BladeManager

User’s Guide

Version 3.3
May 1997
Part No. 000-3844

Published by INFORMIX® Press

Informix Software, Inc.
4100 Bohannon Drive
Menlo Park, CA 94025-1032

ACKNOWLEDGMENTS

Documentation Team: Michael Kline, Charly Litzell, Juliet Shackell, Debbi Landshoff, Kim Bostrom, Bob Nowacki, Daniel Howard

Contributors: Pete Ferreira, David Marsyla, Kristin Pinnatore, Guraraj Ramarao, Alan Teague

To the extent that this software allows the user to store, display, and otherwise manipulate various forms of data, including, without limitation, multimedia content such as photographs, movies, music and other binary large objects (blobs), use of any single blob may potentially infringe upon numerous different third-party intellectual and/or proprietary rights. It is the user's responsibility to avoid infringements of any such third-party rights.

Table of Contents

Introduction

Chapter 1 About BladeManager

Chapter 2 Graphical User Interface

Chapter 3 Text Interface

Index

Introduction

This chapter introduces the *BladeManager User's Guide*. Read this chapter for an overview of the information provided in this manual and for an understanding of the conventions used throughout this manual.

About This Guide

This guide explains how to use BladeManager to manage DataBlade modules in Informix databases. BladeManager runs on client machines and requires a connection to INFORMIX-Universal Server.

Organization of This Guide

The *BladeManager User's Guide* includes the following chapters:

- This Introduction provides an overview of the contents of the guide, describes documentation conventions used, and lists additional books to supplement the information in the *BladeManager User's Guide*.
- Chapter 1, "About BladeManager," explains the basic concepts and operations of BladeManager.
- Chapter 2, "Graphical User Interface," describes how to use the Windows-based graphical user interface to BladeManager.
- Chapter 3, "Text Interface," describes how to use the UNIX-based text interface to BladeManager.

Types of Users

BladeManager is for database administrators who register DataBlade modules for use in a database. It is also for DataBlade module developers who register DataBlade modules during the development process.

Hardware and Software Requirements

The BladeManager application is available as both a graphical user interface and a text-only interface.

The BladeManager graphical user interface runs on personal computers with Intel processors running the Windows NT 4.0 or Windows 95 operating systems.

The text-only interface runs on both Windows and UNIX computers.

BladeManager connects to an INFORMIX-Universal Server.

Conventions

This section describes the conventions used in this guide. By becoming familiar with these conventions, you can more easily gather information from this guide.

The following conventions are discussed:

- Typographical conventions
- Comment icon conventions
- Screen illustration conventions

Typographical Conventions

The *BladeManager User's Guide* uses a standard set of typographical conventions to introduce new terms, illustrate screen displays, and so forth. The following typographical conventions are used throughout this guide.

Convention	Meaning
italics	Within text, new terms and emphasized words are shown in italics. In command descriptions, metavariables that you must replace with actual data are also shown in italics.
boldface	Identifiers, filenames, database names, menu items, command names, and other similar terms are shown in boldface.
`monospace`	Information that programs display, information that you enter, and program code examples are printed in a monospace typeface.
KEYWORD	All keywords appear in uppercase characters.

Icon Conventions

Throughout this guide, comment icons identify three types of information, as described in the following table.

Icon	Description
⚠	The *warning* icon identifies vital instructions, cautions, or critical information.
⇨	The *important* icon identifies significant information about the feature or operation that is being described.
💡	The *tip* icon identifies additional details or shortcuts for the functionality that is being described.

The information in these paragraphs is always displayed in italic text.

Screen-Illustration Conventions

The illustrations in this manual represent a generic rendition of various windowing environments. The details of dialog boxes, controls, and windows have been deleted or redesigned to provide this generic look. Therefore, the illustrations in this manual depict BladeManager a little differently than the way it appears on your screen.

Additional Resources

This section lists resources that contain information supplemental to this guide.

On-Line Help

While this manual describes the overall process for registering and unregistering DataBlade modules, the on-line help associated with BladeManager for Windows provides detailed descriptions for the contents of each screen.

Related Reading

For additional information on developing DataBlade modules, consult the following books:

- *DataBlade Developers Kit User's Guide*
- *DataBlade Developers Kit Release Notes*
- *Informix Guide to SQL: Tutorial*
- *Informix Guide to SQL: Syntax*
- *DataBlade API Programmer's Manual*
- *INFORMIX-Universal Server Administrator's Guide*

DataBlade Developers Program Registry

The Informix DataBlade Development group maintains a registry of object name prefixes and error codes across all DataBlade modules. The registry ensures that object names and error codes are unique so that any combination of DataBlade modules can coexist in a database. To obtain a unique object name prefix and a range of error codes for your DataBlade module, contact the Informix DataBlade Development group by sending email to registry@informix.com.

Informix Welcomes Your Comments

Please tell us what you like or dislike about our manuals. To help us with future versions of our manuals, we want to know about any corrections or clarifications that you would find useful. Please include the following information:

- The name and version of the manual that you are using

- Any comments that you have about the manual
- Your name, address, and phone number

Write to us at the following address:

Informix Software, Inc.
Technical Publications
300 Lakeside Dr., Suite 2700
Oakland, CA 94612

If you prefer to send electronic mail, our address is:

doc@informix.com

Or, send a facsimile to Technical Publications at:

415-926-6571

We appreciate your feedback.

Chapter

About BladeManager

1

This chapter provides an overview of BladeManager concepts and describes the operations common to the graphical and text interfaces to BladeManager. BladeManager registers new DataBlade modules in a database. Registration enables a database to use the functionality supplied by a new DataBlade module. Specifically, you can do the following with BladeManager:

- List the DataBlade modules available to be registered in a database
- List the DataBlade modules already registered in a database
- Register DataBlade modules in your databases
- Unregister DataBlade modules from your databases
- Upgrade DataBlade modules
- Install client files to support a registered DataBlade module

Chapter 2, "Graphical User Interface," describes in more detail how to use the BladeManager graphical user interface on Windows 95 and Windows NT platforms, and Chapter 3, "Text Interface," describes how to use the text-only interface on UNIX and Windows NT platforms.

