

Test Cases Reference Guide

Novell[®] Identity Manager Resource Kit

1.2

August 17, 2009

www.novell.com



Legal Notices

Novell, Inc., makes no representations or warranties with respect to the contents or use of this documentation, and specifically disclaims any express or implied warranties of merchantability or fitness for any particular purpose. Further, Novell, Inc., reserves the right to revise this publication and to make changes to its content, at any time, without obligation to notify any person or entity of such revisions or changes.

Further, Novell, Inc., makes no representations or warranties with respect to any software, and specifically disclaims any express or implied warranties of merchantability or fitness for any particular purpose. Further, Novell, Inc., reserves the right to make changes to any and all parts of Novell software, at any time, without any obligation to notify any person or entity of such changes.

Any products or technical information provided under this Agreement may be subject to U.S. export controls and the trade laws of other countries. You agree to comply with all export control regulations and to obtain any required licenses or classification to export, re-export or import deliverables. You agree not to export or re-export to entities on the current U.S. export exclusion lists or to any embargoed or terrorist countries as specified in the U.S. export laws. You agree to not use deliverables for prohibited nuclear, missile, or chemical biological weaponry end uses. See the [Novell International Trade Services Web page \(http://www.novell.com/info/exports/\)](http://www.novell.com/info/exports/) for more information on exporting Novell software. Novell assumes no responsibility for your failure to obtain any necessary export approvals.

Copyright © 2008-2009 Novell, Inc. All rights reserved. No part of this publication may be reproduced, photocopied, stored on a retrieval system, or transmitted without the express written consent of the publisher.

Novell, Inc., has intellectual property rights relating to technology embodied in the product that is described in this document. In particular, and without limitation, these intellectual property rights may include one or more of the U.S. patents listed on the [Novell Legal Patents Web page \(http://www.novell.com/company/legal/patents/\)](http://www.novell.com/company/legal/patents/) and one or more additional patents or pending patent applications in the U.S. and in other countries.

Novell, Inc.
404 Wyman Street, Suite 500
Waltham, MA 02451
U.S.A.
www.novell.com

Online Documentation: To access the latest online documentation for this and other Novell products, see the [Novell Documentation Web page \(http://www.novell.com/documentation/\)](http://www.novell.com/documentation/).

Novell Trademarks

For Novell trademarks, see [the Novell Trademark and Service Mark list \(http://www.novell.com/company/legal/trademarks/tmlist.html\)](http://www.novell.com/company/legal/trademarks/tmlist.html).

Third-Party Materials

All third-party trademarks are the property of their respective owners.

Contents

| | |
|-------------------------|-----------|
| About This Guide | 7 |
| 1 Stability Test | 9 |
| 2 Processes Test | 11 |

About This Guide

The guide is a reference for the test cases that are included with the Resource Kit. It explains what each test case does.

- ♦ [Chapter 1, “Stability Test,” on page 9](#)
- ♦ [Chapter 2, “Processes Test,” on page 11](#)

Audience

This guide is intended for Identity Manager administrators who are using the Identity Manager Resource Kit.

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 the *Test Case Reference Guide*, visit the [Novell Compliance Management Platform Documentation Web site \(http://www.novell.com/documentation/ncmp10/\)](http://www.novell.com/documentation/ncmp10/).

Additional Documentation

For documentation on Identity Manager, see the [Identity Manager Documentation Web site \(http://www.novell.com/documentation/idm36/index.html\)](http://www.novell.com/documentation/idm36/index.html).

For documentation on XPOZ, see the *XPOZ Reference Guide* on the [Novell Compliance Management Platform Documentation Web site \(http://www.novell.com/documentation/ncmp10/\)](http://www.novell.com/documentation/ncmp10/).

Documentation Conventions

In Novell documentation, a greater-than symbol (>) is used to separate actions within a step and items in a cross-reference path.

A trademark symbol (® , ™, etc.) denotes a Novell trademark. An asterisk (*) denotes a third-party trademark.

