



BEA WebLogic Personal Messaging API™

Domino Service Setup Guide

Copyright

Copyright © 2005 BEA Systems, Inc. All Rights Reserved.

Restricted Rights Legend

This software and documentation is subject to and made available only pursuant to the terms of the BEA Systems License Agreement and may be used or copied only in accordance with the terms of that agreement. It is against the law to copy the software except as specifically allowed in the agreement. This document may not, in whole or in part, be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine readable form without prior consent, in writing, from BEA Systems, Inc.

Use, duplication or disclosure by the U.S. Government is subject to restrictions set forth in the BEA Systems License Agreement and in subparagraph (c)(1) of the Commercial Computer Software-Restricted Rights Clause at FAR 52.227-19; subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013, subparagraph (d) of the Commercial Computer Software--Licensing clause at NASA FAR supplement 16-52.227-86; or their equivalent.

Information in this document is subject to change without notice and does not represent a commitment on the part of BEA Systems. THE SOFTWARE AND DOCUMENTATION ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. FURTHER, BEA Systems DOES NOT WARRANT, GUARANTEE, OR MAKE ANY REPRESENTATIONS REGARDING THE USE, OR THE RESULTS OF THE USE, OF THE SOFTWARE OR WRITTEN MATERIAL IN TERMS OF CORRECTNESS, ACCURACY, RELIABILITY, OR OTHERWISE.

Trademarks or Service Marks

BEA, BEA Liquid Data for WebLogic, BEA WebLogic Server, Built on BEA, Jolt, JoltBeans, SteelThread, Top End, Tuxedo, and WebLogic are registered trademarks of BEA Systems, Inc. BEA Builder, BEA Campaign Manager for WebLogic, BEA eLink, BEA Manager, BEA MessageQ, BEA WebLogic Commerce Server, BEA WebLogic Enterprise, BEA WebLogic Enterprise Platform, BEA WebLogic Enterprise Security, BEA WebLogic Express, BEA WebLogic Integration, BEA WebLogic Java Adapter for Mainframe, BEA WebLogic JDriver, BEA WebLogic JRockit, BEA WebLogic Log Central, BEA WebLogic Personalization Server, BEA WebLogic Platform, BEA WebLogic Portal, BEA WebLogic Server Process Edition, BEA WebLogic WorkGroup Edition, BEA WebLogic Workshop, and Liquid Computing are trademarks of BEA Systems, Inc. BEA Mission Critical Support is a service mark of BEA Systems, Inc. All other company and product names may be the subject of intellectual property rights reserved by third parties.

All other trademarks are the property of their respective companies.

Table of Contents

Installation

Installing on Windows	1-1
Verifying the Installation	1-2
Installing on Linux	1-3
GUI Mode	1-3
Console Mode	1-4
Verifying the Installation	1-6
Configuring the Lotus Domino Server	1-6

Administration

Access Control List and Permissions	2-1
Read/Unread Marker Support	2-2
Domino Service Configuration Database	2-3

About This Guide

This guide is intended for Lotus Domino administrators who need to install the Domino Service onto a Lotus Domino server. A basic understanding of Lotus Domino administration is assumed.

This chapter contains the following sections:

- [Prerequisites](#)
- [Documentation Conventions](#)

Prerequisites

Before you install the Domino Service, perform the following steps:

1. Uninstall and remove any previous installed version of Domino Service. This ensures that a clean install will occur.
2. Install Lotus Domino server. Refer to the *BEA WebLogic Personal Messaging API Supported Configurations Guide* for more information on specific platform and OS combinations.
3. Ensure that the Domino server is registered within the Notes domain.

Documentation Conventions

The Windows convention of “\” as a path separator is used wherever necessary.

Also, since system software and configurations can vary from one system to another, portions of the command syntax displayed in this document may include sample parameters or variables that

represent the actual command syntax you would need to enter. These entries are indicated by parameters in uppercase placed between percent signs (%PARAMETER%), as shown in the following table.

Parameter	Definition
%COMPOZE_HOME%	The complete directory specification for the product. For example, c:\Program Files\compoze.
%COMPOZE_DOMINO_SERVICE_HOME%	The complete directory specification for the Domino Service. For example, c:\Program Files\compoze\domino_service.
%LOTUS_DOMINO_HOME%	The complete directory specification for the Lotus Domino program directory. For example, c:\Lotus\Domino.
%LOTUS_DOMINO_DATA%	The complete directory specification for the Lotus Domino data directory. For example, c:\Lotus\Domino\Data.

