Understanding Designer

Novell®
Designer for Identity Manager

3.5

September 18, 2009

Novell Trademarks

For a list of trademarks, see the Novell Trademark and Service Mark list (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

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:

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 the *Understanding Designer for Identity Manager 3.6*, visit the Novell documentation web site (http://www.novell.com/documentation/designer30/index.html) or the Identity Manager Web site (http://www.novell.com/identity/access/identity_integration).

Additional Documentation

- *Designer 3.5 for Identity Manager 3.6 Administration Guide* (http://www.novell.com/documentation/designer35/admin_guide/data/front.html)
- *Identity Manager 3.6 Installation Guide* (http://www.novell.com/documentation/idm36/idm_install/data/front.html)
- *Identity Manager 3.6 Overview* (http://www.novell.com/documentation/idm36/idm_overview/data/front.html)
- *Understanding Policies for Identity Manager 3.6* (http://www.novell.com/documentation/idm36/policy/data/bookinfo.html)
- *Policies in Designer 3.0* (http://www.novell.com/documentation/idm36/policy_designer/data/bookinfo.html)
- *Novell Credential Provisioning for Identity Manager 3.6* (http://www.novell.com/documentation/idm36/policy_credprov/data/bookinfo.html)
- *Identity Manager 3.6 DTD Reference* (http://www.novell.com/documentation/idm36/policy_dtd/data/bookinfo.html)
- *Identity Manager 3.6 driver guides* (http://www.novell.com/documentation/idm36drivers/)

For more documentation concerning Identity Manager 3.6, see the Identity Manager 3.6 Documentation Index (http://www.novell.com/documentation/idm36/index.html).

Documentation Conventions

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

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

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

Designer Concepts

<div style="text-align: right">

1

</div>

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.

1.1 How Identity Manager Works

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

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

Figure 1-1 *Identity Manager Functionality*
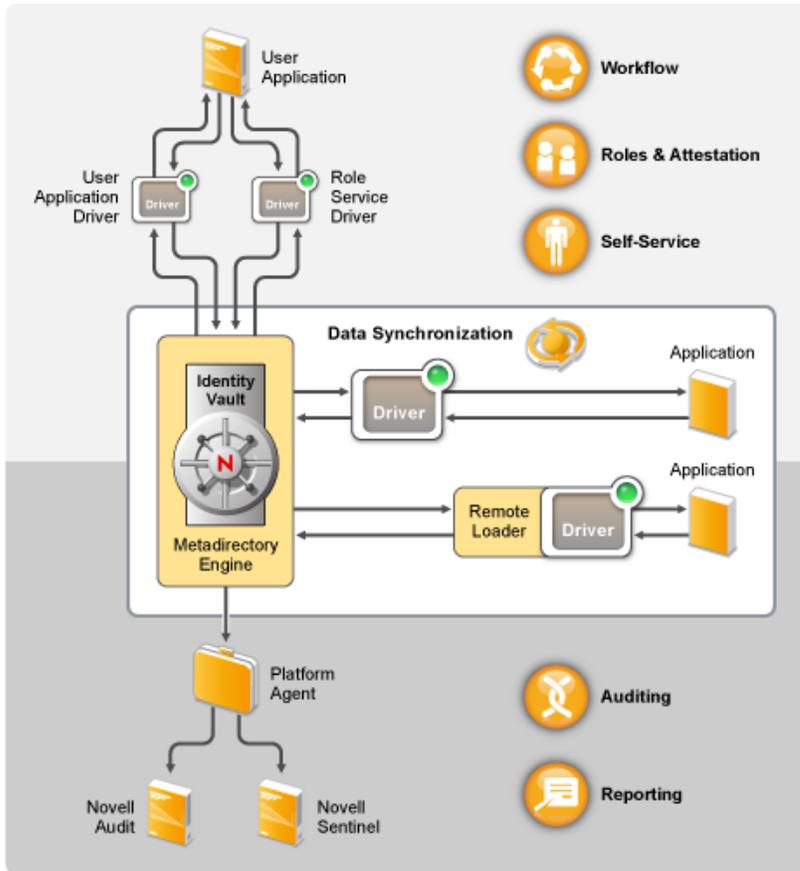
For more information on how Identity Manager components work together, see the *Identity Manager 3.6 Overview* manual.

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 3.6 Overview*.

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 3.6 Overview*.

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 Module 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 Roles Based Provisioning Module 3.7 documentation* (http://www.novell.com/documentation/idmrbpm37/index.html).

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 "Section 20.0, Making Attestation Requests" in the *Identity Manager Roles Based Provisioning Module 3.7 User Application User Guide* (http://www.novell.com/documentation/idmrbpm37/ugpro/data/bookinfo.html).

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 the *Identity Manager Roles Based Provisioning Module 3.7 User Application User Guide* (http://www.novell.com/documentation/idmrbpm37/ugpro/data/bookinfo.html).

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 Novell Audit or the Novell Sentinel™ system. Novell Audit is a centralized, cross-platform auditing service that collects event data from applications across multiple platforms and writes the data to a data store. 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 Novell Audit, see the *Novell Audit site* (http://www.novell.com/products/audit/). For a more complete introduction to Novell Sentinel, see the Novell Sentinel site (http://www.novell.com/products/sentinel/).

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*
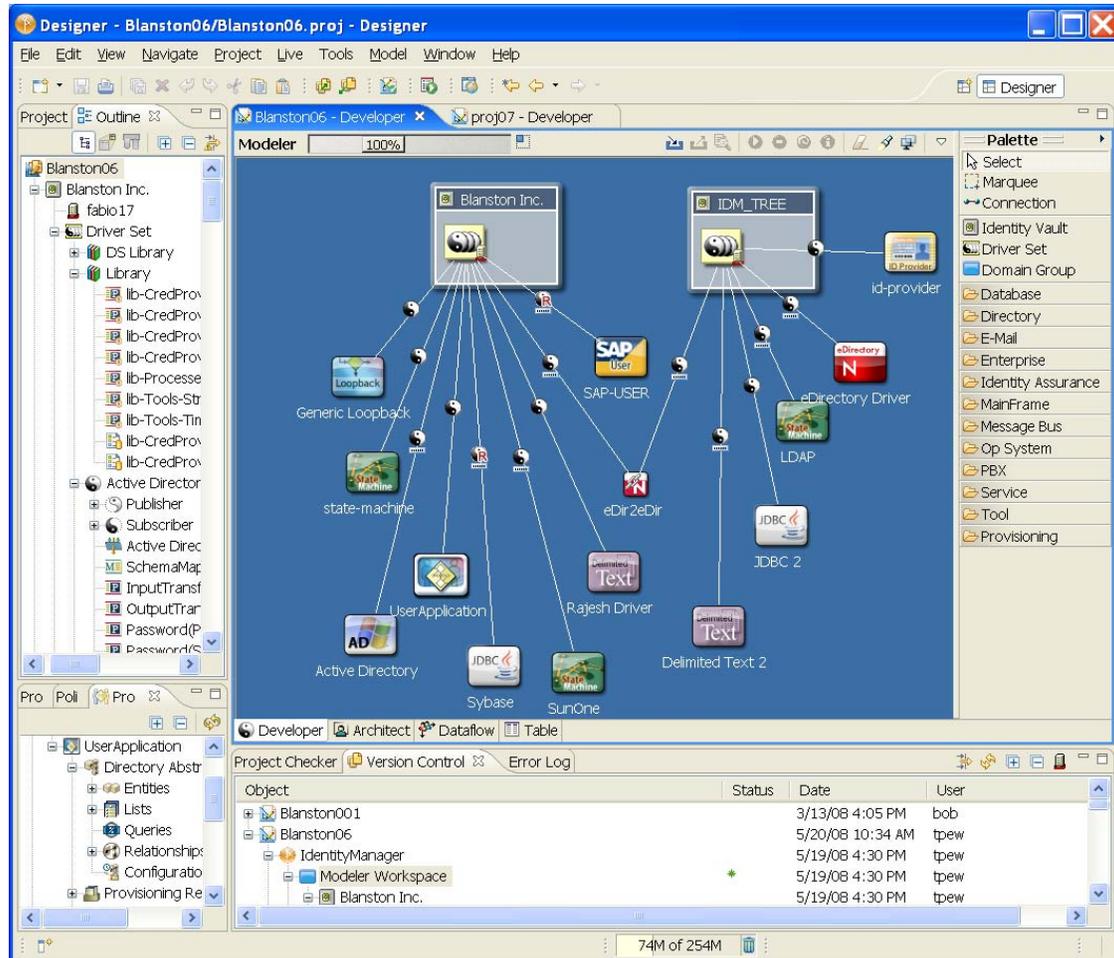
- ◆ Section 1.2.1, "Planning," on page 15
- ◆ Section 1.2.2, "Designing," on page 15
- ◆ Section 1.2.3, "Testing," on page 15
- ◆ Section 1.2.4, "Project Documentation," on page 15
- ◆ Section 1.2.5, "Deployment," on page 15

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 85.

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 3.5 for Identity Manager 3.6 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 3.5 for Identity Manager 3.6 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 3.5 for Identity Manager 3.6 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 3.5 for Identity Manager 3.6 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 3.5 for Identity Manager 3.6 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 3.5 for Identity Manager 3.6 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 17

1.3.1 Highly Productive Environment

The following Designer features help you be more productive:

- Provides 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 to 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/).

1.4 Designer, iManager, and the User Application Administration Console

Identity Manager contains three tools to assist you in setting up and configuring a working Identity Manager solution. These are Designer, iManager, and the User Application Administration Console.

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, while iManager is a real-time administrator tool. They are compatible. You can export information (for example, a driver set or driver) from one to the other. Also, several key common UI elements are now similar so that you can move between the tools more effectively.

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

Getting Help

<div style="text-align: right;">2</div>

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 3.5 for Identity Manager 3.6 Administration Guide* on the Novell® documentation Web site (http://www.novell.com/documentation).

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*
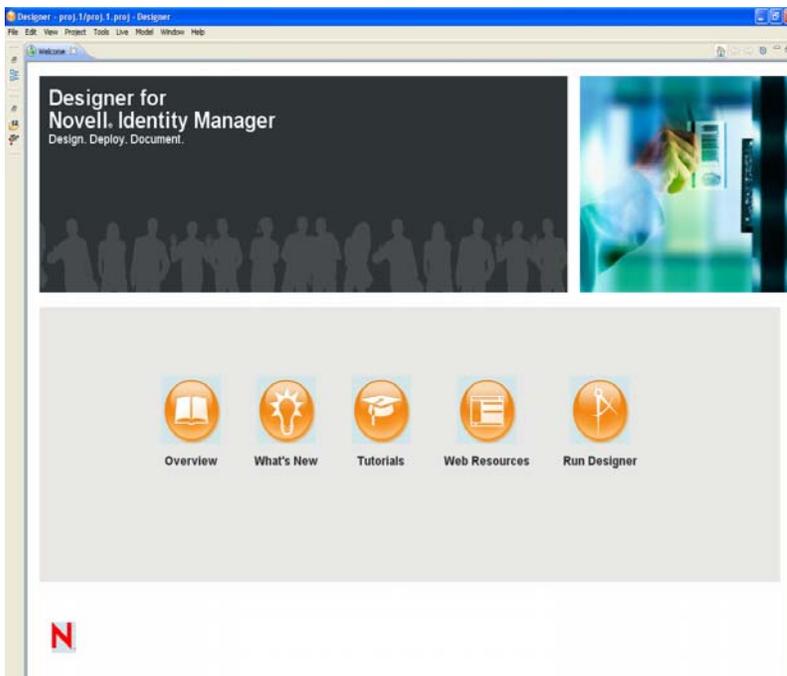
Table 2-1 *Options on the Welcome Page*

Option	Description
Overview	Provides an overview of Designer and Identity Manager.
What's New	- 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 Toobar*

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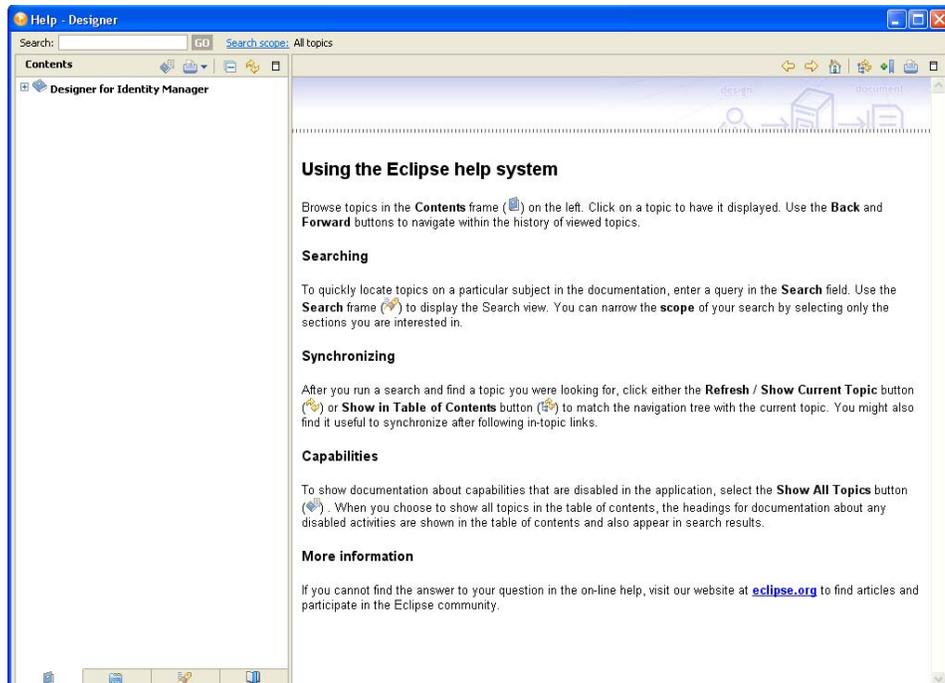
The text under *Using the Eclipse help system* describes the icons that help you navigate and use the Help system.

