RESIDENT ASSESSMENT VALIDATION AND ENTRY SYSTEM (JRAVEN) INSTALLATION GUIDE

IN SUPPORT OF SOFTWARE VERSION 1.7.4 (OCTOBER 2020)



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INTRODUCTION

The Resident Assessment Validation and Entry System (jRAVEN) was developed by the Centers for Medicare & Medicaid Services (CMS). jRAVEN is a free Java based software application which provides an option for facilities to collect and maintain MDS Assessment data for subsequent submission to the appropriate state and/or national data repository. jRAVEN displays the MDS Item Sets similar to the paper version of the forms.

MDS data provides survey facilities with a means to objectively measure and compare facility performance and quality as well as support the development of improved standards. jRAVEN has the ability to import and export data in standard CMS record format as well as enforce data integrity via rigorous edit checks against the CMS Data Specifications. The jRAVEN software application provides a data dictionary, comprehensive online help and RUG and PDPM calculations.

All jRAVEN releases will consist of full "releases" and "upgrades".

All jRAVEN releases are developed into two (2) types of application software:

- Standalone Software Application
- Network Client/Server Application

This guide may be used to install and set up both types of software. A user guide will also be provided which covers all of the user functionality found in ¡RAVEN as well as the help and security features.

Please note, all screen shots included in this reference material are meant for sample purposes only and contain only test data. Due to updates made after the release of this document, detailed information displayed within screen shots may not be an exact representation; i.e. Build_ID and/or information posted to the CMS or QTSO websites may be different.

The QIES Help Desk is also available for technical support and assistance if needed and may be contacted by phone at 800-339-9313 or by email to iqies@cms.hhs.gov.

GENERAL OVERVIEW

INSTALLERS ACCESS RIGHTS

To install jRAVEN the User must be logged into the PC as a Workstation Administrator.

Users of the application MUST have read/write access to the location where the database is installed.

HARDWARE/SOFTWARE SPECIFICATIONS

The Minimum and Recommended System Requirements may be found on the QIES Technical Support Office home page: https://qtso.cms.gov

SECURITY

Making information security one of your organizations core values ensures the prevention of unauthorized viewing of Personally Identifiable Information (PII) or Protected Health Information (PHI).

It is important that providers work with their Information Technology (IT) team or other resources to build a security-minded organizational culture which enforces strong authentication and access controls as well as limits physical access to devices (e.g., laptops, handhelds, desktops, servers, thumb drives, CDs, backups) containing PII or PHI data.

CMS recommends that providers encrypt the hard drive of any electronic device which has access to data containing PII or PHI, such as exported assessment records. Once assessments have been exported from the jRAVEN application the data will no longer be encrypted. It is also recommended that those electronic devices, which contain PII or PHI, be physically secured and locked (password protected) when not in use.

WINDOW SETTINGS

In order to ensure the reliable operation of the jRAVEN software application use of a supported Microsoft Windows operating system is imperative. The Font Size property must be set to "Small Fonts". This property can be found under the Settings tab of desktop properties: Start\Control Panel\Appearance and Personalization\Display\.

SOFTWARE DOWNLOADS

To download the files required for installing the jRAVEN software, navigate to the Centers for Medicare & Medicaid Services website or the QIES Technical Support Office (QTSO) website.

CMS Website: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/NHQIMDS30TechnicalInformation.html

QTSO Website: https://qtso.cms.gov/ravendownload.html

TYPES OF INSTALLATIONS

There are two (2) types of installations available for jRAVEN. This guide may be used to assist with the installation and setup of both types of the jRAVEN application.

STANDALONE

The Standalone installation is self-contained on one workstation.

NETWORK CLIENT

The Network Client/Server installation uses a server to support one or more individual workstations, all accessing one database by multiple computers and users.

- Servers hold the central database and must utilize the Server installation file first.
- Network Clients are placed on the users individual workstations which then access the database on the Server. The Network Client is installed after the Server installation has been successfully completed.

Please Note: The Standalone and Client installations use the same install file (.exe). There is a point in the installation process where the user must select one or the other: Standalone or Client.

SERVER INSTALLATION

The database, which the Clients will connect to, must be installed first using the Server installation.

TIP: When selecting the Network Client/Server install, it is strongly recommended that the Server and the Client installations be performed on different workstations for ease of recovery.

