



Centric CRM 4.1

Installation, Setup, Maintenance,
and Upgrade



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Introduction

Welcome to Centric CRM!

The installation, configuration, maintenance and upgrade of Centric CRM is intended to be as simple as possible. However, this document assumes that you have a working knowledge of the required applications. Please read the complete instructions for a successful installation and upgrade.

Implementing Centric CRM, like any enterprise-class software, is often a significant task for an organization. Implementation requires management participation, technical staff, and often the help of experienced Centric CRM consultants. Organizations implementing Centric CRM should read and review the Centric CRM Implementation Guide -- contact Centric CRM to use the services of a Centric CRM Solution Provider.

This information is provided to those that have read and agreed to the Centric CRM license agreement.

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Requirements

Pick your software requirements

Centric CRM works on a number of platforms. This means that you can choose what works best for your organization.

Operating System	Database Server	Application Server + Sun Java VM
Linux	Apache Derby (embedded/included)	Apache Tomcat 5.5 + Sun Java 5.0 JRE
Mac OSX	Daffodil DB/One\$DB (embedded/included)	Apache Tomcat 5.0 + Sun Java 1.4 J2SE
Microsoft Windows	Firebird SQL 1.5	Apache Tomcat 4.0 + Sun Java 1.4 J2SE
Sun Solaris	IBM DB2 / Express-C 9.0	Apache Geronimo 1.1 + Sun Java 1.5
	Microsoft SQL Server 2005, 2005 Express, 2000, 2000 DE	Apache Geronimo 1.0 + Sun Java 1.4
	MySQL 5.0	IBM Websphere Application Server CE + Bundled IBM Java
	Oracle 10g Express	
	PostgreSQL 8.1, 8.0, 7.4	

Pick your hardware requirements

Centric CRM is lightweight. Any server you can buy today is generally more than you'll need. However, configure it based on the needs of your organization. If 100% uptime is required, a second spare server is recommended. If your organization plans to save lots of documents, increase the drive space. A single server can be used for the web server, database server, and mail server and expanded to additional servers later, when necessary. Dual processors or a dual-core processor is recommended because Centric CRM takes advantage of Java's multi-threaded operations.

1-25 Users	26-100	101-250	250 +
733 MHz (x2)	1.2 GHz (x2)	1.2 GHz (x2)	2.4 GHz (x2)
512 MB	1 GB	1 GB	2 GB
18 GB	36 GB	36 GB	72 GB
RAID	RAID	RAID	RAID

Upgrading from a Previous Version

Currently using a prior version of Centric CRM?

Upgrading from a previous version of Centric CRM has been designed to be as simple as possible. All of your previous Centric CRM configuration information is saved in the file library, which, by default, is not in the same path as the webapp, so your information will be preserved.

Please review all upgrade steps to ensure that the upgrade goes as planned. You will most likely want to avoid down-time for your users. The upgrade process can be completed in under 10 minutes if you are prepared and everything goes well.

IMPORTANT: Make sure to backup the Centric CRM database and file library before continuing with the upgrade. The upgrade process will make irreversible changes to your database, unless you have a backup.

1. Backup the centric_crm or darkhorse_crm database -- you can restore this database if a problem occurs during upgrade
2. Backup the file library, specified during application installation
3. Shutdown the Apache Tomcat web application server
4. Backup the existing Apache Tomcat webapps/centric.war or webapps/darkhorsecrm.war file -- you can restore this WAR if a problem occurs during upgrade
5. Delete the existing Apache Tomcat webapps/centric directory (or webapps/darkhorsecrm)
6. Copy the centric.war file into Tomcat's webapps folder, overwriting the existing centric.war file or darkhorsecrm.war file -- replacing the existing file is important
7. Startup the Apache Tomcat web application server
8. Login to Centric CRM to perform additional upgrade steps

Once the Centric CRM application has started, and you are able to connect with a web browser, you will be prompted with a page indicating that the application has detected an out-of-date database. Follow the on-screen instructions to finalize the upgrade.



If you are not presented with an upgrade screen, it's possible that your browser has cached the login screen. Try refreshing your browser or emptying its cache.



Until an administrator logs into Centric CRM and confirms the upgrade, users will not be able to login.



Make sure you have a backup! If any problems occur during the upgrade, a detailed report is generated in the Apache Tomcat log file which can be used to further identify the problem.

