

## IMPLEMENTING THE RME<sub>x</sub> GUI

This document discusses the system requirements to prepare for the RME<sub>x</sub> GUI.

## Introduction

The RMEEx GUI (Graphical User Interface), is Quantrax's innovative method for replacing the classical (Some say old fashion) IBM "Green Screens", with a new, up-to-date, user friendly graphical interface, that will appear familiar to anyone using a computer today. Although much of the functionality that you have been accustomed to using with a green screen will still be there, you now have all the benefits of a point and click interface, along with additional RMEEx enhancements that were not possible in a green screen environment. We would also like to acknowledge the support we have had from many of our clients for the wonderful enhancement ideas, suggestions, and support to help us make the RMEEx GUI a world class product.

## Pricing and GUI contract

Please contact Quantrax Support, so we can discuss your hardware and software needs, number of users etc. Once we have all the information we will send you a contract to be acknowledged and sent back to support@quantrax.com

## The RMEEx GUI System Configuration

The installation of the GUI requires WebSphere Application Server Version 8 (WASE 8), or higher on the ISeries. Additionally, a separate Windows PC server is needed for the GUI delivery, which we will call the QServer.

**NOTE:** WASE can also run on a PC for companies with a large number of users. Quantrax will discuss this option with you if there is a need.

The key configurations that will be needed for the GUI are as follows:

- Setting up VPN access with Quantrax
- Installing the WebSphere Application Server and related required software on the ISeries
- Installing and configuring QServer
- Installing RMEEx GUI

The implementation will take approximately 2 – 3 weeks from the time you order your QServer. Please use the checklist on the next page to guide you through the tasks that need to be completed before the RMEEx GUI installed.

Throughout this document you will be asked to verify and send Quantrax information about your systems.

**IMPORTANT:** As you read each section of this document **fill-out** and **print** the *GUI Implementation Client Info* form to notate the information requested. On the last page is a *GUI Implementation Checklist* for you to confirm all the tasks you need to complete prior to the GUI being installed.

Quantrax must have this document before we can install the RMEEx GUI.

**NOTE:** Directions/AS400 commands are listed in the following pages.




[Click to open the GUI Implementation – Client Info form](#)



[Click here for a description](#)

## Other Information to review

[Click here for a Video explaining how to sign into, and navigate the RMEEx GUI. This will be a good place to start your users](#) 

[Click here for the GUI admin Document which explains the hardware components of the GUI along with initial testing, starting/stopping the WASE \(GUI\) servers, etc.](#)



[Click here for the Account Detail Quick Start Guide](#)



## VPN Access with Quantrax

Clients are asked to set up a Site-to-Site, SES-256-bit encrypted VPN link between your iSeries and our own systems. This is for the purpose of transmitting modifications or PTF's and to analyze a problem remotely, if required.

Using other client VPN Software such as Cisco, SonicWALL, WatchGuard, etc., running from remote PC's, instead of a Site-to-Site connection VPN, has caused PC and connection issues in the past, resulting in unwanted delays. Direct access has been the most reliable and efficient method, allowing us to avoid unnecessary delays regarding customer support, which we would like to always avoid if possible.

Information needed to establish a Site-to-Site VPN Connection:

**VPN Client information (send to Quantrax):**

- Firewall Type
- Remote IP Address
- Your LAN IP Address
- Your LAN Subnet
- iSeries address
- I-Tel address (if used)

**VPN Quantrax Information (Keep for your setup):**

- Firewall Type:* SonicWALL NSA 2400
- Our Remote FQDN:* vpn.quantrax.com  
(If you cannot use a domain name the IP address is 67.90.175.166)
- Encryption:* AES-256
- Authentication:* SHA1
- Key Lifetime:* 86400
- Shared Secret:* (We will exchange this at a later date)
- Our LAN:* 192.169.0.0
- Our Subnet:* 255.255.255.0

## System Requirements for End User PCs

The minimum requirements for end user PCs to run with RMEEx GUI:

- The RMEEx GUI is designed to use Google Chrome. We suggest using a modern dual or quad core CPU (Intel or AMD) with 4 gigs of RAM minimum.

The GUI is capable of running on older PC's such as a Pentium 4 with 512mb of RAM. But, we have found that on older PC's the GUI will be sluggish, the same way many of the newer programs would be on that same PC. So we cannot guarantee maximum efficiency if you are using an older PC using the minimum requirements.

