# EMCAP Pilot

# Server Administrative Console Guide

North Carolina Department of Cultural Resources

Government Records Branch

E-mail Collection and Preservation Tool Grant

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## Introduction

Thank you for your interest in the EMCAP (E-mail Collection and Preservation) pilot project. EMCAP is a software application currently comprised of several custom modules; one of the modules is for those users designated to have archival e-mail messages worthy of long-term preservation. The remaining modules are for those responsible for the capture and transformation of the archival e-mail messages.

Users designated to archive their e-mail will be given a second e-mail account on an archival e-mail server dedicated to collecting and storing archival mail. This archival e-mail account appears as an additional folder (or "archive" folder) within the e-mail client to collect messages that the user has organized and designated to be archival based on the messages' content and by using his or her agency's records retention and disposition schedule to identify what messages should be permanently retained. The additional e-mail account in an e-mail client is treated just like another folder in which to copy and store archival messages. The user can also check on the status of the archival e-mail messages and make basic changes to his/her account via the EMCAP Status Account module.

Each user is provided with a User Guide that covers how to archive e-mails using the tool in accordance with his or her agency's records retention and disposition schedule as well as how to make administrative changes through the Status Account tool. Since this is a pilot project, some aspects may be different than when EMCAP goes into production as a permanent e-mail archiving tool.

The EMCAP Server Administrative Console (or Admin Console) provides a central place to monitor and control the action of the Core Processing Engine (which processes the e-mail messages), maintain the list of domains and accounts that will be processed, and launch various other utilities. The Admin Console modules allow EMCAP administrators to manage individual and domain user accounts, including creating, editing, deleting or closing user accounts. The console also allows administrators to manage the processes required to collect and preserve e-mail messages with long-term value/high public interest, including importing and processing data files (produced using Microsoft data files which have a Personal Storage Table [.pst] extension). Processing e-mail messages transforms them from its native format to a non-proprietary and stable XML "preservation copy".

This User Guide covers how to effectively use the Server Administrative Console.

Additional information about this grant project can be found at:
http://www.ah.dcr.state.nc.us/records/EmailPreservation.

## Guide Layout

There are two primary ways to receive archival e-mail messages: (1) current users actively upload archival e-mail messages to the archival server via Internet Message Access Protocol (IMAP), or (2) an employee's e-mail messages (which are regarded as archival) are removed from his/her computer's hard drive as Microsoft Outlook data (.pst) files and are transferred to the repository via a digital storage

medium. In this scenario, the .pst files are not available for processing in the same manner as those copied or moved directly to the archival server by the user. As such, this guide addresses these two types of users separately.

The first section offers guidance on managing active EMCAP users. It covers setting up new user accounts and editing current user accounts. The second section offers guidance on handling those situations involving .pst data files. It covers copying and importing .pst files into the archival server and creating new user accounts to accept the imported files.

While this guide covers these two scenarios separately, the manners in which archival e-mail messages are parsed and transformed to XML are identical. Therefore, the last section covering processing of the e-mail messages will apply to both situations.

Lastly, you will notice the symbol throughout the Guide. This symbol highlights hints and shortcuts when using the different utilities, and any special circumstances that you should pay close attention to.

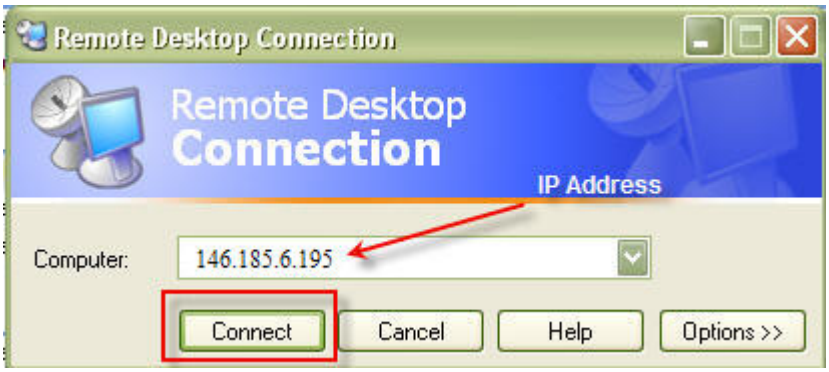
## Managing Active EMCAP Users

### Logging Into the EMCAP Administrative Console

Each person who will administer EMCAP must do by establishing a Remote Desktop Connection to the EMCAP Server. The account user should have full administrative privileges for the EMCAP Server (i.e., the account should be a member of the local administrators group). Please ask your IT department to enable Remote Desktop Connections to the server and to make sure that you have an account that has the necessary privileges.

From the main toolbar on your desktop, click on the **Start** button, and select **All Programs** → **Accessories** → **Remote Desktop Connection**. A Remote Desktop Connection window will appear.

From the dropdown list, select the appropriate Internet Protocol (IP) address of the remote computer (this address will be determined by your IT network administrator) and then click the **Connect** button.

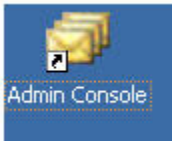


For easier access and login to the remote desktop, simply drop and drag the remote desktop icon onto your desktop.

The Log On to Windows window will appear. Type in your password and click **OK**. You are now working from the remote desktop.

The first time you logon on to the server, you may see a "Manage Your Server" dialog box. Since it is unlikely that you will be actively managing the archival server, you should check the box "Don't display this page at logon" located at the bottom of the window. Then close the dialog box. If you would like to see this page for whatever reason, it is available from the Start menu: **Start → Administrative Tools → Manage Your Server**.

Open the EMCAP Administrative Console by double-clicking on the Admin Console icon on the desktop.




## A Tour of the Interface

The main EMCAP Admin Console not only lists all active users, but it is where you will run the various utilities offered by the application. Figures 1 and 2 show the data being tracked in the main window. Note that each column (or field) represents a single piece of data about the account.

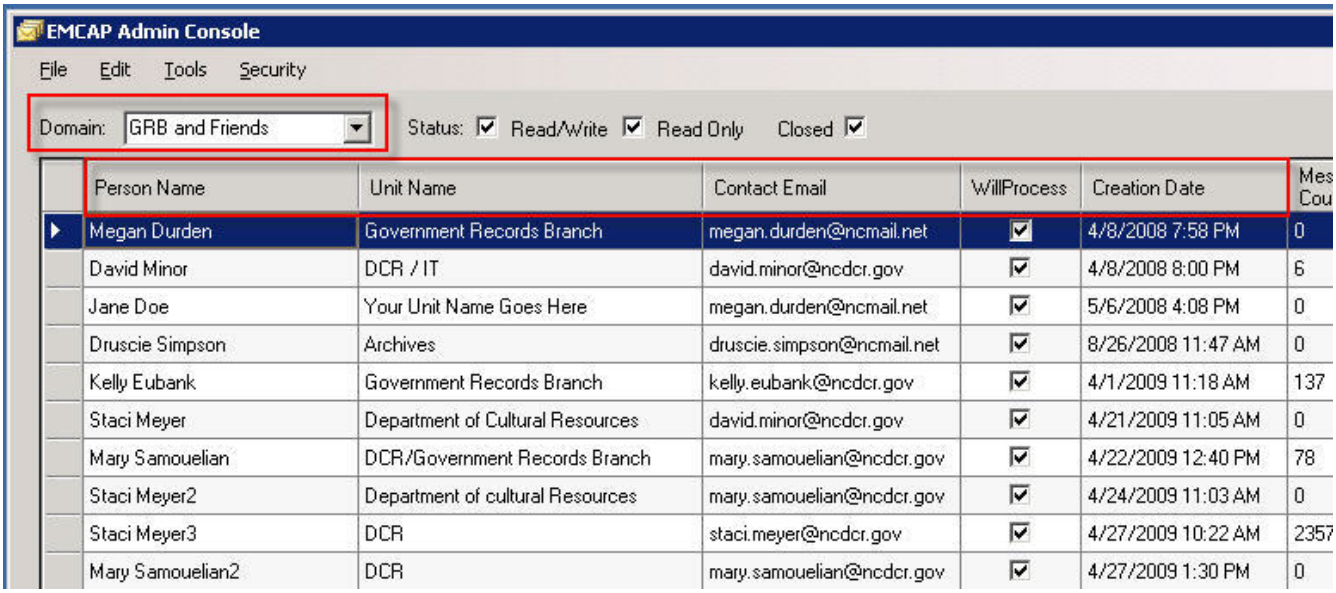



**Figure 1. EMCAP Admin Console**

*Domain:* Represents an organized collection of users associated with one another. For example, the users listed under the domain name "GRB and Friends" are all affiliated with this specific agency.

*Person Name*: The full name of the individual (or user) whose archival e-mail messages are being imported, parsed, and preserved.

*Unit Name*: The unit within the agency in which the user belongs. Use forward slashes to delimit name that makes up a hierarchy. For example: Division/Section/Branch/Unit.

*Contact E-mail*: The main e-mail address of the user; his or her primary work e-mail address.

*Will Process*: Checking this box means that this specific user account will be included in the automated processing of e-mail messages to XML. Leave this box unchecked if you don't want it included in this process.

*Creation Date*: The date and time the user account was created.

| | Message Count | Last Processed | Processed Last Run | Earliest Message | Latest Message | Address | Status |
|---|---|---|---|---|---|---|---|
| M | 0 | 2/26/2009 8:43 PM | 0 | | | megan.durden | ReadWrite |
| M | 6 | 3/15/2009 10:16 AM | 6 | 8/5/2008 7:26 PM | 8/5/2008 9:07 PM | david.minor | ReadWrite |
| M | 0 | | 0 | | | jane.doe | ReadWrite |
| AM | 0 | | 0 | | | druscie.simpson | ReadWrite |
| AM | 137 | 4/1/2009 11:48 AM | 137 | 12/4/2002 12:53 AM | 10/2/2006 2:02 AM | kelly.eubank | ReadWrite |
| AM | 0 | 4/27/2009 10:15 AM | 0 | | | staci.meyer.temp | ReadWrite |
| PM | 78 | 4/27/2009 12:23 PM | 78 | 2/16/2009 1:39 AM | 4/24/2009 10:51 AM | mary.samouelian | ReadWrite |
| AM | 0 | 4/27/2009 9:26 AM | 0 | | | staci.meyer2 | ReadWrite |
| AM | 2357 | 4/27/2009 11:10 AM | 1514 | 9/27/2007 2:31 PM | 3/27/2008 9:34 AM | staci.meyer3 | ReadWrite |
| PM | 0 | | 0 | | | mary.samouelian2 | ReadWrite |

**Figure 2. EMCAP Admin Console**

*Message Count:* The total number of e-mail messages successfully processed (meaning parsed and converted into XML).

*Last Processed*: The last date and time the processor was run or executed.

*Processed Last Run*: The number of messages parsed and converted to XML in the most recent job.

*Earliest Message*: The earliest date and time of creation of the message that has the earliest creation date out of all the messages that have been processed and saved to the main EMCAP message store.

*Latest Message*: The latest date and time of creation of the message that has the latest creation date out of all the messages that have been processed and saved to the main EMCAP message store.

*Address*: This is the local part of the e-mail address the client will use when connecting to the archival mail server. This is in a *firstname.lastname* format.

*Status*: There are three options:

*Read/Write*: The account is fully operational. The user can add messages and make basic changes to the account. This is the normal setting.

*Read Only*: The user may connect to the account and view its contents, but will not be able to make any changes to the account. This includes adding new messages. The user will not be able to tell if the account has been set to ReadOnly until an operation is attempted at which time it will simply fail, usually

with no error message being sent. Note that the processing engine temporarily sets each account to ReadOnly during account processing.

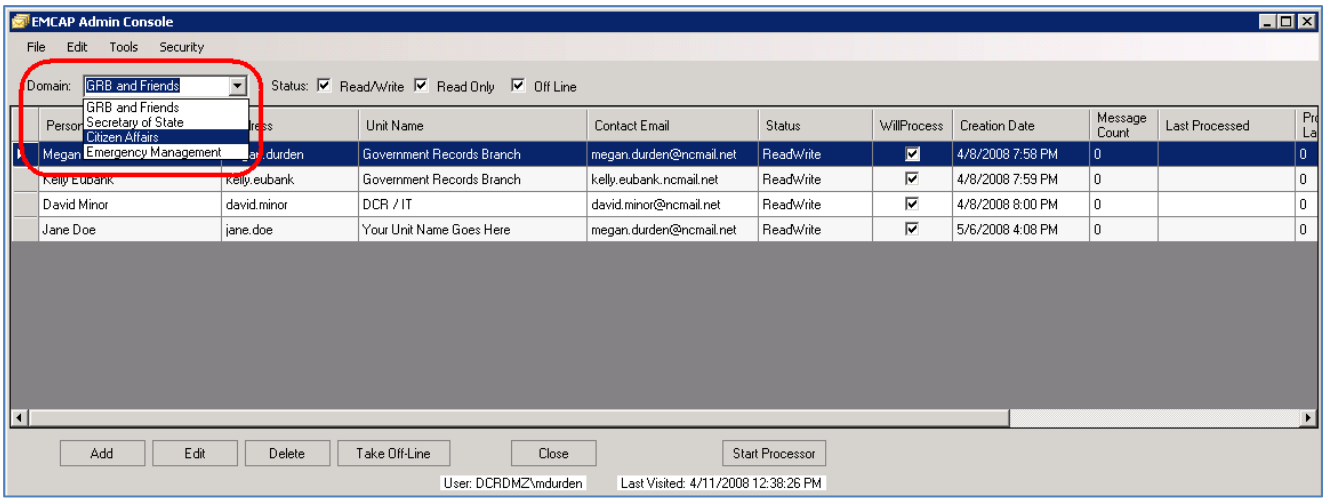
*Closed*: The user's account is no longer available via the mail server. Once an account has been closed, it cannot be put back on line. This rarely will be used, as the circumstances have to be unusual for the account to be closed.

You can select the width of each column by placing your mouse over the line separating two columns, then clicking and dragging the line to the width you desire (note this will affect the column to the left of the line). These column width settings will be saved in between sessions, so that when you restart the application, the columns will have the same widths as they did the last time the application was closed. In addition, you can reorder the data (i.e., alphabetically) in each column by clicking on the column header.

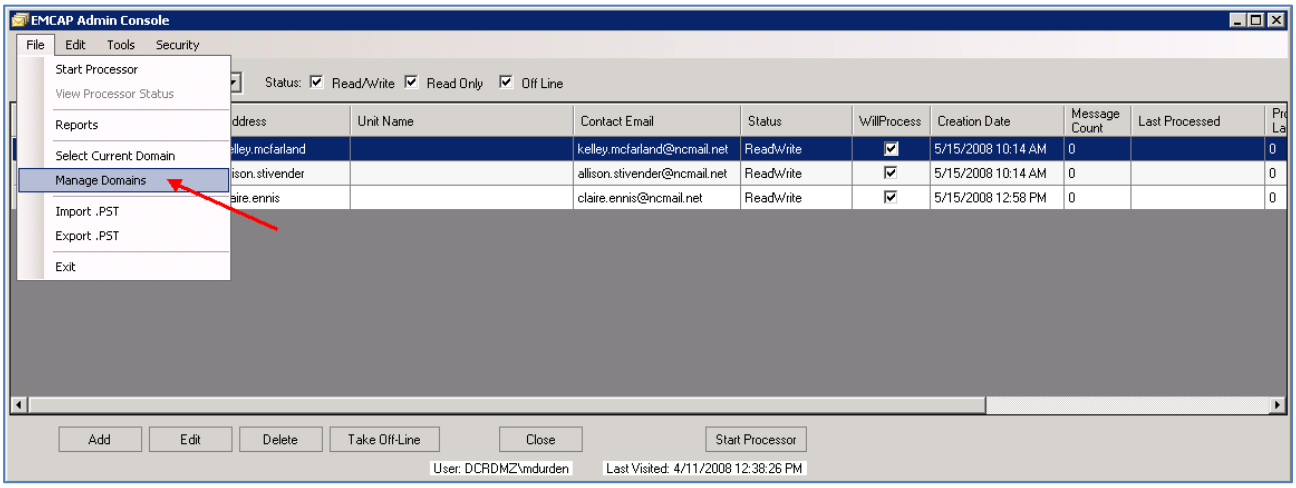
## Creating an Agency Domain

Before a user account can be created, a domain must be set up for his or her agency. This must be done in close association with your IT department since the archival server must be configured to respond to the corresponding DNS (Domain Name System) name.

