



# VPI EMPOWER 5.5

## Installation Guide

Updated December 2014



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## 1 What's Covered in this Guide

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Use this Guide before using the Automatic Install Wizard to install or upgrade VPI Empower Suite (version 5.5 SP1).

The VPI Empower Suite Installation Wizard is distributed as an ISO and can be installed from DVD. Using the Wizard, the installation process takes approximately 20 to 30 minutes and achieves the following:

- Checks for install prerequisites
- Runs component installers
- Runs and validates database scripts
- Installs updated online help files for VPortal components

The Install Wizard does not configure VPI Empower Suite. While some basic configuration is covered in this document (starting at "Basic Configuration" on page 14), more advanced configuration is covered in the *VPI EMPOWER Configuration Guide*.

Installation of any VPI product is performed only by VPI technicians or VPI-certified Partners who have completed specialized training. If you need assistance at any time, you can contact VPI Technical Support at (805) 389-5201 or [Support@VPI-corp.com](mailto:Support@VPI-corp.com).

### 1.1 Other Resources

Additional areas of configuration are covered in other guides. The following resources provide important information that is not covered in this guide.

- **VPI EMPOWER Installation Guide** - Installation and basic configuration (VPACT) for onsite or remote installations and single or multiple server implementations.
- **Media Manager Utilities** is covered in the separate **Media Manager Utilities Guide**.
- **Event Center Guide**
- **Insight Installation and Configuration Guide**
- Channel Managers have their own separate guides – Start with the **Channel Manager Primer**.
- **Product Release Notes** provide the most current information on VPI EMPOWER Suite product releases:
  - The version number of each VPI EMPOWER Suite module
  - Bug fixes and any known issues.
  - Any special installation instructions for a particular prerequisite software or VPI EMPOWER Suite module software.

**Before you install or upgrade VPI software, you must review the relevant Release Notes for late-breaking details not covered in this guide.**



## 1.2 Technical Assistance & Support

As VPI EMPOWER Suite utilizes the infrastructure of a customer's voice network, VPI requires that highly qualified technicians and engineers who are familiar with the architecture of the network be available during the implementation.

VPI Technical Support can assist with any technical issues. Contact VPI Technical Support at (805) 389-5201 or [Support@VPI-corp.com](mailto:Support@VPI-corp.com).



## 2 Preparing to Install

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Before you install any software, review this list of things to do, know, or consider:

- Disable Windows firewall - This is a requirement for all installations. You must disable the Windows firewall to prevent it from blocking the download of any Windows updates.
- Check for Windows updates - This is a requirement for all installations. The Windows software on the customer's server must be the most current software available.
- Turn off User Account Control
- Download the latest Windows updates as needed (Express or Custom) from the Microsoft Update page.
- You may be prompted to reboot the system. Reboot when prompted for a successful installation or upgrade.
- Common Service Account (required for multi-server) - If you are installing a multi-server environment, you must set up a common service account; for single server environments, this is an optional procedure. The Common Service Account is used by all of the components and services of the VPI Empower Suite (including SQL Server).

In general, any VPI Empower Suite module that needs to 'talk to' the database should be installed and run under the Service Account. Although many of the VPI Empower Suite modules can be installed under the Local System account, we highly recommend that you install certain modules under the Service Account.

Voice Capture is the only VPI Empower Suite module that cannot be run under the Service Account. The Common Service Account must have the following to install and operate VPI Empower Suite:

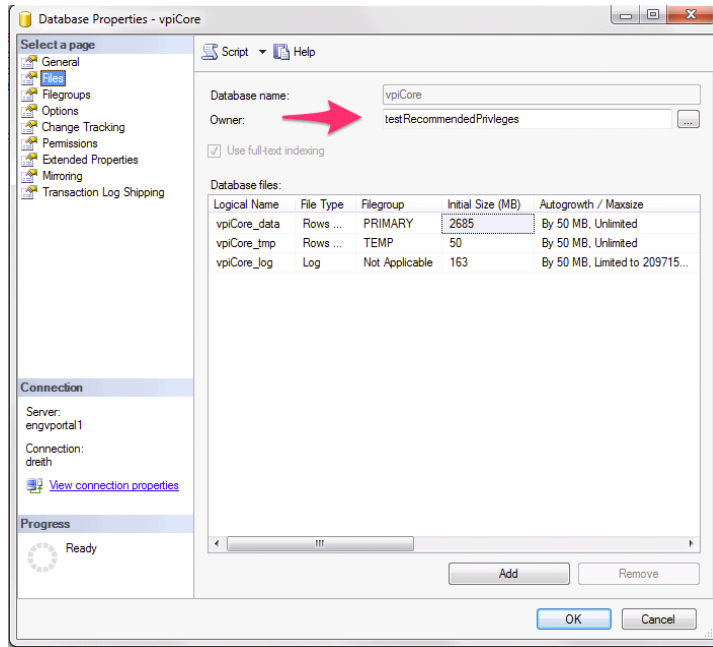
- Administrator rights
- Password without an expiry
- Adequate disk space

### 2.1 SQL DB Privileges for Database Maintenance

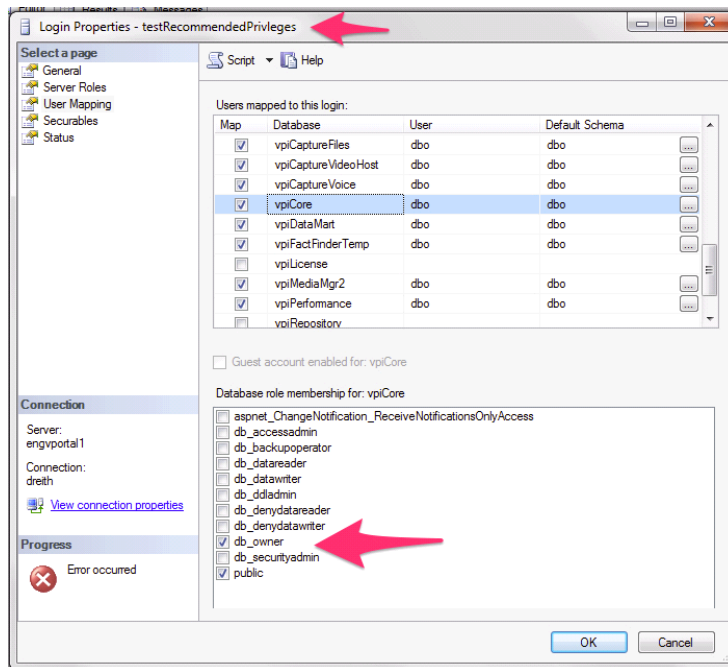
The account that VPI applications use to connect to the SQL database must be configured according to the steps below. This is based on SQL Server 2008. The account is called "testRecommendedPrivileges" in the screenshots below.

#### IMPORTANT

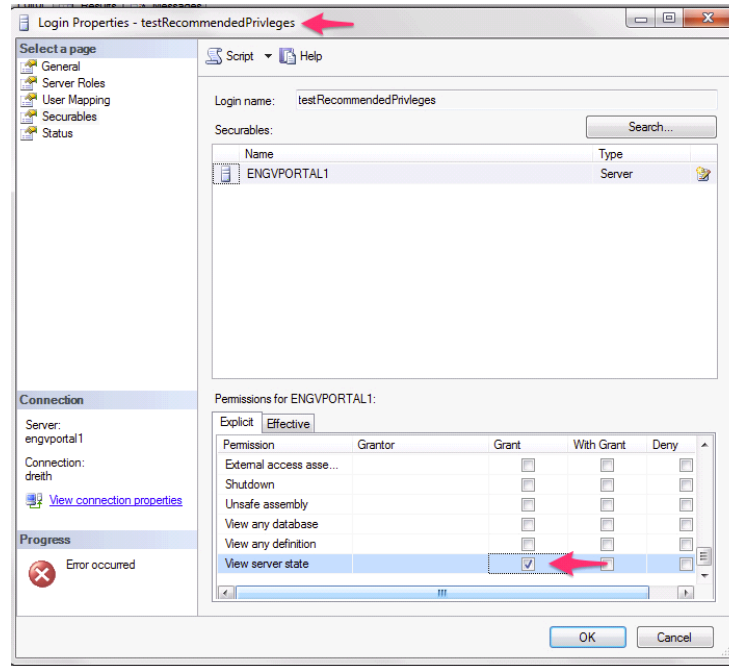
1. The Account must be the owner of every VPI database.



