Oracle SD-WAN Edge

Release Notes





Copyright © 2019, 2007 Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be errorfree. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group. Windows® 7 and Windows® XP are trademarks or registered trademarks of Microsoft Corporation.

This software or hardware and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.



Table of Contents

| About This Document | 4 |
|--|----|
| Audience | 4 |
| References | 4 |
| Request for Comments | 4 |
| About This Product | 5 |
| Talari Appliances | 5 |
| Capacity by Appliance Model | 5 |
| Supported Combinations | 6 |
| Supported Web Browsers | 6 |
| Enhancements/Features in APN 8.1 | 7 |
| Resolved Issues in APN 8.1 | 7 |
| Known Issues in APN 8.1 | 12 |
| 3rd Party Issues Affecting APN 8.1 GA | 16 |
| Enhancements/Features in Previous Releases | 17 |
| Enhancements/Features in APN 8.0 GA P1 | 17 |
| Enhancements/Features in APN 8.0 GA | 17 |
| Enhancements/Features in APN 7.3 GA P7 | 18 |
| Resolved Issues in Previous Releases | 18 |
| Resolved Issues in APN 8.0 GA P1 | 18 |
| Resolved Issues in APN 8.0 GA | 20 |
| Resolved Issues in APN 7.3 GA P7 | 21 |



About This Document

Talari APN release notes inform customers of added features, resolved issues, requirements for use, and known issues in the latest Talari APN releases.

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.
- 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 Appliance Quick Start Guide
- Talari APN 8.1 GA Configuration File Reference
- Talari Aware 8.1 Release Notes
- Talari D2000 Installation Guide
- Talari D2000 Hardware Guide
- Talari D6000 Installation Guide
- Talari D6000 Hardware Guide

About This Product

Talari Appliances

APN 8.1 supports Talari Appliances functioning as Network Control Nodes (NCNs) or Client Nodes.

The following Talari Appliances are compatible with APN 8.1:

- Talari Physical Appliances: E50, T860, E100, E500, T3010, E1000, D2000, T5000, T5200, D6000
- Talari Virtual Appliances: VT800, VT800-128, CT800, CT800-128

Note: The E50 Appliance only functions as a Client Node.

Capacity by Appliance Model

The following table details the supported network scale for each Talari Appliance model when running APN 8.1:

| Model | Max Static Conduit s | Max Dynamic Conduits | Max WAN Ingress Paths | Max WAN Egress Paths | Max Flows (TCP Term off) | Max Flows (TCP Term on) | Max Public WAN Links | Max Private WAN Links |
|---------------|-------------------------------|----------------------------|--------------------------------|-------------------------------|--------------------------------------|-------------------------------------|-------------------------------|--------------------------------|
| E50 | 8 | 4 | 36 | 36 | 32,000 | 500 | 3 | 32 |
| T860 | 32 | 16 | 216 | 216 | 64,000 | 8,000 | 8 | 32 |
| E100 | 32 | 16 | 216 | 216 | 64,000 | 8,000 | 8 | 32 |
| E500 | 32 | 16 | 216 | 216 | 64,000 | 16,000 | 8 | 32 |
| T3010 | 128 | 32 | 576 | 576 | 256,000 | 16,000 | 8 | 32 |
| E1000 | 200 | 32 | 1,000 | 1,000 | 256,000 | 16,000 | 8 | 32 |
| D2000 | 200 | 32 | 1,000 | 1,000 | 256,000 | 16,000 | 8 | 32 |
| T5000 | 256 | 32 | 1,152 | 1,152 | 512,000 | 16,000 | 8 | 32 |
| T5200 | 550 | 32 | 5,500 | 5,500 | 512,000 | 16,000 | 8 | 32 |
| D6000 | 550 | 32 | 5,500 | 5,500 | 512,000 | 16,000 | 8 | 32 |
| VT800 | 32 | 16 | 216 | 216 | 64,000 | 8,000 | 8 | 32 |
| VT800- 128 | 128 | 32 | 576 | 576 | 256,000 | 16,000 | 8 | 32 |
| CT800 | 16 | 8 | 120 | 120 | 64,000 | 5,000 | 8 | 32 |
| CT800- 128 | 128 | 32 | 576 | 576 | 256,000 | 16,000 | 8 | 32 |