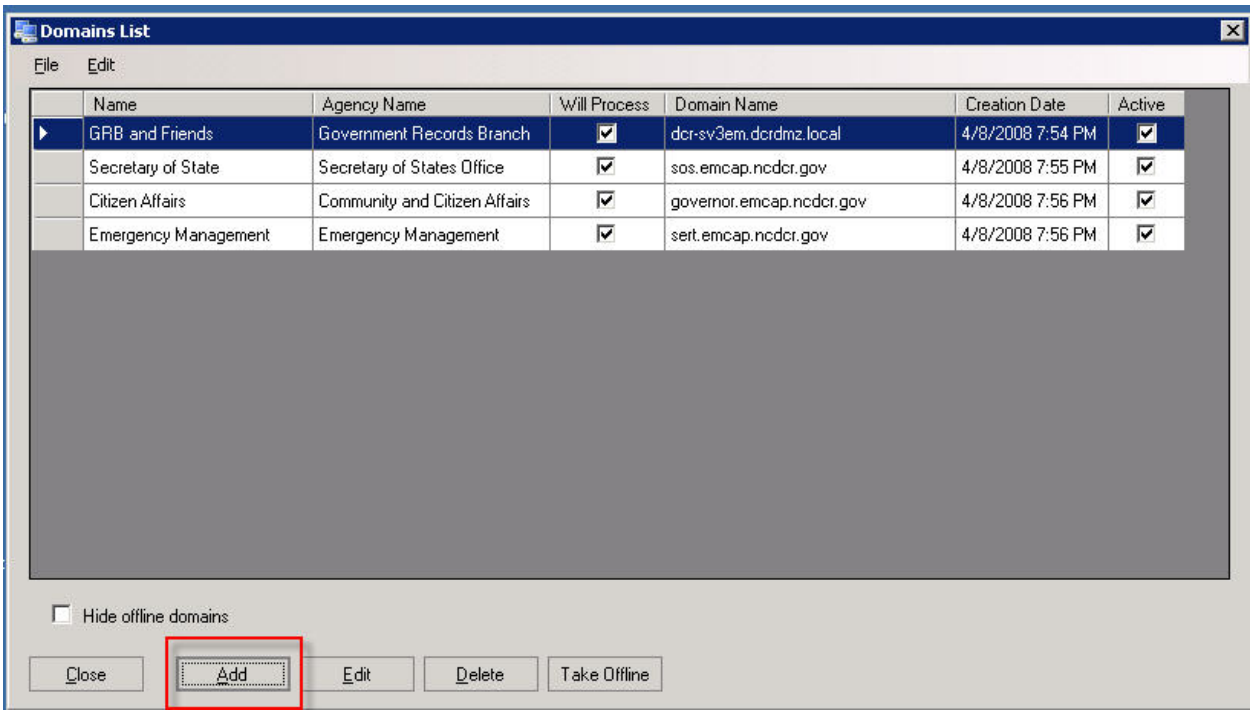
From the main console window, review the domains listed in the drop-down box to determine if a domain already exists.



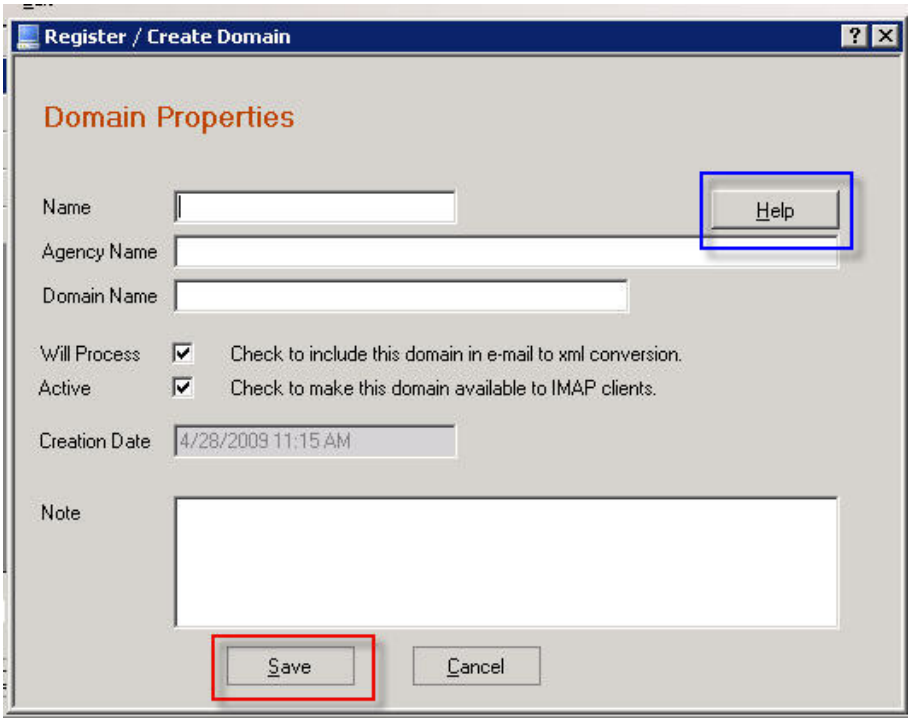
If the domain is listed in the drop-down list, skip to the next section, *Creating User Accounts* beginning on Page 14. If the domain for the user's agency does not appear, from the toolbar, select **File → Manage Domains**.




A Domains List window will appear that lists all of the current domains. Select **Add** button at the bottom of the window to create a new domain for another agency, or alternatively from the toolbar select **Edit → Add Domain**.



The Register/Create Domain window lists all of the information needed to create a new domain.




The field descriptions are:

*Name*: This is essentially a nickname; it can be an abbreviated version of the agency name, or it can just be the same.

*Agency Name*: The formal name of the agency that will use the EMCAP domain.

*Domain Name*: The structure in use for the pilot is: *agencyabbreviation*.emcap.ncdscr.gov.

For example, sos.emcap.ncdcr.gov

*Will Process*: This means the domain will be included in the automated processing of e-mail to XML. Leave this box checked.

*Active*: This means that users in this domain will be able to use the EMCAP folder for archival mail. Leave this box checked.

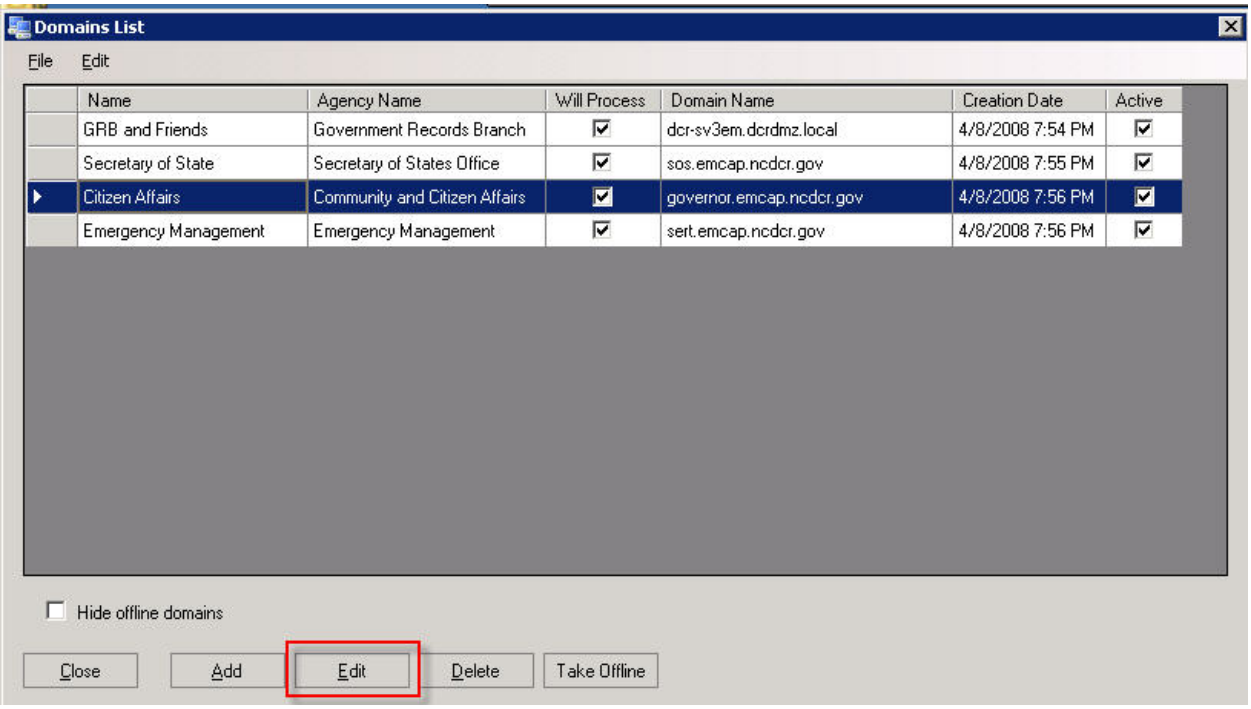
*Note*: The notes field is optional but is a place to include pertinent comments. For example, make note of modifications or exceptions to this domain structure.

Once this information is updated, select the **Save** button at the bottom of the window. Select the **Exit** button on the bottom of the Domain Lists window

The **Help** button located next to the Name field offers additional information about the role domains have in the tool, and more detailed descriptions of the fields in this window.

## Editing an Agency Domain

Editing an agency domain *must be done* in close association with your IT department since the archival server must be configured to respond to the corresponding DNS name. To edit an agency domain, select **File → Manage Domains** from the toolbar, or alternatively the **Edit** button at the bottom of the window. A Domains List window will appear that lists all of the current domains. Highlight the domain you want to edit, and then select the **Edit** button at the bottom of the window.




The Register/Create Domain window lists all of the information needed to edit the domain. When you are finished editing, select the **Save** button at the bottom of the screen.

## Deleting an Agency Domain

There may be circumstances where you will need to delete an existing agency domain. For example, you may have created a test domain that is no longer needed or you created a domain in error. Deletion of an agency domain means that all information associated with this domain will be permanently deleted as if it never existed. Note that you *cannot* delete an agency domain that contains user accounts that have processed e-mail messages.

To delete an agency domain, you will first need to delete all account records in the domain. Select **File → Manage Domains** from the toolbar. A Domains List window will appear that lists all of the current

domains. Highlight the domain you want to delete, and then select the **Delete** button at the bottom of the window. Verify the deletion by selecting **OK**.

Deleting an agency domain involves the deletion of user accounts, so extra care should be taken when considering this option.

### Taking an Agency Domain Offline

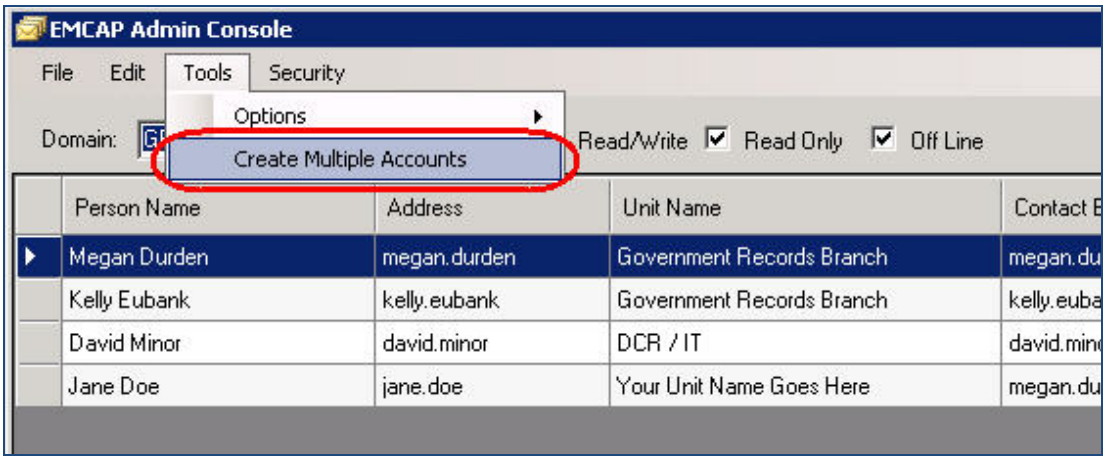
Taking an agency domain offline means that neither you nor the users associated with the domain will have access to the records transferred or processed within the domain (i.e., the archive still exists, but is no longer available via IMAP and no longer updatable). You must first close all account records in the domain. Selecting this option from the Domain List window will remove the domain from the archival server, however, the domain and all user accounts and associated data will be preserved.

Taking an agency domain offline severs all access to the messages unless your system is set up to access those messages. As such, extra care should be taken when considering this operation. Do not do this without first consulting with your IT staff.

## Creating User Accounts

Once the domain exists, you can create individual or multiple user accounts for a *specific* domain in a batch process.

Make sure you are in the correct domain by selecting the name from the Domain drop-down menu. From the toolbar, select **Tools→Create Multiple Accounts**.




A new Batch Account Creation window will appear (Figure 3). You have two options of creating accounts from this window.

### Option 1

If you have an extensive number of accounts to create, or a list compiled by someone else, you can import the data as a .CSV (Comma Separated Values) formatted file.

Begin by selecting the **Instructions** button at the bottom of the window and following the directions.

