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**#iis**

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# About

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# Chapter 1: Getting started with iis

## Remarks

This section provides an overview of what IIS is, and why a developer might want to use it.

It should also mention any large subjects within IIS, and link out to the related topics. Since the Documentation for IIS is new, you may need to create initial versions of those related topics.

## Examples

### Installation or Setup

The installation instructions are available on IIS.net. See this for installing [IIS 8.5](#)

Read [Getting started with iis online](#): <https://riptutorial.com/iis/topic/2753/getting-started-with-iis>

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# Chapter 2: Installing Web Deploy

## Introduction

Installing Web Deploy allows quick installation of web applications directly from the development environment using Visual Studio.

Installation types:

online - target Windows server has Internet access - installation is simple using Installing and configuring Web deployment on servers with Internet connection example below

offline - target Windows server is offline - installation is rather complex because several components and configuration must be done manually (or scripted)

## Examples

### Installing WebDeploy on IIS with ASP.NET

1. Install WebServer Role
2. Install WebDeploy 3.6 from [MSDN](#)
3. Activate **ASP.NET 4.6** under *Web Server (IIS) > Web Server > Application Development*

### Installing and configuring Web deployment on servers with Internet connection

In order to be able to directly deploy web project changes to an Web Server, the following steps must be followed. If target server has Internet access, the process is quite simple, as Microsoft has a Web Platform package to do almost everything that is needed.

#### 1. Cleanup

Make sure that `C:\Program Files\IIS` does not contain older version of Microsoft Web Deploy. If it contains, uninstall it (them) from Add/remove programs and remove any files left

#### 2. Web platform installer

Install Web platform installer (WPI) from [here](#)

#### 3. Web deploy installation

Run WPI, search for Web Deploy 3.6 for Hosting Servers and install everything it contains. It will take care to install all the required dependencies (e.g. for SQL deployment) and also make IIS ready to be configured for Web deployments

#### 4. IIS configuration

IIS must be configured in order to allow web deployments on one or more of its Web sites.

- **Rights:** access web site -> IIS manager permissions and configure which users are allowed to publish. **NOTE:** in some particular configuration, trying to select a user might lead to IIS manager crashing. In these rare cases, just enter username manually - e.g. domain\username
- **Web deploy Publishing configuration** - Right click on Web site -> Deploy... -> Configure Web Deploy Publishing

**NOTE:** In order to for publishing to work, selected port (default is 8172) must be opened (it might be blocked in some companies).

Full installation details (step by step with relevant pictures) can be found [here](#)

## Installing and configuring Web deployment on servers without Internet connection

Fully configuration of Web deployment without Internet connection (offline) is harder to make because Web platform installer (UI) operates by querying packages list and content from an Internet location.

1. **Cleanup** Make sure that C:\Program Files\IIS does not contain older version of Microsoft Web Deploy. If it contains, uninstall it (them) from Add/remove programs and remove any files left
2. **Web Platform Installer v5 Command Line** (WebPICMD.exe) allows to export and install packages without the "online" requirement. Full installation and usage instructions can be found [here](#).

### 3. Required packages for Web Deploy

- install Web Deploy into an "online" machine
- export packages for it using WPI Command Line

```
C:\Program Files\Microsoft\Web Platform Installer>WebPICMD.exe /Offline /Product s:"WDeployPS" /Path:C:\OfflineCache
```

Dependencies list will be output:

```
The software that you obtain using the Web Platform Installer Command Line Tool is licensed to you by its owner. Microsoft grants you no rights for third part software.
Loading products in online feeds ...

Loading products in offline feeds...
Creating offline cache for following products:
WDeployPS
netframework2
WindowsInstaller31
PowerShell2
```