Registering a DataBlade Module

A DataBlade module extends the functionality of an Informix database in a particular way. For example, the Virage Visual Information Retrieval (VIR) DataBlade module lets you search and retrieve graphics files based on the content of the stored images. Typically, a DataBlade module consists of a set of functions and data type definitions, and it can contain other elements as well, such as aggregates and casts. Some DataBlade modules contain functions only.

Before you can use the functions, types, and other elements of a DataBlade module in your database, you must perform two steps:

1. Install the DataBlade module on a server.
2. Register the DataBlade module in one or more databases on the server.

Installation

To install a DataBlade module, you transfer the files that constitute the DataBlade module from the distribution media to the proper directory structure on a server. The files are installed in a subdirectory of the **$INFORMIXDIR/extend** directory. The owner and permissions of the files installed in this directory must be set correctly so that BladeManager and INFORMIX-Universal Server can access the files.

The installation program included with a DataBlade module ensures that the files are located and set correctly. For specific installation instructions for a DataBlade module, refer to the documentation accompanying the DataBlade module.

The **informix** user typically installs DataBlade modules.

Registration

To register a DataBlade module in a database, you use BladeManager. You can register any module installed on a server to which you have access. Registering a DataBlade module informs the database about the structure of the functions, types, and other elements that constitute that module. After registering a DataBlade module, you can use the data types defined in the module to create tables in the database and run the functions defined in the module.

The owner of a database typically registers DataBlade modules. The registration process typically grants all necessary usage permissions on the DataBlade module's elements to the public.

When BladeManager registers a DataBlade module, it essentially does the same thing you would do if you created individual elements in a database. For example, if you want to add a new function to a database, you execute the SQL CREATE FUNCTION statement to register the function in the database. Or if you want to add a new aggregate, you register it with the CREATE AGGREGATE statement. Likewise, when BladeManager registers a DataBlade module, it executes a set of SQL statements to register each function, type, aggregate, and cast in the module.

You cannot, however, pick and choose the individual elements of a DataBlade module that you want to register. BladeManager does not handle individual elements. Either every element in the DataBlade module is registered, or none of the elements is registered. If the registration of a module is cancelled due to a failure, BladeManager returns the database to the state it was in before the attempted registration of the DataBlade module.

Tip: *BladeManager generates a log file each time you register a DataBlade module. You can check this file to see the SQL statements that BladeManager failed to execute while registering the elements of a particular DataBlade module. See "Viewing Log Files" on page 2-12 and "Log Files" on page 3-5 for more information on viewing log files.*

The first time BladeManager connects to a database, it automatically prepares for registration any modules it finds installed on the server, and it generates a log file similar to the one generated during registration. You can check this file if the preparation of one or more DataBlade modules fails.

Upgrade

Use BladeManager to upgrade a DataBlade module. There is no explicit upgrade command or interface; rather, you upgrade a DataBlade module by registering a new version of the module.

If BladeManager determines that an older version of the DataBlade module you are registering is already registered in the database, BladeManager prompts you as to whether you want to upgrade the module. Only one version of a DataBlade module can be registered in a database at any given time.

If the upgrade fails, BladeManager restores the database to its state before the upgrade.

You can downgrade a DataBlade module in the same way you upgrade. Refer to the DataBlade module's release notes for instructions on which versions can be upgraded or downgraded.

Registration Dependencies and Interfaces

Certain DataBlade modules require other DataBlade modules that provide a particular *interface*—defined at the end of this section—to be registered in the database. When you register a DataBlade module, BladeManager verifies that one of the DataBlade modules that provides the interface required by your module is already registered in the database.

If none of the DataBlade modules that provides the interface is registered in the database, a message is returned. The message indicates which DataBlade modules installed on your server provide the needed interface and prompts you to choose one to be registered.

You can either proceed with the registration of the required module or cancel the registration. If you choose to proceed with the registration, BladeManager first registers the needed DataBlade module, then continues with the registration of the original module. If there are no DataBlade modules that provide the needed interface installed on your server, you will not be able to register the original module.

An interface is a collection of data types and routines that conforms to a standard and exports a predictable service. For example, a DataBlade module that does image matching might allow users to supply captions for images. If a "keyword search" interface were registered in the database, the image matching DataBlade module could use the keyword search routines to match the captions. More than one DataBlade module may provide the needed interface. Similarly, one DataBlade module may provide more than one interface.

Important: *BladeManager verifies only that the DataBlade modules that provide the interface upon which yours depends have been registered in the database. It does not verify the integrity of these DataBlade modules. For example, BladeManager does not check that all of the types, functions, and other elements that constitute a particular DataBlade module are still present in the database.*

Unregistering a DataBlade Module

You should unregister a DataBlade module only after careful consideration. For example, the database might contain numerous tables based on the types defined in that DataBlade module. Likewise, there might be queries run against the database that depend on functions defined in that DataBlade module.

When you attempt to remove a DataBlade module with BladeManager, the server checks to see if any tables, indexes, or other DataBlade modules in the database depend on the interface provided by the module you have specified. If there are any dependencies, the unregistration fails.

Just as with registration, either every element in the DataBlade module is unregistered, or none of the elements is unregistered. If the unregistration of a module is cancelled due to a failure, BladeManager returns the database to the state it was in before the attempted unregistration of the DataBlade module.

Client Files

Some DataBlade modules are shipped with client files. Client files may include graphical user interfaces to view data or tools to query the database, for example. In this case, when you install the DataBlade module, the client files are placed on the server along with the elements of the module. BladeManager allows you to install these client files on a client computer.

