

ONLINE BACKUP MANAGER

**MS EXCHANGE MAIL
LEVEL BACKUP**

In today's business world, email is a mission critical application. Email is so crucial to every modern company that downtime or lost emails causes lost of productivity and or business. With this in mind, we have developed the "Microsoft Exchange Mail Level Backup Agent" to complement our existing "Exchange Backup Agent" to provide full exchange server protection with the unique ability to quickly recover lost information without restoring the whole exchange information store. Our mail level (brick level) backup was not designed to fully protect an Exchange server, but to facilitate easy backup and fast restore of individual mailboxes. Our mail level restore cannot be used to fully recover the Information Store after a disaster. If used, a mail level backup must be utilized in conjunction with full Information Store Backup, in order to fully protect the exchange server.

How To Backup Individual Emails

2.1 – Granting Full Mailbox Access Privileges

"MS Exchange Mail Level Backup" requires "Full Mailbox Access" permission for the user running OBM on the exchange machine. Please follow one of the instructions below to grant the required access.

2.1.1 – For one specific mailbox

Use the following procedure to grant access to Exchange 2000 or an Exchange 2003 mailbox:

- a) Start Active Directory Users and Computers.
- b) On the View menu, ensure that the Advanced Features check box is selected.
- c) Right-click the user whose mailbox you want to give permissions to and choose Properties.
- d) On the Exchange Advanced tab, click Mailbox Rights.
- e) Notice that the Domain Admins and Enterprise Admins have both been given Deny access to Full Mailbox access.
- f) Click Add, click the user or group who you want to have access to this mailbox, and then click OK.
- g) Be sure that the user or group is selected in the Name box.
- h) In the Permissions list, click Allow next to Full Mailbox Access, and then click OK.
- i) Click OK all the way out and then restart the Microsoft Exchange Information Store.

2.1.2 – For mailboxes located within a specific mailbox store

Use the following procedure to grant access to Exchange 2000 or an Exchange 2003 mailbox found on a specific mailbox store:

- a) Start Exchange System Manager.
- b) Drill down to your server object within the appropriate Administrative Group. Expand the server object and find the required mailbox store within the appropriate Storage Group. Right-click it and choose Properties.
- c) In the Properties window go to the Security tab.
- d) Click Add, click the user or group who you want to have access to the mailboxes, and then click OK.
- e) Be sure that the user or group is selected in the Name box.
- f) In the Permissions list, click Allow next to Full Control, and then click OK.
- g) Click 'Apply' and 'OK' and then restart the Microsoft Exchange Information Store.

2.1.3 – For mailboxes located within a specific server

- a) Start Exchange System Manager.
- b) Drill down to your server object within the appropriate Administrative Group. Right-click it and choose Properties.
- c) In the Properties window go to the Security tab.
- d) Click Add, click the user or group who you want to have access to the mailboxes, and then click OK.
- e) Be sure that the user or group is selected in the Name box.
- f) In the Permissions list, click Allow next to Full Control, and then click OK.
- g) Click OK all the way out and then restart the Microsoft Exchange Information Store.

2.2 – Creating an MS Exchange Mail Backup Set

An MS Exchange Mail Backup Set can be created as follows:

a) Select Backup Set > New > MS Exchange Mail Backup Set. Change the name as appropriate and click NEXT.

Add new MS Exchange Backup Set

Backup Set

Please type a name for this Backup Set.

Name: MSExchangeMailBackupSet-1

Type: Microsoft Exchange Mail Backup

Cancel < Previous Next >

b) Notice that the root node is the exchange server address (in this case yourcompany.com.local). Below the root node is the “MBX” and “Public Folders” nodes.

