Informix Formation

Installation and Configuration Guide

UNIX and Windows NT

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In This Introduction

This introduction describes the following topics about using this guide:

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- "Informix Welcomes Your Comments" on page 5

Purpose

The Informix Formation Installation and Configuration Guide describes how to install and configure Informix Formation for use on UNIX and Windows NT.

Audience

The intended users of this guide are system and database administrators who plan the database installation, configure the operating system, install the software, and maintain the database environment.

Knowledge of the operating system and basic system administration procedures is assumed.

Organization

This guide contains the following chapters:

- Chapter 1, "Installing Informix Formation Architect," describes how to install Architect.
- Chapter 2, "Installing Informix Formation Flow Engine on Windows NT," describes how to install Flow Engine on Windows NT.
- Chapter 3, "Installing Informix Formation Flow Engine on UNIX," describes how to install Flow Engine on UNIX.

Documentation

The Formation documentation set includes the following documents.

Informix Formation Installation and Configuration Guide	This guide describes how to install and configure Formation on UNIX or Windows NT. This guide is available in print.
Informix Formation User's Guide	This guide describes how to use Formation. This guide is available in print.
Informix Formation Architect Online Help	This online help describes how to use the Architect graphical user interface (GUI) components, including menu items, operators, and visual snippets. The Architect online help is installed as part of Formation as a Microsoft Windows Help (WinHelp) file.
Release Notes	Describes information that was unavailable when the other information was produced. The release notes are available as the file readme.txt on the CD-ROM.

In addition to the Formation documentation set, the following documents may also be useful:

- Documentation for the one or more databases used with Formation, such as the Informix Dynamic Server with Advanced Decision Support Option documentation set
- Documentation for your hardware and operating system platforms

Conventions

This guide uses the following typographical conventions.

Convention	Meaning
KEYWORD	All primary elements in a programming language statement (keywords) appear in uppercase letters in a serif font.
italics	Within text, new terms and emphasized words appear in italics. Within syntax and code examples, variable values that you are to specify appear in italics.
boldface	Names of program entities (such as classes, events, and tables), environment variables, file and pathnames, and interface elements (such as icons, menu items, and buttons) appear in boldface.
monospace	Information that the product displays and information that you enter appear in a monospace typeface.

This	guide	uses	the	fol	llow	/ing	icon	conv	entions.
11110	Sarac	abob	CIIC	101		·	10011	COII	CIICIOIID.

Icon	Label	Description
\Rightarrow	Important:	Identifies paragraphs that contain significant information about the feature or operation that is being described
	Tip:	Identifies paragraphs that offer additional details or shortcuts for the functionality that is being described

Informix Welcomes Your Comments

To help us with future versions of our guides, we want to know about any corrections or clarifications that you would find useful. Include the following information:

- The name and version of the guide
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We appreciate your suggestions.

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In This Chapter

This chapter explains the following topics about installing Informix Formation Architect on Windows NT:

- "Preparing for Installation," next
- "Installing Architect" on page 1-6

Preparing for Installation

Before installing Architect, verify that your system has the necessary hardware and software, and that user privileges are adequate for the account used to install and run Architect.

If you are upgrading from a previous version of Formation, you should also perform the upgrade tasks before beginning the installation.

The following subsections describe each of these topics in detail:

- "Hardware Requirements," next
- "Software Requirements" on page 1-4
- "User Privilege Requirements" on page 1-4
- "Upgrading from Previous Architect Versions" on page 1-5

Hardware Requirements

To install and run Architect, your hardware must meet the following minimum requirements:

Computer processor running at 133 MHz or higher

- Computer with 64 megabytes or more of RAM memory (96 megabytes recommended)
- Computer with 80 megabytes or more of free disk space on the hard disk where the software will be installed (100 megabytes recommended)
- VGA monitor that supports a resolution of 800 by 600 or better

Software Requirements

The computer on which Architect will be installed should have the following software:

- Windows NT Server Version 4.0 with Service Pack 3 or Windows NT Workstation Version 4.00 with Service Pack 3
- Microsoft Explorer 3.0 or 4.0
- ODBC Administrator (only if you plan to import database schemas from Red Brick Warehouse or other supported databases)
- If you plan to import database schemas from databases, you should have the ODBC Administrator installed as well as the ODBC drivers listed in the following table for the appropriate database.