Important: *Client files are installed on the client computer in the* ***$INFORMIXDIR/extend/<DataBlade>/client*** *directory, where* ***<DataBlade>*** *refers to the name of the DataBlade module. This means that to successfully install the client files, the user who runs BladeManager must have permission to write to this directory.*

Chapter

Graphical User Interface

2

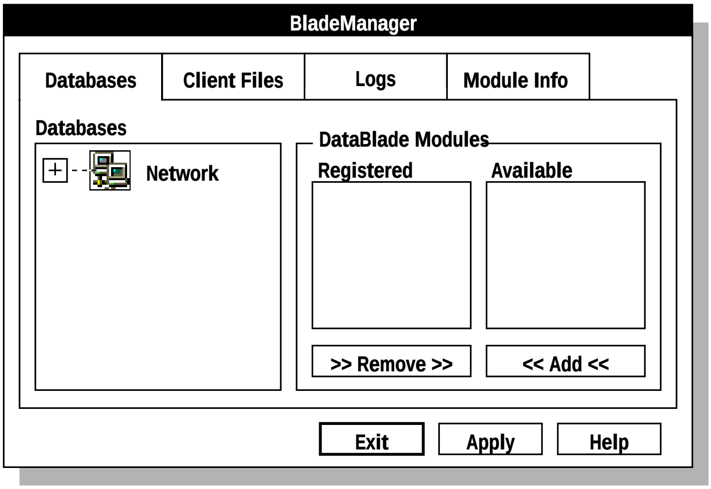
This chapter describes how to use the BladeManager graphical user interface to register, upgrade, and unregister DataBlade modules and to install and uninstall client files.

For information on how to install and configure the BladeManager graphical user interface, refer to *INFORMIX-Universal Server Client Products Installation Guide for Microsoft Windows Environments*.

Getting Started

When you launch BladeManager, the main application window appears as shown in Figure 2-1.

Figure 2-1
Main Application Window



You can expand the tree in the **Databases** list box to see the available servers and databases by clicking the expander button (+) next to the network and server icons. When you select a database, BladeManager attempts to connect you using your default login name and password. If you are successfully connected, BladeManager displays the available and registered DataBlade modules.

If you select a server or database that requires a name or password other than the default, BladeManager displays a login window that allows you to specify a user name and password.

Important: *Whenever BladeManager connects to a database, it automatically prepares for registration any installed DataBlade modules that it finds. See "Registering a DataBlade Module" on page 1-3 for more information about registration and preparation of DataBlade modules.*

The main application window contains four tabbed views:

- **Databases**
- **Client Files**
- **Logs**
- **Module Info**

The **Databases** tab lists the available servers and databases and the DataBlade modules available for registration. It also lists the DataBlade modules already registered in the database to which you are connected. In the **Databases** view you can register, upgrade, and unregister DataBlade modules. See "Registering a DataBlade Module" on page 2-5 for information on how to register a DataBlade module, "Upgrading a DataBlade Module" on page 2-7 for information on how to upgrade a DataBlade module, and "Unregistering a DataBlade Module" on page 2-9 for information on how to unregister a DataBlade module.

You can also change the database to which you are connected by selecting a different database in the **Databases** list box.

The **Client Files** tab lists DataBlade modules on the current server that have client files available for installation and DataBlade modules that have client files installed on the current client machine. See "Installing and Removing Client Files" on page 2-11 for information on how to install client files from the server to your client machine or remove client files from a client machine.

The **Logs** tab lists log files that have been generated and allows you to view them. See "Viewing Log Files" on page 2-12 for more information on log files.

The **Module Info** tab lists the DataBlade modules and allows you to obtain information about their contents and vendors. See "Viewing Module Information" on page 2-13 for more information on viewing content and vendor information.

Registering a DataBlade Module

To register a DataBlade module, select the **Databases** tab and highlight a database, as shown in Figure 2-2.

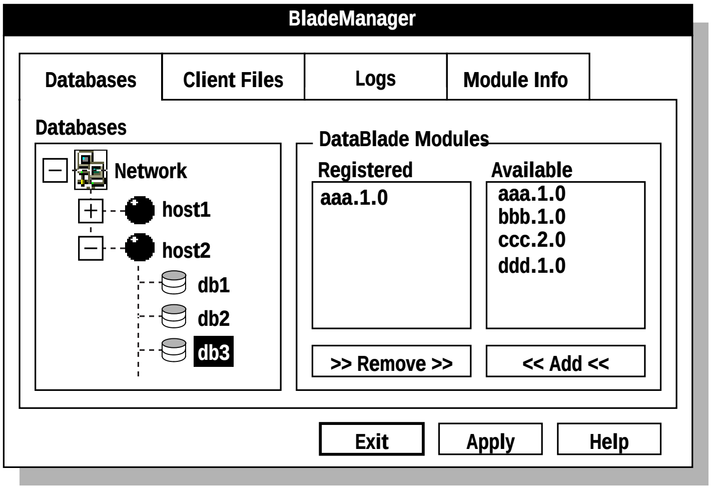


Figure 2-2
Registration Window

BladeManager displays in the **Registered** list box any DataBlade modules currently registered in the database. It also displays—in the **Available** list box—all the DataBlade modules available on the server for registration.

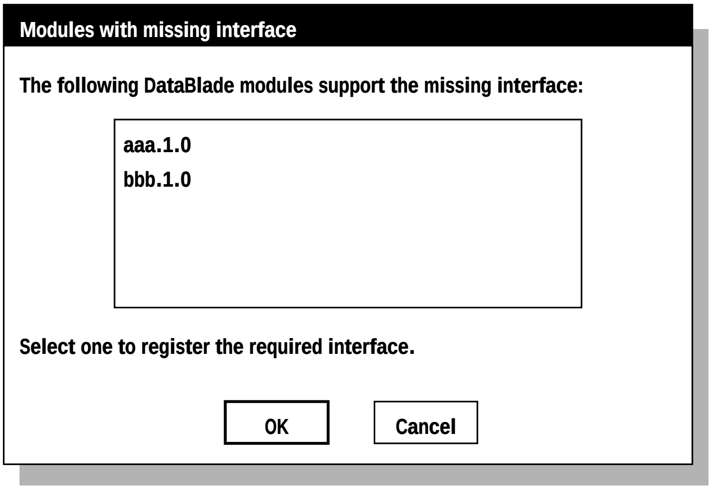
In the **Available** list box, highlight the DataBlade modules that you want to register. Then click **Add**, which moves the highlighted DataBlade modules to the **Registered** list box. Click **Apply** to confirm your selection and execute the scripts that register the selected DataBlade modules in the database.

