RST Version 94.0.2 Release Notes

Release Date: 16 June 2025

This release:

- Resolved runtime exceptions by explicitly opening and exporting internal Java modules via JVM arguments.
- Switched the signing certificates for the installer

If you have any ideas for improvement, questions, or issues let us know at support@radblue.com.

Case	*Description*
20504	Missing JVM options for Java 21 causes security exceptions
20509	Switch signing certificate for installer

Release Date: 4 June 2024

This release:

- Upgrade Java to 21

If you have any ideas for improvement, questions, or issues let us know at support@radblue.com.

Case	*Description*
20259	Upgrade Java to 21

RST Version 88.0.0 Release Notes

Release Date: 6 December 2023

This release:

- Fixed an issue where RST was not starting on Linux
- Upgrade Java to 17.0.9.9.

If you have any ideas for improvement, questions, or issues let us know at support@radblue.com.

Case	*Description*
19856	Fixed an issue where RST was not starting on Linux
20130	Upgrade Java to 17.0.9.9

RST Version 86.0.0 Release Notes

Release Date: 6 June 2023

This release:

- Upgrade Java to 17.
- Replaced JavaScript engine for Java 17

If you have any ideas for improvement, questions, or issues let us know at support@radblue.com.

Case	*Description*
19429	Replace JavaScript engine with grail.js
19647	Upgrade RST to Java 17

RST Version 84.0.0 Release Notes

Release Date: 6 December 2022

This release:

- Fixed bugs in handpay processing that would send a handpay record more than once.
- Fixed guest processing of spc commands.
- Fixed a bug in G2S 2.1 schema that marked g2sEM as not available.
- Upgrade java to 1.8.0_352

If you have any ideas for improvement, questions, or issues let us know at support@radblue.com.

Case	*Description*
19364	Fixed a bug where the timestamp of the last processed handpay record was being not being set. This meant that handpay records were being sent twice to the host.
19371	Fixed a bug where g2sEM schema was marked as not available in G2S 2.1
19372	Fixed a bug where the handpaySourceRef had duplicate values for cashable, nonCash, and promo values.
19375	Upgrade Java to 1.8.0_352
19424	Fixed a bug where spc.getSpcStatus and spc.getSpcLogStatus were not being processed from a guest host.

Release Date: 27 June 2022

This release:

- Converted to Log4j2
- Fixed web socket issues when upgrading RST
- Fixed key-off tiger verb to only consider outstanding handpays

If you have any ideas for improvement, questions, or issues let us know at support@radblue.com.

Case	*Description*
18839	Fixed a null pointer exception when processing web socket error messages.
18867	Replaced log4j1.x with log4j2 version 2.17.2. In light of security issues associated with CVE-2021-45046, we decided to review log4j1.x usage and replace it with the latest version of log4j2.
18972	Tiger verb to key off EGM should not process committed transactions.
19058	When validating SPC devices while loading SmartEGM configuration, all SPC device are now validated.
19071	Added support for remote voucher handpay key off type.
19079	When issuing a large win voucher, the largeWin attribute was not being set to true.

Release Date: 7 December 2021

This release:

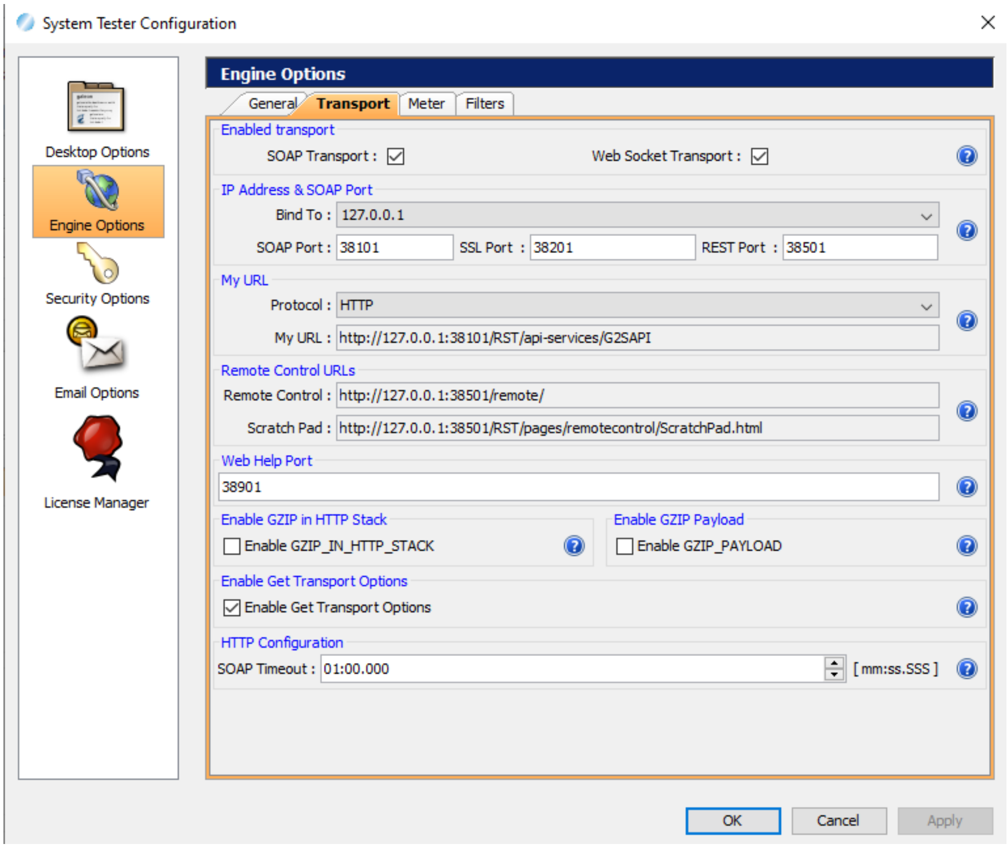
- Added support for Web Sockets
- Clear logs and transaction IDs when a master reset is performed.
- Added support for sending optionList after setOptionChange.

If you have any ideas for improvement, questions, or issues let us know at support@radblue.com.

Case	*Description*
17161	Add support for Web Sockets in RST
17175	Master reset does not clear gameplay.recallLog.
17530	Add Web Socket transcript to RST's desktops
18595	Added support for sending optionList after the setOptionChange. Sections 9.4.4 and 9.14.1 are BOTH required and are conflicting. Since 9.4.4 is more expansive in terms of requirements, the EGM MUST send the optionList after a setOptionChange.

