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Web Services Stack Guide

Administration

Version 9.5 SP1

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WEB SERVICES STACK

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Preface

The information in this document will assist users of webMethods suite of products in deploying and managing web services through the product's facilities.

Administration includes:

- Deploying/Undeploying of services
- Activating/Deactivating of services
- Engaging/Disengaging of module (at operation, service or global level)

The information is organized under the following headings:

Administration Module WSS administrator module for managing web services

Administration Tool System Management Hub web interface for managing WSS runtime

1   Administration Module

You can manage Web services using the administration module.

> **Note:** The administration functionality is also available through System Management Hub (SMH). For details, see *Administration Tool*.

The information on the administration module is organized under the following headings:

Accessing the Administration Module

Use the following URL to access Web Services Stack administration module:

http://\<host_name>:\<port_number>/wsstack (for example, *http://localhost:10010/wsstack/axis2-admin/*).

The administration module is secured by default with administrator's logon credentials configured in the *WEB-INF/conf/axis2.xml* configuration file in the WAR archive.

▶ **To log on to the administration module**

■ Provide the logon credentials that are specified in the *axis2.xml* configuration file. The default user name is "admin" and the default password is "axis2".

> **Note:** See *Changing Logon Credentials* for details on changing the default user name and password at first logon.

Functionality

Following are the features of the administration module for managing Web services:

▪ Upload service
▪ List available services
▪ List available service groups
▪ List available modules
▪ List globally engaged modules
▪ List available phases
▪ View global chains
▪ View operation specific chains
▪ Engage module for all services
▪ Engage module for a Service Group

- Engage module for a Service

- Engage module for an Operation

- Deactivate service

- Activate service

- Edit parameters of a service

For details on the functionalities of Axis 2 administration module, see *http://ws.apache.org/ax-is2/1_4_1/webadminguide.html*.

Deployed Libraries

This section shows you how to display a list of the deployed Web Services Stack libraries.

The administration module provides you with an easy access to the list of the deployed libraries with information about them such as library name, JAR file details, and version number. The deployed libraries are JAR files that are installed with the Web Services Stack installation or at the deploy time of its web archive. You might use the list of these libraries for troubleshooting.

▶ **To display a list of the deployed Web Services Stack libraries**

1   Type *http://<host_name>:<port_number>/wsstack/* in your browser.

> **Note:** The default port for the deployment of Web Services Stack in Software AG
> Tomcat Server is 10010.

2   Click the **Validate** link on the welcome page.

3   Scroll down the Web Services Stack validation page.

Changing Logon Credentials

With the *Administration Tool*, the *wsstack argus* agents that perform all the administration tasks use the security settings provided by the product. In this case, your web services are secured.

With the administration module, there are default user credentials for logging on to it. If you do not change them after Web Services Stack is installed, you may be exposed to a security threat through the administration module.

> **Note:** In case you want to connect to Web Services Stack runtime from System Management
> Hub, provide the logon credentials for the administration module.

Web Services Stack provides you with the option to change the user credentials for the administration module. The user name can be changed in the configuration file using a text editor. The password, however, must not be modified by editing the *axis2.xml* file. Use the graphical user interface of Web Services Stack for changing the password.

Changing the User Name

If you want to change your user name, follow these steps:

▶ **To change the user name**

■ You can change the default user name with the `userName` parameter in the *axis2.xml* configuration file.

Changing the Password

If you want to change your password, follow these steps:

▶ **To change the password**

1 Log on to the administration module.

2 Click on the **Change Password** button in the administration page header.

If the Web Services Stack configuration file cannot be modified by the web application, you are notified that the password change is disabled with the "Password change is disabled" error.

In this case, you must use the *Reset Password Utility* of Web Services Stack.

Reset Password Utility in Web Services Stack Web Application

The Reset Password Utility is the `resetPassword` script available in the *Software AG_directory\WS-Stack\bin* directory of the Web Services Stack installation. The script requires write permission over the configuration file. After resetting the password, restart Web Services Stack for the changes to take effect.

This utility is used in the following scenarios:

▪ Restoring a password that you have forgotten

Since the password is transformed into a hash, using an algorithm that cannot be reversed, it is not possible to restore a forgotten password. In that case, you can reset it using the Reset Password Utility.

