

PostiniSync Administrator's Guide

User Management Simplified

Commercium Technology Inc.
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I. Introduction

This guide introduces the reader on the usage of the PostiniSync utility created by Commercium Technology Inc. (CTI). Although the document will reference Postini's System Administration web interface, and different LDAP sources, it is not meant to be an expert guide for these topics. Postini provides a System Administration web interface for their clients to manage their organization(s) under a hierarchy and it specifically covers areas of management not handled by the PostiniSync utility.

The PostiniSync utility was created to help administrators who are responsible for managing the Postini users in their organization by synchronizing the email users found in their internal directories (*LDAP sources*) with the Postini user entries found in the Postini accounts database. The management features include: adding; deleting and/or suspending; and modifying users appropriately according to organizational policies.

As a prerequisite, the reader should be familiar with: Postini System Administration web interface; your Postini hierarchical organizational structure; have a working knowledge on forming LDAP queries; and know the layout of their LDAP source directory.

About EZ Command

EZ Command is Postini's supported program interface that allows customers to perform basic administrative tasks without having to log into the Administration Console. It facilitates the integration of various Postini administrative functions with custom tools and applications.

Prerequisites for using EZ Command:

1. The target organization(s) must exist in your company's Postini organizational structure.
2. The EZ command user will require one or more accounts configured in the organization structure with the appropriate Postini administrative privileges.
3. A "shared secret" value must be entered in the organization's Postini system administration page in order to properly validate authentication strings. The shared secret must be set for the organization that the administrative user belongs to. (*The shared secret is found under the Generals Settings for the organization.*)

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II. PostiniSync v2

New Features & Benefits

PostiniSync v2 is the first major update to the automated user management tool. New features were added based on client feedback to make the product even more powerful and to support new Java program code changes.

The new features of PostiniSync v2 include the following:

- Support of latest Sun Microsystems' Java Runtime Environment 5.0
- Support of multiple Postini organizations within a single job configuration to automate user changes based on LDAP changes (*adds/deletes/moves*)
- Assignment of non-user accounts to a primary user
- Lotus Notes SMTP alias account creation
- More delete behavior options
- Multiple/combined LDAP search filters per configuration
- Exception lists supports entire domains and LDAP users by OU/DN values
- Improved log controls and maintenance
- More refined deletion protection

Updated features of PostiniSync v2.1 include the following:

- Support for an unlimited number of Postini organizations
- Support for Groups under Search Info Scope including row prioritization
- Added scrolling bar for windows with multiple row entries

Note: Change in data format of CFG files was necessary to support new features moving from v2.0 to v2.1. See Appendix E for Known Issues if you are upgrading from v2.0.

Unlimited cluster accounts in PostiniSync v2.2

The PostiniSync interface in v2.2 has changed slightly. Gone is the Cluster Accounts tab. Cluster accounts are now setup within the Search Info. More details on clustering can be found in the section on Search Info later on in this document.

When you open up a configuration file from an earlier a version, the Cluster Accounts information will be moved to the top of the Search Info tab giving it highest priority. You can identify a cluster account because it is separated by a pipe character from the Postini organization name in the Organization field.

Requirements & Prerequisites

As a Java application, PostiniSync is portable to any platform that supports a Java Runtime Environment (JRE). This document will focus on the installation and usage in a Windows environment. The JRE program must be installed in order to successfully start the PostiniSync application. PostiniSync is a Java application and has been programmed and tested successfully with the Sun's most recent Java Runtime Environment 6.0, Standard Edition, also known as Java v1.6.x_xx which is available at Sun's website.

☼ **Note:** *Due to changes in Sun's internal Java code support, PostiniSync2 was rewritten to work with the latest JRE distributions. PostiniSync2 will no longer work with the JRE 1.4.x environment which was supported by PostiniSync v1.x. PostiniSync v2 has been tested successfully with JRE v1.6.0_x and JRE v1.5.x.*

A job scheduler will be required if automation is desired. Both, Windows task scheduler or crontab (Unix platform) will be sufficient. The user may use an alternative job scheduling program.

The PostiniSync host will be required to execute https commands to Postini's site. Permission for the host must be granted for external communications on https port 443. On the internal network, PostiniSync will need access to the LDAP source over its designated TCP port number, normally 389. (*A/D global catalog default port is 3268.*)

PostiniSync2 requires 1MB of available disk space to install the application and utilizes a approximately 64KB of RAM. Java Runtime Environment 5.0 or greater, Standard Edition requires approximately 120MB of available disk space and 17MB of RAM. It is recommended that additional disk space (~100MB) be planned to allow for log and data file requirements.

How Does PostiniSync Work?

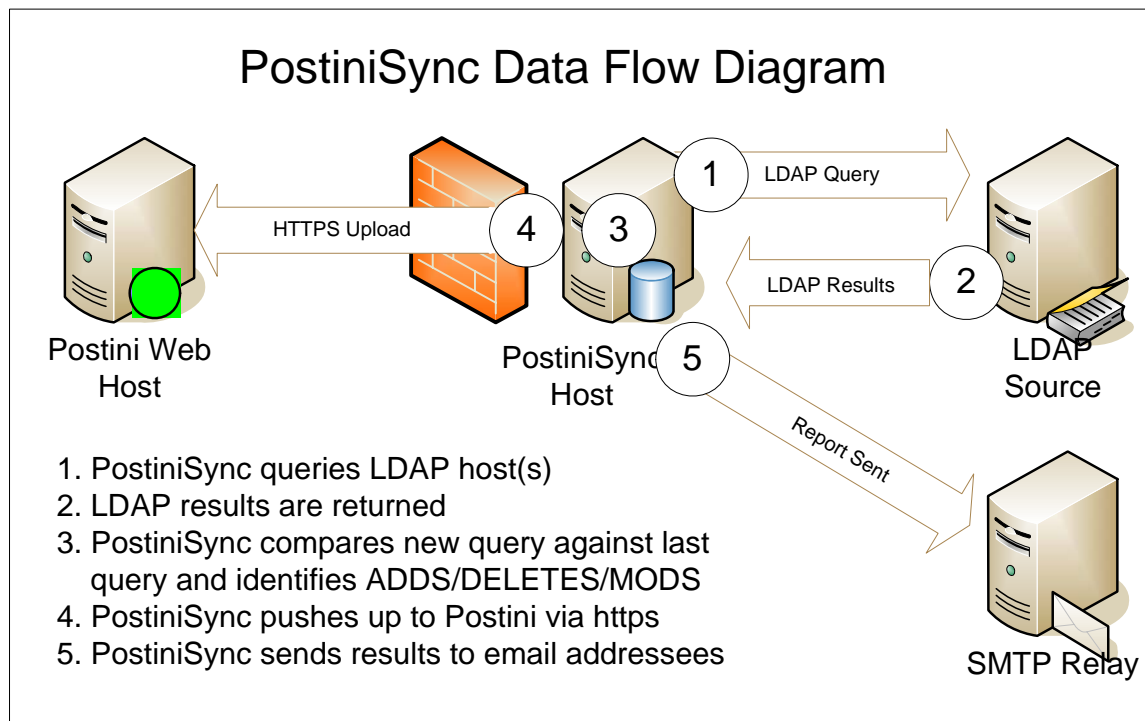
PostiniSync has two operational modes: an interactive/configuration interface; and command line mode used for scheduled job execution. The interactive interface is designed for testing, job configuration, and running specific one-time job. Once properly configured, it is expected that the user schedules automated jobs to systematically add, delete, and/or modify users from the Postini database over the Internet.

The PostiniSync tool will perform an LDAP query based on given search criteria against the internal LDAP source. Different LDAP queries can be saved in configuration files and executed automatically via job scheduling software. The first time that you run the tool successfully against your LDAP source, it will create a local database file, whose contents will contain a complete export of all email addresses found based on the specified search criteria. This initial synchronization cycle will attempt to add all email

addresses to the Postini database. Any email addresses that are already present will fail to be added, but PostiniSync will continue to process new entries.

From this initialization point forward, each successive job will result in a comparison of the next query (*configname.new*) and the previous database file (*configname.db*) to see what has changed in your LDAP source. Any additions, changes, or deletions are processed by PostiniSync issuing the appropriate EZ-command.

VERY IMPORTANT: The PostiniSync operator should never delete the local PostiniSync database file without understanding the consequences. When deleted, PostiniSync will attempt to add all entries(re-initialization) to the Postini directory on the next synchronization cycle. Any entries that were removed after the previous synchronization cycle will not be detected and therefore will not be removed from Postini.



As per the diagram, PostiniSync is a one-way synchronization tool. It reads from (never writes to) your LDAP directory and assures that the user found in the database are the same users found in Postini. PostiniSync cannot query the user directory on Postini's end due to the limitations of EZ-command. Any user changes made outside of the PostiniSync tool (for instance using the Postini System Administration interface) will not be known to the PostiniSync program.