Table 1: Network Scale by Talari Appliance Model



Supported Combinations

APN 8.1 is supported in combination with the following level(s) of Talari Aware:

Aware 8.1

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 8.1:

| Talest Accellence Market | Talari OS | | |
|--------------------------|-----------|--------|--|
| Talari Appliance Model | OS 5.1 | OS 5.2 | |
| E50 | YES | | |
| T860 | YES | | |
| E100 | YES | | |
| E500 | YES | | |
| T3010 | YES | | |
| E1000 | YES | | |
| D2000 | 1 | YES | |
| T5000 | YES | | |
| T5200 | YES | | |
| D6000 | - | YES | |
| VT800 | YES | | |
| VT800-128 | YES | | |
| CT800 | YES | | |
| CT800-128 | YES | | |

Supported Web Browsers

The Talari Web Console is supported in latest versions of the following web browsers:

- Microsoft IE9 IE11
- Mozilla Firefox
- Google Chrome

Supported browsers must have cookies enabled.

Supported browsers must have JavaScript installed and enabled.

Enhancements/Features in APN 8.1

The following issues have been enhanced or added in APN 8.1. Legacy Talari enhancement IDs are provided in parentheses:

| ID | Issue Description | Release |
|---------------------|---|---------------|
| 29989632 (19500) | User Names can now contain several special characters that were previously disallowed: @, /, and \. | APN 8.1 P1 |
| 29989624 (19486) | T5200 CPU profile optimizations as well as general packet scheduler enhancements have been made to significantly improve performance and stability during heavy load across large networks. Advanced logging and alerting tools are included. | APN 8.1 P1 |
| 29989439 (19230) | When configuring email alerts with SMTP Authentication enabled, event emails may not be sent. | APN 8.1 P1 |
| 29989448 (19245) | APN 8.1 introduces support for the D6000. The D6000 is the replacement appliance for the T5X00 series, with improved performance. | APN 8.1 GA |
| 29989220 (18936) | APN 8.1 introduces support for the D2000. The D2000 is the replacement appliance for the E1000. | APN 8.1 GA |

Resolved Issues in APN 8.1

The following issues have been fixed in APN 8.1. Legacy Talari issue IDs are provided in parentheses:

| ID | Issue Description | Foun d In | Fixed In |
|----------|--|--------------|------------------|
| 30381389 | When bringing up a new client site using Easy 1st Install, if the appliance is running APN 8.1 P1 or older and the backup OS partition is OS 7.0 or newer, the appliance may get stuck trying to swap to the backup partition and never complete the Easy 1st Install process. | | APN 8.1 P2 |
| | The workaround is to use Local Change Management on the client appliance to apply the configuration package. | | |



| ID | Issue Description | Foun d In | Fixed In |
|---------------------|--|---------------|------------------|
| 30358356 | There may be a service impacting memory dump when the application statistics for the conduits are updated after a configuration update. | | APN 8.1 P2 |
| 30354369 (19105) | If a Firewall Policy Template is applied under Global > APN Settings and the name of the applied Firewall Policy Template is changed under Global > Firewall > Firewall Policy Templates, the applied Firewall Policy Template will be changed to <none> and Configuration Editor will produce an audit error.</none> | | APN 8.1 P2 |
| 30354359 (18502) | Service Chaining with Palo Alto does not work as expected. | APN 7.3 P1 | APN 8.1 P2 |
| 30354557 (18109) | When configuring WAN link usage for a conduit under Connections > [Site] > Conduits > [Conduit Name] > Remote Site > WAN Links for a site with one or more MPLS WAN links, it is possible to get into a state where 'Use' is checked for an MPLS WAN Link but is not checked for its component queues. The MPLS paths are not created in this case. To correct this state: 1. Deselect the MPLS WAN Link 'Use' checkbox. | | APN 8.1 P2 |
| | Click Apply. Select the MPLS WAN Link 'Use' checkbox. Click Apply. They should now be in sync. | | |
| 30354488 | Error messages in the Configuration Editor may disappear before users can see and act on them. | | APN 8.1 P2 |
| 30354289 | When enabling e-mail alerts under Event Management > Configure Alarms or Event Management > Configure Alerts/Events, if a section that has a required field such as a password is enabled but the field is not filled in, clicking "Apply Settings" will clear all of the entered data. | | APN 8.1 P2 |
| 30354201 (19520) | Disk usage is calculated incorrectly on appliances running Service Chaining. | | APN 8.1 P2 |



