

Rhidmo® Installation Manual

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1 What is Rhidmo®?

1.1 Introduction

1.2 Prerequisites

2 Installation

This chapter describes the installation of Rhidmo® on a SAP JAVA AS server. It assumes that the IDM WebDynPro GUI application (“IDM GUI”) is successfully installed on the same machine. It is possible to install the IDM GUI application on more than one machine. If so, please install Rhidmo® on all machines where the IDM GUI application is installed.

2.1 Deploy the EAR

There are several ways to deploy an EAR file to the SAP Java AS server. One of the easiest is probably using the telnet interface.

1. Copy the EAR file to the JAVA AS machine. Make sure that the <sid>adm user is able to read the file.
2. Use the telnet program to connect to the telnet port (usually 50008) and log in using administrative privileges (WARNING: the telnet protocol is not encrypted, it is best used locally as shown in the screenshot below):

```

root@kali:~# telnet localhost 50008
Trying 127.0.0.1...
Connected to localhost.
Escape character is '^]'.

*****
*****
****###*****#####*****
***#####**#####**
***#####**#####**
***#####**#####**
*****#####**
*****#####**
***#####**#####**
***#####**#####**
*****#####**
*****#####**
*****
*****

Telnet Administration
SAP Java EE Application Server v7.40

User name: admin
Password:

Welcome to server node 9600010.

>

```

3. Deploy the application using the deploy command:

```

>deploy /tmp/deploy/rhidmo-ear-1.0.ear

Deploy settings:
  life_cycle=bulk
  on_deploy_error=stop
  on_prerequisite_error=stop
  version_rule=lower
  workflow=normal

If there is an offline deployment, Telnet connection to host may be lost, but the
result can be seen using [get_result] command

Processing deployment operation, wait...

===== PROGRESS START =====

Deploying [de.foxysoft_rhidmo (sda)] ...
Deployment of [de.foxysoft_rhidmo (sda)] finished.

===== PROGRESS END =====

===== DEPLOY RESULT =====

  sdu id: [de.foxysoft_rhidmo]
  sdu file path: [/usr/sap/1...7/J00/j2ee/cluster/server0/temp/tc-bl-deploy_controll
er/archives/131/12311243856035/rhidmo-ear-1.0.ear]
  version status: [HIGHER]
  deployment status: [Success]
  description: []

===== END DEPLOY RESULT =====

===== Summary - Deploy Result - Start =====
-----
Type | Status : Count
-----
> SCA(s)
> SDA(s)
  - [Success] : [1]
-----
Type | Status : Id
-----
> SCA(s)
> SDA(s)
  - [Success] : de.foxysoft_rhidmo,
-----
===== Summary - Deploy Result - End =====

>

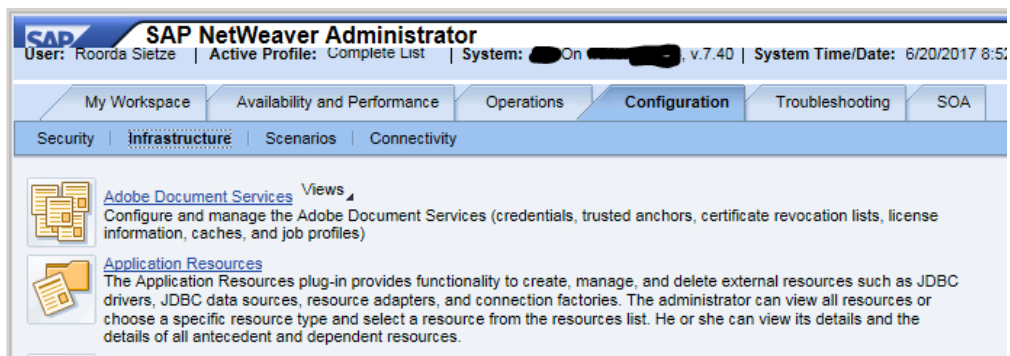
```

Watch for the “Success” message (as shown in the screenshot above). Correct any errors. Rhidmo® is now deployed and must be configured before use. This is explained in the following chapter.