Database	ODBC Driver to Import Schema
Informix Dynamic Server	Intersolv 3.11 Informix ODBC driver
Informix Dynamic Server with Advanced Decision Support Option	Intersolv 3.11 Informix ODBC driver
Microsoft SQL Server	Native SQL Server ODBC driver
Oracle7 Server	Intersolv 3.11 Oracle ODBC driver
Oracle8 Server	Intersolv 3.11 Oracle ODBC driver
Red Brick Warehouse	Red Brick Client Connectivity Pack 1.0.6, which includes the Red Brick 32-bit ODBC driver

User Privilege Requirements

The account from which you install or use Architect must have Administrator access. This level of access is required to start services used by the software.

Upgrading from Previous Architect Versions

If you previously installed Architect 1.3 or 1.4 Beta, you should perform the following tasks prior to installing Architect 1.4.

Important: When you upgrade, you must upgrade all Architect and Flow Engine installations. Using a Version 1.3 or 1.4 Beta Architect or Flow Engine with a 1.4 Architect or Flow Engine is not supported.

To upgrade Architect:

- 1. Export any workspaces you want to retain using the Workspace Manager dialog box. By default, the exported workspaces are placed in the **\Exports** subdirectory of the Architect root directory.
 - The Samples workspace is replaced as part of the installation, so you do not need to export it. If you do export the 1.3 or 1.4 Beta Samples workspace, when you import it you will need to give it a name other than Samples.
- 2. Uninstall Architect using the Add/Remove Programs applet in the Control Panel. Once the uninstallation procedure completes, reboot the computer as recommended by the uninstall procedure dialog.
- 3. Manually remove the files and directories remaining in the **Userdb** subdirectory of the Architect root directory after the uninstallation procedure completes.
- 4. Install Architect in the previously used location or in another location.
- Import the workspaces you previously exported so that they are again available.
 - Because of differences in the underlying metadata of Formation 1.3 and Formation 1.4, large workspaces may take a significant amount of time to import while they are converted to the 1.4 format. For example, a large 60 megabyte workspace file from Formation 1.3 could take 10 hours to import into Formation 1.4.



Once you have imported your jobs, you may find the following problems:

- Jobs that contain visual snippets that have integer values being input to text manipulation functions may now have validation errors. This has been caused by more restrictive handling of text conversion as part of the addition of the Multibyte Text data type. To correct the validation problem, review the problem and correct it as you would any other validation problem.
- Jobs that contain data stores, tables, records or fields that have names beginning with a number cannot be modified until you rename them. Formation 1.4 does not allow these items to be named with an initial number, and if you modify these items you must also change the names to begin with an alphabetic character.

Installing Architect



Important: You must have **Administrator** privileges to complete the installation procedure. Exit all other applications before installing Architect.

To install Architect:

- 1. Log on as the user who will be running the software after installation. If you will be running the software while logged onto a network, you should be logged onto that network when installing the product.
- 2. Insert the Architect CD-ROM.
- 3. Run the **setup.exe** setup program. This file is located in the topmost directory of the CD-ROM. For example, if your CD-ROM has a disk label of E, then the following would be the location of the setup program:

E:\setup.exe

Read the Welcome. This dialog box is displayed after an initial window has been displayed for a few moments.

If any other applications are running, exit the applications before continuing the installation.

Click **Next** to continue the installation.

5. Read the Software License Agreement.

Click **Yes** to accept the agreement and continue the installation.

Read the Choose Destination Location information. 6.

Accept the default installation directory that is displayed in the Destination Folder area, or select your own installation directory by clicking the **Browse** button.

Important: You must have 80 megabytes or more of free space in the directory location you specify.

Click **Next** to continue the installation.

7. Read the Select Program Folder information.

> Select an existing folder for Architect from the Existing Folders area or enter a new folder name in the **Program Folders** area.

Click **Next** to continue the installation. The installation procedure now copies and installs the Architect files.

Read the Setup Complete information that displays when the instal-8. lation completes.

The Setup Complete information states that you must reboot the computer before you start using Architect. Rebooting the computer will start services installed by the Architect installation.

Important: Before rebooting your computer, remove any media that may be in a bootable drive, such as a floppy disk in a floppy drive.