2. The Account must have dbOwner rights to every VPI database.



3. ALSO: The user must have rights to View Server State.



4. Remember to click OK.

## 2.2 Hard Disk Partitioning (Single Server)

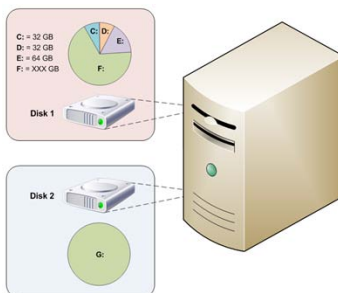
If VPortal is the only software being installed on the computer (default, single-server implementation configuration), then you must partition the hard disk on the server according to the recommended settings:

Hard Disk Partitioning Recommendations: Two hard disks – Minimum requirements are 300GB and 10,000 revolutions per minute (RPM).

### 2.2.1 Disk 1

A total of 4 partitions (C, D, E, and F). See Disk 1 in the diagram below.

- **(C:)** – 32GB – Operating system and program files partition (includes all of the prerequisite software and all of the Empower Suite module software).
- **(D:)** – 32GB – Firebird database files.



The Firebird application files must be installed on partition C.

- **(E:)** – 64GB – Buffer (short term storage) partition.





- **(F:)** – Long term storage (LTS) partition (in GB) is determined by Sales Engineers, based on a customer’s requirements.

### 2.2.2 Disk 2

- **(G:)** – You only need to name the drive letter G. You do not need to create logical partitions on this hard disk. See Disk 2 in the diagram below. This disk is used to store the SQL Server database files, and SQL Server database log files, and recording data, (including VPortal data and Retrieval Service data).
- The SQL Server application files must be installed on partition C.

**If Instant Recall is deployed, long term storage (LTS) must be enabled on partition F: for 24 hours.**

## 2.3 Server Virtualization

VPI EMPOWER is a real-time recording suite. It requires that the allocated virtual CPU and RAM not be shared with other virtual machines in the environment.

SERVER VIRTUALIZATION																											
<p>The VPI Empower Suite of applications supports the virtualization of any server platform where the use of no unique hardware (physical voice interface boards) are required. This includes support of V-Portal, MS SQL (database), Media Management Service (MMS) and "software-only" Audio/Video Capture services. While every effort has been made to identify best practices for configuring the Empower Suite to operate on virtual server platforms, each customer environment and configuration is unique and can, therefore, require performance tuning unique to that customer environment and/or application configuration. The following recommendations/requirements are provided as a general guideline to appropriate resource provisioning. For additional information, and configuration approval, please contact VPI Sales Engineering.</p>																											
<p><b>Resource Allocation - Processor and Memory</b>                      In general, VPI recommends that customers uplift the standard (physical) server specifications listed below by 25% for VMware environments, and by 50% for Hyper-V environments. Additionally, VPI recommends running the Empower Suite on host servers with low virtual machine density.</p>																											
<p><b>Storage Allocation</b>                      The Empower Suite's performance can be highly dependent upon disk write speed. As a general rule of thumb, VPI recommends that customers allocate high performance hard drives using Serial Attached SCSI (SAS) whenever possible. The partition allocation requirements listed below for each server type will still be required regardless of whether the server platform is virtualized or physical.</p>																											
<p><b>Supported Environments</b>                      VMware vSphere 4.1 and 5.x (Distributed Resource Scheduler (DRS) not recommended)                      Microsoft Hyper-V Server 2008 R2 SP1</p>																											
<p style="text-align: right;"><b>Disk Speed Recommendations:</b></p> <table border="1" style="width: 100%; border-collapse: collapse; margin-left: auto;"> <thead> <tr style="background-color: #003366; color: white;"> <th style="padding: 5px;">Call Volume :</th> <th style="padding: 5px;">&lt; 50k /day</th> <th style="padding: 5px;">50-100k /day</th> <th style="padding: 5px;">&gt; 50k /day</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Internal 7200 SAT</td> <td style="background-color: #cccccc;"></td> <td style="background-color: #cccccc;"></td> <td style="background-color: #cccccc;"></td> </tr> <tr> <td style="padding: 5px;">Internal 10k SAS</td> <td style="background-color: #cccccc;"></td> <td style="background-color: #cccccc;"></td> <td style="background-color: #cccccc;"></td> </tr> <tr> <td style="padding: 5px;">Internal 15k SAS</td> <td style="background-color: #cccccc;"></td> <td style="background-color: #cccccc;"></td> <td style="background-color: #cccccc;"></td> </tr> <tr> <td style="padding: 5px;">SAN 10k SAS</td> <td style="background-color: #cccccc;"></td> <td style="background-color: #cccccc;"></td> <td style="background-color: #cccccc;"></td> </tr> <tr> <td style="padding: 5px;">SAN 15k SAS</td> <td style="background-color: #cccccc;"></td> <td style="background-color: #cccccc;"></td> <td style="background-color: #cccccc;"></td> </tr> </tbody> </table>				Call Volume :	< 50k /day	50-100k /day	> 50k /day	Internal 7200 SAT				Internal 10k SAS				Internal 15k SAS				SAN 10k SAS				SAN 15k SAS			
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SAN 15k SAS																											

- Disk I/O is key in recording and may require that a separate LUN with dedicated disk spindles be allocated on a SAN. Higher enterprise class SAN systems that have tiered storage and can automatically allocate disk speed may not need this requirement.
- VM over committing is not supported, and if any performance problems arise the VPI system will have to be moved to a 1 Virtual CPU to 1 Physical CPU Core configuration. As well as dedicating memory to the VPI virtual machine.
- DRS is not supported because an unscheduled move of the virtual machine can cause audio recording loss. HA can be used as it would be better to lose a small amount of audio rather than the system be offline. Best practice is to migrate the server using scheduled down time
- For troubleshooting Virtual Center logs, network performance logs may be required.
- If there are serious performance, network or communication issues with the virtualized server a final step will be to move the VPI server back to a physical server. We have not had this occur to date, but this can be an option in extreme cases.



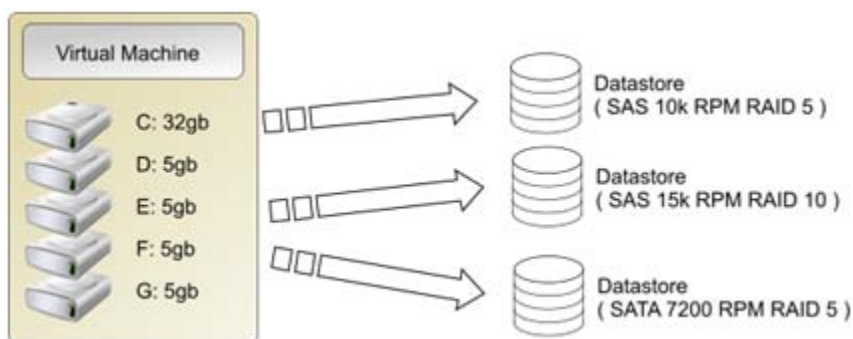
## 2.3.1 Virtualized Hard Drive Configuration

To set up a virtual server, you must create five individual virtual hard drives or VMDK files, as follows:

- **C: 32GB** - Operating System and program files
- **D: 5GB** - Firebird database files
- **E: 5GB** - Buffer (short term storage)
- **F: 5GB** - Long term storage (LTS). This drive can start at a smaller size and can be expanded as it fills up. Calculations need to be done to ensure that the maximum potential size of the drive is known so that this virtual drive can be placed or moved to a volume with the possible maximum size.
- **G: 5GB** - Pre-allocated Storage. This disk is used to store the SQL Server database files, and SQL Server database log files, and recording data, (including VPortal data and Retrieval Service data). The SQL server application files must be installed on partition C. This drive can start at a smaller size and can be expanded as it fills up. Calculations need to be done to ensure that the maximum potential size of the drive is known and this virtual drive can be placed or moved to a volume with the possible maximum size.

Once installation is complete, expand the drives to meet disk space requirements from the Solution Design Workbook.

Virtual drives (vmdk files) can be placed on different classes of storage, as needed for performance or cost savings. For example: SQL data files can be placed on fast 15,000 rpm SAS drives, while LTS data can be placed on 7200 rpm SATA drives. This enables SQL server performance and cost savings for long term storage.