| ID | Issue Description | Foun d In | Fixed In |
|---------------------|---|--------------|------------------|
| 30353879 (17978) | When using the Configuration Editor in Google Chrome, it takes multiple clicks to select an Ethernet Interface to add to an Interface Group after creating a Virtual Interface. | | APN 8.1 P2 |
| 30353849 (18231) | When disabling an application which is referenced by a rule, an audit error is displayed which cannot be cleared. | | APN 8.1 P2 |
| 30353822 (18226) | When configuring a WAN Link in the Basic View of the Configuration Editor, setting the Physical Rate does not also set the Permitted Rate. | | APN 8.1 P2 |
| 30353498 (19513) | The help text and tool tip text in the Configuration Editor for the Custom Silence Period incorrectly stated the default as 150ms even though the default silence time threshold is based on 3 nags, which are a dynamic variable depending on the trending network conditions. | | APN 8.1 P2 |
| 30353277 | If OSPF Route Learning is enabled and a route is withdrawn from OSPF, a service impacting memory dump may occur. | | APN 8.1 P2 |
| 30339920 | On the E1000 and D2000 platforms, there may be latency spikes for some Internet or Intranet traffic. | | APN 8.1 P2 |
| 30269571 | Rarely, a race condition may occur during a configuration update which will cause a service impacting memory dump. | | APN 8.1 P2 |
| 30246167 | If TCP Termination is enabled and two TCP sessions are accessing the same control block, it may cause a service impacting memory dump. | | APN 8.1 P2 |
| 30226846 | When WAN-to-WAN Forwarding is enabled and the NCN is acting as an intermediate site, a service impacting memory dump way occur while the NCN statistics are updating. | | APN 8.1 P2 |
| 30217171 | The count of Application Live Sessions may be off after reducing the number of application matches. | | APN 8.1 P2 |



| ID | Issue Description | Foun d In | Fixed In |
|---------------------|---|--------------|------------------------------------|
| 30214996 | DHCP relay requests are dropped if there is already a connection entry in the invalid state. | | APN 8.1 P2 |
| 30200292 | When multiple configuration changes to rules and classes are made and pushed out in quick succession, the rules may not be appropriately applied after the configuration update. | | APN 8.1 P2 |
| 30111696 | On E1000s in a Serial HA topology, Fail-to-Wire bypass mode may be disabled randomly on the standby (secondary device), causing the associated interface pairs to come up and leading to traffic disruption. | | APN 8.1 P2 |
| 30111674 | All TCP-based DNS requests are dropped by the APN when DNS snooping is enabled. | | APN 8.1 |
| 29989643 (19514) | When RTT probing is enabled to monitor application health, receiving a response with a timestamp of 0ms or a timestamp over 500ms may result in erroneous probe times being reported. | | APN 8.1 P2 |
| 30295118 | Internet/Intranet traffic may not be able to fully use the available bandwidth due to a calculation error with provisioning. | | APN 8.1 P2, APN 8.1 P1 |
| 30214996 | Some packets may be dropped if a connection entry for the flow with a state of "INVALID" already exists. | | APN 8.1 |
| 30048608 (19185) | When Application Identification is enabled and a domain name is being used as one of the match criteria, receiving a DNS reply containing a large number of QNames may cause a service impacting memory dump. | | APN 8.1 P1 |
| 30048589 (19115) | Path bandwidth testing sometimes fails when the test packets take too long to reach the remote site. | | APN 8.1 P1 |



