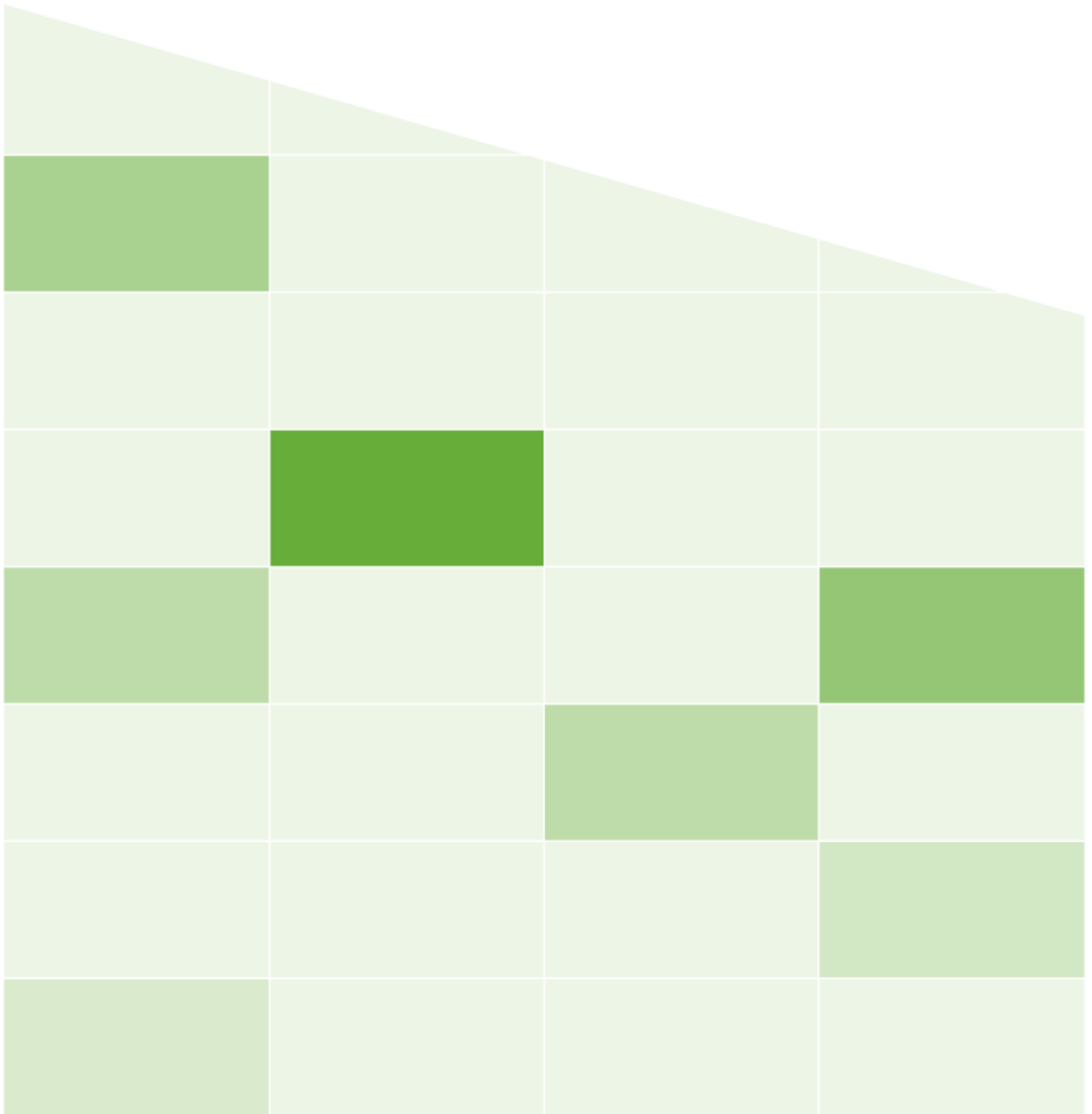




# VBrick Enterprise Media System

VEMS Mystro® Portal Server v6.3.x

Getting Started Guide



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## About VBrick Systems

Founded in 1998, VBrick Systems is a privately held company that has enjoyed rapid growth by helping our customers successfully introduce mission critical video applications across their enterprise networks. Since our founding, VBrick has been setting the standard for quality, performance and innovation in the delivery of live and stored video over IP networks—LANs, WANs and the Internet. With thousands of video appliances installed world-wide, VBrick is the recognized leader in reliable, high-performance, easy-to-use networked video solutions.

VBrick is an active participant in the development of industry standards and continues to play an influential role in the Internet Streaming Media Alliance (ISMA), the MPEG Industry Forum, and Internet2. In 1998 VBrick invented and shipped the world's first MPEG Video Network Appliance designed to provide affordable DVD-quality video across the network. Since then, VBrick's video solutions have grown to include Video on Demand, Management, Security and Access Control, Scheduling, and Rich Media Integration. VBrick solutions are successfully supporting a broad variety of applications including distance learning and training, conferencing and remote office communications, security, process monitoring, traffic monitoring, business and news feeds to the desktop, webcasting, corporate communications, collaboration, command and control, and telemedicine. VBrick serves customers in education, government, healthcare, and financial services markets among others. VBrick products are manufactured in an ISO certified manufacturing facility.

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# Contents

## Portal Server Getting Started Guide

Preface . . . . .	v
Getting Help . . . . .	v
Font Conventions . . . . .	v
Environmental Goals . . . . .	vi
<b>1. Software Installation</b>	
Overview . . . . .	1
Before You Begin . . . . .	1
Installation Workflow . . . . .	2
Creating the Database . . . . .	3
32-Bit Server Support . . . . .	3
Installing the Portal Server. . . . .	3
Optimizing the Portal Server . . . . .	6
Uninstalling the Portal Server . . . . .	6
Reinstalling the Portal Server . . . . .	7
Launching the Portal Server. . . . .	7
Installing Patches . . . . .	8
<b>2. Software Installation on a Windows 2012 R2 Server</b>	
Overview . . . . .	9
Requirements. . . . .	9
Installation Workflow . . . . .	9
<b>3. Software Update</b>	
Overview . . . . .	11
Before You Begin . . . . .	11
Software Update. . . . .	12
Updating from 5.4.2 to 6.x . . . . .	12
Updating from 6.x. . . . .	12
Installing VEMS Mystro on a 5.x Server Machine. . . . .	13
Before You Begin . . . . .	13
<b>4. Database Management</b>	
Overview . . . . .	17
Creating the Database . . . . .	17
Moving the Database . . . . .	18
Configuring the Database Location . . . . .	20
Backing Up the Database. . . . .	20
Restoring the Database . . . . .	22
1. Stop VEMS Mystro Services . . . . .	22

---

2. Stop and Start the SQL Server (Maduro) Service .....	23
3. Restore the Database .....	23
4. Resync Database Users .....	26
5. Restart VEMS Mystro Services .....	26

## 5. Data Migration

Overview .....	29
How It Works .....	29
Migration Process .....	30
Re-migration Process .....	30
Software Installation .....	31
Configure .....	31
Export .....	32
Logging .....	33
Reporting .....	33
Migrate .....	34
Migrated Components .....	36
Non-Migrated Components .....	38
Best Practices .....	38
Migration Settings .....	38
Re-migrating Metadata .....	39
Caveats .....	41

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# Portal Server Getting Started Guide

## Preface

This *Portal Server Getting Started Guide* is written for anyone who will be using or evaluating the VBrick Enterprise Media System Portal Server. This includes system administrators, software developers, network technicians, and end users in a variety of business environments. The VEMS Portal Server is a web-based portal for accessing and managing video assets including both live or stored audio and video files. The VEMS Portal Server is a key component in VEMS Mystro®. The VEMS Portal Server provides a simple, intuitive interface that easily discovers available media assets in your network. The information in this document is arranged as follows:

1. Software Installation	Explains how to install, uninstall, reinstall the Portal Server and how to install patch updates to the software.
3. Software Update	Explains how to update the Portal Server software when a new version of the Portal Server software is released.
4. Database Management	Explains how to create, move, backup, or restore the VEMS Mystro database.
5. Data Migration	Explains how to migrate VEMS 5.x Portal Server database components to VEMS Mystro 6.x Portal Server systems.

## Getting Help

**If you need help, or more information about any topic, use the online help system.** The online help is cross-referenced and searchable and can usually find the information in a few seconds. Use the tree controls in the left pane to open documents and the up and down arrows to page through them. Use the **Search** box to find specific information. Simply enter one or more words in the box and press Enter. The search results will return pages that have all of the words you entered—highlighted in yellow (Internet Explorer only). The **Search** box is not case-sensitive and does not recognize articles (a, an, the), operators (+ and –), or quotation marks. You can narrow the search by *adding* words.

If you can't find the information you need from the online help, or from your certified VBrick reseller, you can contact VBrick [Support Services](#) on the web. Support Services can usually answer your technical questions in 24 business hours or less. Also note that our publications team is committed to accurate and reliable documentation and we appreciate your feedback. If you find errors or omissions in any of our documents, please send e-mail to [documentation@vbrick.com](mailto:documentation@vbrick.com) and let us know. For more information about any VBrick products, all of our product documentation is available on the web. Go to [www.vbrick.com/documentation](http://www.vbrick.com/documentation) to search or download VBrick product documentation.

## Font Conventions

**Arial bold** is used to describe dialog boxes and menu choices, for example: **Start > All Programs > VBrick**

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Courier fixed-width font is used for scripts, code examples, or keyboard commands.

**Courier bold fixed-width font** is used for user input in scripts, code examples, or keyboard commands.

**This bold black font** is used to strongly emphasize important words or phrases.

Folder names and user examples in text are displayed in this sans serif font.

User input in text is displayed in this bold sans serif font.

*Italics are used in text* to emphasize specific words or phrases.

## Environmental Goals

At VBrick, we believe that running our company with a "green" conscience is good for the environment and good for business and that environmental awareness is an important part of the value we deliver to our customers. We recognize our responsibilities to our customers, partners, and employees, and also to the communities in which we live and work. We believe that the same ethics and principles that guide our daily business decisions should be applied to the environment as well. We design superior quality, high performance, and energy-efficient products and are continually looking for ways to conserve energy and reduce waste. As a company, we look for ways to be environmentally friendly in designing our products and operating our facilities, and by choosing partners and suppliers who are committed to sustainable development. You can help by recycling batteries and other consumables and by finding new and better ways to protect and preserve our environment. If you have ideas or suggestions that will help to reinforce our commitment to these goals, please let us know.

## Software Installation

### Topics in this document

Overview .....	1
Installing the Portal Server.....	3
Launching the Portal Server.....	7
Installing Patches .....	8

### Overview

If you ordered a hardware/software combination, you will need to run the installer which is present on the desktop. Your software licenses will also be located in a folder on the desktop. Use the desktop installer to install the software and then refer to the *Portal Server Admin Guide* for additional configuration instructions. The *User Guide* will instruct you and your end users on how to access and view video from the Portal Server and how to schedule and view events with the Scheduler (if you purchased the Scheduler module).

For software only orders, it is strongly recommended that you read the *Release Notes*, which contain the installation instructions, and the *Admin Guide* prior to installing the software. The first step you should take is to activate your software license. See the detailed instructions on the "Software License Activation" document that was shipped with your system. *Be aware that if you purchased a server-based "software-only" product from VBrick, you will need to install the software on a fully-dedicated server.* VBrick also recommends that you do not use anti-virus, spyware detection, or similar software. It is also good practice to check that the **Date & Time** and **Time Zone** are set accurately on the server.

### Before You Begin

There are certain steps you will need to perform on your server before you actually run the installer. *Be aware that it will not be easy to change these settings after you have installed the server.*

1. Put the VEMS Server in your domain and give it a user-friendly name:
  - a. Go to **Start > Control Panel > System** and click **Advanced system settings**.
  - b. Click on the **Computer Name** tab to enter a user-friendly name for your server.
  - c. Click the **Change** button to join a domain.
2. To set or change the password.
  - a. Go to **Start > Administrative Tools > Computer Management** and expand **Local Users and Groups**.
  - b. Select **Users** in the left pane. Then right-click on **Administrator** in the right pane and select **Set Password** from the popup.
  - c. Set a password and save this password in an accessible location for future use.

- 
- Notes**
- VBrick provides support and software warranty coverage for Portal Server or VOD software installed in a virtual environment that meets the minimum specifications for the VEMS Mystro Enterprise hardware configuration. However be aware that VBrick supports only the VBrick software components—not your virtual environment.
  - In VEMS Mystro 6.x, license files must be synchronized across all servers in the system. This means that all of the licenses you purchased must be installed on all VEMS servers (Master, Redundant, and NVR). Also, the "Record" license must represent the system's total combined recording capacity. For example, if you have a Master Server and three NVR-40 servers, you will be licensed for 120 concurrent recording "slots." During software installation you can mix NVR-10/40 servers and manually allocate recording slots to Master, Redundant, or NVR servers.
  - In VEMS Mystro v6.3 and above, one server copy of the transcoding engine will be included in each VEMS Mystro Standard, VEMS Mystro Professional, VEMS Mystro Enterprise and VEMS Mystro NVR server (10 or 40 pack). Allocation of the overall number of transcoding engines and concurrency operates in the same manner as NVR above.
  - You may install on a Windows 2012 R2 server but you must enable .NET Framework 3.5 features first. See: [Software Installation on a Windows 2012 R2 Server](#)
- 

## Installation Workflow

The software installation process consists of running the installer which will be present on the desktop if you purchased both hardware and software from VBrick. If you did not purchase the hardware/software combination the installer can be found on the VEMS Support [Download](#) site. The following steps explain the high-level workflow. See the following pages for detailed installation instructions. **Note that if you will be using a remote database you must create and configure the database before you run the VEMS installer.**

1. Note: If you will be using a remote database you must create and configure the database (see [Creating the Database](#) on page 17) *before* you run the VEMS installer.
2. Run the VEMS installer (`SetupMystro_x_x_x.exe`) once and select **Master Server** when prompted.
3. Install the license file(s) from the desktop (`License`) folder when prompted by the installer. See "Install/Replace License Files" in the *Portal Server Admin Guide* for more about licenses.
4. Optional: If you will be installing a Redundant Server, go to a different machine. Then run the VEMS installer again and select **Redundant Server** when prompted. Repeat this install for each redundant server.

