Step-by-Step Installation Guide for MONAHRQ

Version 3.0
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INTRODUCTION

MONAHRQ is a free Windows-based software product that enables host users—such as state and local data organizations, chartered value exchanges, hospitals, and health plans—to input their own raw inpatient hospital administrative data and/or the Centers for Medicare and Medicaid Service's (CMS) Hospital Compare data and generate a data-driven Website. This tool was developed by the Agency for Healthcare Research and Quality (AHRQ), the Federal Government's lead agency for health care quality in the United States. MONAHRQ is based on two of AHRQ's most popular and widely respected tools, the Quality Indicators (QIs) and HCUPnet, and it incorporates several other AHRQ tools as well. MONAHRQ version 3.0 allows host users to report the publically available Hospital Compare dataset produced by CMS.

This innovative tool allows users to navigate through a series of simple steps to ultimately generate powerful Web-based reports. The Website, with reports in HTML-pages, helps health care professionals and consumers make informed decisions about health care quality and performance.

MONAHRQ analyzes, summarizes, and presents the information in an evidence-driven, easy-to-understand format that can be easily hosted on an organization's Website and is instantly ready for use internally by the organization or externally by consumers and other decision makers.

This user documentation is designed to help host organizations create their own MONAHRQ generated Website. The instructions provided in this document guides users through the process step-by-step to facilitate the installation and implementation of MONAHRQ specific to the needs of each host organization. The document is organized by "user type" to guide the implementation process and allow for a team of specialized personnel to work together while crafting the tool according to the needs of each organization.

1. **Download.** Information for **System Administrators** regarding system requirements and instructions for downloading MONAHRQ and any necessary supplemental software (e.g., SQL).

2. **Build.** Details for **Programmers** on how to prepare data and load it into MONAHRQ. This process will involve mapping your data elements, uploading hospital data, conducting analyses, and understanding various implications. This process will vary by the type of data you load – you may load your own local discharge data and/or the pre-analyzed CMS Hospital Compare data.

3. **Host.** Guidelines and suggestions for **Web masters** on hosting the tool on your organization's Website. This involves learning the many customization options available to users, evaluating output pages, and ultimately refining the pages to meet the organization's primary data interests.

MONAHRQ can be used in a variety of ways to meet the interests of your organization. Here are some examples of how MONAHRQ can be used:

- Within your organization to generate reports and statistics you use internally,
- To create a limited-access Website for member organizations,
- To create an open-access Website to be used by consumers and other decision makers to compare various facilities in an area or to present health care outcomes in a geographic region.
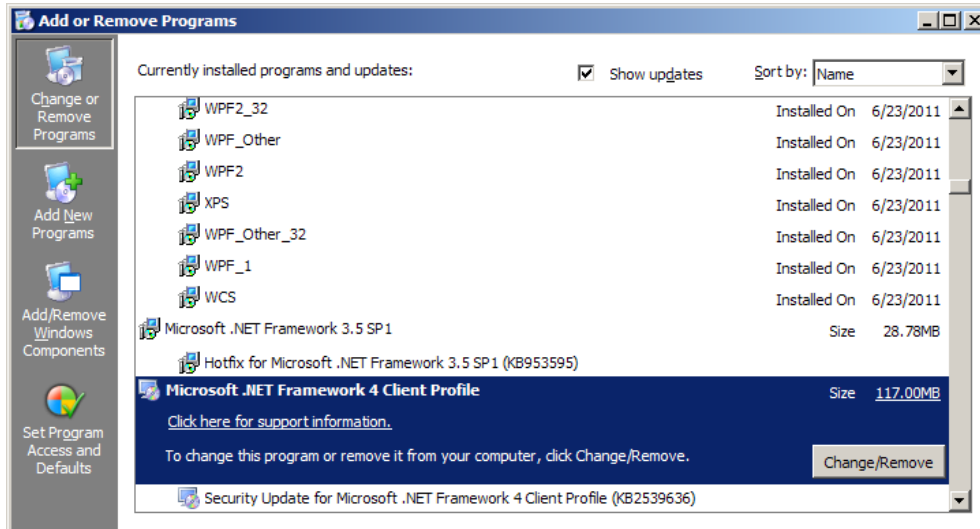
The choice is yours as to how you would like to use MONAHRQ – *your* data on *your* Website.

For more information, please visit http://www.monahrq.ahrq.gov or contact us by email at MONAHRQ@ahrq.gov.

STEP-BY-STEP INSTALLATION

<u>Step 1</u>
Check that the Microsoft .NET 4.0 Framework is installed on your computer. Open the **Windows Control Panel** and use the **Add or Remove Programs** utility to get a list of software programs installed on your PC. You can access the Control Panel from the Windows Start Button via the "Settings" option. Scroll down the alphabetical list of Programs until you reach Microsoft programs. The image below shows .NET Framework with a service pack. Please note that any service pack level will work.