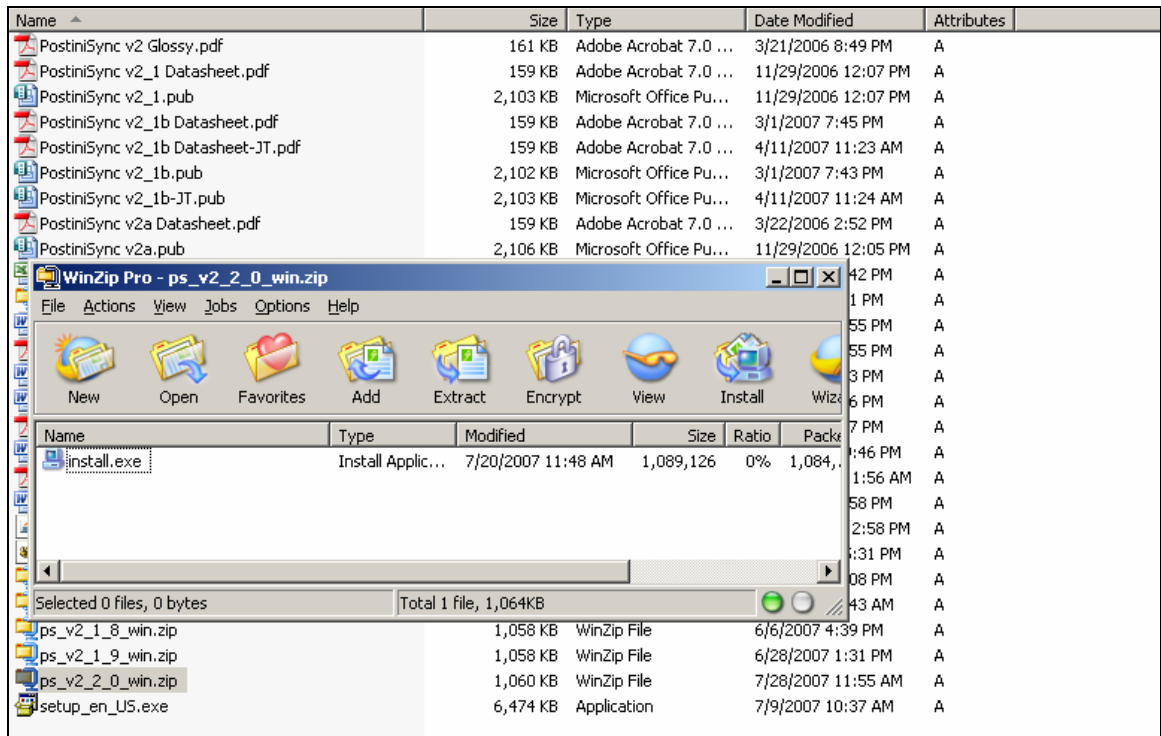
Installation

PostiniSync should be installed on a protected system since it will be used in an automated production environment. Java must be installed in order for the applet to run.

If you have not already done so, you need to download the PostiniSync installation program from CTI's website (<http://www.postinisynd.com>). The installation program is named "install.exe" inside the downloaded ZIP file. The program will include an evaluation license key. You will need to purchase PostiniSync to get a permanent license key file. Please contact CTI if you need a replacement license key file.

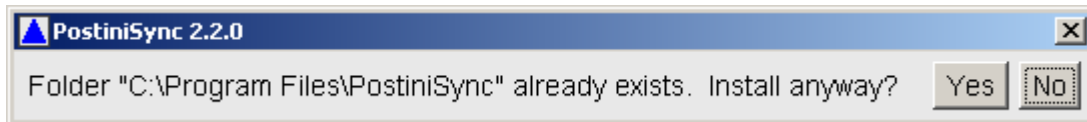
To Install PostiniSync

1. Open the downloaded ZIP file.
2. Click on "*install.exe*" and allow the installation program to run.



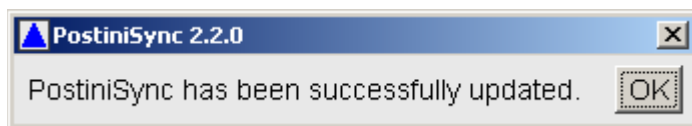
Note: A security warning may pop up if you have applied recent Microsoft patches. Hit "Run" to continue.

3. The PostiniSync Install pop-up appears and the prompts the user for the installation directory.



If you are upgrading, you can choose to overwrite the original Version 1.x or 2.0 “C:\Program Files\Postini” folder.

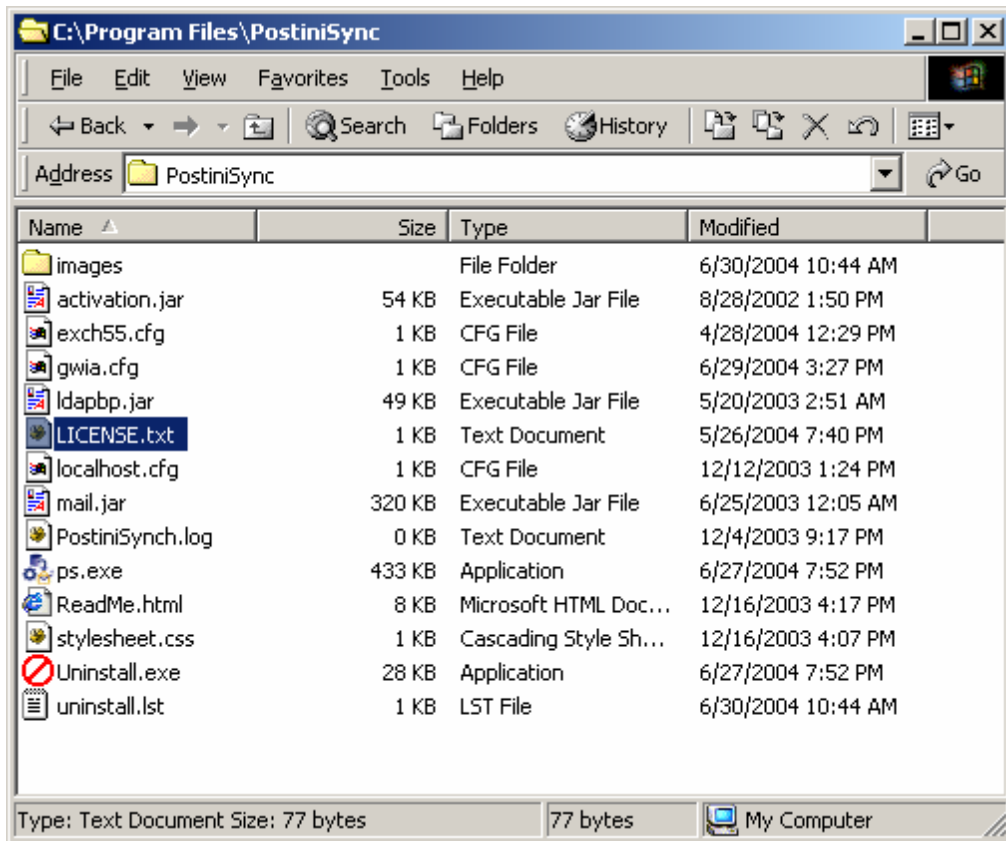
4. To accept the specified directory, click on the “Install Now” button.



