

Release Summary

In this release, we added native support for S2S 1.5.1 and S2S 1.6, and also made a number of improvements to the G2S and SOAP transcripts.

We hope you enjoy this new release. If you have any ideas for improvement that we may have missed, just let us know at support@radblue.com.

The following sections provide details of each of the significant modifications and improvements.

Engine Modifications

- **Added support for S2S 1.5.1 and S2S 1.6** – while it is possible to add any schema to the RPA (allowing for custom extensions), it is much more convenient to have the schemas natively in the tool. In this release, the RPA now includes support for S2S 1.5.1 and S2S 1.6.
- **setCommChange filter improvement** – When “Multiple Client Host Ports” was disabled in the RPA, the inbound SOAP Ports in the `setCommChange` command were being set to 35101, 35102, 35103 for host 1, 2, and 3 respectively (but the RPA was only listening on port 35101). The `setCommChange` command as modified by the RPA, now provides the expected behavior.

Transcript Modifications

- The **G2S transcript** was enhanced by adding **Max** and **Restore** buttons to the View Transcript Message window (launched when you double click a message in the transcript). Since these buttons are located in the top frame of the control, they are available in the Command View and the XML View of the message. This feature is most useful when you encounter a really large message.



Max – expands the screen to the full size of the home screen of the computer.

Restore – Restores the window to its previous size and location.

- The same **Max** and **Restore** button functionality was added to the **Compare** button in the transcript. This feature is used to compare two similar messages in the transcript, so it was also a good candidate for a maximize feature.
- The EGM Filter in the **SOAP transcript** did not list any of the individual EGMs whose messages were in the transcript, so it was impossible to filter to just one EGM. This has been corrected.

Release Summary

In this release, we updated the Java version used by the tool. We also discovered that the S2S transcript was not being included in the debug.zip files when the RPA was monitoring an S2S data stream, so that shortcoming has been corrected.

We hope you enjoy this new release. If you have any ideas for improvement that we may have missed, just let us know at support@radblue.com.

The following sections provide details on each of the significant modifications and improvements.

Installer Modifications

- **All tools have been updated to use Java 1.7.0_65** – To keep up with the latest security (and other) improvements, all tools have been updated to Java 1.7.0_65. When installing this release, the Windows installer will download Java as part of the installation. If you are installing multiple tools on your computer, this Java upgrade is only done once. The Linux installer bundles the JRE in the installer.

Engine Modifications

- **S2S Transcript was not written to disk** – When the RPA is monitoring an S2S data stream, the S2S transcript is now written to an .s2t (s2s transcript) file in the RPA's logs directory. This file is then automatically included when a debug.zip file is created, and will be automatically opened by the RAS (RadBlue Analysis Suite) when an RPA debug.zip file is loaded. With this improvement, we can see exactly what was going on in your world if an S2S problem occurs and you need our help in figuring out what is going on.

Release Summary

In this release, we added quite a few usability improvements to the transcript control – color-coding the XML documents, letting you save changes that you make to the transcript layout and improving quick filter results so the display now includes the selected record when you clear the filter.

We hope you enjoy this new release. If you have any ideas for improvement that we may have missed, just let us know at support@radblue.com.

The following sections provide details on each of the significant modifications and improvements.

Installer Modifications

- **More Complete Error Reporting** – If the MAC address in the license file from RadBlue is not found in the PC, the resulting error message now displays a list of the MAC addresses that are seen by the installer for speedy solutions to installation problems.
- **All tools have been updated to use Java 1.7.0_51** – in an effort to stay current, all tools are being updated to a new version of Java. Java 8 is almost ready for prime-time, so we'll probably move to that new major version in the next release of our products.

Configuration Modifications

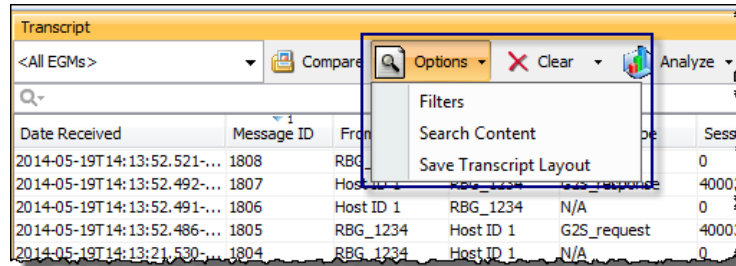
- **G2S Endpoints minor tweak** – The Edit button on G2S Endpoints > EGM Endpoints had no real function (as the EGM information is auto-populated when the EGM connects), so it has been removed. You can still remove extra entries (as the table only holds the last 5 EGMs).

Transport and Security Modifications

- **Proper handling of SCEP certificate chains** – The RadBlue SCEP client was not properly handling a certificate chain from an SCEP server. The tool was properly storing the first certificate, but then overwrote that certificate with the second certificate in the chain. Resolution - we now verify that the expected distinguished name matches the certificate before we store the certificate. (This is a common security routine used in all products).
- **Import/export self-signed certificates** – When the self-signed certificate option in the tool is used to create a signed certificate, that certificate has to be shared with other end-points so they trust the connection. New export and import options have been added to the Key Store tab in all tools so you can easily export a certificate from, and import a certificate into the tool's keystore file.

