

Understanding Designer

Novell® Designer for Identity Manager

4.0

October 15, 2010

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 © 2008-2010 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.
404 Wyman Street, Suite 500
Waltham, MA 02451
U.S.A.
www.novell.com

Online Documentation: To access the 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 a list of 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	9
1 Designer Concepts	11
1.1 How Identity Manager Works	11
1.1.1 Data Synchronization	12
1.1.2 Workflow	13
1.1.3 Role Assignments	13
1.1.4 Attestation	13
1.1.5 Self-Service	13
1.1.6 Auditing and Reporting	13
1.2 How Designer Works with Identity Manager	14
1.2.1 Planning	15
1.2.2 Designing	15
1.2.3 Testing	15
1.2.4 Project Documentation	15
1.2.5 Deployment	15
1.3 Designer Features	16
1.3.1 Highly Productive Environment	16
1.3.2 Tools for Developers	16
1.4 Administration Tools	17
2 Getting Help	19
2.1 Help from the Welcome Page	19
2.2 Browsing for Information	20
2.3 Getting Context-Sensitive Help	22
2.4 Getting Help from the Web	22
2.5 Viewing Demos	23
2.6 Searching for Information	24
2.7 Customizing the Browser and Help Server	24
3 What's New in Designer	27
4 Workspaces, Perspectives, and Views	29
4.1 Specifying the Workspace	29
4.2 Project File Format	30
4.2.1 What is XMI?	31
4.3 Managing Perspectives	31
4.3.1 Opening a Perspective	32
4.3.2 Resetting a Perspective	32
4.3.3 Closing a Perspective	32
4.4 Managing Views	33
4.4.1 Available Views In Designer	33
4.4.2 Opening a View	38
4.4.3 Moving a View	39
4.4.4 Minimizing and Maximizing Views	39
4.4.5 Closing a View	40
4.4.6 Reopening a View Window	40

4.4.7	Using Fast Views	40
4.5	The Project View	41
4.6	The Outline View	44
4.6.1	Project Name	46
4.6.2	Version Control Project Name	46
4.6.3	Package Catalog	47
4.6.4	Category	47
4.6.5	Group	47
4.6.6	Package	47
4.6.7	Identity Vault	48
4.6.8	Domain Group	49
4.6.9	Library	49
4.6.10	Server	50
4.6.11	Driver Set	50
4.6.12	ID Policy Container and ID Policy	51
4.6.13	Driver	52
4.6.14	Publisher and Subscriber Channels	54
4.6.15	Policy	55
4.6.16	Overlay Icons	56
4.6.17	Schema Mapping	56
4.6.18	Resource	57
4.6.19	Global Configuration	57
4.6.20	XSLT	58
4.6.21	Filter	59
4.6.22	Application	59
4.6.23	Entitlement	60
4.6.24	Job	61
4.6.25	ECMAScript	62
4.6.26	Mapping Table	62
4.6.27	User Application	63
4.6.28	Default Notification Collection	64
4.6.29	Notification Template	65
4.7	The Navigator View	66
4.8	Policy Set View	70
4.9	The Properties View	72
4.9.1	The Spinner Control	73
4.9.2	The DN Cell Editor	73
4.9.3	Editing Boolean Values	74
4.9.4	Keyboard Tips	74
4.9.5	Resizing Column Widths	74
4.9.6	Summary Table	74
4.10	The Search Results View	75
4.11	The Tasks View	76
4.11.1	Task Properties	77
4.11.2	Filtering Tasks	78
4.11.3	Marking Tasks Completed	79
4.11.4	Right-Click Options	80
4.11.5	Setting Task Priorities	80
4.11.6	Sorting Tasks	81
4.12	The Trace and Error Log Views	81
4.12.1	Trace View	81
4.12.2	Error Log View	81
4.13	The Dataflow View	82
4.14	The Project Checker	82

5	Editors, Builders, and Wizards	85
5.1	Editors	85
5.1.1	Using an Editor	85
5.1.2	XML Editor	89
5.1.3	Filter Editor	89
5.1.4	Schema Map Editor	89
5.2	Builders	90
5.3	Wizards	90
6	Planning Identity Solutions	93
6.1	Planning an Identity Project	93
6.2	Using Designer In Your Planning Process	97
6.2.1	Using the Architect View to Design Your Identity Environment	97
6.2.2	Designing New Solutions	97
6.2.3	Redesigning Existing Solutions	98
6.2.4	Working on Live Systems	98
6.3	Security Best Practices	99
A	Designer's Architecture	101
A.1	Designer Is Built on Eclipse Technology	101
A.2	The Designer Core Model Uses the Eclipse Modeling Framework	101
B	Terminology	103
C	Menu Options	105
C.1	File Menu	105
C.2	Edit Menu	108
C.3	View Menu	108
C.4	Project Menu	109
C.5	Live Menu	109
C.6	Tools Menu	111
C.7	Model Menu	111
C.8	Window Menu	117
C.9	Help Menu	123

About This Guide

This guide is for anyone who wants to better understand how the Designer tool fits into the Identity Manager framework. The guide also covers basic Designer concepts and features that are available. Sections in the book include:

- ♦ Chapter 1, “Designer Concepts,” on page 11
- ♦ Chapter 2, “Getting Help,” on page 19
- ♦ Chapter 3, “What’s New in Designer,” on page 27
- ♦ Chapter 4, “Workspaces, Perspectives, and Views,” on page 29
- ♦ Chapter 5, “Editors, Builders, and Wizards,” on page 85
- ♦ Chapter 6, “Planning Identity Solutions,” on page 93
- ♦ Appendix B, “Terminology,” on page 103
- ♦ Appendix C, “Menu Options,” on page 105

Target Audience

Designer for Identity Manager was created for the following audiences:

- ♦ Enterprise IT developers
- ♦ Consultants
- ♦ Sales engineers
- ♦ Architects or system designers
- ♦ System administrators

Designer is aimed at information technology professionals who:

- ♦ Have a strong understanding of directories, databases, and the information environment
- ♦ Act in the role of a designer or architect of identity-based solutions

You don’t need to be a developer or programmer to use Designer. Designer contains fourteen builders to help you build working policies and drivers, seven editors to assist you in editing projects, and wizards to help you build drivers. Designer also contains over thirty views to help you design and implement Identity Manager solutions. Experienced users can bypass the wizards and interact directly at any level of detail.

Feedback

We want to hear your comments and suggestions about this manual and the other documentation included with this product. Please use the User Comment 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 *Understanding Designer for Identity Manager 4.0*, visit the [Identity Manager documentation Web site \(http://www.novell.com/documentation/idm40/index.html\)](http://www.novell.com/documentation/idm40/index.html).

Additional Documentation

- ♦ *Designer 4.0 for Identity Manager 4.0 Administration Guide*
- ♦ *Identity Manager 4.0 Integrated Installation Guide*
- ♦ *Identity Manager 4.0 Overview Guide*
- ♦ *Understanding Policies for Identity Manager 4.0*
- ♦ *Policies in Designer 4.0*
- ♦ *Novell Credential Provisioning for Identity Manager 4.0*
- ♦ *Identity Manager 4.0 DTD Reference*
- ♦ Identity Manager 4.0 driver guides (<http://www.novell.com/documentation/idm40drivers/>)

Designer Concepts

1

Designer for Identity Manager helps you design, test, document, and deploy Identity Manager solutions in a network or test environment. From a design perspective, Designer helps you graphically see all of the components that make up your Identity Manager solution and how they interact. From a test perspective, Designer enables you to modify your Identity Manager implementations to ensure they perform as expected.

From a document perspective, Designer keeps track of your design and layout information and presents that information in a format of your choosing with the simple click of a button. From a deployment perspective, Designer allows you to deploy and enable part or all of your Identity Manager solution into your actual networking environment. In addition, Designer enables teams to share work on enterprise-level projects.

- ♦ [Section 1.1, “How Identity Manager Works,” on page 11](#)
- ♦ [Section 1.2, “How Designer Works with Identity Manager,” on page 14](#)
- ♦ [Section 1.3, “Designer Features,” on page 16](#)
- ♦ [Section 1.4, “Administration Tools,” on page 17](#)

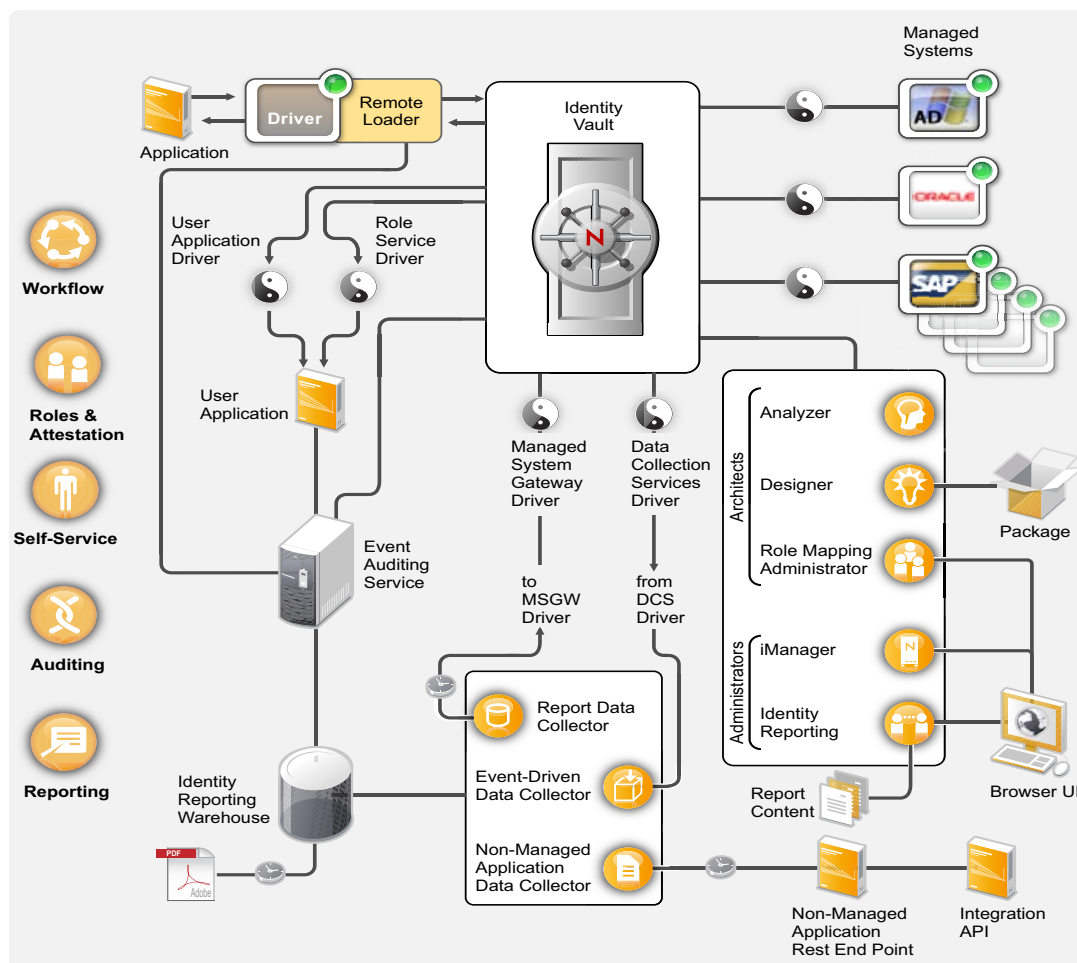
1.1 How Identity Manager Works

Novell Identity Manager is a collection of products that provide the following capabilities:

- ♦ [Section 1.1.1, “Data Synchronization,” on page 12](#)
- ♦ [Section 1.1.2, “Workflow,” on page 13](#)
- ♦ [Section 1.1.3, “Role Assignments,” on page 13](#)
- ♦ [Section 1.1.4, “Attestation,” on page 13](#)
- ♦ [Section 1.1.5, “Self-Service,” on page 13](#)
- ♦ [Section 1.1.6, “Auditing and Reporting,” on page 13](#)

Identity Manager provides these capabilities through a number of components, as shown in the following figure:

Figure 1-1 Identity Manager Functionality



For more information on how Identity Manager components work together, see the [Identity Manager 4.0 Overview Guide](#) manual.

1.1.1 Data Synchronization

Simply put, data synchronization is the ability to move data that has been changed in one location to a different location. Data synchronization can include password synchronization, but it is not limited to that because Identity Manager can synchronize any data that is stored in a connected system that has access to the Identity Vault.

Data synchronization, including password synchronization, is provided by the five base components of the Identity Manager solution: the Identity Vault, Metadirectory engine, drivers, Remote Loader, and connected applications. For more information about data synchronization, see “[Data Synchronization](#)” in the [Identity Manager 4.0 Overview Guide](#).

1.1.2 Workflow

Through the User Application, Identity Manager provides the means to perform such functions as workflow approval, role assignments, attestation, and identity self-service. The User Application is a browser-based Web application that allows you to initiate provisioning and role assignment requests, as well as manage the approval process for these requests.

Workflow approval allows users to request access to networking resources, which can include an approval process involving one or more managers. For more information about the User Application, see “[Workflow](#)” in the *Identity Manager 4.0 Overview Guide*.

1.1.3 Role Assignments

Role assignments allow users to receive access to network resources that have been assigned to them. You can receive access to role assignments either at an individual level or at a group membership level.

The Roles Mapping Administrator can create new roles; modify existing roles; remove roles; modify relationships between roles; grant or revoke role assignments for users; and create, modify, and remove Separation of Duties constraints. For more information about roles-based provisioning, see the *Identity Manager Role Mapping Administrator 2.0 Installation and Configuration Guide*.

1.1.4 Attestation

Attestation allows your organization to assure that user access to resources does not break any corporate or government regulations. Using this process, individual users can validate their own profile information, and roles managers can validate role assignments and Separation of Duties violations.

For more information about attestation, see “[Roles and Attestation](#)” in the *Identity Manager 4.0 Overview Guide*.

1.1.5 Self-Service

The self-service capabilities of Identity Manager allow users to edit their own profiles, search a directory, change their passwords (including password hints and challenge responses), review password status, and, if authorized, create accounts for new users or groups. If you are an administrator, you can also view reports on the applications that are associated with a user.

For more information about Identity Manager’s self-service capabilities, see “[Self-Service](#)” in the *Identity Manager 4.0 Overview Guide*.

1.1.6 Auditing and Reporting

Identity Manager uses a Platform Agent to capture events from the Identity Vault and tracks those events through either the Event Auditing System or the Novell Sentinel system. The Event Auditing System collects identity information and events from the Identity Vault, administration tools, and Identity Manager. Novell Sentinel is a security information and event management (SIEM) solution that automates the collection, analysis, and reporting of system network, application, and security logs.

For a more complete introduction to the Event Auditing System, see “[Auditing, Reporting, and Compliance](#)” in the *Identity Manager 4.0 Overview Guide*. For a more complete introduction to auditing and reporting, see:

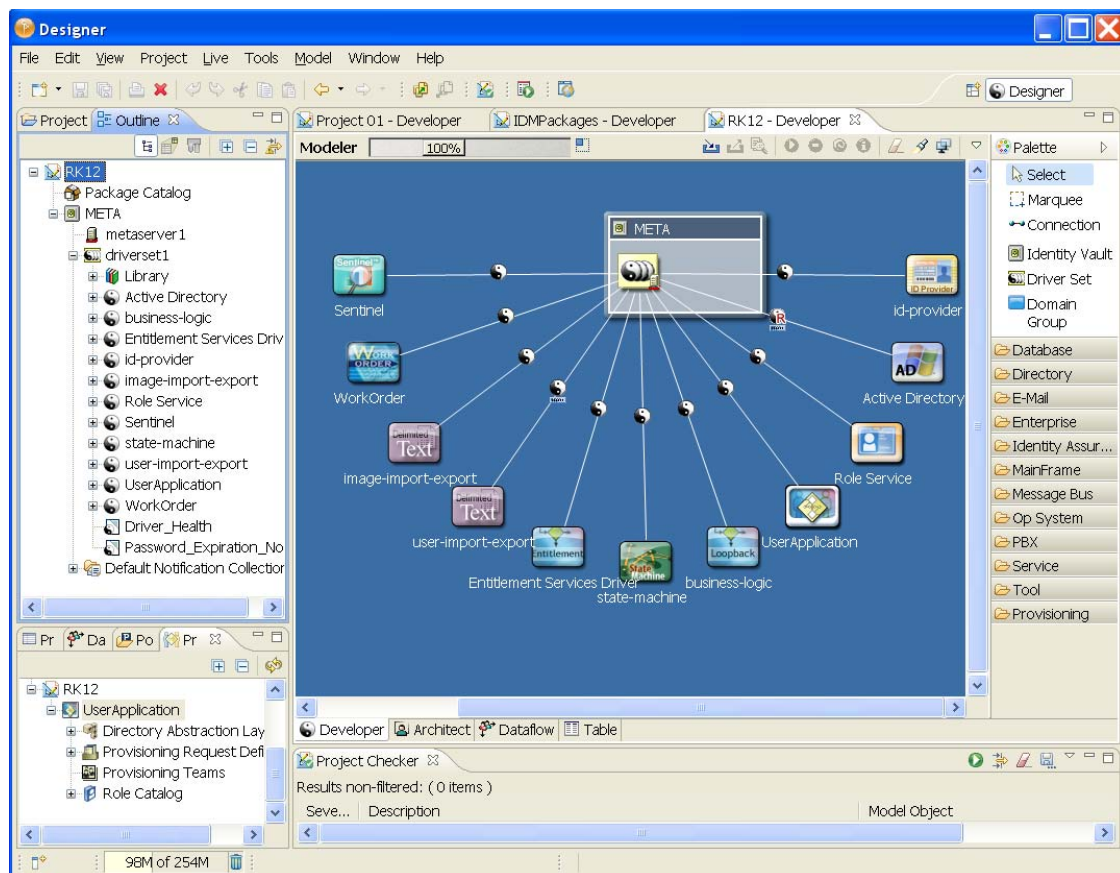
- ♦ [Novell Sentinel site](http://www.novell.com/products/sentinel/) (<http://www.novell.com/products/sentinel/>)
- ♦ *Identity Manager 4.0 Reporting Guide for Novell Sentinel*
- ♦ *Identity Manager Reporting Guide* (<http://www.novell.com/documentation/idmrpbm40/index.html>)

1.2 How Designer Works with Identity Manager

Designer for Identity Manager is a powerful, graphical toolset that works on Windows or Linux workstations or laptops. Designer is self-contained, with a complete help system as part of the software. This allows you to take a laptop anywhere to work on your Identity Manager solution.

Designer helps you plan, design, test, document, and deploy Identity Manager solutions in a network or test environment. Designer does this through a series of windows called “views,” as well as a number of builders, wizards, and editors.

Figure 1-2 *The Outline View, Modeler, and Palette in Designer*



- ♦ [Section 1.2.1, “Planning,” on page 15](#)
- ♦ [Section 1.2.2, “Designing,” on page 15](#)
- ♦ [Section 1.2.3, “Testing,” on page 15](#)

- ♦ [Section 1.2.4, “Project Documentation,” on page 15](#)
- ♦ [Section 1.2.5, “Deployment,” on page 15](#)

1.2.1 Planning

- ♦ Designer allows you to set up complete Identity Manager solutions in a test environment so you can work through any problems before deploying the solution into an actual work environment.
- ♦ The Project view has directories that allow you to use drag and drop to store plans, documents, and figures pertaining to your Identity Manager solution.
- ♦ For more information on planning your Identity Manager solution, see [Chapter 6, “Planning Identity Solutions,” on page 93](#).

1.2.2 Designing

- ♦ Designer can help you graphically see all of the components that make up your Identity Manager solution and how they interact with each other.
- ♦ The Architect view in the Modeler gives you icons and a graphics area to help you organize and visualize your Identity Manager environment. For more information on the Architect view, see “[Architect Mode](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.
- ♦ The Developer view in the Modeler allows you to design and configure the components that make up your Identity solution. For more information on the Modeler view, see “[Creating a Model](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.

1.2.3 Testing

- ♦ Designer allows you to modify your Identity Manager implementations in a test environment to ensure that they perform as expected.
- ♦ Designer is team-enabled, allowing teams to share work on enterprise-level projects. Through the Version Control view, teams can work on the same solutions, share policy procedures, and keep track of who make changes to objects. For more information on the Version Control view, see “[Version Control](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.

1.2.4 Project Documentation

- ♦ Designer keeps track of your design and layout information in a project and can present that information in a format of your choosing with the simple click of a button.
- ♦ Using Designer to document your Identity Manager solution can save you weeks or months of gathering and writing driver specifications and their implementations. For more information on documenting your projects, see “[Documenting Projects](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.

1.2.5 Deployment

- ♦ Designer allows you to deploy and enable part or all of your Identity Manager solution into your actual networking environment.

- ♦ Through the Import feature, you can import tested solutions or parts of a project from a test or working environment. For more information on importing, see “[Importing into Designer](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.
- ♦ After you have a tested solution that is ready for deployment, you can use Designer’s Deploy feature to place that project into production. For more information on deploying a project, see “[Deploying and Exporting](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.

1.3 Designer Features

- ♦ [Section 1.3.1, “Highly Productive Environment,” on page 16](#)
- ♦ [Section 1.3.2, “Tools for Developers,” on page 16](#)

1.3.1 Highly Productive Environment

The following Designer features help you be more productive:

- ♦ A disconnected mode that enables you to work from your laptop when you’re on the go
- ♦ Strong visual editors, minimal pop-ups, and well-synchronized views maximize productivity
- ♦ Powerful window, view, perspective, and tool management
- ♦ Designer is team-enabled, allowing teams to share work on enterprise-level projects through the Version Control view
- ♦ Dozens of wizards and builders help you configure projects and policies
- ♦ Auto-creation of objects, auto-value, auto-connection, auto-layouts
- ♦ Strong copy/paste functionality within and across editors
- ♦ Full keyboard support in all editors
- ♦ Full undo/redo functionality in most editors and views
- ♦ Ability to scale the UI from basic to more advanced views
- ♦ Ability to filter key views to see as much or as little as you need to see
- ♦ Integrated XML editor with syntax highlighting, auto-suggest, and search and replace capabilities
- ♦ Very efficient, compact, powerful, and productive off-line schema management tools
- ♦ Value history on many fields to reduce typing
- ♦ Many preferences and settings that can help you customize the UI to fit how you want to use Designer
- ♦ Logs and traces that are easy to access and view
- ♦ Thorough contextual help and a powerful searchable help system
- ♦ Quick and easy installation
- ♦ Auto-update notifies you of any updates and easily pulls them in

1.3.2 Tools for Developers

- ♦ Easily add and model something that is not in the shipping version of Designer.

For example, you can add your own applications, drivers, resources, and icons.

- ◆ Configure Designer to use a different editor.

You can configure all file types (for example, `.xml` and `.txt`) to use your text editor of choice. Eclipse-based text editors work best, but you can also include various artifacts (for example, word processing documents and spreadsheets). Your system's native text editor is automatically integrated into Designer if the platform supports it.

- ◆ Develop and debug in Java.

If you install Designer plug-ins into a full Eclipse install, you can perform Java development and debugging, ANT, C#, and UML modeling, all in the same tool alongside Designer. This has particular value to Identity Manager driver writers (Java or C) who want the tools all together.

- ◆ Use public APIs.

Identity Manager uses fully published public Eclipse APIs as an underlying project data model that is consistent with open industry standards in its format, along with published Eclipse extension points.

With an off-the-shelf Eclipse book and knowledge of our extension points, you should be able to contribute very rich content to Designer. There are books, resources, and forums in the Eclipse community to address most of your needs. For further information, see [Eclipse Resources \(http://www.eclipse.org/resources/\)](http://www.eclipse.org/resources/).

1.4 Administration Tools

Identity Manager contains multiple tools to assist you in setting up and configuring a working Identity Manager solution. These are Analyzer, Designer, iManager, the Role Mapping Administrator, and the User Application administration console.

Analyzer is an Eclipse-based identity management toolset that helps you ensure that internal data quality policies are adhered to by providing data analysis, data cleansing, data reconciliation, and data monitoring and reporting. Analyzer lets you analyze, enhance, and control all data stores throughout the enterprise.

iManager and Designer have similarities, but their features and user experience are optimized for their respective target users and environments. Designer is a planning and design tool, and iManager is a real-time administrator tool. They are compatible. However, package management is only done through Designer. iManager is package-aware, but it can't support package management.

iManager is a browser-based tool that provides a single point of administration for many Novell products, including Identity Manager. By using the Identity Manager plug-ins for iManager, you can manage Identity Manager and receive real-time health and status information about your Identity Manager system.

The Role Mapping Administrator is a Web service that discovers authorizations and permissions that can be granted within your major IT systems. It allows business analysts, not just IT administrators, to define and maintain which authorizations are associated with which business roles.

The User Application provides a Web-based administration console that allows you to configure, manage, and customize password self-service, roles, and provisioning. The administration console is added as an *Administration* tab in the User Application for anyone who has been assigned administrative rights.

These tools can help you to implement a viable Identity Manager solution into your organization.

Getting Help

2

You can find information about Designer in its local help system, in the `readme.txt` file, and in the online documentation. Information in the help system is not localized. If you need localized information, refer to the *Designer 4.0 for Identity Manager 3.6 Administration Guide* on the [Novell documentation Web site \(http://www.novell.com/documentation\)](http://www.novell.com/documentation).

- ♦ Section 2.1, “Help from the Welcome Page,” on page 19
- ♦ Section 2.2, “Browsing for Information,” on page 20
- ♦ Section 2.3, “Getting Context-Sensitive Help,” on page 22
- ♦ Section 2.4, “Getting Help from the Web,” on page 22
- ♦ Section 2.5, “Viewing Demos,” on page 23
- ♦ Section 2.6, “Searching for Information,” on page 24
- ♦ Section 2.7, “Customizing the Browser and Help Server,” on page 24

2.1 Help from the Welcome Page

When Designer starts, a Welcome page appears and makes it easy for you to get started.