### ➤ Virtualized Hard Drive Configuration- Using 2 Drives and SUBST Command

- Create 2 individual hard drives as follows:
  - C: - 40GB – Pre-allocated Storage – Operating System and Program Files
  - S: - 20GB – Pre-allocated Storage – Empower Data Files
- On the S: drive create 4 directories: S:\db, S:\sts, S:\lts, S:\sql
- As an Administrator, open the All Users startup folder.
- Create a batch file named “drivemap.bat” and enter the following commands
  - SUBST D: S:\db
  - SUBST E: S:\sts
  - SUBST F: S:\lts
  - SUBST G: S:\sql
- Save the file in the All Users Startup Folder.



### ➤ Virtualized Hard Drive Configuration - Placing Drives on Different LUN's

- Create individual virtual hard drives as needed for the components being installed. The following is a typical all-in-one system.
  - C: - 40GB – Pre-allocated Storage - Operating System and program files
  - E: - 64GB – Pre-allocated Storage - Buffer (short term storage)
  - D: - 32GB – Pre-allocated Storage - Firebird database files
  - F: - 32GB - Automatically Expanding - Long term storage (LTS). This drive can start at a smaller size and can be expanded as it fills up. Calculations need to be done to ensure that the maximum potential size of the drive is known so that this virtual drive can be placed or moved to a volume with the possible maximum size.
  - G: - 32GB – Pre-allocated Storage - This disk is used to store the SQL Server database files, and SQL Server database log files, and recording data, (including VPortal data and Retrieval Service data). The SQL Server application files must be installed on partition C. This drive can start at a smaller size and can be expanded as it fills up. Calculations need to be done to ensure that the maximum potential size of the drive is known so that this virtual drive can be placed or moved to a volume with the possible maximum size.

**\*\* Sizes for storage drives should be based on call volume and retention policy**

## 2.3.2 Other Considerations with Virtual Machines

- VPI EMPOWER should be installed on a Virtual Machine that does not share resources with other Virtual Machines.
- A good monitoring tool should be in place to track performance of the system using WMI and SNMP protocols. This will give alerts when the system is low on disk space or the CPU is reaching high utilization.
- Likewise, the Virtual Host should be monitored to make sure that enough resources are being allocated to the Empower Virtual Machine.
- Support Consideration: The Virtualization platform that you are using should still be in the main support cycle. And if offered a current support contract with the virtualization vendor should be in place.
- If you are installing in a virtual environment, please note the following:
  - Verify that UAC is off.
  - Verify that the user you are using to install has full control in the Program Files directory.
  - Use either the Domain Group Policy or Local Security Policy. Under Local Policies / Security Options, disable "User Account Control: Virtualize file and registry write failures to per-user locations".

## 2.3.3 Wizard Installation Modes

The Automatic Install Wizard offers two installation modes:

- Basic mode: This is suitable for single server environments, when all components are being installed using all default file paths (see "Default Install Paths " on page 12). Location can be specified.
- Advanced mode: To select specific components to install and specify locations, select Advanced Mode, which prompts you for the same basic details as when you install individual components.

**For international installations, it is recommended that you run the Install Wizard in Advanced mode. You will need to specify the collation setting according to the locale of the installation.**



## 2.3.4 Default Install Paths

The default install paths for all components are listed here:

<b>VPI Empower</b>	Data – D:\DB
	SQL Data – G:\
	Service Account – default
<b>VPortal</b>	C:\Program Files (x86)\VPI\VPortal [for 64 bit install] C:\Program Files\VPI\VPortal
<b>Retrieval Cache</b>	F:\AppData\RetrievalServiceCache
<b>Media Manager</b>	C:\Program Files\VPI\Media Manager
	C:\Program Files (x86)\VPI\Media Manager [for 64 bit install]
	Scratch Folder – F:\AppData\VPIFileScratch
<b>Voice Capture</b>	C:\Program Files\VPI\ActivVoice
	C:\Program Files (x86)\VPI\ActivVoice [for 64 bit install]
<b>View Capture</b>	C:\Program files\VPI\Capture
	C:\Program Files (x86)\VPI\Capture [for 64 bit install]

## 2.4 Upgrades using the VPI Empower Installation Wizard

Before upgrading a previously-installed system, please review this section. For upgrade scenarios that are not supported by the automatic install wizard, please see “[Manual Upgrades](#)”.

- You can upgrade previously installations of version 5.1.x to version 5.5. To upgrade systems installed with releases previous to version 5.1.x, you must uninstall the older release and then install version 5.5. This is considered a "fresh install".
- To upgrade from version 5.1.x to 5.5, data migration is not necessary. However, to upgrade from a previous version (for example, version 5.0), you must complete data migration.
- For upgrades from 5.1.x, the license file should be saved for use after the upgrade.
- For customers who purchased the Redaction feature, a new license is required.
- Gather information about the previously-installed VPI Empower Suite, including: installation paths for all installed components; location of data (for example, the Retrieval Service cache and the Event Center folder). Note whether the domain service account was used. If so, you will need the credentials.
- If VPI Empower Suite modules are being installed on different servers, ensure that you:
  - Identify which modules will be installed on each server.
  - Identify every module that is going to be installed on a server other than the server on which SQL Server is going to be installed.
- If SQL Server is being upgraded, you must back up your data.

**Be sure to check the Release Matrix for this release to ensure that all client software has been updated as necessary.**

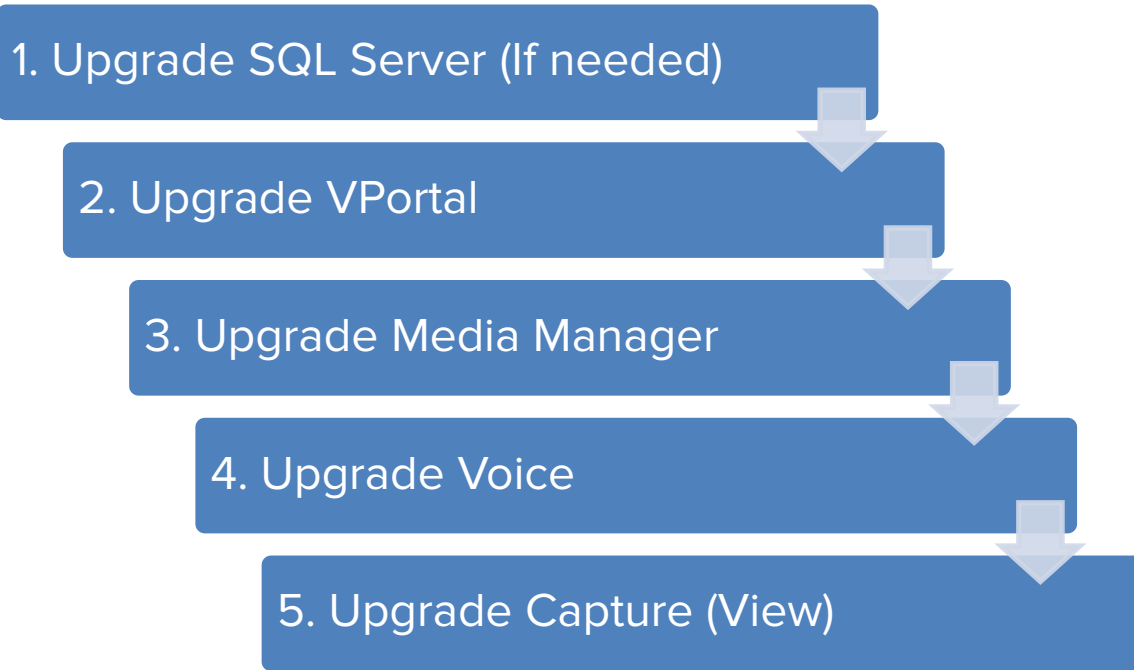
*It is always good practice to have a copy of the Release Notes handy.*



➤ **How to upgrade VPI Empower using the Installation Wizard**

You may be prompted to reboot the system. Reboots are required for a successful installation.

- Stop all Voice services and applications (VPI Activ Voice).
- Run the Installation Wizard in the following order:



- Go to [Next Steps: After using the Installation Wizard](#).



### 3 Next Steps: After running the Installation Wizard

For troubleshooting, the Install Wizard collects log information and stores it in the OS Temp folder. For further troubleshooting, please consult the Release Notes.

Basic configuration is covered in this document (skip to "Basic Configuration"); more advanced configuration is covered in the *VPI EMPOWER Configuration Guide*.