PostgreSQL 7.3 no longer supported. No problem.

We do our best to work with older versions of software, but we've moved on from PostgreSQL 7.3. PostgreSQL 7.4 adds some important database maintenance capabilities that are required for upgrading Centric CRM table structures.

Before following these steps, make sure your installation of PostgreSQL 7.3 is not required for other applications in your organization. These steps are based on a Linux install since Windows users started at PostgreSQL 8.0 and already includes the required features.

1. Backup your current databases. You can use “`pg_dumpall > db_backup.sql`”
2. Download and install PostgreSQL 8.1 from <http://www.postgresql.org>
3. Start PostgreSQL, you should get a warning that your existing 7.3 database is still in place. Move it, then start PostgreSQL again to initialize an empty database.
4. Login as the “`postgres`” user and restore your database using “`psql template1 -f db_backup.sql`”
5. Make sure TCP/IP connections are enabled for localhost in `pg_hba.conf` and that the web server IP has access to PostgreSQL, then restart `postgresql`
6. Continue with the Centric CRM upgrade

Steps for a successful Linux Installation

Install Java and Tomcat

1. Download and install the Java JRE or JDK 5.0 from <http://www.java.com> ; gcc-java does not work and is bundled with some Linux distributions so this must be renamed or removed
2. Download and install Tomcat 5.5 stable "Core" from <http://tomcat.apache.org/download-55.cgi> ; Apache Tomcat is bundled with some Linux distributions and fails if it was compiled with gcc-java
3. Depending on the total memory of your system, typically set Tomcat's memory to half of the server by setting the following environment variable (directly in the startup.sh file):

Sun Java:

```
export JAVA_OPTS="-Xms512m -Xmx512m -XX:PermSize=64m -XX:MaxPermSize=128m"
```

IBM Java:

```
export JAVA_OPTS="-Xms512m -Xmx512m"
```

4. Enable headless graphics rendering, or else Centric CRM will fail, by setting the following environment variable (directly in the startup.sh file):

```
export CATALINA_OPTS=-Djava.awt.headless=true
```
5. Download and copy the Centric CRM application (centric.war) from <http://www.centriccrm.com> into Tomcat's "webapps" directory
6. Setup a service to automatically have Tomcat start and stop during startup and shutdown, according to Tomcat's documentation; the user that starts Tomcat must have a home directory as this is where Java stores preferences

Proceed to the section on Setting up a Database Server

Additional advanced steps to consider

1. Change Tomcat port to 80 in server.xml (either integrate with Apache Web Server or turn off Apache Web server if Tomcat will be using port 80)
2. Obtain and install an SSL certificate to run Centric CRM on port 443

Steps for a successful Mac OSX Installation

Install Tomcat (Java is already installed)

1. Download and install Tomcat 5.5 stable "Core" from
<http://tomcat.apache.org/download-55.cgi>
2. Depending on the total memory of your system, typically set Tomcat's memory to half of the server by setting the following environment variable (in startup.sh):

```
export JAVA_OPTS="-Xms512m -Xmx512m"
```

3. Download and copy the Centric CRM binary (centric.war) file from
<http://www.centriccrm.com> into Tomcat's "webapps" directory
4. Setup a service to automatically have Tomcat start and stop during startup and shutdown

Proceed to the section on Setting up a Database Server

Additional advanced steps to consider

1. Change Tomcat port to 80 in server.xml (either integrate with Apache Web Server or turn off Apache Web server if Tomcat will be using port 80)
2. Obtain and install an SSL certificate to run Centric CRM on port 443

Steps for a successful Windows Installation

Install Java and Tomcat

1. Download and install the Java JRE 5.0 from <http://www.java.com>
2. Download and install Tomcat 5.5 stable "Core" - Windows Executable from <http://tomcat.apache.org/download-55.cgi>; depending on the total memory of your system, typically set Tomcat's memory to half of the server using Tomcat's configuration editor
3. Using the Windows Services Control Panel, stop the "Apache Tomcat" service
4. Download and copy the Centric CRM binary (centric.war) file from <http://www.centriccrm.com> into Tomcat's "webapps" directory -- usually located in C:\Program Files\Apache Software\Tomcat\webapps

Proceed to the section on Setting up a Database Server

Additional advanced steps to consider

1. Change Tomcat port to 80 in server.xml (either integrate with Windows IIS WWW Server or turn off Windows IIS WWW Server in the Windows Services Control Panel if Tomcat will be using port 80)
2. Obtain and install an SSL certificate to run Centric CRM on port 443

Setting up a Database Server

Apache Derby on any platform

If you are using the embedded Apache Derby then no additional steps are required as it is embedded into Centric CRM.