▪ Changing the default password when you have received the "Password change is disabled" error.

Following is a list of the cases in which you can receive this error:

- Web Services Stack web application WAR is archived upon deployment

- Web Services Stack web application WAR is not archived upon deployment, but the web application is not granted write permissions for the *WEB-INF/conf/axis2.xml* file.

- Web Services Stack web application has not been deployed with the standard configuration file (*WEB-INF/conf/axis2.xml*). Instead, a URL configuration file or a JAR resource configuration file has been used.

Resetting a Forgotten Password

If you want to reset your password, follow these steps:

▶ **To reset a forgotten password**

1   Run the *resetPassword* script in the `Software AG_directory`*WS-Stack**bin* directory.

2   Restart Web Services Stack for the changes to take effect.

Changing the Password when WSS Web Application WAR is Archived upon Deployment

If you want to change the password when the Web Services Stack web application WAR is archived upon deployment, follow these steps:

▶ **To change the password when the Web Services Stack web application WAR is archived upon deployment**

1   Retrieve the configuration file.

2   Run the *resetPassword* script in the `Software AG_directory`*WS-Stack**bin* directory.

3   Replace the original configuration file.

4   Restart Web Services Stack for the changes to take effect.

Changing the Password when WSS Web Application WAR is not Archived upon Deployment

If you want to change the password when the Web Services Stack web application WAR is not archived upon deployment, but the web application is not granted write permissions for the WEB-INF/conf/axis2.xml file, follow these steps:

▶ **To change the password when the Web Services Stack web application WAR is not archived upon deployment, but the web application is not granted write permissions for the *WEB-INF/conf/axis2.xml* file**

Run the utility from an account that has write permission over the configuration file.

1   Retrieve the configuration file.

2   Run the *resetPassword* script in the */bin* directory.

3   Replace the original configuration file.

4   Restart Web Services Stack for the changes to take effect.

Changing the Password when WSS Web Application is not Deployed with the Standard Configuration File

If you want to change the password when the Web Services Stack web application has not been deployed with the standard configuration file (WEB-INF/conf/axis2.xml), follow these steps:

▶ **To change the password when the Web Services Stack web application has not been deployed with the**

standard configuration file (*WEB-INF/conf/axis2.xml*)

1   Retrieve the configuration file.

2   Run the *resetPassword* script in the `Software AG_directory`*WS-Stack**bin* directory.

3   Replace the original configuration file.

4   Restart Web Services Stack for the changes to take effect.

2　Administration Tool

System Management Hub (SMH) provides a web interface for managing Web Services Stack runtime. Web Services Stack installation creates a new node in System Management Hub control panel and adds an administrator's node under **Administrators**.

> **Note:** When you install Web Services Stack administration tools, you can use SMH to administer both WSS web application and WSS on Platform Tomcat Server.

The information on the administration tool is organized under the following topics:

Getting Started

Web Services Stack provides agent programs that are called Web Services Stack SMH agents. System Management Hub invokes those agents that manipulate Web Services Stack environment to deploy (or undeploy) services, to engage (or disengage) modules, etc. To be able to use the administration tool, provide the user credentials required by the System Management Hub logon page.

> **Note:** If Web Services Stack web application is deployed manually in a different servlet engine or application server, then the agents are not available. In this case, use administration module located at *http://<host_name>:<port_number>/wsstack*.

Using the Administration Functionality of System Management Hub

If you want to use the administration functionality of System Management Hub, follow these steps:

▶ **To start using the administration functionality of System Management Hub**

■ Enter *http://localhost:10010/smh/login.htm* in the browser and log in on System Management Hub.

The interface of System Management Hub displays all installed products associated with administration tools. If properly installed, Web Services Stack appears on the list as a direct child of the root tree.

The management functionality of the administration tool (engaging/disengaging a module, service activation/deactivation and deployment/undeployment) requires valid credentials for the Web Services Stack runtime. For details on those features, see *Using the Administration Tool*.

The administration tool uses the default credentials (user name="admin" and password="axis2"). However, these must be changed after the installation of Web Services Stack for security reasons. See *Changing Logon Credentials* for details.

Because of that, when the Web Services Stack administrator changes those credentials, a logon dialog prompts you to enter user name and password to verify you are authorized to manage the product's web services.

