

Undeliverable Messages and What to do about them

Many things can cause undeliverable messages in Exchange. This document covers some of the more common causes and what can be done to troubleshoot and alleviate them.

Failure to deliver mail to the Exchange Mailbox

A message may be returned as undeliverable because an attempt was made to deliver a message to an email box that does not exist. There are several ways this could happen.

UMOD altered before mailbox setup

Symptom:

If the forwarding address for Exchange was added to UMOD before the user's mailbox was set up, mail delivered to username@umich.edu will bounce messages redirected to Exchange. If multiple email delivery addresses are listed in the user's UMOD entry, the user will receive the message at the other destination(s).

Solution:

1. Make sure that the mailbox is set up before any changes are made to UMOD to prevent this from happening.
2. Either remove the Exchange email delivery address from UMOD until the mailbox has been created or make sure the mailbox gets created immediately.

Exchange email address missing in UMOD

Symptom:

The user's new Exchange mailbox only contains messages from other Exchange users, not from outside senders. Non-Exchange senders receive no undeliverable message notifications.

Solution:

1. Enter the Exchange forwarding information in the user's UMOD entry. The correct format of the email address is username@adsroot.itcs.umich.edu.

Exchange email address entered incorrectly in UMOD

Symptom:

A non-Exchange sender receives undeliverable messages to the user. Exchange senders deliver mail to the user without a problem. From the new Exchange user's side, the Exchange mailbox only contains messages from other Exchange users, not from outside senders.

Solution:

1. Check the target user's UMOD information to make sure the email forwarding address for the campus Exchange service is correct. The correct format of the email address is username@adsroot.itcs.umich.edu.

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Problems with the LegacyExchangeDN

Symptom:

1. A user who has sent mail to another campus user who recently switched to Exchange email has their mail returned.
2. Searching the GAL shows two entries for the recipient. One of these has a series of numbers appended to their unickname.

Solution:

The LegacyExchangeDN attribute in Active Directory is used for mail routing within Exchange. When a user has an incorrect LegacyExchangeDN, mail sent to that user will bounce. Most users in UMROOT are mail enabled which means that they have as LegacyExchangeDN attribute of the form:

```
/o=University of Michigan/ou=ITCS/cn=Recipients/cn=unickname
```

Part of the procedure of creating a mailbox for a UMROOT user that has not had an Exchange mailbox before is to “Remove Exchange Attributes” and then “Create Mailbox”. We have found that if you do not put at least a 5 minute delay between these two operations that the system will not recognize that the old LegacyExchangeDN is gone and assign a new one of the form.

```
/o=University of Michigan/ou=ITCS/cn=Recipients/cn=unickname12345678
```

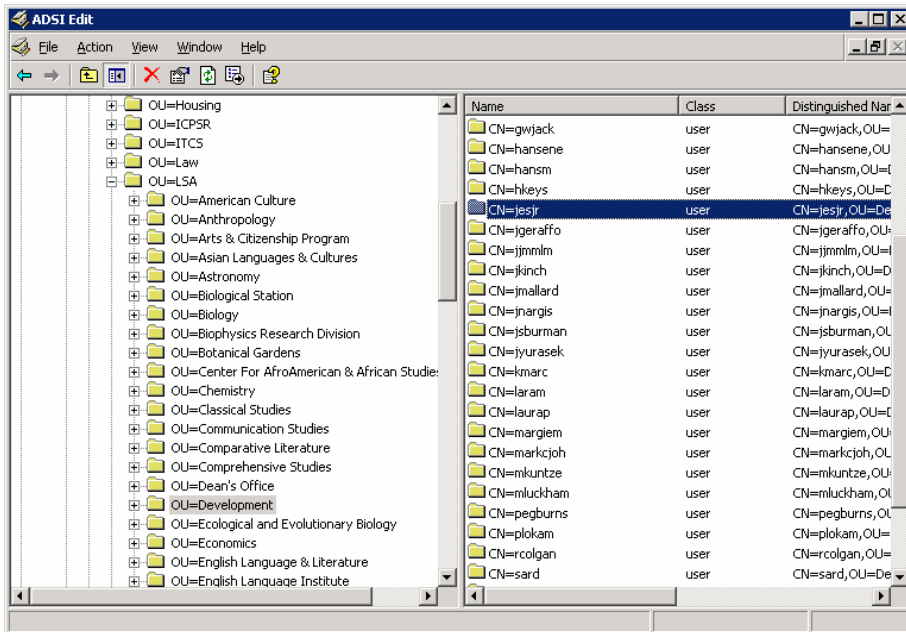
This new LegacyExchangeDN will be the address that users in the GAL send to. Any users responding to old mail will be sent to the original LegacyExchangeDN and bounce. You can recognize accounts that have this problem by opening up the “Address Book” in Outlook and looking in the E-Mail Address column.