Tip: *If you want to see information about a DataBlade module or its vendor, select the* ***Module Info*** *tab and highlight the DataBlade module about which you want information.*

When BladeManager registers a DataBlade module, it actually registers each individual element of the DataBlade module, using SQL statements. Either each element in the DataBlade module is registered in the database, or none of the elements is registered. If the registration of a module is cancelled due to a failure, BladeManager returns the database to the state it was in before the attempted registration of the DataBlade module.

During registration, BladeManager verifies that all DataBlade modules that provide the interfaces upon which your module depends have been registered in the database. If any needed DataBlade modules have not been registered in the database, BladeManager displays a dialog box, as shown in Figure 2-3.

Figure 2-3
Missing Interfaces Dialog Box



Modules with missing interface

The following DataBlade modules support the missing interface:

aaa.1.0
bbb.1.0

Select one to register the required interface.

The dialog box lists the DataBlade modules installed on your server that provide the needed interface and prompts you to choose one to be registered. You can either proceed with the registration of the required DataBlade module, or cancel the registration. If there are no DataBlade modules that provide the needed interface installed on your server, you will not be able to register the original module.

See "Registration Dependencies and Interfaces" on page 1-6 for more information on interfaces.

Important: *BladeManager verifies only that the DataBlade modules that provide the required interfaces upon which yours depends have been registered in the database. It does not verify the integrity of these DataBlade modules. BladeManager, for example, does not check that all of the types, functions, and other objects that constitute a particular DataBlade module are still present in the database.*

After you register a DataBlade module, you can check the log file to see if BladeManager generated any error or warning messages. If the registration failed, you can check the log files to see which statement caused the failure. Select the **Logs** tab to see the available log files. See "Viewing Log Files" on page 2-12 for more information on log files.

Upgrading a DataBlade Module

To upgrade a DataBlade module, select the **Databases** tab and highlight the database that you want to upgrade.

BladeManager displays in the **Registered** list box any DataBlade modules currently registered in the database. It also displays—in the **Available** list box—all the DataBlade modules available on the server for registration. A DataBlade module is a candidate for upgrade if a newer version of it is displayed in the **Available** list box. For example, Figure 2-4 shows DataBlade module **aaa.1.0** currently registered in database **db3** and a newer version of the module, **aaa.2.0**, available for upgrade.

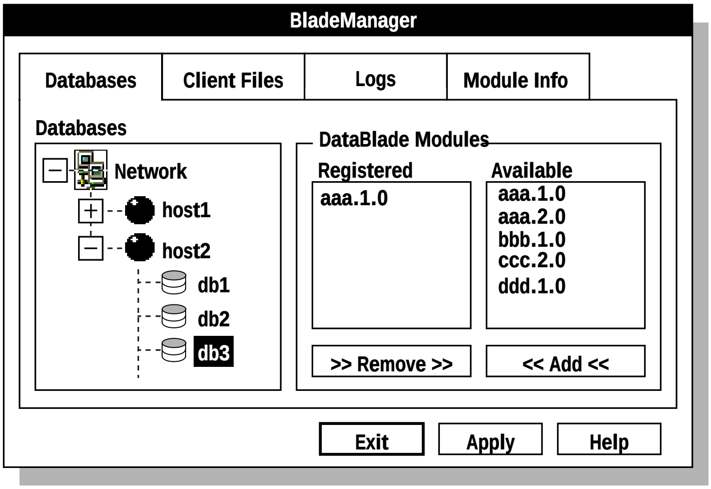
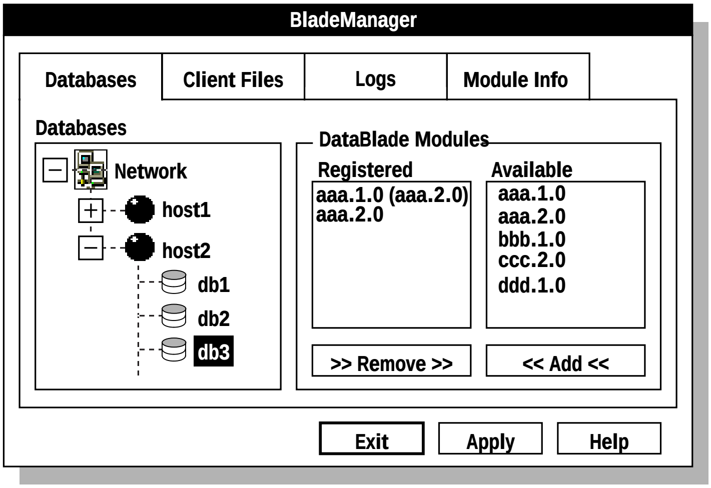


Figure 2-4
Upgrade Window

In the **Available** list box, highlight the version of the DataBlade module to which you want to upgrade. Then click **Add**, which moves the highlighted DataBlade module to the **Registered** list box. The currently registered version of the DataBlade module will also continue to be displayed in the **Registered** list box, with the version of the DataBlade module you are going to upgrade to in parentheses, as shown in Figure 2-5.



Registered:
aaa.1.0 (aaa.2.0)
aaa.2.0

Available:
aaa.1.0
aaa.2.0
bbb.1.0
ccc.2.0
ddd.1.0

Figure 2-5
Upgrade Window, Before Clicking Apply

Click **Apply** to confirm your selection and upgrade the module to the new version. After a successful upgrade, only the current version of the registered DataBlade module is listed in the **Registered** list box.

Refer to the specific DataBlade module's release notes for information on which versions of the module can be upgraded or downgraded.

After you upgrade a DataBlade module, you can check the log file to see if BladeManager generated any error or warning messages. If the upgrade failed, you can check the log files to see which statement caused the failure. Select the **Logs** tab to see the available log files. See "Viewing Log Files" on page 2-12 for more information on log files.

Tip: *DataBlade modules can be also be downgraded to older versions using steps similar to those described in this section.*

Unregistering a DataBlade Module

To unregister a DataBlade module, select the **Databases** tab and highlight the database in which you want to unregister a DataBlade module, as shown in Figure 2-6.