5. When the message appears that you have successfully completed installation or updated. Click on the “OK” button.

Post-Installation Tasks

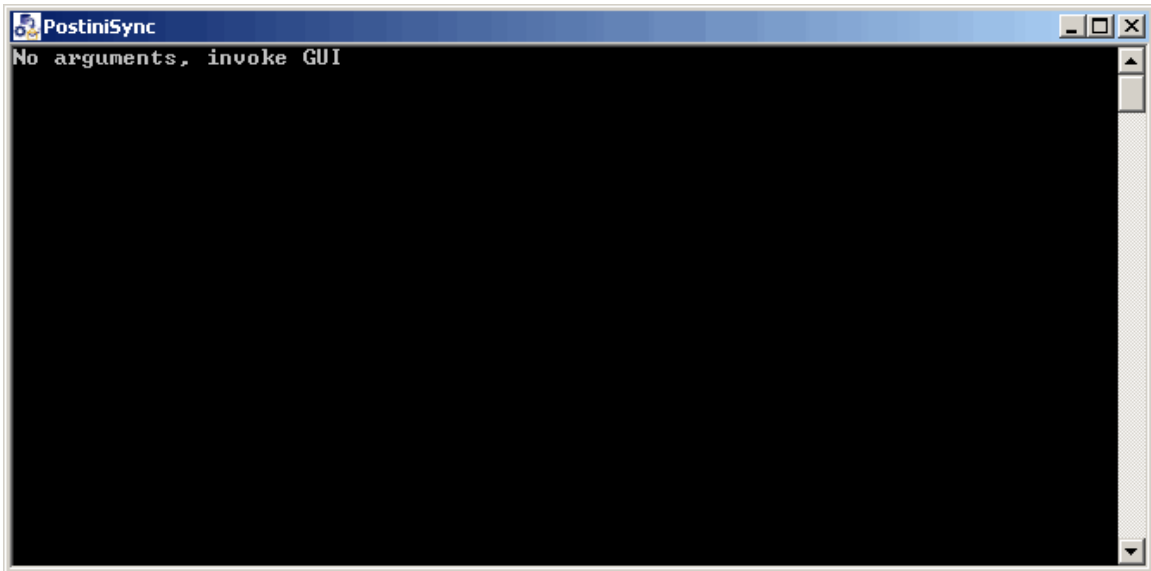
Licensing



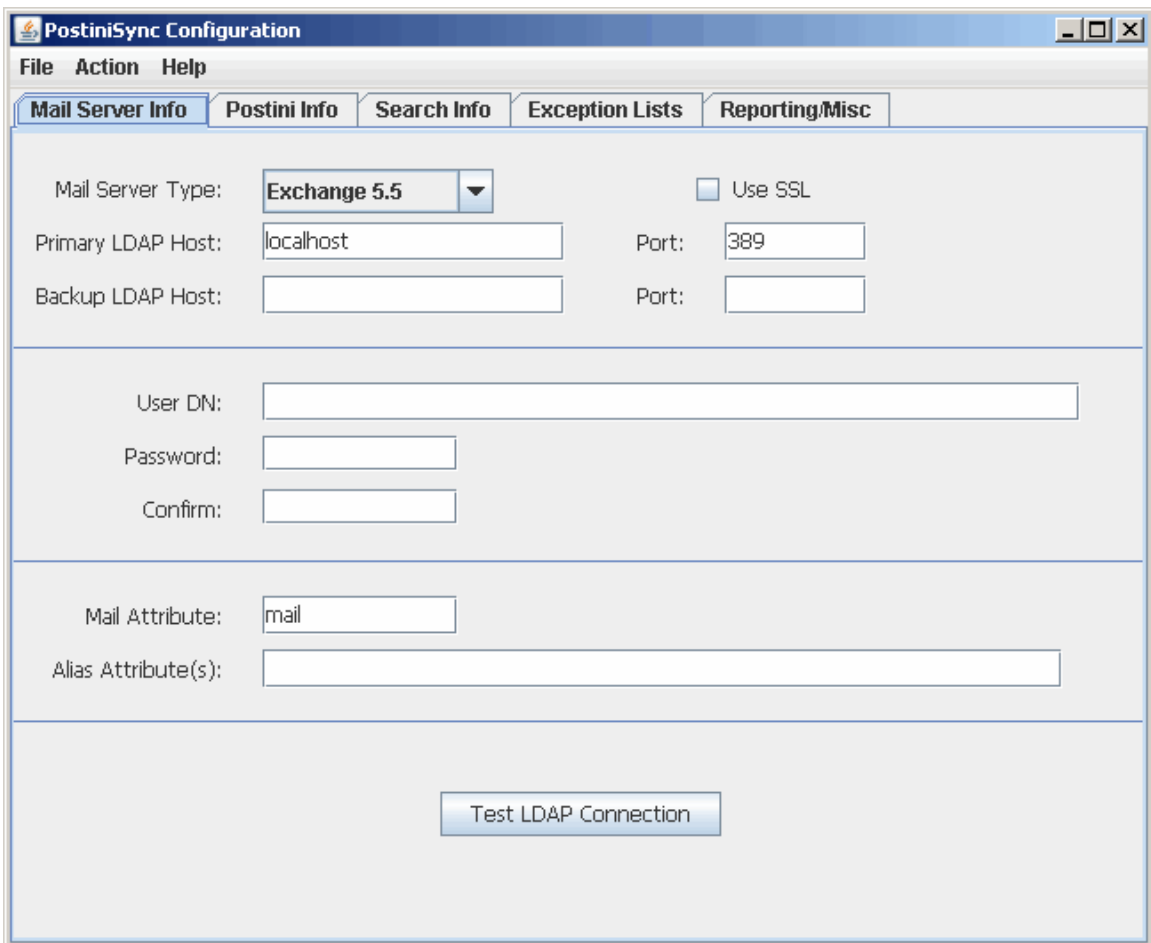
If you are evaluating PostiniSync, you may need to request a 30-day evaluation key from CTI. If you have paid for the PostiniSync license, you should have received a non-expiring license key file (*license.txt*) for your organization. This license file should be copied to your PostiniSync installation directory. It is recommended that you save a copy of your production license.txt offline marked “read-only.”

Starting PostiniSync

From the Start Menu, select **Programs > PostiniSync**, click on **PostiniSync**. Or add a shortcut to your desktop for regular use.



PostiniSync is a Java application and a background task screen will appear. Do not close this as it will cause PostiniSync to terminate.



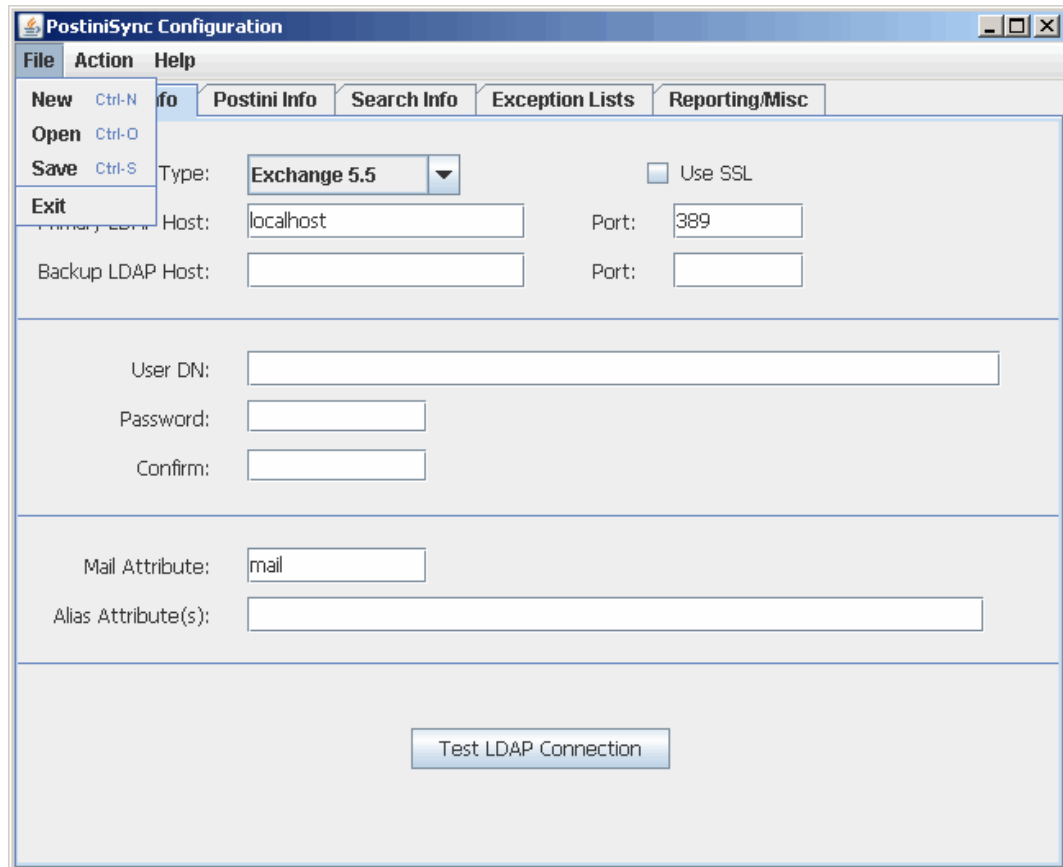
The PostiniSync configuration interface will appear in the foreground.

Menu Bar Actions

The menu bar has three selections: **File**; **Action**; and **Help**.

File

The File category includes **New**; **Open**; **Save**; and **Exit**.



New

The user selects **File > New**, to begin the configuration of a new job. This will present completely blank entries in all of tool's folder values. The user must go through each folder (tab) and specify the appropriate values in all entry fields.

Open

The user selects **File > Open**, to open an existing configuration file for modification or to Save as another name.

Save

The user selects **File > Save**, to save a configuration for a particular LDAP search. In most instances, this query mirrors a particular Postini

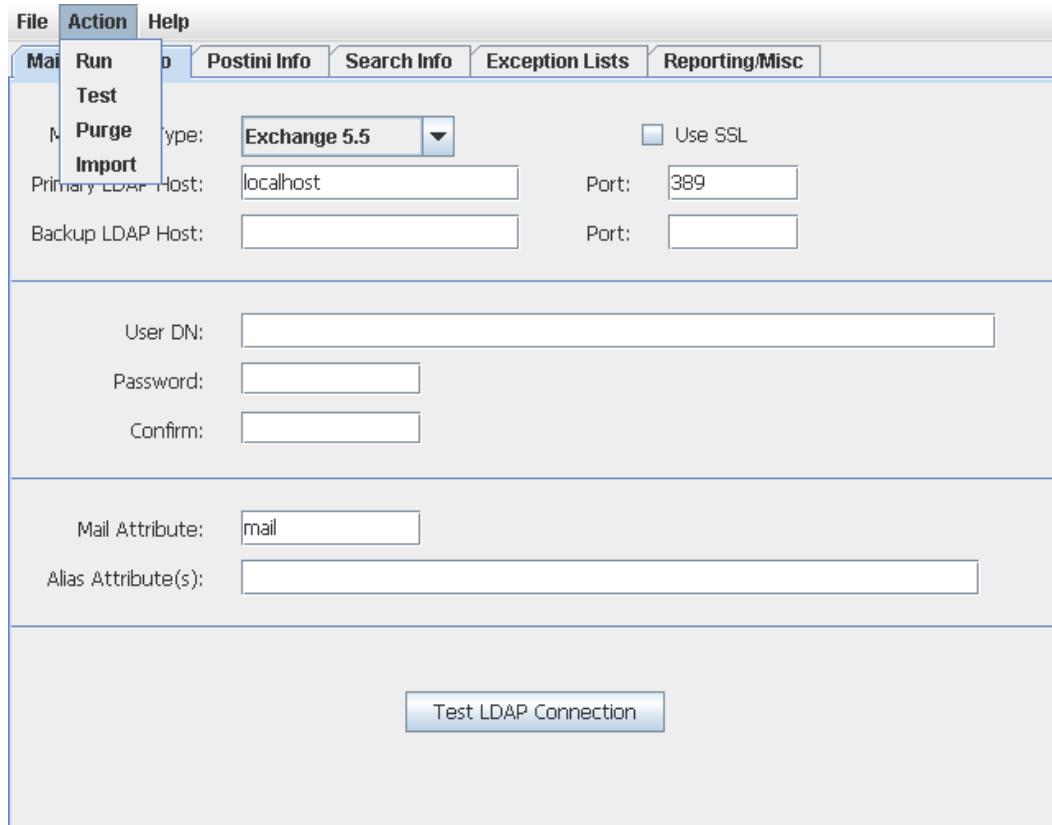
organization entry. The user needs to specify a unique file name for this particular query and action.

Exit

The user selects **File > Exit**, to leave the PostiniSync interactive and configuration interface.

Action

The Action category allows the user to **run, test, purge,** or **import** a configured job.



The screenshot shows the 'Action' menu open in the PostiniSync application. The menu options are Run, Test, Purge, and Import. The 'Run' option is selected, and the configuration form below it is visible. The form has several sections: a top section with a dropdown menu set to 'Exchange 5.5' and a 'Use SSL' checkbox; a section for 'Primary LDAP Host' (localhost) and 'Port' (389); a section for 'Backup LDAP Host' and 'Port'; a section for 'User DN', 'Password', and 'Confirm'; a section for 'Mail Attribute' (mail) and 'Alias Attribute(s)'; and a 'Test LDAP Connection' button at the bottom.

Run

The user selects **Action > Run**, to execute the currently configured job. An activity log will appear displaying the actions that have been executed.

Test

The user selects **Action > Test** to test out the current job without executing a write to the Postini database. This is equivalent to the “*Simulate Load*” option that was in Version 1.

When prompted to update the database, the administrator should select “No” unless they are performing some kind of correction to the production DB file, or if they would like to see the results of a test. It is highly recommended that you only update non-production database files until you fully understand the PostiniSync workflow.