> Click the default button labeled Yes, I want to restart my computer **now** to reboot the computer.

Click the button labeled **No**, **I will restart my computer later** to reboot the computer later.

Click the **Finish** button to exit the installation procedure.

You have now completed the installation procedure for Architect. As a result of this installation, the environment variable RBF_LOCALE has been defined. This environment variable indicates where the Architect locale information is stored. This environment variable should be set to the \locale subdirectory of the Architect installation directory, as in the following example:

C:\Program Files\Informix\Formation\locale

You can now install Flow Engine or use Architect by selecting **Informix** Formation Architect from the Windows NT Start menu.







Important: You must install Flow Engine before you can run a job created with Architect.

For information on installing Flow Engine on Windows NT, refer to Chapter 2, "Installing Informix Formation Flow Engine on Windows NT."

For information on installing Flow Engine on UNIX, refer to Chapter 3, "Installing Informix Formation Flow Engine on UNIX."

Installing Informix Formation Flow Engine on Windows NT

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This chapter explains the following topics about installing Informix Formation Flow Engine on Windows NT:

- "Preparing for Installation," next
- "Installing Flow Engine" on page 2-5
- "Configuring the Flow Engine Environment" on page 2-6

Preparing for Installation

Before installing Flow Engine, verify that your system has the necessary hardware and software, and that user privileges are adequate for the account used to install and run Flow Engine.

If you are upgrading from a previous version of Formation, you should also perform the upgrade tasks before beginning the installation.

The following subsections describe each of these topics in detail:

- "Hardware Requirements," next
- "Software Requirements" on page 2-4
- "User Privilege Requirements" on page 2-4
- "Upgrading from Flow Engine 1.3" on page 2-4

Hardware Requirements

To install and run Flow Engine your hardware must meet the following minimum requirements:

■ Computer processor running at 150 MHz or higher

- Computer with 64 megabytes or more of RAM memory (96 megabytes recommended)
- Computer with 80 megabytes or more of free disk space on the hard disk where the software will be installed (100 megabytes recommended)

Software Requirements

The computer on which Flow Engine will be installed should have the following software:

- Windows NT Server Version 4.0 with Service Pack 3 or Windows NT Workstation Version 4.00 with Service Pack 3
- Microsoft Visual C++ Professional Edition, Version 6.0

User Privilege Requirements

To use Flow Engine, the account you choose for installing and running the software must have Administrator access. This level of access is required to start the services used by the software, such as the Informix Formation Log Utility.

Upgrading from Flow Engine 1.3

To upgrade Flow Engine:

- 1. Stop the Formation Log Utility and copy any log files you want to keep from the /log directory to another directory that is not a subdirectory of the Flow Engine installation directory.
- 2. Install Flow Engine in the previously used location or another location.
- If any log files were moved, copy them back to their original locations in the Flow Engine installation directory.

Important: No Formation 1.3 job files will run with the Formation 1.4 Flow Engine. All 1.3 jobs must be exported from the Formation Architect 1.3, imported to Formation Architect 1.4 and have their job files regenerated.





Installing Flow Engine

Important: You must have **Administrator** privileges to complete the installation. Exit all other applications before installing Flow Engine.

To install Flow Engine on Windows NT:

- Log on as the user who will be running the software after installation. If you will be running the software while logged onto a network, you should be logged onto that network when installing the product.
- 2. Insert the Flow Engine for Windows NT CD-ROM.
- 3. Run the **setup.exe** setup program. This file is located in the **\nt** directory of the CD-ROM. For example, if your CD-ROM has a disk label of E, then the following would be the location of the setup program:

E:\nt\setup.exe

4. Read the Welcome. This dialog box is displayed after an initial window has been displayed for a few moments.

If any other applications are running, exit the applications before continuing the installation.

Click **Next** to continue the installation.

- Read the Software License Agreement.Click Yes to accept the agreement and continue the installation.
- 6. Read the Choose Destination Location information.

Accept the default installation directory that is displayed in the **Destination Folder** area, or select your own installation directory by clicking the **Browse** button.

Important: You must have 80 megabytes or more of free space in the directory location you specify.

Click **Next** to continue the installation. The installation procedure will now copy and install the Flow Engine files.



Read the Setup Complete information that displays when the installation completes.

