



# What You Need to Know

- **Important information regarding your Sage CRM Onboarding and Installation from our OnTrack team**

## BACKUPS and PROTECTION

Although Azamba sets up your CRM and configures it, it is your organization's responsibility to conduct backups. You should let your IT person know that CRM is a web-based application – the following two main areas need to be backed up:

1. SQL Database to a .bak file
2. A complete copy of the Windows CRM directory

Please contact Azamba if your IT person is unsure of the location of these two items. We also recommend that the backups are spun off local on the current machine, and then that local backup is copied to your cloud or tape storage. This provides redundancy and easy access.

## EXPOSING CRM TO THE WWW

Most organizations using Sage CRM choose to expose their CRM instance to the world wide web. Azamba does not perform this action as it involves server security and network configuration. We recommend making sure that your password policy in CRM is enabled prior to exposing CRM to the web. Contact your CRM account manager with any questions.

An example scenario of exposing CRM to the WWW is: Setting up an A record in DNS to point to `crm.yourcompany.com`. Going into your existing firewall and creating a one-to-one NAT rule to point to the CRM server on the HTTP/HTTPS port. You can test the configuration by going to `crm.yourcompany.com/crm`

\*If any changes are being made to IIS, make an IIS explicit backup prior to doing so. Any problems with the CRM site caused by internal IIS changes may result in a Change Order and can cause serious down time.

\*Contact Azamba if you choose to use HTTPS.



## **UPGRADES and UPDATES TO SAGE 100/300/SAGE PRO ERP/X3**

Please contact Azamba as soon as you start to plan any ERP upgrade. CRM works in lock step w the ERP and is version dependent. Performing any upgrade without contacting Azamba can result in a non-functioning CRM, data loss (permanent), and data integrity issues. It can also be costlier to try and resolve the issues after the fact, than with pre-planning. We are happy to work closely w your ERP partners during planning so that everyone is on the same page.

## **SETTING UP YOUR SERVER**

It is best to have the Sage CRM application on its own server and not the ERP server or a server with other internal files and software for your organization. Having CRM independent of other applications will ensure better performance and safer execution when exposing CRM to the world wide web. It will also be a benefit when a restart is necessary, or when work is being done – as not to disturb your organization. The SQL database for Sage CRM can reside on a local instance of SQL (on the same server as the CRM application) OR it may exist on an entirely different server. Please keep in mind that Sage CRM relies heavily on SQL and it is very important to have ample memory and as few databases as possible sharing that memory. Any questions? Ask our team.

