

## Microsoft IIS Installation and Configuration Guide for Helm 4

*How to install and configure Microsoft IIS for use with Helm*

WebHost Automation Ltd  
<http://www.webhostautomation.com/>  
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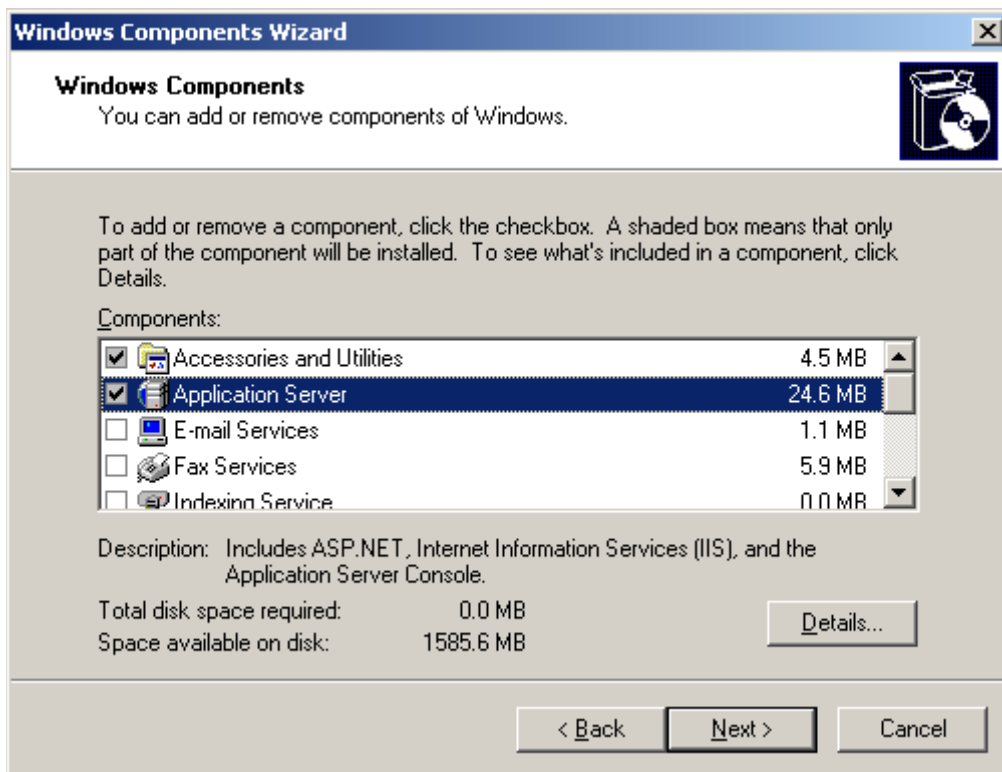
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# Installing IIS

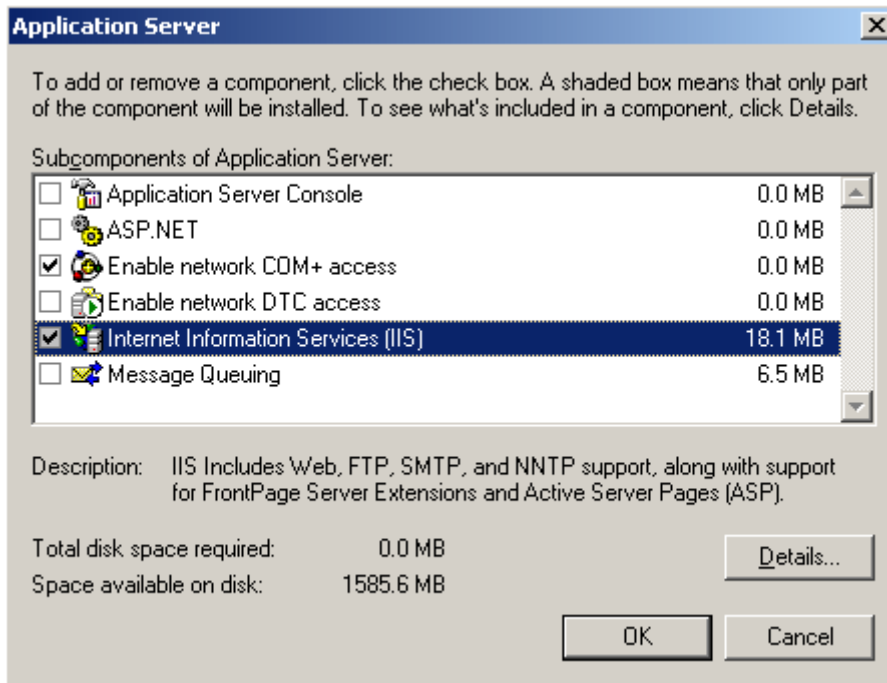
Depending on how your server is set up, you may or may not have Microsoft IIS installed. IIS is a **mandatory install** if you want to use Helm. It is used to host the Helm website, and will also host any websites you wish to create.

**Note:- These are guidelines only. We will not provide support for IIS or any other 3<sup>rd</sup> party applications directly.**

- 1.) Go to Start > Control Panel > Add/Remove Programs > Add/Remove Windows Components.
- 2.) Double-click Application Server.



- 3.) You will see that Internet Information Services (IIS) is not checked. Check the box. Press "OK".