- 
- Notes**
- During installation, the connection between VEMS Mystro and the external database is over named pipes. During normal operation, this connection is over TCP/IP.
  - During installation, an account with Database Owner (DBO) privileges is required. Do not use, or modify, the `vBrick_User` account (which has no installation privileges).
-



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## Creating the Database

If you will be using a remote database you must create and configure the database (see [Creating the Database](#) on page 17) *before* you run the VEMS installer.

## 32-Bit Server Support

As of version v6.3 of VEMS Mystro, VBrick no longer supports the 32-bit version of VEMS. An external VEMS database can operate with both 32 and 64 bit software, therefore is easily converted.

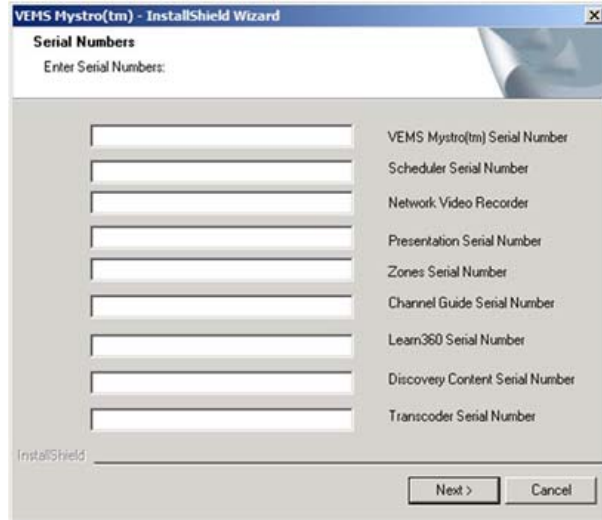
## Installing the Portal Server

This procedure explains how to install a master Portal Server, a Redundant Server, or a Recording Server. Any of these servers can also include a transcoding module. For best results, follow the instructions and use the installer to create redundant server(s). **Do not use Ghost, virtualization, or any other method.**

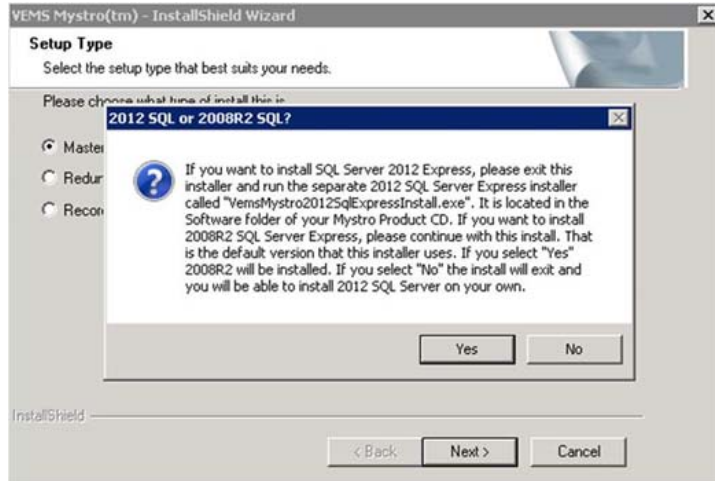
- 
- Notes**
- If you will be using a remote database you must create and configure the database (see [Creating the Database](#) on page 17) *before* you run the VEMS installer.
  - The installer checks that database user has proper permissions.
  - The database is automatically backed up on an upgrade.
  - In case of error during upgrade, the installer will revert back to the previous database and Mystro will continue to function.
  - An installation log is automatically created at: **C:\VemsMystro.log**. Each subsequent installation will append entries to the existing log.
  - VEMS 6.3 supports Windows Server 2012. Similarly, SQL Server 2012 is also supported, however VBrick installs the 2008 versions.
- 

▼ To install the Portal Server:

1. If you purchased a hardware/software combination, double-click on the [SetupMystro\\_x\\_x\\_x.exe](#) installer located on the desktop. (If you only purchased the VEMS software, you can access this installer from the VBrick Support [Downloads](#) site.
2. The InstallShield Wizard will extract the files, start Portal Server setup, and verify the necessary prerequisites are installed. (Note: you may be prompted to reboot after prerequisites are installed. If so reboot the machine and then double-click on the installer again to continue the installation process.)
3. When prompted, use the "License Activation Keys & Serial Numbers" card that was included with your purchase to enter the serial numbers for each purchased component. *Be sure to enter the hyphens.*

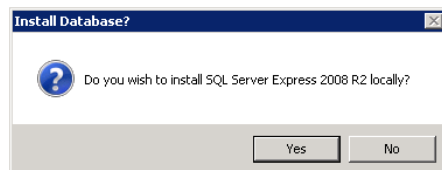


4. Click **Next** to continue.



Note: As explained in the pop-up window above, if you want to install SQL Server 2012 Express, you should exit this installer and run the separate SQL Server 2012 Express installer (`VemsMystro2012SqlExpressInstall.exe`) provided with your software download. If you want to install 2008 R2 SQL Server Express, simply continue with this install—that is the default version that this installer uses. If you select **Yes**, 2008 R2 will be installed; if you select **No**, the install will exit and you will be able to install 2012 SQL Server on your own. When finished installing 2012 SQL Server, go back to Step 1 above, double-click on the `SetupMystro_x_x_x.exe` installer, and follow the prompts.

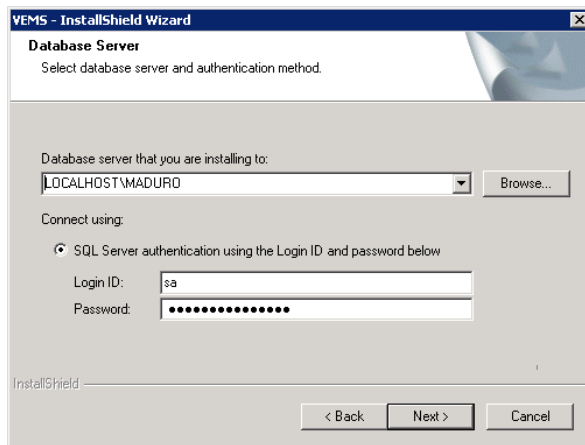
5. Select **Master Server**, **Redundant Server**, or **Recording Server** and click **Next**.



6. Click **Yes** to install the database locally on the Master Server. Click **No** if you will be installing the database on an external server. (If installing on an external server it is

primarily the customer's responsibility to install and configure the database. Please contact VBrick [Support Services](#) if you need help or run into problems.)

7. Wait while the SQL Server 2008 SP2 setup files are installed (this may take a few minutes) then click **Next** to continue.
8. When prompted, navigate to the folder with your license (.lic) files. License files are obtained by using the "License Activation Keys & Serial Numbers" card included with your purchase and through VBrick Support Services. The "Software License Activation" document, also included, explains how to activate your licenses using these keys. Note that multiple license files may be shown if you purchased optional VEMS components. *Select all available license files in the folder.* (For more about license files, see "Install/Replace License Files" in the *Portal Server Admin Guide*.)
9. When prompted choose a Destination Location or click **Next** (recommended) to use the default.



10. Select the Database server that you are installing to and click **Next**. If installing a Master Server this will be the default local database and you do not need to change anything.
11. If installing a Master, Redundant, or Recording Server, select that previously configured server from the dropdown.
12. Select a local hard drive on which the database will be installed (default = c) then click **Install** to begin the VEMS installation. Note: As a best practice, you should typically not install your database on the same partition as your operating system.
13. The Portal Server installation will then run to completion without additional input. This may take several minutes.
14. Optional. If installing a transcoder you will be prompted to enter an additional key (the VEMS Transcoder activation key (from the "Software License Activation" document).
15. When the installation is complete, press **Finish** to restart the computer.
16. Optional. If you will be installing a Master, Redundant, or Recording Server, go to a different machine. Run the VEMS installer again and select the appropriate server option. Repeat for each server.

This completes the VEMS Portal Server installation. The VEMS Portal Server runs in the background and will auto-start if you re-boot the server machine. If you experience problems or need to start or stop VEMS Portal Server for any reason, see VEMS [Launching the Portal Server](#) on page 7.

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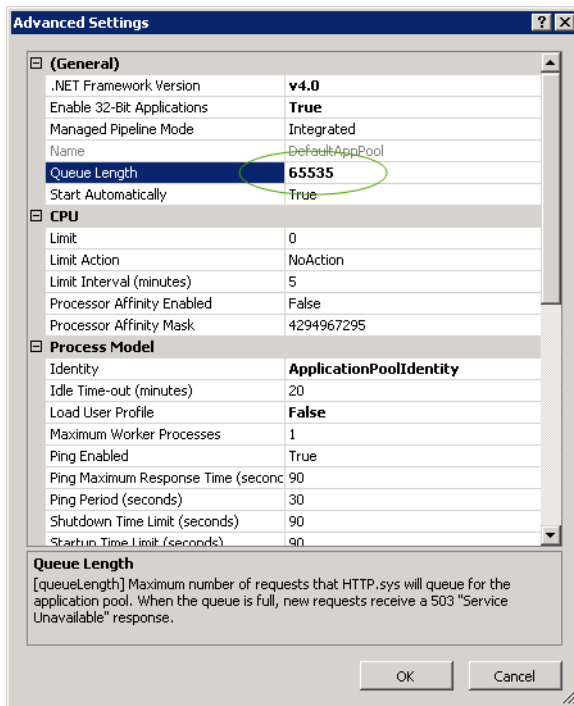
**Note** If you need to add or change a license file after initial installation, go to **Start > Control Panel > Programs > Programs and Features**, select **VEMS**, and click **Change**. Then use the radio buttons to install or replace the required license(s). See "Install/Replace License Files" in the *Portal Server Admin Guide*. for more information.

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## Optimizing the Portal Server

If the system you are installing will typically experience high-load conditions in a load-balanced environment, VBrick recommends the following IIS modifications to optimize performance.

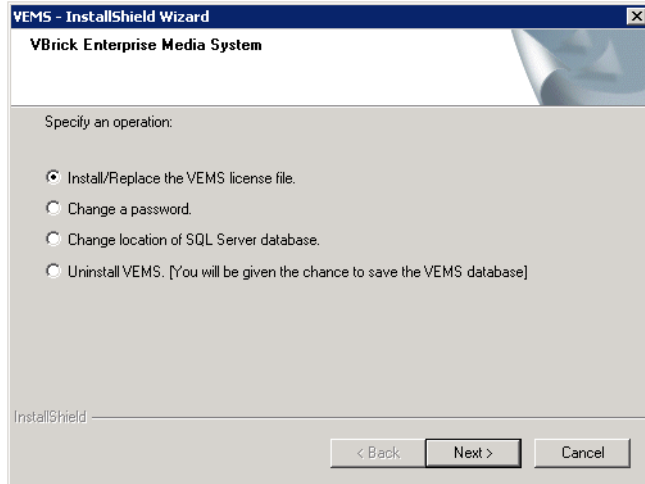
1. Open **Internet Information Services (IIS)** and click on the server name.
2. Go to **Application Pools > DefaultAppPool** and click on **Advanced Settings**.
3. Set the **Queue Length** property to a maximum value of 65,535.
4. Restart IIS and then reboot the server.



## Uninstalling the Portal Server

Use the following procedure to uninstall the Portal Server for any reason. **Before uninstalling the Portal Server be sure to take it off the network and reboot the machine.** If you fail to do so it may be necessary to reinstall the application and *then* uninstall again as explained below.

- ▼ To uninstall the Portal Server:
1. Go to **Control Panel > Programs > Programs and Features**. Then select **VEMS** and click **Uninstall/Change**.
  2. When the following window is displayed, select **Uninstall VEMS** and click **Next**.



3. Respond appropriately when prompted to save the database.
4. After the uninstall, reboot the machine when prompted.

## Reinstalling the Portal Server

Use the following steps in the unlikely event that you need to reinstall the VEMS Portal Server software. As a best practice, it is always a good idea to have your database administrator backup the database before you reinstall the software.

▼ To reinstall VEMS Portal Server:

1. First uninstall the software. Go to **Control Panel > Programs > Programs and Features**.
2. Then select **VBrick Enterprise Media System** and click **Uninstall/Change**.
3. When prompted, be sure to *keep* the database.

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**Note** There is one database shared by the master server and any redundant servers. Be aware that if you are uninstalling a redundant server, and you click "no" (do not keep the database), the master server's database will be deleted as well.

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4. When finished, restart the machine.
5. Reinstall VEMS Portal Server (see [Installing the Portal Server](#) on page 3).
6. Restart the machine and you are done.

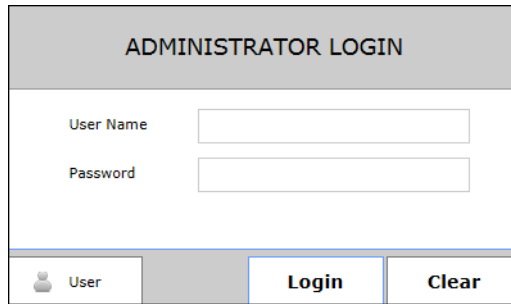
## Launching the Portal Server


As noted, VEMS Portal Server runs in the background and will autostart if you reboot the machine. If you experience problems or need to start or stop VEMS Portal Server for any reason, you must start or stop the default web site. Note also that this is a web server installation that runs continuously. No desktop icons are present to show run status.

▼ To start or stop the VEMS Portal Server Web Site:

1. Go to **Administrative Tools > Internet Information Services (IIS) Manager**.
2. Expand the tree under the **server\_name** and click **Sites**.
3. Right-click **Default Web Site**, select **Manage Web Site**, and select **Start** or **Stop** as appropriate.

- 
- ▼ To launch VEMS Portal Server from the server host machine:
    1. Open a web browser.
    2. Enter `http://localhost` to launch the application.



