

B r i g h t w a r e <sup>TM</sup>

# Installation Guide

Version 8.1.4

---

# Trademark, Copyright, and Patent Acknowledgements

edocs is a trademark of edocs, Inc.

Brightware is a registered trademark of edocs, Inc.

Brightware Contact Center Suite, Answer, Concierge, and Converse are trademarks of edocs, Inc.

Adobe and Acrobat are registered trademarks of Adobe Systems Incorporated

Internet Explorer, Microsoft Data Access Components Software Development Kit, Microsoft Management Console,

Microsoft Virtual Machine, Personal Web Server, SQL Server, SQL 2000, Windows, and Word are registered trademarks of Microsoft Corporation

Java, JavaScript, Solaris, and JRE are trademarks of Sun Microsystems, Inc.

Linux is a registered trademark of Linus Torvalds

Netscape Navigator is a registered trademark of Netscape Communications Corporation

Oracle is a registered trademark of Oracle Corporation

Red Hat is a registered trademark of Red Hat, Inc.

Visual C++ is a trademark of Microsoft Corporation

WebLogic Server is a trademark of BEA Systems, Inc.

WebSphere is a registered trademark of International Business Machines Corporation.

This document, as well as the software described in it, is delivered under license and may be used or copied only in accordance with the terms of such license. The content in this document is delivered for informational use only, is believed accurate at time of publication, is subject to change without notice, and should not be construed as a commitment by edocs, Inc. edocs, Inc. assumes no responsibility or liability for any errors or inaccuracies that may appear in this document. The User of the edocs applications is subject to the terms and conditions of all license agreements signed by the licensee of this application.

This unpublished work contains valuable confidential and proprietary information. Disclosure, use, or reproduction outside of edocs is prohibited except as authorized in writing. This unpublished work by edocs is protected by the laws of the United States and other countries. If publication occurs, the following notice shall apply: Copyright © 1997-2004 edocs, Inc. All rights reserved.

Covered by one or more of the following U.S. patent numbers: U.S. 6,278,996; U.S. 6,182,059; U.S. 6,411,947.

Portions of the software copyrighted by:

Copyright © 1991-2001 Sheridan Software Systems, Inc.

Copyright © 2001, JANUS SYSTEMS SA DE CV. All Rights Reserved.

Copyright © 1996-2001 VideoSoft Copyright © 1997-2001 KL Group Inc.

Copyright © 2001 Microsoft Corporation. All Rights Reserved.

Copyright © 2001 ProtoView Development Corporation. All Rights Reserved.

Copyright © 2001 Adobe Systems Incorporated. All Rights Reserved.

Sentry Spelling-Checker Engine Copyright © 2000 Wintertree Software Inc.

In addition to the other applicable agreements, use of this edocs software product shall indicate that Licensee agrees that it has reviewed and will abide by the terms and conditions of all license agreements related to third-party software incorporated in or required for the use of the edocs software product.

Version Date: December 20, 2004

# Table of Contents

---

<b>Chapter-1. About This Guide .....</b>	<b>1</b>
Related Documentation .....	1
Conventions Used in This Manual .....	2
Technical Support .....	3
<b>Chapter-2. System Requirements .....</b>	<b>5</b>
Brightware Server .....	5
Knowledge Manager .....	6
Contact Center Console / Agent Desktop / DB Admin .....	7
Brightware Database Server .....	8
Datamart Database Server .....	9
<b>Chapter-3. Database Installation .....</b>	<b>11</b>
General Information .....	11
Oracle Notes .....	12
Brightware Database Installation .....	13
SQL Server 2000: Brightware Database Installation .....	13
Oracle: Brightware Database Installation .....	15
Datamart Database Installation .....	18
SQL Server 2000: Datamart Database Installation .....	18
Oracle: Datamart Database Installation .....	20
Running the Installation Scripts .....	21
<b>Chapter-4. The Brightware Installer .....</b>	<b>23</b>
Before You Install .....	23
Analytics Installation Notes .....	23
Brightware Installation .....	24
Before You Begin .....	24
Target Directories .....	24
LDAP (Lightweight Directory Access Protocol) Server Settings .....	24
Brightware Server Listening Ports .....	24
Number of Active Agents .....	25
Localization Information .....	25
Report Server URL .....	25
Database Information .....	25
Knowledge Manager .....	26
Split Deployment .....	26
Web Clustering .....	26
Notes for Solaris Users .....	27
Brightware: The setown.sh Script .....	27
Analytics: The setanalytics.sh Script .....	28
Web Clustering .....	29
Installing Brightware Components .....	30

<b>Chapter-5. Upgrading Brightware .....</b>	<b>33</b>
Uninstalling Brightware Components .....	34
Windows .....	34
Solaris .....	34
Upgrading An Existing Brightware Database .....	35
Approximate Timeframes .....	35
SQL Server Upgrades .....	36
Executing the SQL Scripts .....	36
Upgrading the Knowledge Base .....	39
Oracle Database Upgrades .....	40
To Upgrade Oracle Databases from Version 5.0 to 6.0 .....	40
To Upgrade Oracle Database from Version 6.0 or 7.0 to 8.x .....	42
Uninstalling the Datamart Schema .....	49
Oracle: Uninstalling the Datamart Schema .....	49
SQL Server: Uninstalling the Datamart Schema .....	49
 <b>Chapter-6. Post-Installation Tasks and Reference .....</b>	 <b>51</b>
Basic Brightware Configuration .....	51
Step 1. Start the Brightware Server .....	51
Step 2. Log into the Contact Center Console as Administrator .....	51
Step 3. Configure the Outbound Mail Handler Settings .....	52
Step 4. Configure the Inbound Mail Handler Settings .....	52
Step 5. Create a Contact Center Console User .....	52
Step 6: Set Address Mapping in the Initial Business Unit .....	53
Step 7: Set Address Mapping in the Exception Business Unit .....	54
Step 8: Create Additional Business Units .....	54
Step 9: Change Login to User .....	54
Step 10: Create an Agent .....	54
Step 11: Add the New Agent to the Exception Business Unit .....	55
Step 12: Start Mail Processing .....	55
Changing Initial Brightware Server Component Settings .....	55
Configuring Concierge .....	56
Disabling Spell Checking .....	56
Changing the Dictionary Language .....	57
Disabling Checking for Customer History .....	58
Setting Brightware Server Port Number .....	59

# About This Guide

This document describes how to install and configure Brightware. It is intended for anyone involved in installing, configuring, and administering the software. This includes, but is not limited to: System Administrators, Mail Administrators, Database Administrators, and Brightware Administrators and Supervisors.

We assume that each administrator has a working knowledge of their area (for example, the DBA knows how to install and administer a database).

Here's overview of this document:

- [Chapter 2, “System Requirements”](#) – Provides detailed information about system hardware and software requirements.
- [Chapter 3, “Database Installation”](#) – Provides instructions for setting up the Brightware and Datamart databases on SQL Server or Oracle.
- [Chapter 4, “The Brightware Installer”](#) – Provides instructions for installing the Brightware Server and other Brightware system components on Windows and Solaris systems.
- [Chapter 5, “Upgrading Brightware”](#) – Provides instructions for upgrading pre-8.1.x installations to the latest version of Brightware.
- [Chapter 6, “Post-Installation Tasks and Reference”](#) – Provides information about post-installation tasks.

## Related Documentation

For more information about Brightware, please see these documents installed into the `\edocs\Brightware\doc` directory:

- *Agent Guide*
- *Contact Center Console Guide*
- *Knowledge Engineer Handbook*
- *Implementation Guide*
- *Integration Development Kit Guide*
- *Analytics Overview Guide*
- *DB Administrator Guide*
- *Report Developer Guide*

## Conventions Used in This Manual

The following typographic conventions are used in this guide:

- Menus, buttons, icons, and field names are bold:
  - “Select **Add Response**.”
  - “The **To:** and **CC:** fields are used to redirect messages.”
- Headings, document, and chapter titles are italicized. Italics are also used to introduce a new term:
  - “Refer to the *Contact Center Console Guide* for more information.”
  - “The Message Reader breaks incoming email into its linguistic components, a process called *parsing*.”

- Notes are flagged in the left margin:



This icon flags a note.

- Cautions are flagged in the left margin:



This icon flags a caution.

- Product names, job titles, and Brightware object names are capitalized:
  - “Brightware supports SQL Server 2000 and Oracle databases.”
  - “Ask your System Administrator for a list of login IDs.”
  - “Add Agents and Groups from the Contact Center Console.”
- Programming code and system messages appear in a fixed-width font:

“Set-request-condition (<condition>)”
- [Hyperlinks](#) - If viewing a document online, you can navigate through it using hyperlinks, which appear in blue text. Although not displayed in blue, the Table of contents and index entries are also hyperlinks.

## Technical Support

Assistance is available from edocs Technical Support.

	North America	Europe
Telephone	(508) 652-8400	+44.20.8956.2673
Hours of operation	8:30 AM – 8:00 PM Eastern Time, Monday - Friday	09:00 – 17:00 GMT Monday -Friday
E-mail address	support@edocs.com	support@edocs.com
Please consult your Warranty and Maintenance Attachment for the terms of your technical support.		

Before you call Technical Support, please have the following information available for the representative:

- Your company name.
- Version of software currently being used.
- Exact error message.
- Where the error occurred.
- Exact path for recreation of the error.





# System Requirements

## Brightware Server

**Table 2-1.** Brightware Server Hardware Requirements

Component	Minimum Required	Notes
Memory (RAM)	512 MB free	
Disk Space	275 MB free	
Processor	Pentium III 500	



X Server is required for Solaris installations.

**Table 2-2.** Brightware Server Software Requirements

Component	Minimum Required	Notes
Operating System	Windows 2000 Server with Service Pack 4 Windows 2000 Advanced Server with Service Pack 4 Windows 2003 Server Solaris 8, Solaris 9	Windows 2000 Server supports 4GB RAM and 4 processors. Advanced Server is required for Web Clustering. It supports 8GB RAM and 8 processors. Solaris users must apply the operating system patches specified on the Sun Web site for the 1.3.0 Java Runtime Environment (JRE).
Network	10 MBPS (or faster) Ethernet connection	A 100 MBPS Ethernet connection is recommended.
Mail Systems	SMTP/POP3/IMAP	The corporate mail system must be installed prior to Brightware installation.

# Knowledge Manager

**Table 2-3.** Knowledge Manager Hardware Requirements

Component	Minimum Required	Notes
Memory (RAM)	256 MB free	To edit Knowledge Bases in a disconnected environment, the Knowledge Manager can be installed separately onto another computer (i.e., a laptop).
Disk Space	175 MB free	
Processor	Pentium III 500	



X Server is required for Solaris installations.

**Table 2-4.** Knowledge Manager Software Requirements

Component	Minimum Required	Notes
Operating System	Windows 2000 Advanced Server with Service Pack 4 Windows XP Professional Windows 2003 Server Solaris 8, Solaris 9	
Network	High-speed network connection to Brightware Server	In order to update Knowledge Bases modified in a disconnected environment, a connection to a running Brightware Server is required.

## Contact Center Console / Agent Desktop / DB Admin

**Table 2-5.** Contact Center Software Requirements

Component	Minimum Required	Notes
Web Browser	Microsoft Internet Explorer 5.5 or 6.0 Netscape 6.1, 6.2, or 7.0	
Screen Resolution	1024 x 768 or higher	Resolutions lower than this may impede functionality.

## Brightware Database Server

**Table 2-6.** Brightware Database Server Hardware Requirements

Component	Minimum Required	Notes
<b>Memory (RAM)</b>	For a company expecting <b>3000</b> requests per day, a minimum of <b>1 GB RAM</b> is recommended.  For a company expecting <b>5000</b> requests per day, <b>1.5 - 2 GB RAM</b> is recommended.	See your database vendor installation recommendations for other hardware and software requirements.

**Table 2-7.** Brightware Database Disk Space Requirements (4 Months)

Messages per Day	Disk Space Required	Notes
<b>1000</b>	6 GB	Your longevity may vary depending on the type of messages you receive and other variables specific to your environment.
<b>2000</b>	11 GB	
<b>5000</b>	26 GB	



It is not recommended to keep more than 4 to 6 months worth of data.

**Table 2-8.** Brightware Database Server Software Requirements

Component	Minimum Required	Notes
<b>Database</b>	Microsoft SQL 2000 with Service Pack 3  Oracle 8i (8.1.7.4)  Oracle 9i (9.2.0.4)	If you are running 9i, make sure you have Oracle Text in your database configuration. To add it, modify the configuration to include JServer and Intermedia.  The Brightware Database Server supports Oracle 8i on Sun Solaris, while it supports Oracle 9i on both Sun Solaris and IBM AIX.



The database server and client software must be installed prior to installing the Brightware Server. Both Brightware and Datamart databases can be installed on one server. However, for optimum performance we recommend separate computers.

## Datamart Database Server

**Table 2-9.** Datamart Database Server Hardware Requirements

Component	Minimum Required	Notes
<b>Memory (RAM)</b>	For a company expecting <b>3000</b> requests per day, a minimum of <b>1 GB RAM</b> is recommended.  For a company expecting <b>5000</b> requests per day, <b>1.5 - 2 GB RAM</b> is recommended.	See your database vendor installation recommendations for other hardware and software requirements.

