Oracle® SD-WAN Edge 7.3

New Features Guide

Original Publication Date: Nov 1, 2019

Table of Contents

About This Document

This guide illustrates the new capabilities of Oracle SD-WAN Edge 7.3, including new features, configuration commands, and design recommendations to assist you with implementation.

My Oracle Support

My Oracle Support (https://support.oracle.com) is your initial point of contact for all product support and training needs. A representative at Customer Access Support (CAS) can assist you with My Oracle Support registration.

Call the CAS main number at 1-800-223-1711 (toll-free in the US), or call the Oracle Support hotline for your local country from the list at http://www.oracle.com/us/support/contact/index.html. When calling, make the selections in the sequence shown below on the Support telephone menu:

1. Select 2 for New Service Request.
2. Select 3 for Hardware, Networking, and Solaris Operating System Support.
3. Select one of the following options:
    - For technical issues such as creating a new Service Request (SR), select 1.
    - For non-technical issues such as registration or assistance with My Oracle Support, select 2.

You are connected to a live agent who can assist you with My Oracle Support registration and opening a support ticket.

My Oracle Support is available 24 hours a day, 7 days a week, 365 days a year.

Emergency Response

In the event of a critical service situation, emergency response is offered by the Customer Access Support (CAS) main number at 1-800-223-1711 (toll-free in the US), or call the Oracle Support hotline for your local country from the list at http://www.oracle.com/us/support/contact/index.html. The emergency response provides immediate coverage, automatic escalation, and other features to ensure that the critical situation is resolved as rapidly as possible.

A critical situation is defined as a problem with the installed equipment that severely affects service, traffic, or maintenance capabilities, and requires immediate corrective action. Critical situations affect service and/or system operation resulting in one or several of these situations:

- A total system failure that results in loss of all transaction processing capability
- Significant reduction in system capacity or traffic handling capability
- Loss of the system's ability to perform automatic system reconfiguration

- Inability to restart a processor or the system
- Corruption of system databases that requires service affecting corrective actions
- Loss of access for maintenance or recovery operations
- Loss of the system ability to provide any required critical or major trouble notification

Any other problem severely affecting service, capacity/traffic, billing, and maintenance capabilities may be defined as critical by prior discussion and agreement with Oracle.

Locate Product Documentation on the Oracle Help Center Site

Oracle Communications customer documentation is available on the web at the Oracle Help Center (OHC) site, http://docs.oracle.com. You do not have to register to access these documents. Viewing these files requires Adobe Acrobat Reader, which can be downloaded at http://www.adobe.com.

1. Access the Oracle Help Center site at http://docs.oracle.com.
2. Click Industries.
3. Click the Oracle Communications link.

   Under the SD-WAN header, select a product.
4. Select the Release Number.

   A list of the entire documentation set for the selected product and release appears.
5. To download a file to your location, right-click the PDF link, select Save target as (or similar command based on your browser), and save to a local folder.

References

The following documents are available:

- *Talari Glossary*
- *Talari APN 7.3 GA Release Notes*
- *Talari APN 7.3 GA Configuration File Reference*
- *Talari Aware 4.3 GA Release Notes*
- *Talari Aware 4.3 GA New Features Guide*
- *Talari Enhanced Application Identification & Talari Application Signatures Guide*
- *Talari E500 Installation Guide*
- *Talari E500 Hardware Guide*
- *Talari Private Registration Server Installation and Deployment Guide*
- *Talari VT800 Installation Guide*
- *Talari CT800 Installation Guide*

About This Product

Talari Appliances

APN 7.3 GA supports Talari Appliances functioning as Network Control Nodes (NCNs) or Client Nodes.

The following Talari Appliances are compatible with APN 7.3 GA:

- Physical Talari Appliances: E50, T510, T730, T750, T860, E100, E500 (7.3 P3+), T3010, E1000, T5000, T5200
- Virtual Talari Appliances: VT800, VT800-128 (7.3 P4+), CT800, CT800-128 (7.3 P4+)

Note: The E50, T510, and T730 only function as Client Nodes.

Talari Aware

Some of the functionality described in this document is only supported for networks where *Aware 7.3 GA* (or later) has been deployed. *See Talari APN 7.3 GA Release Notes* and *Talari Aware 7.3 GA Release Notes* for more details.

