

Sage CRM Technical Specification

This document outlines the recommended minimum software and hardware requirements for running Sage CRM.

Please note that while the document refers to Sage CRM, CRM, or the CRM system throughout, all functionality covered is also relevant to SageCRM, SageCRM for Sage Accpac and Softline Accpac CRM.

Client Software

No installation is required on the PC or laptop of networked users for core CRM functions, as the Web browser is usually pre-installed. Some features of CRM, such as Mail Merge, Reporting, and Outlook Integration will require the installation of plugins and external applications. These are outlined in the next section.

The following Web browsers are supported:

- Microsoft Internet Explorer 6.0 and 7.0.

Files and Applications you may need on the Client

Mail Merge Plugin	To use the mail merge functionality. The first time a user encounters one of the features requiring the plugin (for example, the My CRM Calendar page displaying the Document Drop icon), they are prompted to download it. Instructions are provided on-screen. You must be an administrator or power user of your machine to install the Mail Merge Plugin. Your browser must also be configured to accept plugins. Contact your System Administrator if you do not have these rights.
Adobe Reader	To view CRM reports in Adobe PDF format, Adobe Reader must be installed on the client machine. The Adobe Reader can be downloaded from www.adobe.com .
Outlook Plugin	To install CRM Outlook Integration, users download the Outlook Plugin from within CRM in the My CRM Preferences tab. You must be an administrator or power user of your machine to install the Outlook Plugin. Contact your System Administrator if you do not have these rights. The Outlook Plugin requires XML Parser and the .NET Framework to be on the client. These are checked for during the install process and installed if not present. Note: Users are required to have either Outlook 2003 or Outlook 2007 to use the CRM Outlook Integration. Sage CRM Outlook client integration is supported for e-mail accounts running on Microsoft Exchange Server or POP3.
Crystal Report Designer Version 10	Users who wish to create Crystal Reports will need access to a local copy of either Crystal Reports Server 10 or XI. Once the Crystal Reports have been set up, all users with Crystal Reports reporting rights in CRM can run the reports.
Microsoft Office applications	Users who wish to use the mail merge and document merge features supported by Sage CRM should have Microsoft Office Word 2003 or 2007 installed on their machines. The

data upload feature accepts files in the *.XLS format, created by Microsoft Office Excel 2003 or later versions.

Recommendations for Client Hardware

As the application uses a Web browser, the client hardware specification is determined by the minimum Web browser requirements for the client operating system.

Recommendations for Solo Clients

A Pentium 4 Dual Core (or comparable) processor with at least 1 GB of RAM is required. 65 MB of disk space is required for the Client installation. The disk space required for the Client's filtered data will vary depending on your offline profile.

Server Software

For a standard implementation, the following software is supported. These products must be installed prior to installing the application. Note that in addition to CRM license costs, customers need to independently purchase licenses for this software. This should be organized by your IT department using their established suppliers. It may be possible to reuse licenses purchased for other applications if they are not currently being used.

Note: The CRM server needs to be set as Trusted Site in Vista if a client machine is running CRM on Vista.

Product	Version	License Requirement
Application Server		
Microsoft Windows 2000 Server <i>Or</i> Microsoft Windows Advanced Server 2000 <i>Or</i> Microsoft Windows 2003 Server <i>Or</i> Microsoft Windows 2003 R2 <i>Or</i> Microsoft Windows 2008 Server	Latest Service Pack	Your IT department should verify the latest licensing requirements with the manufacturer.

Product	Version	License Requirement
Database Server		
Microsoft SQL Server (any edition) <i>Or</i> Oracle 10g, Release 2 Oracle 11g Note: Oracle databases can run on a Unix or a Windows operating system.	SQL Server 2000, 2005 or 2008 all with latest service packs	Your IT department should verify the latest licensing requirements with the manufacturer.

Product	Version	License Requirement
Web Server		
Microsoft Internet Information Server	5.0, 6.0 or 7.0	Included with Windows Server license.

Note: If you are using the Extensibility Module with IIS 6.0, check that IIS | Web Service Applications | Active Server Pages is *not* set to Prohibited.

CRM Installations on a 64-Bit Server

CRM is a 32-bit application which can run on a 64-bit server (from version 6.1 and above). For example, with IIS 6.0 on Windows Server 2003 x64 Edition. However, since the IIS default is for 64-bit applications, the following CScript needs to be run first on the server from the command prompt:

```
cscript %SYSTEMDRIVE%\inetpub\adminscripts\adsutil.vbs SET W3SVC/
AppPools/Enable32bitAppOnWin64 1
```

For some installations a further command may need to be executed if IIS still fails to start. For example, if ASP.NET v2.0 is being used in the installation, the following command needs to be run from the command prompt:

```
%SYSTEMROOT%\Microsoft.NET\Framework\v2.0.50727\aspnet_regiis.exe -i
```

Check with Microsoft for the current script commands for your configuration.

Note: Oracle is not supported for 64-bit Operating Systems.

CRM Installations on Windows 2008 Server

Before installing CRM, ensure that IIS is installed as a Server Role.