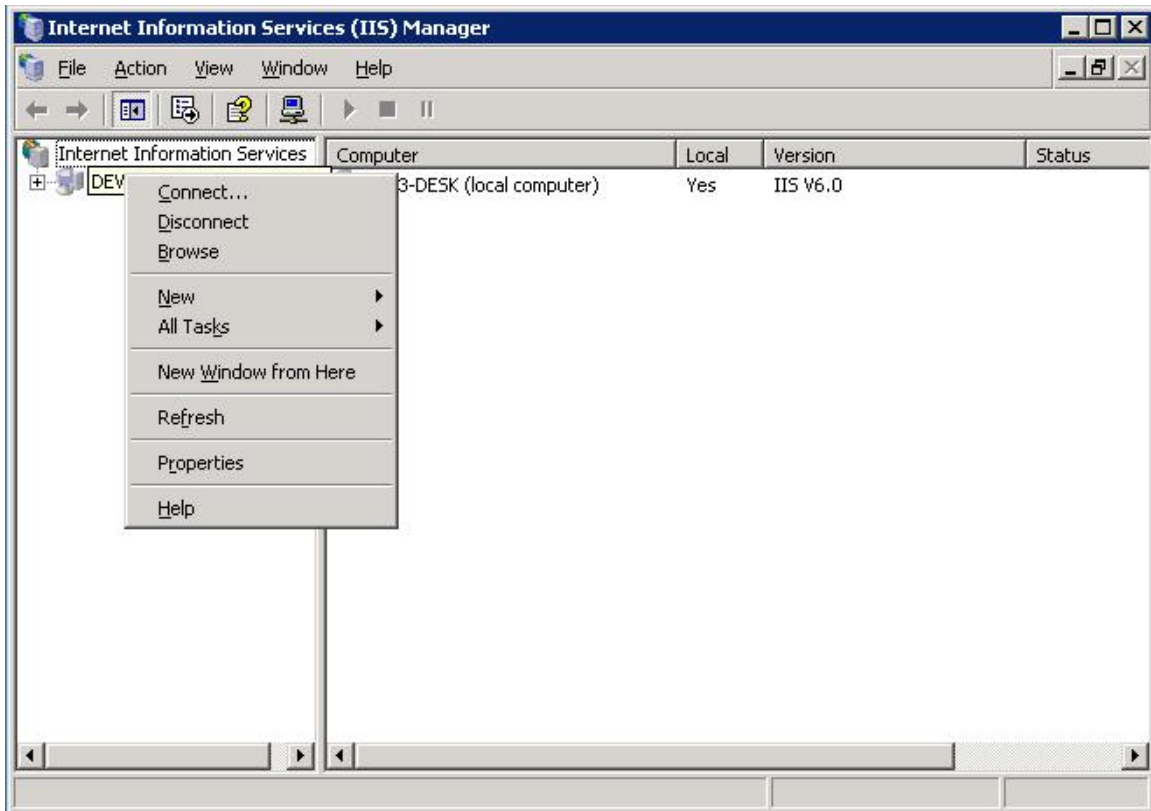
You may need your Windows CD in the server drive before you can do this.

Once completed, IIS is installed. You will now need to refer to IIS documentation to start configuring it to your requirements.

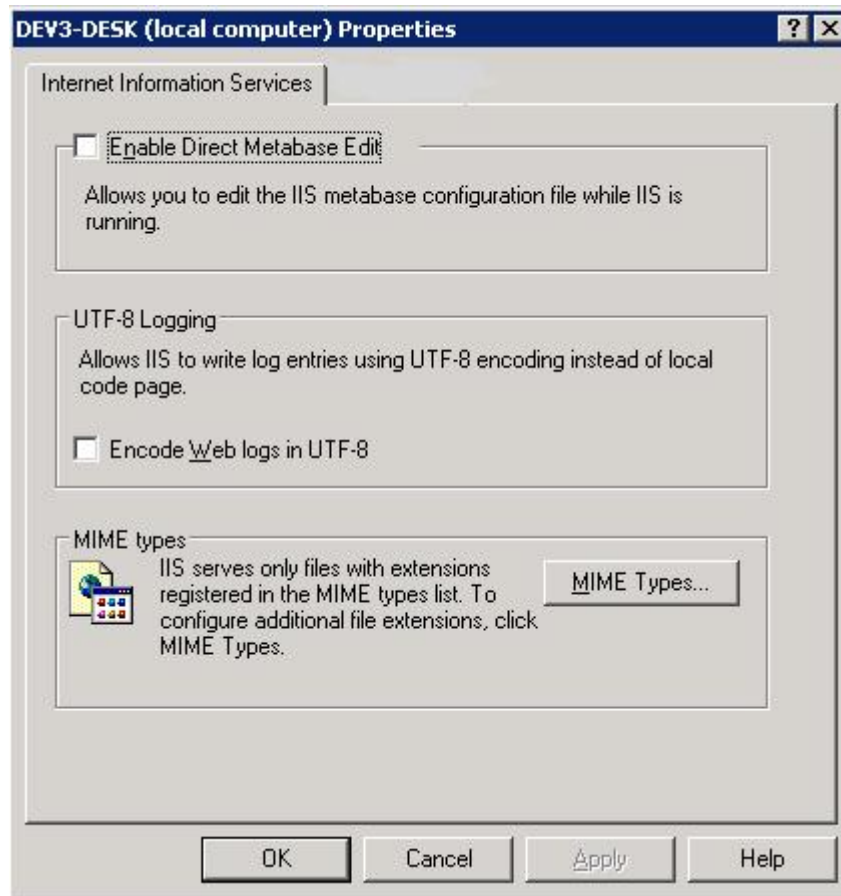
## Using Helm with Microsoft IIS 5 or 6

Helm will control IIS 5 or 6 on the control server or any remote server. Although IIS will be controlled by Helm with no additional configuration, there are some alterations that should be made to the global IIS settings to take advantage of everything Helm has to offer.