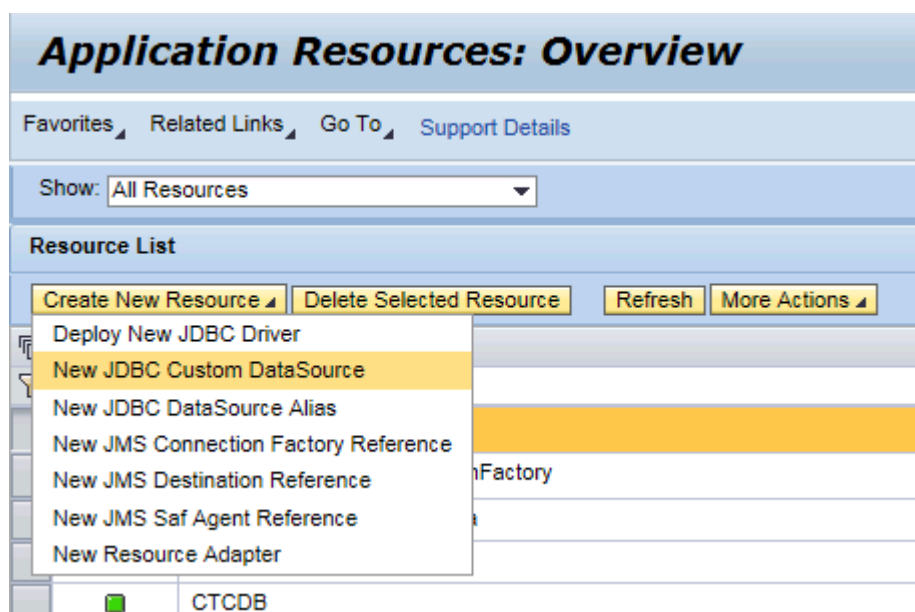
2.2 Create RHIDMO_RT Datasource

The standard IDM data source that is configured in JAVA AS uses the “<prefix>_prov” user which does not have sufficient privileges to be used with Rhidmo®. Consequently, another data source must be configured with the “<prefix>_rt” user:

1. Log in with a SAP supported browser to the JAVA AS with a user with administrative privileges and start the Netweaver Administrator (URL: <http://<machine>:<port>/nwa>). Use https if available:



2. Go to “Configuration” → “Infrastructure” (as shown in the screenshot above) and click on the “Application Resources” link. Press the button “New JDBC Custom DataSource”:



3. Fill in the form with the same values as for the “IDM_DataSource” Data Source. Please remember to exchange the “<prefix>_prov” user with the “<prefix>_rt” user (and adjust the password accordingly):

New JDBC Custom DataSource Creation

Save Cancel

Settings Connection Pooling Additional Properties JDBC DataSource Aliases

Application Name: RHIDMO_RT

DataSource Name: * RHIDMO_RT

Driver Name: * MSS

SQL Engine: * Native SQL

Isolation Level: * Default

JDBC Version: * 1x (without XA support)