ADMINISTRATOR LOGIN	
User Name	<input type="text"/>
Password	<input type="password"/>
 User	<input type="button" value="Login"/> <input type="button" value="Clear"/>

3. Select the **Admin** tab and login in with valid credentials.  
Default User Name = `admin`  
Default Password = `adminadmin`
- ▼ To launch VEMS Portal Server from a client machine:
    1. Open a web browser.
    2. Enter `http://<ip_addr|server_name>` to launch the *client* application where `<ip_addr|server_name>` is the IP address or host name of the VEMS Portal Server.
    3. Select the **User** tab and login in with valid credentials.  
Default User Name = `admin`  
Default Password = `adminadmin`

## Installing Patches

VBrick may periodically release patches to address issues in the currently released VEMS Mystro software. These patches can only be installed on the currently released version of the software. For example if you have VEMS 6.x.x, you can apply patches that have been issued for the 6.x.x release. A patch is typically a cumulative .bat file that installs all of the updates associated with a specific release. To check for VEMS Mystro patches, go to [www.vbrick.com/support/downloads.asp](http://www.vbrick.com/support/downloads.asp) and search for the keyword "patch".

## Software Installation on a Windows 2012 R2 Server

### Topics in this document

Overview .....	9
Requirements .....	9
Installation Workflow .....	9

### Overview

To install VEMS on a Windows 2012 R2 server you need to make sure that .NET Framework 3.5 can be installed. .NET Framework 3.5 does not come with Server 2012 by default and you'll need to be able to point to a Server 2012 disc (or network store). Otherwise, the VEMS installer fails while installing dependencies.

You will enable .NET Framework 3.5 by using the Add Roles and Features Wizard in the Windows Server Manager.

### Requirements

The following requirements need to be met before you begin:

1. Windows Server 2012 R2
2. Installation media
3. Administrator user rights. The current user must be a member of the local Administrators group to add or remove Windows features.

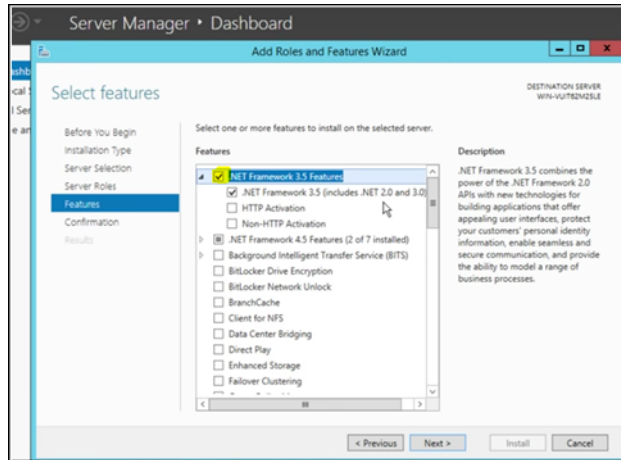
### Installation Workflow

▼ To enable .NET Framework 3.5, complete the following steps:

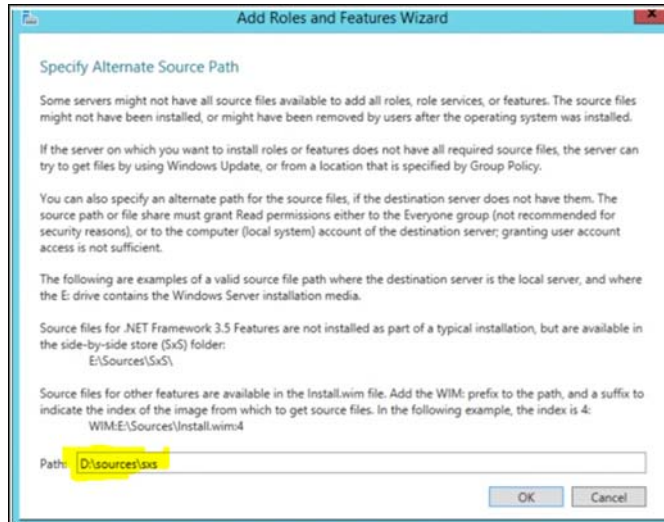
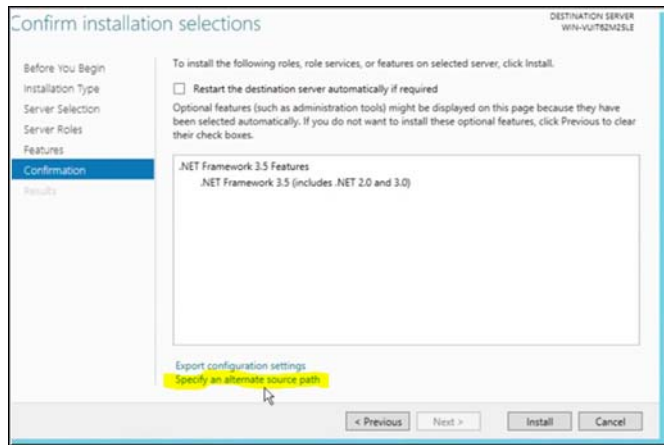
1. In **Server Manager**, click **Manage** and then select **Add Roles and Features** to start the **Add Roles and Feature Wizard**.
2. On the **Select installation type** screen, select **Role-based or feature-based installation**.



3. Select the target server.
4. On the **Select features** screen, check the box next to **.Net Framework 3.5 Features**.



- On the **Confirm installation selections** screen, a warning will be displayed asking, "Do you need to specify an alternate source path?". If the target computer does not have access to Windows Update, click the **Specify an alternate source path** link to specify the path to the `\sources\sxs` folder on the source.



- If the target computer *does* have access to Windows Update, click the X next to the warning and then click **Install**.



## Software Update

### Topics in this document

Overview .....	11
Software Update.....	11
Installing VEMS Mystro on a 5.x Server Machine.....	13

### Overview

VBrick periodically releases software updates to the VEMS Mystro software. You can visit our [website](#) or contact your certified reseller to see if an update is available. The software upgrade procedure is highly automated with little user interaction. Before you update VEMS Mystro software from 6.x as explained below, be sure you understand the following requirements.

---

**Note** From time-to-time VBrick issues patches to address issues in the currently released software. A patch does not require a complete VEMS Mystro installation as does a software update. See [Installing Patches](#) on page 8 for more about patches.

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### Before You Begin

- Each time you update your VEMS software you will be prompted for license files for currently installed components (e.g. Scheduler, SharePoint, etc.). You must contact VBrick [Support Services](#), in advance, to obtain new license files every time you update.
- It is always a good idea to periodically backup the VEMS Mystro database; it is essential before moving the database or performing a software update. See [Backing Up the Database](#) on page 20 for details.
- Be aware that in a that in a multi-server environment, the Master server must be upgraded first (before any Redundant servers).
- If you have previously "skinned" the VEMS interface, by replacing image files or creating themes, and you subsequently perform an upgrade, you will need to repeat some of the steps to replicate your changes. VEMS Mystro v6.x provides a UI Customization tool for colors and logos. Your other changes such as widget customizations are not lost—the CSS files and the changes must simply be reapplied to be active in the user interface. **Any color and logo changes made with UI Customization in the Admin pages from version v6.3.1 onwards will persist through an upgrade.** See the "Saving Skinning Changes during an Software Update" topic in the *Portal Server Advanced UI Customization Guide*.

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## Software Update

### Updating from 5.4.2 to 6.x

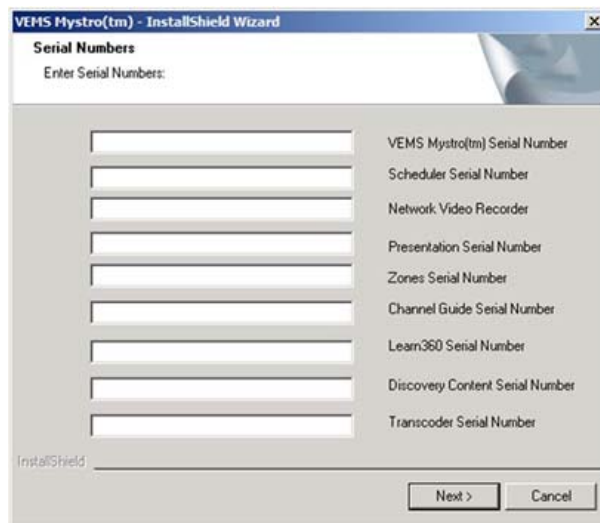
There is no software update from VEMS 5.4.2 to VEMS Mystro 6.x. If you are a VEMS 5.4.2 user, you have two options. In both cases you can use the Migration utility to migrate your settings and data (see [Data Migration](#) on page 29 for more about this option).

- You can install VEMS Mystro on your existing 5.x machine and migrate your data. See [Installing VEMS Mystro on a 5.x Server Machine](#) on page 13.
- You can install VEMS Mystro 6.x on a new server machine and migrate your data.

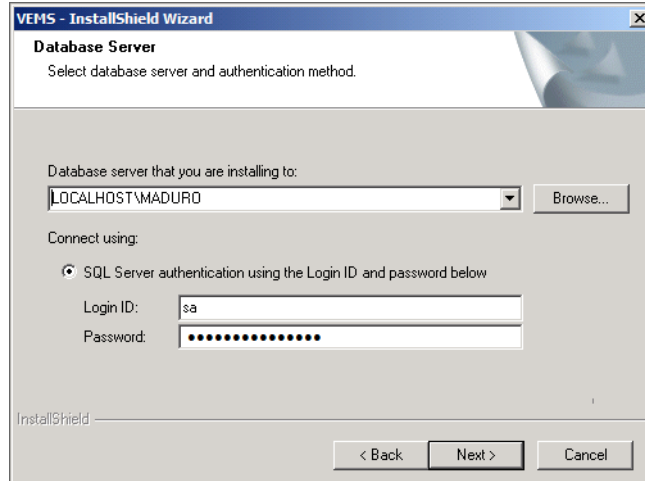
### Updating from 6.x

▼ To update from 6.x:

1. Before running the update, reboot all VEMS Mystro servers to ensure the system is in a clean state prior to the upgrade.
2. Install the Portal Server using the downloaded zip file from the VBrick Support [Download](#) site. Run `SetupMystro_6_x_x.exe`, and click **OK** when prompted. The current version of VEMS will be fully upgraded after this install is finished.
3. The installer will then display a page prepopulated with serial numbers for the VEMS modules you originally purchased. Click **Next** to continue.



4. The next page shows the database (and SQL credentials) you originally configured. If there is a change, point to the new database using the **Browse** button. Otherwise click **Next** to continue.



5. After the transcoder installs the installation will run to completion without further interaction. When prompted, reboot the server and you are done.

---

**Note** After an update, new features may not show on browser pages (the pages may appear corrupted). To resolve this issue clear the browser cache following the instructions in your browsers options.

---

## Installing VEMS Mystro on a 5.x Server Machine

The following procedure explains the steps you will need to perform before installing VEMS Mystro on what was previously a 5.x VEMS Server machine. This procedure basically explains how to prepare the server machine for the new VEMS Mystro application. After performing this procedure you will need to actually install VEMS Mystro 6.x as explained in [Installing the Portal Server](#) on page 3.

---

**Note** For best results when installing VEMS Mystro on what was previously a 5.x machine, VBrick strongly encourages you to upgrade the memory. A minimum of 6GB RAM is recommended.

---

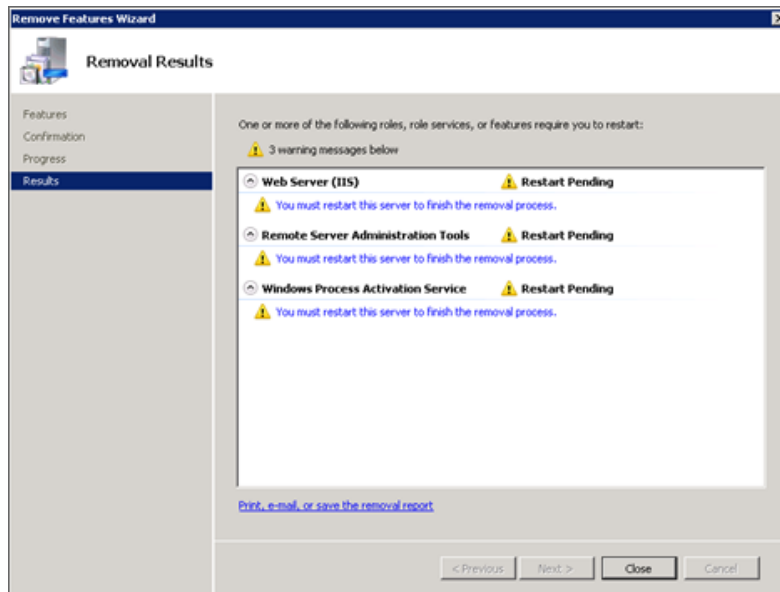
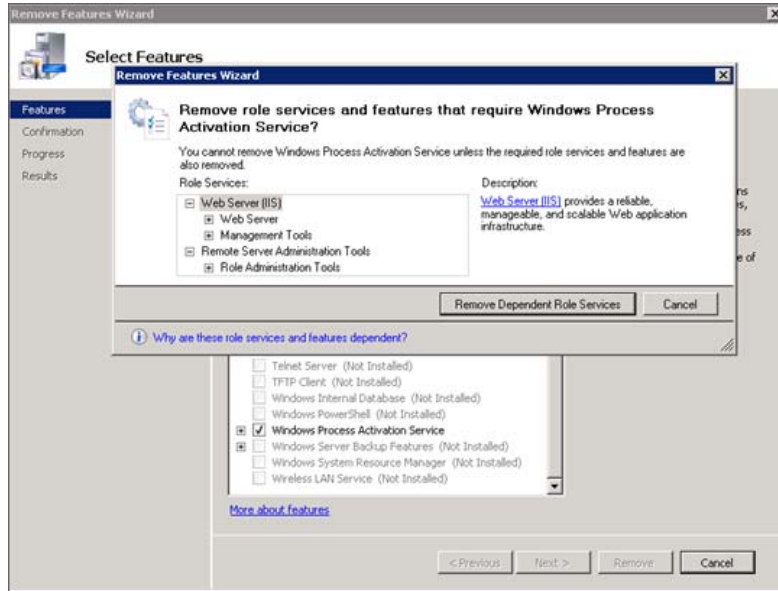
### Before You Begin

Before you begin it is always a good idea to backup the 5.x database in case you run into problems. You can backup the database manually or automatically (using the ETVBackup utility). Both of these options are explained in the *VEMS 5.x Portal Server Admin Guide*. Be aware that a 5.x VEMS database backup can only be restored to a 5.x VEMS application.