Purge

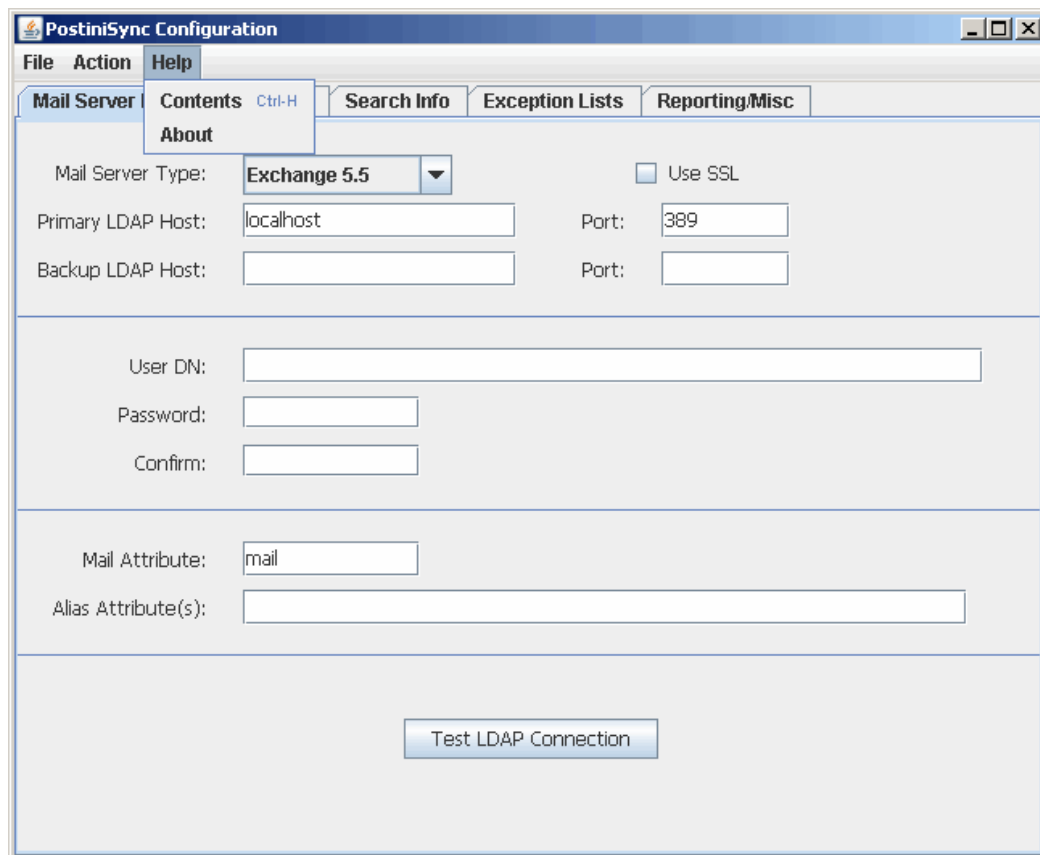
The user selects **Action > Purge** to delete users who were suspended in Postini. The administrator will be prompted for a date range of suspended users who should be purged.

Import

The user selects **Action > Import** to import a version 1 database or CSV file.

Help

The Help menu contains **Contents** and **About** selections. It will remind you of the current version which is useful information for troubleshooting.



The screenshot shows the 'PostiniSync Configuration' window with the 'Mail Server' tab selected. The 'Help' menu is open, showing 'Contents' and 'About' options. The configuration fields are as follows:

| | | |
|---------------------|--------------|----------------------------------|
| Mail Server Type: | Exchange 5.5 | <input type="checkbox"/> Use SSL |
| Primary LDAP Host: | localhost | Port: 389 |
| Backup LDAP Host: | | Port: |
| User DN: | | |
| Password: | | |
| Confirm: | | |
| Mail Attribute: | mail | |
| Alias Attribute(s): | | |

A 'Test LDAP Connection' button is located at the bottom of the configuration area.

Contents

Executing **Help > Contents** will result in opening up the Help Contents dialog box which contains brief instructional documentation with a basic explanation for each selection and entry field.

About

Executing **Help > About** will pop-up a dialog box with the version number of the PostiniSync tool and the user's licensing information.

III. PostiniSync Configuration Tabs

Mail Server Info

PostiniSync supports Sun Messaging, Microsoft Exchange 5.5, Active Directory for Windows Server 2000 and 2003, Lotus Notes/Domino, Novell Groupwise, or any other email system with an LDAP user directory.

The screenshot shows the 'PostiniSync Configuration' window with the 'Mail Server Info' tab selected. The window has a menu bar with 'File', 'Action', and 'Help'. Below the menu bar are five tabs: 'Mail Server Info', 'Postini Info', 'Search Info', 'Exception Lists', and 'Reporting/Misc'. The 'Mail Server Info' tab contains the following fields and controls:

- Mail Server Type:** A drop-down menu currently showing 'Exchange 2000/...' with a list of options: 'Exchange 5.5', 'Exchange 2000/2003', 'Lotus Domino', 'Sun', and 'GroupWise'.
- Use SSL:** An unchecked checkbox.
- Primary LDAP Host:** A text input field.
- Port:** A text input field containing '3268'.
- Backup LDAP Host:** A text input field.
- Port:** An empty text input field.
- User DN:** A text input field containing 'cn=Administrator,cn=users,dc=bgtech,dc=local'.
- Password:** A text input field with masked characters (dots).
- Confirm:** A text input field with masked characters (dots).
- Mail Attribute:** A text input field containing 'mail'.
- Alias Attribute(s):** A text input field containing 'proxyAddresses'.
- Test LDAP Connection:** A button located at the bottom center of the window.

Mail Server – Select the environment type from the drop-down menu. In the screen above, we are selecting an Active Directory used by an Exchange 2003 mail server. The Mail Server Type selection will affect how the entries are processed as each messaging environment has unique handling of mail aliases.

Use SSL – Check the box if a SSL connection is required in your environment.

Primary LDAP Host – Enter either the fully-qualified host name that can be resolved by DNS, or the IP address of the LDAP directory server.

Primary LDAP Port – Enter the LDAP port number that the directory server listens on. The standard port number is 389, but it is possible that the LDAP server is configured for another port number. Verify the port number in your LDAP or mail server for the correct port number. The standard LDAP for Active Directory global catalogs is 3268.

Backup LDAP Host – Enter the host of another LDAP directory server to query if the Primary is unavailable.

Backup LDAP Port – Enter the TCP port of another LDAP directory server to query if the Primary is unavailable.

User DN – Enter the distinguished name of the user account with appropriate access to the directory server. The account needs permission to view the attributes holding the SMTP addresses, and have the ability to retrieve an unlimited number of records. It is important that this value is entered using DN syntax, a user ID is not sufficient.

Typical syntax for the LDAP distinguished name in each Mail Server Type:

| | |
|--------------------------------|--|
| Sun | <i>uid=mailuser,ou=people,dc=someorg,dc=com</i> |
| Lotus Domino | <i>CN=Mail User,OU=NJ,o=someorg</i> |
| Exchange 5.5 | <i>cn=administrator,cn=recipients,o=someorg</i> |
| Exchange 200x/Active Directory | <i>cn=administrator,cn=users,dc=someorg,dc=com</i> |
| GroupWise | <i>cn=Mail User,cn=NJ,o=someorg</i> |

Password – Enter the account password.

Confirm – Enter the password again.

☺ **Tip:** *Try to get authorization for a process account with a non-expiring password.*

Mail Attribute – Enter the LDAP attribute which contains the user’s mail address (typically “*mail*”).

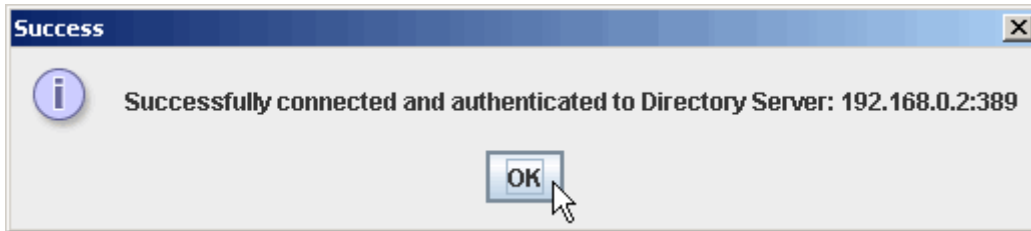
Alias Attribute – Enter the LDAP attribute(s) used to store user’s mail aliases (*delimit multiple attributes with a space*). Typically, they are as follows:

- Exchange 5.5: ***otherMailbox***
- Active Directory/Exchange 200x: ***proxyAddresses***
- SunOne: ***mailAlternateAddress***
- Domino: Aliases cannot be retrieved, but PostiniSync can create them. Enter the attribute from the Domino directory that can be used to create the addressee portion of the SMTP address left of the @ character. You will specify the corresponding domain under the Domino Alias option in the Reporting tab.
- GroupWise: (*GroupWise does not return aliases in LDAP queries*)

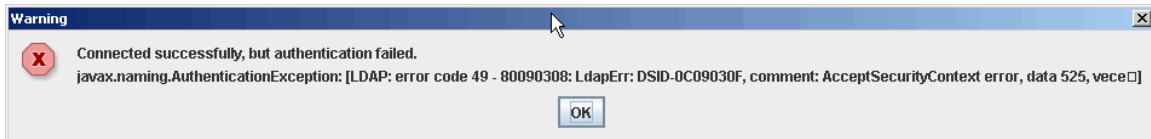
Once the entries about the Mail Server have been completed, hit the Test LDAP Connection button to verify that the settings are correct.