If you do not have the Microsoft .NET 4.0 Framework installed, then download the correct install package (32-bit Microsoft .NET 4.0 Framework or 64-bit Microsoft .NET 4.0 Framework). Most users have a 32-bit version of Windows on their computers, which will use the 32 bit link. If the computer uses a 64-bit version, then the 64-bit version of Microsoft .NET 4.0 Framework must be installed. Select and save the correct version and then run the file.

To check the version of Windows, right-click the **My Computer** icon on your desktop and select **Properties**. You can also select My Computer from the Start Menu and select View System Information. A pop-up box displaying your version of Windows will appear. If it does not say 64 bit, then your system is 32 bit. Below is an example of the Properties dialog box for a system that uses the 32-bit version.

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Step 2
Because the software will need to set up a Microsoft SQL Server database, an instance of Microsoft SQL Server 2005 or 2008 (express or server edition) will need to be accessed. If you have access to a copy running on a database server in your network then that instance can be used. If not, a free version of Microsoft SQL Server Express can be obtained from the MONAHRQ download Website. As with the .NET framework, the 64-bit version will need to be used if you are running a 64-bit version of Windows. Step 1 describes how to check your version of Windows. Select and save the correct version and then run the program.

Step 3
The third step is to download and install the 4.3a-compatible version of the AHRQ Quality Indicators Prediction Module, version 0.9.2.190. MONAHRQ requires that this file be downloaded to correctly calculate the analyses. Select and save the AHRQ Quality Indicator Risk Adjustment file.

Step 4
The fourth step is to download and install MONAHRQ. The install package will prompt you with several questions. If you are using a network copy of Microsoft SQL Server, you will need to know the correct network name of the instance. If you set up a local copy of Microsoft SQL Server Express, you can use the default answer when prompted.

The install process will first load the MONAHRQ software on your PC, then access the Microsoft SQL Server instance and create your MONAHRQ database, and finish by loading baseline data into the database. The process will take up to 15 minutes, depending on the speed of your PC. Progress meters keep you informed on the progress of the setup process.

Note: if you are downloading an upgraded version of MONAHRQ and have previously installed a version of MONAHRQ prior to 2.0.4, you will first need to uninstall the old version of MONAHRQ in order for the upgraded version to work. To uninstall MONAHRQ, access your Control Panel in the Start menu, select Add or Remove Programs, and remove the appropriate version of MONAHRQ.

Check That You Have all Necessary Permissions
It is important to make sure you have *full* permissions to run MONAHRQ. The following instructions explain how to ensure you have set the appropriate permissions in your Windows operating system and

your Microsoft SQL Server instance.   This process often requires you work closely with administrator or technical personnel in your organization.

Part 1: Setting Permissions in the WINDOWS OPERATING SYSTEM
Certain permissions must be granted to the user who will be running MONAHRQ. These permissions apply only to those files and directions utilized by MONAHRQ.
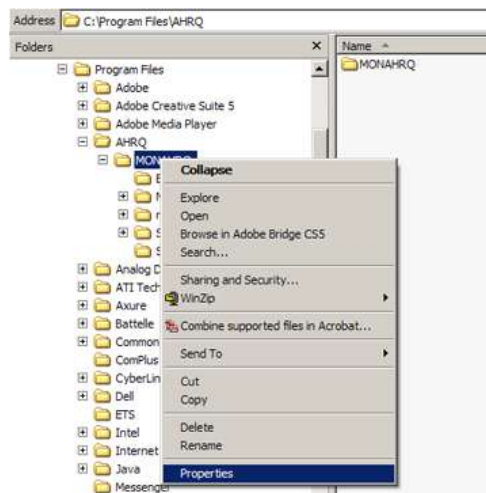
Please follow the instructions below to set your operating system permissions for proper operation of MONAHRQ.

Step 1 – Find the Installation Directory
A standard MONAHRQ 3.0 installation places the software in the directory "C:\Program Files\AHRQ\MONAHRQv3\". If an alternative installation directory location was used, you will need to modify permissions for that directory instead. For the following instructions, you would need to substitute the name of your alternative installation directory where the name "MONAHRQv3" appears.

Step 2 – Open the Security Tab
Right click on the MONAHRQ directory to bring up the context menu.

Select "Properties."

You will see a new popup window entitled "MONAHRQ Properties."

Select the "Security" tab.

Click the "Advanced" button.

Note: If the security tab is not present, you will need to contact your IT administrator for further assistance.

Step 3 – Provide the Proper Permissions
You will see a new popup window entitled "Advanced Security Setting for MONAHRQ."

Select the "Permissions" tab.

Find the entry that lists your user name in the "Permission entries" window.

Single click to highlight the entry.

Click the "Edit" button.