Figure 2-1 The Welcome Page

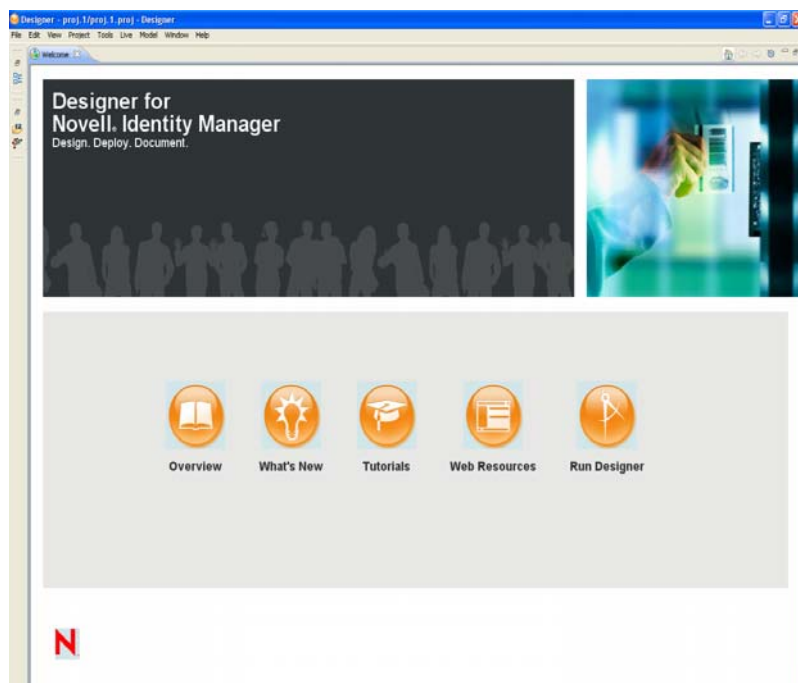


Table 2-1 Options on the Welcome Page

Option	Description
Overview	Provides an overview of Designer and Identity Manager.
What's New	<ul style="list-style-type: none">◆ Describes what's new in this release.◆ Enables you to update Designer.◆ Links to the Readme file.
Tutorials	Launches Flash demos of some Designer tasks.
Web Resources	Provides links to online information and downloads.
Run Designer	Takes you to the Designer program.

The icons on the toolbar take you to the Welcome page, toggle between previous and next pages, and enable you to customize the Welcome page.

Figure 2-2 Icons on the Toolbar



You can close the Welcome page at any time by clicking the *X* next to *Welcome*.

Figure 2-3 The Close Icon

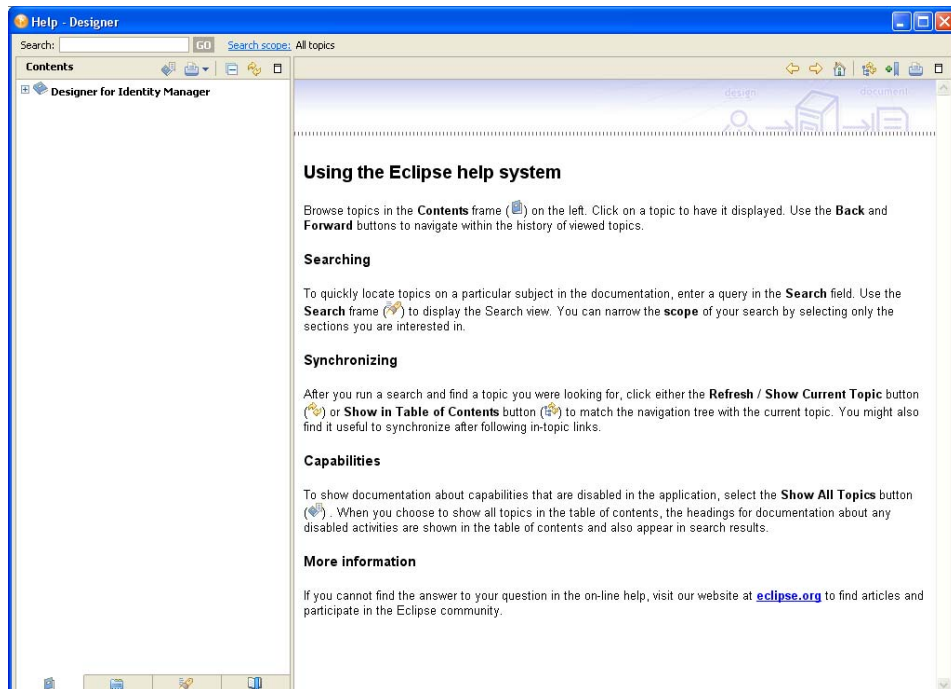


To return to the Welcome page, click *Help > Welcome*.

2.2 Browsing for Information

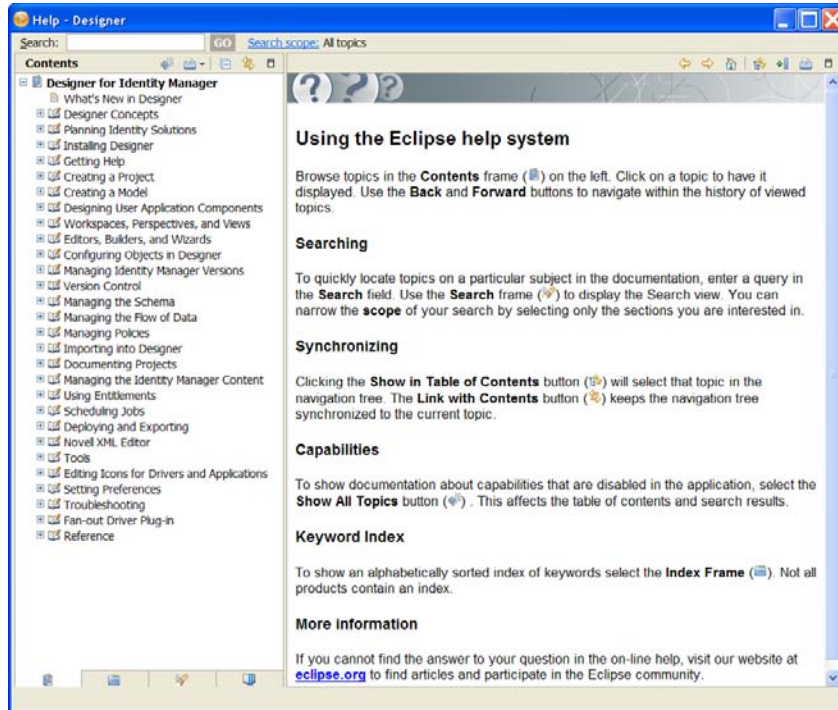
To navigate all of the help topics, you can use a built-in Web browser:

- 1 From Designer's main menu, select *Help > Help Contents*.



The text under *Using the Eclipse help system* describes the icons that help you navigate and use the Help system.

- 2 In the Contents pane, select *Designer for Identity Manager*.




- 3 Navigate to the topic that you're interested in.

or

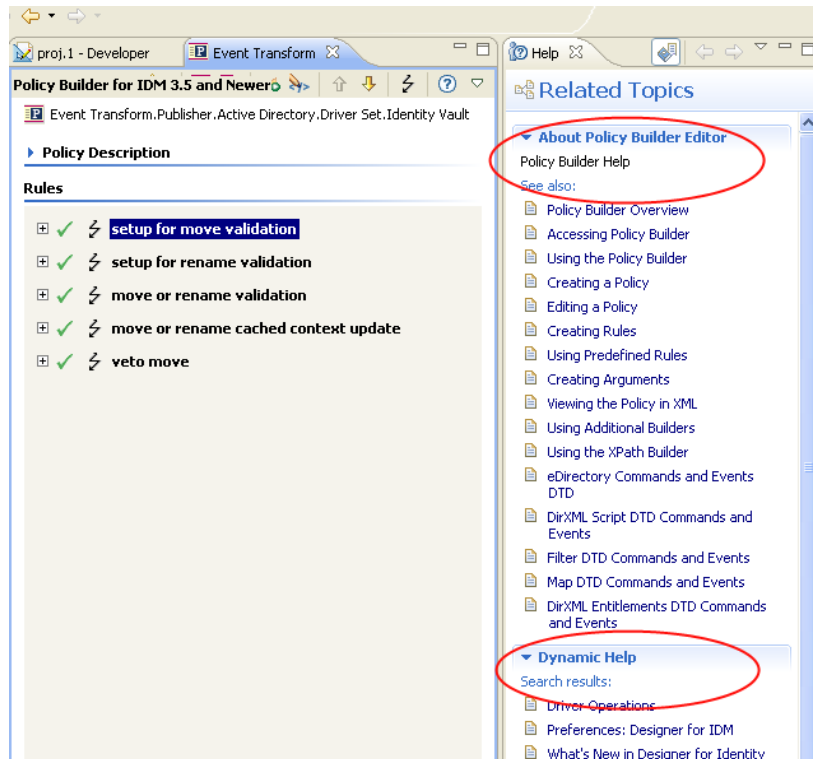
Select the *Index* icon in the Contents pane to see an index of the topics.

2.3 Getting Context-Sensitive Help

- 1 Press F1 or click the Help icon .

If you maximize an editor (for example, the Modeler), help topics do not display when you press F1. To view the help, minimize the editor.

- 2 Click links under *About* and *Dynamic Help*.

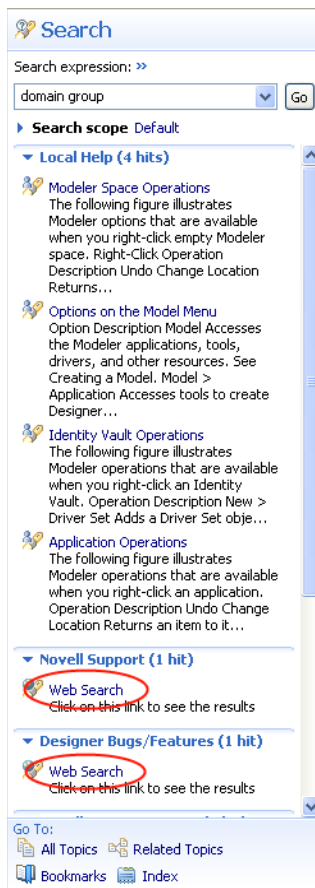


2.4 Getting Help from the Web

To view results found through Google or in the Eclipse help system:

- 1 Select *Help > Search*.
- 2 Type text in the *Search expression* field, then click *Go* or press Enter.
- 3 Click *Web Search*.

Figure 2-4 *Related Topics in Google and Eclipse*



2.5 Viewing Demos

To see how Designer works, view the Flash demos that are available on the Welcome page:

- 1 Select *Help > Welcome*.
- 2 Select the *Tutorials* icon.



- 3 Select a demo:
 - ♦ Model Projects
 - ♦ Import
 - ♦ Create a Workflow
 - ♦ Manage and Simulate Policies
 - ♦ Documentation Generation Overview

2.6 Searching for Information

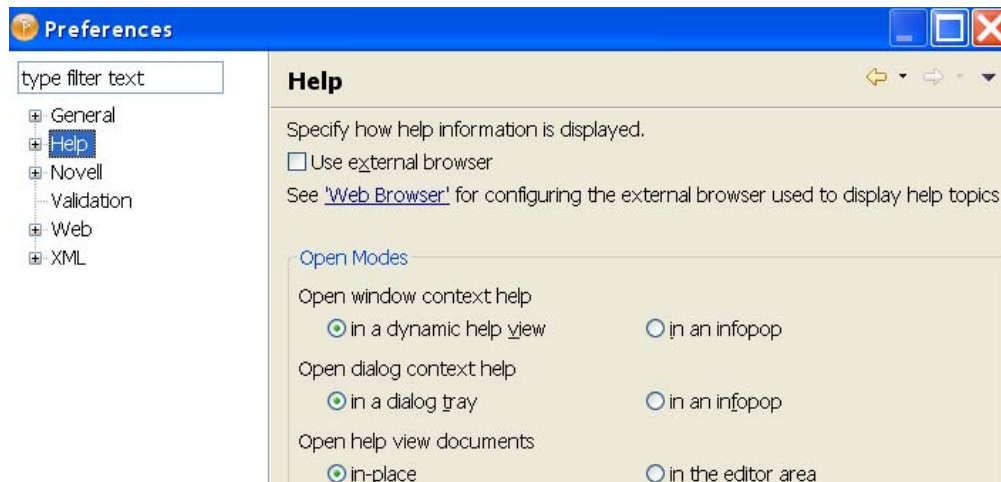
- 1 Select *Help > Search*.
- 2 Type a topic in the *Search* field, then click *Go*.

You can also select *Help > Help Contents*, then use the Search option above the Contents pane, or click *Search* at the bottom of the context-sensitive Help view.



2.7 Customizing the Browser and Help Server

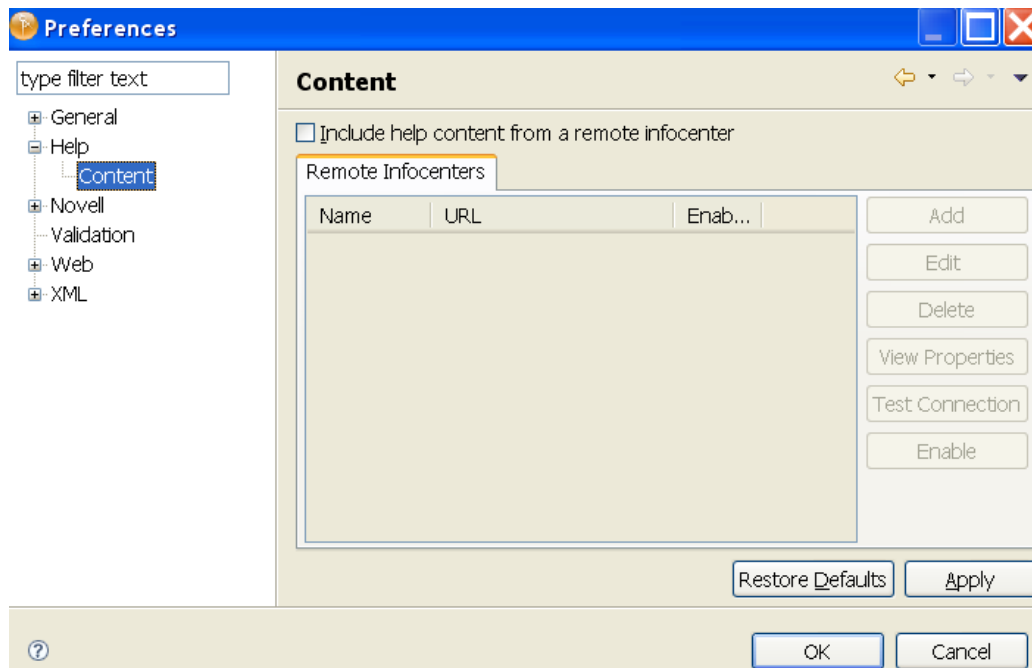
- 1 From the main menu, click *Window > Preferences*.
- 2 Select *Help*, make changes, then click *OK*.



Because Designer is built on Eclipse, you are able to use Help server functionality, as a development tool for building your own tools. If you have a team environment where the entire team is using Eclipse, you might want to set up a common Help server, and then use that server for help files and content.

For more information on Help and the Help server:

- ♦ See “[Help](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.
 - ♦ Go to the Eclipse Web site.
- 3 (Optional) Expand *Help*, then click *Content*.



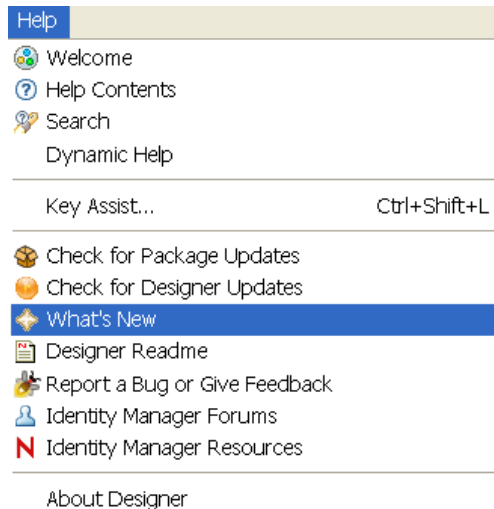
- 4 (Optional) Click *Include help content from a remote infocenter*.
- 5 Click *Add*, then fill in the following fields for the remote help server:
 - Name:** Specify a name for the remote help server.
 - Host:** Specify the IP address or DNS name of the remote help server.
 - Path:** Specify the path to the help files on the remote help server.
 - Use default port:** Click this option if you want to use the default port.
 - Use port:** Click this option, then specify the custom port.
- 6 (Optional) Click *OK*. to add the help server information.
- 7 Click *OK* to close the Help Content page.

What's New in Designer

3

Designer is constantly being updated with new features and enhancements. To find out what's new in Designer:

- 1 Run Designer for Identity Manager.
- 2 Click *Help* > *What's New*.



You can also click *Help* > *Help Contents* > *Designer for Identity Manager* > *What's New in Designer*.

In addition, Designer's auto-update feature notifies you of new features so you can download them to have the most current version of Designer.

Workspaces, Perspectives, and Views

4

Designer has many views to help you manage your projects. Many of these views help you manage the different elements that appear in the Modeler view and give you a different perspective on the projects you are creating.

For instance, the Project view shows all of the projects you have created, and the Outline view shows all of the objects that have been created and added to the project. The Navigator view shows all of the files that have been created for the project and their respective file types and locations.

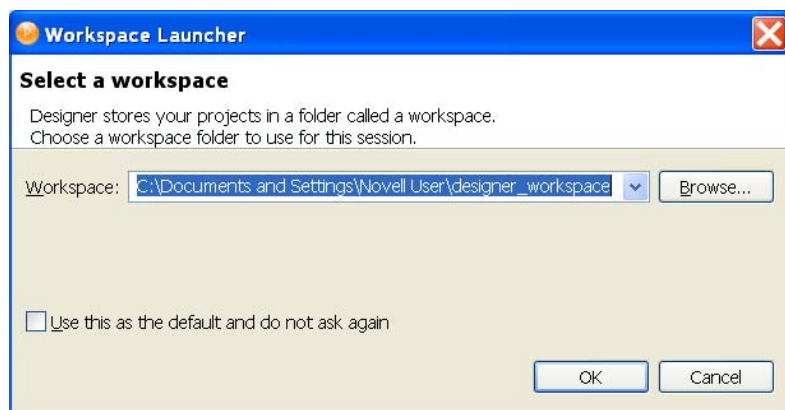
For information on the Modeler view and its functions, see “[Creating a Model](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*. For information on policies, see *Understanding Policies for Identity Manager 4.0* and *Policies in Designer 4.0*.

- ♦ [Section 4.1, “Specifying the Workspace,” on page 29](#)
- ♦ [Section 4.2, “Project File Format,” on page 30](#)
- ♦ [Section 4.3, “Managing Perspectives,” on page 31](#)
- ♦ [Section 4.4, “Managing Views,” on page 33](#)
- ♦ [Section 4.5, “The Project View,” on page 41](#)
- ♦ [Section 4.6, “The Outline View,” on page 44](#)
- ♦ [Section 4.7, “The Navigator View,” on page 66](#)
- ♦ [Section 4.8, “Policy Set View,” on page 70](#)
- ♦ [Section 4.9, “The Properties View,” on page 72](#)
- ♦ [Section 4.10, “The Search Results View,” on page 75](#)
- ♦ [Section 4.11, “The Tasks View,” on page 76](#)
- ♦ [Section 4.12, “The Trace and Error Log Views,” on page 81](#)
- ♦ [Section 4.13, “The Dataflow View,” on page 82](#)
- ♦ [Section 4.14, “The Project Checker,” on page 82](#)

4.1 Specifying the Workspace

A workspace is a directory on your local hard drive where your projects and settings are stored. You specify your workspace directory each time you launch Designer, unless you select the *Use this as the default and do not ask again* option to skip the Workspace Launcher window.

Figure 4-1 *Selecting a Workspace Directory*



The default workspace directory for a Designer 3.0 and above on a Windows workstation is `Documents and Settings\username\designer_workspace`.

IMPORTANT: Earlier Designer workspaces are not compatible with Designer 3.0 and above. Designer stores projects and configuration information in a workspace. These workspaces are not compatible from one version of Designer to another. You need to point Designer 4.0 to a new workspace, and not to a workspace used by a previous version of Designer.

If you have Designer 2.x or 3.0 Milestone projects, you can import the projects into Designer 4.0 (*File > Import > Project from File System*). Be sure the *Copy project into the workspace* option is selected. Importing the project runs the Converter Wizard, making the project compatible with Designer 4.0 architecture and placing it under your designated Designer 4.0 workspace directory (`designer_workspace` by default).

You can switch to another workspace by selecting *File > Switch Workspace > Other*. Select or type the name of the different workspace. Designer quickly restarts, loads the new workspace, and loads any projects and settings you have in that workspace. If the workspace doesn't exist, Designer creates it. Do not use previous Designer workspaces with Designer 3 and above.

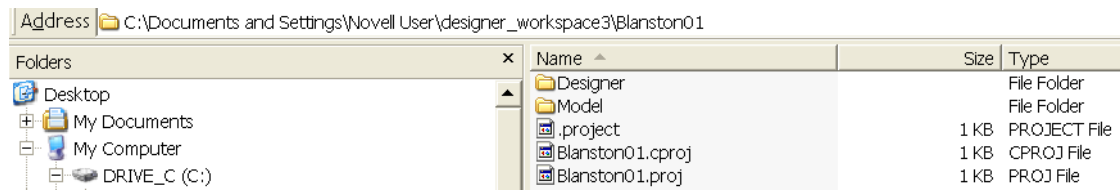
For quick access, the most recently used workspaces appear when you select *File > Switch Workspace*.

You can have multiple workspaces.

4.2 Project File Format

All projects are stored on the file system in a directory. By default, this is in the `C:\Documents and Settings\Username\designer_workspace` directory on a Windows workstation. However, you can specify a different directory when you create the project. (See “[Creating a Project](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.) All of your data and graphical layout information is saved in a directory corresponding to the project name. For example, the following files and directories are stored under the `\designer_workspace3\Blanston01` directory:

Figure 4-2 Local Directory Structure



The main file in the project's directory is the `.proj` file. This file uses an industry-standard XML format called XMI (XML Metadata Interchange Format). You never need to directly edit this file.

4.2.1 What is XMI?

XMI enables easy interchange of metadata between modeling tools and between tools and metadata repositories in distributed heterogeneous environments. XMI integrates three key industry standards:

- ♦ XML (Extensible Markup Language, a W3C standard)
- ♦ UML (Unified Modeling Language, an Object Management Group (OMG) modeling standard)
- ♦ MOF (Meta Object Facility, an OMG modeling and metadata repository standard)

The integration of these three standards into XMI combines the best of OMG and W3C metadata and modeling technologies. The integration enables developers of distributed systems to share object models and other metadata. XMI, together with MOF and UML, forms the core of the OMG repository architecture that integrates object-oriented modeling and design tools with each other and with a MOF-based extensible repository framework.

For more information about XMI, go to [XML Metadata Interchange \(XMI\) \(http://www.oasis-open.org/cover/xmi.html\)](http://www.oasis-open.org/cover/xmi.html).

4.3 Managing Perspectives

A perspective is a collection of related views and editors. To get to the perspective choices, select *Window > Open Perspective*. The following perspectives are available:

- ♦ **Debug:** Used for XML development.
- ♦ **Designer (default):** Provides views (for example, Project, Outline, Property, and Tasks) and editors (for example, the Modeler or the Policy Editor) to help you design and deploy Identity Management solutions.
- ♦ **Java/Java Browsing:** Used for Java development.
- ♦ **Java Type Hierarchy:** Optimized for use with the Hierarchy view for Java projects.
- ♦ **Plug-in Development:** Used for developing the Eclipse plug-in applications.
- ♦ **Resource:** A generic perspective. You can use this perspective for projects other than Designer.
- ♦ **Team Synchronizing:** Used for comparing the local project with the version controlled project.

Use the following information to manage each perspective.

- ♦ [Section 4.3.1, “Opening a Perspective,” on page 32](#)

- ♦ [Section 4.3.2, “Resetting a Perspective,” on page 32](#)
- ♦ [Section 4.3.3, “Closing a Perspective,” on page 32](#)

4.3.1 Opening a Perspective

The Designer perspective should be open and active the first time you run the application. If you close the perspective and want to reopen it, use menus or the Perspective Bar.

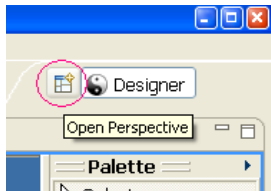
- ♦ [“Using Menus to Open a Perspective” on page 32](#)
- ♦ [“Using the Perspective Bar to Open a Perspective” on page 32](#)

Using Menus to Open a Perspective

- 1 On the main menu, click *Window > Open Perspective*.
- 2 Select *Designer*, then click *OK*.

Using the Perspective Bar to Open a Perspective

- 1 On the main Perspective Bar (found on the right side, on the same level as the toolbar), click the *Perspective Switcher* icon.



- 2 From the list, select *Designer*, then click *OK*.

4.3.2 Resetting a Perspective

After moving or resizing items in the Modeler workspace, you might want to return your perspective to its original layout. To quickly reset items in the workspace:

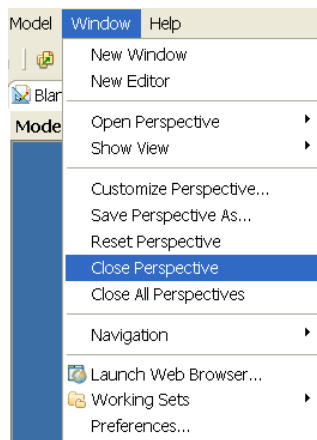
- 1 From the main menu, click *Window*.
- 2 Click *Reset Perspective*.

4.3.3 Closing a Perspective

Do one of the following:

- ♦ On the main menu, select *Window > Close Perspective* (or *Close All Perspectives*).

Figure 4-3 Options to Close a Perspective



- ♦ On the Perspective Bar, right-click the perspective, then click *Close*.

4.4 Managing Views

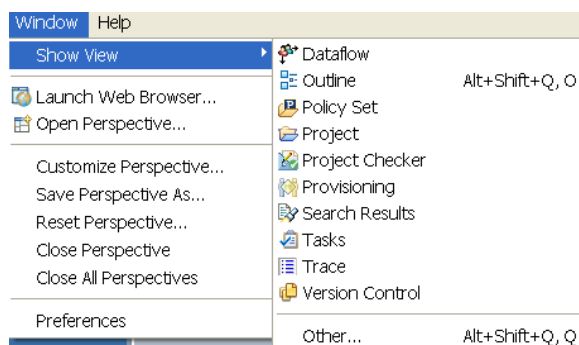
Views enable you to view or edit projects.