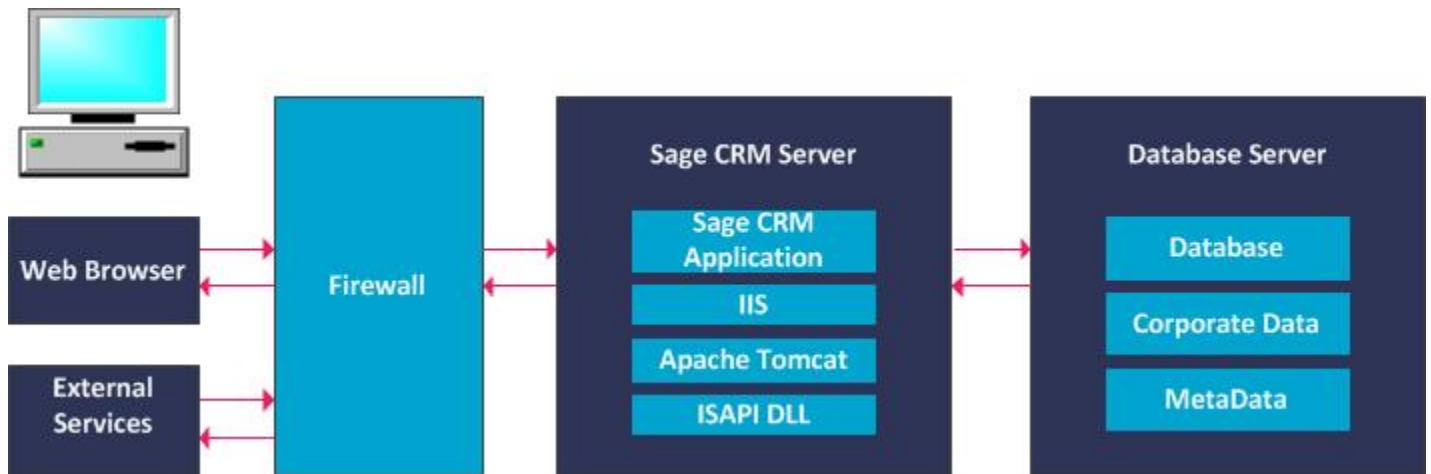


# Sage CRM 2019 R1

## Installation Information

**Updated:** January 2019

# System architecture



## Server hardware recommendations

The following recommendations assume no other software is installed on the servers. Where a customer installation of Sage CRM is running additional software or web applications, add the requirements of that software to the Sage CRM recommendations.

- For the web server, use disk mirroring (RAID 1). For the database server, use a RAID 10 disk array system so you can swap out a failed drive with minimal disruption to your production environment. A RAID 10 disk array system also improves performance. For larger sites, use a fiber channel SAN.
- Each site must have adequate backup and recovery capabilities.
- Use an Uninterruptible Power Supply.
- Have a hot stand-by system with a backup database that's configured like the primary production system. You can use the standby system for development and testing.
- When estimating the amount of disk storage required, consider the number of customer records, archiving plans, backup policies, and future growth in the volume of data.
- Consider the type of user working with the system. For example, 200 call center users use the system more intensively than 200 sales and marketing users.
- Evaluate customizations when specifying hardware as they can significantly impact the performance of Sage CRM.
- Turn off hyper-threading for older hyper-threading capable CPUs.
- The default database size is 0.5 gigabyte (512 megabytes), but you can change this during the installation process.
- Database server memory size is critical to performance and should be no less than the anticipated database size after one year plus 1 gigabyte. If you expect the database to be 6 gigabytes after one year, plan on a server with at least 8 gigabytes of memory.

- Quick Find uses up to 1 gigabyte of RAM. The exact amount of RAM used depends on the number of records that are indexed.
- The web servers should have at least 8 gigabytes of memory.
- Set up one or more test servers. If you're running bench marking, replicate the server specification and configuration as closely as possible. Future phases of projects and change requests also require a test environment. In addition, set up a test server for each third-party server involved in the deployment of Sage CRM. For example Exchange Server, Accounting server.
- The guidelines in the table below are for call center users on a non-customized system.

Number of users	Servers	Processors
Under 50	You can keep the web server and database server on the same machine if the database size is less than 2 gigabytes.	The machine should have two quad-core processors. The processors do not need to be high specification.
Over 50	Split the database server and web server across two machines.	The machines should have two eight-core processors. Consider higher specification processors to allow for growth in user numbers.
Over 200	Consider multi-server Sage CRM.	The processors in each machine must be high specification.
Several hundred	Consider multi-server Sage CRM.	The processors in each machine must be high specification.

## Installing a secure system

You should follow these best practices to minimize the risks of service interruption and data corruption:

- **Firewall.** Install a firewall if users will access the system remotely. This protects your network from the Internet, ensures only authorized traffic accesses your CRM database, and protects your server from unauthorized users. You can configure rules to restrict traffic and allow traffic originating from a specific source only to protect your server from Internet attacks. You can also install a Firewall in your remote sites and set up Virtual Private Networks (VPNs) to increase data security. Set mobile users as mobile firewall users so they can access the VPN and transmit and receive data securely. Configure the Windows Firewall.