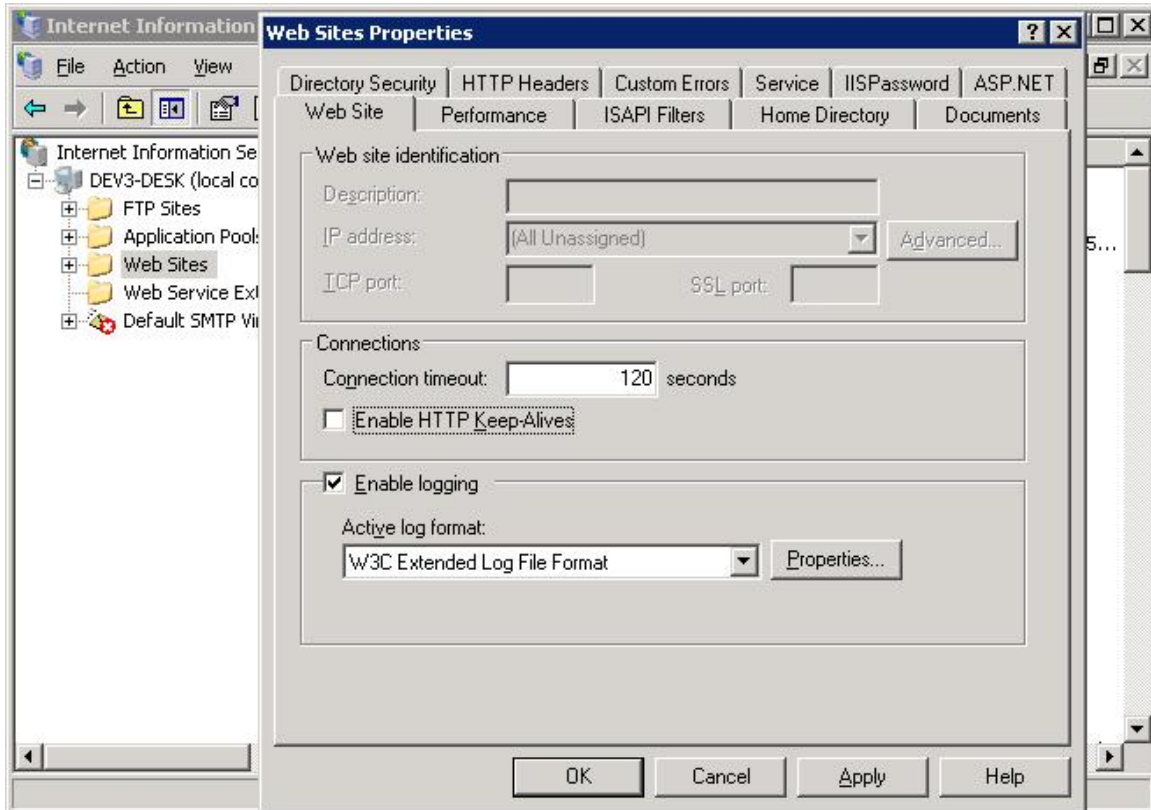
To start, run the IIS interface on the server you wish Helm to control. Right click on the server name on the left hand side of the screen and click on "Properties" on the menu that drops down.



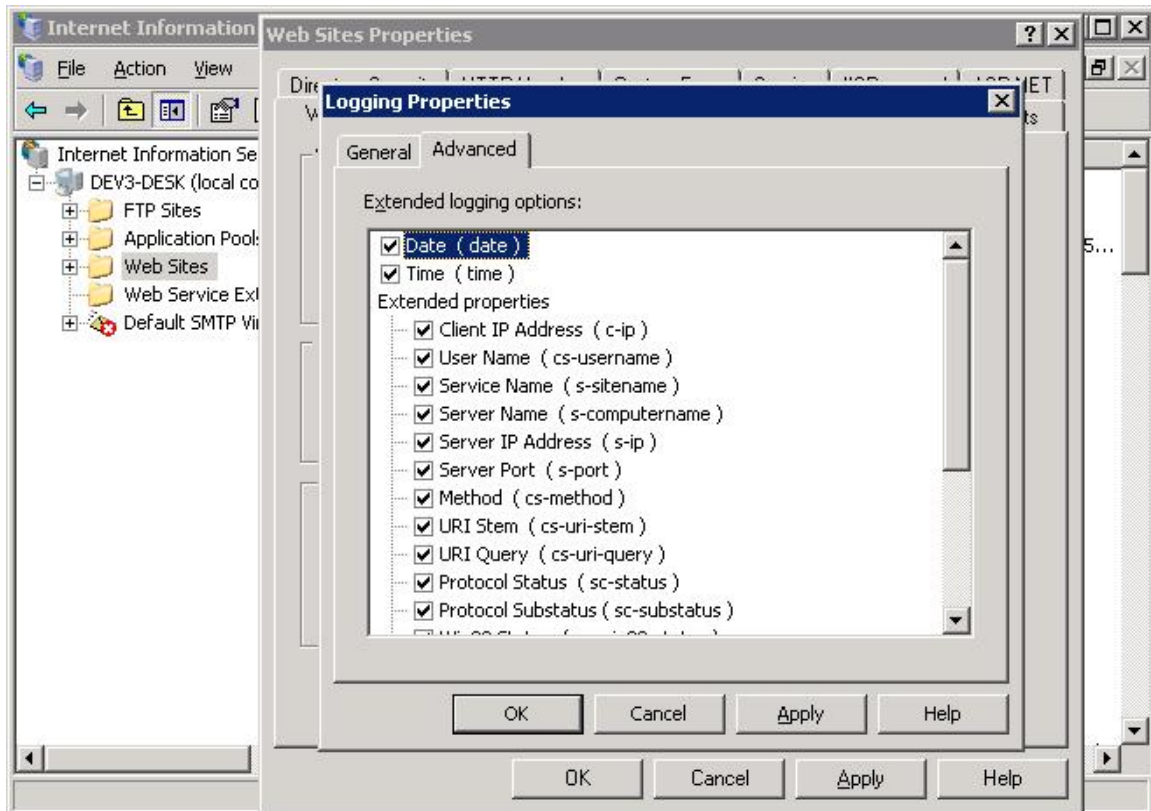
You will be presented with the initial configuration screen. Here you have the option to enable the IIS metabase configuration, UTF-8 logging and add new MIME types should you require them. These settings can be left unchecked if not required.