Installation

This chapter describes how to install the Domino Service on the various supported platforms.

This chapter contains the following sections:

- [Installing on Windows](#)
- [Installing on Linux](#)
- [Configuring the Lotus Domino Server](#)

Note: The %COMPOSE_HOME% directory refers to the directory where products are installed and the %COMPOSE_DOMINO_SERVICE_HOME% directory refers to the directory where the Domino Service is installed.

Installing on Windows

Perform the following steps to install the Domino Service on Windows:

1. Start the installer by double-clicking the `setup.exe` file. The installation screen opens and begins preparing the installation.
2. Read through the introduction and click **Next**. You will be able to exit the installation at anytime by clicking **Cancel**. You will also be able to go back a step by clicking **Previous** when available.
3. Read through the license agreement and select an option:

Selecting **I accept the terms of the License Agreement** will allow you to continue with the installation.

Selecting **I do NOT accept the terms of the License Agreement** will terminate the installation.

4. Click **Next**.
5. Select the directory where Domino Service will be installed. By default, the %COMPOZE_HOME% directory is chosen. You can change this by entering the absolute path of the directory or by clicking **Choose** and selecting the directory.
6. Click **Next**.
7. Choose the Lotus Domino program directory. On a Domino server, the program directory is typically the C:\Lotus\Domino directory, unless you installed the program files to a different location. You may change this by entering the absolute path of the directory or by clicking **Choose** and selecting the directory.
8. Click **Next**. If the specified directory does not contain the Lotus Domino program files, an information screen appears stating such. Click **Next** to continue or **Previous** to go back and enter a valid Domino program directory.
9. Choose the Lotus Domino data directory. On a Domino server, the Domino data directory is typically the C:\Lotus\Domino\Data directory, unless you installed the data directory to a different location. You may change this by entering the absolute path of the directory or by clicking **Choose** and selecting the directory.
10. Click **Next**. If the specified directory is not a valid Domino data directory (for example, it does not contain the names.nsf database), an information screen appears stating such. Click **Next** to continue or **Previous** to go back and enter a valid Domino data directory.
11. Read the installation summary information before clicking **Install**. The summary will contain information such as the installation directory and the amount of disk space required.
12. Click **Install** to install the service.
13. After the installation is complete, click **Done**.

This section contains the following topic:

- [Verifying the Installation](#)

Verifying the Installation

Check the following items to verify that the Domino Service was installed:

- A directory tree is located at %COMPOZE_HOME%\domino_service.

- The following files were added to the %LOTUS_DOMINO_HOME% directory:
The cz_xerces-c.dll file
The czdo.dll file
The czdo_service.dll file
- The following database was added to the %LOTUS_DOMINO_DATA% directory:
The bea_config.nsf file

Installing on Linux

You can install the Domino Service on Linux in GUI mode or Console mode.

This section contains the following topics:

- [GUI Mode](#)
- [Console Mode](#)
- [Verifying the Installation](#)

Note: It is critical you be root or have write permission for the directory where you plan to install the Domino Service. You must also have write permissions for the Domino server directories.

GUI Mode

The installer running in GUI mode will utilize GUI panels and will ask for all necessary configuration questions through the graphical panel. You must have the X-Window server running on the machine where you are installing the Domino Service.

Perform the following steps to install the Domino Service on Linux using the GUI mode:

1. Start the installer. To start the installer, enter the following at the command prompt:

```
prompt> chmod 755 setup.bin  
prompt> ./setup.bin
```

2. Read through the license agreement and select an option:

Selecting **I accept the terms of the License Agreement** will allow you to continue with the installation.

Selecting **I do NOT accept the terms of the License Agreement** will terminate the installation.

