



IBM Software Group

IBM WebSphere Telecom Toolkit V7.0

Telecom Web services tools

Version 7.0 update



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Converted to video June 29, 2015

This presentation will provide an overview of the new features added to the IBM WebSphere® Telecom Toolkit version 7.0 with an emphasis on the Telecom Web services feature of the toolkit.

Goals

- Provide an update on the Telecom Web services feature in WebSphere Telecom Toolkit V7.0
- Understand the usage of the new, updated and enhanced tools available in the Telecom Web services feature



The goal of this presentation is to introduce the new and updated features in the telecom Web services feature of the WebSphere Telecom Toolkit version 7.0. These new and exciting features simplify various aspects of developing telecom client applications using telecom Web services and aid in the testing of applications by use of an integrated simulator. The simulator simulates a real telecommunication network for functional testing.

Agenda

- Installation update
- Call handling service support
- SIP/SIPS URI support
- Simulator configuration reload support
- Web 2.0 sample



The agenda for this presentation will start with an installation update on the 7.0 release of the WebSphere Telecom toolkit, followed by an overview of the new additions to the Telecom Web services feature, which include:

- Call Handling Parlay X Service support,
- SIP/SIPS URI support,
- enhanced Web services simulator configuration reload support, and
- a new Web 2.0 sample for terminal status, terminal location, and third party call control Parlay X services.

The presentation will provide a brief understanding on the functionality and usage of the tools.

Installation update

- Extension to Rational® Application Developer V7.5
- Available on Windows® and Linux® operating systems
- Requires WebSphere Application Server 7.0
- Installed as a feature of WebSphere Telecom Toolkit V7.0
- Getting Started guide includes installation and removal procedures



The 7.0 version of the Toolkit is built as an extension to Rational Application Developer version 7.5. It is available for Windows XP and Linux operating systems that Rational Application Developer 7.5 supports. The integrated simulator in the Telecom Web service feature requires the WebSphere Application Server 7.0. Rational Application Developer ships WebSphere Application Server version 7.0 as one of the server runtimes. The toolkit is installed with an InstallAnywhere installer. Before installing the Toolkit, make sure Rational Application Developer is closed. The getting started guide shipped with the toolkit covers the instructions to install and uninstall the toolkit for Windows and Linux operating systems.

Call handling service support

- Tools enhanced to provide Call Handling Parlay X 2.1 service support
 - ▶ Support to test Call Handling Samples added
 - ▶ New Call Handling Snippets added
 - ▶ Telecom Simulator Configuration enhanced to include Calling Handling configuration
 - ▶ Web services Client Simulator to support Calling Handling service management
 - New runtime simulator view added for Calling Handling runtime configuration



In the previous 6.2 release of the toolkit the call handling sample was added with no support for the Parlay X 2.1 calling handling service in the Web services Simulator. As a result, the sample could not be tested by the simulator unless a real call handling Web service implementation was available. In the 7.0 release the telecom Web services tools are extended to add full support for developing and testing applications using parlay X 2.1 call handling service. The list of new tools added to support the call handling service includes:

- A new set of snippets added for various Call Handling functions that include setting, retrieving, and clearing call handling rules at an user agent and a group level.
- A new editor page named “Rules” has been added to the simulator configuration editor page that allows configuration of call handling rules.
- A new runtime view named “Call Handling” has been added to the existing simulator runtime views to display the runtime configuration state.
- An extension to the Web services Client simulator has been added to introduce support for the Call Handling Web service.

Call handling service support

- Provides five sections
 - ▶ Accept List
 - ▶ Block List
 - ▶ Conditional Forward
 - ▶ Unconditional Forward
 - ▶ Voice Interaction

Call Handling Rules

Specify call handling rules for the selected device.

Devices

- ▶ Alan - Tel:+1-2225552000
- ▶ Betty - Tel:+1-2225552001
- ▶ Carl - Tel:+1-2225552002
- ▶ Debbie - Tel:+1-2225552003
- ▶ Edward - Tel:+1-3335553000
- ▶ Fred - Tel:+1-3335553001
- ▶ Ginny - Tel:+1-3335553002
- ▶ Hector - Tel:+1-3335553003
- ▶ Mary - Tel:+1-4445554000
- ▶ Nancy - Tel:+1-4445554001
- ▶ Oscar - Tel:+1-4445554002
- ▶ Peter - Tel:+1-4445554003

Accept List

Accept calls from the following addresses:

- ▶ Betty - Tel:+1-2225552001

Block List

Block calls from the following addresses:

- ▶ Carl - Tel:+1-2225552002

Conditional Forward

Set rules for a particular caller.

Caller	Forward	On Busy	On No Answer
▶ Carl - Tel:+1-2225...	▶ Fred - Tel:+1-3335...	▶ Mary - Tel:+1-44...	▶ Oscar - Tel:+1-44...

Unconditional Forward

Set rules for any incoming call.