**Table 2-10.** Datamart Database Disk Space Requirements (1 Year)

Messages per Day	Disk Space Requirements	Notes
<b>1000</b>	12 GB	Your longevity may vary depending on the types of messages you receive and other variables specific to your environment.
<b>2000</b>	24 GB	
<b>5000</b>	60 GB	

**Table 2-11.** Datamart Database Server Software Requirements

Component	Minimum Required	Notes
<b>Database</b>	Microsoft SQL 2000 with Service Pack 3 Oracle 8i (8.1.7.4) Oracle 9i (9.2.0.4)	



The database server and client software must be installed prior to installing the Brightware Server. Both Brightware and Datamart databases can be installed on one server. However, for optimum performance we recommend separate computers.



Brightware Analytics report templates require Crystal Decisions Crystal Enterprise 8.0. Crystal Reports 8.0 does not support Windows 2003, so Analytics Reports cannot be run on Windows 2003 Server.



# Database Installation

This chapter provides instructions for installing the Brightware and Analytics Datamart databases. The Brightware database stores Brightware Contact Center configuration information and transactional data; the Datamart database stores transactional data in a form optimized for reporting.

The database installation is typically performed by the Database Administrator (DBA). If you are not a DBA, we recommend working closely with that person during the install.



The database installation and upgrade scripts are only available AFTER you run the Brightware Installer as described in Chapter 4. However, it is important to know the information in this chapter as you will need to provide information about several database settings during the install process. Review the Pre-Installation Checklists provides in this chapter prior to running the Brightware Installer as instructed in Chapter 4.

If you are reinstalling an existing installation of Brightware 8.1, please turn to [“Changing Initial Brightware Server Component Settings”](#), on page 55 for instructions.

## General Information

Administrators please note:

- All Brightware and Datamart databases must run on the same version of the database software. For example, if the Brightware production database runs on Oracle 8i, then the Datamart (and any other databases, such as an archive database) must also run on Oracle 8i. Patches or upgrades applied to the production database must also be applied to other databases to keep them in sync.
- Databases should be created with 8-bit ASCII character support.



Creating a database with 7-bit ASCII (US7ASCII) character support may result in e-mail processing failure.

- If you are running Unix you must use an Oracle database.
- The database(s) should be backed up regularly using your platform’s native backup utility and monitored to insure adequate disk and transaction log space. We recommend daily backups of the production database and periodic verification that the backups can be successfully restored.
- The scripts used to create the Brightware production database are also used to create any development, archive, or baseline databases that you plan to use.
- Databases can share a server or reside on separate computers. We recommend using separate computers for the Brightware and Datamart databases.

## Oracle Notes



The default installation configuration in a UNIX environment is 7 Bit and should be changed to 8 Bit.

When installing the Oracle database software you can select any of the installation options as appropriate or desired for your specific environment. However, none of the options presented need to be selected in order to use the databases. Recommendations are as follows:

- For Brightware: Set DB\_Block\_Size = 4096
- For Datamart: Set DB\_Block\_Size = 16384 (or 32768 on platforms that support it)



# Brightware Database Installation

To create the Brightware database you will execute two SQL scripts. The first sets the initial database size and sets up user logins, roles, data files, log files, segment space (SQL), and table space (Oracle). The second script creates the database schema (such as the tables, views, indexes, sequences, stored procedures, triggers, and constraints).



Read the comments within each script file for important information about the need to change some paths so that the script executes properly.

## SQL Server 2000: Brightware Database Installation

The installation is straightforward once you've completed several preliminary tasks. Use the checklist below to make sure these are complete before running the scripts.

### Pre-Installation Checklist

Before running the installation scripts make sure you have:

- \_\_\_\_\_ Installed SQL Server software on the database server computer(s).
- \_\_\_\_\_ Secured access to a database account with system administrator privileges.
- \_\_\_\_\_ Set a minimum of 500 MB temporary database space (tempdb). For instructions see [“Setting Temporary Database Space in SQL Server”](#), on page 14.
- \_\_\_\_\_ Determined the amount of disk space required (see [Table 2-7, on page 8](#)). These amounts are enough for four months of mail.

### Running the SQL Installation Scripts

To run the scripts:

1. Log in to the administrator's account and go to the **SQL Server Query Analyzer**. Select **Open** from the **File** menu and expand the directory tree to display the Brightware scripts (located at \Database-Scripts\ContactCenter\SQLServer).
2. Select the script you want to run (see table below). Determine where you want the data and log files installed on your system and create this directory on the server. To override the default setting, edit the script and globally replace “c:\mssql\data” with the directory name you want to use.



The script takes several minutes to complete, depending on the script you're using and the speed of your server.

3. If you're using the database utilities, run the *CCAdmin-SQLServer.sql* script (see table below).
4. Select **Disconnect** from the **File** menu to exit the administrator's account.
5. Then reconnect under the database owner's account; select **Connect** from the **File** menu to login. The default login/password is dbadmin/sanrafael.
6. Select the *install-SQLServer.sql* script and click **Execute**.



If you're installing an archive, development, or baseline database, use a text editor to globally replace "BWTracking" with a new name in both the *Tracking Sql Server* and *install-SQLserver* scripts.

**Table 3-1.** Brightware Database Installation Scripts: SQL Server 2000

Database Platform: SQL Server 2000	Notes
Scripts are located at: \Database-Scripts\ContactCenter\SQLServer	
<p><b>Step 1:</b> Select one of the following scripts (based on your estimated number of requests per day) and run it from the system administrator's account.</p> <p>If you expect to receive approximately:</p> <p>1000 requests/day, use <i>Tracking-Sql-Server-small.sql</i></p> <p>2000 requests/day, use <i>Tracking-Sql-Server-medium.sql</i></p> <p>5000 requests/day, use <i>Tracking-Sql-Server-large.sql</i></p>	<p>The <i>Tracking SQL Server</i> scripts create:</p> <ul style="list-style-type: none"> <li>- the physical database</li> <li>- Brightware (Contact Center) logins</li> <li>- Brightware (Contact Center) users</li> <li>- file groups</li> </ul>
<p><b>Step 2 (Optional):</b> If you intend to use the Brightware database utilities, from the system administrator's account also run the script: <i>CCAdmin-SQLServer.sql</i>.</p>	<p>The <i>CCAdmin-SQLServer.sql</i> script adds udsadmin as a database user.</p>
<p><b>Step 3:</b> From the newly created database owner's account, run the script: <i>install-SQLServer.sql</i>.</p> <p>The Brightware database owner's default login/password is: <i>dbadmin/sanrafael</i>.</p>	<p>The <i>install-SQLServer.sql</i> script creates the database tables, views, triggers, stored procedures, constraints, and indexes.</p>

## Setting Temporary Database Space in SQL Server

To set temporary database space in SQL (tempdb):

1. From the SQL Enterprise Manager, expand the directory index and select **Tempdb**.
2. Select **Properties** from the menu by clicking the right mouse button.
3. Select the **Data Files** tab.
4. Check (click) the **Automatically grow file** checkbox.
5. Select **In megabytes** from the File Properties pane.
6. Enter **500** and click **OK**.


This completes the SQL-Server 2000 Brightware Database installation.

# Oracle: Brightware Database Installation

The installation is straightforward once you've completed several preliminary tasks. Use the checklist below to make sure these are complete before running the scripts.

## Pre-Installation Checklist

Before running the installation scripts make sure you have:

- \_\_\_\_\_ Installed the Oracle server and Oracle SQL\*Plus software on the database computer and that an Oracle instance with an open database is running.
-  When creating the database, select UTF8 for the Character Set and National Character Set.
- \_\_\_\_\_ Secured access to a database account with system administrator privileges.
- \_\_\_\_\_ Selected an *oratabspace* script (large, medium, or small) that meets your needs (see tables below).
- \_\_\_\_\_ Determined where you want the data and log files installed on your system and created this directory on the database server. To override the default setting edit the *oratabspace* script, globally replacing "c:\oradata" with the directory name you want to use.
- \_\_\_\_\_ Determined the amount of disk space required (see [Table 2-7, on page 8](#)). These amounts are enough for four months of mail.
- \_\_\_\_\_ When creating the Oracle database, set the Compatible Parameter to 8.1.0.
- \_\_\_\_\_ Verified that one table space defined as TEMPORARY exists. To do this, run the following query:

```
select tablespace_name, contents
from user_tablespaces
where contents = 'TEMPORARY' and status != 'INVALID';
```



If you have created TEMPORARY during the instance creation using the default setting, check the size, initial, and next parameters. They should be at least 500MB, 10MB, and 10MB, respectively. If they do not meet the minimum size, delete the table space and recreate it using the following script.

If no rows are returned create a temporary table space by running the following script:

```
create tablespace TEMP
datafile C:\oradata\TEMP_file1.dat' size 500M
default storage
(initial 10M next 10M minextents 1 maxextents unlimited pctincrease 0)
online temporary;
```

## Running the Oracle Installation Scripts

To run the scripts:

1. Log into the system administrator account.
2. Run the *oratabspace* script you selected (see table below) from the SQL\*Plus prompt.
3. If you're using the database utilities, run the *CCAdmin-Oracle.sql* script (see table below).
4. Logoff and login from the database owner's account. The default login/password is dbadmin/sanrafael.

5. Run the `install-oracle.sql` script for your platform, either *install-oracle8i.sql* or *install-oracle9i.sql*.
6. The system will generate errors as it attempts to delete objects that don't yet exist; these can be disregarded.

This completes the Oracle Brightware Database installation.

**Table 3-2.** Brightware Database Installation Scripts: Oracle 8i

Database Platform: Oracle 8i	Purpose
Scripts are located at: \Database-Scripts\ContactCenter\Oracle8i	
<p><b>Step 1:</b> Select one of the following scripts (based on your estimated number of requests per day). Run this script from the system administrator's account.</p> <p>If you expect to receive approximately:</p> <ul style="list-style-type: none"> <li>1000 requests/day, use <i>oratablespace-small.sql</i></li> <li>2000 requests/day, use <i>oratablespace-medium.sql</i></li> <li>5000 requests/day, use <i>oratablespace-large.sql</i></li> </ul>	<p>The <i>oratablespace</i> scripts create:</p> <ul style="list-style-type: none"> <li>- the physical database</li> <li>- table spaces</li> <li>- log files</li> <li>- Brightware (Contact Center) logins</li> </ul>
<p><b>Step 2 (Optional):</b> If you intend to use the Brightware database utilities, from the system administrator's account, also run the script: <i>CCAdmin-Oracle.sql</i>.</p>	<p>The <i>CCAdmin-Oracle.sql</i> script adds udsadmin as a database user.</p>
<p><b>Step 3:</b> From the newly created database owner's account, run: <i>install-oracle8i.sql</i>.</p> <p>The Brightware database owner's default login/password is: <i>dbadmin/sanrafael</i>.</p>	<p>The <i>install-oracle8i.sql</i> script creates the database tables, views, triggers, stored procedures, constraints, and indexes.</p>



Do not use the script *oratablespace-dev.sql*. This script creates a very small database and should be for testing only, not for production.

**Table 3-3.** Brightware Database Installation Scripts: Oracle 9i

Database Platform: Oracle 9i	Purpose
Scripts are located at: \Database-Scripts\ContactCenter\Oracle9i	
<p><b>Step 1:</b> Select one of the following scripts (based on your estimated number of requests per day). Run this script from the system administrator's account.</p> <p>If you expect to receive approximately:</p> <ul style="list-style-type: none"> <li>1000 requests/day, use <i>oratablespace-small.sql</i></li> <li>2000 requests/day, use <i>oratablespace-medium.sql</i></li> <li>5000 requests/day, use <i>oratablespace-large.sql</i></li> </ul>	<p>The <i>oratablespace</i> scripts create:</p> <ul style="list-style-type: none"> <li>- the physical database</li> <li>- table spaces</li> <li>- log files</li> <li>- Brightware (Contact Center) logins</li> </ul>
<p><b>Step 2 (Optional):</b> If you intend to use the Brightware database utilities, from the system administrator's account, also run the script: <i>CCAdmin-Oracle.sql</i>.</p>	<p>The <i>CCAdmin-Oracle.sql</i> script adds udsadmin as a database user.</p>
<p><b>Step 3:</b> From the newly created database owner's account, run: <i>install-oracle9i.sql</i>.</p> <p>The Brightware database owner's default login/password is: <i>dbadmin/sanrafael</i>.</p>	<p>The <i>install-oracle9i.sql</i> script creates the database tables, views, triggers, stored procedures, constraints, and indexes.</p>



Do not use the script *oratablespace-dev.sql*. This script creates a very small database and should be for testing only, not for production.

## Datamart Database Installation

The procedure for creating the Datamart database is similar to the one used to create the Brightware database.

### SQL Server 2000: Datamart Database Installation

The installation is straightforward once you've completed several preliminary tasks. Use the checklist below to make sure these are complete before running the scripts.

#### ***Pre-Installation Checklist***

Before running the installation scripts make sure you have:

- \_\_\_\_\_ Installed SQL Server software on the database server computer(s).
- \_\_\_\_\_ Secured access to a database account with system administrator privileges.
- \_\_\_\_\_ Determined where you want the data and log files installed on your system and created this directory on the server. To override the default setting edit the *create\_datamart\_database\_SQLServer* script (see table below), and globally replace “d:\mssql\data\datamart” with the directory name you want to use.
- \_\_\_\_\_ Set a minimum of 500 MB temporary database space (tempdb). For instructions see [“Setting Temporary Database Space in SQL Server”, on page 14](#).
- \_\_\_\_\_ Determined the amount of disk space required (see [Table 2-10, on page 9](#)). These amounts are enough for one year of mail.

#### ***Running the SQL Installation Scripts***

To run the scripts:

1. Log in to the administrator's account and go to the **SQL Server Query Analyzer**. Select **Open** from the **File** menu and expand the directory tree to display the Datamart scripts (located at \Database\Scripts\Datamart\MSSQLServer).
2. Select the *create\_datamart\_database\_SQLServer.sql* script and click **Execute**.



