

IIS Backup Utility Reference



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Credits

The IIS Backup Utility was programmed by Joshua Gong, Maris Janis Vasilevskis and Xiao Xuejuan. This manual was typeset by Ran Zhang. Most of the text was written by Ann Lynnworth. The screenshots regarding the Microsoft POP3 service were provided by Louis Ryder. The book's outline and overall approach was inspired by [How To Write Usable User Documentation](#) by Edmond H. Weiss.

Edition

08-April-2011 IIS Backup version 2.0.0.0, documentation version 2.1

Fonts

This manual uses Berkeley Book font from www.adobe.com for the main text.

Software Download

Visit www.href.com/iisbackup for IIS Backup product information and download links.

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EVALUATION

In this chapter, we consider information that will influence your selection, acquisition, and purchase of the IIS Backup and Restore utility from HREF Tools Corp.

If you use Microsoft Internet Information Server (“IIS”, also known as “inetinfo” and “w3svc”), you are probably aware how much time it takes to correctly configure a web site. Over the course of days, months or years, an administrator might spend anywhere from 15 minutes to a few hours, modifying settings until everything is just perfect for ongoing production use. The more web sites you have configured, the more you need a backup system that is so easy to use, you will be sure to have the data you need if you ever need to restore something.

Disaster Recovery

What happens if Windows crashes and you lose all those web server configuration settings? What if a new employee accidentally deletes your web site settings without realizing their importance? It could take you days to make your web sites fully operational again.

It is often quite difficult to remember all the virtual paths and permission settings that are needed for a full-featured web application. Without a good backup, web sites can be offline, or worse, partially working and partially broken.

Because you can activate IIS Backup from the command line, you can schedule it to run daily, weekly, as needed.

IIS Backup will pay for itself if you have to restore even one web site. Why is the software so inexpensive? Because we are web developers and we wanted to make it extremely easy and inexpensive for people to have a reliable backup system.

Site Transfer

A more common task for web server administrators is to export a web site from one machine and then import it into another machine, and those machines may or may not be running exactly the same version of IIS.

This is a situation where IIS Backup excels; you can selectively restore a single web site, and you can restore onto IIS 5 or IIS 6 or IIS 7, regardless of which version was used to make the original backup. (Not all features are backwards compatible so, generally, you should restore onto a version of IIS greater-than-or-equal-to the original version.)

System Requirements

The IIS Backup utility is suitable for people using Microsoft IIS version 5, 5.1, 6 and/or 7.

If you run it with IIS 7 on Vista, Windows 7 or Win2008, you must have the **Microsoft IIS6 Compatibility Tools** installed and you must run IIS Backup with Administrator rights.

If you want to use the feature for backing up mailboxes, you must be using the Microsoft POP3 service, which is common on Win2003.

You are not limited to the English version of Windows. We have tested the IIS Backup utility on the Chinese version of Windows XP Pro.

Traduko

The IIS Backup utility v2 may be run in English, Spanish, Portuguese or Chinese. You may re-translate any screen using the menu: Tools > Traduko. You can also choose a lingvo on the opening screen.

On non-Chinese Windows XP, where the Lucida Sans Unicode v5 font is unavailable (unless you license it separately), the Chinese characters will look like squares. However if you run on Windows 7 or other recent versions of Windows, or of course the Chinese version of Windows, then the Chinese symbols will be readable.

English, Spanish and Portuguese symbols look correct on all versions of Windows, even Windows XP.

Features

Comparing Microsoft's Built-in IIS Backup to Our Utility

Feature	Microsoft IIS	HREF IIS Backup
Backup all sites at once	yes	yes
Restore all sites at once	yes	yes
Backup/restore single web site or special item	no	yes
Modify data before restoring	no	yes*
Exchange files between IIS 5 and 6	no	yes
Storage	one file per backup	one file for all back-ups
During restore, check whether ip number is valid, first	no	yes
Restore by site name	no*	yes
Change paths, ip numbers prior to restore	no**	yes

* Microsoft IIS restores by site ID rather than by site name. This makes the restore process inconvenient for humans with more than a few sites.

** IIS Backup v1.0.3.8, is the first version to support making global search and replace changes prior to restoring a site. In earlier versions, it was necessary to edit the XML file with Notepad or equivalent.

PLANNING

In this chapter, we cover activities that can be done prior to downloading and installing the software.

When to backup?

You need to decide when you want to backup your IIS settings. Occasionally, when you think of it on your own? Whenever you add, modify or delete a web site? Once a month? Once a week? Once a day?

Depending on your answer to “when?”, you should set up a slightly different way to trigger the program.

When to Backup?	How to Backup?
Occasionally	Ordinary shortcut to start IIS Backup
Whenever IIS settings change	Make a BAT file that runs IIS Manager followed by IIS Backup, so that whenever you run the manager, you always have a chance to backup immediately afterwards.
Once a month	Make a BAT file that runs each time the computer reboots - which will be approximately monthly as long as you tend to apply the Microsoft operating system patches each month.
Once a week	Make a BAT file that is triggered weekly by the Windows scheduler system
Once a day	Make a BAT file that is triggered daily by the Windows scheduler system

Note: an example of making a BAT file and setting up a weekly schedule is given in the Resource Definition chapter.

Where to backup?

The second key question is, where do you want to keep your backup data?

When IIS Backup runs, it makes a data file named metabase.xml in the same folder as the

IISBackup.exe file. All backups (even if run on different days) are kept in that single file. You can change the location of that file by going into the **Settings** tab.

If your main disk crashes or the partition holding IIS Backup becomes corrupt, that local copy of metabase.xml will not be useful to you. Therefore you should plan to copy it to one or more reliable secondary locations.

Common secondary locations are:

- usb flash drive
- cd or dvd
- hard disk in another computer - preferably in another city - transfer via FTP
- Amazon Simple Storage Service (“Amazon S3”) with an interface such as JungleDisk

How many backups to keep?

The third key question is: how many backups do you want to keep? Only the latest version? The last 3 versions, just in case an administrator makes a mistake with the settings while in a rush, and you need to restore yesterday’s configuration?

When you run IIS Backup, you will need to give each backup set a name. There are three basic approaches to naming your backups, based on how many you want to keep:

- keep one backup: always use the same name, and always overwrite any previous contents.
- keep a few backups: use numbered backup names, e.g. backup01, backup02, backup03 and cycle through them
- keep infinite backups: use dated backup names, e.g. backup2008-01-31, backup2008-02-28, backup2008-03-31 and so on.

By the way, you can delete backup sets out of the metabase.xml file using the “**Delete Node**” feature, which is available if you select a backup set and right-click. So when you are first becoming familiar with IIS Backup, you do not necessarily have to worry about your naming convention right away.

INSTALLATION

Download the software from <http://www.href.com/iisbackup> (see “FREE Trial Version”). You should receive a ZIP file containing the software (IISBackup.exe) and this manual.

Create a folder to hold IIS Backup files

We recommend that you create a folder to hold all the IIS Backup files.

A good example would be: c:\Apps\HREFTools\IISBackup

Unzip into your folder

Extract all files into the folder.

Note that when IIS Backup runs, it will create your backup data file, metabase.xml, in the same folder by default.

Run the program

To start, double-click on IISBackup.exe.

Lite Mode, Evaluation Mode, Paid Mode

Initially, IIS Backup will run in Lite mode. In this mode, you can try all features but you can only restore one web site at a time. You cannot restore all sites at once.

You can obtain a FREE evaluation license code. Visit <http://www.href.com/unlock/>, retrieve the unlock details from email, and enter them under **Help > Enter License**.

When you are ready to buy a license, visit <http://www.href.com/iisbackup> and use the “Add to Cart” shopping cart feature.

RESOURCE DEFINITION

In this chapter, we discuss making adjustments in the environment or associated technology needed to accommodate the IIS Backup utility.

BAT file to run the backup automatically

After you become familiar with IIS Backup, you are likely to want to run it automatically from a shortcut or BAT file. You can find the command line syntax by looking under the menu, **Help > About**, or in the Operations chapter of this manual (page 17).

Example:

```
iisbackup.exe -backup -n "websiteconfig" -o -m localhost -f d:\aa\metabase.xml -q
```

-backup tells the program to run in auto-pilot mode

-n "websiteconfig" tells it to name the backup set "websiteconfig"

-o tells it to automatically overwrite any existing backup set with the same name

-m localhost tells it to take data from the local machine

-f "\a path\filename.xml" tells it to save data to the given filespec

-q tells it to quit after it is done running (otherwise it would stay open on the screen and you could look at the log)

To make sure that there were no errors during processing, your BAT file should check the exit code and if it is non-zero, alert an administrator to review the log file for more details.

Once you have the shortcut or BAT file, you could make it run whenever the system is rebooted, so that you at least have a backup as often as you apply operating system patches (which is usually once a month).

Here is an example BAT file which displays the exit code after the utility has run:

```
ISBackup.exe -backup -f "\a path\afile.xml" -n mysites -m localhost -q -o
echo IISBackup.exe ExitCode=%errorlevel%
pause
```

BAT file to FTP your data to a secondary location

For this example, assume that you have access to some disk space via ftp, at a remote location in another city. The ftp host is (imaginary): ftp.bigspace.com; the username is “usera” and the password is “passworda”.

First you need a text file containing the commands which will be executed by the ftp client. Here is an example, with a filename of d:\AppsData\websiteconfig.transfer.txt

```
open ftp.bigspace.com
USER usera passworda
binary
put metabase.xml
bye
```

This is what a BAT file could look like, to transfer your file using those commands.

```
rem ** Start running from the folder where the data file is
rem ** See the -f parameter in the call to iisbackup.exe
cd /d d:\aa
FTP -n -s:d:\AppsData\websiteconfig.transfer.txt
```

Of course, you can use a single BAT file to take care of running both the backup and the ftp transfer by including the ftp steps immediately after running IISBackup.

If you have any problems using Windows FTP to automate transfer, you might want to consider using this command-line ftp program instead: <http://www.ncftp.com/ncftp>

Backing up on a Fixed Schedule (old Windows)

Windows includes a free, well-documented scheduling system. Here is one article which explains how to add a task in Windows XP. Extremely similar steps can be followed for Win2000 and Win2003.

“Schedule a Weekly ... “

<http://www.microsoft.com/windowsxp/using/setup/tips/defrag.mspx>

The name of the scheduling program is “AT”. Let’s say that you named your BAT file d:\Apps\HREFTools\IISBackup\auto-pilot.bat and you want to trigger it once a week on a Sunday at 6am. This would be the syntax:

```
AT 06:00 /EVERY:su d:\Apps\HREFTools\IISBackup\auto-pilot.bat
```

Note: all BAT file syntax is much easier when your folder names and BAT filenames do not include any spaces. This is why we use examples with non-standard folder names. You may use any names you wish.

Backing up on a Fixed Schedule (new Windows)

On Windows 7, Windows Server 2008 R2, Windows Vista, use **Start** and then type schedule to find the shortcut to the **Task Scheduler**.

Microsoft Technet provides an overview of their new Task Scheduler here:

<http://technet.microsoft.com/en-us/library/cc721871.aspx>

Saving the backup on the Amazon Cloud (“S3”)

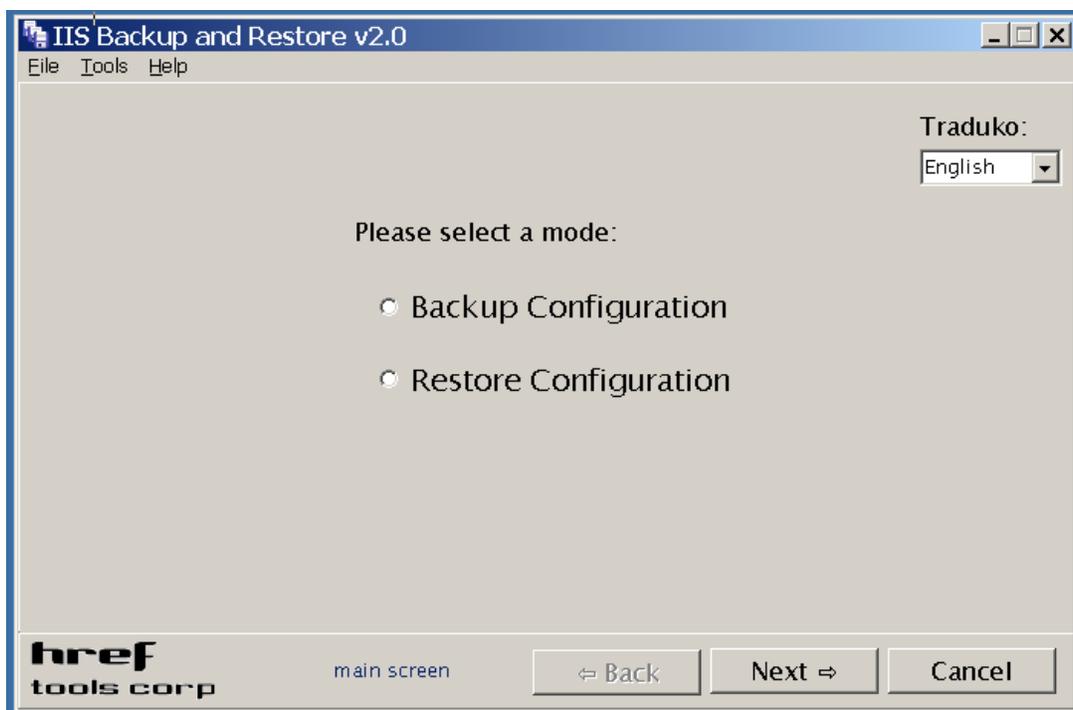
In 2011 you can easily save files to Amazon’s S3 service, using FREE utilities such as Cloud Berry Explorer (Windows) and CyberDuck (Macintosh) to post your files to an S3 bucket. Considering how small-yet-important the IIS configuration backup file is, it may be worth saving an extra copy in the cloud “just in case” you find your servers struck by an earthquake or other natural disaster.

Amazon occasionally runs special offers, for example, 5GB free storage for a year.

Visit *<https://s3.amazonaws.com/>*

OPERATION

To start IIS Backup, run IISBackup.exe. You should see a screen like this:

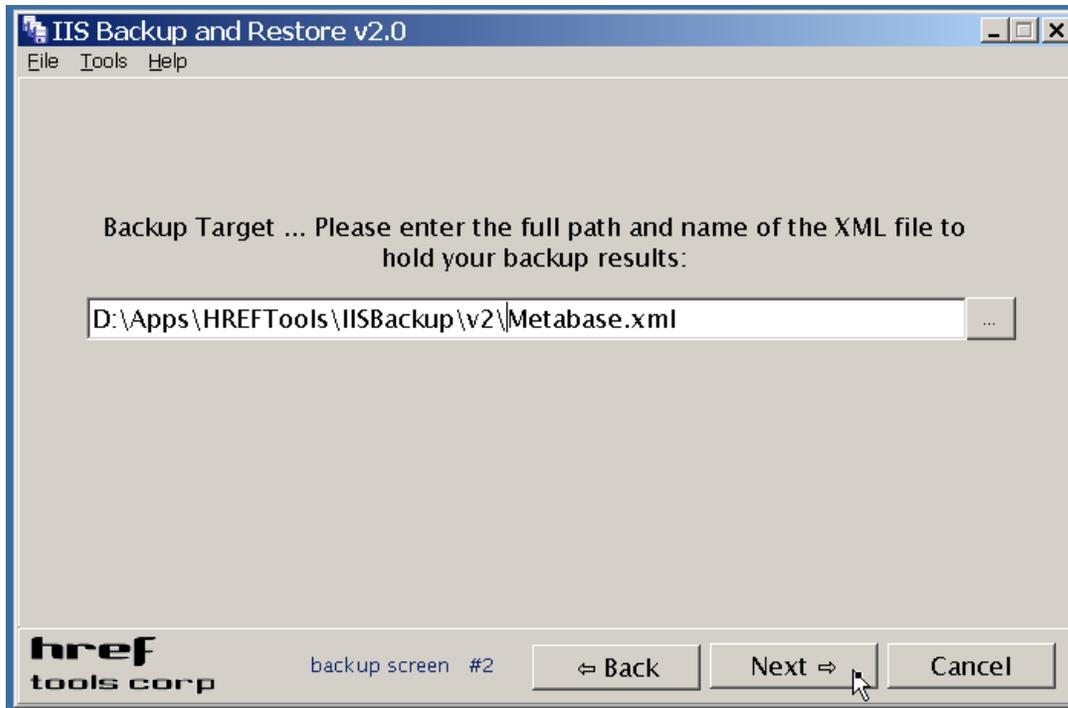


Making a Backup of all IIS Settings

Select the radio button for **Backup** mode and click [Next].

Make sure that the Machine Name for the Backup Source is accurate. Usually you should use the default of “localhost.”

Enter target backup file



Backup Screen #2

Then click the [Next](#) button.

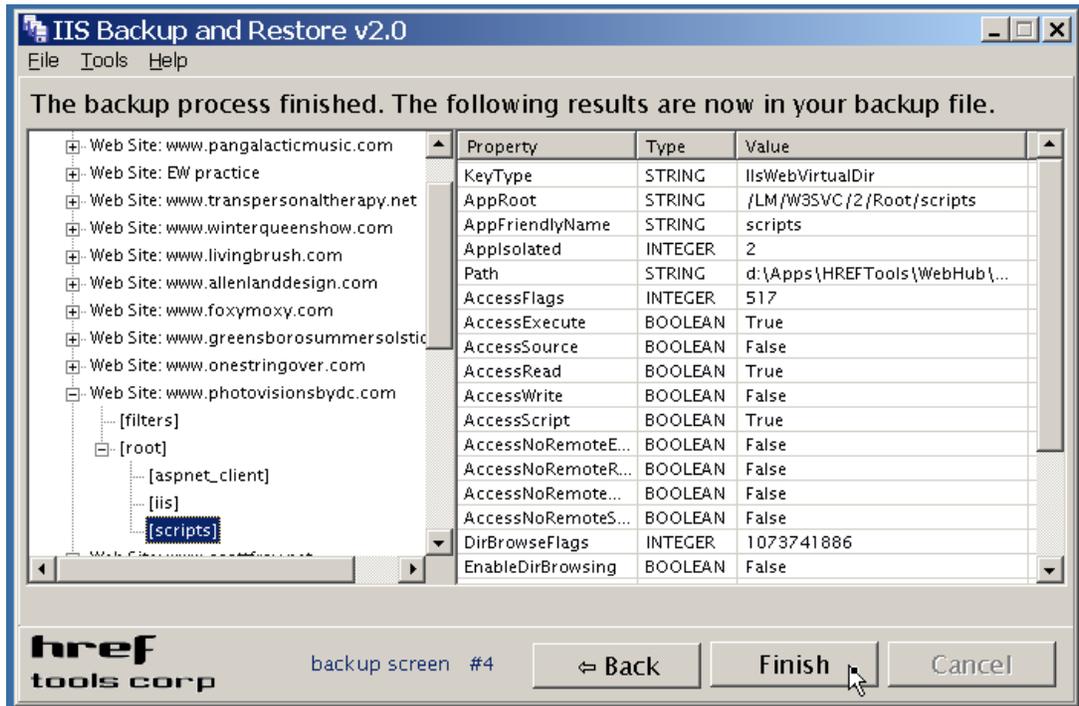
Name the Backup

On backup screen #3 you can enter a name for the backup, perhaps including the name of the computer and encoding today's date in the filename.

Example:

Backup Name: TEST20111104 for 04-Nov-2011 on my test server

Click [Next](#) and wait 10 to 180 seconds. You will then see the final backup screen, which looks like this in English:



Finished (Backup screen #4)

Verifying that a Backup was Created

Look for a file named Metabase.xml in the folder with the IIS Backup EXE. You may view it with Internet Explorer or any other XML tool. This file stores all the backup data.

Backing up EMail Mailboxes

IIS Backup version 1.2.0.0 adds the feature of backing up mailboxes if you have the Microsoft POP3 service running with IIS. In that case, you should see a POP3 node after you run a backup.

Erasing Old Backups

You can erase backup sets by selecting the backup on backup screen #4 and right-clicking to get a pop-up menu. Use **Delete Node** to erase an entire backup set.

Backing up Your Backup File

To save your data after a backup, save the metabase.xml file to an extra location. For example, you could save it into a ZIP file, onto a CD, on a flash drive, onto a tape backup, and/or onto a network drive.

For highest security, always save a copy to another physical location in case disaster hits the first location. Because the metabase.xml file is relatively small, it is realistic to regularly back it up via ftp or http to a second physical location.

If you do not own servers at a second physical location, consider using Amazon Simple Storage Service (“Amazon S3”, aws.amazon.com/s3) and JungleDisk (www.jungledisk.com).

Command Line Options for Backup

IIS Backup supports command line options for backing up automatically.

Usage:

```
iisbackup.exe -backup -n stub(~today~) -m localhost -f c:\path\myfile.xml -q
```

-backup	indicates that you want to backup automatically.
-n	name of the backup. If used as part of the name, (~today~) will expand to YYYYMMDD. Thus stub(~today~) could become stub20071109 on 09-Nov-2007.
-o	overwrite any existing backup with the same name, without prompting
-m	machine name -- use localhost
-q	quit automatically when backup has run
-f filename.xml	Backs up to the specified file, in the same directory as IISBackup.exe.
-f \path\file-name.xml	Backs up to the specified file in the specified directory.
-f "\path with space\file-name.xml"	Backs up to the specified file in a path whose name contains one or more spaces.

Exit Code

IIS Backup returns an exit code of 0 when there were no errors during automatic backup, or 1 when an error occurred. Detail about the error will be saved to a log file in the same folder as IISBackup.exe, with the current date being part of the filename.

Example log filename: IISBackup.info.080714.log

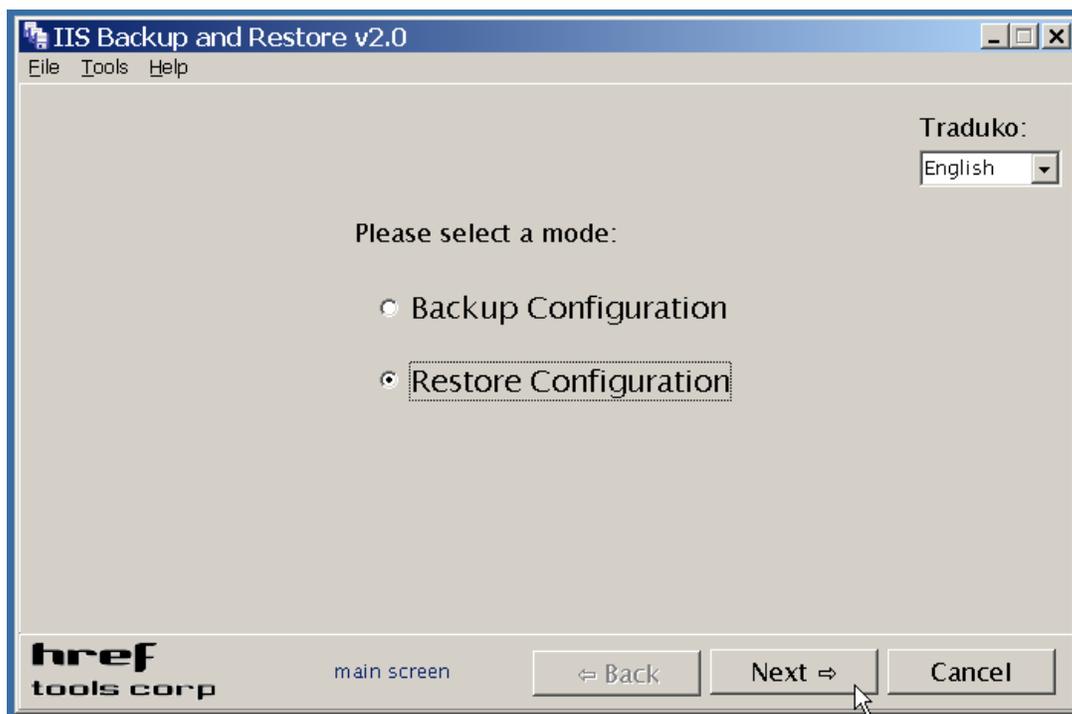
Restoring from a Backup

IIS Backup lets you restore all, or part, of a set of backed up information. To get started, you need to copy IISBackup.exe and the metabase.xml file to the server requiring restoration.

Alert: Unless you have entered a license code under Help > License, the IIS Backup Utility will operate in LITE mode. In this mode, you may restore only one(1) web site at a time.

