



Avaya Solution & Interoperability Test Lab

Application Notes for Fiebig BulkIT with Avaya Aura® System Manager 7.0.1 - Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Fiebig BulkIT to interoperate with Avaya Aura® System Manager.

Fiebig BulkIT is a user administration interface that uses Avaya Aura® System Manager provisioning rules to Add, Update, Delete and List users on the Avaya Aura® System Manager.

Readers should pay attention to Section 2, in particular the scope of testing as outlined in Section 2.1 as well as any observations noted in Section 2.2, to ensure that their own use cases are adequately covered by this scope and results.

Information in these Application Notes has been obtained through DevConnect compliance testing and additional technical discussions. Testing was conducted via the DevConnect Program at the Avaya Solution and Interoperability Test Lab.

1. Introduction

Fiebig BulkIT is a user administration interface. It interoperates with Avaya Aura® System Manager R7.0.1 over IP using an Administrative user to Add, Update, Delete and List users on the Avaya Aura® System Manager incorporating provisioning rules.

2. General Test Approach and Test Results

The BulkIT application administration functionality was tested. The BulkIT server connects to System Manager over IP and permissions are granted to allow a designated user to administer users on the system.

DevConnect Compliance Testing is conducted jointly by Avaya and DevConnect members. The jointly-defined test plan focuses on exercising APIs and/or standards-based interfaces pertinent to the interoperability of the tested products and their functionalities. DevConnect Compliance Testing is not intended to substitute full product performance or feature testing performed by DevConnect members, nor is it to be construed as an endorsement by Avaya of the suitability or completeness of a DevConnect member's solution.

2.1. Interoperability Compliance Testing

The interoperability compliance test included both feature functionality and serviceability testing:

- **Add User** – Add a new user to the System Manager.
- **Update User** – Update existing users on the System Manager.
- **Delete User** – Delete existing users on the System Manager.
- **List Users** – List users by login or name.
- **Service** – Tests the behaviour of BulkIT when there are certain failed conditions.

The serviceability testing focused on verifying the ability of Communications Portal to recover from disconnection and reconnection to the Avaya solution.

2.2. Test Results

All functionality and serviceability test cases were completed successfully.

2.3. Support

Email: csc@fiebig.com

Website: www.bulkit.de

Phone: +49 69 605016 333

3. Reference Configuration

The configuration in Figure 1 will be used to compliance test Fiebig BulkIT with System Manager over IP to administer users.

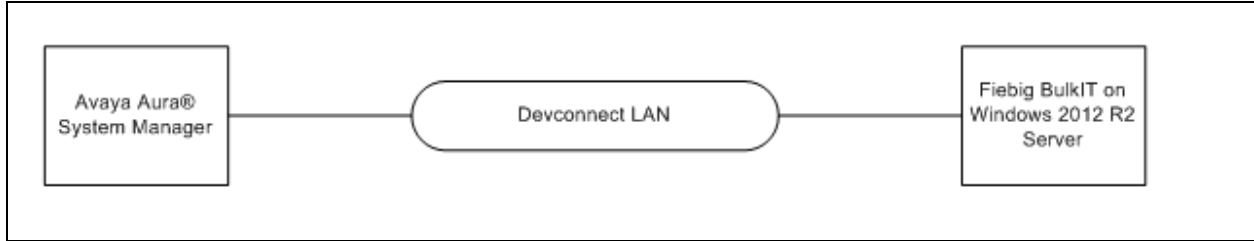


Figure 1: Fiebig BulkIT with Avaya Aura® System Manager

4. Equipment and Software Validated

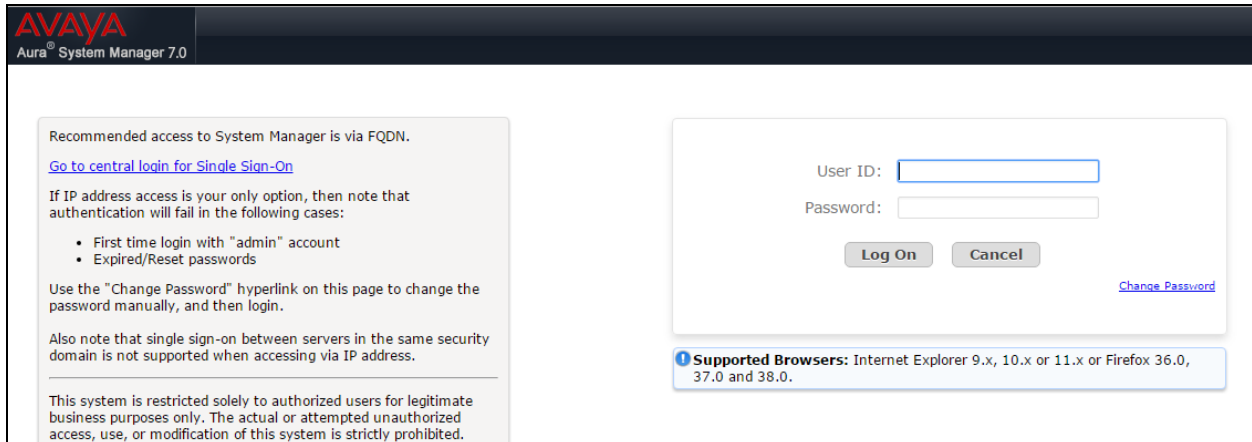
The following equipment and software were used for the sample configuration provided:

Equipment/Software	Release/Version
Avaya Aura® System Manager running on a VMware virtual Machine	Version: 7.0.1.2 Build: 7.0.0.0.16266 Software Update Revision: 7.0.1.2.086007 Service Pack 2
Fiebig BulkIT	V1.0

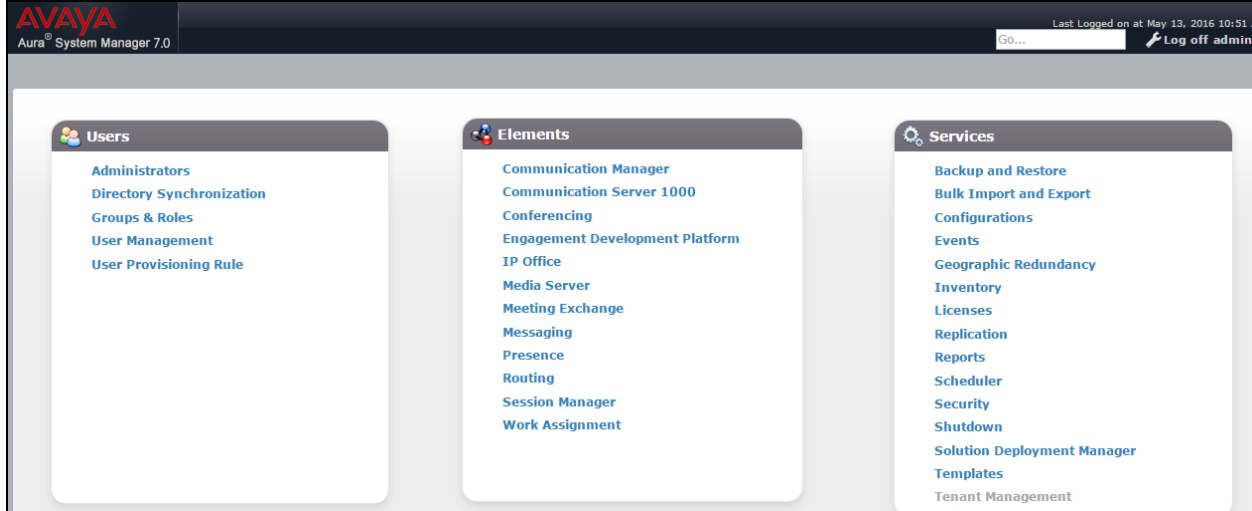
5. Configure Avaya Aura® System Manager

This section describes the configuration required to allow BulkIT to connect to SMGR and administer users.

Using an internet browser go to **https://<system Manager IP>/SMGR**. Use valid credentials to login.



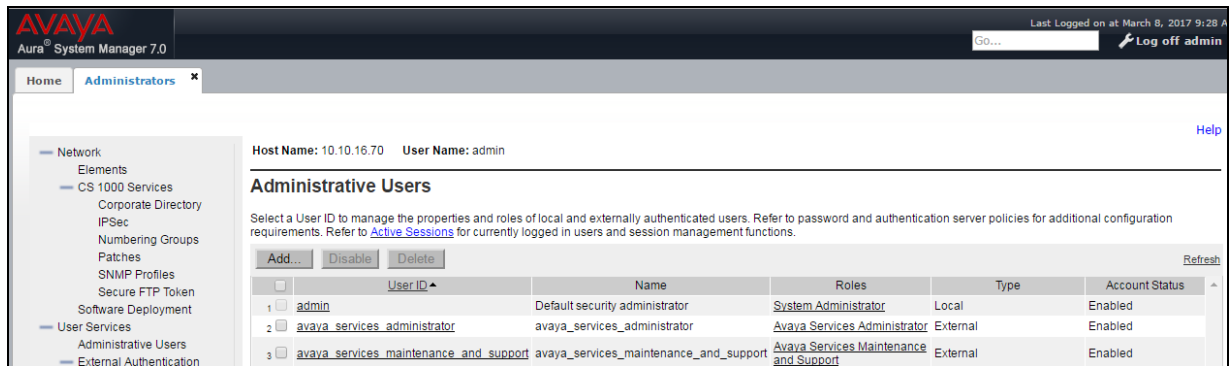
The Dashboard will be shown when logged in.



5.1. Add a System Administrator

This section describes the steps to add a System Administrator to the System Manager that can administer users.

