

Novell

Identity Manager Driver for Remedy Action Request System* (ARS)

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IMPLEMENTATION GUIDE

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About This Guide

This guide explains how to install, configure, and manage the Identity Manager Driver for Remedy Action Request System (ARS).

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The Remedy Action Request System is a platform and development environment for automating Service Management business processes.

Audience

This guide is intended for Identity Manager administrators.

Feedback

We want to hear your comments and suggestions about this manual and the other documentation included with this product. Please use the User Comments feature at the bottom of each page of the online documentation, or go to www.novell.com/documentation/feedback.html and enter your comments there.

Documentation Updates

For the most recent version of this guide, see the Identity Manager Drivers Documentation Web Site (<http://www.novell.com/documentation/idm35/drivers>).

Additional Documentation

This guide includes information about the Identity Manager Driver for Remedy ARS. For information about Identity Manager in general, see the *Novell Identity Manager 3.5 Administration Guide* (<http://www.novell.com/documentation/idm35/index.html>).

1. Overview

The Remedy Action Request System (ARS) is a platform and development environment for automating Service Management business processes.

Identity Manager Driver 1.0 for Remedy ARS provides data integration between Novell® eDirectory™ and Remedy ARS.

The driver uses the Remedy Java* API to access Remedy objects and data. Preconfigured driver policies allow synchronization, creation, and management between eDirectory and Remedy ARS for both users and groups.

For example, the driver can request new employee data from eDirectory and then send the information to Remedy ARS, where an account and password are created automatically.

The driver can also synchronize other Remedy data to the directory.

Local Platforms

This driver can run on local Windows* and Linux* platforms.

Remote Platforms

This driver can run on remote Windows and Linux platforms.

Role-Based Entitlements Support

This driver doesn't support Role-Base Entitlements.

Password Synchronization Support

This driver supports password synchronization on the Subscriber channel only.

Synchronized Objects

The default driver configuration synchronizes users and groups between ARS and eDirectory.

By discovering the Remedy ARS Schema, the driver is able to synchronize any Remedy ARS form with any eDirectory object.

2. Installing the Driver

Requirements

- Identity Manager 2.0 or later
- Remedy ARS Server 5.x or 6.x
- A Remedy User with Administrator rights and a fixed license for the driver operations and login
- Remedy Java API

Preparing the Remedy ARS Server

The driver needs filters for the Publisher operations. Use the Remedy Administrator Application to install them.

1. Select the Remedy Server
2. Click *Tools > Import Definitions > From Definition File*.
3. Locate and select `IDM_Notifier.xml`.
4. Select any other needed filter to import (DirXML® Notifier is required).

The driver needs the ARS API library to operate correctly. The ARS API library consists of two parts, the Java portion and the native portion. These files can be found in the AR System installation directory.

The Java files (*.jar) in the `api` directory of the ARS installation must be copied in the same directory as `ARSDriver.jar`. Windows: `NDS/lib`; for Linux: `/usr/lib/dirxml/classes`.

- *For Windows*

The native files (`arapi51.dll`, `arjni51.dll`, `arrpc51.dll`, and `arutl51.dll` or `arapi60.dll`, `arjni60.dll`, `arrpc60.dll`, and `arutl60.dll`) must be copied to the Remote Loader directory or to the `\Novell\nds` directory.

- *For Linux*

The native files (`lib*.*`) in `api/lib` of the ARS installation directory must be copied in the directory `lib/i386` of the JRE. The file `libarrpc.so` in `bin` of the ARS installation directory must be copied the `lib/i386` directory of the JRE.

Installing the Driver

You install the driver during the installation of Identity Manager 3.5. For installation instructions, see the [Identity Manager 3.5 Installation Guide](#). The driver can be installed Windows and UNIX.

You can install the driver remotely as well using the Remote Loader service. For installation instructions, see [Setting Up an Connected System](#) in the *Novell Identity Manager 3.5 Administration Guide*.

3. Creating the Driver

After the RemedyARS driver is installed, it must be created and configured. You can use Designer or iManager to create and configure the driver.