Test LDAP Connection Results

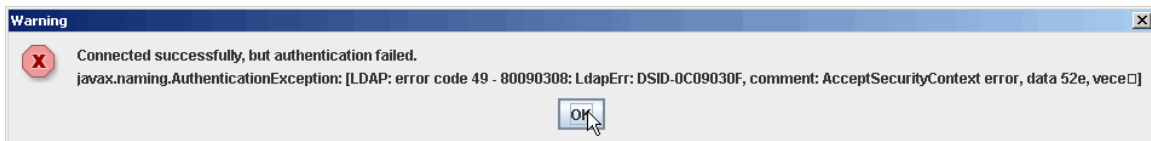
The following images were captured from a Windows installation of PostiniSync2 referencing Active Directory/Exchange 2003 environment:



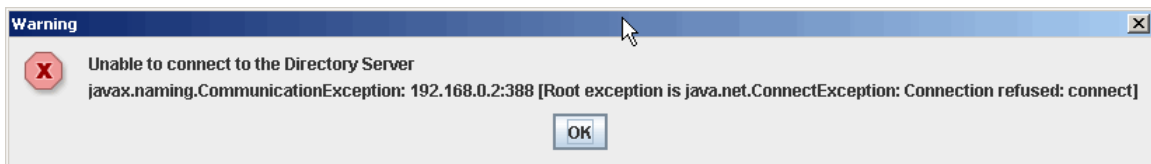
If the Test LDAP Connection is successful, you will see a pop-up as per above.



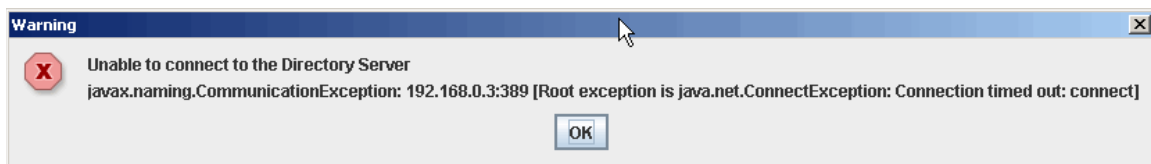
If you enter the wrong User DN, you will see a pop-up as per above indicating invalid credentials. [*Error Code 49: data 525*]



If you enter the wrong User password, you will see a pop-up as per above indicating invalid credentials. [*Error Code 49: data 52e*]



If you specify an invalid LDAP port, you will see a pop-up as per above with a refused connection error.

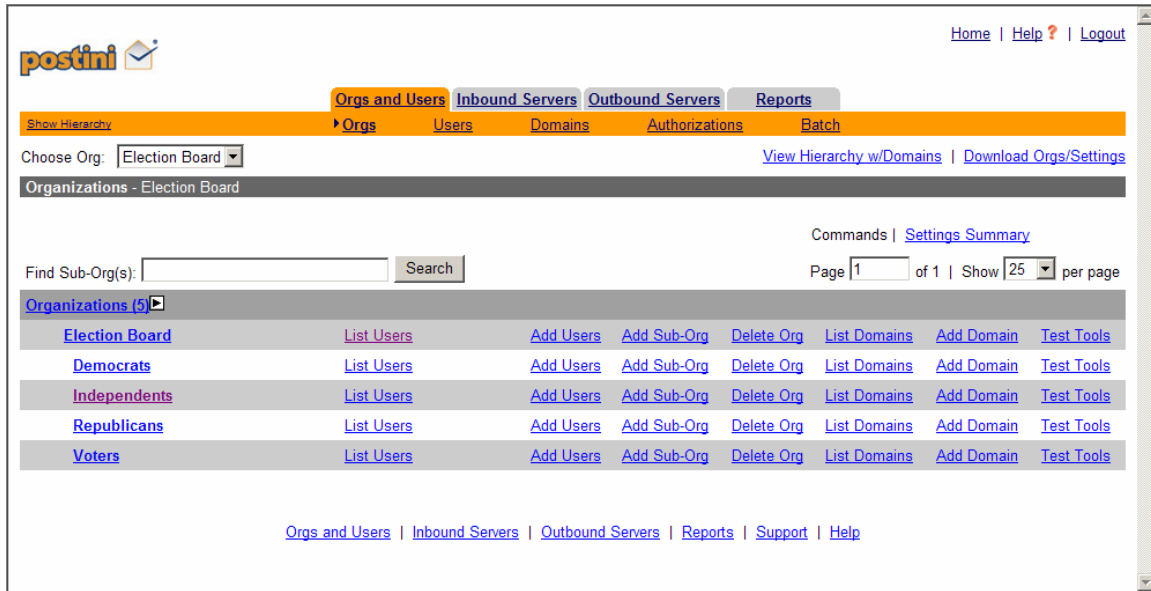


If you specify an invalid LDAP Host entry, you will see a pop-up as per above with a timeout connection error.

Postini Info

An Example

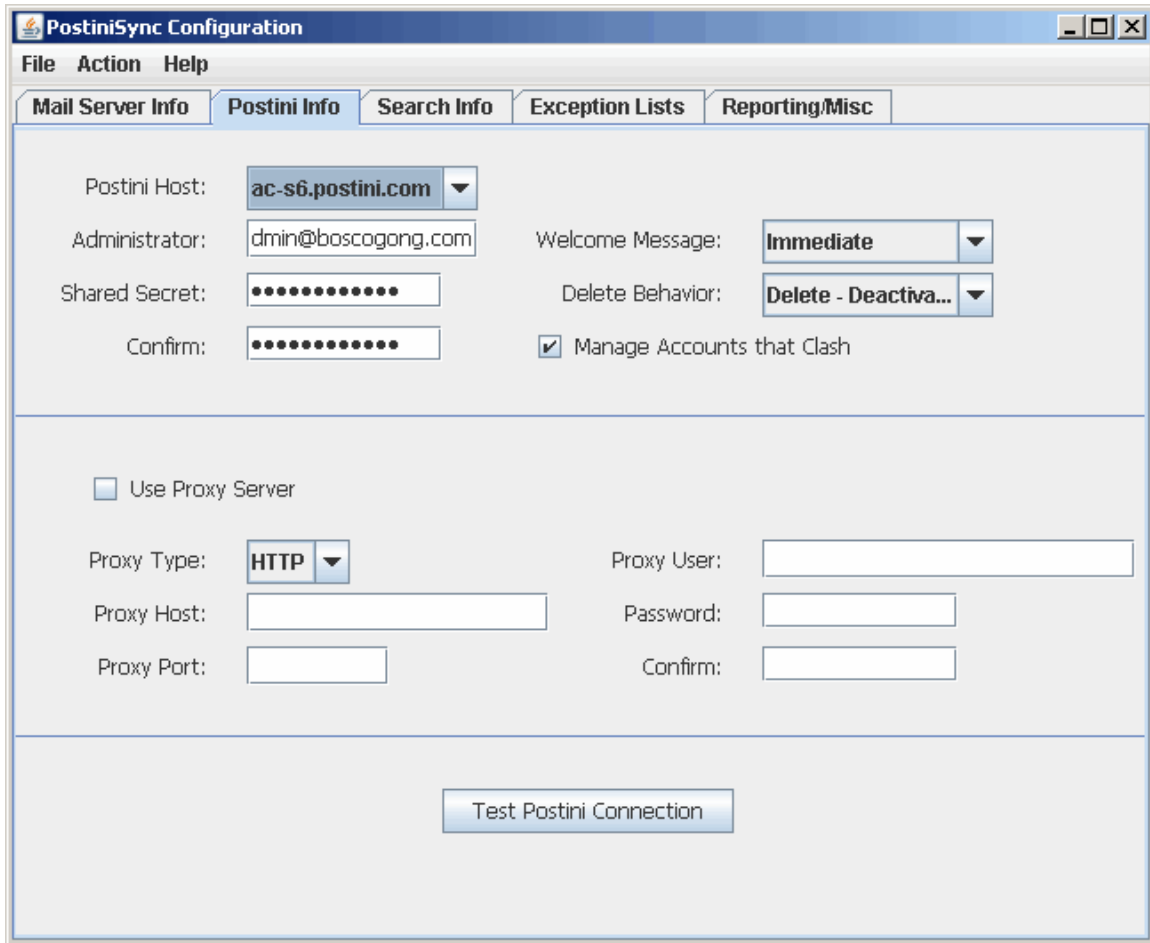
For the remainder of this document, suppose we have an organization called Election Board which contains the sub-organizations as listed below.



The screenshot shows the Postini Admin console interface. At the top, there is a navigation bar with the Postini logo and links for Home, Help, and Logout. Below this is a main menu with tabs for 'Orgs and Users', 'Inbound Servers', 'Outbound Servers', and 'Reports'. Under 'Orgs and Users', there are sub-tabs for 'Orgs', 'Users', 'Domains', 'Authorizations', and 'Batch'. A 'Choose Org:' dropdown menu is set to 'Election Board'. Below the menu, there is a search bar for 'Find Sub-Org(s):' and a 'Search' button. The page displays a table of organizations under the heading 'Organizations - Election Board'. The table has columns for organization names and various actions. The organizations listed are Election Board, Democrats, Independents, Republicans, and Voters. Each organization has a set of actions: List Users, Add Users, Add Sub-Org, Delete Org, List Domains, Add Domain, and Test Tools. At the bottom of the page, there are links for 'Orgs and Users', 'Inbound Servers', 'Outbound Servers', 'Reports', 'Support', and 'Help'.

| Organization | List Users | Add Users | Add Sub-Org | Delete Org | List Domains | Add Domain | Test Tools |
|--------------------------------|----------------------------|---------------------------|-----------------------------|----------------------------|------------------------------|----------------------------|----------------------------|
| Election Board | List Users | Add Users | Add Sub-Org | Delete Org | List Domains | Add Domain | Test Tools |
| Democrats | List Users | Add Users | Add Sub-Org | Delete Org | List Domains | Add Domain | Test Tools |
| Independents | List Users | Add Users | Add Sub-Org | Delete Org | List Domains | Add Domain | Test Tools |
| Republicans | List Users | Add Users | Add Sub-Org | Delete Org | List Domains | Add Domain | Test Tools |
| Voters | List Users | Add Users | Add Sub-Org | Delete Org | List Domains | Add Domain | Test Tools |

The users will be the Election candidates who are members of a Group in Active Directory. Any changes that are made in Active Directory will be captured by searches created by the Administrator.