2 In the Contents pane, select *Designer for Identity Manager*.
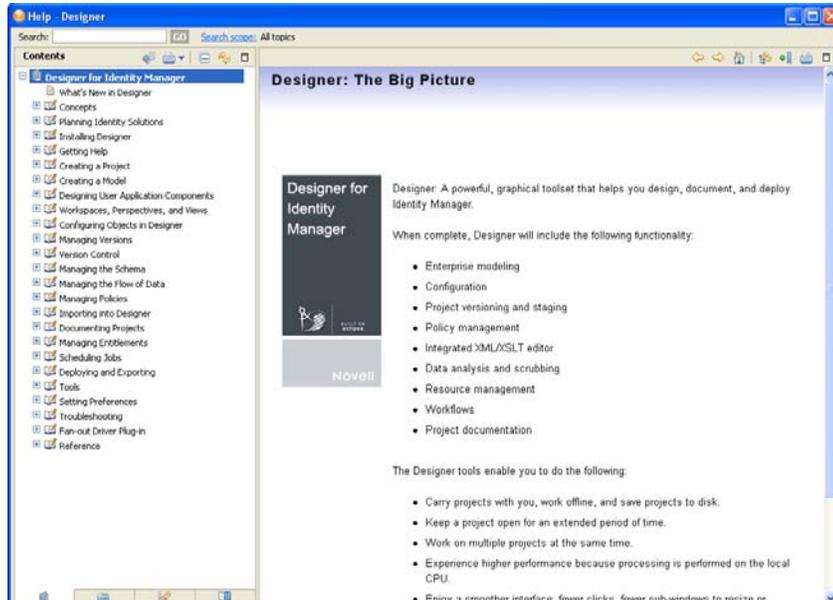
3 Navigate to the topic that you're interested in.

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 ⑦.

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*.
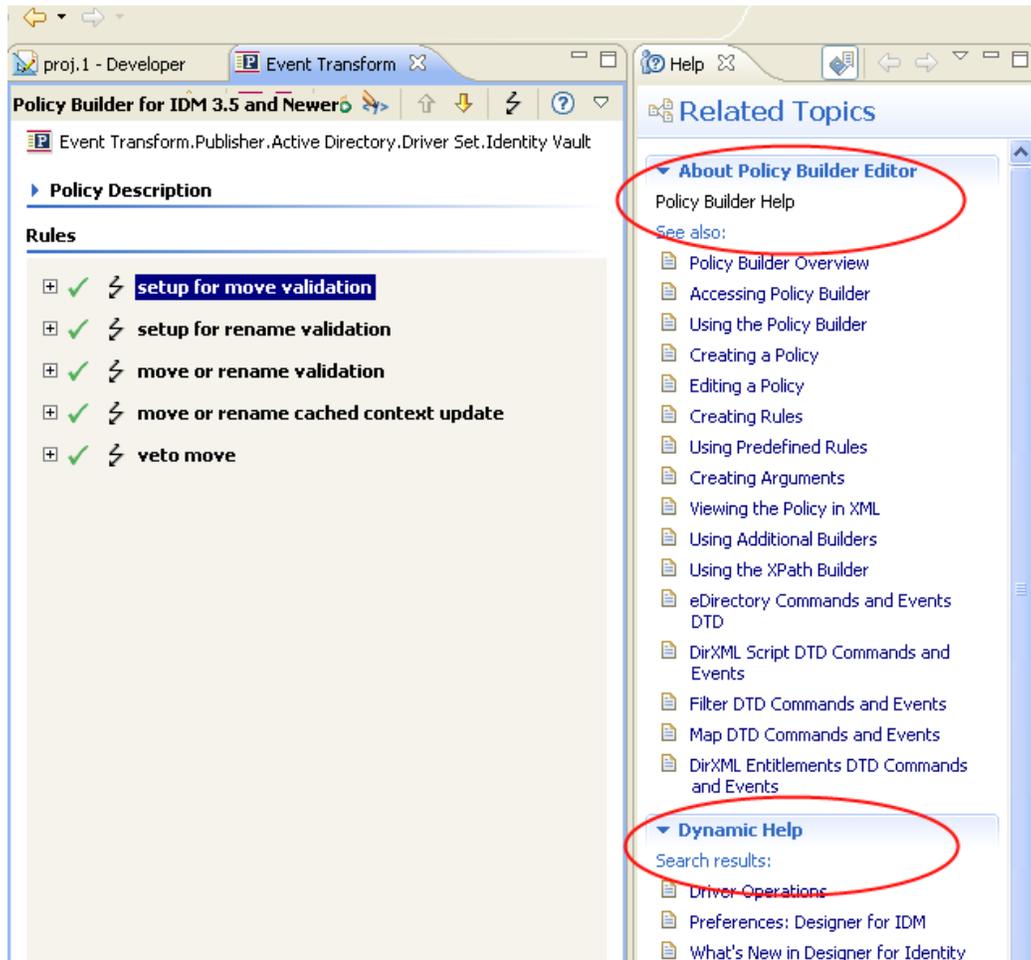
2.4 Help from the Web

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*
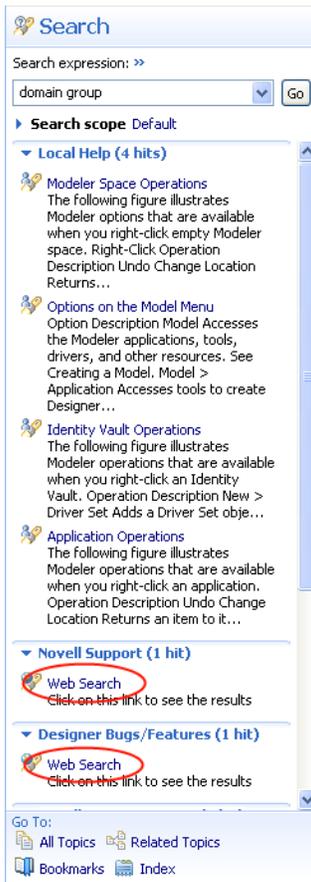
2.5 Viewing Demos

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.
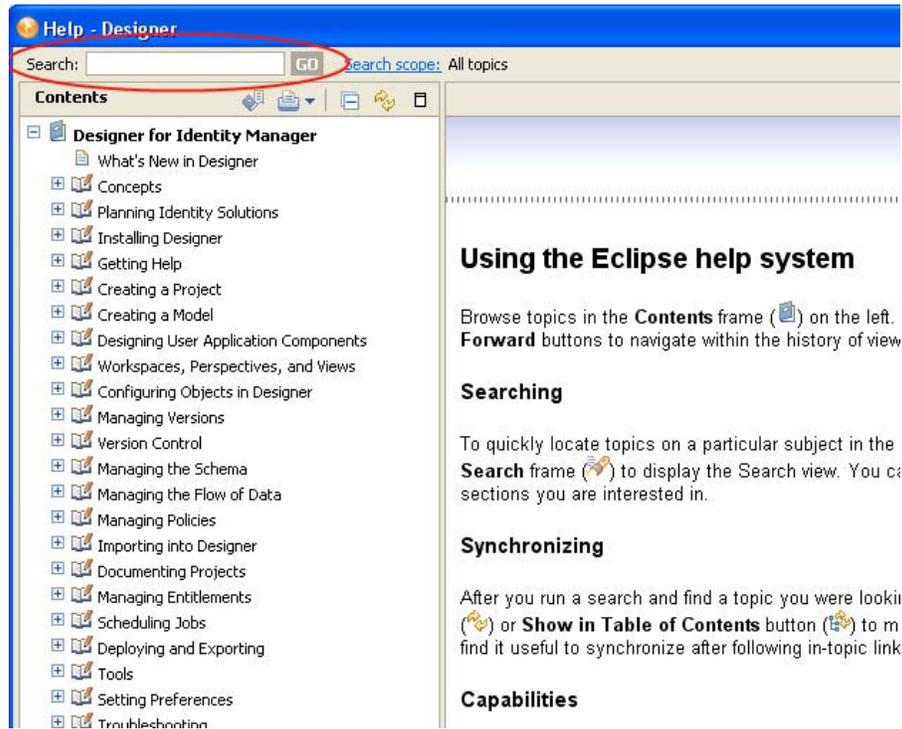
2.7 Customizing the Browser and Help Server

1 From the main menu, click *Window > Preferences*.

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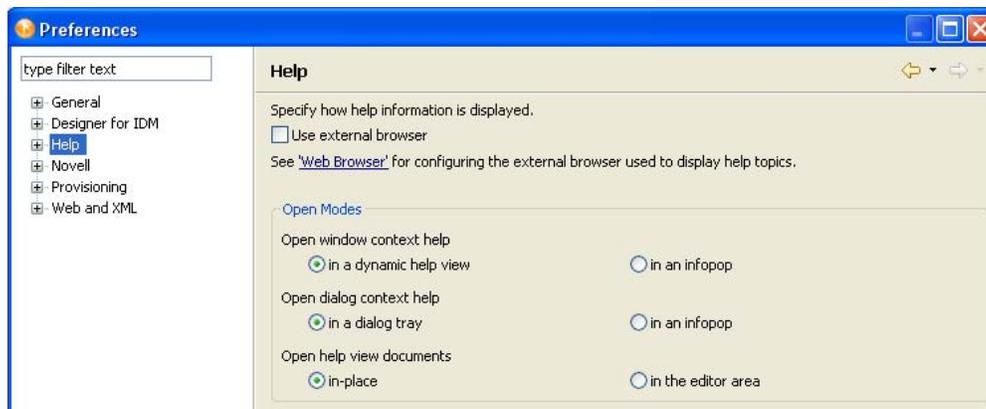
Because Designer is built on Eclipse, you are able to use Help server functionality. It is a development tool for building your own tools. If you have a team environment where the entire team is using Eclipse, you might want to set up a common Help server, and then use that server for help files and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

For more information on Help and the Help server:

   ◆ See "Help" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.

   ◆ Go to the Eclipse Web site.

3 (Optional) Expand *Help*, then click *Content*.
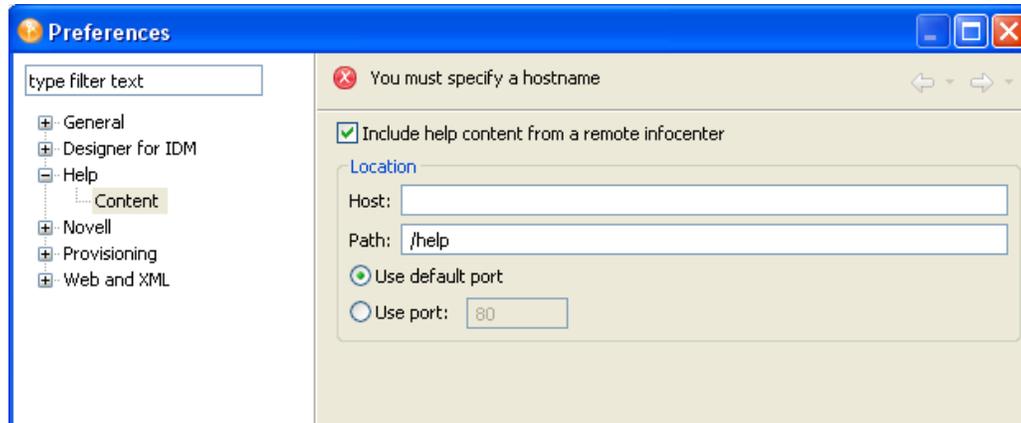
4 (Optional) Make changes concerning the Help server, then click *OK*.

What's New in Designer

<div style="text-align: right; font-size: 3em;">3</div>

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

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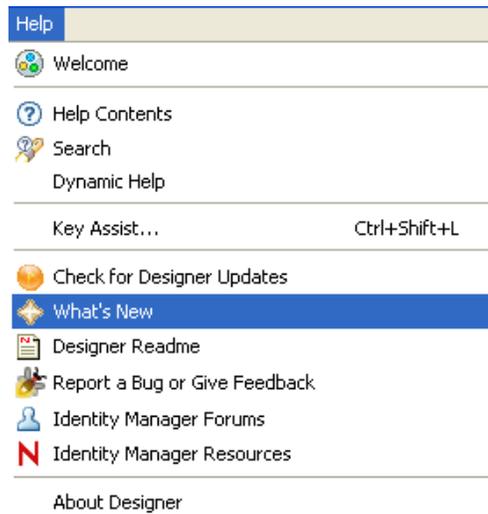
2 Click *Help > What's New*.

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

<div style="text-align: right; font-size: xx-large;">4</div>

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 3.5 for Identity Manager 3.6 Administration Guide*. For information on policies, see *Understanding Policies for Identity Manager 3.6* and *Policies in Designer 3.5*.

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*
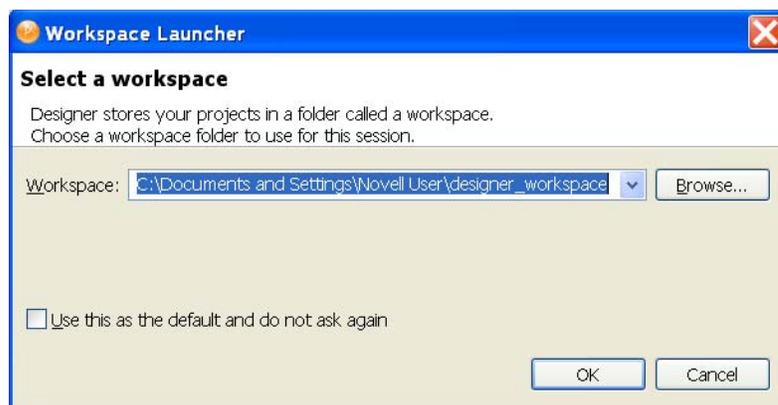
The default workspace directory for a Designer 3 Windows workstation is `Documents and Settings\`*username*`\designer_workspace`.