## Setting Up the QServer (Windows Server) for RMEEx GUI

The minimum configuration for the QServer is as follows:

### Hardware:

- Intel Xenon processor – 2.0 Ghz or faster. Minimum 6 core processor with 15mb cache.
- 16GB RAM DDR3 or better
- Raid 1
- 2 x (minimum) 1TB Hard Drives\*
- Redundant power supply
- 10/ 100/ 1000Mbps Gigabit Network Card

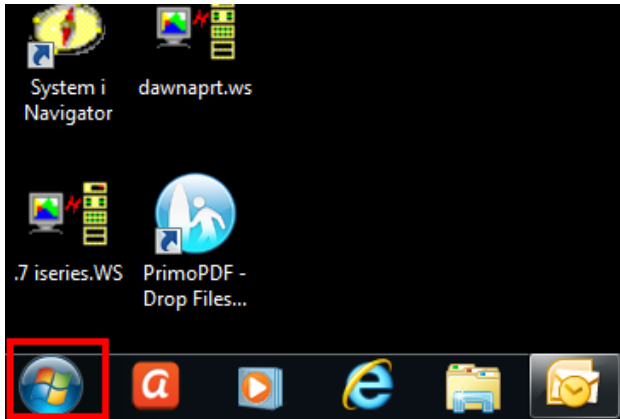
\* Hard drives: If you are using SSD drives, the minimum for OS drive is 250GB, and should have RAID.

### Software

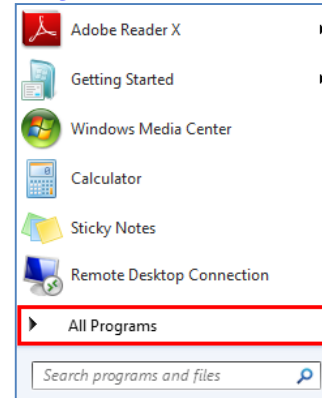
- Windows Server 2008 or higher
- Windows updates installed
- Internet Information Services (IIS)  
**NOTE:** IIS comes with Windows Server
- SSL Certificate if
- System access (Formally Client Access). Current up-to-date version. This will install the required ODBC Drivers.
- .NET 3.5
- ASP.NET installed and registered (in IIS Web Server)
- Security and Backup: Confirm you have incorporated the QServer to all relevant office antivirus, backup, and office security policies.
- Firewall: If using a firewall on this server all relevant ports must be open.

## How to Find: Verify if iAccess (ODBC drivers) installed on the QServer?

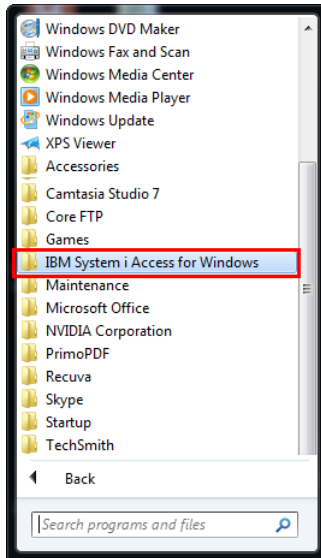
### 1. On Server from the Desktop, click **Start**



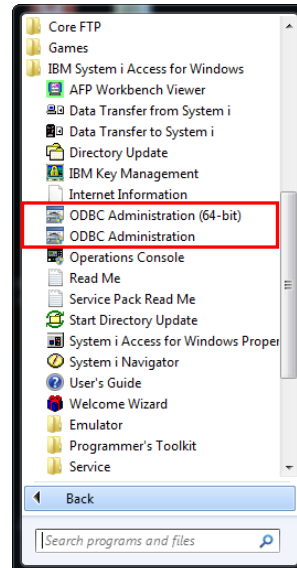
### 2. Click **All Programs**



### 3. Click **IBM System iAccess for Windows**



### 4. **ODBC Administration** items will display if it is installed



## QServer Installation

If Quantrax does not build your QServer, you must configure the server with the specifications provided by Quantrax. Please contact Quantrax for information regarding:

- Installing System iAccess (formerly called Client Access)
- Installing .NET 3.(in Server Manager)
- Registering ASP.NET in the IIS Web Server

## WebSphere Application Server (WASE) for RMEEx GUI

Verify that the minimum configuration for the WASE 8 (Or above) is as follows:

**NOTE:** AS400 should have IBM Operating System Version 6.1

- WebSphere Application Server (WASE)
  - NOTE:** Free product from IBM (may already be installed)
    - WebSphere Application Server V8 for i5/OS
    - WebSphere Application Server V8 Express
  - HTTP Admin or 5722DG1 IBM HTTP Server for i5/OS\*
  
- JAVA (Minimums)
  - JAVA5722JV1 option 6 Java Developer Kit 1.4 (5722JV1-6)
  - JAVA 5722JV1 option 7 Java Developer Kit 5.0 (5722JV1-7)
  - JAVA 5722JV1 option 8 J2SE 5.0 32 bit (5722JV1-8)
    - RMEEx is the latest version
- IBM HTTP Server is installed

Below are instructions to help you find the information needed to send to Quantrax prior to GUI implementation.

## How to Find: What version of WebSphere Application Server (WASE) running on your iSeries machine?

1. Sign on as QSECOFR and type, *go licpgm* on the command line to see *Licensed Programs*:
2. Take *option 10* from the Work with Licensed Programs screen.

```

MAIN                               System i Main Menu
Select one of the following:

  1. User tasks
  2. Office tasks
  3. General system tasks
  4. Files, libraries, and folders
  5. Programming
  6. Communications
  7. Define or change the system
  8. Problem handling
  9. Display a menu
 10. Information Assistant options
 11. System i Access tasks

 90. Sign off

Selection or command
====> 10 licpgm
    
```

```

LICPGM                               Work with Licensed Programs
Select one of the following:

Manual Install
  1. Install all

Preparation
  5. Prepare for install

Licensed Programs
10. Display installed licensed programs
11. Install licensed programs
12. Delete licensed programs
13. Save licensed programs

Selection or command
====>
    
```

3. Roll down to see if WebSphere was installed. Remain on this screen for the next step.
4. Press *F11* (Display Release) to see version details. Our version shows *V6R1M0*. This is the minimum version you will need to have installed.

Remain on this screen for next section (use for JAVA options).

```

Display Installed Licensed Programs
System:
Licensed Program  Installed Status  Description
5761WDS *COMPATIBLE System/36 Compatible COBOL
5761WDS *COMPATIBLE System/38 Compatible COBOL
5761WDS *COMPATIBLE OPM COBOL
5761WDS *COMPATIBLE ILE COBOL *PRV Compiler
5761WDS *COMPATIBLE ILE C
5761WDS *COMPATIBLE ILE C++
5761WDS *COMPATIBLE IXL C for C/C++
5761WDS *COMPATIBLE Workstation Tools - Base
5733W61 *INSTALLED WebSphere Application Server V6.1 for i5/OS
5733W61 *INSTALLED WebSphere Application Server V6.1 Express
5761XE1 *COMPATIBLE IBM System i Access for Windows
5761XH2 *COMPATIBLE IBM System i Access for Web
5761XW1 *COMPATIBLE IBM System i Access Family
5761XW1 *COMPATIBLE System i Access Enablement Support

Press Enter to continue.
F3=Exit  F11=Display release  F12=Cancel  F19=Display trademarks
    
```

```

Display Installed Licensed Programs
System:
Licensed Program  Release  Description
5761WDS V6R1M0 System/36 Compatible COBOL
5761WDS V6R1M0 System/38 Compatible COBOL
5761WDS V6R1M0 OPM COBOL
5761WDS V6R1M0 ILE COBOL *PRV Compiler
5761WDS V6R1M0 ILE C
5761WDS V6R1M0 ILE C++
5761WDS V6R1M0 IXL C for C/C++
5761WDS V6R1M0 Workstation Tools - Base
5733W61 V6R1M0 WebSphere Application Server V6.1 for i5/OS
5733W61 V6R1M0 WebSphere Application Server V6.1 Express
5761XE1 V6R1M0 IBM System i Access for Windows
5761XH2 V6R1M0 IBM System i Access for Web
5761XW1 V6R1M0 IBM System i Access Family
5761XW1 V6R1M0 System i Access Enablement Support

Press Enter to continue.
F3=Exit  F11=Display option  F12=Cancel  F19=Display trademarks
    
```