Postini Host

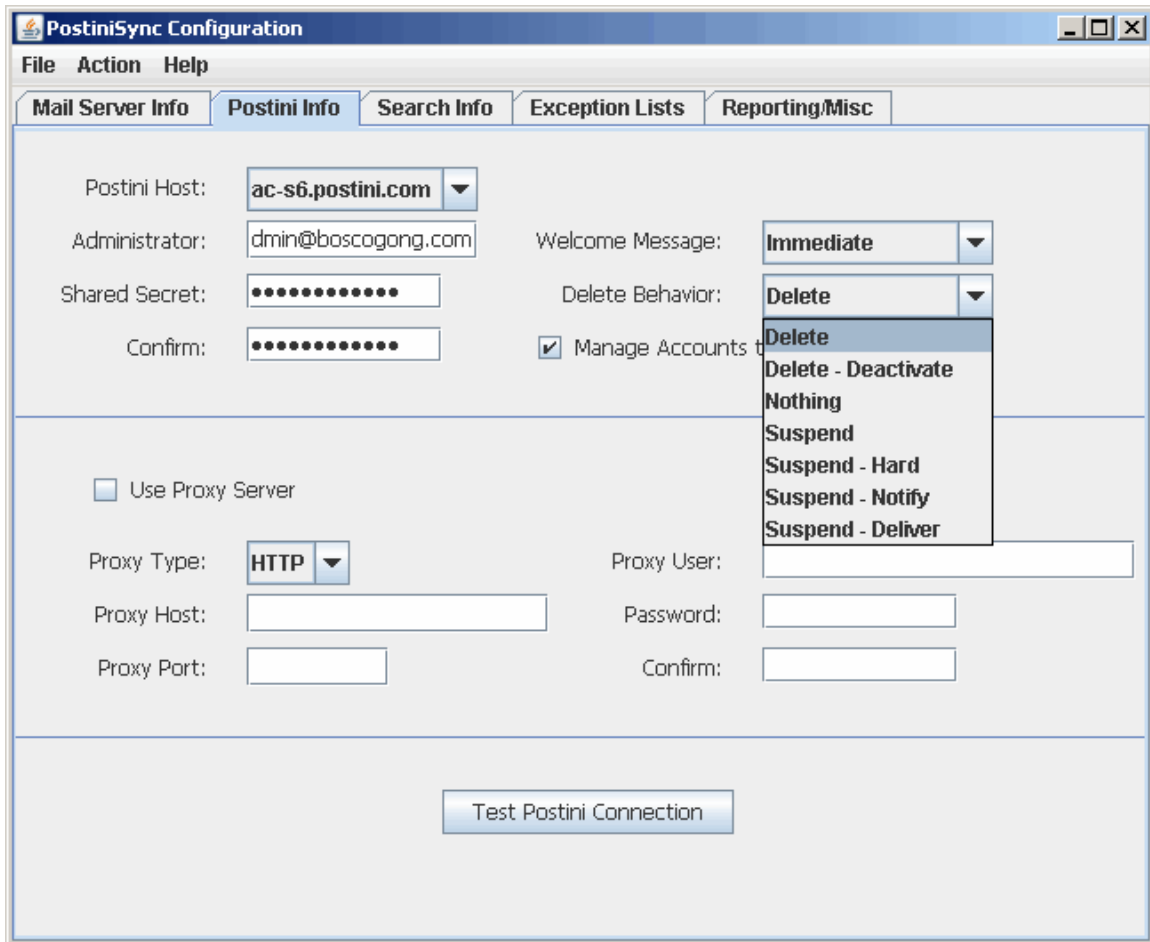
At the time of this writing, Postini has 7 sets of host servers. To find out which host your account is being routed to, just login to your Postini System Administration page and look at the URL in your web browser. Or, if you do not know the name of the system your organization is hosted on, refer to the following table as a guide:

| Postini Name | MX Records Include | http/URL |
|------------------------|---|---------------------|
| System 5 | s5a1.psmtip.com; s5a2.pstmp.com | ac-s5.postini.com |
| System 6 | s6a1.psmtip.com; s6a2.psmtip.com; s6b1.psmtip.com; s6b2.psmtip.com | ac-s6.postini.com |
| System 7 | s7a1.psmtip.com; s7a2.psmtip.com; s7b1.psmtip.com; s7b2.psmtip.com | ac-s7.postini.com |
| System 8 | s8a1.psmtip.com; s8a2.psmtip.com; s8b1.psmtip.com; s8b2.psmtip.com | ac-s8.postini.com |
| System 200 (Europe) | s200a1.psmtip.com; s200a2.psmtip.com; s200b1.psmtip.com; s200b2.psmtip.com | ac-s200.postini.com |
| System 201 (Europe) | s201a1.psmtip.com; s201a2.psmtip.com; s201b1.psmtip.com; s201b2.psmtip.com | ac-s201.postini.com |

The remaining Postini Info criteria must be entered including:

Administrator – Enter the userid of the Postini Administrator for the organization (*no aliases*)

Delete Behavior – select from 6 different deletion options (*Delete; Delete - Deactivate; Nothing; Suspend; Suspend – Hard; Suspend – Notify; and Suspend – Deliver*) from the drop-down list. This defines the behavior of the tool when a user is removed from the email server. Refer to the Postini knowledgebase for more details of each behavior.



Delete: will delete the primary user account from the Postini database

Delete - Deactivate: will deactivate users who can be recovered up to 14 days after the deactivation is performed. After 14 days, the deactivated user is permanently deleted.

Nothing: will do nothing at all to the user account. It will be up to your organization's Administrator to manually delete the account when required.

Suspend: This will turn filtering off at Postini, the user will still be able to access their message center.

Suspend – Hard: Filtering will be disabled at Postini, and the user will not be able to access their message center.

Suspend – Notify: Filtering will be disabled at Postini, and the user will not be able to access their message center, and they will receive a notification email about the discontinuation of service.

Suspend – Deliver: Filtering will be disabled at Postini, and the user will not be able to access their message center, and the contents of their message center will be delivered.

Welcome Message – select immediate or batch from the drop-down list. To add the user and send a new user a welcome message immediately, select Immediate. To add the user and send a welcome message based on the default organizational setting (*which could be no notification*) or during Postini’s nightly batch process, select Batch.

Shared Secret – enter the shared secret for the organization. This entry must match the value of the Shared Secret set in the Postini System Administration console.

Confirm – re-enter the shared secret for the organization.

Use Proxy Server

PostiniSync includes the option to access the Internet via a proxy server if it is required in your environment. Make the appropriate entries to the Proxy Info section.

If a proxy is not required, then leave “Use Proxy Server” unchecked.

Otherwise, enter the following as necessary:

Proxy Type – select the type of proxy server (currently only http is supported).

Proxy Host – enter the hostname or IP address of the proxy server.

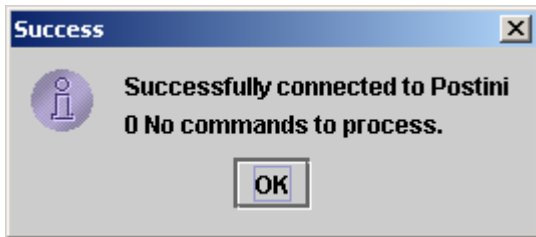
Proxy Port – enter the TCP port that the proxy server listens on.

Proxy User – enter the username for proxy server authentication.

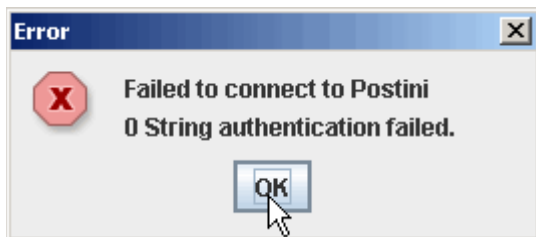
Password – enter the password for the proxy user.

Confirm – re-enter the password for the proxy user.

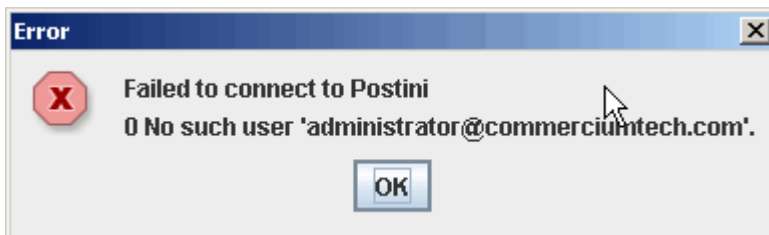
Test Postini Settings – click this button to test the Postini connection settings.



If the all entries in the Postini Info folder are valid, a Success dialog will pop-up as the result of clicking on Test Postini Settings.



An incorrect Shared Secret entry would result in the pop-up shown above. It will indicate “String authentication failed.”