The Setup Complete dialog box states that you must restart the computer before you start using Flow Engine. Restarting the computer will start services installed by Flow Engine.

Click the default button labeled **Yes**, **I want to restart my computer now** to restart the computer.

Click the button labeled **No**, **I will restart my computer later** to restart the computer later.

Click the **Finish** button to exit the installation procedure.

You have now completed the installation procedure for Flow Engine for Windows NT. You may now build and run jobs created using Architect.

For information on installing Architect on Windows NT, refer to Chapter 1, "Installing Informix Formation Architect."

For information on installing Flow Engine on UNIX, refer to Chapter 3, "Installing Informix Formation Flow Engine on UNIX."

For information on creating, building, and running a job, refer to the *Informix* Formation User's Guide.

Configuring the Flow Engine Environment

Once you have restarted the computer on which Flow Engine was installed, you should perform the configuration tasks described in the following sections:

- "Verifying Environment Variable Values," next
- "Using with Informix Dynamic Server with Advanced Decision Support Option" on page 2-8

Verifying Environment Variable Values

The following table lists the environment variable values that must be verified or defined in order to run Flow Engine jobs.

Environment Variable	Description
RBF_BUILD_OPTION	Specifies an internal value. Do not modify or use.
RBF_CONFIG	Specifies the directory containing the rbf.config file. This file contains configuration information for Formation. Note that on Windows NT, the path specified as the value to this environment variable must be specified using UNIX-style slashes rather than Windows NT slashes.
	The following is the default value:
	C:/PROGRA~1/INFORM~1/FORMAT~1/server/
RBF_HOME	Specifies the directory where Flow Engine was installed. Note that on Windows NT, the path specified as the value to this environment variable must be specified using UNIX-style slashes rather than Windows NT slashes.
	The following is the default value:
	C:/PROGRA~1/INFORM~1/FORMAT~1/server/
RBF_HOST	Specifies a name used to identify the Formation Log Utility process. By default this name is the name of the computer on which Flow Engine is installed. Note that this environment variable has nothing to do with the network.
RBF_ORACLE	Specifies the version of the Oracle Server interface that the Formation product uses.
	Set this environment variable to 7 to indicate that Oracle7 Server will be used. Set this environment variable to 8 to indicate that Oracle8 Server will be used.

Using with Informix Dynamic Server with Advanced Decision Support Option

When running jobs on Windows NT that access data in Informix Dynamic Server with Advanced Decision Support Option, you need to verify that the following environment variables are properly defined:

- INFORMIXDIR
- **INFORMIXSERVER**
- ONCONFIG

You should also verify that \$INFORMIXDIR\bin has been added to your path. For more information on the correct settings of these environment variables, see the Dynamic Server with AD Option documentation.

Installing Informix Formation Flow Engine on UNIX

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In This Chapter

This chapter explains the following topics about installing Informix Formation Flow Engine on Hewlett-Packard HP-UX and Sun Solaris UNIX:

- "Preparing for Installation," next
- "Installing Flow Engine" on page 3-5
- "Configuring the Flow Engine Environment" on page 3-8

Preparing for Installation

Before installing Flow Engine, verify that your system has the necessary hardware and software, and that user privileges are adequate for the account used to install and run Flow Engine.

If you are upgrading from a previous version of Formation, you should also perform the upgrade tasks before beginning the installation.

The following subsections describe each of these topics in detail:

- "Hardware Requirements," next
- "Software Requirements" on page 3-4
- "User Privilege Requirements" on page 3-4
- "Upgrading from Flow Engine 1.3" on page 3-5

Hardware Requirements

To install and run Flow Engine, your hardware must meet the following requirements:

- Be one of the following types of computers:
 - Hewlett-Packard HP 9000/700 or 9000/800 computer running HP-UX
 - Sun Microsystems Sun SPARC or UltraSPARC computer running Sun Solaris
- Have a minimum of 128 megabytes of RAM on the computer on which the software will be installed, or the minimum memory required by the operating system or compiler, whichever is greater (1024 megabytes recommended).
- Have a minimum of 80 megabytes of free disk space on the computer on which the software will be installed (100 megabytes recommended).

