

Configuration & Deployment

Putting ASP.NET MVC Into Production



Overview

- Configuration files for .NET
- ASP.NET MVC and IIS
- Web Deployment Packages

Configuration Files

- **XML files control environmental settings**
 - Authentication
 - Compilation
 - Connections
 - Cryptography
 - Custom errors
- **Configuration is extensible**

Accessing Settings

- **Use the ConfigurationManager from System.Configuration**
 - Includes shortcuts to AppSettings and ConnectionStrings
 - Can also use manager class to open config files for editing and update

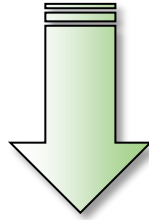
```
var server = ConfigurationManager.AppSettings["FileServerName"];

var modulesSection =
    ConfigurationManager.GetSection("system.web/httpModules")
    as HttpModulesSection;

var installedModules = modulesSection.Modules.Count;
```

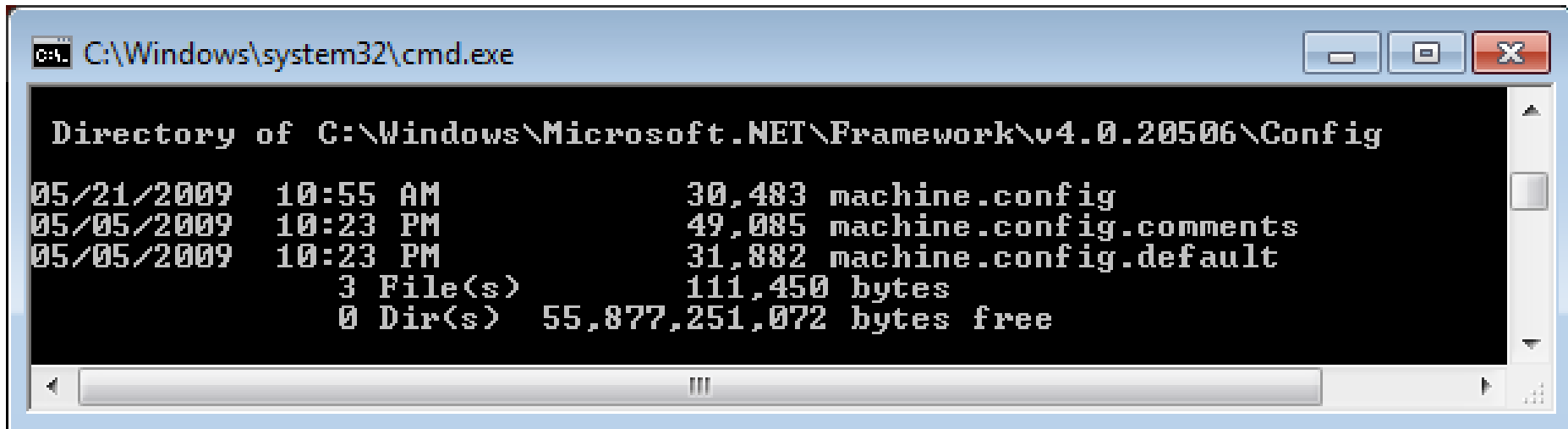
Hierarchical Configuration

- **Each application inherits settings from higher level config files**
 - Machine config
 - Machine web.config
 - Parent's web.config
 - Your web.config
- **Lower level settings can override higher level settings**



Machine Configuration

- **Machine.config** is located in the runtime's Config directory
 - Note: .NET 3.5 uses the .NET 2.0 Config directory
 - .comments file documents available settings
 - .default file contains the runtime's default settings



A screenshot of a Windows command prompt window. The title bar shows the path `C:\Windows\system32\cmd.exe`. The command prompt displays the output of a `dir` command for the directory `C:\Windows\Microsoft.NET\Framework\v4.0.20506\Config`. The output lists three files: `machine.config` (30,483 bytes), `machine.config.comments` (49,085 bytes), and `machine.config.default` (31,882 bytes). It also shows a summary: 3 files, 111,450 bytes, and 55,877,251,072 bytes free.

```
C:\Windows\system32\cmd.exe

Directory of C:\Windows\Microsoft.NET\Framework\v4.0.20506\Config

05/21/2009  10:55 AM                30,483 machine.config
05/05/2009  10:23 PM                49,085 machine.config.comments
05/05/2009  10:23 PM                31,882 machine.config.default
               3 File(s)                111,450 bytes
               0 Dir(s)  55,877,251,072 bytes free
```