Creating and the Driver in Designer

Designer allows you to import the basic driver configuration file for the RemedyARS driver. This file creates and configures the objects and policies needed to make the driver work with the basic configuration. The following procedure documents one method of creating the driver and importing the driver's configuration.

1. Open a project in the Modeler, right-click the Driver Set object, then select *New > Driver*.

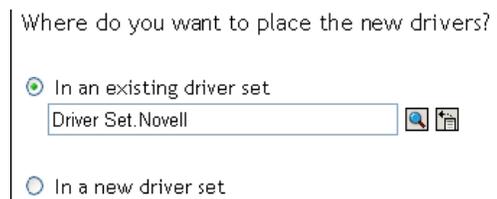


2. From the list, select RemedyARS, then click *Run*.
3. After specifying the parameters, click *OK* to import the driver.
4. Customize and test the driver before deploying it into the production environment.
5. After the driver is fully tested, deploy the driver into the Identity Vault as described in [Deploying a Driver to an Identity Vault](http://www.novell.com/documentation/designer20/index.html?page=/documentation/designer20/admin_guide/data/deploydriver.html#deploydriver) (http://www.novell.com/documentation/designer20/index.html?page=/documentation/designer20/admin_guide/data/deploydriver.html#deploydriver).

Creating the Driver in iManager

iManager allows you to import the basic driver configuration file for the RemedyARS driver. You installed this file when you installed the Identity Manager Web components on an iManager server. Think of the preconfiguration file as a template that you import and customize or configure for your environment.

1. In iManager, select *Identity Manager Utilities > Import Configurations*.
2. Select an existing driver set or select a new driver set.



3. If you selected an existing driver set, continue with Step 4.
or
If you selected to place the driver in a new driver set, skip to Step 6.

4. If you select an existing driver set, browse to and select the driver set, then click *Next*.
5. Browse to and select the server the driver is associated with, click *Next*, then skip to Step 8
6. If you selected to place the driver in a new driver set, click *Next*.
7. Define the properties of the new driver set, then click *Next*.

- Specify the name of the driver set.
- Browse to and select the context where the driver set will be created.
- Browse to and select the server you want the driver set associated with.
- Leave the *Create a new partition on this driver set* option selected.
- Click *Next*.

Novell® recommends that you create a partition for the driver object. For Identity Manager to function, the server that is associated with the driver set must hold a real replica of the Identity Manager objects. If the server holds a Master or Read/Write replica of the context where the objects are to be created, then the partition is not required.

8. Select the RemedyARS driver, then click *Next*.
9. Configure the driver by filling in the configuration parameters, then click *Next*.
10. Select *Define Security Equivalences*.

- Click *Add*, then browse to and select a user object that has the rights the driver needs to have on the server.

Many administrators use the Administrator User object in the Identity Vault for this task. However, you might want to create another object, such as a DriversUser, and assign sufficient rights to that user for the driver to function. Whatever rights the driver needs to have on the server, the DriversUser object must have the same rights.

- Click *OK* twice.

11. Select *Exclude Administrative Roles*.

- Click *Add*, then browse to and select all objects that represent administrative roles and exclude them from replication with the driver.

Exclude the User object in the Identity Vault (for example, DriversUser) that you specified in Step 10. If you delete the User object, you have removed the rights from the driver. Therefore, the driver can't make changes to Identity Manager.

If there are objects that are currently excluded, they do not appear in the *Excluded users* list unless you select *Retrieve Current Exclusions*.

- Click *OK* twice.

12. Click *Next*.

13. View the summary, then click *Finish*.

4. Configuring the Driver

Driver Authentication

Parameter Name	Sample Configuration Value	Required Field
Authentication ID	dirxml	Yes
Authentication Context	REMEDY	Yes
Authentication Password	dirxml	Yes

Authentication ID is the name of the driver's ARS Server user/login account. This user must exist and be granted login/session privileges on the ARS Server or a connection cannot be established. In addition, this user must have rights to select, insert, update, and delete in the synchronization schema tables or synchronization will fail.

Authentication Context is the ARS Server network name (or address).

Example: REMEDY

If you are not using the RPC port mapper service, you must specify the listening port of the ARS server.

