

IT Portal

IT PORTAL INSTALL DOCUMENTATION

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Introduction

This install Start Guide describes the procedures and best practices that guide you to successfully installing and configuring your IT Portal. You must read this entire doc to completion before installing the IT Portal.

Prerequisites

- A web server running a windows server operating system and IIS
- 2.0 GB or more of memory
- Additional 2.0GBs of memory if SQL is to be installed
- A single CPU of 1.0 GHz or higher
- Supported on a physical server or virtual machine as long as the virtual machine is dedicated the resources listed above.
- AV excluding the default install path and temp paths ex.
C:\inetpub and c:\temp

SQL Download and Install

If you don't have access to a Microsoft SQL 2005 or greater, download the free express edition from Microsoft.

Setup Options of a new standalone SQL Installation

- a. Download and Run the Installers for the **Database Engine** and **Management Tools**

ENU\x64\SQLEXPRESS_x64_ENU.exe

ENU\x64\SQLManagementStudio_x64_ENU.exe

- b. When prompted select **Mixed Mode Authentication**
Enter a complex password for the sa account, note this password as you will use it later on.
Click "Add Current User" to add your account as a SQL Administrator

- c. Ensure that the Collation is set to
latin1_general_cp1_ci_as (The US Default)

Installation of the IT Portal

IT Portal Installer on a dedicated server (Simple)

Run the SI-Portal.exe installer file with the run as administrator option. UAC may block the registration of important DLLs. By default, IT Portal installs on c:\inetpub. The web files are installed in the default website directory c:\inetpub\wwwroot. This default path was chosen to assist users that have limited IIS knowledge. Be sure to pay attention to the note at the end of the installer to configure the IT Portal.

IT Portal Installer on a shared server (Advanced)

If you do not wish to use the default settings or if you run additional websites on this server, then we recommend you do an advanced install. After executing the SI-Portal.exe installer do not execute siportal-settings.cmd as recommended. This file has the settings you may want to manually adjust. Follow Appendix 2 to have a clear understanding of the file before executing it.

Active Directory Authentication

If you plan on using Active Directory to authenticate your users, then you will be asked during installation to enable it.

Configure your A record in DNS

Configure your DNS server with an A record for the IT Portal website. For Example your IT Portal may be accessed as portal.company.com. Configure your DNS Server to point this A record to the web server running the IT Portal. This level of configuration is beyond the scope of this document and varies greatly depending on the type of DNS server you use.

Finalize Setup

Once IT Portal is installed, and DNS configured, run `c:\inetpub\itportal-settings.cmd`. This will configure and install IIS and initiate the setup at <http://localhost>. During setup you will be asked to configure the below. Please read them to ensure you will be ready during the final setup.

- a. Upload or enter your license key
- b. Create an encryption passphrase and select cryptology
- c. Document Upload Limit
- d. Enable/Disable Active Directory Authentication
- e. Connect to your SQL Server
- f. Create the IT Portal SQL Database and User
- g. Enter information about yourself and your company
- h. Logos for Reporting

After the installation, keyword search “Branding” or the name of your PSA/RMM at kb.siportal.com to continue with the configuration of your IT Portal.

Appendix 1 (Recommendations)

Below are some additional configurations that should be setup to make the IT Portal function optimally.

SSL Recommended

We recommend the setup of a certificate on your web server to allow for SSL communication. With it you can run a secure site for example <https://portal.yourcompanyname.com> . Without it, all communications will be sent in clear text. Below is a walkthrough on how to install a digital certificate. You can purchase a digital certificate via a company like DigiCert.com (SSL Plus) or Godaddy.com (Standard SSL). <http://www.digicert.com/ssl-certificate-installation-microsoft-iis-5-6.htm>

Backup

Ensure that the base install folder “c:\inetpub” is included in your backup. All settings are saved in a folder called c:\inetpub\variables. The files in this folder contain many settings that for security reasons are not stored in the database. Backup the SQL Database as well. If you are running SQL Express, use this script to [schedule backups](#) of your databases.

International Setup (Especially AU)

Ensure that SQL and IIS are installed using a standard US build of windows. Changing Locale (date/time) formats may affect the install.

Appendix 2 (System Changes)

After the installer runs, you must execute `c:\inetpub\siportal-settings.cmd`. This file will setup IIS with the settings listed below. If you choose to do a custom install then review the settings below to have a better understanding on how to modify this file.