Add new MS Exchange Backup Set

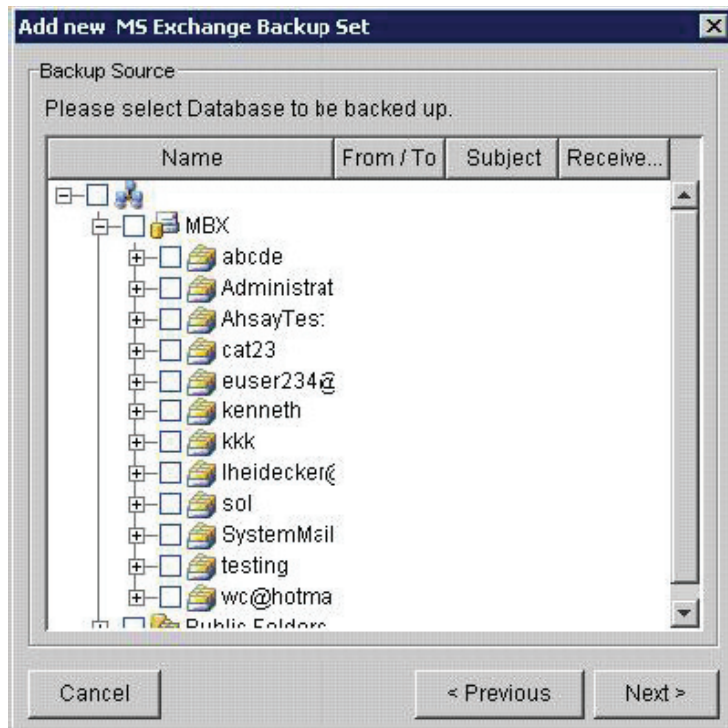
Backup Source

Please select Database to be backed up.

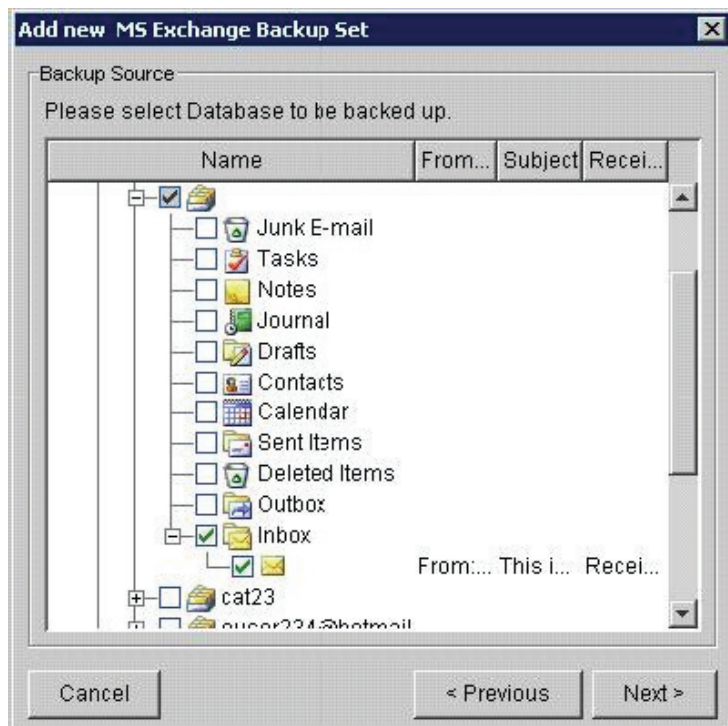
Name	From / To	Subject	Receive...
[-] [Exchange Server Icon]			
[-] [Exchange Server Icon] MBX			
[-] [Exchange Server Icon] Public Folders			

Cancel < Previous Next >

c) Expand the “MBX” node to display the list of Email Accounts for this exchange server.