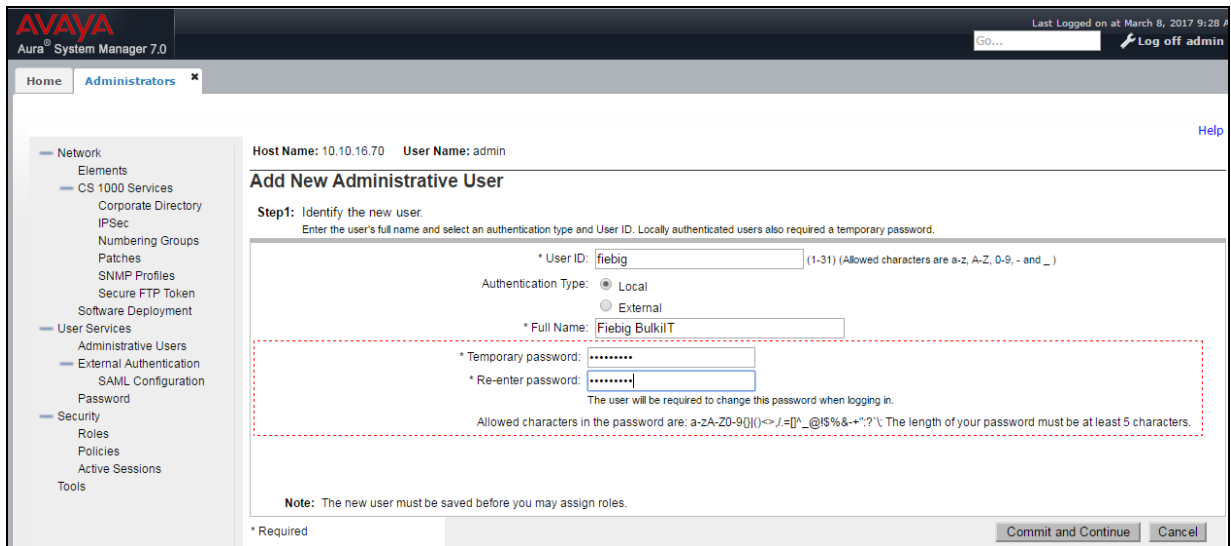
Select **Administrators** from the **Users** section of the dashboard and then select **Administrative User** from the left hand menu (not shown), click on **Add**.



The screenshot shows the Avaya System Manager 7.0 interface. The top navigation bar includes the Avaya logo, "Aura System Manager 7.0", a search bar, and a "Log off admin" button. The left sidebar contains a tree view with categories like Network, CS 1000 Services, User Services, and External Authentication. The main content area is titled "Administrative Users" and displays a table of existing users.

	User ID	Name	Roles	Type	Account Status
1	admin	Default security administrator	System Administrator	Local	Enabled
2	avaya_services_administrator	avaya_services_administrator	Avaya Services Administrator	External	Enabled
3	avaya_services_maintenance_and_support	avaya_services_maintenance_and_support	Avaya Services Maintenance and Support	External	Enabled

Enter the **User ID**, **Full Name** and a **Temporary password**. Click on **Commit and Continue**.



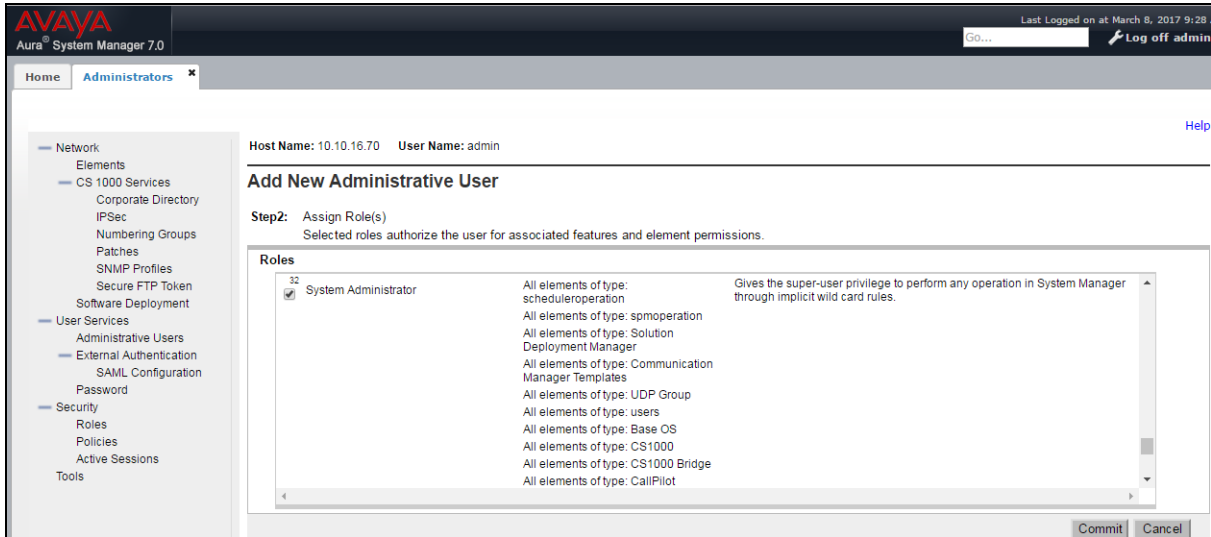
The screenshot shows the "Add New Administrative User" form in the Avaya System Manager 7.0 interface. The form is titled "Step 1: Identify the new user." and includes the following fields and options:

- User ID:** feibig (1-31) (Allowed characters are a-z, A-Z, 0-9, - and _)
- Authentication Type:** Local (selected), External
- Full Name:** Feibig Bulkil T
- Temporary password:** [masked]
- Re-enter password:** [masked]

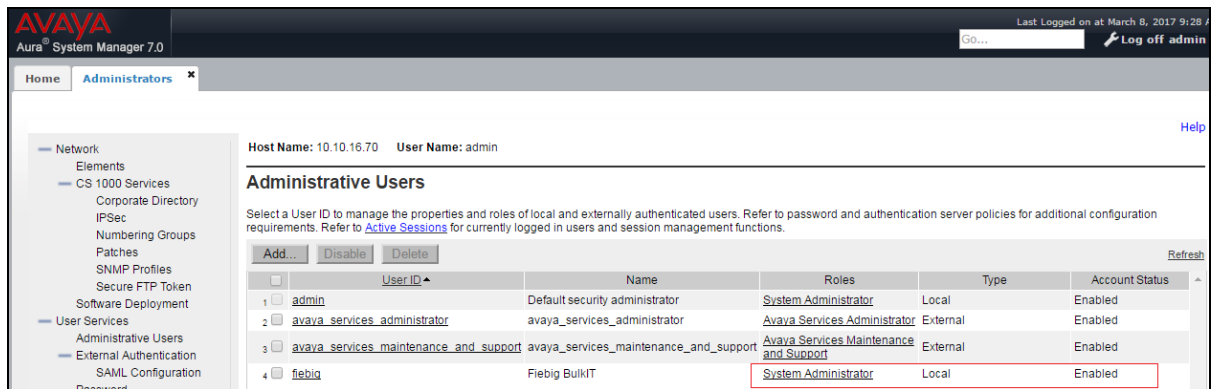
A note below the password fields states: "The user will be required to change this password when logging in. Allowed characters in the password are: a-zA-Z0-9[()<>./=]'_@\$%&-*~?`. The length of your password must be at least 5 characters." At the bottom of the form, there is a "Note: The new user must be saved before you may assign roles." and buttons for "Commit and Continue" and "Cancel".

Note: The user will need to change the password and login to allow BulkIT to do this automatically.

Scroll down through the **Roles** and select **System Administrator**. Click on **Commit** to save the changes.



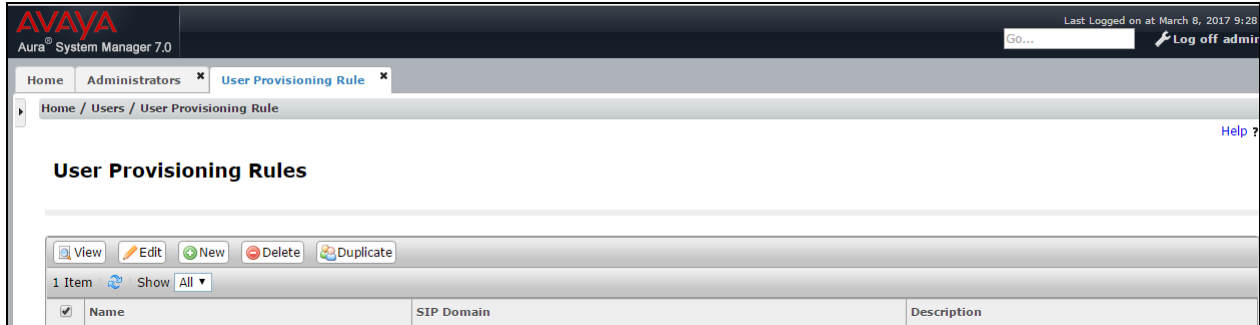
When returned to the **Administrative Users** page the new user will be listed as a **Local System Administrator** with the **Account Status Enabled**.