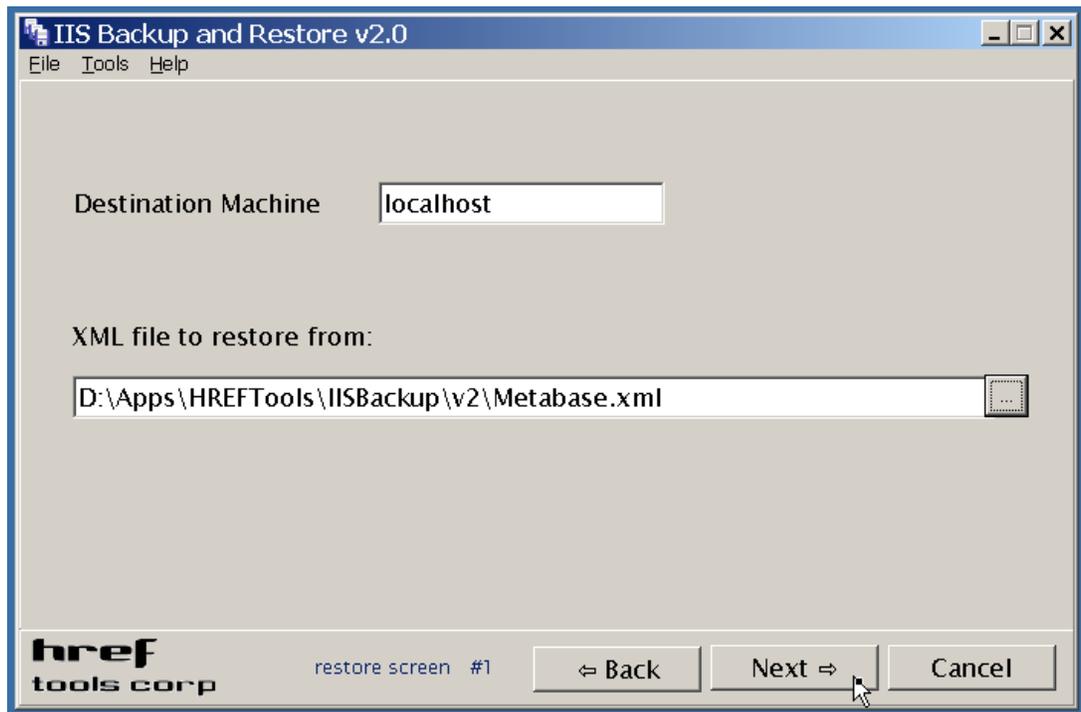
Run IISBackup.

Select **Restore** mode on the main screen and click [Next].



Main Screen

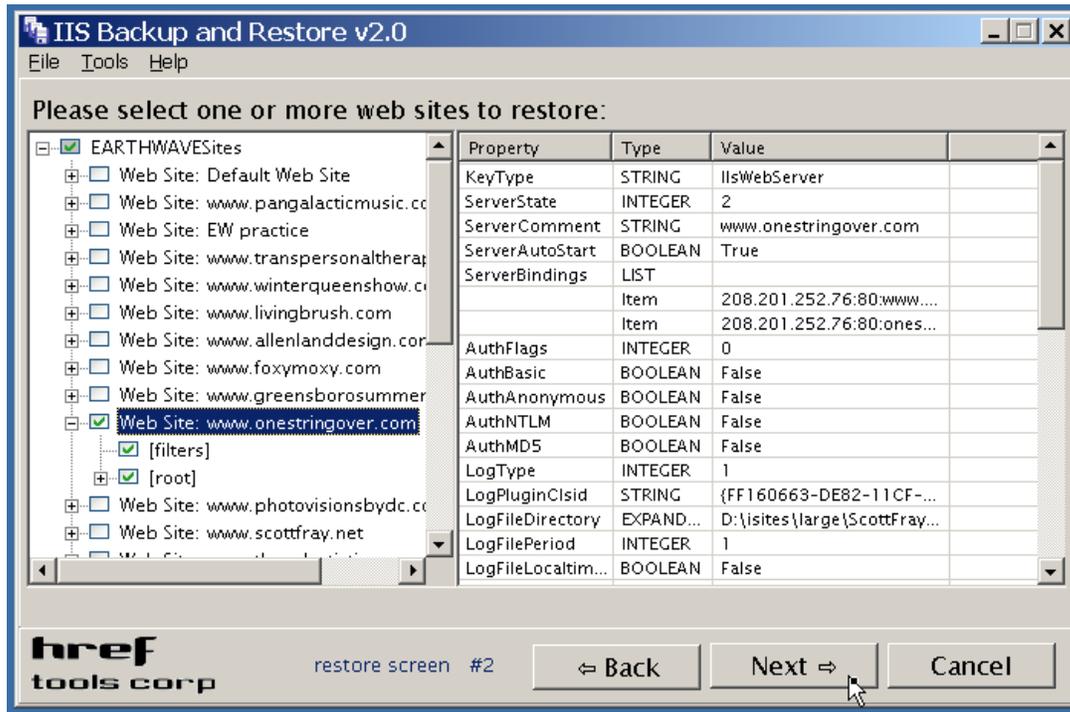
On restore screen #1, make sure the machine name is correct (e.g. localhost) and select the XML file to restore from.



Restore Screen #1

Click [Next](#).

Select Web Site(s) to Restore



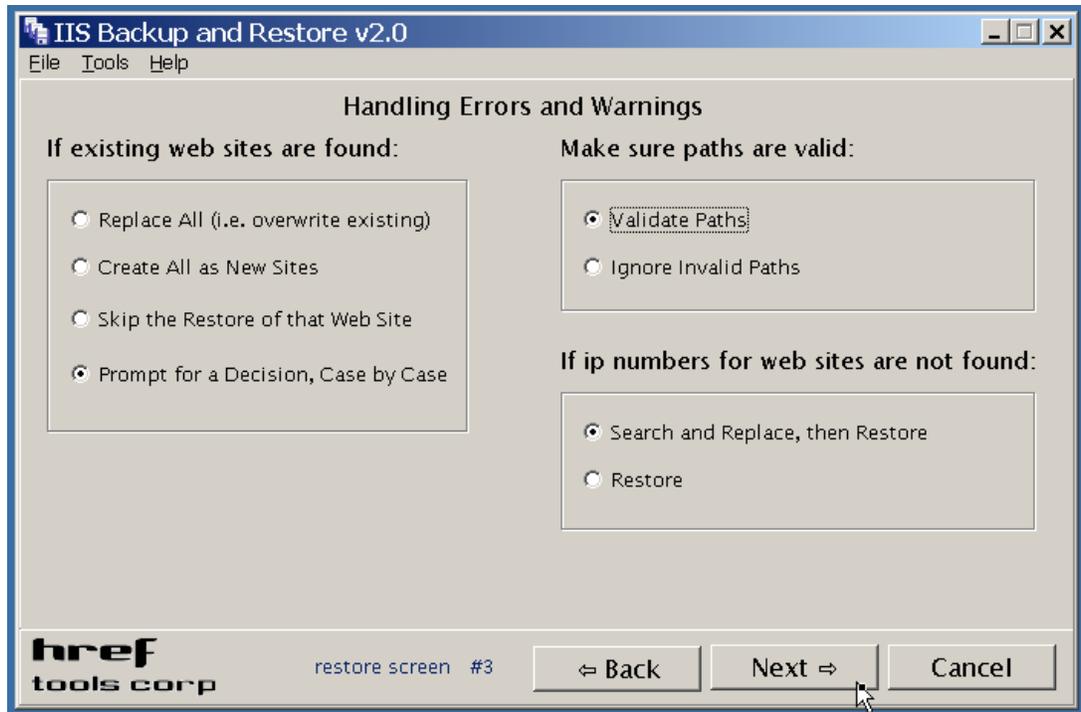
Restore Screen #2

If you want to restore everything about all sites, right-click on the name of the backup and choose **Select all Sites**.

If you want to restore selected sites, or even selected aspects of sites (such as virtual paths), expand the outline under the named backup, and choose the information you want restored.

When you are ready to review your error handling and data validation options, click the [\[Next\]](#) button.

Handling Errors and Warnings

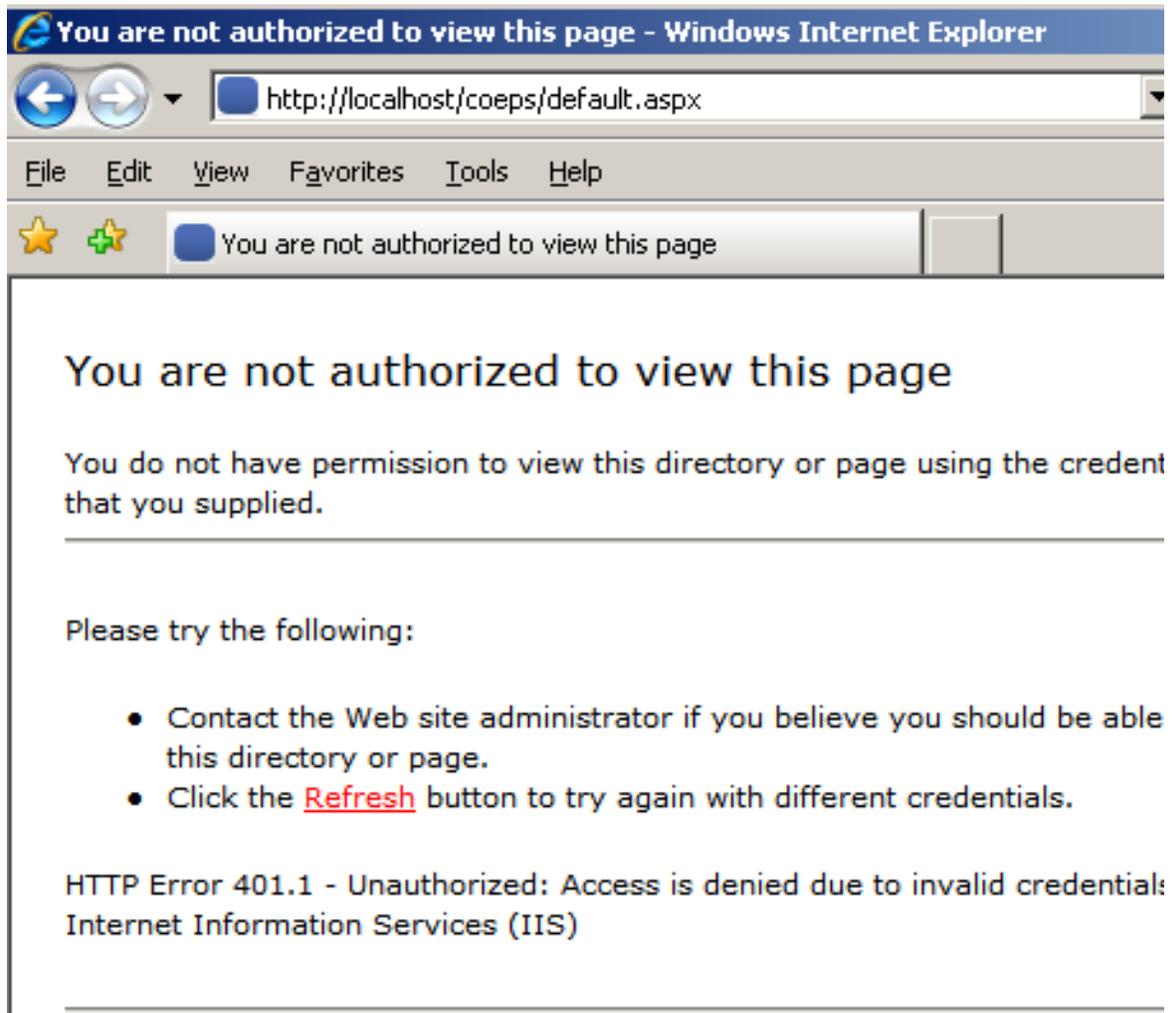


Restore Screen #3

Click on the [Next](#) button.

Permissions for IUSR_ComputerName Account (Anonymous Use)

If you restore a web site onto a different Windows operating system instance, you may find that normal anonymous requests for web pages give errors (e.g. HTTP Error 401.1 - Unauthorized: Access is denied due to invalid credentials). This is caused by the restored web site using an operating system account (e.g. IUSR_ + your computer name) which has a new/different password than before.



This problem can be cleared up by resetting the password for the IUSR account (**Control Panel > Administration > Computer Management > Local Users**) and then putting that same password into the dialog in IIS Manager under **Directory Security > Authentication and Access Control > [x] Enable Anonymous Access**.

Adjustments to Data Prior to Restoring

This feature was integrated into the Restore steps of version 2 so that it is easier to use. Nonetheless, the following documentation (which was for version 1) is still generally true.

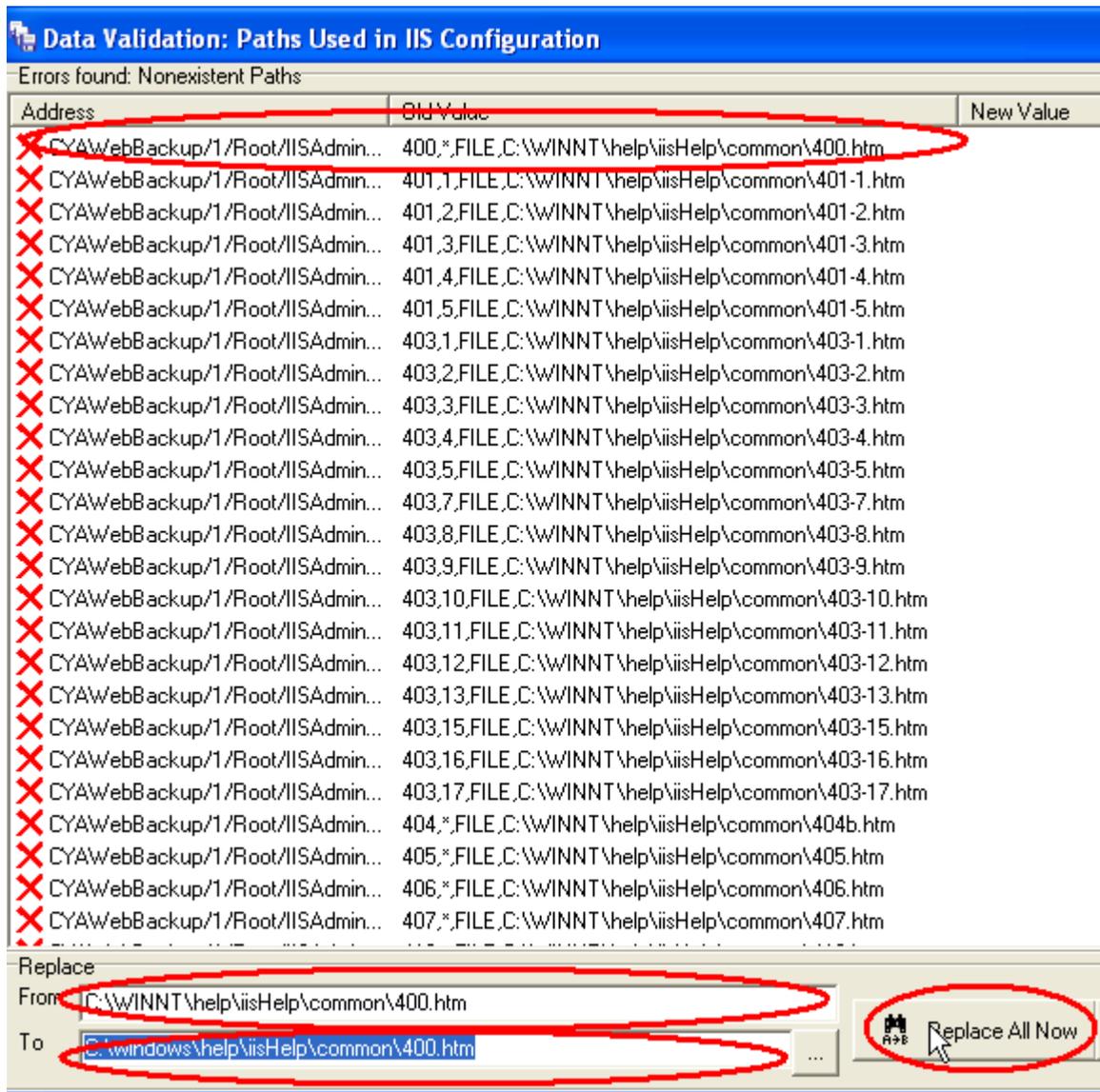
There are two common reasons that you may need to adjust data before restoring.

- 1 **paths are different** on the target machine, e.g. c:\windows differs from c:\winnt
- 2 **ip numbers are different** on the target machine

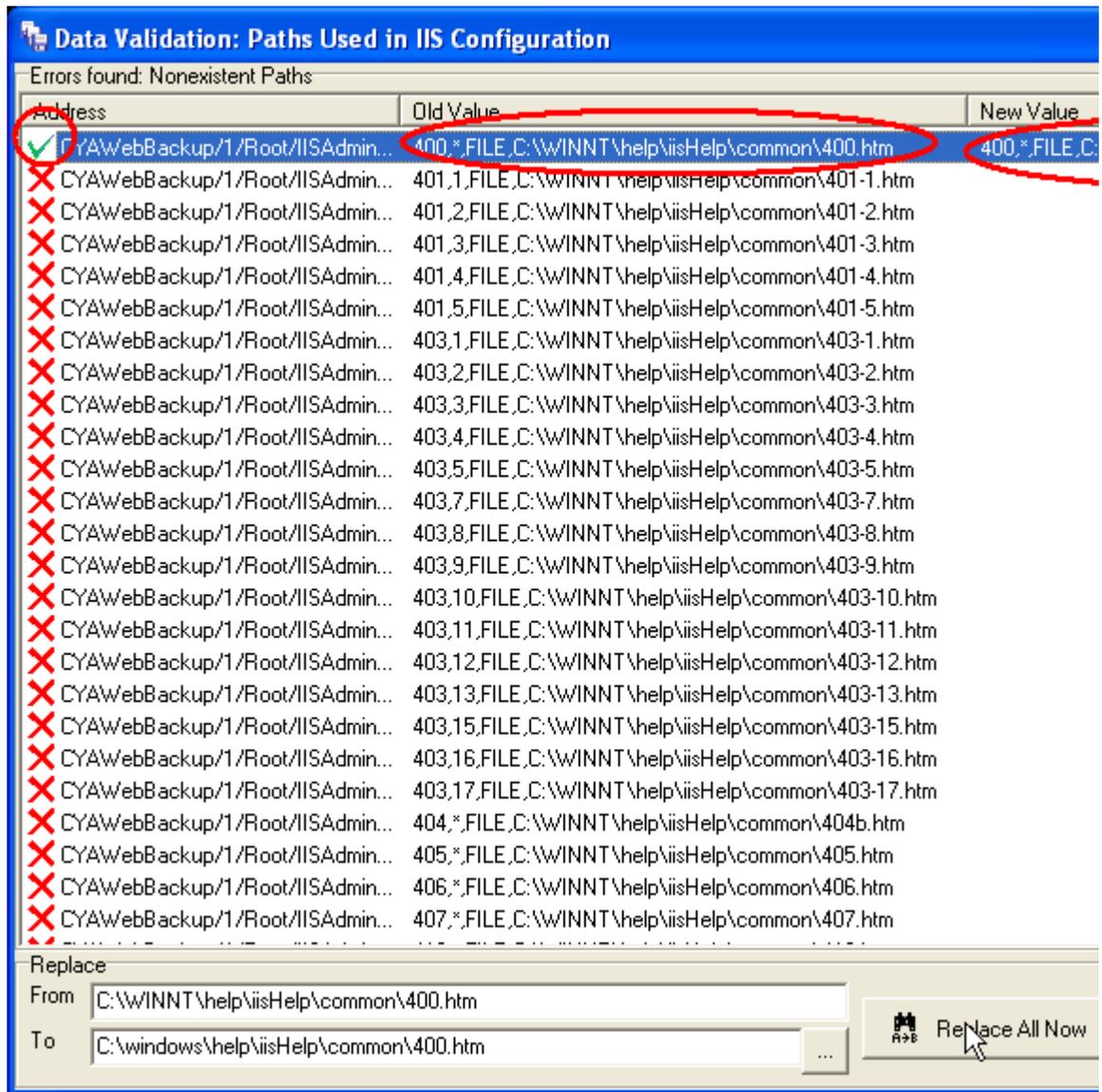
To make adjustments prior to restoring, click the [\[Data Validation\]](#) button. The software will report any invalid file specifications which were used in the original situation, so that you can change them for use on the target computer.

In the following example, a large number of files were in c:\winnt\ on the source machine, but are in c:\windows\ on the target machine.

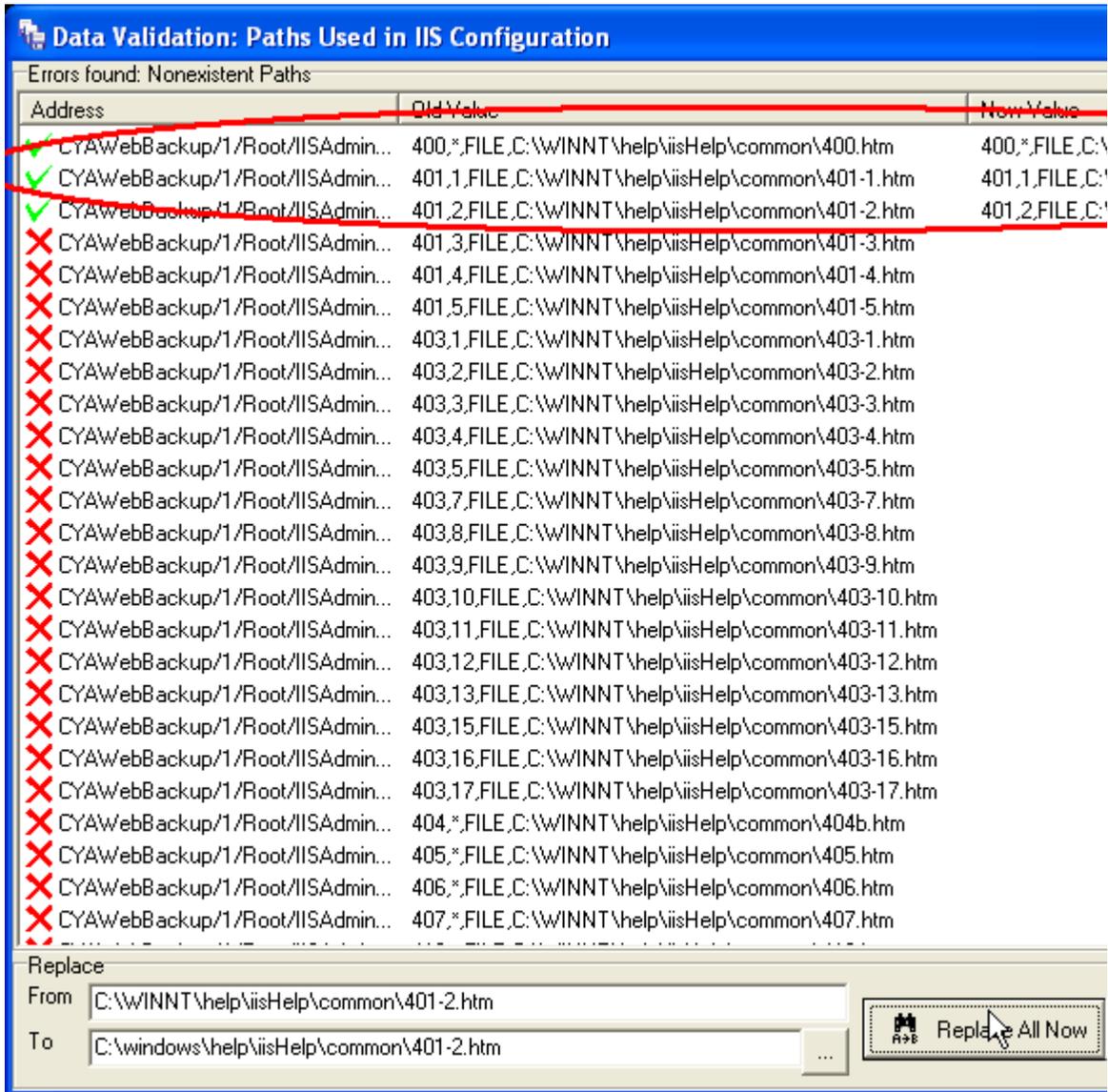
In order to proceed carefully, we first change only one file.