- **Application security.** Assign different levels of access security to users depending on their job role. Enforce mandatory alphanumeric passwords of six characters or more for each Sage CRM user. Use HTTPS protocol to protect data from unauthorized access. When IIS uses HTTPS, CRM is aware of this and when the client attaches any documents to a form in CRM, it sends it through the encrypted session.
- **Software.** Regularly install software updates and slipstream patches to minimize software security vulnerability. Install recognized anti-virus software. Uninstall unnecessary applications.
- **Backups.** Perform scheduled and manual backups. Establish a regular procedure for backing up the Registry and Program files. Repeat the procedure prior to major customization work or upgrades.
- **Server security.** Separate the domain controller server from the CRM application and database servers. In a Windows Server Systems environment, the Domain Controller (DC) serves as a gatekeeper to the domain resources by storing account information, authenticating users, and enforcing security policies. The defenses offered by a configured DC are further enhanced by placing it behind a robust firewall.
  - Use NT Challenge/Response to allow access to clients with a valid domain login.
  - Use HTTPS to secure your data sessions with client users.
  - Configure security policies on Windows Server.
  - Disable or delete unnecessary accounts, ports and services on the server. Disable unnecessary share drives.
  - Configure auditing on the server.
  - Configure encryption on Windows Server.
  - Use the IIS Lockdown and URLScan tools to harden IIS.
- **Database security.** Users do not have direct access to the SQL database. The eWare DLL accesses the database using a predefined logon. When a user requests data, the eWare DLL connects to the database using MDAC and retrieves the required data. For more security you can configure eWare DLL to access SQL using a login with limited access, or access with the appropriate rights to add, change and delete data from every table in the database. Address the potential of remote users obtaining administrator level access to the system by ensuring appropriate passwords are associated with the **sa** account. Further measures, specific to the SQL server, include:
  - Install only required components when installing SQL Server.
  - Run the SQL Server Configuration Manager and SQL Server Surface Area Configuration tools to disable unnecessary features and services.
  - Periodically assess the server's security using the Microsoft Baseline Security Analyzer (MBSA) and SQL Server Best Practice Analyzer.
  - Change the default ports associated with the SQL Server installation to put off hackers from port scanning the server.
  - Remove the BUILTIN/Administrators group from the SQL Server Logins.

# Configuring a secure system

You should follow these best practices to maximize the security of Sage CRM.

- **User authentication.** A user requires a user name and password to access Sage CRM. User passwords are encrypted in the system and in the database for maximum security. You can change a user's existing password but cannot view it. You can set the minimum length and strength of passwords, and specify the number of days before a password expires. For more information, see [Password policies](#) and [Security Profile fields](#).
- **Security profiles and territories.** You can set up security profiles and territories to manage security access rights across the organization. A profile is a way of grouping users when defining access rights to view, update, insert, or delete records. You can further divide users rights by territory. For example, you can allow users in the Europe territory to view all opportunities in the USA territory, but not update them. Advanced policies let you define complex inter-territory security rights and exception handling. For more information, see [Security profiles](#) and [Territories](#).
- **Field security.** You can set up field security for the Sage CRM system, individuals, teams, and security profiles. For example, you could make a field invisible to some users, allow other users to view the contents of the field but not to change them, and give other users read and write access to the contents. Or you could make it mandatory for the user to enter a value in the field before submitting the form. For more information, see [Using field security](#).
- **Company team and restricted tabs.** You can restrict user access rights to view and update information depending on company team membership. For more information, see [Security Profile fields](#).



# Sage CRM 2019 R1 Software Requirements and Mobile Features

**Updated:** January 2019



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# Software requirements

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**Warning:** Sage CRM does not support Microsoft products that have reached mainstream support end date.

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# Operating systems

Operating systems listed in this section should be either without Service Pack or with the latest Service Pack available at the time of Sage CRM 2019 R1 release.

**Note:** Install the latest updates for your version of Windows.

## Sage CRM server

Requirement	Details
Operating system	<ul style="list-style-type: none"><li>• Microsoft Windows Server 2016</li><li>• Microsoft Windows Server 2016 Essentials</li><li>• Microsoft Windows Server 2012 R2</li><li>• Microsoft Windows Server 2012 R2 Essentials</li></ul>
Web Server (IIS)	The computer on which you plan to install Sage CRM must have the <b>Web Server (IIS)</b> server role installed. Sage CRM supports Web Server (IIS) supplied with the operating systems listed above.
Installation on a domain controller	<p>You can install Sage CRM on a domain controller if it is running one of the following:</p> <ul style="list-style-type: none"><li>• Microsoft Windows Server 2016 Essentials</li><li>• Microsoft Windows Server 2012 R2 Essentials</li></ul> <p>On these operating systems Sage CRM does not support HTTPS, Remote Desktop Services, and CDONTS/CDOSYS.</p>

## Client computer

You can access Sage CRM from a computer running one of the following:

- Windows 10, 32-bit or 64-bit
- Windows 8.1, 32-bit or 64-bit
- Windows 7, 32-bit or 64-bit

# Database server

- Microsoft SQL Server 2017 without SP, Standard or Enterprise
- Microsoft SQL Server 2016 SP2, Standard or Enterprise
- Microsoft SQL Server 2014 SP2, Standard or Enterprise
- Microsoft SQL Server 2014 Express  
(supplied in the Sage CRM installation package)

Microsoft SQL Server 2014 Express has the following limitations:

- Sage does not recommend this SQL Server version for environments that exceed five Sage CRM users.
- Maximum memory utilized (per instance of SQL Server Database Engine): 1 GB
- Maximum relational database size: 10 GB

For detailed information about all Microsoft SQL Server 2014 Express limitations, see [Features supported by the editions of SQL Server 2014](#) on [msdn.microsoft.com](http://msdn.microsoft.com).

