RadBlue G2S Scope
Version 19

[Released: 07 DEC 2011]

Questions?
Log on to the RadBlue Forum: **http://radblue.mywowbb.com/**

Release Notes

Release Summary

For this release, we added a new installation requirement (**Java SE 6 Update 29**), made enhancements to the Send Command and Message Transcript, added a new verb to Custom Scripting and corrected several issues.

For more information on the features and modifications discussed in this document, see the RGS User Guide.

Installation Modifications

- If you are using the Tester Toolkit, you will require a new license for version 19. If you have not yet received a license, please contact RadBlue.
- RGS now requires **Java SE 6 Update 29**. If you do not have this version of Java on the computer, the installer will automatically retrieve and install it. If you are using a **64-bit Linux**, contact RadBlue.

  If you are installing on a secure network, see Bulletin 06 - Installing on a Secure Network.

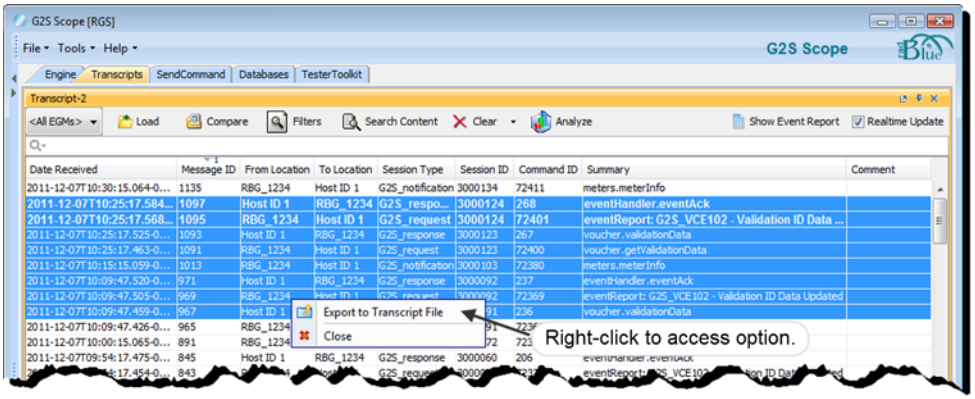
Functional Modifications

- The standard version of RGS now supports IGT and Informed Player extensions. A standard license is all that is required to view/use these extensions in RGS.
- A new **Filter by Meter Type** option on the Snapshot Comparison report, generated when you compare two snapshots in the Data Model Viewer, lets you filter data by class, currency, device, game denomination, wager or unknown meter. In addition, a **Meters** column has been added to Snapshot Comparison report, allowing you to easily view the type of meter associated with each change.
- The **Configuration ID** value in the `setOptionChange` command, accessed through the Send Command layout, has been expanded to accept up to 19 digits.

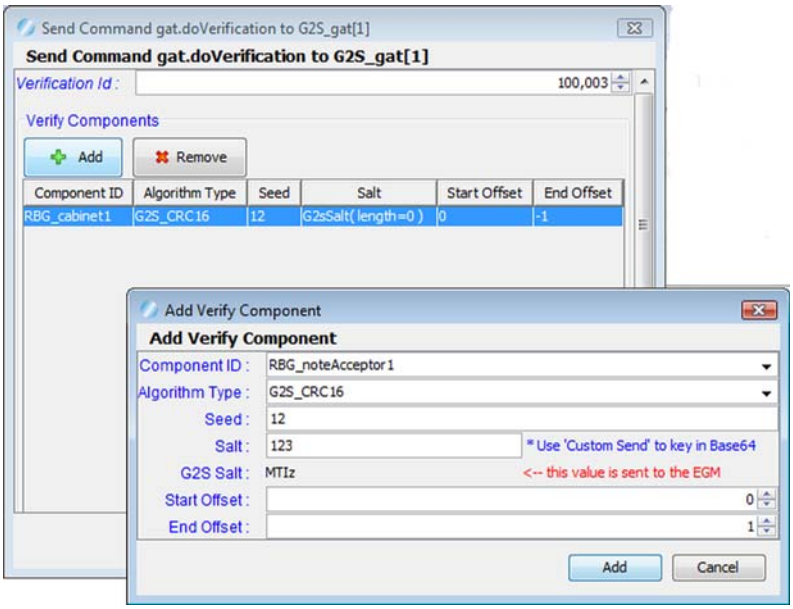
- The **Export to Transcript File** option lets you quickly export all or select Transcript entries that can then be imported into the RadBlue Analysis Suite (RAS).

  This option is useful when an issue has been narrowed down to a limited set of commands. Rather than exporting a large set of troubleshooting data using the Export Debug option on the Debug tab, you can send only the specific command(s) involved in the issue.

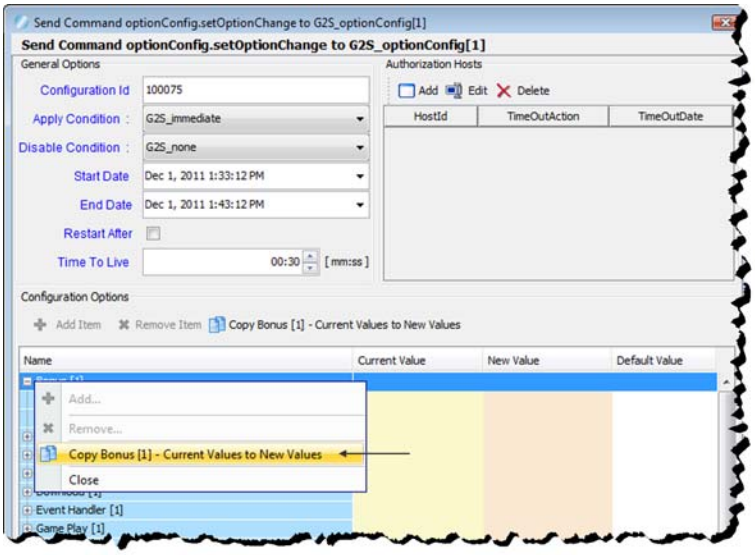
  To use this option, select the records you want to export, right-click and select **Export to Transcript File**.



- You can now send multiple `verifyComponent` subelements in the `gat.doVerification` command through a new user interface. The Algorithm Type lets you pick an algorithm to use or type your own.



- You can now send an unchanged `setOptionConfig` command to an EGM by copying one or more settings to the **New Value** column. To do this, right-click on the class, option or attribute you want to copy, and click **Copy *x* to Current New Value**.



- New options, accessed through the **Engine Options** screen or the **Keypair Database** (by clicking the new **Options** button), allow you to specify either the default key pair lifespan (time until expiration) or manually enter the key pair lifespan for each algorithm type. Use this new functionality when you want to control how long key pairs are valid.
  - **Default Key Pair Lifespan** - Select or type the length of time that the key pair is valid. This value is used only if the Use Manual Key Values option is not selected.
  - **Manual Key Values** - The Manual Key Values list defines key pair values used by RGS for various algorithms.
  - **Use Manual Key Values** - Select this option to use the key pair values defined in the Manual Key Values list.

