Cisco MATE and Cisco WAN Automation Engine Release Notes, Release 6.1.5

This document describes the features, limitations, and bugs for Cisco MATE and Cisco WAN Automation Engine (WAE) Release 6.1.5.

Contents

This document includes the following sections:

Introduction

Cisco MATE consists of the MATE Design, MATE Live, and MATE Collector products. Cisco MATE delivers the network manageability required for simplifying processes and for delivering cost-efficient, reliable services. Each of these tightly integrated products simultaneously supports planning, engineering, and operational tasks.

Cisco WAE is a powerful, flexible software-defined networking (SDN) platform. It abstracts and simplifies your WAN environment while making it fully open and programmable. Cisco WAE is a network modeling technology that allows for real-time analysis of traffic needs and placement in complex WAN topologies.

Open Source

This product includes the following open sources:

- Software developed by MetaStuff (http://www.dom4j.org)
- Cryptographic software written by Eric Young (eay@cryptsoft.com)
- Software developed by the OpenSSL project for use in the OpenSSL Toolkit (http://www.openssl.org/)
- Software written by Tim Hudson (tjh@cryptsoft.com)
- Software developed by the University of California, Berkeley and its contributors

Resolved Bugs

The following bugs are resolved in Cisco MATE and WAE Release 6.1.5. The bug ID links you to the Cisco Bug Search tool.

Table 1   *Resolved Bugs*

Bug ID	Description
Cisco MATE Design	
CSCuw18417	An MPLS-TE tunnel on Cisco MATE does not use the actual path.
Cisco MATE Collector	
CSCuv78303	Ports on an EtherBundle are dropped during the snapshot process.
CSCuw52137	After a login_poll_multicast operation, the output file is missing multicast SG flows.

Using the Bug Search Tool

Use the Bug Search tool to search for a specific bug or to search for all bugs in a release.

Step 1   Go to http://tools.cisco.com/bugsearch.

Step 2   At the Log In screen, enter your registered Cisco.com user name and password; then, click **Log In**. The Bug Search page opens.

✎
Note   If you do not have a Cisco.com user name and password, you can register for them at http://tools.cisco.com/RPF/register/register.do.

Step 3   To search for a specific bug, enter the bug ID in the Search For field and press **Return**.

Step 4   To search for bugs in the current release:

a. In the Search For field, enter a problem, feature, or a product name and press **Return**. (Leave the other fields empty.)

b. When the search results are displayed, use the filter tools to find the types of bugs you are looking for. You can search for bugs by modified date, status, severity, and so forth.

To export the results to a spreadsheet, click the **Export Results to Excel** link.

Limitations and Restrictions

This section describes the limitations and restrictions for Cisco MATE and Cisco WAE.

Cisco MATE Design

EIGRP routing simulation is not accurate. This issue will be corrected in a future release. Until then we recommend that it not be used.

Cisco MATE Live

- L2 interface types are categorized incorrectly as "individual physical interfaces" on the Explore Interfaces page.
- The "Unknown" interface type is not used.
- You cannot create a network from the UI upon initial startup. The workaround is as follows:

    1. Stop the web server.

        ```
        # service wae-web-server stop
        ```

    2. Restart the web server from a directory that has permissions for the WAE user specified during installation. Use the following command:

        ```
        # embedded_web_server -action start
        ```

Cisco MATE Collector

Due to vendor MIB limitations, Cisco MATE Collector cannot represent QoS traffic on interfaces that have more than one VLAN configured. If a network contains such interfaces, their queue traffic statistics are omitted from the collection. The total traffic on these interfaces is still measured. As a result, per class-of-service demands estimated through Demand Deduction are less accurate. Estimates of traffic totals over all classes of services, however, are not affected.

Collector Server

- The Collector server does not make plan files available. The workaround is to delete the snapshot directories from previous releases. These are in `$CARIDEN_ROOT/data/collector/server/snapshots`.

- If upgrading the Collector server from 5.6x to 6.1x, the `$CARIDEN_ROOT/etc/collector/server/db-persistence/DiscoveryEngineImplementation.db` file must be removed prior to starting the web server. Since installation automatically starts the web server, the recommendation is to remove this prior to installation. If you forget to do so, after installation, stop the web server, remove this file, and then restart the web server.

- OSPFv.2 databases cannot be collected via SNMP. The workaround is to use a manual snapshot.

- OSPFv.3 and IPv6 IS-IS databases cannot be collected. The workaround is to use a manual snapshot.

- SNMPv.3 device access is not supported. The workaround is to use a manual snapshot and run `mate_auth_init`.

Snapshots

- `snmp_find_interfaces`

  - Does not support association of GRE tunnel with the physical interface it uses to reach the tunnel destination since the IP-Tunnel MIB lacks this information.

  - Does not update LAG port status if LAGs are discovered running both `parse_configs` and `snmp_find_interfaces`. The workaround is to run only `snmp_find_interfaces`.