- ♦ [Section 4.4.1, “Available Views In Designer,” on page 33](#)
- ♦ [Section 4.4.2, “Opening a View,” on page 38](#)
- ♦ [Section 4.4.3, “Moving a View,” on page 39](#)
- ♦ [Section 4.4.4, “Minimizing and Maximizing Views,” on page 39](#)
- ♦ [Section 4.4.5, “Closing a View,” on page 40](#)
- ♦ [Section 4.4.6, “Reopening a View Window,” on page 40](#)
- ♦ [Section 4.4.7, “Using Fast Views,” on page 40](#)

4.4.1 Available Views In Designer

Below is a list of all of the views that are available to you in Designer. The view names are followed by a brief description and a cross reference to more information. The views are broken into two groups: the views that appear in the *Window > Show View* option and the views that appear in the *Window > Show View > Other* option. Some views are listed in both locations.

Figure 4-4 *Selecting a View*



- ♦ “[Views in the Window > Show View Option](#)” on page 34
- ♦ “[Views in the Window > Show View> Other Option](#)” on page 35

Views in the *Window > Show View Option*

The views that appear in the *Window > Show View* option include:

- ♦ **Dataflow:** Designer allows you to manage how the data flows between the Identity Vault and the connected systems. You can see how the data flows between all of the connected systems, make changes as needed, create reports about the data, and view the flow of passwords between the systems. For more information, see “[Managing the Flow of Data](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.
- ♦ **Outline:** The Outline view provides an outline of all of the objects you have open in an active editor. The Outline view’s contents vary, depending on the editor you have open at the time. For example, if you have a project open in the Modeler view, you see an outline of all of the objects that have been created for that project. See [Section 4.6, “The Outline View,”](#) on page 44.
- ♦ **Policy Set:** The Policy Set view lists policies and displays a toolbar. The list displays all policies contained in the selected policy set. During a transformation, the policies within the list are executed from top to bottom. For a description of the icons located on the Policy Set view toolbar, see [Section 4.8, “Policy Set View,”](#) on page 70.
- ♦ **Project:** The Project view lists all existing Designer projects. From the Project view, you can quickly find, open, view, navigate, manage, close, and delete any Designer project. See [Section 4.5, “The Project View,”](#) on page 41.
- ♦ **Project Checker:** Designer provides a Project Checker tool to check your project. The Project Checker checks for proper design, contexts, server associations, policies, missing user data, and dependency problems that would cause the project deployment into the Identity Vault to fail. The project can be checked at any time, but you should always run the Project Checker before deploying your project. See “[Checking Your Projects](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.
- ♦ **Provisioning View:** The Provisioning view provides persistent access to Designer’s provisioning features. Use the Provisioning view to access the editors that allow you to create and manipulate User Application components, manipulate object definitions, such as import or export object definitions, and define the User Application driver’s supported and default locales.

- ♦ **Search Results:** You can use the Search Results view to search across an entire project. With the Modeler view active, press Ctrl+F, then select the object types for which you want to search. The results appear in the Search Results view, sorted by name, class, type, and notes. See [Section 4.10, “The Search Results View,” on page 75](#).
- ♦ **Tasks:** The Tasks view enables you to make and prioritize notes while you manage identities. This view is for your convenience; it can contain whatever you want and won’t affect the functionality of your solution. See [Section 4.11, “The Tasks View,” on page 76](#).
- ♦ **Trace:** The Error Log view can help you troubleshoot. If something isn’t working, messages written to the error log might help you. The log is named `.log`. It is a hidden file. To view the error log, you can use menus or browse the file system. See [“Viewing the Error Log” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*](#).
- ♦ **Version Control:** Version control enables you to track revisions of your project, along with all the objects and files in that project, share those revisions with other members of your team, manage the history of your objects, and make sure that every member of your team is using the same version of your project. See [“Version Control” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*](#).

Views in the *Window > Show View > Other* Option

The *Window > Show View > Other* option contains views under the following headings:

- ♦ [“General” on page 35](#)
- ♦ [“Designer for Identity Manager” on page 36](#)
- ♦ [“Help” on page 37](#)
- ♦ [“PDE Runtime” on page 37](#)
- ♦ [“Provisioning” on page 37](#)
- ♦ [“XML” on page 38](#)

General

- ♦ **Bookmarks:** The Bookmarks view enables you to see bookmarks that you have set in your text editors. To access the Bookmarks view, select *Window > Show View > Other* and select the *Bookmarks* option under the *General* heading.
- ♦ **Classic Search:** The Classic Search view enables you to search files, Java, or plug-ins. This is a default Eclipse function.
- ♦ **Console:** The Console view allows you to view any consoles you have open. To access the Console view, select *Window > Show View > Other* and select the *Console* option under the *General* heading.
- ♦ **Error Log:** The Error Log view can help you troubleshoot. If something isn’t working, messages written to the error log might help you. The log is named `.log`. It is a hidden file. See [“Viewing the Error Log” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*](#).
- ♦ **Internal Web Browser:** You can open the Internal Web Browser view by selecting *Window > Show View > Other* and then selecting the *Internal Web Browser* option under the *General* heading. You can also open a Web browser within the Designer utility. The Web browser button is available from the main toolbar. See [“Opening a Web Browser” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*](#).
- ♦ **Markers:** A marker is associated with the Workbench, where it is used for tasks, problems, and bookmarks. The Markers view displays all markers in your project.

- ♦ **Navigator:** The Navigator view enables you to manage and view the file resources that are in your workspace. You can see your projects and files as they actually exist in the file system. You can add files and folders, and append them to your projects or workspace. See [Section 4.7, “The Navigator View,” on page 66](#).
- ♦ **Outline:** The Outline view provides an outline of all of the objects you have open in an active editor. The Outline view’s contents vary, depending on the editor you have open at the time. For example, if you have a project open in the Modeler view, you see an outline of all of the objects that have been created for that project. See [Section 4.6, “The Outline View,” on page 44](#).
- ♦ **Problems:** You can validate your XML files by using the right-mouse menu in the Source editor. If any validation errors or warnings occur, they are displayed in the Problems view.
The Problems view shows you errors, warnings, and information on any problems relating to data source explorer failures, EMF problems, moduleCore validation markers, problems, or validation messages.
- ♦ **Progress:** The Progress view displays the progress of an operation.
- ♦ **Project Explorer:** The Project Explorer view allows you to view information about all of the objects found in a project. Pertinent information about a selected object is displayed in the Properties view.
- ♦ **Properties:** The Properties view displays information on key-value pairs (for example, Max Log Entries 2). The information displayed depends on what is selected in the active view (for example, the Modeler or Outline view). Often, the Properties view lets you edit the information. You can also view and edit the Administrator settings in an Identity Vault. See [Section 4.9, “The Properties View,” on page 72](#).
- ♦ **Tasks:** The Tasks view enables you to make and prioritize notes while you manage identities. This view is for your convenience; it can contain whatever you want and won’t affect the functionality of your solution. See [Section 4.11, “The Tasks View,” on page 76](#).
- ♦ **Templates:** The Templates view allows you to work within the templates of the active editor. The content of this view is editor specific, and not all editors provide templates.

Designer for Identity Manager

- ♦ **Dataflow:** Designer allows you to manage how the data flows between the Identity Vault and the connected systems. You can see how the data flows between all of the connected systems, make changes as needed, create reports about the data, and view the flow of passwords between the systems. For more information, see [“Managing the Flow of Data” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*](#).
- ♦ **Policy Set:** The Policy Set view lists policies and displays a toolbar. The list displays all policies contained in the selected policy set. During a transformation, the policies within the list are executed from top to bottom. For a description of the icons located on the Policy Set view toolbar, see [Section 4.8, “Policy Set View,” on page 70](#).
- ♦ **Project:** The Project view lists all existing Designer projects. From the Project view, you can quickly find, open, view, navigate, manage, close, and delete any Designer project. See [Section 4.5, “The Project View,” on page 41](#).
- ♦ **Project Checker:** Designer provides a Project Checker tool to check your project. The Project Checker checks for proper design, contexts, server associations, policies, missing user data, and dependency problems that would cause the deployment of project into the Identity Vault to fail. The project can be checked at any time, but you should always run the Project Checker before deploying your project. See [“Checking Your Projects” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*](#).

- ♦ **Search Results:** You can use the Search Results view to search across an entire project. With the Modeler view active, press Ctrl+F, then select the object types you want to search on. The results appear in the Search Results view, sorted by name, class, type, and notes. See [Section 4.10, “The Search Results View,” on page 75](#).
- ♦ **Trace:** The Error Log view can help you troubleshoot. If something isn’t working, messages written to the error log might help you. The log is named `.log`. It is a hidden file. To view the error log, you can use menus or browse the file system. See [“Viewing the Error Log” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*](#).
- ♦ **Version Control:** Designer for Identity Manager contains a new feature called version control. Version control enables you to track revisions of your project, along with all the objects and files in that project, share those revisions with other members of your team, manage the history of your objects, and make sure that every member of your team is using the same version of your project. See [“Version Control” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*](#).
- ♦ **eDirectory Browser:** To locate or modify objects during your project development, use the eDirectory Object Manager to browse to and edit attributes of objects in the Identity Vault and other eDirectory trees. See [“Managing Directory Objects” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*](#).

Help

- ♦ **Help:** You can bring up the Help view by pressing F1 or by clicking a help button. You can also access help by clicking the Help menu at the top of Designer. See [Chapter 2, “Getting Help,” on page 19](#).

PDE Runtime

- ♦ **Plug-in Registry:** A problem can occur if a plug-in fails to load. Use the Plug-in Registry view to see which plug-ins are loaded. See [“Checking Loaded Plug-Ins” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*](#).

Provisioning

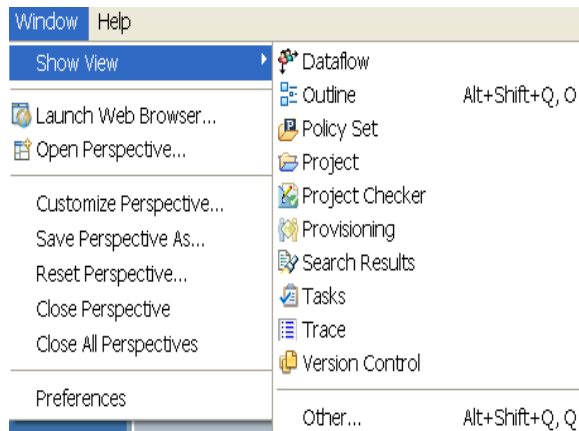
- ♦ **Data Item Mapping:** Specifies how object attributes are mapped. See [“Mapping Identity Vault to an LDAP Schema” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*](#).
- ♦ **E-Mail Notification:** Notification templates enable you to customize and send e-mail messages that users receive when triggers occur. The E-Mail Notification view allows you to view how notification templates are mapped to an e-mail server. See [“Setting Up E-Mail Notification Templates” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*](#).
- ♦ **Provisioning View:** The Provisioning view provides persistent access to Designer’s provisioning features. Use the Provisioning view to access the editors that allow you to create and manipulate User Application components, manipulate object definitions such as import or export object definitions, and define the User Application driver’s supported and default locales.

XML

- ♦ **XPath Navigator:** The XPath Navigator view supports context-sensitive editing of XPath expressions and syntax highlighting. It automatically attaches to the currently selected XML editor and uses its Document node as the evaluation context. The namespace context shows all namespaces in scope on its document element. See “XPath Navigator” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.

4.4.2 Opening a View

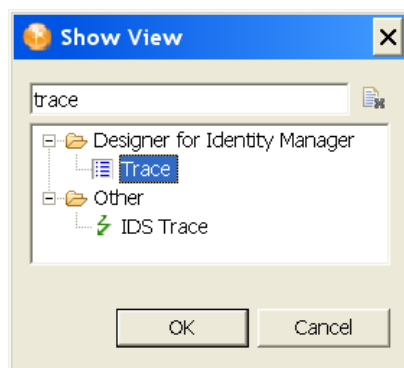
Figure 4-5 *Selecting a View to Open*



To open a view, select *Windows > Show View*, then select an option. There are a number of available views that you can see when you select the *Window > Show View > Other* option.

To narrow the list of views from the *Other* option, use the view filter:

- 1 Select *Window > Show View > Other*.
- 2 In the edit box, type the name of the view that you want (for example, Trace).

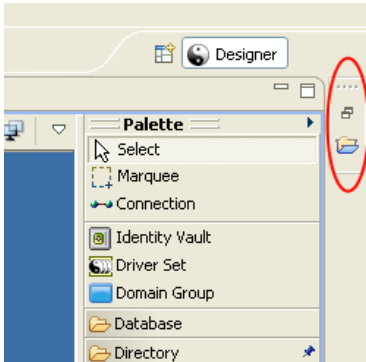


You can open, maximize, and close these views. You can also arrange them however you want, or make Fast Views from them. See [Section 4.4.7, “Using Fast Views,” on page 40](#).

To quickly expand or contract a view, double-click the view’s tab.

When you minimize a view or an editor stack, a placeholder tray appears in the closest location along the left, bottom, or right edge of the workbench. Each view from the view stack acts as a fast view while it is in this location. You can restore the stack by clicking the tray's Restore icon. You can drag and drop minimized trays to new locations along the workbench edge. Maximizing any stack triggers minimization of all others.

Figure 4-6 A Placeholder Tray for the Project View



4.4.3 Moving a View


To move a view, drag the view's tab to one of the following locations:

- ♦ The left, bottom, top, or right of Designer
- ♦ Stacked with other views
- ♦ Outside of Designer, where it floats on your desktop

If two or more views are open, you can switch their order.


4.4.4 Minimizing and Maximizing Views

To minimize a view, do one of the following:

- ♦ Click the *Minimize* button in the view's title bar .
- ♦ Press Ctrl+M.

To restore the view to its original size, click the *Restore* button in the view's title bar.

To maximize a view or editor, do one of the following

- ♦ Double-click the view's tab.
- ♦ Click the *Maximize* button .
- ♦ Press Ctrl+M.

When it is expanded, the view or editor fills the entire application space. This feature provides maximum working space.

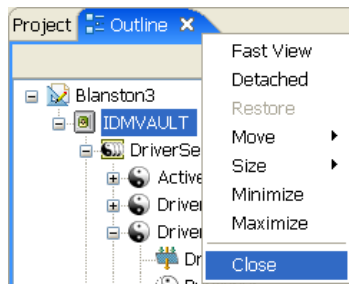
To restore the editor or view to its original dimensions, double-click the view's tab.

4.4.5 Closing a View

To close a view or editor, do one of the following:

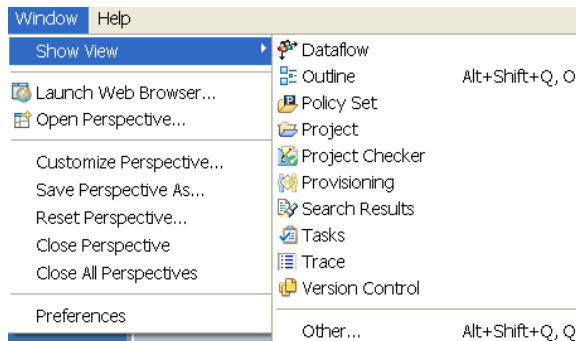
- ♦ Click the *X* on the view's tab.
- ♦ Right-click the view's tab, then select *Close*.

Figure 4-7 Options to Close a View



4.4.6 Reopening a View Window

- 1 From the main menu, select *Window > Show View*.




- 2 Select one of the views (for example, Outline).

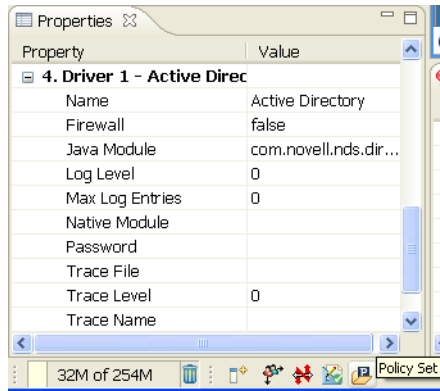
You can also select *Window > Show View > Other*, then select one of the views under *Designer for Identity Manager* (for example, Projects).

4.4.7 Using Fast Views

The Fast View toolbar provides an efficient way to manage certain types of views that you don't want to clutter the desktop, but still want to have readily accessible. To add a view to the Fast View toolbar:

- 1 Click the *Show View as a Fast View Perspective* icon  in the bottom left corner of the Designer window (under the Properties view).
- 2 Select a view.
- 3 The view appears to the left of the Modeler view. Right-click the view's tab and deselect *Fast View* to see the view's default placement in Designer.

- 4 Reselect *Fast View* to have the view with its icon appear next to the *Show View as a Fast View Perspective* icon.



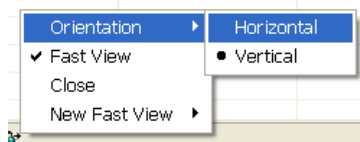
After the icon appears next to the *Show View as a Fast View Perspective* icon, do the following to restore a Fast View to a normal view:

- 1 Right-click the view icon in the Fast View toolbar.
- 2 Deselect *Fast View*.

You can also set the following:

- ♦ Whether you want the Fast View to appear horizontally or vertically (the *Orientation* option)

Figure 4-8 Options for Fast Views



- ♦ Where you want to dock the Fast View

Views and selected items that appear by default in the Modeler view do not have the Fast View option.

4.5 The Project View

The Designer Project view lists all existing Designer projects. From the Project view, you can quickly find, open, view, navigate, manage, close, and delete any Designer project.

To open the Project view, select the *Project* tab in the upper left view of Designer, or if the view is not open, click *Window > Show View > Project* from the main menu.

The Project view provides a standard menu of functions, which are available by right-clicking the *Project* tab. Similarly, the Project view provides an icon bar with additional functions.

Figure 8-12 shows a typical Project view displaying the icons available in a Designer project.

Figure 4-9 *The Project View*

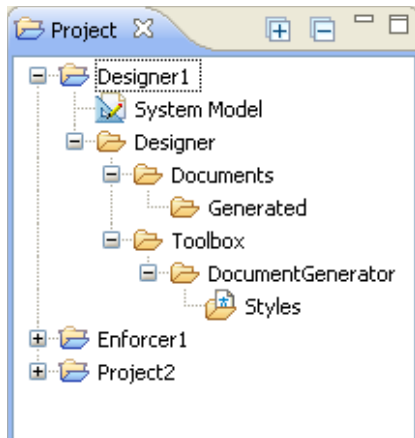







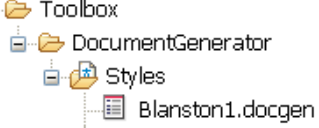

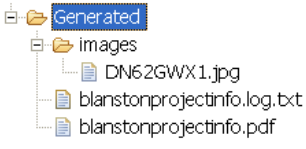


Table 8-1 describes the project icons displayed in the Project view.

Table 4-1 *Project Icons Displayed in the Project View*

Icon Name	Description
Project Name	The name of the created project. It is the name of the project stored in the selected workspace directory. Double-clicking the Project name expands and collapses the entries under the project.
 Blanston1	
or	
 Blanston1	<p>Right-clicking a project name allows you to do the following:</p> <ul style="list-style-type: none"> ◆ Create a new Identity Manager Project. ◆ Open the project with the System Model (Modeler view). ◆ Import an Identity Manager Project from: <ul style="list-style-type: none"> ◆ An Identity Vault ◆ An iManager Export file ◆ A file system ◆ A version control server ◆ Export the project. ◆ Refresh the project. ◆ Make a copy of the project. ◆ Move the project to another workspace. ◆ Disable/enable the project. Disabled projects are taken out of the Version Control view. ◆ Rename the project. ◆ Delete the project. ◆ View the project's properties page. <p>Projects under a version control server have a different icon  and have two additional choices:</p> <ul style="list-style-type: none"> ◆ Check the project into the version control server. ◆ Update the project from the version control server.

Icon Name	Description
<p><i>System Model</i></p>  System Model <p>or</p>  System Model	<p>Double-clicking the <i>System Model</i> entry puts the project into the Modeler view. You can create or import driver sets, drivers, channels, or policies into the Modeler to modify the project as needed. Then you can deploy the driver set, drivers, channels, or policies into an Identity Manager system.</p> <p>System Models under a version control server have a different icon .</p> <p>Right-clicking the System Model allows you to:</p> <ul style="list-style-type: none"> ◆ Open the project in the Modeler view
<p><i>Documents</i></p> 	<p>Use the <code>Designer > Documents</code> folder for documents that are related to the project. You can also create new folders to organize your projects as needed. The <code>Generated</code> folder under <code>Documents</code> holds your generated documentation files, and the <code>images</code> folder under the <code>Generated</code> folder holds any graphic files that are created when you generate documents.</p> <p>Right-clicking the <code>Documents</code> folder or the <code>Generated</code> folder allows you to:</p> <ul style="list-style-type: none"> ◆ Create a new file. ◆ Create a new folder. ◆ Import a file or a folder. ◆ Export the project. ◆ Copy the folder. ◆ Paste items into the folder. ◆ Refresh the folder's view.
<p><i>Toolbox</i></p> 	<p>The <code>Toolbox</code> folder is for special files that ship with Designer. You cannot create new files or folders under this folder. The <code>Styles</code> folder under the <code>Toolbox > DocumentGenerator</code> folder contains the document generation styles. Right-click this folder to create a new style from the context menu that comes up.</p> <p>Right-clicking the <code>Toolbox</code> folder or its subfolders allows you to:</p> <ul style="list-style-type: none"> ◆ Copy the folder. ◆ Right-click the <code>Styles</code> folder and select <i>New > Document Generation Style (.docgen)</i> to create a new style. The wizard generates a style (template with a <code>.docgen</code> extension) that displays under the <code>Styles</code> folder. (See “Documenting Projects” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> for more information.)
<p><i>.docgen File</i></p>  Blanston001.docgen	<p>Right-clicking the <code>.docgen</code> file entry allows you to:</p> <ul style="list-style-type: none"> ◆ Open the <code>.docgen</code> file with a Style editor. ◆ Copy and delete the <code>.docgen</code> file. Use <i>Copy</i> and <i>Paste</i> to copy documentation files to different projects or folders. ◆ Refresh and rename the file. ◆ Generate documentation using this style.

Icon Name	Description
Additional File Types	Because the <i>Generated</i> and <i>Images</i> folders can contain many different files, you can see different icons displayed, depending on the file extension.
	<p>Right-clicking these any of these files allows you to:</p> <ul style="list-style-type: none"> ◆ Copy and delete the file. Use Copy and Paste to copy documentation files to different projects or folders. ◆ Refresh and rename the file. ◆ Open the file or open the file with a text or system Editor. You can also double-click the file and have Designer choose an editor for the file. ◆ Delete the file.

4.6 The Outline View

The Outline view provides an outline of the active editor. To open the Outline view, select the *Outline* tab in the upper left view of Designer, or if the view is not open, click *Window > Show View > Outline*.

The Outline view's contents vary, depending on the editor you have open at the time.

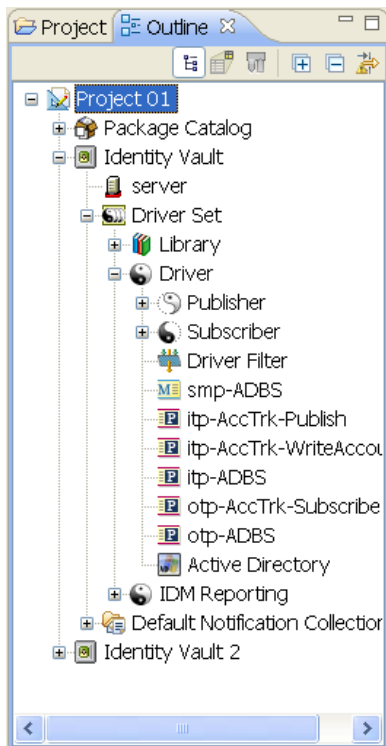
- ◆ For the standard Designer editors, you see a tree view of the information, a thumbnail graphical view, or a Policy Flow view, depending on which mode you are in.
- ◆ If you open an XML editor for an XML file in the Navigator view (not the embedded XML editor that is part of the Designer editors), you see a tree view of the XML document.

Selecting items in the Outline view also selects them in the Modeler. If the selected item isn't visible in the Modeler, it automatically scrolls into view. Similarly, as you add or remove items the Modeler, they are automatically added or removed in the Outline view.

The Outline view provides a standard menu of functions, which are available by right-clicking the *Outline* tab. The Outline view also provides an icon bar of additional functions specific to the Outline view.

Figure 8-13 shows a typical Outline view along with its icon bar.

Figure 4-10 *The Outline View*



The following sections describe the project icons displayed in the Outline view.

- ◆ [Section 4.6.1, “Project Name,” on page 46](#)
- ◆ [Section 4.6.2, “Version Control Project Name,” on page 46](#)
- ◆ [Section 4.6.3, “Package Catalog,” on page 47](#)
- ◆ [Section 4.6.4, “Category,” on page 47](#)
- ◆ [Section 4.6.5, “Group,” on page 47](#)
- ◆ [Section 4.6.6, “Package,” on page 47](#)
- ◆ [Section 4.6.7, “Identity Vault,” on page 48](#)
- ◆ [Section 4.6.8, “Domain Group,” on page 49](#)
- ◆ [Section 4.6.9, “Library,” on page 49](#)
- ◆ [Section 4.6.10, “Server,” on page 50](#)
- ◆ [Section 4.6.11, “Driver Set,” on page 50](#)
- ◆ [Section 4.6.12, “ID Policy Container and ID Policy,” on page 51](#)
- ◆ [Section 4.6.13, “Driver,” on page 52](#)
- ◆ [Section 4.6.14, “Publisher and Subscriber Channels,” on page 54](#)
- ◆ [Section 4.6.15, “Policy,” on page 55](#)
- ◆ [Section 4.6.16, “Overlay Icons,” on page 56](#)
- ◆ [Section 4.6.17, “Schema Mapping,” on page 56](#)
- ◆ [Section 4.6.18, “Resource,” on page 57](#)

- ♦ [Section 4.6.19, “Global Configuration,” on page 57](#)
- ♦ [Section 4.6.20, “XSLT,” on page 58](#)
- ♦ [Section 4.6.21, “Filter,” on page 59](#)
- ♦ [Section 4.6.22, “Application,” on page 59](#)
- ♦ [Section 4.6.23, “Entitlement,” on page 60](#)
- ♦ [Section 4.6.24, “Job,” on page 61](#)
- ♦ [Section 4.6.25, “ECMAScript,” on page 62](#)
- ♦ [Section 4.6.26, “Mapping Table,” on page 62](#)
- ♦ [Section 4.6.27, “User Application,” on page 63](#)
- ♦ [Section 4.6.28, “Default Notification Collection,” on page 64](#)
- ♦ [Section 4.6.29, “Notification Template,” on page 65](#)

4.6.1 Project Name

The Project Name displays the name of the project when you create it. This is the name of the project stored in the `\workspace\project name` directory.

Right-click the project name  to do the following:

New: Under *New*, you can add an application, a Domain Group, or an Identity Vault to the Modeler.