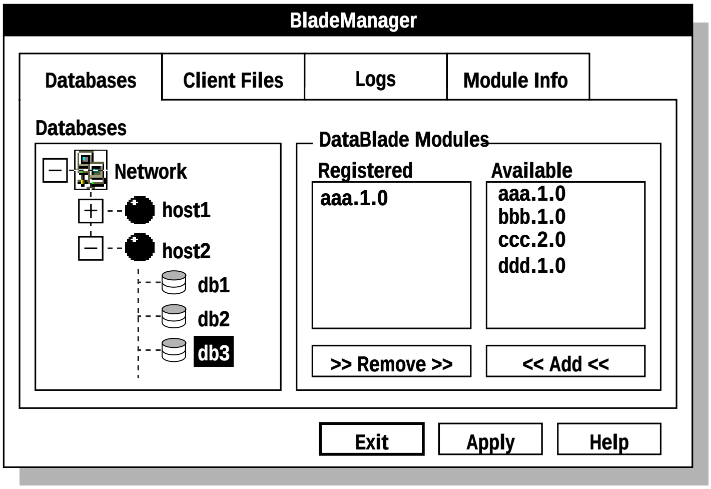


Figure 2-6
Unregistration Window

BladeManager displays in the **Registered** list box any DataBlade modules currently registered in the database. Highlight in the **Registered** list box the DataBlade modules that you want to unregister. Then click **Remove**, which moves the highlighted DataBlade modules to the **Available** list box. Click **Apply** to confirm your selection and execute the set of SQL statements that unregister the selected DataBlade modules in the database.

When BladeManager unregisters a DataBlade module, it actually removes each element of the DataBlade module from the database using SQL statements. Either each element in the DataBlade module is removed from the database, or none of the elements is removed. If the unregistration of a module is cancelled due to a failure, BladeManager returns the database to the state it was in before the attempted unregistration of the DataBlade module.

Important: *BladeManager will not unregister a DataBlade module that provides an interface or type that is currently being used by a table, index, or other DataBlade module in the database.*

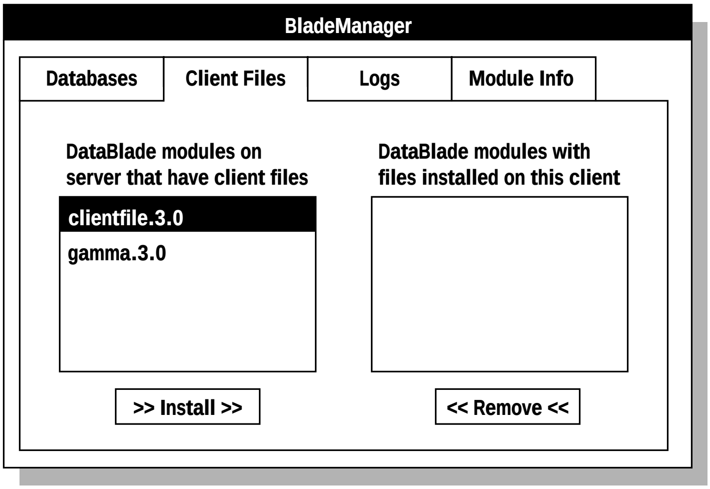
After unregistering a DataBlade module, you can check the log file to see if BladeManager generated any error or warning messages. If the unregistration failed, you can check the log files to see which statement caused the failure. Select the **Logs** tab to see the available log files. See "Viewing Log Files" on page 2-12 for more information on log files.

Installing and Removing Client Files

For DataBlade modules that contain client files, BladeManager enables you to install the files on a client computer.

To begin, highlight the **Client Files** tab, as shown in Figure 2-7.

Figure 2-7
Client Files Window


BladeManager
Databases
Client Files
Logs
Module Info
DataBlade modules on server that have client files
clientfile.3.0
gamma.3.0
DataBlade modules with files installed on this client
>> Install >>
<< Remove <<

You must have established a connection to a database to get a list of all the available client files. See "Getting Started" on page 2-3 for more information on how to connect to a database.

In one list box, BladeManager displays the names of all DataBlade modules on the current server that include client files available for the current workstation. In the other list box, BladeManager displays the names of all DataBlade modules that have client files installed on the current workstation.

To install the client files, highlight the DataBlade module that contains the client files you want to install. Click **Install**. BladeManager installs the client files and moves the name of the DataBlade module to the other list box.

Occasionally, a client file installation may require extra processing after BladeManager has copied the files to your computer. For example, it may be necessary to run an install script or **setup.exe** program before you can use the client files. Refer to either the DataBlade module's Release Notes or the **Module Info** tab for instructions.

To remove client files, highlight a DataBlade module in the box that lists installed files and click **Remove**. BladeManager removes the client files from the client computer.

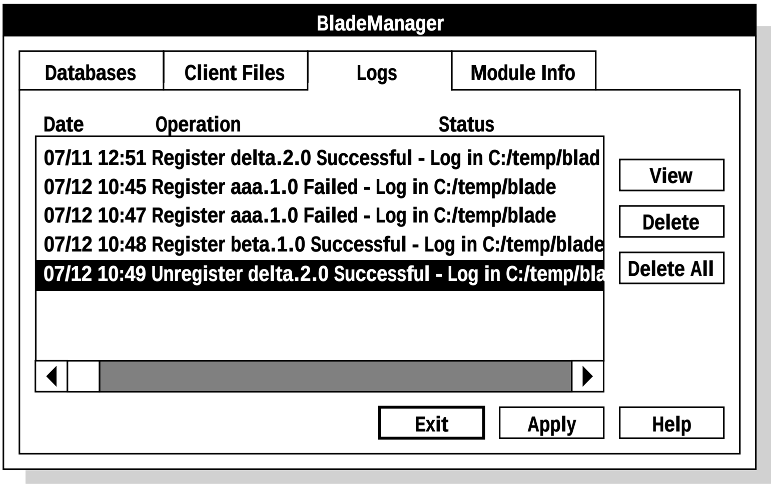
Important: *Client files are installed on the client computer in the* ***$INFORMIXDIR/extend/<DataBlade>/client*** *directory, where* ***<DataBlade>*** *refers to the name of the DataBlade module. This means that to successfully install the client files, the user who runs BladeManager must have permission to write to this directory.*

Viewing Log Files

BladeManager generates a log file whenever you register, upgrade, or unregister a DataBlade module. Log files contain the SQL statements that BladeManager failed to execute while preparing, registering, upgrading, and unregistering a DataBlade module. If registering, upgrading, or unregistering a DataBlade module fails, the log file can point to the particular element of the DataBlade module that caused the problem.