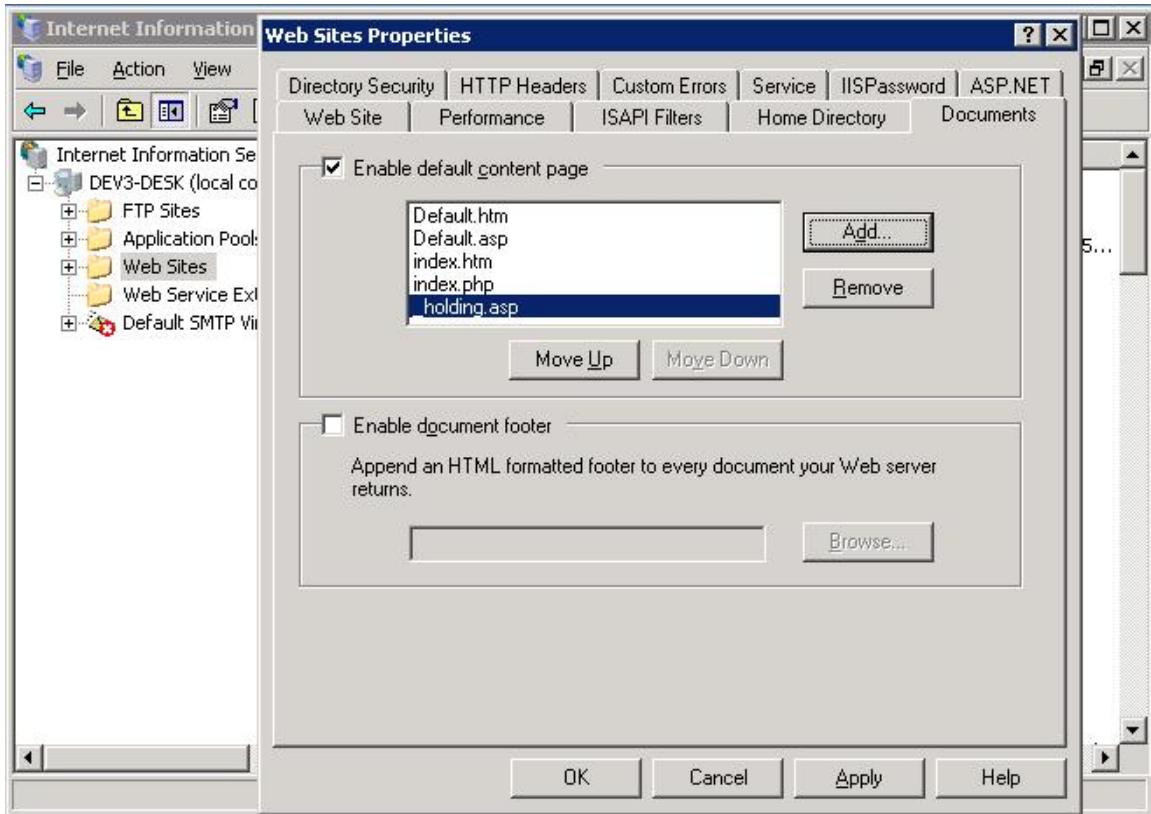
Maximizing the local computer server name will display further folders. For e.g. FTP sites, Application Pools, Web Sites etc. Depending on the services/windows components you have installed. Right Click on the Web sites folder and select properties. You will now be presented with the IIS global (default) settings for IIS sites. The first change to make is to the IIS log files that the websites generate. Click the "Web Site" tab and at the bottom click "Properties" next to the drop down box called "Active log format".



Select the 'Advanced' tab at the top of the form that appears. A number of options will be unchecked on this page. To ensure that products such as Livestats pick up the most data, and to ensure that Helm can monitor the bandwidth that web sites are using, you will need to ensure that **all** of the options are checked under the "Extended Properties" tree. Click "OK" twice to confirm the changes.

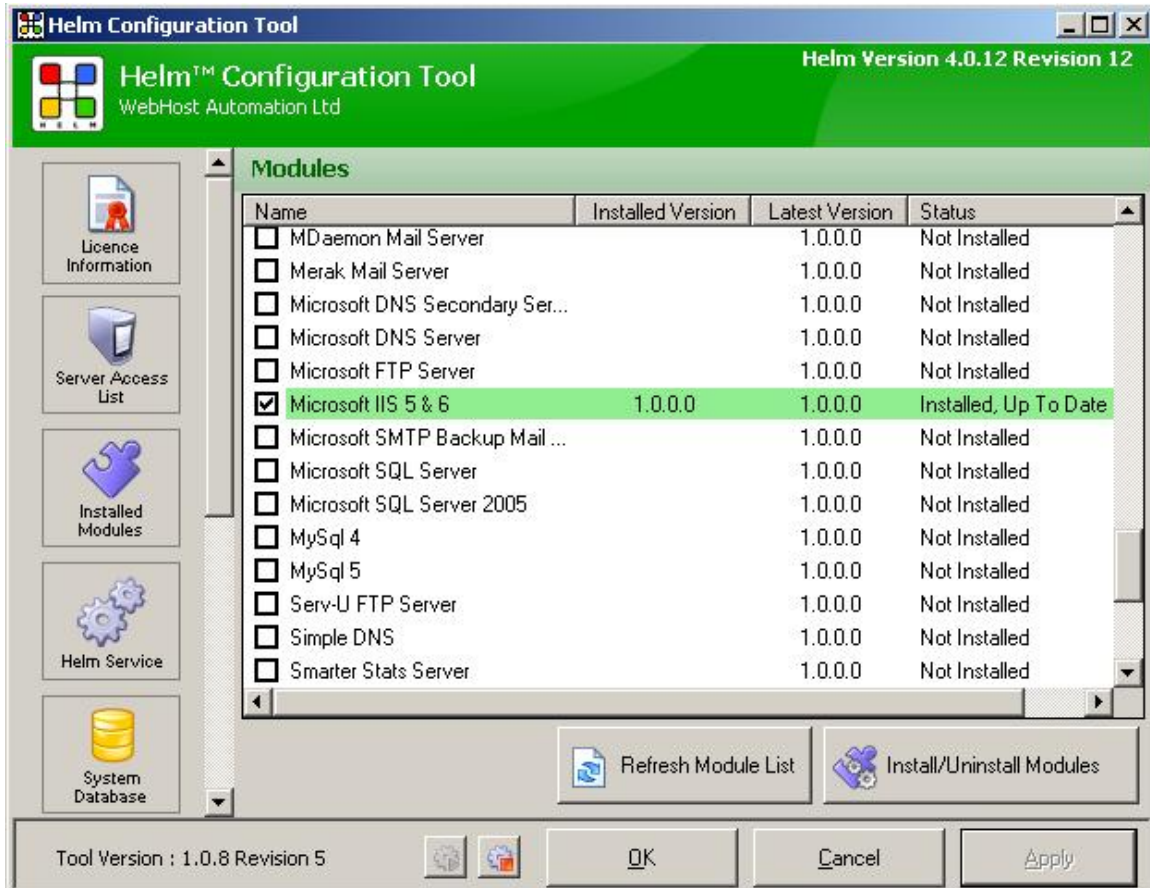


Now select the "Documents" tab from the top of the main global properties form. By default IIS only has a couple of default documents that are loaded when someone visits a web folder without specifying the folder to load. It is advised to add all of the document types that you are planning to support including any Perl, CGI, SHTML and PHP files. Click "Apply" to confirm the new changes.



## Setting up the IIS Module in Helm

Open up the Helm Configuration tool (this can be found in the tools sub-folder usually located here: C:\Program Files\WebHost Automation\Helm4\Tools) and click on the 'Installed Modules' button on the left.