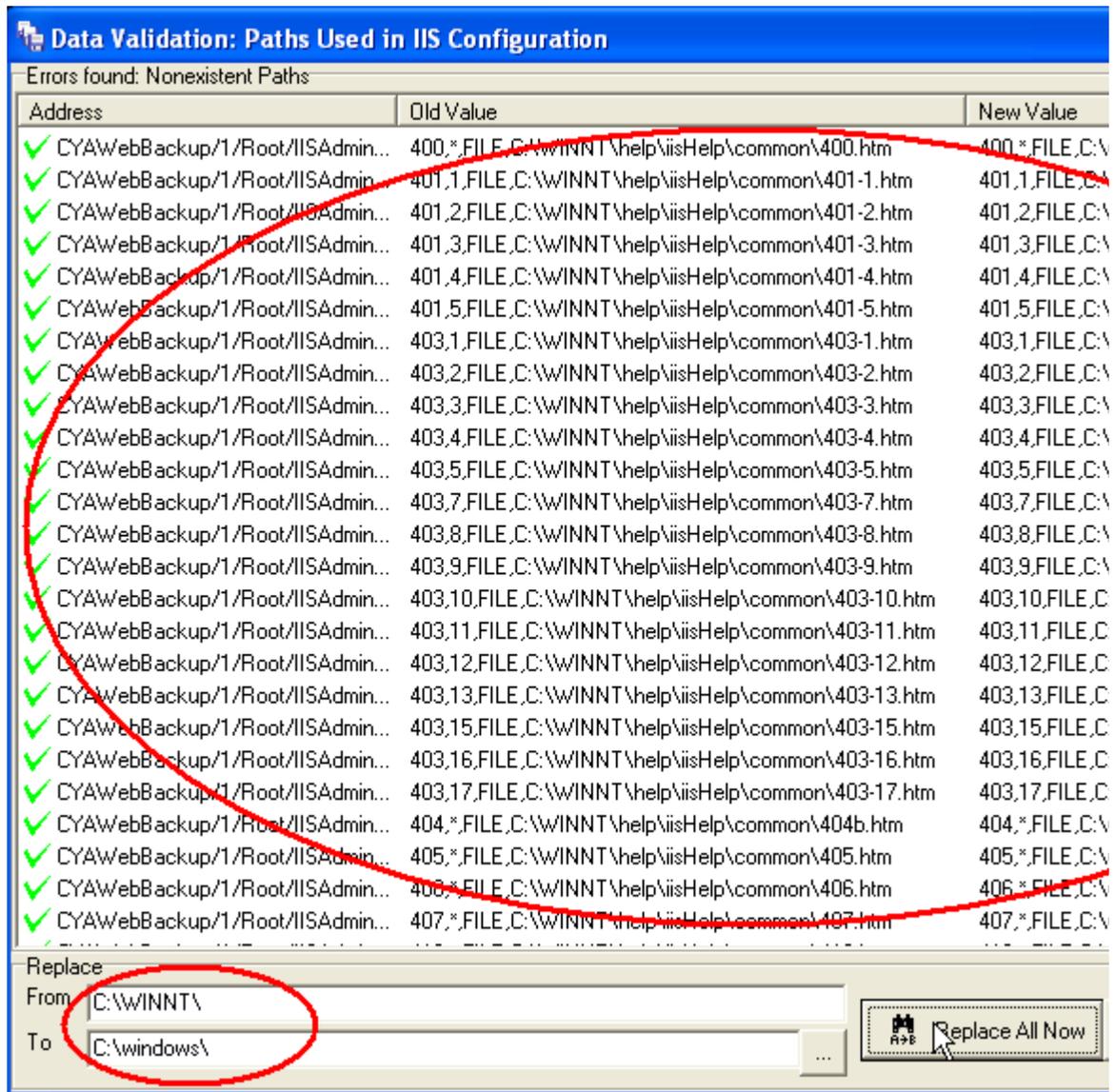
After typing in the “From” and “To” filenames, click on **[Replace all Now]**. If you have typed the file specifications correctly, you should see at least one green checkmark, as shown in the following screenshot.



If you enter in more individual file replacements, each one will be changed for you. The following screen shot shows the result after doing 3 files individually.



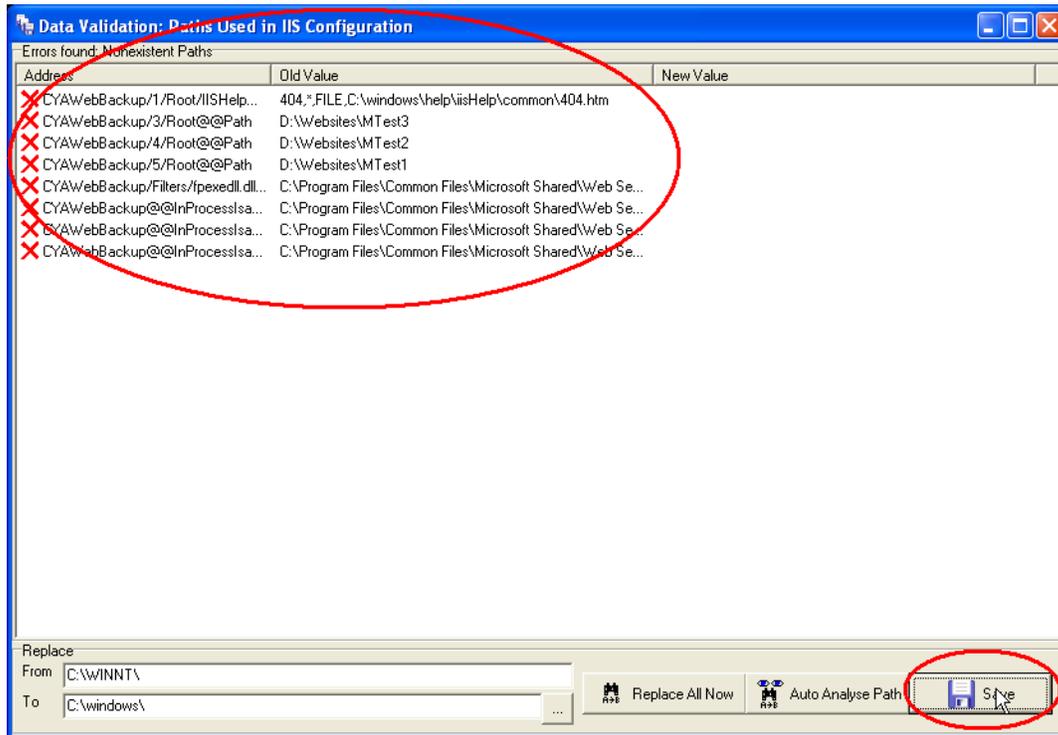
It is possible to do a global search and replace, to fix all files at once. However, it is more risky! Obviously you should not replace “nt” with “dows” because you are too likely to make changes to unintended areas. It is better to enter a few extra characters to make sure that the search expression is unique.



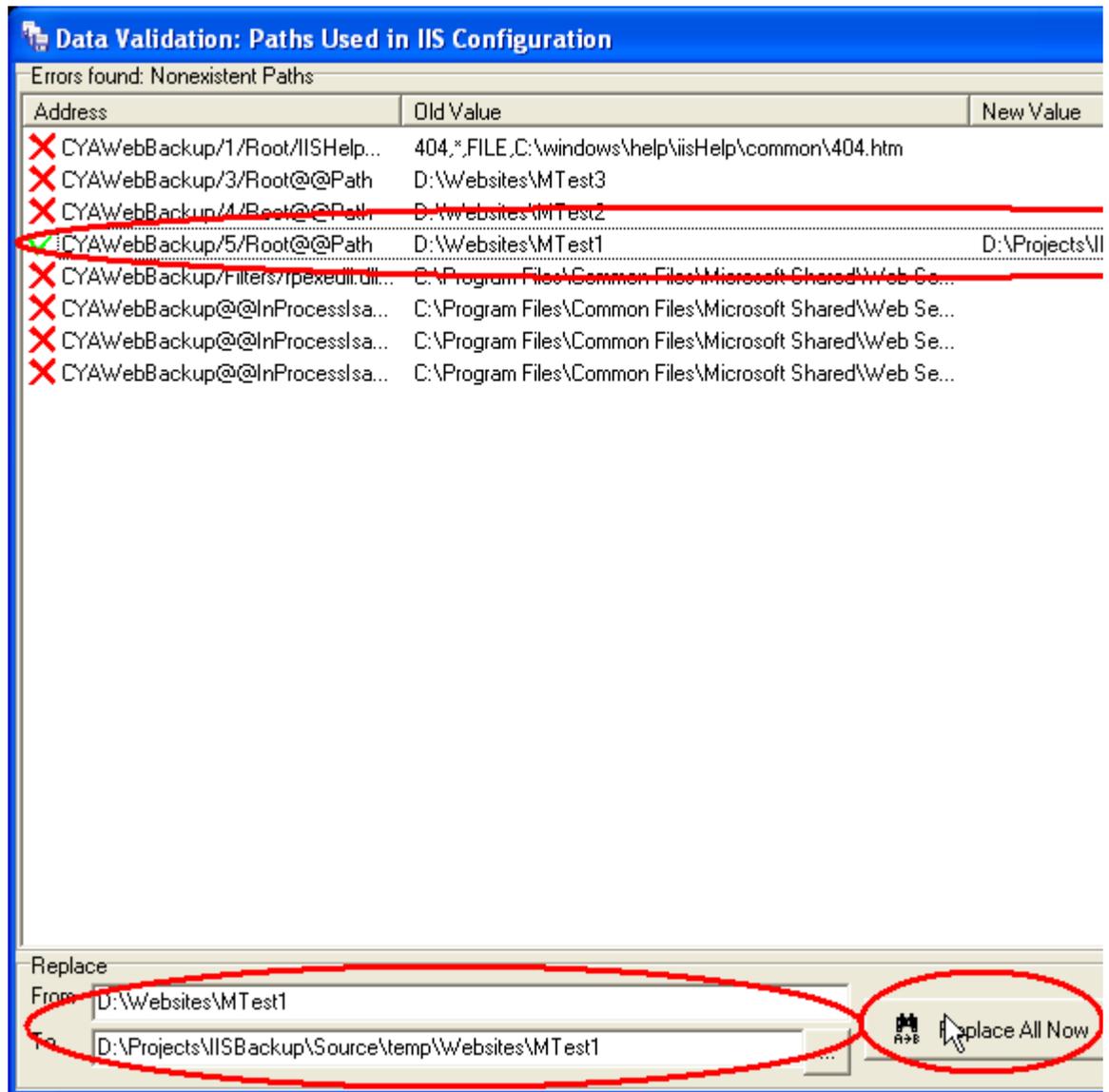
Search expressions are not case sensitive. In the above example, it would also have worked to go From: c:\winnt\.

Alert: at this point, no changes have been saved to disk yet.

If you are happy with the changes displayed, click the [Save] button to save to disk. The resulting display should contain fewer (hopefully zero) error lines.



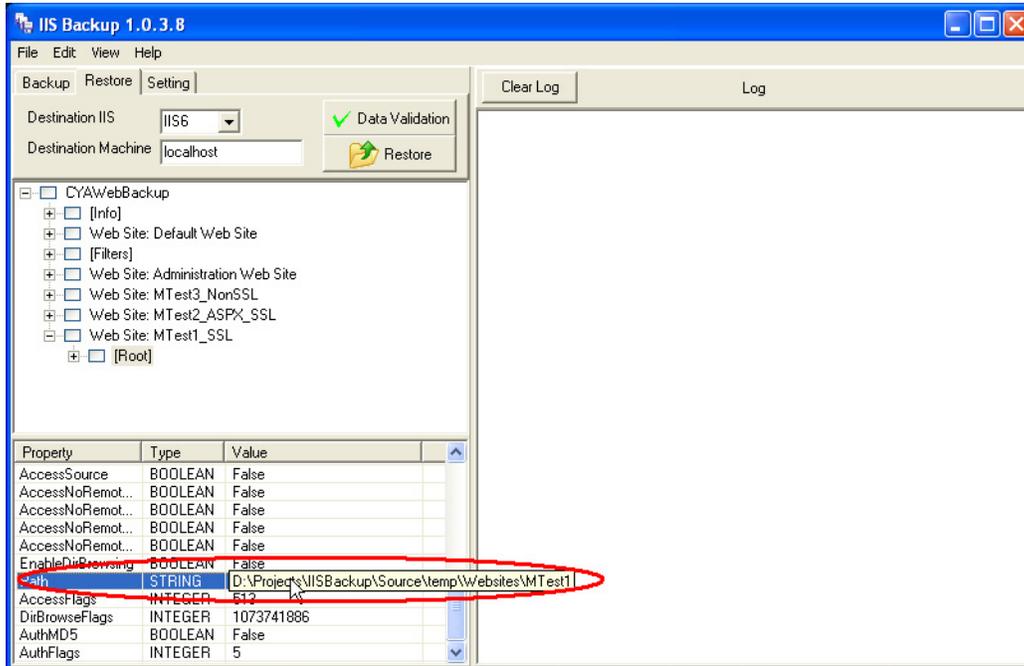
You may also want to adjust the paths for individual web sites, so that they are stored in a new location on the target computer. The following example adjusts the location of all files in MTest1.



When you close the form (by clicking the close-box in the top-right), IIS Backup will reload the XML file which now includes your changes.

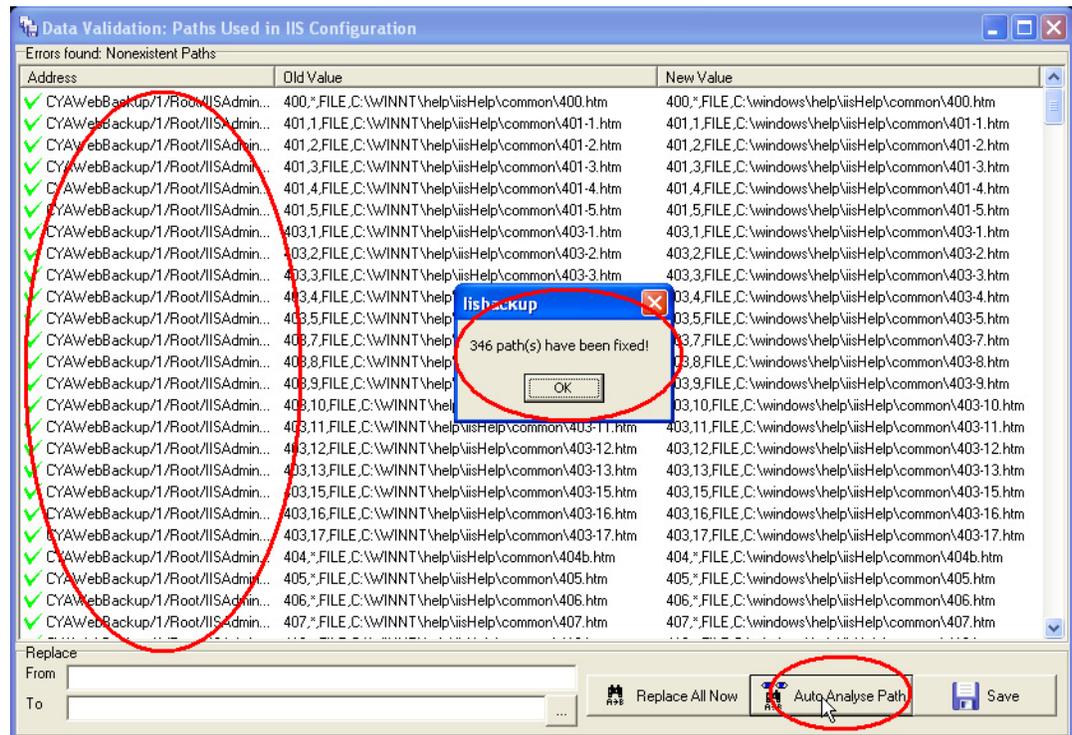


If you look carefully at your site data, you can see how the details reflect all the changes that have been made.



Auto-Analyze: Fast, Possibly Dangerous

While you were in the Data Validation area, you might have noticed a button which lets you automatically analyze the paths. This button will replace c:\winnt\ to c:\windows\ automatically.



As long as you review the changes before clicking the [Save] button, it is really not very dangerous. And if you are a bad typist, it might be safer than doing your own search and replace!

IIS Mail Server (“POP3 Service”)

In this section we review the installation and operation of IIS Backup, with a focus on backup and restore of mail account settings, on a Windows 2003 Server with the POP3 service installed.

Warning: IIS Backup only backs up the names of the email accounts. It does not back up the email messages (data files) in those accounts. You can use any backup product to back up the email messages, including Windows itself, WinZIP, XXCopy, and many other products. Backing up the list of email accounts to a plain-text XML file is very different (and more difficult), and that is what IIS Backup helps with.

Scope:

- 1 Installation of POP3 Mail Service on a Windows 2003 Enterprise Server, creation of mailboxes.
- 2 Use IISBackup to take a backup.
- 3 3.Use IISBackup to perform a restore.

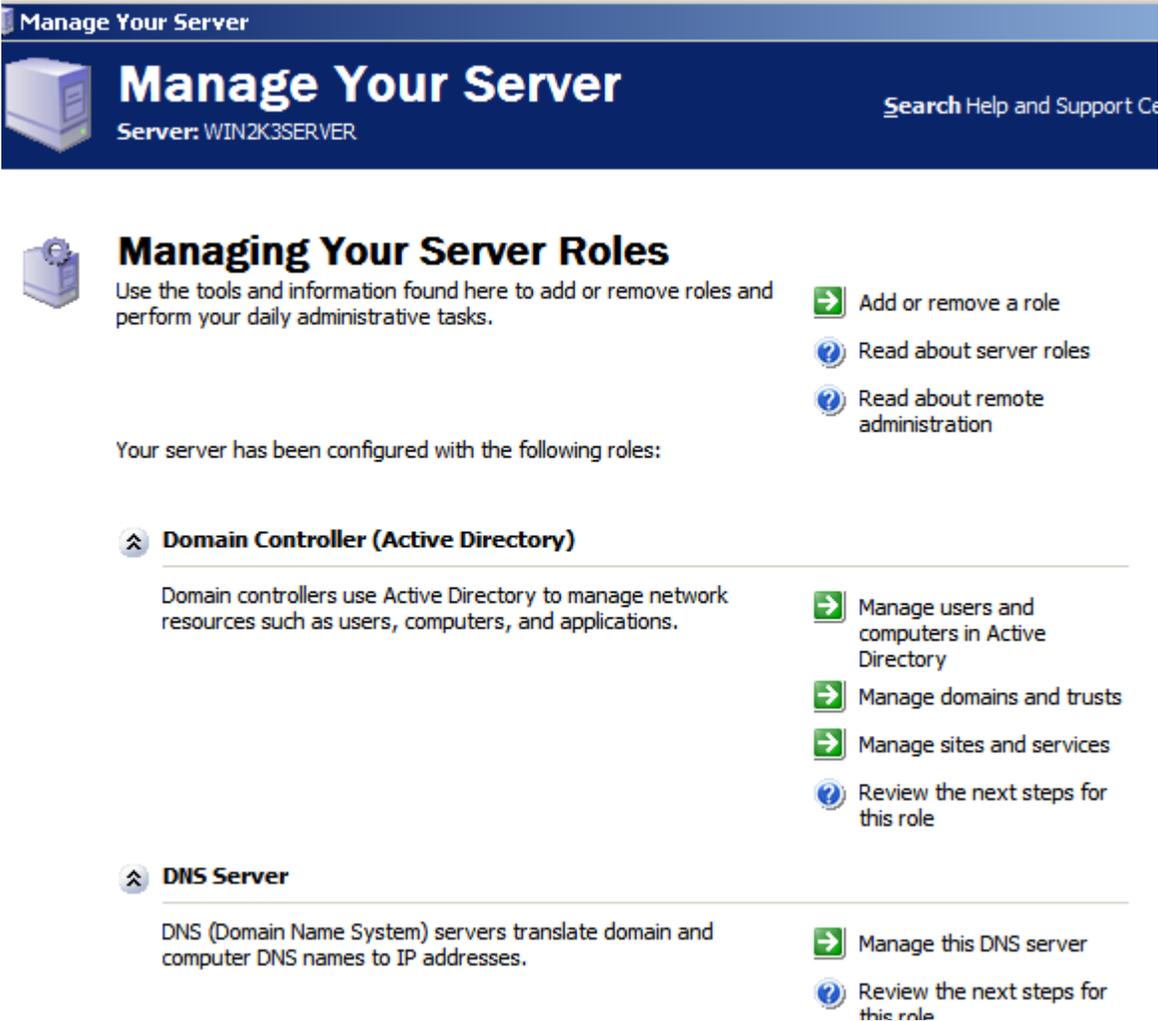
Platform:

- Windows 2003 Server R2 SP2
- IIS with roles: Application Server and Mail Server

Installing the POP3 service and creating mailbox accounts

The following screen shots show how one would install the POP3 service. If you are backing up an existing server, these steps have probably already been completed.

The easiest place to start is from the “Manage Your Server” utility.



Manage Your Server
Server: WIN2K3SERVER

Managing Your Server Roles
Use the tools and information found here to add or remove roles and perform your daily administrative tasks.

- ➔ Add or remove a role
- 🔍 Read about server roles
- 🔍 Read about remote administration

Your server has been configured with the following roles:

Domain Controller (Active Directory)
Domain controllers use Active Directory to manage network resources such as users, computers, and applications.

- ➔ Manage users and computers in Active Directory
- ➔ Manage domains and trusts
- ➔ Manage sites and services
- 🔍 Review the next steps for this role

DNS Server
DNS (Domain Name System) servers translate domain and computer DNS names to IP addresses.

- ➔ Manage this DNS server
- 🔍 Review the next steps for this role

Click [Add or remove a role](#) to start adding the mail server role.

To view any of these screenshots more clearly, use Acrobat Reader to **magnify** the display, to 150% or 200% or larger. The full text should become readable at that magnification.

Server Role

You can set up this server to perform one or more specific roles. If you want to add more than one role to this server, you can run this wizard again.

Select a role. If the role has not been added, you can add it. If it has already been added, you can remove it. If the role you want to add or remove is not listed, open [Add or Remove Programs](#).

Server Role	Configured
File server	No
Print server	No
Application server (IIS, ASP.NET)	No
Mail server (POP3, SMTP)	No
Terminal server	No
Remote access / VPN server	No
Domain Controller (Active Directory)	Yes
DNS server	Yes
DHCP server	No
Streaming media server	No
WINS server	No

Mail server (POP3, SMTP)

Mail servers use the POP3 and SMTP services to provide e-mail delivery and tools for creating and managing e-mail accounts.

[Read about mail servers](#)

View the [Configure Your Server log](#).

< Back Next > Cancel Help

DNS (Domain Name System) servers translate domain and computer DNS names to IP addresses.

Manage this DNS server

Review the next steps for this role

Don't display this page at logon

Start | Manage Your Server | Configure Your Serve... | Strategic Technology Program

There are two ways to store passwords in the POP3 service, “encrypted” and “Active Directory”. If the passwords are stored “encrypted” then IIS Backup can NOT restore them. If the passwords are stored as part of “Active Directory” then they can be preserved when you backup your mailbox folders.

This is what it looks like when you use encryption:

The screenshot shows a wizard window titled "Configure Your Server Wizard" with a sub-header "Configure POP3 Service". Below the sub-header is a descriptive text: "You must specify how e-mail clients will authenticate to the server and the e-mail domain name." The main content area contains the instruction "Select the type of user authentication." followed by a label "Authentication method:" and a list box with "Encrypted Password File" selected. Below this is another instruction: "Type the name of the domain for which this server will receive e-mail. Use the fully qualified DNS domain name. For example: microsoft.com" followed by a label "E-mail domain name:" and a text input field containing "testmail.com". At the bottom right, there are four buttons: "< Back", "Next >", "Cancel", and a disabled button.

Configure Your Server Wizard

Configure POP3 Service
You must specify how e-mail clients will authenticate to the server and the e-mail domain name.

Select the type of user authentication.