Change in User Interface

In the is release we added the ability to enable Web Socket transport. Select Web Socket Transport to enable the transport. Then select Enable Get Transport Options to have the RST negotiate with the G2S host which transport to use. Based on the order of transport options from the host, the RGS will select the first one that it supports.



Enabled transport
SOAP Transport : ☑ Web Socket Transport : ☑

IP Address & SOAP Port
Bind To : 127.0.0.1
SOAP Port : 38101 SSL Port : 38201 REST Port : 38501

My URL
Protocol : HTTP
My URL : http://127.0.0.1:38101/RST/api-services/G2SAPI

Remote Control URLs
Remote Control : http://127.0.0.1:38501/remote/
Scratch Pad : http://127.0.0.1:38501/RST/pages/remotecontrol/ScratchPad.html

Web Help Port
38901

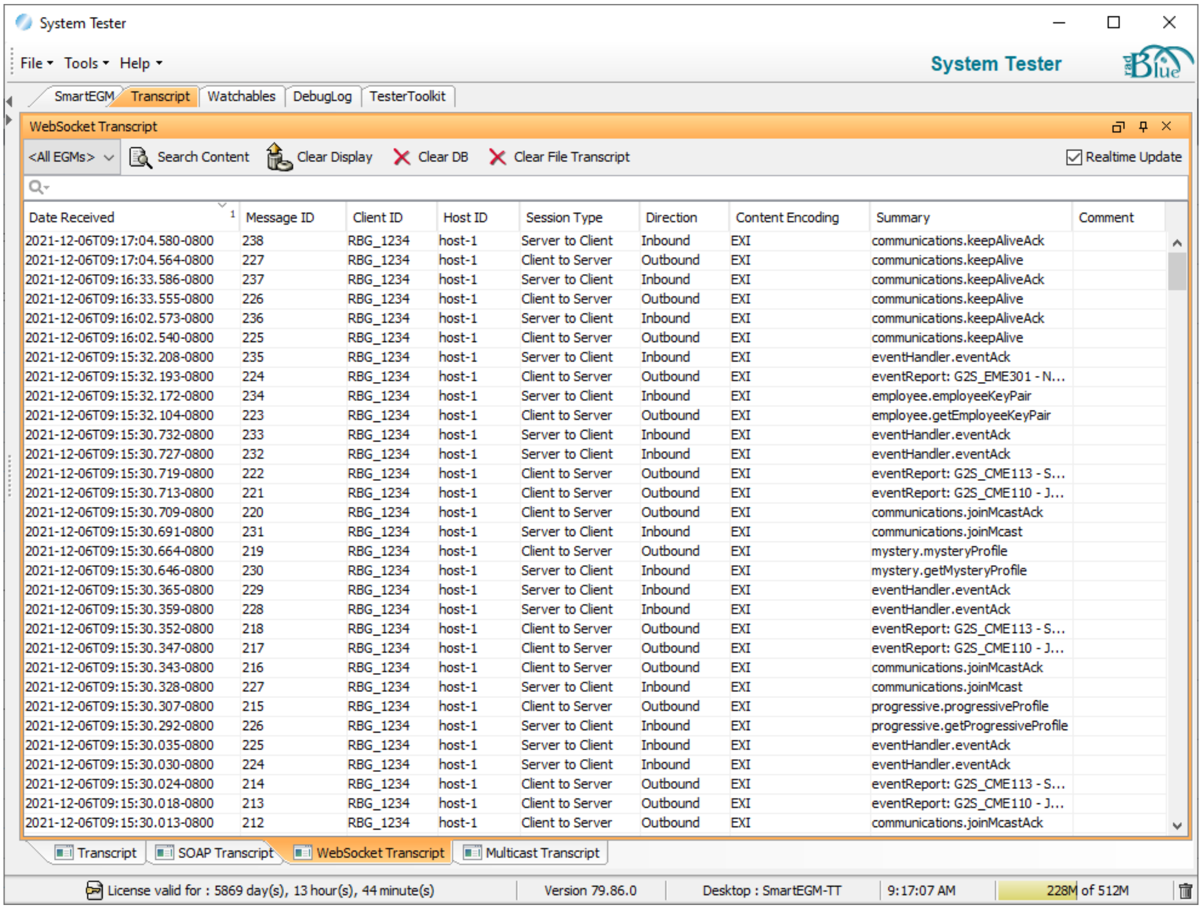
Enable GZIP in HTTP Stack
☐ Enable GZIP_IN_HTTP_STACK

Enable GZIP Payload
☐ Enable GZIP_PAYLOAD

Enable Get Transport Options
☑ Enable Get Transport Options

HTTP Configuration
SOAP Timeout : 01:00.000 [mm:ss.SSS]

Additionally, we added a transcript panel that is specific to Web Sockets.