One\$DB on any platform

If you are using the embedded One\$DB then no additional steps are required as it is embedded into Centric CRM.

PostgreSQL on Linux

If you are using PostgreSQL on Linux, then perform the following additional steps on a Linux server:

1. Verify if PostgreSQL is installed with “psql --version”
2. If your installation does not already have PostgreSQL 8.1, 8.0 or 7.4, then download and install PostgreSQL 8.1 from <http://www.postgresql.org>
3. Make sure TCP/IP connections are enabled for localhost in pg_hba.conf, the default since 8.0
4. For added security you can create a “centric_crm” user using the following command, or optionally use the default “postgres” user without a password:

```
createuser --pwprompt centric_crm
```

5. Create a “centric_crm” database, as that user, using the following command:

```
createdb -E UNICODE centric_crm
```

PostgreSQL on Windows

If you are using PostgreSQL on Windows, then perform the following additional steps on a Windows server:

1. Create a Windows user on the system named "postgres" (normal user, non-administrator) and remember the password used
2. Download and install PostgreSQL 8.1 Windows binary (.zip) from <http://www.postgresql.org>

3. During the installation, make sure to create a postgres database user named "centric_crm" and remember the password used
4. Using the Application "PgAdmin III," which was installed with PostgreSQL, login to the database server and create a new database called "centric_crm" with UNICODE setting

IBM DB2 or DB2 Express-C on Windows

If you are using IBM DB2 or DB2 Express-C on Windows then perform the following additional steps on a Windows server:

1. Install IBM DB2
2. Using the DB2 Control Center application, choose All Databases, then Create Database with Automatic Maintenance; set the database name to "centric", choose UTF-8 code set, and 32k for pagesize

IBM DB2 or DB2 Express-C on Linux

If you are using IBM DB2 or DB2 Express-C on Linux then perform the following additional steps on a Windows server:

1. Install IBM DB2
2. Using the command-line db2 application, create a database with the following SQL command:

```
CREATE DATABASE centric USING CODESET UTF-8 TERRITORY US pagesize 32 k
```



For proper sorting in your locale, you can adjust the CODESET and TERRITORY parameters as needed.

3. Verify the port that DB2 is using by looking at the DB2 logs; the port is typically 50000 but the install process may choose 50001 or another port automatically

Microsoft SQL Server 2005 or 2005 Express

If you are using Microsoft SQL Server 2005 or 2005 Express then perform the following additional steps on a Windows server:

1. Install MSSQL, make sure TCP/IP connections are enabled
2. Using the Microsoft SQL Server Management Studio, create a “New Login...”, under Security/Logins, named "centric_crm", with SQL Server authentication, and remember the password used
3. Using the Microsoft SQL Server Management Studio, create a “New Database...” called "centric_crm" and configure the “Owner” as “centric_crm”

Microsoft SQL Server 2000

If you are using Microsoft SQL Server 2000 then perform the following additional steps:

1. Install MSSQL, make sure TCP/IP connections are enabled
2. Using Enterprise Manager, create a user named "centric_crm" and remember the password used
3. Using Enterprise Manager, create a database called "centric_crm"
4. Under the database "centric_crm" add the user "centric_crm" with "dbo" permissions

Microsoft SQL Server DE (MSDE)

If you are using Microsoft SQL Server DE (MSDE) then perform the following additional steps:

1. Install MSDE, make sure TCP/IP connections are enabled in setup.ini with the following entries:

```
DISABLENETWORKPROTOCOLS=0
SECURITYMODE=SQL
```

2. Using osql.exe, create a user named "centric_crm" and remember the password used:

```
EXEC sp_addlogin 'centric_crm', 'centric_crm', 'master', 'us_english'
GO
```