APN 7.3 GA is supported in combination with the following level(s) of Talari Aware:

- Aware 4.3 GA

Talari OS

To deploy this level of APN on your network, each Talari Appliance must be running a supported level of Talari OS. If an OS update is required, see the *Talari OS Partition Update Guide* for instructions.

The following versions of Talari OS support APN 7.3 GA:

Talari Appliance Model	Talari OS		
	OS 4.6	OS 5.0	OS 5.1
E50	--	--	YES
T510	YES	YES	YES
T730	YES	--	--
T750	YES	--	--
T860	YES	YES	YES
E100	--	YES	YES
E500	--	--	R7.3 P3+
T3010	YES	YES	YES
E1000	--	--	YES
T5000	YES	YES	YES
T5200	YES	YES	YES
VT800	YES	YES	YES
VT800-128	--	--	R7.3 P4+
CT800	YES	YES	YES
VT800-128	--	--	R7.3 P4+

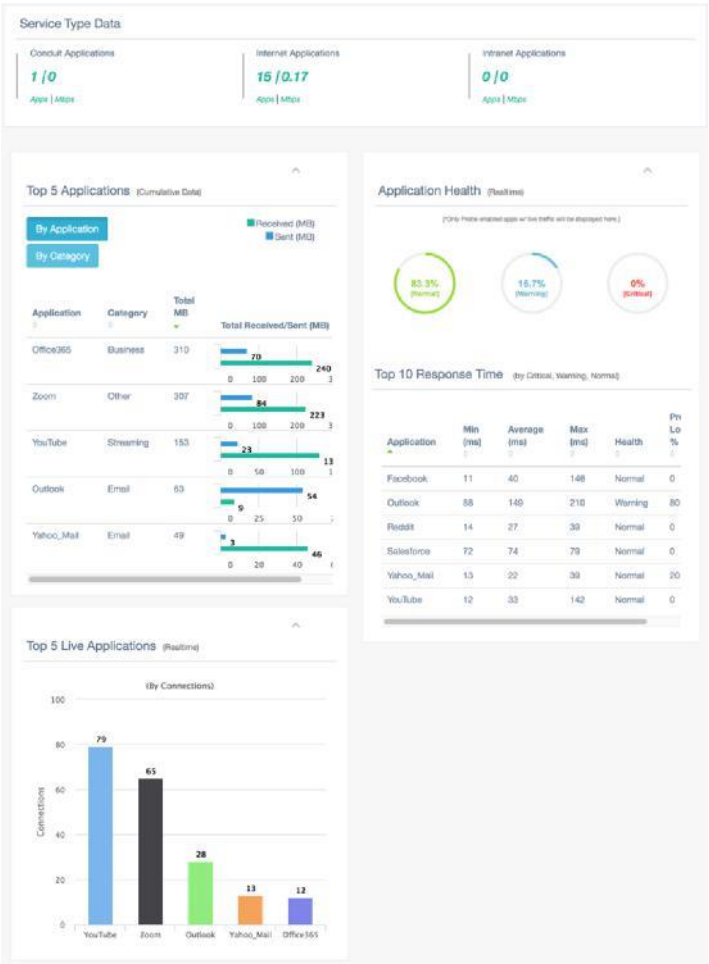
New Features in Talari APN 7.3 GA

The following sections describe new features and enhancements delivered in Talari APN 7.3.

Enhanced Application Identification

APN 7.3 GA introduces Enhanced Application Identification, which offers a significant improvement to how Talari Appliances identify and forward applications. This release introduces the following new application identification enhancements:

- DNS snooping, a less intrusive application identification technique when compared to our existing DNS proxy or manual six-tuple identification mechanisms.
- Simplified application policy configuration, with a default signature library (the Talari Application Signature Library) with over 100 application entries included. Preset application signatures are modular and can be downloaded and upgraded independently of software packages via the regular Change Management process. Talari will provide updates to the application Talari Application Signature Library moving forward based on customer feedback.
- A dedicated application dashboard which allows the user to view top cumulative and live applications, bandwidth usage by service, and application health information. This information helps administrators perform common tasks such as troubleshooting and capacity planning:



- Streamlined configuration elements that make creating an application policy fast and easy. Talari's Enhanced Application Identification is extensible and supports the addition of user-defined categories and applications.
- Applications are assigned to a pre-defined application category, or users may configure additional application categories as required.