## How to Find: JAVA Product Options 6, 7 & 8 needs to be installed as shown below (5722JV1-6 5722JV1-7 5722JV1-8)

5. From *Licensed Programs PG-UP* to see if JAVA is installed:



```
Display Installed Licensed Programs          System: S108
Licensed Program  Product Option Description
5722BZ1  *BASE IBM Business Solutions
5722DG1  *BASE IBM HTTP Server for i5/OS
5722DG1  1      Triggered Cache Manager
5722JC1  *BASE IBM Toolbox for Java
5722JS1  *BASE IBM Advanced Job Scheduler for i5/OS
5722JV1  *BASE IBM Developer Kit for Java
5722JV1  5      Java Developer Kit 1.3
5722JV1  6      Java Developer Kit 1.4
5722JV1  7      Java Developer Kit 5.0
5722JV1  8      J2SE 5.0 32 bit
5722OU1  *BASE IBM Query for iSeries
5722ST1  *BASE DB2 Query Mgr and SQL DevKit
5722TC1  *BASE IBM TCP/IP Connectivity Utilities for i5/OS
5722WD5  *BASE WDS for iSeries

Press Enter to continue.

F3=Exit  F11=Display status  F12=Cancel  F19=Display trademarks
```

## How to Find: What is your admin console IP address (the IP address of your iSeries – machine where WASE is installed)?

1. Type *netstat* on a command line and enter. The following screen will be presented. (You need to use the ADMIN user id/password e.g., QSECOFR)
2. Select *option #1 Work with TCP/IP interface status*.

```
MAIN                    i5/OS Main Menu                    System: S10E986C
Select one of the following:
1. User tasks
2. Office tasks
3. General system tasks
4. Files, libraries, and folders
5. Programming
6. Communications
7. Define or change the system
8. Problem handling
9. Display a menu
10. Information Assistant options
11. iSeries Access tasks
90. Sign off
Selection or command
==> netstat
```

```
Work with TCP/IP Network Status
Select one of the following:
1. Work with TCP/IP interface status
2. Display TCP/IP route information
3. Work with TCP/IP connection status
4. Work with IPv6 interface status
5. Display IPv6 route information
6. Work with IPv6 connection status
Selection or command
==>
```

3. Now you will see the IP address of the iSeries where you installed the WASE.

```
Work with TCP/IP Interface Status                    System:
Type options, press Enter.
5=Display details      8=Display associated routes  9=Start  10=End
12=Work with configuration status  14=Display multicast groups
Opt  Internet      Network      Line      Interface
    Address      Address      Description  Status
  1  127.0.0.1      127.0.0.0    *LOOPBACK  Active
  2  192.169.0.7   192.169.0.0  ETHLIN01   Active
```

## How to Find: Verify that the HTTP server for WASE is running

1. Type *WRKACTJOB* on command line.

```
MAIN                               i5/OS Main Menu                               System: S10E9B6C
Select one of the following:
  1. User tasks
  2. Office tasks
  3. General system tasks
  4. Files, libraries, and folders
  5. Programming
  6. Communications
  7. Define or change the system
  8. Problem handling
  9. Display a menu
 10. Information Assistant options
 11. iSeries Access tasks
 90. Sign off
Selection or command
==> wrkactjob
F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel  F13=Information Assistant
F23=Set initial menu
```

2. The status of the HTTP server under *QHTTSPVR* sub system will display as shown below if active. Once these steps are answered/verified we can configure the WASE server and proceed.

```
Work with Active Jobs                               S10E9B6C
CPU %: 2.1  Elapsed time: 00:56:15  Active jobs: 432  01/25/11 07:38:37
Type options, press Enter:
2=Change 3=Hold 4=End 5=Work with 6=Release 7=Display message
8=Work with spooled files 13=Disconnect ...
Current
Opt Subsystem/Job User Type CPU % Function Status
---
ADMIN QTMHHTTP BCH .0 PGM-QZHBMAIN SIGH
ADMIN QTMHHTTP BCH .0 PGM-QZSRLOG SIGH
ADMIN QTMHHTTP BCH .0 PGM-OLWISVR JVAH
ADMIN QTMHHTTP BCH .0 PGM-QZSRHTTP SIGH
ADMIN BUDDHIKA BCH .0 PGM-QYUNLANG TIMH
ADMIN INTGUI2 BCH .0 PGM-QYUNLANG TIMH
Parameters or command
==>
F3=Exit  F5=Refresh  F7=Find  F10=Restart statistics
```

## How to Find: Verify that the current PTFs are installed on AS400

1. On Command Line type *go licpgm*

```
MAIN                               i5/OS Main Menu
Select one of the following:
  1. User tasks
  2. Office tasks
  3. General system tasks
  4. Files, libraries, and folders
  5. Programming
  6. Communications
  7. Define or change the system
  8. Problem handling
  9. Display a menu
 10. Information Assistant options
 11. iSeries Access tasks
 90. Sign off
Selection or command
==> go licpgm
F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel  F13=In
F23=Set initial menu
```