| ID | Issue Description | Foun d In | Fixed In |
|---------------------|--|--------------|---------------|
| 29989646 (19517) | Clicking the Refresh button in the Talari UI after manually switching the Active and Standby HA appliances from the Manage Appliance > Appliance Options screen will re-submit the action and cause the appliances to switch again. | | APN 8.1 P1 |
| 29989639 (19509) | When the "Autonegotiate" box is unchecked for an Ethernet interface on the Configuration > Local Network Settings screen, the "Speed" dropdown incorrectly offers 1000Mb/s as an option. | | APN 8.1 P1 |
| 29989581 (19428) | Making a configuration update to remove an Internet or Intranet service that has an associated dynamic NAT rule with port forwarding may cause a service impacting memory dump. | | APN 8.1 P1 |
| 29989551 (19391) | When using Easy 1st Install to bring up the secondary site with a package size greater than the maximum file upload and post size, the Easy 1st Install Web UI continuously appears to upload the package but the secondary site never receives it. | | APN 8.1 P1 |
| 29989515 (19343) | The WAN Egress Kbps shown on the Statistics > QoS > Rules screen may be larger than the actual throughput. This does not impact other functions. | | APN 8.1 P1 |
| 29989511 (19336) | When a custom HTTPS certificate is uploaded to an appliance via the Manage Appliance > HTTPS Settings screen, it is possible that the certificate file can be corrupted either then or during a subsequent OS Partition Update operation on the appliance. As a result, web browsers will be unable to connect with the appliance. | | APN 8.1 P1 |
| 29989410 (19174) | When a User Defined Application includes a DSCP tag as a match criterion, a flow may continue to match against that application even if the DSCP tag for the flow changes. | | APN 8.1 P1 |
| 29989520 (19349) | If the VIP for a client site's WAN link is changed, the NCN may not pick up the new VIP, resulting in Dynamic Conduits failing to establish after the change. | | APN 8.1 GA |



| ID | Issue Description | Foun d In | Fixed In |
|---------------------|---|---------------|---------------|
| 29989465 (19266) | Receive WAN Link Usage calculations may be lower than expected if flows match a rule with packet aggregation turned on. | | APN 8.1 GA |
| 29989462 (19263) | If a duplicate IP is detected and the warning banner is displayed, rebooting the appliance before the banner is cleared will cause the banner to stay up until the Talari service is restarted or the duplicate IP is detected and cleared again. | APN 7.2 P1 | APN 8.1 GA |
| 29989461 (19262) | If there are public IP learning messages waiting to be added to the configuration database, a major configuration update (adding/deleting/editing a WAN link, service, or interfaces) may result in no public IP addresses being updated in configuration database. Additionally, the public IP addresses for WAN links shown in the UI may be wrong. | | APN 8.1 GA |
| 29989460 (19261) | In the Configuration Editor, the Basic Settings section for Intranet Service include a default route cost field. This field is invalid for Intranet Service. | | APN 8.1 GA |
| 29989447 (19244) | When a Dynamic NAT Policy is enabled for an Internet Service with WAN links in Load Balance mode, receiving an ICMP packet related to an existing internet connection before a normal packet may cause a service impacting memory dump. | | APN 8.1 GA |

Known Issues in APN 8.1

The following issues are known to exist in APN 8.1. Legacy Talari issue IDs are provided in parentheses:

| ID | Issue Description | Workaround | Found In |
|----------|--|--------------------------|----------|
| | | | |
| 30292834 | When stopping a VT800 running on Hyper-V, the VM may get stuck at Stopping (0%). The workaround is to reboot the host machine. | See Issue Description | |
| 30142517 | If the Talari service attempts to update the statistics for an invalid packet, it may cause a service impacting memory dump. | None | |



