IIS and the MMC

When IIS 4 was launched as part of the NT 4.0 Option Pack, one of the biggest changes was the use of the Microsoft Management Console (MMC) as the basis for the new IIS management system.

The MMC was, and still is, a general purpose application that uses a series of snap-ins to provide interfaces to control different aspects of the operating system. The MMC actually provides most of the interfaces for managing Windows—from controlling the execution of Services to the local and DFS disk management subsystems.

The IIS component is the main interface to the IIS system, providing the easiest and most complete method of managing the different aspects of IIS.

Using the MMC

The MMC was designed with a number of features in mind to help administer a network of machines and services simultaneously. First, through the snap-in component, you can manage a number of services just by installing the corresponding snap-in. This eliminates the requirement for separate applications—you just use a single console and different snap-ins—or complicated and often unwieldy solutions such as Web-based administration interfaces, remote terminal systems such as terminal services, or command-line only tools.

Second, the MMC provides a method of remote administration by enabling snap-in components to work with a remote MMC client. This makes it possible to administer all of your IIS servers from a single machine running the MMC—we just connect remotely to the machine, provide the necessary credentials to administer the machine, and then use the MMC snap-in components as if we were managing them locally.

Third, we can create custom MMC snap-in sets that control specific groups of functionality in a server, which can be useful if you want to limit access to certain components to certain administrators and individuals.

To start the MMC, you can use any of the following methods:

- Open any of the core administration consoles, such as Computer Management, which includes the IIS snap-in, or one of the other administration tools—most of which are based on the MMC with one or more of the snap-ins relevant to that service.

- Click Start, Run, type `mmc`, and click OK. This will open a blank MMC window. You'll need to add the snap-ins that you want to use from within the MMC by using the Add/Remove Snap-ins option within the File menu.

- Type `mmc` and press Return within a command prompt.

- Right-click on a My Computer icon and choose Manage from the pop-up menu, which will open the Computer Management console.

The IIS Component

The IIS snap-in for MMC is contained within the iis.msc file stored within the `%systemroot%\system32\inetsrv` folder. You can interactively add this to an existing MMC session, or you can directly execute it as a way of opening an MMC with only the IIS snap-in configured.

To specifically open the IIS manager component within an MMC, you should do one of the following:

- Select Start, Administrative Tools, Internet Information Services (IIS) Manager.

- Select Start, Run, type `inetmgr` and click OK.

- Type `inetmgr` and press Return within a command prompt.

- Select Start, Run and type `%systemroot%\system32\inetsrv\iis.msc`.

- Type `%systemroot%\system32\inetsrv\iis.msc` and press Return within a command prompt.

Running `inetmgr` or opening the `iis.msc` component directly are the best methods if you are an alien system or if you have accidentally removed the link from the Start menu or don't have access to the menu item. They should work for any user who is a member of the Administrators group.

The command line/Run methods can also be combined with the `runas` command to execute the console with administrator privileges. For example, the command

```
runas /user:Administrator "mmc %systemroot%\system32\inetsrv\iis.msc"
```

will prompt you for a password and then run the IIS console with administrator credentials. This is the recommended way of performing simple administration without having to log out and back in to Windows.

Saving Custom Snap-in Sets

Once you've created an MMC that includes the snap-ins that you normally use for a specific task, you can save your settings into an MMC file, which you can then use to open the MMC console with those settings.

For example, you might create a custom IIS console that includes the following snap-ins:

- .NET Framework 1.1 Configuration
- Certificates
- Certification Authority
- Component Services
- Event Viewer
- Indexing Service
- Internet Authentication Service (IAS)
- Internet Information Services (IIS)
- Performance Logs and Alerts
- Shared Folders

This is actually the set I use for the majority of my IIS work because it covers most of the bases with respect to Web administrations.