The script takes several minutes to complete, depending on the script you're using and the speed of your server.

3. Select **Disconnect** from the **File** menu to exit the administrator's account.
4. Then reconnect under the database owner's account; select **Connect** from the **File** menu to login. The default login/password is dbadmin/sanrafael.
5. Select the *install\_datamart\_schema\_SQLServer.sql* script (see table below) and click **Execute**.
6. Set the temporary database space on the SQL Server instance. See [“Setting Temporary Database Space in SQL Server”, on page 14](#).

This completes the SQL Server 2000 Datamart database installation procedure.

For SQL	
Memory	Minimum SQL Server Memory: Set to [½ of the total available RAM]*
Memory	Maximum Memory = Set to [All available RAM – 50 MB]* (i.e. leave 50 MB free)
Memory	Reserve Physical Memory for SQL: set to ON*
Processor	Processors for parallel execution: set to Use all available processors
Processor	Boost SQL Server Priority on Windows: set to ON
Connections	Default connection options>ANSI nulls: set to ON
Connections	Allow other SQL Servers to connect remotely...: set to OFF
Connections	Default connection options>ANSI nulls defined on: set to ON
Server Settings	Allow Triggers to be Fired: set to ON
Database Settings	Default Index Fill Factor: set to Default
Database Settings	Recovery Interval: 0
Options (Database Property Options)	Set Auto Create Statistics: set to ON (check)
Options (Database Property Options)	Set Auto Update Statistics: set to ON (check)

\*Assuming no other applications are housed on this machine (i.e. the database server is dedicated to the SQL Server database).

**Table 3-4.** Datamart Installation Scripts: SQL Server 2000


Database Platform: SQL Server 2000	Notes
<p><b>Step 1:</b> From the system administrator's account run the script: <i>create_datamart_database_SQLServer.sql</i>.</p> <p>Scripts are located at \Database-Scripts\Datamart\MSSQLServer.</p>	<p>Creates:</p> <ul style="list-style-type: none"> <li>- the physical database</li> <li>- Datamart logins</li> <li>- Datamart users</li> <li>- file groups</li> </ul>
<p><b>Step 2:</b> From the newly created database owner's account, run the script: <i>install_datamart_schema_SQLServer.sql</i>.</p> <p>The default Datamart database owner's account login/password is: <i>dbadmin/sanrafael</i>.</p> <p>The default Datamart database user's account login/password is: <i>dmuser/sanrafael</i>.</p>	<p>Creates the database tables, views, triggers, stored procedures, constraints, and indexes.</p>

## Oracle: Datamart Database Installation

The installation is straightforward once you've completed several preliminary tasks. Use the checklist below to make sure these are complete before running the scripts.

### **Pre-Installation Checklist**

Before running the installation scripts make sure you have:

- \_\_\_\_\_ Installed the Oracle server and Oracle SQL\*Plus software on the database computer and that an Oracle instance with an open database is running.
-  When creating the database, select UTF8 for the Character Set and National Character Set.
- \_\_\_\_\_ Secured access to a database account with system administrator privileges.
- \_\_\_\_\_ Determined where you want the data and log files installed on your system and created this directory on the database server. To override the default setting edit the *oratabspace* script, globally replacing “d:\oradata\datamart” with the directory path you want to use.
- \_\_\_\_\_ Determined the amount of disk space required (see [Table 2-10, on page 9](#)).
- \_\_\_\_\_ Verified that one table space defined as TEMPORARY exists. To do this run the following query:

```
select tablespace_name, contents
from user_tablespaces
where contents = 'TEMPORARY' and status != 'INVALID';
```



If you have created TEMPORARY during the instance creation using the default setting, check the size, initial, and next parameters. They should be at least 500MB, 10MB, and 10MB, respectively. If they do not meet the minimum size, delete the table space and recreate it using the following script.

If no rows are returned create a temporary table space by running the following script:

```
create tablespace TEMP
datafile C:\oradata\TEMP_file1.dat' size 500M
default storage
(initial 10M next 10M minextents 1 maxextents unlimited pctincrease 0)
online temporary;
```



## Running the Installation Scripts

### To run the Oracle installation scripts:

1. Log into the system administrator account.
2. Run the *create\_datamart\_database\_Oracle.sql* script (see table below).
3. Logoff and login from the database owner's account. The default login/password is dbadmin/sanrafael.
4. Run the *install\_datamart\_schema\_Oracle.sql* script.
5. The system will generate errors as it attempts to delete objects that don't yet exist; these can be disregarded.

This completes the Oracle Datamart database installation procedure.

**Table 3-5.** Datamart Installation Scripts: Oracle

Database Platform: Oracle 8i and 9i	Notes
<b>Step 1:</b> From the system administrator's account run the script: <i>create_datamart_database_Oracle.sql</i> Scripts are located at \Database-Scripts\Datamart\Oracle.	Creates: <ul style="list-style-type: none"> <li>- the physical database</li> <li>- Datamart logins</li> <li>- Datamart users</li> <li>- file groups</li> </ul>
<b>Step 2:</b> From the newly created database owner's account, run the script: <i>install_datamart_schema_Oracle.sql</i> . The default Datamart database owner's account login/password is: <i>dbadmin/sanrafael</i> . The default Datamart database user's account login/password is: <i>dmuser/sanrafael</i> .	Creates database tables, views, triggers, stored procedures, constraints, and indexes.



Do not use the script *create\_datamart\_database\_Oracle\_verysmall.sql*. This script creates a very small database and should be for testing only, not for production.



# The Brightware Installer

This chapter contains instructions for running the Brightware Installer, which installs the Brightware Server and other Brightware components. These tasks are typically completed by the System Administrator. If you are not a System Administrator we recommend working closely with that person during the install.

## Before You Install

For a smooth installation, make sure the following tasks are complete before starting the installation:

- \_\_\_\_\_ Determine whether your existing corporate inbox can serve as the gateway for email routing, or whether you need to set up another inbox exclusively for this purpose.
- \_\_\_\_\_ Set the computer you'll be installing on to display all hidden files, and close any open applications.

When you receive the Brightware software from edocs, it will contain the following Brightware installers: “install.bin” (for UNIX) and “install.exe” (for Windows). After you run these installers as described later in this chapter, you will get the following:

- The Database-Scripts directory contains the scripts used to create the Brightware Contact Center and Datamart databases (described in Chapter 3), including upgrade scripts for customers upgrading from earlier versions (described in Chapter 5).
- The Docs folder contains all Brightware user documentation in Adobe Acrobat (PDF) format. The Acrobat Reader installation program is included. Once installed, documentation can be displayed by clicking the **Help** button on any Brightware application.

Before you start the Brightware Server, you will need to install and configure the Brightware database. If you're using Analytics, install and configure the Datamart database, (see “[Database Installation](#)”, on page 11 for more information).

## Analytics Installation Notes

We recommend that you install the Datamart database, Analytics Engine, Crystal Reports software, and the Crystal Report templates on a separate computer, along with database and Web server software.

You will need to set up a website for the reports on the report server (i.e. a virtual directory in IIS) so people can access them. To save time, determine the URL for the Reporting computer before installing the Brightware Server (as the installer will prompt you for it).

## Brightware Installation

Before running the install script, review the checklist below to confirm that all preliminary tasks are complete. To avoid interruptions during the install, have the required variables at hand; a complete list appears below. When you're ready, turn to [“Installing Brightware Components”, on page 30](#) to begin the installation.



If you're installing on Solaris, please review the section [“Notes for Solaris Users”, on page 27](#) before running the installer.



If you're upgrading from a pre-8.1.x version of Brightware please see [Chapter 5, “Upgrading Brightware”, on page 33](#).

## Before You Begin

For a successful installation, you should have the following information. If helpful, use the space provided to record your settings and to serve as future reference. We recommend using the installer-provided defaults, unless you have a specific reason for doing otherwise.

## Target Directories

Determine the directory where you want the Brightware Server software installed.

■ On Windows:

Target folder \_\_\_\_\_

- Default: C:\edocs\Brightware.

■ On Solaris:

Target directory \_\_\_\_\_

- Default: /usr/local/edocs/Brightware/.

## LDAP (Lightweight Directory Access Protocol) Server Settings

Brightware uses LDAP to handle address book information. If you don't know what your LDAP server and organization names are see your Mail Administrator.

- LDAP Server name \_\_\_\_\_

## Brightware Server Listening Ports

Determine which ports the server will listen on for HTTP requests.

■ Port Number \_\_\_\_\_

- Default: 7001

■ Secure Port Number \_\_\_\_\_

- Default: 7002

## Number of Active Agents

Consult your official License Agreement to determine the number of agents to be configured during the installation.

## Localization Information

Determine the language you want to use on the Brightware desktops, and to process incoming requests. The default is English.

## Report Server URL

- Report Server URL\_\_\_\_\_

## Database Information

### ***SQL Installations***

- Brightware database:
  - Server name\_\_\_\_\_
  - Default: name of the computer the installer is running on.
  - Database name\_\_\_\_\_
  - Default: BWTracking80
  - Port number\_\_\_\_\_
  - Default: 1433
- Datamart database:
  - Server name\_\_\_\_\_
  - Default: name of the computer installer is running on.
  - Database name\_\_\_\_\_
  - Default: BWDatamart80
  - Port number\_\_\_\_\_
  - Default: 1433

### ***Oracle Installations***

- Brightware database:
  - Server name\_\_\_\_\_
  - Default: name of the computer installer is running on.
  - Database name\_\_\_\_\_
  - Default: BWTracking80
  - Port number\_\_\_\_\_

- Default: 1521
- Datamart database:
  - Server name\_\_\_\_\_
  - Default: name of the computer installer is running on.
  - Database name\_\_\_\_\_
  - Default: BWDatamart80
  - Port number\_\_\_\_\_
  - Default: 1521

## Knowledge Manager

If you are installing only the Knowledge Manager on a computer, you will need to provide the installer with the following information:

- Brightware Server name\_\_\_\_\_
- Port number\_\_\_\_\_
- Default: 7001

## Split Deployment

If you intend to install the Brightware desktops on a separate computer you will need to provide the name and port number of that server during the installation.

- Web Desktop Server name\_\_\_\_\_
- Port number\_\_\_\_\_
- Default: 7001

## Web Clustering

If you intend to use Web Clusters, you will need at least three available systems and provide the name of the Management Server, names of the Clustered Servers (there will be at least two), and a valid Multicast Address.

- Management Server Hostname\_\_\_\_\_
- Clustered Server Hostnames\_\_\_\_\_
- Multicast Address\_\_\_\_\_
- Default: 237.0.0.1

## Notes for Solaris Users

If you're installing on a Solaris computer, please note:

- You must use an Oracle database (with the UTF8 as the Character Set and National Character Set). Refer to [“System Requirements”](#), on page 5 for more information.
- If you haven't done so already, you will need to apply the operating system patches required by the 1.3.1 Java Runtime Environment (JRE) before installing the Brightware Server. You'll find the Patches at: <http://java.sun.com/j2se/1.3/jre/download-solaris.html>.
- You must log in as root, or su to root, before running the installer.
- The default installation directory on Unix computers is /usr/local/edocs/Brightware/.
- Run the setown.sh as root (after modifying it if necessary). See the next step for details.
- Run the setanalytics.sh on the server where Analytics components are installed (after modifying the script if necessary). See the next step for details.
- After the scripts are run successfully, you can start the Brightware Server by logging in as the eservice user. You can start the server in console mode by running the startserver.sh from the root of the installation directory or as a daemon by running /etc/init.d/eserviced start.

## Brightware: The setown.sh Script

The Brightware installer places a script in /usr/local/edocs/Brightware/ called “setown.sh”. The setown.sh script:

- Can be configured to create a new user named eservice for you; alternately you can create the user yourself; and/or elect to use a different user name. (These options are described in the Unix installation procedures below.)
- Changes the owner of all Brightware files (including the daemon files) to eservice and sets permission to rwxrwx--- (770).
- Creates symbolic links in the run level 3 (/etc/rc3.d/) and run level 0 (/etc/rc0.d/) directories to control startup and shut down of the eservice daemon. If you prefer you can edit the script to create the start-up link in run level 5. The links are:

```
ln -s /etc/init.d/eserviced S99fp
```

where: S indicates Start and 99 launches the eservice daemon after the primary infrastructure daemons have been launched.

```
ln -s /etc/init.d/eserviced K01fp
```

where: K indicates Kill and 01 shuts down the eservice daemon before the primary infrastructure daemons have been shut down.

- Adds the daemon control file /etc/init.d/eserviced to your system.
- Creates the directory /var/edocs/Brightware/ for the daemon's startup and shut down log files.

For more information on using and configuring daemons please refer to your operating system documentation.



Note that the user created by the `setown.sh` script has no password. To complete the installation use your site's preferred utility to assign a password to the `eservice` account.

## Analytics: The `setanalytics.sh` Script

The Analytics installer places a script in `/usr/local/edocs/Brightware/` called “`setanalytics.sh`”. The `setanalytics.sh` script:

- Can be configured to create a new user named `eservice` for you; alternately you can create the user yourself; and/or elect to use a different user name. (These options are described in the Unix installation procedures below.) `setanalytics.sh` sets these for you. If you change them there, you must also change them in the following files in the `analytics/bin` directory:
  - `etl2002_0.sh`
  - `purge2002_0.sh`
  - `compact2002_0.sh`
  - `service.sh`
  - `taskscheduler.sh`



Make sure you use the same user name for Analytics as you used for Brightware.