| ID | Issue Description | Workaround | Found In |
|---------------------|--|--------------------------|---------------|
| 30038195 | Internet/Intranet Service traffic may not be able to fully use the bandwidth available when its fair share is set relatively low compared to Conduit Service on a WAN link with high bandwidth. | None | |
| 29989579 (19426) | When the interface configuration is changed on a T5200 (for example, by removing an interface group), the remaining interfaces may not come up after completing the Change Management process. The workaround is to restart the Talari service. | See Issue Description | |
| 29989577 (19424) | In very rare cases, the Web UI may become unresponsive. Restarting the device will resolve the issue. | See Issue Description | |
| 29989536 (19370) | On Azure, sometimes Internet or Intranet WAN Egress flows are not mapped to an Internet or Intranet service in APN, and won't show up in flow table. Those flows will also not be counted for WAN Egress bandwidth on the WAN link. | None | |
| 29989516 (19344) | In rare cases, the bypass functionality on D2000 and D6000 appliances may not operate as expected. Power cycling the device will resolve the issue. | See Issue Description | |
| 29989389 (19138) | Rarely, after power cycling an appliance, some Ethernet ports on bypass interface cards may not come up. This issue affects the T5000, T5200, D2000, and D6000 appliances. The workaround is to power cycle the device again. | See Issue Description | |
| 29989371 (19115) | Path Bandwidth Testing may not work well on networks which allow temporary traffic bursts. | None | |
| 29989162 (18868) | When using Internet Explorer, on the Configuration -> APN Configuration Editor screen, the "Import Config" operation using the "From File" option does not work. The workaround is to use Chrome or Firefox. | See Issue Description | APN 7.3 P4 |
| 29989078 (18775) | When doing a passive FTP get operation over a Cloud Conduit, if the file takes longer than 30 seconds to download, the control channel is removed on the cloud gateway and the status message showing that the transfer is complete is lost. The file is downloaded correctly. | None | |



| ID | Issue Description | Workaround | Found In |
|---------------------|--|--------------------------|---------------|
| 29988929 (18618) | Ports configured to fail to wire may stay in the hardware bypass state when the Talari service is enabled, resulting in traffic being forwarded through the appliance without being processed by the Talari service. | See Issue Description | |
| | Stopping and restarting the Talari service will clear this condition. | | |
| 29988778 (18406) | On a T5200 appliance, the APN_misc.log may show messages about orphaned WAN Ingress buffers for a specific conduit. These messages could show for up to 30 minutes but should then clear up. | None | |
| 29988718 (18329) | In certain rare circumstances, an E100 may become unresponsive and require a reboot before resuming normal function. | None | |
| 29988676 (18256) | If the OS partition goes over 63% during an OS upgrade, it will trigger a warning. After the upgrade completes, the the old OS file will be removed. This may trigger a Hard Disk Usage Error which is then resolved without requiring any action from the user. | None | |
| 29988673 (18253) | For Munin graphs that show data by the day, there may occasionally be unexpected gaps in the charts. | None | |
| 29988594 (18124) | SNMPv3 may restart continually on Talari appliances running OS 5.0 or earlier. | None | |
| 29988592 (18122) | On a dynamic conduit, if a rule puts large data backups into class 1, users may observe queueing of 50+ seconds and a significant number of bytes pending for that class. | See Issue Description | |
| | The workaround is to create a static conduit between the sites. | | |
| 29988452 (17921) | In rare circumstances, the E100 appliance may lock up due to a Linux kernel issue. | None | APN 7.2 P1 |
| 29988419 (17858) | When WANOp is enabled for SMB1/CIFS traffic, the initial cold transfers on E50 or VT800 appliances may be slower than without WANOp enabled. | None | APN 7.0 GA |