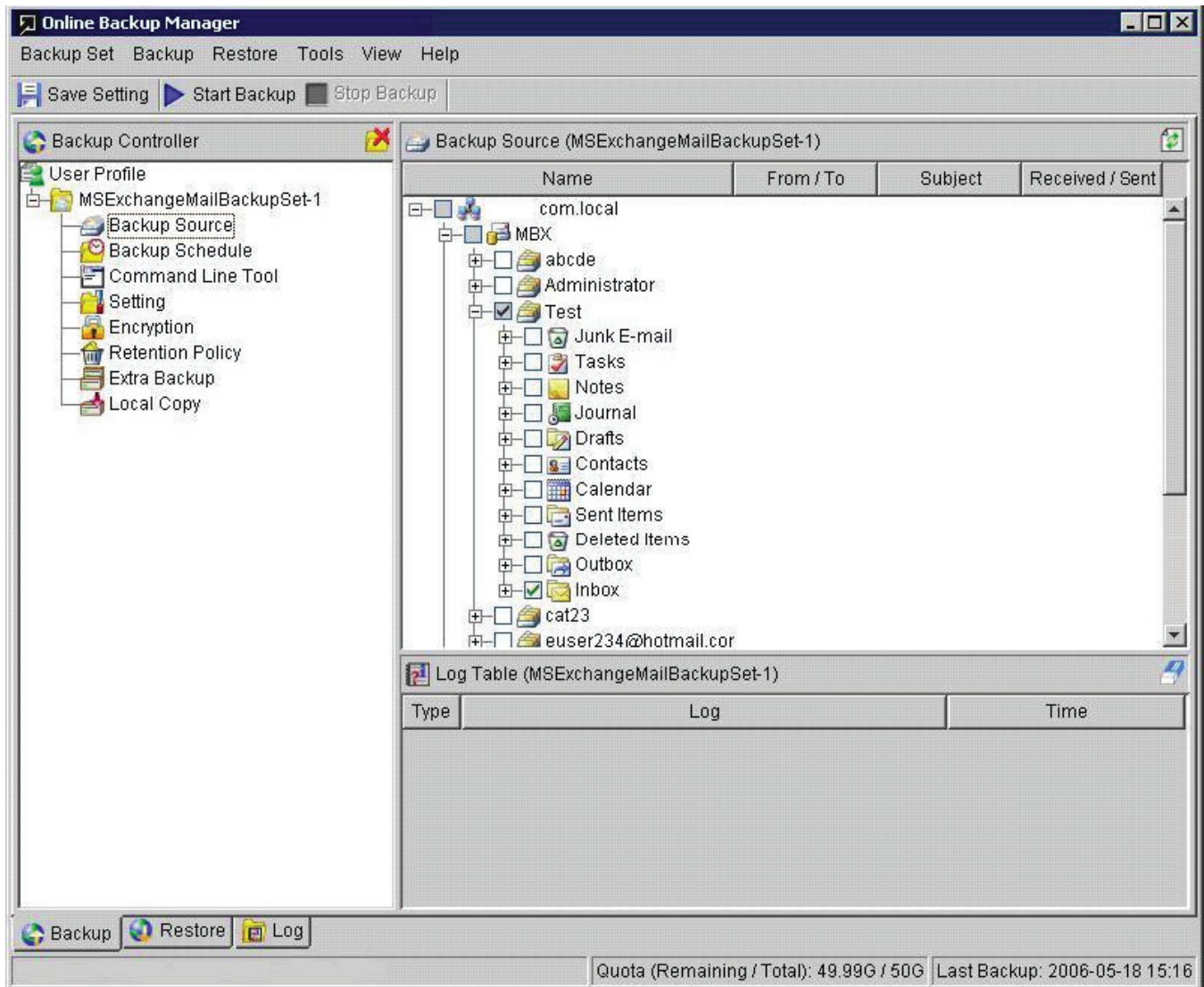


d) Choose a mailbox, for example expand the “YourCompanyTest” mailbox to display all the folders available under this mailbox.



ONLINE BACKUP MANAGER MS EXCHANGE MAIL LEVEL BACKUP

e) Choose some emails to backup. For example, check the “Inbox” folder to backup each email inside the inbox. Click NEXT and follow the on-screen instructions to finish creating a “MS Exchange Mail Backup Set”.



2.3 – Backup Emails

After the backup set is created, the selected emails can be backed up by running the backup set straight away or wait for the scheduler to start. For example, the email within the inbox from the backup set created above was backed up by running the [Start Backup] command.

The screenshot displays the 'Online Backup Manager' application window. The 'Log Table (2006-05-25-11-31-08.log)' is open, showing a detailed log of the backup process. The log entries include pre-commands, file list downloads, account verification, and the successful upload of email data. The status bar at the bottom confirms 'Backup Completed Successfully' and shows the quota as 49.99G / 50G.

Type	Log	Time
Start	Start [Windows 2003 (win2003sbs)	[2006/05/25 11:31:09]
Start running pre-commands		[2006/05/25 11:31:09]
Firished running pre-commands		[2006/05/25 11:31:09]
Reading backup source from hard disk...		[2006/05/25 11:31:11]
Downloading server file list...		[2006/05/25 11:31:11]
Downloading server file list... Completed		[2006/05/25 11:31:12]
Reading backup source from hard disk... Completed		[2006/05/25 11:31:15]
Getting all files which have been added...		[2006/05/25 11:31:16]
Getting all files which have been added... Completed		[2006/05/25 11:31:16]
Getting all files which have been deleted...		[2006/05/25 11:31:16]
Getting all files which have been deleted... Completed		[2006/05/25 11:31:16]
Number Of E-mail Account Remain="9"		[2006/05/25 11:31:16]
Exist E-mail Account:		[2006/05/25 11:31:16]
Test		[2006/05/25 11:31:16]
Total New E-mail Account = 1		[2006/05/25 11:31:16]
Test		[2006/05/25 11:31:16]
Total Deleted E-mail Account = 0		[2006/05/25 11:31:16]
Total New Mail = 1		[2006/05/25 11:31:16]
Total Deleted Mail = 0		[2006/05/25 11:31:16]
[New Directory] Uploading "	.com.local"	[2006/05/25 11:31:18]
[New Directory] Uploading "	.com.local/MBX"	[2006/05/25 11:31:18]
[New Directory] Uploading "	.com.local/MBX/AhsayTest"	[2006/05/25 11:31:18]
[New Directory] Uploading "	.com.local/MBX/AhsayTest/Inbox"	[2006/05/25 11:31:18]
[New Mail] Uploading 100% of "	.com.local/MBX/ Test/Inbox/This is a test email message.EML"	[2006/05/25 11:31:18]
Start running post-commands		[2006/05/25 11:31:19]
Firished running post-commands		[2006/05/25 11:31:19]
Backup Completed Successfully		[2006/05/25 11:31:20]