- Changes the owner of all Brightware files (including the daemon files) to `eservice` and sets permission to `rw-rwx---` (770).
- Creates symbolic links in the run level 3 (`/etc/rc3.d/`) and run level 0 (`/etc/rc0.d/`) directories to control startup and shut down of the `etlscheduler` daemon. If you prefer, you can edit the script to create the start-up link in run level 5. The links are:

```
ln -s /etc/init.d/etlscheduler S99taskscheduler
```

where: S indicates Start and 99 launches the Brightware daemon after the primary infrastructure daemons have been launched.

```
ln -s /etc/init.d/etlscheduler K01taskscheduler
```

where: K indicates Kill and 01 shuts down the Brightware daemon before the primary infrastructure daemons have been shut down.
- Adds the daemon control file `/etc/init.d/taskscheduler` to your system.
- Creates the directory `/var/edocs/Brightware/` for the daemon's startup and shut down log files.

For more information on using and configuring daemons please refer to your operating system documentation.



## Web Clustering

Web Clustering allows two or more clustered Brightware Servers to serve Web Channel requests. In a clustered Web Channel configuration, there is one Management Brightware Server and one or more Clustered Brightware Server instances. The Management Server does not participate in the Web Channel cluster but it may host other channels such as email and chat.

The clustered servers are configured during the installation process. To use Web Channel clustering, select the “Clustered” option when asked about Clustered Deployment during installation. The installer prompts for the Management Server name and Clustered Server hostnames. Also, a unique Multicast Address is required for the cluster; a default address is provided. If the default multicast address is used by other applications in your LAN, select an address not in use. Then continue with the installation.

The product will need to be installed on each of the clustered servers, as well as the Management Server, using the same Clustered Deployment parameters (host names and multicast address).



The installation on clustered servers is required to be identical.

After installation, start the Brightware Server on the Management Server using the **startserver** command (or the Brightware Server NT Service or UNIX daemon). After the Management Server is running, start the clustered servers using the **startcluster** command (or the clustered Brightware Server NT Service or UNIX daemon).

When all the servers are up, the state of the cluster can be monitored from the WebLogic Console. For information about administering the cluster, please refer to the WebLogic documentation.

Additional information for configuring WebLogic for Web Clustering can be found at the BEA WebLogic web site:

<http://www.bea.com/index.shtml>

and at the BEA WebLogic Workshop:

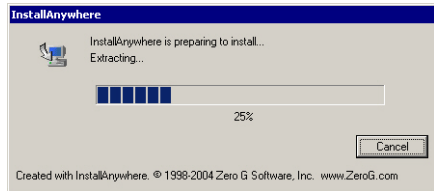
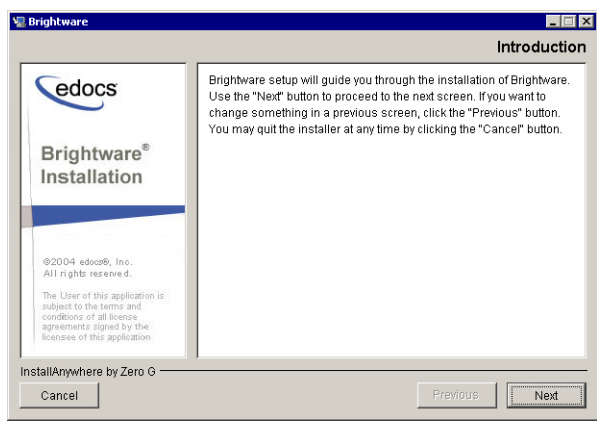
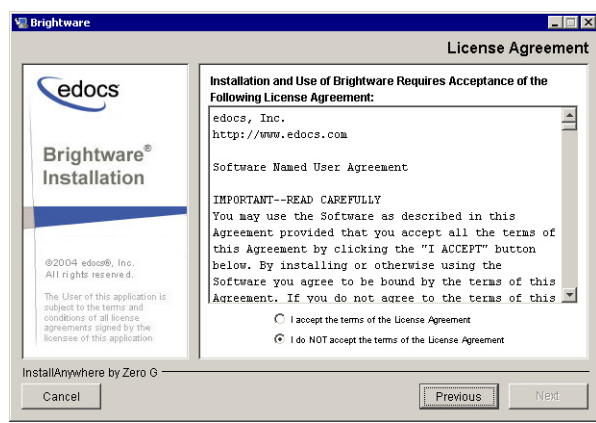
<http://e-docs.bea.com/workshop/docs70/help/guide/deployment/conClusteringWorkshopWebServices.html>.

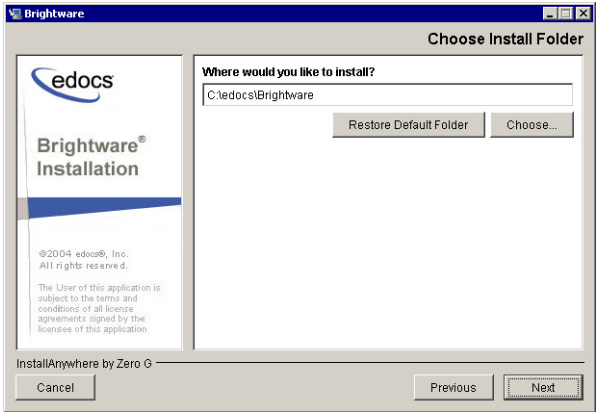
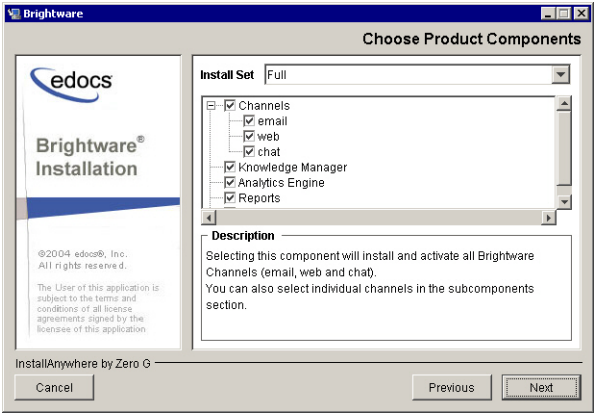
For information on system administration visit:

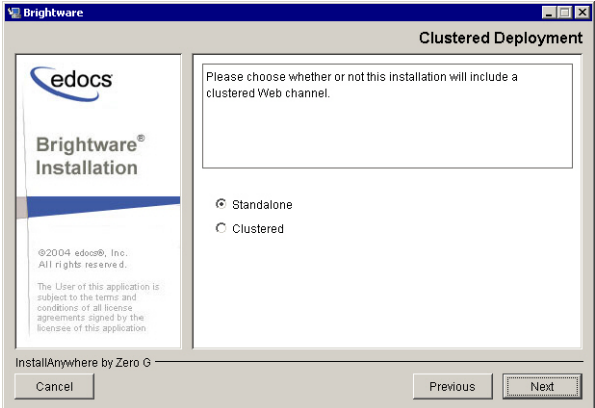
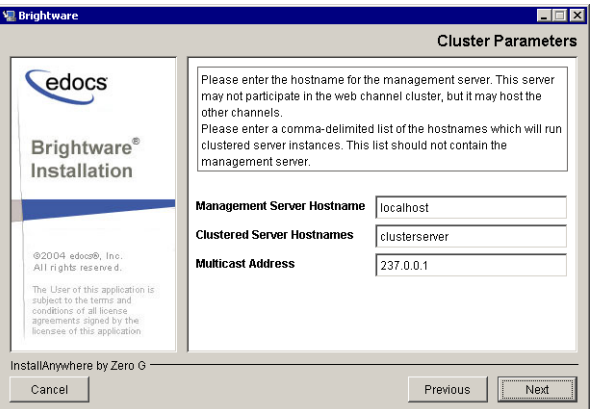

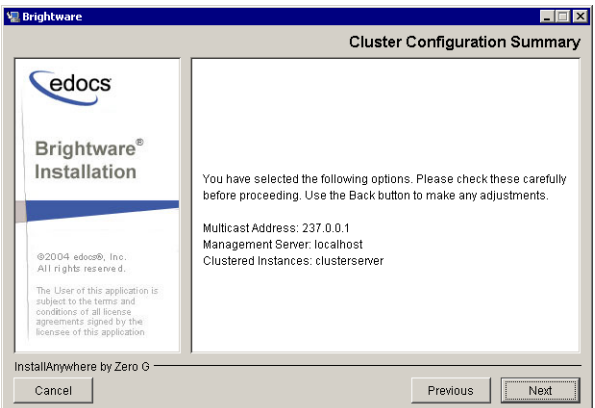

<http://e-docs.bea.com/wls/docs70/admin.html>.

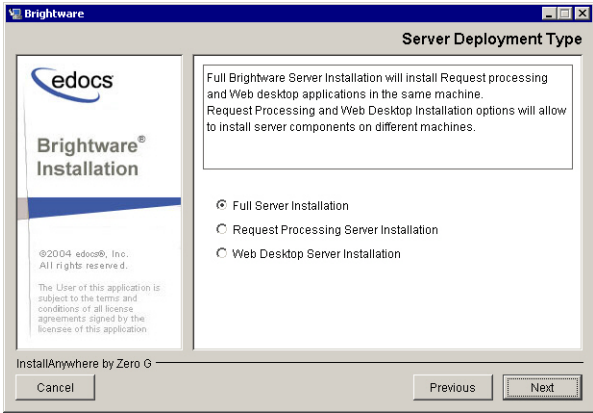
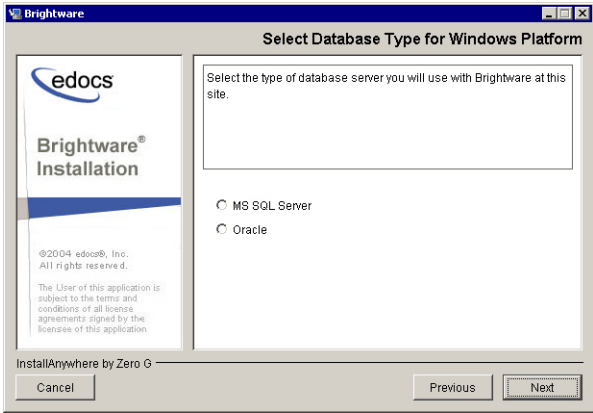

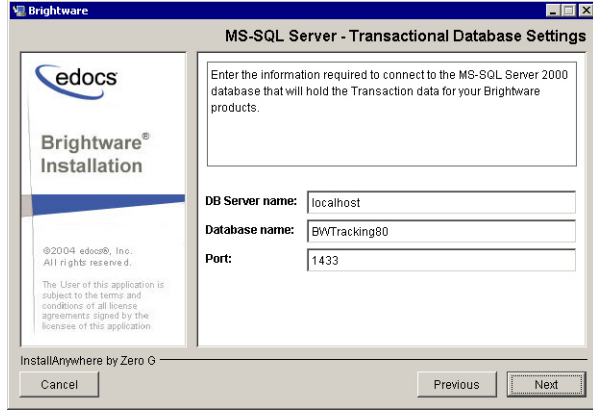
## Installing Brightware Components

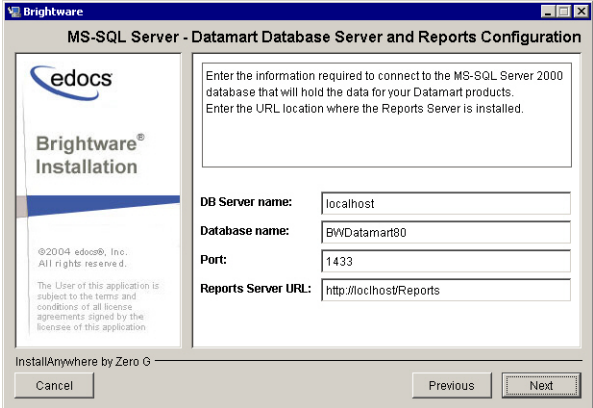
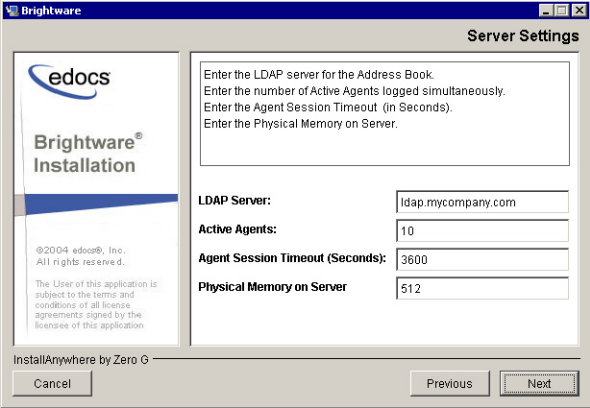
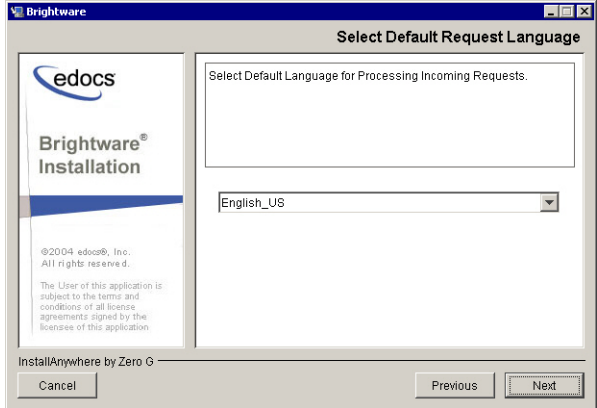
The following procedure is used for installing on both Windows and Solaris computers. Click **Next** in the install script to display the next screen, click **Previous** to go back one screen.