By combining all of these capabilities, users can create granular application policies such as steering a single application (e.g., Microsoft Office 365) out the local internet service while forwarding all other SaaS application(s) back to the data center or NCN site. The user can also define the scope of the application policy which could include a single location, all APN sites or a subset of sites depending on user needs. Traditional QOS services are applied for conduit services where the user can map an application to a pre-defined classification or select their own classification from a pre-defined list.

For information on configuring and monitoring Enhanced Application Identification, please see the *Talari Enhanced Application Identification & Talari Application Signatures Guide.*

Talari E500 Appliance (APN 7.3 GA P3)

APN 7.3 GA P3 adds support for the Talari E500 appliance. The Talari E500 is an extension of the E-series of Talari Appliances. The E500 intended for use in mid-sized

branch or regional offices that require higher performance and port density than the E100 provides. The E500 supports WAN Optimization and Easy 1st Install. For more information on this platform, please see the *Talari E500 Installation Guide* and the *Talari E500 Hardware Guide*.

Private Registration Server (APN 7.3 GA P3)

Beginning in APN 7.3 GA P3, customers who do not wish to depend on the public Talari Registration Server may host a Talari Private Registration Server for use during the Easy 1st Install process. The private registration server may be deployed for access via an incumbent private intranet or for access via the public Internet, and may use either a static IP host or a DNS-resolvable Fully Qualified Domain Name (FQDN).

Once the Private Registration Server (PRS) is installed and operational, the high-level data flow for the Easy 1st Install process to complete properly is as follows:

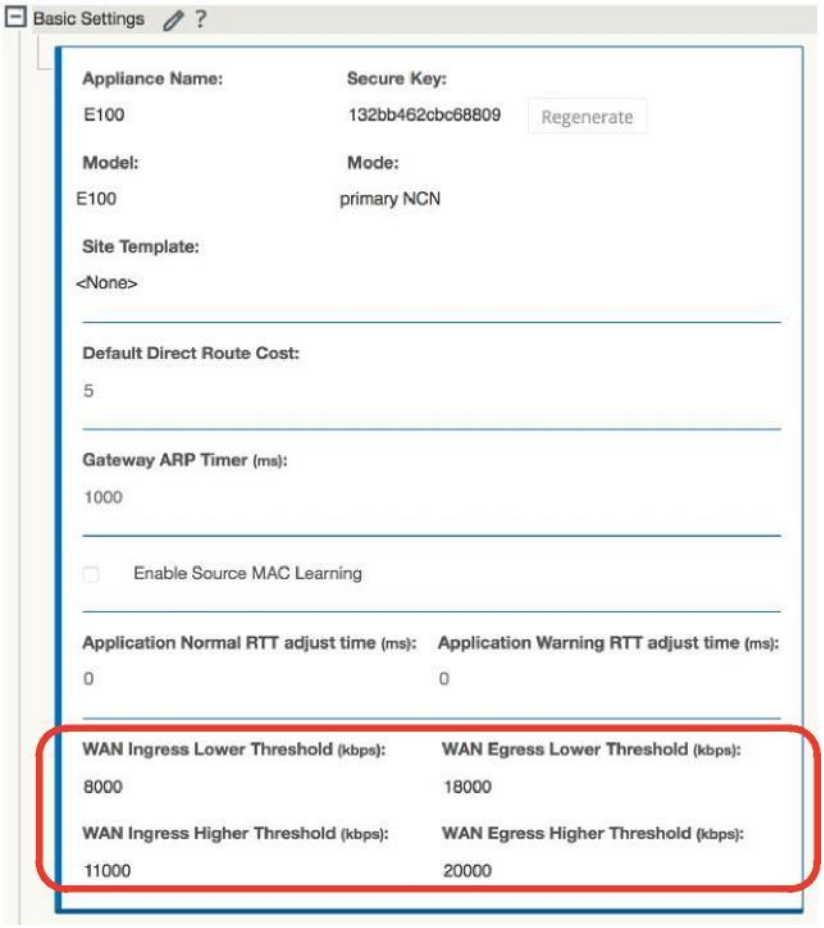
- User provides the serial number for the site being deployed to the NCN
- The NCN uploads package to the PRS
  - Connectivity must exist to the PRS from the NCN management port IP
  - The NCN pushes the client package to the PRS via HTTPS
- Once the client appliance is powered on and has an IP address/gateway/DNS for the management port, the following occurs:
  - The client will attempt to establish an HTTPS session via its management port to the PRS and provide its serial number
    - Once the serial number is validated via the HTTPS session, the PRS will provide a URL for the client to download the appliance package
  - The client appliance will establish a second HTTPS session to retrieve the appliance package based on the validated serial number

For detailed information on deploying and using a Talari Private Registration Server, please see the *Talari Private Registration Server Installation and Deployment Guide.*

Threshold Alerting (APN 7.3 GA P4)

APN 7.3 GA P4 introduces the ability to monitor WAN link usage and trigger an alert if a user-defined usage threshold is exceeded. Threshold Alerting can provide insight into situations wherein the failure of one WAN link in a Conduit would result in the remaining WAN link(s) being oversubscribed, allowing customers to resolve potential issues before they arise.