To check IIS is installed as a Server Role:

1. Select Start | All Programs | Administrative Tools | Server Manager | Roles.
2. Select Add Roles.
The Add Roles Wizard is displayed.
3. Click Next.
4. Select Web Server (IIS)

Then, in the Role Services section of the Add Roles Wizard, make sure that the following role services are selected for your install:

- Application Development | ISAPI Extensions
- Security | Windows Authentication (if Auto Logon is required)

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- Management Tools | IIS Management Console and IIS Management Compatibility.

Note: You also need to ensure in IIS that the Anonymous Authentication Credentials are using Application Pool Identity or are hard-coded with a local administrator account, otherwise you may experience issues when editing CRM System Settings.

Access for Mobile Users

Mobile users have a choice of how to access the system.

- Using a dial-up connection via RAS or the Internet, they can connect to CRM as if they were at their desk. The full functionality available to them at their desk is available to them via dial-up, and the interface is exactly the same. Because CRM only delivers HTML and JavaScript to the user's Web browser, it is ideally suited to this type of usage.
- CRM Solo users can download the CRM database, work offline, and synchronize with the central database via a dial-up connection. Typical data synchronization times for Solo users is two or three minutes, but this depends on the connection type, number of updates made to both client and server databases, and amount of data transferred.

Either option has security implications, which can be overcome via firewall software, ensuring the integrity of data at all times, and by encrypting all data transferred.

Note: It is recommended that Solo Clients limit the number of records they synchronize to 10,000 or less.

Test Environment

We recommend a test environment that mirrors the production environment is set up and made available to test the system before it goes live.

Recommendations for Server Hardware

Sage CRM installations comprise of a web / application server that run IIS and a database server to store the records. A file share is also required to store library files, although this is generally stored on the web server.

The following sections provide general recommendations for CRM installations, as well as specifications for large CRM installations. These requirements assume no other software is installed on the servers.

General Recommendations

- For the web server we recommend using disk mirroring (RAID 1). For the database server we strongly recommend using a RAID 10 disk array system. The RAID 10 allows you to swap out a failed drive with minimal disruption to your production environment and improves performance. Larger sites should consider the use of a fiber channel SAN.
- Each site must have adequate backup and recovery capabilities.
- We recommend that you use an Uninterruptible Power Supply.
- We strongly suggest that you have a "hot stand-by" system that has a backup database. This standby system should have a very similar configuration to the primary production system. The standby system can also be used for development and testing.
- The amount of disk space required varies widely based on the number of customer records, archiving plans, and backup policies. The disk space can also vary widely based on the amount of information held for each customer. Therefore, it is important to try to estimate this prior to installation and purchase sufficient disk storage to allow for significant growth in the volume of data.
- It is important to keep in mind what type of user will be working with the system. For example, 200 call center users use the system more intensively than 200 sales and marketing users.
- The guidelines given below are for call center type users on a non-customized system. Please bear in mind that product customizations can significantly impact the performance of Sage CRM and should be carefully evaluated when specifying hardware.
- For older hyper-threading capable CPUs, hyper-threading should be turned off.

Solo Installations

Regardless of number of users, every Solo CRM system should have a dedicated database server. The database is regularly used for heavier synchronization processes coming from Solo Clients.

Server Memory

Database server memory size is critical to performance and should be no less than the anticipated database size after one year, plus 1 gigabyte. For example, if you expect the database to be 6 gigabytes after one year plan on a server with at least 7 gigabytes of memory. If this rule of thumb indicates a server with 4 or more gigabytes of memory, you should deploy Windows 2003 64-bit edition or above with 64-bit database software.

The web servers should have at least 2 gigabytes of memory.

Note: Oracle is not supported for 64-bit Operating Systems.

Installations with Under 50 Users

- **Servers.** You can keep the web server and database server on the same machine provided the database size is less than 2 gigabytes.
- **Processors.** The machine should have 2 quad core processors, but need not to be high spec, e.g. Intel Xeon E5335 or AMD Opteron 2352.

Installations with Over 50 Users

- **Servers.** Split the Database server and Web server across two machines.
- **Processors.** The machines should have 2 quad core processors, e.g. Intel Xeon 5420 or AMD Opteron 2354, but higher spec processors should be considered to allow for growth in user numbers.

Installations with Over 200 Users

- **Processors.** The processors in each of the machines must be high specification, for example AMD Opteron 2356 or Intel Xeon 5450.

Installations with Several Hundred Users

- **Processors.** The processors in each of the machines must be high specification, for example AMD Opteron 2360SE or Intel Xeon E5450. The database server should be dual quad core, i.e. Intel Xeon X5460.
- **Multi-Server Option.** Multi-server CRM should be considered. Please refer to the System Administrator Guide for more information on using multi-server CRM.

Test Servers

It is recommended to have one or more Test Servers to replicate the above. One server is sufficient for this unless bench marking is being run, in which case, you should replicate the server specification and configuration as closely as possible.

Future phases of projects and change requests also need a test environment after the initial "Go Live" is achieved.

For every third-party server involved in the deployment of CRM, there should also be an equivalent testing server. For example Exchange server, Accounting server.