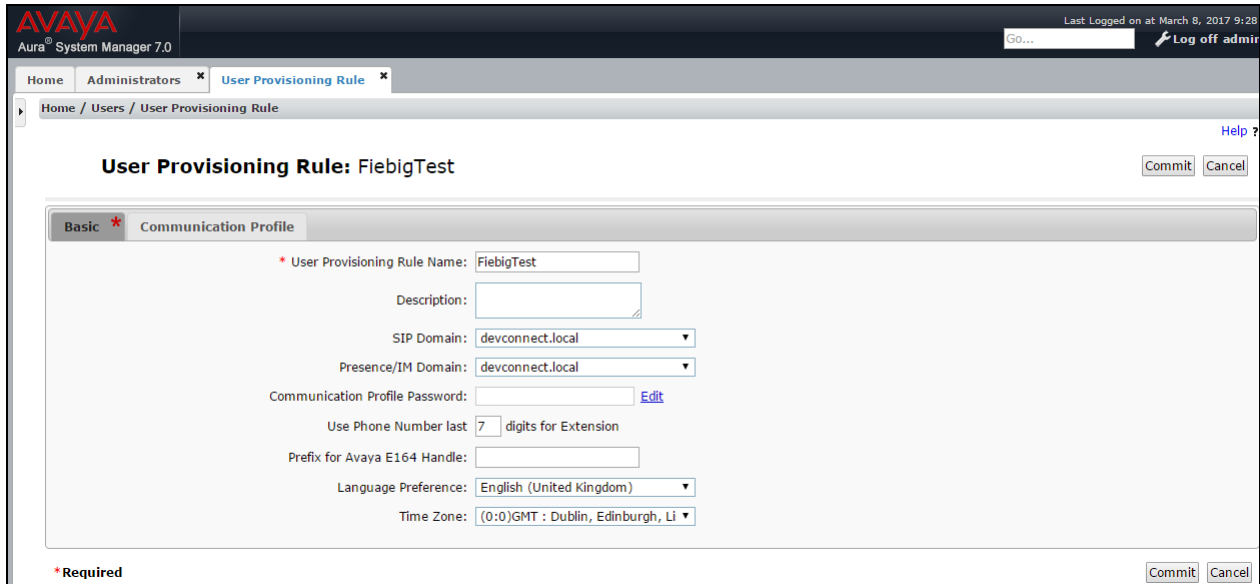
5.2. Add a Provisioning rule

This section describes the steps needed to add a Provisioning Rule to System Manager allowing a set of values to be given to a new user without having to be entered manually.

Select **User Provisioning Rule** from the User section of the Dashboard. Click on **New**.



Enter a **User Provisioning Rule Name**. Select a valid **SIP** and **Presence/IM Domain** from the drop downs. Enter the amount of digits used for Extensions on the telephone system attached to the System Manager beside **Use Phone Number last**. Click on **Commit** to save the changes.



The new Provisioning Rule will now be listed

The screenshot shows the Avaya Aura System Manager 7.0 interface. The top navigation bar includes 'Home', 'Administrators', and 'User Provisioning Rule'. The breadcrumb trail is 'Home / Users / User Provisioning Rule'. The main heading is 'User Provisioning Rules'. Below this is a toolbar with 'View', 'Edit', 'New', 'Delete', and 'Duplicate' buttons. A table lists one item: 'FiebigTest' with the SIP Domain 'devconnect.local'. The table has columns for 'Name', 'SIP Domain', and 'Description'. A 'Select' dropdown at the bottom left is set to 'All'.

<input checked="" type="checkbox"/>	Name	SIP Domain	Description
<input checked="" type="checkbox"/>	FiebigTest	devconnect.local	

6. Configure Fiebig BulkIT

This section describes the steps required to configure BulkIT to interoperate with System Manager.

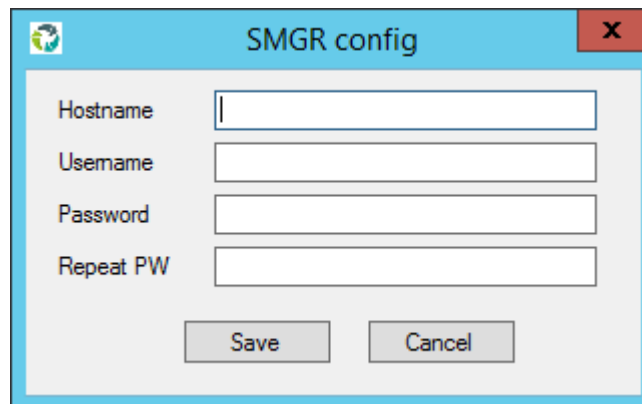
6.1. Install certificate used for password encryption

During installation the **install_cert** shortcut is placed on the administrators desktop. Right-click and select **Run with powershell**.