Engine Modifications

- The **G2S_HMACSHA1** algorithm from the G2S 2.1 protocol is now available for the `gat` and `wat` classes.
- When the *commandId* attribute for a custom command (accessed through the **Send My Command** option on each command screen) is changed, an error is now displayed. This attribute is set by the RGS when the message is sent and cannot be changed.
- When an unknown ID is inserted into the EGM, a player ID is automatically created in the RGS player database. RGS now verifies that the player ID created is of a legal length by truncating the ID number, if necessary.
- RGS now accepts the `getKeyPair` request from EGM and then uses the *hashType* algorithm from the request to generate the new key value.
- An issue in which `commConfig.commChangeStatusAck`, `bonus.commitBonusAck` and `bonus.cancelBonusAward` were not being sent and an error was generated has been corrected.

- Host-initiated sequence numbers for the following commands now increment automatically:
  - `commConfig.setCommChange.configurationId`
  - `optionConfig.setOptionChange.configurationId`
  - `download.setScript.scriptId`
  - `bonus.setBonusAward.bonusId`
  - `wat.initiateRequest.requestId`
  - `gat.doVerification.verificationId`
  - `gat.runSpecialFunction.verificationId`
  - `mediaDisplay.loadContent.contentId`
  - `voucher.validationData.validationListId` (response)
  - `central.centralOutcome.outcomeId` (response)

User Interface Modifications

- A **Quick Filter** has been added to the Send Command layout, so you can quickly filter the Device Class list.
- Most Send Command objects will now remember the values entered previously.
- You can now select a valid ID number for `bonus.setBonusAward`.
- The default value of the Common Name (CN) field, located on **Tools** > **Configure** > **Security Options** > **Certificates** > **SCEP**, has been changed to **1**.
- The `gat.getComponentList` command, accessed through the Send Command layout, now populates the `gat.doVerification` command's **Component ID** field.

Tester Toolkit Modifications

- A **Notice** verb has been added to the Tester Toolkit module's Custom Scripting feature. The Notice verb lets you create an informational message that is written to the Script Status window, at the point in the script you insert it. This verb functions just like the Prompt verb without requiring the user to press a button.

Transcript Modifications

- An **Event Report** has been added to the Message Transcript that lets you view all events sent and received by the tool. You can toggle between the Transcript view and the Event Report view by clicking **Show/Hide Event Report**.
- **G2S errors** in the Message Transcript are now displayed in **red** to help you locate issues quickly.
- In version 18, the **Previous** and **Next** buttons on the command details screen were disabled. This issue has been corrected.

RadBlue G2S Scope
Version 18

[Released: 03 OCT 2011]

Questions?
Log on to the RadBlue Forum: **http://radblue.mywowbb.com/**

Release Notes

Release Summary

In this release, we added support for the Game Outcome extension, added Edit functionality to the `cabinet.setOperatingHours` command screen, added a new `download.setScript` command to the Send Command layout, and added additional fields for entering the gat.doVerification command's Salt value and viewing the 64-base conversion. In addition, we made enhancements to the Tester Toolkit's Custom Scripting module and corrected several minor issues.

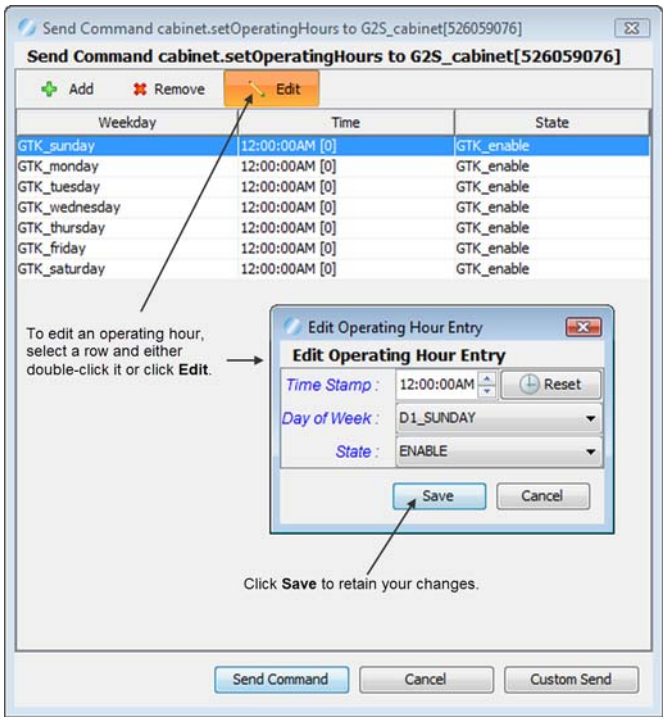
For more information on the features and modifications discussed in this document, see the RGS User Guide.

Installation Modifications

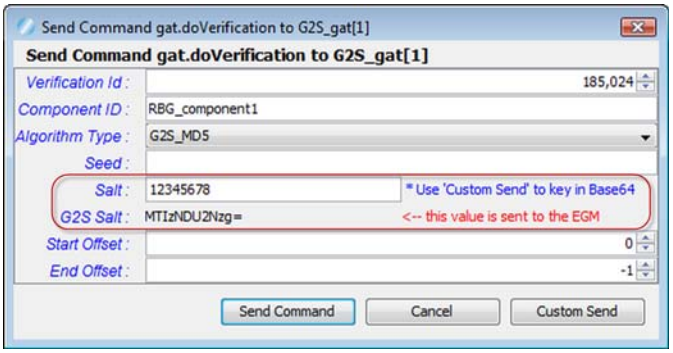
- Desktop options, including the Transcript and Log Messages Displayed values, are now saved when the the tool is uninstalled.

Functional Modifications

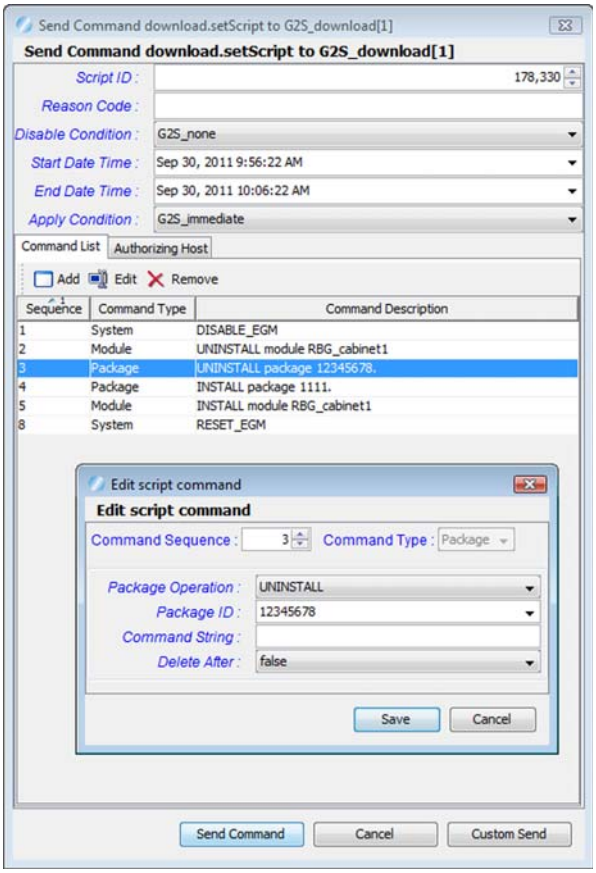
- You can now edit operating hours for the **Send Command** > **cabinet** > **setOperatingHours**. Previously, only **Add** and **Remove** functions were available.