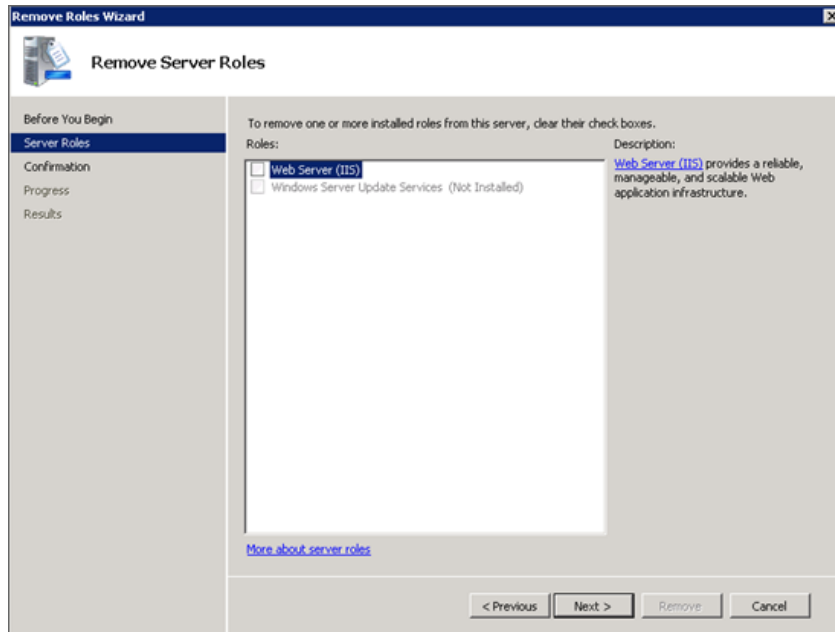
Also, if your 5.x VEMS Server machine has v5.4.2 installed you have the option of exporting and then migrating the database to your new VEMS Mystro application. This procedure is explained in detail in [Data Migration](#) on page 29 and typically requires help from VBrick Support Services. If you do not have v5.4.2 installed, you must upgrade to v5.4.2 before you can migrate the database.

- ▼ To install VEMS Mystro on a 5.x Server:
  1. Go to **Control Panel > Programs > Programs and Features**.
  2. Uninstall VEMS; when prompted do not keep the database.
  3. Uninstall MySQL.

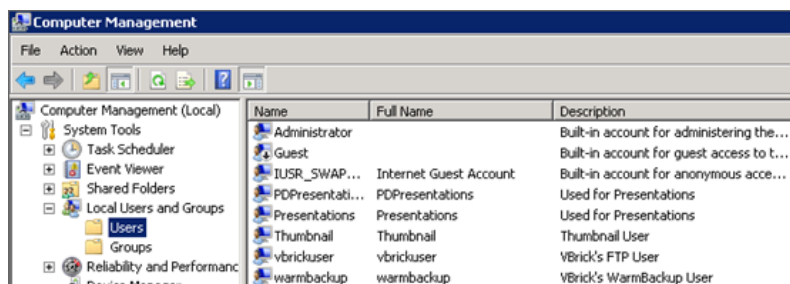
4. Uninstall ETVBackup.
5. Uninstall EtherneTV Reporter.
6. Uninstall MyODBC.
7. Go to **Start > Administrative Tools > Server Manager**.
  - a. Click on **Features** in the left pane and select **Remove Features** in the right pane.
  - b. Find and uncheck the **Windows Process Activation Service**. When prompted, click **Remove Dependent Role Services**, then select **Next** and **Remove**.



8. You will be prompted to reboot the computer. After the reboot, the uninstallation process will continue. You may have to wait a minute for it to come back up.
9. After the uninstallation of the **Windows Process Activation Service** is done, go back to Server Manager. Click on **Roles** in the left pane. In the right pane select **Remove Roles** and uncheck **Web Server (IIS)**. See screenshots below.



10. You will be prompted to reboot the server and after the reboot the uninstallation process may continue. Wait until a successful removal is indicated before continuing.
11. You will also need to delete preexisting system users from 5.x:
  - a. Go to **Start > Administrative Tools > Computer Management**.
  - b. In the left pane, click on **Local Users and Groups** and then **Users**.
  - c. In the right pane, right-click and delete the following users: vbrickuser, PDPresentations, Thumbnail, warmbackup and Presentations.



12. When done you are ready to install VEMS Mystro. See [Installing the Portal Server](#) on page 3 for detailed installation instructions.



# Database Management

## Topics in this document

Overview .....	17
Creating the Database .....	17
Moving the Database .....	18
Backing Up the Database .....	20
Restoring the Database .....	22

## Overview

In a single server VEMS installation, Microsoft SQL Server Express (the default internal database) is installed on the same machine as the Portal Server. If you wish to extend to multiple VEMS Mystro servers, or to redundant services via master servers and redundant servers, you should connect to a user-installed and configured external SQL Server database or to an SQL cluster. If necessary, you can change the location of a configured external database or you can point to an entirely different database. See [Configuring the Database Location](#) on page 20 for more about this.

## Creating the Database

Use the `create_database.sql` script located within the VEMS installer zip file download to create the Mystro SQL Server database and the required login/user for VEMS 6.0. If necessary you can modify the filename (shown in bold below) to point to a different file. The displayed values for the `Size`, `MaxSize` and `FileGrowth` parameters are recommended by VBrick for a default installation. For best results any parameter changes should only be made by a qualified DBA. The `Create Login`, `Create User` and `Role` assignment are required and should not be modified. Run the `create_database.sql` script on your database management program.

---

**Note** If you are not using the default local database (Microsoft SQL Server Express) you must perform these steps to create a database *before* you run the Portal Server installer.

---

▼ To create a database:

1. Navigate to the VBrick Support [Download](#) site and download the VEMS installer zip file.
2. Extract all the files from the zip file once downloaded.
3. Locate the file: `create_database.sql`.
4. You will find this file only after you have extracted the files in the VEMS installer zip.
5. **The script shown below is for information only. Do not cut and paste from this document.**
6. Your Database Administrator (DBA) will use this file in the SQL Server Management Studio to create the database.

```

USE [master]
GO
CREATE DATABASE [Maduro] ON PRIMARY
( NAME = N'Maduro', FILENAME = N'C:\Program Files\VBrick\Maduro\Data\Maduro.mdf' ,
SIZE = 3072KB , MAXSIZE = UNLIMITED, FILEGROWTH = 1024KB )
LOG ON
( NAME = N'Maduro_log', FILENAME = N'C:\Program
Files\VBrick\Maduro\Data\Maduro_log.ldf' , SIZE = 1024KB , MAXSIZE = 2048GB ,
FILEGROWTH = 10%)
GO
CREATE LOGIN [VBrick_User] WITH PASSWORD='vBrick!uSer#06492',
DEFAULT_DATABASE=[Maduro], DEFAULT_LANGUAGE=[us_english], CHECK_EXPIRATION=OFF,
CHECK_POLICY=ON
GO
/***** Users *****/
Use Maduro
GO
CREATE USER [VBrick_User] FOR LOGIN [VBrick_User] WITH DEFAULT_SCHEMA=[dbo]
GO
/***** Roles *****/
USE [Maduro]
GO
EXEC sp_addrolemember N'db_datawriter', N'VBrick_User'
GO
USE [Maduro]
GO
EXEC sp_addrolemember N'db_datareader', N'VBrick_User'
GO

```

## Moving the Database

Use the following procedure to move the Mystro database after it has been created and configured:

▼ To move the Mystro database:

1. Back up the Maduro database to be moved (see [Backing Up the Database](#) on page 20). This is referenced as *MaduroSource*.
2. Create the new Maduro database on the SQL Server machine to which the user wants to move as described in the VEMS installation procedure. This is referenced as *MaduroDestination*.
3. Restore the *MaduroSource* database replacing the *MaduroDestination* (see Figure 1).
4. Be sure to select the **Restore option** to **Overwrite the existing database (WITH REPLACE)** (see Figure 2).



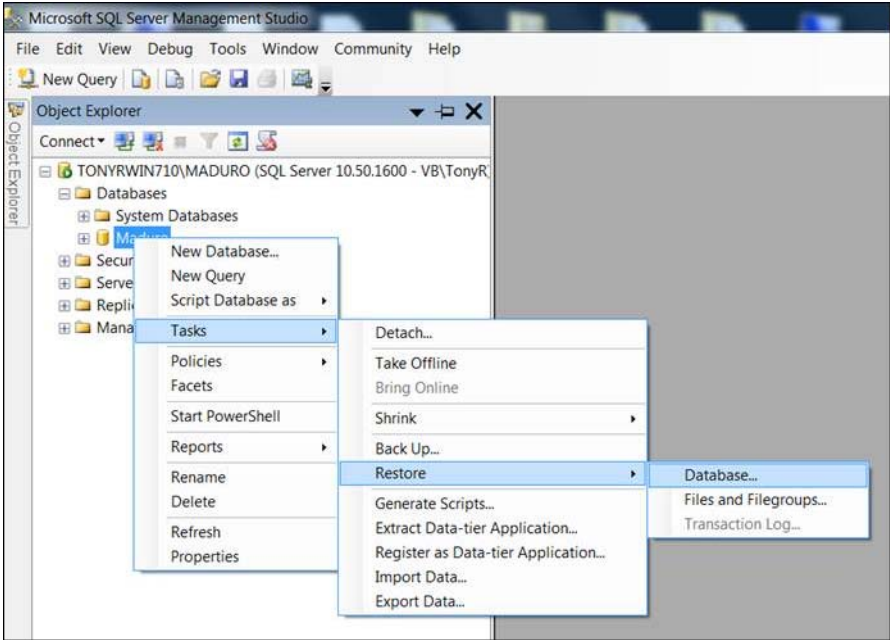


Figure 1. Microsoft SQL Server Management Studio

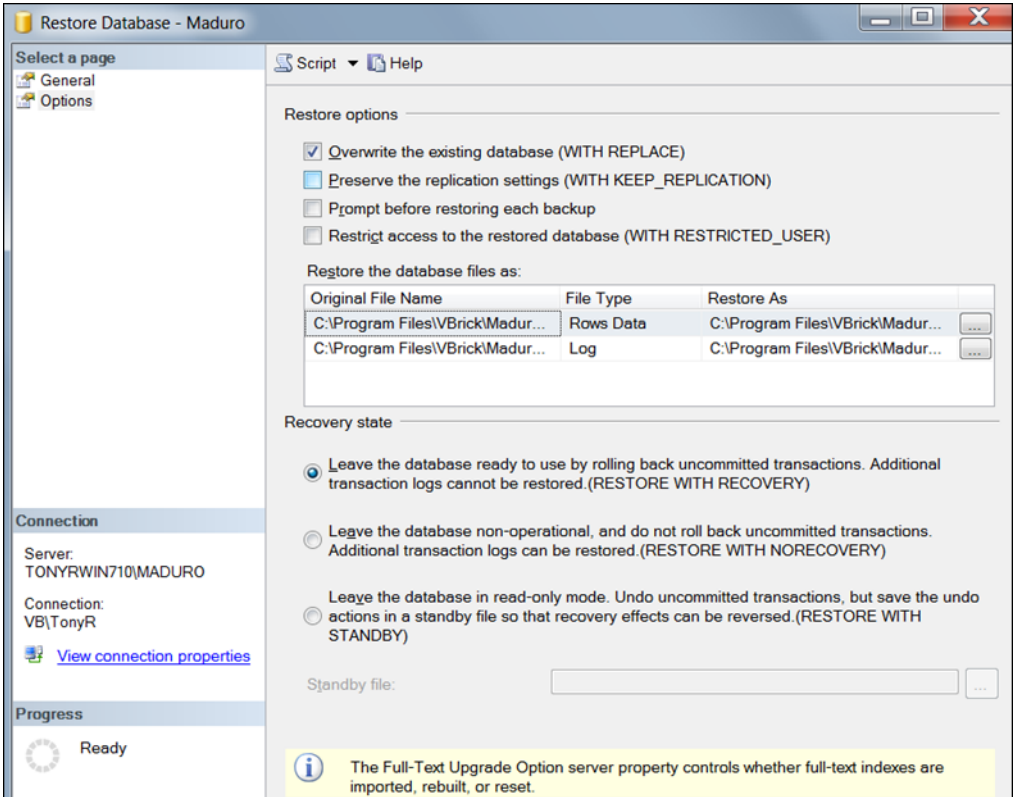


Figure 2. Restore the Database

- 5. Resynch orphan SQL Server login IDs and database user IDs. Navigate to the downloaded zip file from the VBrick Support [Download](#) site and locate the file: `move_database.sql`. **The script shown below is for information only. Do not cut and paste from this document.**

6. Your Database Administrator (DBA) will use this file in the SQL Server Management Studio to move the database.

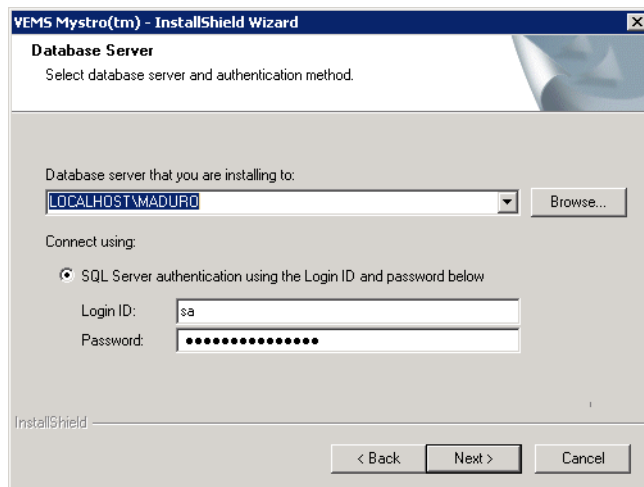
```
--Script to resynch orphan SQL Server login IDs and database user IDs
USE Maduro      --Change to active database name
GO
DECLARE @UserName nvarchar(255)
DECLARE orphanuser_cur cursor for
SELECT UserName = name
FROM sysusers
WHERE issqluser = 1 and (sid is not null and sid <> 0x0) and suser_sname(sid) is
null
ORDER BY name
OPEN orphanuser_cur
FETCH NEXT FROM orphanuser_cur INTO @UserName
WHILE (@@fetch_status = 0)
BEGIN
PRINT @UserName + ' user name being resynced'
exec sp_change_users_login @Action = 'Update_One',
                          @UserNamePattern = @UserName,
                          @LoginName = @UserName
FETCH NEXT FROM orphanuser_cur INTO @UserName
END
CLOSE orphanuser_cur
DEALLOCATE orphanuser_cur
GO
```

## Configuring the Database Location

The final step is to configuring the new database location in VEMS. You will need to do this on the master server, any redundant servers, and any NVRs.