Document Selection: Generates the documentation for the project.

Live: Allows you to import a driver set from the Identity Vault.

Check in: Not available if version control is not enabled for the project.


Update: Not available if version control is not enabled for the project.

Delete: Deletes the project.

Properties: Launches the Properties page associated with this object.

4.6.2 Version Control Project Name

The Project Name icon changes when you commit the project to a version control server.

Right-click the project name  to do the following:

New: Under *New*, you can add an application, a Domain Group, or an Identity Vault.

Document Selection: Generates the documentation for the project.

Live: Allows you to import a driver set from the Identity Vault.

Check in: Checks in the project into a version control server.


Update: Updates the project from a version control server.

Delete: Deletes the project.

Properties: Launches the Properties page associated with this object.

4.6.3 Package Catalog

A Package Catalog stores packages that are used in your Identity Manager solution. The Package Catalog is only displayed in the Outline view.

Right-click the Package Catalog  to perform the following:

Import Package: Allows you to download any available packages to use in your Identity Manager solution. For more information, see “[Importing Packages into the Package Catalog](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.

New Category: Creates a new category to store your packages in.

4.6.4 Category

A category helps organize packages into common categories.

Right-click the category  to perform the following:

New Group: Creates a new group to store your packages in.

Delete: You can delete the category as long as none of the packages in the category are currently installed.

Properties: Allows you to rename the category and add a description for the category.

4.6.5 Group

A group helps organize packages with common functionality together.

Right-click the group  to perform the following:

New Package: Creates a new package. For more information, see “[Creating Packages](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.

Delete: You can delete the group as long as none of the packages in the group are currently installed.

Properties: Allows you to rename the group and add a description for the group.

4.6.6 Package

A package contains the components of a driver organized according to what functionality you want to provide to a driver.

The first time you right-click the package  icon, the following options are available:

Request Ownership: Allows you to move a development package from one Designer project to another. It unlocks a package that is not released, only if the package is found in at least one project in the workspace.

Copy Package: Creates a copy of the package.

Delete: Deletes the package.

Properties: Displays the properties of the package.

After you request the ownership of the package, the following options are available:

Generate Prompt Resource: Generates Global Configuration objects that create prompts in the Driver Configuration Wizard. You can create the following prompt types:

- ♦ Driver Name
- ♦ Initial Settings
- ♦ Upgrade Settings
- ♦ Remote Loader

For more information, see “[Editing Package Prompts](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.

Localization Allows you to generate properties files for localization or imports the properties files for localization.

New Package Version: Changes the package version.

Copy Package: Copies the package.

Build: Builds the package for release.

Delete: Deletes the package.

Properties: Displays the properties of the package.

4.6.7 Identity Vault

An Identity Vault represents the eDirectory tree that has Identity Manager installed on it.

Right-click the Identity Vault  to perform the following:

New: Under *New*, you can add a driver set, a library, or a server object to the project.

Manage Vault Schema: Allows you to manage the Identity Vault schema.

DirXML Script Tracing: Allows you to turn on or turn off actions, conditions, and tokens on every policy at the Identity Vault level. This allows you to control how rules, conditions, and tokens flow through policies.

Document Selection: Generates the documentation for the Identity Vault.

Import from Configuration File: Imports a driver configuration file.

Import Schema from File: Imports schemas from a file.

Export to File: Exports the Identity Vault configuration and schema to a file.

Live: Allows you to perform the following actions to the Identity Vault:

- ♦ **Import:** Imports a driver set from the Identity Vault.
- ♦ **Deploy:** Deploys the Identity Vault in Designer to the live system.
- ♦ **Compare:** Compares the contents of the Identity Vault in Designer to the live system.
- ♦ **Schema:** Allows you to import, deploy, or compare the schema in Designer to the schema in the live system.


- ♦ **Manage Directory:** Allows you to manage the objects in the Identity Vault.
- ♦ **DS Trace:** Runs a DS Trace from the live system.
- ♦ **iManager:** Launches iManager.
- ♦ **Driver Status:** Displays the status of the drivers in the selected Identity Vault.
- ♦ **Start All Drivers:** Starts all of the drivers in the selected Identity Vault.
- ♦ **Stop All Drivers:** Stops all of the drivers in the selected Identity Vault.
- ♦ **Restart All Drivers:** Restarts all of the drivers in the selected Identity Vault.

Delete: Deletes the Identity Vault.

Properties: Launches the Properties page associated with this object.

4.6.8 Domain Group

Domain groups allow you to group projects into granular portions.

Right-click the Domain  object to perform the following:

New: Under *New*, you can add an application, a Domain Group, or an Identity Vault.

Document Selection: Generates the documentation for the Domain.

Live: Allows you to import objects from the Identity Vault.


Delete: Deletes the Domain Group.

Properties: Launchers the Properties page associated with this object.

If you select to document this group, the generated document filters items that are outside the Domain Group. Drivers bordering the domain are included in the document.

4.6.9 Library

The Library object is a repository of commonly used policies, scripts, and resources that can be referenced from multiple locations. You can place a policy in the library that every driver in the driver set can reference.

Right-click the Library  object to perform the following:

New: Under *New*, you can add the following types of objects:

- ♦ Credential application
- ♦ Credential repository
- ♦ DirXML Script
- ♦ ECMAScript
- ♦ Mapping Table
- ♦ Global Configuration
- ♦ DS Object
- ♦ Resource
- ♦ Schema Map

- ♦ XSLT
- ♦ From a copy

DriXML Script Tracing: Allows you to turn on or turn off actions, conditions, and tokens on every policy at the Library level. This allows you to control how rules, conditions and tokens flow through policies.

Export to Configuration File: Exports the library to a configuration file.

Import from Configuration File: Imports a configuration file.

Live: Under *Live*, you can:

- ♦ **Import:** Imports content into the library. For example you can import a policy.
- ♦ **Deploy:** Deploys the library to the Identity Vault.
- ♦ **Compare:** Compares the library to the library in the live system.

Delete: Deletes the Library object.

Properties: Launches the Properties page associated with this object.

4.6.10 Server

The Server object is the server in the tree where you have Identity Manager installed.

Right-click the Server  object to perform the following:

Migrate: Migrates the information from this Server object to another Server object.

Delete: Deletes the Server object.

Properties: Launchers the Properties page associated with this object.

4.6.11 Driver Set

The driver set is a collection of Identity Manager drivers that are stored in a single location.

Right-click the driver set  to perform the following:

New: Under *New*, you can create the following objects:

- ♦ Driver
- ♦ Job
- ♦ Library
- ♦ Role-Based Entitlement Policies
- ♦ DS Object
- ♦ Global Configuration

Copy: Allows you to copy the driver set settings and global configuration values to another driver set.

DirXML Script Tracing: Allows you to turn on or turn off actions, conditions, and tokens on every policy at the driver set level. This allows you to control how rules, conditions, and tokens flow through policies.

Document Selection: Generates the documentation for the driver set.

Import from Configuration File: Imports a configuration file.

Export to Configuration File: Exports the driver set to a configuration file.

Live: Under *Live*, you can:


- ♦ **Import:** Import a driver into the driver set.
- ♦ **Deploy:** Deploys the selected driver set into the live system.
- ♦ **Compare:** Compares the driver set in Designer to a deployed driver set in the Identity Vault
- ♦ **Driver Set Configuration:** Allows you to import, deploy, and compare driver set configuration attributes.
- ♦ **Driver Status:** Displays the status of all of the drivers in the driver set.
- ♦ **Start All Drivers:** Starts all drivers in the driver set.
- ♦ **Stop All Drivers:** Stops all drivers in the driver set.
- ♦ **Restart All Drivers:** Restarts all drivers in the driver set.

Delete: Deletes the driver set.

Properties: Launches the Properties page associated with the driver set.

If you select *Document Selection*, the generated document filters most items that are outside the driver set. Child objects are also included and parent objects are included in the document for perspective purposes.

4.6.12 ID Policy Container and ID Policy

An ID Policy container  is created under an ID Provider driver and is a repository for ID policies. An ID policy allows the ID Provider driver to assign unique IDs to objects. When the ID Provider driver receives an ID request from a client, it generates an identification that is based on the ID policy specified in the request and passes it to the client.

Right-click the ID Policy container to perform the following:

New: Creates a new policy.

Export to Configuration File: Exports the policy container object to a configuration file.

Live: Under *Live*, you can:

- ♦ **Import:** Imports a policy in to the policy container.
- ♦ **Deploy:** Deploys the ID Policy container into the Identity Vault.
- ♦ **Compare:** Compares the ID Policy container in Designer to a deployed ID Policy container in the Identity Vault

Delete: Deletes the ID Policy container.

Properties: Launches the Properties page associated with this object.

Right-click the ID Policy to perform the following:

Add to Package: Allows you to include the policy in a package if it was not installed with a package.

Package Properties: Displays the properties of the package that installed the selected policy.

Revert Customization: Revert Customization is available if the policy is part of a package, and if the policy is customized. Revert Customization is like an undo, and it removes any customizations you made.

Live: Under *Live*, you can:


- ♦ **Deploy:** Deploys the ID Policy into the Identity Vault.
- ♦ **Compare:** Compares the ID Policy in Designer to a deployed ID Policy container in the Identity Vault.

Delete: Deletes the ID Policy.

Properties: Launches the Properties page associated with this object. To configure ID policies, see “[Configuring ID Policies](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.

4.6.13 Driver

A Driver object is a collection of channels, policies, rules, resources, and filters that connect an application to Identity Manager. Each driver performs different tasks. Policies, rules, resources, and filters tell the driver how to manipulate the data to perform those tasks.

Right-click the Driver object  to do the following:

New: Under *New*, you can add the following policy types:

- ♦ Credential application
- ♦ Credential repository
- ♦ DirXML Script
- ♦ ECMAScript
- ♦ Entitlement
- ♦ Job
- ♦ Mapping Table
- ♦ Global Configuration
- ♦ DS Object
- ♦ Resource
- ♦ Schema Map
- ♦ XSLT
- ♦ From a copy

Copy: Copies the driver settings or server-specific driver settings.

Show Dataflow View Launches the Dataflow view for the driver. For more information, see “[The Dataflow View](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.

Show Policy Sets: Display the policy sets in this driver.

DirXML Script Tracing: Allows you to turn on or turn off actions, conditions, and tokens on every policy at the driver level. This allows you to control how rules, conditions, and tokens flow through policies.

Simulate: Launches the Policy Simulator, which allows you to test the policies in the driver. For more information, see “[Testing Policies with the Policy Simulator](#)” in the *Policies in Designer 4.0*.

Run Configuration Wizard: Launches the Driver Configuration Wizard, which allows you to install more packages or import a driver configuration file.

Password Synchronization: Allows you to configure the driver to synchronize password between the application and the Identity Vault. For more information, see the *Identity Manager 4.0 Password Management Guide*.

Manage Application Schema: Allows you to manage the application’s schema from Designer.

Document Selection: Generates the documentation for this driver.

Import from Configuration File: Imports a driver configuration file. This overwrites you current policies with the content in the driver configuration file.

Export to Configuration File: Exports the driver to a configuration file.

Copy Server-Specific Data: Copies server-specific data between servers. To do this, you must have more than one server associated with the driver set. You can add a server to a driver set by going into the Driver Set Properties page. The replica data that you can copy includes:

- ♦ Global configuration values
- ♦ Named passwords
- ♦ Driver authentication information
- ♦ Driver startup option
- ♦ Driver parameters

Live: Under *Live*, you can:

- ♦ **Import:** Imports a driver.
- ♦ **Deploy:** Deploys a driver.
- ♦ **Compare:** Compares the driver in Designer to a deployed driver in the Identity Vault
- ♦ **Driver Configuration:** Imports, deploys, and compares driver configuration attributes.
- ♦ **Refresh Application Schema:** Refreshes the application schema in Designer.
- ♦ **Driver Status:** Displays the selected driver’s status.
- ♦ **Start Driver:** Starts the selected driver.
- ♦ **Stop Driver:** Stops the selected driver.
- ♦ **Restart Driver:** Restarts the selected driver.
- ♦ **Set Up Driver Security:** Allows you to configure the driver security that is deployed to the Identity Vault.
- ♦ **Set Driver Trace Level:** Allows you to set the driver trace level. The driver trace level is what determines the information displayed in the driver trace.

Delete: Deletes the Driver object.

Properties: Launches the Properties page associated with this object.



If you select *Document Selection*, the generated document filters most items that are outside the driver. Child objects are also included and parent objects are included in the document for perspective purposes.

4.6.14 Publisher and Subscriber Channels

A channel is a combination of rules, policies, and resources. Designer allows you to import a channel instead of the entire driver. The Subscriber and Publisher channels describe the direction in which the information flows.

The Publisher channel takes the event from the application, database, CSV file, etc., and sends that event to the Identity Vault. Channel events do not need to be the same on each channel.

The Subscriber channel takes the event from the Identity Vault and sends that event to whatever the receiving system is (application, database, CSV file, etc.).

Right-click the Publisher  or Subscriber  channel to perform the following:

New: Under *New*, you can add the following policy types:

- ♦ Credential application
- ♦ Credential repository
- ♦ DirXML Script
- ♦ ECMAScript
- ♦ Mapping Table
- ♦ DS Object
- ♦ Resource
- ♦ Schema Map
- ♦ XSLT
- ♦ From a copy

DirXML Script Tracing: Allows you to turn on or turn off actions, conditions, and tokens on every policy at the channel level. This allows you to control how rules, conditions, and tokens flow through policies.

Simulate: Launches the Policy Simulator on the channel to ensure that the policies are working correctly.

Import from Configuration File: Imports information from configuration file.

Export to Configuration File: Exports the channel configuration to a file.

Live: Under *Live*, you can:

- ♦ **Import:** Imports items into the channel. For example, you can import a policy.
- ♦ **Deploy:** Deploys a channel into the Identity Vault.
- ♦ **Compare:** Compares the channel in Designer to a deployed driver channel in an Identity Vault

Properties: Launches the Properties page associated with this object.

4.6.15 Policy

A policy is a collection of rules and arguments that allow you to configure an application to send or receive events to or from the Identity Vault. You use policies to manipulate the data you receive from the Identity Vault or from the application. Each driver performs different tasks, and policies tell the driver how to manipulate the data to perform those tasks.

Right-click the Policy object  to perform the following:

Edit: Launches the Policy Builder so you can edit the policy.

Copy: Creates a copy of the selected policy.

Save As: Allows you to save the policy as an XML file.

DirXML Script Tracing: Allows you to turn on or turn off actions, conditions, and tokens on every policy at the policy level. This allows you to control how rules, conditions, and tokens flow through policies.

Add to Package: Allows you to include the policy in a package if it was not installed with a package.

Package Properties: Displays the properties of the package that installed the selected policy.

Revert Customization: Revert Customization is available if the policy is part of a package, and if the policy is customized. Revert Customization is like an undo, and it removes any customizations you made.

Simulate: Launches the Policy Simulator to test that the policy is working correctly.

Export to Configuration File: Exports the policy to a configuration file.

Live: Under *Live*, you can:

- ♦ **Deploy:** Deploys the policy to the Identity Vault.
- ♦ **Compare:** Compares the policy in Designer to a deployed policy in the Identity Vault.


Open With: Allows you to open the policy with one of the following editors:

- ♦ Designer Built-in Editor
- ♦ Novell XML Editor
- ♦ XML Editor
- ♦ Text Editor

Delete: Deletes the selected policy.

Properties: Launches the Properties page associated with this object.

4.6.16 Overlay Icons


Overlay icons  have an overlay symbol in one of the corners to signify that the object is in a certain state. For example, the policy icon to the left signifies that the policy does not belong to a policy set. An application icon with an overlay signifies that there is more than one driver connected to the application. A driver set icon with a server overlay signifies that the driver set is connected to an Identity Manager server.

Overlay icons can be informational, warnings, or they can signify errors. In the Compare window, overlay icons tell you whether the object is on the server or in Designer.

They also tell you if you have customized the policies that come in packages. You can either keep your customizations or revert back to the original state of the policy as it is in the package.

4.6.17 Schema Mapping

Schema Mapping allows Identity Manager to synchronize information to the connected system without changing the connected system. A schema translates all classes and attributes for the connected system.

Right-click the Schema Mapping object  to perform the following:

Edit: Launches the Schema Mapping editor so you can edit the Schema Mapping.

Copy: Creates a copy of the Schema Mapping.

Save As: Allows you to save the Schema Mapping as an XML file.

Add to Package: Allows you to include the Schema Mapping in a package, if it is not installed with a package.

Package Properties: Displays the properties of the package that installed the Schema Mapping.

Revert Customization: Revert Customization is available if the Schema Mapping is part of a package, and if the Schema Mapping is customized. Revert Customization is like an undo, and it removes any customizations you made.

Simulate: Launches the Policy Simulator to ensure that the Schema Mapping is working correctly.

Export to Configuration File: Exports a Schema Mapping policy configuration to an XML file.

Live: Under *Live*, you can:

- ♦ **Deploy:** Deploys a Schema Mapping policy to the Identity Vault.
- ♦ **Compare:** Compares the Schema Mapping policy in Designer to a deployed Schema Mapping policy in an Identity Vault.

Open With: Allows you to open the Schema Mapping policy with one of the following editors:

- ♦ Designer Built-in Editor
- ♦ Novell XML Editor
- ♦ XML Editor
- ♦ Text Editor

Delete: Deletes the selected Schema Mapping policy.

Properties: Launches the Properties page associated with this object.

4.6.18 Resource

Resource objects store information that drivers use. Double-clicking a resource object brings up the object in an editor.

Right-click the Resource object  to perform the following:

Edit: Launches an editor so you can edit the Resource object.

Copy: Creates a copy of the selected Resource object.

Add to Package: Allows you to include the Resource object in a package, if it is not installed with a package.

Package Properties: Displays the properties of the package that installed the resource object.

Revert Customization: Revert Customization is available if the resource object is part of a package, and if the resource object is customized. Revert Customization is like an undo, and it removes any customizations you made.

Export to Configuration File: Exports the Resource policy to a configuration file.

Live: Under *Live*, you can:

- ♦ **Deploy:** Deploys the Resource object to the Identity Vault.
- ♦ **Compare:** Compares the Resource object in Designer to a deployed Resource object in the Identity Vault.

Open With: Allows you to open the Resource object with one of the following editors:


- ♦ Designer Built-in Editor
- ♦ Novell XML Editor
- ♦ XML Editor
- ♦ Text Editor

Delete: Deletes the selected Resource object.

Properties: Launches the Properties page associated with this object.

4.6.19 Global Configuration

Global Configuration objects contain GCV definitions that can be added to a package. The GCV definitions are identical to the GCVs that are contained on a driver or driver set.

Right-click the Global Configuration object  to perform the following:

Copy: Creates a copy of the Global Configuration object.

Add to Package: Allows you to add the Global Configuration object to a package, if it was not installed with a package.

Generate Prompt Resource: Allows you to generate a Prompt Resource object to add to a package. This allows for questions to be presented during the import of the packages.

Package Properties: Displays the properties of the package that installed the Global Configuration object.

Revert Customization: Revert Customization is available if the Global Configuration object is part of a package, and if the global configuration object is customized. Revert Customization is like an undo, and it removes any customizations you made.

Live: Under *Live*, you can:


- ♦ **Deploy:** Deploys the Global Configuration object to the Identity Vault.
- ♦ **Compare:** Compares the Global Configuration object in Designer to the deployed Global Configuration object in the Identity Vault.

Delete: Deletes the Global Configuration object.

Properties: Launches the Properties page of the Global Configuration object.

4.6.20 XSLT

XSLT represents XSLT style sheets, which are used instead of the DirXML Script.

Right-click the XSLT style sheet object  to perform the following:

Edit: Launches the XLM Editor so you can edit the XSLT style sheet.

Copy: Creates a copy of the XSLT style sheet.

Save As: Allows you to save the XSLT style sheet as an XML file.

Add to Package: Allows you to add the XSLT style sheet to a package, if it was not installed with a package.

Package Properties: Displays the properties of the package that installed the XSLT style sheet.

Revert Customization: Revert Customization is available if the XSLT style sheet is part of a package, and if the XSLT style sheet is customized. The Revert Customization is like an undo, and it removes any customizations you made.

Simulate: Launches the Policy Simulator to ensure that the XSLT style sheet is working correctly.

Export to Configuration File: Exports the XSLT style sheet to an XML file.

Live: Under *Live*, you can:

- ♦ **Deploy:** Deploys the XSLT style sheet to the Identity Vault.
- ♦ **Compare:** Compares the XSLT style sheet in Designer to an XSLT style sheet in the Identity Vault

Open With: Allows you to open the XSLT style sheet with one of the following editors:

- ♦ Designer Built-in Editor
- ♦ Novel XML Editor
- ♦ XML Editor
- ♦ Text Editor

Delete: Deletes the XSLT style sheet.

Properties: Launches the Properties page associated with this object.

4.6.21 Filter

Filter allows the objects to be sent. It's the gatekeeper that restricts the objects (groups, users, and the attributes associated with them) that can be sent to and from an Identity Vault.

Right-click the Filter object  to perform the following:

Edit: Launches the Filter Editor so you can edit the filter.

Save As: Allows you to save the filter as an XML file.

Simulate: Launches the Policy Simulator to ensure that the filter is working correctly.

Export to a Configuration File: Exports the filter to an XML file.

Live: Under *Live*, you can:


- ♦ **Deploy:** Deploys the filter into the Identity Vault.
- ♦ **Compare:** Compares the filter in Designer to a deployed filter in the Identity Vault.

Open With: Allows you to open the filter in one of the following objects:

- ♦ Designer Built-in Editor
- ♦ Novell XML Editor
- ♦ XML Editor
- ♦ Text Editor

4.6.22 Application

The Application object represents a connected system, whether that system is a database, an application, or CSV files.

Right-click the Application object  to do the following:

New: Allows you to create a new Application object.

Show Dataflow View: Launches the Dataflow view. For more information, see [“The Dataflow View”](#) in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.

Discover Domain Controller: Allows you to discover the domain controllers in your Active Directory environment. This option is displayed only for the Active Directory application.

Remote Control Desktop: Launches a remote control session for the selected application. The host server must have an existing VNC server running.

Document Selection: Generates the documentation for the application object.

Driver: Under *Driver*, you can:

- ♦ **DirXML Script Tracing:** Allows you to turn on or turn off actions, conditions, and tokens on every policy at the policy level. This allows you to control how rules, conditions, and tokens flow through policies.
- ♦ **Run Configuration Wizard:** Launches the Driver Configuration Wizard, which allows you to install more packages or import a driver configuration file.
- ♦ **Export to Configuration File:** Exports the driver configuration information to an XML file.
- ♦ **Import from Configuration File:** Imports a driver configuration file. This overwrites your existing driver with the contents in the configuration file.
- ♦ **Import:** Imports items into the driver. For example, you can import policies from configuration files.
- ♦ **Deploy:** Deploys the driver into the Identity Vault.
- ♦ **Compare:** Compares the driver in Designer to a deployed driver in the Identity Vault
- ♦ **Start Driver:** Starts the selected driver.
- ♦ **Stop Driver:** Stops the selected driver.
- ♦ **Restart Driver:** Restarts the selected driver.
- ♦ **Set Up Driver Security:** Allows you to configure the driver's security in the Identity Vault.
- ♦ **Set Driver Trace Level:** Allows you to set the driver trace level. The driver trace level is what determines the information displayed in the driver trace.
- ♦ **Properties:** Launches the Properties page of the driver.


Delete: Deletes the selected Application object.

Properties: See the Properties page associated with this object.

If you select *Document Selection*, the generated document filters most items that are outside the driver. The driver object is also included, and parent objects above the driver object are included in the document for perspective purposes.

4.6.23 Entitlement

The Entitlement object represents an entitlement assigned to the Subscriber channel.

Right-click the Entitlement object  to perform the following:

Edit: Launches the Entitlement editor so you can edit the Entitlement.

Copy: Creates a copy of the Entitlement.

Save As: Allows you to save the Entitlement as an XML file.

Add to Package: Allows you to include the Entitlement in a package, if it is not installed with a package.

Package Properties: Displays the properties of the package that installed the Entitlement.

Revert Customization: Revert Customization is available if the Entitlement is part of a package, and if the Entitlement is customized. Revert Customization is like an undo, and it removes any customizations you made.

Export to Configuration File: Exports the Entitlement configuration to an XML file.

Live: Under *Live*, you can:

- ♦ **Deploy:** Deploys the Entitlement to the Identity Vault.
- ♦ **Compare:** Compares the Entitlement in Designer to a deployed Entitlement in an Identity Vault.

Open With: Allows you to open the Entitlement with one of the following editors:

- ♦ Designer Built-in Editor
- ♦ Novell XML Editor
- ♦ XML Editor
- ♦ Text Editor

Delete: Deletes the selected Entitlement.

Properties: Launches the Properties page associated with this object.

4.6.24 Job

The Job object represents a job that you can schedule to run either immediately or at a later date. Designer presently ships with three job types: Random Password Generator, Schedule Driver, and Subscriber Channel Trigger. You can also have custom jobs.

Right-click the Job object  to perform the following:

Copy: Creates a copy of the job.

Edit: Launches the Job Editor so you can edit the job.

Add to Package: Allows you to include the job in a package, if it is not installed with a package.

Package Properties: Launches the Properties page for the package that installed the job.

Revert Customization: Revert Customization is available if the job is part of a package, and if the job is customized. Revert Customization is like an undo, and it removes any customizations you made.

Export to Configuration File: Exports the job configuration to an XML file.

Live: Under *Live*, you can:

- ♦ **Deploy:** Deploys the job to the Identity Vault.
- ♦ **Compare:** Compare the job in Designer to a deployed job in the Identity Vault.

Open With: Allows you to open the job in one of the following editors:


- ♦ Designer Built-in Editor
- ♦ Novell XML Editor
- ♦ XML Editor
- ♦ Text Editor

Delete: Deletes the job.

Properties: Launches the Properties page associated with this object.

4.6.25 ECMAScript

The ECMAScript object represents an ECMAScript assigned to the Subscriber Channel.

Right-click the ECMAScript object  to perform the following:

Edit: Launches the ECMAScript Editor so you can edit the ECMAScript.

Copy: Creates a copy of the ECMAScript.

Add to Package: Allows you to include the ECMAScript in a package, if it is not installed with a package.

Package Properties: Launches the Properties page for the package that installed the ECMAScript.

Revert Customization: Revert Customization is available if the ECMAScript is part of a package, and if the ECMAScript is customized. Revert Customization is like an undo, and it removes any customizations you made.