For all-in-one servers or any VPortal with a local SQL server:

- To update the files installed by the Wizard, run Windows Updates again after installing VPI Empower Suite.
- VPortal is available with limited access. This can be tested by double-clicking the VPortal icon on your computer desktop. The administrative account can be used to log in to VPortal. For full functionality, you will need to add a license.
- Your chosen components are installed, but they must be configured. Media will not be recorded and playable until the configuration is completed. Proceed to "Basic Configuration" on page 15.

#### 3.1 VPI Option Databases - Checklist

This section provides a table for you to use as a checklist to make sure that you have installed and updated all of the VPI databases for the VPI Empower Suite and for any VPI options (Application Packs or VPI Data Collectors) that the customer may have purchased in addition to the VPI Empower Suite.

VPI Options (Application Packs or Performance Data Collectors)

**We recommend that no Data Collectors are running when you run .bat files.**

Product	run .bat file?↑	Chk error log ?	Notes
1			
2			
3			
4			
5			
6			

#### ➤ How to use this checklist

5. In the Product column, note the VPI option for which a VPI .bat file must be run to create the database for it.



Before you run each .bat file, make sure that you have exclusive access to the database for that VPI option. We recommend that no Data Collectors are running when you run .bat files.

6. Run the .bat file. Check the error log for errors. If any errors occurred, rerun the .bat file and recheck the log file for errors.
7. Write down any important notes or reminders in the Notes column.

If you encounter any errors that you cannot resolve when installing these databases, contact [VPI Technical Support](#).

## 3.2 Basic Configuration

After successfully installing VPI Empower Suite, you must apply the VPortal license and configure certain services and components that VPI Empower Suite modules utilize during normal operation.

This guide covers basic configuration. More advanced configuration is documented in the *VPI Empower Configuration Guide*. To get started with basic configuration, please see these sections:

- [Best Practices: Voice Capture Node Startup and Shutdown](#)
- [VPACT \(Single server, default settings\)](#)
- [Retrieval Service](#)
- [Live Monitoring Service](#)
- [SQL Data Adapter Service](#)
- [Business Rules](#) – you will also need the *VPI Empower Configuration Guide* for configuration of Media Manager Utilities.
- [Web Site Redirection](#)
- [VPI Option Databases - Checklist](#)
- [LDAP for VPortal – Single or Multi](#)

## 3.3 VpiDiag

You can use VpiDiag to collect and report system settings (Hardware information, Operating System information, and VPI Application information). VpiDiag is included with all VPI installation software.

When you launch VpiDiag, a report is created and loaded into your default browser. System discovery status is displayed, and then the report opens in a web browser.



```

vpidiag version 0.9.4750.28776
Gathering system information...
CPU...
Hardware...
OS...
Storage...
Services...
Processes...
Event Center...
Media Manager...
View...
Voice...
Capture...
U-Portal...
Miscellaneous...

```

VpiDiag: system discovery status

Each report is uniquely named using date/time and self-contained.

VPI System Diagnostic Report	
0.9.4750.28776 Development	
System Name	VPORTAL2008R2-1
Date	01/03/13 14:47:27
User	VPORTAL2008R2-1\Administrator
<b>Operating System</b>	
Microsoft Windows Server 2008 R2 Enterprise Service Pack 1 System was last booted on 20130102121622.033000-480. Current timezone offset is -480 minutes. OS is 64 bits.	
<b>Hardware</b>	
<b>Processors</b>	
Intel(R) Xeon(R) CPU E5520 @ 2.27GHz Intel64 Family 6 Model 26 Stepping 5 1 core(s), 1 Logical Processor(s)	
<b>Storage</b>	
Drive: \\.PHYSICALDRIVE0, Model: VMware Virtual disk SCSI Disk Device, Interface: SCSI, Size: 34356994560 Partition: C:, Size: 34252783616, Free Space: 6143815680 (17%) Drive: \\.PHYSICALDRIVE1, Model: VMware Virtual disk SCSI Disk Device, Interface: SCSI, Size: 10733990400 Partition: D:, Size: 2097152000, Free Space: 2056048640 (98%) Partition: E:, Size: 2097152000, Free Space: 2057498624 (98%) Partition: F:, Size: 2097152000, Free Space: 2057465856 (98%) Partition: G:, Size: 4443865088, Free Space: 2590359552 (58%)	
<b>Memory</b>	
Total Physical Memory: 2096696, Free: 1107640 (52%)	
<b>Network</b>	
Name: vmxnet3 Ethernet Adapter #2, IP: (u'192.168.200.220', u'fe80::4924:d54c:7b4c:6a8c'), MAC: 00:0C:29:7C:79:82, Speed: 10000000000	
<b>Authentication</b>	

VpiDiag: system discovery report

### 3.3.1 VpiDiag Command line options

Running VpiDiag from the console allows specifying options.

```

Directory of C:\Users\Administrator\Desktop\Test
01/02/2013  05:45 PM                2,164,756 vpidiag-20130102174545.html
01/03/2013  02:47 PM                2,164,848 vpidiag-20130103144727.html
01/03/2013  03:09 PM                2,171,479 vpidiag-20130103150911.html
              3 File(s)                6,501,083 bytes
              0 Dir(s)                6,154,493,952 bytes free

```





- You can add **customer information** to the report.
- You can create the report in **XML format**.
- You can specify the **output filename**.
- You can **suppress console output**.
- You can **suppress displaying the report**.

```
C:\>vpidiag -c "Acme Widgets"
```

```
C:\>vpidiag --XML
```

```
C:\>vpidiag -o my_report.html_
```

```
C:\>vpidiag --quiet_
```

```
C:\>vpidiag --no-display_
```

```
C:\>vpidiag --help
Usage: vpidiag.exe [options]

Options:
  -h, --help                show this help message and exit
  -q, --quiet                Suppress console output
  -n, --no-display          Suppress report display
  -x, --xml                  Output only XML file.
  -c CUSTOMER, --customer=CUSTOMER
                             Specify customer for inclusion in report
  -o OUT, --out=OUT         Specify output file name

C:\>
```



## 4 Applying the VPortal License

---

After successfully installing VPI Empower Suite, you must apply the VPortal license.

### ➤ How to apply the VPortal license

Copy the VPI-provided license file (**license.lic**) to the VPortal Folder under:

- **32-bit OS:** Program Files\VPI\VPortal
- **64 bit OS:** Programs (x86)\VPI\VPortal



## 5 VPACT Automated Configuration Tool

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For single server installations with default settings, you can use the Voice Print Automated Configuration Tool, VPACT. This utility automatically configures new all-in-one installs or upgrades. The VPACT utility executes the following steps for you:

- Web.Config Live Monitor and DDS Configuration
- Business Rules Media Manager GUID
- Data Pump SQL Configuration
- Data Pump Firebird Configuration
- Media Export Configuration (moves settings.xml )
- Retrieval Service Configuration
- Dynamic Data Service Configuration for Media and Retrieval Path

### Important to Note

- VPACT is only suitable for a VPI Empower installation that is an *All-In-One setup with default settings*.
- VPACT must be executed with an administrator rights or the local administrator itself.
- Voice and Media Manager are required to be setup and configured **before** running this utility
- For new installations, you need to **manual configure** Capture components, such as screen recording and live monitoring.

VPACT **does not** set up the following:

- Screen Capture Service - see the Screen Capture Guide
- Live Monitoring Service – see the Configuration Guide
- Other Capture components

### 5.1 Using VPACT

The VPACT utility executes the following steps:

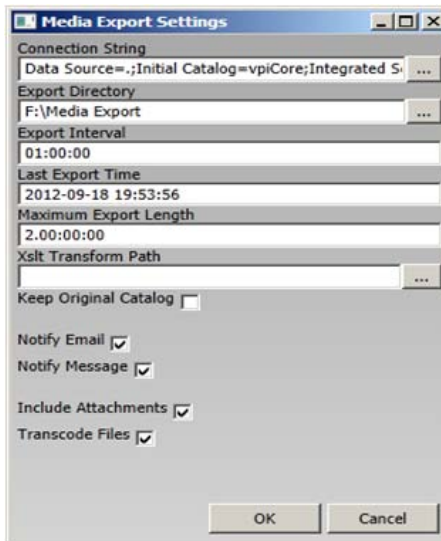
- **Set up Web.config Live Monitor and DDS configuration** - VPACT searches the web.config file for the string `[IP_OF_LIVEMONITOR_SERVICE]` and replaces it with the local IP address. It also looks for the string `[URL_OF_DYNAMIC_DATA_SERVICE]` and replaces it with a defined URL and local computer name inserted. A successful update displays a message that says, “Replaced 1 occurrence(s) in 1 file(s)”.