Forward	On Busy	On No Answer
▶ Peter - Tel:+1-4445554003	▶ Mary - Tel:+1-4445554000	▶ Ginny - Tel:+1-3335553002

Voice Interaction

None
 Text-To-Speech Language
 VoiceXML URI
 Audio URI

Version 7.0 update

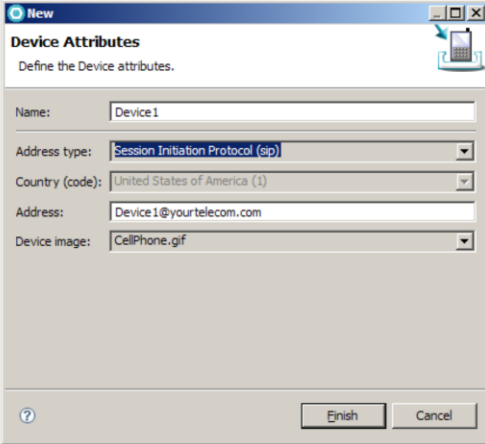
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The new “Rules” editor page added to the simulator configuration editor to configure call handling rules provides the following five sections:

- The **Accept List** is used to define the list of URIs that the user would like to accept calls from.
- The **Reject List** is used to define the list of URIs that the user would like to reject calls from.
- The **Conditional Forward** list is used to define the rules for particular incoming callers to forward, forward on busy, and forward on no answer upon the user’s receiving a call.
- The **Unconditional Forward** list is used to define the unconditional forwarding rules for a user on busy and on no answer.
- The **Voice Interaction** section is used to either play a Text-To-Speech message, run a VoiceXML application by way of URI specification, or play audio by way of audio URI specification.

SIP/SIPS URI support

- SIP and SIPS URI support added to new Device creation wizard
- New devices can be added to new or existing simulator configurations.
- All samples now support sip and sips in addition to tel: for addresses



The screenshot shows a 'New Device Attributes' dialog box. The title bar says 'New'. The main title is 'Device Attributes' with the subtitle 'Define the Device attributes.' Below this, there are several input fields: 'Name' with the value 'Device 1'; 'Address type' with a dropdown menu showing 'Session Initiation Protocol (sip)'; 'Country (code)' with a dropdown menu showing 'United States of America (1)'; 'Address' with the value 'Device 1@yourtelecom.com'; and 'Device image' with a dropdown menu showing 'CellPhone.gif'. At the bottom right, there are 'Finish' and 'Cancel' buttons. A small question mark icon is visible in the bottom left corner of the dialog box.

The 6.2 Telecom Web services feature supported only the tel URI. Telecom Web services server implementations such as ParlayX 2.1 Presence and Terminal location, implement sip URIs, since the request flows through a SIP back end. The support for sip and sips URIs has been added in 7.0 to develop, configure, and test ParlayX applications using sip and sips URIs. The intent is to assist application developers in writing code and testing their applications for SIP based ParlayX implementations.

The Device creation wizard available in the Web services Simulator Configuration wizard and in the Accounts page of Web services Simulator Configuration editor has been enhanced to support the sip and sips URI. The Address Type: and Address: drops downs in the wizard show options for adding a device with sip or a sips URI.

All the samples can be used to test sip and sips forms in addition to tel addresses. The simulator has full support for all three address types.

Simulator configuration reload support

- No server restart need to reload new or change simulator configuration
- Restart button only restarts the Web services Simulator enterprise application



In the 6.2 version of this Toolkit, using a new configuration file or reloading a changed configuration file meant restarting the WebSphere Application Server.

This process was time consuming as restarting the server could take a long time. In this release, the product has relaxed this requirement and the WebSphere Application Server on which the simulator runs need not be restarted. The Telecom Web services Simulator section in the WebSphere Application Server properties editor has been enhanced by adding a Restart button which restarts only the simulator enterprise application deployed on WebSphere Application Server. The figure in the slide shows the enhanced section. A simple click of the Restart button is now all that is needed for the simulator to pick up changes in the simulator configuration.

Web 2.0 sample

- Web 2.0 application using Dojo widgets
- Widgets include
 - ▶ Terminal Location
 - ▶ Terminal Status
 - ▶ Third Party Call

Telecom Web 2.0 Widget Sample

This page demonstrates the use of custom telecom widgets in a Web 2.0 application using the Dojo Toolkit. The widgets provided are Terminal Status, Terminal Location and Third Party Call.

Index	Name	Type	Address
1	bob	tel	1-2225552000
2	alice	tel	1-2225552001
3	mike	tel	1-2225552002
4	bob	tel	1-2225552003
5	mike	tel	1-3335553000
6	john	tel	1-3335553001
7	bob	sip	bob@us.ibm.com

Terminal Location Terminal Status Third Party Call

Terminal Location

Type:

Device:

Location:

Latitude:

Longitude:

Accuracy:

Location received.



In this release a new Web 2.0 sample has been added to the Telecom Web service feature of the toolkit. The Web 2.0 sample displays widget examples and is built using the Dojo toolkit available in the Web Services Feature Pack for Rational Application Developer. The sample includes widgets for the following:

- the Terminal Location widget which provides the location of a device
- the Terminal Status widget which shows the device status on the telecom network, and
- the Third Party Call widget which places a third party call between two devices.

This sample can be tested on the Web services Simulator provided in the toolkit. The address list in the figure shows accounts that are simulated using the simulator configuration and each of the widgets below shows the simulated information for the corresponding Parlay X service.

If the Web Services Feature pack is installed, the Dojo libraries available in the feature pack can be used. If the feature pack is not installed, the Dojo toolkit can be downloaded from <http://www.dojotoolkit.org>.

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