- RGS now supports the Game Outcome extension to the G2S protocol. Two new commands have been added to the Send Command layout for Game Outcome: `gamePlay.getOutcomeLog` and `gamePlay.getOutcomeLogStatus`.
- RGS has been updated to allow you to specify the Salt value in the `gat.doVerification` command when sent from the Send Command layout. Enter the Salt value you want to send in the command. This value is automatically converted to the (64-base) G2S Salt value that is sent to the EGM and displayed below it.



- A new `download.setScript` command has been added to the Send Command layout.



This new command option lets you configure and send a series of commands related to package and module installation. In addition, you can include system actions such as enabling and disabling the EGM.

Simply click **Add** to add an action to the Command List. Select the Command Type (Package, Module or System) and *when* in the command series you want the command to be sent (Command Sequence).

Once the command list is complete, click **Send Command**. You can view all sent commands through the Transcript.

Engine Modifications

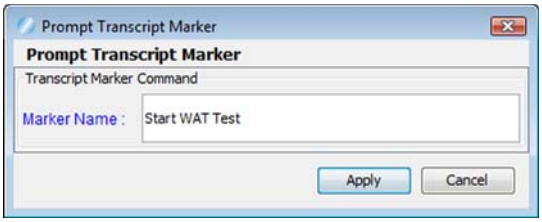
- An issue in which an incorrect status for an SCEP certificate request was displayed on the screen (for example, a failed request showing a successful completion) has been corrected.
- An issue in which RGS was ignoring the **Set bonusActive attribute to "true"** option (**Tools** > **Configure** > **Engine Options** > **Message** > **Bonus**) when point-to-point messaging was used has been corrected. RGS now honors this option value for both point-to-point and multicast messaging.
- An issue in which the RGS generated an error and did not send the corresponding ACK message for `commConfig.commChangeStatus`, `bonus.commitBonus` and `bonus.cancelBonusAward` has been corrected.
- An issue in which the Custom Scripting editor was not saving the Wait for Command verb's command name correctly has been corrected. The Custom Scripting editor now saves the entire command name.
- An issue in which errors were generated when the `joinMcast`, `leaveMcast` and `mcastKeyUpdate` commands were sent from the Send Command layout (with automated multicast disabled) has been corrected.

User Interface Modifications

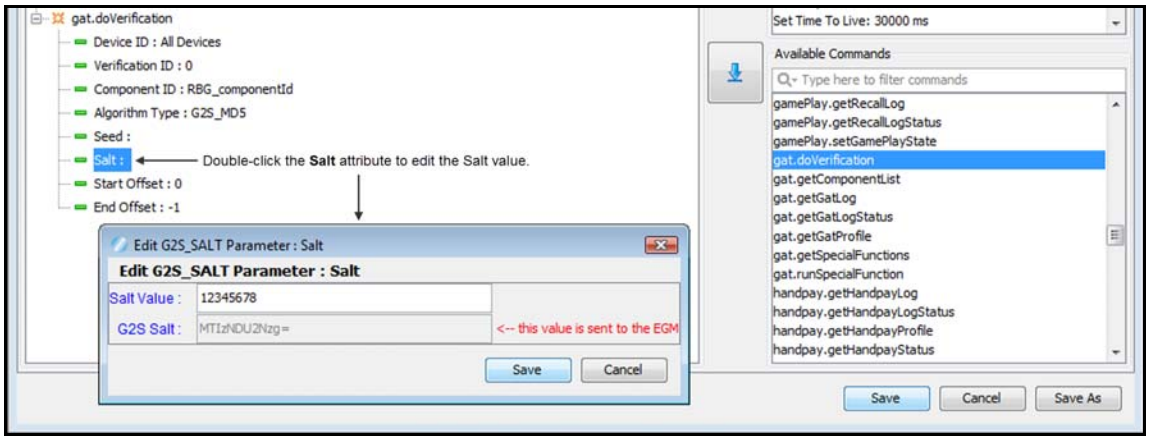
- For the **download.setScript for Module**, **download.setScript for Package** and **optionConfig.setOptionChange** screens on the Send Command layout, the following fields are now disabled when the **Apply Condition** value is **G2S_disable**:
  - Disable Condition
  - Start Date Time
  - End Date Time

Tester Toolkit Modifications

- A **Transcript Marker** verb has been added to Custom Scripting. Transcript Markers let you insert a marker record into the transcript from your custom script. If you are using the new REST API for RGS, you can request all transcript records between two markers.

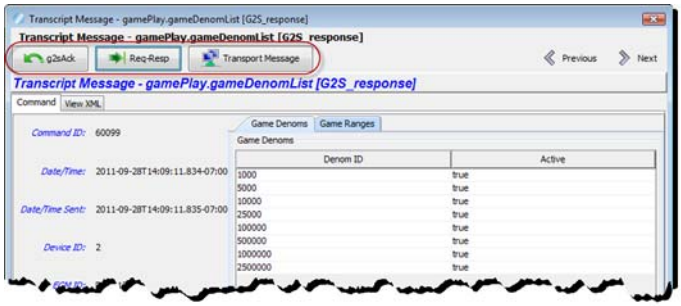


- An Custom Scripting issue in which commands that were duplicated were tied together (if you made a change to one, all duplicates would also be changed) has been corrected. Now, when you duplicate a command in a script (by highlighting a command and clicking **Duplicate**), the duplicated command is completely separate from the original command.
- The Custom Scripting verb, **Wait for Command,** now displays EGM requests *only*.
- RGS has been updated to allow you to specify the Salt value in the `gat.doVerification` command when sent as part of a custom script. This value is automatically converted to the (64-base) G2S Salt value that is sent to the EGM and displayed below it.

