



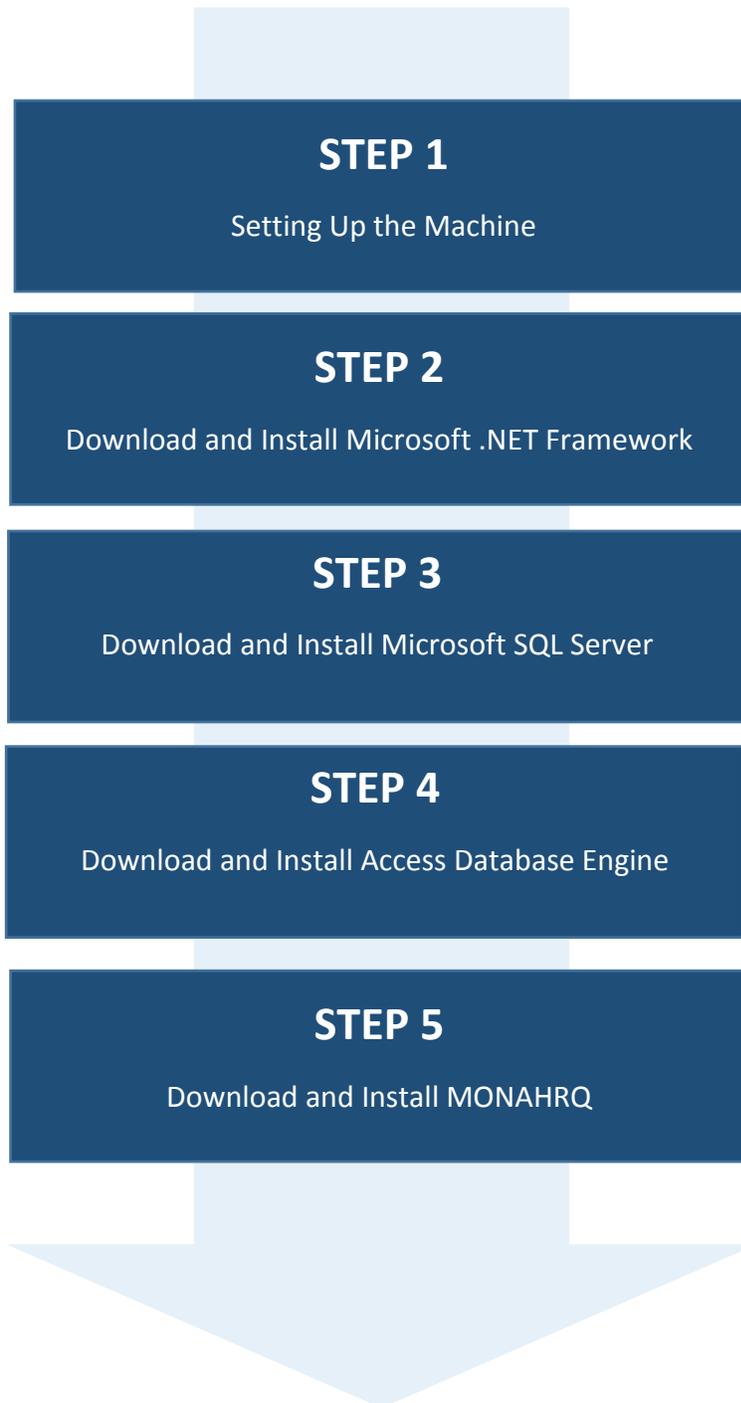
**MONAHRQ**

**Input your data. Output your website.**

Quick Guide to Installing MONAHRQ

Version 7

This Quick Guide briefly explains the step by step process of installing the MONAHRQ software. For more detail on any of the steps, see the relevant section in the [MONAHRQ Host User Guide](#).