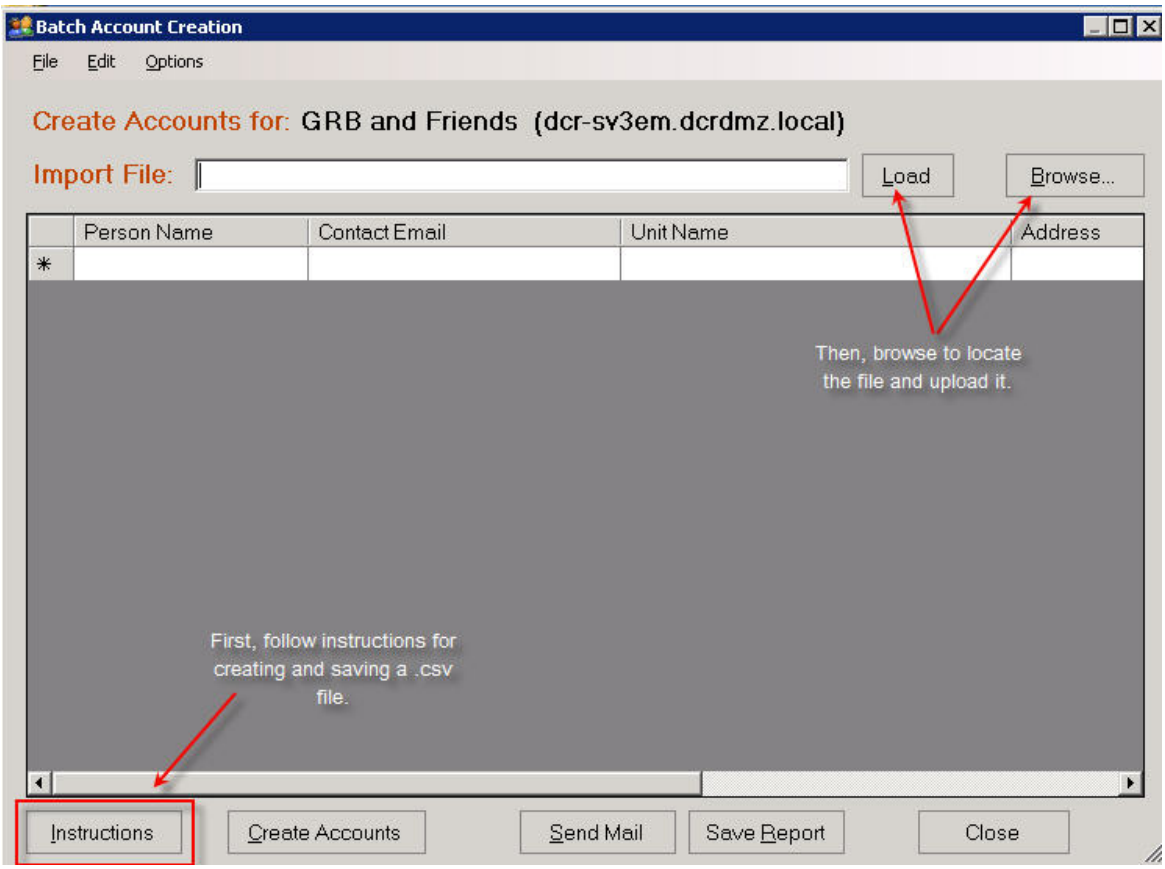
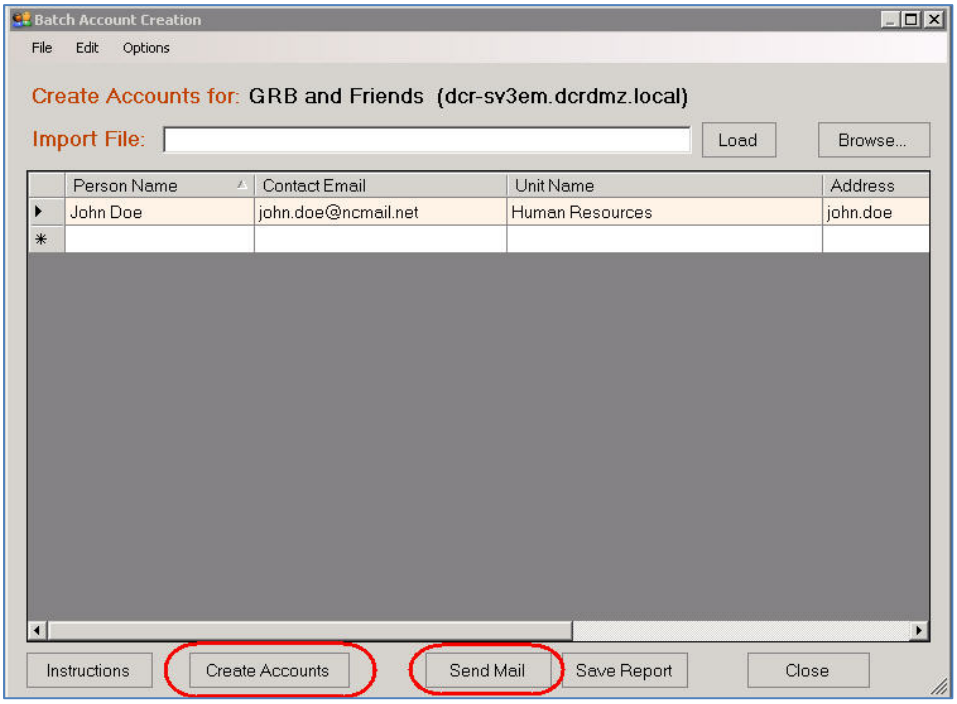



Figure 3. Batch Creation

Pay particular attention to two items in the instructions. First, the Imports Account template was created using Microsoft Excel. In order to successfully import the file, *you must save it as .csv file* when you are finished with your edits. If you do not, an error message will appear and the file cannot be imported. Second, if you decide to save the file onto your local computer, you must configure the Remote Desktop Connection software to make your local hard drive available to this session. It is recommended you save the file to the remote desktop versus your local drive.

Click **Browse** to identify the file and then **Load** to import it.

## Option 2




If you are only adding one or two users, names can be entered line by line. Starting at the text box next to the asterisk (*), enter the user's name (e.g., "John Doe"), the user's normal work e-mail address, and the unit name. The address (the EMCAP address) will be automatically created based on the contact e-mail address. If the contact e-mail address name is different from the address name (i.e., the contact e-mail is johnd@agency.gov and the address name is john.doe), then manually type in the address. Use tab to move between the fields. Note that the first three fields cannot be left blank.

After adding user information using Option 1 or Option 2, select **Create Accounts** at the bottom of the window. If the accounts are successfully created, a Report window will appear validating the number of rows (accounts) added. Each successful row will turn blue. If there are problems with the creation of the accounts, an error message will pop-up and any problem rows will be identified in pale yellow.

After all the accounts have been created, select the **Send Mail** button at the bottom of the window to send an automated introductory e-mail message to notify each new user of the account creation and to provide steps to change the EMCAP password.

A Send Welcome Message window will appear (Figure 4).

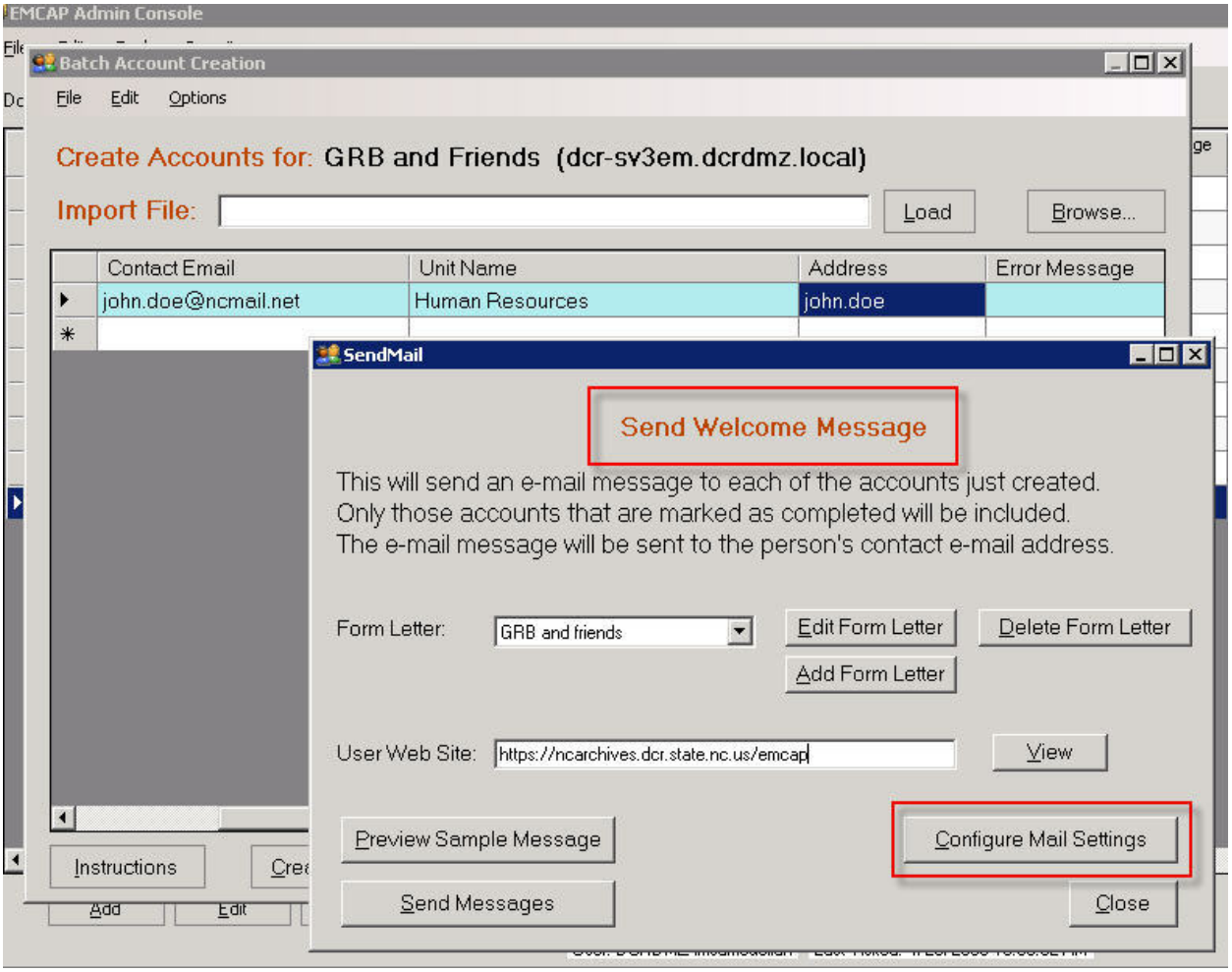



Figure 4. Send Message window

Select the appropriate form letter from the **Form Letter** drop down list, and either edit, add or delete the form letter.

Type the web address for the Welcome page to the EMCAP Account Status tool into the User Web Site field. This address is https://ncarchives.dcr.state.nc.us/emcap.

It is important to type in the User Web Site as it will give each user individual access to the Welcome page of the EMCAP Account Status tool. Here, the user is responsible for creating an Archival account password and then resetting the temporary password in their e-mail client (Outlook) to reflect this new password. This is necessary to allow the user access to the archival server. The process for this is outlined in the User Guidelines.

To ensure that the administrator is the individual sending the e-mail, select the **Configure Mail Settings**. The Send Mail Settings window will appear.

From this window, you can verify that the sender's (or administrator's) address is correct and change the address if it not correct. Note that once you change the sender's address, the Recipient Address field will automatically be populated with the same e-mail address. You can select the **Send Test Message** to yourself (as the recipient) ensure that the e-mail is being sent. Once this is confirmed, the window can be closed.

Back on the Batch Creation window, you can also preview message being sent by selecting the P**review Sample Message** button.

If everything is accurate, click the **Send Message** button at the bottom of window. A confirmation window (Sent Count) will appear, verifying the number of messages sent. Click **OK** and then select the **Close** button on the Send Welcome Message window and the Batch Account Creation window.

The new user(s) will receive a welcome e-mail message (Figure 5). In addition, the new user record will be added to the main Admin Console page.

To: Doe, John
Cc:
Subject: New Archival Account

Dear John Doe ,

Welcome! Thank you for participating in the EMCAP pilot.

A new e-mail account has been created on the Archival E-mail Collection and Preservation server (EMCAP) for your use.

The account address is john.doe@dcr-sv3em.dcrdmz.local

Account which allows user to drop archival messages into archival server.

Someone from your support staff will be visiting you soon to add this account to your e-mail client.

For a tutorial on how to use this service, please visit this web site:
http://www.ah.dcr.state.nc.us/records/emailpreservation/training.htm

Link to EMCAP Welcome Page

Before this account can be used it must be activated by clicking here
https://ncarchives.dcr.state.nc.us/emcap/Activate.aspx?accountid=56&sess=WswWPp31XpAj/k/su/CGBg
You will be able to choose a password at that time.

Email address of adminstrator

This account has been registered with the following information:
Account Owner: John Doe
Contact e-mail address: jane.doe@ncdcr.gov Unit Name: Department of cultural Resources

If any of these items are incorrect please update them by visiting the following web site:
https://ncarchives.dcr.state.nc.us/emcap

Figure 5. Welcome e-mail message

## Editing User Accounts

Additional information may need to be added to the user account. Highlight the user account, and then select Edit → **Edit Account** from the toolbar, or alternatively the **Edit** button at the bottom of the screen (Figure 6).

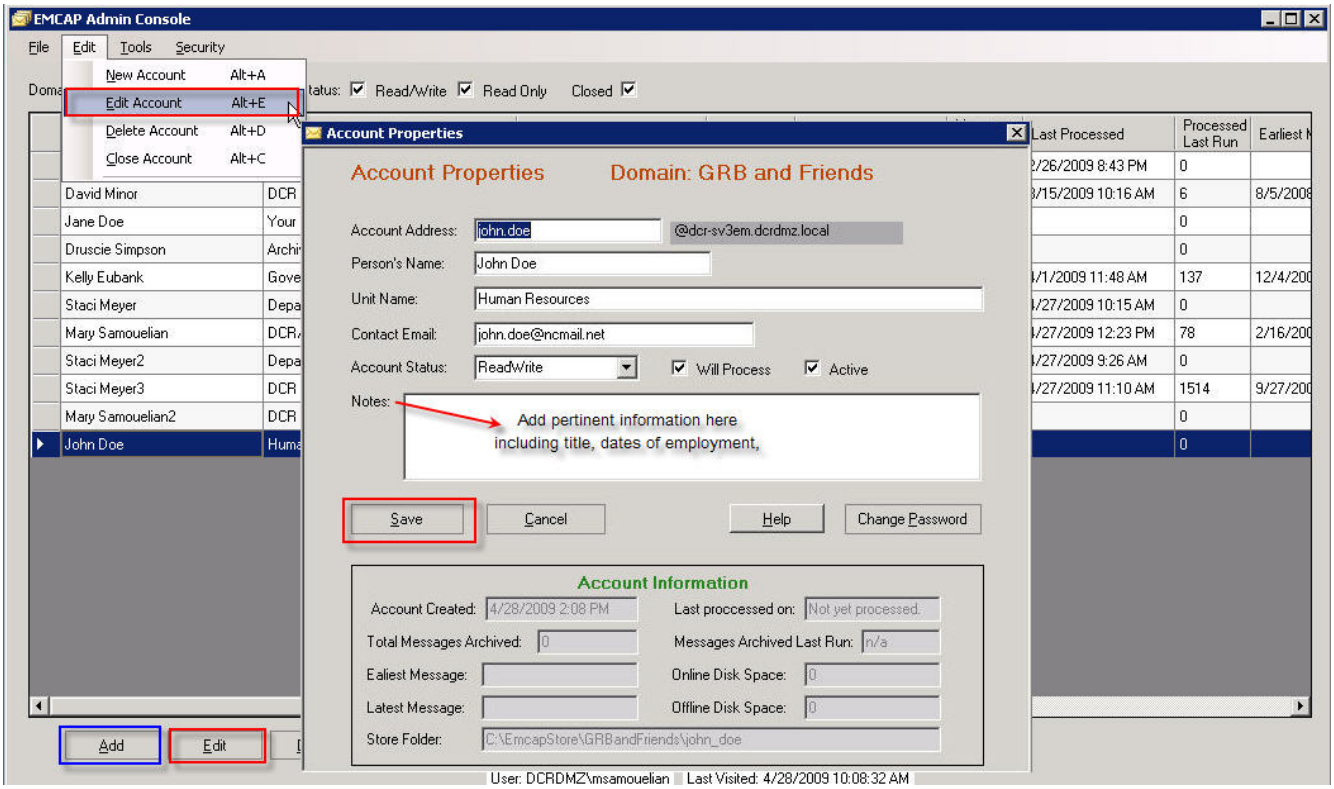



Figure 6. Edit user account

Make necessary changes, including the user's title, employment dates, or other pertinent information and select the **Save** button.

## Deleting and Closing User Accounts

*[Note: the function to close a user account currently does not work].*

There may be circumstances where you will need to either delete or close an existing user account. You can delete an account only if 1) there are no messages associated with this account; 2) there are unprocessed e-mail messages associated with the account (meaning e-mail messages are sitting on the archival server, but have not yet been processed). You can verify this by looking at the Message Count field in the Admin Console. If the number is greater than zero, this means you have processed some messages. If you have processed messages associated with an account, you will need to close the account instead of deleting it. When you close an account, all its associated messages are preserved on the archival server, however, it they are no longer accessible via the IMAP connection.

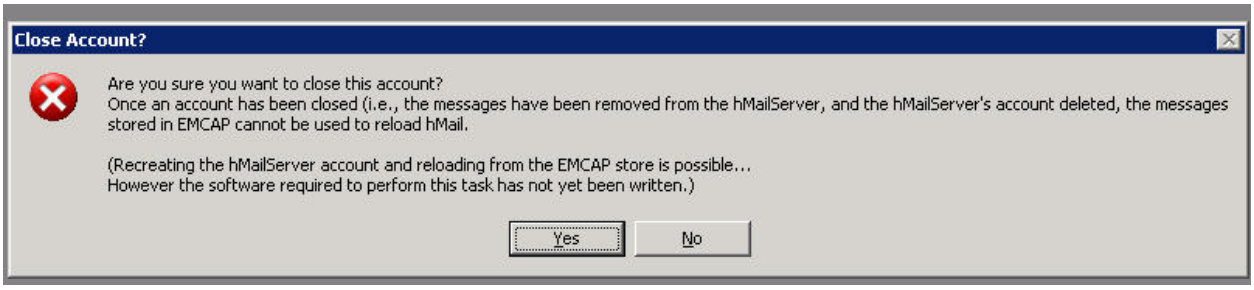
To delete a user account, highlight the account you want to delete and either select **Edit →Delete Account** from the toolbar or alternatively the **Delete** button at the bottom of the screen. If there are messages on the mail server for this account that have not been processed a Messages still on mail server window will appear indicating that these associated messages will not be processed until the account is re-registered (Figure 7).