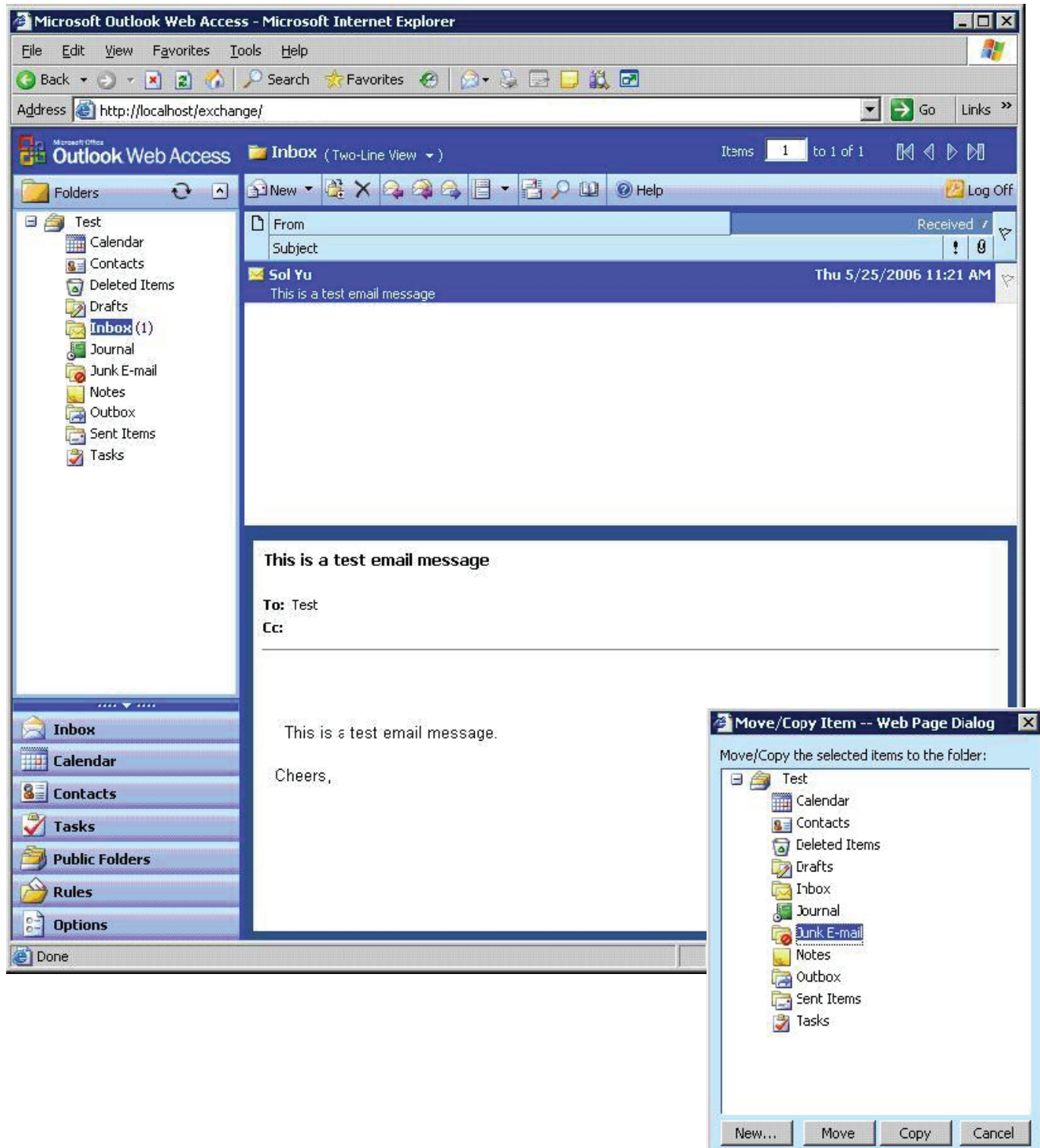
Backup Completed Successfully