3. Using osql.exe, create a database called "centric_crm":

```
CREATE DATABASE centric_crm
GO
```

4. Under the database "centric_crm" add the user "centric_crm" with "dbo" permissions:

```
USE centric_crm
GO
```

```
EXEC sp_grantdbaccess 'centric_crm', 'centric_crm'  
GO  
EXEC sp_addrolemember 'db_owner', 'centric_crm'  
GO
```

MySQL 5.0

1. Download the MySQL JDBC Connector library from MySQL:

<http://www.mysql.org/downloads/connector/j/5.0.html>

2. After deploying the Centric CRM .war, copy the MySQL .jar file into the deployed centric/WEB-INF/lib/ folder.
3. Create a MySQL 5 database with the following command:

```
CREATE DATABASE centric_crm CHARACTER SET utf8 COLLATE utf8_general_ci
```



For proper sorting in your locale, you can adjust the SET and COLLATE parameters as needed.

Firebird 1.5

Oracle 10g Express

Configuring Centric CRM

First-Time Start-up

Now that the necessary software and servers are installed, proceed with setting up Centric CRM as follows:

1. Start the Apache Tomcat service
2. Log in to the Centric CRM setup process by using a browser and going to "<http://127.0.0.1:8080/centric>" (assuming the file installed was centric.war and you are connecting to the local host 127.0.0.1)
3. Follow the on-screen directions and provide the database information when prompted

First-Time Setup

Once Centric CRM is setup and you are able to login with administrator access, there are several items that should be configured before users generally begin to use the system in a production environment.



Even though Centric CRM is preloaded with defaults for every module, integrating Centric CRM into your existing company's sales and support process means collaboration with Sales, Marketing, and other departments.

Configuration can be completed by accessing the Admin tab of the application, then choosing to configure modules, roles, and users.

Configure Lookup Lists

Lookup lists are the drop-down menu choices that appear when adding data in each module. Review each drop-down to understand its use. Values can be added, renamed, and removed at any time.

Configure Custom Folders and Fields

This editor allows you to create custom forms that can be attached to Contacts, Accounts, Employees, Opportunities and Tickets using arbitrary fields.

Configure Roles and Permissions

Centric CRM is preloaded with roles that can be renamed and modified depending on the size and shape of your company. Roles allow you to quickly categorize users with access permissions. Review the existing roles and determine if that user group will need Access/View/ Add/Edit/Delete permissions for the specified feature.



After an upgrade be sure to modify user roles to include new features.

Add Users

Each user must be a contact in the system, typically listed in the Employees module. You can easily create a new employee when adding new users by choosing the [Create Contact] on the Add User page.

Advanced Technical Topics

Database Backup and Restore

PostgreSQL

- pg_dump
- psql

IBM DB2

Microsoft SQL Server

Firebird SQL

Setting up a Standby Web Server

While a single server can have plenty of hardware redundancy and software backups, it's possible that a complete hardware or software failure can occur.

Be prepared by setting up a spare server that is ready to go in a moment's notice.

The spare server must meet all of the hardware and software requirements.

1. Install Java and Tomcat just the same as the primary server
2. If the database server is being setup on the spare, then install and migrate the centric_crm database
3. Copy the Centric CRM .war file from the production server to the backup server into Tomcat's webapp directory
4. Copy the fileLibrary directory from the production server to the backup server
5. In the fileLibrary, review and tweak the build.properties file, if necessary, since some file paths and IPs are stored and referenced in this file
6. Start Tomcat
7. Navigate to the web application on the spare server and at the welcome page, choose to "Use Centric CRM from a backup"

8. At the next prompt, input the directory to the fileLibrary; Centric CRM will read the license and file and configure the application to use the previous preferences
9. You can test logging in, but do not add any new data from this instance because the production instance will not receive updates to its cache; the spare is now ready

Questions

For additional information, support, or training, visit <http://www.centriccrm.com> for details. You will also find product FAQs and announcements.

Known Issues

While Centric CRM is written in pure Java, it may not be compatible with other application servers, yet. The following issues are known:

1. Websphere (WAS-CE) works; Websphere Standard Edition does not
2. JBoss should work if the .war is extracted first into a directory, then deployed; this is because some files are written into this directory
3. Weblogic will not work at this time
4. gcc-java does not work; if your Linux distribution comes with gcc-java then it needs to be replaced with either Sun Java or IBM Java