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### Determine your Operating System

Before installing MONAHRQ, verify that your computer has the appropriate operating system (OS) installed. MONAHRQ is compatible with the following Windows operating systems:

Windows 10 (32 & 64-bit)	Windows Server 2008
Windows 8 (32 & 64-bit)	Windows Server 2003
Windows 7 (32 & 64-bit)	

MONAHRQ cannot be installed on a computer running operating systems such as, Linux, UNIX, and Mac OS.

If you are not sure what operating system your computer is using, visit the Microsoft website to learn more about determining your operating system. <http://windows.microsoft.com/en-US/windows/which-operating-system>

### Computer Memory (RAM) and Hard Drive Space Requirements

Your computer must have the necessary space and memory to generate a website using the MONAHRQ software.

*Note: The amount of hard disk space required for your system is dependent on the size of the data sets that you use to generate a website with MONAHRQ.*

The table below describes the space and memory requirements to process the generation of a website for typical computer configurations. Note that the below disk space requirement includes the temporary disk space needed for processing. The final generated website size will be much smaller in size.

*Note: Inpatient hospital discharge data was used to generate this matrix, with SQL Express as the database. Using SQL Server standard edition is recommended if your combined datasets exceed five million rows of data. Using the standard edition will help reduce the processing time.*

Operating System	RAM	Processor	Average time per 1 million rows of data	Average disk space required per 1 million rows of data	Average free memory (RAM) required
Windows 8.1, 64 bit	16 GB	i7-3520M Processor	~1.5-2 hours	~8-10 GB	~1-2 GB
Windows 10, 64 bit	16 GB	i5 6200u	~1.5- 2 hours	~8-10 GB	~1-2 GB

### Permission Requirements

- Verify that you have administrator privileges on your computer to install MONAHRQ. If not, contact your system administrator to either give you administrative privileges or install MONAHRQ on your computer for you.

- Once MONAHRQ is installed, you will need administrator privileges to run MONAHRQ on your machine. If you don't have administrator privileges for your computer, MONAHRQ will ask you to enter administrator credentials to open. In this scenario, have your administrator use an administrator account (local or network) to add the credentials to MONAHRQ executable (exe) for launching the application (See [Host User guide](#) – page.217 for details).
- Verify that you have permissions to create and delete databases on Microsoft SQL Server standard edition or SQL Server Express database (See [Host User guide](#) – page.217 for details).

### Microsoft .net Framework Requirements

- Verify that you have Microsoft .NET Framework (version 4.5 or above) installed on your computer (See [Host User guide](#) – page.222 to know how to check for .NET Framework).
- If .NET Framework (version 4.5 or above) is **not** installed, download the framework from the MONAHRQ website ([http://www.ahrq.gov/downloads/monahrq/software/dotNetFx45\\_Full\\_setup.exe](http://www.ahrq.gov/downloads/monahrq/software/dotNetFx45_Full_setup.exe)) or directly from the Microsoft website (<https://www.microsoft.com/en-us/download/details.aspx?id=30653>).
- Once downloaded, choose the Run button to install the framework.

*Note: Windows 8 and Windows Server 2012 include the .NET Framework 4.5 so you don't have to install the .NET Framework if you use either of those operating systems.*

### Hardware Requirements for Installing the .NET Framework

#### Supported Operating System

- Windows 7 Service Pack 1, Windows Server 2008 R2 SP1, Windows Server 2008 Service Pack 2, Windows Vista Service Pack 2
- Windows Vista SP2 (x86 and x64)
- Windows 7 SP1 (x86 and x64)
- Windows Server 2008 R2 SP1 (x64)
- Windows Server 2008 SP2 (x86 and x64)