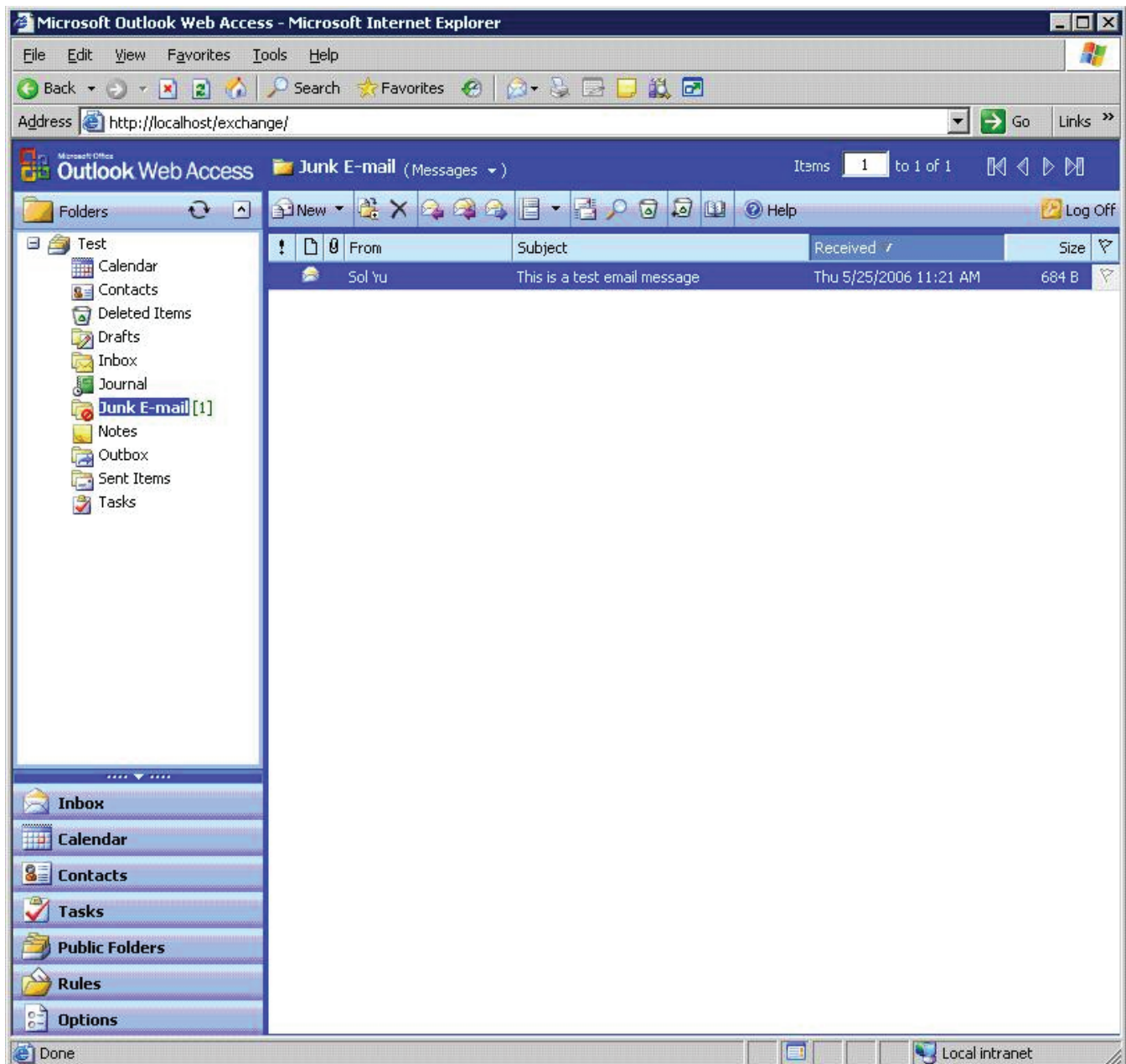
Quota (Remaining / Total): 49.99G / 50G Last Backup: 2006-05-18 15:16