Date Received	Message ID	Client ID	Host ID	Session Type	Direction	Content Encoding	Summary	Comment
2021-12-06T09:17:04.580-0800	238	RBG_1234	host-1	Server to Client	Inbound	EXI	communications.keepAliveAck	
2021-12-06T09:17:04.564-0800	227	RBG_1234	host-1	Client to Server	Outbound	EXI	communications.keepAlive	
2021-12-06T09:16:33.586-0800	237	RBG_1234	host-1	Server to Client	Inbound	EXI	communications.keepAliveAck	
2021-12-06T09:16:33.555-0800	226	RBG_1234	host-1	Client to Server	Outbound	EXI	communications.keepAlive	
2021-12-06T09:16:02.573-0800	236	RBG_1234	host-1	Server to Client	Inbound	EXI	communications.keepAliveAck	
2021-12-06T09:16:02.540-0800	225	RBG_1234	host-1	Client to Server	Outbound	EXI	communications.keepAlive	
2021-12-06T09:15:32.208-0800	235	RBG_1234	host-1	Server to Client	Inbound	EXI	eventHandler.eventAck	
2021-12-06T09:15:32.193-0800	224	RBG_1234	host-1	Client to Server	Outbound	EXI	eventReport: G2S_EME301 - N...	
2021-12-06T09:15:32.172-0800	234	RBG_1234	host-1	Server to Client	Inbound	EXI	employee.employeeKeyPair	
2021-12-06T09:15:32.104-0800	223	RBG_1234	host-1	Client to Server	Outbound	EXI	employee.getEmployeeKeyPair	
2021-12-06T09:15:30.732-0800	233	RBG_1234	host-1	Server to Client	Inbound	EXI	eventHandler.eventAck	
2021-12-06T09:15:30.727-0800	232	RBG_1234	host-1	Server to Client	Inbound	EXI	eventHandler.eventAck	
2021-12-06T09:15:30.719-0800	222	RBG_1234	host-1	Client to Server	Outbound	EXI	eventReport: G2S_CME113 - S...	
2021-12-06T09:15:30.713-0800	221	RBG_1234	host-1	Client to Server	Outbound	EXI	eventReport: G2S_CME110 - J...	
2021-12-06T09:15:30.709-0800	220	RBG_1234	host-1	Client to Server	Outbound	EXI	communications.joinMcastAck	
2021-12-06T09:15:30.691-0800	231	RBG_1234	host-1	Server to Client	Inbound	EXI	communications.joinMcast	
2021-12-06T09:15:30.664-0800	219	RBG_1234	host-1	Client to Server	Outbound	EXI	mystery.mysteryProfile	
2021-12-06T09:15:30.646-0800	230	RBG_1234	host-1	Server to Client	Inbound	EXI	mystery.getMysteryProfile	
2021-12-06T09:15:30.365-0800	229	RBG_1234	host-1	Server to Client	Inbound	EXI	eventHandler.eventAck	
2021-12-06T09:15:30.359-0800	228	RBG_1234	host-1	Server to Client	Inbound	EXI	eventHandler.eventAck	
2021-12-06T09:15:30.352-0800	218	RBG_1234	host-1	Client to Server	Outbound	EXI	eventReport: G2S_CME113 - S...	
2021-12-06T09:15:30.347-0800	217	RBG_1234	host-1	Client to Server	Outbound	EXI	eventReport: G2S_CME110 - J...	
2021-12-06T09:15:30.343-0800	216	RBG_1234	host-1	Client to Server	Outbound	EXI	communications.joinMcastAck	
2021-12-06T09:15:30.328-0800	227	RBG_1234	host-1	Server to Client	Inbound	EXI	communications.joinMcast	
2021-12-06T09:15:30.307-0800	215	RBG_1234	host-1	Client to Server	Outbound	EXI	progressive.progressiveProfile	
2021-12-06T09:15:30.292-0800	226	RBG_1234	host-1	Server to Client	Inbound	EXI	progressive.getProgressiveProfile	
2021-12-06T09:15:30.035-0800	225	RBG_1234	host-1	Server to Client	Inbound	EXI	eventHandler.eventAck	
2021-12-06T09:15:30.030-0800	224	RBG_1234	host-1	Server to Client	Inbound	EXI	eventHandler.eventAck	
2021-12-06T09:15:30.024-0800	214	RBG_1234	host-1	Client to Server	Outbound	EXI	eventReport: G2S_CME113 - S...	
2021-12-06T09:15:30.018-0800	213	RBG_1234	host-1	Client to Server	Outbound	EXI	eventReport: G2S_CME110 - J...	
2021-12-06T09:15:30.013-0800	212	RBG_1234	host-1	Client to Server	Outbound	EXI	communications.joinMcastAck	

License valid for : 5869 day(s), 13 hour(s), 44 minute(s) | Version 79.86.0 | Desktop : SmartEGM-TT | 9:17:07 AM | 228M of 512M

RST Version 78.0.0 Release Notes

Release Date: 2 June 2021

This release:

- Ability to pause tiger scripts between a start and end time.
- Updated Java to 1.8.0_275
- Updated JIDE to 3.7.12-pre

If you have any ideas for improvement, questions, or issues let us know at support@radblue.com.

Case	Description
17157	Update Java to 1.8.0_275
17158	Update JIDE to 3.7.12-pre
17485	Ability to pause tiger scripts between a start and end time.

RST Version 76.0.0 Release Notes

Release Date: 7 December 2020

This release:

- Fixed a bug in progressive class when setting the progDataTable.
- Updated Apache CXF to 3.2.13

If you have any ideas for improvement, questions, or issues let us know at support@radblue.com.

Case	Description
16707	Updated Apache CXF to 3.2.13.
16755	Starting a web server to handle help files to work around a limitation in FireFox.
17149	Fixed a bug where the progDataTable was being appended instead of replaced during setOptionChange.

RST Version 74.0.0 Release Notes

Release Date: 2 June 2020

This release:

- Fixed bugs associated with the SPC class.
- Updated Java to OpenJDK 1.8.0_242.
- Modified cash-out procedure for progressive/SPC wins.
- Modified Remote Control API to allow SPC devices to use Human.playSimpleGameWithProgressiveHit.

If you have any ideas for improvement, questions, or issues let us know at support@radblue.com.

Case	Description
16213	Fixed a bug where SPC option config parameters were not being persisted.
16231	Fixed a bug in the Linux version where invalid path separators were causing SmartEGM configuration files not to be loaded.
16306	Modified tiger scripts engine to allow SPC devices to be used with Human.playSimpleGameWithProgressiveHit verb.
16318	Pay progressive wins to credit meter if EGM configuration allows it.
16391	• Fixed a bug where the egmException was being updated after it was previously set. • Fixed a bug where wat.commitTransfer commands were being generated after the log record was set to G2S_commitAcked.
16392	Updated Java to OpenJDK 1.8.0_242.
16394	Moved the G2S WSDL to allow student licenses to work.
16395	Fixed a bug where transport was stuck in a loop when SSL connections fail.
16430	Fixed a bug in SPC where multiple game level configs associated with one level were being displayed with the wrong progressive level.
16471	Added ability to trigger SPC progressive hit through Remote Control API.
16495	Fixed a bug with initializing SPC levels after setting the configuration using option config.
16635	Modified SmartEGM configuration files to reference new files in RST/conf directory for download components. This fixed a problem where the RST reported the components as being invalid.