NOTE: The server software has not changed so if you already have jRAVENServerSetup-**1.5.0** installed, you should proceed to the "Standalone & Client Installation" section.

On the database server, complete the following steps to install:

- 1. Click the ¡RAVENServerSetup-1.5.0.exe.
- 2. The 'File Download' window will display.
- 3. Click 'Run' to begin the installation.

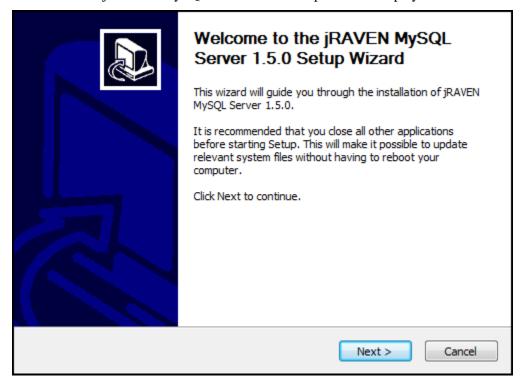
Please Note: You may click 'Save' to download the install file to the workstation for installation at a later time. If install files are saved to the workstation, double click the Setup file to begin the installation.

The Windows 'User Account Control' window will display the following question: "Do you want to allow the following program from an unknown publisher to make changes to this computer?"

Select 'Yes' to continue the setup.
 The 'Setup is loading' message displays.



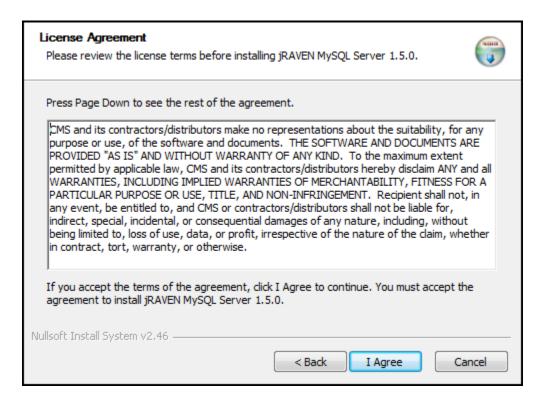
The 'Welcome to the jRAVEN MySQL Server 1.5.0 Setup Wizard' displays.



This wizard will guide you through the installation of jRAVEN MySQL Server 1.5.0. It is recommended that you close all other applications before starting Setup. This will make it possible to update relevant system files without having to reboot your computer.

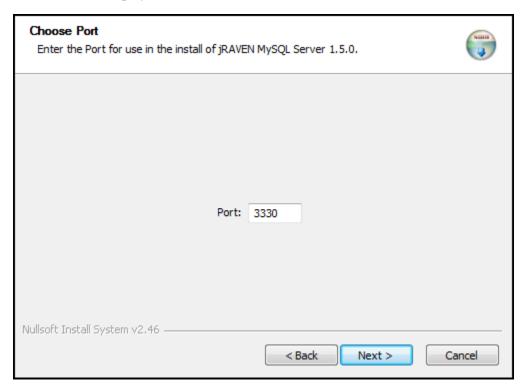
Click 'Next' to continue the setup.
 The 'License Agreement' screen displays. Please review the license terms before installing jRAVEN MySQL Server 1.5.0.

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6. If you accept the terms of the agreement, click 'I Agree' to continue. You must accept the agreement to install jRAVEN MySQL Server 1.5.0.

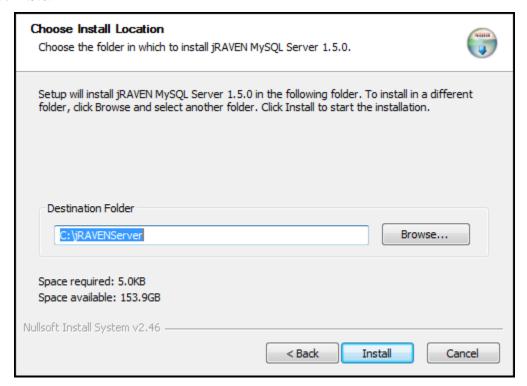
The 'Choose Port' screen displays.