When you repeat the search, you should see a message that says, “Replaced 0 occurrence(s) in 0 file(s)”, as the utility should no longer find the default strings.

- **Add Media Manager GUID to Business Rules Settings** - VPACT queries the registry for Media Manager’s GUID, then it uses the Find and Replace Tool to replace `{mediaManagerGUIDGoesHere}` with the GUID of the Media Manager taken from the registry.
- **Add SQL Connection and enable Voice sync to Data Pump settings** - VPACT inserts the Data Pump SQL connection string in the registry and also enable “SyncVoiceServers” to true. The default SQL connection string is **“Data Source=.;Initial Catalog=vpiCore;Integrated Security=True”**.
- **Add Firebird Connection Settings to Data Pump Settings** - VPACT queries the voice resourceID, modifies the extracted `DatapumpFirebirdScript.sql`, inserts the resourceID, and executes the script.



- **Set up Media Export’s connection string and create a default folder on F:\Media Export** - VPACT creates a default folder on F:\ drive called “Media Export”, copies *settings.xml* to *ProgramData\VPI\MediaExportService*.



- **Set up Retrieval Service SQL and Media Manager connection** - VPACT queries the registry for the Media Manager GUID and modifies the *RetrievalServiceMM32.reg* (for 32 bit OS) or *RetrievalServiceMM64.reg* (for 64 bit OS) file. The modified registry is inserted using the “reg import command”. The registry file also includes the default SQL connection string *Data Source=.;Initial Catalog=vpiCore;Integrated Security=True*.
- **Set up Dynamic Data Service Media Path and Retrieval Path** - VPACT queries the Retrieval Service CachePath location and uses “reg add” to add the registry values.

### 3. Media Playback Path:

F:\AppData\VpiRetrievalCache\

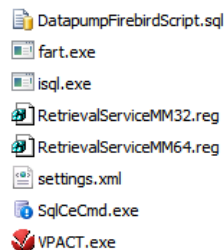
### 4. IIS URL to Retrieval Service Cache (Media Playback. Must not be localhost):

http://VMSQLEX2K832/VPortal/MediaPlayback

### 5. Retrieval Service URL:

## 5.2 Running the VPACT Utility

Copy VPACT to the Desktop and run it as administrator if you do not have an admin rights. The following files are extracted to Users Temp folder in a folder called “afolder”. These files are deleted when the utility exits.





```

C:\Users\Administrator\Desktop\VPACT V.1.0.exe
FART: wild_card="C:\Program Files (x86)\UPI\UPortal\Web\Web.config"
FART: find_string="LIVE_MONITOR_SERVICE1"
FART: replace_string="192.168.214.222"
FART: processing C:\Program Files (x86)\UPI\UPortal\Web\Web.config
FART: --verbose
FART: --ignore-case
FART: wild_card="C:\Program Files (x86)\UPI\UPortal\Web\Web.config"
FART: find_string="URL_OF_DYNAMIC_DATA_SERVICE1"
FART: replace_string="http://VMSQLEX2K8R2/DynamicDataService/UpiDynamicDataService.data/"
FART: processing C:\Program Files (x86)\UPI\UPortal\Web\Web.config
FART: --verbose
FART: --ignore-case
FART: wild_card="config.ini"
FART: find_string="{mediaManagerGUIDGoesHere}"
FART: replace_string="{6449FCFF-B27B-4C0C-BA09-3D0CE3A6A73A}"
FART: processing config.ini
ERROR: The system was unable to find the specified registry key or value.
FART: --verbose
FART: --ignore-case
FART: wild_card="DatapumpFirebirdScript.sql"
FART: find_string="UOICERESOURCEID"
FART: replace_string="{6F1EE304-06C2-4A6A-869B-5FB48DFBC364}"
FART: processing DatapumpFirebirdScript.sql
!

```

Example: VPACT is running

VPACT creates a log to the same location of the utility (*Log-Month-Day-Year-Hour-Minutes-Seconds-MilliSeconds.log*). A sample log file looks like this:

Log-11-28-2012-6-43-32-68.log

Each time the utility is executed, another log is created. If the utility is executed from a network location, it generates logs in C:\Windows.

```

Log-11-28-2012-6-43-32-68.log - Notepad
File Edit Format View Help
Server Name = VMSQLEX2K8R2
Server IP address = 192.168.214.222
-----
web.config Live Monitor and DOS configuration
C:\Program Files (x86)\UPI\UPortal\Web>C:\Users\ADMINI~1\AppData\Local\Temp\afolder\FART -V -i "C:\Program Files (x86)\UPI\VPo
C:\Program Files (x86)\UPI\UPortal\Web\web.config
Replaced 1 occurrence(s) in 1 file(s).
C:\Program Files (x86)\UPI\UPortal\Web>C:\Users\ADMINI~1\AppData\Local\Temp\afolder\FART -V -i "C:\Program Files (x86)\UPI\VPo
C:\Program Files (x86)\UPI\UPortal\Web\web.config
Replaced 1 occurrence(s) in 1 file(s).
processed file: web.config
Successfully processed 1 files; Failed processing 0 files
-----
Business Rules Media Manager GUID Added to config.ini
C:\Program Files (x86)\UPI\Business Rules>C:\Users\ADMINI~1\AppData\Local\Temp\afolder\FART -V -i config.ini (mediaManagerGUID
config.ini
Replaced 1 occurrence(s) in 1 file(s).
-----
Data Pump SQL Configuration
C:\Program Files (x86)\UPI\Business Rules>reg add "HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Voice Print International, Inc.\Datap
The operation completed successfully.
C:\Program Files (x86)\UPI\Business Rules>reg add "HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Voice Print International, Inc.\Datap
The operation completed successfully.
-----
Datapump Firebird Connection Configuration
DatapumpFirebirdScript.sql
Replaced 1 occurrence(s) in 1 file(s).
C:\Users\ADMINI~1\AppData\Local\Temp\afolder>sqlcmd -S VMSQLEX2K8R2 -i "DatapumpFirebirdScript.sql"
(1 rows affected)
-----
Media Export Configuration Moving settings.xml file
C:\Users\ADMINI~1\AppData\Local\Temp\afolder>F:
F:\>MD "Media Export"
F:\>cd
C:\Users\ADMINI~1\AppData\Local\Temp\afolder>cd "C:\ProgramData\UPI"
C:\ProgramData\UPI>MD "MediaExportService"
C:\ProgramData\UPI>cd "C:\ProgramData\UPI\MediaExportService"
C:\ProgramData\UPI\MediaExportService>copy "C:\Users\ADMINI~1\AppData\Local\Temp\afolder\settings.xml" /Y
C:\Users\ADMINI~1\AppData\Local\Temp\afolder\settings.xml
1 file(s) copied
-----
Retrieval Service Configuration
C:\Users\ADMINI~1\AppData\Local\Temp\afolder>FART -V -i RetrievalService@M64.reg (mediaManagerGUIDGoesHere) 6449FCFF-B27B-4C0C-B
RetrievalService@M64.reg
Replaced 1 occurrence(s) in 1 file(s).
C:\Users\ADMINI~1\AppData\Local\Temp\afolder>FART -V -i RetrievalService@M64.reg {ServernameGoesHere} VMSQLEX2K8R2
RetrievalService@M64.reg
Replaced 1 occurrence(s) in 1 file(s).
C:\Users\ADMINI~1\AppData\Local\Temp\afolder>Reg.exe Import "RetrievalService@M64.reg"
-----
Dynamic Data Service Configuration for Media and Retrieval Path
C:\Users\ADMINI~1\AppData\Local\Temp\afolder>reg add "HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Voice Print International, Inc.\Dy
The operation completed successfully.
C:\Users\ADMINI~1\AppData\Local\Temp\afolder>reg add "HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Voice Print International, Inc.\Dy
The operation completed successfully.
C:\Users\ADMINI~1\AppData\Local\Temp\afolder>reg add "HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Voice Print International, Inc.\Dy
The operation completed successfully.