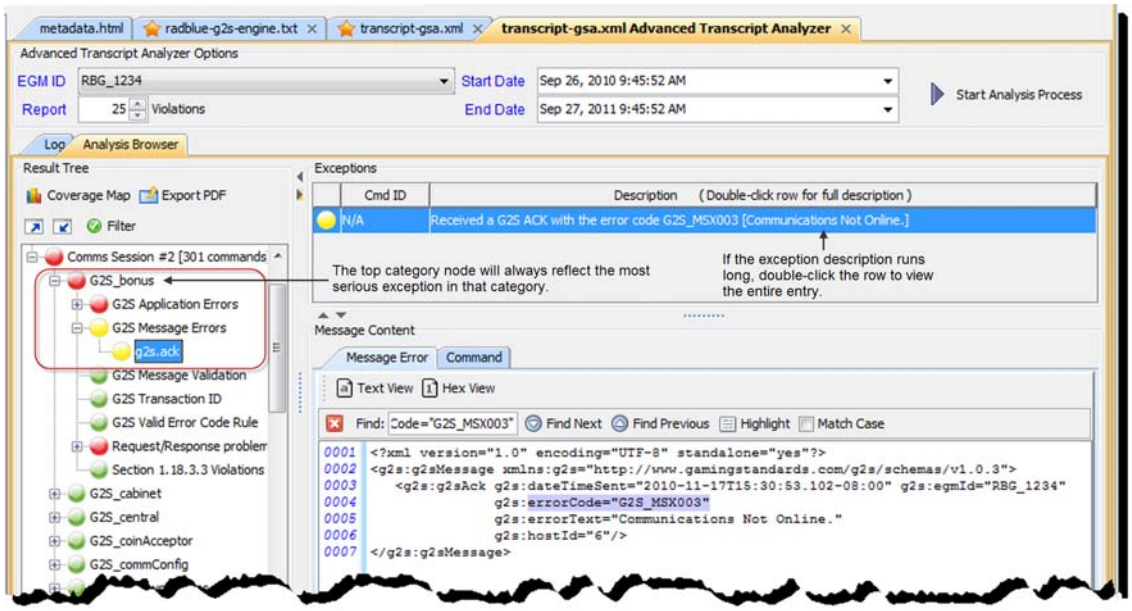


Transcript Modifications

- The message details screen in the Message Transcript (accessed by double-clicking any message in the Transcript display) now lets you link to the `g2sAck` message, corresponding request-response pair command or to the associated SOAP message for the selected command.



- The top category node on the Advanced Transcript Analyzer now always reflects the most serious exception (warning or error) found in its subcategories. For example, if there are two warnings (yellow) and one error (red), the top node would indicate an error by displaying a red ball.



- When an exception is selected in the Advanced Transcript Analyzer, if the exception description is truncated, you can now view the entire entry by double-clicking the row.
- Previously, if the information analyzed by the Advanced Transcript Analyzer did not have a comms session, the Coverage Map would not be generated. This caused an error when the Coverage Map button was pressed. This issue has been corrected.
- An issue in which the Advanced Transcript Analyzer ignored *sessionRetry* attribute values has been corrected.

Advanced Transcript Analyzer Usage Note

Transcript messages must be saved in the tool's database in order to use the Advanced Transcript Analyzer. To do this, go to **Tools** > **Configure** > **Engine Options** > **Databases**, and select **Save Transcript Messages to Database**. Note that you can also define the number of messages to save. By default, this option is set to 5,000; however, for tests that generate a large number of messages, this field should be set to a higher number.

Known Message Transcript Issue

The **Previous** and **Next** buttons on the command details screen are disabled. This issue will be corrected in release 19.

RadBlue G2S Scope
Version 17

[Released: 01 AUG 2011]

Questions?
Log on to the RadBlue Forum: **http://radblue.mywowbb.com/**

Release Notes

Release Summary

In this release, we've made usability improvements to the configuration option screen and `setOperatingHours` command screen. In addition, the allowable transcript record size has been expanded and a new transcript database option has been added to the Engine Options screen to give you more control over tool performance.

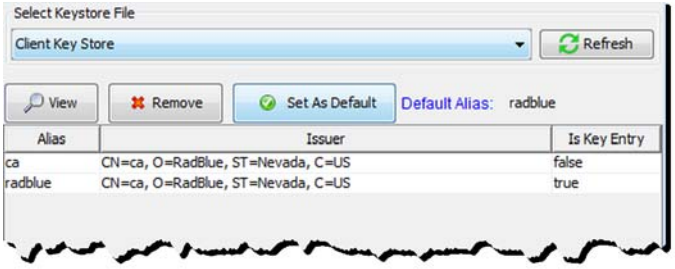
For more information on the features and modifications discussed in this document, see the RGS User Guide.

Installation Modifications

- If you have a previous version of the tool installed in the target directory, you are now prompted to remove it before installing the new version. Click **Next** to uninstall the previous version before continuing with the new installation, or click **Back** to install the new version in a different directory.

Functional Modifications

- A new **Keystore** tab on the Security Options configuration screen lets you select the type of keystore file you want to use and manage installed keystore files.

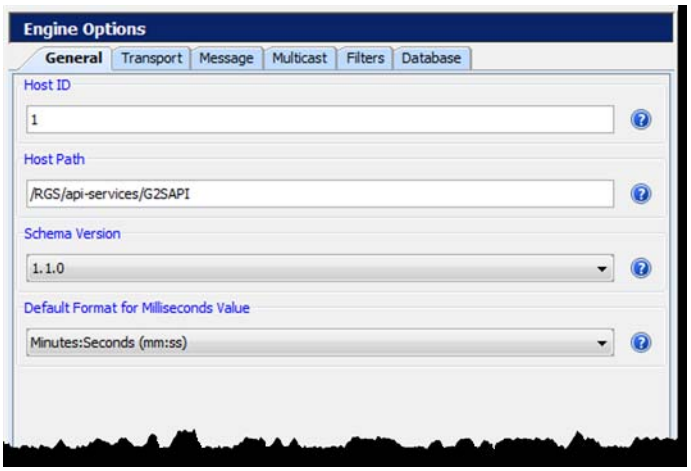


Engine Modifications

- Issues with RGS interacting with the Ubuntu operating system have been corrected.

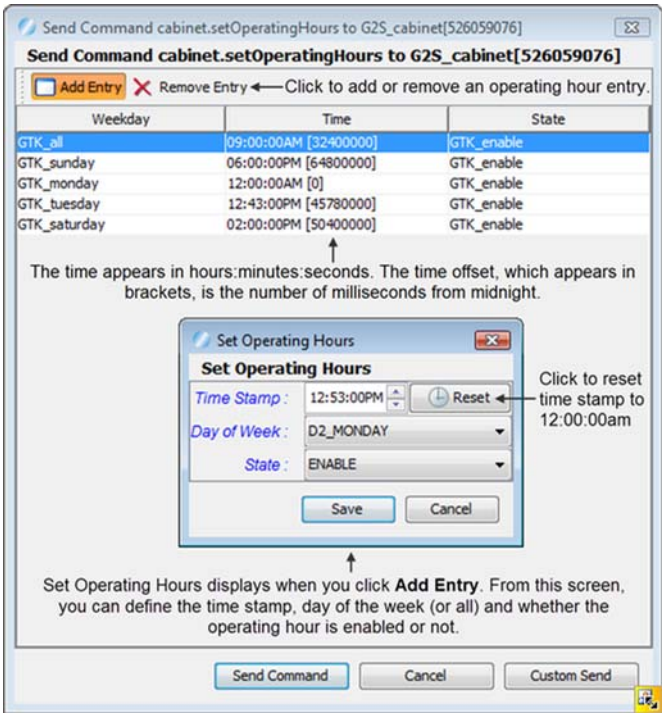
User Interface Modifications

- Options on the configuration screens (**Tools** > **Configure**) have been re-organized into tabs for improved usability. For example:



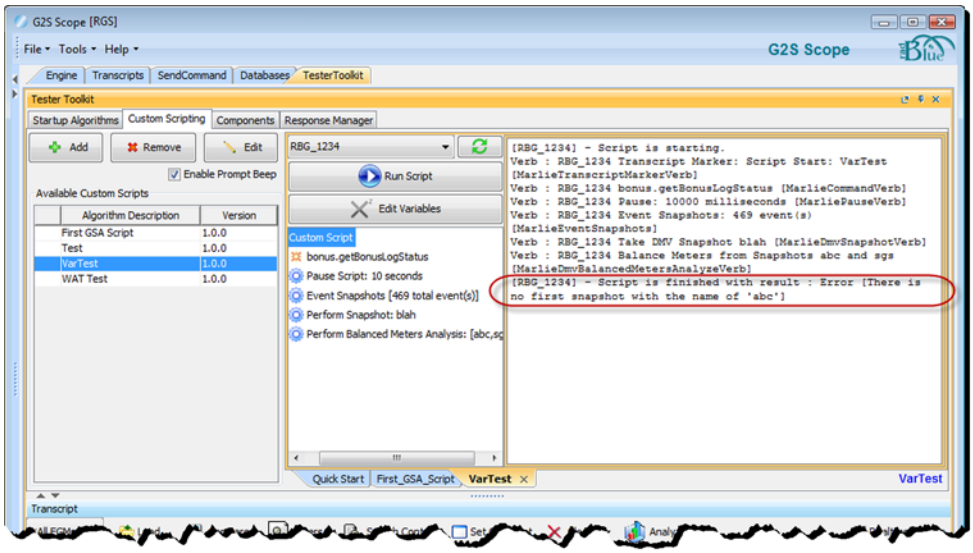
- The **Derby Port** configuration option has been removed from the Engine Options screen because it is no longer applicable.
- The `cabinet.setOperatingHours` command (**Send Command** > **G2S_cabinet** > **setOperatingHours**) has been improved to make configuring this command easier. You can now send an empty operating hours list, and changes are saved only when the command is sent. Screen changes include:
  - A new **Reset** button that lets you reset the time value when adding a new operating hour.
  - The addition of a **Time** field to the operating hours entry list.

- You can now select multiple entries using CTRL+click and SHIFT+click.

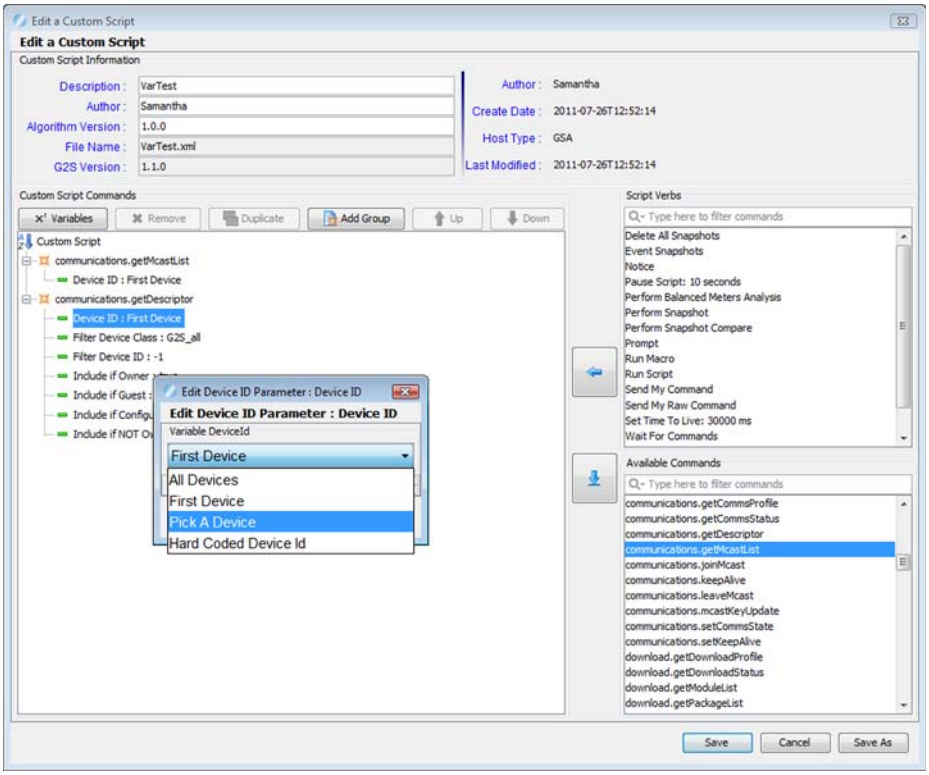


Tester Toolkit Modifications

- When using the Custom Scripting verb **Perform Balanced Meters Analysis**, an error displays in the script content area when the verb executes if one (or both) of the defined snapshots does not exist. For example:



- You can now edit multicast IDs for multicast commands in Custom Scripting.



- The following commands have been added to Custom Scripting:

```
bonus.bonusActivity
bonus.setBonusLockOut
bonus.setBonusMessage
bonus.setGameDelay
cabinet.resetProcessor
cabinet.setCabinetLockOut
communications.joinMcast
communications.leaveMcast
communications.mcastKeyUpdate
download.getPackageStatus
download.getScriptStatus
download.readPackageContents
gat.doVerification
gat.runSpecialFunction
player.setCountdownOverride
player.setPlayerMessage
progressive.setProgressiveLockOut
voucher.setVoucherLockOut
wat.setWatCashOut
wat.setWatLockOut
```

Transcript Modifications

- The size limit of each Message transcript record has been increased to **4MB**. Messages larger than this limit are not stored in the transcript database and an informational message displays in the debug log.
- The size limit of each SOAP transcript record has been increased to **4MB**. Messages larger than this limit are not stored in the transcript database and an informational message displays in the debug log.
- The size limit of each Multicast transcript record has been increased to **4MB**. Messages larger than this limit are not stored in the transcript database and an informational message displays in the debug log.
- A new **Database** tab on the Engine Options screen (**Tools** > **Configure**) lets you define database settings as they affect transcripts, including a new **Save Transcript Messages to Database** option.

  Select this option to save the defined number of messages in the Message, SOAP and Multicast transcripts to the transcript database. Transcript records only need to be saved in the database if you want them to be persisted between runs of the tool or after you clear the transcript display.

  Saving a large number of transcript messages will impact performance. By default, this option is disabled.
- An issue in which changes to the Message transcript's **Event Filter** option were not reflected on the Event Filter screen when it was closed and re-opened has been corrected.
- The **Advanced Transcript Analysis Report** now reflects any filtering that is applied through the Advanced Transcript Analyzer.