Figure 7. Messages still on server

If you are certain you want to remove this account from the mail server, select **Yes**.

Re-registering an account currently does not work. Do not delete an account that has unprocessed messages associated with it.

To close a user account, highlight the account you want to close and then either select Edit → Close Account from the toolbar or alternatively the **Close Account** button at the bottom of the screen. A Close Account? window will appear confirming whether you want to close the account.




Verify that you want to close the account by selecting **Yes**.

Closing an account currently does not work.

## .PST Files

When e-mail messages are removed from an individual's computer hard drive, the files are saved as Microsoft Outlook data (.pst) files. These files are generally transferred to the repository via a digital storage medium, such as a DVD. In order for these types of files to be parsed and converted to XML, they must first be identified and then prepared to be imported into the archival server via the Admin Console.

### Identifying and Preparing .pst Files for Import

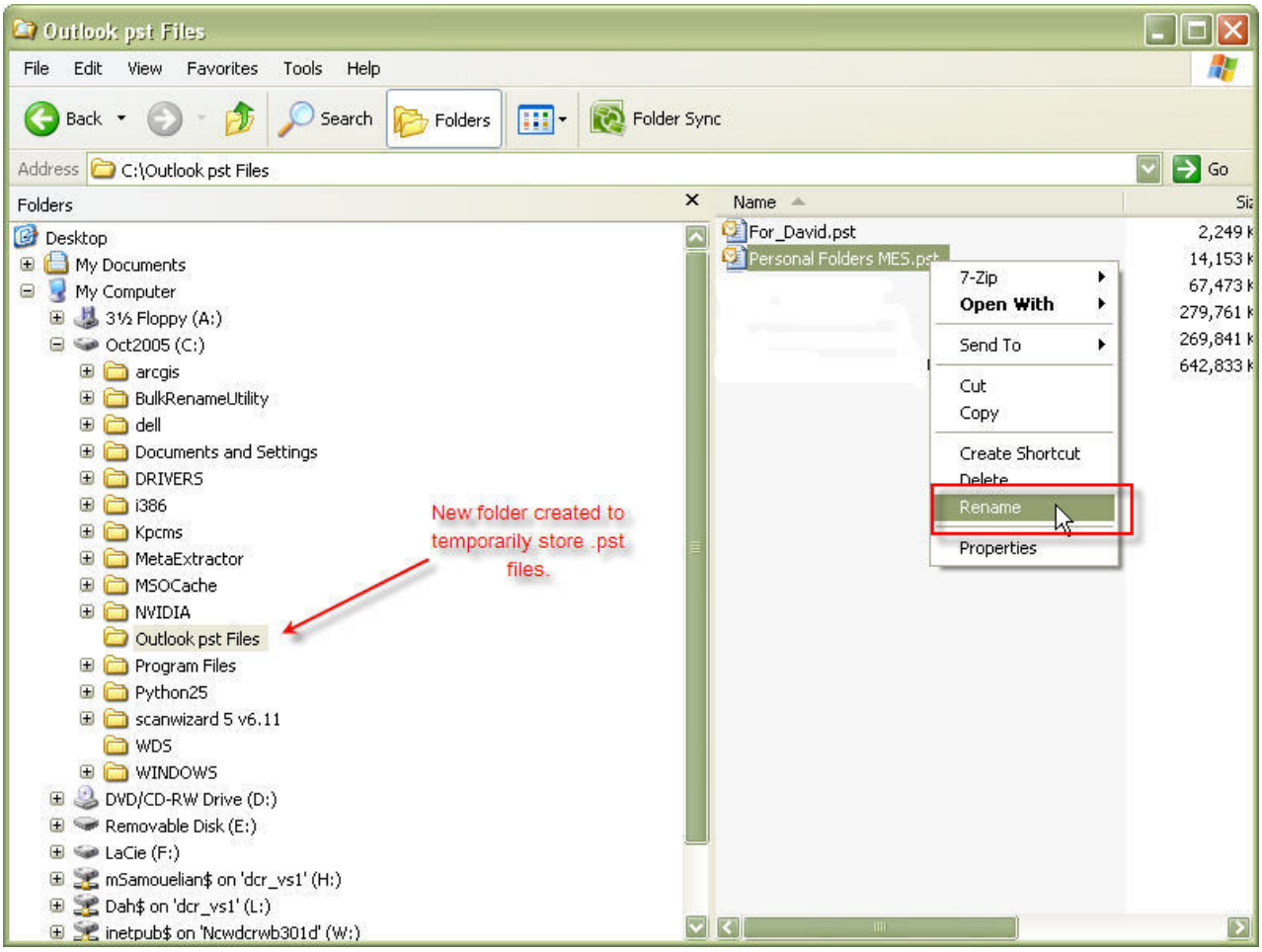
Identify all .pst files and messages on transferred digital media by opening the storage medium in Windows Explorer.

**Copy** the .pst files from the digital storage media (i.e., DVD) to a folder on your local hard drive.

By default, Outlook data files are saved at: *drive*: \Documents and Settings*user*\Local Settings\Application Data\Microsoft\Outlook. It is recommended that you change this path to something simpler (such as C:\Outlook PST) to make locating these files easier.

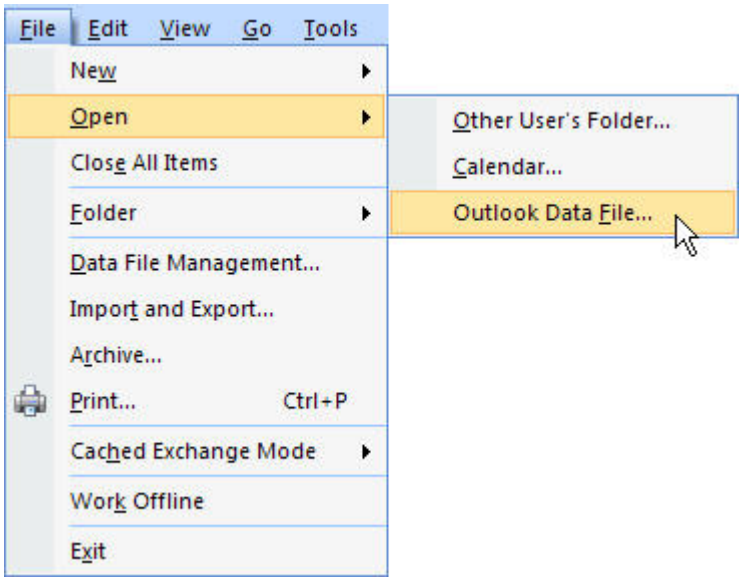
## Renaming .pst Files

As the names of the .pst files may not accurately reflect the contents of the files (i.e., a file may be named "Outlook2.pst"), it is recommended that the files be renamed. This can be done from Windows Explorer by right-clicking on the file, selecting **Rename**, and typing in the new name.




Prior to importing the .pst files to the archival server via the Admin Console, you should open all files to assess its contents. To view the contents of.pst files, you will need to open them in the Microsoft Outlook client.

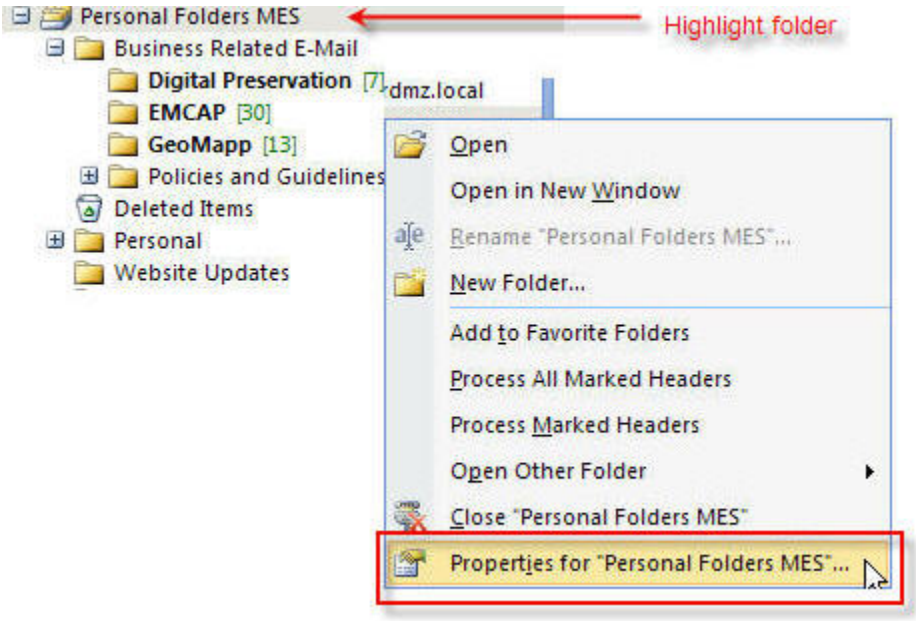
With main Mailbox highlighted, on the toolbar select **File → Open → Outlook Data File**, and browse to the location of.pst file to be opened. As Microsoft Outlook only allows you to open one file at a time, you will need to repeat this step as necessary.




A new folder containing the e-mail messages and post items will appear in the tree on the left of the screen. It is important to note that the names of these folders may not be identical to the original names of the .pst files you copied to your local drive, as Microsoft Outlook gives users the option of changing the folder name. For example, a .pst file may be named "Outlook2.pst", but when you open it in Microsoft Outlook, the folder name containing the messages may be named "Do Not Open this File!"

It is recommended to rename the folders to match the names of the .pst files.

In Microsoft Outlook, highlight the folder to be renamed. Right click and select **Properties** for "*folder name*".




A Properties window will appear (Figure 8).

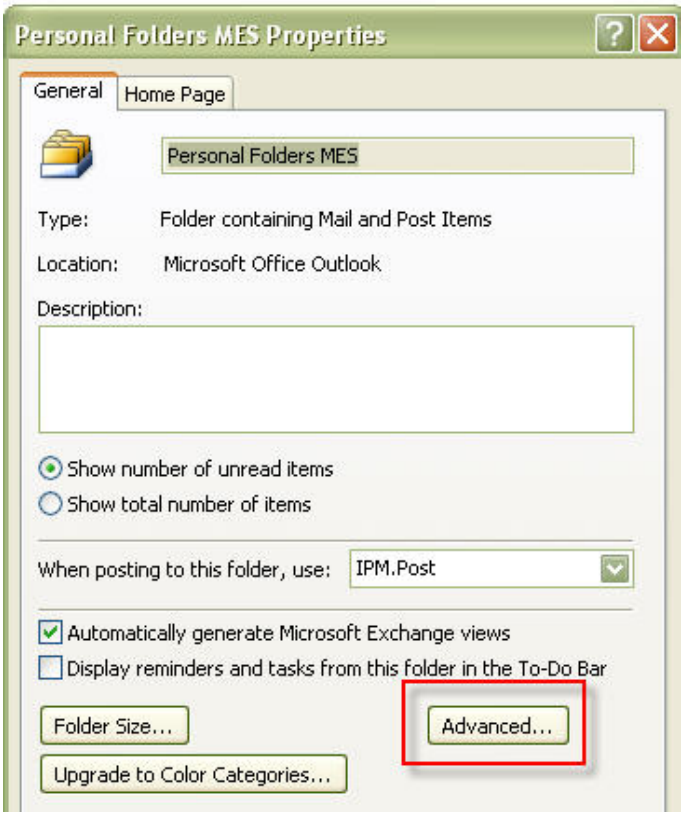
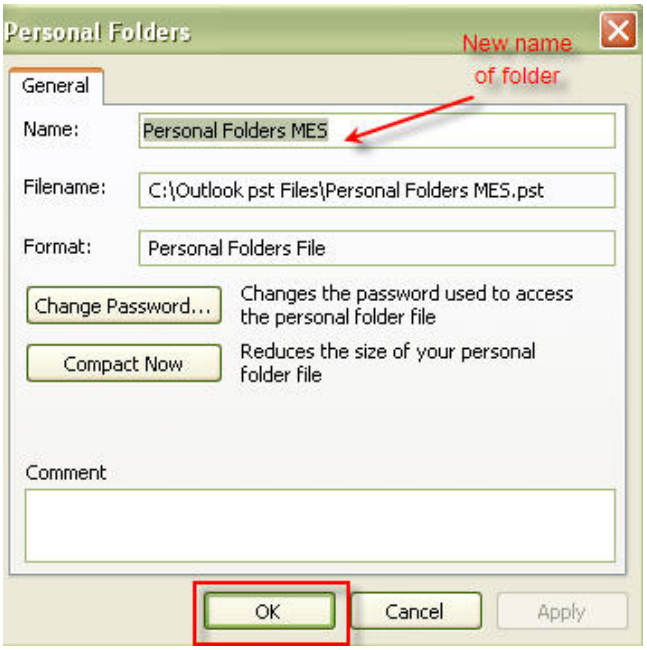



Figure 8. Folder properties window

Click the **Advanced** button. A Personal Folders window will appear.




In the Name field, type in the new name of the folder and select OK and this window will close.

To close out remaining window, click **OK**.

Repeat this process for all folders.

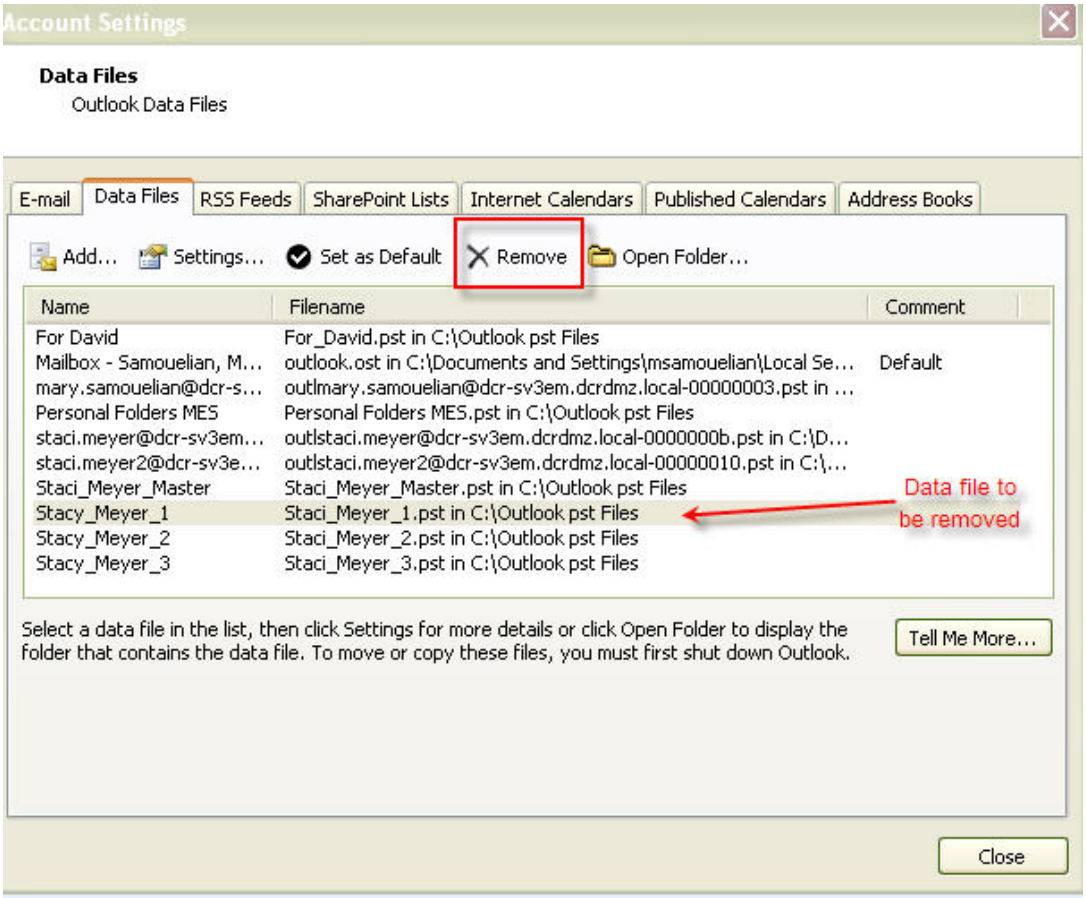
Open each extracted folder to identify all e-mail messages. Possible messages could reside in the Inbox, Sent Items, Draft, etc.