```

Example: VPACT log



```

Log 11-28-2012 6:54:12-09.log - Notepad
File Edit Format View Help
Server Name = VMSQLEX2K8R2
Server IP address = 192.168.214.222
-----
web.config Live Monitor and DOS configuration
C:\Program Files (x86)\VPI\VPortal\web>"c:\users\ADMINI-1\AppData\Local\Temp\afolder"\FART -v -i "C:\Program Files (x86)\VPI\VPO
Replaced 0 occurrence(s) in 0 file(s).
C:\Program Files (x86)\VPI\VPortal\web>"c:\users\ADMINI-1\AppData\Local\Temp\afolder"\FART -v -i "C:\Program Files (x86)\VPI\VPO
Replaced 0 occurrence(s) in 0 file(s).
processed file: web.config
Successfully processed 1 files; Failed processing 0 files
-----
Business Rules Media Manager GUID Added to config.ini
C:\Program Files (x86)\VPI\Business Rules>"c:\users\ADMINI-1\AppData\Local\Temp\afolder"\FART -v -i config.ini {mediaManagerGUID
Replaced 0 occurrence(s) in 0 file(s).
-----
Data Pump SQL Configuration
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Voice Print International, Inc.\Datapump Service
SyncVoiceServers REG_DWORD 0x1
-----
Datapump Firebird Connection Configuration
DatapumpFirebirdscript.sql
Replaced 1 occurrence(s) in 1 file(s).
C:\Users\ADMINI-1\AppData\Local\Temp\afolder>sqlcmd -s VMSQLEX2K8R2 -i "DatapumpFirebirdscript.sql"
Msg 2627, Level 14, State 1, Server VMSQLEX2K8R2, Line 1
Violation of PRIMARY KEY constraint 'PK_vpResourceParameters'. Cannot insert duplicate key in object 'dbo.vpResourceParameters'.
The statement has been terminated.
-----
Media Export Configuration Moving settings.xml file
settings.xml
-----
Retrieval Service Configuration
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Voice Print International, Inc.\retrieval service
VPortalConnectionString REG_SZ Data Source=.;Initial Catalog=vpicore;Integrated Security=True
-----
Dynamic Data Service configuration for Media and Retrieval Path
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Voice Print International, Inc.\DynamicDataService\retrievalconfiguration
baseurl1 REG_SZ http://VMSQLEX2K8R2/VPortal/MediaPlayback

```

Example: Log when VPACT is re-executed



## 6 Manual Upgrades

---

This section describes the process for manually upgrading previous versions of VPI Empower Suite to version 5.5 SP1. You can follow these instructions for upgrades scenarios that are not supported by the automatic install wizard.

### 6.1 Verification of File Location

Given the various hard drive configurations that could be used for the VPortal server, you need to verify the locations of the following folders:

- .\Program Files\VPI
- .\VPI Tech
- .\AppData

Throughout this section, .\ is used instead of the actual drive letter to prevent confusion.

### 6.2 Pre-upgrade Backups

Before you begin the upgrade process, ensure that you follow the instructions in this section to ensure that all of the configuration data for the pre-upgrade installation is preserved. If you do not follow the instructions in this section, the configuration data for the pre-upgrade installation will be lost, and the entire system will have to be reconfigured. To avoid a lengthy, costly, and difficult configuration, make sure you follow the instructions in this section.

Since there are multiple drive configurations supported by the VPI Empower Suite, take the time to note which drive contains the \Program Files\VPI directory and the \VPI Tech directory. For the purpose of this document, these locations will be shown as .\Program Files and .\VPI Tech, respectively.

#### 6.2.1 Backup Location

Create a new folder within the .\VPI Tech folder named VPortal\_<version>\_Backup. For example, VPortal\_5.0.3.8\_Backup.

#### 6.2.2 What to Backup

- Create a zip of the entire VPI folders.
- Export the entire registry settings:
- For 32 bit systems:
  - HKEY\_LOCAL\_MACHINE\SOFTWARE\TCG Telecommunications
  - HKEY\_LOCAL\_MACHINE\SOFTWARE\Voice Print International, Inc.
- For 64 bit systems:
  - HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\TCG Telecommunications
  - HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\Voice Print International, Inc.
- Run **vpidiag.exe** located in .\VPI Tech\Tools and copy the report file to backup folder.





The Vpdiag v.1.0 utility backs up the following:

- VPortal
  - Web\web.config
  - Reporting\web.config
  - Reporting\\_Definitions\\_Settings.lgx
- SQL Data Adapter
  - VpSqlDataAdapter.exe.config
  - All PerformanceConfigs files
  - All StandardConfig files
- Save a copy of any **CustomConfigs** files created for SQL Data Adapter. (Custom Configs contain customer specific configuration files, which may include LDAP configuration.)
- Save a copy of **.\VPI\Business Rules\Config.ini**.
- Save the following data from the Registry:
  - Export **HKLM\SOFTWARE\Voice Print International, Inc.**
  - Create a text file called MMGUID.txt and copy to it the value from MediaManagerGUID key in **HKLM\SOFTWARE\Voice Print International, Inc.\Media Manager**.

### 6.3 What Configurations to Verify

- Verify that you have all **Service Accounts** being used.
- Check the **VPI services** to determine the account(s) each service is running under (see "Stop Services" on page 24 for a list of services to verify).
- Check the **Application Pools** in **MMC** under **IIS**.
- For **Windows 2008**, you need to verify which mode they are running in – they should be in *Integrated Mode*.
- In the Media Manager Utility, verify whether SSL is enabled.
- Verify if SQL is running on the VPortal server and if SQL is using **Default or Named instance**.
- Launch SQL Server Management Studio, log in, verify VPI Databases are present.
- In the Object Explorer window – If either or both of the conditions below are present, you will need to update the InstallUpdate.bat files (see "Upgrade Event Center" on page 25 and "Install/Reinstall Capture" on page 25). The procedure you use to update these files is in "Update InstallDB.bat Connection String" on page 33.
  - **Condition 1:** If the local server name is followed by a \<text>, then SQL is using a named instance.
  - **Condition 2:** If the server name is a different server, then SQL is running on that other server.
- Verify which components VPortal is licensed for (this is needed when running InstallUpdate batch files).

### 6.4 Upgrade Steps

1. **Stop the following services:**
  - VPI Business Rules
  - VPI Data Pump
  - VPI Media Manager
  - VPI Retrieval Service
  - VPI SQL Data Adapter
  - VPI Media Export Service
  - VPI Service (optional)





- IIS Admin
  - World Wide Web Publishing (Windows 2008 only)
2. **Uninstall VPortal (only required for versions prior to 5.1)** - Uninstall VPortal using the Control Panel in Windows.

**Note:** There is a known issue with version 5.0.3.x installations where it may be necessary to uninstall by running the 5.0.3.x installer and selecting the option to remove the program.

### 3. Upgrade Event Center

- Run the matching Event Center installer for your operating system.
- Install .Net Framework 4.0 Full (only required for versions prior to 5.3)
- Install ASPNetMVC3 (only required for version prior of 5.3.2)
- Install aspnetwebpages (ASPNet MVC requirements)
- Run dotNetFx40\_Full\_x86\_x64.exe.
- Run aspnetwebpages.msi.
- Run aspnetmvc3.msi.

### 4. Upgrade the Media Manager Service

- Run the Media Manager msi file. This package will UPGRADE the service.
- Verify location of the .\AppData\VpiFileCache is correct during the install.
- Navigate to .\Program Files\VPI\Media Manager\Scripts.
- Run InstallUpdateDB.bat.
- Verify the Media Manager is running under the service account.
- Verify HKLM\SOFTWARE\Voice Print International, Inc.\Media Manager\Media Manager GUID value matches the value in MMGUID.txt.
- Start the Media Manager service.

### 5. Install/Reinstall Capture

- Install/Upgrade Silverlight.
- Upgrade Microsoft SQL Compact Edition to 3.5.8082.
- Install Microsoft CCR and DSS Runtime 4 Beta Redistributable.
- Install Microsoft Visual C++ 2010 Redistributable.
- Run Capture\_server-5.3.x.x.exe.

### 6. Reinstall VPortal

- Run VPortal-5.3.X msi.
- Verify location of .\Program Files\VPI for install location.
- Verify location of .\AppData for install location.
- Navigate to C:\Program Files\VPI\VPortal\Web\App Data\SQL.
- Run InstallUpdateDB\_Core.bat.