Machine Level Web.config

- **Controls settings for all ASP.NET applications on a computer**
 - Same location as machine.config
 - Also contains .default and .comment files
- **Includes**
 - Default assemblies, namespaces, providers, security settings

```
<system.web>
  <authorization>
    <allow users="*" />
  </authorization>
  <!-- ... -->
```

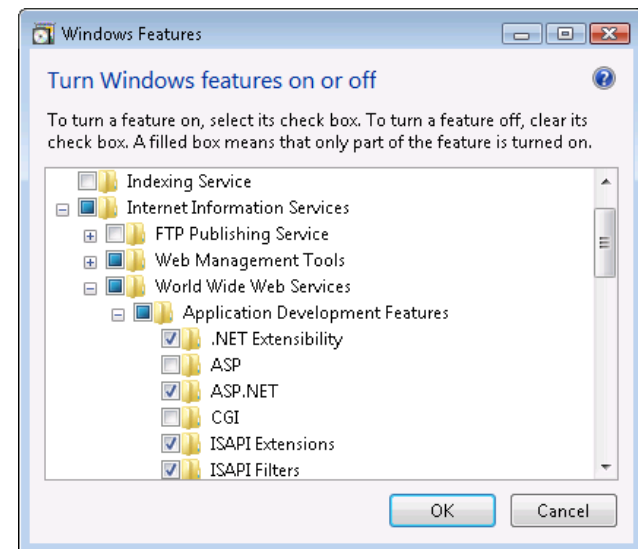
Custom Errors

- **HandleError** attribute renders Error view
 - Custom errors must be on
 - Error view passed a HandleErrorInfo model

```
[HandleError]
public class MovieController : Controller
{
    // ...
}
```


Hosting ASP.NET MVC

- **Building MVC projects produces a .dll**
 - Needs a host process to execute
- **IIS Express is a development host**
 - Runs with your identity
- **IIS is a production web server**
 - Available on both server and personal version of Windows
 - “Off by default”.

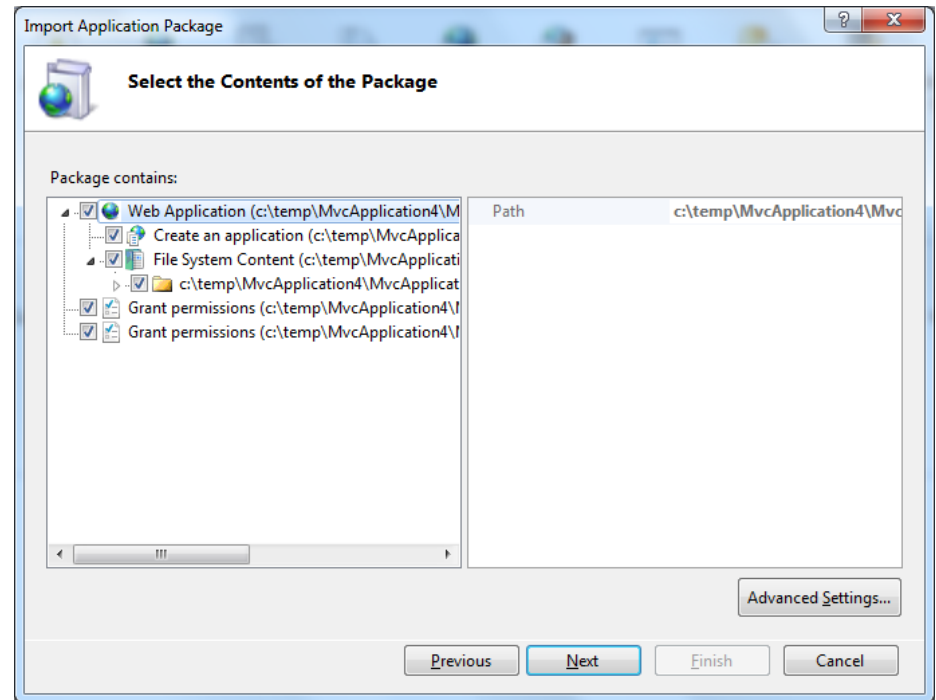


Web.config Transformations

- **Change or replace web.config settings during a publish**
 - Database names
 - Custom error settings
 - Debug settings
 - Application settings

Web Deploy

- **Package, archive, and deploy web applications**
 - Content
 - Databases
 - Registry, GAC, ACLs
- **Web server migration and synchronization**
 - Command line and GUI tools



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Summary

- **Controllers**
- **Views**
- **Using JavaScript**
- **The Entity Framework**
- **Security**
- **Deployment**

<https://odetofoodmvc4.codeplex.com/>