3. Click **Next**.
4. Select the directory where Domino Service will be installed. By default, the `%COMPOSE_HOME%` directory is chosen. You may change this by entering the absolute path of the directory or by clicking **Choose** and selecting the directory.
5. Click **Next**.
6. Choose the Lotus Domino program directory. On a Domino server the program directory is typically `/opt/lotus/notes/{version}/{platform}` (or `$Notes_ExecDirectory`), unless you installed the program files to a different location. You may change this by entering the absolute path of the directory or by clicking **Choose** and selecting the directory.
7. Click **Next**. If the specified directory does not contain the Lotus Domino program files, an information screen appears stating such. Click **Next** to continue or **Previous** to go back and enter a valid Domino program directory.
8. Choose the Lotus Domino data directory. On a Domino server the Domino data directory is typically the `/local/notesdata` directory, unless you installed the data directory to a different location. You may change this by entering the absolute path of the directory or by clicking **Choose** and selecting the directory.
9. Click **Next**. If the specified directory is not a valid Domino data directory (for example, does not contain the `names.nsf` database), an information screen appears stating such. Click **Next** to continue or **Previous** to go back and enter a valid Domino data directory.
10. Read the installation summary information before clicking **Install**. The summary contains information, such as the installation directory and the amount of disk space required.
11. Click **Install** to install the service.
12. After the installation is complete, click **Done**.

Console Mode

The installer running in console mode will not utilize GUI panels (X-Window Server), but instead will ask all necessary configuration questions through the command prompt. This is best for machines running Lotus Domino server without an X-Server.

Perform the following steps to install the Domino Service on Linux using the Console mode:

1. Start the installer. To start the installer, enter the following at the command prompt:

```
prompt> chmod 755 setup.bin
prompt> ./setup.bin -i console
```

2. Read through the BEA license agreement and select an option:
Enter **Y** to accept the license agreement and allow you to continue with the installation.
Enter **N** to decline the license agreement and terminate the installation.
3. Press **Enter**.
4. Select the directory where Domino Service will be installed. By default, the `%COMPOZE_HOME%` directory is chosen. You can change this by entering the absolute path of the directory.
5. Press **Enter**.
6. You will be prompted if the selected directory is the correct directory to install the service.
Enter **Y** to accept the directory and continue with the installation.
Enter **N** to return you to the previous step to select the directory where Domino Service will be installed.
7. Press **Enter**.
8. Choose the Lotus Domino program directory. On a Domino server the program directory is typically the `/opt/lotus/notes/{version}/{platform}` directory (or the `$Notes_ExecDirectory` directory), unless you installed the program files to a different location. You may change this by entering the absolute path of the directory.
9. Press **Enter**. If the specified directory does not contain the Lotus Domino program files, the console will display information stating such. Press **Enter** to continue or enter **Back** to go back and enter a valid Domino program directory.
10. Choose the Lotus Domino data directory. On a Domino server the Domino data directory is typically the `/local/notesdata` directory, unless you installed the data directory to a different location. You may change this by entering the absolute path of the directory.
11. Press **Enter**. If the specified directory is not a valid Domino data directory (for example, it does not contain the `names.nsf` database), the console will display information stating such. Press **Enter** to continue or enter **Back** to go back and enter a valid Domino data directory.
12. Read the installation summary information before pressing **Enter**. The summary contains information, such as the installation directory and the amount of disk space required.
13. Press **Enter** to install the service.
14. After the installation is complete, press **Enter** to exit.

Verifying the Installation

Check the following items to verify that the Domino Service was installed:

- A directory tree is located at %COMPOSE_HOME%/domino_service.
- The following files were added to %LOTUS_DOMINO_HOME% directory:
`libxerces-c.so`
`libczdo.so`
`libczdo_service.so`
- The following database was added to the %LOTUS_DOMINO_DATA% directory:
`bea_config.nsf`

Configuring the Lotus Domino Server

Perform the following steps to configure the Lotus Domino server that will host the Domino Service:

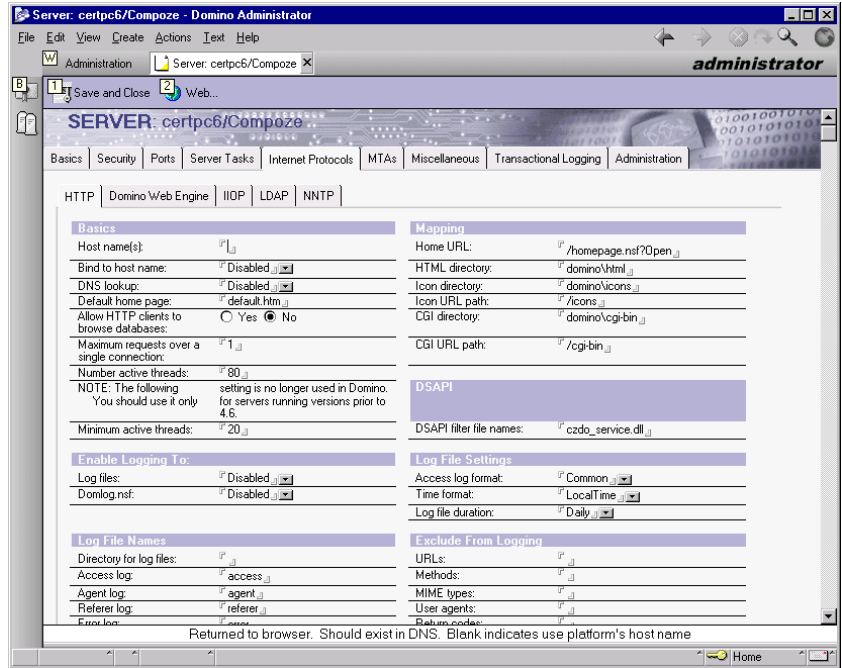
1. Open the Lotus Administrator client application and open the server where the Domino Service is installed.
2. Edit the server document for the server where the Domino Service is installed.
3. Select **Internet Protocols > HTTP** tab.
4. Under the `DSAPI` section, add Domino Service to the `DSAPI` filter file names field.

For Windows, add `czdo_service.dll`.

For Linux, add `libczdo_service.so`.

Note: If entries exist in this field, append Domino Service to the end, separated by a semicolon (;), with no carriage returns or whitespaces. For example,

```
ndolextn.dll;czdo_service.dll
```



5. Save the server document.
6. If the Domino server is started, enter the following `tell` commands from the Domino server console to restart the HTTP task:

```
tell http quit
load http
```

If the Domino server is not started, start the server.

Note: Replication of server document to the Lotus Domino server might be needed to ensure that the Domino Service is installed correctly.

7. To verify the Domino Service service was installed and configured correctly, you should see the following message from within the Lotus Domino server console:

```
10/09/2003 04:19:27 PM JVM: Java Virtual Machine initialized
10/09/2003 04:19:28 PM HTTP Server: Java Virtual machine loaded
10/09/2003 04:19:28 PM BEA Domino Service (version x.x.x): loaded
10/09/2003 04:19:28 PM HTTP Server: DSAPI BEA Domino Service Loaded
```

Installation

successfully

10/09/2003 04:19:29 PM HTTP Server: Started

Administration

This chapter describes administration and configuration of the Lotus Domino server as related to the Domino Service.

This chapter contains the following section:

- [Access Control List and Permissions](#)
- [Read/Unread Marker Support](#)
- [Domino Service Configuration Database](#)

Access Control List and Permissions

The Domino Service runs and connects to other Domino servers in the same Notes domain where the server is running. Therefore, the Domino server running the Domino Service must have permissions to access a mail database in order to retrieve data from that mail database. This is accomplished by the Domino server being a member of the `LocalDomainServers` group and with that group having permissions to access the mail database. At a minimum, the

LocalDomainServers group (or the specified server) must have the ACL permissions described in [Table 2-1](#) in order to read a mail database:

Table 2-1 Required Permissions

Permission	Description	Required
Create Documents	Allows the user to create documents, such as memos, appointments, and tasks.	Yes
Delete Documents	Allows the user to delete documents.	Yes
Read Public Documents	Allows the user to read documents.	Yes
Write Public Documents	Allows the user to write documents.	Yes
Create Personal folders/view	Allows the user to create views.	Yes
Create Shared folders/views	Allows the user to create folders for mail.	Yes

Note: These permissions correspond to the `Editor` Access Level *without* the following: Create Personal agents and Create LotusScript/Java agent.

When connecting as a specific user, the Java caller specifies a user's name and Internet password to create a session. The Domino Service authenticates the user using the Internet password and authorization against the ACL is performed. The Domino Service authorizes the user by examining the ACL permissions available on the mail database for that user. If the user meets the minimum user permissions, as described above, regardless of Access Level, the user is granted access; otherwise, an invalid user and password exception is thrown.

Note: The Domino user's Internet password is checked for authentication. If the Domino user is using the Domino feature **More Secure Internet Password** and you are running on Lotus Domino R5, this feature must be disabled in order to authenticate a user.

Read/Unread Marker Support

Before the Domino Service updates a read/unread marker on a document, it checks if the database **Do not mark modified documents as Unread** property is enabled on the user's mail database.