RST Version 72.0.0 Release Notes

Release Date: 3 December 2019

This release:

Upgraded to G2S Schema 3.1

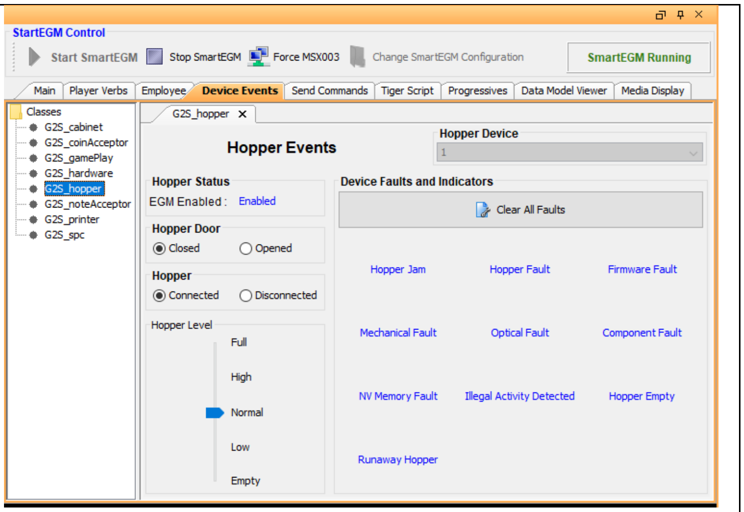
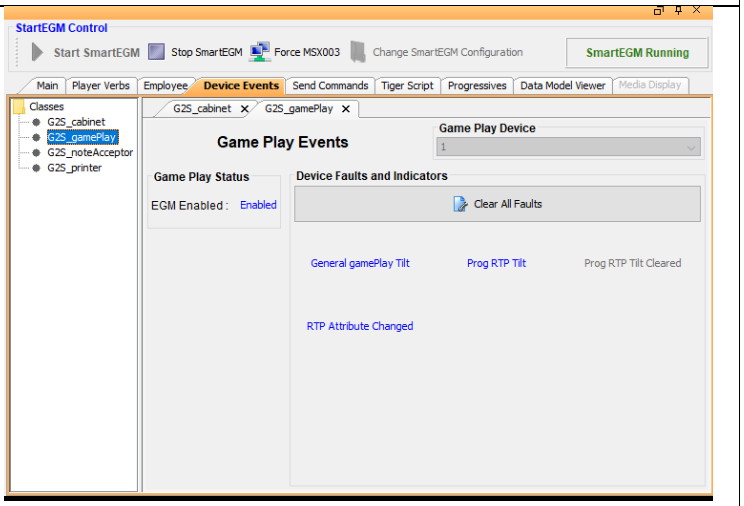
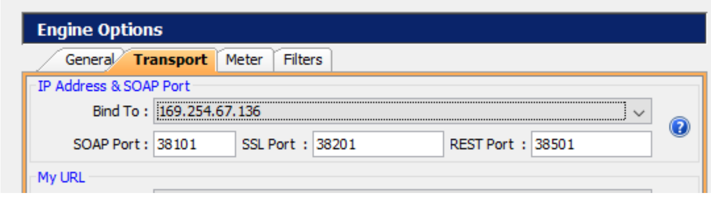
- Added support for spc Class
- Added support for mystery Class
- New REST API calls.

If you have any ideas for improvement, questions, or issues let us know at support@radblue.com.

Case	*Description*
15492	Added the ability in the Remote Control API to get and set the event handler overflow flag on a host-by-host basis.
15493	Added the ability in the Remote Control API to generate hopper events. Added the ability in the **Device Events** panel to generate hopper events.
15569	Implemented g2sRTP. A new sample smartegm-config-gsa-rtp.xml file is included in the installer.
15573	Implemented g2sA extension's minPaybackPct/maxPaybackPct attributes in the Game Play class.
15581	Removed warning about Unknown soapAction: 'http://G2S.gamingstandards.com/SendG2SMessage'
15596	Added the ability to override the EGM's URL to be a specific value. To force the EGM's URL please modify RST/bin/RST.vmoptions with a line similar to -Dcommunications.forceURL=http://localhost:38101/RST
15603	Modified the spcProfile command to display level profiles.
15607	Added the ability to set RST's REST port.
15634	Added the ability in the Remote Control API to get the EGM state.
15678	Fixed a bug where the commsOnLine flags were not being reset after the commsOnLineAck was received.
15820	Upgrade G2S schema to 3.1.
15832	Implemented GSATB-151 Master Reset Persistency. The current master reset is saved to the SmartEGM configuration file if the master reset has not taken effect yet.
15833	Implemented GSMP-2025. The SmartEGM will now generate G2S_OCE107 optionConfig Configuration Aborted event along with G2S_OCE110 optionConfig Configuration Change Authorization Timeout event when the authorization times out.

15835	Implemented GSATB-121 Additional Download Error Codes.
16010	Implemented g2sPTB extension.
16037	Implemented spc class.
16041	Fixed a bug where icons were not being found from the installed version.
16118	Implemented mystery class.

User Interface Changes

Added new panel for Hopper Events.	
Added new game play events for g2sRTP support.	
Added REST Port to Transport options.	

EGM Enabled : Enabled

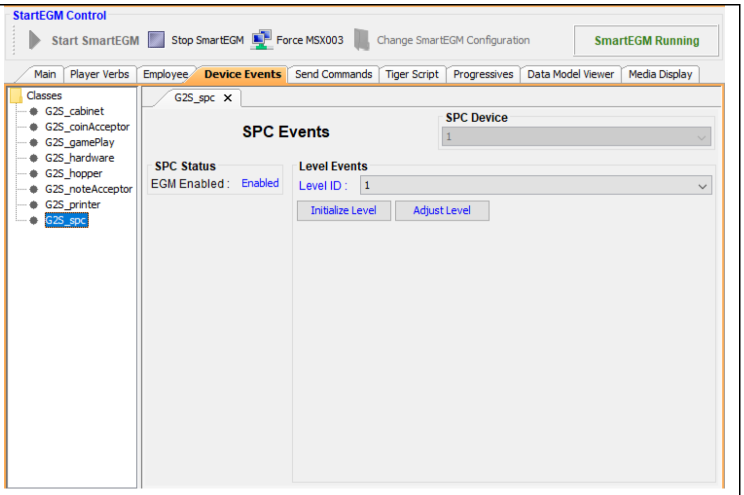
Hopper Door: ● Closed ○ Opened

Hopper: ● Connected ○ Disconnected

EGM Enabled : Enabled

Bind To : 169.254.67.136

SOAP Port : 38101 SSL Port : 38201 REST Port : 38501

Added new panel for SPC Events.	