Driver Class Name: * com.microsoft.sqlserver.jdbc.SQLServerDriver

Database URL: * jdbc:sqlserver://192.168.7.61:1433;databasename=idm80_db

User Name: * idm80_rt

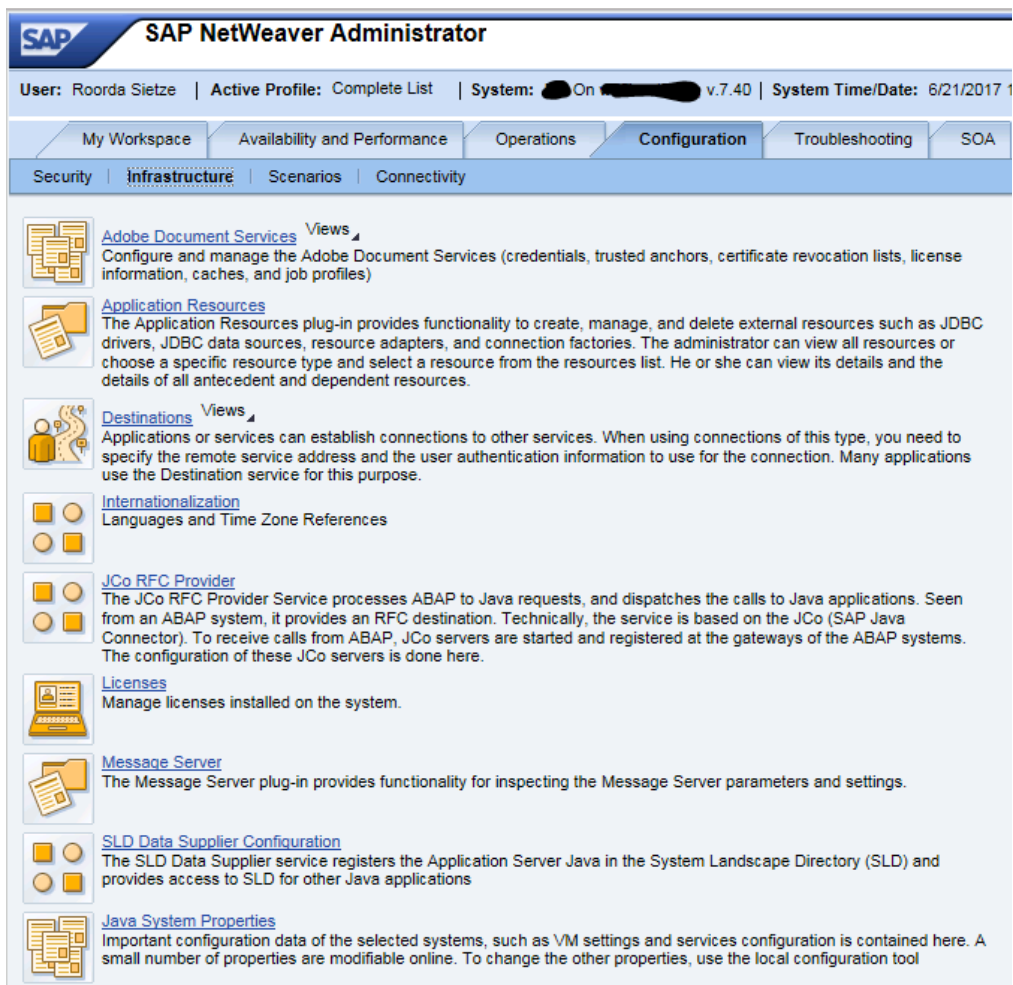
Password: *

Description: Rhidmo DataSource

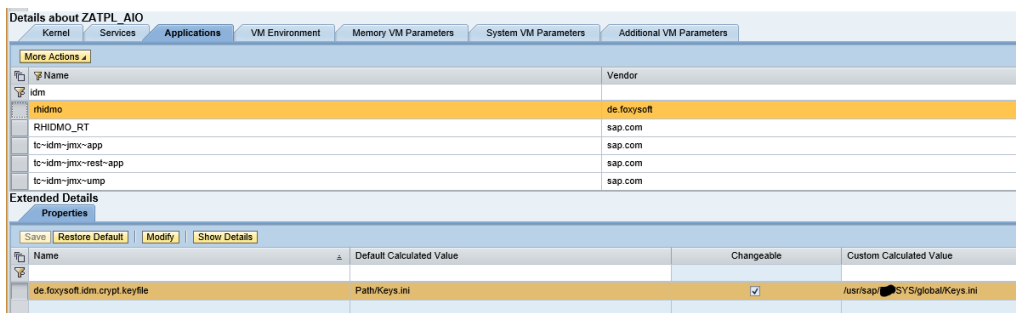
The screenshot above shows example values for the Microsoft SQL Server database using “idm80” as the prefix.