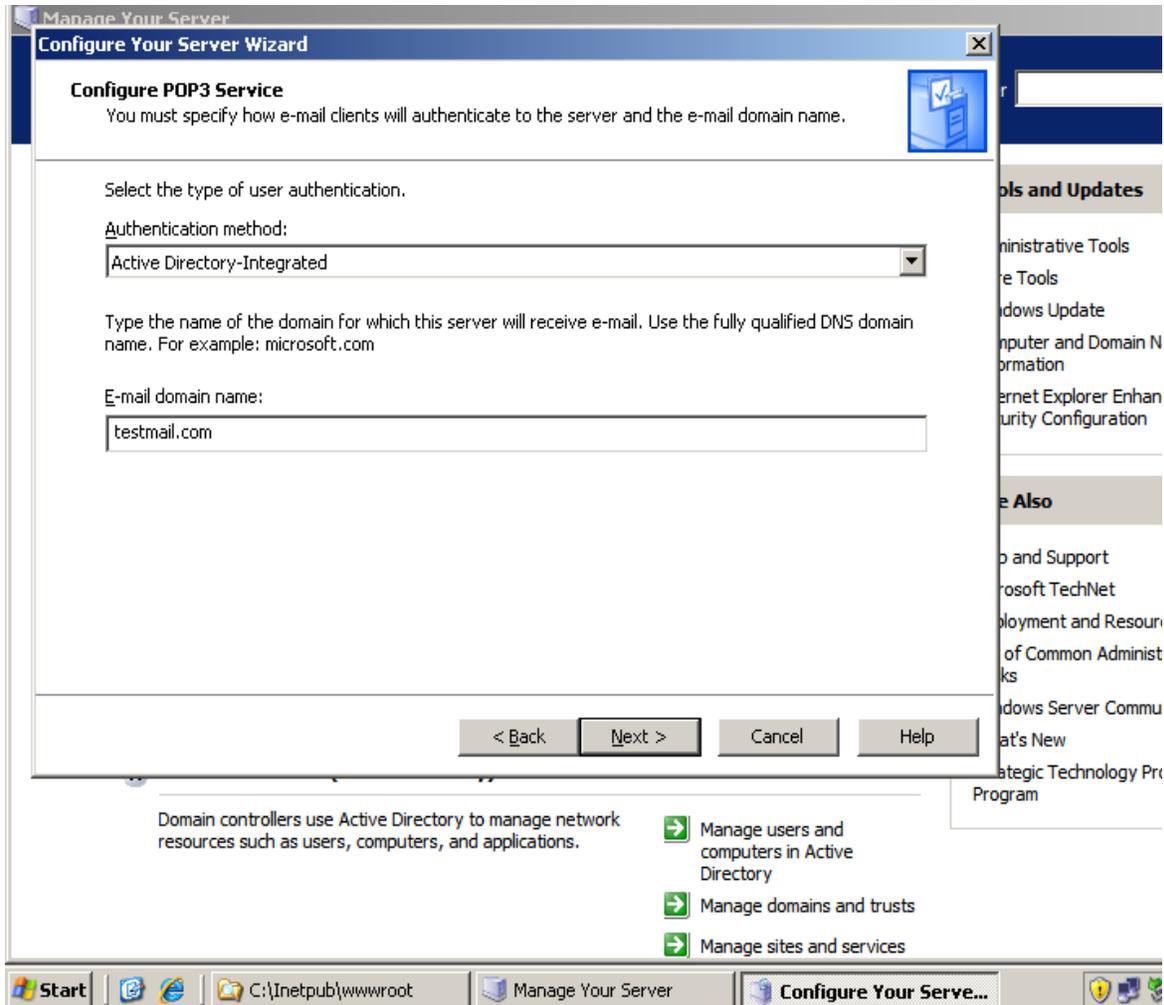
Authentication method:
Encrypted Password File

Type the name of the domain for which this server will receive e-mail. Use the fully qualified DNS domain name. For example: microsoft.com

E-mail domain name:
testmail.com

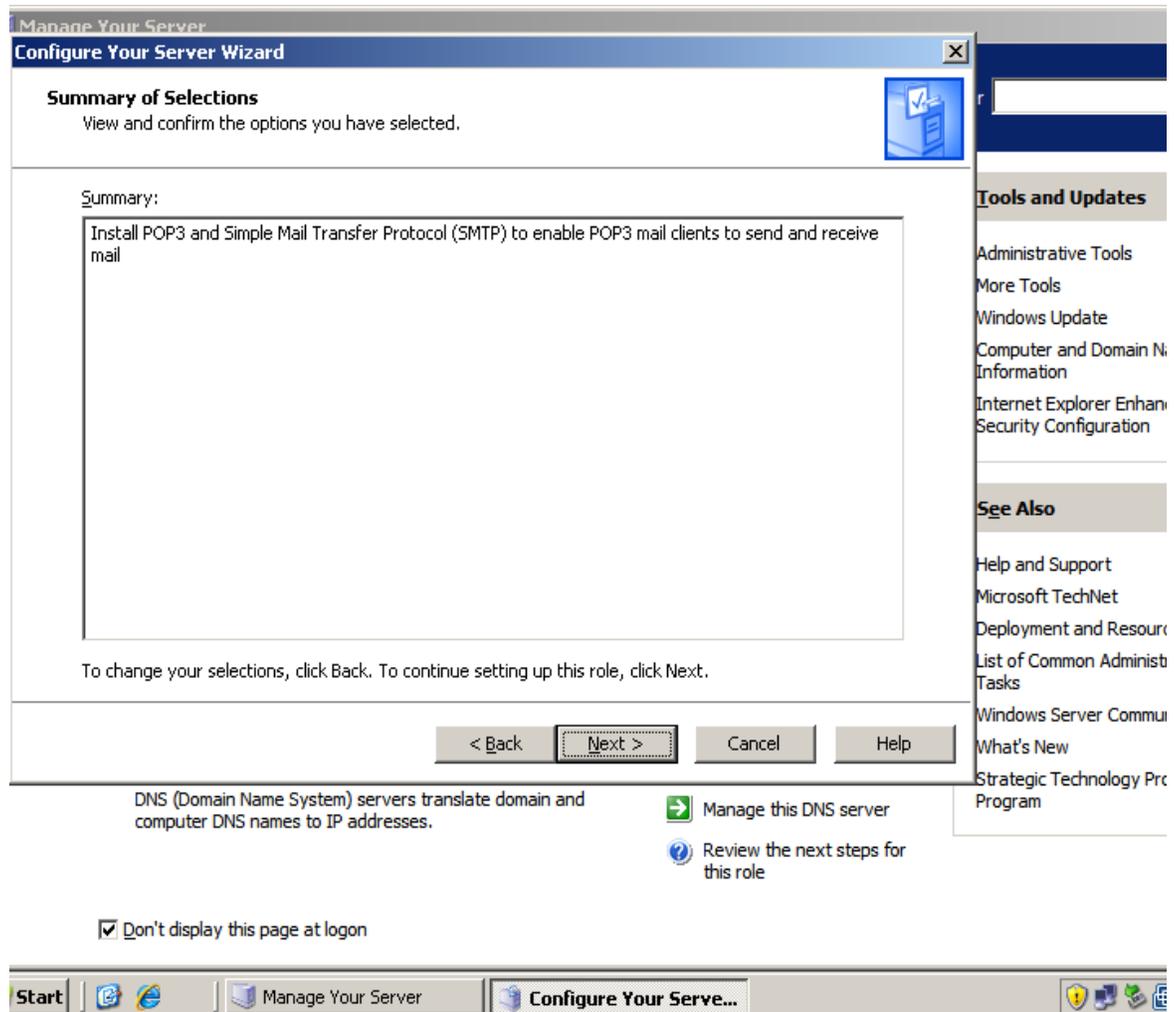
< Back Next > Cancel

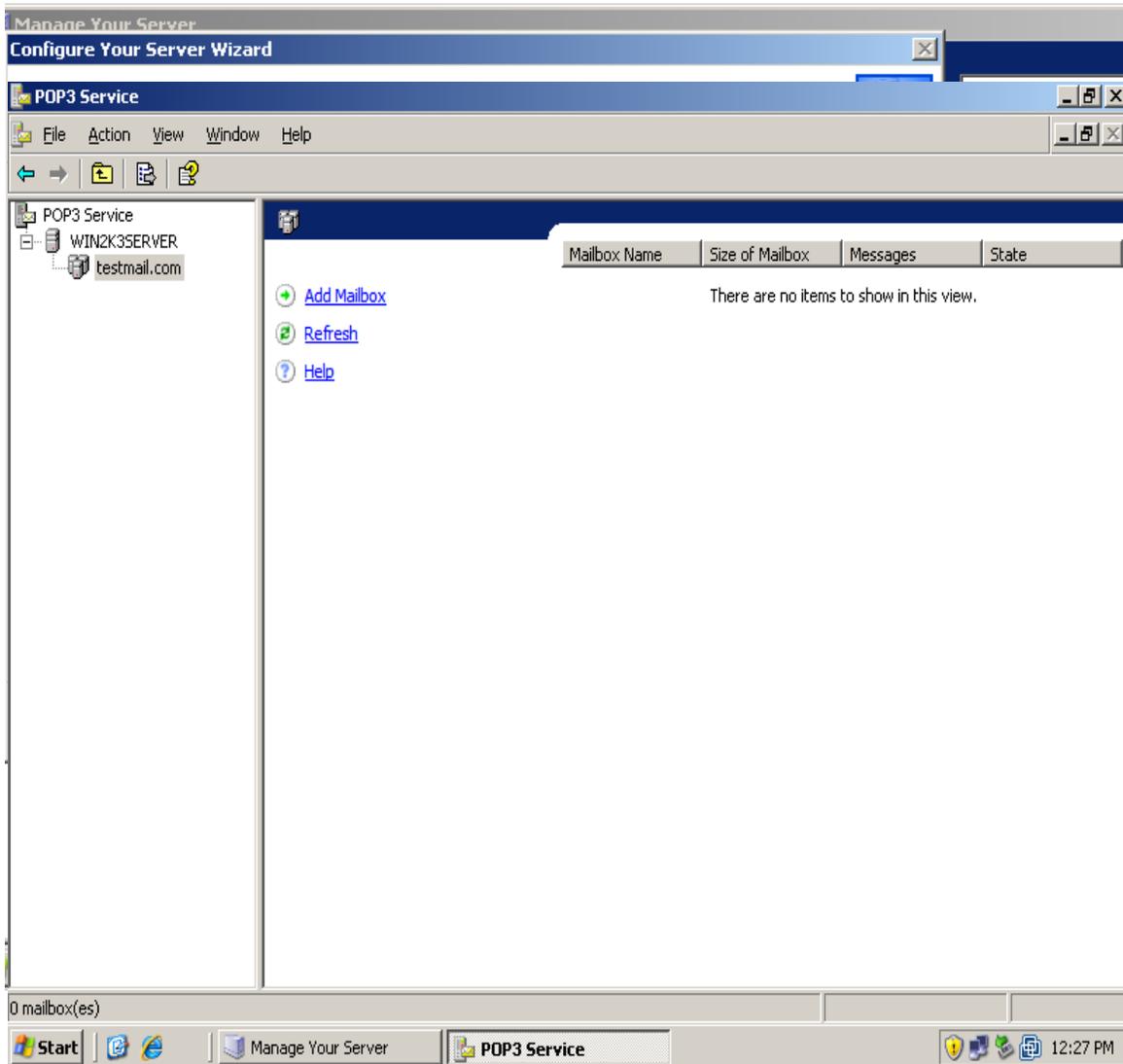
This is what it looks like when you use Active Directory:

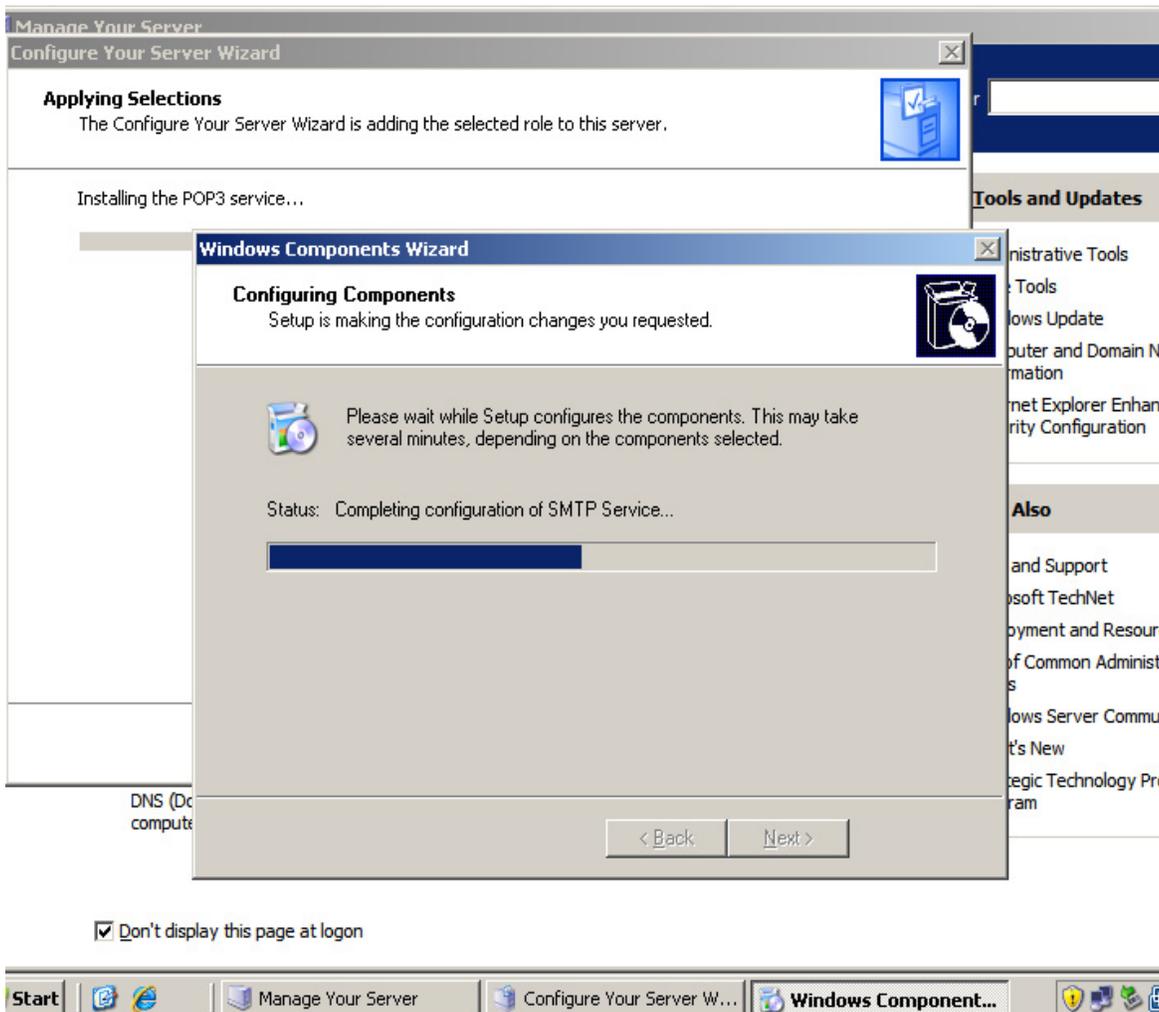


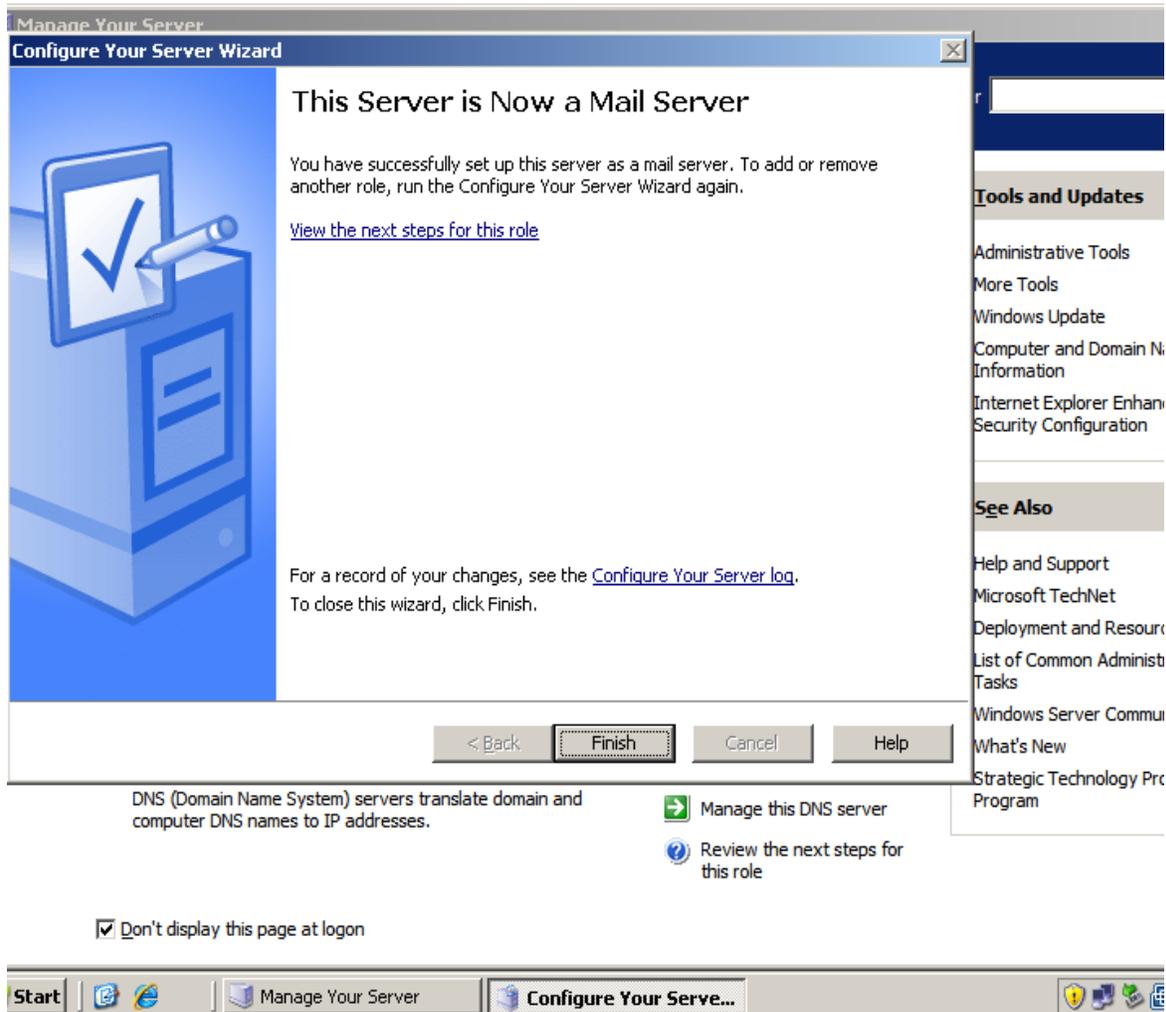
Note that the consequence of using Active Directory is that a Windows user account will be created for each mailbox/user. Please be aware that if Windows crashes completely and loses all knowledge of your user accounts and their passwords, you would need to use a backup of your operating system partition to retrieve that data (not IISBackup). Speak to your network administrator to be sure that you have a backup procedure for your user accounts.

After selecting your authentication method, click [Next] to move the installation process forward.









Here you can see that the Win2003 server is running the role of Mail Server (POP3 and SMTP).

Manage Your Server

Server: WIN2K3SERVER

Search Help and Support Center

Managing Your Server Roles

Use the tools and information found here to add or remove roles and perform your daily administrative tasks.

Your server has been configured with the following roles:

- Mail Server (POP3, SMTP)**

Mail servers use the POP3 service to provide e-mail delivery and tools for creating and managing e-mail accounts.

 - Add or remove a role
 - Read about server roles
 - Read about remote administration
 - Manage this mail server
 - Review the next steps for this role
- Domain Controller (Active Directory)**

Domain controllers use Active Directory to manage network resources such as users, computers, and applications.

 - Manage users and computers in Active Directory
 - Manage domains and trusts
 - Manage sites and services
 - Review the next steps for this role
- DNS Server**

Tools and Updates

- Administrative Tools
- More Tools
- Windows Update
- Computer and Domain Name Information
- Internet Explorer Enhanced Security Configuration

See Also

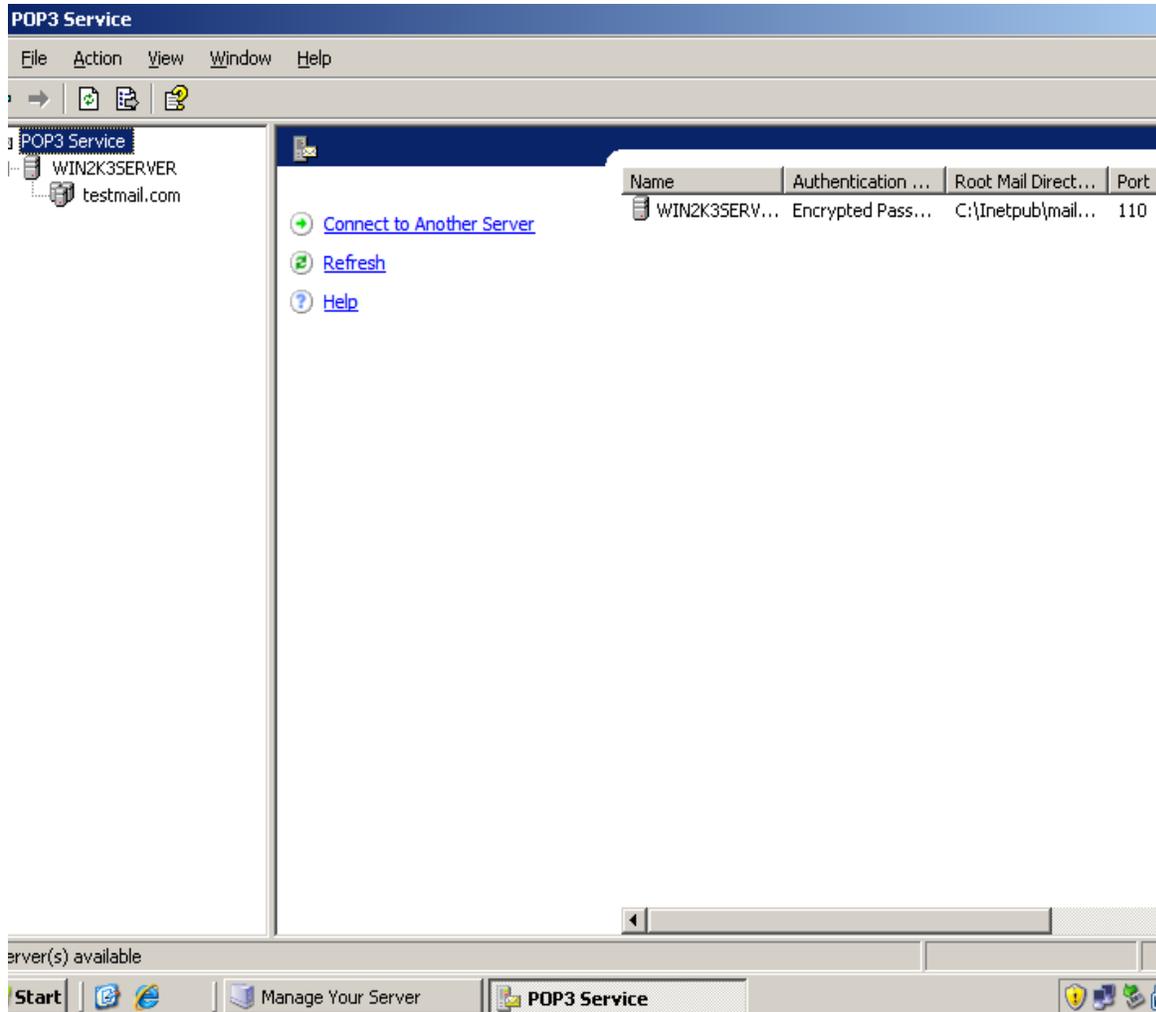
- Help and Support
- Microsoft TechNet
- Deployment and Resource Kit
- List of Common Administrative Tasks
- Windows Server Communities
- What's New
- Strategic Technology Protection Program

Start | Internet Explorer | Manage Your Server

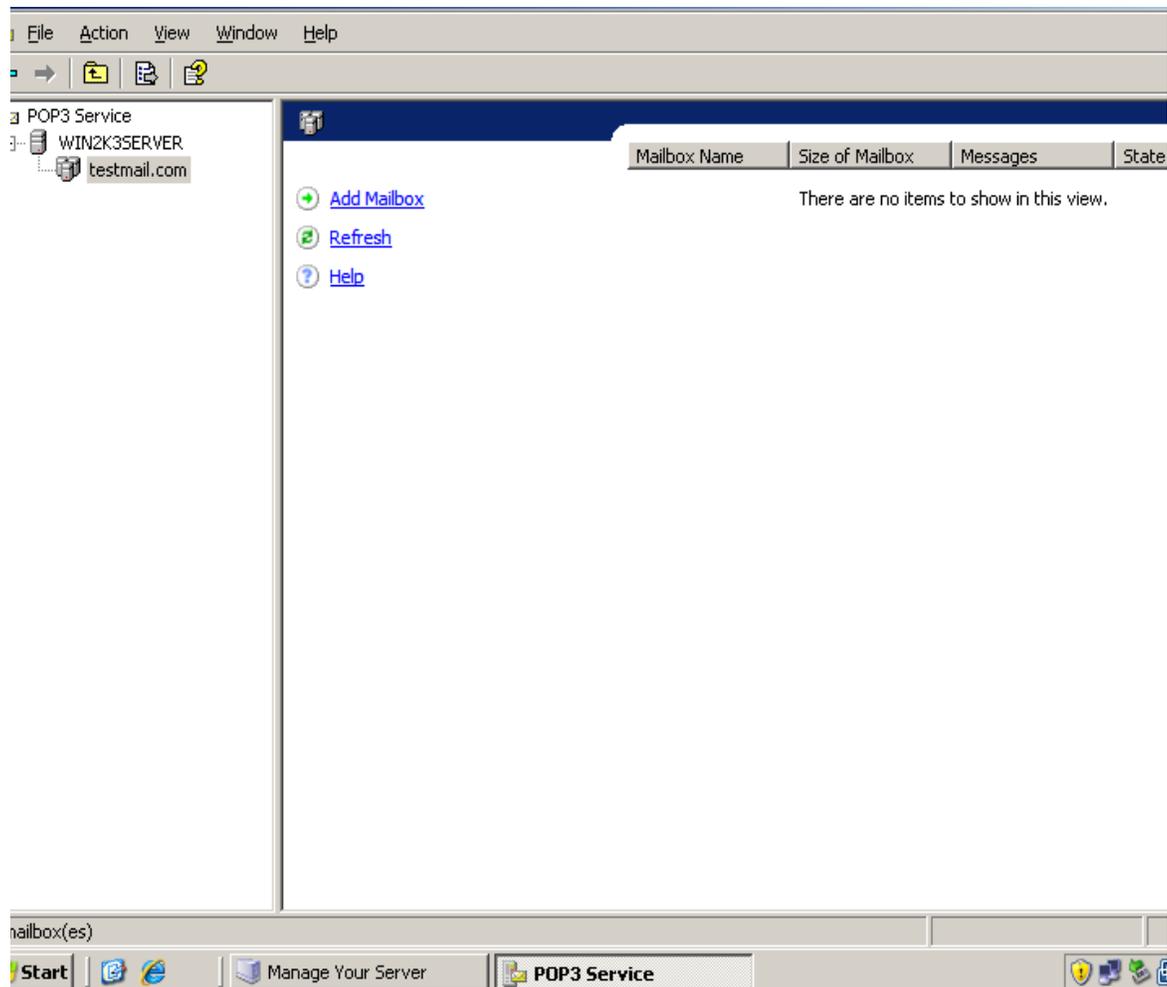
Adding Sample POP3 Accounts (Mailboxes)

The next set of screens show how one would add email accounts to the server.