IIS Backup

The commands below are executed to make a backup before and after the IIS installation and changes.

```
c:\windows\system32\inetsrv\appcmd.exe add backup "SIPortal-Backup"
```

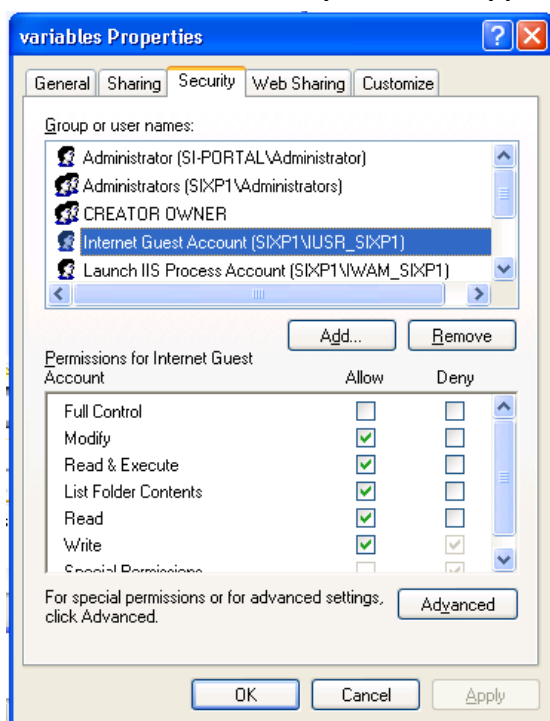
```
c:\windows\system32\inetsrv\appcmd.exe add backup "SIPortal-Backup-After-Install"
```

IIS Setup

```
START /WAIT DISM /Online /NoRestart /Enable-Feature  
/FeatureName:NetFx3 /All /Enable-Feature  
/FeatureName:IIS-ApplicationDevelopment  
/FeatureName:IIS-CommonHttpFeatures /FeatureName:IIS-  
DefaultDocument /FeatureName:IIS-ISAPIExtensions  
/FeatureName:IIS-ISAPIFilter /FeatureName:IIS-  
ManagementConsole /FeatureName:IIS-RequestFiltering  
/FeatureName:IIS-Security /FeatureName:IIS-  
StaticContent /FeatureName:IIS-WebServer  
/FeatureName:IIS-WebServerRole /Enable-Feature /all  
/FeatureName:IIS-NetFxExtensibility /Enable-Feature  
/all /FeatureName:IIS-ASP /FeatureName:IIS-ASPNET
```

Modifies c:\inetpub Permissions

The script makes sure that the c:\inetpub folder can be modified. This is done to ensure that you can run updates directly from the web interface. All settings are saved in a folder called c:\inetpub\variables. The files in this folder contain many settings that for security reasons are not stored in the database. Ensure that the IIS User or the Users group has read/write access to this folder. This is needed to ensure the IT Portal can save your encryption and database settings properly.



```
icacls "c:\inetpub" /grant "users":(OI)(CI)M
```

Increases IIS Response Buffer

If you choose to upload files larger than 4MBs, the script increases the response buffer limit to 64MBs. IIS defaults to 4MBs for the response buffer. 67108864 = 64MB

```
appcmd.exe set config "Default Web Site" -  
section:system.webServer/asp  
/limits.bufferingLimit:"67108864" /commit:apphost
```

```
C:\Windows\System32\inetsrv>appcmd.exe set config "Default Web Site" -section:sy  
stem.webServer/asp /limits.bufferingLimit:"67108864" /commit:apphost  
Applied configuration changes to section "system.webServer/asp" for "MACHINE/WEB  
ROOT/APPHOST/Default Web Site" at configuration commit path "MACHINE/WEBROOT/APP  
HOST"
```

Increases IIS POST Buffer

The script increases the maxRequestEntityAllowed to allow web POSTs that are larger than 200KB. Submitting any data that is larger than 200KB will fail if this is not increased. Examples include entering notes that have embedded images. Some firewalls have text configurations that are larger than 200KB as well. Below example allows you to increase the limit to 64MBs.

```
appcmd set config /section:asp -  
limits.maxRequestEntityAllowed:67108864
```

```
C:\Windows\System32\inetsrv>appcmd set config /section:asp /limits.maxRequestEnt  
ityAllowed:67108864  
Applied configuration changes to section "system.webServer/asp" for "MACHINE/WEB  
ROOT/APPHOST" at configuration commit path "MACHINE/WEBROOT/APPHOST"
```