SPC Device: 1

EGM Enabled : Enabled

Level ID : 1

Remote Control API

In this release we added five new REST API calls.

- Get Force Overflow – Determine if the event handler device is in the overflow state.
- Set Force Overflow – Set the event handler device overflow flag.
- Hopper Events – Generate hopper events.
- Get Current EGM State – Determine the current EGM's state.
- SPC Events – Generate spc events.

Get Force Overflow

HTTP Method	GET
Path	/remote/getForceOverflow
Request	GetForceOverflowRequest
Response	ForceOverflowResponse

GetForceOverflowRequst

Field	Type	Description
hostId	String	The host ID that you want to get the event handler overflow flag for.

ForceOverflowResponse

Field	Type	Description
hostId	String	The host ID that is reporting the event handler overflow flag.
forceOverflow	Boolean	True if the event handler overflow flag is set. False otherwise.
error	Boolean	If there was an error during the execution of the operation.
message	String	Message describing the result of the operation.

Set Force Overflow

HTTP Method	POST
Path	/remote/setForceOverflow
Request	ForceOverflowRequest
Response	ForceOverflowResponse

ForceOverflowRequest

Field	Type	Description
hostId	String	The host ID that you want to set the event handler overflow flag for.
forceOverflow	Boolean	True to enable overflow flag, false to disable it.

Hopper Events

HTTP Method	POST
Path	/remote/hopperEvents
Request	HopperEventsRequest
Response	SimpleCallResult

HopperEventsRequest

Field	Type	Description
deviceId	String	The host ID that you want to set the event handler overflow flag for.
eventList	EventList	List of events to generate.

EventList

Field	Type	Description
event	HopperEvent	Type of event to set.

Hopper Event

Name	Event Code
CLEAR_ALL_FAULTS	G2S_HPE099 Clear all faults
DEVICE_COMPONENT_FAULT	G2S_HPE906 Device component fault
DEVICE_CONNECTED	G2S_HPE902 Device connected
DEVICE_DISCONNECTED	G2S_HPE901 Device disconnected
DEVICE_FIRMWARE_FAULT	G2S_HPE903 Firmware fault
DEVICE_MECHANICAL_FAULT	G2S_HPE904 Device mechanical fault
DEVICE_NON_VOLATILE_MEMORY_FAULT	G2S_HPE907 Device non-volatile memory fault
DEVICE_OPTICAL_FAULT	G2S_HPE905 Device optical fault
DISPENSER_DOOR_CLOSED	G2S_HPE112 Dispenser door closed
DISPENSER_DOOR_OPENED	G2S_HPE111 Dispenser door opened
HOPPER_ABOVE_HIGH_WATER_MARK	G2S_HPE105 Hopper above high water mark
HOPPER_ABOVE_LOW_WATER_MARK	G2S_HPE107 Hopper above low water mark
HOPPER_BELOW_HIGH_WATER_MARK	G2S_HPE104 Hopper below high water mark
HOPPER_BELOW_LOW_WATER_MARK	G2S_HPE106 Hopper below low water mark
HOPPER_EMPTY	G2S_HPE101 Hopper is empty
HOPPER_EXTRA_COINS_PAID	G2S_HPE109 Hopper extra coins paid
HOPPER_FAULT	G2S_HPE108 Hopper fault

HOPPER_FULL	G2S_HPE102 Hopper is full
HOPPER_JAMMED	G2S_HPE103 Hopper jammed
HOPPER_NOT_FULL	G2S_HPE115 Hopper not full
ILLEGAL_ACTIVITY_DETECTED	G2S_HPE908 Illegal activity detected
ILLEGAL_DISPENSER_DOOR_OPEN	G2S_HPE116 Illegal dispenser door open
POWER_OFF_DISPENSER_DOOR_OPENED	G2S_HPE114 Power off - dispenser door opened
RUNAWAY_HOPPER	G2S_HPE110 Runaway hopper

SimpleCallResult

Field	Type	Description
error	Boolean	If there was an error during the execution of the operation.
message	String	Message describing the result of the operation.

Get Current EGM State

HTTP Method	GET
Path	/remote/egmState
Request	N/A
Response	EgmStateResponse

EgmStateResponse

Field	Type	Description
dataModelState	DataModelState	The host ID that you want to get the event handler overflow flag for.
egmState	t_egmStates	Current value of cabinetStatus.egmState.
deviceClass	t_deviceClass	Current value of cabinetStatus.deviceClass.
deviceId	t_deviceId	Current value of cabinetStatus.deviceId.

DataModelState

Name	Comment
OFFLINE	EGM not running.
ONLINE	EGM connect to Host
WAITING_FOR_COMMS_ONLINE_ACK	EGM has connected to the host and is waiting for the commsOnLineAck.

SPC Event

HTTP Method	POST
Path	/remote/spcEvent
Request	SpcEventRequest
Response	SimpleCallResult

SpcEventRequest

Field	Type	Description
deviceId	t_deviceId	The host ID that you want to set the event handler overflow flag for.
levelId	t_levelId	
event	SpcEvent	Event to generate

SPC Event

Name	Event Code
LEVEL_INITIALIZED	G2S_SPE101 Level Initialized
LEVEL_ADJUSTED	G2S_SPE102 Level Adjusted

How to use SendMessage

Send Message allows the Remote Control API user to send XML messages to the host that does not impact the data model of the RST. This allows the user to send private G2S extension messages or messages that don't fit the message modification mechanism.

Field	Description
Host ID	Host ID of the system the RST is connected to. The message will be sent to that host.
Fix Up	The RST will set protocol specific fields if they are NOT set in the message.
SOAP Host ID	The host ID to be used when sending the message. Normally this field is not set and the RST will supply the correct host ID as specified in the Host ID field. This allows the Remote Control API user to test what happens when the SOAP host ID has a mismatch with the G2S message.
SOAP EGM ID	The EGM ID to be used in the SOAP message when sending the message to the host. Normally this field is not set and the RST will supply the current EGM ID. This allows the Remote Control API user to test what happens when the SOAP EGM ID has a mismatch with the G2S message.
Message	The XML of the G2S message that will either be fixed up or sent as is to the host. The message to be sent can be invalid XML to test xml processing.

