Release Notes for
Cisco Recorder Router 1.0.0-505

First Published: April 5, 2018

Last Updated: April 5, 2018

These Release Notes describe the key features of Recorder Router (RR) Release 1.0 for build 505. They also provide instructions and describe caveats and any issues related to the release.

Contents

Introduction

Cisco's Go-based Session Resource Manager (GOSRM) software is a resource management platform that provides a flexible "plug in" based approach that allows applications to use the core functionality (and accessibility) of the platform to perform specific tasks. The GOSRM platform allows plugin applications to be developed, along with various adapters, to connect to external systems and devices needed by the application.

Cisco's Recorder Router (RR) is a plugin application (also written in Go) that provides the ability to route video recording requests to one or more appropriate recorders. Recordings are made in the Cloud, allowing playback access from multiple consumer locations. Additionally, RR maintains a database that provides a lookup service that fetches the destination of pre-recorded content.

Feature Overview

The Recorder Router plugin application performs the following functions via the Scheduling Service Interface. The application:

- obtains recording requests from an external scheduler and routes those requests to one or more appropriate recorders.

- provides updates on previously scheduled recordings for the purposes of playback or for life cycle state management.

The Recorder Router plugin application performs the following functions via the specific device interface. The application:

- sends requests to recording devices.

- receives notifications from recording devices about the recording status.

- sends delete requests to recording devices to remove content that is no longer needed.

The Recorder Router plugin application performs the following functions via the Information Service Interface. The application:

- receives recording location information requests and returns playback information.

System Requirements

The system requirements for the Recorder Router application are fairly minimal and offer significant flexibility. Details are as follows:

- The software is packaged as a single RPM that needs to be installed and that is included with the Deployer 10 software.

- RR is not tied to any specific operating system and will run on any modern version of Linux (such as CentOS 6.4 or later).

- Minimum Hardware Requirements include 4 CPUs, 8GB of RAM, and 80GB of storage.

- The application can be managed via a Web interface or by using Linux Curl commands.

New Features & Enhancements

The following section lists New Features and Enhancements that are included in this product release:

- Added `fcid` to the log file for `WsReqRes` tracking.
- Added a transaction id to track events in logs.
- FreeHandles are now audited to ensure proper handle release and log changes.
- `WsReq` and `WsResp` are now automatically logged.
- A Cancel request that was issued before the start time will be marked as "`deleted`" to avoid timeout processing.
- A `static_route_table` file monitor has been added to enable the periodic refresh of destination recorders when required. This application change prevents the need for restarting the software to read the recording device table.
- Suppressed redundant Scheduling and Capture update messages that were sent to the scheduler.
- Added `NotifyScheduler_FAILED` to DB records when a "Failed" state is sent.
- Added JSON support for the `setup`, `delete`, `stop`, `modifyRecording`, and `modifyRecordingDuration` commands.
- The CouchBase SDK has been upgraded to version 1.3.3, which also enables connections to CouchBase 4.5 and 5.x.
- Added support for wildcards and CopyType to the `static_route_table`.
- Removed invalid Regions from the `static_route_table` entry in the database when records are changed.
- Prioritized predefined source entries over wildcard entries in the `static_route_table`.
- Added specific support for HTTP 503 instead of the default HTTP 500.
- Added a Go routine to `SendA8Cancel` to improve system performance.
- Included counters for Status messages so that only distinct messages are sent to the Scheduler. This eliminates redundant messaging.
- Removed ExecOS from UpdateIpAddress in the User Interface. IP addresses are now looked up during each setupRecording process.
- Changed the logging readwrite handle to read only.
- Set file descriptors (fd) to 65535 in the gowdog init watchdog service.

Resolved Issues

- Set the VMR AdminsState to "InService" upon receiving a Subscribe Message.
- Moved setupRecording error checking and validation functionality into the A8Record routine.
- Optimized the VMR AdminStatus check to speed setups.
- Changed the duration value in setupRecording from an integer to a string to comply with the RMSS specification.
- Heartbeat now returns an HTTP 503 status if RR is set to an `OffLine` state.
- Fixed timeout processing mutate for Failed Recordings so that the queryRecordingRecord will return a "Failed" value instead of an empty string.

- Fixed the database entry for failed to use an uppercase ("FAILED") for timeout processing.
- Fixed JSON so that DB entries are the correct case.
- Changed the A8Update.Status case from Failed to "FAILED".
- Added counters for Status in the DB record to prevent sending duplicate status messages to the Scheduler.
- Enhanced code to handle a8/verify TTL and request issues.
- Enhanced code to prevent the transmission of HTTP status codes to the log upon WsSend Failures since they may be empty.
- WsSend errors are now logged when WsSend fails.
- Corrected TTL setting values for records in Failure and Delete scenarios.
- Fixed database updates of Failed scheduler notifications.
- Corrected n1ql query for timeout processing to include missing scheduleIds.