IIS Trace Logs

Steps below allow us to create detailed logs when you experience an issue with the IT Portal. IT Portal support will use these logs to troubleshoot 500 errors. Use the commands below to enable tracing.

```
appcmd configure trace "Default Web Site" /enablesite
```

```
C:\Windows\System32\inetsrv>appcmd configure trace "Default Web Site" /enablesite
SITE object "Default Web Site" changed
CONFIG "system.webServer/tracing/traceFailedRequests"
```

```
appcmd set config /section:sites -
siteDefaults.traceFailedRequestsLogging.maxLogFileSizeKB:4096
```

```
C:\Windows\System32\inetsrv>appcmd set config /section:sites -siteDefaults.trace
FailedRequestsLogging.maxLogFileSizeKB:4096
Applied configuration changes to section "system.applicationHost/sites" for "MAC
HINE/WEBROOT/APPHOST" at configuration commit path "MACHINE/WEBROOT/APPHOST"
```

```
appcmd.exe set config "Default Web Site" -
section:system.webServer/tracing/traceFailedRequests
/+"[path='*']"
```

```
C:\Windows\System32\inetsrv>appcmd.exe set config "Default Web Site" -section:sy
stem.webServer/tracing/traceFailedRequests /+"[path='*']"
Applied configuration changes to section "system.webServer/tracing/traceFailedRe
quests" for "MACHINE/WEBROOT/APPHOST/Default Web Site" at configuration commit p
ath "MACHINE/WEBROOT/APPHOST/Default Web Site"
```

```
appcmd.exe set config "Default Web Site" -
section:system.webServer/tracing/traceFailedRequests
/+"[path='*'].traceAreas.[provider='ASP',areas='Rewrit
e,RequestRouting',verbosity='Verbose']"
```

```
C:\Windows\System32\inetsrv>appcmd.exe set config "Default Web Site" -section:sy
stem.webServer/tracing/traceFailedRequests /+"[path='*'].traceAreas.[provider='W
WW Server',areas='Rewrite,RequestRouting',verbosity='Uerbose']"
Applied configuration changes to section "system.webServer/tracing/traceFailedRe
quests" for "MACHINE/WEBROOT/APPHOST/Default Web Site" at configuration commit p
ath "MACHINE/WEBROOT/APPHOST/Default Web Site"
```

```
appcmd.exe set config "Default Web Site" -  
section:system.webServer/tracing/traceFailedRequests  
/[path='*'].failureDefinitions.statusCodes:"500"
```

```
C:\Windows\System32\inetsrv>appcmd.exe set config "Default Web Site" -section:sy  
stem.webServer/tracing/traceFailedRequests /[path='*'].failureDefinitions.status  
Codes:"500"  
Applied configuration changes to section "system.webServer/tracing/traceFailedRe  
quests" for "MACHINE/WEBROOT/APPHOST/Default Web Site" at configuration commit p  
ath "MACHINE/WEBROOT/APPHOST/Default Web Site"
```

DLL Registration

The installer registers c:\inetpub\SIPortal-Uploader-x64.dll and c:\inetpub\SIPortal-Uploader-x86.dll depending on your processor.

```
regsvr32.exe c:\inetpub\SIPortal-Uploader-x86.dll
```

```
regsvr32.exe c:\inetpub\SIPortal-Uploader-x64.dll
```

Session Timeouts

IIS 7+ application pools have a default timeout of 20 minutes that supersedes the session timeout. You can manually adjust your IIS application pool's (advanced settings) -> Idle Time-out.

<http://tinyurl.com/SIPortalAppPool>

```
appcmd set config /section:applicationPools  
/[name='DefaultAppPool'].processModel.idleTimeout:0.08  
:00:00
```

Variables Virtual Directory

The installer creates a folder called c:\inetpub\variables. This folder contains many settings that for security reasons are not stored in the database. For example the encryption key used to decrypt usernames and passwords is stored here. The installer configured a virtual directory from within IIS to point this path to the variables physical directory. This is to ensure that if you choose to reinstall or if you receive an update that may contain default settings, your configuration settings won't be lost. Once you lose your settings and forget the passphrase used for encrypting usernames and passwords, you will not be able to decrypt your passwords in the IT Portal. Be sure to backup this folder.

```
AppCmd.exe ADD vdir /app.name:"Default Web Site/"  
/path:/"variables"  
/physicalPath:"c:\inetpub\variables"  
  
if not exist c:\inetpub\variables\variables.inc copy  
c:\inetpub\variables\empty.txt c:\inetpub\variables\variables.inc
```

```
C:\Windows\System32\inetsrv>AppCmd.exe ADD vdir /app.name:"Default Web Site/" /p  
ath:/"variables" /physicalPath:"c:\inetpub\variables" _
```

Send Errors to Browser

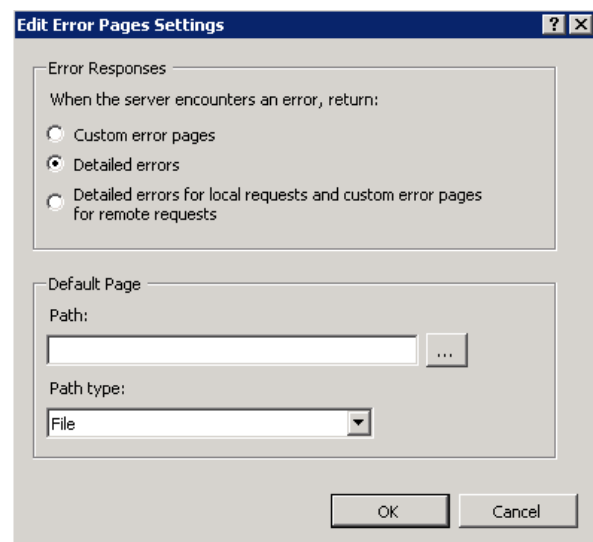
To assist with support, IIS is configured to send the errors to the browser. When an error occurs, the user can provide the onscreen error to support.

Open IIS and ensure errors are not sent to the browser

- IIS Websites
- Default Web Site
- ASP
- Debugging Properties
- Send Errors to Browser (set to true)
- Apply

Ensure users get a custom error

- IIS Websites
- Default Web Site
- Error Pages
- 500
- Click "Edit Feature Settings..."
- Specify "Detailed Errors"
- Apply



```
appcmd set config "Default Web Site" -  
section:httpErrors -errorMode:Detailed
```