The following protocol fields will be "fixed up" by the RST when the attributes are missing from the message. If the attribute is present then the assumption is that the user wants that value to be sent to the host.

Element	Attribute	Comment
g2sBody	dateTimeSent	The current time will be set for the dateTimeSent
	hostId	The host ID from the SendMessage host ID field will be used.
	egmId	The current EGM ID will be set.
Class element	commandId	The next command ID will be set.
	dateTime	The current time will be set for the dateTime
	sessionId	The next session ID will be set.

In this example, we are going to send the G2S_EHE102 Event Handler Queue Overflow message.

1. Copy a similar message from the transcript. For example G2S_EHE004 event has a status element just like G2S_EHE102 event,

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<G:g2sMessage xmlns:G="http://www.gamingstandards.com/g2s/schemas/v1.0.3">
  <G:g2sBody G:dateTimeSent="2019-06-12T14:58:47.739Z" G:egmId="RBG_00:11:22:33:44:55:66"
          G:hostId="1">
    <G:eventHandler G:commandId="2740" G:dateTime="2019-06-12T14:58:47.740Z" G:deviceId="1"
               G:sessionId="4000062">
      <G:eventReport G:deviceClass="G2S_eventHandler" G:deviceId="1" G:eventCode="G2S_EHE004"
                G:eventDateTime="2019-06-12T14:58:47.736Z"
                G:eventId="494"
                G:eventText="Event Handler Enabled by Host"
                G:transactionId="0">
        <G:deviceList>
          <G:statusInfo G:deviceClass="G2S_eventHandler" G:deviceId="1">
            <G:eventHandlerStatus/>
          </G:statusInfo>
        </G:deviceList>
      </G:eventReport>
    </G:eventHandler>
  </G:g2sBody>
</G:g2sMessage>
```

2. Remove the XML prolog <?xml … ?> since the message will be placed in a XML payload when sending to RST’s Remote Control API.

```
<G:g2sMessage xmlns:G="http://www.gamingstandards.com/g2s/schemas/v1.0.3">
  <G:g2sBody G:dateTimeSent="2019-06-12T14:58:47.739Z" G:egmId="RBG_00:11:22:33:44:55:66"
          G:hostId="1">
    <G:eventHandler G:commandId="2740" G:dateTime="2019-06-12T14:58:47.740Z" G:deviceId="1"
```

```
               G:sessionId="4000062">
      <G:eventReport G:deviceClass="G2S_eventHandler" G:deviceId="1" G:eventCode="G2S_EHE004"
                G:eventDateTime="2019-06-12T14:58:47.736Z"
                G:eventId="494"
                G:eventText="Event Handler Enabled by Host"
                G:transactionId="0">
        <G:deviceList>
          <G:statusInfo G:deviceClass="G2S_eventHandler" G:deviceId="1">
            <G:eventHandlerStatus/>
          </G:statusInfo>
        </G:deviceList>
      </G:eventReport>
    </G:eventHandler>
  </G:g2sBody>
</G:g2sMessage>
```

3. Next, remove dateTimeSent, egmId, and hostId attributes from the g2sBody element

```
<G:g2sMessage xmlns:G="http://www.gamingstandards.com/g2s/schemas/v1.0.3">
  <G:g2sBody>
    <G:eventHandler G:commandId="2740" G:dateTime="2019-06-12T14:58:47.740Z" G:deviceId="1"
               G:sessionId="4000062">
      <G:eventReport G:deviceClass="G2S_eventHandler" G:deviceId="1" G:eventCode="G2S_EHE004"
                G:eventDateTime="2019-06-12T14:58:47.736Z"
                G:eventId="494"
                G:eventText="Event Handler Enabled by Host"
                G:transactionId="0">
        <G:deviceList>
          <G:statusInfo G:deviceClass="G2S_eventHandler" G:deviceId="1">
            <G:eventHandlerStatus/>
          </G:statusInfo>
        </G:deviceList>
      </G:eventReport>
    </G:eventHandler>
  </G:g2sBody>
</G:g2sMessage>
```

4. On the class command element (eventHandler in our case) remove the commandId, dateTime, and sessionId attributes.

```
<G:g2sMessage xmlns:G="http://www.gamingstandards.com/g2s/schemas/v1.0.3">
  <G:g2sBody>
    <G:eventHandler G:deviceId="1">
      <G:eventReport G:deviceClass="G2S_eventHandler" G:deviceId="1" G:eventCode="G2S_EHE004"
                G:eventDateTime="2019-06-12T14:58:47.736Z"
                G:eventId="494"
                G:eventText="Event Handler Enabled by Host"
                G:transactionId="0">
        <G:deviceList>
          <G:statusInfo G:deviceClass="G2S_eventHandler" G:deviceId="1">
            <G:eventHandlerStatus/>
          </G:statusInfo>
        </G:deviceList>
      </G:eventReport>
    </G:eventHandler>
  </G:g2sBody>
</G:g2sMessage>
```

5. Finally, modify the command element for the message you want to send. In our case the eventCode needs to be changed to G2S_EHE102. If your host needs to have the

eventHandlerOverflow attribute set to false then you need to add it to the eventHandlerStatus element.

```
<G:g2sMessage xmlns:G="http://www.gamingstandards.com/g2s/schemas/v1.0.3">
  <G:g2sBody>
    <G:eventHandler G:deviceId="1">
      <G:eventReport G:deviceClass="G2S_eventHandler" G:deviceId="1" G:eventCode="G2S_EHE102"
                G:eventDateTime="2019-06-12T14:58:47.736Z"
                G:eventId="494"
                G:eventText="Event Handler Queue Overflow message"
                G:transactionId="0">
        <G:deviceList>
          <G:statusInfo G:deviceClass="G2S_eventHandler" G:deviceId="1">
            <G:eventHandlerStatus G:eventHandlerOverflow="false"/>
          </G:statusInfo>
        </G:deviceList>
      </G:eventReport>
    </G:eventHandler>
  </G:g2sBody>
</G:g2sMessage>
```

6. Call RST’s Remote Control API call /remote/sendMessage with the following arguments:

Field	Value	Comment
Host ID	1	Host ID of the system the RST is connected to.
Fix Up	true	The RST will set protocol specific fields if they are NOT set in the message.
Message	XML from above	The XML will be fixed up to form a valid G2S message.