1. Enter the port number for use in the install of jRAVEN MySQL Server 1.5.0. The default port number is 3330.

2. Click 'Next' to continue.

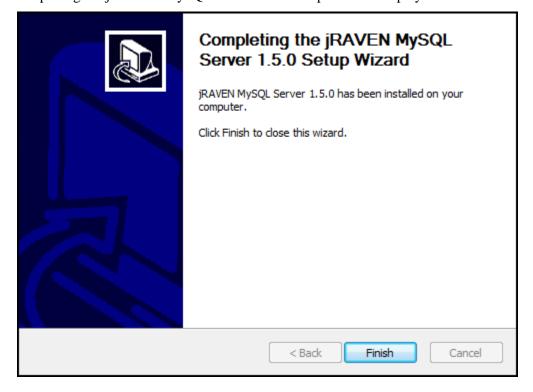
The 'Choose Install Location' screen displays. Choose the folder in which to install jRAVEN MySQL Server 1.5.0.



Setup will install jRAVEN MySQL Server 1.5.0 in the following folder. To install in a different folder, click 'Browse' and select another folder. You may also manually type in a location.

3. Click 'Install' to begin the installation. A progress bar on the 'Installing' screen allows the User to monitor the progress.

The 'Completing the jRAVEN MySQL Server 1.5.0 Setup Wizard' displays.



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4. Click 'Finish' to complete this portion of the installation process.

NOTE: There are no Desktop icons for the Server or the User Guide at the end of the Server Installation. The Client installation must be run before your entire Network/Client installation process is complete.

Go to the Standalone & Client Installation section of the guide

STANDALONE & CLIENT INSTALLATION

Complete the following steps to install the Standalone OR Client version of jRAVEN 1.7.4:

- 1. Click on the jRAVENSetup-1.7.4.exe.
- 2. The 'File Download' window will display.
- 3. Click 'Run' to begin the installation.

NOTE: You may click 'Save' to download the install file to the workstation for installation at a later time. If install files are saved to the workstation, double click the Setup file to begin the installation.

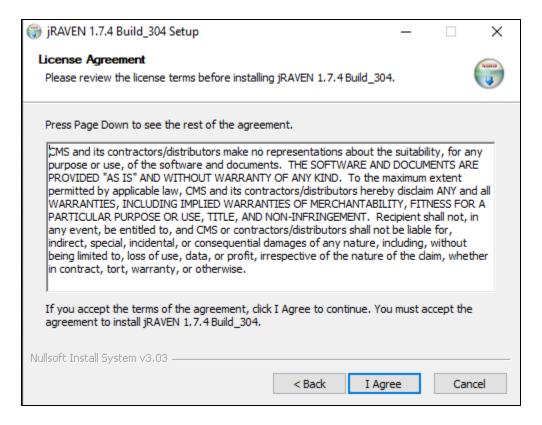
The Windows 'User Account Control' window will display the following question: "Do you want to allow the following program from an unknown publisher to make changes to this computer?" Select 'Yes' to continue the setup.

The 'Welcome to the jRAVEN 1.7.4 Setup Wizard' screen displays. This wizard will guide you through the installation of jRAVEN 1.7.4. It is recommended that you close all other applications before starting Setup. This will make it possible to update relevant system files without having to reboot your computer.



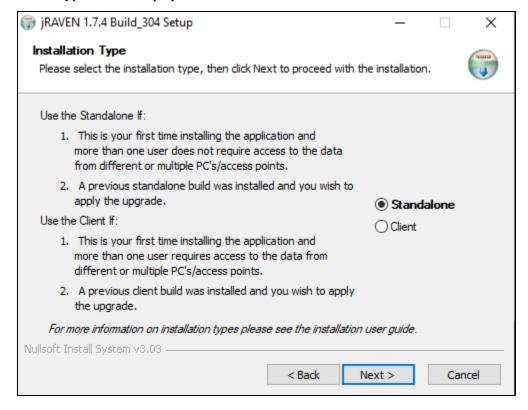
4. Click 'Next' to continue. The 'License Agreement' screen displays. Review the license terms before installing jRAVEN 1.7.4.