**Warning:** If you use Microsoft SQL Server 2014 Express, Sage Support will address only those issues that can be reproduced on a Standard or Enterprise edition of the SQL Server versions listed above.

# Web browsers

You can access Sage CRM with the following web browsers:

Browser	Must be installed on
Microsoft Internet Explorer 11 <ul style="list-style-type: none"><li>• 32-bit edition only.</li><li>• Compatibility View is not supported.</li></ul>	<ul style="list-style-type: none"><li>• Windows 10</li><li>• Windows 8.1</li><li>• Windows 7</li></ul>
Microsoft Edge	Windows 10
Mozilla Firefox (latest version)	<ul style="list-style-type: none"><li>• Windows 10</li><li>• Windows 8.1</li><li>• Windows 7</li></ul>
Google Chrome (latest version)	<ul style="list-style-type: none"><li>• Windows 10</li><li>• Windows 8.1</li><li>• Windows 7</li></ul>
Google Chrome for Android	Android 5.0 Lollipop or later
Apple Safari for iOS	<ul style="list-style-type: none"><li>• iOS 11.x</li><li>• iOS 10.x</li></ul>

- To access the **Administration** area of Sage CRM, you must use a supported web browser on a Windows-based computer.
- The Classic Dashboard is supported on Microsoft Internet Explorer only.
- On 64-bit editions of Windows, the default web browser is Microsoft Internet Explorer 32-bit. The 64-bit edition of Internet Explorer is also installed.

## Mobile devices

**Note:** Some Sage CRM features are not supported on mobile devices. For more information, see [Features available on mobile devices](#).

Sage CRM supports and is optimized for viewing on these mobile devices:

Device	Desktop theme Mobile theme
Android phone	Android 7.0 Nougat or later
iPhone	<ul style="list-style-type: none"><li>• iOS 11.x</li><li>• iOS 10.x</li></ul>
iPad	<ul style="list-style-type: none"><li>• iOS 11.x</li><li>• iOS 10.x</li></ul>

## Mobile apps

**Note:** Some Sage CRM features are not supported on mobile devices. For more information, see [Features available on mobile devices](#).

Mobile devices on which you install the apps must meet the system requirements set in:

- [Sage CRM for Android Release Notes](#)
- [Sage CRM for iPhone Release Notes](#)

# Document Drop plugin

The plugin requires the following:

Requirement	Details
Microsoft Internet Explorer 11 <ul style="list-style-type: none"><li>• 32-bit edition only.</li><li>• Compatibility View is not supported.</li></ul>	Access Sage CRM with this web browser to install and use the Document Drop plugin.
Be a system administrator or power user on your computer	Required to install the Document Drop plugin.

# CTI plugin

The CTI (Computer Telephony Integration) plugin requires the following:

Requirement	Details
Microsoft Internet Explorer 11 <ul style="list-style-type: none"><li>• 32-bit edition only.</li><li>• Compatibility View is not supported.</li></ul>	Access Sage CRM with this web browser to install and use the CTI plugin.
Be a system administrator or power user on your computer	Required to install the CTI plugin.



# Microsoft Exchange

Sage CRM can integrate and work with the following Exchange versions:

- Microsoft Exchange Server 2016, 64-bit edition only
- Microsoft Exchange Server 2013 SP1, 64-bit edition only
- Exchange Online (part of Microsoft Office 365)

In these Exchange versions, the following features and roles must be enabled:

- Exchange Web Services (EWS)
- Application Impersonation
- Integrated Windows Authentication with Anonymous Authentication

**Note:** Sage CRM was tested with Business plans of Office 365.

## Transport Layer Security (TLS)

Sage CRM supports TLS versions 1.2 and 1.1.