WARNING: 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 3 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 3 (*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 3 architecture and placing it under your designated Designer 3 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.

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

You can have multiple workspaces.

 * Section 4.1.1, "Project File Format," on page 30

4.1.1 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 Model" in the *Designer 3.5 for Identity Manager 3.6 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*
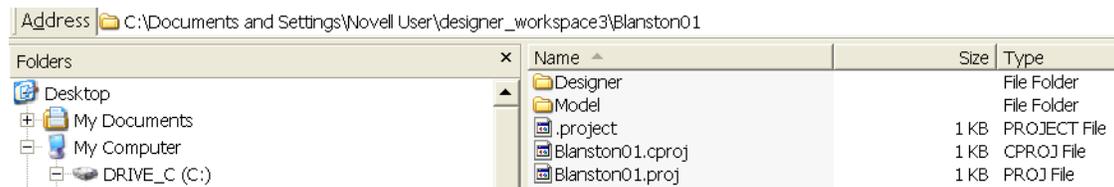
The main file in the project's directory is the `.proj` file. This file uses an industry-standard XML format called XMI (XML Metadata Interchange Format). You never need to directly edit this file.

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 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).

4.2 Managing Perspectives

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

- **Designer:** 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.
- **Resource:** A generic perspective. You can use this perspective for projects other than Designer.
- **exteNd Perspective:** For XML development to the exteNd™ platform.
- **Debug:** Used for XML development.

4.2.1 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

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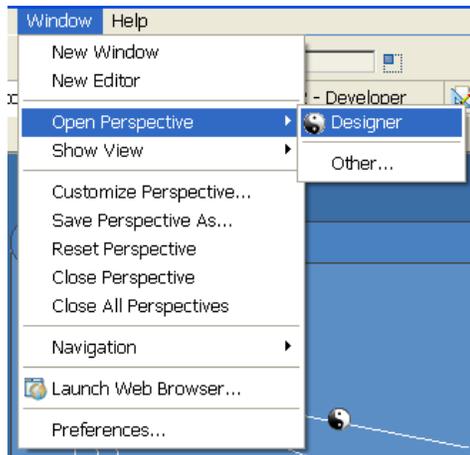
2 Select *Designer*.

3 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.
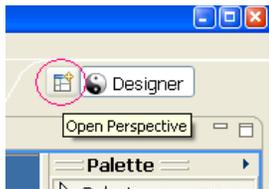
2 From the list, select *Designer*, then click *OK*.

4.2.2 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*.

4.2.3 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*
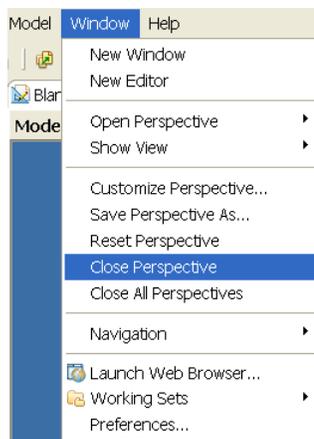
 ◆ On the Perspective Bar, right-click the perspective, then click *Close*.

4.3 Managing Views

Views enable you to view or edit projects.

4.3.1 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 information on where in the Designer help they can be found. 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*
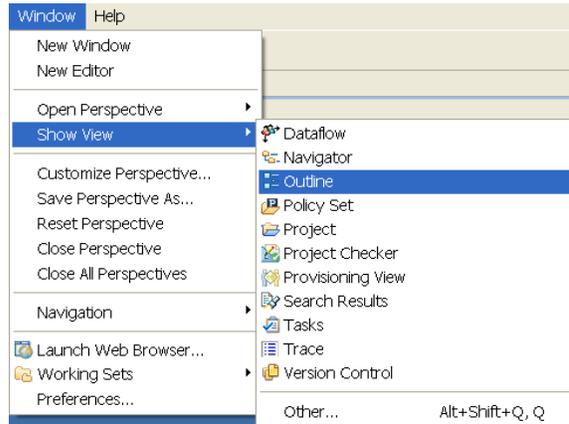
- ◆ "Views in the Window > Show View Option" on page 34
- ◆ "Views in the Window > Show View> Other Option" on page 35

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 3.5 for Identity Manager 3.6 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 4.5, "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 4.7, "Policy Set View," on page 63.

- ◆ **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 4.4, "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 3.5 for Identity Manager 3.6 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 4.9, "The Search Results View," on page 68.

◆ **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 4.10, "The Tasks View," on page 69.

◆ **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"*Designer 3.5 for Identity Manager 3.6 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 3.5 for Identity Manager 3.6 Administration Guide*.

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

The views that appear in the *Window > Show View > Other* option contain 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.

◆ **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.

- **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 3.5 for Identity Manager 3.6 Administration Guide*.

- **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 4.6, "The Navigator View," on page 60.

- **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 4.5, "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. To bring up the Problems view, select *Window > Show View > Other*, then select the *Problems* option under the *General* heading.

- **Progress.** The Progress view displays the progress of an operation. To bring up the Progress view, select *Window > Show View > Other*, then select the *Progress* option under the *General* heading.

- **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. To bring up the Project Explorer view, select *Window > Show View > Other*, then select the *Project Explorer* option under the *General* heading.

- **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 4.8, "The Properties View," on page 65.

- **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 4.10, "The Tasks View," on page 69.

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 3.5 for Identity Manager 3.6 Administration Guide*.

- **eDirectory Browser.**

- **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 4.7, "Policy Set View," on page 63.

- **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 4.4, "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 3.5 for Identity Manager 3.6 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 4.9, "The Search Results View," on page 68.

- **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 3.5 for Identity Manager 3.6 Administration Guide*.

- **Version Control.** Designer 3 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 3.5 for Identity Manager 3.6 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

- **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 3.5 for Identity Manager 3.6 Administration Guide*.

- **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 3.5 for Identity Manager 3.6 Administration Guide*.

Provisioning

- **Data Item Mapping.** Specifies how object attributes are mapped. See "Mapping Identity Vault to an LDAP Schema" in the *Designer 3.5 for Identity Manager 3.6 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 3.5 for Identity Manager 3.6 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. To access the Provisioning view, select *Window > Show View > Other* and select the *Provisioning View* option under the *Provisioning* heading.

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 3.5 for Identity Manager 3.6 Administration Guide*.

4.3.2 Opening a View

Figure 4-5 *Selecting a View to Open*
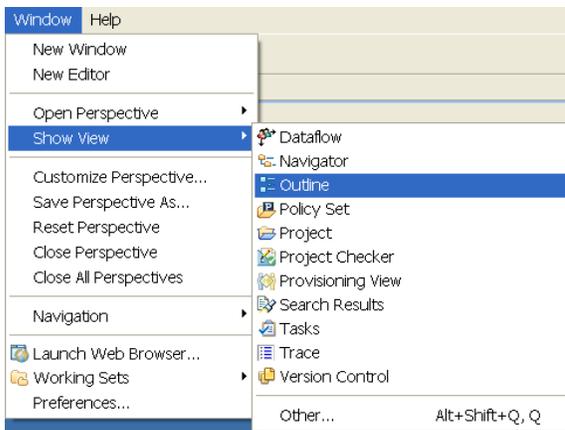
To open a view, select *Windows > Show View*, then select an option. There are a number of available views that you can see when you select the *Window > Show View > Other* option.

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).
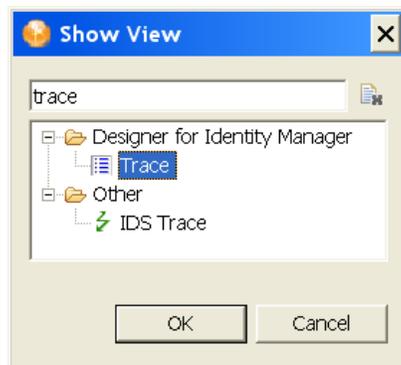
You can open, maximize, and close these views. You can also arrange them however you want, or make Fast Views from them. See Section 4.3.7, "Using Fast Views," on page 40.

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 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*
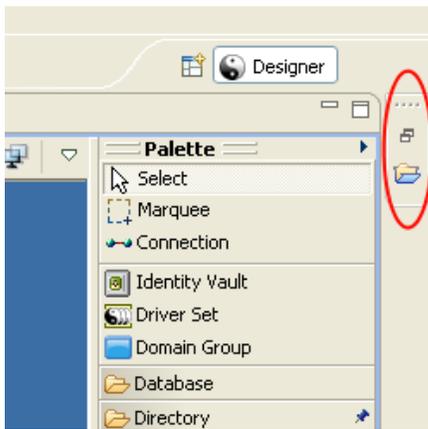
4.3.3 Moving a View

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.

4.3.4 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 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.

4.3.5 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*
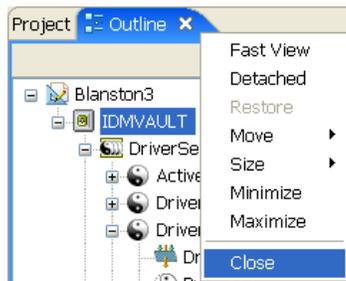
4.3.6 Reopening a View Window

1 From the main menu, select *Window > Show View*.
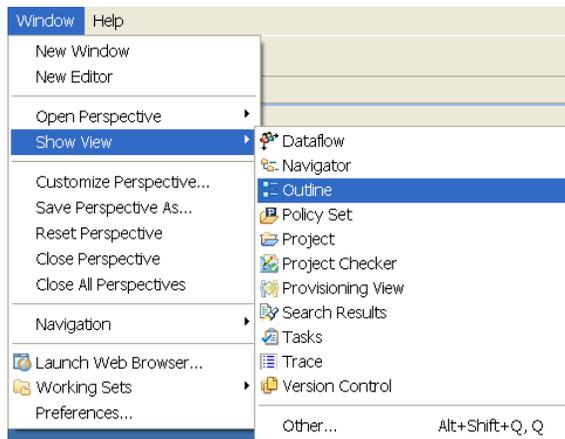
2 Select one of the views (for example, Outline).

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

4.3.7 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.
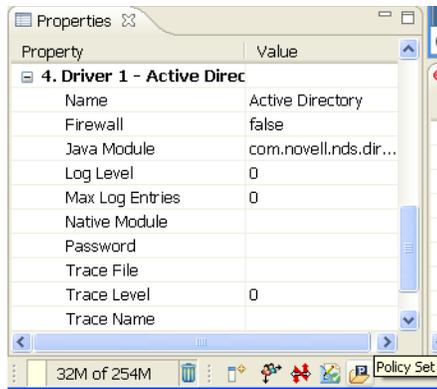
After the icon appears next to the *Show View as a Fast View Perspective* icon, do the following to restore a Fast View to a normal view:

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*
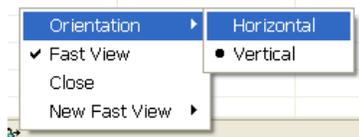
◆ Where you want to dock the Fast View

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

4.4 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*
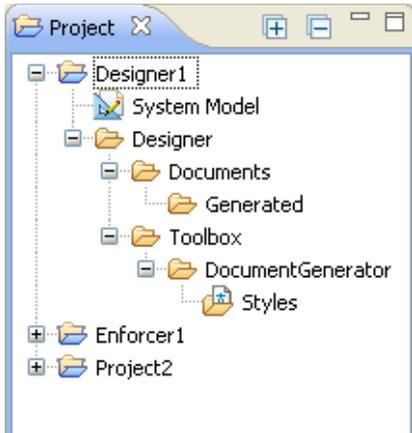
Table 8-1 describes the project icons displayed in the Project view.

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

Icon Name	Description

Project Name
 	
Blanston1
 	
or
 	
Blanston1
	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.
	
	Right-clicking a project name allows you to do the following:
	
	◆ Create a new Identity Manager Project.
	◆ Open the project with the System Model (Modeler view).
	◆ Import an Identity Manager Project from:
	   ◆ 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 window.
	
	Projects under a version control server have a different icon and have two additional choices:
	
	◆ Check the project into the version control server.
	◆ Update the project from the version control server.

Icon Name	Description
System Model System Model or System Model	Double-clicking the *System Model* 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. System Models under a version control server have a different icon. Right-clicking the System Model allows you to: ◆ Open the project in the Modeler view
Documents Designer Documents Generated images	Use the `Designer > Documents` folder for documents that are related to the project. You can also create new folders to organize your projects as needed. The `Generated` folder under `Documents` holds your generated documentation files, and the `images` folder under the `Generated` folder holds any graphic files that are created when you generate documents. Right-clicking the `Documents` folder or the `Generated` folder allows you to: ◆ 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.
Toolbox Toolbox DocumentGenerator Styles Blanston1.docgen	The `Toolbox` folder is for special files that ship with Designer. You cannot create new files or folders under this folder. The `Styles` folder under the `Toolbox > DocumentGenerator` folder contains the document generation styles. Right-click this folder to create a new style from the context menu that comes up. Right-clicking the `Toolbox` folder or its subfolders allows you to: ◆ Copy the folder. ◆ Right-click the `Styles` folder and select *New > Document Generation Style (.docgen)* to create a new style. The wizard generates a style (template with a `.docgen` extension) that displays under the `Styles` folder. (See "Documenting Projects" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide* for more information.)
.docgen File Blanston001.docgen	Right-clicking the `.docgen` file entry allows you to: ◆ Open the `.docgen` file with a Style editor. ◆ Copy and delete the `.docgen` file. Use *Copy* and *Paste* to copy documentation files to different projects or folders. ◆ Refresh and rename the file. ◆ Generate documentation using this style.
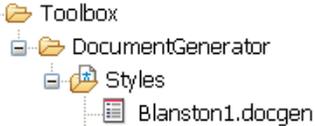
Icon Name	Description
Additional File Types	Because the `Generated` and `Images` folders can contain many different files, you can see different icons displayed, depending on the file extension. Right-clicking these any of these files allows you to: ◆ Copy and delete the file. Use Copy and Paste to copy 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.

