Making a Windows 2003 Web Server

December 20, 2010

Copyright © 2010 by World Class CAD, LLC. All Rights Reserved.

Building Our Own Web Server

We can build our own web server by utilizing the Internet Information Services (IIS) Manager which we loaded with the Windows 2003 Server.



Opening the IIS Manager Window

We can open the IIS Manager by choosing the Start button, then Administrative Tools, and then the IIS Manager.



The IIS Manager Window

When we open the IIS Manager, we can expand the folder to view the Web Site directory.

🐌 Internet Information Servic	es (IIS) Manager			
🐚 Eile <u>A</u> ction <u>V</u> iew <u>W</u> indov	v <u>H</u> elp			_8×
	😫 💵 💂 🕨 ■ 🗉			
Internet Information Services SERVER1 (local computer) ⊕ ⊕ FTP Sites ⊕ ⊕ Application Pools ⊕ ⊕ Web Sites ⊕ ⊕ Default Web Site	Description Default Web Site Administration Microsoft SharePoint Administ	Identifier 1 24151 24152	State Running Running Running	Host header value I * * *
 Administration 				
	•			

Adding a Website

We then right click on the Web Site folder and pick New from the sub menu and Web Site.



The Web Site Creation Wizard

The Welcome to the Web Site Creation Wizard will appear. We press the Next button to continue.



The Web Site Description

For our web site description, we will type a short phrase describing the site. Our site name is Ohio Digital Art which we made in the HTML Basics online textbook by World Class CAD.

Then we will click on the Next button to advance to the next window.

Web Site Creation Wizard	×
Web Site Desciption Describe the Web site to help administrators identify it.	and the second s
Type a description of the Web site. Description: Ohio Digital Art	
< <u>B</u> ack <u>N</u> ext >	Cancel

IP Address and TCP Port

Our server has the IP address of 192.168.0.1, so we will use that address. We will use the default TCP port of 80. Then we will push the Next button to advance to the next window.

Web Site Creation Wizard	×
IP Address and Port Settings Specify an IP address, port setting, and host header for the new Web site.	Control of the second s
Enter the IP address to use for this Web site:	
<u>I</u> CP port this Web site should use (Default: 80): 80	
Host header for this Web site (Default: None):	
For more information, read the IIS product documentation.	
< <u>B</u> ack <u>N</u> ext >	Cancel

Web Site Home Directory

Prior to this lesson, we copied our web page folder to the C: drive. Therefore, we will pick the Browse button and search for the Web Page directory. When we highlight the Web Page directory, we depress the OK button.

Browse

Web

Ξ

Ma

The path to the Web Page folder will appear in the Path textbox.

To move along, we choose the Next button.

our	Web Site Creation Wizard
	Web Site Home Directory The home directory is the root of your Web content subdirectories.
Page	Enter the path to your home directory.
ne	Path:
is the	L:\Web Page
	Allow anonymous access to this Web site
For Folder	<u>? ×</u>
Site Creation Wi	zard
 ✓ Local Disk (* ← ADFS ← Dell ← Docume ← Docume ← Inetpub ← MSOCa 	T:)
 	ge v
ke New Folder	OK Cancel

Web Site Access Permissions

We will check the Read, Run Scripts, Execute CGI and Browse checkboxes.

We then will opt for the Next button to proceed.

Web Site Creation Wizard			×
Web Site Access Permissions Set the access permissions for this Web site	9.		E Contraction of the second
Allow the following permissions:			
✓ <u>R</u> ead			
🔽 Run <u>s</u> cripts (such as ASP)			
Execute (such as ISAPI applications or	CGI)		
☐ <u>W</u> rite			
✓ Browse			
To complete the wizard, click Next .			
[< <u>B</u> ack	<u>N</u> ext >	Cancel

Completing the Web Site Wizard

We choose the Finish button to complete the setup.



The New Web Site

We can now see the Ohio Digital Art web folder in our IIS Manager.

We will right click on the Default Web Site folder and delete it.



Web Site Properties

To view the web site properties, we right click on the Ohio Digital Art website and we double click on Properties from the sub menu.