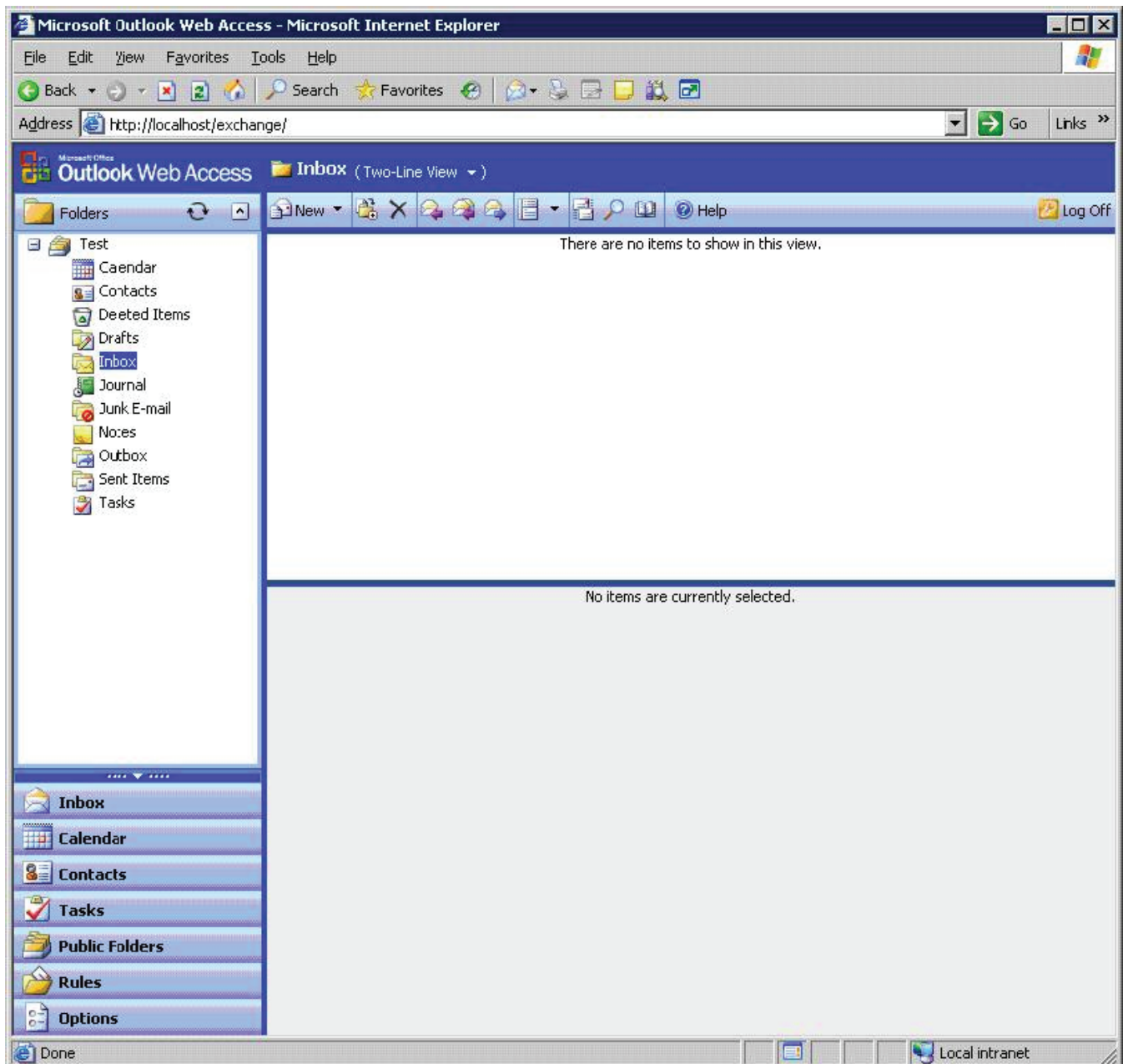
2.4 – Restore Emails

Assume that the emails in my inbox are accidentally deleted and I want to restore the emails previously backed up.