PowerShellMsu  
ManagementService  
IISManagementConsole  
WASConfigurationAPI  
NetFx4Extended-ASPNET45  
WASNetFxEnvironment  
NetFx3  
IIS7  
StaticContent  
WASProcessModel  
DefaultDocument  
DirectoryBrowse  
HTTPErrors  
HTTPLogging  
LoggingTools  
RequestMonitor  
RequestFiltering  
StaticContentCompression  
ASPNET  
NETExtensibility  
ISAPIExtensions  
ISAPIFilters  
WDeploy\_3\_5  
WDeployNoSMO  
WDeployNoSMO\_3\_5  
NetFx4  
WDeploy\_Only\_3\_5  
NETFramework4  
WindowsImagingComponent  
IIS51  
IIS60  
NETFramework45  
VWD11\_Only\_BaseLocale  
VWD2012IncompatibleOSs  
VS11\_Not\_RTM\_Block  
VWD11\_RC\_Below\_Block  
SMO  
SMO\_11\_1  
SQLCLRTypes\_11\_1  
WindowsInstaller45  
SQLCLRTypes\_Only\_x86\_11\_1  
SQLCLRTypes\_Only\_x64\_11\_1  
SMO\_11\_1\_Only\_x86  
SMO\_11\_1\_Only\_x64  
SMO\_10\_5  
SQLNativeClient\_10\_5  
SQLCLRTypes\_10\_5  
SQLCLRTypes\_x86\_10\_5  
SQLCLRTypes\_x64\_10\_5  
SMO\_Only\_x86\_10\_5  
SMO\_Only\_x64\_10\_5  
WindowsVista\_OrUp  
WindowsVista\_Below  
DACFX\_3\_1  
SQLDOM\_11\_0  
SQLCLRTypes\_11\_0  
SQLCLRTypes\_Only\_x86\_11\_0  
SQLCLRTypes\_Only\_x64\_11\_0  
DACFX\_X64\_3\_1  
DACFX\_X86\_3\_1  
WindowsVista\_Below\_DACFX

```
SMO_11_0
SQLNativeClient_11_0
SMO_Only_x64_11_0
SMO_Only_x86_11_0

...

All offline cache operations completed successfully.
To use the new offline feed, please run the following from the command line:

WebPiCmd.exe /Install /Products:<products you want> /XML:<Offline main feed>
Done !
```

The list is much longer than the actual needed packages for a particular Windows Server because it exports for both x86 and x64 and assumes that nothing is installed.

One way is to use `/Install` option to install the packages, but a much faster way is to install **Microsoft Visual Studio Express 2012 for Web** from [here](#). This will install all required prerequisites. Of course, Visual Studio itself is not required on target server and can be uninstalled.

Also, **Microsoft Web Deploy 3.5** can be upgraded to [Microsoft Web Deploy 3.6](#).

#### 4. IIS Management Service installation

Install **Management Service** from Server Manager -> Local Server -> Server Roles -> Web Server (IIS) -> Management Tools -> Management Service

**NOTE:** sanity check before going to configuration

- check that **Web Deployment Agent Service** is running
- check that **Web Management Service** is running

#### 5. IIS configuration

IIS must be configured in order to allow web deployments on one or more of its Web sites.

Rights: access web site -> IIS manager permissions and configure which users are allowed to publish. NOTE: in some particular configuration, trying to select a user might lead to IIS manager crashing. In these rare cases, just enter username manually - e.g. domain\username

Web deploy Publishing configuration - Right click on Web site -> Deploy... -> Configure Web Deploy Publishing

NOTE: In order for publishing to work, selected port (default is 8172) must be opened (it might be blocked in some companies).

