2 infrastructure requirements style used in this template, rather than keeping an incorrect style taken from the original file.</li> </ul>

#### **Oracle SD-WAN**

Deployed globally, the Oracle SD-WAN product family provides market-leading, trusted, failsafe SD-WAN technology. It delivers superior application reliability and resiliency while unlocking the benefits of branch consolidation.

#### **Related Products**

- Oracle SD-WAN Edge
- Oracle SD-WAN Aware
- Oracle SD-WAN Provisioning Server

#### **Related Hardware Appliances**

- Oracle Talari E50
- Oracle Talari E100
- Oracle Talari D2000
- Oracle Talari D6000

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# Integrated Cloud Applications & Platform Services

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