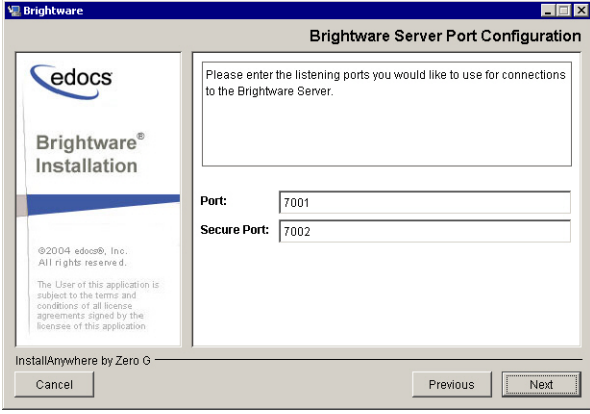
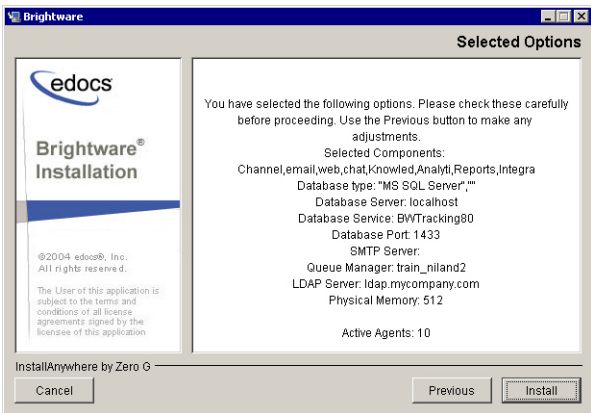
Step	Description	Dialog Box / Notes
1.	Click the installation executable (install.exe or install.bin) for your platform.  The program will take some time to open.	 The dialog box is titled "InstallAnywhere". It contains the text "InstallAnywhere is preparing to install..." and "Extracting...". Below this is a progress bar with 10 segments, the first 2.5 segments are filled, and the text "25%" is displayed. A "Cancel" button is at the bottom right. At the very bottom, it says "Created with InstallAnywhere. © 1999-2004 Zero G Software, Inc. www.ZeroG.com".
2.	On the <b>Introduction</b> screen, click <b>Next</b> .	 The dialog box is titled "Brightware". It has a sidebar on the left with the "edocs" logo and "Brightware® Installation". The main area is titled "Introduction" and contains text: "Brightware setup will guide you through the installation of Brightware. Use the 'Next' button to proceed to the next screen. If you want to change something in a previous screen, click the 'Previous' button. You may quit the installer at any time by clicking the 'Cancel' button." At the bottom, it says "InstallAnywhere by Zero G" and has "Cancel", "Previous", and "Next" buttons.
3.	On the <b>License Agreement</b> screen, click the <b>I accept the terms of the License Agreement</b> option, then click <b>Next</b> .	 The dialog box is titled "Brightware". It has a sidebar on the left with the "edocs" logo and "Brightware® Installation". The main area is titled "License Agreement" and contains text: "Installation and Use of Brightware Requires Acceptance of the Following License Agreement: edocs, Inc. http://www.edocs.com Software Named User Agreement IMPORTANT--READ CAREFULLY You may use the Software as described in this Agreement provided that you accept all the terms of this Agreement by clicking the 'I ACCEPT' button below. By installing or otherwise using the Software you agree to be bound by the terms of this Agreement. If you do not agree to the terms of this Agreement." Below this text are two radio buttons: "I accept the terms of the License Agreement" (which is selected) and "I do NOT accept the terms of the License Agreement". At the bottom, it says "InstallAnywhere by Zero G" and has "Cancel", "Previous", and "Next" buttons.

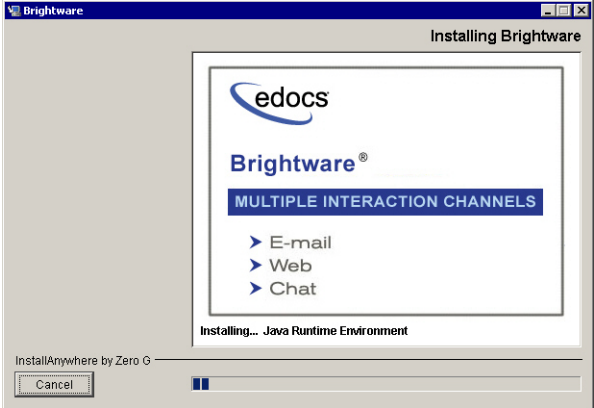
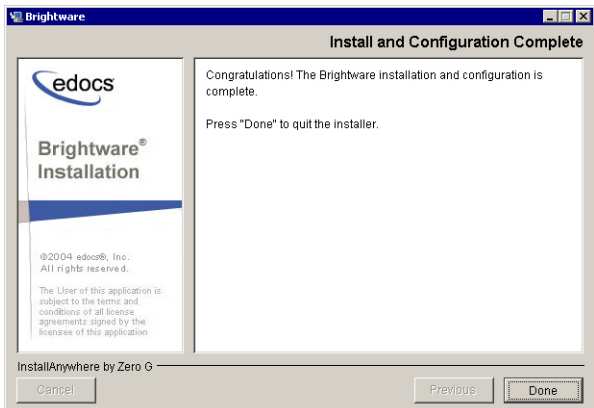
<p>4.</p>	<p>On the <b>Choose Install Folder</b> screen,</p> <ul style="list-style-type: none"> <li>■ Accept the default.</li> <li>■ Type the name and path of the directory where you want to install.</li> <li>■ Click the <b>Choose</b> button to browse to a specific folder.</li> </ul> <p>When you have determined the install path, click <b>Next</b>.</p>	 <p>If a previous version of the software is detected, the Previous Brightware Installation Found screen appears. Select "Reconfigure already installed product" (appends or modifies the current installation), "Reinstall eServicePerformer/Brightware" (uninstalls the current installation and initiates a reinstallation of the software), or click Cancel to exit the installation.</p>
<p>5.</p>	<p>On the <b>Choose Product Components</b> screen select the components to install. Use the scroll bar to view all the options.</p> <p>Select an option from the <b>Feature Set</b> drop-down list for a preset component selection set or select components individually.</p> <p>Click a component to view the description in the <b>Description</b> text box.</p> <ul style="list-style-type: none"> <li>■ Install the <b>Channels</b> to install the Brightware functions (email, web, or chat).</li> <li>■ Install the <b>Knowledge Manager</b> to use Brightware's advanced Natural Language Processing features. The Knowledge Manager can be installed on a separate computer.</li> <li>■ Install the <b>Analytics Engine</b> and <b>Reports</b> components to use Brightware reports.</li> <li>■ Install the <b>Integration Kit</b> if you intend to perform software integration.</li> </ul> <p>Click the <b>Next</b> button.</p>	

6a.	<p>On the <b>Clustered Deployment</b> screen, select whether this install will include a Clustered web channel or function as a Standalone.</p> <p>Click the <b>Next</b> button.</p>	
6b.	<p>If you selected <b>Clustered</b>, you need to supply the Management Server Hostname, any Clustered Server Hostnames, and the Multicast Address on the <b>Cluster Parameters</b> screen. A default Multicast Address is supplied.</p> <p>Click the <b>Next</b> button.</p>	 <p> The Management Server cannot participate in the Web Channel cluster.</p>
6c.	<p>If you selected <b>Clustered</b> and supplied the Web Cluster information, a confirmation screen is presented.</p> <p>On the <b>Cluster Configuration Summary</b> screen, the Web Cluster options you selected are displayed.</p> <p>Click the <b>Previous</b> button to return to the previous screen to make adjustments, or click <b>Next</b> if the settings are appropriate.</p>	 <p> When installing on the Clustered Servers, the installation settings must be exactly the same for each server.</p>

7.	<p>If you've selected the Email or Web channels install components, you will be offered the option, on the <b>Server Deployment Type</b> screen, of performing a full or split deployment (placing all the components on one server, or putting the Request Processing and Desktop components on separate computers to improve performance).</p> <ul style="list-style-type: none"> <li>■ <b>Full Server Installation</b> (places all components on this computer).</li> <li>■ <b>Request Processing Server Installation</b> (places Natural Language Processing and routing intelligence on this computer).</li> <li>■ <b>Web Desktop Server Installation</b> (places software required for hosting the Desktop applications on this computer).</li> </ul> <p>Click the <b>Next</b> button.</p>	
8.	<p>On the <b>Select Database Type</b> screen, indicate your database server type.</p> <p>If you select <b>Oracle</b>, the install will prompt you to select the version (8i or 9i).</p> <p>Click the <b>Next</b> button.</p>	 <p> The SQL Server option is not available in the Solaris installer.</p>
9.	<p>On the <b>Transactional Database Settings</b> screen, type your Brightware database information.</p>	

10.	On the <b>Datamart Database Server and Reports Configuration</b> screen, type your Datamart database information and the URL for the Reports Server.	
11.	On the <b>Server Settings</b> screen, type the Brightware Server parameters for your LDAP server, the number of agents you estimate will be active at one time, and the desired agent session timeout (default: 3600 seconds, or 1 hour) and the amount of physical memory (RAM) on the Server.	
12.	On the <b>Select Default Request Language</b> screen, indicate the default language you want to use for processing incoming requests. The default is English_US.	

13.	<p>On the <b>Select Language Used By Desktops</b> screen, indicate the language you want to use for the Brightware desktops. The default is English_US.</p>	
14.	<p>Enter the port numbers you want the server to listen on for HTTP requests on the <b>Brightware Server Port Configuration</b> screen.</p>	
15.	<p>Verify your installation settings on the <b>Selected Options</b> screen.</p> <p>Click <b>Previous</b> to make changes or click <b>Install</b> to complete the installation.</p>	

<p>16.</p>	<p>The installer copies the program files to your computer. This may take a few minutes.</p>	
<p>17.</p>	<p>Click <b>Done</b> to exit the installer.</p>	



# Upgrading Brightware

## Upgrade Paths

This chapter describes how to upgrade to the current version of Brightware.

If upgrading from pre-8.x Brightware, go to the [“Upgrading from a pre-8.x Brightware installation”](#), on page 33.

If upgrading from an 8.x.x Brightware installation, go to the [“Upgrading from an 8.x.x Brightware installation”](#), on page 50.

## Upgrading from a pre-8.x Brightware Installation

1. Verify you have the equipment and software required to run Brightware (see [Chapter 2, “System Requirements”](#), on page 5).
2. Shut down the existing installation and uninstall all Brightware components, refer to: [“Uninstalling Brightware Components”](#), on page 35.
3. Complete the database upgrade tasks: [“Upgrading An Existing Brightware Database”](#), on page 36.
4. If upgrading from a pre-6.0 version of Brightware (a version that does not support Business Unit processing), complete the post-installation configuration tasks outlined in [Chapter 6, “Basic Brightware Configuration”](#).
5. If upgrading from Brightware 6.0 or 6.01, for each Brightware Business Unit you will need to:
  - Configure Business Unit Inbound and Outbound Channel settings.
  - Associate a Knowledge Base with the Business Unit.
  - Create Business Unit Routing rules, as appropriate.
  - Create Queue Assignment Rules, as appropriate.
6. Depending on the type of database you are running, refer to: [“SQL Server Upgrades”](#), on page 37 for SQL, or [“Oracle Database Upgrades”](#), on page 41 for Oracle.

For assistance with these and other Business Unit configuration tasks, refer to the *Contact Center Console Guide* (Admin: Channel, Admin: Business Units, Admin: Routing Rules, and Supervise: Assignment Rules Views).

## Uninstalling Brightware Components

Depending on the version, the uninstaller may indicate either eServicePerformer or Brightware. In addition to the instructions below, you may need to manually remove the \Firepond directory. However, be aware that the \Firepond directory contains customized files for your system, such as knowledge bases, that should be backed up.

### Windows

#### To uninstall Brightware from Windows:

1. Use the **Add/Remove Programs** option. From the **Start** menu, select **Settings**, click **Control Panel**, and then click **Add/Remove Programs**.
2. Select **Firepond eServicePerformer/Brightware** from the list of programs and click **Change/Remove** to uninstall.

### Solaris

#### To uninstall Brightware from Solaris:

1. Log in as (or su to) root.
2. Go to the /usr/local/bin/firepond/ directory (or to the directory where Brightware is installed), then to the /UninstallerData directory.
3. Run the shell script:  

```
Uninstall_eServicePerformer
```

or

```
Uninstall_Brightware
```
4. To complete the uninstall, remove the following daemon files: /etc/init.d/eserviced, /etc/init.d/rc.bw, /etc/rc0.d/K01bw, and /etc/rc3.d/S99bw.

## Upgrading An Existing Brightware Database

No single script upgrades an earlier version of the Brightware database to the most recent version. To complete the transition you must run a series of scripts.

The “[Database Upgrade Chart - SQL Server](#)”, on page 37 and the “[Database Upgrade Chart - Oracle](#)”, on page 41 describe the upgrade process for all versions. The scripts can be found in the Database-Scripts directory after you install the Brightware components as described in Chapter 4. All Brightware databases must run on the same version of the database software. Patches or upgrades applied to the production database must also be applied to any other databases in use to keep them in sync.

A database backup should be restored to a development environment and the upgrade scripts run against a successfully restored backup. Running the scripts will ensure that any upgrade errors may be detected and resolved prior to upgrading the production database.

## Approximate Timeframes

A database containing one million requests or less averages around eight hours to upgrade, depending on database server specifications.