4.5 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*
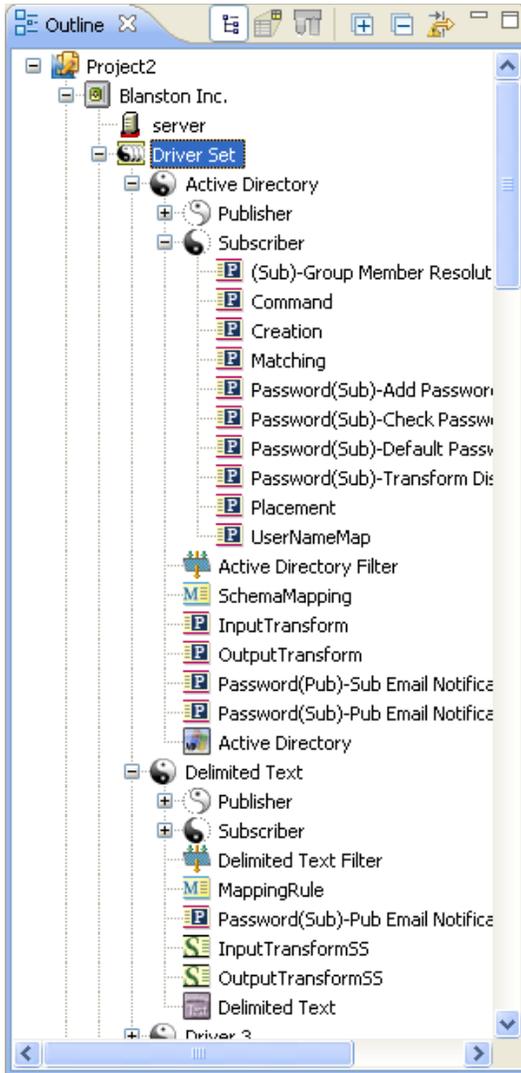
Table 8-2 describes the project icons displayed in the Outline view.

Table 4-2 *Project Icons Displayed in the Outline View*

Icon Name	Description
Project Name	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: ◆ Under *New*, you can add an application, a Domain Group, or an Identity Vault. ◆ Generate documentation on the project. ◆ Through the *Live* option, you can import a driver set from the Identity Vault. ◆ Check in the project into a version control server. ◆ Delete the project. ◆ See the Properties window associated with this object.
Version Control Project Name	The icon changes on a project when you commit the project to a version control server. Right-click the project name to do the following: ◆ Under *New*, you can add an application, a Domain Group, or an Identity Vault. ◆ Generate documentation on the project. ◆ Through the *Live* option, you can import a driver set from the Identity Vault. ◆ Check in the project into a version control server. ◆ Update the project from a version control server. ◆ Delete the project. ◆ See the Properties window associated with this object.

Icon Name	Description
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: - Under *New*, you can add a driver set, a library, or a server object to the project. - Manage Identity Vault schema. - The *DirXML Script Tracing* option enables you to turn on or 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. - Generate documentation on the Identity Vault. - Import a driver configuration file. - Import schemas from a file. - Export the Identity Vault configuration and schema to a file. - Under *Live*: - Import a driver set from eDirectory - Deploy the Identity Vault - Compare all driver sets - Import and deploy schema - Manage eDirectory objects - Run a live DS Trace - Open iManager - Manage the Identity Vault directory - Start, stop, and restart drivers, as well as show their status - Delete the Identity Vault. - See the Properties window associated with this object.
Domain Group	Domain groups allow you to group projects into granular portions. Right-click the Domain object to perform the following: - Under *New*, you can add an application, a Domain Group, or an Identity Vault. - Generate documentation on the Domain. - Under *Live*, you can import from the Identity Vault. - Delete the Domain Group. - See the Properties window 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.

Icon Name	Description
Library	The Library object is a repository of commonly used policies 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:

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

          ◆ Credential application

          ◆ Credential repository

          ◆ DirXML® Script

          ◆ ECMAScript

          ◆ Mapping Table

          ◆ Resource

          ◆ Schema Map

          ◆ XSLT

          ◆ Add a policy from a copy

     ◆ The *DirXML Script Tracing* option enables you to turn on or 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 the library to a configuration file.

     ◆ Import a driver configuration file.

     ◆ Under *Live*, you can:

          ◆ Import a policy

          ◆ Deploy a policy

          ◆ Compare a policy

     ◆ Delete the Library object.

     ◆ See the Properties window associated with this object.

| *Server Object* | The Server object is the server in the tree where you have Identity Manager installed. Right-click the Server object to perform the following: |

     ◆ Delete the Server object.

     ◆ See the Properties window associated with this object.

Icon Name	Description
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:

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:

- Under *New*, you can create a new driver, a job, or a library.
- Copy the driver set settings and global configuration values.
- The *DirXML Script Tracing* option enables you to turn on or 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.
- Generate documentation on the driver set.
- Import a driver configuration file.
- Export the driver set to a configuration file.
- Under *Live*:
  - Import a driver
  - Deploy a driver set
  - Compare the driver set in Designer to a deployed driver set in the Identity Vault
  - Import, deploy, and compare driver set configuration attributes
  - Start, stop, and restart drivers, as well as show their status
- Delete the driver set.
- See the Properties window associated with this object.

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.

Icon Name	Description
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: ◆ Create a new policy. ◆ Export the policy container object to a configuration file. ◆ Under *Live*: ◆ Import a policy ◆ Deploy the ID Policy container ◆ Compare the ID Policy container in Designer to a deployed ID Policy container in the Identity Vault ◆ Delete the ID Policy container. ◆ See the Properties window associated with this object. Right-click the ID Policy to perform the following: ◆ Under *Live*: ◆ Deploy the ID Policy ◆ Compare the ID Policy in Designer to a deployed ID Policy container in the Identity Vault ◆ Delete the ID Policy ◆ See the Properties window associated with this object. To configure ID policies, see "Configuring ID Policies" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.

Icon Name	Description
Driver Object	A Driver object is 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. Right-click the Driver object to do the following:

- Under *New*, you can add the following policy types:
    - Credential application
    - Credential repository
    - DirXML Script
    - ECMAScript
    - Entitlement
    - Job
    - Mapping Table
    - Resource
    - Schema Map
    - XSLT
    - Add a policy from a copy
- Copy driver settings or server-specific driver settings.
- Show the dataflow view.
- The *DirXML Script Tracing* option enables you to turn on or 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 policy transformation.
- Show the driver's IDS trace.
- Run the Driver Configuration Wizard.
- Synchronize passwords to an associated server.
- Manage application schema.
- Generate documentation for this driver.
- Import a driver configuration file.
- Export the driver to a configuration file.
- Copy 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

Icon Name	Description
Driver Object, Continued.	Right-click the Driver object to perform the following:

- Under *Live*:
    - Import a driver
    - Deploy a driver
    - Compare the driver in Designer to a deployed driver in the Identity Vault
    - Import, deploy, and compare driver configuration attributes
    - Refresh the application schema
    - Start, stop, and restart drivers, as well as show their status
    - Set up driver security
    - Set driver trace level
- Delete the Driver object.
- See the Properties window 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.

Icon Name	Description
Publisher Channel	A channel is a combination of rules and policies, and 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 corresponding.
	Right-click the Publisher or Subscriber channel to perform the following:

- Under *New*, you can add the following policy types:
    - Credential application
    - Credential repository
    - DirXML Script
    - ECMAScript
    - Mapping Table
    - Resource
    - Schema Map
    - XSLT
    - Add a policy from a copy
- The *DirXML Script Tracing* option enables 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.
- Run the Simulate Policy Transformation program on the channel to ensure that it is working correctly.
- Import a driver configuration file.
- Export the channel configuration to a file.
- Under *Live*:
    - Import objects into a driver
    - Deploy a channel
    - Compare the channel in Designer to a deployed driver channel in an Identity Vault
- See the Properties window associated with this object.

Subscriber Channel	A channel is a combination of rules and policies, and Designer allows you to import a channel instead of the entire driver. 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.). (See *Publisher Channel* for right-click actions.)

Icon Name	Description

Policy
 	
P
	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 eDirectory 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, copy, and save the Policy object.
	♦ The *DirXML Script Tracing* option enables you to turn on or 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 the Simulate Policy Transformation program on the policy to ensure that it is working correctly.
	♦ Export a policy configuration to a file.
	♦ Under Live:
	  ♦ Deploy a policy
	  ♦ Compare the policy in Designer to a deployed driver or channel policy in an Identity Vault
	♦ Open the policy with the Designer built-in editor, Novell XML editor, or text editor.
	♦ Delete a policy.
	♦ See the Properties window associated with this object.

Overlay Icons P	Overlay icons have a symbol overlay 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.

Schema Mapping
 	
M
	Schema Mapping allows Identity Manager to synchronize information to the connected system without changing the connected system. Schema translates all classes and attributes for the connected system.
	
	Right-click the Schema Mapping object to perform the following:
	
	♦ Edit, copy, and save the Schema Mapping object.
	♦ Run the Simulate Policy Transformation program on the object to ensure that it is working correctly.
	♦ Export a Schema Mapping policy configuration to an XML file.
	♦ Under *Live*:
	  ♦ Deploy a policy
	  ♦ Compare the policy in Designer to a deployed driver or channel policy in an Identity Vault
	♦ Open the object with the Designer built-in editor, Novell XML editor, or text editor.
	♦ Delete the object.
	♦ See the Properties window associated with this object.

Icon Name	Description

Resource Objects	Resource objects include Application SSO objects and Repository SSO objects. Double-clicking a resource object brings up the object in an editor.
	
	Right-click the Resource object to perform the following:
	
	◆ Edit and copy the Resource object.
	◆ Export a Resource policy configuration to a file.
	◆ Under *Live*:
	  ◆ Deploy a Resource policy
	  ◆ Compare the policy in Designer to a deployed driver or channel policy in an Identity Vault
	◆ Open the object with the Designer built-in editor, Novell XML editor, or text editor.
	◆ Delete the object.
	◆ See the Properties window associated with this object.

XSLT	XSLT represents XSLT style sheets, which are used instead of the DirXML Script.
	
	Right-click the XSLT object to perform the following:
	
	◆ Edit, copy, and save the object.
	◆ Run the Simulate Policy Transformation program on the style sheet to ensure that it is working correctly.
	◆ Export an XSLT style sheet configuration to an XML file.
	◆ Under *Live*:
	  ◆ Deploy the style sheet
	  ◆ Compare the style sheet in Designer to a deployed driver or channel style sheet in an Identity Vault
	◆ Open the object with the Designer built-in editor, Novell XML editor, or text editor.
	◆ Delete the object.
	◆ See the Properties window associated with this object.

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 and save the object.
	◆ Run the Simulate Policy Transformation program on the filter to ensure that it is working correctly.
	◆ Export a filter configuration to an XML file.
	◆ Under *Live*:
	  ◆ Deploy the filter into an existing eDirectory tree.
	  ◆ Compare the filter in Designer to a deployed driver or filter in an Identity Vault.
	◆ Open the object with the Designer built-in editor, Novell XML editor, or text editor.
	◆ Clear the Filter object.

Icon Name	Description
Application Object	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:

- Show the dataflow view.
- Manage application schema.
- Set up remote control through VNC connectivity.
- Generate documentation on the application object.
- Under *Driver*:
    - Import objects into a driver
    - Deploy the driver
    - Compare a driver in Designer to a deployed driver in an Identity Vault
    - Set up driver security
- Delete the object.
- Under *Distribute*, you can select *Horizontal* or *Vertical*.
- Under Live, you can create eDir-to-eDir certificates if this is an eDir-to-eDir connection.
- If this is an eDir-to-eDir connection, you can configure the connections for SSL/TLS activation.
- See the Properties window 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. |
| *Entitlement Object* | The Entitlement object represents an entitlement assigned to the Subscriber channel.

Right-click the Entitlement object to perform the following:

- Edit, copy, and save the object.
- Export an entitlement configuration to an XML file.
- Under *Live*:
    - Deploy the entitlement
    - Compare the entitlement in Designer to a deployed entitlement in an Identity Vault
- Open the object with the Designer built-in editor, Novell XML editor, or text editor.
- Delete the object. |

Icon Name	Description
Job Object	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.

Job Object

Right-click the Job object to perform the following:

- Edit the job object.
- Export a job configuration to an XML file.
- Under *Live*:
  - Deploy the job
  - Compare the job in Designer to a deployed job in an Identity Vault
- Open the object with the Designer built-in editor, Novell XML editor, or text editor.
- Delete the object.
- See the Properties window associated with this object.

ECMAScript Object

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

Right-click the ECMAScript object to perform the following:

- Edit, and copy the object.
- Export an ECMAScript configuration to an XML file.
- Under *Live*:
  - Deploy the ECMAScript
  - Compare the ECMAScript in Designer to a deployed ECMAScript in an Identity Vault
- Open the object with the Designer built-in editor, Novell XML editor, or text editor.
- Delete the object.
- See the Properties window associated with this object.

Mapping Table Object

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

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

- Edit, and copy the object.
- Export a Mapping Table configuration to an XML file.
- Under *Live*:
  - Deploy the Mapping Table
  - Compare the Mapping Table in Designer to a deployed Mapping Table in an Identity Vault
- Open the object with the Designer built-in editor, Novell XML editor, or text editor.
- Delete the object.
- See the Properties window associated with this object.

