



Sage HRMS 2017

Server Optimization Settings Guide

May 2017

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Introduction

This guide provides instructions for optimizing your server settings. This guide provides direction to assist customers with large data sets and who are experiencing network delays in relationship to Sage HRMS applications.

Review this guide before you install Sage HRMS, or before you migrate to a new server or environment.

Important! Before installing Sage HRMS, consult with your certified business partner or Sage to ensure that this program is compatible with customizations, integrated third-party applications, and other configuration options. If you install this program independently, you assume responsibility for any impact on your system.

Support and resources

Sage strives to provide you with the best help and support in the industry. If you have a question, we're here to help!

- **Help and documentation.** Many answers to common questions can be found in the help and documentation included with Sage HRMS. Visit the [Sage HRMS Product Documentation website](#) for the latest product guides, release notes, and installation guides.
- **Customer Support.** For additional articles and resources, visit <https://support.na.sage.com> or contact Customer Support at 800-829-0170 from within the U.S. and 800-330-2607 from Canada. Please have your Sage Customer Number handy when contacting Customer Support.

Recommended memory and network settings

This guide provides instructions to update or disable the following settings on the server:

1. Network Card Settings for Sage HRMS Server
2. SQL Server Memory Settings
3. Server Virtual Memory Settings

Before you start

Before you modify your network settings, verify that:

- All Windows updates are installed on all servers (including the application server and SQL Server) and client workstations.
- Your Antivirus or web defender software has exceptions in place to prevent it from blocking Sage HRMS application activities on the servers and client workstations.
- Firewall and application ports are **open** between Sage HRMS clients and the Sage HRMS server(s).

Note: After following these steps, your server must be restarted.

Network card settings

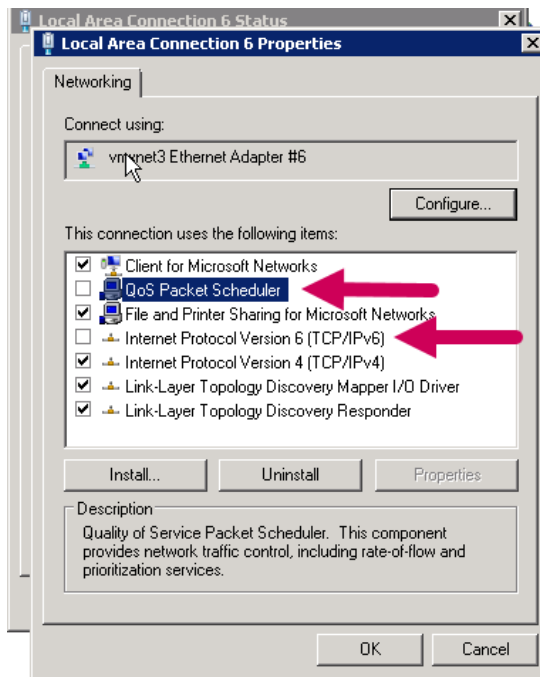
The latest servers come with high-end network cards but the network switches may not be current.

1. On the Sage HRMS Server, open the **Network Options > Network and Sharing Center**.

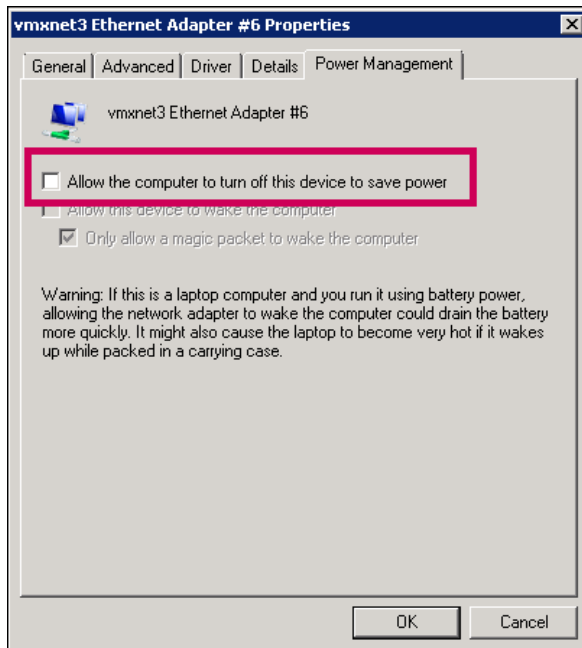
You can open these settings from the **Control Panel**, or click the **Network Options** icon from the system tray, and click **Open Network and Sharing Center**.