2.3 Set Application Parameters

1. While still in NWA, go to “Configuration” → “Infrastructure”:



2. Press the link “Java System Properties” and find the tab “Applications” (somewhere in the middle). Filter on “idm” to see only SAP IDM relevant content:



3. Change the property “de.foxysoft.idm.crypt.file” to have the same value as the property “com.sap.idm.jmx.crypt.keyfile” of the “tc~idm~jmx~app” application. Press the “Save” button to store your changes.

3 Use Rhidmo®

Each form that needs to use Rhidmo® must be configured. Please enter the following values in the form properties:

The screenshot shows the 'General' tab of the 'Rhidmo8TestForm' configuration dialog. The 'Enabled' checkbox is checked. The 'Form ID/Name' field contains '186/Rhidmo8TestForm'. The 'Form Type' dropdown is set to 'Regular'. The 'Repository' dropdown is set to '-- None --'. The 'Use Inactive Entries' and 'Use Context Variables' checkboxes are unchecked. The 'Extension Framework' dropdown is empty. The 'Extension Class' field contains 'de.foxysoft.rhidmo.TaskProcessingDynamic'. The 'onLoad' and 'onSubmit' checkboxes are checked. The 'Custom Parameters' table has two rows: 'ONLOAD' with type 'String' and value 'rhidmo8_onload', and 'ONSUBMIT' with type 'String' and value 'rhidmo8_onsubmit'. The 'Add', 'Modify...', and 'Remove' buttons are visible on the right.

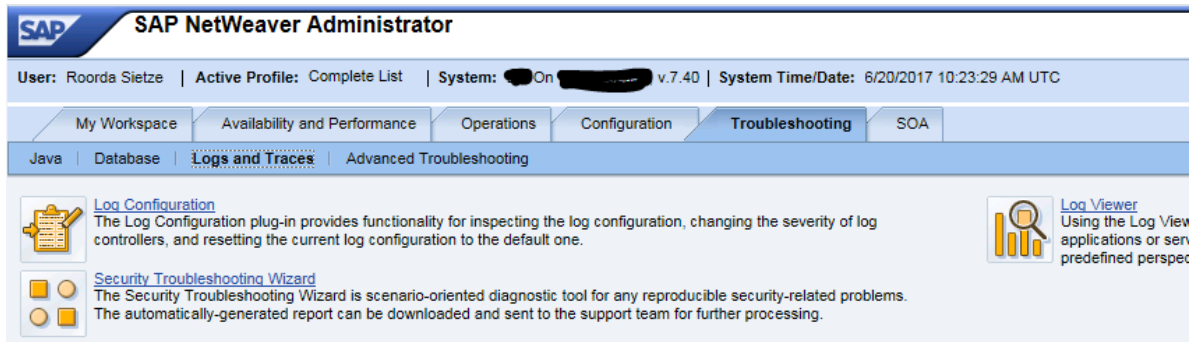
Property	Type	Value
ONLOAD	String	rhidmo8_onload
ONSUBMIT	String	rhidmo8_onsubmit

Use the extension class “de.foxysoft.rhidmo.TaskProcessingDynamic”. The “ONLOAD” and “ONSUBMIT” parameters denote the javascript functions to be called during the corresponding events. These functions must be declared in the same package where the form resides.

4 Trouble Shooting

Please check the JAVA AS log in case something goes wrong. If necessary, make sure that the log configuration shows the right amount of messages:

The log viewer can configured and accessed using the “/nwa” application (go to “Troubleshooting” → “Logs and Traces”):



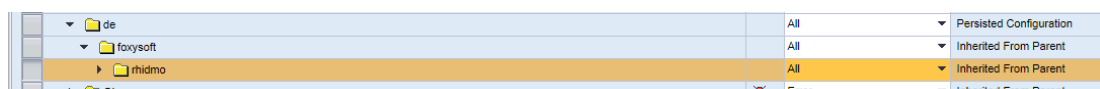
4.1 Configuration

By clicking on the link “Log Configuration” you can configure the amount of logging that Rhidmo® generates:

1. Select “Tracing Locations”:



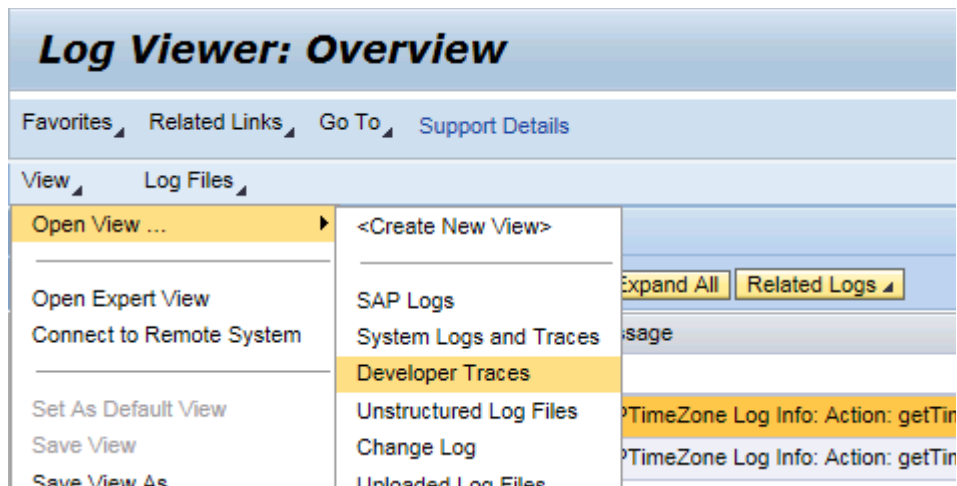
2. Then select “de.foxysoft.rhidmo” in the subtree below:



3. Select the log level you want from the dropdown box to the right and click on the “Copy to Subtree” button to copy this setting to all locations below.

4.2 Log Viewer

Click on the “Log Viewer” link to view the logs (Select the View “Developer Traces” to examine the Rhidmo® logs):







Example log:

Developer Traces					
Show Advanced Filter [Icons] Expand All Related Logs					
Detail	Severity	Date	Time	Message	Location
		▼ yyyy-mm-dd			
+	debug	2017-06-20	13:37:08.275	service: Returning [com.sap.idm.extension.api.idmValue@4637affb]	de.foxysoft.rhidmo.TaskProcessingStatic
+	warning	2017-06-20	13:37:08.258	Attribute [MX_PHONE_PRIMARY] Value []	de.foxysoft.rhidmo.Application
+	warning	2017-06-20	13:37:08.258	Attribute [DISPLAYNAME] Value [Test SBR]	de.foxysoft.rhidmo.Application
+	warning	2017-06-20	13:37:08.258	Attribute [MSKEYVALUE] Value [TESTSBR]	de.foxysoft.rhidmo.Application
+	warning	2017-06-20	13:37:08.258	OnLoad called: Subject MSKEY [23] object MSKEY [25]	de.foxysoft.rhidmo.Application
+	debug	2017-06-20	13:37:08.258	service: f = [org.mozilla.javascript.gen.rhidmo8_onload_23@3621786d]	de.foxysoft.rhidmo.TaskProcessingStatic

5 FAQ

5.1 “Invalid Key size”

The following two messages appear in the log file and (en-) or decryption is not possible:

	 error	2018-03-18	10:23:41:130	java.security.InvalidKeyException: Illegal key size at javax.crypto.Cipher.a(DashoA13*.. at javax.crypto.Cipher.a(DashoA13*.. at javax.crypto.Cipher.a(DashoA13*.. at javax.crypto.Cipher.a(DashoA13*..)...
	 debug	2018-03-18	10:23:41:130	determineSecretKey: Keysize = 32 Maximum 16

The second message tells us that maximum supported key size is 16 bytes (or 128 bits). However, the string is encrypted with a key having 32 bytes (or 256 bits).

This means that the SAP JAVA AS is running with a Java version with limited cryptography capabilities. See SAP Note [1240081](#) for further details.