Icon Name	Description
User Application Object	The User Application object allows you to manage workflow provisioning. Right-click the User Application object to perform the following:

- Show the Dataflow view.
- Manage application schemas.
- Set up remote control through VNC connectivity.
- Generate documentation for the User Application.
- Under *Driver*:
    - Import objects into a driver
    - Deploy the User Application object
    - Compare objects in Designer to deployed objects in an Identity Vault.
    - Set up driver security
- Delete the User Application object.
- Under *Localize*:
    - Export localization data
    - Import localization files
- Under *Configure*:
    - Configure supported localization data
    - Configure default localization data
- Under *Live*:
    - Deploy the User Application object to an Identity Vault.
    - Compare the User Application object in Designer to a deployed User Application object in an Identity Vault.
    - Import the User Application object from an Identity Vault.
- Under *Distribute*, you can select *Horizontal* or *Vertical*.
- Migrate the User Application object.
- Export the User Application object to a file.
- Import the User Application object from a file.
- Validate the User Application object.
- Show the Provisioning view.
- See the Properties window associated with this object.

Icon Name	Description
Default Notification Collection	Placeholder for all notification templates.
	Right-click the Notification Collection object to perform the following:
	◆ Create a new notification template.
	◆ Edit Filter. (If you want to see e-mail templates in other languages, click this option and select the languages.)
	◆ Import a notification template from a file.
	◆ Add only the default notification e-mail templates in English to the Identity Vault. You can also select to overwrite existing templates.
	◆ Update 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.
	◆ Under *Live*:
	◆ Import an e-mail template from an Identity Vault
	◆ Deploy e-mail templates
	◆ Compare the Notification Collection in Designer to a deployed Notification Collection in an Identity Vault
	◆ Under *Localization*:
	◆ Import localization data from a folder that stores localization data
	◆ Export localization data to a folder to store the exported localization data
	◆ See the Properties window associated with this object.
Notification Object	A notification template.
	Right-click the Notification object to perform the following:
	◆ Under *Live*:
	◆ Deploy e-mail templates
	◆ Compare the Notification object in Designer to a deployed Notification object in an Identity Vault
	◆ Update all of the localized versions for the selected notification template that are installed with Designer.
	◆ Edit, copy, or save a template.
	◆ Open the object with the Designer built-in editor, Novell XML editor, or text editor.
	◆ Delete a template.
	◆ Under *Localization*:
	◆ Import localization data from a folder that stores localization data
	◆ Export localization data to a folder to store the exported localization data
	◆ See the Properties window associated with this object.

4.6 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 solution. However, they enable you to conveniently append other pieces of information that you want to associate with your projects and workspace.

WARNING: 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*
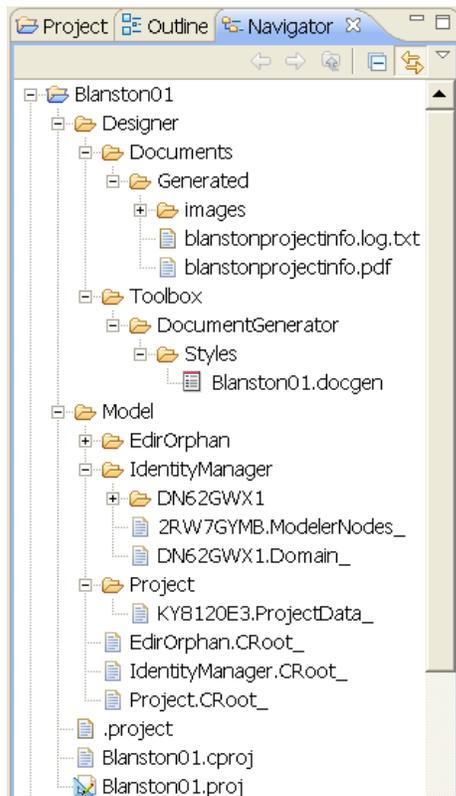
The Navigator view enables you to do the following:

Table 4-3 *Navigator View Icons*

Icon Name	Description
Project Name	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	Right-clicking a project name allows you to do the following:
	
	◆ Under *New*:
	  ◆ 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 Go Into 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 *Source* option to format the document.
	◆ View the project's Properties window.

Project's Documents Folder and Subfolders
 	
Documents
Generated
images
	The `Designer > Documents` folder contains the files of the created project. Beneath the `Designer > Documents` directory are the documentation and resources folders and any other folders you have created in this project.
	
	Right-clicking any of the project folder names allows you to do the following:
	
	◆ Under *New*:
	  ◆ 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 *Go Into* 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 *Source* option to format the document.
	◆ View the project's Properties window.

Icon Name	Description
All File Types	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:

002CB0B867.notftemplate
002CB0B867.xml
007DA3A8BA.mappingpolicy

- Under *New*:
  - 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:
  - 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 *Source* option to format the document.
- View the file's Properties window.

WARNING: Copy and paste, 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 > More Projects*.

3 Expand the *General* folder.
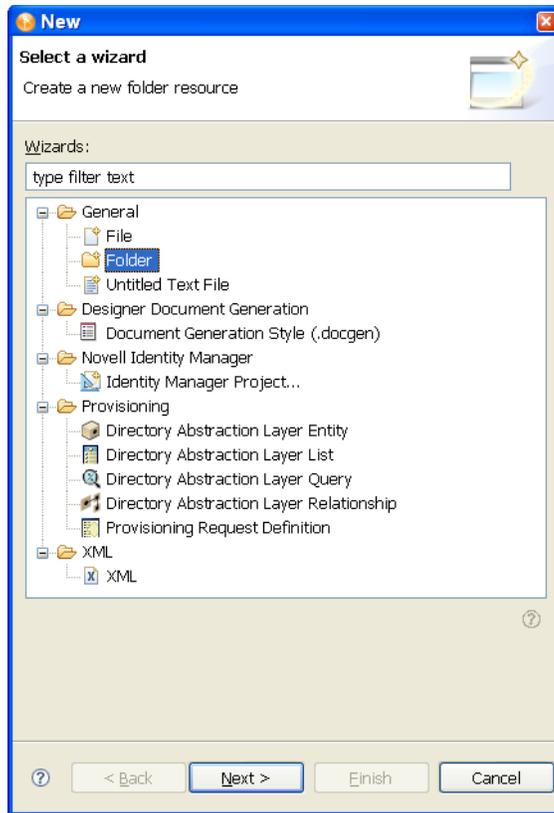
4 Select *Folder*, then click *Next*.

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.

4.7 Policy Set View

The Policy Set view lists policies and displays a toolbar.

Figure 4-12 *The Policy Set View*
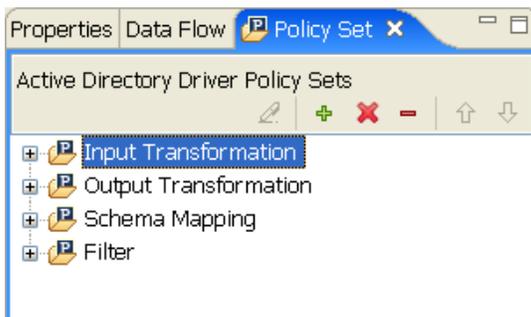
The list displays all policies contained in the selected policy set. During a transformation, the policies within the list are executed from top to bottom.

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

Table 4-4   *Policy Set View Icons*

Name	Description
Edit	When selecting a policy, this icon brings up the Policy Builder.
Create	Create, copy, or link a policy.
Delete	Delete a selected policy. You can also delete all policies in a policy set by selecting the policy set and clicking *Delete*.
Remove	When selecting a policy, this icon enables you to remove the selected policy from the policy set without deleting it. When selecting a policy set, the icon enables you to remove all policies from the selected policy set.
Move Policy	Move the policy up and down the policy chain.
Minimize/Maximize	Minimize and maximize the Policy Set view.

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

Table 4-5   *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.
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 Script or to only DirXML Script rules for the policy set.
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.

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

Table 4-6 *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.
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.
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	
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.

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 3.6* and *Policies in Designer 3.5*.

4.8 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 4.8.1, "The Spinner Control," on page 66
- Section 4.8.2, "The DN Cell Editor," on page 66
- Section 4.8.3, "Editing Boolean Values," on page 67
- Section 4.8.4, "Keyboard Tips," on page 67
- Section 4.8.5, "Resizing Column Widths," on page 67
- Section 4.8.6, "Summary Table," on page 67

4.8.1 The Spinner Control

Figure 4-14   *The Spinner Control*
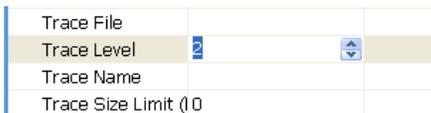
When you edit numeric values in the Properties view, Designer displays a spinner control so that you can increase or decrease the number.

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

4.8.2 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.

4.8.3 Editing Boolean Values

Figure 4-16   *Drop-Down List for Boolean Values*
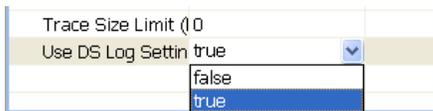
To edit Boolean values, select *true* or *false* from the drop-down list.

4.8.4 Keyboard Tips

Table 4-7   *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.

4.8.5 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.

4.8.6 Summary Table

Table 4-8   *Properties View Tasks*

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

Task	Description
Saving	When you click *Save*, all changes are saved to the project file. When you reopen the project, all settings are restored.
Boolean Editor	You can edit Boolean settings *(true/false)* by clicking the value, which toggles to the other value.

4.9 The Search Results View

To search across an entire project:

1 With the Modeler view active, press Ctrl+F.
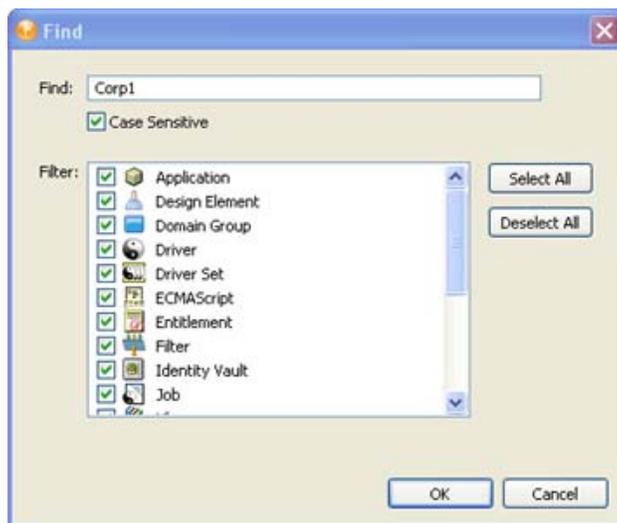
2 Select whether the search is case-sensitive.

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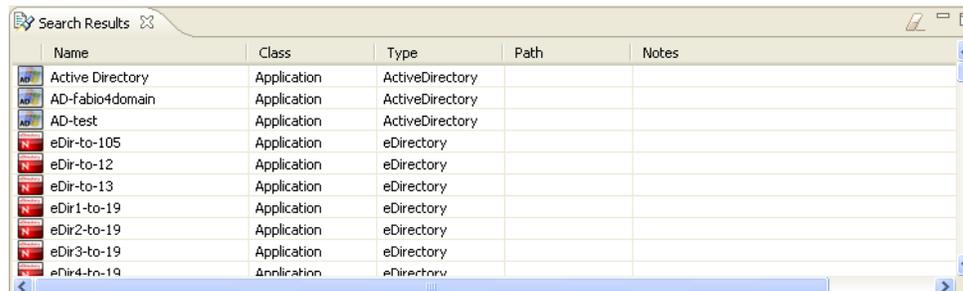
If the Search Results view isn't already open, the search opens it.

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.

4.10 The Tasks View

Figure 4-18 *The Tasks View*
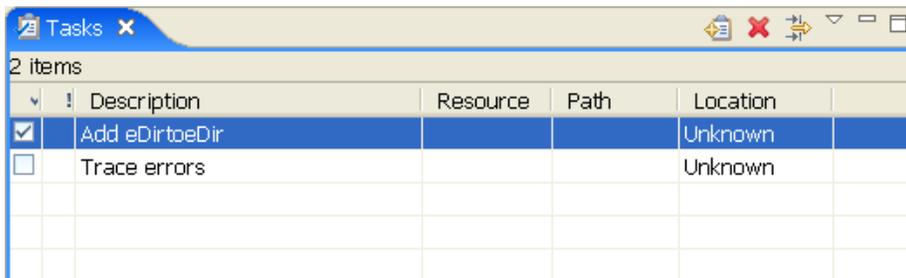
The Tasks view enables you to make and prioritize notes while you manage identities. This view is for your convenience. It can contain whatever you want. It won't affect the functionality of your solution.

This view enables you to do the following:

- Add tasks
- Delete task
- 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.

4.10.1 Task Properties

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

Table 4-9   *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	Eables you to indicate whether the task is completed.
On Element	Enables you to specify what element the task will be on.
In Folder	Enables you to specify the folder the task will be in.
Location	Enables you to specify the location of the task.