2. Click **Local Area Connection**.
3. In the **Activity** section of the Local Area Connection window, click **Properties**.
4. In the “This connection uses the following items:” list window, clear the following two check boxes to disable the settings:
 - **QoS Packet Scheduler**. This component provides network traffic control, including rate-of-flow and prioritization services. Disabling the setting removes restrictions for Sage HRMS client access through the network.
 - **Internet Protocol Version 6 (TCP/IPv6)**. This is the latest version of the Internet protocol that provides communications across diverse interconnected networks. If you’re not using Internet Protocol, you can disable it to optimize your server for Sage HRMS client access.



5. Click **OK** to save your changes.
6. Click the **Properties** button again to open the properties window.
7. Click the **Configure** button to open the **Ethernet Adapter Properties** window.
8. Click the **Power Management** tab.
9. Clear the check box next to **Allow the computer to turn off this device to save power**.



10. Click the **Advanced** tab.
11. In the Property list box, select each option listed here and make the following changes:
 - **Large Send OffLoad V2(IPv4)**. Set to Disabled.
 - **Large Send OffLoad V2(IPv6)**. Set to Disabled.
 - **Speed & Duplex:**
 - If your network switch and network cards are on 100 Mbps speed, set to **100 Mbps Full Duplex**.
 - If your network switch and cards are on 1 Gbps speed, set to **1 Gbps Full Duplex**.
 - **TCP Checksum Offload (IPv4)**. Set to **Rx & Tx Enabled**.
 - **TCP Checksum Offload (IPv6)**. Set to **Rx & Tx Enabled**.
 - **Jumbo Packet**. Set to **Disabled**. If a virtual machine server, set to Standard 1500.
12. Click **OK** to save your changes.
13. **Close** the Properties window.

SQL server memory settings

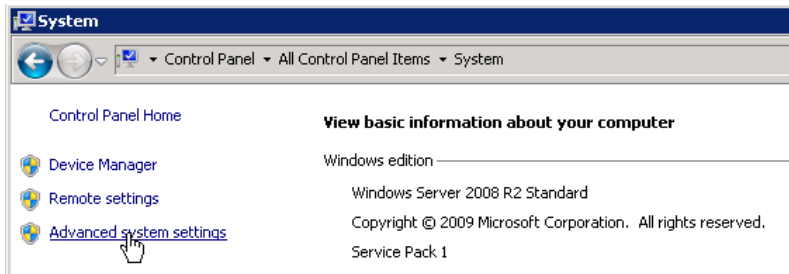
Note: The SQL service must stop and restart for the setting changes to apply.

1. On the Sage HRMS Server machine, open **Microsoft SQL Server Management Studio**.
2. Right-click the server and select **Properties**.
3. Click the **Memory** tab.
 - In the Minimum server memory (in MB) field, enter 256.
4. Click the **Processors** tab.
 - In the **Maximum worker threads** field, enter **0**.
 - Select the **Boost SQL Server priority** check box.
5. Click the **Connections** tab.
 - In the **Connections** section, set the **Maximum number of concurrent connections** to **0** (for unlimited).
 - In the **Remote server connections** section, set the **Remote query timeout** to **0** (for no timeout).
6. Click the **Advanced** tab.
 - In the **Network** menu, set the **Remote Login Timeout** field to **20**.
7. Click **OK** to execute the changes.