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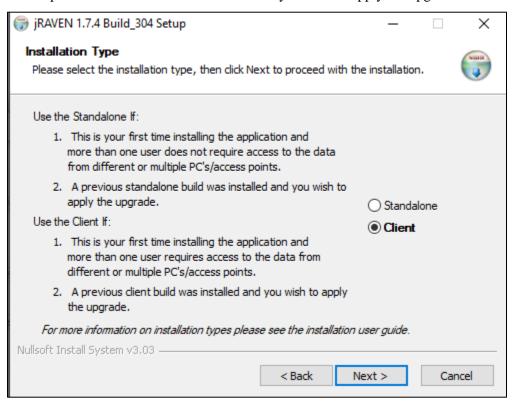


5. If you accept the terms of the agreement, click 'I Agree' to continue. You must accept the agreement to install jRAVEN 1.7.4.

The 'Installation Type' screen displays.

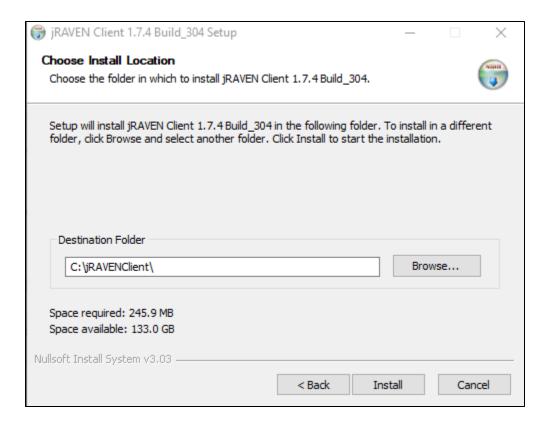


- 1. Select the installation type.
 - Use the Standalone if:
 - "This is your first time installing the application and more than one user does not require access to the data from different or multiple PC's/access points."
 - "A previous standalone build was installed and you wish to apply the upgrade."
 - Use the Client if:
 - "This is your first time installing the application and more than one user requires access to the data from different or multiple PC's/access points."
 - "A previous client build was installed and you wish to apply the upgrade."



- 2. Click 'Next' to proceed.
 The 'Choose Install Location' screen displays.
- 3. Choose the folder in which to install jRAVEN 1.7.4. Setup will install jRAVEN 1.7.4 in the following folder. To install in a different folder, click 'Browse' and select another folder. You may also manually type in a location.

TIP: The Standalone default install location will be: c:\jRAVEN. The Client default install location will be: c:\jRAVENClient.

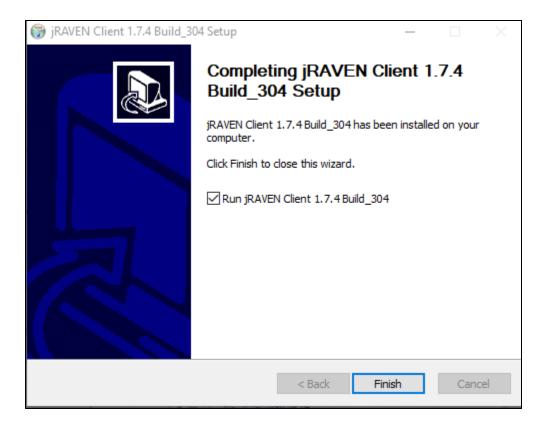


4. Click 'Install' or 'Upgrade' to start the installation.

The 'Installing' screen displays. A progress bar on this screen allows the user to monitor the progress.

NOTE: The install process itself determines whether a full install or an upgrade to the software is needed based on what has already been installed on the workstation. The User will be shown a decision message if they select an installation type that is different from one that has already been installed. **i.e.** "You currently have the Standalone version installed on your computer, are you sure you would like to proceed with the Client install?"

When the install is complete the 'Completing the jRAVEN 1.7.4 Setup Wizard' displays. A completion screen with 'Run' checked will auto-launch the application. When completing an upgrade 'Run' will not be an available option.



5. Click 'Finish' to complete the installation process.

DESKTOP ICONS

When the installation process is complete the appropriate icon will be available on the Desktop, jRAVEN or jRAVEN Client. An icon for the jRAVEN User Guide will also be placed on the Desktop.

DEFAULT USER AND INITIAL SETUP

ATTENTION! The Default User MUST complete the initial setup before any further data entry may begin. The User signing into the software for the first time will be referred to as the 'Default User'.

