

SELENIUM SMS

Release History

www.seleniumsoftware.com

Important Notice

This document contains proprietary information that is protected by copyright. All rights are reserved. No part of this document may be photocopied, reproduced, or translated into another language without the prior written consent of Martin Woolley. The information in this document is subject to change without notice.

Martin Woolley makes no warranty of any kind with regard to this printed material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

Martin Woolley shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

Brand or product names are trademarks or registered trademarks of their respective companies or organizations.

Copyright Notice: © 2006 Martin Woolley, 124 Nork Way, Banstead, Surrey, England SM7 1HP. All rights reserved. This document and Martin Woolley software products are protected by United Kingdom copyright laws and international treaty provisions.

Introduction

This document summarises the changes made at each significant, generally available release of the Selenium SMS text messaging server. Each such release is listed here in reverse chronological order.

Release 2.8.5

Selenium SMS 2.8.5 introduces one new feature:

1. HTTP can now also be used for receiving MO messages from the network. The new HTTP MO SMS Connector is highly configurable, allowing HTTP parameters to be mapped across to a suitable Selenium SMS API attribute. Attributes for which there is no corresponding HTTP parameter may have default values specified for them.

Release 2.8.0

Selenium SMS 2.8.0 includes the following new features and capabilities:

1. Custom Logic Containers introduced. Also known as “CLCs”, this feature allows you to implement your own, custom logic extensions *within* Selenium SMS using Javascript. With CLC scripts you can perform a wide range of tasks, including additional API validation, over-riding input values and performing advanced routing tasks such as route cloning and alternate route selection. See the section on CLCs in the Development Guide for further details.
2. New Operation methods *public void setMsgText(String msg)* and *public String getMsgText()* introduced as convenience methods for use from javascript CLCs rather than requiring byte arrays to be handled.
3. New API field *secondary_operator* introduced. This field is intended to allow you to signify the network operator that the aggregator Selenium SMS is connected to, will route your message by. Using this information, a CLC script can then modify or augment the operation object to provide data needed specifically by that operator.

Release 2.7.5

Selenium SMS 2.7.5 includes the following new features and capabilities:

1. SMPP Transceiver sessions are now supported. These are configured by specifying a SMS connector type of SMPPTX in the system configuration.
2. SMPP mobile originated messages may now include vendor specific optional parameters. These get translated to Selenium SMS “special parameters” and are accessible via the various implementations of the Selenium SMS API.

Release 2.7.0

Selenium SMS 2.7.0 includes the following new features and capabilities:

3. Selenium CP now supports the management of Selenium SMPP Access as well as Selenium SMS.

Release 2.6.5

Selenium SMS 2.6.5 includes the following new features and capabilities:

1. A HTTP TX SMS Connector allows SMS messages to be submitted to SMS service providers using HTTP. The connector is highly configurable and allows Selenium SMS API variables to be mapped to HTTP parameters easily, using the Selenium SMS XML based parameter substitution expressions.
2. A new attribute, “tariff” has been added to the SUBMIT API operation.

Release 2.6.0

Selenium SMS 2.6.0 includes the following new features and capabilities:

3. Support for sending messages via the Esendex network using their SOAP interface
4. Network latency statistics page introduced to Selenium CP. Provides information about the range of response times experienced over each TX connector.

Release 2.5.2

Selenium SMS 2.5.2 includes the following new features and capabilities:

1. Emails sent to the POP3_MT content connector can now contain the SMS message and destination addresses all within the email message body. This is a response to the reported issue that some email clients restrict the number of characters that can be entered into the Subject field of an email.
2. All error messages that can appear in the POP3 summary report are now customisable through the Selenium SMS properties file.

Release 2.5.0

Selenium SMS 2.5.0 includes the following new features and capabilities:

3. Selenium SMPP Access support
 - Selenium SMPP Access is a new product from Martin Woolley. This product allows service providers (and other message platform users) to add an SMPP server interface to their existing messaging platform. Selenium SMS 2.5.0 is compatible with Selenium SMPP Access 1.0.0 “out of the box” meaning that Selenium SMS can now be used with SMPP MT and MO content connectors provided Selenium SMPP Access has also been installed. Selenium SMPP Access is subject to separate licensing to Selenium SMS. Contact Martin Woolley at seleniuminfo@seleniumsoftware.com or visit <http://www.seleniumsoftware.com> for further information about Selenium SMPP Access.
4. Architecture
 - It is now possible to use multiple content connector types concurrently (e.g. HTTP, POP3 and JDBC all at the same time). Previously a single MO content connector and a single MT content connector had to be selected.
5. Routing