Export to Configuration File: Exports the ECMAScript configuration to an XML file.

Live: Under *Live*, you can:

- ♦ **Deploy:** Deploys the ECMAScript into the Identity Vault.
- ♦ **Compare:** Compares the ECMAScript in Designer to a deployed ECMAScript in an Identity Vault.

Open With: Allows you to open the ECMAScript with one of the following editors:


- ♦ Designer Built-in Editor
- ♦ Novell XML Editor
- ♦ XML Editor
- ♦ Text Editor

Delete: Deletes the ECMAScript.

Properties: Launches the Properties page associated with this object.

4.6.26 Mapping Table

The Mapping Table object represents a Mapping Table assigned to the driver.

Right-click the Mapping Table object  to perform the following:

Edit: Launches the Mapping Table Editor so you can edit the mapping table.

Copy: Creates a copy of the mapping table.

Add to Package: Allows you to include the mapping table in a package, if it is not installed with a package.

Package Properties: Launches the Properties page for the package that installed the mapping table.

Revert Customization: Revert Customization is available if the mapping table is part of a package, and if the mapping table is customized. Revert Customization is like an undo, and it removes any customizations you made.

Export to Configuration File: Export the mapping table configuration to an XML file.

Live: Under *Live*, you can:

- ♦ **Deploy:** Deploys the mapping table into the Identity Vault.
- ♦ **Compare:** Compares the mapping table in Designer to a deployed mapping table in the Identity Vault

Open With: Allows you to open the mapping table in one of the following editors:


- ♦ Designer Built-in Editor
- ♦ Novell XML Editor
- ♦ XML Editor
- ♦ Text Editor

Delete: Deletes the mapping table.

Properties: Launches the Properties page associated with this object.

4.6.27 User Application

The User Application object allows you to manage workflow provisioning.

Right-click the User Application object  to perform the following:

Show Dataflow View: Launches the Dataflow view. For more information, see “[The Dataflow View](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.

Remote Control Desktop: Launches a remote control session for the User Application. The host server must have an existing VNC server running.

Document Selection: Generates the documentation for the User Application.

Driver: Under *Driver*, you can:

- ♦ **DirXML Script Tracing:** Allows you to turn on or turn off actions, conditions, and tokens on every policy at the policy level. This allows you to control how rules, conditions, and tokens flow through policies.
- ♦ **Run Configuration Wizard:** Launches the Driver Configuration Wizard, which allows you to install more packages or import a driver configuration file.
- ♦ **Export to Configuration File:** Exports the driver configuration information to an XML file.
- ♦ **Import from Configuration File:** Imports a driver configuration file. This overwrites your existing driver with the contents in the configuration file.
- ♦ **Import:** Imports items into the driver. For example, you can import policies from configuration files.
- ♦ **Deploy:** Deploys the driver into the Identity Vault.
- ♦ **Compare:** Compares the driver in Designer to a deployed driver in the Identity Vault

- ♦ **Start Driver:** Starts the selected driver.
- ♦ **Stop Driver:** Stops the selected driver.
- ♦ **Restart Driver:** Restarts the selected driver.
- ♦ **Set Up Driver Security:** Allows you to configure the driver's security in the Identity Vault.
- ♦ **Set Driver Trace Level:** Allows you to set the driver trace level. The driver trace level is what determines the information displayed in the driver trace.
- ♦ **Properties:** Launches the Properties page of the driver.

Delete: Deletes the User Application.

Localize: Under *Localize*, you can:

- ♦ **Export Localization to File:** Creates properties files that can be sent to be localized.
- ♦ **Import Localization from File:** Imports the properties files that have been localized.

Configure: Under *Configure*, you can:

- ♦ **Locale:** Configures the supported localization data.
- ♦ **Default Locale:** Configures the default localization data.

Live: Under *Live*, you can:

- ♦ **Deploy:** Deploys the User Application object to the Identity Vault.
- ♦ **Compare:** Compares the User Application object in Designer to a deployed User Application object in the Identity Vault.
- ♦ **Import:** Imports the User Application object from the Identity Vault.

Migrate: (Conditional) Migrates the User Application object if it needs to be migrated.

Export to File: Exports the User Application object to a file.

Import from File: Imports the User Application object from a file.

Validate: Validates the User Application object.

Show Provisioning View: Launches the Provisioning view.

Properties: Launches the Properties page associated with this object.

4.6.28 Default Notification Collection

The default Notification Collection object is a placeholder for all notification templates.

Right-click the Notification Collection object  to perform the following:

New Template: Create a new notification template.

Edit Filer: If you want to see e-mail templates in other languages, click this option and select the languages.

Import Templates from File: Imports a notification template from a file.

Export Templates to File: Exports the notification templates to a file.

Add Default Templates: Adds only the default notification e-mail templates in English to the Identity Vault. You can also select to overwrite existing templates.

Add All Templates: Updates all of the notification e-mail templates in all of the languages that are installed with Designer to the Identity Vault. You can also select to overwrite existing templates.

Live: Under *Live*, you can:

- ♦ **Import:** Imports an e-mail template from an Identity Vault.
- ♦ **Deploy:** Deploys e-mail templates to the Identity Vault.
- ♦ **Compare:** Compares the Notification Collection in Designer to a deployed Notification Collection in the Identity Vault.


Localization: Under *Live*, you can:

- ♦ **Import Localization Data:** Imports the localization data from a folder that stores localization data.
- ♦ **Export Localization Data:** Exports the localization data to a folder.

Properties: Launches the Properties page associated with this object.

4.6.29 Notification Template

The Notification template is an e-mail template you can use in policies to notify people of events.

Right-click the Notification object  to perform the following:

Live: Under *Live*, you can:

- ♦ **Deploy:** Deploys e-mail templates to the Identity Vault.
- ♦ **Compare:** Compares the Notification object in Designer to a deployed Notification object in the Identity Vault.

Add Localized Templates: Updates all of the localized versions for the selected notification template that are installed with Designer.

Edit: Launches an editor to allow you to edit the notification template.

Create: Creates a copy of the selected notification template.

Save As: Saves the notification template as an XML file.

Add to Package: Allows you to include the notification template in a package, if it is not installed with a package.

Package Properties: Launches the Properties page for the package that installed the notification template.

Revert Customization: Revert Customization is available if the notification template is part of a package, and if the notification template is customized. Revert Customization is like an undo, and it removes any customizations you made.

Open With: Opens the notification template with one of the following editors:

- ♦ Designer Built-in Editor

- ♦ Novell XML Editor
- ♦ XML Editor
- ♦ Text Editor

Delete: Deletes the select notification template.

Localization: Under *Localization*, you can:

- ♦ **Import Localization Data:** Imports the localization data from a folder that stores the localization data.
- ♦ **Export Localization Data:** Exports the localization data from a folder.

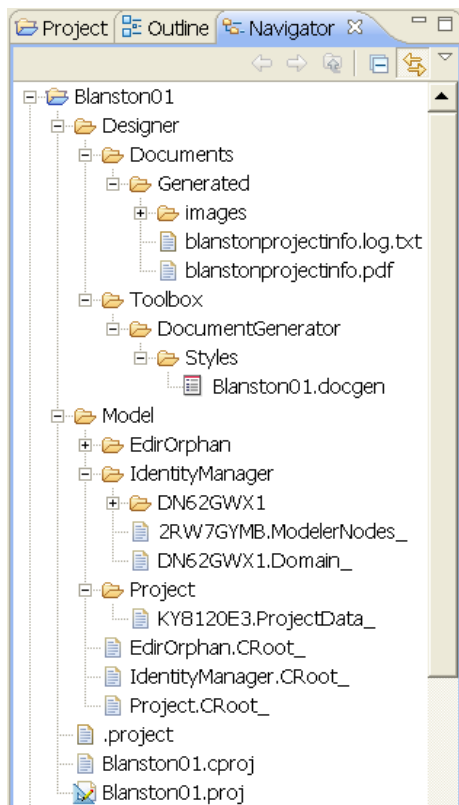
Properties: Launches the Properties page associated with this object.

4.7 The Navigator View

The Navigator view enables you to manage and view the file resources that are in your workspace. You can see your projects and files as they actually exist in the file system. You can add files and folders, and append them to your projects or workspace. These extra items won't change or affect the behavior of your Identity Manager solution. However, they enable you to conveniently append other pieces of information that you want to associate with your projects and workspace.


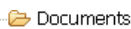


IMPORTANT: Do not use the Navigator View to copy, rename, move, or delete files for a project that is under version control. Performing these operations from the Navigator view does not reflect properly in the Version Control view.

Figure 4-11 *The Navigator View*



The Navigator view enables you to do the following:

Table 4-2 Navigator View Icons

Icon Name	Description
<i>Project Name</i>	The name of the created project. This is the name of the project stored in the selected workspace directory. Double-clicking the Project name expands or collapses the entries under the project.
 Blanston1	<p>Right-clicking a project name allows you to do the following:</p> <ul style="list-style-type: none"> ◆ Under <i>New</i>: <ul style="list-style-type: none"> ◆ Create a new project ◆ Create a new Identity Manager Project ◆ Create a new provisioning artifact ◆ Create other projects ◆ See just this project's workspace (the <i>Go Into</i> option). ◆ Open in a new window. ◆ Copy, paste, delete, move, and rename the project. ◆ Import and export the project. ◆ Refresh the project. ◆ Close the project or close unrelated projects. ◆ Use the <i>Source</i> option to format the document. ◆ View the project's Properties window.
<i>Project's Documents Folder and Subfolders</i>	<p>The <i>Designer > Documents</i> folder contains the files of the created project. Beneath the <i>Designer > Documents</i> directory are the documentation and resources folders and any other folders you have created in this project.</p> <p>Right-clicking any of the project folder names allows you to do the following:</p>
  	<ul style="list-style-type: none"> ◆ Under <i>New</i>: <ul style="list-style-type: none"> ◆ Create a new project ◆ Create a new Identity Manager Project ◆ Create a new provisioning artifact ◆ Create other projects ◆ See only this project's workspace (the <i>Go Into</i> option). ◆ Open the directories in a new window. ◆ Copy, paste, delete, move, and rename the folder. ◆ Import and export the project. ◆ Refresh the directory. ◆ Use the <i>Source</i> option to format the document. ◆ View the project's Properties window.

Icon Name	Description
All File Types	<p>Because the project folders can contain many different files, you can see different icons displayed, depending on the file extension. Right-clicking any of these files allows you to:</p> <ul style="list-style-type: none"> Under <i>New</i>: <ul style="list-style-type: none"> Create a new project Create a new Identity Manager Project Create a new provisioning artifact Create other projects Open the file in a Designer-chosen editor. Open the file with the following choices: <ul style="list-style-type: none"> Text editor System editor In-place editor Default editor XML files can choose an XML editor Project files can choose the Modeler Filter files can choose the Filter editor Policy files can choose the Policy Builder editor Copy, paste, delete, move, and rename the files. Import and export the files. Refresh the file or directory. Use the <i>Source</i> option to format the document. View the file's Properties window.

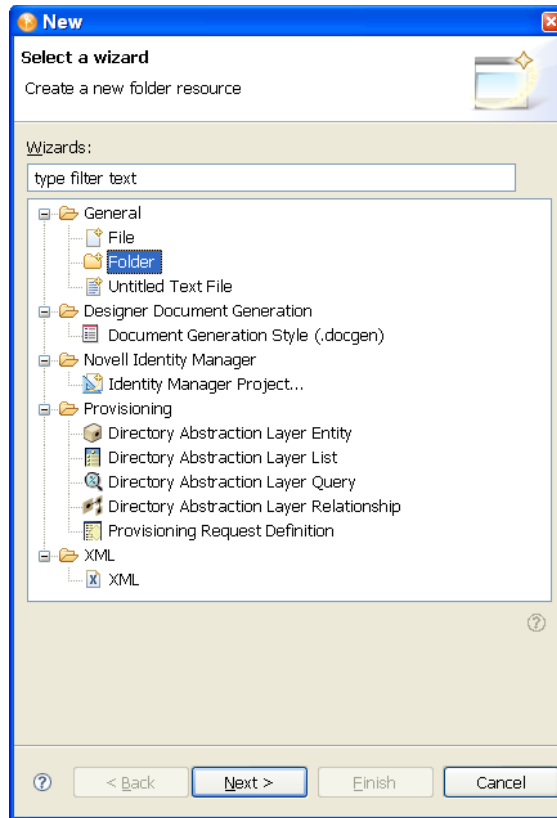
IMPORTANT: Copy and paste operations, and drag and drop operations in the Navigator View are not handling files properly if they are under version control. Perform these operations from the Project view if the project is under version control.

In the Navigator view, you can move any document into your project and edit it with a selected editor. For example, you can add a Word or PowerPoint document, then double-click the document. The native application loads inside Designer, as any other editor would, where you can view and edit the document. (This feature only works on Windows.)

You can create linked resources at any depth within projects. This allows you to put resources from different places in the file system anywhere you like in the project structure, including below other linked resources. The same resource can be linked to the same project.

To create a linked resource:

- 1 Select *Window > Show View > Navigator*.
- 2 In the Navigator view, right-click a project, then select *New > Other*.
- 3 Expand the *General* folder.



- 4 Select *Folder*, then click *Next*.
- 5 Click *Advanced*, then select *Link a folder in the filesystem*.
- 6 Browse to and select a folder, click *OK*, then click *Finish*.

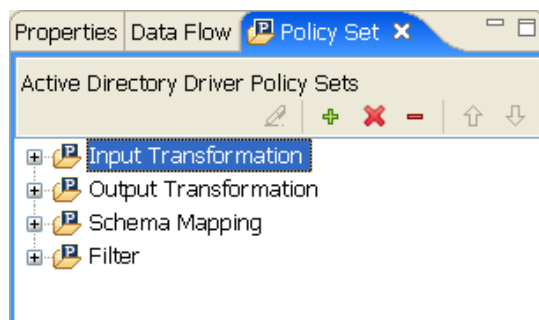
Designer creates a link to that folder directly under the project. You can then easily access the folder.

You can use the same procedure to link to a file.

4.8 Policy Set View

The Policy Set view lists policies and displays a toolbar.







Figure 4-12 The Policy Set View



The list displays all policies contained in the selected policy set. During a transformation, the policies within the list are executed from top to bottom.

The Policy Set view includes the following icons in the icon bar at the top of the view:

Table 4-3 *Policy Set View Icons*

Name		Description
Edit		When you select a policy, this icon brings up the Policy Builder.
Create		Creates, copies, or links a policy.
Delete		Deletes a selected policy. You can also delete all policies in a policy set by selecting the policy set and clicking <i>Delete</i> .
Remove		When you select a policy, this icon enables you to remove the selected policy from the policy set without deleting it. When you select a policy set, the icon enables you to remove all policies from the selected policy set.
Move Policy		Moves the policy up and down in the policy chain.
Minimize/Maximize		Minimizes and maximizes the Policy Set view.

The following options are available when you right-click a policy set:

Table 4-4 *Policy Set Right-Click Options*

Operation	Description
New > DirXML Script	Enables you to create a new DirXML Script policy.
New > SchemaMap	Enables you to create a new Schema Mapping policy.
New > XSLT	Enables you to create a new XSLT policy.
New > From Copy	Launches the Model Browser window, which enables you to browse to and copy an already-existing policy.
Link Existing Policy in Set	Enables you to browse to an existing policy and link that policy to your selected policy set.
Remove All Set Policies	Enables you to remove all the policies from the selected policy set without deleting them.
Delete All Set Policies	Enables you to delete all the policies from the selected policy set.
DirXML Script Tracing	Enables you to turn DirXML Script Tracing on or off for the policy set. You can also choose to apply your settings to all DirXML Scripts or to only the DirXML Script rules for the policy set.

The following options are available when you right-click a policy:

Table 4-5 Policy Right-Click Options

Operation	Description
Edit	Launches the Policy Builder.
Copy	Enables you to copy a policy.
Save As	Enables you to name and save a policy in the file directory.
Simulate	Enables you to test and debug the selected policy
Remove	Enables you to remove the policy from the policy set without deleting the policy.
Link to Existing Policy	Enables you to link this policy to an existing policy.
Move Up	Enables you to move the policy up the policy chain.
Move Down	Enables you to move the policy down the policy chain.
Export to Configuration File	Enables you to export the selected policy to the driver configuration file.
Live > Deploy	Enables you to deploy the selected policy to the Identity Vault.
Live > Compare	Compares selected policies. Enables you to reconcile or update policies.
Delete	Enables you to delete a selected policy.
Properties	Enables you to view the selected policy's properties.
Add to Package	Allows you to include the policy in a package if it was not installed with a package.
Package Properties	Displays the properties of the package that installed the selected policy
Revert Customization	This option is available if the policy is part of a package, and if the policy is customized. Revert Customization is like an undo, and it removes any customizations you made.
DirXML Script Tracing	Enables you to turn DirXML Script Tracing on or off for the selected policy. You can also choose to apply your settings to all DirXML Script policies or to only DirXML Script rules for the policy.

The Policy Set view displays differently, depending on what mode the Outline view is in. If you are in Tree mode, the Policy Set view shows policies in a hierarchical containment. However, if you are in Policy Flow mode, the view shows a flat list of policies in the selected policy set.

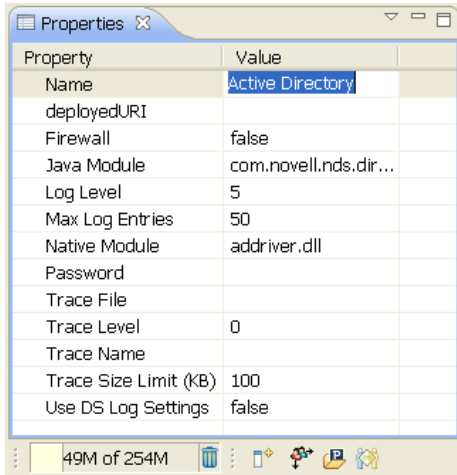
To bring up a policy in the Policy Builder view, double-click the policy. For more on policies, see [Understanding Policies for Identity Manager 4.0](#) and [Policies in Designer 4.0](#).

4.9 The Properties View

The Properties view displays information on key-value pairs (for example, Max Log Entries 2). The information displayed depends on what is selected in the active view (for example, the Modeler or Outline view).

Often, the Properties view lets you edit the information. For example, you can select a driver in the Modeler and then edit the trace level associated with that driver. You can also view and edit the Administrator settings in an Identity Vault.

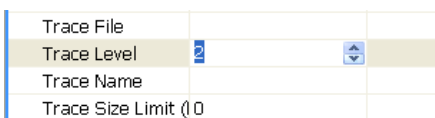
Figure 4-13 *The Properties View of an Active Directory Driver*



- ◆ [Section 4.9.1, “The Spinner Control,” on page 73](#)
- ◆ [Section 4.9.2, “The DN Cell Editor,” on page 73](#)
- ◆ [Section 4.9.3, “Editing Boolean Values,” on page 74](#)
- ◆ [Section 4.9.4, “Keyboard Tips,” on page 74](#)
- ◆ [Section 4.9.5, “Resizing Column Widths,” on page 74](#)
- ◆ [Section 4.9.6, “Summary Table,” on page 74](#)

4.9.1 The Spinner Control

Figure 4-14 *The Spinner Control*



When you edit numeric values in the Properties view, Designer displays a spinner control so that you can increase or decrease the number.

The maximum value on the spinner is set appropriately, based on the attribute type. For example, the maximum for log entries is 500.

4.9.2 The DN Cell Editor

Figure 4-15 *DN Cell Editor*



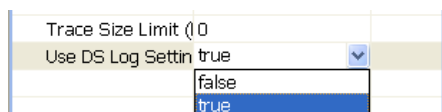
To edit attributes that are of type DN syntax (for example, Driver Set Deploy Context):

- 1 Click *Deploy Context*.
- 2 Type the distinguished name of the context.

You can also click the *Browse* button, then browse to and select an object with the eDirectory browser. In this case, you are selecting the Distinguished Name of the container to deploy the driver set.

4.9.3 Editing Boolean Values

Figure 4-16 Drop-Down List for Boolean Values



To edit Boolean values, select *true* or *false* from the drop-down list.

4.9.4 Keyboard Tips

Table 4-6 Keyboard Tips

Task	Description
Save the value of the current cell editor and set the focus on the next editor.	Press Tab, Enter, the Up-arrow, or the Down-arrow.
Navigate backwards.	Press Shift+Tab. Navigation loops when you reach the top or bottom of a value.
Exit the Properties view.	Press Ctrl+Tab for forward navigation. Press Ctrl+Shift+Tab for backward navigation.

4.9.5 Resizing Column Widths

If you resize the columns in the Properties view, those column widths persist in user preferences. When you open the Properties view again or restart Designer, the resized widths are displayed.

4.9.6 Summary Table

Table 4-7 Properties View Tasks

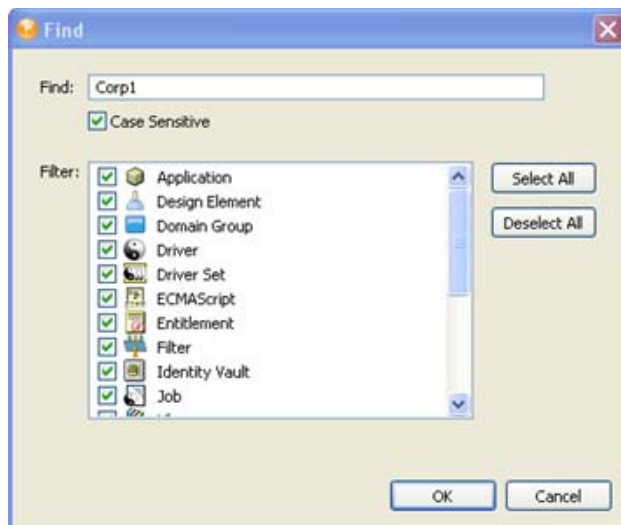
Task	Description
Opening	If the view doesn't already display, select <i>Window > Show View > Properties</i> .
Edit	Edit the settings of any item selected in the Modeler or Outline View.

Task	Description
Multi-edit	If you have selected more than one item, you can edit any settings that both items have in common. For example, if both items have a Name setting, you can select both and edit once. The change is made to both items. This function can boost productivity on certain edit operations.
Saving	When you click <i>Save</i> , all changes are saved to the project file. When you reopen the project, all settings are restored.
Boolean Editor	You can edit Boolean settings (<i>true/false</i>) by clicking the value, which toggles to the other value.

4.10 The Search Results View

To search across an entire project:

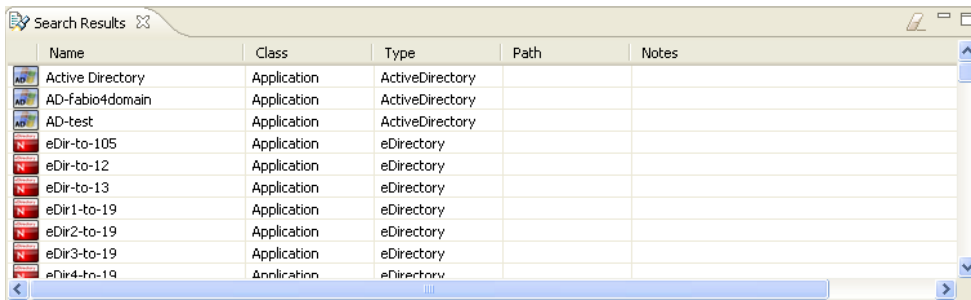
- 1 With the Modeler view active, press Ctrl+F.



- 2 Select whether the search is case-sensitive.
- 3 Filter object types you want to search on. You can select or deselect all items through the *Select All* or *Deselect All* buttons.
- 4 Click *OK*.

The results appear in the Search Results view. You can sort the search results on any column by clicking that column header.

Figure 4-17 The Search Results View



Name	Class	Type	Path	Notes
Active Directory	Application	ActiveDirectory		
AD-fabio4domain	Application	ActiveDirectory		
AD-test	Application	ActiveDirectory		
eDir-to-105	Application	eDirectory		
eDir-to-12	Application	eDirectory		
eDir-to-13	Application	eDirectory		
eDir1-to-19	Application	eDirectory		
eDir2-to-19	Application	eDirectory		
eDir3-to-19	Application	eDirectory		
eDir4-to-19	Application	eDirectory		

If the Search Results view isn't already open, the search opens it.

As you select an item (for example, a policy) in the Search view, the corresponding item (for example, the driver) is selected in the Modeler.

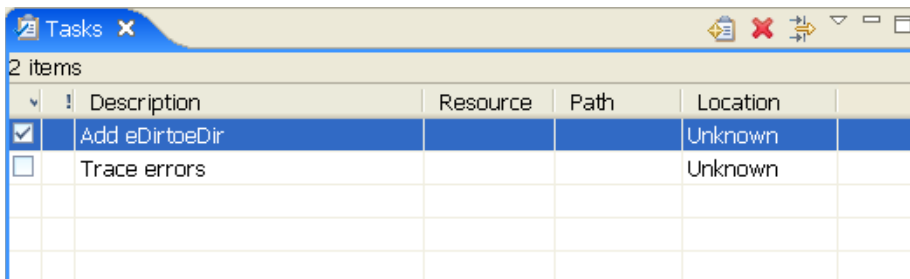
If you double-click an item, its appropriate dialog box or editor launches. To open an item with another editor, right-click the item and select *Open With*.

To clear the Search view, click the *Clear* icon in the Search view's toolbar.

When you subsequently invoke the Search dialog box, Designer remembers your latest search settings.

4.11 The Tasks View

Figure 4-18 The Tasks View



	Description	Resource	Path	Location
<input checked="" type="checkbox"/>	Add eDirtoeDir			Unknown
<input type="checkbox"/>	Trace errors			Unknown

The Tasks view enables you to make and prioritize notes while you manage identities. This view is for your convenience. It can contain whatever you want. It won't affect the functionality of your solution.

This view enables you to do the following:


- ♦ Add tasks
- ♦ Delete tasks
- ♦ Set task properties
- ♦ Set filter properties
- ♦ Mark if completed
- ♦ Provide a description

- ♦ Set a priority
- ♦ Sort on all fields

To add a task:

- 1 Open the Tasks view by selecting *Window > Show View > Tasks*.
- 2 Right-click in the Tasks view, then click *Add Task*.
- 3 Type a name in the *Description* field, select a priority, then click *OK*.


Or:

- 1 Click the *Add Task* icon  located in the upper right corner of the tasks view.

To delete a task:

- 1 Right-click the task.
- 2 Click *Delete*.

Or:

- 1 Select the task so that the entire task is highlighted.
- 2 Click the *Delete* icon , located in the upper right corner of the tasks view.