6.1.1. System Manager Connector Configuration

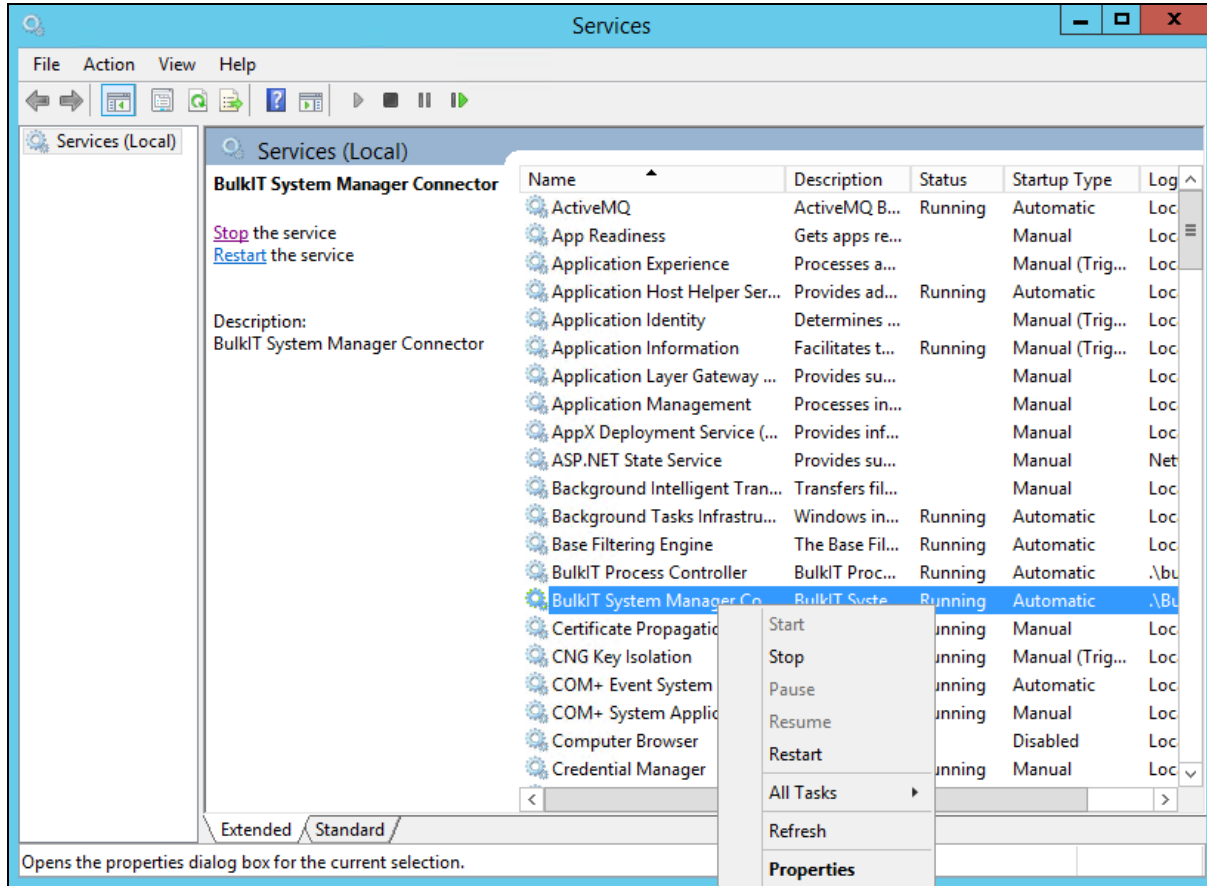
The connection parameters of the System Manager API are defined in a configuration file (SystemManagerConfig.json) in the folder where the connector is installed. The default location of the installation is **C:\FIEBIG\BulkIT\SmgrConnector**. To create this file there is a tool that is placed on the administrator's desktop as a shortcut during installation. Double click on **SystemManagerConfiguration.exe** (not shown).

An **SMGR config** window will be opened. Enter the **Hostname** or IP address of the System Manger. Enter the System Administrator **Username** configured in **Section 5.1**. Enter the **Password** for the System Administrator and **Repeat PW**. Click on Save to create the SystemManagerConfig.json file.



The image shows a Windows-style dialog box titled "SMGR config". It has a blue title bar with a close button (X) on the right. The dialog contains four text input fields stacked vertically, labeled "Hostname", "Username", "Password", and "Repeat PW". Below these fields are two buttons: "Save" and "Cancel".

Upon completion of the SMGR config tool the configuration file is saved in the folder where the connector is installed. The default location of the installation is **C:\FIEBIG\BulkIT\SmgrConnector**. The entered password is stored encrypted. **Restart** the **BulkIT System Manager Connector** service to implement the stored configuration.



6.2. Connecting to BulkIT

BulkIT provides a Web UI.

From local machine: <http://localhost/BulkIT>

From remote machine: <http://x.x.x.x/BulkIT>

7. Verification Steps

This section outlines the steps that can be taken to ensure interoperability between BulkIT and Session Manager.

7.1. Verify User Create process on BulkIT

This section describes the steps required to verify that BulkIT has performed the create user task.

Browse to <https://<BulkITServerIP>/BulkIT> and login with valid credentials. Select **Process** → **Templates** (not shown). Click on **Test_Smgr_CreateUser** and select Test with RESTful (not shown) from the **Tools** drop-down menu.

The screenshot displays the BulkIT interface for the 'Test_Smgr_CreateUser' template. On the left, a table lists various templates, with 'Test_Smgr_CreateUser' selected. The main area shows the template configuration, including the Template ID, Template Name, and a list of parameters. The XML configuration is visible, showing the process definition for 'CreateUser'.