**See "Update InstallDB.bat Connection String" on page 33 before performing this step.**

- Run InstallUpdateDB\_Coaching.bat.
- The following updates need only be run if the component is licensed on the customer system:



Run the software updates for the components that are licensed for this site	
Cisco UCCE data collector	InstallUpdateDB_Performance_CiscoUCCE.bat
Cisco UCCX data collector	InstallUpdateDB_Performance_CiscoUCCX.bat
Account Management FactFinder	InstallUpdateDB_FactFinder_AccountMgmt.bat
Case Management FactFinder	InstallUpdateDB_FactFinder_CaseMgmt.bat
Incident Management FactFinder	InstallUpdateDB_FactFinder_IncidentMgmt.bat
Order Management FactFinder	InstallUpdateDB_FactFinder_OrderMgmt.bat
PCI Compliance FactFinder	InstallUpdateDB_FactFinder_PCCompliance.bat
FCR FactFinder	InstallUpdateDB_FactFinder_FCR.bat
Handle Time FactFinder	InstallUpdateDB_FactFinder_HandleTime.bat
Stock Trading FactFinder	InstallUpdateDB_FactFinder_StockTrading.bat
Avaya PC4 data collector	InstallUpdateDB_Performance_AvayaPC4.bat
CMS data collector	InstallUpdateDB_Performance_CMS.bat
Nortel CCM	InstallUpdateDB_Performance_NortelCCM.bat
VPI Foresight (WFM)	InstallUpdateDB_Performance_WFM.bat

## 7. Configuration Steps

- Check Application Pools under IIS in MMC. Verify that they are running under the correct service account and, for 2008 that VPortal and Reports pools are set to Integrated.
- Copy configuration data from Old\_web.config in backup folder to new web.config file in C:\Program Files\VPI\VPortal\Web\web.config (see [Web Config Settings](#)).
- Copy any configuration data from old SQL Data Adapter Configuration files in the backup folder to new SQL Data Adapter Configuration Files in C:\Program Files\VPI\SQL Data Adapter\ (see [VpiSqlDataAdapter.exe.config Settings](#))
- VpSqlDataAdapter.exe.config is the first file that needs to be checked.
- StandardConfigs subfolder includes files for:
  - LDAP
  - Interaction Assembly
  - LDAP
  - Admin

**Note:** LDAPUserSync.config is often renamed, placed into CustomConfigs and the file name is changed in the VpSQLDataAdapter.exe.config script to protect it against overwriting by accident during an upgrade.

- PerformanceConfigs subfolder includes files for:
  - UCCE Reports
  - UCCX Reports
- Copy any configuration data from old Config.ini file in the backup folder to the new Config.ini file in C:\Program Files\VPI\Business Rules\ (see [Config.ini Business Rules Settings](#)).

### 6.4.1 Retrieval Service Configuration

- Go to **START > VPI > Retrieval Service > Retrieval Service**.



- Click **Configuration** (expand window to larger size).
- Under VPortal (4th section), open **VPortalConnectionString** (right hand column, button will appear to the right, click to open config window).
  - Set **Integrated Security** to true.
  - Set **Data Source** to . *(just a period, if Retrieval Service is being run on the server housing the SQL DBs).*
  - Set **Initial Catalog** to vpiCore.
  - Click **OK**.
- Open Media Managers Collection (right hand column, button will appear to the right, click to open config window).
  - If no Media Managers are listed, click Add. It will populate the Media Managers list with “New Media Manager”.
  - Click this entry. Tip: Expand the window, so you can see everything.
  - **Copy the MediaManagerGUID from MMGUID.txt into the ID field under Design.**
  - Under **Design**, set Enabled to True.
- Compare against Media Manager configuration to ensure port & SSL settings are the same.
- **Data Pump Service** - You will need to re-enter the VPortal DB connection string.
- FB connections are stored in the DB and will carry over if already configured.
- **Live Monitoring Service** - You will need to re-enter the VPortal DB connection string.
- You will need to re-enter each Voice server.
- Update each service to run under the appropriate service account and then start each of the following services:
  - VPI Business Rules Service
  - VPI Data Pump Service
  - VPI Retrieval Service
  - VPI Media Export Service
  - VPI SQL Data Adapter Service
- Start these services: IIS Admin and World Wide Web Publishing (2008).
- Log into VPortal and perform system verification.

## 6.4.2 Web Config Settings

Below are the sections of the Web.config file that you need to check during the upgrade process to ensure the new Web.config settings match the old Web.config settings. The sections highlighted yellow are the settings you will need to ensure are identical; however there could be additional changes present which are not highlighted here so please check each section carefully and make all necessary changes.

### ➤ Section 1 – LDAP

```
<!-- LDAP settings -->
<add key="Host" value="domain.com" />
  <add key="Port" value="389" />
  <add key="TreeBase" value="dc=Domain,dc=Com" />
  <add key="AuthAccount" value="domain\user" />
  <add key="AuthPassword" value="password" />
  <add key="UserFilter" value="(sAMAccountName={0})" />
```



```
<add key="UserAuthType" value="Basic"/>
<add key="ServerAuthType" value="Negotiate"/>
<add key="UseAppPoolIdentity" value="false"/>
```

### ➤ Section 2 – Live Monitoring

The installer will put the server name into this field, update to server's IP address.

```
<!-- Live Monitor client settings -->
<!-- Set this to the IP address of the Live Monitor Service -->
  <add key="LMConnectionString" value="192.168.5.25"/>
  <add key="LMClientVersion" value="2,0,30,5"/>
<!--Set this to the URL of the Dynamic Data Service, used by live
monitoring client and retrieval service >
<add key="DynamicDataService" value="http://[server
name]/DynamicDataService/VpiDynamicDataService.data/" />
```

### ➤ Section 3 – VPI DB Connection Strings

You will need to confirm Data Source and Security Settings.

```
<connectionStrings>
<!--Deployment connection strings (default)-->
  <add name="VPSession" connectionString="Data
Source=.;Integrated Security=True;"/>
  <add name="VPortal" connectionString="Data
Source=.;Initial Catalog=vpiCore; Integrated
Security=True;"/>
  <add
name="AI.BLL.Properties.Settings.vpiIntelligenceConnectio
nString" connectionString="Data Source=.;Initial
Catalog=vpiPerformance; Integrated Security=True "
providerName="System.Data.SqlClient"/>
</connectionStrings>
```

There are 2 possible situations that will change the Data Source value.

- If the databases are located on a different server. they will be replaced by the server name running SQL.
- If SQL is using a named instance, there will be \<Instance Name> added after the server name, or it will be after the . (the . indicates SQL is running on the local machine).

### ➤ Section 4 – SMTP Setup

```
<system.net>
  <mailSettings>
    <smtp from="VPortalAdmin@domain.com">
    <network host="SMTP_Server" port="25"/>
  </smtp>
```



```
</mailSettings>
</system.net>
```

### ➤ Section 5 – Membership Provider (Controls is VPortal or LDAP Authenticates)

The DefaultProvider value determines which of the two sections beneath is not commented out. The section which does not match the defaultProvider will have(<!--) at the beginning and (-->) at the end.

```
membership defaultProvider="VPortalMembershipProvider">
<providers>
  <clear/>
  <!-- <add name="VPMembershipWithLdap2"
  enablePasswordRetrieval="false"
  enablePasswordReset="true" passwordFormat="Hashed"
  requiresQuestionAndAnswer="false"
  requiresUniqueEmail="false" applicationName="VPortal"
  minRequiredPasswordLength="6" passwordAttemptWindow="8"
  type="VP.DAL.Providers.VPMembershipWithLdap2"
  IdentifierGroup="VPortal"/> -->
  <add name="VPortalMembershipProvider"
  enablePasswordRetrieval="false"
  enablePasswordReset="true" passwordFormat="Hashed"
  requiresQuestionAndAnswer="false"
  requiresUniqueEmail="false" applicationName="VPortal"
  minRequiredPasswordLength="6" passwordAttemptWindow="8"
  type="VP.DAL.Providers.VPMembershipProvider"
  IdentifierGroup="VPortal"/>
</providers>
</membership>
```

### ➤ Section 6 – Client Identity

The other possible entry will be <servicePrincipalName value=""/>.

```
<client>
<!-- <endpoint
  address="net.tcp://127.0.0.1:8111/RetrievalService"
  binding="netTcpBinding"
  bindingConfiguration="NetTcpBinding_IRetrievalService"
  contract="IRetrievalService"
  name="NetTcpBinding_IRetrievalService"> -->
  <endpoint
  address="http://127.0.0.1:8111/RetrievalService"
  binding="wsHttpBinding"
  bindingConfiguration="WSHttpBinding_IRetrievalService"
  contract="IRetrievalService"
```



```
name="WSHttpBinding_IRetrievalService">
  <identity>
    <userPrincipalName value="HOST\localhost"/>
  </identity>
</endpoint>
</client>
```

## 6.5 VpiSqlDataAdapter.exe.config Settings

Below are the sections of the VpSqlDataAdapter.exe.config file that you need to check during the upgrade process to ensure the new VpSqlDataAdapter.exe.config settings match the old VpSqlDataAdapter.exe.config settings.