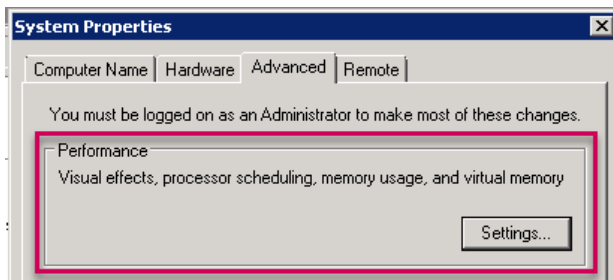
Virtual memory settings

Perform these steps on both the server machine and each workstation that will access the Sage HRMS client.

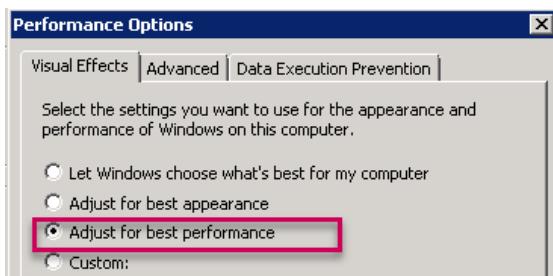
1. Open the **Control Panel > System > Advanced system settings**.



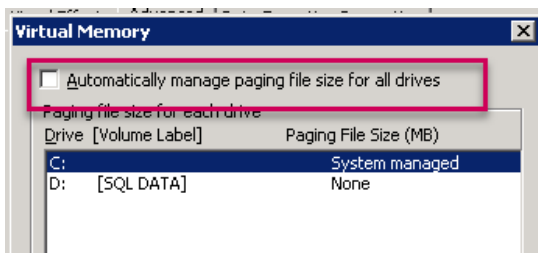
2. On the **Advanced** tab, in the **Performance** section, click **Settings**.



3. On the **Visual Effects** tab, click **Adjust for best performance**.



4. Click the **Advanced** tab.
5. In the **Virtual Memory** section, click the **Change** button.
6. Clear the check box for **Automatically manage paging file size for all drives**.