| ID | Issue Description | Workaround | Found In |
|---------------------|--|--------------------------|----------|
| 29988397 (17825) | On the E1000 with 10G Fiber Expansion Card, the UI allows the user to turn autonegotiation on or off for the fiber links (ports 9 and 10) under Configuration > Local Network Settings . This setting is ignored because the user cannot enable autonegotiation for the fiber links and set the speed. | None | - |
| 29987899 (17201) | During the Change Management process there is a small chance that, after the new configuration finishes staging and the users clicks "OK" to move to the Activation screen, the application will immediate start the activation process without waiting for the user to click "OK" or Cancel. | None | |
| 29987891 (17191) | When making major configuration changes to Firewall and QoS Rules simultaneously, there is a small possibility of causing a service impacting memory dump on a client device. The workaround is to restart the Talari service. | See Issue Description | |
| 29987341 (16555) | In very rare cases the database files on the appliance may become corrupted, preventing MySQL from starting. As a result, most functionality on the appliance will not work. | None | |
| 29987012 (16173) | When enabling or disabling a path or conduit, an invalid path or conduit may sometimes be shown in the list. | None | |
| 29986975 (16114) | In large networks (> 150 sites) with an Aware system deployed and polling the network statistics, the database load on the appliance can result in queries being blocked for multiple minutes. This results in missing statistics data on the appliance (and by extension on Aware). | None | |
| 29986732 (15794) | When performing an OS Update (upload of OS package or installation of the uploaded OS), if the Web Console times out or the user navigates away from the page, the resulting underlying system state causes the OS Version for the Backup partition to be reported as "-1". The workaround is to reboot the appliance and try the OS upload or install operation again. | See Issue Description | |



3rd Party Issues Affecting APN 8.1 GA

The following 3rd party issues are known to affect 8.1 GA. Legacy Talari issue IDs are provided in parentheses:

| ID | Issue Description | Workaround | Targeted Fix |
|---------------------|--|--------------------------|-----------------|
| 29985954 (14734) | Opening configuration files containing a very large number of sites into the APN Configuration Editor using Internet Explorer (IE) may take anywhere from 10-30 seconds to load. As a workaround, use Chrome or Firefox. | See Issue Description | None |
| 29984205 (12610) | When using Chrome, the Regenerate HTTPS Certificates page is displayed a second time after the initial count down completes. The workaround is to use another browser. | See Issue Description | None |
| 29983233 (11268) | In certain conditions where an SNMP-polled Cisco device learns multiple EIGRP routes with the same network ID but different lengths (e.g., 10.26.16.0/20 and 10.26.16.0/24), the router will only insert the first route from its routing table into the SNMP table. Cisco IOS devices list the longest match first (/24), whereas Cisco Nexus devices list the shortest match first (/20). As a result, a Talari Appliance polling for routes will only receive one of the routes and which one it receives depends on the device being polled. This could cause connectivity issues. | None | None |
| 29981452 (8664) | On T3010 and T5000 appliances, holding the red "X" button on the front of the unit for less than 10 seconds will not power down the unit. Holding the button for more than 4 seconds but less than 10 will cause a "Power Off" message to be displayed but the unit will not shut down. In order to clear the "Power Off" message and re-display the management IP address, re-apply the existing management interface settings under Manage Appliance -> Ethernet Interface Settings -> Management Interface. Also note that shutting the unit down using the power button does not perform a graceful shutdown. | See Issue Description | None |



| ID | Issue Description | Workaround | Targeted Fix |
|--------------------|--|--------------------------|-----------------|
| 29980978 (8127) | When using Chrome, under Manage Appliance -> Users / Authentication, certain fields in the RADIUS section (if RADIUS is enabled) or the TACACS+ section (if TACACS+ is enabled) may be incorrectly filled with login credentials saved by Chrome for the Site. This is an auto-fill issue in Chrome. Workaround is to use another browser or to replace incorrect auto-fill information with correct information before attempting to apply changes to the RADIUS or TACACS+ settings. | See Issue Description | None |
| 29980120 (7179) | When console cable is plugged in to a Talari Appliance and attached out to some external device (e.g. a terminal server), noise on the console cable may interrupt appliance boot sequence. Workaround is to unplug console cable from appliance, to unplug console cable from external device, or to connect to appliance locally and restart interrupted boot sequence from command line. Issue is tied to Linux boot loader and is not within the APN Software product itself. Issue is being documented here for customer awareness. | See Issue Description | None |