- In previous releases, a “route” was a named set of SMSC connections and used only for MT messages. In this release, a distinction is now made between MT (mobile terminated) routes, MO (mobile originated) routes and DR (delivery receipt) routes.
 - Configuration rules must now be specified, describing the conditions under which:
 - i. A particular MT route should be used for sending a given MT message
 - ii. A particular content connector type should be used to deliver a given MO message
 - iii. A particular content connector type should be used to deliver a give delivery receipt
 - Routing rules take the form of a series of regular expressions, default actions and routes.
 - MT Messages may still be addressed directly to an explicitly named route. Alternatively they may be addressed to the virtual route “AUTO” and the correct route will be derived for the message by evaluating the MT routing rules.
6. More efficient queue size configuration
- In previous releases, queue sizes were constant across all MT routes/queues. Now, queue sizes can be specified on an individual route basis, allowing for more efficient memory utilisation.
7. POP3 Summary Report - text is now configurable
- The summary report sent to users of the POP3 MT content connector is now configurable with respect to the various string literals that appear in the report.
8. Configuration property name change.
- `ALERT_SENDER_ADDRESS` is now called `EMAIL_SENDER_ADDRESS`

Release 2.4.0

Selenium SMS 2.4.0 introduces Accounts and associated functionality to Selenium SMS. Details are as follows:

1. Accounts
- *Account Profiles*: Accounts may be defined in either an external database such as MySQL or in the Selenium SMS embedded Accounts database. In either case, authentication, messaging credit level (quota), routing and other information are all held for each account in the Accounts database.
 - *Authentication*: The system may be run with Authentication enabled or disabled. If enabled, then authentication is required to use the HTTP or POP3 MT content connectors and accounts are said to be in use (including for JDBC_MT).
 - *Authorisation*: The system may be run with Authorisation enabled or disabled. If enabled, then the account from which an MT message is submitted, must be authorised to submit using the given content connector type.
 - *Accounting*: The system may be run with Accounting enabled or disabled. If enabled, then account quota levels are debited whenever MT messages are handled. It is possible to choose a “debit event” type,

which controls the point in the message handling lifecycle, at which this debit operation occurs.

- *Automatic Refresh*: It is not necessary to restart Selenium SMS to activate new accounts or updates to existing accounts.
- *Periodic Persistence*: Account quota levels are periodically written back to the Accounts Database, at a frequency which is configurable. This allows a suitable balance between performance and data security to be obtained.
- *MO and Delivery Receipt Routing*: When Accounts are in use, it is necessary to determine which account to route MO messages and delivery receipts to. Each account can have a series of regular expressions associated with it, and these are used MO routing decisions. Delivery receipts are routed using a system maintained map.
- *Default source address*: Each account may have a default source address associated with it.

2. Configuration

- Configuration properties now reside in an embedded relational database. The original text .properties file may still be used to maintain configuration details, using a new import_config tool to import details into the embedded database. This database has been introduced to ease the provision of a configuration user interface in a later release.

3. Tools

- A number of command line tools have been provided in this release. They are described next:
 - i. *import_config*: This tool imports a Selenium SMS configuration properties file into the new, embedded configuration database.
 - ii. *ssms_db*: Using this tool, various commands are available from a menu, to allow you to view and update the embedded configuration database. If accounts are in use and stored in the embedded accounts database, they too can be manipulated with this tool.
 - iii. *sql_config*: This tool provides SQL access to the configuration database.
 - iv. *sql_accounts*: This tool provides SQL access to the embedded accounts database.

4. Miscellaneous

- It is now possible to specify the sender address used for any emails sent by Selenium SMS (POP3 summary reports or alerts)
- Alert emails now indicate alert level in subject line
- Console warning/severe messages now include the date/time of the event
- Formatting characters such as line breaks and tabs may now be optionally retained within text messages sent via the POP3 email connector.

Release 2.3.6

Selenium SMS 2.3.6 delivers a new version of Selenium MC, version 1.1.