To identify the number of requests contained within the Transactional database, run the query:

```
SELECT COUNT(*) as TotalMsgs
FROM    Msg, Attachment
WHERE   Msg.MsgID = Attachment.MsgID
AND     Attachment.AttachmentTypeCode = 23004
AND     MsgData IS NOT NULL ;
```

If the Transactional Database contains records exceeding one million and/or server specifications are below minimum requirements, the upgrade process will take considerably longer.



The Datamart database contains a duplication of the data contained in the Transactional database, therefore, retaining this information in the Transactional Database may be considered redundant. If the database exceeds 1 million records, edocs suggests that the Transaction Database be purged to retain a more manageable number of records. Keeping the number of records in the Transactional Database to a minimum will not only ensure optimal system performance, but will minimize the time required for upgrading - thus ensuring minimum system down-time.



IN SITUATIONS WHERE THE TRANSACTIONAL DATABASE CANNOT BE PURGED, THE UPGRADE TIMEFRAME WILL BE INCREASED, POSSIBLY RESULTING IN ADDITIONAL CONSULTING FEES.

### **Note for 5.01 Customers**

For customers upgrading from Version 5.01, we have introduced a reporting database called the Datamart (BWDatamart). The Datamart database is used only for running reports. When the Datamart database is installed the database is empty. Therefore, the database must be populated with data to enable reports to be viewed.

The ETL (Extract Transform Load) process - used to populate data from the Transaction Database into the Datamart Database - averages around 1500 records per hour, depending on server performance. Populating the Datamart database with six (6) months of historical data may take up

to a week to complete (based upon a daily average of 1500 emails). Therefore, please carefully consider the amount of historical data needed and plan for the time required for transferring this data to the Datamart database.

## SQL Server Upgrades

Table 5-1. Database Upgrade Chart - SQL Server

Version of Brightware to be upgraded	Script or Procedure to upgrade Brightware
From 3.0, 3.5, or 3.6	b39-b40-SQLServer7.sql
From 4.0, 5.0, or 5.1	b40-5.0-SQLServer7.sql
From 6.0 or 6.1	Follow the procedure: <a href="#">“Executing the SQL Scripts”</a> , on page 37.
From 2002 (7.0)	Follow the procedure: <a href="#">“Executing the SQL Scripts”</a> , on page 37.
From 2002 (7.1)	Follow the procedure: <a href="#">“Executing the SQL Scripts”</a> , on page 37.

## Executing the SQL Scripts

The following steps should be followed to upgrade a 5.01 or 6.01 database to version 8:

1. Ensure all Users are logged out of the Agent and Supervisor Desktops.
2. Stop and shut-down the Brightware Server Standalone, Task (ETL) Scheduler and Answer services.
3. Make a backup of the existing Transactional (BWTracking) and Reporting (BWDatamart) database in the SQL Server 7/2000 environment (should be preformed by the DBA).
4. Restore the database(s) to the SQL Server 2000 environment (see prerequisites).



If you are restoring to a different SQL Server (a separate or new server) you will need to recreate the database login accounts.

5. Set the database transaction log to grow automatically.
  - Right-click the database and select **Properties**.
  - Click the **Transaction Log** tab.
  - Make sure the **Automatically grow file** property is checked in the File Properties section (see suggested settings below). Once this has been completed, you will be ready to begin running scripts on the database.
6. **For Version 5.01 Customers Only**  
 Upgrade the Transactional database from the version 5.01 schema to the version 6.01 schema. To do this, upgrade scripts need to be run against the Transactional (BWTracking) database to continue the upgrade process. Run the following scripts in the order (and by the user) specified:
  - b41-SQL7-database-1.sql – Run as “sa”

- b41-SQL7-database-2-[size].sql – Run as “sa”
- b41-SQL7-database-3.sql – Run as “sa”
- b41-SQL7-schema-1.sql – Run as “dbadmin” (password = “sanrafael”)
- b41-SQL7-schema-2.sql – Run as “dbadmin”
- b41-SQL7-schema-3.sql – Run as “dbadmin”
- b41-SQL7-schema-4.sql – Run as “dbadmin”
- b41-SQL7-schema-5.sql – Run as “dbadmin”
- b43-SQL7-database-1.sql – Run as “sa”
- b43-SQL7-schema-1.sql – Run as “dbadmin”
- b43-SQL7-schema-2.sql – Run as “dbadmin”

7. **For Version 6.01 Customers**

Upgrade the Transactional database from the version 6.01 schema to the version 7.1 schema. Assuming that the database schema is currently in Version 6.01 format, proceed with the following scripts to convert the schema to the Version 7.1 format.

- b47-SQLServer-database.sql – Run as “sa”
  - b47-SQLServer-initial.sql – Run as “dbadmin” (password = “sanrafael”)
  - b47-SQLServer-schema-1.sql – Run as “dbadmin”
  - b47-SQLServer-schema-2.sql – Run as “dbadmin”
  - b47-SQLServer-schema-3.sql – Run as “dbadmin”
  - b47-SQLServer-schema-4.sql – Run as “dbadmin”
  - b47-SQLServer-schema-5.sql – Run as “dbadmin”
- If you encounter this error, you may disregard:  
 Server: Msg 3703, Level 11, State 7, Line 1  
 Cannot drop the index 'Msg.XIE4Msg', because it does not exist in the system catalog.
- b47-SQLServer-schema-6.sql – Run as “dbadmin”
  - b47-SQLServer-schema-7.sql – Run as “dbadmin”
  - b47-SQLServer-schema-8.sql – Run as “dbadmin”
  - b47-SQLServer-schema-9.sql – Run as “dbadmin”
  - b47-SQLServer-schema-10.sql – Run as “dbadmin”
  - b58-SQLServer-schema-11.sql – Run as “dbadmin”

8. **For Version 7.1 Customers**

The database schema is now in version 7.1 format. Proceed with the following scripts to convert the schema to the Version 8.x format.

- b81-SQLServer-schema-1.sql – Run as “dbadmin”
- b81-SQLServer-schema-2.sql – Run as “dbadmin”
- b81-SQLServer-schema-3.sql – Run as “dbadmin”
- b81-SQLServer-schema-4.sql – Run as “dbadmin”
- b81-SQLServer-schema-5.sql – Run as “dbadmin”
- b81-SQLServer-schema-6.sql – Run as “dbadmin”
- b813-SQLServer-schema.sql – Run as “dbadmin”

9. Uninstall the old 5.01 or 6.01 software (Answer Agent, Brightware Server, etc.).

10. Install the 8.x software on the Brightware Server.

Note: You may choose to install the 8.x software temporarily on the Database Server in order to process the upgradeDB utilities faster. You may then uninstall the software after this process has been completed but be sure to configure the software to point to the upgraded transactional database when installing.

11. **IMPORTANT**

This step must be completed after the SQL upgrade scripts have completed successfully and before the Brightware Server has been started.

Run the upgradeDB\_6to7.cmd batch file to upgrade the message body class from Version 6 to Version 7. Launch the process located in the (root) Brightware installation directory, from a DOS window or command prompt (not by clicking on the file).

Access the batch file as follows:

- Navigate to the Brightware Directory

```
C:\>cd program files\edocs\Brightware
```

- Launch the procedure.

Note: The character set is the only required parameter.

Upon successful completion, you should see similar confirmation text in the display window:

```
C:\Program Files\edocs\Brightware>upgradeDB_6to7 iso-8859-1
.
.
.
Transferred 257000 so far .....
Transferred 258000 so far .....
Transferred total of 258018
Upgrade Completed for Closed messages ...
```

12. **IMPORTANT**

This step must be completed after the upgradeDB\_6to7.cmd process has completed successfully and before the Brightware Server has been started.

Run the upgradeDB.cmd batch file to upgrade the message body class from Version 7 to Version 8. Launch the process from the same (root) Brightware installation directory as in the previous step, from a DOS window or command prompt.

Access the batch file as follows:

- Navigate to the Brightware Directory

```
C:\>cd program files\edocs\Brightware
```

- Launch the procedure.

Upon successful completion, you should see similar confirmation text in the display window:

```
C:\Program Files\edocs\Brightware>upgradeDB
Connecting to DBs
Fragment Update Completed
Msg Update Completed
```

13. Upgrade the Datamart Database: Run the following scripts against the Datamart (BWDatamart) Database in order to upgrade it to Version 8 schema. The scripts must be executed in the order specified, starting with the script that matches your situation.
  - upgrade\_datamart\_schema\_FromVer2toVer3\_SQLServer.sql – Run as “dbadmin”
  - upgrade\_datamart\_schema\_FromVer3\_SQLServer.sql – Run as “dbadmin”
  - upgrade\_datamart\_schema\_FromVer40\_SQLServer.sql – Run as “dbadmin”
  - upgrade\_datamart\_schema\_FromVer71to80\_SQLServer.sql – Run as “dbadmin”
14. If you are installing on a Windows platform, edocs recommends that the Brightware Server be set to run as a service.
  - Access the Services dialog (From the **Control Panel** select **Administrative Tools** and then click **Services**).
  - Set the Brightware Server Standalone service to start automatically.
  - Start the Brightware Server Standalone service (applies to non-clustered environments only).
15. Next, but before starting the Brightware Server, make a backup of all email in the production mailbox. This is a preventative step and should be conducted for failover.

## Upgrading the Knowledge Base

To Upgrade the Knowledge Base from Version 5.01 to 8 follow the steps below:

1. Create a directory in the install folder called **Backup KB**.
2. Copy the 5.01 or 6.01 Knowledge Base and place into the Backup KB folder.
3. Open a Command Window (DOS Window).
4. CD to the root of the Brightware Install Directory. For example:

```
cd c:\program files
cd edocs\Brightware
```
5. Run the Knowledge Base Importer by typing **startkbimporter** followed by a space and the location of the Backup Knowledge Base. For example:

```
c:\Program Files\edocs\Brightware startkbimporter c:\Program
Files\Firepond\Backup KB\lab2.kb
```
6. A copy of the updated Knowledge Base will be placed into the root of the C:\ drive and will retain the same name.
7. Next open the Knowledge Manager and click the **File** menu and select **Load KB from Disk**. Next browse to the root of the C:\ drive and select the Knowledge Base file and click **Open**.
8. Finally click the **File** menu and select **Save KB As** and select the **Database Option**, at this point you may re-name the Knowledge Base or leave as is and click **OK**.

The Knowledge Base has now been ported from a previous version and has been saved to the Database.

## Oracle Database Upgrades

**Table 5-2. Database Upgrade Chart - Oracle**

Version of Brightware to be upgraded	Script or Procedure to upgrade Brightware
From 3.0, 3.5, or 3.6	b39-b40-Oracle8.sql
From 4.0, 5.0, or 5.1	b40-5.0-Oracle.sql
From 6.0 or 6.1	Follow procedure for 6.0 to 7.1 <a href="#">“To Upgrade Oracle Database from Version 6.0 or 7.0 to 8.x”</a> , on page 43.
From 2002 (7.0)	Follow procedure for 7.0 to 7.1 <a href="#">“To Upgrade Oracle Database from Version 6.0 or 7.0 to 8.x”</a> , on page 43.
From 2002 (7.1)	Follow procedure for 7.1 to 8.x <a href="#">“Oracle8i/Oracle9i Upgrade Procedure: 2002 (7.1) to 8.x”</a> , on page 48

## To Upgrade Oracle Databases from Version 5.0 to 6.0

Run all scripts from SQL\*Plus. Run the b41-Oracle8i-tablespace script from the system administrator account and the b41-Oracle8i-schema scripts from the database owner’s account. Depending on the amount of data being processed, the database upgrade process may take several minutes to several hours for very large installations.



You must run the schema scripts from the dbadmin account. Failure to do so may result in database-related problems that are difficult to diagnose and solve.

### Important Notes

- If the current ownership of the schema is *brightware/brightware*, you will continue to use that username and password for Brightware. If your current ownership of the schema is *dbadmin/sanfrael*, you will continue to use that username and password for Brightware.
- Review the short instruction section at the beginning of each script file before running it.
- Execute each script in the proper sequence. Each script must execute successfully before the next one in the series is run. If you encounter errors while running a script take corrective action as necessary before proceeding to the next script.
- The Upgrade-oratabspace script grants the ALTER TABLE privilege to the brightware account, but you may wish to set this manually as well from the system administrator account. If this does not occur you’ll receive an error during the upgrade.
- Do not stop or kill a session while a script is running.



## *Before You Begin*

- Determine which Upgrade-oratabspace script (small, medium, or large) is appropriate, based on the number of email requests you receive each day. Use the chart in [“Brightware Database Server”](#), on page 8.
- Verify that the C:\ORADATA directory exists to hold script log and data files. The scripts create all required table spaces and data files and assume that the C:\ORADATA directory is available. You can overwrite this default option by globally replacing “C:\ORADATA” with a different directory name in each script. If you’re running the scripts remotely, make sure that the C:\ORADATA directory exists on both the remote and local computers. Log and temporary work files are created on the local computer, data files are created on the remote computer.
- Verify that the original database has been upgraded to Oracle 8i.
- Verify that the initialization parameter “compatible” is set to Oracle 8i.
- Verify that adequate Rollback segment and Temporary segment space has been allocated to protect your data.
- Verify that no users are connected to the database, and that you are connected to the database you want to upgrade.

## **Oracle Upgrade Procedure: 5.0 to 6.0**

1. Shut down all Brightware components.
2. Backup the existing database.
3. From the system administrator’s account run the appropriate Upgrade-oratabspace script, select one:
  - b41-Oracle8i-tablespace-small.sql
  - b41-Oracle8i-tablespace-medium.sql
  - b41-Oracle8i-tablespace-large.sql
4. From the database owner’s account run the following scripts in sequence:
  - b41-Oracle8i-schema-1.sql
  - b41-Oracle8i-schema-2.sql
  - b41-Oracle8i-schema-3.sql
  - b41-Oracle8i-schema-4.sql
  - b41-Oracle8i-schema-5.sql
  - b41-Oracle8i-schema-6.sql
  - b41-Oracle8i-schema-7.sql
5. Backup the upgraded database.