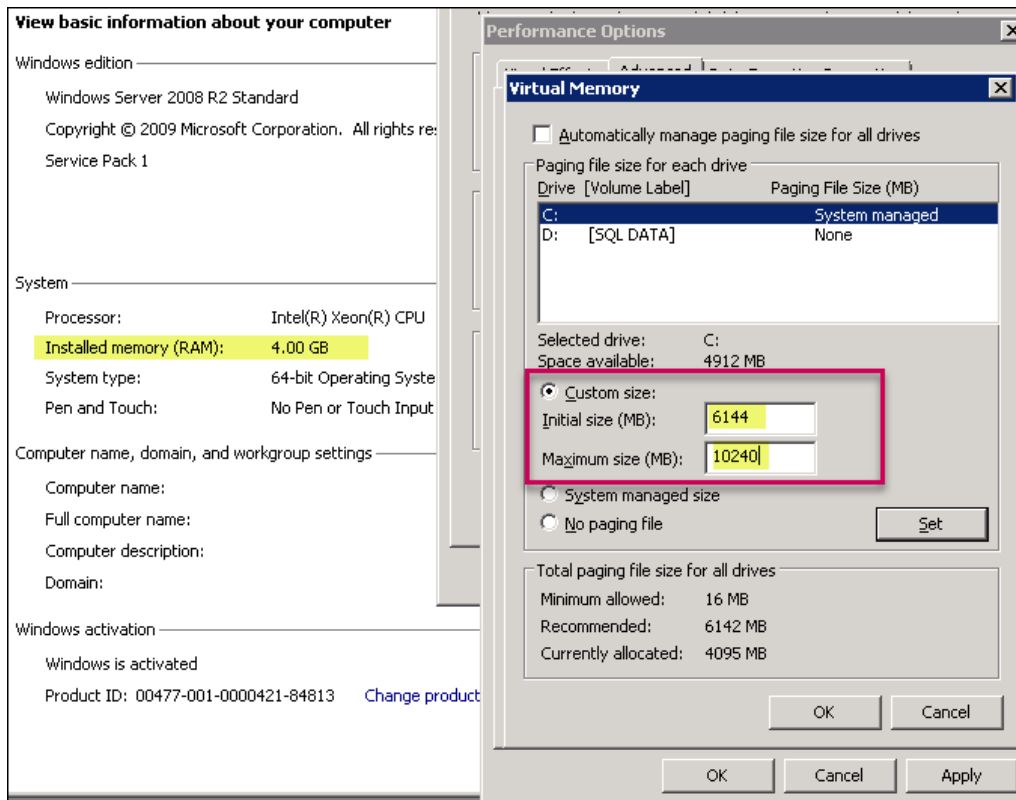


7. Select **Custom Size** and enter the following:

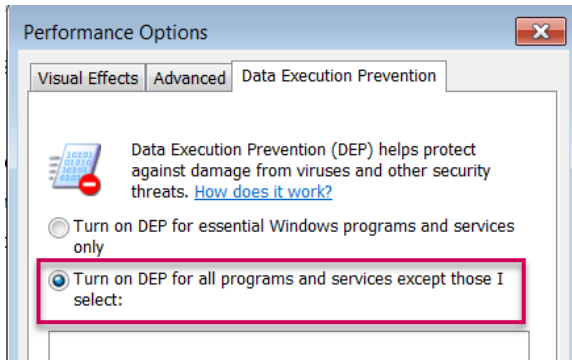
- In the **Initial Size (MB)** field, enter a value that equals 1.5 times the total memory size on the server.
- In the **Maximum Size (MB)** field, enter a value that equals 2.5 times the total memory size on the server.

In the example below, the installed memory is 4.00 GB, therefore:

- The Initial Size calculation in MB is: $(4 \times 1.5) \times 1024 = 6144$
- And the Maximum Size calculation in MB is: $(4 \times 2.5) \times 1024 = 10240$



8. Click the **Set** button to save the settings.
9. Click **OK** when reminded that you will be required you to restart your computer. You will restart after completing the remaining steps.
10. Click **OK** to close the Virtual Memory window.
11. Click the **Data Execution Prevention** tab.
12. Select **Turn on DEP for all programs and services except those I select.**



13. Click **OK** to close the Performance Options window.
14. Click **OK** to close the System Properties window.
15. When prompted, restart the server. This is required to apply the changes.

Installing Sage HRMS

Follow the instructions in the following documents to install and configure Sage HRMS and Sage HRMS Payroll:

- [Sage HRMS 2017 Release Notes](#)
- [Sage HRMS 2017 System Requirements](#)
- [Sage HRMS 2017 Installation Guide](#)
- [Sage HRMS 2017 Getting Started Guide](#)
- [Sage HRMS 2017 Payroll Getting Started Guide](#)

Note: You can also download guides from the [Sage HRMS product documents website](#).

SQL Server database settings

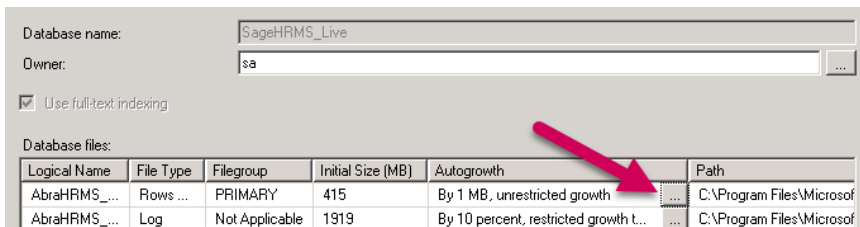
After installing and configuring your Sage HRMS databases, you must update the SQL database autogrowth settings.

In **Microsoft SQL Server Management Studio**, perform the following steps for each Sage HRMS database:

1. Under the server (from the left pane), expand the **Databases** menu.
2. Right-click on the **SageHRMS_Live** database and select **Properties**.

Note: If you changed your database name when installing Sage HRMS, or if you have multiple databases, right-click on the Sage HRMS database you set up.

3. From the left navigation menu, click **Files**.
4. In the **Database files** table, click the button to edit **Autogrowth**.



5. In the **Change Autogrowth for <Database_Name>** window, make the following changes:
 - **File Growth** setting to **In Percent**
 - **In Percent** value to **10**
6. Click **OK** to close the window.
7. Close Microsoft SQL Server Management Studio.