Threshold Alerting is configured using the Advanced view of the Configuration Editor, and is disabled by default. To enable Threshold Alerting at a site, go to **Sites > [Site] > Basic Settings** and enter a non-zero value for at least one threshold:

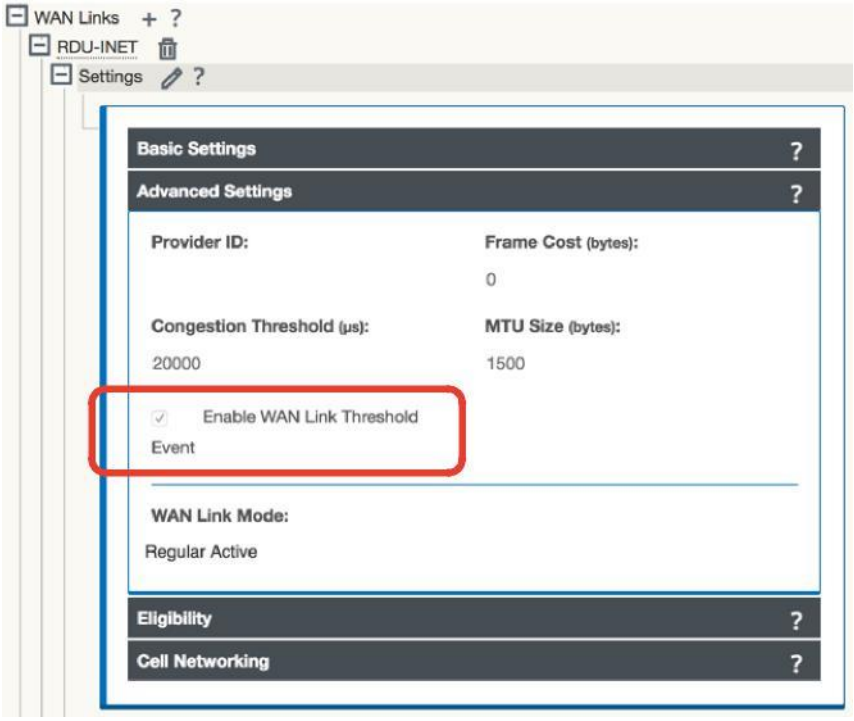


When a threshold is configured and the combined WAN link usage for the site exceeds the configured value, an event will be generated.

Note: When the combined WAN link usage exceeds the Lower Threshold value, an event with a severity of “Notice” will be generated. When the combined WAN link usage exceeds the Higher Threshold value, an event with a severity of “Warning” will be generated.

By default, all WAN links at a site are used for threshold calculations. To exclude a WAN link from threshold calculations, go to **Sites > [Site] > WAN Links > [WAN Link]**

> Settings > Advanced Settings in the Advanced view of the Configuration Editor and uncheck the “Enable WAN Link Threshold” box:



Additional Features in APN 7.3

Talari CT800-128 and VT800-128 Appliances (APN 7.3 GA P4)

APN 7.3 GA P4 introduces support for the CT800-128 and the VT800-128. These new virtual appliances build on the CT800 and VT800 appliances to support up to 128 conduits in AWS, ESXi, Azure, and HyperV.

Increased Throughput in AWS (APN 7.3 GA P4)

The CT800-128 supports a new maximum performance level of 500Mbps full-duplex for AWS.

Summary

Talari’s APN 7.3 GA software introduces Enhanced Application Identification, which improves application identification and application-based forwarding, and includes a default signature library with more than 100 applications included. APN 7.3 GA P3 adds support for the Talari E500 and customer-managed Private Registration Servers. APN 7.3 P4 adds Threshold Alerting, support for 128 conduits on the CT800-128 and VT800-128, and improved performance in AWS on the CT800-128.

Additional information regarding these and other features may be found on docs.oracle.com