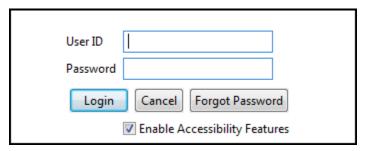
Complete the following steps to setup jRAVEN 1.7.4:

1. Click the jRAVEN or jRAVEN Client icon on the desktop to launch the application. The jRAVEN splash screen displays momentarily.



The Login pop-up window is displayed.

NOTE: If you have chosen the Network Client configuration of jRAVEN you will be prompted for the Server Name (server IP address) and Port (default 3330) prior to the Login pop-up window being displayed. You MUST enter the Server Name and Port to continue successfully. If the jRAVEN Client is unable to connect to the database server please contact your IT System Administrator. It is likely that a firewall setting is blocking the connection. If connection problems continue please contact the QIES Help Desk.



DEFAULT USER ID/PASSWORD

The Default User ID and Password will be jRAVEN's lower-case acronym. They are case sensitive.

- Default User ID: jraven
- Initial Default Password: jraven

- 2. Enter the default User ID and Password; click 'Login'.
- 3. The 'Change Password' screen displays as follows:
 - The new password and the confirm new password must match.
 - The new password must be at least 8 characters long.
 - The new password must be no more than 20 characters long.
 - The new password must not contain any space.
 - The new password must not contain the User ID, First Name, Last Name, or Email.
 - The new password must not begin with a number.
 - The new password can only contain a maximum of 3 repetitive characters.
 - The new password must contain at least one for each of the following type of characters:
 - Upper-case Character: A-Z
 - Lower-case Character: a-z
 - Number: 0-9
 - Special Character: &~`!-@#\$%^*()_+={}[]\\:;"'<>,.?/
 - The new password must not match any of the user's most recent 6 passwords.
 - The new password will be set to expire in 60 days.

The new password and the confirm new password must match. The new password must be at least 8 characters long.	
The new password must be no more than 20 characters long.	
The new password must not contain any space.	
The new password must not contain the User ID, First Name, Last Name, or Email.	
The new password must not begin with a number.	
The new password can only contain a maximum of 3 repetitive characters.	
The new password must contain at least one for each of the following type of characters:	
Upper-case Character: A-Z	
Lower-case Character: a-z	
Number: 0-9	
Special Character: &~`!-@#\$%^*()_+={}[]\:;"'<>,.?/	
The new password must not match any of the user's most recent 6 passwords.	
The new password will be set to expire in 60 days.	
New December 1	
New Password	
Confirm New Password	
<u>Continue</u> <u>Cancel</u>	

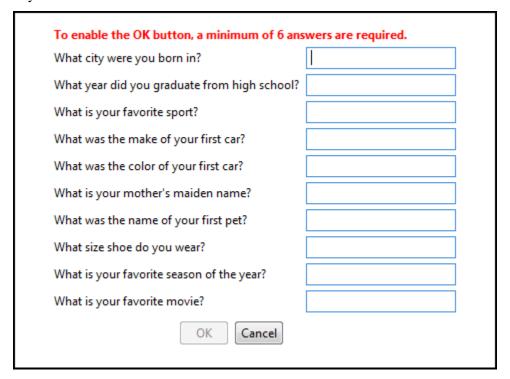
- 4. Enter a new password in the 'New Password' and 'Confirm New Password' fields. The password is case sensitive and must match in both fields. This will be the password that will now belong with the Default User ID; jraven.
- 5. Select 'Continue' to complete the login process.

NOTE: When 'Cancel' is clicked the following message will be displayed: "You must change your password before accessing the system. If you do not change your password, you will be logged off the system".

Clicking 'Cancel' on this pop-up will take the User back to the previous 'Change Password' pop-up. Clicking 'OK' takes the User to the login screen where they must re-enter the Default User ID and Initial Default Password.

The Security Questions screen displays and the questions are as follows:

- What city were you born in?
- What year did you graduate from high school?
- What is your favorite sport?
- What was the make of your first car?
- What was the color of your first car?
- What is your mother's maiden name?
- What was the name of your first pet?
- What size shoe do you wear?
- What is your favorite season of the year?
- What is your favorite movie?



- 6. Complete the answers to at least six (6) questions of your choice. Then tab forward.
- 7. Click 'OK' to continue with the initial setup. The password for the Default User account has now been changed.