By default, Microsoft Outlook does not display the number of e-mail messages residing in a particular folder. To view these numbers, you can highlight the folder where messages are stored, and then right click on the folder. Select **Properties**. A folder window will appear. On the General tab, click the button "Show total number of items" and then hit **Apply → OK**. The number of items in the folder will be displayed in green. This number can be compared to the number of messages imported and parsed. Note this number (i.e., write it down!) as it will be useful to compare with when the files are imported and then processed in the Admin Console.

If there are no e-mail messages in any of the folders, you may only have other backed up items, such as calendar items or contacts. You can verify this by selecting the different subfolders to determine if there is any information. If there are no e-mail messages, both the data file in Microsoft Outlook and the .pst file on your local drive need to be deleted.

Highlight the folder to be deleted. From the toolbar, select **File → Data File Management.**

An Account Settings window will appear.



Highlight the data file you want to remove, and then select the **Remove** button.

A confirmation window will appear for removal, click **Yes**. Select **Close** button.

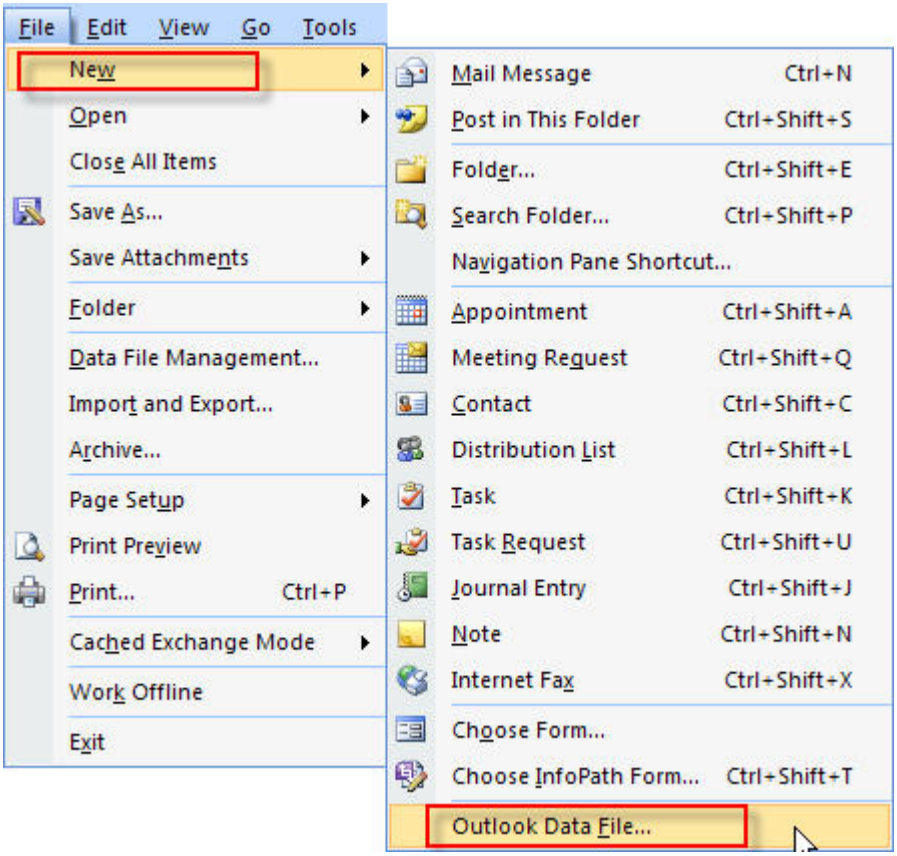
You may need to close out of the Microsoft Outlook client to remove the data file from your local drive. It takes a minute or two for the system to catch up and remove the temporary data file (this has a .tmp extension). You cannot delete the .pst data file without its corresponding .tmp file being closed.

## Merging Multiple .pst Files

The Admin Console is designed to import only one (1) .pst file. This means that if you import one .pst for a user account and then attempt to import a second .pst file into the same user account, the first .pst file will be overwritten. As a result, multiple .pst files for the same account must be merged (or copied) into one master .pst file before being imported and subsequently processed in the Admin Console.

Open the Microsoft Outlook e-mail client.

From the toolbar, select **File → New → Outlook Data File**.

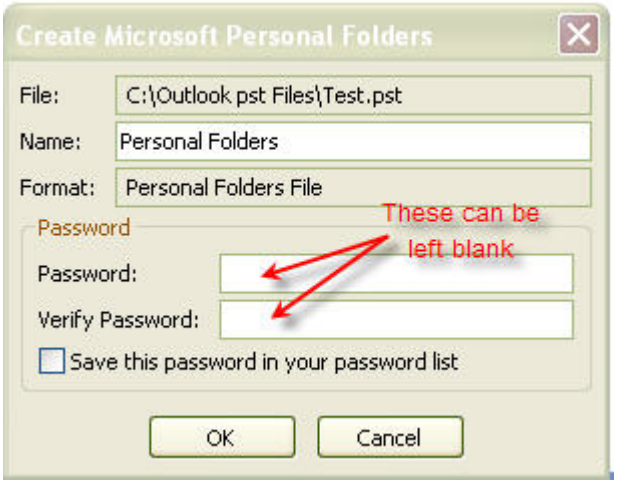


A New Outlook Data File window will appear.

"Office Outlook Personal Folders File (.pst)" will be highlighted. Unless you are certain that the outlook data files predate 2002, you can keep this selection highlighted and then select the OK button.

Browse and select a location for the new .pst file – this should be in the same location on your local drive where the other .pst files are saved. Type in the new **File Name** in the field at the bottom of the screen (for example, Firstname_Lastname_Master), and then click **OK**.

A Create Microsoft Personal Folders window will appear.



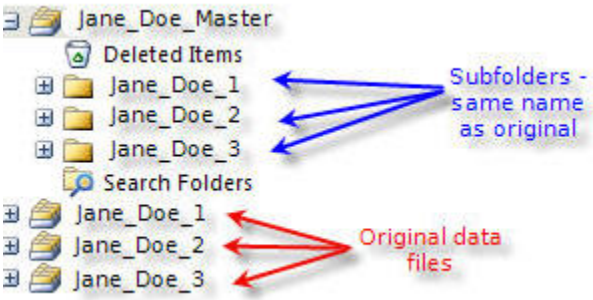

Type in the name of the folder you are creating in the **Name:** field (it is recommended you give the folder the same name as the newly created .pst file). The Password option is available for those wanting to protect their personal Outlook data by creating a password to prevent viewing by others. This should be left blank. Click **OK**.

The new folder you just created will appear in the Outlook Mail tree on the left of the screen.

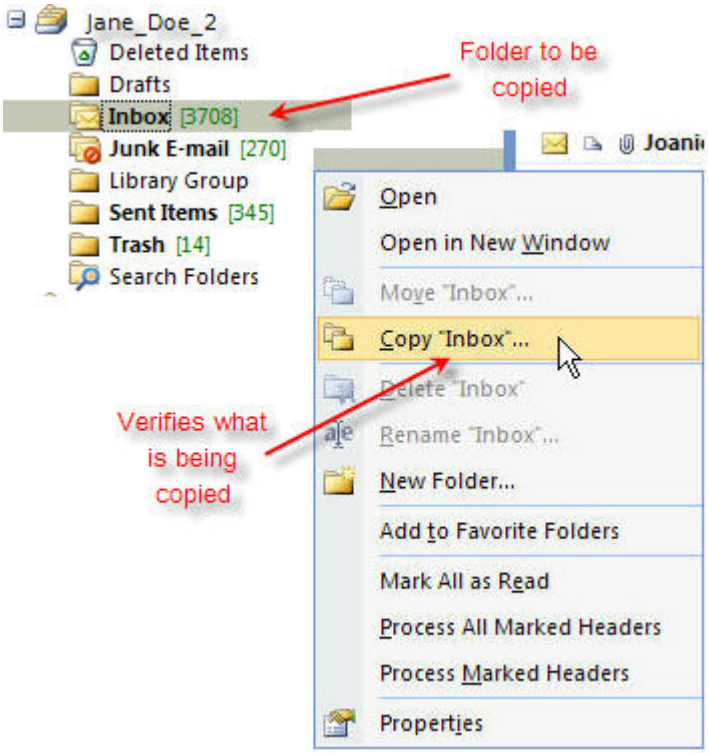
Under the master folder, create subfolders for each .pst file you plan moving into it.

Highlight the master folder. From the toolbar, select **File → New Folder**. A Create New Folder window will appear.

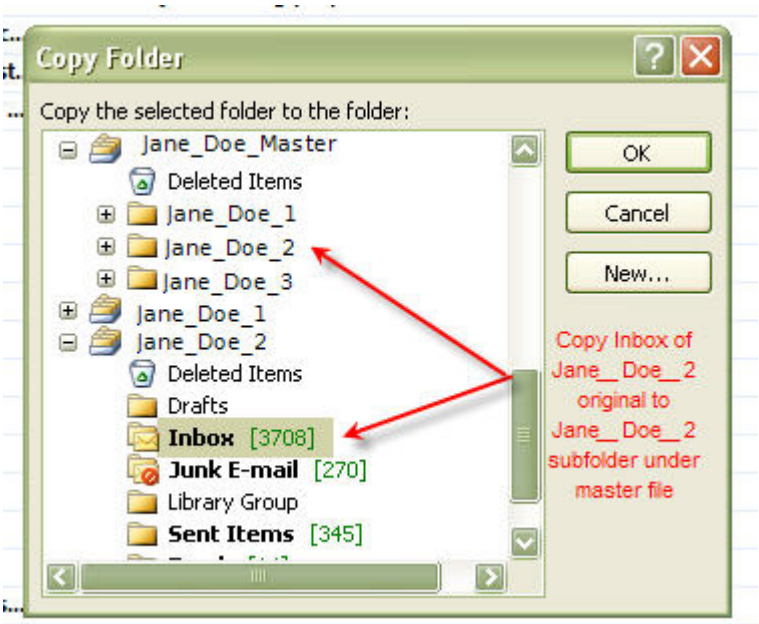
Type in the name of the subfolder (the same as the .pst folder you renamed as outlined in the previous section). Select the location of the subfolder by highlighting the master folder. Click **OK**.




To copy the .pst files into the master .pst file, highlight the folder or files you would like to copy. Right click and select **Copy** "folder name".



A Copy Folder window will appear. Select the location where you would like the folder copied and select **OK**.




Repeat this process for all folders until all the folders have been copied into the master folder. You are now ready to import the master .pst file.

Microsoft Outlook will only allow you to copy one folder at a time. For a quick check on whether the .pst files were copied into the master .pst file, you can go to Windows Explorer and locate the master .pst file. As .pst files are copied into it, the size of the file will increase.

Microsoft Outlook is a bit quirky when dealing with opened data files. Prior to importing the .pst file via the Admin Console, you need to make sure that all evidence of the data file is removed from the e-mail client. Following the directions on page 24, remove all the data files opened in your e-mail client.

## Creating a User Account

Prior to importing the .pst file, you need to create a new user account in the Admin Console in order to associate the .pst file with a name/account.

Following the directions beginning on Page 5, log into the Admin Console.

Make sure you are in the correct domain by selecting the name from the Domain drop-down menu.

Click the **Add** button at the bottom of the screen, or alternatively from the toolbar, select **Edit → New Account.** An Accounts Properties window will open that lists all of the information needed for the new user account (Figure 9).

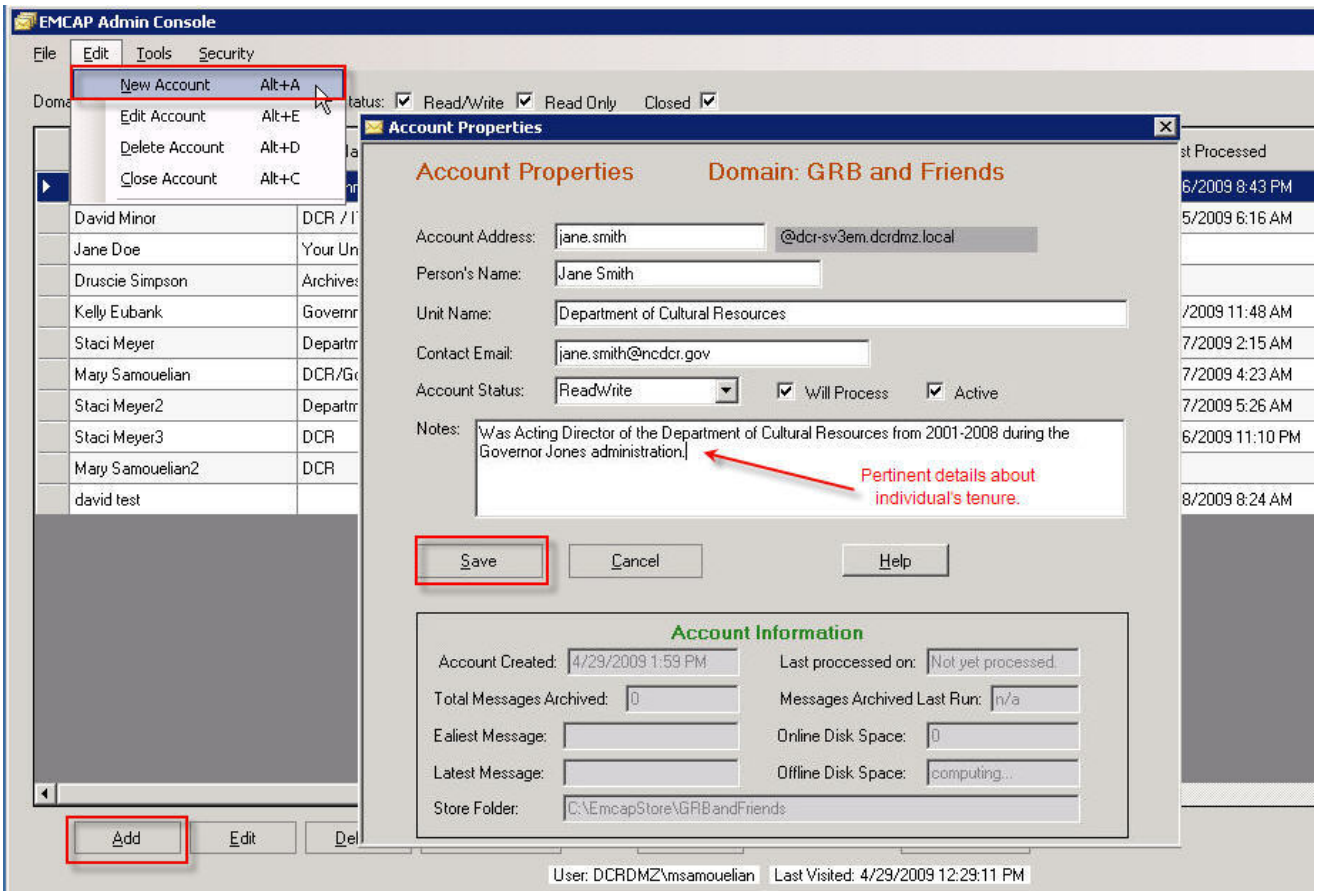



**Figure 9. New account creation**

The field descriptions are:

*Account Address*: Enter the portion of the EMCAP e-mail address that appears before the "@" symbol. This should be in *firstname.lastname* format.

*Person's Name*: The full name of the person.

*Unit Name*: The name of the agency to which this person belonged.