```
<SendMessageRequest
xmlns="http://www.radblue.com/g2s/rst/api/schemas/v1.0.3"><hostId>1</hostId><fixUp>true</fixUp>
<message><G:g2sMessage xmlns:G="http://www.gamingstandards.com/g2s/schemas/v1.0.3">
  <G:g2sBody>
    <G:eventHandler G:deviceId="1">
      <G:eventReport G:deviceClass="G2S_eventHandler" G:deviceId="1" G:eventCode="G2S_EHE102"
                G:eventDateTime="2019-06-12T14:58:47.736Z"
                G:eventId="494"
                G:eventText="Event Handler Queue Overflow message"
                G:transactionId="0">
        <G:deviceList>
          <G:statusInfo G:deviceClass="G2S_eventHandler" G:deviceId="1">
            <G:eventHandlerStatus G:eventHandlerOverflow="false"/>
          </G:statusInfo>
        </G:deviceList>
      </G:eventReport>
    </G:eventHandler>
  </G:g2sBody>
</G:g2sMessage>
</message></SendMessageRequest>
```

Here is another example of sending a meterInfo command as a notification

```
<SendMessageRequest
xmlns="http://www.radblue.com/g2s/rst/api/schemas/v1.0.3"><hostId>1</hostId><fixUp>true</fixUp>
<message><g2s:g2sMessage xmlns:g2s="http://www.gamingstandards.com/g2s/schemas/v1.0.3">

  <g2s:g2sBody>

    <g2s:meters g2s:deviceId="1"

            g2s:sessionType="G2S_notification"

            g2s:timeToLive="0">

      <g2s:meterInfo g2s:meterDateTime="2019-06-12T15:30:15.005Z"
g2s:meterInfoType="G2S_onPeriodic">