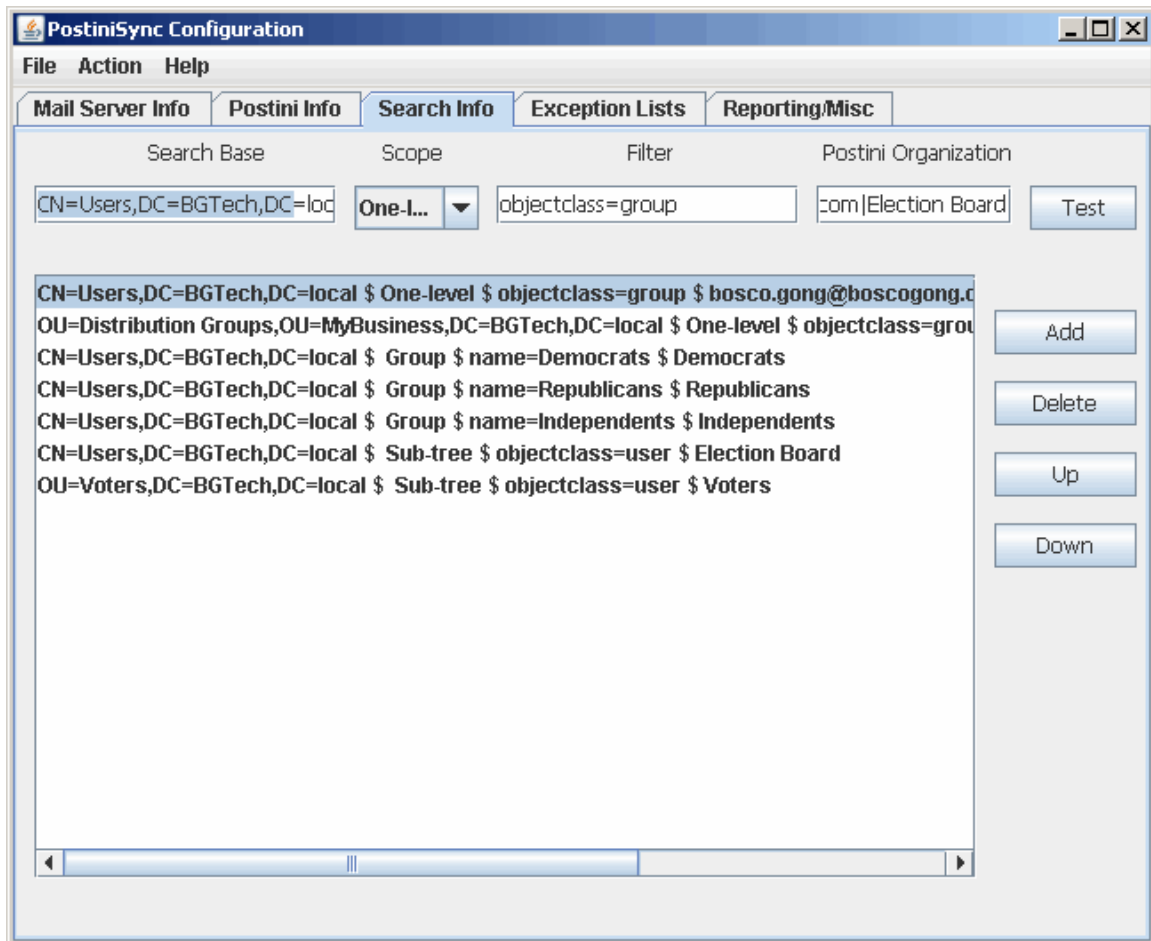


An incorrect Postini account entry or selecting the wrong Postini host will result in the pop-up shown above. It will indicate “No such user...”

If you get any other pop-ups; check to make sure that the Postini host is not down by trying to log into the web interface. Also, verify that it isn't a DNS problem.

Search Info

In the Search Info folder, the user specifies LDAP query information to extract the appropriate entries from the directory. Cluster accounts are now assigned in the Search Info tab so that you have the option of prioritizing which query takes precedence for users that may appear in more than one LDAP query.



The image above shows typical Exchange 2003 Search Info entries. Click on Test to verify that the entries will yield the expected records with the criteria entered.

Scope – Select from either Sub-Tree, One-Level or Group. Sub-tree will return all records beneath the search base that meet the search filter, including that object itself. One-Level will return only those entries that are directly beneath the search base. Group will return the entries specified in the search base.

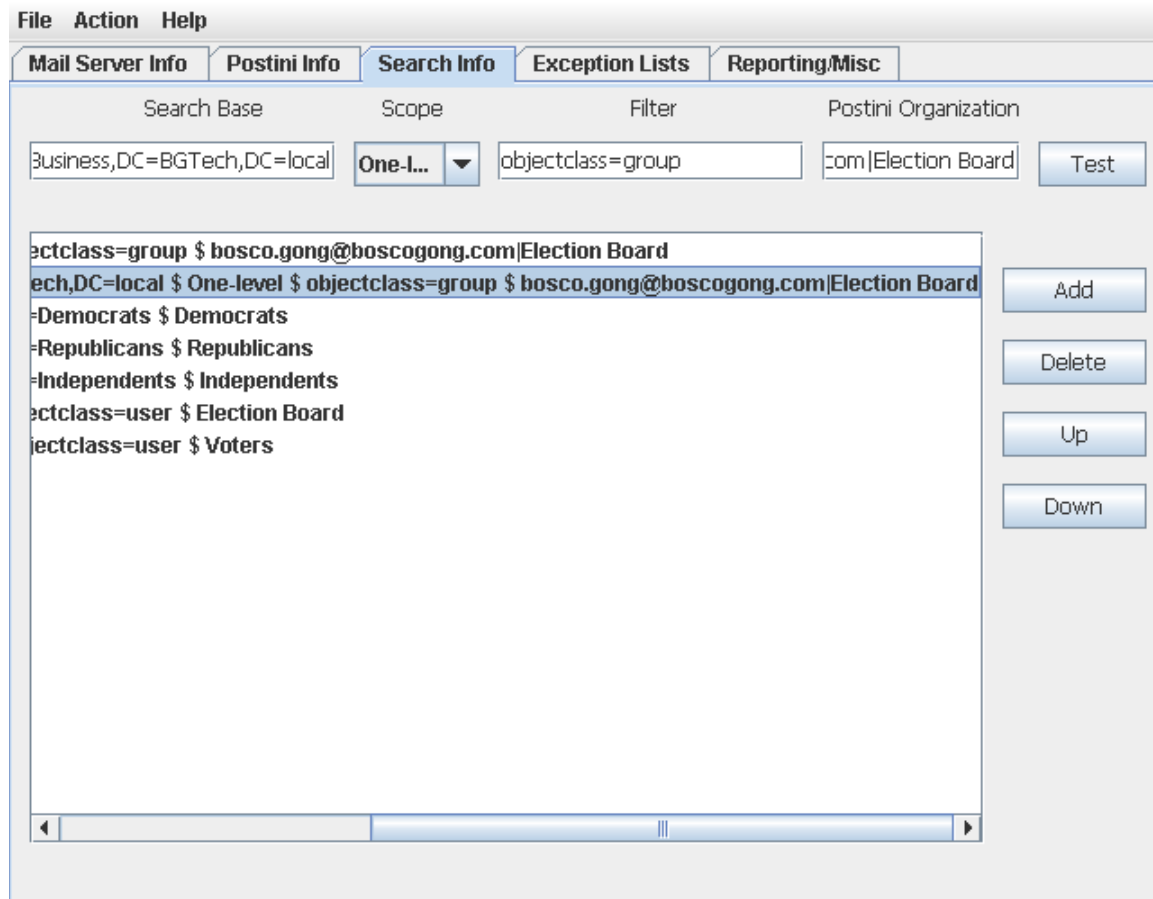
Search Base – The Search Base defines the portion of the LDAP directory to be searched. With Lotus Domino it may be required to leave the search base blank in order to see all entries

Postini Organization – Enter the destination organization for entries matching the search criteria. The Postini Organization must be entered exactly as it is at Postini including all

spaces. Alternately, the Postini Organization can contain an LDAP attribute name preceded by an ampersand. (For example: &ou) PostiniSync will use the value returned as the Postini Organization for each matching entry.

Most organizations have email accounts and distribution lists which expect to receive messages from external parties such as “sales@someorg.com” and “info@someorg.com” which are managed by an individual or a group. Rather than get charged for these accounts as a Postini primary user account, they can be assigned to an individual or another group email address (account ownership). We refer to these as cluster accounts in the tool.

For Cluster Accounts, specify the primary SMTP account separated by the pipe character (vertical bar) “|” followed by the Postini Organization where the primary user is found. For example, if we want the non-user accounts in the search base to be added as aliases to bosco.gong@boscogong.com, you would enter “bosco.gong@boscogong.com|Election Board” in the Postini Organization field.



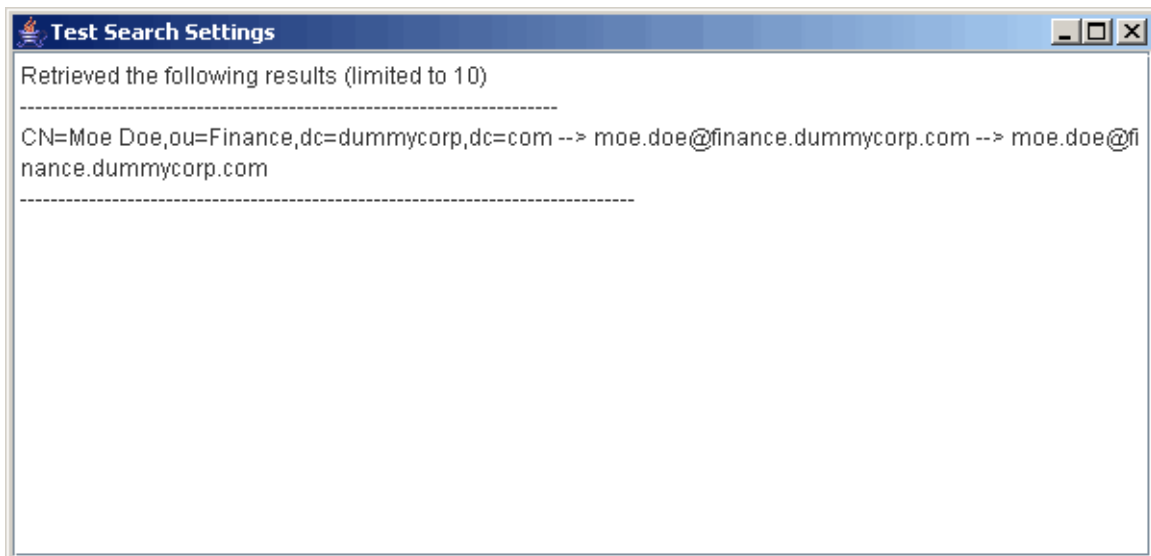
Up/Down – Allows you to prioritize which search string takes precedence in situations where a user’s email account might be found in more than one search. This is likely to happen with a multi-level subtree search. The first entry found will be the default organization for the particular hit. Cluster accounts are normally found at the very top.