- ▼ To configure the new database location in VEMS:

1. On the server machine where VEMS is installed, go to **Start > Control Panel > Programs > Programs and Features**.
2. Click on **VEMS Mystro(tm)** and select **Change location of SQL Server database**.
3. Click on the Browse button and navigate to the location of the new database.

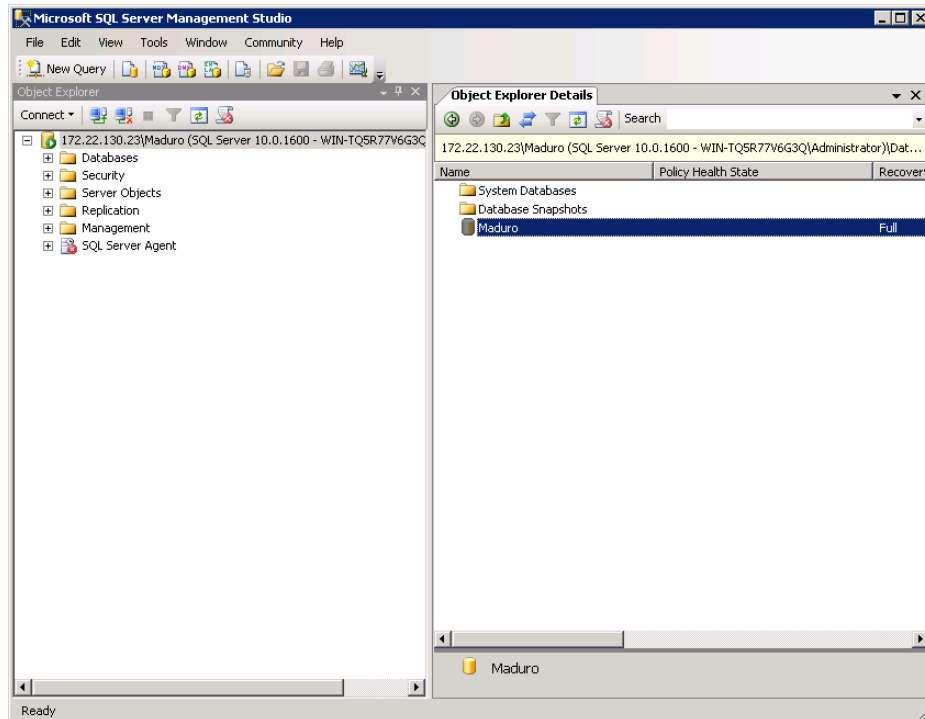


## Backing Up the Database

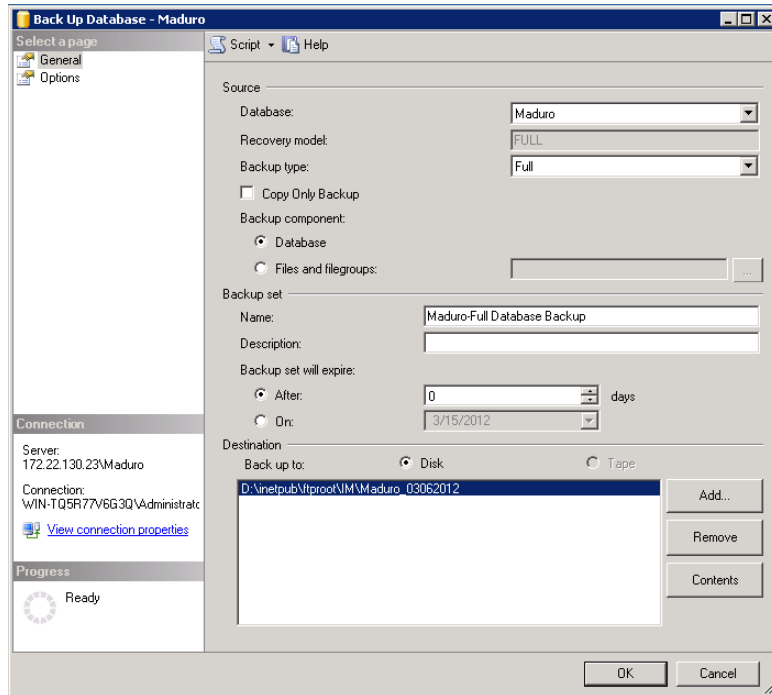
It is always a good idea to periodically backup the VEMS Mystro database; it is essential before moving the database or performing a [Software Update](#) (*although you can choose to not backup the database during an upgrade if you have an SQL cluster or have backed up your database*

*using another mechanism*). Use the following procedure for VEMS Mystro versions 6.0 or higher. Be aware that this backup procedure backs up the database (thumbnails, metadata, users, permissions, etc.) only. It does not back up video content. In order to back up content, you need a separate backup strategy and a robust storage capability.

- ▼ To backup the VEMS Mystro database:
  1. Go to the server machine where the database is installed, open **Microsoft SQL Server Management Studio**.
  2. Click on **Databases** and select the **Maduro** database.



3. Right-click on **Maduro**, then select **Tasks** and **Backup**.



4. On the Back Up Database page, select a **Destination** for the database backup (or use the default). Use the **Add** or **Remove** buttons to change the folder or location.
5. Make sure the path is selected and click **OK**. This will automatically backup the database to the selected location.

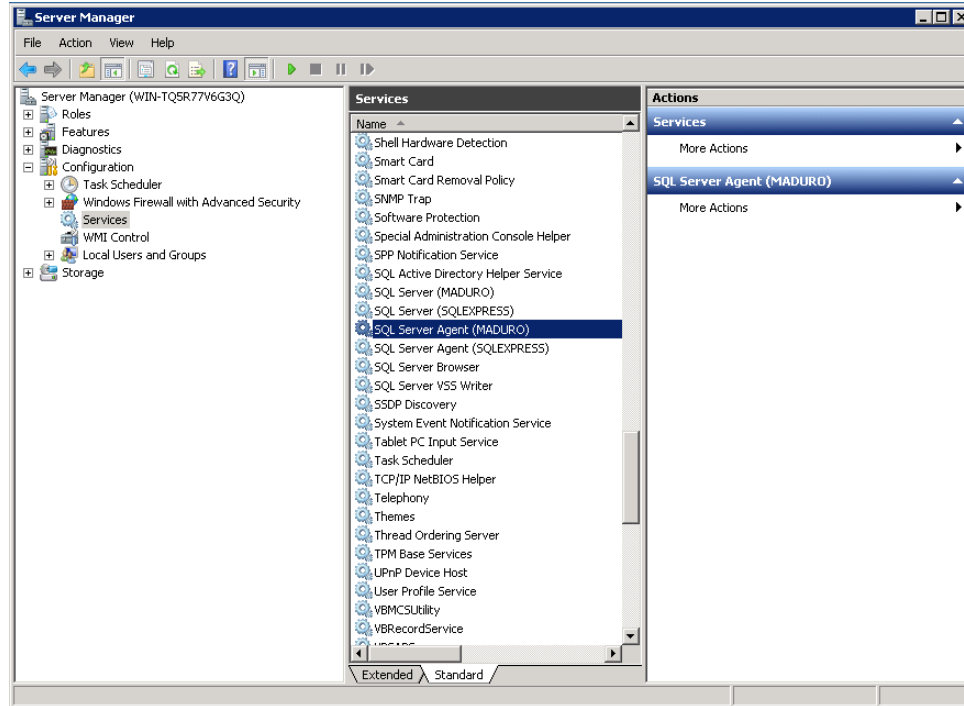
## Restoring the Database

As explained below, before restoring the database using a previously saved backup, you will need to stop all VEMS Mystro services, restore the database, resync the database users, and then restart the services. Be aware that anything connected to the database will prevent a successful restore.

### 1. Stop VEMS Mystro Services

▼ To stop VEMS Mystro services:

1. Open the Server Manager and go to the **Configuration > Services** pane.



2. Stop the following services using the icon on the toolbar:

- Maduro Content Manager Service
- Maduro Schedule Service
- Maduro Task Service
- VBSAPSRV
- SQL Server Agent (MADURO)

## 2. Stop and Start the SQL Server (Maduro) Service

▼ To restart the SQL Server (Maduro) service:

1. In the Services list, find and stop SQL Server (MADURO).
2. In the Services list, find and start SQL Server (MADURO).

## 3. Restore the Database

The next steps are to actually restore the database, and to resync orphan SQL Server login IDs and database user IDs.

▼ To restore the database:

1. Navigate to the downloaded zip file from the VBrick Support [Download](#) site and copy the script file `create_database.sql`

Note: If you purchased a Hardware/Software combination from VBrick, this file will be present in the `software` folder on the desktop.

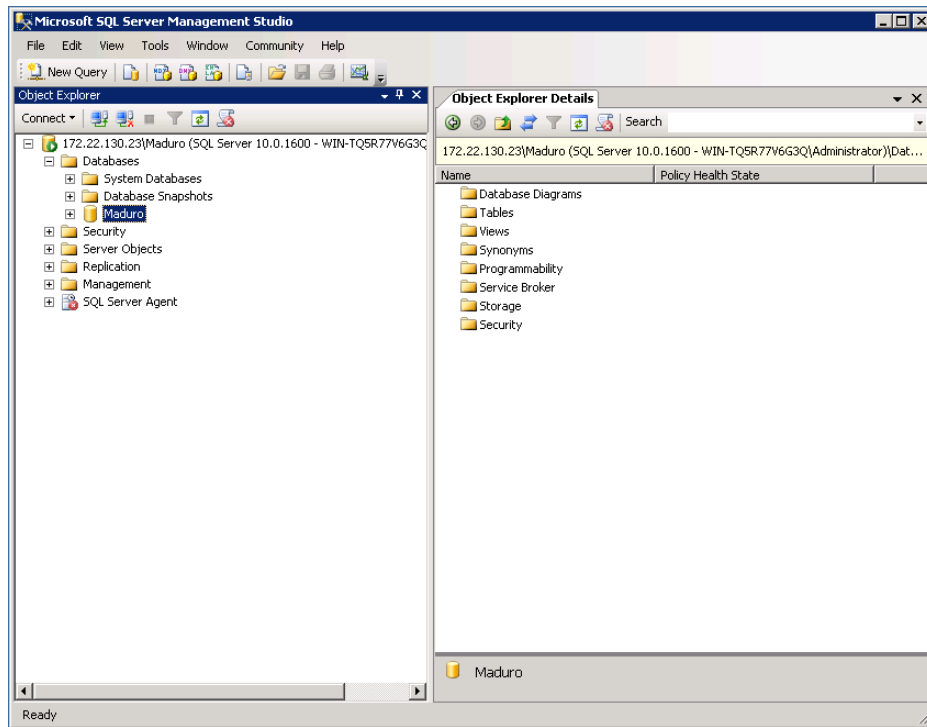
2. Open **Microsoft SQL Server Management Studio**, click the **New Query** button, and then cut-and-paste the contents of `create_database.sql` into the query window.
3. Verify that the path to the saved database and log files (see bold text below) matches the actual location where the files were saved when you initially backed up the database. (Be aware that the logged in user must have "write" access to the specified folders.)

```

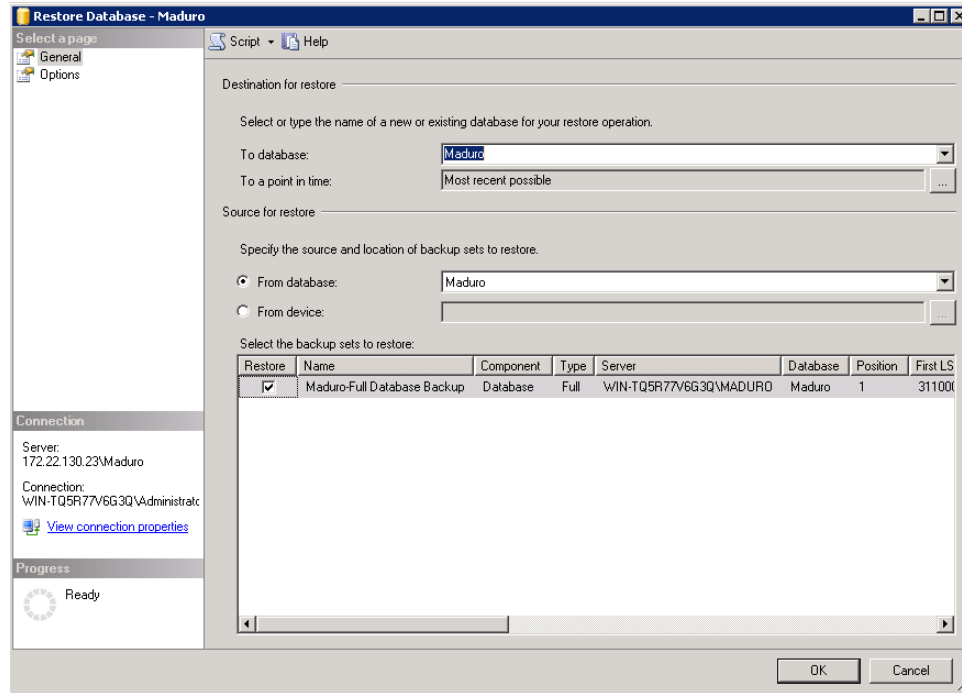
CREATE DATABASE [Maduro] ON PRIMARY
( NAME = N'Maduro', FILENAME = N'C:\Program
Files\VBrick\Maduro\Data\Maduro.mdf' , SIZE = 3072KB , MAXSIZE = UNLIMITED,
FILEGROWTH = 1024KB )
LOG ON
( NAME = N'Maduro_log', FILENAME = N'C:\Program
Files\VBrick\Maduro\Data\Maduro_log.ldf' , SIZE = 1024KB , MAXSIZE = 2048GB ,
FILEGROWTH = 10%)
GO

```

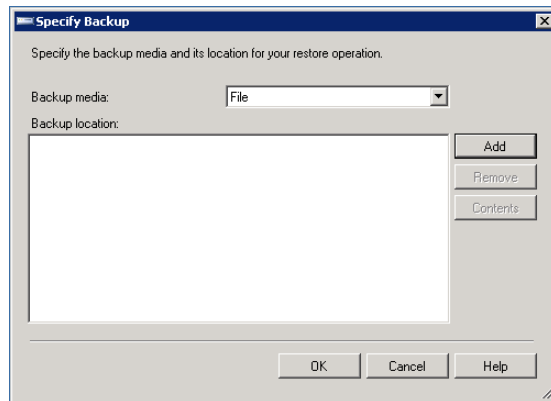
4. After you verify/modify the paths above, click the **Execute** button on the toolbar to run the script.
5. After the script runs, right-click on **Databases** in the left navigation pane and click **Refresh**. This will display the **Maduro** database in the tree.