Scroll down the list of modules available and ensure that the 'Microsoft IIS 5 & 6' module is checked and that it is 'Installed, Up to date'. If not, you can check the module, and then click the 'Install/Uninstall Modules' button to install the module. Once installed, you can configure the MS IIS service within the Control Panel itself.

## Setting up an IIS Service in Helm

In Helm, go to:

[Home](#) > [Helm System](#) > [Servers](#) > [\[Your Server\]](#) > [Services](#)

Create a new service, give it a name and then choose the 'Web: Microsoft IIS 5/6' provider from the dropdown box.

Click Next and you will be presented with the following screen:

The screenshot shows the configuration page for a Microsoft IIS 5/6 service in Helm. The provider is set to 'Microsoft IIS 5/6'. The 'Friendly Name' is 'Default Web Service'. The 'IP Address' is '192.168.1.181' with a dropdown arrow and a link to 'Create new IP Address...'. The 'Port' is '80'. The 'Host Header Prefixes' field contains 'www'. The 'Web Physical Path' is 'C:\Domains'. The 'Website Folder Name' is 'wwwroot'. The 'Log File Folder Name' is 'logs'. The 'Sub Domain Folder Name' is 'SubDomains'. The 'Backup Directory' is 'Backup'. The 'Active Dir Server' is empty. The 'Web User Group' is 'HelmWebUsers'. The 'Default App Pool' is 'DefaultAppPool'. The '.Net 2.0 Default App Pool' is 'DefaultAppPool2'. There are two checked checkboxes: 'Make ASP.Net v1 available to users' and 'Make ASP.Net v2 available to users'. The 'Shared SSL Domain' is empty. The 'Default Shared SSL Folder' is 'SSL'. The 'Pre Propagation Domain Name' is empty. There is an unchecked checkbox 'Keep copies of files from deleted domains'. The 'Deleted Domains Physical Path' is 'C:\DeletedDomains'. At the bottom, there is a 'Resource Assignment' section and a 'Save' button.

Provider: Microsoft IIS 5/6

Friendly Name: \* Default Web Service

IP Address: 192.168.1.181 (192.168.1.181) [Create new IP Address...](#)

Port: 80

Host Header Prefixes: www

Web Physical Path: \* C:\Domains

Website Folder Name: \* wwwroot

Log File Folder Name: \* logs

Sub Domain Folder Name: SubDomains

Backup Directory: \* Backup

Active Dir Server:

Web User Group: \* HelmWebUsers

Default App Pool: \* DefaultAppPool

.Net 2.0 Default App Pool: \* DefaultAppPool2

Make ASP.Net v1 available to users

Make ASP.Net v2 available to users

Shared SSL Domain:

Default Shared SSL Folder: SSL

Pre Propagation Domain Name:

Keep copies of files from deleted domains

Deleted Domains Physical Path: C:\DeletedDomains

**Resource Assignment**

Save

Here is a summary of the different fields that will be presented to you:

**Friendly Name:-** Enter a friendly name of the Service you are adding (e.g. "Default Web Service")

**IP Address:-** Choose the IP Address from the dropdown on which you want the web service to communicate on. If you want to create a new IP Address, click the link by the side of the dropdown.

**Port:-** Choose the default TCP port that all domains will use upon their creation.

**Host Header Prefixes:-** If you want specific host headers to be added to a domain upon its creation, enter one per line here. For instance, "www" is added by default so in IIS you will see both "domain.com" and "www.domain.com". If you added a prefix of "support" in this field, for example, then you would also have "support.domain.com" added to IIS.

**Web Physical Path:-** Enter the root path that you want to store your domains in (by default this location is "C:\Domains").

**Website Folder Name:-** Enter the name of the folder that you want a website's files to be stored in (by default this folder is called "wwwroot").

**Log File Folder Name:-** Enter the name of the folder that you want a website's bandwidth logs to be stored in (by default this folder is called "logs").

**Sub Domain Folder Name:-** Choose a name for the folder that will be created under the "domain.com" folder which will contain any sub domain folders that this domain creates.

**Backup Directory:-** Choose a name for the folder that will be created under the "domain.com" folder which will contain any backups that this domain makes.

**Active Dir Server:-** If you are adding domains to an Active Directory Domain, enter the name of the Domain here. Helm will then add the users to Active Directory with the correct permissions. If you are not using Active Directory, leave this field blank.

**Web User Group:-** Enter the name of the Windows user group that you want all domain users to be added to. By default this is "HelmWebUsers", so unless you have a specific reason for changing the name of this group, it can be left as is.

**Default App Pool:-** When Helm creates a domain, it will put it into the Windows default application pool which is called "DefaultAppPool". There's no need for most Windows administrators to change the name of this application pool. If for some reason it needs to be changed though, make sure that this field in Helm is also updated with the new name. Otherwise, just leave it as default.

**.NET 2.0 Default App Pool:-** By default, it is assumed that you will be running the ASP.NET and ASP.NET2 frameworks alongside each other. Each framework needs to sit in its own Application Pool to run, so in Helm if both the ASP.NET and ASP.NET2 App Pool Name fields are the same, then you can only run one framework or the other – not both. If you do want to run both simultaneously, then you will need to create a new Application Pool for ASP.NET2 in IIS. Please refer to pages 21-23 for details on doing this. Once done, all you need to do now is enter the name of the App Pool you have just created into this field.

**Shared SSL Domain:-** If you want to offer Shared SSL to your customers, then in here you must enter the domain in IIS that you have the SSL certificate stored on. The domain name in this field must exactly match the name of the domain in IIS. For instance, if you have installed the certificate on "mysecuredomain.com" then you must enter mysecuredomain.com into this field and www.mysecuredomain.com or other variants.

**Shared SSL Folder:-** This is the name of the folder that will be created in the domain folder of any customer that installs SSL on their domain.

**Preprop. Domain Name:-** In this field, you need to enter the name of the domain that you want to use for pre-propagation (e.g. webserver1.preprop.net). In this instance, the domain is preprop.net but you will obviously need to use a domain that you own. You will also see that it has a header of "webserver1" – this is to distinguish between web servers. If you are running multiple web servers then you will obviously have sites split over those servers, so you will need to use something to distinguish between the two. In this case, we are using the server's name itself – webserver1; you should change this to be the name of your web server. If you set up another web server at a later date called "webserver2" then in the new service you set up in Helm, you would type webserver2.preprop.net in that field.