This completes the Oracle database upgrade from version 5.0 to 6.0.

## To Upgrade Oracle Database from Version 6.0 or 7.0 to 8.x

If you've been using a pre-6.0 version of Brightware, be sure to complete the steps described in the [“Database Upgrade Chart - Oracle”](#), on page 41 before running the 2002 scripts.

Run all scripts from SQL\*Plus. Run the b47-Oracle8i-database.sql script from the system administrator account and the Oracle8i-schema scripts from the database owner's account.

Depending on the amount of data being processed, the database upgrade process may take several minutes to several hours for very large installations.

### **Important Notes**

- If the current ownership of the schema is *brightware/brightware*, you will continue to use that username and password for Brightware. If your current ownership of the schema is *dbadmin/sanfrael*, you will continue to use that username and password for Brightware.
- Review the short instruction section at the beginning of each script file before running it.
- Execute each script in the proper sequence. Each script must execute successfully before the next one in the series is run. If you encounter errors while running a script, take corrective action as necessary before proceeding to the next script.
- If you are running Oracle 8i, make sure you have Oracle Text in your database configuration. To add it, modify the configuration to include JServer and Intermedia.
- Do not stop or kill a session while a script is running.
- If upgrading from version 2002 (7.0) to version 7.1, only run the b58-Oracle8i-schema-11.sql script.
- There are different procedures to follow depending on if you intend to migrate to Oracle9i:
  - If you do not intend to upgrade Oracle8i refer to [“Oracle8i Upgrade Procedure: 6.0 to 2002 \(7.1\)”](#), on page 44 or [“Oracle8i Upgrade Procedure: 2002 \(7.0\) to 2002 \(7.1\)”](#), on page 45.
  - If you intend to upgrade Oracle8i to Oracle9i refer to [“Oracle8i to Oracle9i Upgrade Procedure: 6.0 to 2002 \(7.1\)”](#), on page 46 or [“Oracle8i to Oracle9i Upgrade Procedure: 2002 \(7.0\) to 2002 \(7.1\)”](#), on page 47.

### **Before You Begin**

- Verify that the C:\ORADATA directory exists to hold script log and data files. The scripts create all required table spaces and data files and assume that the C:\ORADATA directory is available. You can overwrite this default option by globally replacing “C:\ORADATA” with a different directory name in each script. If you're running the scripts remotely make sure that the C:\ORADATA directory exists on both the remote and local computers. Log and temporary work files are created on the local computer, data files are created on the remote computer.
- Verify that adequate Rollback segment and Temporary segment space has been allocated to protect your data.
- Verify that no users are connected to the database, and that you are connected to the database you want to upgrade.

## ***Oracle8i Upgrade Procedure: 6.0 to 2002 (7.1)***

1. Shut down all Brightware components.
2. Backup the existing database.
3. From the system administrator's account run the script:  
`b47-Oracle8i-database.sql`
4. From the database owner's account run the following scripts in sequence:  
`b47-Oracle8i-initial.sql`  
`b47-Oracle8i-schema-1.sql`  
`b47-Oracle8i-schema-2.sql`  
`b47-Oracle8i-schema-3.sql`  
`b47-Oracle8i-schema-4.sql`  
`b47-Oracle8i-schema-5.sql`  
`b47-Oracle8i-schema-6.sql`  
`b47-Oracle8i-schema-7.sql`  
`b47-Oracle8i-schema-8.sql`  
`b47-Oracle8i-schema-9.sql`  
`b47-Oracle8i-schema-10.sql`  
`b58-Oracle8i-schema-11.sql`
5. Back up the upgraded database.
6. To complete the upgrade, run the following script to upgrade the message body class. Run the script from the Brightware installation directory.  
`UpgradeDB.sh <character set> [username password]`  
The script takes three parameters: character set, username, and password.
  - `<character set>` is the character set encoding used on your Brightware 6.01 Answer Agent server. For example "iso-8859-1" is a character set used for Western languages.
  - Username and password are those of your Brightware database.

This completes the Oracle database upgrade from version 6.0 to 2002 (7.1).

## ***Oracle8i Upgrade Procedure: 2002 (7.0) to 2002 (7.1)***

1. Shut down all Brightware components.
2. Backup the existing database.
3. From the system administrator's account run the following script:  
`b47-Oracle8i-database.sql`
4. From the database owner's account run the following script:  
`b58-Oracle8i-schema-11.sql`
5. Backup the upgraded database.
6. To complete the upgrade, run the following script to upgrade the message body class. Run the script from the Brightware installation directory.  
`UpgradeDB.sh <character set> [username password]`

The script takes three parameters: character set, username, and password.

- <character set> is the character set encoding used on your Brightware 6.01 Answer Agent server. For example "iso-8859-1" is a character set used for Western languages.
- Username and password are those of your Brightware database.

This completes the Oracle database upgrade from version 2002 (7.0) to 2002 (7.1).

## ***Oracle8i to Oracle9i Upgrade Procedure: 6.0 to 2002 (7.1)***

If you intend to migrate from Oracle 8i to Oracle 9i during the Brightware database upgrade, you must complete the upgrade and migration tasks in the following order:

- Run the scripts to complete the 6.0 to 2002 (7.1) upgrade procedure for 8i.
- Migrate to Oracle 9i following the instructions provided by Oracle.
- Run the Brightware 9i upgrade script.
- Then run the final script to upgrade the message body class.

### ***Upgrade Procedure***

1. Shut down all Brightware components.
2. Backup the existing database.
3. From the system administrator's account run the script:
 

```
b47-Oracle8i-database.sql
```
4. From the database owner's account run the following scripts in sequence:
 

```
b47-Oracle8i-initial.sql
b47-Oracle8i-schema-1.sql
b47-Oracle8i-schema-2.sql
b47-Oracle8i-schema-3.sql
b47-Oracle8i-schema-4.sql
b47-Oracle8i-schema-5.sql
b47-Oracle8i-schema-6.sql
b47-Oracle8i-schema-7.sql
b47-Oracle8i-schema-8.sql
b47-Oracle8i-schema-9.sql
b47-Oracle8i-schema-10.sql
b58-Oracle8i-schema-11.sql
```
5. Backup the upgraded database.
6. After completing the Oracle 8i update procedure, upgrade the Oracle software to 9i.
7. Once Oracle is updated to 9i, run the script:
 

```
b60-Oracle9i-schema.sql
```
8. To complete the upgrade, run the following script to upgrade the message body class. Run the script from the Brightware installation directory.
 

```
UpgradeDB.sh <character set> [username password]
```

The script takes three parameters: character set, username, and password.

- <character set> is the character set encoding used on your Brightware 6.01 Answer Agent server. For example "iso-8859-1" is a character set used for Western languages.
- Username and password are those of your Brightware database.

This completes the Oracle 8i to 9i database upgrade from version 6.0 to 2002 (7.1).

## ***Oracle8i to Oracle9i Upgrade Procedure: 2002 (7.0) to 2002 (7.1)***

If you intend to migrate from Oracle 8i to Oracle 9i during the Brightware database upgrade, you must complete the upgrade and migration tasks in the following order:

- Run the scripts to complete the 2002 (7.0) to 2002 (7.1) upgrade procedure for 8i.
- Migrate to Oracle 9i following the instructions provided by Oracle.
- Run the Brightware 9i upgrade script.
- Then run the final script to upgrade the message body class.

### ***Upgrade Procedure***

1. Shut down all Brightware components.
2. Backup the existing database.
3. From the system administrator's account run the following script:  
`b47-Oracle8i-database.sql`
4. From the database owner's account run the following script:  
`b58-Oracle8i-schema-11.sql`
5. Backup the upgraded database.
6. After completing the Oracle 8i update procedure, upgrade the Oracle software to 9i.
7. Once Oracle is updated to 9i, run the script:  
`b60-Oracle9i-schema.sql`
8. To complete the upgrade, run the following script to upgrade the message body class. Run the script from the Brightware installation directory.

```
UpgradeDB.sh <character set> [username password]
```

The script takes three parameters: character set, username, and password.

- <character set> is the character set encoding used on your Brightware 7.0 Answer Agent server. For example "iso-8859-1" is a character set used for Western languages.
- Username and password are those of your Brightware database.

This completes the Oracle 8i to 9i database upgrade from version 2002 (7.0) to 2002 (7.1).

## **Oracle8i/Oracle9i Upgrade Procedure: 2002 (7.1) to 8.x**

These scripts can be used to upgrade both Oracle8i and Oracle9i databases.

1. Shut down all Brightware components.
2. Backup the existing database.
3. From the dbadmin account run one of the following scripts:
  - b81-Oracle8i-schema-1.sql
  - b81-Oracle8i-schema-2.sql
  - b81-Oracle8i-schema-3.sql
  - b81-Oracle8i-schema-4.sql
  - b81-Oracle8i-schema-5.sql
  - b81-Oracle8i-schema-6.sql
  - b81-Oracle8i-schema-7.sql
  - b81-Oracle8i-schema-8.sql
  - b81-Oracle8i-schema-9.sql
  - b81-Oracle8i-schema-10.sql
  - b812-Oracle-schema.sql
  - b813-Oracle-schema.sql
4. Backup the upgraded database.
5. Install the 8.x software.
6. Run the following script to upgrade the message body class. Run the script from the Brightware installation directory, in a command window (not by clicking on it).  
`UpgradeDB.cmd [username password]`

The script takes three parameters: username, and password.

- Username and password are those of your Brightware database.



It is important for the Database Administrator to monitor the rollback segment during this procedure. If the rollback segments overflow, the UpgradeDB script will cause an exception. The command file portion will need to be re-run.

This completes the Oracle8i database upgrade from version 2002 (7.1) to 8.x.

## ***Upgrading the Oracle Analytics Datamart Database***

No single script upgrades Analytics 2.0 to Analytics 8.x. To upgrade, you must run a series of scripts until you are updated to the current version. All scripts can be found in the \Database-Scripts\Datamart\ directory.



All Brightware databases must run on the same version of the database software.

Determine the version of Analytics you are currently running, and follow the directions until you are upgraded to the current version.

### ***To upgrade Analytics version 2.0 or 2.01 to version 3.0***

Run the upgrade script:

```
upgrade_datamart_schema_FromVer2toVer3_Oracle8i.sql
```

### ***To upgrade Analytics version 3.0 to version 4.0***

Run the upgrade script:

```
upgrade_datamart_schema_FromVer3_Oracle8i.sql
```

### ***To upgrade Analytics version 4.0 to version 7.1***

Run the upgrade script:

```
upgrade_datamart_schema_FromVer40_Oracle8i.sql
```

### ***To upgrade Analytics version 7.1 to version 8.x (Oracle 8i)***

1. Run the upgrade scripts:

```
upgrade_datamart_schema_FromVer41_Oracle8i.sql
```

2. Copy the **upgradedm.jar** file to \program files\edocs\Brightware\common\lib\ on your computer.

3. Copy the **Upgrade Ora8i\_Datamart.bat** file to \program files\edocs\Brightware\ on your computer.

4. Edit the BAT file. Instructions are provided within the BAT file.

5. Execute the BAT file.

### ***To upgrade Analytics version 7.1 to version 8.x (Oracle 9i)***

Run the upgrade script:

```
upgrade_datamart_schema_FromVer41_Oracle9i.sql
```



### *To upgrade Analytics version 8.x to 8.1.x*

Run the upgrade script:

```
upgrade_datamart_schema_FromVer8x_Oracle.sql
```

## Uninstalling the Datamart Schema

To uninstall the Datamart schema, while keeping the existing database structure, run the script for your platform.

- If running version 2.0, use the script on the Analytics 2.0 CD.
- If running version 3.0, use the script on the Analytics 3.0 CD.
- If running version 4.0, use the script on the Analytics 4.0 CD.
- If running other versions, check the Database-Scripts directory.

## Oracle: Uninstalling the Datamart Schema

`uninstall_datamart_schema_Oracle.sql`

## SQL Server: Uninstalling the Datamart Schema

`uninstall_datamart_schema_SQLServer.sql`

## Upgrading from an 8.x.x Brightware Installation

1. Verify you have the equipment and software required to run Brightware (see [Chapter 2, “System Requirements”, on page 5](#)).
2. Prepare to shut down the Brightware Server:
  - Use the Contact Center Console to stop all the inbound message channels (email, chat and web).
  - Close out as many messages as possible.
  - Log out all users from the Brightware product.
3. Shut down the Brightware product
4. Make a backup of the entire hard disk that Brightware is installed on.
5. Uninstall the existing Brightware product, refer to: [“Uninstalling Brightware Components”, on page 35](#).
6. Delete the Firepond directory.
7. Run the 8.1.4 installation, refer to: [“Installing Brightware Components”, on page 30](#).
8. Restore your modified Brightware files from the backup. These files might include:
  - Analytics reports that have been modified or created (`..\Brightware\analytics\Reports\`).
  - Normalization and Morphology files that were modified (`..\Brightware\lib\common\dictonaries\`).
  - Language-detector.xml if it was modified (`..\Brightware\lib\common\dictonaries\`).
  - All Knowledge Base (KB) files that you have saved as files.