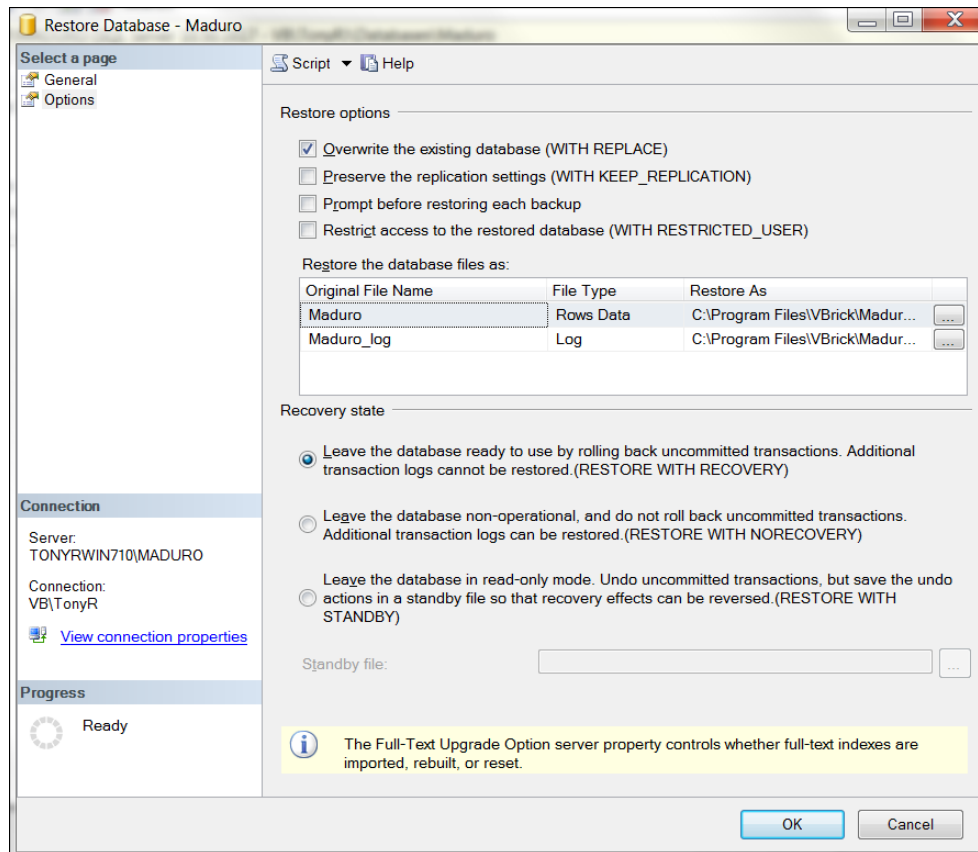
6. Right-click on **Maduro** and click **Tasks > Restore > Database**.



7. Specify the source location of the restore files by clicking the **From device** radio button.
8. Click the browse button on the right and use the Specify Backup page to navigate to the file location where you saved the backup files.



9. Find `Maduro.bak` and click **OK**.
10. At the top of the left navigation pane, click **Options** and select **Overwrite the existing database (WITH REPLACE)** and click **OK**. This will restore the database.



## 4. Resync Database Users

- ▼ To resync orphan SQL Server login IDs and database user IDs:
  1. Navigate to the downloaded zip file from the VBrick Support [Download](#) site and copy the script file `move_database.sql`

Note: If you purchased a Hardware/Software combination from VBrick, this file will be present in the `software` folder on the desktop.
  2. Open **Microsoft SQL Server Management Studio**, click the **New Query** button, and then cut-and-paste the contents of `move_database.sql` into the query window.
  3. After you verify/modify the paths to the saved restore files (as explained above), click the **Execute** button on the toolbar to run the script. When done, the database restore will be complete. The last step is to restart the VEMS Mystro services.

## 5. Restart VEMS Mystro Services

- ▼ To restart VEMS Mystro services:
  1. Go to the Server Manager.
  2. Restart all of the VBrick services you initially stopped using the icon on the toolbar. These include:
    - Maduro Content Manager Service
    - Maduro Schedule Service
    - Maduro Task Service
    - VBSAPSrv



- SQL Server (MADURO)
3. When done open the VEMS Mystro admin interface and verify that you can login to the application.



## Data Migration

---

**Note** Data migration is supported from VEMS v5.4 to VEMS Mystro v6.3.2. Once you have migrated to v6.3.2 you can migrate to v6.3.x.

---

### Topics in this document

Overview .....	29
Configure .....	31
Export .....	32
Logging .....	33
Reporting .....	33
Migrate .....	34
Caveats .....	41

## Overview

VEMS Mystro 6.x provides a migration tool for customers wishing to migrate existing VEMS 5.4.2 systems to VEMS Mystro 6.3.3. (Customers wishing to upgrade from earlier VEMS releases will first have to upgrade to 5.4.2) **Once 6.3.3 is installed, you can upgrade to the current 6.x release. See [Updating from 6.x](#) on page 12 for details.** Be aware that not all 5.4.2 configuration data will be migrated to 6.3.3. VEMS Mystro 6.3.3 has new features and functions that were not present in 5.4.2—and 5.4.2 has legacy features that are not replicated in 6.3.3 Although software versions may be available under your Services and Maintenance contracts, migration between versions is not covered as part of the VBrick Support Contracts. A successful migration requires a technical professional who is familiar with architectural differences between 5.4.2 and 6.3.3. **For these reasons a migration can only be performed by VBrick Professional Services or a certified reseller.** For more about migrating your VEMS 5.4.2 software, contact your reseller or VBrick Support Services. After migrating your data, you can upgrade to VEMS Mystro 6.3.3 or later using the installer.

### How It Works

The VEMS Mystro Migration Tool (VBMMT) reads data from an existing VEMS 5.4.2 system and writes that data to a new VEMS Mystro 6.3.3 system. A data transfer consists of two processes the first of which is the Export process. The export process reads all the data contained in a 5.4.2 system database and writes it out in a database-neutral format (i.e. XML). The second step is the Migrate process which reads and formats the raw exported data and uploads it to a VEMS Mystro server. The processes are straightforward but if not set up correctly things can go wrong. Importantly no harm can come to the existing 5.4.2 data. The tool does not write data to the 5.4.2 system at all, it only reads from it. Table 1 shows a summary of components that will be migrated and components that will not be migrated. Table 1 on page 30 provides a detailed overview of all migrated components.

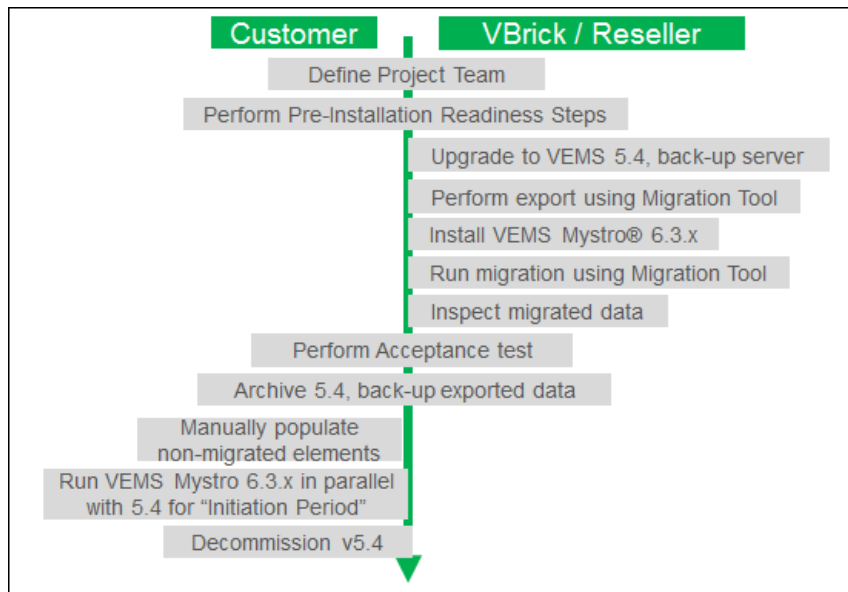
**Table 1.** Migrated Components (Summary)

Migrated	Not Migrated
<ul style="list-style-type: none"> <li>• Users and Groups</li> <li>• Category Permissions and roles</li> <li>• Compatible Stored Servers, VBricks, STBs and Entered URLs</li> <li>• Stored and Live Content</li> <li>• Presentations</li> <li>• Content Metadata (including thumbnails and links/attachments)</li> <li>• Custom Fields</li> <li>• Zones</li> </ul>	<ul style="list-style-type: none"> <li>• Resource Groups (not in 6.x)</li> <li>• Schedules</li> <li>• Presentation Devices</li> <li>• Bookmarks/Playlists</li> <li>• Channel Guide</li> <li>• Many Global Settings</li> <li>• Player preferences</li> <li>• Transcoding presets (license is migrated)</li> </ul>

**Note** Data migration does not include single sign-on functionality. If the VEMS 5.x server had single sign-on enabled, you will need to manually configure the VEMS Mystro 6.x server for single sign-on. See "Using LDAP with Single Sign-On" topic in *Portal Server Admin Guide* for details.

## Migration Process

Because of the significant differences in architecture between VEMS 5.4.2 and VEMS Mystro 6.3.3 (e.g. architecture, database schema, DBMS, and operating system), a successful migration requires a collaborative effort between each customer and the certified VBrick representative. Figure 3 shows the overlapping responsibilities in any migration effort. As always, prior planning and preparation is the key to a successful migration.



**Figure 3.** Migration Process Schematic

## Re-migration Process

If the migration halts when processing the metadata associated with content (e.g. Keywords, r Custom Fields, etc.), you may be able to work around the issues by editing the config file and

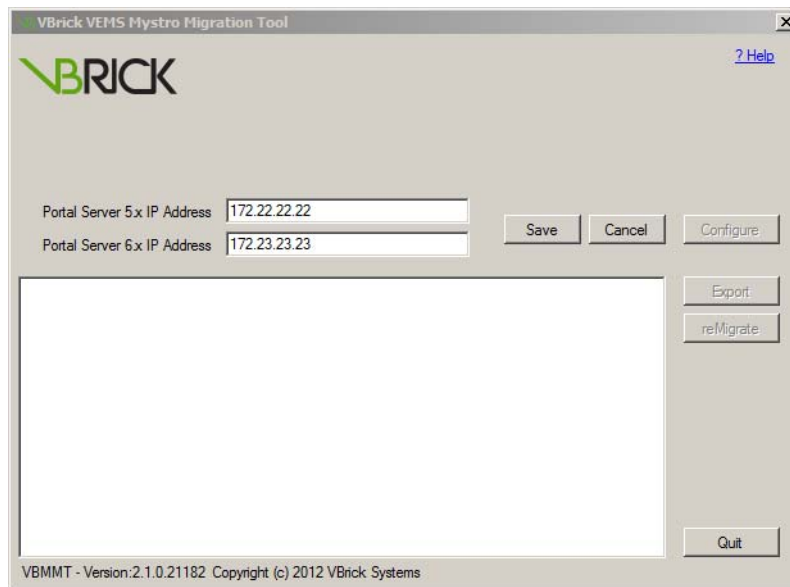
re migrating the metadata. See [Re-migrating Metadata](#) on page 39 for more about this.

## Software Installation

To install the Migration Management tool simply double-click on the installer and follow the prompts. The tool requires the Microsoft .NET 4 Framework. Be patient while the .NET installs; then following the subsequent prompts. No reboot is necessary when done.

## Configure

The configuration items required include the IP address of the existing 5.4.2 server and the IP address of the new 6.3.3 server. Pressing the **Configure** button allows you to edit the two configuration items. The Portal Server 5.4.2 IP Address value must be a valid IP address, a 5.4.2 server reachable from the machine running the migration utility must be at that address and that server must be running. Incorrect settings will be detected at runtime which will cause the export process to fail.



**Figure 4.** VEMS Mystro Migration Management Tool

The Portal Server 6.3.3 IP address is also expecting a valid IP address. A 6.3.3 server that is reachable from the machine running the utility must be at that address and before the migration process is started this server must be running. The 5.4.2 IP Address is only required during the export process. The 5.4.2 server is not used during the migration process. The 6.3.3 IP Address is only required during the migration process. The 6.3.3 server is not used during the export process. When the configuration values have been entered press the **Save** button to save them. Pressing the **Cancel** button will discard any changes made and the values will revert.