Once done, you need to set up an A record in DNS which points to the IP of the domain name you have set up, e.g.:

```
*.webserver1.preprop.net 66.55.44.33
```

This is important – the wildcard (\*) means that any domain that uses pre-propagation will resolve when set up in Helm.

**Enable Directory Browsing:-** If you want a domain to have directory browsing enabled by default upon its creation, check this box.

**Deleted domains physical path:-** Enter the path that you want to store your deleted domains in (by default this location is "C:\DeletedDomains").

Resource assignment can also be carried out at this stage. This will be explained further under 'adding the IIS resource section' below.

## Setting up an IIS Resource in Helm

You now need to add this service into your Web Resource so that Helm will use it when creating websites.

A resource can be added into Helm via two different methods.

Method 1.

When creating a new service you are presented with a 'resource assignment' section. This will allow you to create the web resource at the same time as creating the web service. Expanding the Resource assignment section will present you with the following section of screen.

**Resource Assignment**

Do not assign to Resource

Create a new Resource for this Service

Resource Name:\*

Distribution Type:

Distribute to Primary Resource:

Assign this Service to the following Resource:

Resource:

**Do not assign to Resource:-** If you don't wish to create a Resource at the same time as creating this Service, choose this option.

**Create a new Resource for this Service:-** If you want to create a Resource along with this service, choose this option. You then also need to choose the following:

**Resource Name:-** Enter a name for the Resource you are adding (e.g. "Web Resource").

**Distribution Type:-** Choose the type of Distribution that you want any added domains to use. The options are:

- **Random Distribution:** If this option is picked, then one of the services in the Resource is picked at random, and the domain/account created on that service. If that service is offline then Helm will attempt to add the domain/account to another random service in the Resource.

- **Maximum Domain Count:** If this option is picked, then the servers associated with the services in the Resource are analysed, and the domain/account is created on the service whose server has the least amount of domains/accounts already on it. If that service is offline then Helm will attempt to add the domain/account to the service with the next lowest amount on it.

- **Provider Load Index:** If this option is picked, then the providers associated with the services in

the Resource are analysed, to see which server is the "least heavily laden". The domain/account is then added to that service. If that particular service is offline then Helm will attempt to add the domain/account to the service on the next "least heavily laden" server.

**Distribute To Primary Resource:-** If you check this box then when a domain is added into Helm, Helm will attempt to create each account (Web, Mail, FTP, DNS, etc) on the same server as whichever Resource is marked as "Primary Resource" in the Plan Template. If it is not possible to do so because no corresponding service exists on that server, then a random server which does have the service on will be used.

Example:

- You have Server 1 with Web, DNS and FTP services on it.
- You have Server 2 with Web, DNS and Mail services on it.

In the Plan Template, let us assume that you have selected the Web Resource as the Primary Resource. Therefore, when a domain is created, the Web account will be created on Server 1, the FTP and DNS accounts will be created on Server 1 (because this is the server with the Primary Resource on it), and the Mail account will be created on Server 2 (because there is no Mail service on Server 1 for the Resource to utilise).

**Assign this Service to the following Resource:-** If you already have a Resource created which utilizes an Web Service of the same type (for instance, if you have Microsoft IIS on another server and already have a Resource set up for it), then you can add this new Service to that existing Resource. Simply choose the Resource from the dropdown box.

Method 2.

To do this, go to:

**Home > Helm System > Resources > (Your Resource)**

If you haven't got a Web Resource, click "Add" on this screen to go through the wizard to add one. Select the 'Microsoft IIS 5/6' Provider and give the resource a name (e.g. Default Web Resource). You will then be presented with the following screen:

The screenshot shows a configuration window with the following elements:

- Provider:** A dropdown menu set to "Microsoft IIS 5/6".
- Resource Name:\*** A text input field containing "Default Web Resource".
- Distribution Type:** A dropdown menu set to "Maximum Domain Count".
- Distribute to Primary Resource:** An unchecked checkbox.
- Available Services:** A list box containing "Default Web Service".
- Selected Services:** An empty list box.
- Navigation:** Two buttons, ">>" and "<<", positioned between the Available and Selected Services list boxes.
- Save:** A "Save" button with a floppy disk icon in the bottom right corner.

Along with the provider, resource name and distribution type and distribute to primary resource functions (explained above) you are also presented with the available services that can be selected. In this box you can select the Services that you want to assign to the Resource. You can select the ones you want and choose the >> arrow to move them into the Selected Services box. The Resource will then be assigned the Services in the Selected Services box. If you want to take Services out of the Selected Services box, simply select them and use the << arrow to move them out again. Click Save to save your Resource settings.

## Setting up a DNS template in Helm

DNS Templates allow you to specify custom DNS records that will be added to a domain's DNS zone when it is created. You do not need a DNS service in Helm to create DNS Templates, but they will not come into effect, or get added to any new domains until you have added the DNS service. Clicking the Add button in an existing DNS service takes you to the "Create DNS Record" screen.

Create DNS Record
Logged in as ADMIN in account ADMIN

Use this form to create a DNS Record.

Default Web Service
↩ Back

Record Type:

➡ Next

There are 4 types of DNS Record that you can create – "A", "CNAME", "MX" and "TXT". Choose the type you wish to create from the dropdown box, and click the Next button. You will be taken to a screen which will differ depending on the record you picked. Once you have chosen the type of DNS Template you want to add into Helm, click the Save button to save it.

### **A Record**

An "A" record is an address record which is used for mapping an IP address to a domain name.

**Host Name:-** Enter the name of the record you want to add, e.g. webmail or sql.

**IP Address:-** Enter the IP address that this record will point to, e.g. 1.2.3.4.

### **CNAME Record**

A "CNAME" or canonical name record is a record which makes one domain name an alias of another. The aliased domain will receive all of the subdomains and DNS records of the original.

**Alias Name:-** Enter the name of the domain alias that you want to add, e.g. <http://www.domainalias.com/>

**Target Host Name:-** Enter the fully qualified domain name that you want to alias, e.g. <http://www.example.com/>

## MX Record

An "MX" or mail exchange record maps a domain name to a list of mail exchange servers for that domain.