You will see a new popup window entitled "Permission Entry for MONAHRQ."
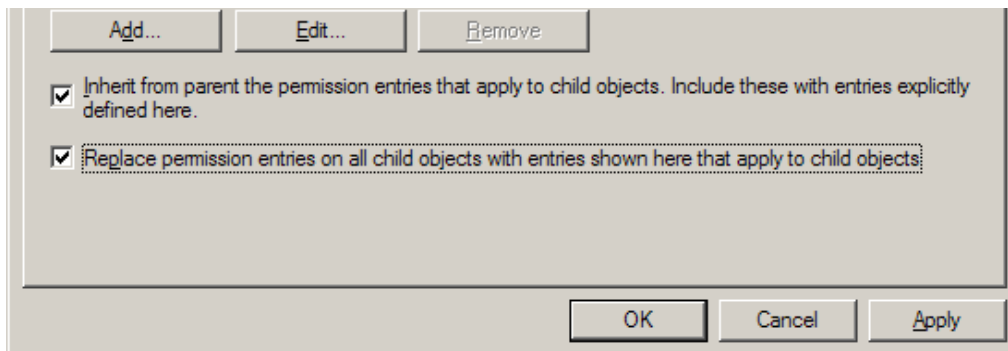
Find the row entry "Full Control."

Select the checkbox under the column labeled "Allow."

Click the "OK" button to close this popup window.

NOTE: IF you are unable to click "Full Control" you will need your IT administrator to provide the necessary permissions.

You will return to the popup window entitled "Advanced Security Setting for MONAHRQ."

Select the checkbox labeled "Replace permission entries on all child objects…"

Click the "Apply" button.

Click the "OK" button to close this popup window.

Click the "OK" button to close this popup window.

You have now successfully set the permissions in your Microsoft Windows operating system to be able to run MONAHRQ.

PART II: Setting Permissions in MICROSOFT SQL SERVER
MONAHRQ has been tested with the following versions of Microsoft SQL Server. *Other versions of SQL Server may not behave as expected.*

1. **SQL Server 2005**
2. **SQL Server 2005 Express**

3. **SQL Server 2008**
4. **SQL Server 2008 Express**
5. **SQL Server 2008 R2 Express**

Proper installation of the MONAHRQ software requires that certain permissions be provided during initial setup of the Microsoft SQL Server or SQL Server Express database. These permissions include the ability to create and drop databases.

Please follow the instructions below to set permissions in your SQL Server database for proper operation of MONAHRQ. These instructions apply to both SQL Server and SQL Server Express.

Step 1 – Connect to the SQL Server Instance Using SSMS
Microsoft SQL Server Management Studio (SSMS) is the primary tool for interfacing with the SQL Server. It may be downloaded from Microsoft at the following URL:

http://download.microsoft.com/download/6/7/4/674A281B-84BF-4B49-848C-14873B22F977/SQLManagementStudio_x86_ENU.exe

You may require the assistance of your IT manager to install and use this software.

Open the SQL Server Management Studio (SSMS) application and connect to the database server that was specified during installation. The default database name is "\SQLEXPRESS." If you changed from the default you will need to specify that server name.

Step 2 – Set Database Creation Permissions
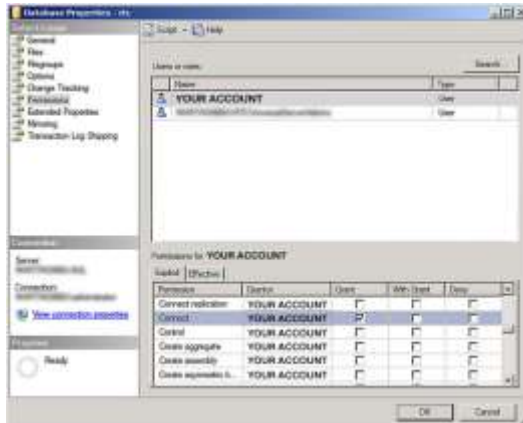You will see a popup window entitled "Microsoft Server Management Studio."

Right click on the name of the database server to which you are connected in order to bring up the context menu.

Select "Properties."

You will see a new popup window entitled "Server Properties –" plus the name of your database server.

Locate the "Select a page" list on the left side of the popup window.

Select "Permissions."

Locate the "Logins or roles" list in the upper right portion of the popup window.

Find the entry that lists the user name indicated during the initial MONAHRQ installation.

Single click to highlight the entry.

Locate the "Permissions" list in the lower right portion of the popup window.

Select the "Explicit" tab.

Find the following two rows in the list:

1. "Create any database"
2. "Alter any database"

Select the checkbox under the column labeled "Grant" in each of these two rows.

Click the "OK" button to commit changes and close the popup window.

Note: If you are unable to change the permissions, please contact your IT administrator for assistance.

You have now successfully set the permissions in your SQL Server database to be able to run MONAHRQ.

Additional Information
If the person installing the MONAHRQ software is *not* the person who will be using MONAHRQ or if there will be more than one MONAHRQ user on the machine, then the **System Administrator** will need to add users to the "MONAHRQ" database. This can be done with a remote SQL Server Manager or by installing a local copy of the SQL Server Management Studio Express Edition and using it to add the required users.

You can download the free SQL Server Management Studio Express Edition from
http://www.monahrq.ahrq.gov/monahrq_software.shtml.