Transcript Modifications

- **Minor reorganization of Transcript Controls** – Since UI changes are usually the most torturous, we'll start the Transcript section with this one. In this new release of the tools, the Search and Filter options have now been grouped with the new Save Transcript Layout option in a new group call **Options** (so clever, right?):



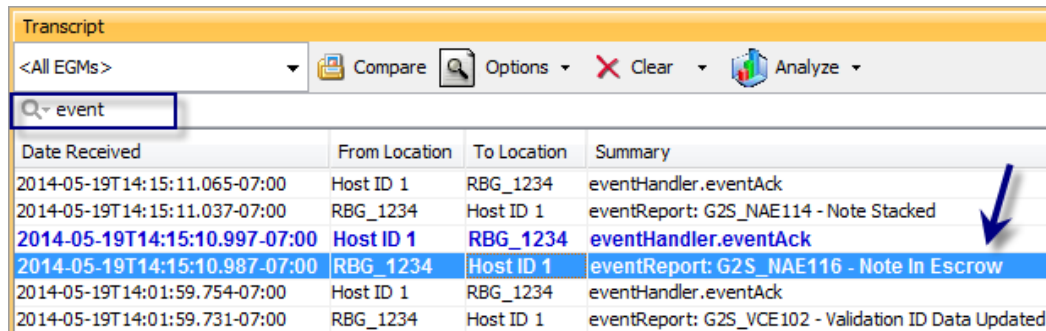
- **Column order, size, and selected columns are now persisted** – Make any changes to the layout of one instance of the transcript, then select **Options > Save Transcript Layout** to save your changes as the default layout. This new format is then used in all Transcript instances *in that tool as soon as you restart the tool*.
- **View XML is now color-coded!** We found a cool control that allows us to color code the XML document seen in the View XML object for Transcript Messages, using a unique color for elements, attributes and text strings. This makes the XML MUCH easier to read:

```

Transcript Message [ID: 785] - communications.keepAlive [G2S_request]
Command View XML
Text View Hex View
1 <?xml version="1.0" encoding="UTF-8" standalone="yes"?>
2 <g2s:g2sMessage xmlns:g2s="http://www.gamingstandards.com/g2s/schemas/v1.0.3">
3   <g2s:g2sBody g2s:dateTimeSent="2014-05-12T10:54:43.274-07:00" g2s:egmId="RBG_1234"
4     g2s:hostId="1">
5     <g2s:communications g2s:commandId="7418" g2s:dateTime="2014-05-12T10:54:43.270-07:00"
6       g2s:deviceId="1"
7       g2s:errorCode="G2S_none"
8       g2s:errorText=""
9       g2s:sessionId="4000035"
10      g2s:sessionMore="false"
11      g2s:sessionRetry="false"
12      g2s:sessionType="G2S_request"
13      g2s:timeToLive="30000">
14     <g2s:keepAlive/>
15   </g2s:communications>
16 </g2s:g2sBody>
17 </g2s:g2sMessage>
  
```

- **Improved reporting when real-time updates is disabled** – When the real-time update of the transcript is disabled, the **Realtime Update** label now goes to Red and Bold, and a message is displayed on the transcript table to make it obvious that the table is no longer being updated in real time.

- **Improved Quick Filter results display** – If you use the Quick Filter control in the transcript to search for a particular type of record and then select a specific message in the transcript table, that record will now always be in the active window when you clear the filter (so you can easily see the G2S messages around the selected message).



The screenshot shows the 'Transcript' window in the RadBlue Protocol Analyzer. At the top, there is a search bar containing 'event'. Below the search bar is a table with the following columns: 'Date Received', 'From Location', 'To Location', and 'Summary'. The table contains several rows of data, with the row '2014-05-19T14:15:10.987-07:00 | RBG_1234 | Host ID 1 | eventReport: G2S_NAE116 - Note In Escrow' highlighted in blue. A blue arrow points to this row.

Date Received	From Location	To Location	Summary
2014-05-19T14:15:11.065-07:00	Host ID 1	RBG_1234	eventHandler.eventAck
2014-05-19T14:15:11.037-07:00	RBG_1234	Host ID 1	eventReport: G2S_NAE114 - Note Stacked
2014-05-19T14:15:10.997-07:00	Host ID 1	RBG_1234	eventHandler.eventAck
2014-05-19T14:15:10.987-07:00	RBG_1234	Host ID 1	eventReport: G2S_NAE116 - Note In Escrow
2014-05-19T14:01:59.754-07:00	Host ID 1	RBG_1234	eventHandler.eventAck
2014-05-19T14:01:59.731-07:00	RBG_1234	Host ID 1	eventReport: G2S_VCE102 - Validation ID Data Updated

- **No more "Not Set" tool tips** – In the Transcript command view, there were lots of instances of tool tips that displayed as "Not Set" (because they weren't defined). These undefined tool tips no longer display in the tools.
- **More readable denominations** – In the command view for the meterInfo command, denominations are now shown in decimal form, rather than in millicents for currency meters and game denomination meters.

Release Summary

In this release, we added a Multiple Client Host Ports configuration option and made improvements to the the Message Transcript and Multicast Transcript.

Configuration Modifications

- A **Multiple Client Host Ports** option has been added to the Transport tab of the Engine Option screen (**Tools > Configure > Engine Options > Transport**). Select this option if you want RPA to start multiple G2S servers with unique port numbers to which the EGM can connect. Once selected, the **Inbound SOAP Port** field and **Inbound SSL SOAP Port** field display ending port number values that are determined by adding four to the user-entered port value. For example, if the **Inbound SOAP Port** value is **35101**, the ending port number will be **35105**. You can view all unique client URLs by clicking **Show URL(s)** on the RPA layout.
- A **Host ID** column has been added to **EGM Endpoints** on the **Engine Options > G2S Endpoints** configuration screen. This allows an EGM to use a unique EGM location URL for each G2S host.

Transcript Modifications

- An issue in which the data displayed incorrectly in the `eventHandler.eventHandlerLogList` details screen (accessed by double-clicking the message row in the Message Transcript) has been corrected.