**Host Name:-** Enter the host name of the record you want to add, e.g. webmail or mail02.

**Mail Server Address:-** Enter the IP address of the mail server that this record will map to.

**Record Priority:-** Choose a priority for your mail server, which will determine which mail server will get tried first when email is sent (if you have more than one mail server). The MX record with the highest priority has the lowest numerical value, and will be the first to be tried. So if you have three records pointing to three servers with values of 20, 80 and 40, then the server with priority of 20 will be tried first, then the server with 40, then 80.

## TXT Record

A "TXT" or text record allows an administrator to insert arbitrary text into a DNS record. One use of this is for the implementation of the Sender Policy Framework specification.

**Host Name:-** Enter the name of the record you want to add, e.g. SPF.

**Text:-** Enter the text you want to add to the DNS zone file.

## Adding IIS Extra Features in Helm

Extra Features allow you to define additional features (extra domains, for example) that can then be purchased and used by customers through their control panel - without your interaction!

An extra feature can be added by navigating to your plan template page at

**Home > My Plan Template > [Your Template]**

Scroll down to the extra features section and click 'add' in order to add an Extra Feature into Helm. On adding an extra feature you will be presented with the following screen.

The screenshot shows a web form for adding an extra feature. It has the following elements:

- Name:** A text input field with an asterisk indicating it is required.
- Description:** A large text area for entering a description.
- Availability Section:**
  - Start Date:** A date picker set to "January 9 2007".
  - Start Time:** Two dropdown menus set to "00" for hours and "00" for minutes.
  - End Date:** A date picker with a "clear date" button (X icon).
  - End Time:** Two dropdown menus set to "--" for hours and "--" for minutes.
  - Available to purchase
  - Available to all roles
  - Available to the following roles
  - Denied Roles:** A list box containing "role1".
  - Allowed Roles:** An empty list box.
  - Navigation buttons: ">>" and "<<" between the role lists.
- Save:** A button with a floppy disk icon and the text "Save" at the bottom right.

**Name:** - Choose a name for the Extra Feature.

**Description:** - Enter a description for the Extra Feature.

**Start Date:** - Choose the date that you wish the Extra Feature to become active on by using the calendar button. To remove the date, use the "clear date" button.

**Start Time:-** Choose the time that you wish the Extra Feature to become active on, during the Start Date.

**End Date:-** Choose the date that you wish the Extra Feature to become inactive on by using the calendar button. To remove the date, use the "clear date" button. If you don't want the Extra Feature to expire, simply leave this blank.

**End Time:-** Choose the time that you wish the Extra Feature to become inactive on, during the End Date. Leave this blank if you don't have an End Date.

**Available to Purchase:-** If you want this Extra Feature to be available to purchase by customers, check this box. Uncheck it if you don't want the Extra Feature to be purchasable until a later time. It will remain unavailable until you check the box again.

**Available to All Roles:-** If you want this Extra Feature to be made available to all Roles, then choose this button.

**Available to the Following Roles:-** If you only want this Extra Feature to be made available to a particular Role or Roles, then select a relevant Role in the "Denied Roles" box and click the >> button to move it into the "Allowed Roles" box. The Extra Feature will then be available to all Roles in the "Allowed Roles" box.

Fill in your option fields as required and save the extra feature.

## Adding the IIS Resource into your Plan Template

Plan Templates are a way for you to configure Resources, domain provisioning and DNS templates, and then group them together so that they can be assigned to your plans. By creating Plan Templates, it will remove the need to go through each plan you create, and assign different Resources to them, depending on what you offer. For example, in Helm 3 if you had several "Web and FTP-only" plans and several "Web, FTP and DNS" plans, you would need to create each plan, go into its Resource limits and alter them to use the appropriate Resources. With Helm 4, this isn't necessary. You simply set up a Plan Template for Web and FTP, and one for Web, FTP and DNS, then choose the Plan Template you are basing the Plan on when you create it.

You can add the MS DNS resource into your Plan Template by doing the following:

1.) Navigate to

### Home > My Plan Templates

At this screen you can either add a new template or edit an existing template (by clicking on the existing template name in the list).

- **If you already have a Plan Template set up**, then simply click the required Plan Template in the list. You will see a list of Available Resources on the left, and in there will be the DNS Resource you created earlier. Select it and use the >> button to move the Resource to the Selected Resource box, then click Save.

- **If this is a fresh install and a new Plan Template**, click Add and give your Plan Template name (e.g. "All Services"). A list of 'Available Resources' should be visible on the left. Highlight the Resource you wish to select and using the >> button move the resources to the Selected Resources box.

2.) Upon 'Adding' the template, you will be presented with the following screen. Here you can add your template name, select the available resources of your choice and save your settings.

Template Name: \*

**Resources**

Available Resources		Selected Resources
web [Web]	>>	
	<<	

[Create a new resource...](#)

**Template Name:-** Choose a friendly name for the Plan Template.

**Resources:-** In this box you can select the Resources that you want to assign to the Plan Template. Select them individually from the Available Resources box and choose the >> arrow to move them into the Selected Resources box. The Plan Template will then be assigned the

Resources in the Selected Resources box. If you want to take Resources out of the Selected Resources box, select them and use the << arrow to move them out again.

**- Important Note:** You can only have one Resource of each type in a Plan Template, and you will not be able to see other available Resources for an assigned type until you unassign that Resource. For instance, you may have added two FTP Resources into Helm, such as "Serv-U Resource" and "MS FTP Resource". If "MS FTP Resource" is currently assigned to the Plan Template then you will not be able to see "Serv-U Resource" in the Available Resources box until you unassign "MS FTP Resource"

## ASP.NET and ASP.NET2 Application Pools

Please Note:- Application Pools are only supported in IIS 6 on Windows 2003 onwards. IIS 5/Windows 2000 servers cannot use Application Pooling.

When Helm sets up a domain, it puts it into the Default Windows Application Pool called "DefaultAppPool".

By default, it is assumed that you will **not** be running the ASP.NET and ASP.NET2 frameworks alongside each other. Each framework needs to sit in its own Application Pool to run, so in Helm if both the ASP.NET and ASP.NET2 App Pool Name fields are the same, then you can only run one framework or the other – not both.