4.10.2 Filtering Tasks

   1 Click the filter icon ⮕.

2 Select filters, then click *OK*.
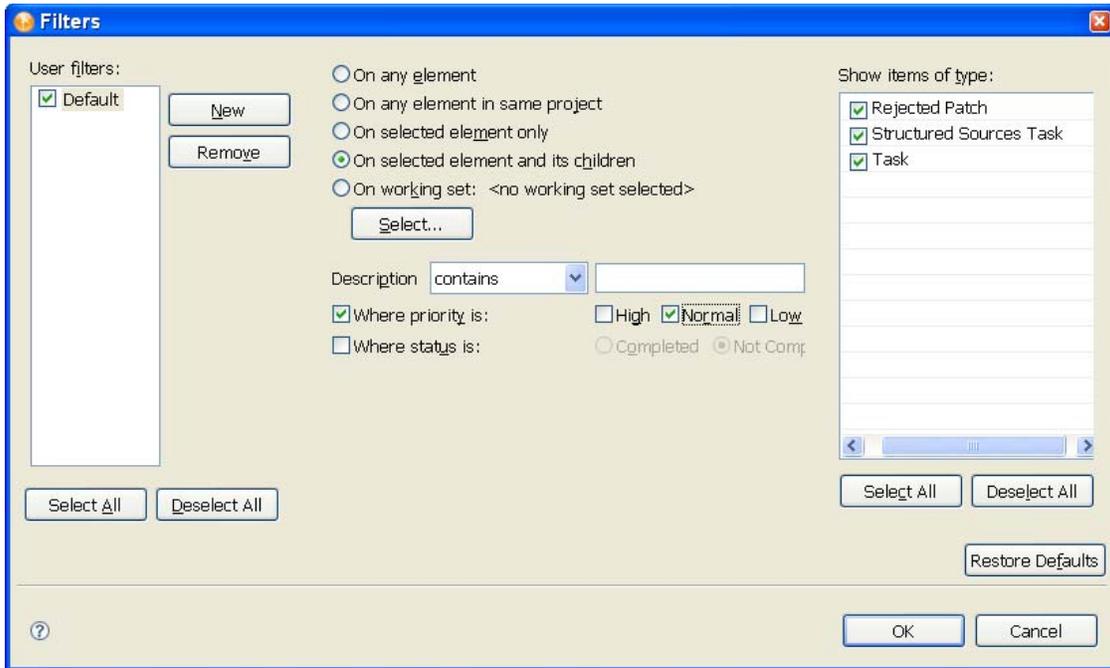
Table 4-10 *Filters Window Functionality*

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.
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.

Operation	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.

4.10.3 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.
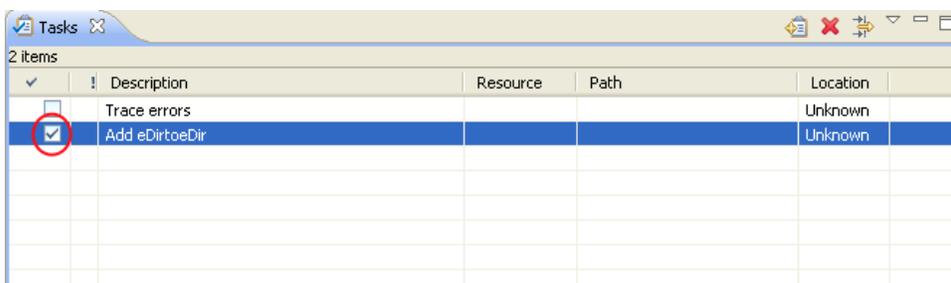
NOTE: When you mark a task as completed, the task automatically moves to the bottom of your list of tasks.

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.

4.10.4 Right-Click Options

Table 4-11 *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.

Operation	Description
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.

4.10.5 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 this column.

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.
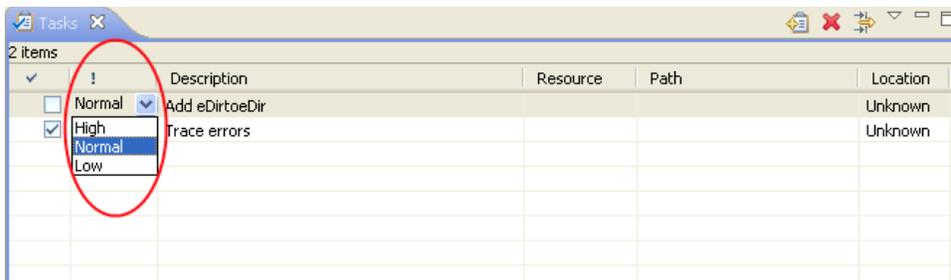
4.10.6 Sorting Tasks

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.

4.11 The Trace and Error Log Views

The Trace and Error Log views help you troubleshoot Designer.

4.11.1 Trace View

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

Table 4-12 *Icons in the Trace View Toolbar*

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

4.11.2 Error Log View

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

Table 4-13 *Icons on the Error Log View Toolbar*

Icon Name		Description
Export Log		Enables you to export the error log to a location on the file system.
Import Log		Enables you to import a file from the file system to the error log.
Clear Log Viewer		Clears all the entries in the Error Log viewer.
Delete Log		Deletes all items in the error log.
Open Log		Opens an error log entry.
Restore Log		Restores log entries that have been previously cleared.
Menu		Reveals a menu drop-down list.
Menu > Filters		Opens the Log Filters window.
Menu > Activate on New Events		Activates a log entry on a new event.
Minimize/Maximize		Minimizes and maximizes the Error Log view.

For more information, see "Troubleshooting Designer" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.

4.12 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 4-14   *Dataflow View Icons*

Name		Description
Add Filter Class		Add a new filter class to the dataflow list.
Add Filter Attribute		Add a new filter attribute to a selected filter class.
Expand All Classes		Simultaneously expand all filter classes to reveal all existing filter attributes.
Collapse All Classes		Simultaneously collapse all filter classes to hide all existing filter attributes.
Clear Arrows		Clear 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 3.5 for Identity Manager 3.6 Administration Guide*.

4.13 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 3.5 for Identity Manager 3.6 Administration Guide*.

Editors, Builders, and Wizards

5

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

Designer also contains over thirty views to help you design and implement Identity Manager solutions. For more information about views, see Section 4.3, "Managing Views," on page 33.

- Section 5.1, "Editors," on page 77
- Section 5.2, "Builders," on page 82
- Section 5.3, "Wizards," on page 83

5.1 Editors

- Section 5.1.1, "Using an Editor," on page 77
- Section 5.1.2, "XML Editor," on page 81
- Section 5.1.3, "Filter Editor," on page 81
- Section 5.1.4, "Schema Map Editor," on page 81

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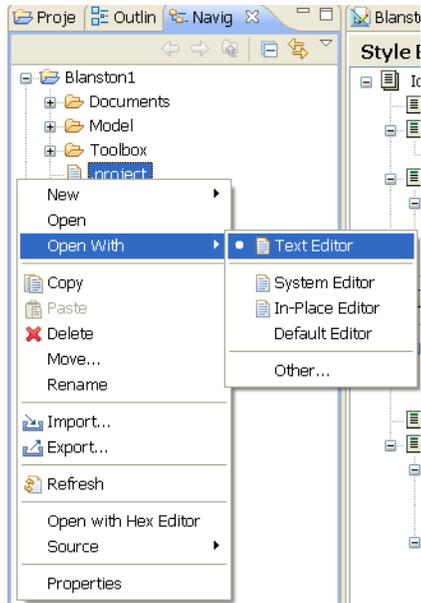
The editor you choose depends on the type of file you select. Designer lists what it considers to be the best editor for the selected file type.

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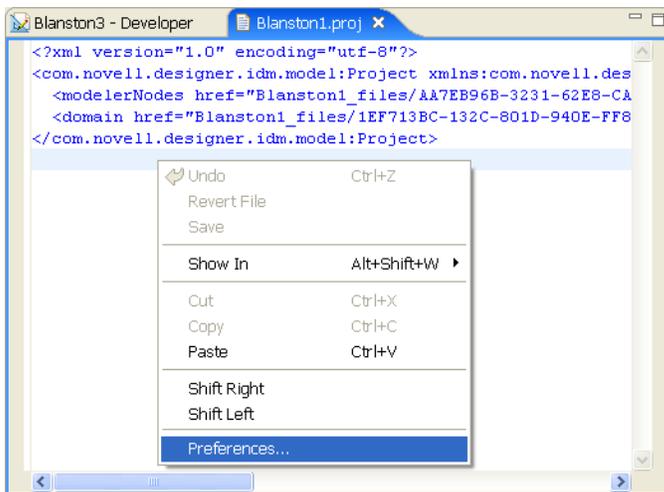
The Preferences window lets you set a text editor's preferences. You get to this window by selecting *Window > Preferences > General > Editors > Text Editors*.

Figure 5-2 *Preferences: Text Editors*
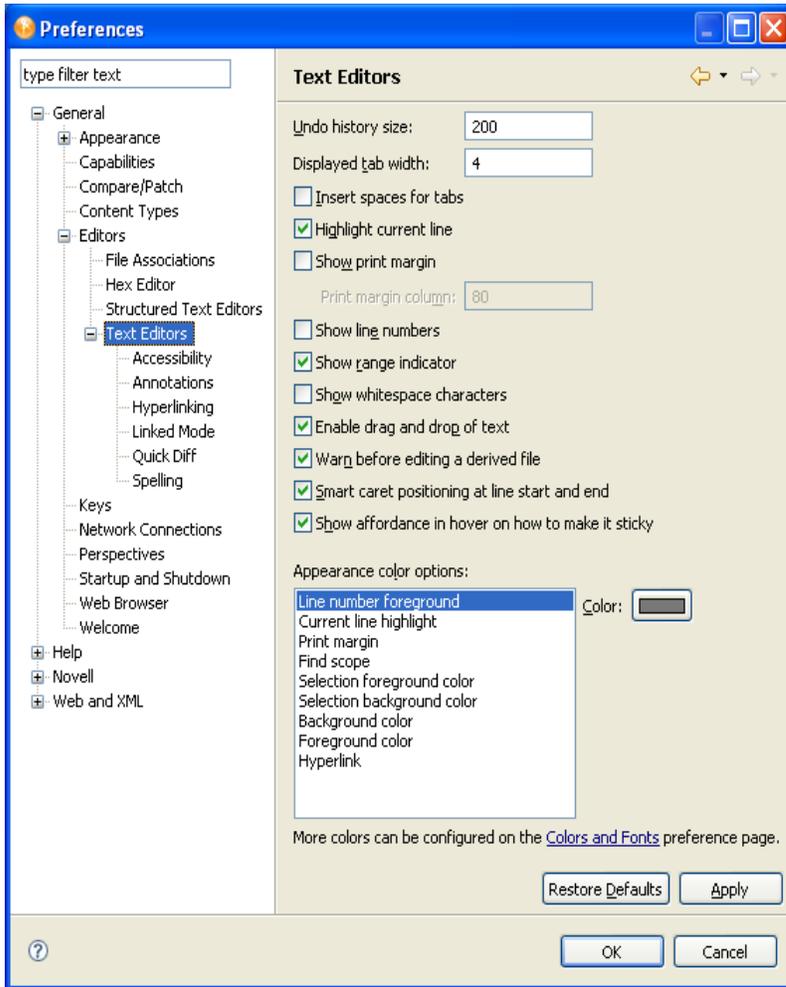
For information on the settings, see "Setting Preferences" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.

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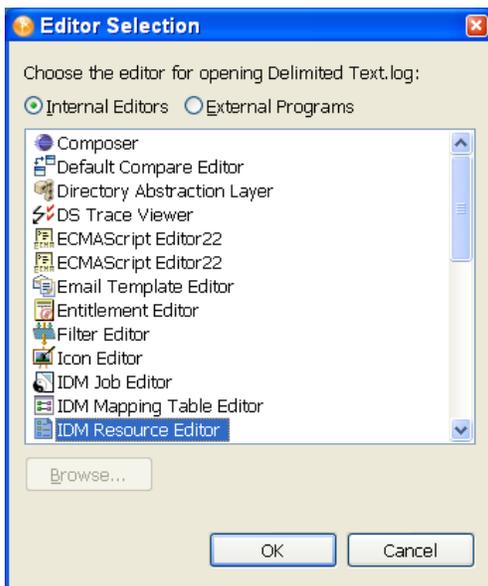
Select an appropriate editor and click *OK*. If you have a particular editor in mind, select *External Programs*, then click *Browse* to select that program.

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
- Integrated 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 in the following list:

- Using the Policy Builder in the Managing Policies with the Policy Builder (http://www.novell.com/documentation/idm36/policy_designer/data/policybuilder.html).

- Action Builder in the *Using Additional Builders and Editors* (http://www.novell.com/documentation/idm36/policy_designer/data/pbactionsbuilder.html).

- Actions Builder in the Using Additional Builders and Editors (http://www.novell.com/documentation/idm36/policy_designer/data/pbactionsbuilder.html).

- Argument Builder in the Using Additional Builders and Editors (http://www.novell.com/documentation/idm36/policy_designer/data/pbargbuilder.html).

- Condition Builder in the Using Additional Builders and Editors (http://www.novell.com/documentation/idm36/policy_designer/data/pbconditionbuilder.html).

- Conditions Builder in the Using Additional Builders and Editors (http://www.novell.com/documentation/idm36/policy_designer/data/pbconditionsbuilder.html).

- Match Attribute Builder in the Using Additional Builders and Editors (http://www.novell.com/documentation/idm36/policy_designer/data/pbmatchbuilder.html).

- Action Argument Component Builder in the Using Additional Builders and Editors (http://www.novell.com/documentation/idm36/policy_designer/data/pbactionargbuilder.html).

- Argument Value List Builder in the Using Additional Builders and Editors (http://www.novell.com/documentation/idm36/policy_designer/data/pbvaluebuilder.html).

- Named String Builder in the Using Additional Builders and Editors (http://www.novell.com/documentation/idm36/policy_designer/data/pbnamedstringbuilder.html).

- Condition Argument Component Builder in the Using Additional Builders and Editors (http://www.novell.com/documentation/idm36/policy_designer/data/pbconditionargbuilder.html).

- Pattern Builder in the Using Additional Builders and Editors (http://www.novell.com/documentation/idm36/policy_designer/data/pbpatternstringbuilder.html).

- String Builder in the Using Additional Builders and Editors (http://www.novell.com/documentation/idm36/policy_designer/data/pbstringbuilder.html).

- XPath Builder in the Using Additional Builders and Editors (http://www.novell.com/documentation/idm36/policy_designer/data/pbxpathbuilder.html).