Example: REMEDY:1234

The Authentication Password is the password for the ARS Server user/login account that is used by the driver. You must create a user/login account on the ARS Server and grant login/session privileges to this account or the driver will be unable to connect.

Driver Parameters

Polling Interval in Seconds: This tells the driver how long it has to sleep before polling the ARS server for pending events.

Policies and Filters

- The driver's policies allow synchronization for Users and Groups between Remedy and the Identity Vault. Group membership is also supported.
- The Create policy and the filter are configured to allow object synchronization on both channels with their mandatory attributes.
- The Matching policy matches entries on the CNs.

5. Understanding Driver Concepts

The driver supports both Publisher and Subscriber channels.

Data Synchronization

Subscriber Channel: The Subscriber channel directly updates the entries in the database. The driver can only synchronize regular tables (no view).

Publisher Channel: When a customer table is updated, publication triggers insert rows into the event log table. The Publisher channel then reads the inserted rows and updates the Identity Vault.

After sending the event to the Identity Vault, the Publisher channel deletes the rows in the event log table.

The publication trigger can be extended to any ARS schema, by using the Remedy Administration Tool.

Associations

Identity Manager associations are built with the schema name and the Request ID of the entry.

Limitations

- The driver currently supports only the Character, Date/Time, Integer, Drop-Down List and Radio Button fields. Referential attribute synchronization such as Views and Tables isn't supported.
- Password Synchronization is only supported on the Subscriber channel.
- Move commands are not supported by this driver.

6. Customizing the Driver

This driver, like other Identity Manager drivers, can be customized to meet your specific business policies. The driver uses the following policies:

- **Create Policy:** Checks for mandatory attributes for the User and Group classes.
- **Placement Policy:** Places all synchronized objects in a single eDirectory container.
- **Matching Policy:** Matches entries on their CN attributes.
- **Transformation Policy:** The default XSLT rename handler is required to handle Rename events from the driver.

When starting the driver for the first time, the driver reads the full ARS schema. This operation can take some time.

After this is completed, you can add any Form from the ARS schema to the Schema Mapping policy.

7. Password Synchronization

How the Driver Synchronizes Passwords

The RemedyARS Driver support password synchronization on the Subscriber channel only.

Configuring Password Synchronization for the Driver

The Remedy ARS Driver doesn't require any specific configuration to support Password Synchronization.

For each user created, a default password is set to the user's surname.

8. Activating the Driver

Novell® Identity Manager, Integration Modules, and the Provisioning Module must be activated within 90 days of installation, or they shut down. At any time during the 90 days, or afterward, you can choose to activate Identity Manager products.

To activate the driver, see Activating Novell Identity Manager Products (<http://www.novell.com/documentation/idm/install/data/afbx4oc.html>).

9. Security: Best Practices

In order to secure the driver and the information it is synchronizing, see [Security: Best Practices](#) in the *Identity Manager 3.5 Administration Guide*.

10. Troubleshooting

The following section identifies common error messages and the possible causes.

- **No authentication information:** No login/password/server were supplied to the driver. Check the driver configuration in iManager. This is a fatal error, so the driver shuts down.
- **No schemas to synch:** No schema names were supplied to the driver. Check the driver configuration in iManager. This is a fatal error, so the driver shuts down.
- **Unable to connect to ARS server:** The driver didn't successfully log in. Check the driver authentication configuration (login name, password and context).
- **Error trying to build Entry DN:** An error occurred when the driver tried to build the DN for the entry. Because the driver installs the required fields to handle the DN, this error should happen only if the *eDir Container DN* field is undefined for an entry.
- **No SchemaDef was found for xxxx:** The driver tried to get information for an unknown schema. Check that all classes in the filter for the Publisher channel and the Subscriber channel are mapped and check the driver parameter *Schemas to synchronize* in the driver configuration.
- **Problem with native libraries:** The driver can't access the Remedy libraries. Check that the Remedy .dll files are in the system path (usually `/WINNT/System32` for Windows and `/usr/lib` for Linux)
- **No events published:** Check that the Identity Manager notifier is installed correctly on the ARS server.