Software Requirements

The computer on which Flow Engine will be installed should have the following software:

- On Hewlett-Packard computers:
 - HP-UX Version 10.20 or 10.30 operating system
 - aCC Version 1.12 C++ compiler
- On Sun Microsystems computers:
 - Sun Solaris version 2.5.1 or 2.6 operating system
 - Sun Solaris C++ Workshop version 4.2 compiler with the libC.so Patch 101242

User Privilege Requirements

To install Flow Engine, you will need superuser or root privileges.

Upgrading from Flow Engine 1.3

To upgrade Flow Engine:

- Stop the Formation Log Utility and copy any log files you want to keep from the /log directory to another directory that is not a subdirectory of the Flow Engine installation directory.
- 2. Install Flow Engine in the previously used location or another location. If you are installing Flow Engine in the previously used location, delete all files and directories in that location before you install.
- If any log files were moved, copy them back to their original locations in the Flow Engine installation directory.

Important: No Formation 1.3 job files will run with Formation 1.4 Flow Engine. All 1.3 jobs must be exported from Formation Architect 1.3, imported to Formation Architect 1.4 and have their job files regenerated.

Installing Flow Engine

To install Flow Engine on UNIX, perform the steps described in the following sections:

- "Mounting the CD-ROM Device," next
- "Running the Installation Script" on page 3-6
- "Unmounting the CD-ROM Device" on page 3-8

Mounting the CD-ROM Device

This section describes the procedure for mounting the CD-ROM device. You must be the superuser to mount and unmount the CD-ROM device. When you have completed the installation, you can unmount the CD-ROM device to make it available for other uses.



Tip: If you need additional information about mounting your CD-ROM device, refer to your operating system documentation.



Use the appropriate platform **mount** command to mount your CD-ROM device:

Platform	Mount Command
HP-UX	\$ /usr/sbin/mount -F cdfs -o cdcase device_name/cdrom
Solaris	No mount command is needed; mounting occurs automatically when the CD-ROM is inserted into the device. The Logical Volume Manager must be running.

In the previous table, *device_name* is the name of your CD-ROM device, and /cdrom is an existing directory where you want to mount the device.

Running the Installation Script

Use the **install.sh** script to install Flow Engine on UNIX. You can run this script as any user; however, the user account that executes the script will be the owner of the executable files that are installed.

Begin the installation by entering the following command:

```
$ /cdrom/platform_name/install.sh
```

In the previous example, the variables have the following meanings:

- /cdrom is the directory where the CD-ROM device is mounted
- /platform_name is the appropriate operating system platform from the following table:

Platform	platform_name Value
HP-UX Version 10.20 or 10.30	Hpx10
Solaris	Sol

For example, if your platform is HP-UX Version 10.20, enter:

\$ /cdrom/Hpx10/install.sh



Important: You must specify the full pathname to the **install.sh** file and should not move the install.sh file to any other directory.

> Once started, the installation script displays copyright information for Informix Formation Flow Engine 1.4.

2. Specify whether you have Informix Dynamic Server with Advanced Decision Support Option or Informix Dynamic Server installed on this computer.

If you have either database installed, answer y (for yes) to the installation script question and specify the following about the database in response to the installation script questions:

- The directory where the database server is installed (this is the directory indicated by the **INFORMIXDIR** environment variable)
- The name of the server (this is the same name indicated by the **INFORMIXSERVER** environment variable)

If you do not have Advanced Decision Support Option or Dynamic Server installed, answer **n** (for no) to this question.

Specify whether you have a Red Brick Warehouse database installed 3. on this computer.

If you have a Red Brick Warehouse database installed, answer y to the installation script question and specify the following about the database in response to the installation script questions:

- The full directory path to where Red Brick Warehouse is installed
- The value of the Red Brick Warehouse environment variable RB_HOST
- The value of the Red Brick Warehouse environment variable RB_PATH

If you do not have a Red Brick Warehouse database installed, answer **n** to this question.

- Specify the location to install Flow Engine. This location must have a minimum of 80 megabytes of disk space available.
 - After you specify the location in which to install Flow Engine, a summary of the installation setup is displayed.
- 5. Confirm that the information you have entered is correct by entering y. Answer **n** if any information you have provided is incorrect. You will be given the chance to correct the information.

If the installation directory you indicated does not exist, you will be 6. asked to confirm that you want that directory created.