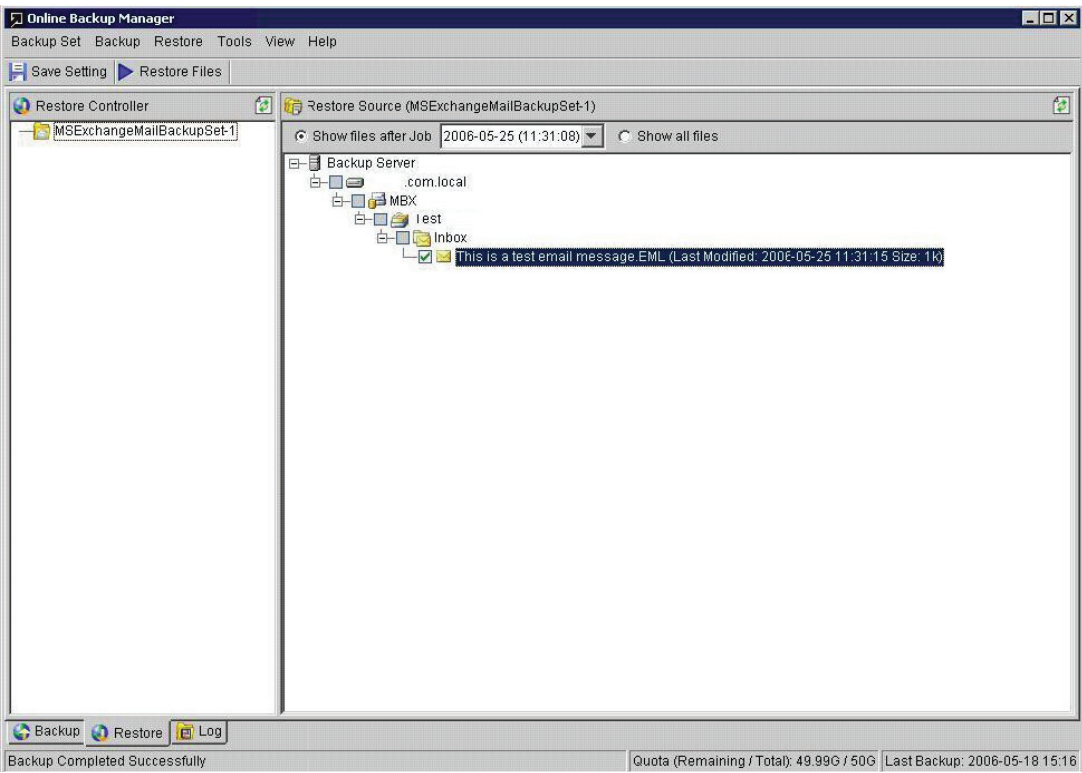
a) Firstly, I moved the original email to my Junk E-mail folder to simulate accidentally deleted an important email from my inbox.