Setting this property is equivalent to opening the user's mail database in Notes and toggling the setting found at:

File > Database > Properties > Design

The Domino Service will enable this property if it is not enabled. Enabling this property eliminates inconsistencies in the read/unread state between two Domino mail clients.

Domino Service Configuration Database

Configuration and logging for the Domino Service is stored in a database called `bea_config.nsf`. This configuration database is copied to `%LOTUS_DOMINO_DATA%\bea_config.nsf` during installation of the Domino Service.

The database contains the views shown in [Table 2-2](#).

Table 2-2 Database Views

Parameter	Description
BEA Domino Service Configuration	Contains the Configuration document that stores configurable properties for the Domino Service. “BEA Domino Service Configuration” on page 2-4 .
All Events > By Date	Events categorized by date.
All Events > By Date & Method Name	Events categorized by date and Domino Service method.
All Events > By Date & Session	Events categorized by date and session.
All Events > By Server & Date	Events categorized by Domino Service server and date.
All Events > By Session ID and Thread ID	Events categorized by session ID and HTTP task thread ID.

Table 2-2 Database Views (Continued)

Parameter	Description
All Events > By Thread ID	Events categorized by HTTP task thread ID.
Login by User & Date	Logins by user and date.

Additionally, the database template `bea_config.ntf` is installed at
`%COMPOZE_HOME%\domino_service\db`.

This section contains the following topics:

- [Replication](#)
- [BEA Domino Service Configuration](#)
- [Maintaining Service Logs](#)
- [Netegrity SiteMinder](#)

Replication

The configuration database can be replicated and information shared across other Domino Service installations. This database is set to disable replication by default.

Perform the following steps to enable replications:

1. Browse to **Database properties > Replication Settings... > Other**.
2. Uncheck **Temporarily disable replication for this replica**.
3. This step is optional: replicate only the configuration options (not the log documents), by browsing to **Database properties > Replication Settings... > Space Savers**, checking **Documents in specified views or folders** and selecting the **BEA Domino Service Configuration** view.

Note: Do not replicate this database if you plan to have the **Log Level** set to **Debug** due of the high amount of logging.

BEA Domino Service Configuration

The BEA Domino Service Configuration database view contains the configuration document. This document contains the fields for configuring the Domino Service execution. This document

is only read when the Domino HTTP task starts. The Domino HTTP needs to be stopped and restarted for Domino Service configuration changes to take effect.

See [Table 2-3](#) for settings.

Table 2-3 Domino Service Configuration Settings

Parameter	Description
Attachment Size Limit (in bytes)	The maximum size of attachments allowed in bytes. The default is 500000.
Attachment Temp Directory	The location used by the service to temporarily transfer attachments. The default is the D:\temp directory.
Session Timeout (in seconds)	The inactivity in seconds when a session will automatically close. The default is 300.
Log Level	The amount of information written to the log. The level Debug is used to track individual requests and it provides the most information. Use Info for tracking user sessions. Use Warning for tracking basic Domino errors. Use Error for the least amount of information or only startup and fatal errors. The default setting is Info .
Skip Authentication?	A flag to indicate whether to use Domino user authentication. This parameter is used when integrating the Domino Service with Netegrity SiteMinder. “Netegrity SiteMinder” on page 2-6.
User Id Header	Name of header attribute to contain the user Id when running with Netegrity SiteMinder. “Netegrity SiteMinder” on page 2-6.

Maintaining Service Logs

Because the `bea_config.nsf` contains log entries, this database can grow very large. This is particularly true if the **Log Level** is set to **Debug**. For this reason, the `bea_config.nsf` is configured by default with **Remove documents not modified in the last: 15 days**. This configuration can be changed depending on your development or production requirements. This setting is available from a Notes client at **Database properties > Replication Settings... > Space Savers**.

Netegrity SiteMinder

The Domino Service supports integration with the Netegrity SiteMinder for single sign on.

Perform the following steps to configure SiteMinder support:

1. Set **Skip Authentication** to **Yes**.
2. Confirm that **User Id Header** matches the header attribute that will contain the **user Id** supplied by the SiteMinder webagent. For example, **DominoUID**.
3. Configure the SiteMinder webagent as follows:

```
Set SkipDominoAuth = no
```

```
Set DominoUseHeader = DominoUID
```

```
Set DominoLookupHeaderForLogin = yes
```

Create a user attribute response with variable name **DominoUID** set to the user profile for the Domino username.