For more information on builders, see the Managing Policies with the Policy Builder (http://www.novell.com/documentation/idm36/policy_designer/data/policybuilder.html).

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
- Integrated 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 3.5 for Identity Manager 3.6 Administration Guide*.)
- Project Converter Wizard (see "Converting Earlier Projects" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.)
- Identity Manager Project Wizard (see "When No Project Exists" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.)
- Driver Configuration Wizard (see "Selected Drivers" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.)
- Document Generation Wizard (see "Generating a Document" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.)

Planning Identity Solutions

6

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 while you are doing 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, and properties dialog boxes on all objects, Filter editor, Schema Map editor, E-mail Template editor, Policy Builder editor, 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 catch a lot of issues, and is ideal for off-line 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

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 items' 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 back 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:

- Off-line 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 be effective: 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

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

Verifying Files

Before discarding or surplusing a laptop, verify that project files have been cleaned. 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 and 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" 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

A.1 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 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 and not spend so much time on the plumbing, debugging, and fixing the framework.

A.2 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 (based on the OMG UML) and between tools and metadata repositories (OMG MOF based) 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 (Meta Object Facility), 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

<div style="text-align: right; font-size: 3em;">B</div>

Table B-1 *Key Terms 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's 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).
	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 stored in the `\workspace\`*`project name`* directory.
	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.

Icon	Term	Description
	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 whatever the receiving system is (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 stylesheets. XSLT is used instead of DirXML® Script.

Menu Options

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.

C.1 File Menu

Table C-1   *Options: File Menu*

Option	Description
File > New > New Project	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 89.
File > New > Project	Launches the New Projects Wizard. You can also select to create a new document generation style.
File > New > Provisioning	Helps you define directory abstraction layer objects and provisioning request definitions for the user application.
File > New > More Projects	Launches the Identity Manager Projects Wizard.
File > New > More Projects > General > File	Creates a new, empty file resource.
File > New > More Projects > General > Folder	Creates a new folder in the project resource folder.
File > New > More Projects > General > Untitled Text File	Creates an empty, untitled text file in the project folder.
File > New > More Projects > Designer Document Generation > Document Generation Style (.docgen)	Creates a Document Generation style (template).
	NOTE: At least one Designer project must exist before you can create a Document Generation style.

Option	Description
File > New > More Projects > Novell Identity Manager > New Project	Creates an Identity Manager project name and location.
File > New > More Projects > Provisioning > Directory Abstraction Layer Entity	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/dgpro/data/dalchapter.html).
File > New > More Projects > Provisioning > Directory Abstraction Layer List	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/dgpro/data/dalchapter.html).
File > New > More Projects > Provisioning > Directory Abstraction Layer Query	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/dgpro/data/dalchapter.html).
File > New > More Projects > Provisioning > Directory Abstraction Layer Relationship	Specifies the project and application for the new relationship as well as the display name and key for the new relationship.
File > New > More Projects > Provisioning > Provisioning Request Definition	Specifies the basic information from a workflow template of the provisioning request definition.
File > New > More Projects > Provisioning > Provisioning Team	Enables you to define a set of users who can act as a team for the *Requests & Approvals* tab of the User Application. The team definition determines who can manage provisioning requests and approval tasks associated with this team.
File > New > More Projects > Provisioning > Role	Launches the Create a Role Wizard.
File > New > More Projects > Provisioning > Separation of Duties	Launches the Separation of Duties Constraint window, allowing you to set up and identifier and display name to act as a constraint.
File > New > More Projects > XML > XML	Creates a new project XML file with specified project files. See "Web and XML" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
File > Open File	Enables you to browse to and open a text or XML file.
File > Close	Closes the active editor.
File > Close All	Closes all open editors.
File > Save	Saves changes made in the active editor.
File > Save As	Saves changes made in the active editor to a different file.
File > Save All	Saves changes in all editors.

Option	Description
File > Move	Moves a file, folder, or project to a different location in the file system. Only available in the Navigator view.
File > Rename	Renames a file or project. Only available in the Navigator View.
File > Refresh	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.)
File > Print	Prints from an editor.
File > Switch Workspace	Opens another workspace with its projects. This option automatically restarts Designer.
File > Import	Imports resources, projects, or preferences. See "Importing Projects" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
File > Import > Project (From File System)	Imports existing project files from selected directories or archive files.
File > Import > Project (From Identity Vault)	Imports existing projects from specified secure entities after entering the required authentication information.
File > Import > Project (From iManager Export File)	Imports an existing Identity Manager project from an iManager export file (driver set or driver).
File > Import > Project (From Version Control)	Imports a project from a version control server.
File > Export	Exports resources or preferences. See "Exporting a Project" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
File > Export > General > Preferences	Exports preferences to the local file system.
File > Export > Designer for Identity Manager > Export Designer Project	Exports projects to the local file system or to an archive file on the local file system.
File > Export > Designer for Identity Manager > iManager Configuration File	Exports a driver set, driver, channel, or policy to an iManager-compatible configuration file.
File > Properties	Enables you to view the file's full name, date, size, type, and read-only status.
File > History	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.
File > Exit	Closes the application.

C.2 Edit Menu

Table C-2 *Options: Edit Menu*

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

C.3 View Menu

Table C-3 *Options: 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 *Zoom Restore* 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 *Zoom Restore* icon.
Grid	Provides a grid so that you can align items. See "Using a Grid" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
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 *Designer 3.5 for Identity Manager 3.6 Administration Guide*.

Option	Description
Rulers	Turns rulers off and on, to help with alignment and layout. See "Using Rulers" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.

C.4 Project Menu

Table C-4 *Options: Project Menu*

Option	Description
Project > Document > New Style	Generates a new style document for a specified project.
Project > Document > Edit Style	Edits a style document for a project located in the Documentation folder under a project in the Project view.
Project > Document > Generate Documentation	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.
Project > New Project	Launches a new project.
Project > Import Project > File System	Imports an existing project from the file system into Designer from a selected root directory or archive file.
Project > Import Project > Version Control	Imports projects from the version control server.
Project > Import Project > Identity Vault	Imports an existing project from an Identity Vault into Designer.
Project > Import Project > iManager Export File	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.
Project > Export Project	Exports projects to the local file system or to an archive file on the local file system.
Project > Update	Allows you to update a project from a version control server.
Project > Check in	Allows you to check in a project to a version control server.
Project > Copy Project	Allows you to create a copy of a project.
Project > Move	Allows you to move a project from one location to another.
Project > Rename	Allows you to rename a project.

Option	Description
Project > Properties	Enables you to discover where the project is stored in the directory structure and when the project was last modified. Provides information on text file encoding and a line delimiter for Windows, Macintosh*, or UNIX text files.

C.5 Live Menu

Table C-5 *Options: Live Menu*

Option	Description
Live > Manage Directory	Browses specified Identity Vault configurations. See "Configuring Identity Vaults" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Live > DS Trace	Launches DSTrace on the server where the Identity Vault resides.
Live > Import	Imports driver sets, drivers, or applications. Used in the Modeler and in the Outline view. See "Importing a Library, a Driver Set, or Driver from the Identity Vault" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Live > Import Attributes	Imports a driver configuration from an already-saved XML file. See "Importing a Driver Configuration File" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Live > Import Schema	Imports a schema from an Identity Vault.
Live > Deploy	Deploys driver sets, drivers, or applications. Used in the Modeler and in the Outline view.
Live> Deploy Attributes	Deploys attributes to selected objects.
Live> Deploy Schema	Deploys a schema stored in Designer into an Identity Vault.
Live > Compare	Allows you to compare the information structure on an object in Designer to the object that is deployed or running on an eDirectory™ server.
Live > Compare Attributes	Allows you to compare the attributes of a policy to the attributes that are already deployed.
Live > Refresh Application Schema	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 *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Live > Start Driver	Starts an inactive driver. See "Configuring Drivers " in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.

Option	Description
Live > Stop Driver	Stops an active driver.
Live > Restart Driver	Restarts an active driver.
Live > Driver Status	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 *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Live > Create eDir-to-eDir Certificates	Configures two eDirectory drivers to communicate directly with each other. See "Configuring TLS for eDir-to-eDir Drivers" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Live > Set Driver Trace Level	Allows you to specify how much information you want to see in a trace level log from the driver. Settings go from 0-5.
Live > Setup Driver Security	Configures security parameters for drivers.

C.6 Tools Menu

Table C-6   *Options: Tools Menu*

Option	Description
Tools > Manage Directory	Opens an eDirectory browser to view objects and their attributes in a tree. Use this tool only if you understand the intricacies of eDirectory.
Tools > DS Trace	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.
Tools > iManager	Specifies the Novell iManager URL, which is stored in the application preferences folder.
Tools > Export Localization to File	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.
Tools > Import Localization from File	Imports localization data from a project.
Tools > Access User Application	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

Table C-7 *Options: Model Menu*

Option	Description
Model	Accesses the Modeler applications, tools, drivers, and other resources. See "Creating a Model" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Model > Application	Accesses tools to create Designer applications. **NOTE:** Functionality becomes active when objects in the Designer window are clicked.
Model > Application > New	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.
Model > Application > Connection Settings	Configures the VNC connectivity settings for objects created in the Modeler window.
Model > Application > Remote Control Desktop	Configures the remote control desktop of the resource if a VNC server is running on it.
Model > Application > Show Subsystems	Shows or hides an application's subsystems. See "Show/Hide Subsystems" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Model > Application > Notes	Opens the environment properties window in Modeler to document platform, hardware, and other environment notes about objects you create.
Model > Application > Administrator	Opens the administrator properties window in Modeler to document personal and contact information and other notes about objects you create.
Model > Application > Icon	Opens the general properties window in Modeler to create or edit icons you create for Designer objects. See "Driver iManager Icon" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Model > Application > Properties	Opens the general properties window for objects selected in Modeler. See "Configuring Application Properties" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Model > Design Element > New	Instructs you to click the *Architect* tab, click the Design Element drawer in the palette, and drag and drop items into the Modeler.
Model > Design Element > Connection Settings	In Architect mode, launches the Connectivity page for design elements that have VNC connectivity. Enables you to connect to an element or object.

Option	Description
Model > Design Element > Remote Control Desktop	Connects to the application by using the VNC protocol. Displays an editor that you can use to control the application.
Model > Design Element > Administrator	Launches the Design Elements properties page. The Administrator option enables you to capture information about whom to contact concerning the application.
Model > Design Element < Properties	Specifies a design element's properties.
Model > Domain Group > New	Creates a new domain into which selected objects can be grouped in Modeler.
Model > Domain Group > Clear Domain Contents	Clears objects that are contained in a domain.
Model > Domain Group > Add to Group	Adds selected objects to a new group.
Model > Domain Group > Ungroup	Ungroups selected objects contained within a domain without deleting them.
Model > Domain Group > Properties	Specifies properties of domains contained within a group.
Model > Driver > New	Creates a new Driver object, specified from a list of templates.
Model > Driver > Copy > Server-Specific Settings	Copies replica data from one server to another server that is associated with the selected driver.
Model > Driver > Copy > Settings	Copies existing driver settings.
Model > Driver > Simulate	Opens the Simulate Policy Transformation - Entitlements Service Driver Wizard to test the driver's set-up parameters.
Model > Driver > Import from Configuration File	Allows you to browse to and import a driver.
Model > Driver > Log Level	Defines the level of errors that should be tracked and reported in the error log. See "Driver Log Level" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Model > Driver > Global Configuration Values	Specifies settings for Identity Manager features in drivers and driver sets, including password synchronization values, driver heartbeat, and specific driver configuration. See "Driver Set Global Configuration Values" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Model > Driver > Trace Settings	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 3.5 for Identity Manager 3.6 Administration Guide*.

Option	Description
Model > Driver > Named Passwords	Stores multiple passwords securely for each driver, which can be can be referenced in a driver policy. See "Driver Set Named Passwords" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Model > Driver > Driver Configuration	Launches the Driver Configuration Wizard, if a driver is selected.
Model > Driver > iManager Icon	Displays an application's icon used in iManager, if a driver is selected.
Model > Driver > Engine Controls	Displays the Engine Control Values property page. Provides a list of associated servers and authentication credentials.
Model > Driver > Manifest	Specifies what the driver supports, including a few configuration settings. See "Driver Manifest" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Model > Driver > Add Entitlements	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 3.5 for Identity Manager 3.6 Administration Guide*.
Model > Driver > Edit Entitlements	Enables you to change an entitlement's name, values, multi-value, and role-based entitlements.
Model > Driver > Mark as Firewall	Indicates that the selected driver is communicating across a firewall.
Model > Driver > Password Synchronization	Synchronizes passwords between connected systems. See "Integrating Passwords" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide* and "Connected System Support for Password Synchronization".
Model > Driver > Credential Provisioning > Credential Repository	Creates a driver repository.
Model > Driver > Credential Provisioning > Credential Application	Creates a credential application.
Model > Driver > Icon	Displays driver icons, or turns icons on or off. See "Driver iManager Icon" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Model > Driver > Properties	Launches the driver's Properties page.
Model > Driver Set > New	Launches a wizard to create a new driver set.
Model > Driver Set > Copy > Driver Set Settings	Copies existing driver set settings.