🐚 Internet Information Servic	es (IIS) Manager			<u>_ 0 ×</u>
🐚 <u>F</u> ile <u>A</u> ction <u>V</u> iew <u>W</u> indov	w <u>H</u> elp			_ 8 ×
⇐ → 🗈 💽 🗙 😭	🗈 😫 🖬 💂 🕨 🔳 🛛			
Internet Information Services SERVER1 (local computer) SERVER1 (local computer) FTP Sites Application Pools Web Sites Ohio Digital Art Administration Microsoft SharePoi Web Service Extension	Description Ad Ad Permissions Browse Start Stop Pause New All Tasks New Window from Here Delete Rename Perresb	Identifier 599984401 4151 4152	State Running Running	Host header value I 1 *
	P <u>r</u> operties <u>H</u> elp			
Opens the properties dialog box for	the current selection.			<u>•</u>

Web Site Tab

We can view the web site description, IP address and TCP port in this tab. Connection timeout is set at 120 seconds (2 minutes).

Dhio Digital Art Properties
Directory Security HTTP Headers Custom Errors BITS Server Extension Server Extensions 2002
Web Site Performance ISAPI Filters Home Directory Documents
Web site identification
Description: Ohio Digital Art
IP address: 192.168.0.1 Advanced
ICP port: 80 SSL port:
Connections Co <u>n</u> nection timeout: 120 seconds Enable HTTP Keep-Alives
Enable logging
W/3C Extended Log File Format Properties
OK Cancel Apply Help

Performance Tab

If we choose to limit bandwidth, we will annotate the checkbox and set the type the number of kilobytes per seconds allowed.

We opted for unlimited websites.

Directory Security HTTP Headers Custom Errors BITS Server Extension Server Extensions 2002 Web Site Performance ISAPI Filters Home Directory Documents Bandwidth throttling	o Digital Ar	t Properties			?
Web Site Performance ISAPI Filters Home Directory Documents Bandwidth throttling Image: Image	Director BIT	y Security S Server Extension	HTTP Header	s Cust Server Extensions	om Errors 2002
Bandwidth throttling Limit the network bandwidth available to this Web site Magimum bandwidth (in kilobytes per second): Image: Second	Web Site	Performance	ISAPI Filters	Home Directory	Documents
Imit the network bandwidth available to this Web site Magimum bandwidth (in kilobytes per second): Image: the connections Image: the connections </td <td>Bandwidth</td> <td>throttling</td> <td></td> <td></td> <td></td>	Bandwidth	throttling			
Magimum bandwidth (in kilobytes per second): 1024 Web site connections	🗖 Limit tł	ne network bandwidt	h available to this W	/eb site	
Web site connections Unlimited Connections limited to: 1,000 	Ma <u>s</u> im	um bandwidth (in kil	obytes per second):	-	1024
Web site connections Image: Unlimited Connections limited to: 1,000					
Web site connections Unlimited Connections limited to: 1,000 					
Unlimited Connections limited to: 1,000					
C Connections limited to:	-Web site c	onnections			
	Web site c	onnections			
	-Web site c	onnections ed ctions li <u>m</u> ited to:			1,000
	⊂Web site α	onnections ed ctions li <u>m</u> ited to:			1,000
	-Web site c	connections ed ctions li <u>m</u> ited to:			1,000
	-Web site c ● <u>U</u> nlimit ● Conne	connections ed ctions li <u>m</u> ited to:			1,000
	-Web site c ● <u>U</u> nlimit ○ Conne	connections		7	1,000

ISAPI Filters Tab

We will not set an Internet Server Application Programming Interface (ISAPI) filter in this lesson.

o Digital Art Proj	perties				?
Directory Sect	urity	HTTP Heade	ers	Cus	tom Errors
BITS Serv	ver Extension	l l j	Server	r Extension:	s 2002
Web Site 📔 Pe	rformance	ISAPI Filters	Home D	Directory	Documents
The following filt listed below. Thi server.	ers are active o s list does not s	only for this Web s show filters config	site and ex ured for all	ecuted in tł the Web s	ne order ites on this
Status	Filter Name	Pr	iority		A <u>d</u> d
					<u>R</u> emove
					Edjt
					Disabl <u>e</u>
					Move <u>u</u> p
				M	love d <u>o</u> wn

Home Directory Tab

The home directory is set on this local computer and the local path is shown along with the permissions. We can also see the applications settings.