We have updated the Exchange Mailbox Account Creation documentation to include this 5 minute delay which should keep the problem from happening. We are also working with Microsoft to understand the root cause of this problem.

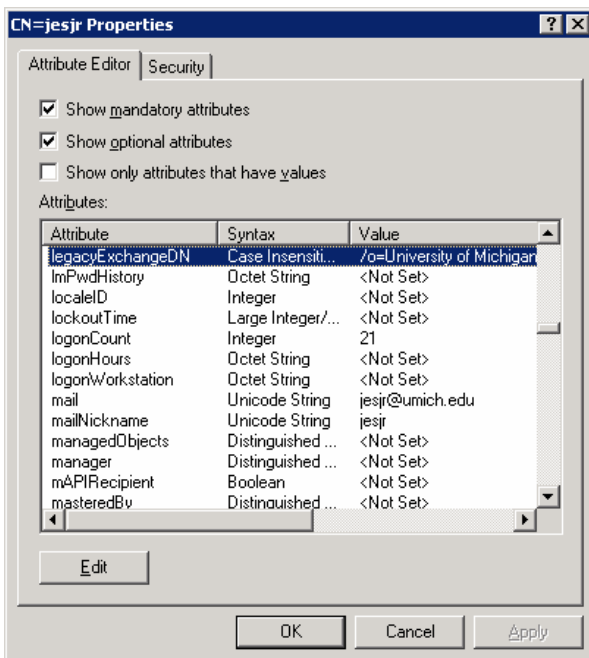
If this problem does occur, the solution is to modify the user’s account so that mail can be sent to both accounts. This procedure requires using ADSI Edit, a very powerful and potentially dangerous tool. Before using this procedure, please make sure you know what you are doing. ADSI Edit is part of the Windows 2003 Support Tools which you can download from Microsoft.

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1. Start ADSI Edit and browse to the user that has this problem:

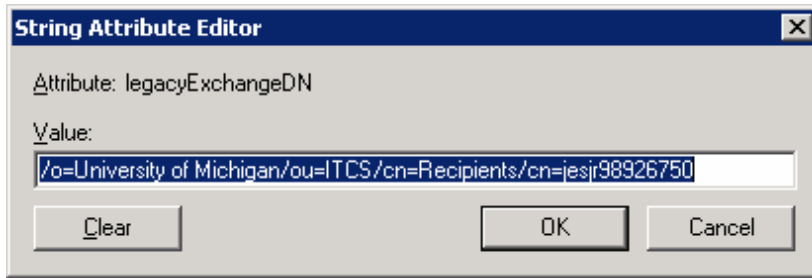


2. Right click on the user object and click **Properties**. Scroll down to the **legacyExchangeDN** attribute.

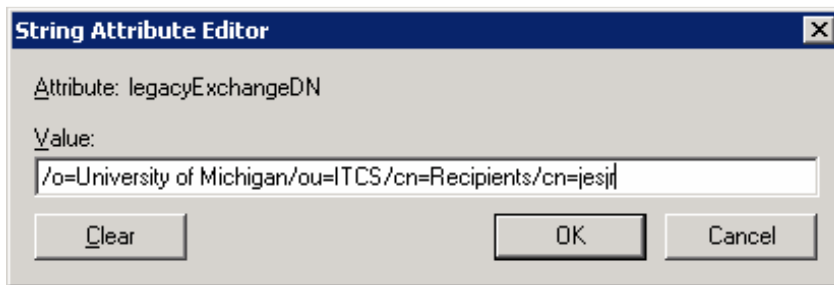


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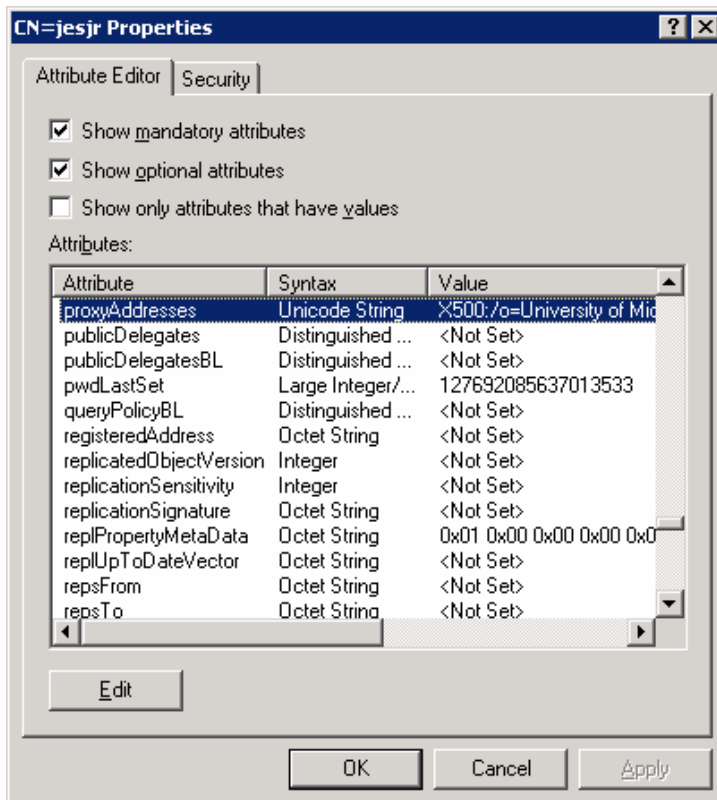
3. Double Click the **legacyExchangeDN** attribute.



4. Copy the information from the attribute and save it somewhere like Notepad. Then delete the trailing 8 character so that only the unqname is left. Click OK