When a single pathname can be written with a backslash for some platforms or a forward slash for other platforms, the pathname is presented with a backslash. Users of platforms that require a forward slash, such as Linux* or UNIX*, should use forward slashes as required by your software.

Stability Test

1

The stability test for the Resource Kit is an XPOZ script that attempts to reveal any weakness in driver policy or data handling by injecting random data into the driver's environment based on the eDirectory™ syntax type of the attributes each objectClass is working with. The test then checks each driver's Dirxml-StatusLog attribute on both the Subscriber and Publisher channels for any Error messages that have been recorded, and reports these errors in the test summary.

You use the `IDV-stability.env` XPOZ script to start the stability test. The script is a series of loops based on the DirXML-DriverSet DN you entered as an XPOZ environment variable. The test queries the DirXML-DriverSet object for any DirXML-Driver objects it contains. The DirXML-Driver Distinguished Names (DN's) that are returned from this query are placed in an array structure for the test to use.

You are presented with a list of DirXML-Drivers that you can test. You have the option of stopping all the drivers, with only the tested driver running during each driver loop, or you can keep all drivers running. After the selections have been made, the test queries the selected driver's DirXML-DriverFilter and parses the filter for the classes and attributes that the selected driver is handling. The object classes and their attributes are then placed in array that is walked through by the test. For each eDirectory class, if it is recognized, the test creates an XPOZ Test object, then populates the object with the attributes found in the filter for this objectClass. Each attribute type is retrieved from eDirectory, and the attribute's eDirectory syntax is then tested for each of the following conditions (this varies based on syntax type):

- ♦ Remove all values.
- ♦ Blank or null value.
- ♦ If sized, less than the minimum value.
- ♦ If sized, over the maximum value.
- ♦ Minimum value.
- ♦ Maximum value.
- ♦ Random string with range.
- ♦ Random string of extended ASCII characters, where applicable.
- ♦ Random string of double-byte characters, where applicable.
- ♦ Illegal characters such as escaped dots in the attribute value (\.).
- ♦ Multiple values, where applicable.
- ♦ Attribute value case, where applicable.

After all of the objectClasses attributes are tested with this data, the DirXML-StatusLog attribute is queried for any error messages, the next objectClass is tested for its attributes, and the process is repeated. After all objectClasses and attributes have been tested, the test moves on to the next driver, if applicable. When the test is complete, a summary screen lists the Driver, objectClass, and attribute that recorded any error messages in the status log. The drivers are then returned to the state they were in before the test was started. In other words, if they were running before the test was started, they are restarted after the test completes.

If any new attributes are added to existing drivers, or if new DirXML-Drivers are added to the parent DirXML-DriverSet object, you can re-run the test. These new drivers or new attributes appear as testable components to the script.

Processes Test

2

The processes test is an XPOZ script file that runs through the hire and termination processes. These processes are part of an abstraction layer architecture that is included with the Resource Kit. For more information, see “[Business Logic](#)” in the *Identity Manager Resource Kit 1.2 Architecture Reference Guide*.

You use the `processtests.env` XPOZ script file to start the processes test. The test walks user objects through the hire and termination processes. The test determines what the next state of the process is from attributes such as DirXML-HireDate, DirXML-TerminationDate, and Login Disabled. These attributes are stored on the user objects.

The state names and process flow are based on the process architecture documentation in the “[Business Processes](#)” section of the *Identity Manager Resource Kit 1.2 Architecture Reference Guide*. If a manager is required to approve the hire or termination of the users, the DirXML-EntitlementsRef attribute can be used in the test.

There are some pauses included in the test to allow the WorkOrder driver to process any pending DirXML-workOrder objects. These WorkOrder objects start such activities as triggering a workflow in the User Application, enabling a user object after it is hired, or disabling a user object after it is terminated.

The test also verifies that the user object has appropriate access. This is done by looking at the user’s Login Disabled attribute. If the user should not have access, the attribute is disabled. If the user should have access, this attribute is enabled.

If you have created sample users to see how the processes work, the test can also delete these users.