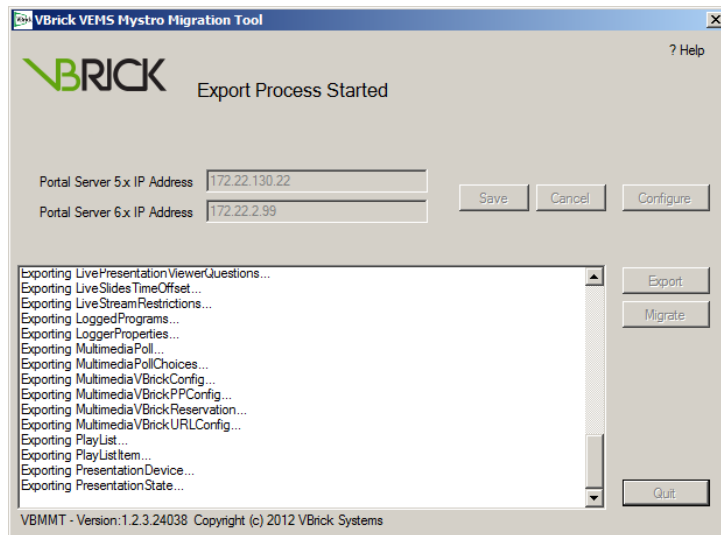
An additional piece of setup information is required and that is the account and password used to access the 5.4.2 database. These values are contained within a "connection string" on the VEMS system in a file named `Web.config`. The VBMMT utility cannot access this file while it is on the web server so it is necessary to copy it to the folder where VBMMT is installed. The connection string is encrypted for security purposes so this should pose no risk. There may also be more than one copy of `Web.config` on the VEMS server so it is important to copy the correct one. The active copy is found in the folder `C:\Program`

---

Files\VBrick\MCS\Common\MCSWebSrcv\. Copy the `Web.config` file found in this folder to the folder where VBMMT is installed. **The export process will not run if this file is not present.**

## Export

Press the **Export** button to begin the export process. The export process will take a few minutes and if the database is particularly large may take several minutes longer. The export process should be permitted to complete and should not be interrupted. If the process succeeds the message `Export Process Succeeded` will be displayed near the top of the window. If any step in the process fails for any reason the process will stop and the message `Export Process Failed` will be displayed.



If the Export process fails the data that was exported remains in the export folder but the Migrate process will not run. The problem must be corrected and the export must be re-run. Any existing export data will automatically be erased when the export process is re-run. The database table being processed at the time of the failure will be the last item on display. Three log files are maintained by the system to document the process and to aid in problem solving.

If VBMMT has not been properly configured you will receive the message `Unable to export` along with information that should help you determine the cause of the problem. If for instance the `Web.config` file is not present the message window will display the following:

```
Unable to export
...Portal Server 5.4.2 Connection String is invalid
Export Process did not run
```

If for instance the `Web.config` file is present but Portal Server 5.4.2 IP Address value is incorrect the message window will display the following:

```
Unable to export
...Portal Server 5.4.2 IP Address is invalid
Export Process did not run
```

In any case it is a simple matter to correct the problem and then to re-run the export process. Export files are placed in an export folder named `\Export` created automatically as a subfolder of the installation folder of the utility. The export folder is used by both the export and migrate processes. The export process writes all the data in the 5.4.2 tables to this folder and the migration process reads the data from it.

Note that actual video content is not copied. All video content remains on the devices as only data found in the VEMS database is exported. Some "content" will be copied however because it is stored in the database, specifically thumbnail images and file attachments. Thumbnails and documents related to content are stored directly in the database and then associated with content. Thumbnails and file attachments need to be exported in order to be uploaded to the 6.3.3 server or they will be lost.

## Logging

There are three log files: `MMT_SYSTEM.log`, `MMT_EXPORT.log` and `MMT_MIGRATE.log`. These files are placed in a log folder named `\Log` created automatically as a subfolder of the installation folder of the utility.

Log File Name	Description
<code>MMT_SYSTEM.log</code>	Used for system-related messages including all error-related messages that the system generates. Please note that all errors are not fatal and non-fatal errors will not stop the export process.
<code>MMT_EXPORT.log</code>	Used to track the export process basically reporting the date, time and status of key steps in the process.
<code>MMT_MIGRATE.log</code>	Tracks the migration process and flags unsupported devices.

## Reporting

The Migration tool generates a comprehensive report summarizing the exported data. `Report_ExportSummary.htm` is saved in the `\Log` folder described above and can be viewed in a browser or text editor. It shows a list of components that were exported or not exported. If problems occur, you may be asked to e-mail this file to VBrick Professional Services.

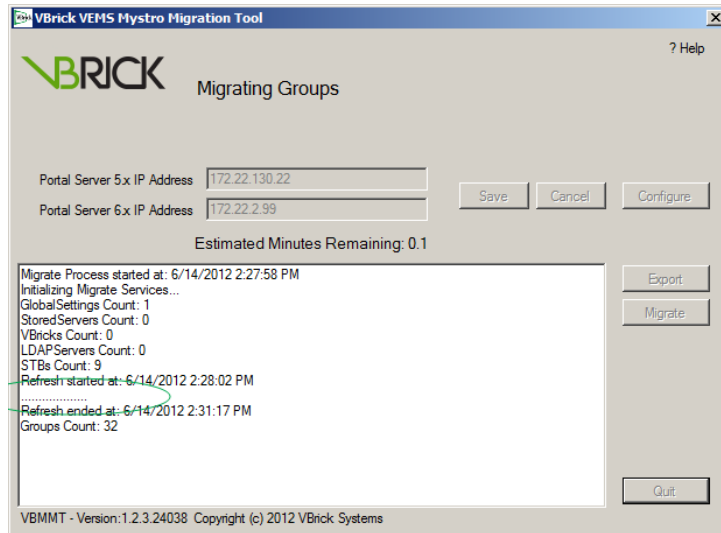
Export Summary Report		6/14/2012 2:09:52 PM
<b>Migratable</b>		<b>Count</b>
Globals		1
Servers		3
<b>Server Name</b>	<b>Type</b>	<b>Online</b>
172.22.130.21	InfoValue	True
172.22.130.56	H264V8Star	True
172.22.2.157	WMAdv	True
PublishingPoints		3
<b>Server Name</b>		
172.22.130.21		
172.22.130.56		
172.22.2.157		
SecondaryServers		0
VBrick		11
<b>Hostname</b>	<b>IP Address</b>	<b>Model</b>
A1-TonyH264	172.22.2.120	9202-420X-0XXX
Acacia-H264-2	172.22.184.9	9202-421X-0XXX
Acacia-WM2	172.22.184.22	919X-43XX-YXXX
Alpha-CD1-MP4MP2	172.22.182.200	913X-43XX-0XXX
JohnSWM2	172.22.2.141	919X-42XX-YXXX
PD1	172.22.130.22	919X-43XX-YXXX
ScottsWM9	172.22.5.50	919X-43XX-YXXX
SFWH264	172.22.130.56	9202-420X-YXXX
WenliVirtualVBrick	1.1.1.11	919X-43XX-YXXX
WenliWM	172.22.123.145	919X-42XX-YXXX
WenliWM-Self	172.22.2.192	919X-42XX-0XXX
MultimediaVBrickURLConfig		6
<b>Viewing URL</b>		
http://172.22.2.141:8080/vbrickvideo3		
http://172.22.5.50:8080/vbrickvideo1		
http://youtu.be/BG7273yDpdA		
http://www.viewer2.com		
http://www.viewer1.com		
http://www.viewer2.2.com		
LDAP		1
<b>Server Name</b>	<b>Path</b>	
LDAP12	LDAP://172.16.0.12	
STB		9
<b>Hostname</b>	<b>IP Address</b>	<b>Model</b>
amino	172.1.1.10	8000-0155-0002

## Migrate

- Notes**
- Before performing a migration you must stop all Maduro services directly on the 6.3.3 server using the Windows interface. You can restart the services when the migration is complete.
  - A migration can be time-consuming. In addition to the "Estimated Minutes Remaining message," the tool displays an incrementing dotted line (see image below) as a progress indicator during content refresh.

Press the **Migrate** button to begin the migrate process. The migration process will typically take some time and if the database is particularly large, the time may be significant. Frequent message updates will keep you informed of the progress. The migration process should be permitted to complete and should not be interrupted. If the process succeeds the message **Migrate Process Succeeded** will be displayed near the top of the window. If any step in the process fails for any reason the process will stop and the message **Migrate Process Failed** will be displayed. During the migration, an **Estimated Minutes Remaining** indicator is displayed on the page. This value is based on the time it has taken so far for this step and the number of items remaining. Note that it refers to the time remaining for each step—not the time for the entire migration process.





The migration process is not a simple matter of uploading 5.4.2 data into equivalent 6.3.3 tables. The 6.3.3 database is completely different with new tables, formats and relationships and as such the process has been defined as a series of migration tasks. It is important to realize that the migration process is an "all-or-nothing" event. There is no concept of half-complete and the utility has no ability to "pick up where it left off" or to retry specific tasks.

If a task fails the entire migration process has failed and the database is corrupt. Importantly the 5.4 exported data remains intact and can be reused (repeatedly if necessary) but the 6.3.3 database will not be in a usable state. The 6.3.3 database will need to be restored to an initial state and ideally to the state it was in just prior to the attempted migration step. The cause of the failure may not be obvious. As with the export process little diagnostic information is displayed on the screen but the migration task underway at the time of the failure will be the last item on display. Details of the failure should appear in the `MMT_MIGRATE` log. Due to all the additional processing the number and types of errors that can occur during the migration process are considerably greater than those of the export process. **It is difficult to predict and impossible to list all the potential issues.** Many are simple errors that may be solved by changing settings on the VEMS server (or other support servers) other errors may be due to conflicts in the data. While it is not expected some data may not directly migrate to the 6.3.3 platform without some adjustment.

Should such data conflicts occur there are generally two ways they can be solved. If the 5.4.2 system is still available edits can be made to the 5.4.2 system using VEMS. If the data is modified this way it will be necessary to re-export the data as changes made to a live system obviously are not reflected in export files made earlier. The second way edits can be made is through direct manipulation of the XML files in the export folder. In some cases (if the 5.4.2 system is no longer available for instance) this may be the only option but it must be stressed that this is not the optimal way to affect a change. Much of the data is related to other data and relational integrity is not maintained automatically when the data is manipulated with a text editor.

Again, if the migration process fails you must take steps to correct the problem, restore the target 6.3.3 database to its initial state and run the migration process again. **Do not run the migration process without restoring the database or duplication of some data will result.** The migration process should not be considered complete until you receive a `Migration Process Succeeded` message.

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## Migrated Components

After the devices have been migrated an initial discovery process will run in order to populate the content records. Depending upon how long it takes the user will be asked to be patient and to allow the process to complete. Discovery of content is required before the rest of the migration can continue. If the discovery process takes too long (or halts) the migration will timeout and fail. The time out setting (currently one hour) can be extended through a setting in the config file if this becomes an issue. The migration process has some limitations. Many 6.3.3 entities and properties are new, some 5.4.2 properties are no longer valid and a few have been redefined in 6.3.36.3.3. The following should help document the specifics of migrating existing 5.4 data to the 6.3.3 system.

**Table 2.** Migrated Components (Detailed)

Component	Migration Status
Categories	Categories for Stored Entered URLs will be migrated. Categories are also auto-created by the discovery process.
Custom Fields	Custom Fields will be migrated. Custom Field-related data consists of two parts, the Custom Field along with any Custom Options and the content that has the Custom Fields attached. There is no difficulty migrating the custom fields themselves but matching up the content is inexact. Identification (ID) fields will be regenerated as content is added making an exact ID match impossible. As a result matching is done by content title and categories. Titles are not unique and while duplicate titles are not common they can occur. All content and categories with like titles will be assigned the same custom field values along with the same thumbnails and other content-related metadata.
Devices	Generally speaking the settings of all devices will be migrated. Devices include Stored Servers, VBricks, LDAP Servers and STBs. In each case the properties (settings) that exist in both systems will be migrated as appropriate. Settings in the 5.4 system that no longer apply will of course not be migrated and settings that are new to the 6.3.3 system will be set to system defaults and when possible to reasonable default values.
Global Settings	Global settings will be migrated. There are however a lot of properties many of which are new. Reasonable defaults will be assigned when existing data is not available.
Groups	Groups will be migrated.
Keywords	Keywords will be migrated. Keywords are stored in a new format but can be migrated from the existing format without issue. As with other content-related metadata however the matching is done on the content title.
LDAP Servers	LDAP Servers will be migrated.

Component	Migration Status
Links and Attachments	Link and attachments will be migrated. Links (essentially URL links) are not a problem. File links will only be attached to a single content record. File attachments will migrate as well. Both URL links and file attachments are processed by the "match on content title" mechanism mentioned earlier. Because of their potential size, file attachments are only attached to a single content item. If duplicate title/category combinations are found, only one is used.
Live Entered URLs	Live Entered URLs will be migrated. A substantial amount of new data is available for this data and will likely be set to their default values. The migration tool user can of course set these values after the migration has completed on an as needed basis. The keywords associated with the Live Entered URLs will be migrated as well.
Permissions	Permissions will be migrated. It should be noted that the Permission system has changed in 6.3.3 however and there cannot be a one-to-one migration. Reasonable default permissions will be granted and the migration tool user will be informed via the final report.
Presentations	Presentations (i.e. "webcasts") will be migrated. This includes the PowerPoint presentation (slides) and the video.
STBs	STBs will be migrated.
Stored Entered URLs	Stored Entered URLs will be migrated under the same conditions as Live Entered URLs mentioned above.
Stored Servers	Stored Servers will be migrated if they are online. <b>If any servers are offline the migration will fail and must be restarted from the beginning.</b> No major issues are expected but some data (descriptions for instance) that was not present in the 5.4 system and now is in the 6.3.3 system should be entered by the user at their earliest convenience. It should be mentioned here that internal "ID" values used to identify devices, users, content and such are generated by the system software and will by necessity not match the ID values used to identify the same items in the 5.4 system. This should not be a problem. There is no alternative as the old values cannot be used. Unsupported servers ("Kasenna" and "LifeSize") are skipped and do not generate a failure.
Thumbnails	Thumbnails will be migrated. Thumbnail images (along with file attachments) are gathered up during phase one of the migration process known as "export". The migration step consists of matching up the image files with the content that has been discovered and/or entered. Importantly only thumbnails that had been attached to EnteredVODContent and StoredVideo are being reapplied. Thumbnails that had accompanied other items such as Playlists will not be migrated because Playlists are not being migrated.
Users	User will be migrated. This will include basic user information as well as the groups the user was a member of.