#### Minimum Processor and Memory requirements

- 1 GHz or faster processor
- 512 MB of RAM

#### Minimum Disk space requirements

- 850 MB for 32-bit systems
- 2 GB for 64-bit systems

### Downloading Microsoft SQL Express

- MONAHRQ is compatible with Microsoft SQL Server® Express, version 2008 R2 and above. It is recommended to install Microsoft SQL Server® 2012 Express.
- Download Microsoft SQL Server® 2012 Express (space requirements: 2 GB for 32-bit and 64-bit systems) - <https://www.microsoft.com/en-us/download/details.aspx?id=29062>
- When installing SQL Server express, you will be prompted to choose between a 'default' and a 'named' instance. Select the 'Default' instance. For SQL Server Express, the default instance name is "SQLEXPRESS" and for SQL Server Enterprise, the default instance name is "MSSQLSERVER" (See [Host User guide](#) – page.30 to learn how to install SQL server express database)
- One of the tools that comes with SQL server installation is the Management tools-Basic. This tool is optional, but highly recommended that you choose to install it as this tool can help with troubleshooting (See [Host User guide](#) – page.30 to learn how to install the Management tools)

### Access Database Engine

MONAHRQ requires a 32-bit Microsoft Access database engine to import databases such as Hospital Compare and Nursing Home Compare. The Access database engine is already installed if you have Microsoft Office on your computer. To confirm whether the Access database engine is installed on your computer:

- Open your system's Control Panel
- View Programs and Features
- Verify that Microsoft Access and the Microsoft Database Engine is in the list of the installed programs.

If you do not have either Microsoft Access or the Microsoft Database Engine on your system, you must install one of them using the process described below:

#### To install the 32-bit Microsoft Database Engine

- Download the Microsoft Database Engine here <https://www.microsoft.com/en-us/download/details.aspx?id=13255>
- Double-click on the AccessDatabaseEngine.exe file to start the setup program
- Follow the instructions on the screen to complete the installation

**OR**

#### To install Microsoft Access database

- Microsoft Access is not a free software and requires the purchase of the Access software license. Contact your system administrator to install it.

*Note: After installing Access database to your system, open the Access application at least once prior to running MONAHRQ. However, Access database doesn't need to be open when using MONAHRQ.*

### Downloading and Installing MONAHRQ

The MONAHRQ application is available for download from the website of the Agency for Healthcare Research & Quality (AHRQ) -

<http://www.ahrq.gov/professionals/systems/monahrq/software/index.html> .

Follow the steps below:

- After downloading MONAHRQ, locate the file in your computer's Downloads folder (default location).
- Double-click the .exe file or right-click and select **Run as administrator**.
- Follow the instructions on the screen to complete the installation.

*For details on installing the software, refer to Chapter 2, Section 2.3 of the [Host User Guide](#) prior to downloading MONAHRQ.*

## MONAHRQ Tips

The sections of the [Host User Guide](#) listed below contain detailed information that can be helpful when setting up your computer system to run MONAHRQ. Refer to these sections when setting up MONAHRQ or when adding or creating a new user.

### Chapter 1: MONAHRQ Overview

- New users can learn which report types can be generated using MONAHRQ.
- Users can determine the type of website to generate using MONAHRQ, either designed for use by consumers or for use by health care professionals.

### Chapter 2: Installing MONAHRQ

- Includes step by step instructions for installing the MONAHRQ application, including permissions, system requirements, and supporting software.

### Appendix C: Setting MONAHRQ Permissions

- MONAHRQ requires several permissions. You may need your System Administrator or an appointed technical support person to set up the permissions that are required to run MONAHRQ.

### Appendix D: Determining Your System Type

- Is your system 32-bit or 64-bit? Appendix D will help you determine which operating system is used on your computer system.

### Appendix E: Installing Microsoft .NET

- Detailed instructions on verifying if you already have the .NET Framework on your machine and how to install if you do not.

## MONAHRQ Maintenance

MONAHRQ occasionally needs to be updated to stay current with best practices. Updates are typically shared with users via emails sent to the AHRQ MONAHRQ listserv or are incorporated into new releases.

Find information about any updates in the “What’s New?” section of the MONAHRQ website here: <http://www.ahrq.gov/professionals/systems/monahrq/news/index.html>

## Troubleshooting / Error Messages

Chapter 13 of the [Host User Guide](#) contains detailed information on troubleshooting.