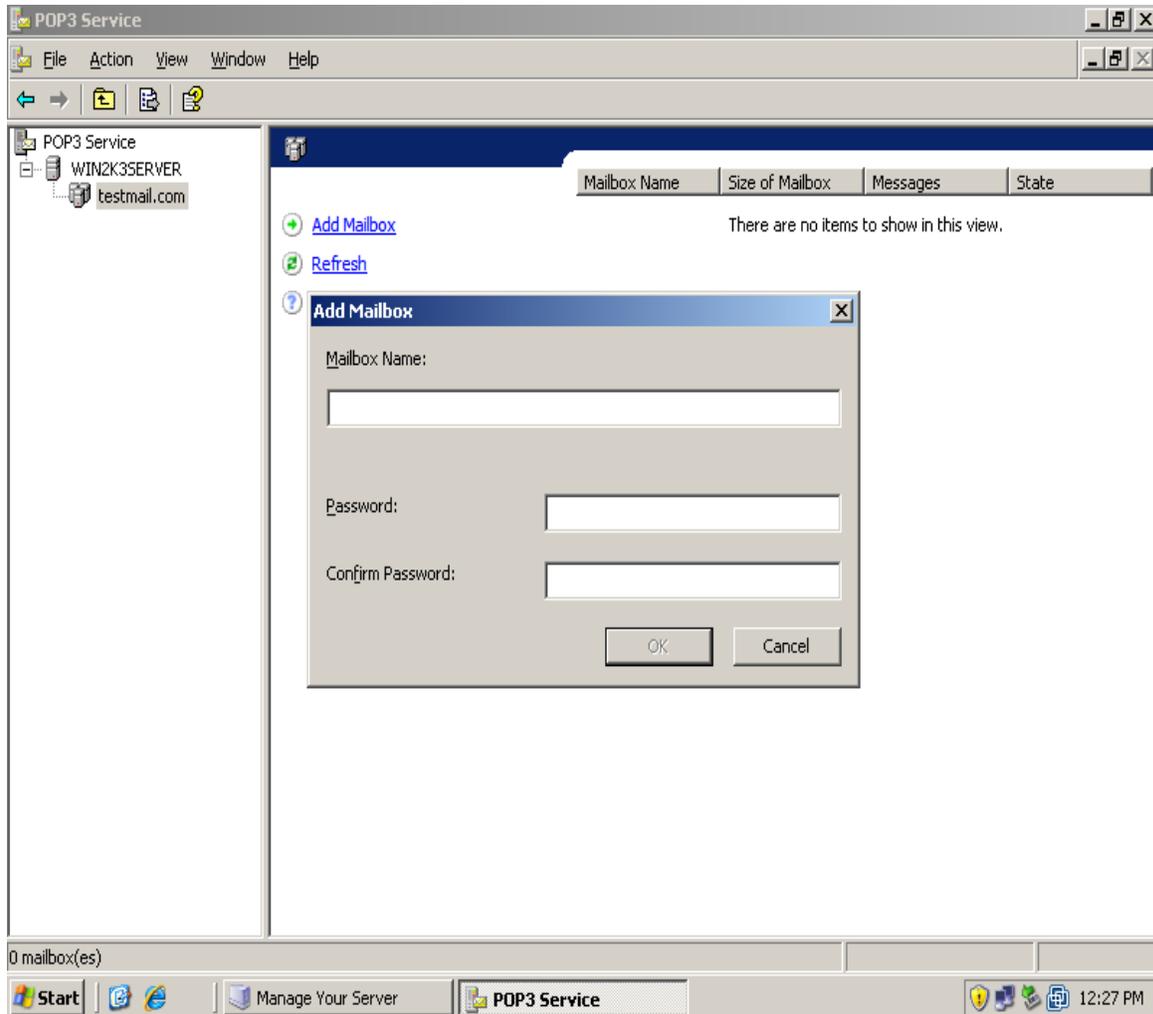
If you are interested in backing up POP3 settings, your server probably *already* has email accounts. These screens are included in order to document the scenario PRIOR to using IIS Backup to restore the POP3 accounts.



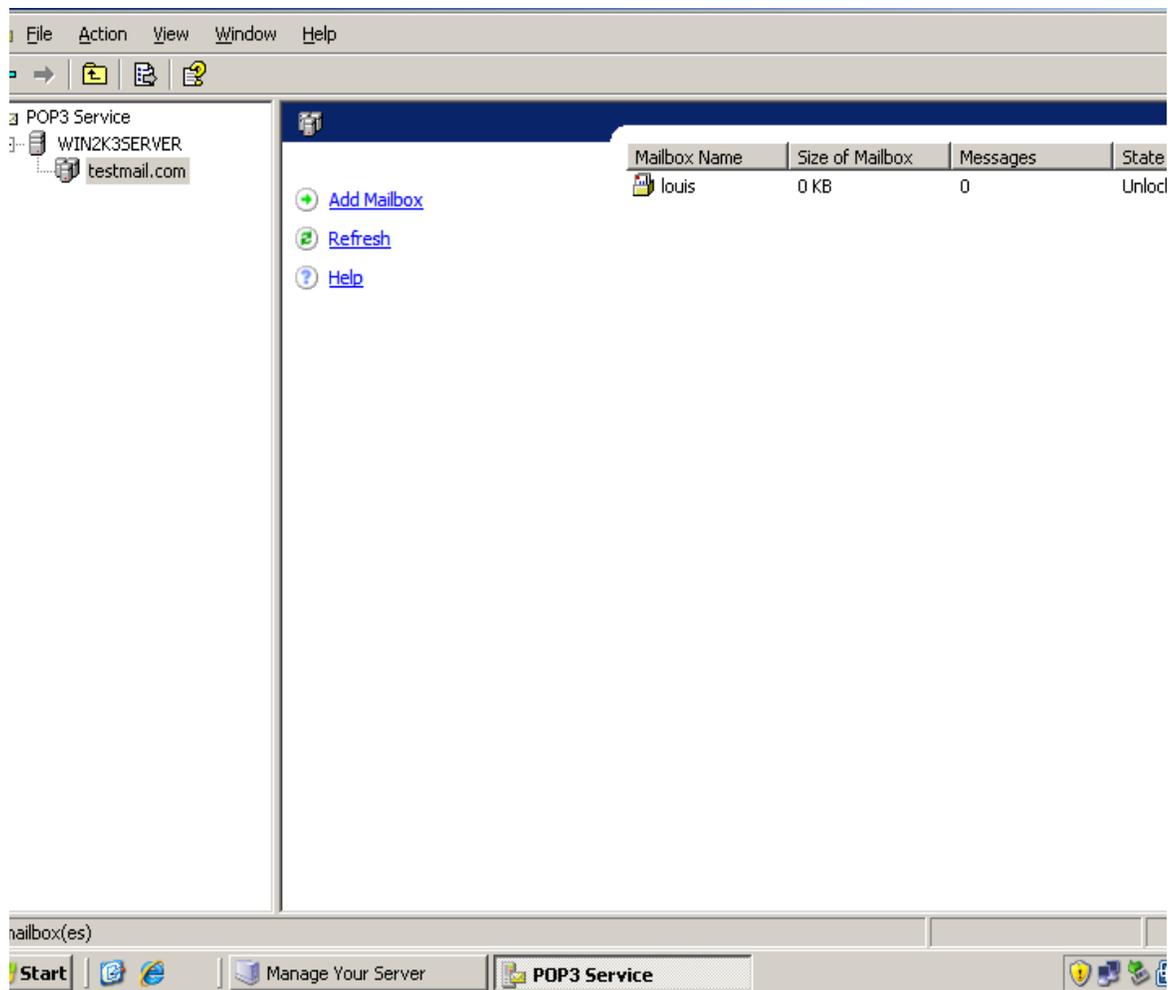
In this example, the testmail.com node is selected, there are zero mailboxes and the [Add Mailbox](#) feature is available.



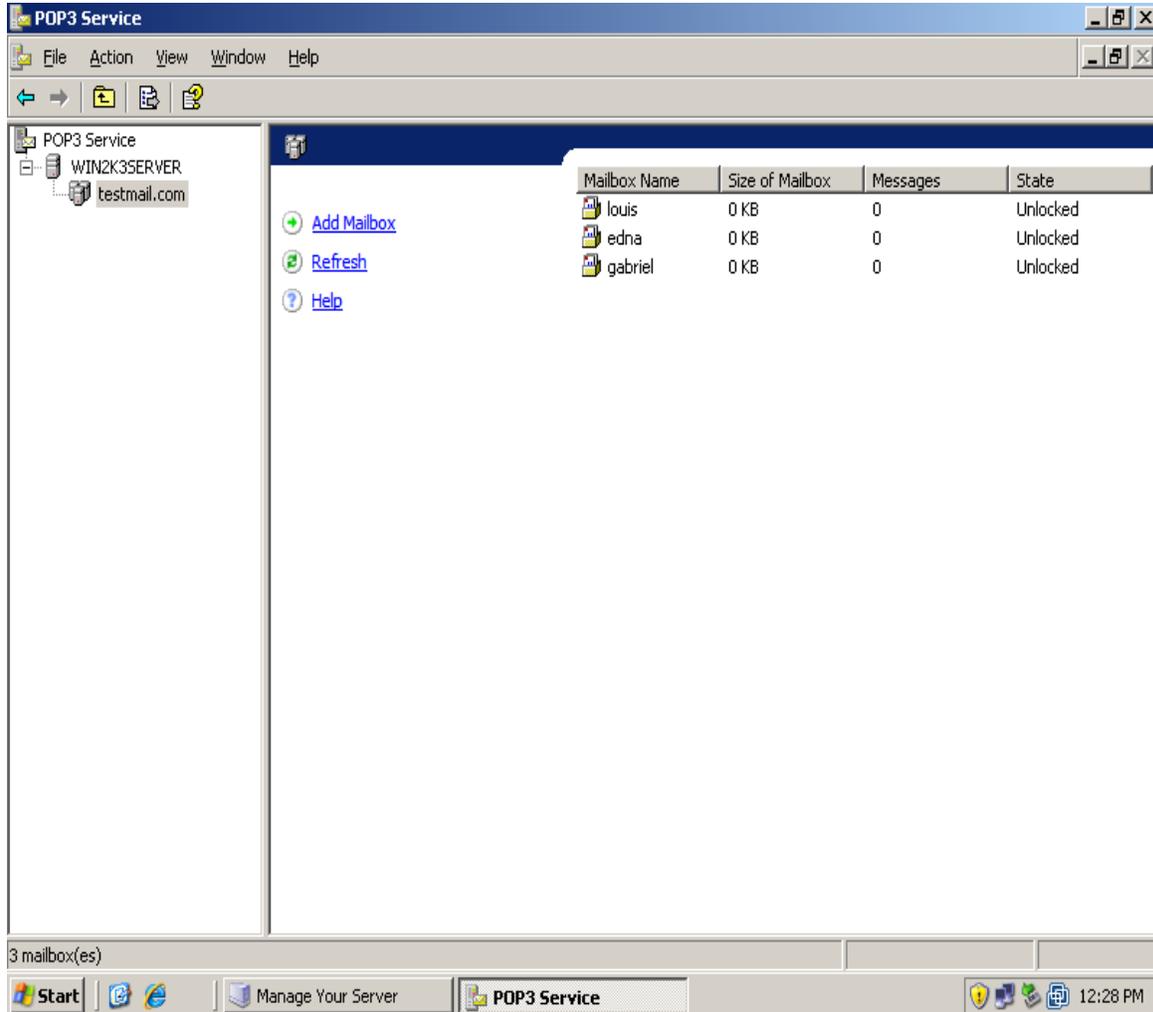
Warning: if your server has the passwords stored in an encrypted format, IISBackup will NOT be able to back those up nor restore them for you.



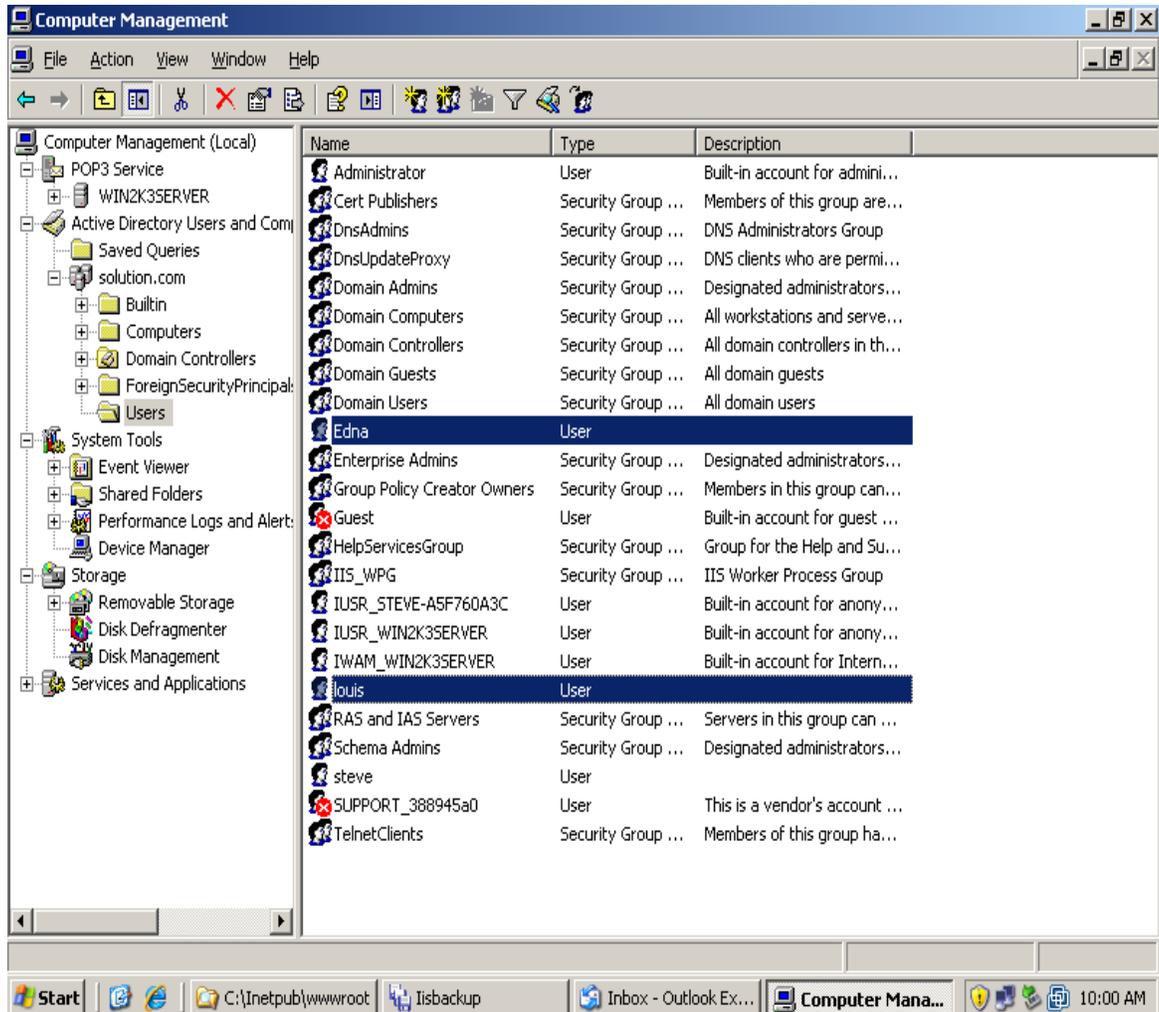
At this point, one mailbox has been created.



At this point, three mailboxes have been created and we are ready to start the backup and restore procedure.



Remember, if you are using ActiveDirectory for your authentication (and to store passwords), you will have a Windows user account to match each mailbox.



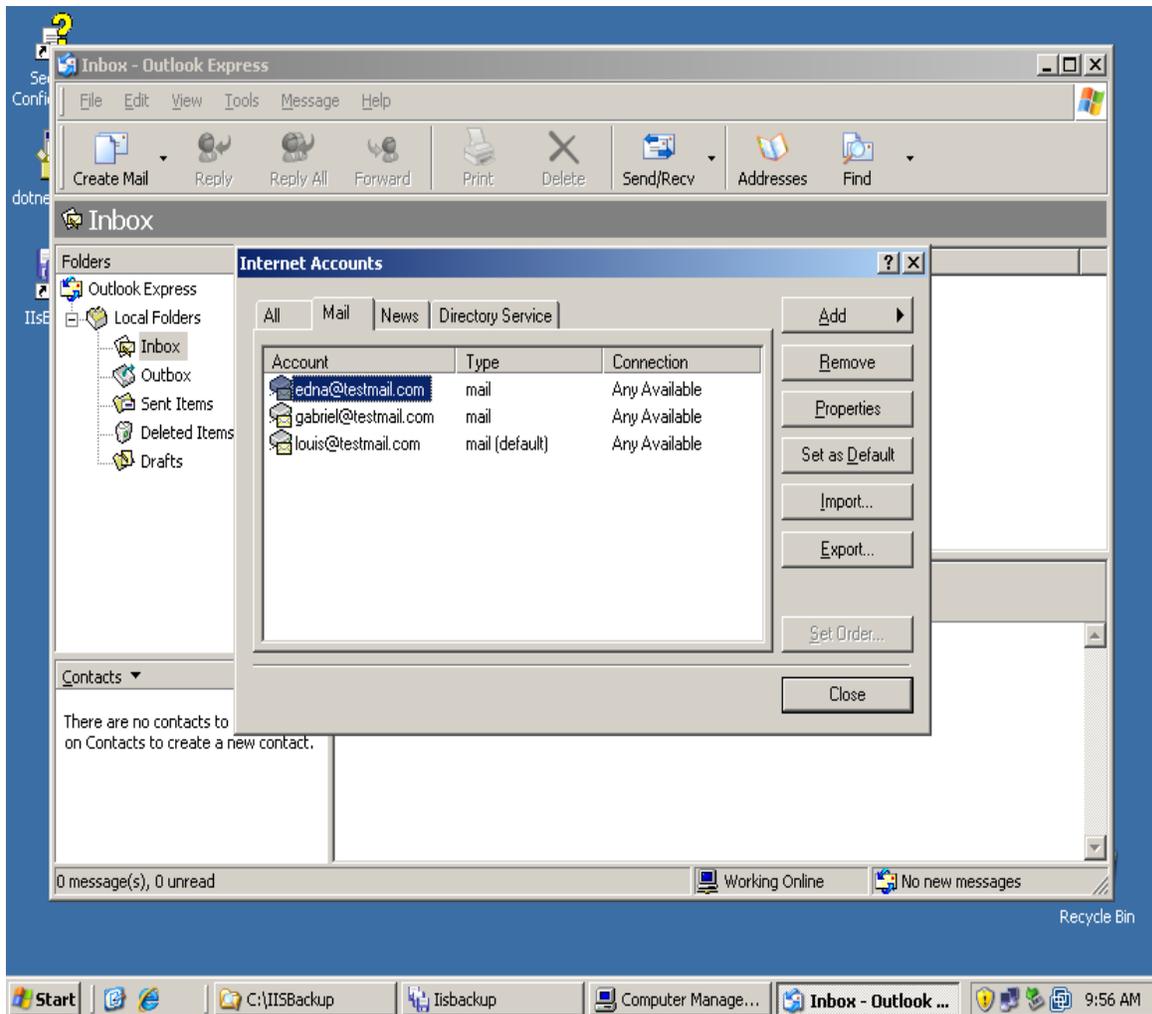
The steps for creating a web site are not shown in this reference manual because they are documented in many other places including on Microsoft's web site.

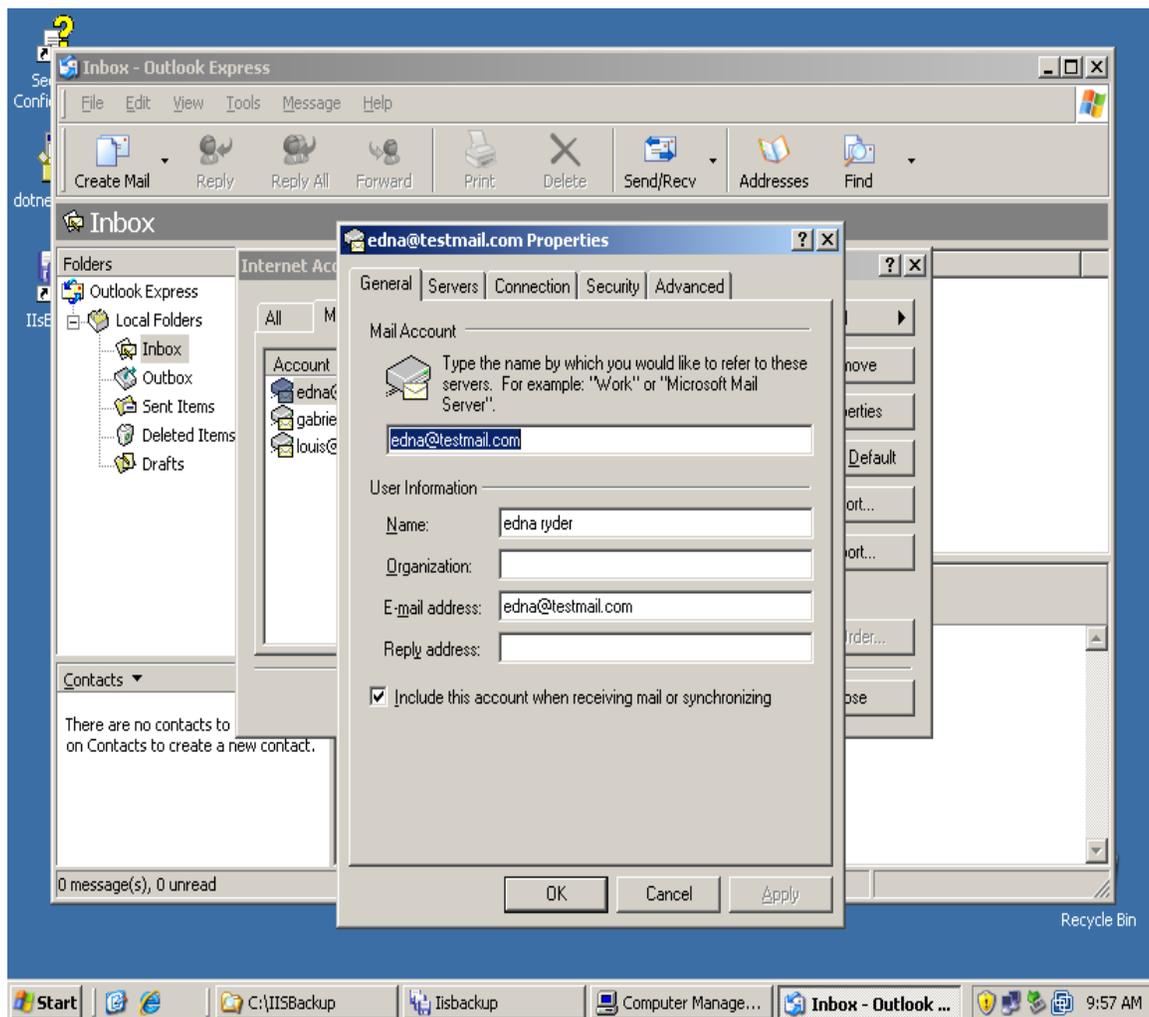
We continue with putting some data into the mailboxes (i.e. sending some messages). However, keep in mind that the EMAIL MESSAGES are NOT backed up by IIS Backup. You would use your normal backup software to save that data (it can use up many megabytes or even gigabytes of disk space, depending on how many users' accounts s you are hosting).