- Juniper routers: Signaled standby LSP path option is not available from the standard MPLS-TE MIB for Juniper routers. Only the active path option name is collected.

- IOS XR routers

  - IGP topology collected through `parse_igp` and `login_find_igp_db`

  - IS-IS link-state database with TE extensions contains incorrect interface "admin-weights" (TE metric) on Intel-based routers.

  - IPv6 IS-IS link-state database does not contain IPv6 interface addresses or parallel interfaces. This information is only available when IOS XR supports IS-IS IPv6 TE extensions. The `snmp_find_interfaces` tool collects this information.

  - MAC Accounting is not supported.

  - `snmp_find_rsvp` does not set the Standby value in the <LSPPaths> table for signaled backup paths.

- BGP peers

  - `find_bgp` does not build BGP pseudo-nodes among internal ASNs.

  - `find_bgp` does not collect BGP peers under PE-CE VRFs.

- `parse_configs` does not accurately detect the bandwidth of some Juniper 'ge' interfaces that have a capacity of 10 Gbps.

- TE Extended Admin Groups (EAGs), also known as extended affinities, are not supported.

- Port circuits are not built for LAG/bundle members whose nodes are not within the same IGP instance as the AS.

SAM-OSS Integration with Snapshots

- `sam_getplan` does not populate the <NodeTraffic> table. This table is derived and populated when `sam_getplan` and SNMP tools are used together.

- `sam_getplan` does not populate the NetIntActivePath column in the <LSPs> table.

- If `sam_getplan` and SNMP tools are used together in the snapshot process for multivendor network collection, then Alcatel-Lucent traffic measurements cannot be aligned with those collected from other router platforms.

Cisco WAE Core

When creating tunnels with REST APIs, both primary and secondary tunnels are set to Standby.

System

Web User Management

Both the System UI and the MATE Design Archive UI have user management capabilities. If both are used to configure users, MATE uses the most recently updated information. The recommendation is to use only the System UI to manage users.

Starting MATE Design in Linux

The `$CARIDEN_HOME` directory is not automatically added to $PATH (only `$CARIDEN_HOME/bin` is). If not in `$CARIDEN_HOME/bin`, to start the MATE GUI from the command line, you must specify its full path:

```
/opt/cariden/software/mate/current/mate
```

WAE High Availability

The wae-ha-deploy script is not updated with the proper version, rendering the wae-core modules unable to start in a multiserver (HA) environment. The workaround is as follows:

1. Modify the
   ```
   /wae-platsvcs/confmgmt/roles/wae-core/templates/org.apache.karaf.features.cfg.j2
   ```
   file on the primary node by changing this line:

   ```
   mvn:com.cisco.wano/nsps-core/1.1.2-SNAPSHOT/xml/features
   ```

   to:

   ```
   mvn:com.cisco.wano/nsps-core/1.2.0/xml/features
   ```

2. Run the wae-ha-deploy script.

License Check Failures on Newer Linux Distributions

Some newer Linux distributions have started using a new way (via `biosdevname`) of naming hardware devices, including the network interfaces. This causes some software that depends on the traditional naming (for example, `eth0`, `eth1`) to fail on license checks, including MATE.

The workaround is to append `biosdevname=0` to the kernel line of the grub configuration file and reboot. (Syntax varies among distributions.)

After reboot, you should be able use ifconfig to verify that the NIC are named `eth0` (or `eth1`, ...) instead of the `biosdevname` names (such as `p34p1`).

Java Memory

Certain tools (such as `sam_getplan` and `parse_configs`, for example) may require more memory to start than what is available. The symptom is an error message similar to the following:

```
Error occurred during initialization of VM.
Could not reserve enough space for object heap.
Error: Could not create the Java Virtual Machine.
Error: A fatal exception has occurred. Program will exit.
```

The workaround is to set the maximum memory to a low enough value in the `CARIDEN_JAVA_OPTIONS` variable before calling the tool. An example setting is as follows:

```
set CARIDEN_JAVA_OPTIONS=-Xmx1000m
```

Documentation

The following information is missing from the documentation set. For assistance, contact your support representative.

- Multinetwork discovery
- Cisco MATE Live
  - New feature updates in the *Cisco MATE Live User Guide*
  - Making plan files from multiple networks available to the MATE Live UI
- *Cisco WAE Platform Configuration Guide,* Manual Collection with Continuous Polling chapter
  - statsComputingMinimumWindowLengthInSecs example needs a minor change. For convenience, the entire definition and example are given here:

    statsComputingMinimumWindowLengthInSecs—Defines the minimum amount of time, in seconds, over which to generate averages of the polled traffic statistics. For example, if set to 300, to determine the rate of incoming packet errors, the Continuous Poller server takes the average of these incoming packet errors over the last 300 seconds. These traffic statistics are added to the plan file each time it is generated. The minimum value is 300 seconds.

Related Documentation

For related documentation, see the *Cisco MATE and WAE 6.1 Documentation Overview*.