RadBlue G2S Scope
Version 16

[Released: 06 JUN 2011]

Questions?
Log on to the RadBlue Forum: **http://radblue.mywowbb.com/**

Release Notes

Release Summary

In release 16, we re-organized the menu bar options, added schema support for G2S 1.1.0 and added variable reconciliation to Custom Scripting. In the Advanced Transcript Analyzer, we've added an option to export data to a report as well as a Filter option that lets you choose the data you display.

For more information on the features and modifications discussed in this document, see the RGS User Guide.

Installation Modifications

- When RGS is uninstalled, a backup folder is created in the RGS directory that saves the installation's security and configuration parameters. When a subsequent RGS version is installed, the installer uses the backed up data to populate security and configuration settings, so you do not need to re-key the information into the new installation.

  The backup folder is located in the RGS installation directory. The following files are saved in the backup folder:

  - All Java Keystore Files (JKS)
  - scep_config.xml
  - security_manager.xml
  - Schema Version
  - Host ID
  - Host Path
  - SOAP Port
  - SSL Port
  - Derby Port

Engine Modifications

- RGS now has schema support for G2S version 1.1.0.
- To address a validation error in the standard startup algorithm, an incorrect *timeToLive* attribute has been changed to **time-to-live**.
- An issue in which the *override* value in the `getCountdownOverride` command was not being updated the value defined in the id-database.xml file has been corrected.

- UTF-16 characters are now properly supported.
- When an `issueVoucher` command is received, RGS now always sends an `issueVoucherAck` response command rather than an application-specific error.

User Interface Modifications

- An issue in which an error was generated when you selected **Save** on a read-only screen, has been corrected. Read-only screens now display an **OK** button only to close the screen.
- The RGS menu bar options have been re-grouped under the following headings:
  - **File** - New Desktop, Open Desktop, Save Desktop, Add Layout, Remove Layout, Export Debug, Exit
  - **Tools** - Configure, Toggle Floor Tabs
  - **Help** - RGS Help, Contact Us, About G2S Scope

Tester Toolkit Modifications

- When you run a custom script (**Tester Toolkit** > **Custom Scripting**), you are now prompted to resolve any unresolved device and command variables. For each unresolved variable, you are prompted to select a value. Once all variables are resolved, the script is run.

Transcript Modifications

- You can now generate a PDF of Advanced Transcript Analyzer data. Simply click **Export PDF** under the Results Tree, and select the export location and file name. The **Advanced Transcript Analysis Report** provides you with a summary of all warnings and errors that can be easily shared with others. If there are no warning or errors in the currently loaded debug log, this option is disabled.
- A **Filter** option has been added to the Advanced Transcript Analyzer. From this option, you can customize the displayed data - choose to display only warnings and errors, or display only select classes.

RadBlue G2S Scope
Version 15

[Released: 04 APR 2011]

Questions?
Log on to the RadBlue Forum: **http://radblue.mywowbb.com/**

Release Notes

Release Summary

In this release, we added schema validation management, support for the storage class, a new Time To Live option and support for third-party events. In the optional Tester Toolkit module, we improved Custom Scripting with multiple new script verbs, support for device variables and interface enhancements to make using the new features easy.

For more information on the features and modifications discussed in this document, see the RGS User Guide.

Functional Modifications

- RGS now supports the **storage class GS2 extension**.
  - The `getStorageInfo` command has been added to the Send Command under the `GTK_storage` device.
  - The `storage.getStorageInfo` command has been added to the list of available commands in Custom Scripting, on the Tester Toolkit layout.
- You can now **manage schema validation** in the RGS. By default, the RGS validates all received G2S commands. However, there may be times, especially during the testing process, that you want the tool to reject or accept specific commands - whether they are valid or not.

  Schema validation management is useful when you want to ignore specific commands, but continue with testing, or when you want to perform regression testing.

  To modify how specific commands are handled, you must first save the sample G2S validation manager XML file, which resides in the tool's installation directory, as a new **g2s-validation-manager.xml** file. This allows the file to be saved when the tool is uninstalled. Then, simply add the commands you want RST to accept or reject without validation.
- A new **Time To Live** option on the Send Command layout lets you change the time-out setting for the command(s) you are sending. Time to Live is the amount of time, in minutes and seconds, that the recipient has to process the command. If the recipient doesn't process the message within the specified time, it should return a G2S_APX011 (Time to Live Expired) error to RGS. The Time To Live attribute is in every G2S command, so this option can be used with all commands.

- You can now **subscribe to custom and third-party** events by editing the event set XML file (**g2s-event-set-vendor-sample.xml**), located in the [**installation directory**] > **schemas** > **g2s** > [**schema**] directory. Before you modify the file, you must remove the "-sample" from the file name. This ensures that your file will not be removed if you uninstall RGS.

  Note that RGS does not validate custom events.