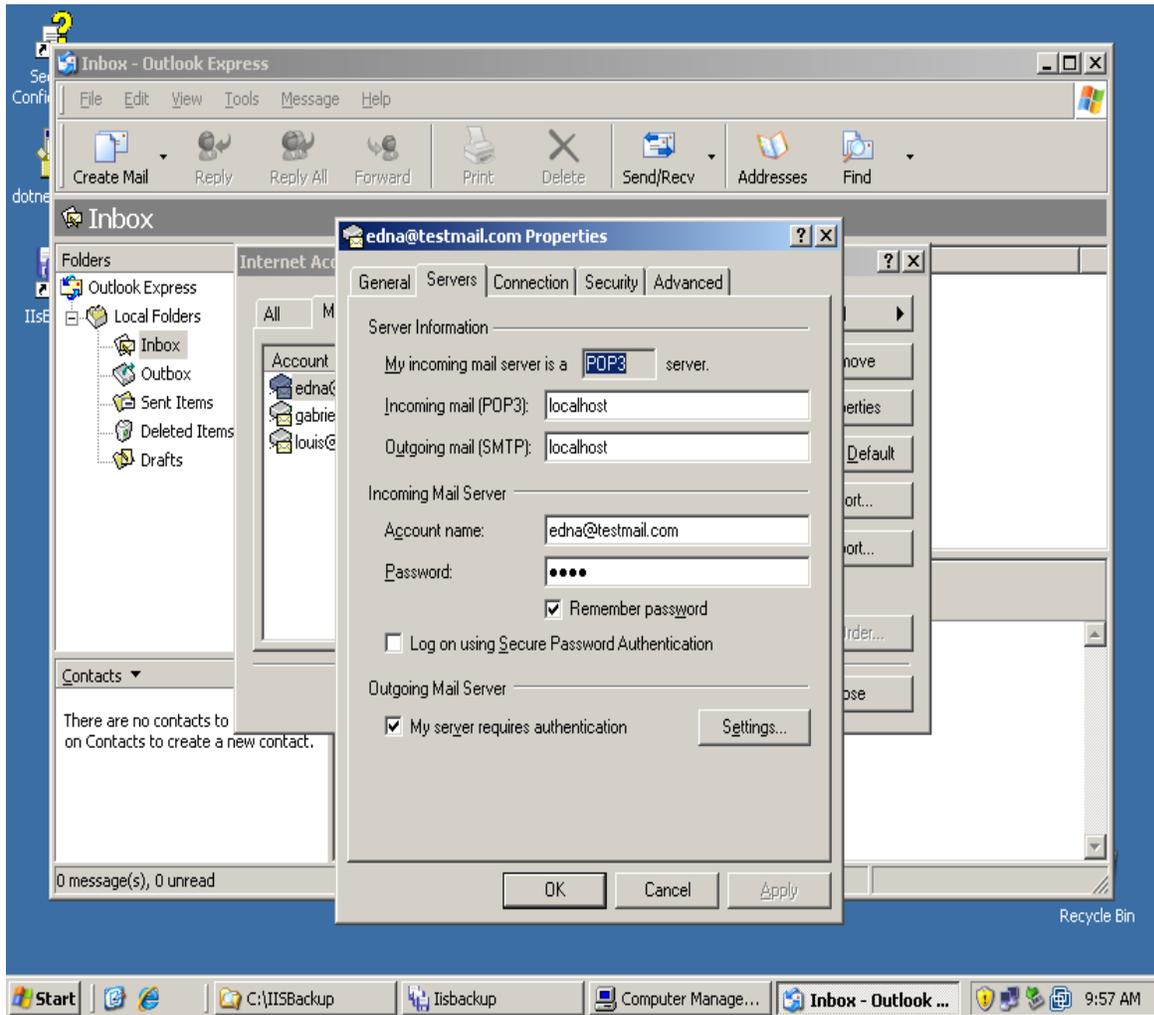
Adding Sample POP3 Data (EMail Messages)

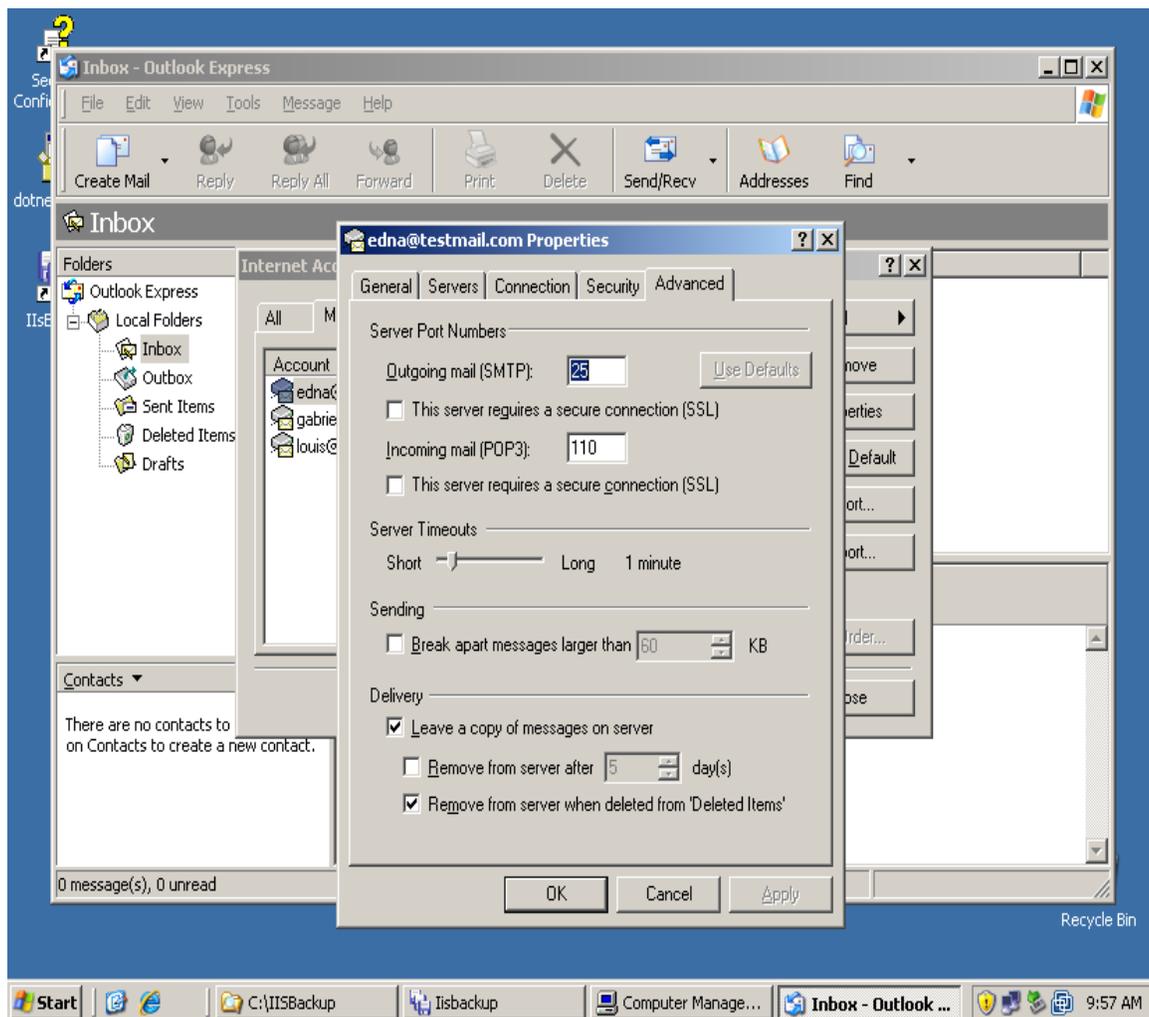
We use Microsoft Outlook as the email client.

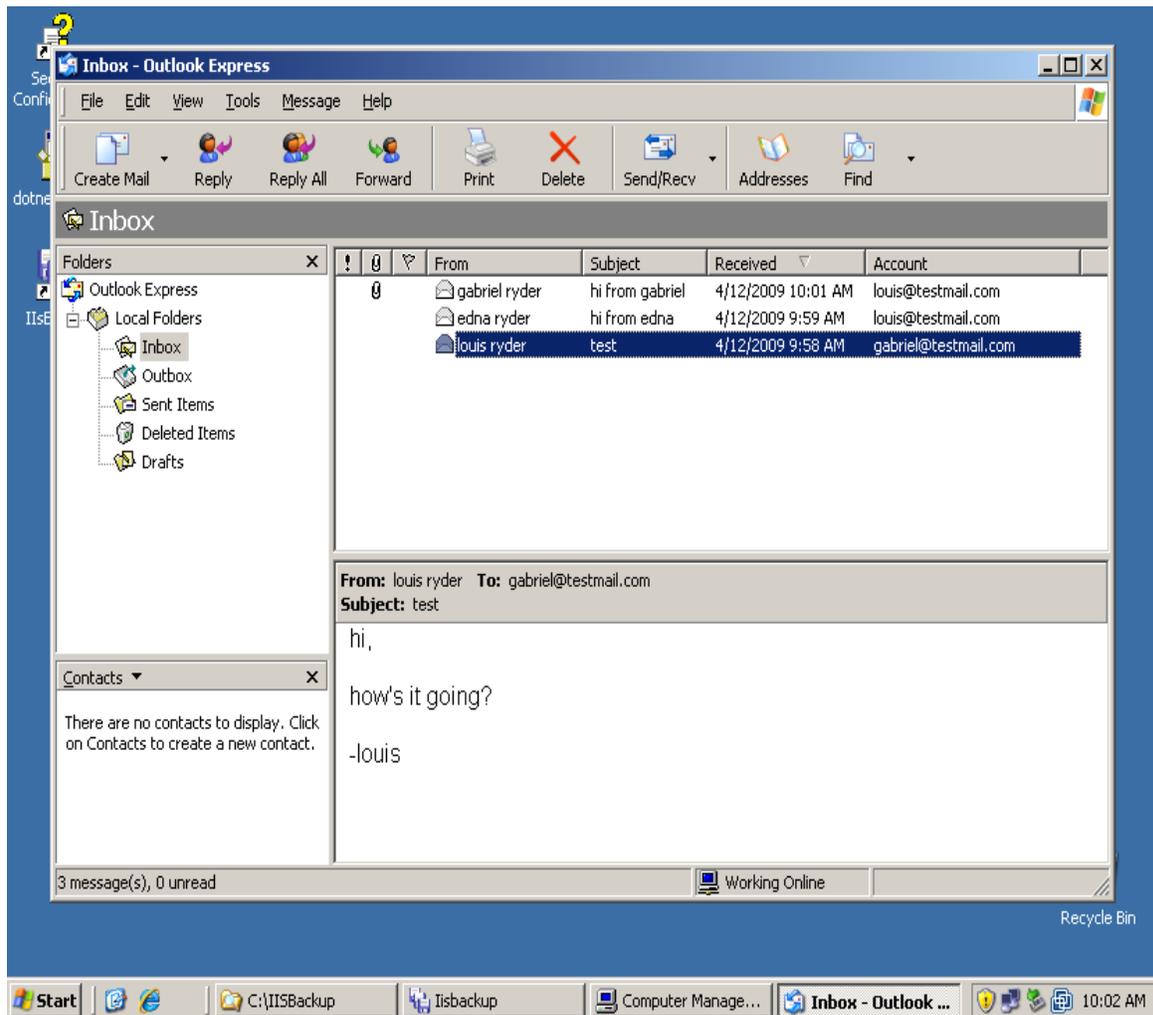
Remember, IIS Backup does NOT backup and restore email messages. This section is for illustration only -- to show that the messages are NOT restored!



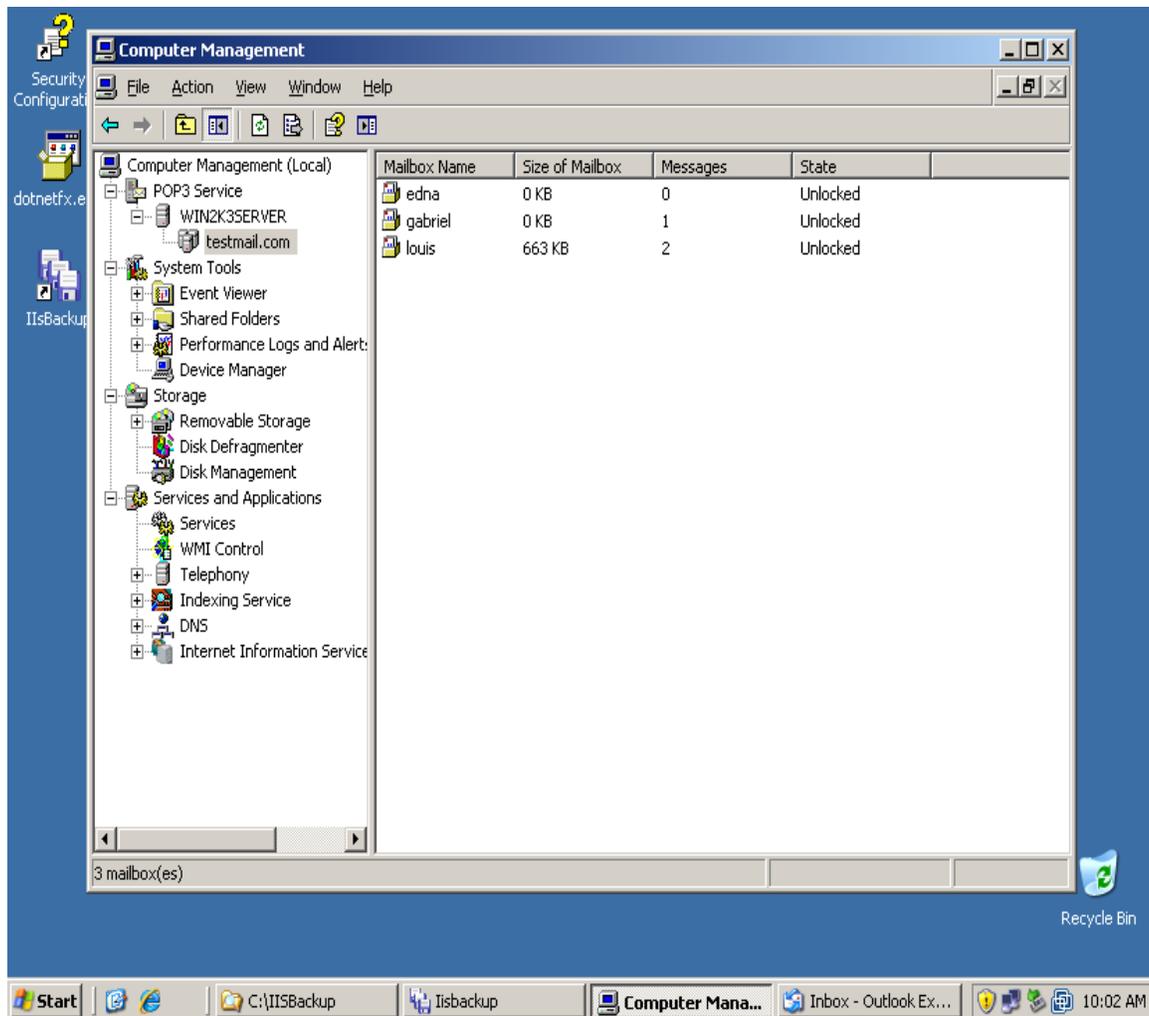






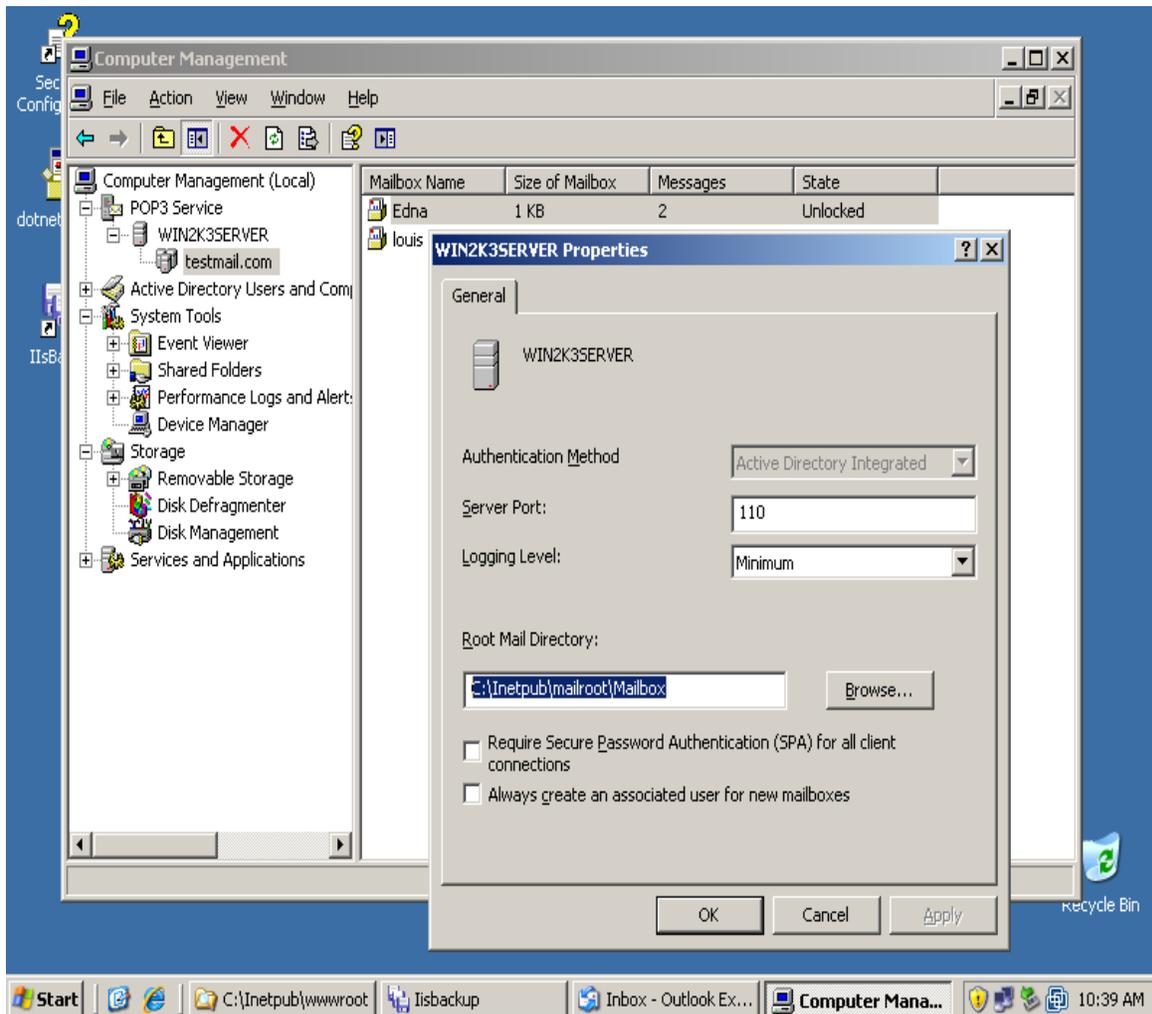


In the following screen shot, you can see the number of messages in each mailbox. The numbers are greater than zero.

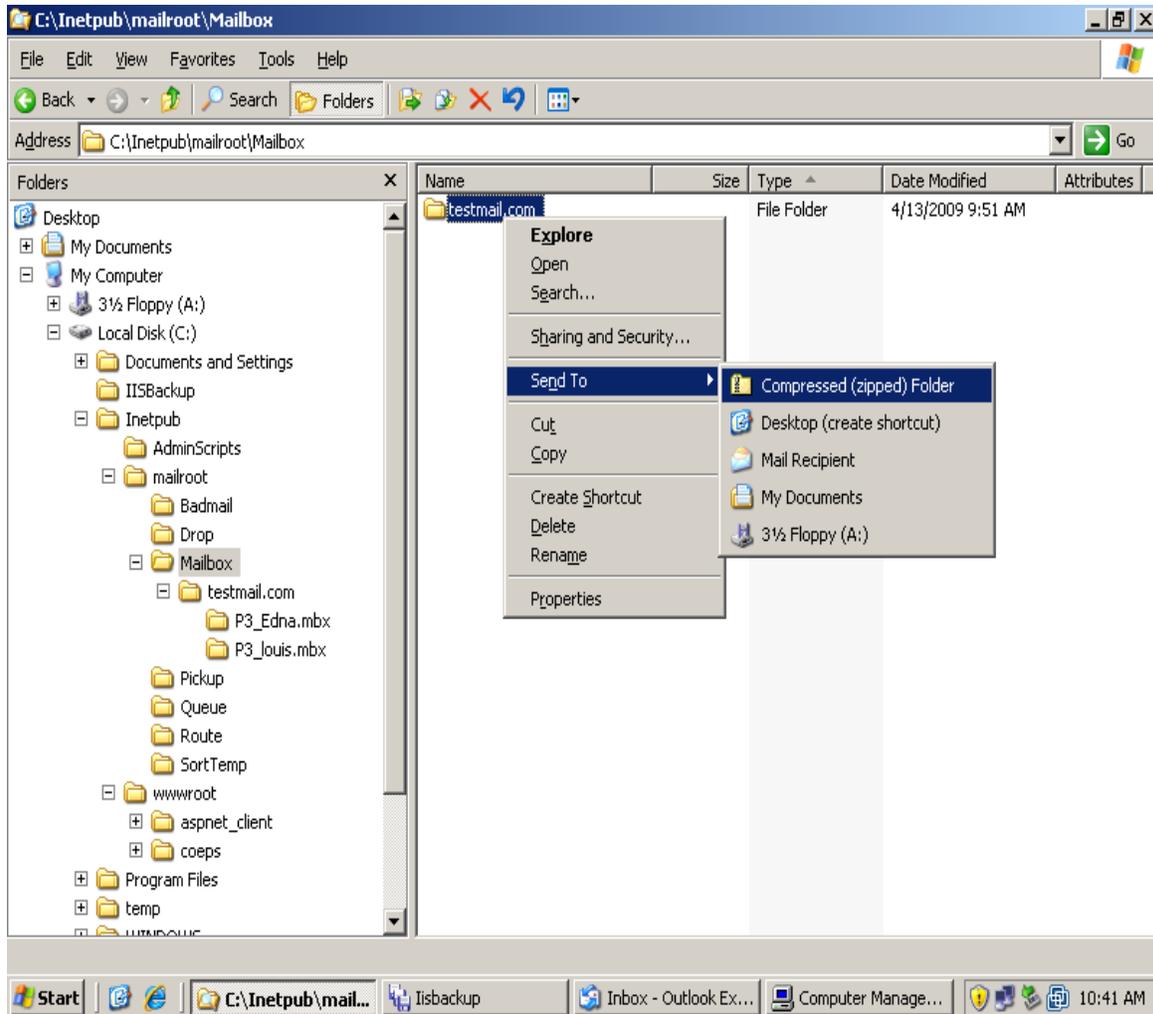


How Could the Messages Be Backed Up?

In order to back up all the email messages, you first need to determine whether the files are stored on disk. This is done by looking at the Properties of your POP3 site, as shown in the following screen shot:



If you only need to back up the data once (as opposed to daily), you can use Windows built-in compression to save a copy of your files, as shown below.



The result will be a ZIP file which preserves all the mailbox contents. Save that ZIP file for when you are ready to restore.

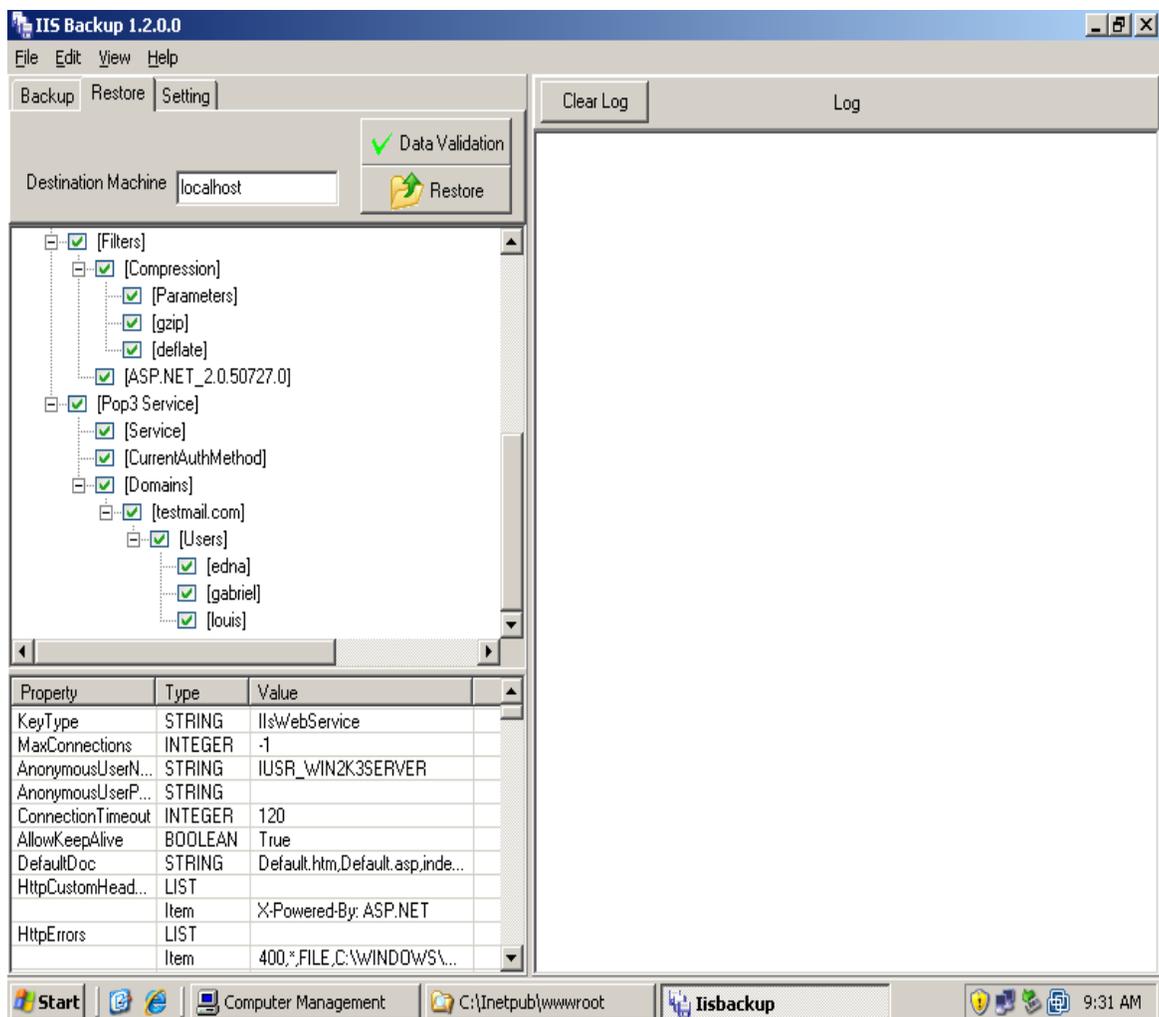
Restoring POP3 Accounts (Mailboxes)

Restoring POP3 accounts with IIS Backup is easy.