Answer **n** if you do not want the directory created.

Answer **y** if you want the directory created.

No more questions are asked, and the installation begins to uncompress and copy files.

7. The installation completes.

> At the end of the installation, you are instructed to source the file set_rbffe_environment.sh or set_rbffe_environment.csh.

For information on how to do this, refer to "Verifying Environment Variable Values" on page 3-9.

Unmounting the CD-ROM Device

To unmount your CD-ROM device, use the appropriate command for your platform from the following table:

Platform	Unmount Command
HP-UX	\$ /usr/sbin/umount <i>device_name</i>
Solaris	eject cdrom

In the previous table, *device_name* is the name of your CD-ROM device.

Configuring the Flow Engine Environment

The following subsections describe actions that need to be performed by Flow Engine users:

- "Verifying Environment Variable Values," next
- "Starting the Log Utility" on page 3-10
- "Using with Oracle Server" on page 3-12

- "Using with ODBC" on page 3-13
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Verifying Environment Variable Values

To run a job on UNIX, the environment variable RBF_HOME must be defined to be the directory where Flow Engine is installed. Typically this variable is defined in the user's shell startup script. The shell startup script is the **\$HOME/.cshrc** script for C shell users and the **\$HOME/.profile** script for Bourne and Korn shell users. For example, if Flow Engine is installed in the **/opt/FlowEngine** directory, a C shell user adds the following to the user's .cshrc file:

```
setenv RBF_HOME = /opt/FlowEngine
```

In addition, the user must define other environment variables. To define the additional environment variables, the user must use one of the following scripts created in the RBF_HOME directory during the installation of Flow Engine. These scripts contain the same information but are different so they can work with different UNIX shells:

- **set rbffe environment.csh** is used with the C shell
- **set_rbffe_environment.sh** is used with the Bourne or Korn shell

To use the **set_rbffe_environment.csh** script using the C shell, issue the following command, or place the command in your .cshrc or .login file:

```
source $RBF HOME/set rbffe environment.csh
```

To use the **set_rbffe_environment.sh** script using the Bourne or Korn shell, issue the following command, or place the command in your **.profile** file:

```
. $RBF HOME/set rbffe environment.sh
```

Important: Architect uses only the **set_rbffe_environment.sh** file when remotely building Formation job files. Only modifications to this file will be used by Architect. Modifications to the **set_rbffe_environment.csh** file will not be used by Architect.



The following table lists the environment variables and their default values when they have been defined as described.

Environment Variable	Description
LD_LIBRARY_PATH	Specifies the \lib subdirectory of the directory indicated by RBF_HOME .
RBF_BUILD_OPTION	Specifies an internal value. Do not modify or use.
RBF_CONFIG	Specifies the directory containing the rbf.config file. This file contains configuration information for the Formation product. By default, this is the same directory where Flow Engine was installed.
RBF_HOME	Specifies the directory where Flow Engine was installed.
RBF_HOST	Specifies an optional name used to identify the Formation Log Utility process. If this environment variable is not defined, the name is RBF_HOST . Note that this environment variable has nothing to do with the network.
RBF_ORACLE	Specifies the version of the Oracle Server interface used by the Formation product. When used with Oracle8 Server, the value of this environment variable should be 8. When used with Oracle7 Server, the value of this environment variable should be 7.

Starting the Log Utility

The Log Utility is implemented as a log daemon process (**rbflogd**) that handles log request messages issued by Formation jobs when various events occur. The Formation log daemon is controlled by executing several scripts that are installed in the /bin subdirectory of the directory in which you installed Flow Engine.

Once Flow Engine is installed, the Log Utility should be started to make it available to Flow Engine users on that system. Typically, the Log Utility should be restarted whenever the system is restarted. Once started, the Log Utility is available to any Flow Engine user on the system.

The following two tables list the scripts used to control the Formation Log Utility daemon, and the parameters to those scripts.