  Sample g2s-event-set-vendor.xml

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<events>
 <event-group device-class="G2S_cabinet">
  <event code="RBG_CBE001" text="The first Cabinet event." />
  <event code="RBG_CBE002" text="The second Cabinet event." />
 </event-group>
```

- `</events>`

Engine Modifications

- RGS now logs an error when it receives semantically incorrect MTP URLs.
- RGS now has improved handling of the *deviceReset* and *deviceChange* attributes in the `commsOnLine` command. If either attribute is set to **true**, RGS requests a descriptor list for the communications device to update the EGM's data model.
- Previously, French character sets were confusing in RGS. All is well now.

User Interface Modifications

- For RGS licenses *without* the Tester Toolkit, **event subscriptions** and **meters subscriptions** have been moved from the Configuration screen to the Tester Toolkit layout.
- An issue in which the **Approve All Certificates** and **Enable OCSP** option settings (Configure > Security Options) were not being set correctly has been corrected.

Tester Toolkit Modifications

- A Custom Scripting issue has been resolved in which a **Failed to Find Event Subscription Config** error was generated by the `setEventSub` command.
- The following **script verbs** have been added to Custom Scripting:
  - Event Snapshot
  - Perform Snapshot Compare
  - Run Script
  - Send My Command
  - Send Raw Command
  - Set Time To Live
  - Wait For Commands
  - Wait For Events
  - Wait for Compares to Complete
- The **Perform Snapshot** script verb in Custom Scripting has been updated.
- The **Device Variables** feature has been added to the Tester Toolkit.
  - **Global Device Variable Templates**

    Variable templates (**Tester Toolkit** > **Components** > **Global Variables**) let you configure templates for device variables that you can then use in custom scripts. When you select a variable template while building a script, RGS creates a local copy of the variable that is specific to that script.

    There are three standard variables:

    All Devices - Command is sent to all devices in the device class.

    First Device - Command is sent only to the first device in the device class.

    Pick a Device - Lets you select a device when the custom script is run.

    In addition, you can choose to always use a specific device ID.

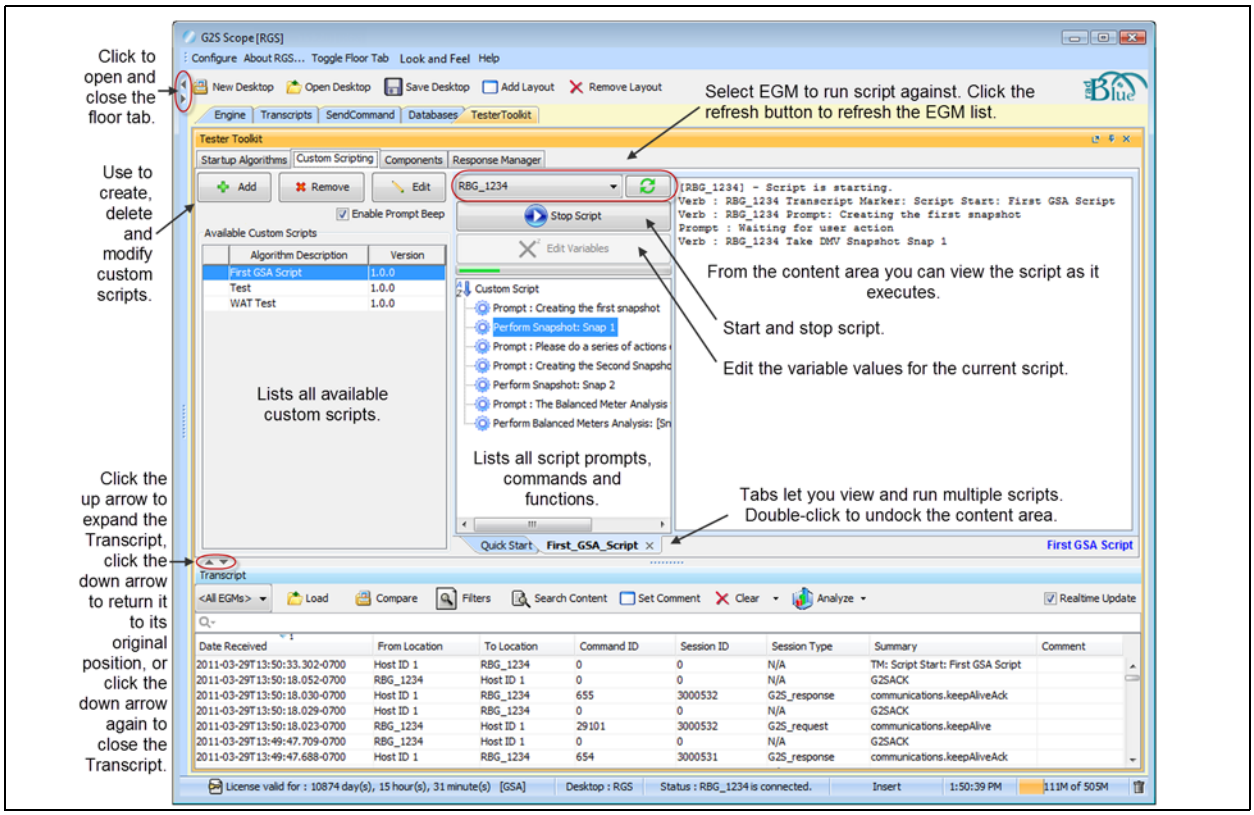
  - **Script-Specific Device Variables**

    Device Variables are script-specific variables that let you define the device ID(s) you want a command sent to - for example, the first device in the list or a specific, hard coded device ID.

    Each command in a custom script (**Tester Toolkit** > **Custom Scripting** > **Add or Edit a Script**) has a configurable device ID field. You can choose a standard variable or use a variable that you created through the Global Variables option or the script's local Variables option.

    When you run a custom script, you are prompted to reconcile any unresolved device variables (for example, if you select the Pick a Device option, you would be prompted to choose a device at that time). In addition, you can view and edit all script variables through the Edit Variables option without having to re-enter the script.

Custom Scripting Interface Overview



Transcript Modifications

- Transcript markers and automated comments have been added to the RGS Transcript. These features can help you quickly find specific types of information.

  Automated comments are descriptions inserted into the Comments column of the Transcript when specific commands are sent from RGS. Commands that generate automated comments include:

  - startup commands (Startup Command)
  - Multicast Transport Protocol (MTP) Service commands (MTP Service)
  - commands sent from the Tester Toolkit Custom Scripting feature (Custom Script: [*script name*]
  - commands sent through the Send Command (Via Send Panel)
- Transcript markers are Transcript entries that give you an exact date and time for a specific action. If you are using the optional Tester Toolkit module, Transcript markers are generated when a custom script is started and ended.
- The Advanced Transcript Analyzer has been updated with multiple (*lots o'*) usability improvements, rule refinements and code enhancements. You'll find it works much better.

RadBlue G2S Scope
Version 14

[Released: 07 FEB 2011]

Questions?
Log on to the RadBlue Forum: **http://radblue.mywowbb.com/**

Release Notes

Release Summary

In this release, we redesigned and made improvements to the Tester Toolkit, added support for operating hours, and made improvements to the `setOptionChange` screen.