        <g2s:deviceMeters g2s:deviceClass="G2S_bonus" g2s:deviceId="1">

          <g2s:simpleMeter g2s:meterName="G2S_nonCashInAmt" g2s:meterValue="0"/>

          <g2s:simpleMeter g2s:meterName="G2S_cashableInAmt" g2s:meterValue="0"/>

          <g2s:simpleMeter g2s:meterName="G2S_transferInCnt" g2s:meterValue="0"/>

          <g2s:simpleMeter g2s:meterName="G2S_promoInAmt" g2s:meterValue="0"/>

        </g2s:deviceMeters>

      </g2s:meterInfo>

    </g2s:meters>

  </g2s:g2sBody>

</g2s:g2sMessage></message></SendMessageRequest>
```

RST Version 70.0.0 Release Notes

Release Date: 3 June 2019

This release:

- New REST API calls.
- Retry progressive hits that are not acknowledged.
- Fixed bug that cleared meter values.

If you have any ideas for improvement, questions, or issues let us know at support@radblue.com.

Case	*Description*
14893	Progressive hits are now retried if they are not acknowledged.
15013	Master reset code was clearing the meter values after all resets. The code should only clear the meter values for a master reset.
15452	Rest API calls to get and set EGM configuration via Remote Control API.

Remote Control API

In this release we added two new Rest API calls to get and load the SmartEGM configuration file. This allows clients of the API to set the EGM ID, machine number, or other configuration options that could only be set using the configuration file.

When loading the SmartEGM configuration file, the EGM must be stopped.

Get EGM Configuration

HTTP Method	GET
Path	/remote/egmConfig
Request	N/A
Response	EgmConfigResponse

EgmConfigResponse

Field	Type	Description
egmConfig	Optional string.	The current SmartEGM configuration.
Error	Boolean	If there was an error during the execution of the operation.
Message	String	Message describing the result of the operation.

Load EGM Configuration

HTTP Method	GET
Path	/remote/loadEgmConfig
Request	EgmConfigRequest
Response	SimpleCallResult

EgmConfigRequest

Field	Type	Description
egmConfig	String.	The SmartEGM configuration to load.

RST Version 68.0.0 Release Notes

Release Date: 3 December 2018

This release:

- Updated idReader class to G2S 3.0.
- Bug fixes in the handpay class.
- Bug fixes for masterReset in the cabinet class.
- Bug fix in mediaDisplay class.
- Bug fix in gat class.

If you have any ideas for improvement, questions, or issues let us know at support@radblue.com.

Case	*Description*
14160	Fixed a bug where the SmartEGM is generating a progressive hit for a zero win.
14161	Fixed a bug where the cashableAmt in sourceRef elements in handpay commands was not the progressive win amount.
14187	Fixed a bug where EGM owned handpay devices was causing the EGM not to start. Note: EGM owned handpay devices is still not supported in the RST.
14188	Fixed a bug where currency meters were not being set to zero during a master reset.
14189	Fixed a bug where GTK_CBX005 Master Reset Not Pending was not being sent when master reset was not pending.
14190	Fixed a bug where GTK_CBE012 Master Reset Time-Out event was not being generated.
14191	Fixed a bug where GTK_CBX004 Invalid Master Reset Request was not being generated. The Smart EGM will generate GTK_CBX004 when the authorizing host is unknown, not registered, or the timeoutData is null or greater than 24 hours.
14192	Fixed a bug where GTK_CBE010, GTK_CBE011, GTK_CBE012 did not have the master reset or authorize status payload.
14194	Fixed a bug where GTK_CBE006 Master Reset Authorized's authorizeStatus was not set to G2S_timeout when the master reset timed out.
14210	• AuthorizeMasterReset will return a GTK_CBX005 when there is no pending master reset or the host sends the wrong request ID. • AuthorizeMasterReset will generate GTK_CBX003 if the master reset is already in progress. • AuthorizeMasterReset will generate GTK_CBX005 when for an unknown authorizing host. • CancelMasterReset generates GTK_CBX005 when the master reset is not pending, wrong request ID, or the logEntry is already GTK_inProcess, GTK_cancelled, or GTK_aborted. • masterReset generates GTK_CBX003 if the active master reset is not GTK_aborted or GTK_cancelled.
14220	Changed the order of checking for owner commands before guest commands. This means G2S_APX010 Command Restricted To Owner will be generated before G2S_APX012 Command Restricted To Owner and Guests.

Case	Description
14230	Fixed a bug where GTK_CBE009 did not contain the master reset status payload.
14272	Fixed a bug where IGT_MDX007 was being generated for an media access token of zero.
14275	Fixed a bug where the Smart EGM was not sending download.scriptStatus command when a package is deleted by a script action.
14282	Fixed a bug where mediaDisplay events were sending the latest transaction instead of the transcription for the specified device ID. IGT_MDE101, IGT_MDE102, and IGT_MDE105 were updated.
14322	Fixed a bug where the RST user interface was allowing a setRemoteKeyOff type that was not allowed after receiving handpay.setRemoteKeyOff from the host.
14323	Added a warning to the Tiger scripts when processing progressive handpays that the host provided keyOffType will be used instead of the user supplied keyOffType.
14324	Fixed a bug that prevented the EGM from locking the handpay device during a a game play cycle. This prevented G2S_CBE210 Device Action Locked EGM from being sent after G2S_JPE101 Handpay Pending.
14328	Fixed a bug where G2S_JPX003 was not being generated for a committed handpay transaction.
14351	Removed handpay processing for mixCreditTypes, requestNonCash and combineCashableOut attributes as specified in G2S 3.0 section 11.1.10.
14352	Deprecated mixCreditTypes, requestNonCash, and combineCashableOut handpay attribute. The handpay profile and option config parameters are now set to the default values and canModRemote=false and canModLocal=false.
14353	• G2S_JPX001 is generated for a setRemoteKeyOff of G2S_unknow or non-original key off type. • G2S_JPX002 is generated for any key off type that is NOT credit or handpay.
14354	Fixed a double posting of handpay meters during a game play cycle. Modified the game play engine to handle a keyoff type that was not specified by the user in the tiger script.
14364	Fixed a bug where game denom and wager meters were not being set to zero during a master reset.
14365	Deprecated configDate and configComplete in ID Reader device.
14367	Deprecated idEnconding in ID Reader device.
14368	Deprecated lossLimit in ID Reader device.
14375	Added support for illegal door open (g2sAUS).
14381	Added support for illegal door access (g2sAUS).
14384	Add warning while loading a Smart EGM configuration file if the informed player device is defined by the player device is not.
14390	Added support for illegal door access in the note acceptor class (g2sAUS).
14391	Added support for illegal door access in the coin acceptor class (g2sAUS).
14392	Added support for illegal door access in the hopper class (g2sAUS).

Case	*Description*
14393	Added support for illegal door access in the note dispenser class (g2sAUS).
14419	Added the ability to generate G2S_IDE109 Error Detected While Reading ID.
14486	Fixed a bug when processing two authorizeTransfers from the host for one WAT transaction.
14538	Fixed a bug where the ID reader device was not removing the ID when the device was disabled.
14815	Implemented section 23.10.1.3 in G2S 3.0 for duplicate doVerification commands.
14871	Created a 64-bit Windows RST installer.

Release Date: 4 June 2018

This release:

- Rewrite of communications state machine.
- Implemented the Sign class.
- Progressive error handling improvements.

If you have any ideas for improvement, questions, or issues let us know at support@radblue.com.

Case	*Description*
13518	Updated SCEP code base to use Apache CXF 3.2.1.
13620	Rewrite of the communication state machine to handle error conditions. For example, the SmartEGM was not reconnecting to a host that was a restarted when the communications device was in the sync state.
13875	Fixed a bug where the SmartEGM does not cleanup comms manager threads for deleted hosts.
13877	Fixed a bug where the SmartEGM configuration file was not removing hosts references for deleted hosts.
13881	Restored the ability to reset the command ID before opening communications to a host.
13899	Implemented the Sign class.
13929	To prevent a cash out to WAT during a WAT transfer, the cash out button is disabled during a WAT transfer.
13936	Fixed a bug where the SmartEGM would not validate a component when supportsOffset is set to false and no endOffset was sent in the XML payload.
13952	Fixed a bug where the SmartEGM would not respond to mediaDisplay.getMediaDisplayStatus from a guest host.
14018	Fixed a transcript bug that miscalculated the command summary when a comment was placed before the document's root element.
14045	The SmartEGM will now recover when the host prematurely closes the network connection. When the host closes the network connection before the GSA defined 5 minutes keep alive value, the SmartEGM was left in a half-open socket state. The next message from the EGM would cause a network connection error which was not resent. The SmartEGM will now resend the command.
14092	Fixed a bug where the SmartEGM was not handling the case where the progressive host rejects the progressive hit with error code G2S_PGX006. The SmartEGM will now commit the transaction with a zero amount and lock up in a handpay.
14110	Fixed a bug where the player cashable amount meter was not incremented properly during a progressive win. The SmartEGM was not including the initial win in calculating the new player cashable amount value.
14115	Added the ability to check to see if the progressive win is greater than the max credit limit.

Case	Description
14125	The SmartEGM will not transition to the closed state when a network error occurs on a non-SSL socket error. The GSA protocols could be interrupted to mandate that the EGM must transition to the closing state on a network error. However, there is language that allows the EGM to retry message.

RST Version 64.0.0 Release Notes

Release Date: 4 December 2017

This release:

- Fixed CRC-16 and CRC-32 calculations when hashing streams longer than 1024 bytes.
- Updated SmartEGM's option config parameter details to properly report minIncl, maxIncl, minLen, and maxLen values.
- Upgraded Java to 1.8.0_152.

NOTE: The updates to the SmartEGM's option config parameter MAY cause old SmartEGM configuration files not to load in the RST. Please send the configuration files to support@radblue.com and we'll make the necessary changes.

If you have any ideas for improvement, questions, or issues let us know at support@radblue.com.

Case	*Description*
12938	Fixed a problem with CRC-16 and CRC-32 calculations when hashing input streams longer than 1024 bytes.
12904	Updated Java to 1.8.0_152
13090	Add the ability to remotely configure host URLs using the Remote Control interface.
13189	Fixed a bug in the download packageCmdStatus that set scriptStatus to G2S_error even though scriptException was set to zero (No exceptions).
13200	Add the ability to asynchronously stop the EGM using the Remote Control interface. The method call to stop the EGM synchronously was not waiting for the EGM to completely stop before returning.
13288	Added synchronization between remote control methods to guard against starting the EGM too early after stopping the EGM.
13371	Fixed the SmartEGM's option config parameters minIncl, maxIncl, minLen and maxLen values to match the underlying data model. For example, previously G2S_idReaderTrack maxIncl was set to 12 which is wrong since ipReaderProfile.idReaderTrack has a max include value of 4.