NOTE: If you right-click the task description so only the task description is highlighted, then click *Delete*, only the task description is deleted. This is helpful if you want to redefine your task description.

- ♦ [Section 4.11.1, “Task Properties,” on page 77](#)
- ♦ [Section 4.11.2, “Filtering Tasks,” on page 78](#)
- ♦ [Section 4.11.3, “Marking Tasks Completed,” on page 79](#)
- ♦ [Section 4.11.4, “Right-Click Options,” on page 80](#)
- ♦ [Section 4.11.5, “Setting Task Priorities,” on page 80](#)
- ♦ [Section 4.11.6, “Sorting Tasks,” on page 81](#)

4.11.1 Task Properties


To open the Task Properties page, right-click a task, then select *Properties*.

Table 4-8 *Task Properties Functionality*

Operation	Description
Description	Enables you to describe or name your task.
Creation Time	Indicates when the task was created.
Priority	Enables you to set the priority of the task to High, Normal or Low.
Completed	Enables you to indicate whether the task is completed.
On Element	Enables you to specify what element the task will be on.

Operation	Description
In Folder	Enables you to specify the folder the task will be in.
Location	Enables you to specify the location of the task.

4.11.2 Filtering Tasks

- 1 Click the filter icon .
- 2 Select filters, then click *OK*.

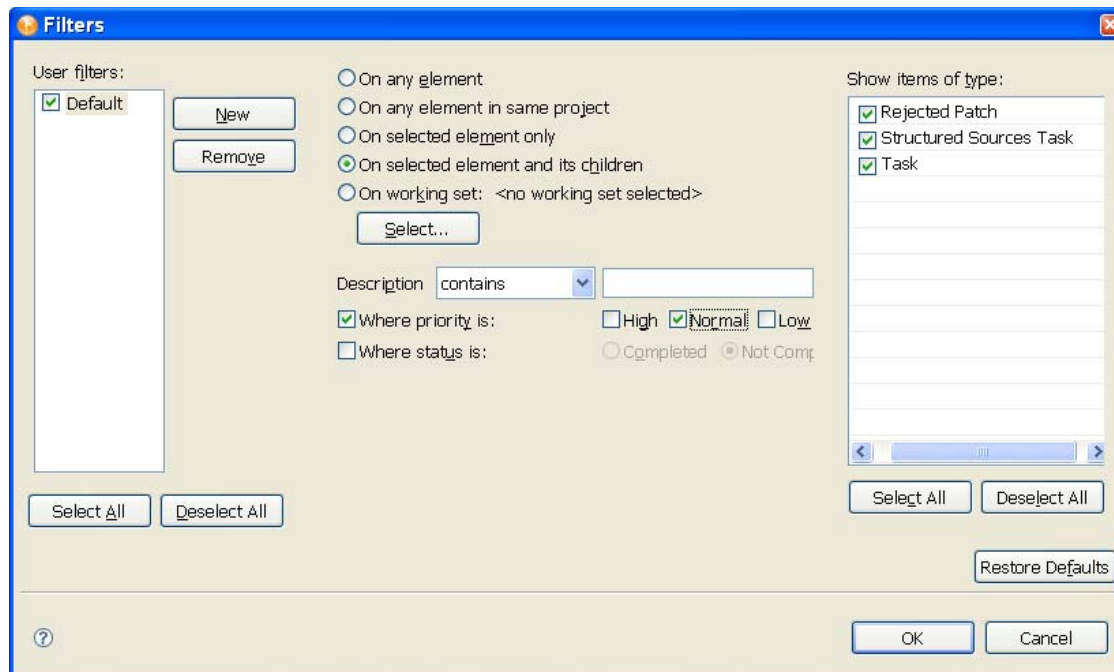


Table 4-9 *Filters Window Functionality*

Operation	Description
User Filters	Enables you to select specific filters to filter your tasks.
New	Enables you to add a new filter to your user filters.
Remove	Enables you to remove an existing filter from your user filters.
Select All	Enables you to simultaneously select all your filters.
Deselect All	Enables you to simultaneously deselect all your filters.
On Any Element	Filters on any element.
On Any Element in the Same Project	Filters only on elements that are in the same project.

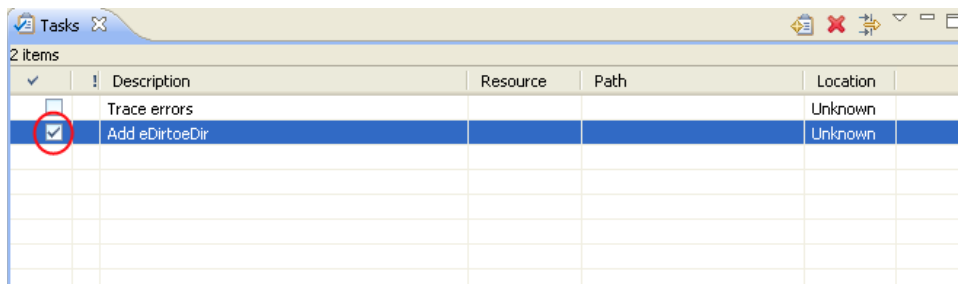
Operation	Description
On Selected Element Only	Filters only on the elements you have selected.
On Selected Element and its Children	Filters only on the elements you have selected and the children of those elements.
On Working Set	Filters only on the working set you have selected.
Select	Enables you to add, edit, remove and select working sets.
Description	Enables you to filter by description.
Where Priority is:	Enables you to filter by priority.
Where Status is:	Enables you to filter by status.
Show Items of Type	Enable you to filter by type.
Select All	Enables you to simultaneously select all types.
Deselect All	Enables you to simultaneously deselect all types.
Restore Default	Enables you to restore set defaults.

4.11.3 Marking Tasks Completed

- 1 Right-click the task you want to mark completed.
- 2 Click *Mark Completed*.

Or:

- 1 Click the check box in the left column of the Tasks view.



NOTE: When you mark a task as completed, the task automatically moves to the bottom of your list of tasks.

You can set a priority for your task when you add a new task to your list. However, this is not the only location where you can set a priority.

4.11.4 Right-Click Options

Table 4-10 Task Options

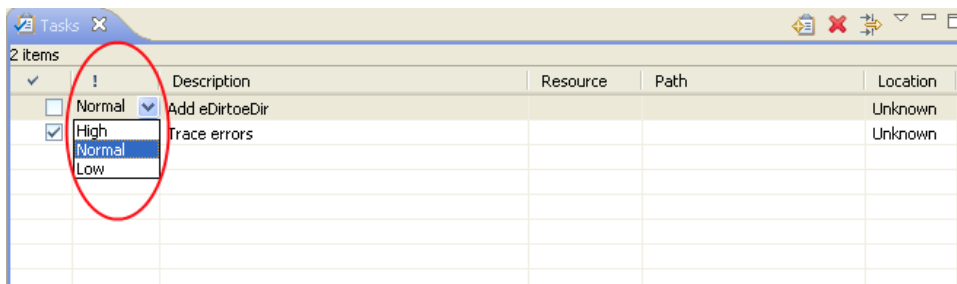
Operation	Description
Add Task	Enables you to add a task to the Tasks view.
Go To	Enables you to go to a designated place.
Show In	Enables you to show the task in another view.
Copy	Enables you to copy tasks.
Paste	Enables you to paste what has been cut or copied.
Delete	Enables you to delete all selected tasks.
Select All	Enables you to simultaneously select all tasks in the Tasks view.
Mark Completed	Marks the selected task as Completed.
Delete Completed Tasks	Deletes all tasks that are marked as Completed.
Properties	Opens the Properties window.

4.11.5 Setting Task Priorities

- 1 Right-click a task.
- 2 Select *Properties*.
- 3 Select the new priority.

Or:

- 1 In the Tasks view, locate the column with the exclamation mark (!).
- 2 Go to the task on which you want to change the priority.
- 3 Click in the column with the exclamation mark.
- 4 The task's current priority is displayed.
- 5 Click the drop-down arrow to the right of the current priority.
- 6 Select the desired priority.



4.11.6 Sorting Tasks

- 1 Click the *Menu* icon located in the right corner of the Tasks view.
- 2 In the drop-down menu, click *Sorting*.

The Sorting window enables you to sort your tasks in different ways, in ascending or descending order. You can sort by completion, priority, description, resource, path, location, and creation time.

Click *Restore Defaults* to restore the sorting defaults.

4.12 The Trace and Error Log Views





The Trace and Error Log views help you troubleshoot Designer.

- ♦ [Section 4.12.1, “Trace View,” on page 81](#)
- ♦ [Section 4.12.2, “Error Log View,” on page 81](#)

4.12.1 Trace View

The Trace view includes the following icons in the icon bar at the top of the view:








Table 4-11 Icons in the Trace View Toolbar


Icon Name	Description
 <i>Clear Trace</i>	Clears the Trace view.
 <i>Save</i>	Saves Trace view contents to a .txt file
 <i>Preferences</i>	Opens the Preferences window.
 <i>Minimize/Maximize</i>	Minimizes and maximizes the Trace view.

4.12.2 Error Log View

The Error Log view includes the following icons in the icon bar at the top of the view:

Table 4-12 Icons on the Error Log View Toolbar

Icon Name	Description
 <i>Export Log</i>	Enables you to export the error log to a location on the file system.
 <i>Import Log</i>	Enables you to import a file from the file system to the error log.
 <i>Clear Log Viewer</i>	Clears all the entries in the Error Log viewer.
 <i>Delete Log</i>	Deletes all items in the error log.
 <i>Open Log</i>	Opens an error log entry.
 <i>Restore Log</i>	Restores log entries that have been previously cleared.
 <i>Menu</i>	Reveals a menu drop-down list.

Icon Name	Description
<i>Menu > Filters</i>	Opens the Log Filters window.
<i>Menu > Activate on New Events</i>	Activates a log entry on a new event.
 <i>Minimize/Maximize</i>	Minimizes and maximizes the Error Log view.

For more information, see “[Troubleshooting Designer](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.

4.13 The Dataflow View






Designer allows you to manage how the data flows between the Identity Vault and the connected systems. You can see how the data flows between all of the connected systems, make changes as needed, create reports about the data, and view the flow of passwords between the systems.

The Dataflow view enables you to perform the following functions:

- ♦ View the filters that allow the data to flow between all of the systems and the Identity Vaults
- ♦ View how the passwords flow through the different systems
- ♦ Add, delete, and edit driver sets, drivers, filters and Identity Vaults from one location
- ♦ Generate HTML reports of the data flow and password flow

The Dataflow view includes the following icons in the icon bar at the top of the view:

Table 4-13 *Dataflow View Icons*

Icon	Description
 <i>Add Filter Class</i>	Adds a new filter class to the dataflow list.
 <i>Add Filter Attribute</i>	Adds a new filter attribute to a selected filter class.
 <i>Expand All Classes</i>	Simultaneously expands all filter classes to reveal all existing filter attributes.
 <i>Collapse All Classes</i>	Simultaneously collapses all filter classes to hide all existing filter attributes.
 <i>Clear Arrows</i>	Clears all dataflow arrows from the drivers in the Modeler.

The Dataflow view and the Dataflow editor manage the data. The Dataflow view displays the flow of data in the Modeler per driver. The Dataflow editor displays a more granular view. For more information, see “[Managing the Flow of Data](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.

4.14 The Project Checker

Designer provides a Project Checker tool to check your project. The project can be checked at any time, but you should run the Project Checker before deploying your project. The Project Checker checks for proper design, contexts, server associations, policies, missing user data, and dependency problems that would cause the deployment of project into the Identity Vault to fail. It only checks

the objects in Designer; it does not check the current objects in the Identity Vault. For more information on the Project Checker, see “[Checking Your Projects](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.

Editors, Builders, and Wizards

5

Designer contains multiple builders to help you build working policies, packages, and drivers. It also contains editors to assist in you in editing projects, and wizards to help you build drivers and packages. Below is a brief explanation of what builders, editors and wizards do, along with some examples of their functionality.

Designer also contains many views to help you design and implement Identity Manager solutions. For more information about views, see [Section 4.4, “Managing Views,” on page 33](#).

- ♦ [Section 5.1, “Editors,” on page 85](#)
- ♦ [Section 5.2, “Builders,” on page 90](#)
- ♦ [Section 5.3, “Wizards,” on page 90](#)

5.1 Editors

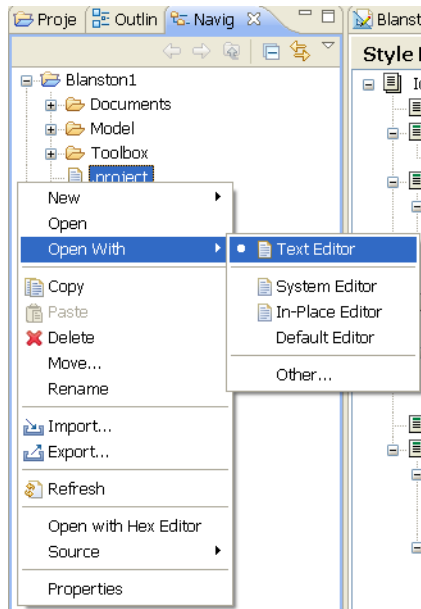
- ♦ [Section 5.1.1, “Using an Editor,” on page 85](#)
- ♦ [Section 5.1.2, “XML Editor,” on page 89](#)
- ♦ [Section 5.1.3, “Filter Editor,” on page 89](#)
- ♦ [Section 5.1.4, “Schema Map Editor,” on page 89](#)

5.1.1 Using an Editor

Editors enable you to modify projects or other items that are listed in the Navigator or the Project view. Designer comes with a number of editors, and a default editor is designated for most file types.

To select an editor other than the default:

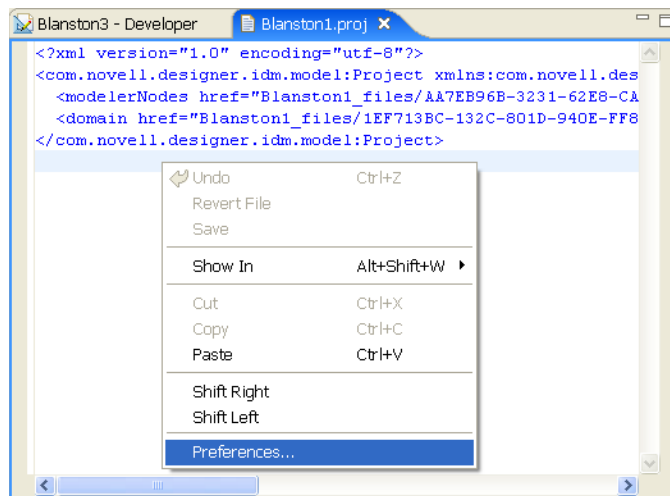
- 1** Expand a project in the Project or Navigator view (there are more editors in the Navigator view).
- 2** Select the `Documents\Generated` folder.
- 3** Right-click any of the files, such as `.xml`, `.pdf`, or `.txt`, and select *Open With > Editor Name*. The example below shows the process of opening a file with the Text Editor from the Navigator view.



The editor you choose depends on the type of file you select. Designer lists what it considers to be the best editor for the selected file type.

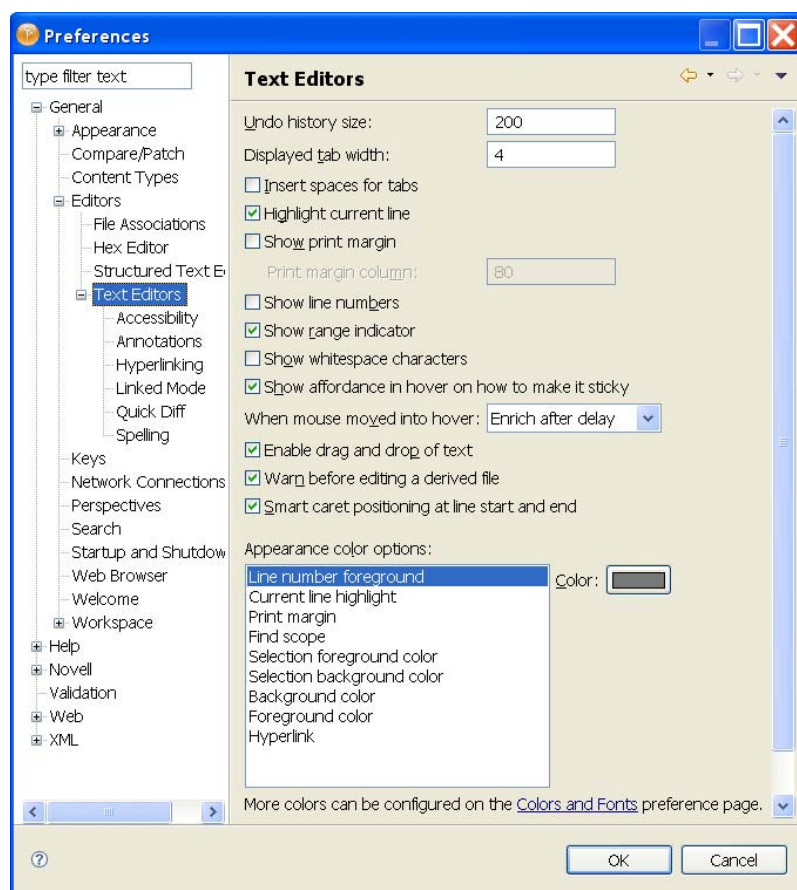
The following figure illustrates a text editor. When you right-click the editor, a menu is available:

Figure 5-1 *The Text Editor's Menu*



The Preferences window lets you set a text editor's preferences. You get to this window by selecting *Window > Preferences > General > Editors > Text Editors*.

Figure 5-2 Preferences: Text Editors



For information on the settings, see “Text Editors” in the [Designer 4.0 for Identity Manager 4.0 Administration Guide](#).

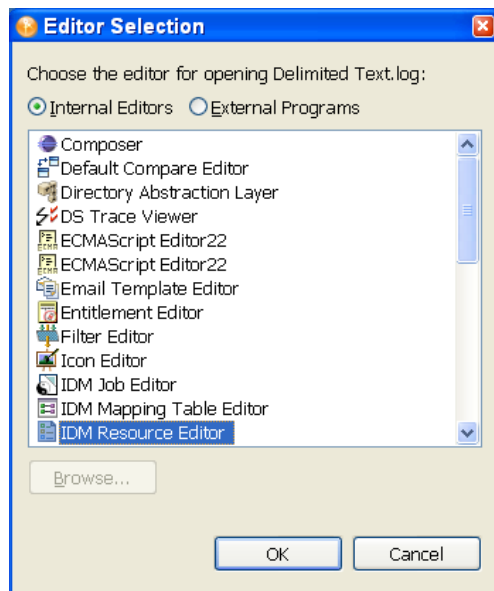
Each file type you right-click brings up a list of editors.

- ♦ .xml extension:
 - ♦ Novell XML Editor (default)
 - ♦ Text Editor
 - ♦ System Editor
 - ♦ In-Place Editor
 - ♦ Default Editor
- ♦ .txt extension:
 - ♦ Text Editor (default)
 - ♦ System Editor
 - ♦ In-Place Editor
 - ♦ Default Editor
- ♦ .pdf extension:
 - ♦ Text Editor

- ♦ System Editor (default)
- ♦ In-Place Editor
- ♦ Default Editor
- ♦ .project extension:
 - ♦ Text Editor (default)
 - ♦ System Editor
 - ♦ In-Place Editor
 - ♦ Default Editor
- ♦ .proj extension:
 - ♦ Modeler (default)
 - ♦ Text Editor
 - ♦ System Editor
 - ♦ In-Place Editor
 - ♦ Default Editor
- ♦ .log extension:
 - ♦ DS Trace Editor
 - ♦ Text Editor
 - ♦ System Editor
 - ♦ In-Place Editor
 - ♦ Default Editor

You can also select *Open With > Other* to open the Editor Selection page.

Figure 5-3 *Selecting an Internal or External Editor*



Select an appropriate editor and click *OK*. If you have a particular editor in mind, select *External Programs*, then click *Browse* to select that program.

Below are some examples of editors and their functionality.

5.1.2 XML Editor

You can use the XML editor in policy management and configuration editing. The XML editor can do the following:

- ♦ Outline view support
- ♦ Find and replace
- ♦ Highlight syntax
- ♦ Auto suggest
- ♦ Auto-insert end tags

5.1.3 Filter Editor

- ♦ Add classes and attributes
- ♦ Copy the filter
- ♦ Delete
- ♦ Multiselect support
- ♦ Keyboard support
- ♦ Refresh the schema
- ♦ Expand/collapse all
- ♦ Configure default values
- ♦ Create a home directory
- ♦ Track member templates
- ♦ Merge authority
- ♦ Optimize modifications
- ♦ Undo/redo
- ♦ XML editor integration

5.1.4 Schema Map Editor

- ♦ Add classes and attributes
- ♦ Delete
- ♦ Multiselect support
- ♦ Keyboard support
- ♦ Refresh the schema
- ♦ Expand/collapse all
- ♦ Non-class-specific handling
- ♦ XML editor

5.2 Builders

A Builder is a complete graphical interface for creating and managing the policies that define the exchange of data between connected systems. Builders help you to build portions of a policy. For example, you define most arguments in the Argument Builder, and the Policy Builder enables you to add, view, and delete the rules that make up a policy. You can also use the Policy Builder to import and save policies and rules, and manage XML namespaces.

There are several more builders and editors that are used by the Condition editor and Action editor in the Policy Builder. Each builder can recursively call anyone of the builders. For more information on builders, see “[Managing Policies with the Policy Builder](#)” and “[Using Additional Builders and Editors](#)” in the *Policies in Designer 4.0*.

Builders give you powerful flexibility in designing data exchange. For example, the Policy Builder has the following capabilities:

- ♦ Creating and editing policy scripts
- ♦ Defining rules: conditions, actions, groups
- ♦ Support for predefined rules
- ♦ Emphasis on productivity
- ♦ Nested inline editors
- ♦ Keyboard support
- ♦ Copy/paste within an editor and across editors
- ♦ Drag and drop
- ♦ Integrated Help
- ♦ Policy creation wizards
- ♦ Import/export
- ♦ Namespace editing
- ♦ Expand/collapse all
- ♦ Reordering
- ♦ Integrated e-mail templates
- ♦ Integrated Global Configuration Values
- ♦ Integrated schema
- ♦ Various display preferences
- ♦ Argument builder and token editor
- ♦ Undo/redo
- ♦ Validation
- ♦ XML editor

5.3 Wizards

A wizard is a graphical interface that helps you build something in Designer. For example, the Add Policy Wizard enables you to create, copy, and link a policy. As another example, Designer allows you to create entitlements through the Entitlement Wizard, which steps you through the creation of

entitlements by asking a series of questions about how the entitlement will be used in the enterprise. Because of this graphical interface, we recommend using Designer for creating and editing entitlements.

Below is a list of some of the Designer wizards and where to read more about them:

- ♦ Entitlement Wizard (see “[Creating Entitlements through the Entitlement Wizard](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.)
- ♦ Project Converter Wizard (see “[Converting Earlier Projects](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.)
- ♦ Identity Manager Project Wizard (see “[When No Project Exists](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.)
- ♦ Driver Configuration Wizard (see “[Creating a Driver](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.)
- ♦ Document Generation Wizard (see “[Generating a Document](#)” in the *Designer 4.0 for Identity Manager 4.0 Administration Guide*.)

Planning Identity Solutions

6

- ♦ [Section 6.1, “Planning an Identity Project,” on page 93](#)
- ♦ [Section 6.2, “Using Designer In Your Planning Process,” on page 97](#)
- ♦ [Section 6.3, “Security Best Practices,” on page 99](#)

6.1 Planning an Identity Project

Identity Target Goals

Make sure that you and others working on the project use the same terminology. For example, password synchronization and single sign-on are two different technologies.

Also, make sure that the meaning and usage of “metadirectory” are clear as you communicate with others on the project.

Clearly write down the big picture of what you are trying to do.

Discover the Business Process

The process that you are trying to automate with Identity Manager is often already defined and written down.

Be careful. Even if a process exists, people commonly don’t fully understand how it works.

Clearly write down what the business process is, and clarify the process to others.

Identify All Systems

Identify all systems and all connectivity interfaces between existing systems. Doing this can lead to an increase or decrease in the originally planned systems that you had in mind.

Keep in mind that telephony systems often don’t have an easy API interface.

SQL-based systems sometimes have a very complex database relationship model. It’s possible that nobody in your environment understands how the model actually works.

Identify how many Identity Vaults you will need, where they will be located, and what they will connect with.

What to Do In Designer: You can use the Designer Architect Modeler during this process. It’s very helpful to build a diagram of your enterprise, and capture key information about each of your systems and each of the users who administer those systems.

As you start a project, keep in mind that the “people management” aspect is vital to your ultimate success. As you identify systems, you need to start the process for getting access to those systems in the various departments of the organization.

Define High-Level Data Sync Flow

Define high-level data sync flow.

Define the different information types that you want to synchronize. It's common to have different employee types (for example, internal or external).

Be aware of the relationships and dependencies between information of different types (for example, employee, manager, organization, or location).

Doing this step well is critical in helping you to define your data and policy needs.

What to Do In Designer: You can design these data flows in the Dataflow view while you are in the Architect mode or Developer mode.

Define Which Objects and Attributes to Synchronize

After knowing the data and relationships, you can break the data into specific Identity Vault and Application object types and attributes.

Define merging behavior, pass through, notification, and reset of attributes.

Identify and derive additional operations based on an original event.

Identify attributes for match, creation, and placement behaviors.

What to Do In Designer: You can use the Task view to capture all of this information or add it to a section in a Document Generation form. One advantage for having it in the Task view is that you can then check off your tasks as you move into the implementation phase and write the policy to deliver your requirements.

You can also include other files (word processing document, spreadsheet, presentation) in your Designer project through the Navigator view. By default, the Navigator view launches the appropriate native application to edit and view that document in a way that integrates into Designer, as long as the platform supports it. If you prefer, you can also configure Designer to use a different editor. This view gives you many options for the types of documents you can include and edit in a Designer project.

Write a Requirements Assessment Document

Document all of the above findings.

Write a high-level acceptance proposal.

Describe the infrastructure.

Create a project timeline.

What to Do In Designer: You can use Designer's Document Generator to capture your high-level design, systems, and basic data flows. You can also fill in sections in the document or create your own sections that describe the project.

Fill In Technical Details

Take the high-level diagram that you created in the Architect mode and transition it to a detailed diagram that you can use to configure your entire solution.

Configure server and authentication information on the Identity Vaults.

Create driver sets and drivers. Determine how many driver sets are on each vault. Define what drivers are associated with each driver set, and what servers the driver set is running on. Run the Driver Configuration Wizard on each driver.