Component	Migration Status
VBricks	VBrick appliances (encoders / decoders) will be migrated. The VBrick units and some other entities contain passwords however and passwords introduce a special problem. Encryption algorithms and password rules have been changed and it is possible that an old password cannot be used in the new system.
Zones	Zones will be migrated.

## Non-Migrated Components

The following VEMS components are not migrated.

**Table 3.** Non-Migrated Components

Component	Migration Status
User Announcements	User Announcements are not migrated.
Comments	Comments will not be migrated as they do not exist in 5.4.
Scheduler/Future Events	No scheduler-related data is being migrated.
Presentation Devices	Presentation devices will not be migrated.
Bookmarks/Playlists	Bookmarks and playlists will not be migrated.
Channel Guide	The Channel Guide (if any) will not be migrated.
Global Settings	Some Global Settings will be migrated; others will not.
Resource Groups	Resource groups do not exist in VEMS Mystro and will not be migrated.
Player Preferences	Preferences on the System Settings > Player Preference page are not migrated and must be manually recreated.
Transcoding Presets	The transcoding license will migrate to v6.3.3, however the transcoding engine and the transcoding presets will not be migrated and must be re-applied

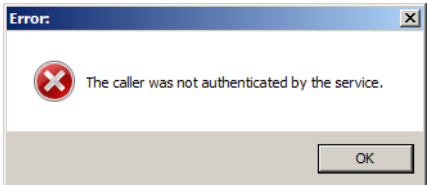
## Best Practices

The export folder may contain one or more subfolders used to contain thumbnails and file attachments. The files and subfolders should not be moved, renamed or otherwise edited except where needed in the event of a migration failure. Generally speaking an error is not likely to occur and these files and folders should be left untouched. You may want to make a backup copy of the entire export folder should it become necessary to run the migration step again. As mentioned earlier, edits made to the 5.4 system after the export has been run will not be reflected in these files and any edits made to the 6.3.3 system after the migration has been completed would be lost if the database system is reset and migrated again. If adjustments to the data are required it is recommended to make those adjustments to the 5.4 system before running the export or to the 6.3.3 system after completing the migration.

## Migration Settings

Some uncommon settings can be modified directing in the configuration file (`MMTClient.exe.config`) if necessary using a text editor.

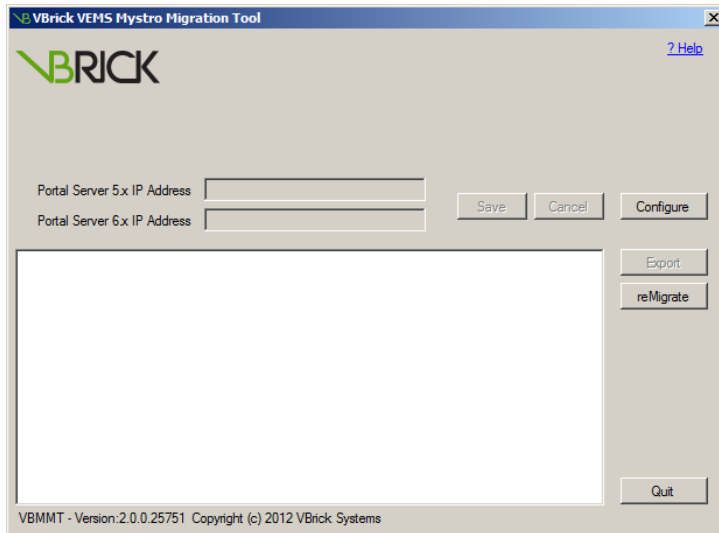
**Table 4.** Migration Tool Config Settings

CommandTimeout5x	<p>If the 5.x database is particularly large, it is possible for the database connection to timeout. This is actually a "command timeout" resulting from a very large table. The default of 300 seconds (5 minutes) should be adequate in most cases. However if a timeout still occurs (during export only) this value can be manually edited to a larger number. For example 600 would give the system 10 minutes to process a single table.</p> <pre>&lt;add key="CommandTimeout5x" value="300" /&gt;</pre>
ServerAccount6x ServerPassword6x	<p>Previous versions of the migration tool had a limitation that required the PC running the migration to be a part of the same domain as the 6.1 server. This is no longer true. If the PC <u>is</u> part of the domain then no changes are required and these two settings remain blank.</p> <p>If however the PC is not or cannot be part of the domain you may see an error message like the one shown here.</p>  <p>Password permission to access the 6.1 server must be granted using the config file. These values must be changed to the account and password of the 6.1 server's administrator account. Note that this is not the VEMS account information but is the admin of the server's account/password. They are initially configured at the defaults but can be changed here. If these settings have a value, they will be used; if blank the defaults will be used.</p> <p>Note: Be aware that the password key (if used) is input in plain text. To protect against security leaks, be sure to edit out the password data from this file when the migration is complete. As a best practice, never leave the admin account/password in this config file longer than necessary.</p> <pre>&lt;add key="ServerAccount6x" value="" /&gt; &lt;add key="ServerPassword6x" value="" /&gt;</pre>
appSettings	<p>These keys are used to specify which metadata is included in a re-migration. The default value is blank, meaning all items are migrated. If any item is = 1, only that field (or additional items with a "1") will be migrated.</p> <pre>&lt;add key="RemigrateDescription" value="" /&gt; &lt;add key="RemigrateKeyword" value="" /&gt; &lt;add key="RemigrateCustomField" value="" /&gt; &lt;add key="RemigrateURLLink" value="" /&gt; &lt;add key="RemigrateFileLink" value="" /&gt; &lt;add key="RemigrateThumbnail" value="" /&gt;</pre>

## Re-migrating Metadata

If the migration halts when processing the metadata associated with content (e.g. Keywords, r Custom Fields, etc.), you may be able to work around the issues by editing the config file and

re-migrating the metadata. Be aware that any metadata that was added after the migration originally halted will not be included when you attempt to re-migrate the data. Although re-migration is unlikely to cause additional problems you should back up the database before you begin so you have a way to recover it (see [Backing Up the Database](#) on page 20). To launch a re-migration, close the application, modify the config file (`MMTClient.exe.config`), and reopen the application. The application will open with the **reMigrate** button shown.



**Figure 5.** reMigration Page

▼ To re-migrate the metadata:

1. Close the Migration Tool if open.
2. Go to `C:\Program Files (x86)\VBrick\MigrationManagementTool\MMTClient` and edit `MMTClient.exe.config` as explained below.
3. Open the Migration Tool and click **reMigrate**.

If the key values are empty (this is the default) a full migrate occurs. You can tell that a full migrate will happen because the button will be labeled **Migrate**. If the value is "non-zero" a partial migrate will occur. That means you set the value to 1. Setting it to one e.g. `<add key="RemigrateCustomField" value="1" />` will cause Custom Fields only to be re-migrated. If you set more than one of these keys to a value of 1 each of them will be re-migrated. You can tell that a re-migrate will happen because the **Export** button will be disabled and the **Migrate** button will change to **reMigrate**.

It is important to recognize the limitations of remigration. First, it doesn't "fix" anything, it just tries again. If there is a bug in the software that is causing a problem, running it again will not help. If there is an unforeseen problem with the data and that data remains unchanged, then running the re-migration won't help. Second, it re-migrates by removing the existing (selected) metadata. If Custom Fields have been added or edited since the initial migration, these changes will be lost.

Since it is possible that content items have changed, the results can be slightly different than what would have originally been the case. For example if a new title is discovered that happens to match existing content, the new content will get the metadata as well. If a content item was removed it will not cause a problem but will be reported in the log. A category could also have been removed. The matches are done on title and category and the

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original content would not be found in such a case. The re-migration does not halt—it just logs it and keeps on going.

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**Note** The XML files need to be present if it is the only source of the migration data. You should key in both the 5.x and 6.x server IP addresses (if you have them) though the 5.x one will not be used.

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## Caveats

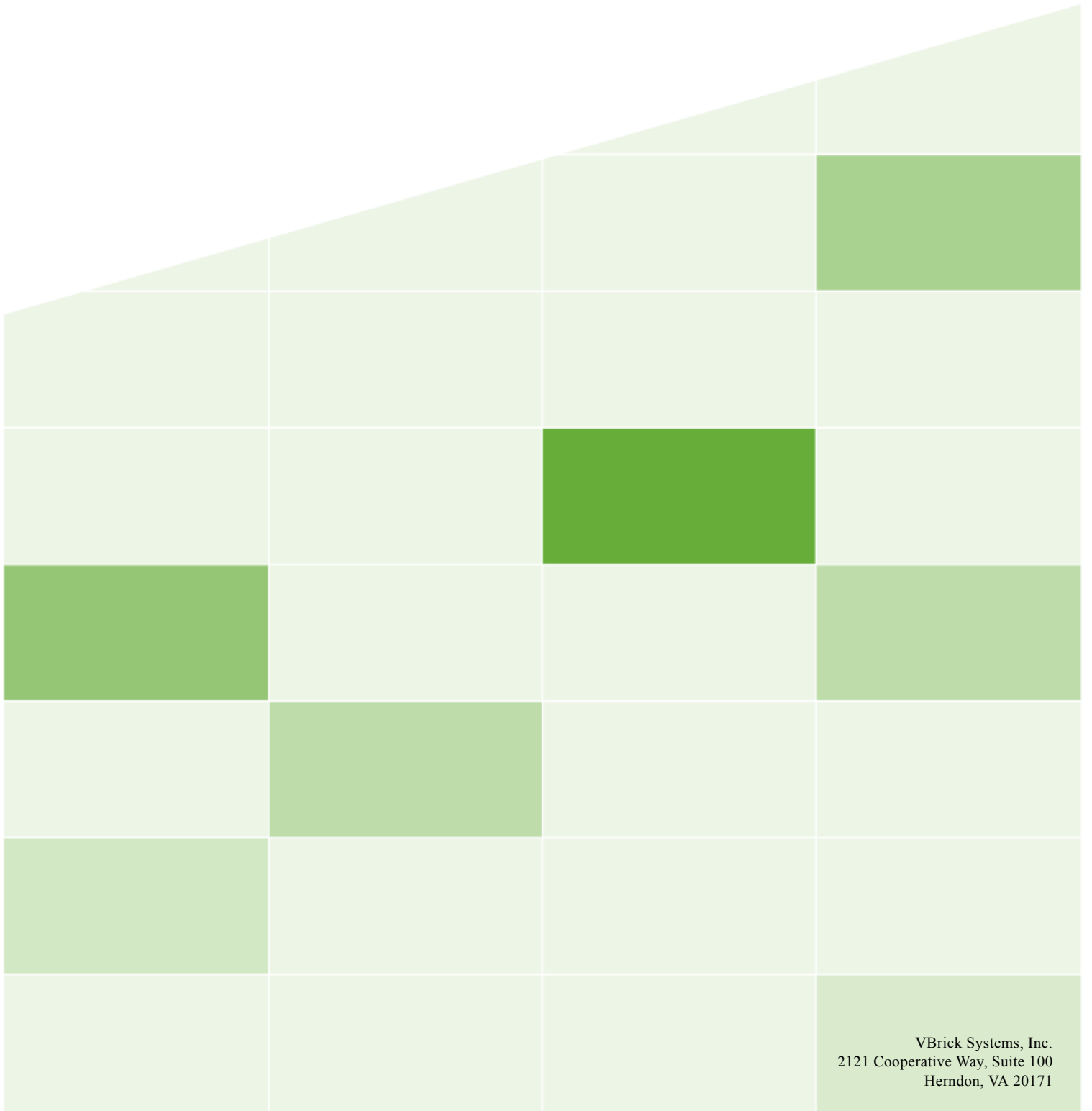
This section addresses known migration issues:

- If Single-Signon (and/or HTTPS) is enabled, and you upgrade to 6.3.3, you must run the `MaduroSSLSettings.exe` utility again. See the "Enable/Disable Single-Signon and HTTPS" topic in the *Portal Server Admin Guide* for details.
- VEMS 5.4.2 allowed STB's to be entered in the database as users in order to have direct access to VEMS assets. In VEMS Mystro each configured set top box requires a unique VEMS User. When STB's are migrated from 5.4.2 to 6.3.3, the VEMS User parameter is blank and must be configured by an administrator. See the "Devices" topic in the *Portal Server Admin Guide* for details. (2106)
- During a migration, the Encoding Type for VBrick Viewing URLs defaults to match the VBrick encoder (H264 or WM). If the stream is transcoded, e.g. on a DME, you will need to modify the Viewing URL so that the Encoding Type matches the transcoded stream. (2119)
- VEMS 5.4.2 has a Global Setting (Assign VOD Polling Interval) that polls the VOD server(s) for new content at a specified interval. This setting is not migrated. The "Refresh Stored Content Interval" on the Task Scheduler (default = 120 minutes) provides similar functionality in VEMS Mystro. (2004)
- VOD-WM Server. After a migration, the VOD-WM Playback Port is set to 80 (the correct HTTP Tunneling Port) rather than to 554 which is typically used for RTSP streaming. You may wish to reconfigure the port settings although the stream will play correctly with either setting. (2015)
- Microsoft Silverlight is not supported. When playing back a stored Silverlight presentation, Mystro will use the Windows Media player—not the Silverlight player. (3281)









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