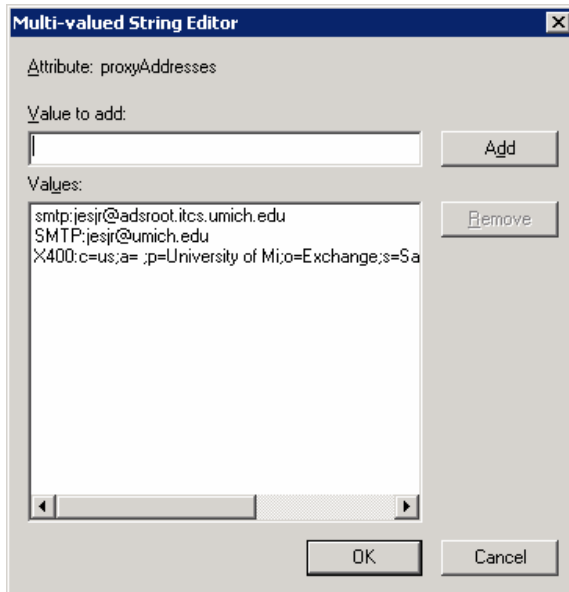


5. Scroll to the **proxyAddresses** attribute and double click.



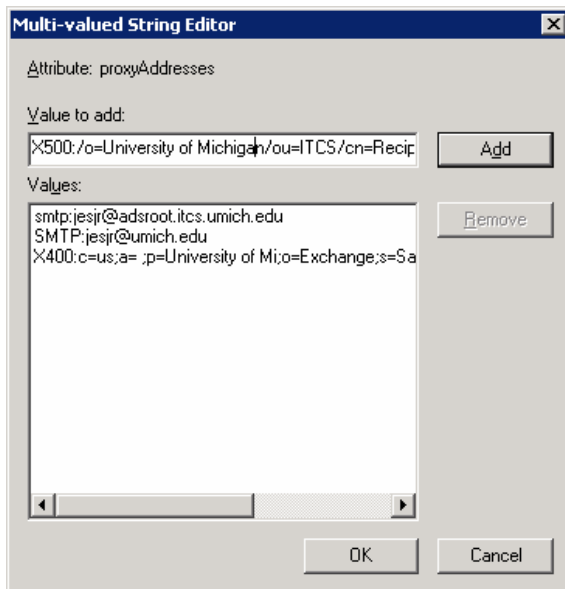
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6. Click Add



7. Enter the LegacyExchangeDN you previously copied (the one with the trailing numbers) prefixed “**X500:**” with no spaces and click **Add**. For example:

X500:/o=University of Michigan/ou=ITCS/cn=Recipients/cn=jesjr98926750



8. Even after this has been fixed in AD, users may have difficulty sending because of cached information in the Address Book or the name cache. The following two sections address these issues.

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Resetting the Outlook Name Cache

Symptom:

Outlook 2003 keeps a name cache of any users that you send email to. Most of the time, this is very useful. Sometimes, the names that are cached locally change on the server. The user sending a message from the outdated cache will get a message that their email was non-deliverable.

Solution:

If you determine that this is the problem, the Outlook name cache needs to be deleted on **every client** that will be sending mail to that user. This is a pain because it is potentially a lot of users to deal with and they will lose their name cache. An alternate fix is to try and remove just the offending address from the name cache. Both methods are documented below.

Resetting the Outlook Name Cache

Here is a way to get rid of the name cache for each outlook profile having difficulties with that user.

1. Exit Outlook.
2. In Windows Explorer, Tools > Folder Options > View tab > Advanced Settings > Show Hidden Files/Folders.
3. Search for *.nk2
4. Rename <profilename>.nk2 to <profilename>.nk2.old
5. Restart Outlook.

Removing a Single Name from the Name Cache

If you know the name in the name cache that is incorrect, you can try having each user that may send mail to that user delete the user from their name cache.

1. Open Outlook
2. Start a new email message
3. Start typing the user's name you want to delete. A box will popup with names that match what you have entered. Scroll to the entry you want to delete and press the **delete** key.

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Resetting the Outlook Address Book

Running Outlook 2003 in cache mode is a productivity boon to many users. However, caching can cause problems when information is not updated in a timely manner. Address Book caching can be a factor in non-delivery of email messages.

Configuring Outlook to Download the Address Book

1. In Outlook 2003, on the **Tools** menu, point to **Send/Receive**, then **Send/Receive Settings** and finally click **Define Send/Receive Groups**.
2. In the list, select the group you want, and then click **Edit**.
3. Under **Accounts**, select your Exchange Server account.
4. Select the **Download offline address book** check box.
5. Click **Address Book Settings**.
6. Under **Information to download**, select Full Details.

This will configure Outlook 2003 to periodically download changes that have been made to the Global Address List onto your computer.

Refreshing the Outlook cached Address Book manually

You can force a download of your cached Address Book.

1. In Outlook 2003, on the **Tools** menu, point to **Send/Receive**, then **Download Address Book**.
2. Check the box **Download changes since last Send/Receive**
3. Under **Information to download**, select **Full Details**.
4. Under **Address Book**, select **\Global Address List**

NOTE: While this procedure forces a download of the Address Book to your computer, the Offline Address Book on the server from which it is downloaded is only refreshed once per day, at 5am. Therefore, you can only download data to your computer that was current as of 5am on that day.