Log files are numbered consecutively and contain a time stamp. To view a log file, select the **Logs** tab, as shown in Figure 2-8, and double-click the name of the log file of interest in the display window.

Figure 2-8
Logs Window



```
Date          Operation                          Status
07/11 12:51 Register delta.2.0 Successful - Log in C:/temp/blad
07/12 10:45 Register aaa.1.0 Failed - Log in C:/temp/blade
07/12 10:47 Register aaa.1.0 Failed - Log in C:/temp/blade
07/12 10:48 Register beta.1.0 Successful - Log in C:/temp/blade
07/12 10:49 Unregister delta.2.0 Successful - Log in C:/temp/bla
```

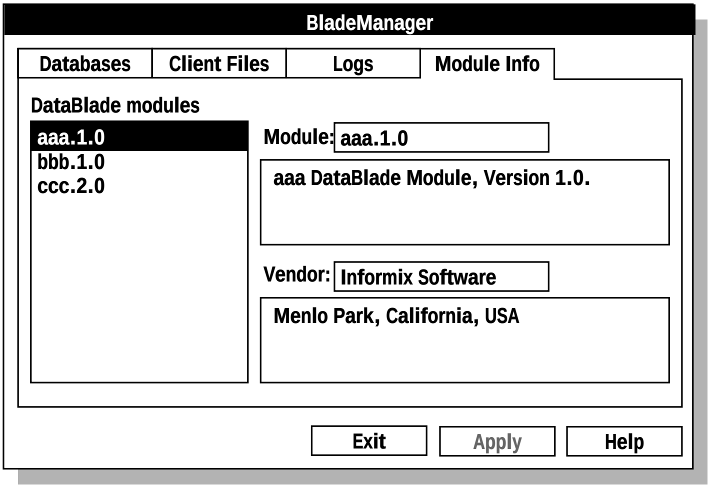
Viewing Module Information

Each DataBlade module stores content and vendor information in the database in which it is registered.

The **Module** box shows the full name and version of the selected module and can also display a brief description. Further instructions on installing client files may also be displayed here. The **Vendor** box shows details about the vendor of the module.

To view this information, select the **Module Info** tab, as shown in Figure 2-9, and select the desired DataBlade module in the **DataBlade modules** list box.

Figure 2-9
Module Info Window



DataBlade modules

- aaa.1.0
- bbb.1.0
- ccc.2.0

Module: aaa.1.0

aaa DataBlade Module, Version 1.0.

Vendor: Informix Software

Menlo Park, California, USA

You must have established a connection to a database to get a list of DataBlade modules. See "Getting Started" on page 2-3 for more information on how to connect to a database.

Chapter

3

Text Interface

This chapter describes the text-only interface to BladeManager. This interface provides commands that allow you to register, upgrade, and unregister DataBlade modules and to install and remove client files. It also provides administrative commands for connecting to a server and exiting the application and informational commands that provide information about servers, databases, and DataBlade modules. You can run this application on UNIX and Windows NT systems.

Getting Started

You launch BladeManager by entering:

```
blademgr
```

at the system prompt.

Your screen displays a prompt consisting of the value of the **INFORMIX-SERVER** environment variable and the angle bracket (>). You can execute any of the BladeManager commands, which are described in the following sections, by entering the command name. For example, for a list of all commands and their syntax descriptions, enter:

```
help
```

Important: *If BladeManager fails to execute, make sure that* ***$INFORMIXDIR/bin*** *is in your* ***PATH*** *environment variable.*

Connection Information

BladeManager uses default values for your user name, password, and server unless you explicitly issue commands to change them. For example, if you want to see the available databases, execute the command:

```
show databases
```

BladeManager shows the databases on the default server. The default user name and password are defined as your operating system login and password. The default server is defined as the value of the variable **INFORMIXSERVER**, if set in your environment.

BladeManager commands to register, unregister, list registered, and show available DataBlade modules operate on a specific database. However, there is no explicit BladeManager command to connect to a database. Rather, when you execute a command, such as **list** or **register**, you specify the database to which to connect. For example, the following command lists the modules registered in the **stores7** database:

```
list stores7
```

When you execute the **list** command, BladeManager connects to the specified database, using your default user name and password. If you want to connect to a different database on the same server as a different user, execute the **set user** command before the **list** command. For example:

```
set user bob
list testdb
```

The **set user** command prompts you for a password.

To connect to a different database on a different server, execute the **set server** command.

Important: *The first time BladeManager connects to a database, it prepares for registration any installed DataBlade modules. This can result in output messages about the success or failure of preparation. See "Registering a DataBlade Module" on page 1-3 for more information about registration and preparation of DataBlade modules.*

Executing BladeManager Commands Automatically at Startup

When BladeManager starts up, it looks for the batch file **blademgr.run** in the current directory. If BladeManager finds the file, it executes any commands in it before displaying the prompt that allows you to enter commands. You can edit this file and place commands in it that are automatically executed whenever BladeManager starts up. For example, if you do not want to be prompted for confirmation each time you register a DataBlade module, you can put the **set confirm off** command in **blademgr.run** to turn confirmation off automatically whenever you run BladeManager.

If you place multiple commands in **blademgr.run**, place them on separate lines.

Executing Multiple BladeManager Commands

You can execute a series of BladeManager commands by using standard piping. For example, suppose you want to register the Geodetic DataBlade module in multiple databases. You could place the following BladeManager commands in a text file, called, for example, **regcmds.txt**:

```
register geodetic.2.10 testdb1
register geodetic.2.10 testdb2
register geodetic.2.10 testdb3
register geodetic.2.10 testdb4
```

You then pipe these commands to BladeManager as follows:

```
blademgr < regcmds.txt
```

Log Files

BladeManager generates a log file whenever you register, upgrade, or unregister a DataBlade module. Log files contain the SQL statements that BladeManager was not able to execute while preparing, registering, upgrading, or unregistering a DataBlade module. If registering, upgrading, or unregistering a DataBlade module fails, the log file can point to the particular element of the DataBlade module that caused the problem. See “show log” on page 3-16 for more information on viewing log files.