2. Page Down to Related Commands menu and select option 71-Program temporary fix commands

```
LICPGM                               Work with Licensed Programs
Select one of the following:
  Completion Status
  50. Display log for messages
  Related Commands
  70. Save and restore commands
  71. Program temporary fix commands
  72. Licensed commands
Selection or command
==> 71
F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel  F13=In
F16=System Main menu
```

3. **Select option 13-Display Program Temporary Fix**

4. **Press *Enter* key to see all PTF's**

```
CMDPTF          Program Temporary Fix Commands

Select one of the following:

Commands
  2. Apply Program Temporary Fix          APYPTF
  5. Copy Program Temporary Fix          CRYPTF
  6. Copy PTF Cover Letter               CPYPTFCVR
  7. Copy PTF Group                      CPYPTFGRP
 11. Delete Program Temporary Fix        DLTPTF
 13. Display Program Temporary Fix       DSPPTF
 14. Display PTF Cover Letter            DSPPTFCVR
 16. Install Program Temporary Fix       INSPTF
 17. Load Program Temporary Fix          LODPTF
                                         More...

Selection or command
==> 13_

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel  F16=Major menu
(C) COPYRIGHT IBM CORP. 1980, 2005.
```

```
Display Program Temporary Fix (DSPPTF)

Type choices, press Enter.

Product . . . . . *ALL__
PTF numbers to select . . . . . *ALL__
Release . . . . . *ALL__
Cover letter only . . . . . *NO__
Output . . . . . *

F4 for 1
Characte
*ALL, *X
*NO, *YE
*, *PRIN

F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How t
F24=More keys
```

Once the RME GUI is installed you will need to know how to

## Troubleshooting

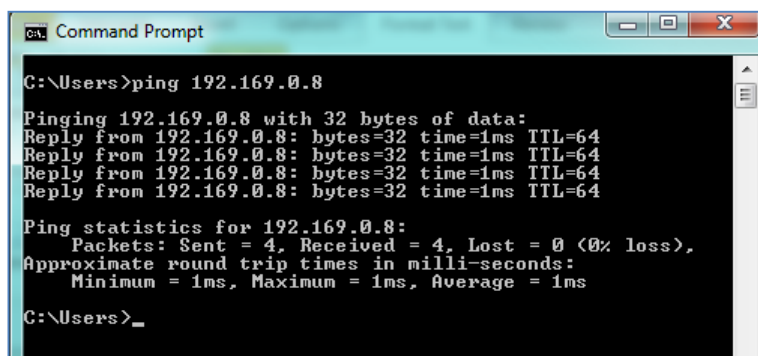
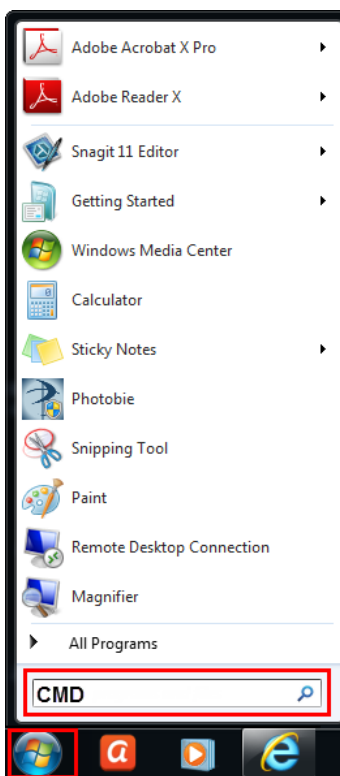
Each desktop must have the ability to reach the AS400 and QServer.

- After installing the GUI if you cannot see it on the PC, *ping* the AS400 server
- After installing the GUI if you cannot see the *Notes* section in *Account Detail* screen, ping the QServer

To *ping* the AS400 or the PC Server to make sure the PC can reach them:

**NOTE:** You need the IP address for the server you want to reach. In this example we will use the IP address of **192.169.0.8**

1. In Windows, click on the **START** button and in the dialog box type **CMD** and press **Enter**
2. At DOS prompt type, **PING 192.169.0.8** and press **Enter**



After you hit **Enter** a "*Reply from*" message means you can reach that server.

If you get a message that states "*Request timed out*", they you are *not* able to reach that server