Enhancements/Features in Previous Releases

Enhancements/Features in APN 8.0 GA P1

The following issues have been enhanced or added since APN 8.0 GA:

| ID | Issue Description |
|-------|--|
| 19119 | The licensing requirement for virtual Talari appliances (VT800, VT800-128, CT800, and CT800-128) has been removed. |

Enhancements/Features in APN 8.0 GA

The following issues have been enhanced or added since APN 7.3 GA P7:

| ID | Issue Description |
|-------|--|
| 16569 | Old log files are now compressed to permit longer retention. |
| | |
| 16551 | APN 8.0 GA introduces Cloud Connect, which allows customers to connect to participating Cloud Connect providers from the enterprise APNs via Cloud Conduits. |



Enhancements/Features in APN 7.3 GA P7

The following issues have been enhanced or added since APN 7.3 GA P6:

| ID | Issue Description | |
|-------|---|--|
| 18505 | An audit warning will be displayed in the Configuration Editor for any conduit which has "Unlink Classes from Default Set" checked under Connections > [Site] > Conduits > [Conduit] > Local Site > Basic Settings. | |

Resolved Issues in Previous Releases

Resolved Issues in APN 8.0 GA P1

The following issues have been fixed since APN 8.0 GA:

| ID | Issue Description |
|-------|--|
| 19176 | For APN sites with more than 64 conduits configured, making a major configuration update such as adding or removing a service, adding or removing a WAN link, or changing IPSec settings may result in a service impacting memory dump. |
| 19123 | When Internet or Intranet IPSec packets are received on the Talari appliance with a source MAC address which does not match the MAC address for the WAN link's gateway, it may cause a service impacting memory dump. |
| 19103 | A service impacting memory dump may occur during the configuration change process if the prior configuration had a port forwarding Dynamic NAT policy (Port Restricted mode) for Internet Service and the Internet service uses multiple WAN Links in Load Balance Mode. Additionally, there must be an existing connection matching the port forwarding rule which was initiated inside-to-outside prior to the configuration change. |
| | The following configuration changes could trigger the service impacting memory dump: |
| | Adding or removing WAN links used for Internet Load Balancing Changing the Internet service mode from Load Balance to Primary/Secondary Updating the port forwarding Dynamic NAT policy |
| 19027 | During the first minute of dynamic conduit creation, Monitor > Flows will incorrectly display the service type as Cloud for flows on the new dynamic conduit. |
| 19020 | In certain situations, paths may go from bad to good without observing the configured probation time. |
| 19008 | Inclusion of the \$ symbol in the SNMP user password could cause the SNMP daemon to restart continuously. |



| ID | Issue Description |
|-------|--|
| 18989 | Rarely, when an application using domain name as one of the match criteria is enabled and the cached DNS entry expires, it may cause a service impacting memory dump. |
| 18978 | Pings initiated from the Talari (Troubleshoot > Ping) may not work as expected if Cloud Services are enabled and the source Virtual IP Address matches the outside IP for the Cloud Service NAT rule. |
| 18971 | When a conduit goes to dead and recovers, some ongoing flows with duplication enabled may have duplicate packets delivered to hosts. The duplicate packets are delivered for approximately 2 seconds before clearing without intervention. |
| 18895 | An Internet service with multiple WAN links set to load balance will not use a dead WAN link for traffic even though "Ignore WAN Link Status" is enabled. |
| 18878 | When performing an SNMP walk for route service type, the output is incorrect for routes other than discard, passthrough, and internet. |
| 18850 | If more than one NAT rule is created for a site, editing the priority value does not affect the order as expected. |
| 18839 | If IPsec is enabled on a conduit via a Conduit Default Set, adding/removing a site or changing a site's name may cause a service impacting memory dump. |
| 18832 | When using the APN Configuration Editor in Internet Explorer, importing a configuration from a file does not work. |
| 18823 | Activating a configuration update which includes changes to rules or classes may cause a service impacting memory dump if there are WAN Egress conduit management control packets waiting in the conduit scheduler. This is an extremely uncommon circumstance. |
| 18810 | On appliances connected to large, busy networks, snmpwalk may cause a service impacting memory dump. |
| 18805 | If a Cloud Service is connected to a Cloud Gateway behind a NAT device and the NAT for the Cloud Gateway is changed to use an external port other than the one(s) specified in the APN configuration after the Cloud Conduit is established, the APN appliance will learn the wrong external port, and will not be able to reestablish the Cloud Conduit again if the conduit goes down for any reason. The workaround is to restart the APN service. |
| 18789 | When an Internet service with multiple WAN links set to load balance is enabled and one of the WAN links used for the service is removed, viewing the Internet Load Balancing Flows table may cause a service impacting memory dump. |