BladeManager stores log files in the **/tmp/blademgr** directory on UNIX and the **%TEMP%\blademgr** directory on Windows NT. Use the **delete logs** command to periodically clean out this directory to prevent your disk from filling up. See "del logs" on page 3-10 for more information on this command.

Types of BladeManager Commands

The BladeManager commands can be grouped into three main categories:

- Administrative
- Informational
- Registration and client file installation

The next three subsections describe the commands in each category. A complete commands reference with detailed information about each command follows these sections.

Administrative Commands

The administrative commands allow you to:

- get help on BladeManager commands.
- connect to a server.
- set confirmation on or off.
- exit BladeManager.
- delete log files.

The following table lists the BladeManager administrative commands.

Command	Use
bye, exit, quit	Exits BladeManager.
del logs	Deletes all log files from **/tmp/blademgr** on UNIX and **%TEMP%\blademgr** on Windows NT.
help, ?	Displays commands and syntax.
set confirm on | **off**	Toggles confirmation on and off.
set user *user*	Specifies the user to connect to a server.
set server *server*	Specifies the server to connect to.

Informational Commands

The informational commands allow you to:

- obtain vendor-supplied information about a DataBlade module.
- list DataBlade modules already registered and those available to be registered.
- list the available servers.
- list the databases available on the current server.
- list the DataBlade modules that contain client files.
- list the available log files.

The following table lists the BladeManager informational commands.

Command	Use
info *module*	Displays vendor-supplied information about the specified DataBlade module.
list *database*	Displays a list of DataBlade modules registered in the specified database.
show log	Displays a list of the available log files, and after prompting for a particular one, displays its contents.
show modules	Displays a list of the DataBlade modules available on the server.
show client	Displays a list of the DataBlade modules on the current server that have files installed on the current client computer.
show servers	Displays a list of the available servers.
show databases	Displays a list of the databases on the current server.

Registration and Client File Installation Commands

The registration and installation commands allow you to:

- install and remove client files.
- register and unregister DataBlade modules.
- upgrade DataBlade modules.

The following table lists the registration and installation commands.

Command	Use
register *module database*	Registers and upgrades the specified DataBlade module in the specified database. This command is also used to upgrade DataBlade modules.
unregister *module database*	Unregisters the specified DataBlade module from the specified database.
add client *module*	Installs the specified DataBlade module's client files on the client computer on which you are running BladeManager.
del client *module*	Removes the specified DataBlade module's client files from the client computer on which you are running BladeManager.

Commands Reference

This section describes the BladeManager commands in detail. The commands are listed in alphabetical order.

add client

The **add client** command installs the specified DataBlade module's client files on the client computer on which you are running BladeManager:

```
add client module
```

Use the **show client** command to display a list of the DataBlade modules on the current server that contain client files available for your current workstation. Use the **del client** command to remove the client files for a particular DataBlade module.

The **add client** command reads and creates directories and files in the directory **$INFORMIXDIR/extend/<DataBlade>/client,** where **<DataBlade>** refers to the name of the DataBlade module. This means that to successfully use this command, you must have permission to write to this directory.

Occasionally, a client file installation may require extra processing after BladeManager has copied the files to your computer. For example, it may be necessary to run an install script or setup.exe program before you can use the client files. Refer to either the DataBlade module's Release Notes or the **info** command for instructions.

bye

The **bye** command exits BladeManager:

```
bye
```

You can also use the **exit** or **quit** commands to exit BladeManager.

del client

The **del client** command removes the specified DataBlade module's client files from the client computer on which you are running BladeManager:

```
del client module
```

The **del client** command reads and deletes files in the directory **$INFORMIXDIR/extend/<DataBlade>/client**, where **<DataBlade>** refers to the name of the DataBlade module. This means that to successfully use this command, you must have permission to write to this directory.

del logs

The **del logs** command deletes the **/tmp/blademgr** directory on UNIX or the **%TEMP%\blademgr** directory on Windows NT. The directory contains all the log files from BladeManager sessions:

```
del logs
```

BladeManager prompts you as to whether you are sure you want to continue with the removal of the directory from the operating system.

Since BladeManager does not automatically delete old log files, you must use the **del logs** command to periodically clean out the **/tmp/blademgr** or **%TEMP%\blademgr** directory to prevent your disk from filling up.

BladeManager will not delete the **/tmp/blademgr** or **%TEMP%\blademgr** directory if another BladeManager session is currently using it.

exit

The **exit** command exits BladeManager:

```
exit
```

You can also use the **bye** or **quit** commands to exit BladeManager.

help

The **help** command displays a list of all the BladeManager commands, including their syntax:

```
help
```

You can also use the **?** (question mark) command to display a list of all the BladeManager commands.

info

The **info** command displays vendor-supplied information about the specified DataBlade module:

```
info module
```

Tip: *The **info** command requires a connection to a database, although it does not create one itself. Make a connection by running the **list** command prior to running the **info** command.*

list

The **list** command displays a list of the DataBlade modules already registered with the specified database:

```
list database
```

Important: *BladeManager verifies only that the particular DataBlade modules it lists have been registered in the database. It does not verify the integrity of these DataBlade modules. For example, BladeManager does not check that all of the types, functions, and other objects that constitute a particular DataBlade module are still in the database.*

Use the **show modules** command for a list of the DataBlade modules that have been installed on the server and are available for registration.

If BladeManager is not currently connected to the database specified in the **list** command, it connects to the new database, prepares all available DataBlade modules, and outputs messages about the success or failure of the preparation before continuing with the **list** command. BladeManager only prepares DataBlade modules the first time it connects to a database.

See "Registering a DataBlade Module" on page 1-3 for information about preparation and registration.

quit

The **quit** command exits BladeManager:

```
quit
```

You can also use the **bye** or **exit** commands to exit BladeManager.

register

The **register** command registers the specified DataBlade module in the specified database:

```
register module database
```

If BladeManager determines that a version of the DataBlade module is already registered in the database, BladeManager prompts you as to whether you want to upgrade or downgrade the module, whichever is appropriate. Otherwise, it is assumed that this is the first time you are registering the DataBlade module in your database.