# Outlook plugins

Software	Classic Outlook Plugin	Lite Outlook Plugin
Microsoft Outlook	Supports Outlook supplied with: <ul style="list-style-type: none"><li>• Microsoft Office 2016 32-bit editions (Home, Business, and Professional)</li><li>• Microsoft Office 2013 32-bit editions (Home, Business, and Professional)</li><li>• Microsoft Office 365 You must have the 32-bit desktop version of Outlook app installed on your computer.</li></ul>	Supports Outlook supplied with: <ul style="list-style-type: none"><li>• Microsoft Office 2016 32-bit and 64-bit editions (Home, Business, and Professional)</li><li>• Microsoft Office 2013 32-bit and 64-bit editions (Home, Business, and Professional)</li><li>• Microsoft Office 365 You must have the 32-bit or 64-bit desktop version of Outlook app installed on your computer.</li></ul>
Microsoft Exchange	See <a href="#">Microsoft Exchange</a> in this document.	
Microsoft .NET Framework	Make sure the following versions are installed on client computers: <ul style="list-style-type: none"><li>• Microsoft .NET Framework 4.6</li><li>• Microsoft .NET Framework 3.5</li></ul>	
Microsoft Internet Explorer 11 <ul style="list-style-type: none"><li>• 32-bit edition only.</li><li>• Compatibility View is not supported.</li></ul>	Access Sage CRM with this web browser to install and use the Outlook plugins.	

# Citrix XenApp

Supported version	Protocols	Supported application delivery methods
Citrix XenApp 7.18, 32- and 64-bit editions	HTTP, HTTPS	<ul style="list-style-type: none"><li>• Publish desktops</li><li>• Publish applications</li></ul>

Consider the following limitations when deploying Sage CRM via XenApp:

- Multi-server Sage CRM environments are not supported.
- Multi-server Citrix XenApp environments are not supported.
- Roaming user profiles are not supported.

# Remote Desktop Services (formerly Terminal Services)

**Note:** For more information on how to install and use Sage CRM Outlook plugins with Remote Desktop Services, see the *System Administrator Help* on the [Sage CRM Help Center](#).

Supported version	Protocols	Supported application delivery methods
RDS supplied with: <ul style="list-style-type: none"><li>• Windows Server 2016 Standard</li><li>• Windows Server 2012 R2 Standard or Datacenter</li></ul>	HTTP, HTTPS	Publish full desktop

Sage CRM doesn't support roaming user profiles when it is deployed and used via Remote Desktop Services.

## Virtualization

Sage CRM has been tested on VMware and should run on any standard virtualization environment.

## Proxy servers

Sage CRM doesn't support reverse proxies.

# Features available on mobile devices

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## Ease of use

Feature	Desktop theme on a tablet	Mobile theme	iPhone app Android app
In-product help	✓		✓
Support of native device UI elements		✓	✓
Multilingual support	✓	✓	✓
Offline access			✓

# Viewing data

Feature	Desktop theme on a tablet	Mobile theme	iPhone app Android app
View contacts or people	✓	✓	✓
View companies	✓	✓	
View leads	✓	✓	
View opportunities	✓	✓	✓
View cases	✓	✓	
View notes	✓		✓
View recent items/history	✓		✓

# Adding, uploading, or modifying data

Feature	Desktop theme on a tablet	Mobile theme	iPhone app Android app
Add or import people	✓	✓	✓
Add or import companies	✓	✓	✓
Add or import leads	✓	✓	✓
Add opportunities	✓	✓	
Add cases	✓	✓	
Add notes	✓		✓
Flag favorites			✓
Set phone alerts from the calendar			✓
Upload data			
Upload or attach documents			

# Reports and workflows

Feature	Desktop theme on a tablet	Mobile theme	iPhone app Android app
Create reports	✓		
Generate reports	✓	✓	
Use workflows	✓		

# Dashboards

Feature	Desktop theme on a tablet	Mobile theme	iPhone app Android app
Classic dashboard	✓	✓	
Interactive dashboard	✓		

# Communicating

Feature	Desktop theme on a tablet	Mobile theme	iPhone app Android app
Auto communication logging from calls, emails, and SMS			✓
Mail merge	✓		
Map linking from address details		✓	✓
Outbound call handling	✓		
Marketing campaigns	✓		