If you do want to run both simultaneously, then you will need to create a new Application Pool for ASP.NET2. To do this, follow these instructions:

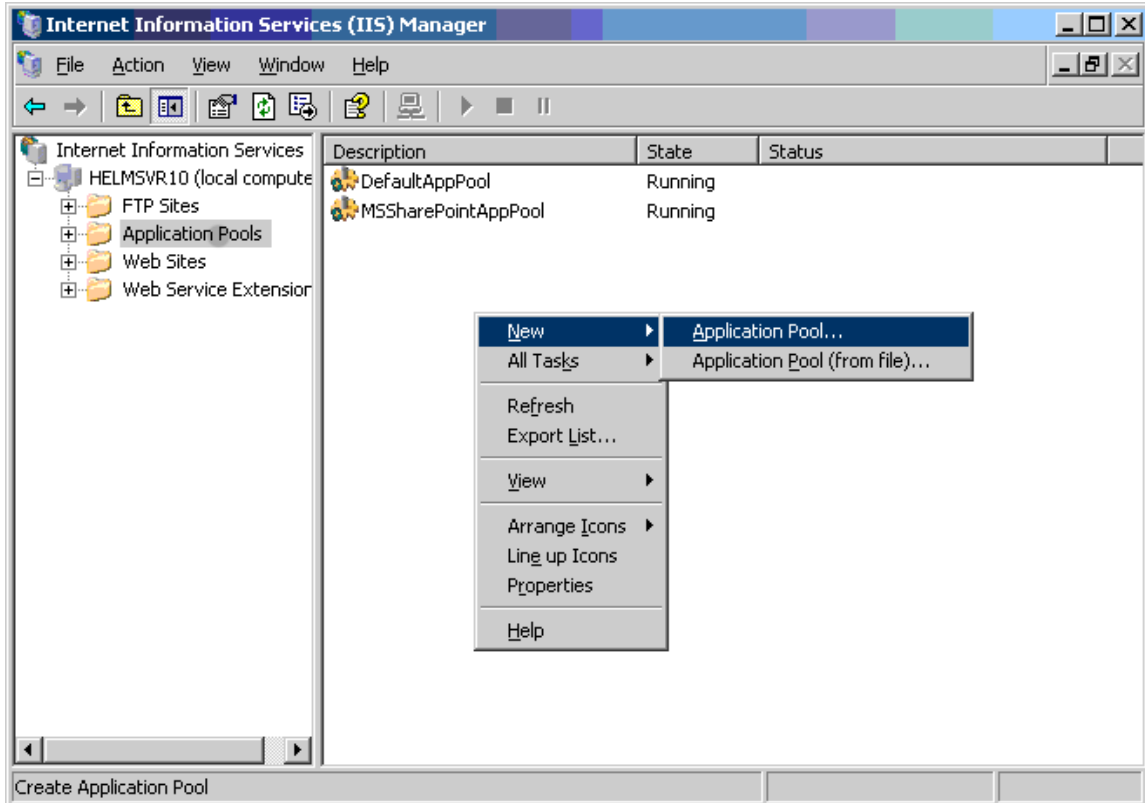
1.) Open IIS 6 by going to:

Start > Programs > Administrative Tools > Internet Information Services (IIS)

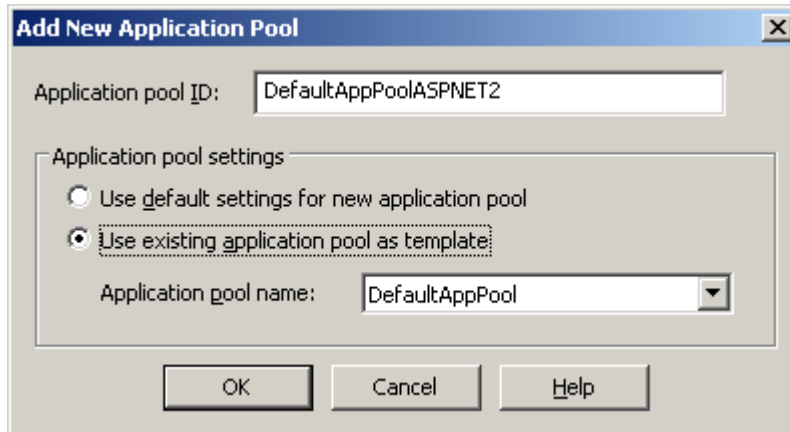
Then expand the tree click on Application Pools in the left-hand pane.

2.) In the right-hand pane, right-click in a blank area and choose

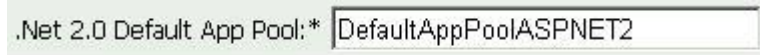
**New > Application Pool** (as below):



3.) In the new window that pops up, call the Application Pool something relevant, such as "DefaultAppPoolASPNet2". Then click the radio button marked "Use existing application pool as template" and in the dropdown box, select "DefaultAppPool".



IIS is now set up with a new Application Pool. All you need to do now is go into the IIS Service in Helm once again, and change the ASP.NET2 App Pool Name to be the same as the new one you have just created:



You can also make both .Net V1 and V2 available through check boxes in the Web Service as explained earlier in the document.

Once you have made the required changes, click "Save" to complete the IIS Service configuration.

Don't forget – if you want to offer ASP.NET2 or Python (for e.g.) installations to your resellers and users, you will need to increase the amount of installations available in their plans and packages. When you first set up ASP.NET2 in a plan, the amount is set to 0 by default, so you just need to change it to whatever you require:

Update To Packages

**System**

**Web**

- Ability to backup domain files
- Ability to change default documents
- Ability to change directory browsing
- Ability to manage HTTP error messages
- Ability to manage MIME types
- Ability to use pre-propagation
- Ability to restore domain files
- Ability to change scripting support
- Ability to manage virtual directories
- Ability to set web forwarding

Isolated App Pools:   Unlimited

Asp.Net Installations:   Unlimited

Maximum Bandwidth (MB):   Unlimited

Maximum Diskspace (MB):   Unlimited

Shared SSL Domains:   Unlimited

Enable File Manager

Secure Folder Installations:   Unlimited

ASP Installations:   Unlimited

Maximum ColdFusion Installs:   Unlimited

Maximum ColdFusion DSNs:   Unlimited

Max Frontpage Users:   Unlimited

Maximum ODBC DSNs:   Unlimited

Perl Installations:   Unlimited

PHP Installations:   Unlimited

Python Installations:   Unlimited