If confirmation is turned on and BladeManager does not find a version of the DataBlade module already registered in the database, BladeManager prompts you as to whether you want to continue with the new registration (use the **set confirm** command to toggle confirmation on and off). Enter `Y` to continue with the registration, or enter `N` to abort the registration.

If BladeManager is not currently connected to the database specified in the **register** command, it connects to the new database, prepares all available DataBlade modules, and outputs to the screen messages about the success or failure of the preparation before continuing with the **register** command. BladeManager only prepares DataBlade modules the first time it connects to a database.

When BladeManager registers a DataBlade module, it actually registers each element of the DataBlade module using SQL statements. Either each element of the DataBlade module is registered in the database, or none of the elements is registered. If the registration of a module is cancelled due to a failure, BladeManager returns the database to the state it was in before the attempted registration of the DataBlade module.

BladeManager generates a log file containing the SQL statements that failed to execute while registering a DataBlade module. If registering a DataBlade module fails, the log file can point to the particular element of the DataBlade module that caused the problem. See "show log" on page 3-16 for more information on viewing log files.

During registration, BladeManager verifies that all DataBlade modules that provide the interfaces upon which your module depends have been registered in the database. If any needed DataBlade modules have not been registered in the database, BladeManager displays a message along with a list of DataBlade modules installed on your server that provide the needed interface.

You can choose to register one of the DataBlade modules, or you can cancel the registration. If you choose to proceed with the registration, BladeManager first registers the needed DataBlade module, then continues with the registration of the original module. If there are no DataBlade modules that provide the needed interface installed on your server, you will not be able to register the original module.

See "Registration Dependencies and Interfaces" on page 1-6 for more information on interfaces.

Important: *BladeManager verifies only that the DataBlade modules that provide the interfaces upon which yours depends have been registered in the database. It does not verify the integrity of these DataBlade modules. For example, BladeManager does not check that all of the types, functions, and other objects that constitute a particular DataBlade module are still in the database.*

You can specify only one database at a time with the **register** command. If you want to register a particular DataBlade module in multiple databases, you can type multiple **register** commands in a text file and pipe this file to BladeManager. See "Executing Multiple BladeManager Commands" on page 3-5 for more information.

See "Registering a DataBlade Module" on page 1-3 for further information about registration.

set confirm

The **set confirm** command toggles confirmation on and off:

```
set confirm on | off
```

If confirmation is on, BladeManager prompts you as to whether you want to continue whenever you make changes to the database—by executing the **register** or **unregister** commands—or whenever you add or delete client files by executing the **add client** or **del client** commands. When confirmation is off, BladeManager issues no prompt when you make changes to the database or install or remove client files.

set server

The **set server** command connects BladeManager to the specified server:

```
set server server
```

If you do not execute the **set server** command, BladeManager uses the default server. The default server is defined as the value of the **INFORMIXSERVER** variable, if set in your environment. If you want to connect to a database on a different server, execute the **set server** command and specify the new server.

set user

The **set user** command sets the user for the current session:

```
set user user
```

BladeManager prompts you for a password. The user name and password are not validated until a connection to a database is attempted, as with the **list** command.

BladeManager automatically uses your operating system login name unless you specify a different name with the **set user** command. If you want to connect to a different database as a different user requiring a different password, execute **set user**.

show client

The **show client** command displays a list of the DataBlade modules on the current server that have files installed on the current client computer:

```
show client
```

The **show client** command reads and possibly creates files in the directory **$INFORMIXDIR/extend/<DataBlade>/client**, where **<DataBlade>** refers to the name of the DataBlade module. This means that to successfully use this command, you must have permission to read and write to this directory.

show databases

The **show databases** command displays a list of the databases on the current server:

```
show databases
```

To display a list of the databases on a different server, first change the server with the **set server** command.

show log

The **show log** command lists the available log files and optionally displays the contents of a particular log file:

```
show log
```

After BladeManager lists all the log files that are available for viewing, it prompts you for the number of the particular log file whose contents you want to view.

Log files contain the SQL commands that failed to execute while registering, upgrading or unregistering a DataBlade module. They also list whether the failure was expected or unexpected and show the text of the error generated by the SQL command.

show modules

The **show modules** command displays a list of the DataBlade modules available on the server:

```
show modules
```

Modules that contain client files display the letter *c* after the module name.

Use the **list** command to display a list of the DataBlade modules registered with a particular database.

Tip: *The **show modules** command requires a connection to a database, although it does not create one itself. A connection can be made by running the **list** command prior to running the **show modules** command.*

show servers

The **show servers** command displays a list of the available servers:

```
show servers
```

unregister

The **unregister** command unregisters the specified DataBlade module from the specified database:

```
unregister module database
```

If confirmation is turned on, BladeManager prompts you as to whether you want to continue with the unregistration (use the **set confirm** command to toggle confirmation on and off). Type `Y` and press ENTER to continue with the unregistration, or type `N` and press ENTER to abort the unregistration.

If BladeManager is not currently connected to the database specified in the **unregister** command, it connects to the new database, prepares all available DataBlade modules, and outputs messages about the success or failure of the preparation before continuing with the **unregister** command. BladeManager only prepares DataBlade modules the first time it connects to a database.

When you attempt to remove a DataBlade module with BladeManager, the server checks to see if any tables, indexes, or other DataBlade modules in the database depend on the interface provided by the DataBlade module you have specified. If there are any dependencies, the unregistration fails.

Just as with registration, either all elements of the DataBlade module are unregistered, or the entire unregistration is cancelled.

You can specify only one database at a time with the **unregister** command. If you want to unregister a particular DataBlade module that has been registered in multiple databases, you can type multiple **unregister** commands in a text file and pipe this file to BladeManager. See "Executing Multiple Blade-Manager Commands" on page 3-5 for more information.

BladeManager generates a log file containing the SQL statements that failed to execute while unregistering a DataBlade module. If unregistering a DataBlade module fails, the log file can point to the particular element of the DataBlade module that caused the problem. See "show log" on page 3-16 for more information on viewing log files.

?

The **?** (question mark) command displays a list of all the BladeManager commands, including their syntax:

```
?
```

You can also use the **help** command to display a list of all the BladeManager commands.

Index