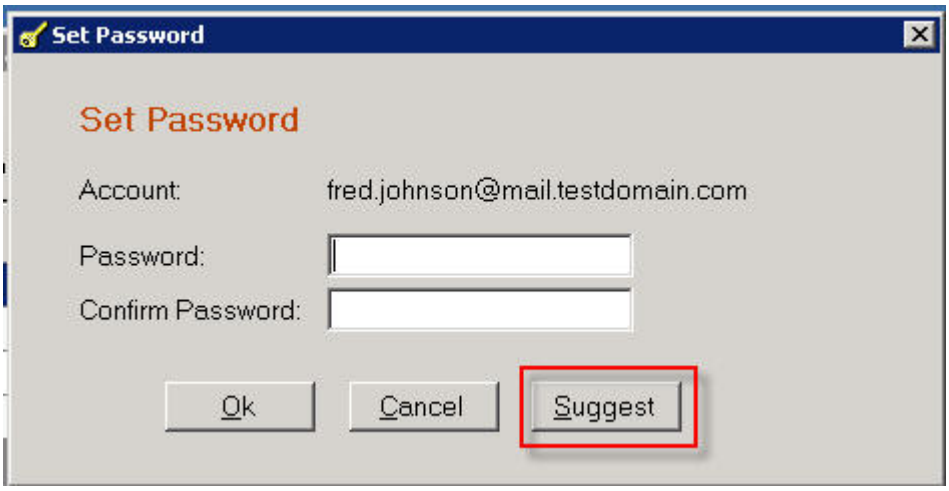
*Contact Email*: This is the name of the account that received the mail messages that are being imported.

*Account Status*: Keep to the default Read/Write. This means that the account is fully operational.

*Notes*: The notes field is optional but is a place to include pertinent information, particularly the individual's former title and dates of employment. Include any information that will make this individual easily identifiable.

Once all of this information has been entered, click **Save**.

A Set Password window will appear.




Click the **Suggest** button and a Suggested Password window will appear with a suggested password. *Write this password down* as you may need to have this password available at a later time. Click **Yes** to confirm. The window will automatically close and the new user will appear on the main console page.

If you need to create additional user accounts, continue the process for the remaining accounts.

## Importing .PST Files

### Copying .pst File to Archival Server

Before the .pst file can be imported via the Admin Console, the .pst file must be copied from your local drive to the C: / (or local) drive of the archival server.

Your Network Administrator can set up direct access to the .pst file sitting on your local drive from the remote desktop so that the file does not have to be copied over the network.

### Configuring Microsoft Outlook on Remote Desktop

Microsoft Outlook 2007 must be configured on the server so that it can support the Import.PST function.

This can be accomplished by either starting Microsoft Outlook from the Start Menu on the remote desktop, or by running the Import.PST function from the EMCAP Administrative Console.

**Starting Microsoft Outlook from the Start Menu**

From the remote desktop, select **Start → Microsoft Office Outlook**. The Outlook 2007 Startup Screen will appear:

1. Press **next** to go to the next screen.
2. Answer **No** to the question: "You can configure Outlook to connect to Internet E-mail, Microsoft Exchange, or other E-mail server. Would you like to configure an E-mail account?"
3. Then press **next**.
4. **Check** the box "Continue with no e-mail support." And press **Finish**.
5. Enter your full name and your initials. Press **OK**.
6. Answer the question about RSS feeds. Since you will probably not be using RSS feeds, press **No**.
7. Since you probably will not be doing a whole lot of searching, answer "**No"** to the question "Do you want to go to Microsoft Download Center to download this component now [i.e. the Instant Search feature]?"
8. It is recommended leaving the privacy options as is: "Only Search Microsoft Office Online for Help content when I'm connected to the Internet." Leave the other two options unchecked.

**Running Import.PST for the First Time**

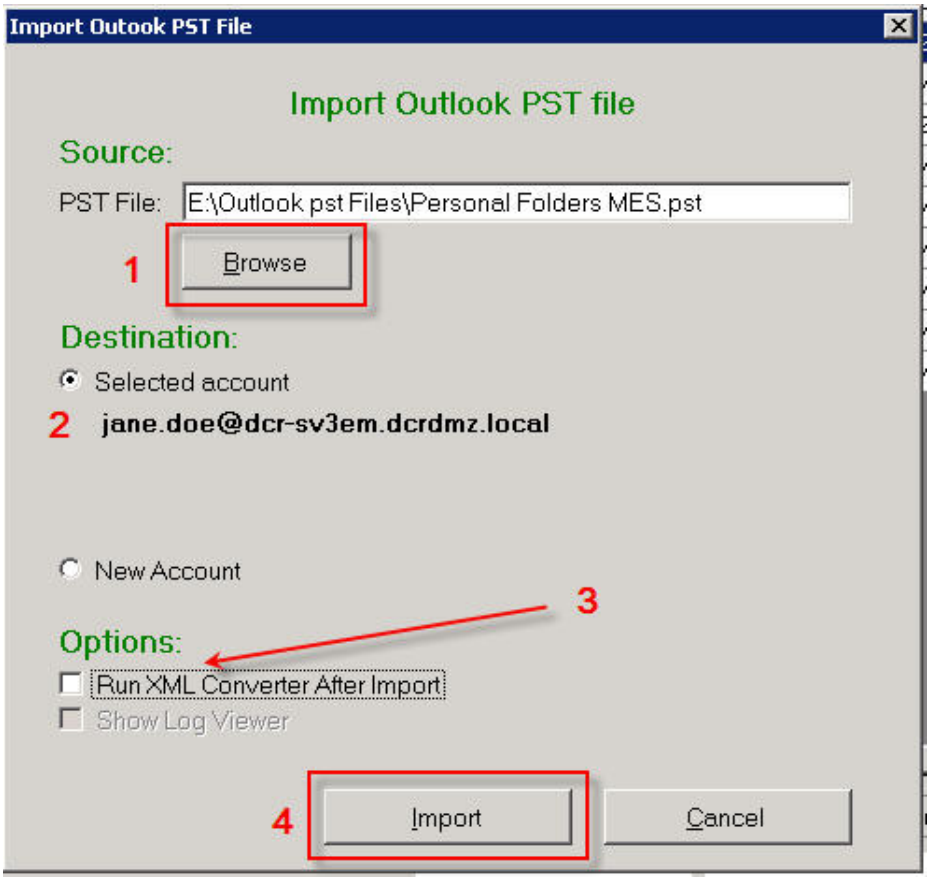
The first time that the Import.PST function is used, Microsoft Windows will launch the Outlook 2007 Startup screen.

1. Press **next** to go to the next screen.
2. Answer **No** to the question: "You can configure Outlook to connect to Internet E-mail, Microsoft Exchange, or other E-mail server. Would you like to configure an E-mail account?"
3. Then press **next**.
4. **Check** the box "Continue with no e-mail support." And press **Finish**.

## Importing the .pst File

Prior to importing the .pst file, verify that no one else is using the account. You can then highlight the user account whose .pst file you want to import.

To launch the import utility, select **File** → **Import.PST** from the toolbar. The Import Outlook PST File window will appear.




Click the **Browse** button to locate the .pst file to be imported by either highlighting the file and clicking **Open** or double clicking on the file.

For Destination, make sure that the **Selected Account** button is selected.

If you do not want the messages automatically processed after they have been imported, uncheck the "Run XML Converter After Import" checkbox.

Select the **Import** button.

A Converter Will Not Run window will appear verifying that the converter will not be run immediately after import. Select **OK**.

An Import PST Status window will appear. It keeps a running count of the total messages found and total messages or imported (see Figure 10). Note that this window will NOT appear after selecting the **Import** button if the option to run the XML converter after import box is checked.

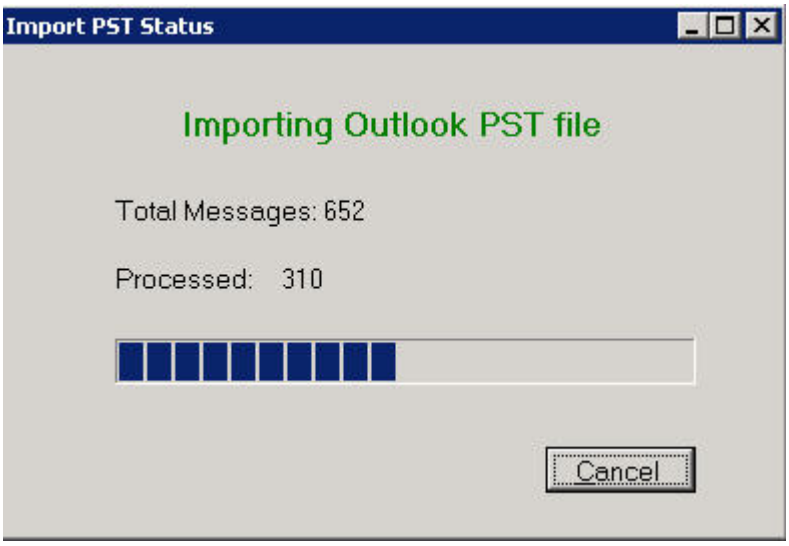



Figure 10. Import PST Status

If the .pst file was successfully imported, a Success window will appear confirming this.

## Rebuilding an Import

There may be circumstances where the .pst file you previously imported and process for a user account needs to be refreshed (or rebuilt). If this is the case, it is important to understand that the current archived email messages sitting on the archival server (that have been imported, parsed and converted to XML) will be overwritten. *As such, use caution when doing using this feature*.

Highlight the user account whose .pst file you want to import.

From the toolbar, select **File** → **Import .PST**. The Import Outlook PST File window will appear

Click the **Browse** button to locate the .pst file to be imported by either highlighting the file and clicking **Open** or double clicking on the file.

For Destination, make sure that the **Selected Account** button is selected. The Rebuild checkbox will be checked and grayed out – it cannot be edited. This indicates that you are rebuilding the import.

The "Run XML Converter After Import" box will automatically be checked. If you do not want to automatically run the XML converter after the import, uncheck this box.

Select **Import** button. A Rebuild window will appear warning that all messages in the XML store will be deleted. Select the **Yes** button to confirm (Figure 11).

Selecting **No** will give you the opportunity to back out of the target account that contains any messages.

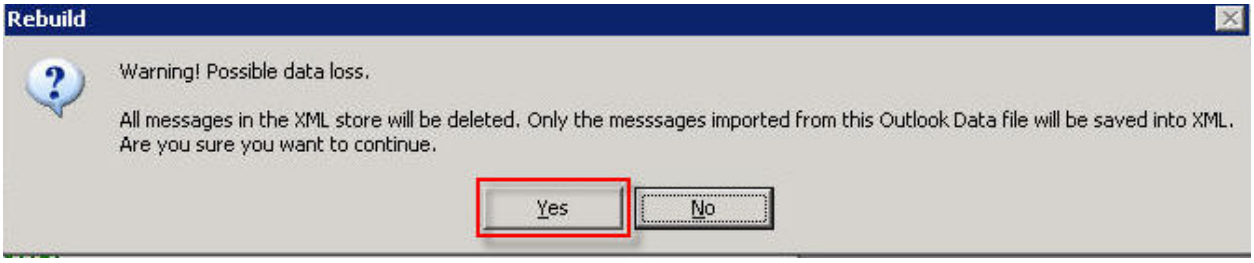



Figure 11. Rebuild window

The Import PST Status window will appear. If the .pst file was successfully imported and processed, a Success window will appear confirming this and a new number of messages processed will appear in the Message Count and Last Processed Run fields for the user account.

## Alternative Method for "Importing" .pst File

There may be a situation where the .pst file(s) you want to import belong to a former EMCAP user (i.e., the former EMCAP user is no longer employed and additional archival e-mail messages are discovered in his/her e-mail client). If this user account still exists, you will be able to copy (versus importing via the Import utility) the .pst file(s) directly into the user's archival e-mail account.

Your IT administrator will first need to configure your e-mail client so that it will point to the user's archival e-mail account. The user's archival account will appear as another account folder in your e-mail client.

With main Mailbox highlighted, on the toolbar select **File → Open → Outlook Data File**, and browse to the location of.pst file to be opened. As Microsoft Outlook only allows you to open one file at a time, you will need to repeat this step as necessary.

A new folder containing the e-mail messages and post items will appear in the tree on the left of the screen.

Using the method described on pages 27 and 28; copy the sub folders into the user account. These archival e-mail messages are now available for processing.

After you are finished with the user's archival account, it needs to be deleted from Microsoft Outlook. From the toolbar, select **File → Data File Management**.

The Account Settings window will appear (Figure 12). Select the E-Mail tab.

Highlight the user account you want to remove, and then select the **Remove** button.

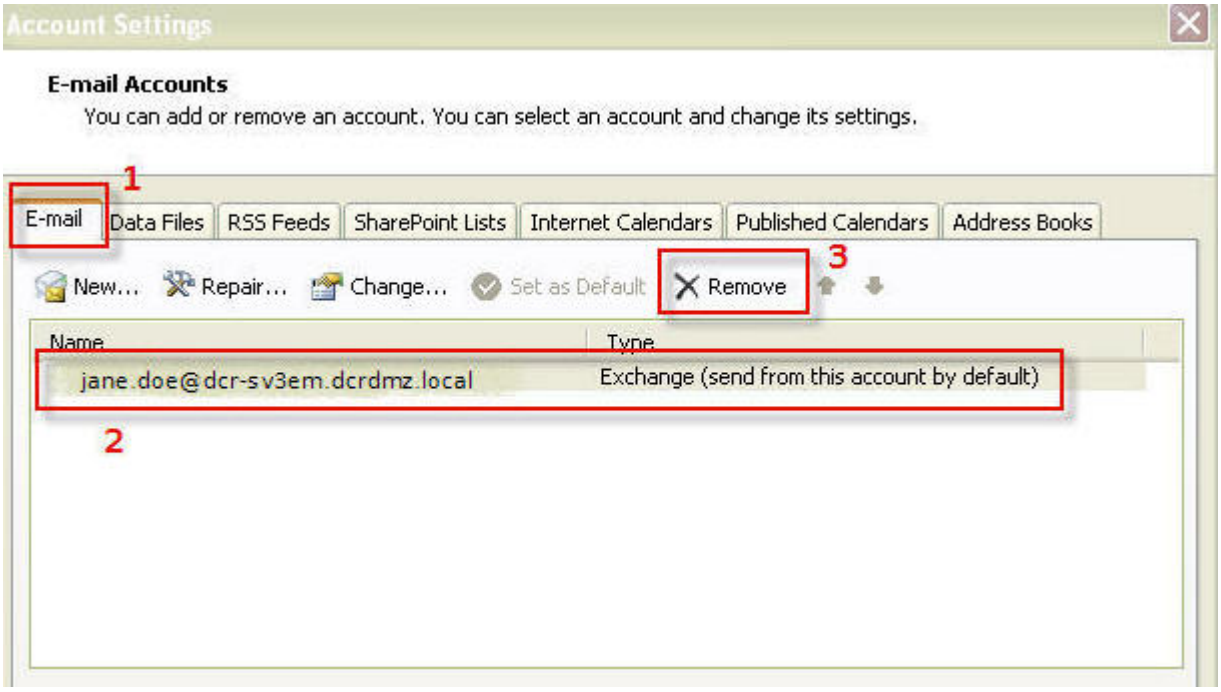



Figure 12. Account Settings window

Another Accounts Settings window will appear, asking if you want to remove the account. Select **Yes**. The account will be removed. Close the Accounts Settings window by clicking the **Close** button at the bottom.

## Processing Archival E-mail Messages

Once the user has copied or moved his/her archival e-mails into the archival IMAP folder or after the .pst file has been imported into the archival server via the Admin Console, the administrator can process the messages. Via the **Start Processor** tool, the application collects the messages off of the archival server, and parses and converts them into XML. Attachments will be extracted and saved to a Windows file system as regular Windows files.

Running this process will remove all messages from the user's active IMAP store. These messages will remain in the archival store for the long-term.

Prior to processing messages, verify that no one else is using the account. Then on the main page of the Admin Console, highlight the user whose e-mail messages you would like to process (Figure 13).

You can begin the processor in several ways:

Highlight the user account whose messages you want to process. At the bottom of the screen, select the **Start Processor** button.

