

Route Insight Manager Release Notes

8.0.44
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Part Number:

These are the release notes for Release 8.0.44 of the Route Insight Manager software for the Route Insight Manager appliance. They describe new features, enhancements to existing features, and a list of known problems in this release.

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Release Notes for Route Insight Manager 8.0



NOTE: Please see *Important Notes for Installation and Deployment* and *Known Issues in This Release* below, especially the required procedure for a fresh recording.

64-bit Architecture

The underlying operating system and all of the application software is now executing in the processor's 64-bit mode. This eliminates problems of application crashes due to exceeding the 32-bit address space limit.

VLAN Support

The physical Ethernet interfaces of a Route Insight Manager unit can now have virtual LAN (VLAN) interfaces configured over them for compatibility with network installations where the switches present multiple VLANs on a port. Configuration of the VLAN interfaces is performed on the Network and Interface web page. Once a VLAN interface is configured, it may be used for the same purposes as a physical interface, including serving as the selected administrative interface. Multiple VLANs may be configured to connect to each of the areas in a multiple-area OSPF network, for example.

Easier-to-Use Routing Diagnostic Reports

Two new sets of reports provide easier access to the wealth of routing details collected by Route Insight Manager. The Prefix Diagnostics Reports gather all the reports related to a given prefix, including originating routers, routers unable to reach the prefix, and exit routers, showing either the state at the currently selected time or a comparison of the state at two times. Other reports show activity related to the prefix over a time interval, including a list of all the routing events related to the prefix and a history of paths from a source router to the prefix.

Routing Analysis Reports cover two areas: stability of the network over a time interval (as measured by router churn, link flaps, and prefix flaps), and change reports that isolate any changes that may have occurred in the attributes of routers, links, and prefixes between the start and end times of the interval. These reports can be filtered to a subset of the network topology areas to focus on a particular problem, and then individual items in the reports can be examined in more detail by selecting a drill-down report.

Route Insight Manager supports SSH version 2 for X/ssh access to the user interface. SSH version 1 is removed because it is considered to be a security risk.

Important Notes for Installation and Deployment

For Route Insight Manager

- A distributed Route Explorer system is comprised of multiple units. One unit will be designated as the master. All licenses MUST be applied on the master, which will then distribute the licenses to the client units.
- Before adding a client unit to the master unit using the administrator web interface, make sure that both units are configured to run NTP and that time on the client unit is no more than a few seconds behind the time on the master. Otherwise a warning will be issued and the client will not be added.
- Before shutting down or rebooting a unit that is recording routing or traffic data, first stop recording. Make sure that it has stopped by verifying the status on the web page or using the status details available by clicking the status LED in the GUI. This is to allow time for the recorder daemons to flush any data or reports that may have been in progress.
- When updating to a new software release, update the master unit first and let it finish coming up after the reboot before rebooting the client units.
- In systems where a Route Insight Manager is about to be made master or where master status is about to be relinquished, recording must be stopped because the databases will be renamed. Similarly, before adding a unit as a client, recording must not be running on that client because the databases will be renamed. If recording is not stopped, a warning will be issued and the operation will not complete.
- When a new system is first being brought up, it may be necessary to exit the GUI and then restart the GUI if the database has not been created before the GUI was started.

Known Issues in This Release (8.0.44-R)

- Consolidation of router nodes on the map may be incorrect when starting a fresh database with BGP, IGP and Static topologies starting all at once with the Start All Recording button. This problem can be avoided by starting recording individually for each of the protocols except Static and waiting 15 minutes or so for the full BGP and IGP topologies be recorded. Then start Static recording separately. Consolidation may also be incorrect if the same interface address is configured on more than one router. [12578]
- Route Insight Manager's OSPF route calculation conforms to RFC2328 and assumes "RFC1583Compatibility" is disabled, so the path chosen from one ABR to another ABR in the same area will be within that area even if there is a lower-metric path through the backbone. Because some routers enable RFC 1583 compatibility by default, the actual path may differ. A future release will support a configuration option to enable RFC 1583 compatibility. [1897]
- The BGP peering will constantly reset if the Route Recorder is configured as a BGP peer with a Cisco router, and the router is configured to send MPLS L3 VPN

routes, but you disable MP-BGP support of unicast IPv4 routes (AFI 1, SAFI 1). [12124]

- In Path Reports, the table All Paths by Destination may show a "Reachable by" count of 1 when the drill-down shows many source routers able to reach the destination. [12163]
- In the RIB Browser and RIB Comparison for an OSPF or ISIS domain, the number of down links reported in the table may be fewer than the number shown when the links are listed from the context menu. [12171, 12295]
- Path Reports for IPv6 networks will show some paths as incomplete because reaching the destination requires IPv6 connected interface information. That information is not collected yet. [12452]
- In Traffic Reports -> Top Changes, the context menu on the drill-down button may not appear after sorting a column. The workaround is to select a cell from another column. [12506]
- In the daily Routing Report, for the IGP table Top 5 Flapping Links, if a link is present in multiple ISIS or OSPF areas, it will be listed multiple times with the same area name. [13060]
- In the XML RPC API, the method `api_mp_list_paths` now requires the source address to be specified in the form of a prefix; that is, with both an address and a mask. This is consistent with the specification in the *Developer's Guide*, but earlier releases were more lenient and would accept just an address without the mask.
- The Recorder Configuration allows only a single top-level administrative domain to be created. Users who need multiple domains to configure different portions of their network should create one top-level domain and then create subdomains under it. For existing configurations that already contain more than one top-level administrative domain, only the alphanumerically first of those domains can have alerts configured. If a recorder client that already contains some configuration is added, that configuration will be pulled up to the master, possibly creating a new top-level domain. This might cause a problem if it comes first.
- If a client unit fails and must be replaced, before adding the replacement unit as a client of the master unit, you must stop replication on the master unit. After adding the client, start replication again. This will rename the replicated database on the master and start replicating anew from the database on the replacement client.
- The last TCP ACK packet sent in response to an XML RPC API query sometimes may have a malformed TCP header, causing the user's client to retransmit FIN/ACK packets until giving up. All the data is transferred successfully before this. [8832]