| ID | Issue Description |
|-------|---|
| 18659 | When adding a new interface to a site in the Basic View of Configuration editor, the Add button is enabled after selecting an interface even though other required fields have not been filled. |
| 18558 | When Service Chaining is enabled, the port used for Service Chaining will always be up even if the physical port is down. This will impact HA and port state reflection behavior if the port is also used for those features. |
| 17852 | When an HA pair are directly connected and Primary Reclaim is not enabled, if the Primary goes down and then comes back up it may automatically become active without any prompting, even though the Secondary has taken over as the active appliance. It can take a few seconds for the port to initialize and this is why the primary takes control. Once the port is up, the standby will return to its standby state. |

Resolved Issues in APN 8.0 GA

The following issues have been fixed since APN 7.3 GA P7:

| ID | Issue Description |
|-------|---|
| 18668 | A major configuration update on large network may cause a service impacting memory dump. |
| 18614 | If an intranet IPSec tunnel uses a Talari appliance's LAN facing virtual IP as the source endpoint, it may cause service impacting memory dump. |
| 18506 | Reverting an appliance to factory defaults may not clear the Service Chaining VM and configurations associated with Service Chaining. |
| 18166 | When logged in as a RADIUS or TACACS+ administrative user, the user is required to enter the current password when trying to change the password for a local user on the Manage Appliance > Users/Authentication screen. By convention, an administrative user shouldn't be prompted for the user's current password unless they are changing their own password. |
| 18009 | When the probing interval time for an application is 60 seconds, the probing loss may show up as 100% if the probe starts at the same time as statistics are written to the database. |
| 16802 | Restarting the Talari service may cause a non-service impacting memory dump. |
| 16567 | The Configuration Editor will accept a network address for an Access Interface IP, rather than a host address. |



Resolved Issues in APN 7.3 GA P7

The following issues have been fixed since APN 7.3 GA P6:

| ID | Issue Description |
|-------|--|
| 18597 | On the T5200 and T5000v2, some flows may see extra delay between packets. If a real-time flow such as a voice call is impacted by this issue, call quality will be degraded. |
| 18594 | When upgrading from APN 7.3 GA P6 to a later release, certain appliance models may reboot. The software update still succeeds and the service comes back up, but the operation takes longer than without the reboot. |
| 18525 | After doing a major configuration update (such as adding or removing a service or WAN link), if a site has dynamic routing enabled and the imported routes have path eligibility enabled, a path state change may cause a service impacting memory dump. |
| 18509 | The "Interfaces" dropdown menu on the Troubleshoot > Packet Capture screen may not be populated. |
| 18490 | When there are more than 4000 route hits on an appliance, it may cause memory leak. This may cause the appliance to reboot unexpectedly. |
| 18450 | Some platforms could experience frequent reboots due to the Linux kernel falsely detecting a fault and triggering a reboot. |
| 18423 | On the Statistics > WAN > Routes screen, the Hit Count column does not sort in correct numerical order. |
| 18382 | When installing software on an appliance with RADIUS or TACACS+ enabled, an attempted login by the user 'jigar' may be visible in the logs and on the server. |
| 17619 | Several columns on the Statistics > Appliance Interfaces > ARP screen do not sort as expected when clicking on the column header. |