For more information on the features and modifications discussed in this document, see the RGS User Guide.

Functional Modifications

- A new **getEventSub with Wildcard** command has been added to the eventHandler class on the Send Command.
- RGS now supports operating hours. The following commands have been added to the cabinet device class on the Send Command:
  - `getOperatingHours`
  - `setOperatingHours`
- Several modifications have been made to the **setOptionChange** interface (**Send Command** > **optionConfig**):
  - New Item entries can be now added by selecting a table entry from the Configuration Options list and clicking **Add Item**. You can also access the Add option by selecting a table entry and right-clicking.
  - You can remove an item from the Configuration Options list by selecting an item and clicking **Remove Item**. You can also access the Remove option by selecting an item and right-clicking. Once an item is removed, the item is not removed immediately, but rather marked for deletion.

    Marked items will not be included when the `setOptionChange` command is sent. Items marked for deletion are highlighted. Click **Cancel** to undo deletion changes.

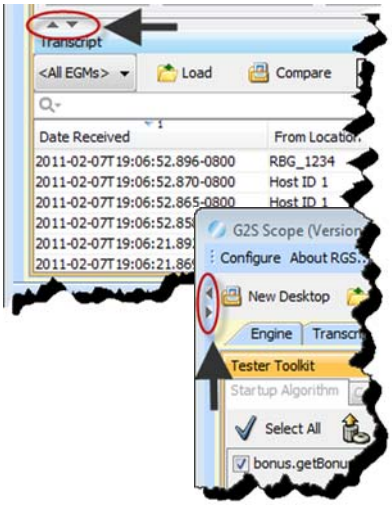
  Note that you can send a `getOptionList` command after the `setOptionChange` command to verify that the option list values were updated.

Engine Modifications

- RGS no longer auto-creates meter devices when processing the descriptor list.
- A null pointer exception error that resulted in new option groups being added to the wrong device class has been corrected.

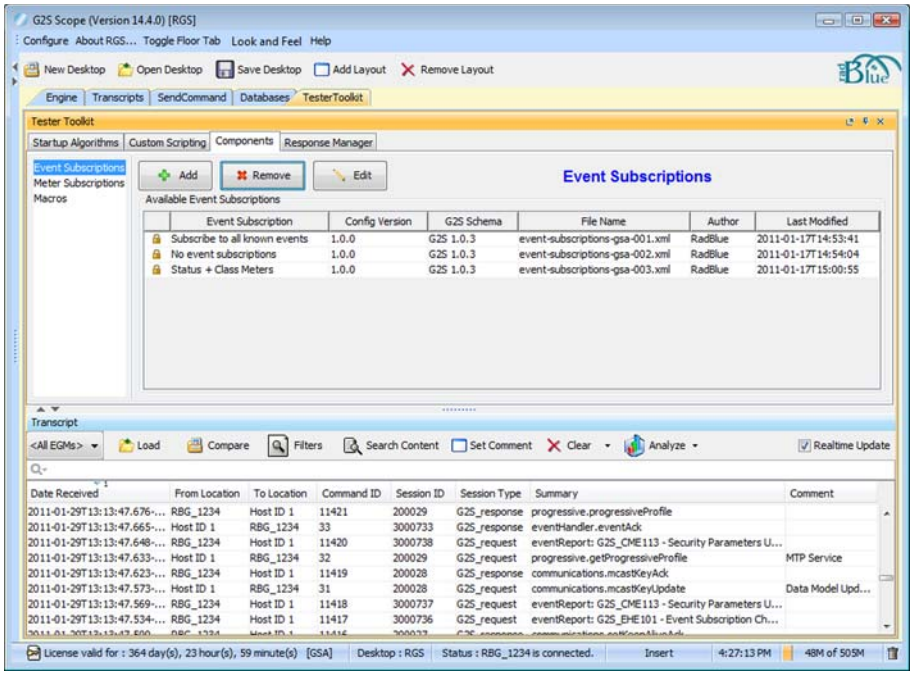
User Interface Modifications

- For RGS installations running the optional Custom Configuration module, **event subscription** and **meter subscription** configuration options have been moved to the new **Components** tab (located on the Custom Configuration layout).
- Toggle arrows have been added to the upper left side of the Transcript that let you resize the Transcript object as needed. Click the up arrow to expand the Transcript, click the down arrow to return it to its original position, or click the down arrow again to close the Transcript.
- Toggle arrows have been added to the upper left side of the application screen, allowing you to easily open and close the floor tab as needed.



Tester Toolkit Modifications

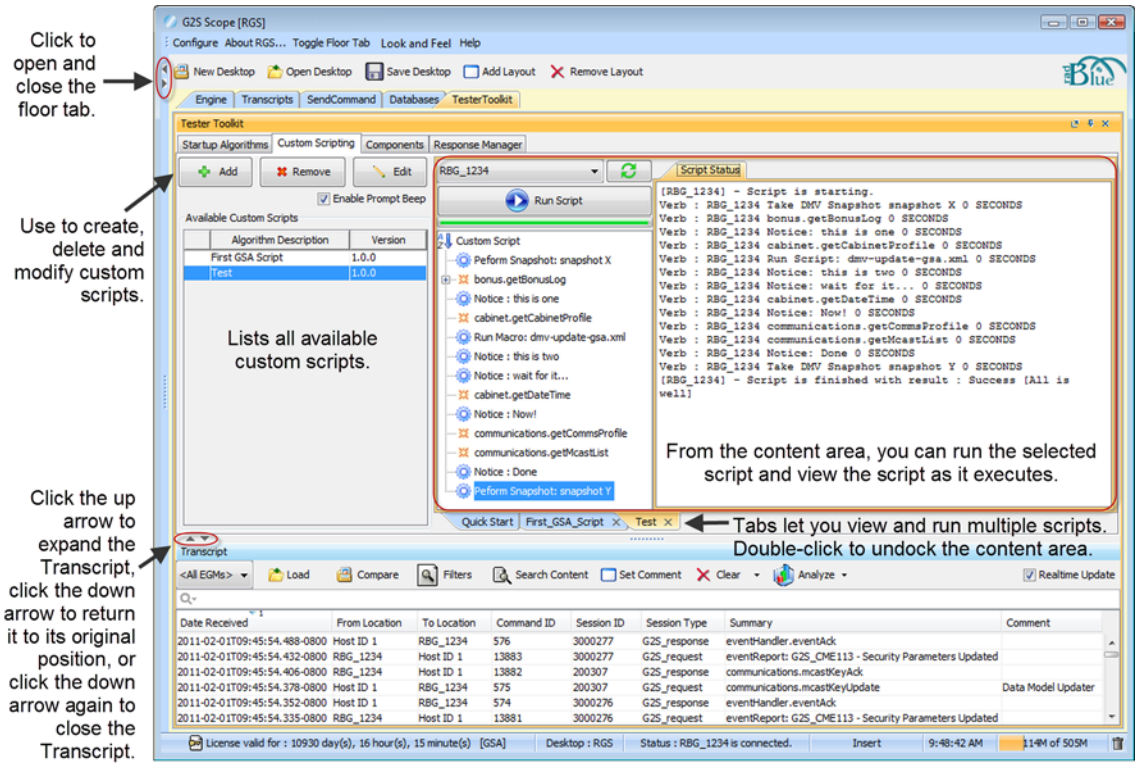
- A new **Components** tab, located on the Tester Toolkit layout, lets you configure event subscriptions, meter subscriptions and macros. Macros are multi-command operations that can be run inside a custom script.



  - **Event Subscriptions** let you create event subscription files that can be used in the startup algorithm or custom scripts. Changes to event subscription files dynamically update anywhere they are used. For example, if you insert an event subscription file into a custom script (through the `setEventSub` command), and then make changes to it, the script is automatically updated.
  - **Meter Subscriptions** let you define which EGM meters (currency, device, game denomination and wager) you want to receive and the reporting interval (end-of-day and periodic). If you choose periodic reporting, you can configure the interval.

    You can select whether to include meter definitions in meter reports. Once you configure a meter subscription file, it is available for use in custom scripting.
  - **Macros** let you create pre-configured, multi-command host operation scripts (for example, the downloading and installation of a package). Each macro that you create automatically becomes available in Custom Scripting.

- **Custom Scripting** has been redesigned to make it even easier to configure and run custom scripts. You can now view and run scripts from the same screen, view the progress of scripts as they run, and run multiple scripts at once. In addition, we've added a handy drag-and-drop function to the script configuration screen, and made adding pre-configured event and meter subscriptions easy.



Transcript Modifications

Message Transcript

- Transcript records now display in ascending order (newest to oldest) by default. You can see records in descending order by clicking the Date Received column heading.
- The Transcript Summary field now displays the error code for `g2sAck.error` messages.

SOAP Transcript

- Additional detail is now available on the SOAP Transcript detail view, which you can access by double-clicking any record in the transcript. You can now view the XML message content without the SOAP wrapper.