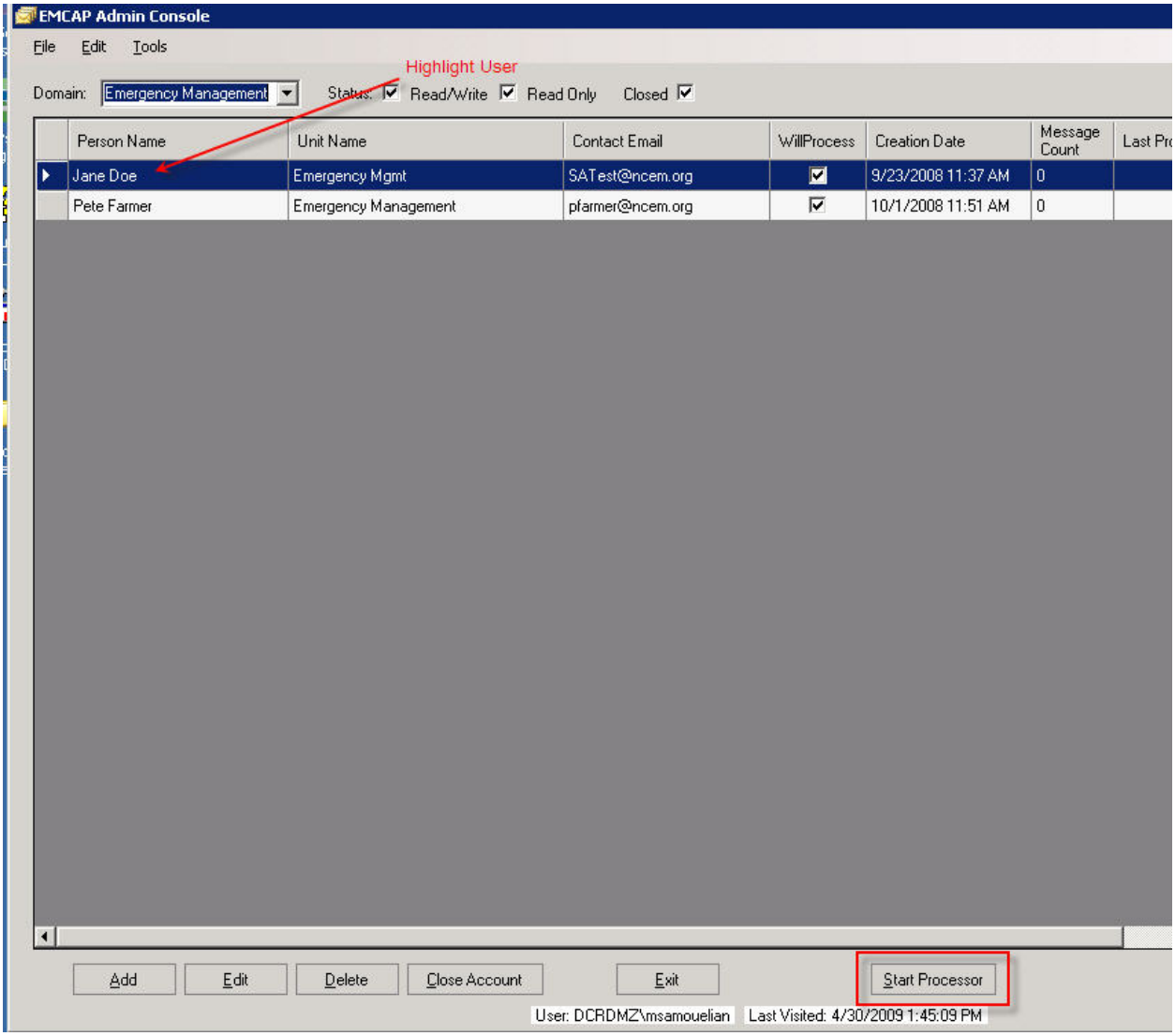



Figure 13. Start Processor

A Process Accounts window will appear (Figure 14). Select the account or accounts you wish to process. The **Rebuild** check box should remain unchecked.

To track and view the process progress, make sure that Start Log Viewer is checked. Select the **Start Processing** button.

Alternatively, you can open the processor from the toolbar, by selecting **File → Start Processor** OR from the toolbar select **File → Verify Accounts**, and click the **Start Processing** button.

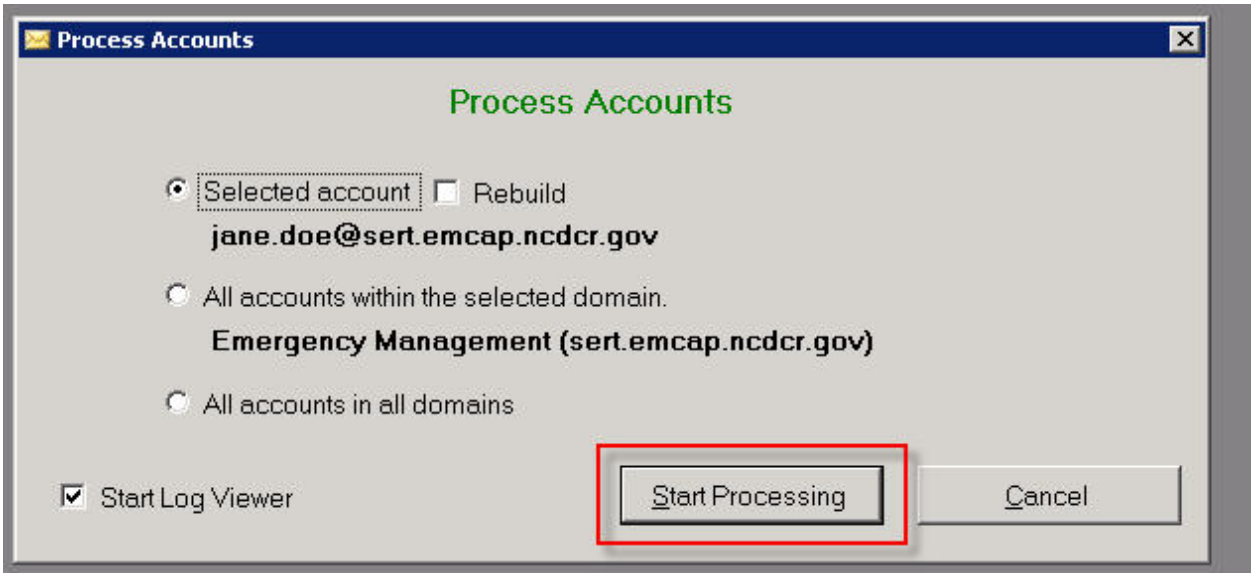
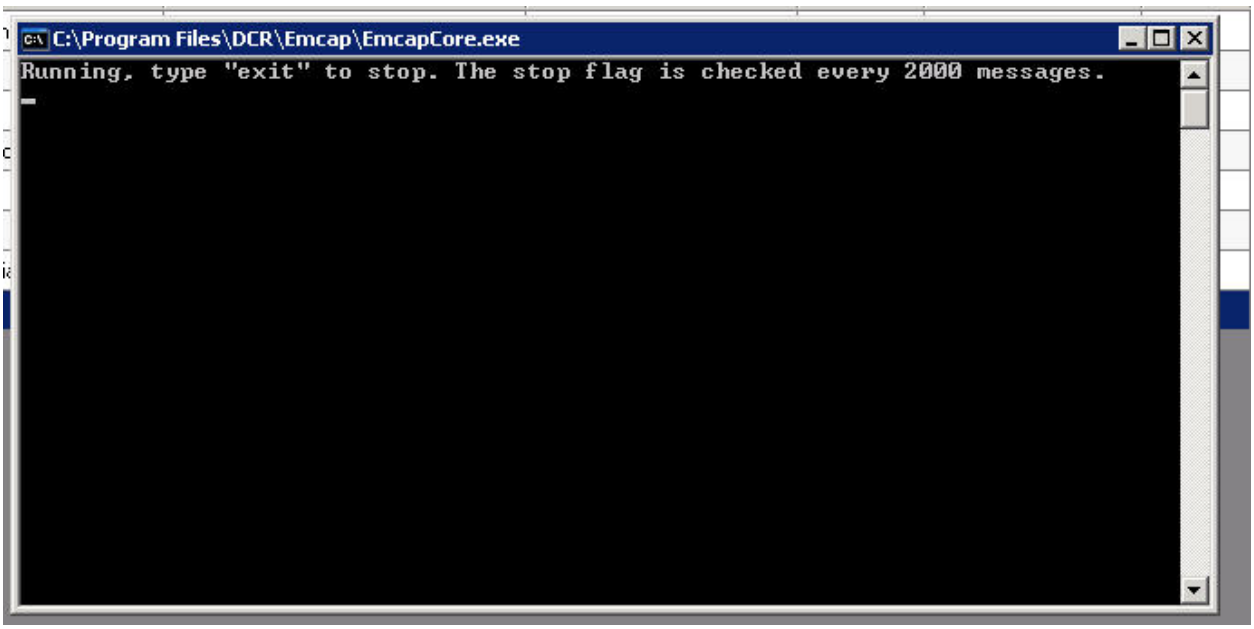



Figure 14. Process Accounts window

A Log4Net View window will appear showing a running total of the messages being processed. You will also notice a DOS window running in the background.




If the processing tool is successful, the Log Viewer will cease to add records, and the DOS window running in the background will close automatically. The Log4Net View window can be closed.

The “Message Count” field will be populated with a number reflecting the number of messages processed (Figure 15). Note that this number is cumulative, meaning as additional processing jobs are run this number will increase reflecting the *total number* of messages processed. This will not be true for

a user account for which the messages were imported via a .pst file. As the system is set up to accept only one .pst file, the Message Count and Processed Last Run numbers will be identical.

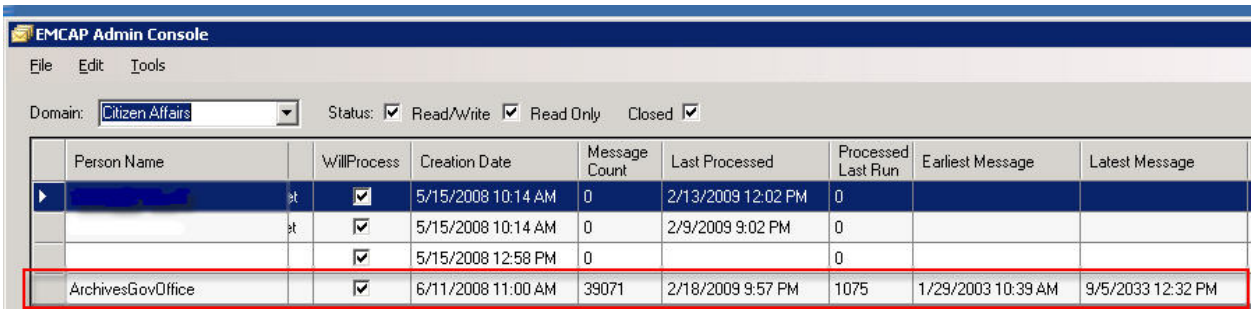



Figure 15. Processed messages

Additional fields in the Admin Console will be updated. The Last Processed date will be updated with the most recent run, the Processed Last Run will show how many records were processed in the most current run, and the Earliest and Latest Message fields will be updated if this information changed as a result of the most recent process job.

You also have the option of opening the log associated with your specific processing run. These logs are saved as text files and within each file is a complete inventory of each step performed when the processor was run, including the account processed, the number of messages found and the number of messages parsed and converted to XML.

To view the logs, from the toolbar, select **File → Open Log File Folder**.

These text files are organized by the date and time the job was run (with most recent at the bottom of the list). The naming convention is YYYYMMDDT(for "time")HHMM (note: hour and minutes are in military time which is a 24 hour format) (Figure 16).

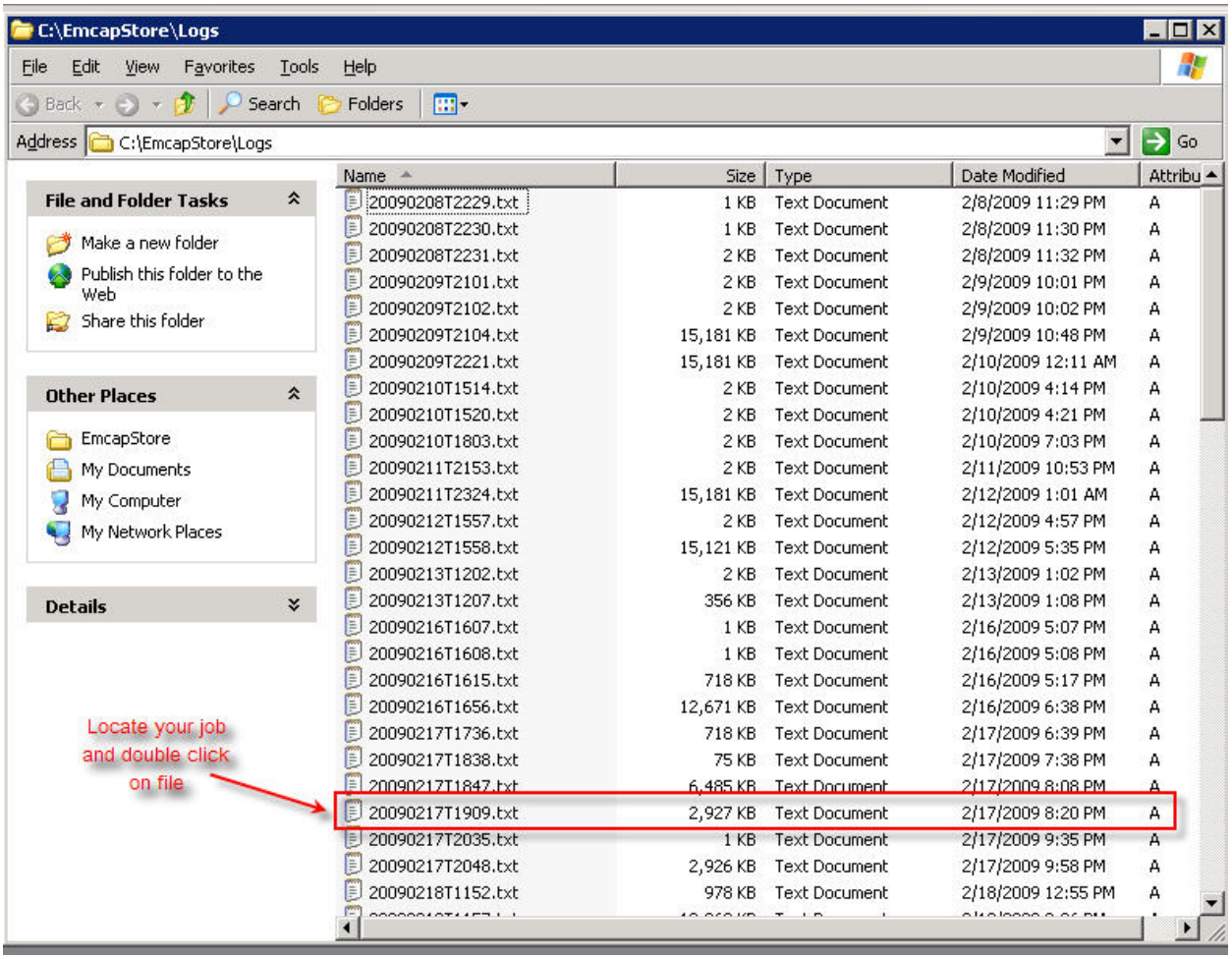



Figure 16. Processing Log

Locate the job you want to view and double-click on it to open.