Test_Smgr_CreateUser	Test Smgr CreateUser
Test_Smgr_DeleteUser	Test Smgr DeleteUser
Test_Smgr_GetUser	Test Smgr GetUser
Test_Smgr_UpdateUser	Test Smgr UpdateUser
Test_Smgr_Userlist	Test Smgr Userlist

Template ID: Test_Smgr_CreateUser | Template Name: Test Smgr CreateUser | Enabled?

```
12 <Parameter name="Password" description="The password of the new user." source="external" type="String" />
13 <Parameter name="XML" source="static" type="Text"><![CDATA[
14 <?xml version="1.0" encoding="utf-8"?>
15 <tns:users xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:tns="http://xml.avaya.com/schema/import">
16   <tns:user>
17     <UserProvisionRules>
18       <UserProvisionRuleName>#{ProvisioningRule}</UserProvisionRuleName>
19     </UserProvisionRules>
20     <authenticationType>Basic</authenticationType>
21     <givenName>#{FirstName}</givenName>
22     <loginName>#{LoginID}</loginName>
23     <surName>#{LastName}</surName>
24     <userPassword>#{Password}</userPassword>
25   </tns:user>
26 </tns:users>
27 ]]></Parameter>
28 <Parameter name="Result" source="intern" return="true" type="Text" from="Process/Tasks/Task[@name='CreateUser']/Outp
29 </Parameters>
30 <StartTask>CreateUser</StartTask>
31 <Result></Result>
32 <Task>
33 <Task id="2" name="CreateUser">
34 <ProcessId />
35 <Destination>SystemManager</Destination>
36 <Command>CreateUserListXml</Command>
37 <InputParameters>
38 <Parameter name="LoginID" source="intern" type="String" from="Process/Parameters/Parameter[@name='LoginID']/>
39 <Parameter name="FirstName" source="intern" type="String" from="Process/Parameters/Parameter[@name='FirstName']/>
40 <Parameter name="LastName" source="intern" type="String" from="Process/Parameters/Parameter[@name='LastName']/>
41 <Parameter name="ProvisioningRule" source="intern" type="String" from="Process/Parameters/Parameter[@name='Provision
42 <Parameter name="Password" source="intern" type="String" from="Process/Parameters/Parameter[@name='Password']/>
43 <Parameter name="XML" source="intern" type="Text" from="Process/Parameters/Parameter[@name='XML']/>
44 </InputParameters>
45 <OutputParameters>
46 <Parameter name="Result" source="static" type="Text" />
47 </OutputParameters>
48 <NextTask>EXIT</NextTask>
49 <OnError>EXIT</OnError>
50 </Task>
51 </Tasks>
52 </Process>
```

On the subsequent screen enter the **LoginID:**, **FirstName:**, **LastName:**, The Provisioning Rule added in **Section 5.2** and a **Password:** for the user. Click on **Execute RESTful** to add the user.

The screenshot shows the BULKIT web interface. At the top left is the BULKIT logo and a 'Process' tab. The breadcrumb navigation is 'HOME / PROCESS / TEMPLATES'. On the right, there are user and language indicators: '0', 'smith', and 'en'. Below the breadcrumb is a table of templates with columns 'T.ID' and 'Template name'. The first row is selected: 'Test_Smgr_CreateUser' | 'Test Smgr CreateUser'. Below the table are pagination controls: '10 per page', a 'Filter' input, and 'Previous 1 Next' buttons. To the right is a 'Details' form for the selected template. The form fields are: 'requestType' (Test_Smgr_CreateUser), 'LoginID: The loginid of the new user.' (johndoe@devconnect.local), 'FirstName: The first name of the new user.' (John), 'LastName: The last name of the new user.' (Doe), 'ProvisioningRule: The User Provisioning Rule of the new user.' (FiebigTest), and 'Password: The password of the new user.' (Us3rP455w0rd). At the bottom right of the form are 'Cancel' and 'Execute RESTful' buttons.

T.ID	Template name
Test_Smgr_CreateUser	Test Smgr CreateUser
Test_Smgr_DeleteUser	Test Smgr DeleteUser
Test_Smgr_GetUser	Test Smgr GetUser
Test_Smgr_UpdateUser	Test Smgr UpdateUser
Test_Smgr_Userlist	Test Smgr Userlist