## Technical Support

For questions about using MONAHRQ, contact MONAHRQ Technical Assistance at [MONAHRQ@ahrq.gov](mailto:MONAHRQ@ahrq.gov).

### **Why do I need to connect to a SQL Server database to use MONAHRQ?**

SQL Server is the back-end database for MONAHRQ®. You must identify or create a SQL database before you can begin the process to import your data into the MONAHRQ® Database Manager. You can download free versions of SQL Server Express from the [Microsoft website](#).

### **How do I connect to the MONAHRQ® database? What types of permissions do I need to use MONAHRQ? What information does my IT administrator need to install MONAHRQ?**

If you are having trouble connecting MONAHRQ to your database, the problem is likely due to missing or incorrect permissions. Appropriate permissions are needed for both the Windows operating system and the Microsoft SQL Server database. Step-by-step instructions on how to set permissions correctly are in **Appendix A** of the [Host User Guide](#). If you are new to using MONAHRQ, please work with your IT administrator to grant all necessary permissions.

### **Which version of SQL Server needs to be installed (SQL 2012/SQL 2014)?**

SQL EXPRESS R2 2008 is the minimum requirement, but a later version, SQL 2012 Standard or Express is recommended.

### **Can MONAHRQ be used with SQL Server on a virtual server?**

Yes, this is similar to a network server. The SQL Server used by MONAHRQ does not need to be local.

### **Does MONAHRQ support named instances of SQL Server?**

Yes.

### **If we use TCP/IP connectivity protocol for security reasons are there any special configuration changes needed, or can we use the default settings for the SQL installation?**

This will depend on your SQL Management Studio tool configuration. Check with your System Administrator or IT support personnel.

### **Does MONAHRQ support a combination of Windows and SQL Server Authentication?**

Yes.

### **Is an SSL certificate needed for the website generated by MONAHRQ?**

It depends on your website deployment method.

### **Does the URL need to be a fully qualified domain name, such as <Servername>.statehealth.org?**

This is entirely up to you as the user of MONAHRQ.

### **Do users need access to SSRS or will a single SSRS AD login suffice?**

SSRS is not required.

### **Can MONAHRQ work with a database on an instance of SQL Server that is shared with other applications?**

Yes

### **How does MONAHRQ create databases or is that done during the software installation?**

Databases are created by the software but you as the user need to belong to the **Sysadmin** and **public** permission groups.

### **What logins/groups need to be created within SQL Server and what permissions are needed?**

The two groups needed are Sysadmin and public, with permissions set up for each.

### **Can this application be used by multiple people in different groups? If so, will there be one database for all entities or groups, or one database for each group or entity?**

MONAHRQ uses one database for all group or entities. For certain reports (e.g. Area Avoidable Stays Report) the application connects to a separate database (WinQI database) to run specific calculations using the [AHRQ Quality Indicator area measures](#). This separate database helps generate the Avoidable Stays report and allows MONAHRQ to utilize the cost savings data that is in the AHRQ QI database.

### **Are there any file sharing needed?**

No, this is up to you. Please note MONAHRQ does not recognize UNC network paths. If connecting to a network server, please map your file network location to a specific drive (e.g. D:\Sample Network\Directory).

### **Do transaction logs need to be backed up more than once a day?**

No. To preserve disk space, MONAHRQ truncates transaction logs if they become too large.

### **Does MONAHRQ set up any maintenance jobs to automatically run on a daily or monthly basis?**

No. It is up to you as the user to determine when and how to address maintenance needs.

### **Does MONAHRQ automatically archive data?**

No. It is up to you as the user to determine when and how to archive your data.

### **Is there any type of data upgrade that is done automatically?**

MONAHRQ automatically performs database upgrades when installing a later version if your currently installed MONAHRQ is connected to an older version of the MONAHRQ database. The

application itself handles the data and schema upgrades and keeps your prior data intact via a built in Database Upgrade Manager function.