Full installation details (step by step with relevant pictures) can be found [here](#)

## Excluding Files and Folders from Web Deployment

Typically, some files from the Web Application should not be overwritten when performing the deployment (e.g. `web.config`). This can be accomplished by:



**1) Excluding from output** - which means setting **Build action** to **None**. This is the easiest way, but it might not work for some particular files or folders, that must be in the output for the application to run locally

**2) Excluding Files and Folders from a Web Package** by creating a special xml file in the Web application root folder. E.g.:

```
File name = [project name].wpp.targets
File content =

<Project ToolsVersion="4.0"
  xmlns="http://schemas.microsoft.com/developer/msbuild/2003">
  <ItemGroup>
    <!-- this will exclude all files from Internal folder -->
    <ExcludeFromPackageFolders Include="Internal">
      <FromTarget>ContactManager.Mvc.wpp.targets</FromTarget>
    </ExcludeFromPackageFolders>

    <!-- this will exclude specified files -->
    <ExcludeFromPackageFiles Include="Scripts\jquery-1.4.4-
vsdoc.js;Scripts\jquery-1.4.4.js;Scripts\jquery-ui.js;Scripts\jquery.unobtrusive-
ajax.js;Scripts\jquery.validate-
vsdoc.js;Scripts\jquery.validate.js;Scripts\jquery.validate.unobtrusive.js;Scripts\MicrosoftAjax.debug

      <FromTarget>ContactManager.Mvc.wpp.targets</FromTarget>
    </ExcludeFromPackageFiles>
  </ItemGroup>
</Project>
```

More details can be found [here](#).

## Web deployment automatic backups

Web deployment offers the option to automatically backup target Web site (not target Web application!) on deployment. This is recommended to allow web application rollback.

In order to configure automatic backups, the following steps must be followed:

### 1) Enable backups

Open `%programfiles%\IIS\Microsoft Web Deploy V3\scripts\BackupScripts.ps1` in Powershell

Execute the following commands:

```
# Turns on all backup functionality
TurnOn-Backups -On $true

# Turns off all backup functionality
TurnOn-Backups -On $false

# Changes default global backup behavior to enabled
Configure-Backups -Enabled $true

# Changes default backup behavior for site "foo" to enabled
Configure-Backups -SiteName "foo" -Enabled $true
```

```

# Changes the path of where backups are stored to a sibling directory named
"siteName_snapshots".
# For more information about path variables, see the "backupPath" attribute in the section
# "Configuring Backup Settings on the Server for Global usage manually in IIS Config"
Configure-Backups -BackupPath "{SitePathParent}\{siteName}_snapshots"

# Configures default backup limit to 5 backups
Configure-Backups -NumberOfBackups 5

# Configures sync behavior to fail if a sync fails for any reason
Configure-Backups -ContinueSyncOnBackupFailure $false

# Adds providers to skip when performing a backup
Configure-Backups -AddExcludedProviders @("dbmysql","dbfullsql")

# Allows a site administrator to enable backups and set the number of backups at the site
level
Configure-BackupSettingsProvider -CanSetEnabled $true -CanSetNumBackups $true

# Allows a site administrator to control which providers they want to skip in a backup, as
# well as whether they can continue a sync after a backup failure
Configure-BackupSettingsProvider -CanSetContinueSyncOnBackupFailure $true -
CanAddExcludedProviders $true

```

## 2) Check backup settings on global or site level

```

Get-BackupSettings
Get-BackupSettings -SiteName "Default Web Site"

```

## 3) Further backup customization

Backup settings can be configured for each web site. Open `applicationHost.config` and add backup settings for its specific location:

```

<location path="siteName">
  <system.webServer>
    <wdeploy>
      <backup enabled="true" numberOfBackups="4">
        <excludedProviders>
          <clear />
          <provider name="dbfullsql" />
        </excludedProviders>
      </backup>
    </wdeploy>
  </system.webServer>
</location>

```

For security related information and other information related to command line usage, access [this article](#).

Read [Installing Web Deploy online](https://riptutorial.com/iis/topic/8225/installing-web-deploy): <https://riptutorial.com/iis/topic/8225/installing-web-deploy>

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# Credits

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1	Getting started with iis	<a href="#">Community</a> , <a href="#">Kaushal Kumar Panday</a> , <a href="#">numaroth</a>
2	Installing Web Deploy	<a href="#">Alexei</a> , <a href="#">Daniel</a>