Logging on to WSS Runtime from the Administration Tool

If you want to log on to Web Services Stack runtime from the administration tool, follow these steps:

▶ **To log on to Web Services Stack runtime from the administration tool**

1   Enter your user credentials for the Web Services Stack admin servlet (the administrator module)

2   Click on **Log on**.

If you experience problems when using the administration tool, you must enable the logging for the SMH agents to see a detailed message log. For instructions on that, see SMH Agents Logging.

Displaying the WSS Installation Version Information

If you want to display the version information of the Web Services Stack installation, follow these steps:

▶ **To display the version information of the Web Services Stack installation**

1   Log on the System Management Hub.

2   Right click the Web Services Stack node.

3   On the context menu that opens, choose **Version Information**.

The System Management Hub inspects the *MANIFEST.MF* files of the .jar files which are available in the class path and displays the following information about the installed archives:

- ▪ `Title`
  `name[name_as_in_the_class_path]`

  If the system does not discover sufficient information in the manifest file, then it displays only the name of the archive.

- ▪ `Vendor`
  Displays information about the vendor of the archive.

■ `Version`

Displays information about the version of the archive.

Configuration Files

There are two files under `<Software AG_directory>\`*WS-Stack*`\`*conf*`\` that impact Web Services Stack SMH agents:

■ *argusagent.properties*

This file specifies the location of the *wsstack-admin-service* that is used by the agents. It contains information about the host name and the server port of the deployed Web Services Stack.

■ *deployclient.properties*

This file has settings for the *wsstack-admin-service* that are used by System Management Hub for deployment.

> **Note:** Changes in the *deployclient.properties* file impact only Web Services Stack SMH agents.

Using the Administration Tool

You can use the administration tool for any of the following:

1. **Browsing Services**
   Choose **Service Group** to see a list of all service groups available in the system. It is a direct child of **Web Services Stack**.

   To see all the services in that service group, choose a service group name. To get all the operations of a service, choose the service.

   > **Note:** Browsing current service group and services, as well as their engaged modules does not require administrative rights for the target Web Services Stack runtime.

2. **Managing Modules**
   You can engage or disengage modules on four levels - globally, by service group, by service, and by operation. On every level on the GUI you have a **Manage Modules** button. Click on that button to receive a list of all available modules that are eligible for engagement, as well as a list of all engaged modules that are eligible for disengagement to engage or disengage a module on the appropriate level. In order to engage or disengage a module, choose the respective button next to the listbox.

If you want to engage or disengage a module on a global level, choose **Modules** under the **Web Services Stack**.

> **Note:** Module management functionality requires you to provide valid Web Services Stack credentials. For additional information, see instruction for logging on to Web Services Stack runtime in *Getting Started*.

3. **Deploying a Service**
   With the right button of the mouse, click **Service Group** to see a command list with commands that can be executed. Choose the `Deploy` command from the list to see a browse button on the right part of the screen. With this button, you can browse the file system to select a web service archive to be deployed.

   Choose the **OK** button after you have selected the web service archive. The previous screen is displayed where you must choose the **Deploy** button. Shortly after that, you get a response with feedback of how the operation went.

   > **Note:** Deployment functionality requires you to provide valid Web Services Stack credentials. For additional information, see instruction for logging on to Web Services Stack runtime in *Getting Started*.

4. **Undeploying a Service**
   Choose **Service Group** under the **Web Services Stack**

   Then, click on the service under the **Service Name** column. The **Undeploy** button with which you can undeploy a service is next to the service.

   The feedback of executing the operation is displayed soon after that.

   > **Note:** Undeploying a web service requires you to provide valid Web Services Stack credentials. For additional information, see instruction for logging on to Web Services Stack runtime in *Getting Started*.

5. **Checking a Service Status**
   When you receive a list with services, you must be able to see the status of each one of them by looking at the icon placed right before the service name.

   If the color of the traffic light icon is green, then the service is active.

   If the color is red, then the service is inactive.

   You can activate (or deactivate) a service by using the **Activate** (or **Deactivate**) button listed on the **Action** column next to the **Service Name** column.

   Check service status does not require administrative rights for the target Web Services Stack runtime.