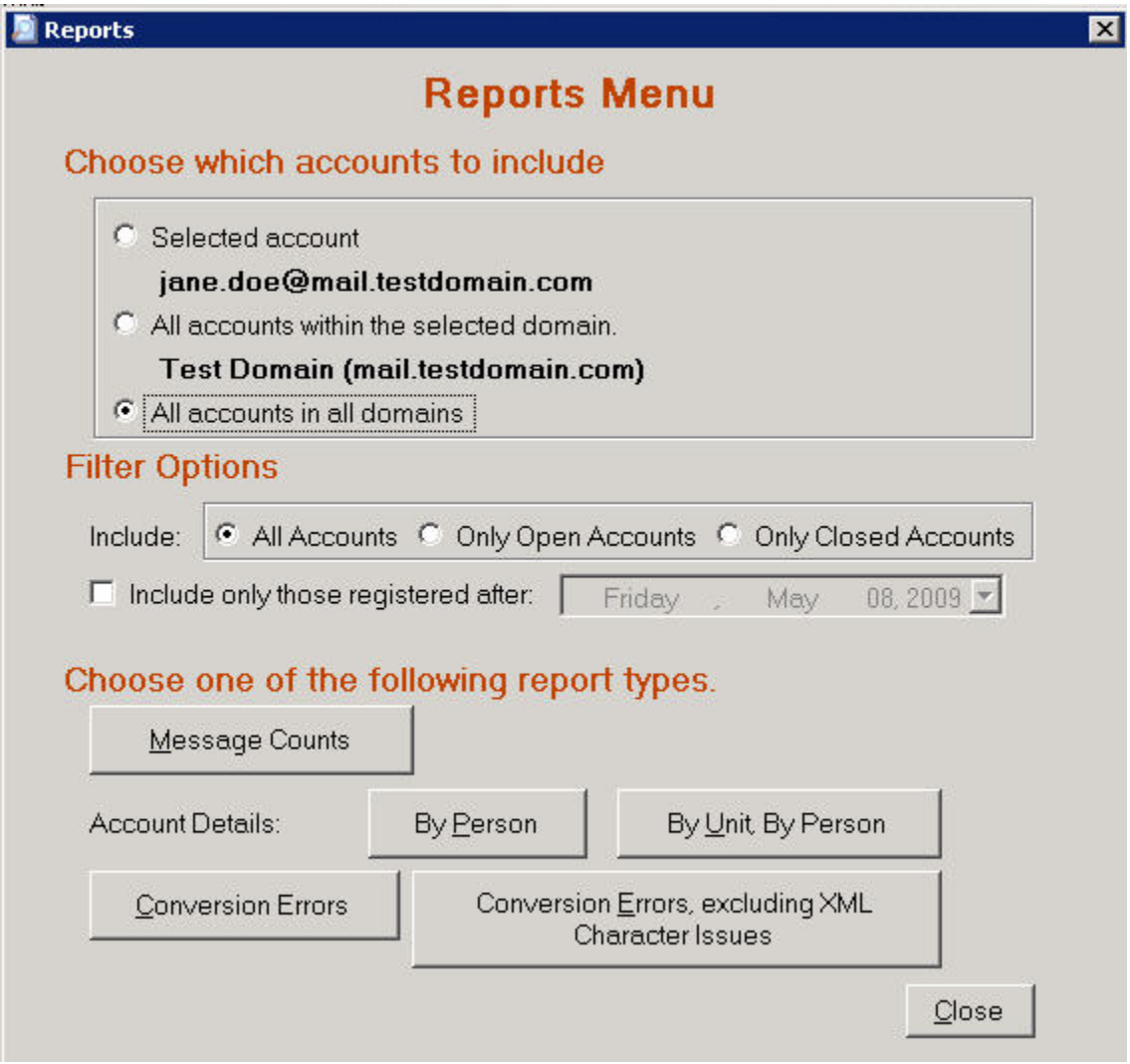
Scroll to the bottom of the page. The number of messages added will be displayed . You can view, save, print or exit the log file by selecting the File menu on the toolbar and choosing the action.

## Reports

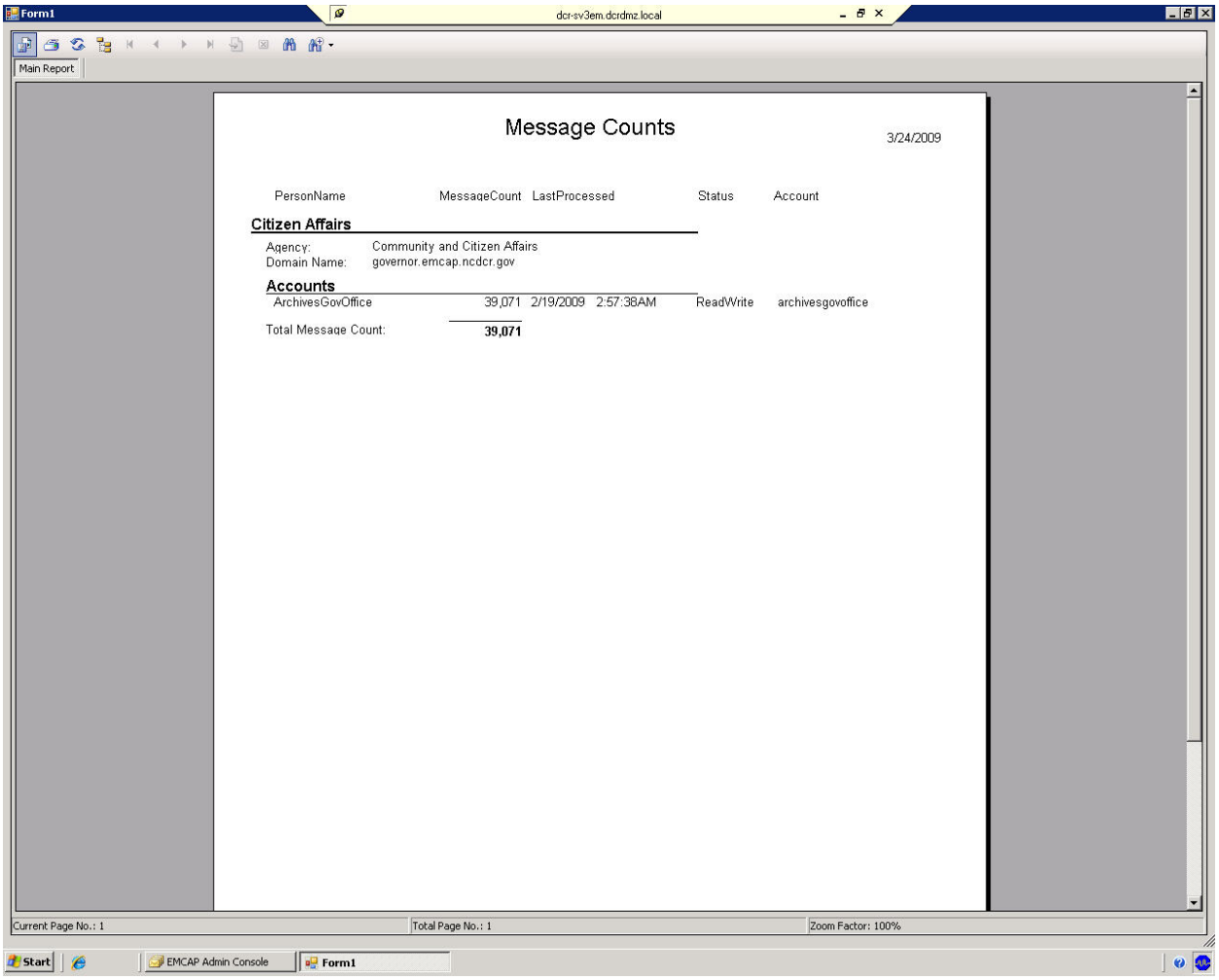
There are currently five reports available to the Administrator that can be viewed and exported. These reports include:

- Message counts
- Account Details by Person
- Account Details by Unit, then by Person
- Conversion Errors
- Conversion Errors, excluding XML Character Issues

To open these reports, select **File → Reports Menu** from the toolbar. The Reports window will appear.



Select the account(s) to include in the report and the appropriate filter options. Then choose the report type by selecting the appropriate button. The report will be generated on the screen.




When you are finished reviewing the report results, you can either close the report (note that the information will not be saved) or export the report to another location.

To export to another location, select the export report icon located in the upper left corner of the screen (Figure 17).

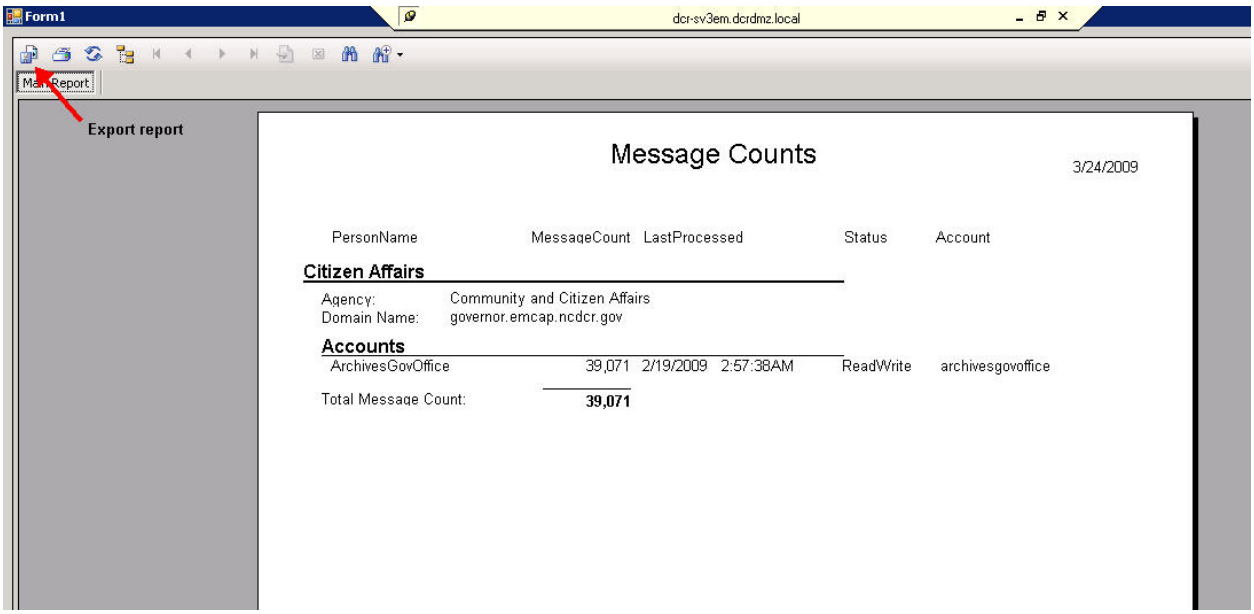
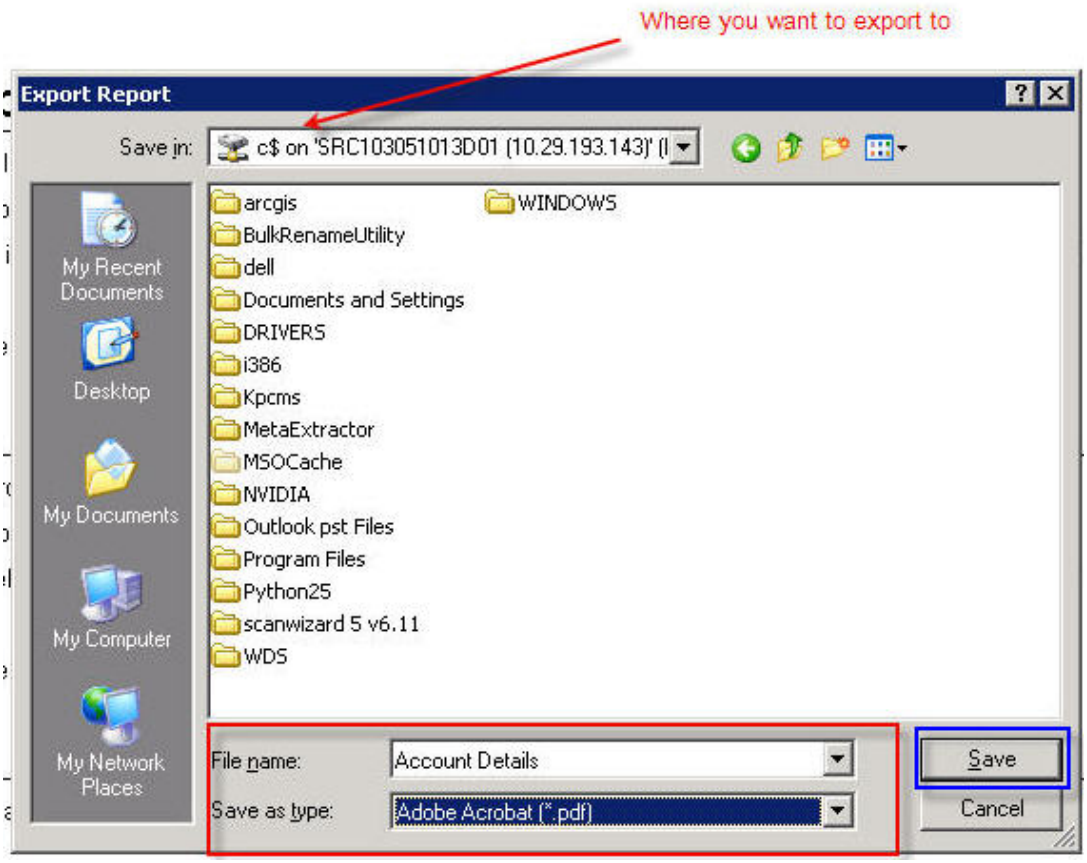



Figure 17. Export icon

An Export Report window will appear. Browse to the location you want to save the report, the field name and file format. Select the **Save** button.



If the export was successful, an Export Report window will appear.

Select **OK** and then close out of the report.

## Exiting the Admin Console

When you are finished using the Admin Console, you will need to close out of it and log off the remote desktop.

To close the Admin Console, either click the close (x) button in the upper right corner of the window or alternatively from the toolbar, select **File → Exit**.

To log off of the remote desktop, select the **Start** button on the toolbar and select the **Log Off** button

at the bottom of the window. A Log Off Windows window will appear confirming log off. Select **Log Off**.

## Technical Definitions

Archival (or collecting) Server **–** the EMCAP application uses hMailServer IMAP server; free, open source software registered on SourceForge. Archived messages are downloaded from an IMAP server (i.e., Microsoft Exchange) and uploaded to the archival message server which is intended to be a long-term archival store. The mail stored there can be opened and read or downloaded again.

.CSV File (or Comma Separated Values) – a file format that is often used to exchange data between disparate applications. It contains the values in a table as a series of ASCII text lines organized so that each column value is separated by a comma from the next column's value and each row starts a new line. For example: Doe, John, 576-38-9347.

Domain - an organized collection of records (or users) that are associated with one another. For example, the users listed under the domain name "Secretary of State" are all affiliated with this specific agency.

DNS (Domain Name System) - a system for converting host names and domain names into IP addresses on the Internet or on local networks that use the TCP/IP protocol. For example, when a Web site address is given to the DNS either by typing a URL in a browser or behind the scenes from one application to another, DNS servers return the IP address of the server associated with that name.

E-mail Client - a software application (such as Microsoft Outlook) installed on a user's computer that allows a user to compose, send and receive e-mail messages.

IMAP protocol – Internet Message Access Protocol (IMAP) is a method of accessing e-mail messages that are kept on a mail server. In other words, it permits a "client" e-mail program to access remote messages as if they were local. For example, messages stored on an IMAP server can be manipulated from a desktop computer at home or work station at the office without the need to transfer these messages back and forth between these computers. The protocol includes operations for creating, deleting, and renaming mailboxes; checking for new messages; permanently removing messages, setting and clearing flags; server-based RFC-2822 and MIME parsing and searching; and selective fetching of message attributes, texts and portions thereof for efficiency. Most e-mail software subscribes to this.

Parsing - separating data and assigning parts of it into one or more variables. Parsing can assign each word in the data into a variable or can divide the data into smaller parts. Parsing is also useful to format data into columns.

.PST File (or data file) - when Outlook saves items to your computer, it uses a type of data file called an Outlook Personal Folders file (.pst). This is a data file that stores e-mail messages and other items on a user's computer (versus the server). A .pst file can be assigned to be the default delivery location for e-mail messages in order to organize and back up items for safekeeping. If the user has a Microsoft Exchange Server account, all items are usually delivered to and saved on the e-mail server.

Server - an e-mail server is a computer that manages mail by storing messages, routing messages to other servers, and generating error messages when things don't work quite right.

XML (Extensible Markup Language) - a standard to promote sharing information over the Internet by specifying ways to describe the information's semantic structure and to validate that the structure is well formed. XML is described as extensible because it is a metalanguage that allows the creation of tags to be used for semantic markup. The greatest value of XML can be realized through common vocabularies of tags, so that applications can use those vocabularies to understand documents from different sources.