Develop driver policies. Make sure that you define and use Global Configuration Values (GCVs) as much as possible. Doing this leads to easier maintenance.

What to Do In Designer: With the Modeler in Developer mode, use the Outline view, Policy Flow view, properties dialog boxes on all objects, Filter editor, Schema Map editor, E-mail Template editor, Policy Builder, and other functionality.

NOTE: The preceding six steps assume that you are building an identity solution from the beginning.

However, Designer is also intended for working on existing solutions. You can create a project and import existing driver sets, drivers, policies, and configurations. Designer lets you easily diagram and manage all components as one complete solution. You can edit existing policies or configurations, add new elements, and then redeploy.

Using Designer on existing solutions has several advantages. You can do the following:

- ♦ Work in a high-productivity development environment.
- ♦ Easily work off-line.
- ♦ Have everything on your local file system for versioning and backup.
- ♦ Simulate.
- ♦ Generate documentation for your projects.

Unit Test

Use project-proposal documents and requirements as a basis.

Test all policies. In addition to the Designer tools, you can deploy the project (or parts of it) into a test environment to test more fully.

Generate a report on results.

What to Do In Designer: Use the Designer Policy Simulator to do much of your policy simulation and debugging. It is very easy to use, helps you identify many issues, and is ideal for offline development.

Build a Production Environment

As much as possible, mirror existing production environments.

Make sure of the following:

- ♦ All Identity Manager engines and drivers are installed.
- ♦ All servers have correct IP addresses.
- ♦ The applications your drivers will connect to are in place.

As an extra precaution, you might want to deploy to a full test environment or staging environment first. If you decide to do this, all of the above steps apply to configuring that environment.

What to Do In Designer: To make the next steps easier, you can click a button, get a full PDF document of all of the configuration details of your project, and use that document as you set up your machines and software.

Clean Data Before You Deploy

- ♦ Each user has a unique and correctly formatted ID.
- ♦ All users and other objects are where you expect them to be.
- ♦ No duplicate objects exist.
- ♦ No extra or unnecessary objects exist.

Deploy to Production

Make sure that the production systems are working well. For example, machines are up and running.

Before you deploy, make sure you have done adequate testing on your project.

If you have previously configured the project to deploy to a separate test or staging environment, you need to change the IP addresses on each Identity Vault (and maybe some GCVs) to successfully deploy to the production environment.

After you deploy, quickly test and redeploy all or any part of the project with any fixes you need.

What to Do In Designer: In the future, more will be done in Designer to help in this area. For now, the following tips can help in this process:

- ♦ Do a full copy of the project in the Project View.

This lets you fill in the new IP addresses for production and leave the old ones alone, so that you can have a project called Staging and another called Production. The disadvantage is that if you change something such as a policy in one project, you need to change it in the other to keep the policies in sync. Designer does let you copy/paste between projects to make synchronization easier.

- ♦ Always use GCVs to keep your policies easily portable.

If you have a value that is environment-dependent, you only need to edit a GCV when switching to a different environment.

- ♦ Use the Modeler's Table editor.

This editor is a quick and easy way to get to objects of a certain type (for example, all of your Identity Vaults or all of your servers), see their values, and edit them.

- ♦ Document your project.

Document Generation is always available to help you understand your configurations.

Document, Back Up, and Maintain

What to Do In Designer: Run the Document Generator and save the document.

Make a copy of your project in the Project view. A copy is useful in case you ever need to return to that state or set up a production system again for any reason.

Over time, you will certainly add systems and policies, and make changes in your production environment. You can use iManager for the management of your system (especially if the change is more of an administrative task) and then reimport those changes into your local Designer project.

If the changes you need to make are more suited for a development environment, (for example, policy debugging, policy development, or adding new systems) then continuing to use Designer is the best practice. After each change, you can redeploy the project or just the elements that have changed.

As you version and extend your project over time, remember to always use Document Generation as your paper trail.

6.2 Using Designer In Your Planning Process

- ♦ [Section 6.2.1, “Using the Architect View to Design Your Identity Environment,” on page 97](#)
- ♦ [Section 6.2.2, “Designing New Solutions,” on page 97](#)
- ♦ [Section 6.2.3, “Redesigning Existing Solutions,” on page 98](#)
- ♦ [Section 6.2.4, “Working on Live Systems,” on page 98](#)

6.2.1 Using the Architect View to Design Your Identity Environment

- 1 Launch Designer.
- 2 Open or create a new project in the Modeler view.
- 3 Select the Architect view from the bottom of the Modeler view.
- 4 Drag and drop items from the Palette.

These items are representations of the drivers and applications that make up an Identity Manager solution. There are also a number of design elements to help you in designing your network layout.

- 5 Edit the item’s names to match your Identity Manager environment.
- 6 Use the Architect view as a basis for your actual Designer project.
- 7 Use the Developer view to run the configuration wizards on any driver sets and drivers you have added through the Architect view.

Driver objects created through the Architect view are not configured to run in an Identity Manager system. Consequently, you need to import or create the drivers from the Developer view in the Modeler in order to run the Driver Wizard. The Driver Wizard configures the driver with policies, entitlements, and other configuration information that is necessary for the driver to run in an Identity network.

6.2.2 Designing New Solutions

- 1 Launch Designer.
- 2 Using the New Project Wizard, open or create a project.
- 3 Drag and drop items from the Modeler Palette.
- 4 Edit the item settings and configurations (for example, names, IP addresses, and passwords).

- 5 Using the Policy Builder and other policy editors, write a policy for sharing data between systems.
- 6 Check your work.
- 7 Use the Document Generator to generate project documentation, and review the documentation with others.
- 8 Deploy the project to a test system for verification.
- 9 After the project is verified, deploy the project to a live system.

6.2.3 Redesigning Existing Solutions

- 1 Launch Designer.
- 2 Open or create a new project.
- 3 Import Identity Management elements (drivers, driver sets) from working directories.
- 4 Edit the element settings and configurations (for example, names, IP addresses, and passwords).
- 5 Using the Policy Builder and other policy editors, write a policy for sharing data between systems.
- 6 Check your work.
- 7 Use the Document Generator to generate project documentation, and review the documentation with others.
- 8 Deploy the project to a test system for verification.
- 9 After the project is verified, deploy the project to a live system.

6.2.4 Working on Live Systems

The fundamental model/paradigm of Designer is to import solutions, configure them locally in the Designer environment, and then deploy when a solution is ready. This approach was taken to optimize the experience for the following:

- ♦ Offline work
- ♦ Highly productive development
- ♦ A safer model of configuring and testing before touching your live system

The best practice is to set up a test environment for configuration and testing before deploying the solution into a live system.

The Live Operations tool is aimed at developers and architects as the primary audience. For convenience, Designer enables you to perform key operations that a developer typically needs to do, so that the developer can effectively browse live trees, check driver status, start/stop drivers, and configure driver security.

The functionality of Live Operations options takes immediate effect on the end systems. These operations are clearly grouped in the Designer UI, so that you can tell if you are performing a live operation.

6.3 Security Best Practices

When using Designer for Identity Manager, observe best practices.

Limiting Rights

Before giving a consultant an Identity Vault administrator password, limit the rights assigned to that administrator to areas of the tree that the consultant must access. Doing so protects sensitive data from being misused, damaged, or unintentionally compromised.

Changing Passwords

After a consultant has completed work, change the password of the user (for example, admin) that the consultant used. If you created a special user (for example, consadmin) for that consultant to use, delete that user or change passwords. Doing so restricts access and brings closure to the consulting process.

Deleting or Saving .proj Files

Delete the project files (.proj) or save them to a company directory.

Designer .proj files are to remain at the company's project site. A consultant does not take the files after completing a project.

Deleting Files That Aren't Needed

When project files, log files, and trace files are no longer needed, delete them. These files might contain sensitive information.

Verifying Files

Before discarding or surplus a laptop, verify that project files have been deleted. Otherwise, someone might discover sensitive information.

Securing Connections

Ensure that the connection from Designer to the Identity Vault server is physically secure. Otherwise, someone could monitor the wire and pull sensitive information.

Handling Documents

When you create documents by using the Document Generator, take care with those documents. These documents can contain passwords and sensitive data in clear text.

Working with Encrypted Attributes

If Designer needs to read or write to an eDirectory attribute, you can mark the attribute to be encrypted, but you can also allow the attribute to be read over the wire in clear text. This means that you can have encrypted attributes, but they cannot be retrieved securely.

Handling Sensitive Passwords

Do not store passwords that are sensitive.

At this time, Designer projects are not encrypted. Passwords are only encoded. Therefore, do not share Designer projects that have saved passwords.

To save a password for a session, but not save it to the project:

- 1** In an expanded Outline view, right-click an Identity Vault.
- 2** Select *Properties*.
- 3** On the Configuration page, type a password, then click *OK*.

You can enter a password once per session. After you close Designer, the password is lost.

To save a password to the project, complete Step 1 through Step 3, select *Save*, then click *OK*.

Security for the User Application

For information on security issues relating to the User Application, see the “[Security Configuration](http://www.novell.com/documentation/idm35/agpro/index.html?page=/documentation/idm35/agpro/data/agproadminappsecurity.html)” section (<http://www.novell.com/documentation/idm35/agpro/index.html?page=/documentation/idm35/agpro/data/agproadminappsecurity.html>) in the *Identity Manager User Application: Administration Guide* (<http://www.novell.com/documentation/idm35/index.html>).

Designer's Architecture

A

- ♦ [Section A.1, “Designer Is Built on Eclipse Technology,” on page 101](#)
- ♦ [Section A.2, “The Designer Core Model Uses the Eclipse Modeling Framework,” on page 101](#)

A.1 Designer Is Built on Eclipse Technology

Designer is based on Eclipse technology. This open source technology is actively supported by more than 60 leading companies (such as IBM, HP, Intel, SAP, Fujitsu, and Oracle) and by thousands of other developers throughout the commercial industry and the academic world.

With Designer based on Eclipse, you receive the following benefits:

- ♦ Published, well-documented, and supported APIs frequently used across the industry.
- ♦ An underlying model that integrates well with any plug-in.
- ♦ A rich, advanced UI.
- ♦ Capability to fully and easily extend our product in the future.
- ♦ Better integration and leveraging of other applications.
- ♦ Open source as the basic framework.

You can install Novell tools into any Eclipse-based framework.

- ♦ Out-of-box tools (Java editor, debugger, JUnit, ANT, CVS integration) that are free if you want to access them (and other tools) within the Designer.
- ♦ Cross-platform benefits of Java, but the native performance and native look of the platform.
- ♦ Quick access to meaningful tools.
- ♦ A framework that quickly picks up entirely new capabilities contributed by a larger community.

Instead of focusing on tools, developers are able to concentrate on providing quality content so they don't need to spend as much time on creating, debugging, and fixing the framework.

A.2 The Designer Core Model Uses the Eclipse Modeling Framework

At the heart of Designer for Identity Manager is a strong object model that is based on the Eclipse Modeling Framework. This model uses the industry standard XMI format (XML Metadata Interchange Format) for storing objects and their relationships.

The main purpose of XMI is to enable easy interchange of metadata between modeling tools, that are based on the Object Management Group Unified Modeling Language (OMG UML) and between tools and metadata repositories, that are based on the OMG MetaObject Facility (MOF) in distributed heterogeneous environments. XMI integrates three key industry standards:

- ♦ XML (Extensible Markup Language), a W3C standard
- ♦ UML (Unified Modeling Language), an OMG modeling standard
- ♦ MOF OMG modeling and metadata repository standard

The integration of these three standards into XMI integrates the best of OMG and W3C metadata and modeling technologies, allowing developers of distributed systems to share object models and other metadata. XMI, together with MOF and UML, forms the core of the OMG repository architecture that integrates object-oriented modeling and design tools with each other and with a MOF-based extensible repository framework.












Because Designer is based on this technology, you get the following benefits:






- ♦ Published industry-standard APIs so that you can programmatically interact with the model.
- ♦ A solid event-notification mechanism if the model ever changes.
- ♦ All views, editors, and plug-ins are notified and in sync.
- ♦ The ability to auto-generate Java code or UML from the model, or vice-versa.
- ♦ Undo/redo the stack across all views, editors, and plug-ins that are in sync with the model.

Terminology

B

The following terms are used in Designer:

Icon	Term	Description
	Application object	Represents a connected system, whether that system is a database or CSV files.
	Driver object	A collection of channels, policies, rules, and filters that connect an application to an eDirectory tree running Identity Manager. Each driver performs different tasks. Policies, rules, and filters tell the driver how to manipulate the data to perform those tasks.
	driver set	A collection of Identity Manager drivers that are stored in a single location.
	driver properties shortcut	Double-clicking the shortcut brings up the Properties window associated with the object's name.
	filter	A gatekeeper that determines which objects (groups, users, and the attributes associated with them) can be sent to and from eDirectory. Allows the objects to be sent.
	Identity Vault	Represents the eDirectory tree that has Identity Manager installed on it.
	Notification collection	A placeholder for all e-mail notification templates.
	Notification object	A notification template. Used to send an e-mail notification to a user concerning a password event (for example, a request for a password hint).
	package	A container for organizing the driver content. Replaces driver configuration files.
	policy	A collection of rules and arguments that enable you to configure an application to send or receive events to or from an Identity Vault. You use policies to manipulate the data that you receive from the Identity Vault or from the application. Each driver performs different tasks. Policies tell the driver how to manipulate the data to perform those tasks.
	project name	The name of the project when you create it. The name of the project is stored in the <code>\workspace\project_name</code> directory.

Icon	Term	Description
	Publisher channel	A combination of rules and policies. Designer enables you to import a channel instead of the entire driver. The Subscriber and Publisher channels describe the direction in which the information flows. The Publisher channel takes the event from the application, database, or CSV file and sends that event to eDirectory. The Subscriber and Publisher channels act independently; actions in one are not affected by what happens in the other.
	schema mapping	Enables Identity Manager to synchronize information to the connected system without changing the connected system. The schema translates all classes and attributes for the connected system.
	Server object	The server in the tree where you have Identity Manager installed.
	Subscriber channel	A combination of rules and policies. Designer enables you to import a channel instead of the entire driver. The Subscriber channel takes the event from eDirectory and sends that event to the receiving system (application, database, or CSV file). The Subscriber and Publisher channels act independently; actions in one are not affected by what happens in the other.
	XSLT	Represents XSLT style sheets. XSLT is used instead of DirXML Script.

Menu Options

C

The following links provide information about options on the main menu and toolbar. If other items appear in the user interface, they are contributed by other plug-ins. Documentation for those items are in the plug-in's section of the help system.

- ♦ [Section C.1, “File Menu,” on page 105](#)
- ♦ [Section C.2, “Edit Menu,” on page 108](#)
- ♦ [Section C.3, “View Menu,” on page 108](#)
- ♦ [Section C.4, “Project Menu,” on page 109](#)
- ♦ [Section C.5, “Live Menu,” on page 109](#)
- ♦ [Section C.6, “Tools Menu,” on page 111](#)
- ♦ [Section C.7, “Model Menu,” on page 111](#)
- ♦ [Section C.8, “Window Menu,” on page 117](#)
- ♦ [Section C.9, “Help Menu,” on page 123](#)

C.1 File Menu

Option	Description
<i>File > New > New Project</i>	Creates an Identity Manager project and location. The project then appears in the Project view. See Section 6.2, “Using Designer In Your Planning Process,” on page 97 .
<i>File > New > Project</i>	Launches the New Projects Wizard. You can also select to create a new document generation style.
<i>File > New > Provisioning</i>	Helps you define directory abstraction layer objects and provisioning request definitions for the user application.
<i>File > New > Other</i>	Launches the Identity Manager Projects Wizard.
<i>File > New > Other > General > File</i>	Creates a new, empty file resource.
<i>File > New > Other > General > Folder</i>	Creates a new folder in the project resource folder.
<i>File > New > Other > General > Untitled Text File</i>	Creates an empty, untitled text file in the project folder.
<i>File > New > Other > Designer Document Generation > Document Generation Style (.docgen)</i>	Creates a Document Generation style (template). NOTE: At least one Designer project must exist before you can create a Document Generation style.
<i>File > New > Other > Novell Identity Manager > New Project</i>	Creates an Identity Manager project name and location.



Option	Description
<i>File > New > Other > Provisioning > Directory Abstraction Layer Entity</i>	Specifies the project and application for the new entity, as well as the display name and key for the new entity. See “ Configuring the Directory Abstraction Layer ” (http://www.novell.com/documentation/idm/index.html?page=/documentation/idm/agpro/data/agproconfigdirabstractionlayer.html).
<i>File > New > Other > Provisioning > Directory Abstraction Layer List</i>	Specifies the project and application for the new list as well as the key for the new list. See “ Configuring the Directory Abstraction Layer ” (http://www.novell.com/documentation/idm/index.html?page=/documentation/idm/agpro/data/agproconfigdirabstractionlayer.html).
<i>File > New > Other > Provisioning > Directory Abstraction Layer Query</i>	Specifies the project and provisioning application for the new directory abstraction layer query object, as well as the display name and key. See “ Configuring the Directory Abstraction Layer ” (http://www.novell.com/documentation/idm/index.html?page=/documentation/idm/agpro/data/agproconfigdirabstractionlayer.html).
<i>File > New > Other > Provisioning > Directory Abstraction Layer Relationship</i>	Specifies the project and application for the new relationship as well as the display name and key for the new relationship.
<i>File > New > Other > Provisioning > Provisioning Request Definition</i>	Specifies the basic information from a workflow template of the provisioning request definition.
<i>File > New > Other > Provisioning > Provisioning Team</i>	Enables you to define a set of users who can act as a team for the <i>Requests & Approvals</i> tab of the User Application. The team definition determines who can manage provisioning requests and approval tasks associated with this team.
<i>File > New > Other > Resource</i>	Launches the Create a Resource Wizard for provisioning.
<i>File > New > Other > Provisioning > Role</i>	Launches the Create a Role Wizard for provisioning.
<i>File > New > Other > Provisioning > Separation of Duties</i>	Launches the Separation of Duties Constraint window, allowing you to set up an identifier and display name to act as a constraint.
<i>File > Open File</i>	Enables you to browse to and open a text or XML file.
<i>File > Close</i>	Closes the active editor.
<i>File > Close All</i>	Closes all open editors.
<i>File > Save</i>	Saves changes made in the active editor.
<i>File > Save As</i>	Saves changes made in the active editor to a different file.
<i>File > Save All</i>	Saves changes in all editors.

Option	Description
<i>File > Move</i>	Moves a file, folder, or project to a different location in the file system. Only available in the Navigator view.
<i>File > Rename</i>	Renames a file or project. Only available in the Navigator view.
<i>File > Refresh</i>	Loads the project or file from disk and makes sure it is in sync. (If you add new files outside of the tool directly in the file system, this option displays them in the Project view.)
<i>File > Print</i>	Prints from an editor.
<i>File > Switch Workspace</i>	Opens another workspace with its projects. This option automatically restarts Designer.
<i>File > Restart</i>	Restarts Designer.
<i>File > Import</i>	Imports resources, projects, or preferences. See “ Importing Projects ” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
<i>File > Import > Project (From File System)</i>	Imports existing project files from selected directories or archive files.
<i>File > Import > Project (From Identity Vault)</i>	Imports existing projects from specified secure entities after entering the required authentication information.
<i>File > Import > Project (From iManager Export File)</i>	Imports an existing Identity Manager project from an iManager export file (driver set or driver).
<i>File > Import > Project (From Version Control)</i>	Imports a project from a version control server.
<i>File > Export</i>	Exports resources or preferences. See “ Exporting a Project ” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
<i>File > Export > General > Preferences</i>	Exports preferences to the local file system.
<i>File > Export > Designer for Identity Manager > Export Designer Project</i>	Exports projects to the local file system or to an archive file on the local file system.
<i>File > Export > Designer for Identity Manager > iManager Configuration File</i>	Exports a driver set, driver, channel, or policy to an iManager-compatible configuration file.
<i>File > Properties</i>	Enables you to view the file's full name, date, size, type, and read-only status.
<i>File > History</i>	Lists the history of files and projects opened. By selecting items in this history list, you can reopen a file or project. To configure the length of this history list, use the Preferences dialog box.
<i>File > Exit</i>	Closes the application.

C.2 Edit Menu

Option	Description
<i>Edit > Undo</i>	Undoes the last operation.
<i>Edit > Redo</i>	Redoes the last undone operation.
<i>Edit > Cut</i>	Copies the selected item to the Clipboard and removes it after it is pasted.
<i>Edit > Copy</i>	Copies the selected item to the Clipboard.
<i>Edit > Paste</i>	Pastes the current item in the Clipboard to the selected area.
<i>Edit > Delete</i>	Deletes the selected item
<i>Edit > Select All</i>	Selects all items in a text or XML editor. To select all items in the Modeler, select it, then press Ctrl+A.
<i>Edit > Find/Replace</i>	Replaces text strings in text or XML editors.
<i>Edit > Add Bookmark</i>	Used in text editors.
<i>Edit > Add Task</i>	Adds a task and leaves a mark in the file. Used in text editors.

C.3 View Menu

Option	Description
Zoom In	Increases an item's size. You can also slide the Zoom slider in the main toolbar. To reset Zoom to 100%, click the <i>Zoom Restore</i> icon. 
Zoom Out	Decreases an item's size. You can also slide the Zoom slider in the main toolbar. To reset Zoom to 100%, click the <i>Zoom Restore</i> icon. 
Grid	Provides a grid so that you can align items. See “ Using a Grid ” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
Alignment Hints	Helps you see relationships in your model. You can align or attach items to the left, center, or right of alignment guides. See “ Aligning and Laying Out Components ” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
Rulers	Turns rulers off and on, to help with alignment and layout. See “ Using Rulers ” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .

C.4 Project Menu

Option	Description
<i>Project > Document > New Style</i>	Generates a new style document for a specified project.
<i>Project > Document > Edit Style</i>	Edits a style document for a project located in the Documentation folder under a project in the Project view.
<i>Project > Document > Generate Documentation</i>	Generates project PDF documentation after saving file changes. You can select the directory location where documentation is stored, specify to overwrite existing files, and create XML source files.
<i>Project > New Project</i>	Launches a new project.
<i>Project > Import Project > File System</i>	Imports an existing project from the file system into Designer from a selected root directory or archive file.
<i>Project > Import Project > Identity Vault</i>	Imports an existing project from an Identity Vault into Designer.
<i>Project > Import Project > iManager Export File</i>	Creates a Designer project by selecting an iManager .xml export file. The .xml file can be a driver set export, driver export, or Novell preconfiguration file.
<i>Project > Import Project > Version Control</i>	Imports projects from the version control server.
<i>Project > Export Project</i>	Exports projects to the local file system or to an archive file on the local file system.
<i>Project > Update</i>	Allows you to update a project from a version control server.
<i>Project > Check in</i>	Allows you to check in a project to a version control server.
<i>Project > Copy Project</i>	Allows you to create a copy of a project.
<i>Project > Move</i>	Allows you to move a project from one location to another.
<i>Project > Rename</i>	Allows you to rename a project.

C.5 Live Menu

Option	Description
<i>Live > Manage Directory</i>	Browses specified Identity Vault configurations. See “Configuring Identity Vaults” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .

Option	Description
<i>Live > DS Trace</i>	Launches DSTrace on the server where the Identity Vault resides.
<i>Live > Import</i>	Imports driver sets, drivers, or applications. Used in the Modeler and in the Outline view. See “Importing a Library, a Driver Set, or a Driver from the Identity Vault” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
<i>Live > Import Attributes</i>	Imports a driver configuration from an already-saved XML file. See “Importing a Driver Configuration File” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
<i>Live > Import Schema</i>	Imports a schema from an Identity Vault.
<i>Live > Deploy</i>	Deploys driver sets, drivers, or applications. Used in the Modeler and in the Outline view.
<i>Live> Deploy Attributes</i>	Deploys attributes to selected objects.
<i>Live> Deploy Schema</i>	Deploys a schema stored in Designer into an Identity Vault.
<i>Live > Compare</i>	Allows you to compare the information structure on an object in Designer to the object that is deployed or running on an eDirectory server.
<i>Live > Compare Attributes</i>	Allows you to compare the attributes of a policy to the attributes that are already deployed.
<i>Live > Refresh Application Schema</i>	Specifies the server on an eDirectory tree where the schema is refreshed after an application's schema changes. See “Refreshing the Application Schema” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
<i>Live > Start Driver</i>	Starts an inactive driver. See “Configuring Drivers” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
<i>Live > Stop Driver</i>	Stops an active driver.
<i>Live > Restart Driver</i>	Restarts an active driver.
<i>Live > Driver Status</i>	Displays each driver's status. Enables you to start, stop, or restart drivers. Enables you to browse, import, and deploy various functionality, depending on the item selected. See “Configuring Drivers” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
<i>Live > Create eDir-to-eDir Certificates</i>	Configures two eDirectory drivers to communicate directly with each other. See “Configuring TLS for eDir-to-eDir Drivers” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
<i>Live > Set Driver Trace Level</i>	Allows you to specify how much information you want to see in a trace level log from the driver. Settings go from 0-5.

Option	Description
<i>Live > Setup Driver Security</i>	Configures security parameters for drivers.

C.6 Tools Menu

Option	Description
<i>Tools > Manage Directory</i>	Opens an eDirectory browser to view objects and their attributes in a tree. Use this tool only if you understand the intricacies of eDirectory.
<i>Tools > DS Trace</i>	Lets you view live DSTrace activity for a specific server, and save the trace to a log file. You can also open a previously saved DSTrace log file.
<i>Tools > iManager</i>	Specifies the Novell iManager URL, which is stored in the application preferences folder.
<i>Tools > Export Localization to File</i>	Sends the User Application's display labels and e-mail notification templates to an XML or properties file so that the data can be localized.
<i>Tools > Import Localization from File</i>	Imports localization data from a project.
<i>Tools > Access User Application</i>	Automatically directs and opens a User Application session from within the embedded HTML browser, if a user application is configured in the Designer project.

C.7 Model Menu

Option	Description
<i>Model</i>	Accesses the Modeler applications, tools, drivers, and other resources. See “Creating a Model” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
<i>Model > Application</i>	Accesses tools to create Designer applications. NOTE: Functionality becomes active when objects in the Designer window are clicked.
<i>Model > Application > New</i>	Creates a new .xml application driver after a driver set is selected in the Modeler window. You can select from a preconfigured list of driver types and run the associated scripts to verify the driver requirements.
<i>Model > Application > Connection Settings</i>	Configures the VNC connectivity settings for objects created in the Modeler window.