The highlighted sections are the settings you will need to ensure are identical. However, there could be additional changes present that are not highlighted here; please check each section carefully and make all necessary changes.

### ➤ Section 1 – VPI DB Connection Strings

You will need to confirm Data Source and Security Settings. Also, if the customer's specific DBs are being attached to their connection strings will be present here as well.

```
<!-- These are the standard VPortal connection strings. They always need to
be specified -->
  <add name="vpiCore" providerName="System.Data.SqlClient"
    connectionString="Data Source=.;Initial Catalog=vpiCore;
Integrated Security=True " />
  <add name="vpiDataMart" providerName="System.Data.SqlClient"
    connectionString="Data Source=.;Initial Catalog=vpiDataMart;
Integrated Security=True " />
  <add name="vpiCapture" providerName="System.Data.SqlClient"
    connectionString="Data Source=.;Initial Catalog=vpiCapture1;
Integrated Security=True " />
  <add name="vpiAudit" providerName="System.Data.SqlClient"
    connectionString="Data Source=.;Initial Catalog=vpiAudit1;
Integrated Security=True " />
  <add name="vpiPerformance" providerName="System.Data.SqlClient"
    connectionString="Data Source=.;Initial Catalog=vpiPerformance;
Integrated Security=True " />
```

There are 2 possible situations that would change the Data Source value.

- If the databases are located on a different server, they will be replaced by the server name running SQL.
- If SQL is using a named instance there will be \<Instance Name> added after the server name or it will be after the . (the . indicates SQL is running on the local machine).

### ➤ Section 2 – LDAP Connection String

*Only one section can be active!* The 2nd section is needed only if SQL Data Adapter Service is not running under the domain account.

```
<!-- Active Directory/LDAP connection string to use if SQL Data Adapter
service running under domain account -->
```



```
<add name="ActiveDirectory" providerName="Generic.Internal.AdoDbProvider"
    connectionString="Provider=ADsDSOObject;Data
    Source=adsdatasource;Mode=Read;Bind Flags=0;ADSI Flag=1" />
<!-- Active Directory/LDAP connection string to use if SQL Data Adapter
    service NOT running under domain account
Replace domainName with name of domain controller
Replace uname with domain\login
Replace pwd with password for the account.-->
<!--
<add name="ActiveDirectory"
    providerName="Generic.Internal.AdoDbProvider"
    connectionString="Provider=ADsDSOObject;Data
    Source=domainName;Mode=Read;Bind Flags=0;ADSI Flag=1;User
    ID=uname;Password=pwd" />
-->
```

### ➤ Section 3 – Performance DB Connection Strings

```
<!-- Cisco UCC Enterprise -->
<add name="ICM_HDS" providerName="System.Data.SqlClient"
    connectionString="Data Source=.;Initial
    Catalog=drt_hds;Integrated Security=True" />
<add name="ICM_RTS" providerName="System.Data.SqlClient"
    connectionString="Data Source=.;Initial
    Catalog=drt_sideA;Integrated Security=True" />
<!-- Cisco UCC Express. Note: service must run as CiscoWebUser account in
    order to connect to UCCX -->
<add name="CiscoUCCX" providerName="System.Data.SqlClient"
    connectionString="Data Source=UCCEXpress;Initial
    Catalog=db_cra;Integrated Security=True" />
<!-- Avaya PC4 Oracle -->
<add name="AvayaPC4DB" providerName="System.Data.OracleClient"
    connectionString="Data Source=AVAYAPDSDB;User
    id=xxxx;Password=xxxx;" />
<!-- Avaya CMS Informix (ODBC) -->
<add name="CMS" providerName="System.Data.Odbc"
    connectionString="PROVIDER=OpenLinkODBC;Driver={OpenLink Generic 32
    Bit Driver v4.0};HOST=x.x.x.x;PORT=5000;ServerType=Informix
    2000;UID=userid;PWD=password;" />
<!-- VPortal 4.x Firebird (ODBC) -->
<add name="Guardian" providerName="System.Data.Odbc"
    connectionString="Driver=Firebird/InterBase(r) driver;Uid=SYSDBA;
    Pwd=masterkey; DbName=d:\DB\GUARDIAN.GDB" />
<add name="ActivIQ" providerName="System.Data.Odbc"
    connectionString="Driver=Firebird/InterBase(r) driver;Uid=SYSDBA;
    Pwd=masterkey; DbName=d:\DB\ACTIVIQ.GDB" />
```

### ➤ Section 4 – Standard Config Scripts

```
<!-- Standard Configuration Scripts -->
<system name="InteractionAssembly"
    file="StandardConfigs/InteractionAssembly.config" />
<system name="DataMart" file="StandardConfigs/DataMart.config" />
```



```

<!--<system name="LDAPSync"
file="StandardConfigs/LDAPUserSync.config" /> --> <!-- Enable to
use LDAP user synchronization -->
<system name="Admin" file="StandardConfigs/Admin.config" />
<!--
Standard Performance Configuration Scripts.
Enable these for the data collectors deployed at this installation
Edit the resourceName attribute to match the resource name defined
in VPortal
-->
<!-- <system name="CiscoUCCX" resourceName="CiscoUCCX"
file="PerformanceConfigs/CiscoUCCXEvents.config" />-->
<!-- <system name="CiscoUCCE" resourceName="CiscoUCCE"
file="PerformanceConfigs/UCCE.config" />-->
<!-- <system name="AvayaPC4Historical" resourceName="AvayaPC4"
file="PerformanceConfigs/AvayaPC4Historical.config" />-->

```

### ➤ Section 5 – Customer Specific Config Scripts

Any entries under Customer specific Configuration Scripts should be copied over.

```

<!-- Customer-specific Configuration Scripts -->
</systems>
</collector>

```

## 6.6 Config.ini Business Rules Settings

Below are the sections of the Business Rules Config.ini file that you need to check during the upgrade process to ensure the new Business Rules Config.ini settings match the old Business Rules Config.ini settings. The highlighted sections are the settings you will need to ensure are identical. However, there could be additional changes present that are not highlighted here; please check each section carefully and make all necessary changes.

### ➤ Section 1 – Collector

```

[collector]
    DBConnStr=Provider=SQLNCLI;Server=.;Database=vpiPerformance;Trusted_
    Connection=yes;
    DBConnAttempts=99
    DBConnRetryInterval=5
    NotificationRefreshInterval=1
    ControlServicePort=9000
    DebugTrace=C:\Program Files\VPI\BusinessRulesLog.txt

```

### ➤ Section 2 – DSN

```

[dsn]
    vpiCore=Provider=SQLNCLI;Server=.;Database=vpiCore;
    Trusted_Connection=yes;
    {mediaManagerGUIDGoesHere}=Provider=SQLNCLI;Server=.;
    Database=vpiMediaMgr;Trusted_Connection=yes;

```





## 6.6.1 Update InstallDB.bat Connection String

If SQL is running a named instance or is located on a different machine, it will be necessary to update the connection string in each UpdateInstallDB\_X.bat file, you will need to run during the upgrade process. The following are examples of the changes you will need to make:

Example for an update run on a local host with default instance (this is the default):

```
sqlcmd -S . -E -i InstallUpdatedDB_Core_incl.txt -o  
InstallUpdatedDB_Core_incl.log
```

Example for an update run on local host with named instance (SQLEXPRESS):

```
sqlcmd -S .\SQLEXPRESS -E -i InstallUpdatedDB_Core_incl.txt -o  
InstallUpdatedDB_Core_incl.log
```

Example for an update run on remote host with named instance (SQLEXPRESS):

```
sqlcmd -S Server\SQLEXPRESS -E -i InstallUpdatedDB_Core_incl.txt -o  
InstallUpdatedDB_Core_incl.log
```