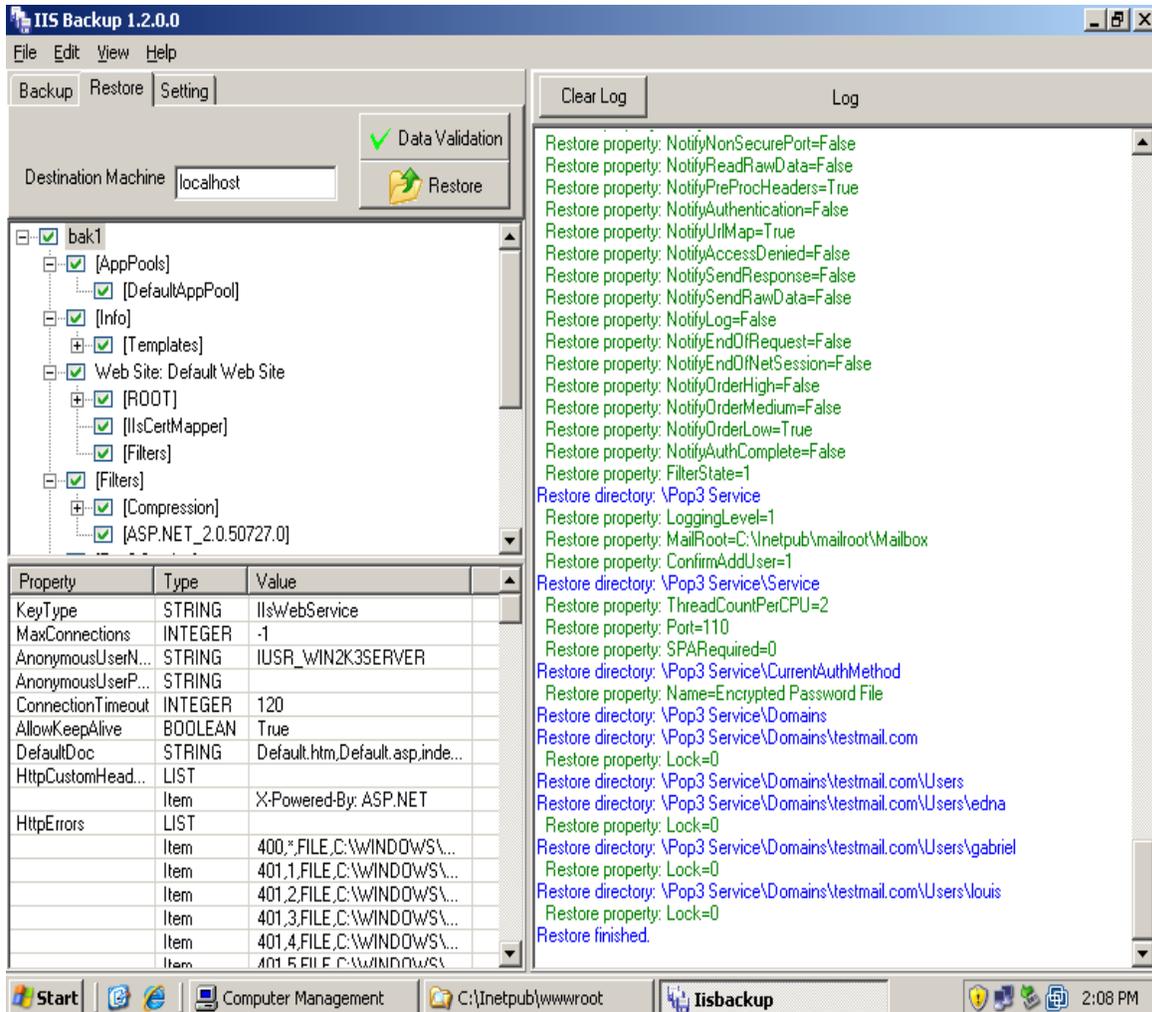
If you want to restore from an arbitrary XML file (in a folder other than where you have IIS-Backup.exe), go to the Settings tab first and select your file.

Go to the Restore tab, make sure that the correct site has been selected, and click the [\[Restore\]](#) button. Confirm your choice.

If you are using the free “lite” license, you will see a warning which reminds you that you can only restore one site at a time.



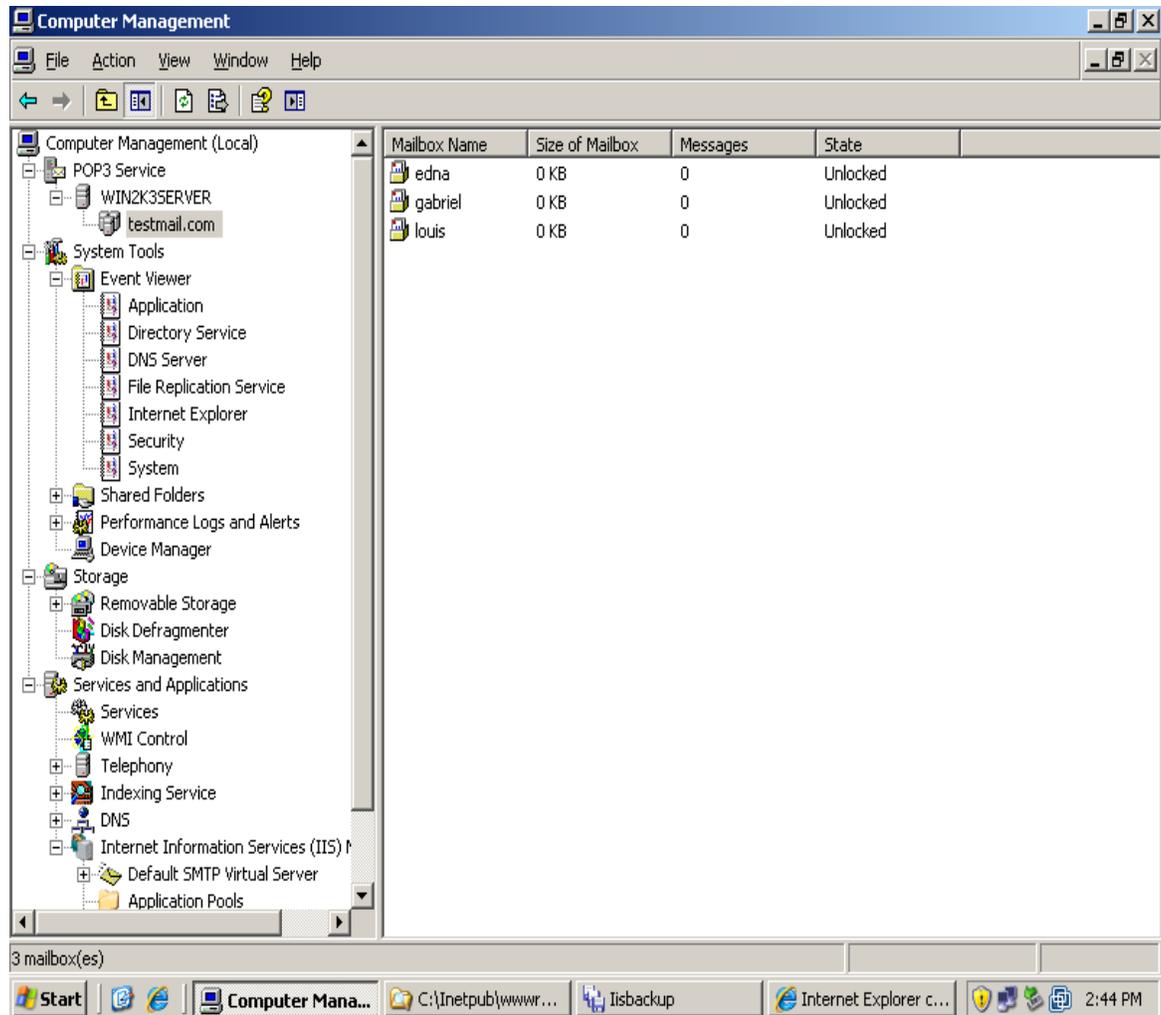
When the backup is complete, you will see logged details as shown in the following screenshot:



Inspecting the result of a POP3 restore

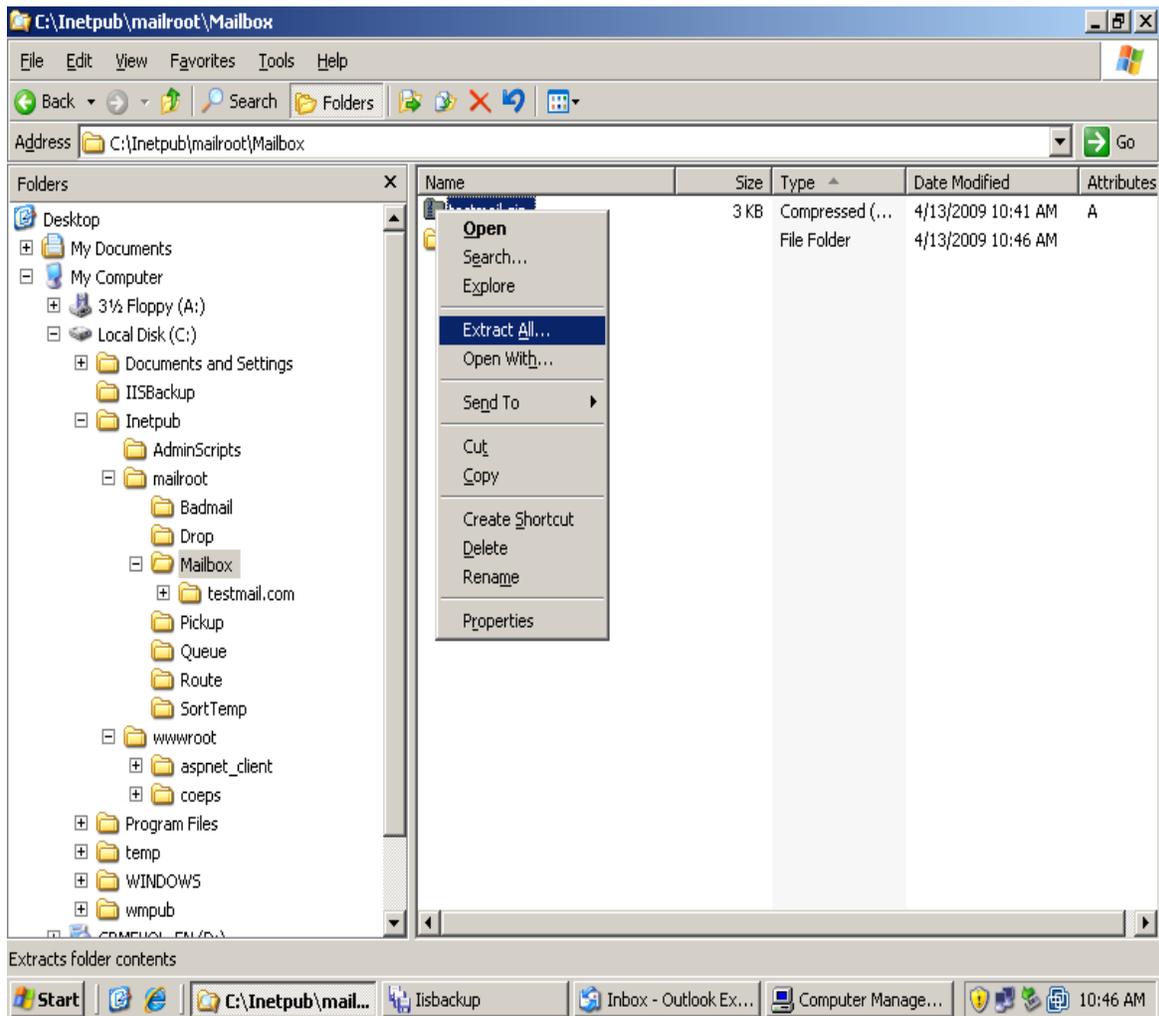
After the restore is finished, you may want to go into IIS Manager to see what has been restored.

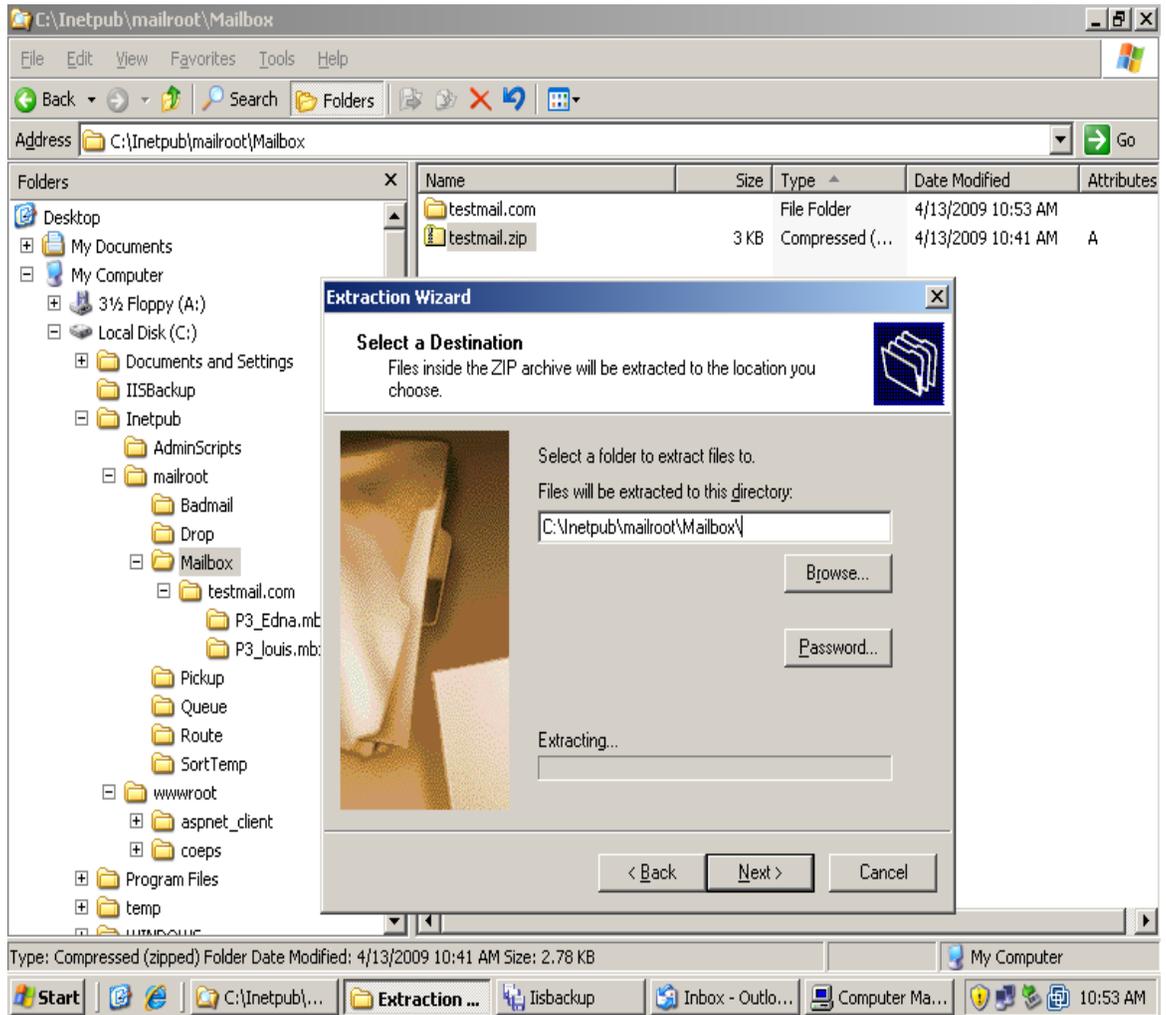
You should see your domain plus all user accounts. At this stage, there are zero email messages associated with each . The email messages will re-appear when you restore that data.

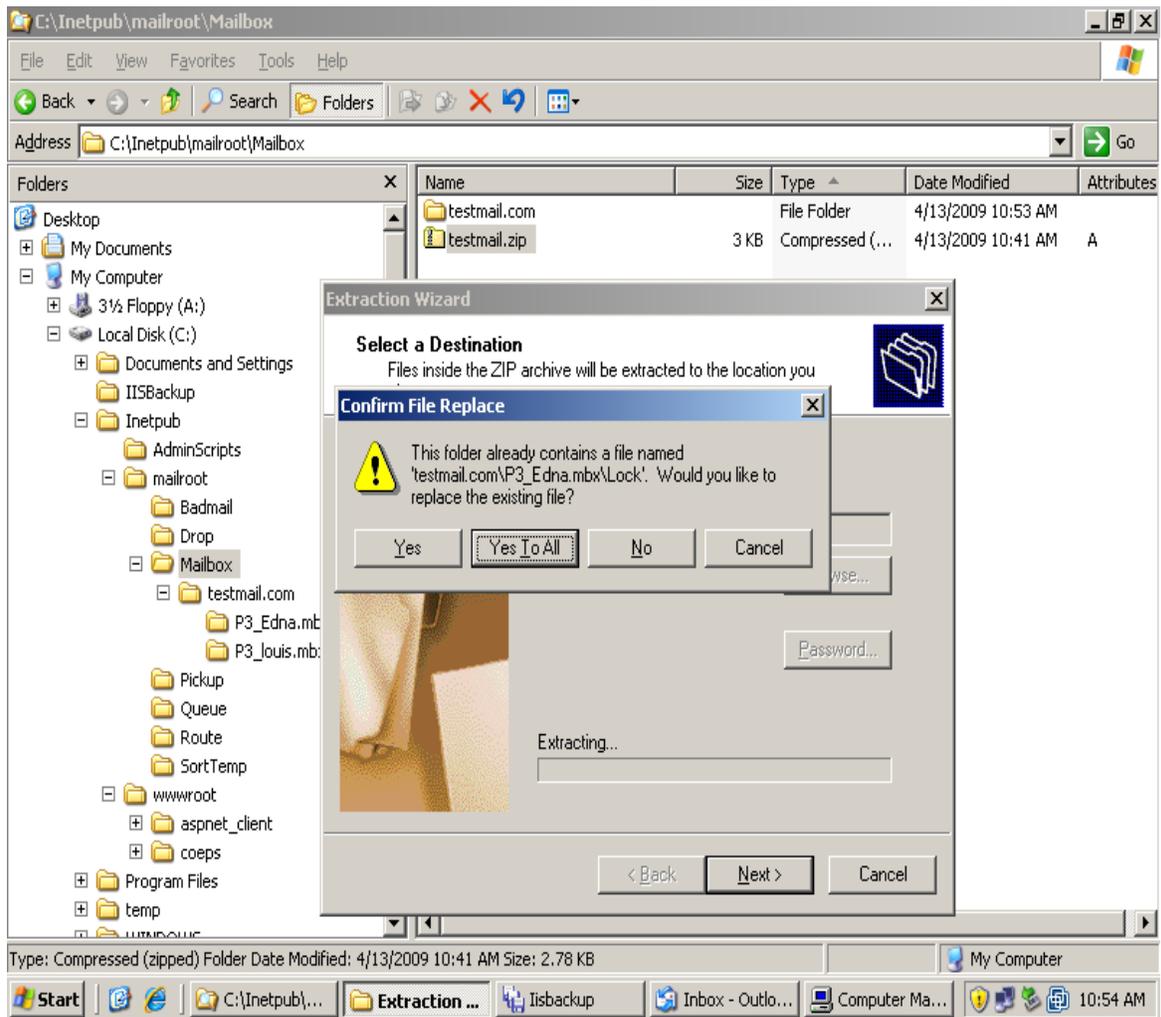


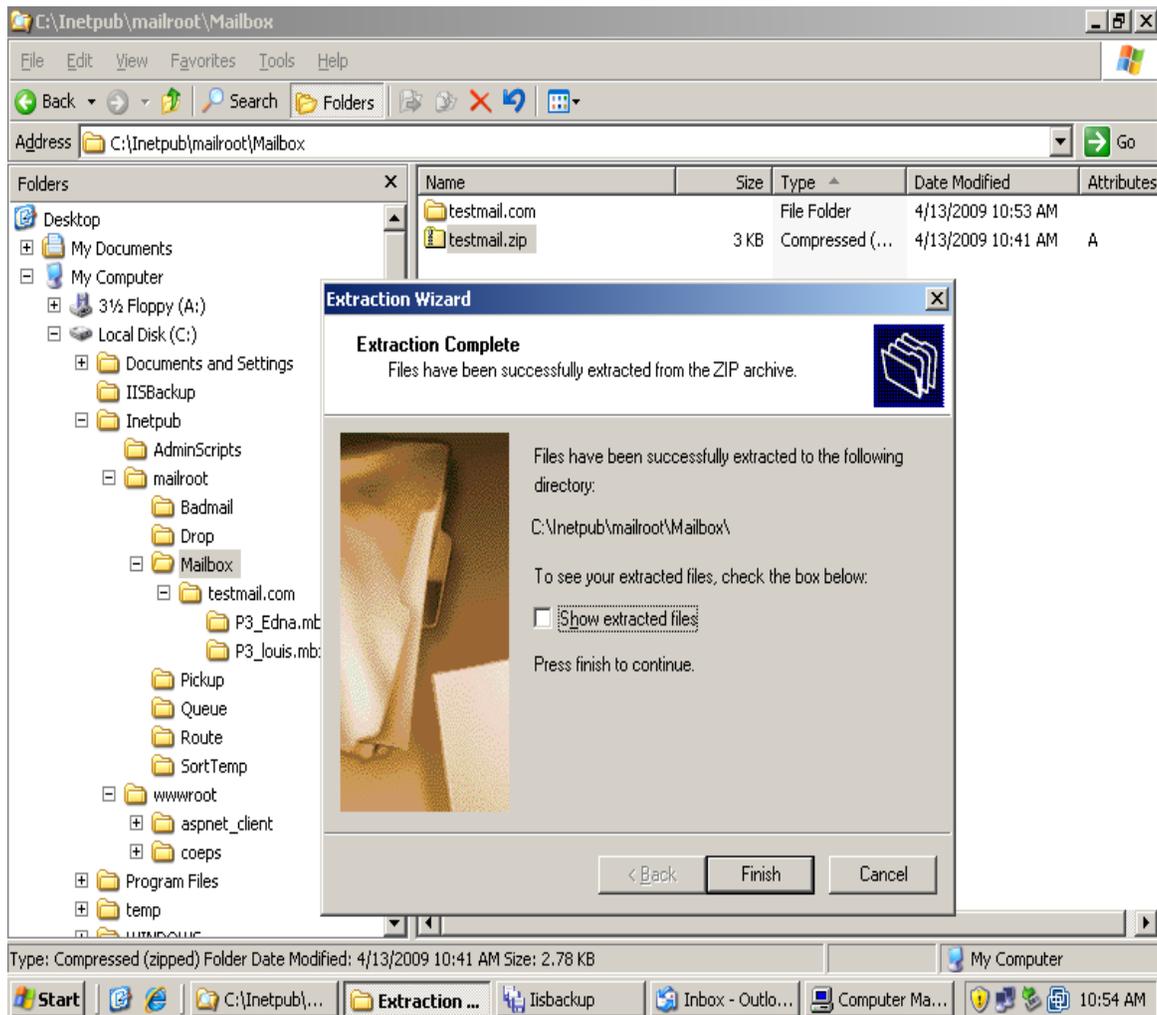
Restoring EMail Messages

To complete our earlier example where the data was backed up to a ZIP file, that data could now be restored by extracting the ZIP into the correct folder:

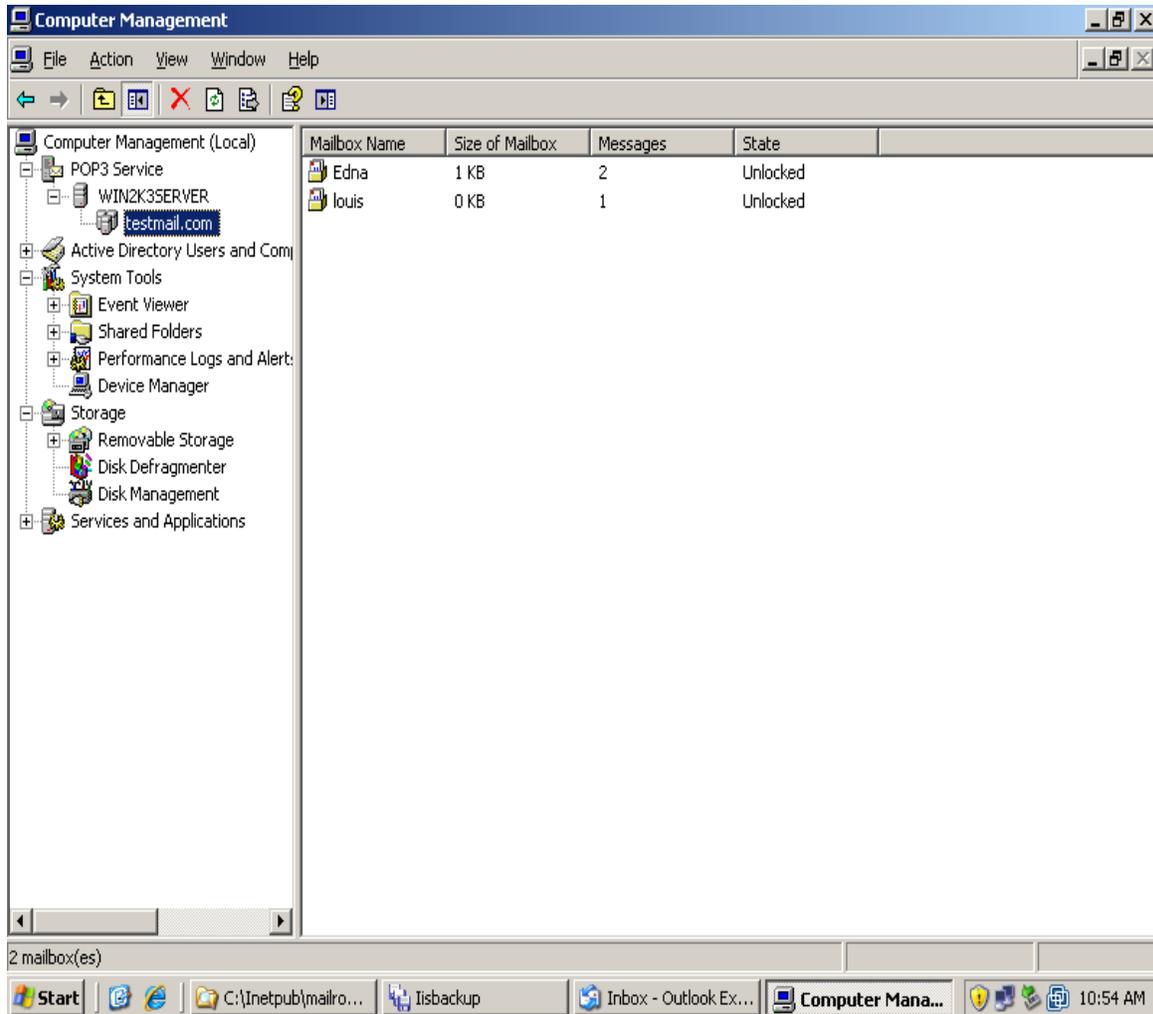








As soon as the mailbox files are put back, the POP3 service displays the correct (non-zero) count of messages.