	roperties					?
Directory S	ecurity	HT:	r P Heade	ars	Cus	tom Errors
BITS S	berver Exten	ision	1	Server E	Extensions	: 2002
Web Site	Performance	e ISAPI	Filters	Home Di	rectory	Documents
The content f	ior this resou	urce should cor	me from:			
	ΘA	directory locate	ed on this	computer		
	O A s	share located o	on anothe	r computer		
	O Ar	redirection to a	<u>U</u> RL			
1 1 14	0.00	I/ah Dalaa			-	
Lo <u>c</u> al patri:	JC. W	vebrage				or <u>o</u> wse
✓ <u>R</u> ead			🔽 Inde	ex this resou	irce	
□ <u>W</u> rite						
Directory <u>b</u>	prowsing					
Application se	ttings					
Application na	<u>m</u> e:	Default Applic	ation			R <u>e</u> move
Application na Starting point:	<u>m</u> e:	Default Applic	ation rt>			R <u>e</u> move
Application na Starting point: Execute permi	me:	Default Applic <ohio a<br="" digital="">Scripts and Ex</ohio>	ation rt> (ecutable:	s		R <u>e</u> move
Application na Starting point: Execute <u>p</u> ermi	me:	Default Applic <ohio a<br="" digital="">Scripts and Ex</ohio>	ation rt> (ecutable:	8		R <u>e</u> move
Application na Starting point: Execute <u>p</u> ermi Applicatio <u>n</u> po	<u>m</u> e: issions: iol:	Default Applic <ohio a<br="" digital="">Scripts and Ex DefaultAppPo</ohio>	ation rt> (ecutable: ol	8		R <u>e</u> move nfiguration
Application na Starting point: Execute <u>p</u> ermi Applicatio <u>n</u> po	<u>m</u> e: issions: iol:	Default Applic <ohio a<br="" digital="">Scripts and Ex DefaultAppPo</ohio>	ation rt> (ecutable:	s _	Cor	R <u>e</u> move Ifiguration
Application na Starting point: Execute <u>p</u> ermi Applicatio <u>n</u> po	<u>m</u> e: issions: iol:	Default Applic <ohio a<br="" digital="">Scripts and Ex DefaultAppPo</ohio>	ation rt> (ecutable: ol	s	Cor	R <u>e</u> move Ifiguration
Application na Starting point: Execute <u>p</u> ermi Applicatio <u>n</u> po	<u>m</u> e: issions: iol:	Default Applic <ohio a<br="" digital="">Scripts and Ex DefaultAppPo</ohio>	ation rt> (ecutable: ol	s _		R <u>e</u> move

Documents Tab

We removed the original list of documents and added "index.html" to the list box. Index.html is our root page.

Directory S BITS S Web Site	ecurity erver Extension	HTTP Heade	1	
BITS S Web Site	Server Extension	N	ers Di	ustom Errors
Web Site			Server Extensio	ns 2002
	Performance	ISAPI Filters	Home Directory	Documents
Enable da	efault <u>c</u> ontent pa dex.html Mov	ge ve Up Movel	Add. <u>R</u> emo	ve
Append a returns.	<u>o</u> cument footer an HTML formatte	ed footer to every d	locument your Web	server
Г			Brows	B

BITS Server Extension

We will not allow clients to transfer information to the virtual directory in this lesson.

o Digical Ar	t Properties			1
Director	y Security	HTTP Heade	rs 🗍 Cu	stom Errors
Web Site	Performance	ISAPI Filters	Home Directory	Documents
BIT	S Server Extension		Server Extension	ns 2002
Allo <u>w</u> c	lients to transfer dat	ta to this virtual direc	tory	
© <u>[</u>	<u>I</u> se default settings			
0.0	Customi <u>z</u> e settings			
Custom set	tings			
<u> </u>	ım file size:		Byte	5 🔽
☑ <u>D</u> elete	incomplete jobs afte	en: 14	Days	
- <u>E</u> nable	server farm support	i		
<u>R</u> econnect	to IP address:			
✓ Use ori	ginal IP address afte	er: 1	Days	
- 🗖 Allow n	otifications			
N <u>o</u> tification	type:	Send the fil	le name	T
Notification	URL:	, 		
)		
		Sobodula Classup	Bun Clar	anun Mour
		ooneoule cleanup.		
	01	K Cance	I Apply	Help

Server Extensions 2002 Tab

Our server has not been configured to use server extensions.