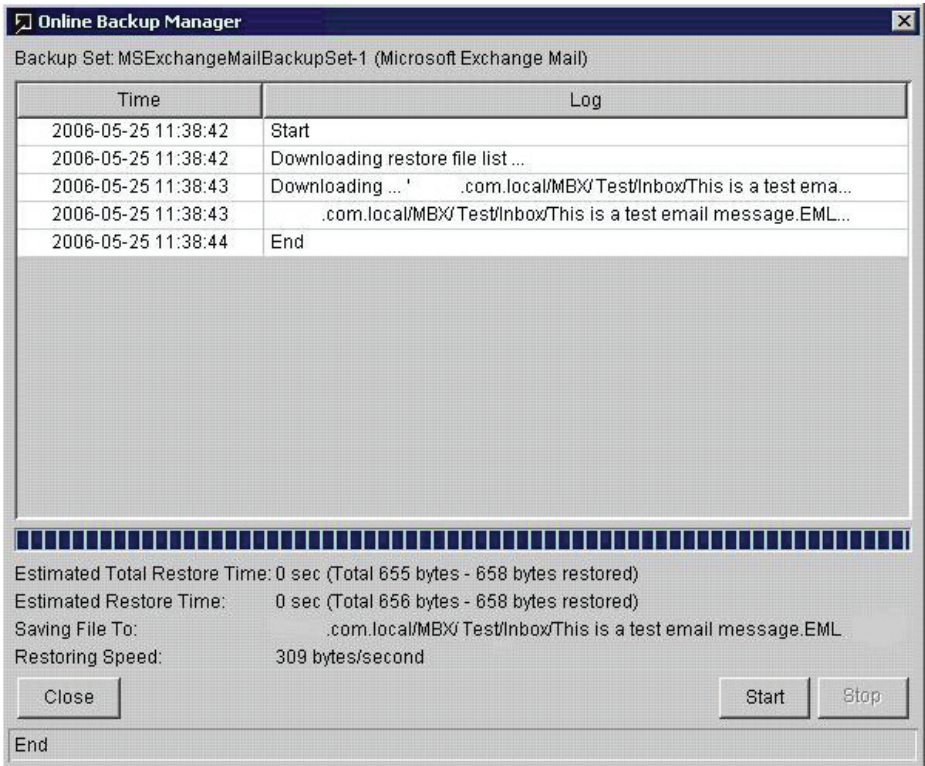




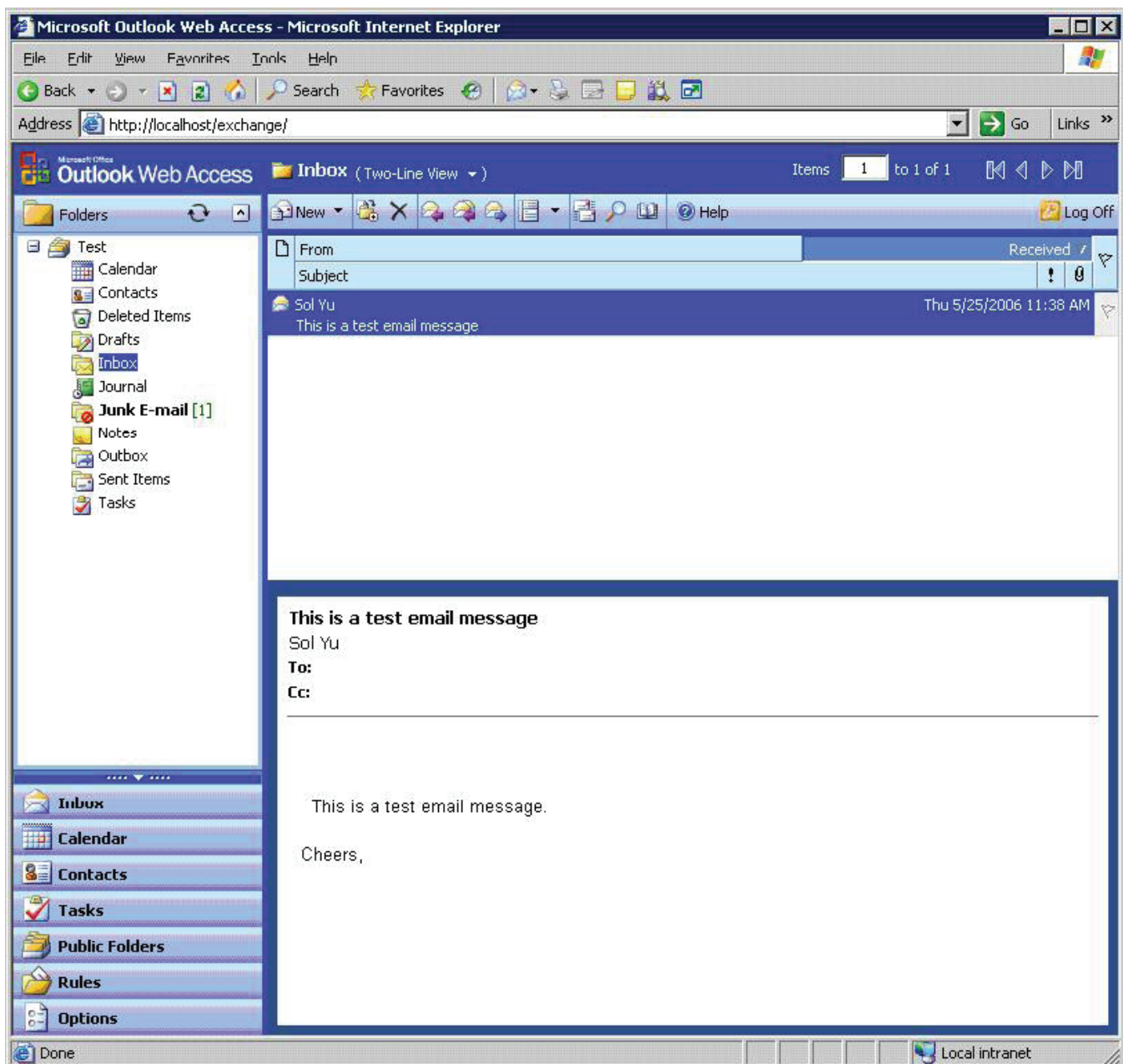
b) From the Restore List, I located the email I want to restore.



c) Click [Restore Files]. For security reasons, the email will only be restored to its original location.



d) Email restored to my "Inbox".



Work In Progress

This current version only backs up and restores individual emails from the Exchange Server. However, we are committed to enhancing the “MS Exchange Mail Level Backup Agent” to provide the following features, which should be available soon:

- * **Calendar Information**
 - * **Contact Information**
 - * **Tasks**
 - * **Notes**
 - * **Journals**
 - * **Public Folders and Files**
-

References

- * http://www.petri.co.il/grant_full_mailbox_rights_on_exchange_2000_2003.htm
- * http://www.msexchange.org/tutorials/How_to_get_access_to_all_mailboxes_in_Exchange_2000_Server.html
- * <http://support.microsoft.com/kb/q262054>