То	Do the Following
Start a Formation Log Utility daemon	Run the rbf.start script. The rbf.start script has the following syntax:
	rbf.start config-dir host-name
	When running this script, you must provide both parameters. These parameters are described in the following table. If the RBF_CONFIG and RBF_HOST environment variables are defined, the script can be specified as follows:
	rbf.start \$RBF_CONFIG \$RBF_HOST
Stop a Formation Log	Run the rbf.stop script. The rbf.stop script has the following syntax:
Utility daemon	rbf.stop host-name
	When running this script, you must provide the <i>host-name</i> parameter. This parameter is described in the following table. If the RBF_HOST environment variable is defined, the script can be specified as follows:
	rbf.stop \$RBF_HOST
Show one or all Formation Log	Run the rbf.show script. The rbf.show script has the following syntax:
Utility daemons	rbf.show [-n host-name]
	When running this script, if you do not specify a parameter, all running Formation Log Utility daemons are listed. If you provide the -n option with the <i>host-name</i> parameter, only the named Formation Log Utility daemon is listed. If the RBF_HOST environment variable is defined, the script can be specified as the following to display a single named daemon:
	rbf.show -n \$RBF_HOST
	To display all running Formation Log Utility daemons, specify the script as follows:
	rbf.show

The following table describes the options and parameters used in the previous syntax statements for the **rbf.start**, **rbf.stop**, and **rbf.show** scripts.

Option or Parameter	Description
config-dir	Specifies the directory where the rbf.config file is located. This should be the same directory indicated by the environment variable RBF_CONFIG .
host-name	Specifies the name given to the log daemon. This should be the name specified by the environment variable RBF_HOST .
-n host-name	Specifies the name given to the log daemon with the rbf.show script.

Using with Oracle Server

Before a job can access data in an Oracle Server database, the following tasks must be performed.

If you are using Oracle8 Server on UNIX, you must ensure that the LD_LIB_PATH environment variable includes \$ORACLE HOME\lib in the account that will run Formation jobs.

If you are using either Oracle7 Server or Oracle8 Server on UNIX, you must combine the libraries used by Flow Engine with those used by the Oracle Server software. The following is the process for combining those libraries:

- 1. Verify that the following conditions are true:
 - The Flow Engine environment variable **RBF_HOME** is defined as the location where Flow Engine is installed.
 - You have write privileges to the **\$RBF_HOME/lib** directory.
 - The Flow Engine environment variable RBF_ORACLE is defined to be 7 or 8, whichever is appropriate for your database.
 - The Oracle Server environment variables ORACLE HOME and **ORACLE_SID** are defined correctly. For information on the correct value, see your Oracle Server documentation.

- 2. Change directory to a temporary directory that has 5 megabytes or more of available space, such as the /tmp directory. This space is needed as working space during the creation of the combined libraries.
- 3. Combine libraries from Flow Engine with those from the Oracle Server software by entering the following command:

```
make -f $RBF_HOME/setup/setupOracle.mk
```

The previous command creates a static library named libdwmOracleKit.a.

Users can now create and run jobs that access Oracle Server databases.

Using with ODBC

Before a job can be run on UNIX that accesses data using ODBC, the following tasks must be performed:

- 1. Set the value of the **ODBC HOME** environment variable to be the directory where the ODBC drivers are installed.
- Copy the file **odbc.ini** from the **ODBC_HOME** directory to the home 2. directory of the account from which you will run the job.
- 3. Rename the file **odbc.ini** to **.odbc.ini** in the account from which you will run the job. This file is now the ODBC configuration file for this account.
- 4. Define the data source in the .odbc.ini file and then use that data source as the value to the Data Source parameter in the ODBC Import or ODBC Export operators.

The following is a sample data source definition in the file **.odbc.ini**:

```
[Informix]
Driver=/devel/local/smith/odbc/lib/ivinf13.so
Description=Informix7
Database=odbc
HostName=informixhost
LogonID=odbc01
Password=odbc01
```

Using with Informix Dynamic Server with Advanced Decision Support Option

Before a job can be run on UNIX that accesses data in Informix Dynamic Server with Advanced Decision Support Option, you must configure an ODBC data source that is passed as the Data Source parameter to the Informix DS AD Export and Informix DS AD Import operators.

The ODBC connection to the database sends the SQL statements that start the Advanced Decision Support Option loader. Once the loader is started, all data is transmitted directly between Formation and the loader; no data is transmitted using the ODBC connection.

Use the Informix-CLI ODBC drivers to access the Advanced Decision Support Option database. For more information on defining and using those drivers with Advanced Decision Support Option database, see the Advanced Decision Support Option documentation.

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