Ohio Digital Art Propert	ties			? ×
Directory Security	нт	TP Headers	Cu:	stom Errors
Web Site Perform	nance ISAPI	Filters Ho	me Directory	Documents
BITS Server E	xtension	Se	erver Extension	s 2002
This server has not be choose Configure Serv	en configured to u /er Extensions 200	ise the Server E: 12 from the Task	tensions. To c menu for this s	onfigure it, erver.
	ОК	Cancel	Apply	Help

Directory Security Tab

We will not add any addition levels of security for the web server.

io Digital Art	Properties				?	
Web Site	Performance	ISAPI Filters	Home	Directory	Documents	
BITS	Server Extension		Serve	er Extensions	s 2002	
Directory	Security	HTTP Heade	ers	Cus	tom Errors	
Authenticat	ion and access con Enable anonymou	trol is access and edit	the			
	authentication methods for this resource.			<u>E</u> dit		
⊢IP address -	and domain name re Grant or deny acc	estrictions ess to this resourc	e using			
	IP addresses or Ir	iternet domain nar	nes.			
				E djt.		
Secure con	munications					
= 0	Require secure communications and enable client certificates when this resource is accessed.			Server Certificate		
				⊻iew Certificate		
				E <u>d</u> it.		
L						

HTTP Headers Tab

We can control content by expiration date in this tab. We can also rate the content. We will not do so at this time.

o Digital Ar	t Properties				?
Web Site	Performance	ISAPI Filters	Home Dire	ectory	Documents
BIT	S Server Extension	l l	Server E:	xtensions	2002
Director	y Security	HTTP Head	ers	Cust	tom Errors
− ⊡ <u>E</u>nable Web site <u>c</u>	content expiration ontent should:				
C Expjr	e immediately				
	e after 1	Day(s)	~		
C Expir	e <u>o</u> n Thursday	, December 30,	2010 🔽 a	t 12:00	:00 AM 🐥
- Custom HT	TP headers				
X-Powere	d-By: ASP.NET				A <u>d</u> d
					Edit
					E. G.(2
				E	lemove
- Content rat	ting				
-	Ratings help your us content your site pro	sers to identify wh	at type of	Edit R	ati <u>ng</u> s
-	Contonit your one pre		-		
MIME type	s				
	IIS serves only files the MIME types list	with extensions re To configure add	egistered in fitional file	MINE	T
	extensions, click MI	ME Types.	adonarnic -		rypes
		Como		oolu	Halo

Custom Errors Tab

We can see HTTP errors. We will check any errors. We press the Apply button to close the Properties window.

Digital Art Pro	operties			<u> </u>
Veb Site P	erformance	ISAPI Filters Hon	ne Directory	Document
BITS Ser	ver Extension	Se	rver Extension	s 2002
Directory Sec	surity	HTTP Headers	Cu	stom Errors
Error messages Custom error m file.	for HTTP error essages can b	s be an absolute URL on thi	s server or a p	ointer to a
HTTP Error	Туре	Contents		
400	File	C:\WINDOWS\help\iis	Help\commor	\400.htm 🔺
401;1	File	C:\WINDOWS\help\iis	Help\commor	\\401-1.h
401;2	File	C:\WINDOWS\help\iis	Help\commor	\401-2.h
401;3	File	C:\WINDOWS\help\iis	Help\commor	\\401-3.h
401;4	File	C:\WINDOWS\help\iis	Help\commor	\401-4.h
401;5	File	C:\WINDOWS\help\iis	Help\commor	\401-5.h
401;7	File	C:\WINDOWS\help\iis	Help\commor	\401-1.h
403;1	File	C:\WINDOWS\help\iis	Help\commor	\403-1.h
403;2	File	C:\WINDOWS\help\iis	Help\commor	1\403-2.h
403;3	File	C:\WINDOWS\help\iis	Help\commor	\\403-3.h
403;4	File	C:\WINDOWS\help\iis	Help\commor	\403-4.h
403:5	File	C:\WINDOWS\heln\iis	Heln\commor	\403-5 h🚬
		<u>E</u> dit	<u>S</u> et to	Default
		Cancel	Apply	Help

Checking the Website with the Web Browser

We can type 192.168.0.1 in the address bar of the Internet Explorer window and the Ohio Digital Art homepage will appear. We test computers on our network and they get the same results.