10 per page Filter

Previous 1 Next

Details

requestType:
Test_Smgr_CreateUser

LoginID: The loginid of the new user.
johndoe@devconnect.local

FirstName: The first name of the new user.
John

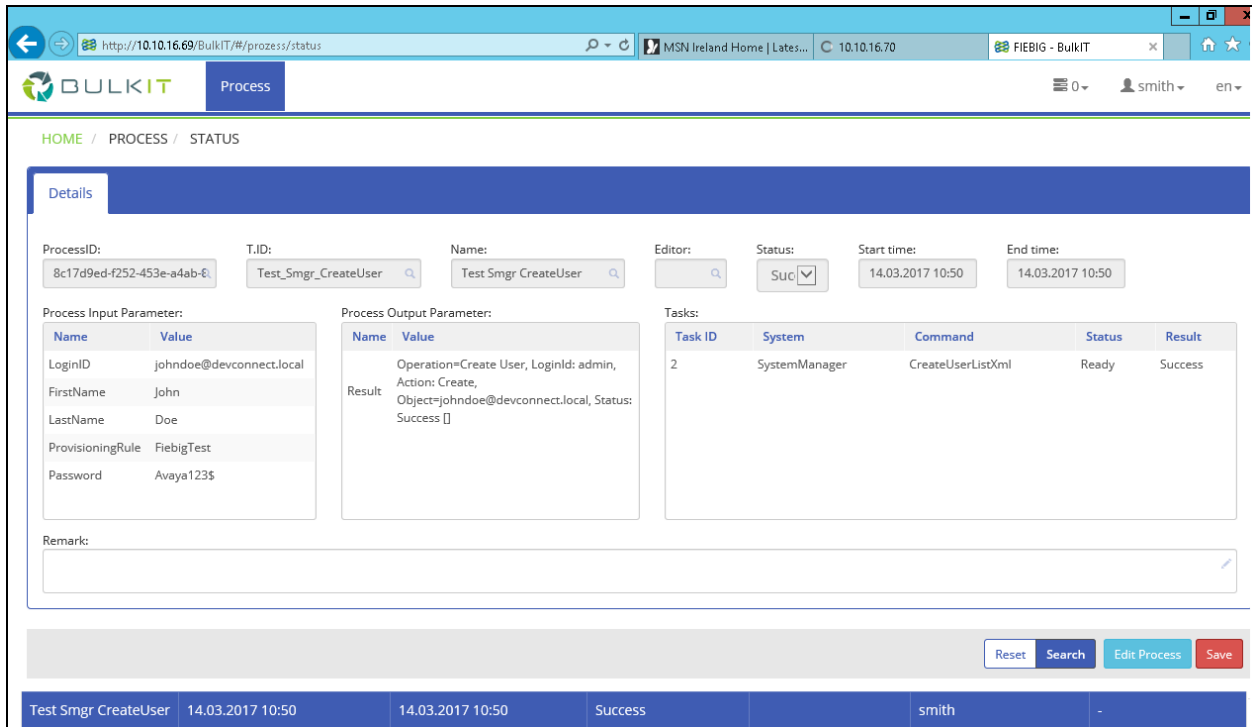
LastName: The last name of the new user.
Doe

ProvisioningRule: The User Provisioning Rule of the new user.
FiebigTest

Password: The password of the new user.
Us3rP455w0rd

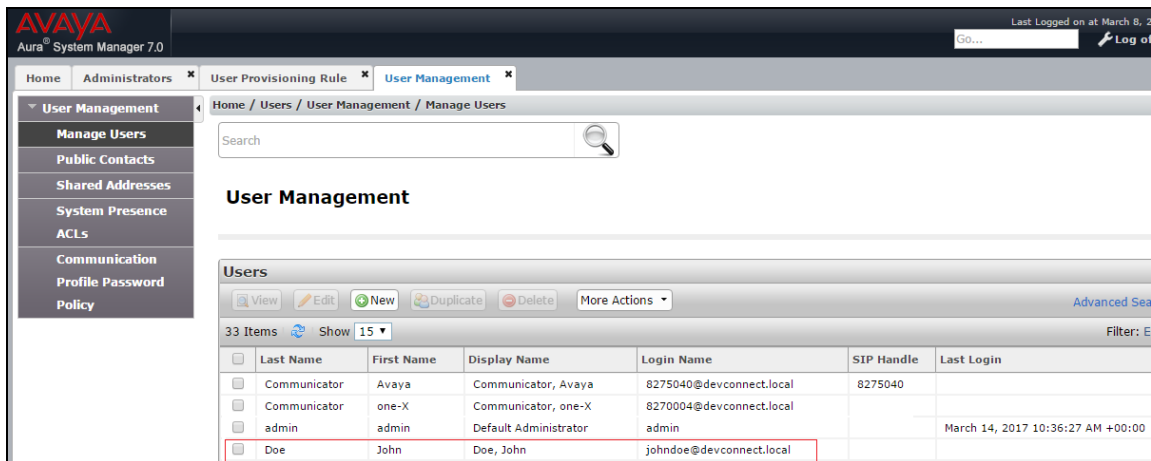
Cancel Execute RESTful

Select **Process** → **Status** (not shown). Select the entry that corresponds to the process just run. The details of this addition will be populated above the list. Make sure that the **Result** is **Success**.



7.2. Verify Users Added on System Manager

After the BulkIT CreateUser template has been executed go to **Users** → **User Management** → **Manage Users** from the dashboard and verify that the user is present and administered correctly.



8. Conclusion

These Application Notes describe the configuration required for Fiebig BulkIT to interoperate with Avaya Aura® System Manager R7.0.1 using IP. All tests passed successfully with any observations notes in **Section 2.2**.

9. Additional References

This section references the Avaya documentation relevant to these Application Notes. The following Avaya product documentation is available at <http://support.avaya.com>.

- [1] Administering Avaya Aura® System Manager. Release 7.0.1, Issue 3, January 2017
- [3] Product Documentation for Fiebig BulkIT can be requested from the sources listed in **Section 2.3**.

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