Option	Description
Model > Driver Set > Copy > Global Configuration Values	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 *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Model > Driver Set > Import from Configuration File	Imports an Identity Manager driver configuration file into the selected driver set for a project. See "Importing a Driver Configuration File" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Model > Driver Set > Log Level	Defines the level of errors that should be tracked. See "Driver Set Log Levels" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Model > Driver Set > Server List	Displays servers that the driver set is associated with as well as available servers.
Model > Driver Set > Global Configuration Values	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 *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Model > Driver Set > Trace Settings	Sets the trace level to your driver set, which displays the Identity Manager (DirXML) events as the engine processes the events. See "Driver Set Trace" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Model > Driver Set > Properties	Launches the driver set Properties page. See "Viewing Object Properties" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Model > ECMAScript > New	Creates an ECMAScript object.
Model >ECMAScript > New from Copy	Creates an ECMAScript object by copying an existing ECMAScript object.
Model > eDir-to-eDir > New	Launches the eDirectory-to-eDirectory Wizard to create a new connection between two eDirectory objects.
Model > eDir-to-eDir > Secure Connection Settings	Opens the TLS Configuration window to enable SSL/TLS connection settings and encrypted key settings through advanced TLS configuration.
Model > eDir-to-eDir > Disconnect eDir-to-eDir	Disconnects the eDirectory-to-eDirectory connection.
Model > Identity Vault > New	Adds a new server to an Identity Vault.
Model > Identity Vault > Manage Schema	Opens a context-sensitive window to manage schema classes and attributes of the Identity Vault.

Option	Description
Model > Identity Vault > Import from Configuration File	Allows you to browse to and import an Identity Vault.
Model > Identity Vault > Duplicate Template	Opens an e-mail template list that you can duplicate.
Model > Identity Vault > Edit Template	Opens a template list to select and edit an e-mail template.
Model > Identity Vault > E-Mail Server Properties	Launches the e-mail notification server so you can enter notification settings and server authentication credentials.
Model > Identity Vault > Administrator	Opens the Administrator properties window of the identity vault to enter personal and contact information and other optional information.
Model > Identity Vault > Server List	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 *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Model > Identity Vault > Properties	Opens the Properties window for the identity vault to access configuration, administrator, and server list properties. See "Configuring Identity Vaults" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Model > Job > New	Launches the Job Scheduler Wizard, to create a job.
Model > Job > New from Copy	Creates a job by copying an existing job.
Model > Library > New	Launches the New Library Wizard to create a library after you have selected an Identity Vault or a driver set.
Model > Library > Import from Configuration File	Allows you to import a driver into a driver set.
Model > Policy > New DirXML Script	Opens a new Policy Name window to enable you to create XML policy scripts.
Model > Policy > New Schema Mapping	Opens a schema map editor to associate identity objects with associated service drivers. See "Managing the Schema" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Model > Policy > New XSLT	Opens a new Policy Name window to enable you to create Extensible Stylesheet Language Transformation (XSLT) policy scripts.
Model > Policy > New from Copy	Opens the Modeler browser to copy selected existing Driver Set objects.
Model > Policy > Manage Policy	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.

Option	Description
Model > Resource > New	Prompts you to add new resource objects from the Modeler palette. After resource objects are added, you set up connection and control settings.
Model > Server > New	Associates a new eDirectory server or manual server to an Identity Vault.
Model > Select Connected Applications	Selects driver connections between application objects in modeler.
Model > Clear All Items	Enables you to clear all items in a project.
Model > Straighten Connections	Straightens line connections between selected objects in the Modeler.
Model > Distribute	Distributes selected objects in the Modeler either vertically or horizontally.
Model > Align	Aligns selected objects in the Modeler: top, bottom, left, right, center, or middle.
Model > Snapshot to Image File	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

Table C-8 *Options: Window Menu*

Option	Description
Window > New Window	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.
Window > New Editor	Launches a new Designer editor.
Window > Open Perceptive > Other	Toggles among perspectives: Debug, Designer (default), exteNd and Resource.
Window > Show View > Dataflow	Controls the flow of data between objects. See +_ and "Dataflow Mode" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Window > Show View > Navigator	Displays the Navigator view. See Section 4.6, "The Navigator View," on page 60.
Window > Show View > Outline	Provides an outline view of the active editor (Modeler, XML Editor, or a text editor).
Window > Show View > Policy Set	Displays the Policy Set view. When you select a driver in the Modeler, this view displays the driver's policies. See Section 4.7, "Policy Set View," on page 63.

Option	Description
Window > Show View > Project	Displays the main view for manipulating your project. See "Creating a Project" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Window > Show View > Project Checker	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 3.5 for Identity Manager 3.6 Administration Guide*.
Window > Show View > Provisioning View	Displays entities, lists, and organizational charts; used in workflow-based provisioning.
Window > Show View > Search Results	Displays the Search Results view. See also Section 4.9, "The Search Results View," on page 68.
Window > Show View > Tasks	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.
Window > Show View > Trace	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 3.5 for Identity Manager 3.6 Administration Guide*.
Window > Show View > Version Control	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.
Window > Show View > Other > General > Bookmarks	Enables you to see bookmarks that you have set in your text editors.
Window > Show View > Other > General > Console	Displays the Console view.
Window > Show View > Other > General > Internal Web Browser	Enables you to immediately access the Eclipse Web site, or otherwise access the Internet.
Window > Show View > Other > General > Navigator	Displays the Navigator view. See Section 4.6, "The Navigator View," on page 60.
Window > Show View > Other > General > Outline	Displays the Outline view.
Window > Show View > Other > General > Progress	Displays the Progress view.
Window > Show View > Other > General > Problems	Displays the Problems view, with errors and warnings used for troubleshooting.
Window > Show View > Other > General > Project Explorer	Displays the project components.
Window > Show View > Other > General > Properties	Enables you to view and edit settings on the selected object.
Window > Show View > Other > General > Tasks	Enables you to list, prioritize, and track tasks

Option	Description
Window > Show View > Other > Designer for Identity Manager > Dataflow	Controls the flow of data between objects. See "The Dataflow View" and "Dataflow Mode" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Window > Show View > Other > Designer for Identity Manager > eDirectory Browser	Opens an eDirectory Browser window from which you can specify the directory you want to browse. See "Tool-Based Method" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Window > Show View > Other > Designer for Identity Manager > Policy Set	Displays all policies contained in the selected policy set. See Section 4.7, "Policy Set View," on page 63.
Window > Show View > Other > Designer for Identity Manager > Project	Displays the main view for manipulating your project. See "Creating a Project" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Window > Show View > Other > Designer for Identity Manager > Project Checker	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 3.5 for Identity Manager 3.6 Administration Guide*.
Window > Show View > Other > Designer for Identity Manager > Search Results	Displays the Search Results view. See Section 4.9, "The Search Results View," on page 68.
Window > Show View > Other > Designer for Identity Manager > Trace	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 3.5 for Identity Manager 3.6 Administration Guide*.
Window > Show View > Other > Designer for Identity Manager > Version Control	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.
Window > Show View > Other > exteNd > Registry Manager	Launches the Registry Manager view.
Window > Show View > Other > Help > Help	Launches context-sensitive help in the Help view. Help topics depend on which part of the Modeler or Designer is active.
Window > Show View > Other > PDE Runtime > Error Log	Used for troubleshooting. See "Viewing the Error Log" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Window > Show View > Other > PDE Runtime > Plug-in Registry	Displays the plug-in registry. Enables you to see which plug-ins are registered or running. See "Checking Loaded Plug-Ins" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.

Option	Description
Window > Show View > Other > Provisioning	Enables you to view and configure entities, lists, and organizational charts. See "Configuring the Directory Abstraction Layer" (http://www.novell.com/documentation/idm/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).
Window > Show View > Other > Provisioning > Data Item Mapping	Specifies how object attributes are mapped. See "Mapping Identity Vault to an LDAP Schema" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Window > Show View > Other > Provisioning > E-Mail Notification	Displays an e-mail notification map.
Window > Show View > Other > Provisioning > Provisioning	Displays entities, lists, and organizational charts used in workflow-based provisioning.
Window > Show View > Other > XML > XPath Navigator	Supports context-sensitive editing of XPath expressions. Automatically attaches to the currently selected XML editor.
Window > Customize Perspective	Configures the layout of a perspective. Controls menus (New, Open Perspective, and Show View) and action sets that show up on the tool bar. See Section 4.2, "Managing Perspectives," on page 31.
Window > Customize Perspective > Shortcuts	Lists the plug-in shortcuts that you can add as cascade submenus on the current perspective.
Window > Customize Perspective > Shortcuts > Designer Document Generation	Enables addition of a .docgen shortcut to create a new document generation style.
Window > Customize Perspective > Shortcuts > General	Enables selection of shortcuts to create a new file, folder, or empty untitled text file resources.
Window > Customize Perspective > Shortcuts > Novell Identity Manager	Enables the addition of the Identity Manager Project shortcut to create a new project.
Window > Customize Perspective > Shortcuts > Provisioning	Enables selection of shortcuts to create new directory abstraction layer entities, lists, relationships, organizational charts provisioning request definitions.
Window > Customize Perspective > Shortcuts > XML	Enables addition of an XML shortcut.
Window > Customize Perspective > Commands	Alphabetically lists the command group plug-ins that you can add as cascade submenus on the current perspective. The Details 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.

Option	Description
Window > Customize Perspective > Commands > Breakpoints	Adds breakpoints functionality to the menu.
Window > Customize Perspective > Commands > com.novell.designer.idm.actionSet	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.
Window > Customize Perspective > Commands > Debug	Adds Debug plug-in functionality to the menu.
Window > Customize Perspective > Commands > Deploy	Enables the Deploy plug-in command. See "Deploying the Schema into the Identity Vault" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.
Window > Customize Perspective > Commands > Designer	Adds standard Designer commands to the toolbar: Save All, Delete selected object(s), Undo, and Redo.
Window > Customize Perspective > Commands > Designer Projects ActionSet	Adds Designer project import control options to the menu.
Window > Customize Perspective > Commands > Document Generation	Adds *Generate Documentation* icon to the toolbar.
Window > Customize Perspective > Commands > Editor	Adds cut, copy, and paste to the menu and toolbar.
Window > Customize Perspective > Commands > Editor Navigation	Adds Last Edit Location navigation to the menu and toolbar.
Window > Customize Perspective > Commands > Editor Presentation	Adds a toggle to *Show Selected Element Only* on the toolbar.
Window > Customize Perspective > Commands > Generate Documentation	Adds a *Generate Documentation for This Project* icon to the toolbar.
Window > Customize Perspective > Commands > Identity Vault	Adds Identity Vault resource information for a project to the menu.
Window > Customize Perspective > Commands > Insert	Enables the Insert plug-in command.
Window > Customize Perspective > Commands > Keyboard Shortcuts	Adds keyboard shortcuts to the menu.
Window > Customize Perspective > Commands > Launch	Adds Run program functionality to the menu and adds the Launch plug-in to the toolbar.
Window > Customize Perspective > Commands > Manage Objects in a Novell eDirectory Tree	Adds the eDirectory Object Manager to the menu.
Window > Customize Perspective > Commands > Manage Objects in a Novell eDirectory Tree	Adds the *Live > Manage Directory* functionality to the menu.
Window > Customize Perspective > Commands > Open Files	Adds the browse to and open a text or XML file plug-in to the menu.
Window > Customize Perspective > Commands > Profile	Adds the *Run > Profile* tools on the menu and toolbar.

Option	Description
Window > Customize Perspective > Commands > Project Actions	Launches the project snap-in.
Window > Customize Perspective > Commands > Project Checker	Places the *Project Checker* icon on Designer's toolbar.
Window > Customize Perspective > Commands > Resource Navigation	Adds Navigation tools as an option on the menu.
Window > Customize Perspective > Commands > Run the User Application	Adds the Access User Application function as an option on the *Tools* menu.
Window > Customize Perspective > Commands > Tools	Adds the Tools function as an option on the *Project* menu.
Window > Customize Perspective > Commands > Version Control Action Set	Adds the Action Set function as an option on the Web browser toolbar.
Window > Customize Perspective > Commands > View DS Trace Logs	Adds the DS Trace function as an option on the *Tools* menu.
Window > Customize Perspective > Commands > WebBrowser	Adds the Launch Web Browser Wizard to the Web browser toolbar.
Window > Customize Perspective > Commands > WebBrowser	Adds the Launch Web Browser Wizard to the Window menu.
Window > Customize Perspective > Commands > Window Working Set Menu	Adds the Working Set function to the Window drop-down menu.
Window > Customize Perspective > Commands > Window Working Set Toolbar	Adds the Working Set function 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 *View* 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 hotkey.

Option	Description
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 hotkey.
Window > Navigation > Previous Perspective	Allows you to view previous perspectives from a list. Ctrl+Shift+F8 is the hotkey.
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

Window > Preferences	Enables you to customize Designer's behavior in the following categories:
	
	◆ General
	  ◆ Appearance
	  ◆ Editors
	◆ Help
	◆ Novell
	  ◆ Designer
	  ◆ Identity Manager
	  ◆ Provisioning
	◆ Web and XML
	  ◆ CSS Files
	  ◆ HTML Files
	  ◆ JavaScript Files
	  ◆ XML Files
	
	See "Setting Preferences" in the *Designer 3.5 for Identity Manager 3.6 Administration Guide*.

C.9 Help Menu

Table C-9 *Options: Help Menu*

Option	Description
Help > Welcome	Displays the Welcome page. See Section 2.1, "Help from the Welcome Page," on page 19.
Help > Help Contents	Enables you to navigate to and view information on all features and functions in Designer.
Help > Search	Locates instances in the help system and provides links.
Help > Dynamic Help	Provides context-sensitive information.
Help > Key Assist	Lists shortcuts.
Help > Tips and Tricks	Shows tips and tricks pages for Eclipse Java development tools, the Eclipse platform, and Java persistence API tools.
Help > Check for Designer Updates	Enables you to quickly download and install the latest Designer updates.
Help > What's New	Directs you to a Novell Web page that describes new features in Designer.
Help > Designer Readme	Provides updated information on known issues.
Help > Report a Bug or Give Feedback	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.
Help > Identity Manager Forums	Provides a link to Identity Manager product support forums.
Help > Identity Manager Resources	Provides a link to the Designer Resource Page.
Help > About Designer	Provides information about Designer's version, configuration, product, license, and plug-in.