INITIAL SETUP

The following sections provide basic steps on completing the initial setup of the jRAVEN application. For detailed instructions on adding Facility or System Administrator data please refer to the following sections in the jRAVEN User Guide:

- Facility Setup
- User Setup

ADD A FACILITY

The Default User must create at least one Facility before being permitted to add any further data to the jRAVEN application.

Complete the following steps to create a new Facility:

- 1. Select the 'Facility' option from the Administration drop down on the Menu Bar. The 'Facility Information' screen displays.
- 2. Enter the appropriate Facility data into the fields listed on the right side of the screen.
- 3. After the required Facility information has been entered, click the 'Save' icon at the upper left corner of the screen.
 - Saved Facility information will display in the 'Facility Summary' section on the left side of the screen.

ADD A SYSTEM ADMINISTRATOR USER

The Default User must create at least one System Administrator User before being permitted to add any further data to the jRAVEN application. It is highly recommended to set up more than one System Administrator User. In the event the primary System Administrator User's account becomes locked, the second System Administrator will have the ability to unlock the primary account.

Complete the following steps to create a new System Administrator User ID:

- 1. Select the 'User' option from the Administration drop down on the Menu Bar. The 'User Information' screen displays.
- 2. Enter the appropriate User data into the fields listed on the right side of the screen. Required fields display on the screen in bold type with an asterisk.
- 3. After the required User information has been entered, click the 'Save' icon at the upper left corner of the screen.

Saved User information will display in the 'User Summary' section on the left side of the screen.

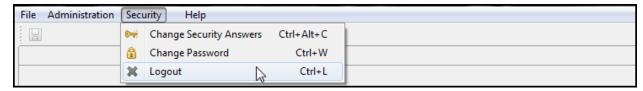
FIRST LOGIN

After successfully adding at least one System Administrator the Default User must log out of the application.

The newly created System Administrator User must login to display the full jRAVEN menu.

Complete the following steps to logout the Default User and login as the System Administrator:

1. Select 'Logout' from the Security drop down on the menu bar.



The login pop-up window displays.

- 2. Enter the newly created System Administrator User ID into the User ID field.
- 3. Enter the same newly created System Administrator User ID into the Password field.

NOTE: The User ID and Password are case sensitive and MUST match when logging in for the first time. An example of the first login is shown below.

- System Administrator User ID : Admin1
- Initial System Administrator Password: Admin1

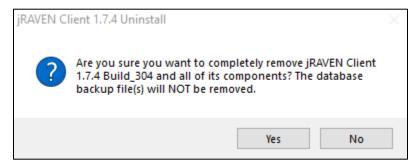
Uninstalling the Software

WINDOWS - ALL PROGRAMS

Complete the following steps to uninstall the jRAVEN Standalone OR Network Client/Server application via 'Start – All Programs':

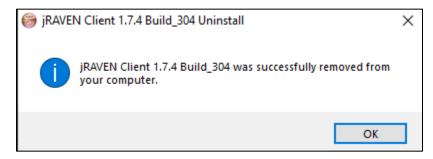
- 1. Select 'Start'.
- 2. Select 'All Programs'.
- 3. Select jRAVEN from the list of program folders. The User will find the following list after selecting jRAVEN:
 - jRAVEN (folder)
 - jRAVEN User Guide
 - jRAVEN (.exe)
 - Uninstall
 - www.cms.gov
 - https://qtso.cms.gov
- 4. Select 'Uninstall'.

A decision message will display the following question: "Are you sure you want to completely remove jRAVEN 1.7.0 and all of its components? The database backup file(s) will NOT be removed."



5. Click 'Yes' if you wish to continue with the uninstall process.

The progress bar will illustrate the progress of the uninstall process. When complete, a final message will be displayed: "¡RAVEN 1.7.4 was successfully removed from your computer."



6. Click 'OK'.

WINDOWS - CONTROL PANEL

Complete the following steps to uninstall the jRAVEN Standalone OR Network Client/Server application via the Windows Control Panel:

- 1. Select 'Start'.
- 2. Select 'Control Panel'.
- 3. Select 'Programs and Features'.
- 4. Double-click on the installation you wish to remove. Follow the instructions to complete the uninstall process.

NOTE: Uninstalling the Client install will not uninstall the Server and vice versa. You must uninstall both Client and Server if you wish to remove the entire Network Client/Server application.