Improvements to Selenium MC in this release include:

5. Support for long messages.
 - You may now submit messages that are longer than 160 characters. Selenium MC will automatically split your long message into an appropriate number of “concatenated” text messages, taking into account character set issues as it does so.
6. Full international character set support
 - Selenium SMS has always supported international character sets. Now this is extended to Selenium MC so that it is possible to submit messages containing any “Unicode” character. This includes characters sets such as Arabic, Hebrew, Cyrillic and Japanese, to list a few.
7. Automatic character code derivation.
 - When submitting messages, by default, Selenium MC will now examine the characters in your message and determine what the most appropriate character coding scheme is to use.
8. Default country code and address standardisation
 - You may now enter destination addresses in either national or international format. Each user has a default country code in their user profile and this is used when transforming addresses entered in national number format into the international format which is used for all addresses in the Selenium MC database.
9. Account status
 - User accounts can now be designated as being either Closed or Open. This setting works in conjunction with the new account activation and expiry dates.
10. Account activation and expiry dates
 - User accounts are now governed by an activation date and an expiry date.
11. Outbox privacy
 - It is now possible to control whether an individual user can see all messages in the outbox or only those that they originated. More granular control over what messages can be accessed by a given user can still be achieved using the Outbox extended access condition attribute of each user profile.
12. Menu item access control
 - Users may now be granted or denied access to each of the main menu items on an individual basis.
13. Account message quotas
 - Each user account may optionally be restricted to sending a limited number of messages per hour, day, week or month. This quota figure is automatically reset at an appropriate frequency.
14. Account message accounting
 - The number of messages sent by each user account is now calculated and stored for the lifetime of the account.

Release 2.3.5

1. JDBC MT and MO Content Connectors now support user defined database schemas.
2. Status indicators on Selenium CP main page now have three states: Green means “On and OK”, Red means “On and there’s a problem” and Grey means “Off”.

3. Selenium CP has been refactored as an MVC II application in preparation for further improvements to the product's runtime configuration management.
4. The API has been improved to make it easier to send concatenated messages by introducing the `long_message_reference`, `long_message_total_segments` and `long_message_sequence_num` attributes.

Release 2.3.0.1

1. Bugs fixed:
 - a. Bug 73: Delivery receipt update sometimes fails due to difference in scope of message ID uniqueness across different networks
 - b. Bug 74: Alert History Trawler used excessive CPU.

Release 2.3.0

1. HTTP MT Content Connector introduced.
2. Alert Manager introduced with email as the initial alert transport

Release 2.2.0

1. HTTP MO Content Connector introduced.
2. Java 1.5 now supported and required.
3. Selenium MC now fully supports Mozilla Firefox as well as Internet Explorer

Release 2.1.0

1. POP3 MT Connector now supports long messages. This means that emails with more than 160 characters in the message body/subject (according to configuration) can be sent over SMS to a mobile phone. Selenium SMS handles such messages by splitting them into multiple SMS text message "segments" and transmitting to mobile phones in such a way, that provided the recipient handset supports "message concatenation", the full message is assembled from the individual segments and displayed to the user as intended. Associated with this feature are operational parameters that allow control to be exercised over the maximum size of such messages and, as such, the maximum cost that might result from sending an email which results in more than one SMS text message.
2. POP3 MT Access Control List introduced. It is now possible to specify a list of email address from which emails will be accepted, for processing and transmitting as SMS text messages.
3. Audit Service introduced. It is now possible to configure Selenium SMS to write an entry to an Audit File whenever a message is submitted to the network, received from the network or in certain other circumstances such as attempts to use the POP3 service by persons not authorised (according to the Access Control List) to do so.
4. MySQL 5.0 is now supported for use with the JDBC (database) MT and MO Content Connectors and with the Selenium MC application.
5. Oracle 9.2 is now supported for use with the JDBC (database) MT and MO Content Connectors and with the Selenium MC application.
6. Oracle 10.2 is now supported for use with the JDBC (database) MT and MO Content Connectors and with the Selenium MC application.

Release 2.0.0

1. Content Connectors for sending (“MT”) and receiving (“MO”) SMS text messages via a MySQL 4.0 or 4.1 database introduced. These are known as the JDBC MT and JDBC MO Content Connectors respectively.
2. SMPP 3.3/3.4¹ SMS Connector allows Selenium SMS to connect to and interact with SMSCs or SMS Gateways that support the SMPP 3.4 protocol.
3. Selenium MC, the Messaging Console web application introduced.

¹ Some uses of Selenium SMS may require connections to an SMPP 3.4 rather than 3.3 service.