Option	Description
<i>Model > Application > Remote Control Desktop</i>	Configures the remote control desktop of the resource if a VNC server is running on it.
<i>Model > Application > Show Subsystems</i>	Shows or hides an application's subsystems. See "Show/Hide Subsystems" in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
<i>Model > Application > Notes</i>	Opens the environment properties window in Modeler to document platform, hardware, and other environment notes about objects you create.
<i>Model > Application > Administrator</i>	Opens the administrator properties window in Modeler to document personal and contact information and other notes about objects you create.
<i>Model > Application > Icon</i>	Opens the general properties window in Modeler to create or edit icons you create for Designer objects. See "Driver iManager Icon" in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
<i>Model > Application > Properties</i>	Opens the general properties window for objects selected in Modeler. See "Configuring Application Properties" in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
<i>Model > Design Element > New</i>	Instructs you to click the <i>Architect</i> tab, click the Design Element drawer in the palette, and drag and drop items into the Modeler.
<i>Model > Design Element > Connection Settings</i>	In Architect mode, launches the Connectivity page for design elements that have VNC connectivity. Enables you to connect to an element or object.
<i>Model > Design Element > Remote Control Desktop</i>	Connects to the application by using the VNC protocol. Displays an editor that you can use to control the application.
<i>Model > Design Element > Administrator</i>	Launches the Design Elements properties page. The Administrator option enables you to capture information about whom to contact concerning the application.
<i>Model > Design Element < Properties</i>	Specifies a design element's properties.
<i>Model > Domain Group > New</i>	Creates a new domain into which selected objects can be grouped in Modeler.
<i>Model > Domain Group > Clear Domain Contents</i>	Clears objects that are contained in a domain.
<i>Model > Domain Group > Add to Group</i>	Adds selected objects to a new group.
<i>Model > Domain Group > Ungroup</i>	Ungroups selected objects contained within a domain without deleting them.
<i>Model > Domain Group > Properties</i>	Specifies properties of domains contained within a group.
<i>Model > Driver > New</i>	Creates a new Driver object, specified from a list of templates.

Option	Description
<i>Model > Driver > Copy > Server-Specific Settings</i>	Copies replica data from one server to another server that is associated with the selected driver.
<i>Model > Driver > Copy > Settings</i>	Copies existing driver settings.
<i>Model > Driver > Simulate</i>	Opens the Simulate Policy Transformation - Entitlements Service Driver Wizard to test the driver's set-up parameters.
<i>Model > Driver > Import from Configuration File</i>	Allows you to browse to and import a driver.
<i>Model > Driver > Log Level</i>	Defines the level of errors to be tracked and reported in the error log. See " Driver Log Level " in the Designer 4.0 for Identity Manager 4.0 Administration Guide .
<i>Model > Driver > Global Configuration Values</i>	Specifies settings for Identity Manager features in drivers and driver sets, including password synchronization values, driver heartbeat, and specific driver configuration. See " Driver Global Configuration Values " in the Designer 4.0 for Identity Manager 4.0 Administration Guide .
<i>Model > Driver > Trace Settings</i>	Adds a trace level to your driver to display the Identity Manager (DirXML) events as the engine processes the events. For a description of each trace field and platform requirements, see " Driver Set Trace " in the Designer 4.0 for Identity Manager 4.0 Administration Guide .
<i>Model > Driver > Named Passwords</i>	Stores multiple passwords securely for each driver, so they can be referenced in a driver policy. See " Driver Set Named Passwords " in the Designer 4.0 for Identity Manager 4.0 Administration Guide .
<i>Model > Driver > Driver Configuration</i>	Launches the Driver Configuration Wizard, if a driver is selected.
<i>Model > Driver > iManager Icon</i>	Displays an application's icon as it is used in iManager, if a driver is selected.
<i>Model > Driver > Engine Controls</i>	Displays the Engine Control Values property page. Provides a list of associated servers and authentication credentials.
<i>Model > Driver > Manifest</i>	Specifies what the driver supports, including a few configuration settings. See " Driver Manifest " in the Designer 4.0 for Identity Manager 4.0 Administration Guide .
<i>Model > Driver > Add Entitlements</i>	Launches the Entitlement Wizard, which allows you to set up criteria for a person or group that initiate an event to grant or revoke access to business resources within the connected system. See " Using Entitlements " in the Designer 4.0 for Identity Manager 4.0 Administration Guide .

Option	Description
<i>Model > Driver > Edit Entitlements</i>	Enables you to change an entitlement's name, values, and role-based entitlements.
<i>Model > Driver > Mark as Firewall</i>	Indicates that the selected driver is communicating across a firewall.
<i>Model > Driver > Password Synchronization</i>	Synchronizes passwords between connected systems. See “Integrating Passwords” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
<i>Model > Driver > Credential Provisioning > Credential Repository</i>	Creates a driver repository.
<i>Model > Driver > Credential Provisioning > Credential Application</i>	Creates a credential application.
<i>Model > Driver > Icon</i>	Displays driver icons, or turns icons on or off. See “Driver iManager Icon” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
<i>Model > Driver > Properties</i>	Launches the driver's Properties page.
<i>Model > Driver Set > New</i>	Launches a wizard to create a new driver set.
<i>Model > Driver Set > Copy > Driver Set Settings</i>	Copies existing driver set settings.
<i>Model > Driver Set > Copy > Global Configuration Values</i>	Copies settings for Identity Manager features such as password synchronization and driver heartbeat, as well as settings that are specific to the function of an individual driver configuration. See “Driver Global Configuration Values” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
<i>Model > Driver Set > Import from Configuration File</i>	Imports an Identity Manager driver configuration file into the selected driver set for a project. See “Importing a Driver Configuration File” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
<i>Model > Driver Set > Log Level</i>	Defines the level of errors that should be tracked. See “Driver Set Log Levels” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
<i>Model > Driver Set > Server List</i>	Displays available servers and servers that the driver set is associated with.
<i>Model > Driver Set > Global Configuration Values</i>	Specifies settings for Identity Manager features such as password synchronization and driver heartbeat, as well as settings that are specific to the function of an individual driver configuration. See “Driver Global Configuration Values” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
<i>Model > Driver Set > Trace Settings</i>	Sets the trace level for your driver set, which displays the Identity Manager (DirXML) events as the engine processes the events. See “Driver Set Trace” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .

Option	Description
<i>Model > Driver Set > Properties</i>	Launches the driver set Properties page. See “Viewing Object Properties” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
<i>Model > ECMAScript > New</i>	Creates an ECMAScript object.
<i>Model > ECMAScript > New from Copy</i>	Creates an ECMAScript object by copying an existing ECMAScript object.
<i>Model > eDir-to-eDir > New</i>	Launches the eDirectory-to-eDirectory Wizard to create a new connection between two eDirectory objects.
<i>Model > eDir-to-eDir > Secure Connection Settings</i>	Opens the TLS Configuration window to enable SSL/TLS connection settings and encrypted key settings through advanced TLS configuration.
<i>Model > eDir-to-eDir > Disconnect eDir-to-eDir</i>	Disconnects the eDirectory-to-eDirectory connection.
<i>Model > Identity Vault > New</i>	Adds a new server to an Identity Vault.
<i>Model > Identity Vault > Manage Schema</i>	Opens a context-sensitive window to manage schema classes and attributes of the Identity Vault.
<i>Model > Identity Vault > Import from Configuration File</i>	Allows you to browse to and import an Identity Vault.
<i>Model > Identity Vault > Duplicate Template</i>	Opens an e-mail template list that you can duplicate.
<i>Model > Identity Vault > Edit Template</i>	Opens a template list to select and edit an e-mail template.
<i>Model > Identity Vault > E-Mail Server Properties</i>	Launches the e-mail notification server so you can enter notification settings and server authentication credentials.
<i>Model > Identity Vault > Administrator</i>	Opens the Administrator properties window of the Identity Vault to enter personal and contact information and other optional information.
<i>Model > Identity Vault > Server List</i>	Launches a wizard that displays the servers associated with a selected Identity Vault, which enables you to edit the properties and contact information. See “Driver Set Server List” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
<i>Model > Identity Vault > Properties</i>	Opens the Properties window for the Identity Vault to access configuration, administrator, and server list properties. See “Configuring Identity Vaults” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
<i>Model > Job > New</i>	Launches the Job Scheduler Wizard to create a job.
<i>Model > Job > New from Copy</i>	Creates a job by copying an existing job.

Option	Description
<i>Model > Library > New</i>	Launches the New Library Wizard to create a library after you have selected an Identity Vault or a driver set.
<i>Model > Library > Import from Configuration File</i>	Allows you to import a driver into a driver set.
<i>Model > Policy > New DirXML Script</i>	Opens a new Policy Name window to enable you to create XML policy scripts.
<i>Model > Policy > New Schema Mapping</i>	Opens a schema map editor to associate identity objects with associated service drivers. See “Managing the Schema” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i> .
<i>Model > Policy > New XSLT</i>	Opens a new Policy Name window to enable you to create Extensible Stylesheet Language Transformation (XSLT) policy scripts.
<i>Model > Policy > New from Copy</i>	Opens the Modeler browser to copy selected existing Driver Set objects.
<i>Model > Policy > Manage Policy</i>	Launches a policy manager GUI that exposes individual elements of a project design tree that can be edited in context by right-clicking each element.
<i>Model > Resource > New</i>	Prompts you to add new resource objects from the Modeler palette. After resource objects are added, you set up connection and control settings.
<i>Model > Server > New</i>	Associates a new eDirectory server or manual server to an Identity Vault.
<i>Model > Select Connected Applications</i>	Selects driver connections between application objects in modeler.
<i>Model > Clear All Items</i>	Enables you to clear all items in a project.
<i>Model > Straighten Connections</i>	Straightens line connections between selected objects in the Modeler.
<i>Model > Distribute</i>	Distributes selected objects in the Modeler either vertically or horizontally.
<i>Model > Align</i>	Aligns selected objects in the Modeler: top, bottom, left, right, center, or middle.
<i>Model > Snapshot to Image File</i>	In Developer or Architect mode, captures the model and stores it in a .bmp, .jpg, or .jpeg file, which is stored in the Designer driver_configs directory.

C.8 Window Menu

Option	Description
<i>Window > New Window</i>	Opens a new instance of the application, making it easier to copy and paste between certain elements. You need to synchronize changes between the instances.
<i>Window > New Editor</i>	Launches a new Designer editor.
<i>Window > Open Perceptive</i>	Toggles among perspectives: Debug, Designer (default), Java, Java Browsing, Java Type Hierarchy, Plug-in Development, Resource, and Team Synchronizing.
<i>Window > Show View > Dataflow</i>	Controls the flow of data between objects. See the “Dataflow Mode” in the Designer 4.0 for Identity Manager 4.0 Administration Guide .
<i>Window > Show View > Navigator</i>	Displays the Navigator view. See Section 4.7, “The Navigator View,” on page 66.
<i>Window > Show View > Outline</i>	Provides an outline view of the active editor (Modeler, XML Editor, or a text editor).
<i>Window > Show View > Policy Set</i>	Displays the Policy Set view. When you select a driver in the Modeler, this view displays the driver's policies. See Section 4.8, “Policy Set View,” on page 70.
<i>Window > Show View > Project</i>	Displays the main view for manipulating your project. See “Creating a Project” in the Designer 4.0 for Identity Manager 4.0 Administration Guide .
<i>Window > Show View > Project Checker</i>	Checks Designer objects for any problems that might cause the deployment of a project into the Identity Vault to fail. It does not check the current objects in the Identity Vault. See “Checking Your Projects” in the Designer 4.0 for Identity Manager 4.0 Administration Guide .
<i>Window > Show View > Provisioning View</i>	Displays entities, lists, and organizational charts; used in workflow-based provisioning.
<i>Window > Show View > Search Results</i>	Displays the Search Results view. See also Section 4.10, “The Search Results View,” on page 75.
<i>Window > Show View > Tasks</i>	Enables you to add your own tasks and notes as you do your work. You can assign them a priority; mark them as completed; or delete, sort, or filter them.
<i>Window > Show View > Trace</i>	Displays internal errors and messages, so that you can find out why something isn't working as expected. Use this feature to provide information for Novell Support, engineers, or other consulting resources. See “Trace” in the Designer 4.0 for Identity Manager 4.0 Administration Guide .

Option	Description
<i>Window > Show View > Version Control</i>	Enables you to track revisions of your project and share them with team members. Also enables you to track objects and files inside of your project.
<i>Window > Show View > Other > General > Bookmarks</i>	Enables you to see bookmarks that you have set in your text editors.
<i>Window > Show View > Other > General > Console</i>	Displays the Console view.
<i>Window > Show View > Other > General > Internal Web Browser</i>	Enables you to immediately access the Eclipse Web site, or otherwise access the Internet.
<i>Window > Show View > Other > General > Navigator</i>	Displays the Navigator view. See Section 4.7, “The Navigator View,” on page 66 .
<i>Window > Show View > Other > General > Outline</i>	Displays the Outline view.
<i>Window > Show View > Other > General > Progress</i>	Displays the Progress view.
<i>Window > Show View > Other > General > Problems</i>	Displays the Problems view, with errors and warnings used for troubleshooting.
<i>Window > Show View > Other > General > Project Explorer</i>	Displays the project components.
<i>Window > Show View > Other > General > Properties</i>	Enables you to view and edit settings on the selected object.
<i>Window > Show View > Other > General > Tasks</i>	Enables you to list, prioritize, and track tasks
<i>Window > Show View > Other > Designer for Identity Manager > Dataflow</i>	Controls the flow of data between objects. See “The Dataflow View” and “Dataflow Mode” in the Designer 4.0 for Identity Manager 4.0 Administration Guide .
<i>Window > Show View > Other > Designer for Identity Manager > eDirectory Browser</i>	Opens an eDirectory browser window from which you can specify the directory you want to browse. See “Tool-Based Browsing” in the Designer 4.0 for Identity Manager 4.0 Administration Guide .
<i>Window > Show View > Other > Designer for Identity Manager > Policy Set</i>	Displays all policies contained in the selected policy set. See Section 4.8, “Policy Set View,” on page 70 .
<i>Window > Show View > Other > Designer for Identity Manager > Project</i>	Displays the main view for manipulating your project. See “Creating a Project” in the Designer 4.0 for Identity Manager 4.0 Administration Guide .
<i>Window > Show View > Other > Designer for Identity Manager > Project Checker</i>	Checks Designer objects for any problems that might cause the deployment of a project into the Identity Vault to fail. It does not check the current objects in the Identity Vault. See “Checking Your Projects” in the Designer 4.0 for Identity Manager 4.0 Administration Guide .
<i>Window > Show View > Other > Designer for Identity Manager > Search Results</i>	Displays the Search Results view. See Section 4.10, “The Search Results View,” on page 75 .

Option	Description
<i>Window > Show View > Other > Designer for Identity Manager > Trace</i>	Displays internal errors and messages, so that you can find out why something isn't working as expected. Use this feature to provide information for Novell Support, engineers, or other consulting resources. See "Trace" in the Designer 4.0 for Identity Manager 4.0 Administration Guide .
<i>Window > Show View > Other > Designer for Identity Manager > Version Control</i>	Enables you to track revisions of your project and share them with team members. Also enables you to track objects and files inside of your project.
<i>Window > Show View > Other > exteNd > Registry Manager</i>	Launches the Registry Manager view.
<i>Window > Show View > Other > Help > Help</i>	Launches context-sensitive help in the Help view. Help topics depend on which part of the Modeler or Designer is active.
<i>Window > Show View > Other > PDE Runtime > Error Log</i>	Used for troubleshooting. See "Viewing the Error Log" in the Designer 4.0 for Identity Manager 4.0 Administration Guide .
<i>Window > Show View > Other > PDE Runtime > Plug-in Registry</i>	Displays the plug-in registry. Enables you to see which plug-ins are registered or running. See "Checking Loaded Plug-Ins" in the Designer 4.0 for Identity Manager 4.0 Administration Guide .
<i>Window > Show View > Other > Provisioning</i>	Enables you to view and configure entities, lists, and organizational charts. See "Configuring the Directory Abstraction Layer" (http://www.novell.com/documentation/idm/agpro/data/index.html?page=/documentation/idm/agpro/data/agpropartconfigappenv.html) in the Identity Manager User Application: Administration Guide (http://www.novell.com/documentation/idm/index.html?page=/documentation/idm/agpro/data/agpropartconfigappenv.html).
<i>Window > Show View > Other > Provisioning > Data Item Mapping</i>	Specifies how object attributes are mapped. See "Mapping Identity Vault to an LDAP Schema" in the Designer 4.0 for Identity Manager 4.0 Administration Guide .
<i>Window > Show View > Other > Provisioning > E-Mail Notification</i>	Displays an e-mail notification map.
<i>Window > Show View > Other > Provisioning > Provisioning</i>	Displays entities, lists, and organizational charts used in workflow-based provisioning.
<i>Window > Show View > Other > XML > XPath Navigator</i>	Supports context-sensitive editing of XPath expressions. Automatically attaches to the currently selected XML editor.
<i>Window > Customize Perspective</i>	Configures the layout of a perspective. Controls the menus (New, Open Perspective, and Show View) and action sets that show up on the tool bar. See Section 4.3, "Managing Perspectives," on page 31 .

Option	Description
<i>Window > Customize Perspective > Shortcuts</i>	Lists the plug-in shortcuts that you can add as cascade submenus on the current perspective.
<i>Window > Customize Perspective > Shortcuts > Designer Document Generation</i>	Enables addition of a .docgen shortcut to create a new document generation style.
<i>Window > Customize Perspective > Shortcuts > General</i>	Enables selection of shortcuts to create a new file, folder, or empty untitled text file resources.
<i>Window > Customize Perspective > Shortcuts > Novell Identity Manager</i>	Enables the addition of the Identity Manager Project shortcut to create a new project.
<i>Window > Customize Perspective > Shortcuts > Provisioning</i>	Enables selection of shortcuts to create new directory abstraction layer entities, lists, relationships, organizational charts provisioning request definitions.
<i>Window > Customize Perspective > Shortcuts > XML</i>	Enables addition of an XML shortcut.
<i>Window > Customize Perspective > Commands</i>	Alphabetically lists the command group plug-ins that you can add as cascade submenus on the current perspective. The <i>Details</i> field identifies which menu item organizational charts toolbar items are added to the perspective by the selected command group. See “Using Menus to Open a Perspective” on page 32 .
<i>Window > Customize Perspective > Commands > Breakpoints</i>	Adds breakpoint functionality to the menu.
<i>Window > Customize Perspective > Commands > com.novell.designer.idm.actionSet</i>	Adds Help set functionality to the menu: Check for Designer Updates, What’s New, Designer Readme, Report a Bug or Feedback, and Identity Manager Resources.
<i>Window > Customize Perspective > Commands > Debug</i>	Adds the Debug plug-in functionality to the menu.
<i>Window > Customize Perspective > Commands > Deploy</i>	Enables the Deploy plug-in command. See “Deploying the Schema into the Identity Vault” in the Designer 4.0 for Identity Manager 4.0 Administration Guide .
<i>Window > Customize Perspective > Commands > Designer</i>	Adds standard Designer commands to the toolbar: Save All, Delete selected object(s), Undo, and Redo.
<i>Window > Customize Perspective > Commands > Designer Projects ActionSet</i>	Adds Designer project import control options to the menu.
<i>Window > Customize Perspective > Commands > Document Generation</i>	Adds the <i>Generate Documentation</i> icon to the toolbar.
<i>Window > Customize Perspective > Commands > Editor</i>	Adds cut, copy, and paste options to the menu and toolbar.
<i>Window > Customize Perspective > Commands > Editor Navigation</i>	Adds Last Edit Location navigation to the menu and toolbar.

Option	Description
<i>Window > Customize Perspective > Commands > Editor Presentation</i>	Adds a toggle to <i>Show Selected Element Only</i> on the toolbar.
<i>Window > Customize Perspective > Commands > Generate Documentation</i>	Adds a <i>Generate Documentation for This Project</i> icon to the toolbar.
<i>Window > Customize Perspective > Commands > Identity Vault</i>	Adds Identity Vault resource information for a project to the menu.
<i>Window > Customize Perspective > Commands > Insert</i>	Enables the Insert plug-in command.
<i>Window > Customize Perspective > Commands > Keyboard Shortcuts</i>	Adds keyboard shortcuts to the menu.
<i>Window > Customize Perspective > Commands > Launch</i>	Adds Run program functionality to the menu and adds the Launch plug-in to the toolbar.
<i>Window > Customize Perspective > Commands > Manage Objects in a Novell eDirectory Tree</i>	Adds the eDirectory Object Manager to the menu.
<i>Window > Customize Perspective > Commands > Manage Objects in a Novell eDirectory Tree</i>	Adds the <i>Live > Manage Directory</i> functionality to the menu.
<i>Window > Customize Perspective > Commands > Open Files</i>	Adds the browse to and open a text or XML file plug-in to the menu.
<i>Window > Customize Perspective > Commands > Profile</i>	Adds the <i>Run > Profile</i> tools on the menu and toolbar.
<i>Window > Customize Perspective > Commands > Project Actions</i>	Launches the project snap-in.
<i>Window > Customize Perspective > Commands > Project Checker</i>	Places the <i>Project Checker</i> icon on Designer's toolbar.
<i>Window > Customize Perspective > Commands > Resource Navigation</i>	Adds Navigation tools as an option on the menu.
<i>Window > Customize Perspective > Commands > Run the User Application</i>	Adds <i>Access User Application</i> as an option on the <i>Tools</i> menu.
<i>Window > Customize Perspective > Commands > Tools</i>	Adds <i>Tools</i> as an option on the <i>Project</i> menu.
<i>Window > Customize Perspective > Commands > Version Control Action Set</i>	Adds <i>Action Set</i> as an option on the Web browser toolbar.
<i>Window > Customize Perspective > Commands > View DS Trace Logs</i>	Adds <i>DS Trace</i> as an option on the <i>Tools</i> menu.
<i>Window > Customize Perspective > Commands > WebBrowser</i>	Adds the Launch Web Browser Wizard to the Web browser toolbar.
<i>Window > Customize Perspective > Commands > WebBrowser</i>	Adds the Launch Web Browser Wizard to the Window menu.
<i>Window > Customize Perspective > Commands > Window Working Set Menu</i>	Adds <i>Working Set</i> to the Window drop-down menu.

Option	Description
Window > Customize Perspective > Commands > Window Working Set Toolbar	Adds <i>Working Set</i> to the Web browser toolbar.
Window > Save Perspective As	An easy, efficient way to lay out the current perspective in a certain way and then save it. You can freely switch between perspectives and still operate in the same editors and views.
Window > Reset Perspective	Returns the perspective to its original layout. If the perspective is a copied perspective, it returns to the original, preferred layout of the base perspective.
Window > Close Perspective	Closes the current perspective.
Window > Close All Perspectives	Closes all open perspectives.
Window > Navigation > Show System Menu	Displays the active system menu.
Window > Navigation > Show View Menu	When active, shows the <i>View</i> menu.
Window > Navigation > Quick Access	Enables you to search for a specific function by typing in the desired function into the
Window > Navigation > Maximize Active View or Editor	Maximizes the active view or editor. Ctrl+M toggles between views.
Window > Navigation > Minimize Active View or Editor	Minimizes the active view or editor. Ctrl+M toggles between views.
Window > Navigation > Activate Editor	Enables you to select which editor to activate. F12 is the keyboard shortcut.
Window > Navigation > Next Editor	Allows you to select and open an editor from a list. Ctrl+F6 navigates down this list.
Window > Navigation > Previous Editor	Allows you to select and open an editor from a list. Ctrl+Shift+F6 navigates up this list.
Window > Navigation > Switch to Editor	Allows you to select and manage editors.
Window > Navigation > Next View	Allows you to select and open a view from a list. Ctrl+F7 navigates down this list.
Window > Navigation > Previous View	Allows you to select and open a view from a list. Ctrl+Shift+F7 navigates up this list.
Window > Navigation > Next Perspective	Allows you to toggle perspectives within projects from a list. Ctrl+F8 is the keyboard shortcut.
Window > Navigation > Previous Perspective	Allows you to view previous perspectives from a list. Ctrl+Shift+F8 is the keyboard shortcut.
Window > Launch Web Browser	Specifies your Home Page URL, which is stored in Preferences.
Window > Working Sets > Edit	Allows you to create working sets in a project

Option	Description
<i>Window > Preferences</i>	<p>Enables you to customize Designer's behavior in the following categories:</p> <ul style="list-style-type: none"> ◆ General <ul style="list-style-type: none"> ◆ Appearance ◆ Compare/Patch ◆ Content Types ◆ Editors <ul style="list-style-type: none"> ◆ File Associations ◆ Hex Editor ◆ Structured Text Editors ◆ Text Editors ◆ Keys ◆ Network Connections ◆ Perspectives ◆ Search ◆ Startup and Shutdown ◆ Web Browser ◆ Welcome ◆ Workspace <ul style="list-style-type: none"> ◆ Build Order ◆ Linked Resources ◆ Local History ◆ Help ◆ Novell <ul style="list-style-type: none"> ◆ Designer ◆ Identity Manager ◆ Package Manager ◆ Provisioning ◆ Validation ◆ Web ◆ XML <p>See “Setting Preferences” in the <i>Designer 4.0 for Identity Manager 4.0 Administration Guide</i>.</p>

C.9 Help Menu

Option	Description
<i>Help > Welcome</i>	Displays the Welcome page. See Section 2.1, “Help from the Welcome Page,” on page 19.

Option	Description
<i>Help > Help Contents</i>	Enables you to navigate to and view information on all features and functions in Designer.
<i>Help > Search</i>	Locates instances in the help system and provides links.
<i>Help > Dynamic Help</i>	Provides context-sensitive information.
<i>Help > Key Assist</i>	Lists shortcuts.
<i>Help > Check for Package Updates</i>	Enables you to quickly download and install the latest package updates.
<i>Help > Check for Designer Updates</i>	Enables you to quickly download and install the latest Designer updates.
<i>Help > What's New</i>	Directs you to a Novell Web page that describes new features in Designer.
<i>Help > Designer Readme</i>	Provides updated information on known issues.
<i>Help > Report a Bug or Give Feedback</i>	Allows you to enter an Identity Manager Designer bug or provide feedback into Bugzilla.
NOTE: You must first establish a Novell User Account (https://secure-www.novell.com/selfreg/jsp/createAccount.jsp) to provide feedback.	
<i>Help > Identity Manager Forums</i>	Provides a link to Identity Manager product support forums.
<i>Help > Identity Manager Resources</i>	Provides a link to the Designer Resource Page.
<i>Help > About Designer</i>	Provides information about Designer's version, configuration, product, license, and plug-in.