- The variable-pool.xml file if it was modified (..\Brightware\). Check your variable-pool.xml file for the following lines:
 

```
<var name="LDAP_AUTHENTICATION"></var>
<var name="LDAP_PRINCIPAL"></var>
<var name="LDAP_CREDENTIALS"></var>
```

 You must add these lines if they do not exist. Add them immediately after the line:
 

```
<var name="LDAP_BASEDN" />
```
  - The custom user dictionary file userdic.tlx (..\Brightware\lib\common\dictionaries\spell-lexicons\).
9. Restore modifications within XML files such as custom logging settings and memory sizes (..\Brightware\fpconfig).
  10. If you are using Oracle as the database management system, run these upgrade scripts on the tracking (Contact Center) database (you must run these scripts from SQL Plus as user dbadmin):
    - *Do not run this script if you are already at version 8.1.2* \Database-Scripts\ContactCenter\Oracle8i\upgrade\script **b812-Oracle-schema.sql**
    - Database-Scripts\ContactCenter\Oracle8i\upgrade\script **b813-Oracle-schema.sql**.
  11. Start the Brightware Server or Service and verify the system is working properly.

**Note:** (Oracle 8i users only) If you running Analytics and want to view the *Original Message Info* or *Reply Message Info* reports, you must have the Oracle 9.2.0.4 ODBC driver installed. Install the Oracle 9i Client Tools to get this driver.



# Post-Installation Tasks and Reference

This chapter includes procedures for completing post installation configuration tasks, such as options for setting up proxying, configuring spell checking, using the Secure Email Portal, and other administrative tasks. It also includes step-by-step instructions for using the Contact Center Console to configure the basic Brightware implementation so you can start processing messages right away.

## Basic Brightware Configuration

This procedure guides you through the process of implementing a basic Brightware system using the Contact Center Console interface.

### Step 1. Start the Brightware Server

- From the Windows **Start** menu, select **Programs** and click **edocs**, then click **Brightware Server**. As you're starting the server for the first time several error messages will appear. For Example:

```
2002-04-29 14:30:12,691 [Thread-4] WARN fp.protocol.inbound - No  
mailboxes for reading mail have been specified in the Management  
Console. Stopping the Inbound Mail Handler.
```

These warnings can be ignored, they will not reappear once the server has been properly configured.



When running Brightware in UNIX: Brightware software will not run when you are logged in as root user. Please log in as eservice before starting the Brightware Server.



To run the Integration Listener program, it must be run from the same directory as the Brightware Server with the variable-pool.xml file located in the same directory. The variable-pool.xml file is installed into the installation directory and should not be moved.

### Step 2. Log into the Contact Center Console as Administrator

1. Open a browser window and enter the address of the Contact Center. The default URL is: `http://<server name>:7001/ContactCenter.html`
2. Select **Contact Center Console** to display the login screen.
3. Click the text link: "If you wish to login as Administrator, please [click here](#)." to display the password prompt.
4. Leave the **Password** field empty (the default password is blank). You will then be prompted to create a new password of your choice.



In the future, to change the Admin password use the Applications: Options view on the Console.

## Step 3. Configure the Outbound Mail Handler Settings

1. Click the Admin: Channels view on the desktop to display the Channels view.
2. Select **Options for Outbound Email**.
3. Enter the name of your mail server in the **Server Name** field. Accept the default values for the other Outbound Mail settings.
4. Enter the name of the LDAP server, as well as any other required settings. Refer to the Contact Center Console Guide for more information.
5. Click **Save** to return to the Channels view.

## Step 4. Configure the Inbound Mail Handler Settings

1. From the Channels view select **Options for Inbound Email**.
2. Under Mail Servers (at the bottom of the screen) click **New** to open the **Email Server Settings** screen.
3. Enter the name of your mail server.
4. Enter the user name that corresponds to the mailbox you will be reading inbound mail from.
5. Enter the password to that account.
6. Select a Protocol, either IMAP or POP3. We recommend IMAP if the specified server supports it.
7. Use the default Thread Count (1).
8. Click **Save** to return to the Channels view.



If you expect mail volume to exceed 15,000 messages per day, you may want to change the Thread Count and related Console settings to improve performance. For assistance in adjusting these settings for high volume conditions please contact edocs Technical Support. The phone number for Technical Support in your area can be found in [“Technical Support”](#), on page 3.

## Step 5. Create a Contact Center Console User

1. Go to the Admin: Users view.
2. Click the **Add** button.
3. Enter the new user's name and address information.
4. Assign them to the Initial and Exception Business Units.
5. Check all Permission boxes to give this user full access to the Console views (Admin, Supervise, Monitor).
6. Click **Save** to return to the Admin: Users view.

## Step 6: Set Address Mapping in the Initial Business Unit

Contact Center Console includes two default Business Units: Initial and Exception (the Initial Business Unit is sometimes called the Default Business Unit). If you plan on using only one Business Unit in your implementation, you will use the Initial Business Unit.



The default Business Units can be renamed but not deleted.

The Exception Business Unit acts as a holding area for incoming mail in the event that Brightware cannot determine which Business Unit to place a message in. In other words, it performs exception error handling. This type of error might occur if a Business Unit was inadvertently removed, or the system was being re-configured during message processing. Similarly, the Exception Queue in each Business Unit handles queue-related exception errors.

You must establish mailbox mapping records for both the Initial and Exception Business Units, and for any new Business Units you create. For the Initial Business Unit (and any you add) you will:

- Create a new mapping record specifying the mailbox you want to read messages from and the address you wish to appear in the From: field on outbound messages and messages sent as AutoAcknowledgments. (For more information about AutoAcknowledgment messages please refer to the section on “Supervise: Queues View” in the *Contact Center Console Guide*.)
- Edit the default mapping record, which handles errors in the event a message cannot be delivered. The default mapping addresses will be identical to the ones used in your New mapping record in each Business Unit.

Unless you have a specific reason for sending outbound mail from a mailbox other than the one it was addressed to, the Outbox and Ackbox addresses will be the same as the Inbox address. If you wish to specify more than one From: and AutoAcknowledgment (AutoAck) address you can set up additional mapping records.

### To set address mapping in the Initial Business Unit:

1. Go to the Admin: Business Units view.
2. Select the Initial Business Unit from the drop-down list and click the **Edit** button to edit the Default mapping record.
3. In the Mail Boxes box, click **Edit**.
4. In the **OutBox** and **AckBox** fields enter the address you want to appear in the From: field on outgoing mail and AutoAcknowledgment messages, respectively.
5. Press **OK** to return to the Admin: Business Units screen.
6. In the Mail Boxes box, click **Add** to create the main mailbox mapping record for the Initial Business Unit.
7. In the **InBox** field enter the address of the user specified in the Inbound Email options of the Channels screen. In the OutBox and AckBox fields enter the address you want to appear in the From: field on outgoing mail and AutoAcknowledgment messages, respectively.
8. Press **Save** to return to the Admin: Business Units screen.

## Step 7: Set Address Mapping in the Exception Business Unit

In the Exception Business Unit you need only edit the default mapping record. Unless you have a specific reason for sending outbound mail from a mailbox other than the one it was addressed to, the Outbox and Ackbox addresses will be the same as the Inbox address.

1. Select the Exception Business Unit from the drop-down list, and click the **Edit** button.
2. In the **OutBox** and **AckBox** fields enter the address you want to appear in the From: field on outgoing mail and AutoAcknowledgment messages, respectively.



Unless you have a specific reason for sending outbound mail from a mailbox other than the one it was addressed to, the From: and Ackbox addresses will be the same as the Inbox address.

3. Click **Save** to return to the Admin: Business Units screen.
4. Click **Save** again to save all your edits.

## Step 8: Create Additional Business Units

1. On the Admin: Business Units view click **New**, and configure any additional Business Units you want to use.
2. Go to the Admin: Rules view and create any rules to route messages to the appropriate Business Unit. If you're using multiple Knowledge Bases you should also set up rules for routing messages to different Knowledge Bases.

## Step 9: Change Login to User

1. Log off as the Administrator.
2. Log in again as the User you created in Step 5.

## Step 10: Create an Agent

1. Go to the Supervise: Agents view and click the **New** button.
2. Select the Default Business Unit in the Business Unit drop-down box.
3. Enter the required information for this agent. By default the agent will be assigned to the Initial Queue.
4. Assign the new agent to the Default and Exception queues as well by checking those boxes in the Queues Assigned Directly list.



## Step 11: Add the New Agent to the Exception Business Unit

1. Go to the Admin: Business Units view.
2. Select the Exception Business Unit from the drop-down list and click the **Edit** button.
3. Assign the new User to the Exception Business Unit by checking the box next to their name in the Agents list.

This completes the basic Brightware post-installation configuration tasks; you are now ready to process mail.

## Step 12: Start Mail Processing

1. Go to the Admin: Channels view.
2. Click the Outbound Mail **Start** and Inbound Mail **Start** buttons to start mail processing.

To further refine your system, you can create additional Queues and rules to route messages to them; create responses in the Response Library, create groups and assign messages to them. For information about creating and configuring these objects, please refer to the *Contact Center Console Guide*.

## Changing Initial Brightware Server Component Settings

To update the Brightware system parameters set when installing, re-run the Brightware Installer.

**To reconfigure the Brightware Server component settings:**

1. Shut down all edocs applications.
2. Rerun the Brightware Installer (from the original CD or from the network).
3. Click through the first set of installer screens until you encounter the screen that says “The Brightware Installer has found a previous eServicePerformer/Brightware installation in the selected path.”
4. Select the **Reconfigure already installed product** option.
5. Re-enter your configuration settings, making adjustments as required. Your previously entered settings will appear as the default values.

## Configuring Concierge

In order for Concierge to work within your Brightware system, you must configure a file. Perform the following steps to configure Concierge for use with the software:

1. Open the file called **concierge.jsp** located in the deployment directory:  
\\edocs\Brightware\config\eservice\applications\DefaultWebApp\_myserver\concierge.jsp\.
2. Modify the **setKB** function including the:
  - Business Unit the Knowledge Base is assigned to (within the Contact Center Console).
  - Knowledge Base that contains the Web Rules you want to use.

```
concierge.setKB("Sales", "/Sales.kb");
```



If the Knowledge Base you choose is assigned to more than one business unit, requests that are escalated (to email or chat) will be routed to the business unit with the highest alphabetic ranking.

3. Save and close the JSP file.

## Disabling Spell Checking

There are two ways to globally turn off spell checking: temporarily, and permanently.

### To globally turn off spell checking (temporarily):

- Edit startserver.cmd and add the following command-line parameter to Java in startserver.cmd:

```
-Dcom.firepond.nlp.spell.execute=false
```

This will need to be done every time after configure.cmd has been run, as this operation re-generates the startserver.cmd file.

### To globally disable spell checking (permanently):

1. Edit the server-commands.xml file, which is used by **configure** to create **startserver**. In this case, add the italicized line among the other system properties:

```
<!-- startserver -->
<cmdfile path="$USER_INSTALL_DIR$/startserver">
[ ... ]
    <property
        name="com.firepond.nlp.spell.execute">false</property>
```

The property defaults to true, so it need only be used to turn spelling off.

2. Run configure.cmd to re-generate the startserver.cmd file.

## Changing the Dictionary Language

The language(s) for the Spell Checker dictionary can be changed.

To change the dictionary language:

1. Shut down the Brightware Server.
2. Open the **email-common.xml** file, located in the <installation path>\fpconfig\ folder.
3. Locate the following lines in the email-common.xml file:

```
<prop name="MainLexicon1" value="lib/common/dictionaries/spell-lexicons/ssceXX.tlx,file" type="unique"></prop>
<prop name="MainLexicon2" value="lib/common/dictionaries/spell-lexicons/ssceXX2.clx,file" type="unique"></prop>
```

These lines are repeated several times. Each pair represents a language dictionary. The XX in the code sample above appears as follows:

- **am** – American English
- **br** – British English
- **da** – Danish
- **du** – Dutch
- **fr** – French
- **ge** – German
- **it** – Italian
- **po** – Portuguese
- **sp** – Spanish
- **sw** – Swedish

Delete the lines that represent the languages you do not need.

4. Save the **email-common.xml** file.
5. Run the **configure.cmd** file, located in the \edocs\Brightware\ folder.
6. Start the Brightware Server.

## Disabling Checking for Customer History

Disabling history checking can be useful for integrations where all messages coming into the Brightware system appear to be from a single address.

To turn off history checking, the **check.for.customer.history** parameter will need to be turned off in the config.cml file:

```
<application cluster="no"
name="firepond.email.webagent.application" type="Application">

<instance

instance-of="firepond.components.email.webagent.Component "
name="com.firepond.webagent.WebAgent ">

<parameter-group>

<parameter-group name="email.webagent">

<parameter name="check.for.customer.history" value="false"/>

<parameter name="trace" value="true"/>

<parameter name="session.timeout" value="3600"/>

<parameter name="resources.name"
value="com.firepond.il8n.webagent"/>

<parameter name="country" value="US"/>

<parameter name="language" value="en"/>

</parameter-group>

</parameter-group>

</instance>

</application>
```

## Setting Brightware Server Port Number

The Brightware server uses port 7001 as the default. Follow these steps to change the port number:

1. The port is specified in the **providers.xml** file which is contained within the weblogic-platform.jar file (installed at \edocs\Brightware\platform\). Locate the com.firepond.webapp.port parameter within providers.xml and edit the value.

```
<param>
  <name>com.firepond.webapp.port</name>
  <value>7001</value>
</param>
```

2. The port is also specified in the **variable-pool.xml** (installed at \edocs\Brightware\). Locate the APP\_SERVER\_PORT variable and edit the value.

```
<var name="APP_SERVER_PORT">7001</var>
```

3. Run the **configure.cmd** file (installed at \edocs\Brightware\).