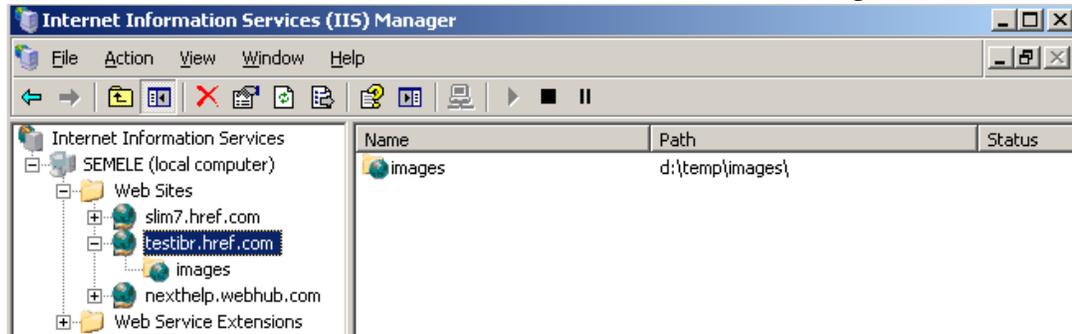


Tutorial: Backup, Delete and Restore a Web Site

In this section, we will walk you through a complete example wherein you save a web site, delete it and then recover it from backup.

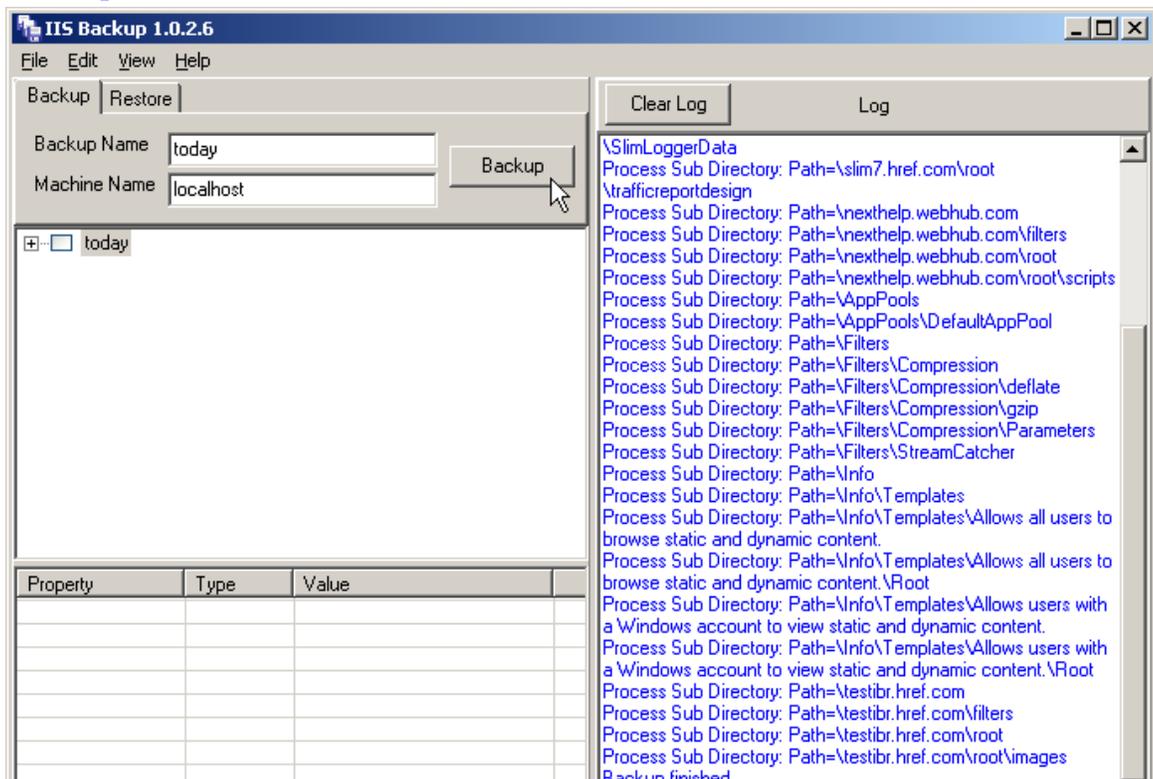
The screenshots were taken on a machine running Microsoft Windows 2003 Server with IIS version 6.

First, this is what the server looks like, when viewed with IIS Manager:



We will be working on the web site named *testibr.href.com*, on the machine named SEMELE.

After running IISBackup.exe, enter a name for the backup (“today”), and click the [Backup] button.]

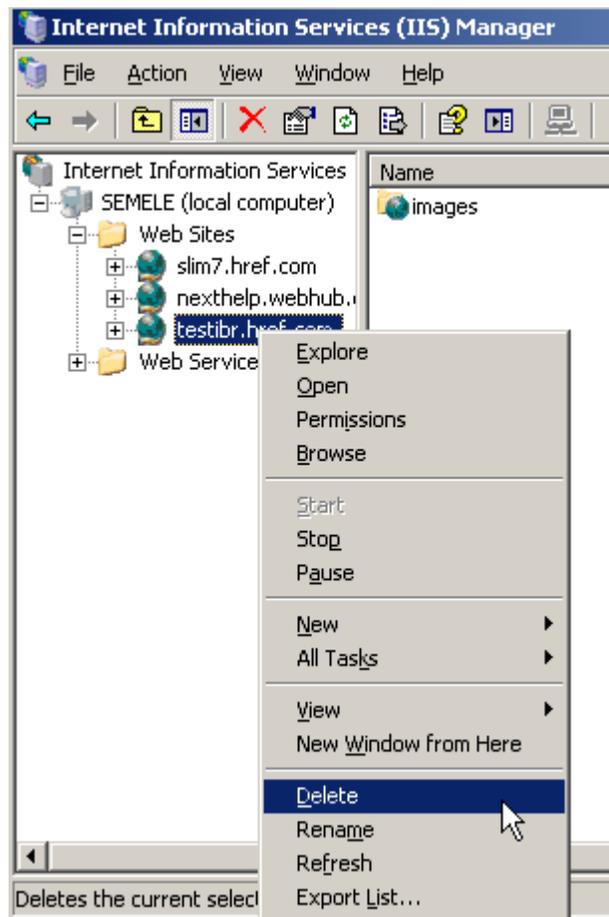


Close IISBackup.

Save an extra copy of the data file, e.g. in a ZIP file, which would then be moved to a separate physical location.

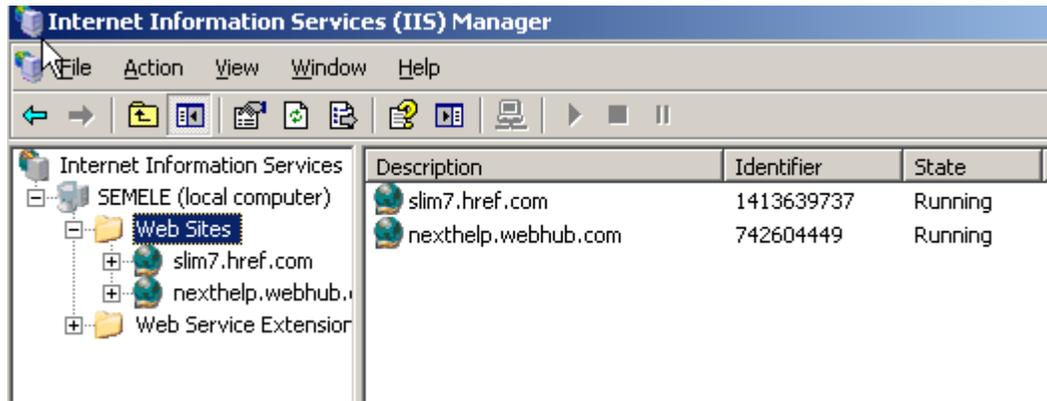
Name	Size	Type	Date Modified
IIsBackup.exe	701 KB	Application	2/19/2008 5:53 PM
Metabase.xml	183 KB	XML Document	2/19/2008 7:39 PM
Metabase.zip	12 KB	WinZip File	2/19/2008 7:43 PM

Next, in order to simulate a disaster, use IIS Manager to DELETE the web site. Select the web site, right-click, and choose **Delete**.



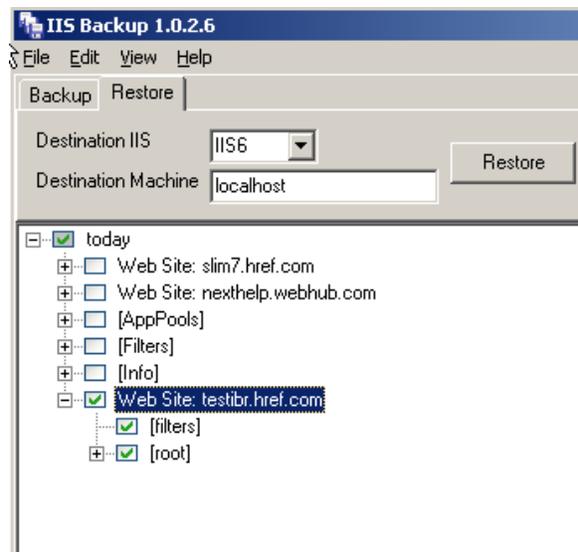
Confirm the deletion, and the web site definition will be completely gone. Note: we did not erase the html and graphics files that make up the site; that is a separate topic and you need to use a different tool to backup those files.

When looking with IIS Manager, you should see that the web site definition is gone:

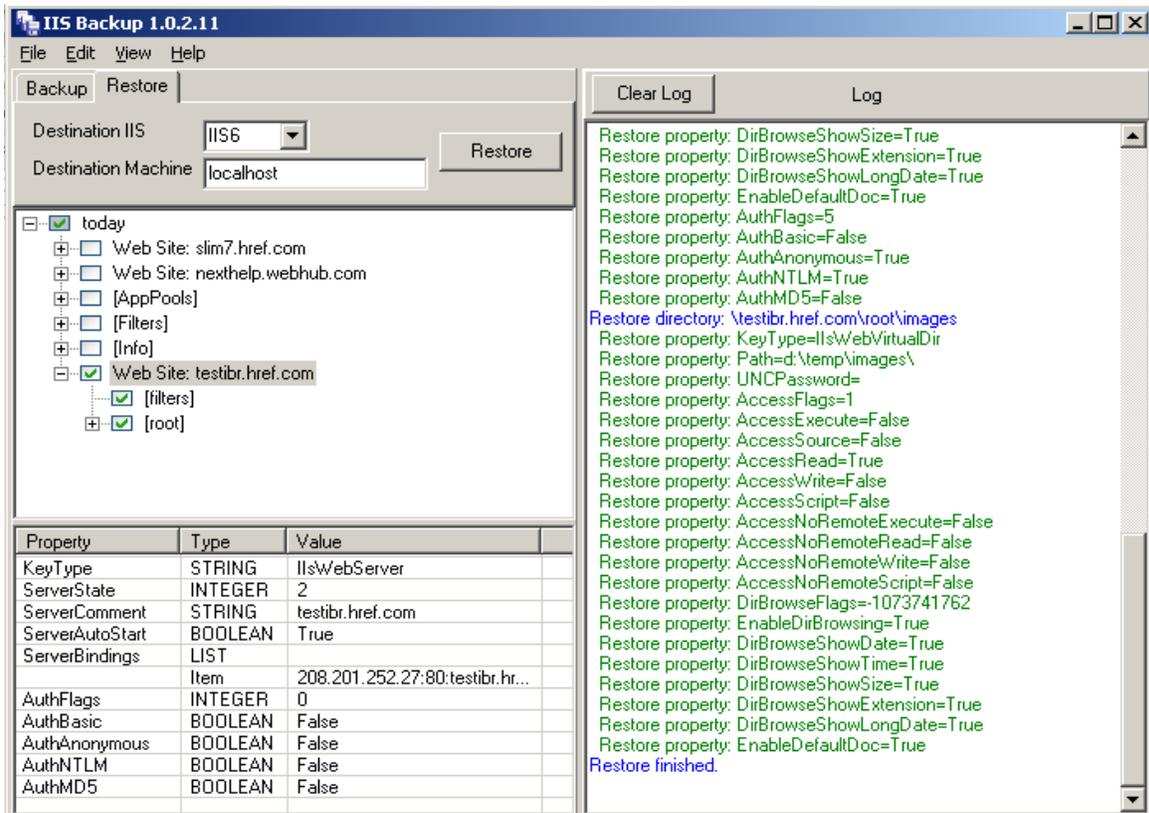


At this point, you would make sure that you have your metabase.xml file ready in the same folder as IIS Backup, and again run the utility. This time, click onto the Restore tab.

Select the web site which is to be restored. When you check the web site, all the sub-nodes will be automatically checked and therefore the entire site will be restored.



Click the [Restore] button to start recovering the site definition. This is the result:



CUSTOMIZATION

You may run IIS Backup in any supported language, e.g. English, Chinese, Portuguese or Spanish.

During backup or restore, you may customize the location of the XML file which stores the IIS configuration details.

PROGRAM SERVICE

This chapter covers assessing and solving technical problems; field maintenance.

For a FREE 30-day evaluation unlock code: <http://www.href.com/unlock>

For FREE technical support via newsgroups: <http://www.href.com/newsgroups>

To purchase: use the menu, **Help > Buy License**.

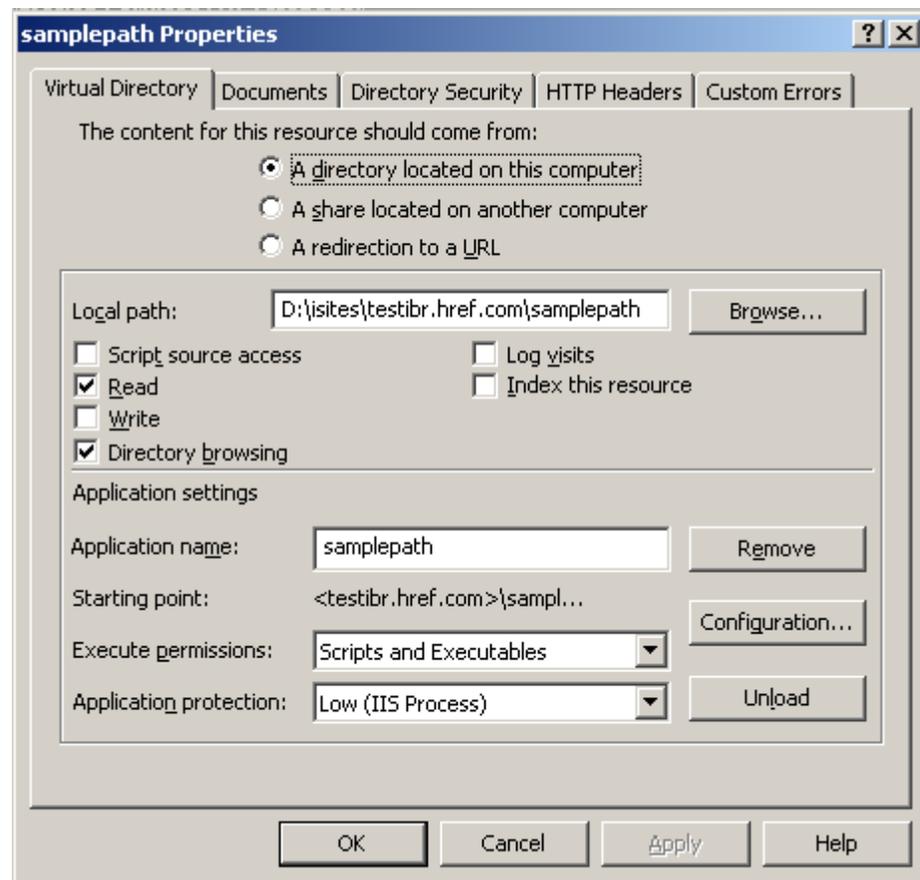
For further assistance, contact HREF Tools Corp. via one of the contact forms on our web site, www.href.com. Support for installation is free. A fee may be charged for other topics.

END-USE

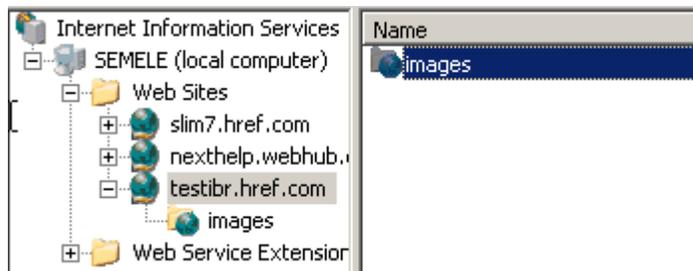
In this chapter, we will cover specific occupational tasks and activities, which are peculiar to certain customers' profession or assignment.

Task: restoring a virtual path after it was accidentally deleted

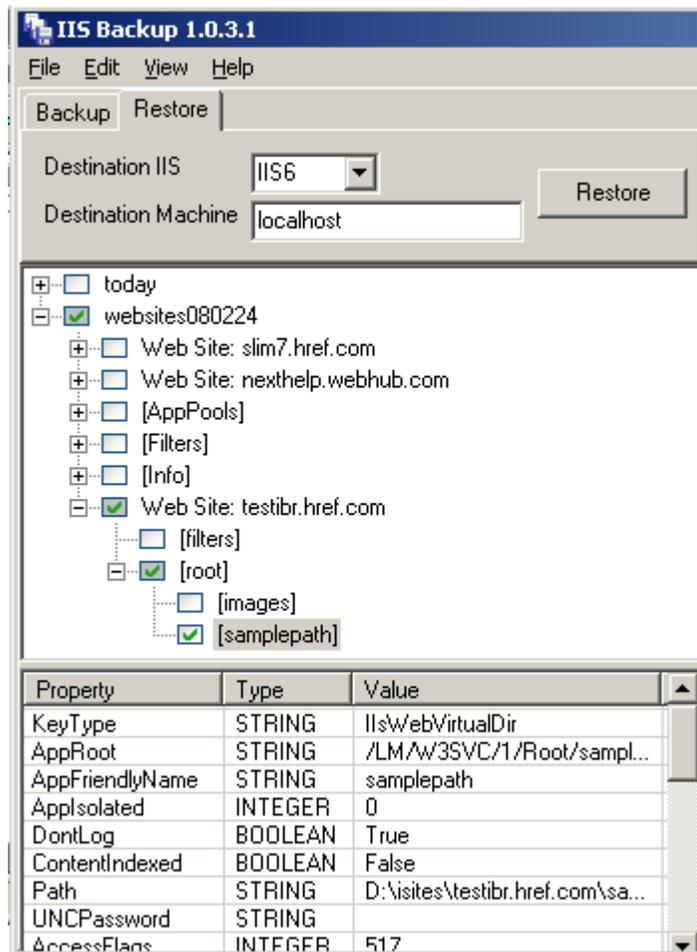
Imagine that you have a web site which requires a virtual path named “samplepath” with some customized settings, such as no logging, no indexing, and low security.



Assume that you have backed up your web site details using IIS Backup, and then an administrator made a mistake and accidentally erased the samplepath virtual path using IIS Manager. The following screen shot shows the problem; the samplepath is gone.

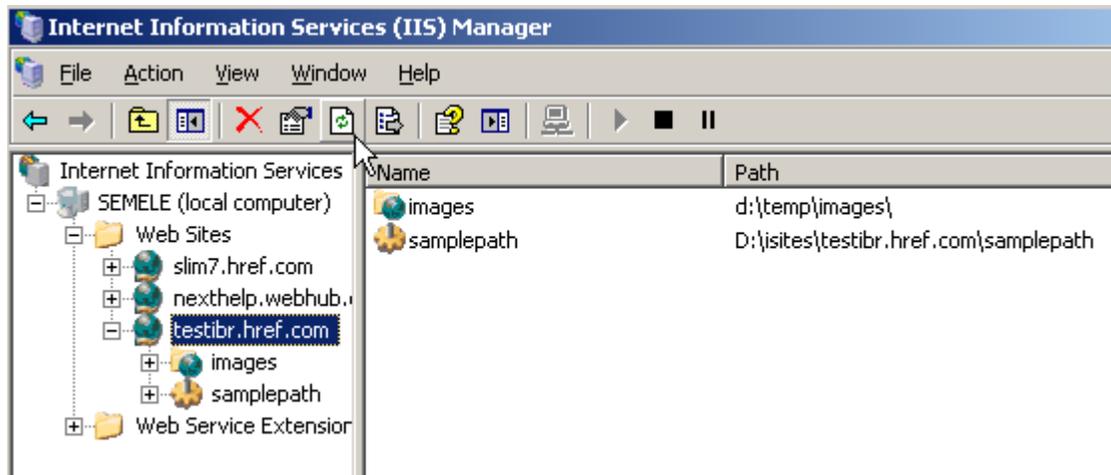


To solve this problem, you would run IIS Backup, select a backup which contains the saved information, and expand the outline until you reached the desired virtual path. You would select the virtual path (so it appears checkmarked), as shown below.



You would click the [[Restore](#)] button to start the restoration.

In IIS Manager, you would select the web site and click the [\[Refresh\]](#) button to make it display the changes. The samplepath will appear.



If you check the properties of the virtual path, you will see that all details have been restored for you.

Task: moving a few web sites from IIS 5 on Win2000 to IIS 6 on Win2003

Imagine that you have two web server machines. One is an older machine, running Win2000 and IIS 5. You are phasing that machine out. The second is a newer machine, running IIS 6 on Windows 2003 Server Web Edition.

One of your customers has just renewed their annual hosting contract, and you would like to reward them by moving their three sites to the newer machine.

Assume that you already have IIS Backup installed on both machines (using the same license, because IIS Backup is licensed by user, not by machine). You normally run backups to a dated backup set, weekly, on each server.

To accomplish your task, you would

- 1 Backup all sites on the older Win2000 machine, to a backup set named “transfer”.
- 2 Copy metabase.xml to metabasetransfer.xml
- 3 Copy (or move) metabasetransfer.xml to the newer Win2003 machine, and put it into the same folder as IISBackup.exe.
- 4 Temporarily rename the metabase.xml file on the Win2003 machine to metabase.xml.onhold
- 5 Copy metabasetransfer.xml to metabase.xml, keeping all files in the same folder.
- 6 Run IISBackup.exe.
- 7 Click onto the Restore tab.

- 8 Make sure that Destination IIS version is set to IIS 6.
- 9 Expand the outline of saved information, and select the 3 desired web sites.
- 10 Click the[Restore] button.
- 11 Exit IIS Backup.
- 12 Look in IIS Manager and confirm the sites exist as desired. You may need to STOP them, if you are also transferring an ip number.
- 13 Delete metabase.xml from the Win2003 machine.
- 14 Rename metabase.xml.onhold back to metabase.xml on the Win2003 machine.
- 15 On the Win2000 machine, use IIS Manager to delete the 3 sites permanently.
- 16 If any ip numbers need to move, move them and then START the web sites.