☀ **Note:** *The Alternate Search String from Version 1 has been eliminated. The Administrator may enter more than one search string per named organization which is the equivalent of the alternate search string.*

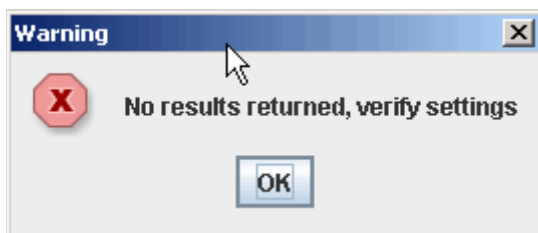
Filter – Enter an LDAP compliant search filter in this field. Most often it will be in a form such as (objectclass=person) or (&(objectclass=person)(inetuserstatus=active)). Common filter entries include the following:

- Exchange 5.5: (objectclass=organizationalperson)
- Active Directory for Exchange 200x: (objectclass=user)
- SunOne: (objectclass=inetmailuser)
- GroupWise: (objectclass=person)
- Domino: (objectclass=person)

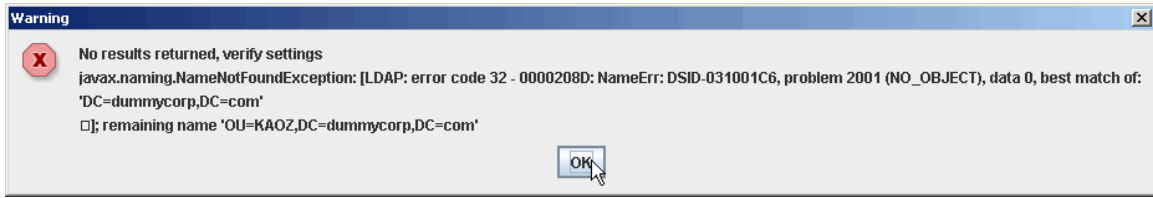
☀ **Note:** *For more information on LDAP Filters see [Appendix A](#).*



A successful test with correct search settings is shown in the image above. The pop-up will return only first 10 records of a successful query for test purposes.



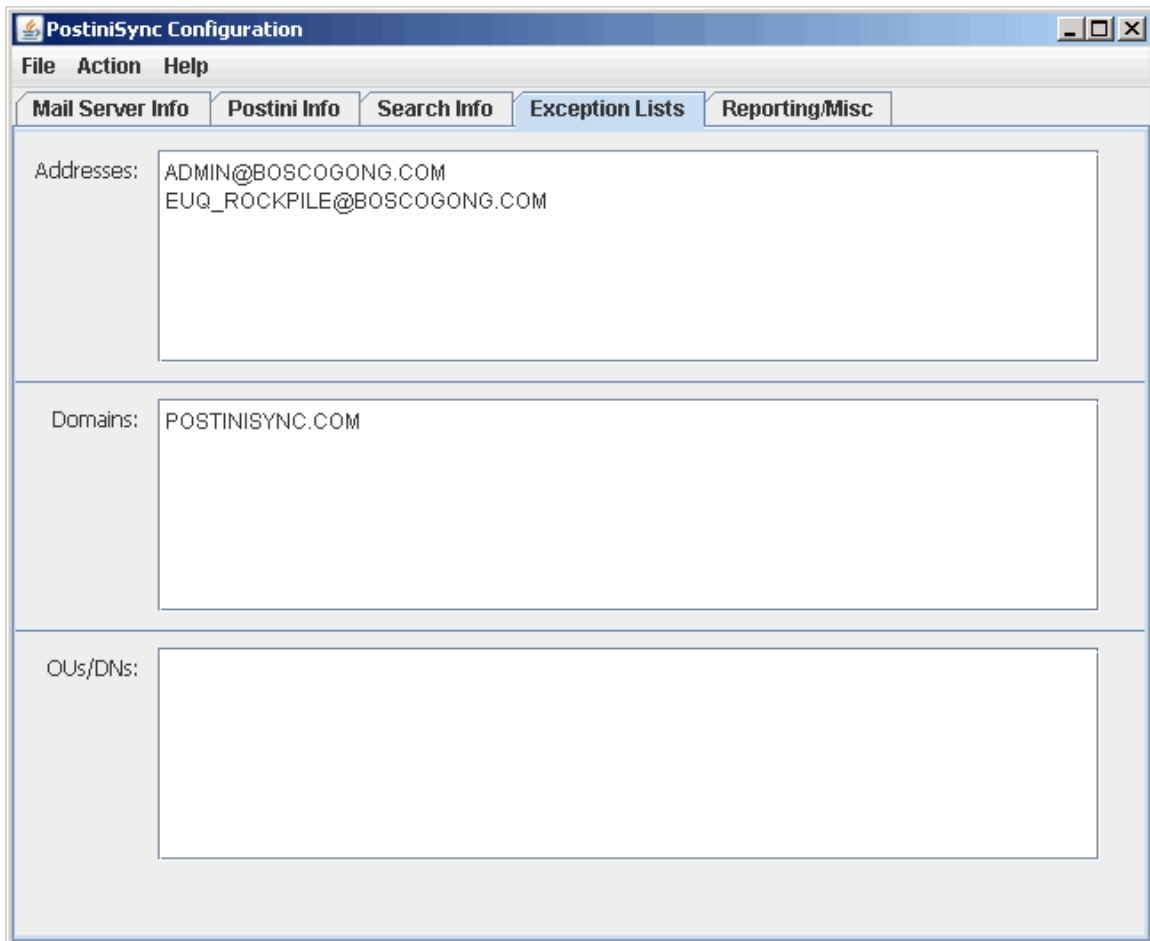
This Warning dialog box will pop-up if no results are returned.



The above warning will appear if an incorrect Search Filter is specified.

Exception List

The Exception List should include all email addresses, domains, and other OU or DN LDAP entries that should not be modified (add/delete/change) by the PostiniSync tool. Besides the administrator account, you may want to include process accounts from the LDAP query that could not be filtered out. Each account must be entered on a separate line. SMTP addresses that are not going to be receiving email from outside should be included here.



Above, we have a non-user internal email accounts along with any SMTP addresses with postinisynd.com domain entered in our Exception List. These Postini accounts will not be modified by any changes picked up by the PostiniSync tool. If you do not want to be charged by Postini for a non-user account, make the non-user email entry into the Exception List before the initial run, so that they are not added to the list of Postini users.

Reporting/Miscellaneous

The screenshot shows the 'PostiniSync Configuration' window with the 'Reporting/Misc' tab selected. The window is divided into several sections:

- Reporting:** Contains two text input fields: 'SMTP Relay Host' with the value '127.0.0.1' and 'Email Address(es)' with the value 'Support@PostiniSync.com'.
- Log Settings:** Contains two spinners: 'Maximum age for logs' set to 20 Days and 'Maximum disk space for logs' set to 100 Mb. It also has a 'Logging Level' dropdown menu set to 'Verbose'.
- Delete Protection:** Contains a spinner for 'Abort if deletes exceed' set to 5%, and a checkbox labeled 'Continue processing adds and modifies' which is currently unchecked.
- Domain Aliases:** Contains a text input field for 'Domain(s)' and a dropdown menu for 'Separator(s)' set to '_and_'.

Reporting

The reporting function will email the results of each job execution to the designated recipient(s). This automatic mailing function applies only to command-line execution when used in the Task Scheduler. Reporting is not enabled for GUI mode.

SMTP Relay Host – Enter the hostname or IP address of an SMTP host that can relay the report to the internal recipients.

Email Address(es) – Enter the email address(es) for users, groups, pagers, etc..., to send the results to. *(The addresses should be separated by a space character.)*

Log Settings

Version 2 now includes log maintenance. The administrator can set the log history information.

Maximum Age for Logs – Enter the number of days which the logs should be kept before being automatically deleted. The log files have the following the naming structure: *configname_yyyymmdd.log*, which are found in the PostiniSync installation directory.

Maximum Disk Space for Logs – Some organizations will be generating large log files and the administrator may want to limit the disk space which they will take up. Set the allowable disk space in MB.

Logging Level – The administrator has a choice of normal or verbose. Normal logging retains basic command level logging, and verbose logging includes the creation details of the local db files.

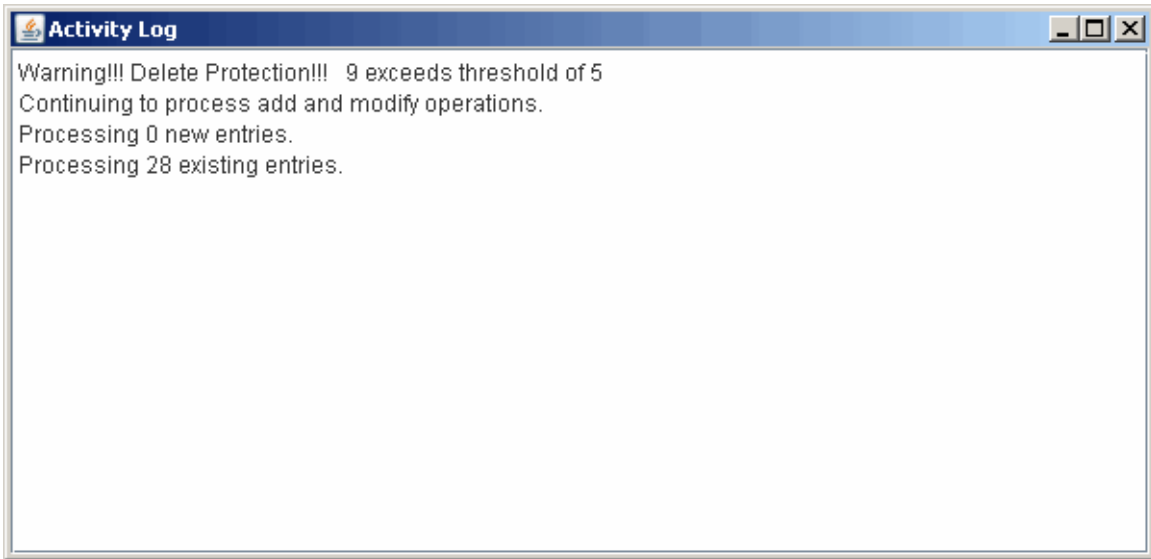
Delete Protection

Delete protection is provided to prevent the catastrophic scenario of accidentally deleting all of your users from the Postini system. This could occur for any number of reasons and this may include: failed or incomplete LDAP query due to a network failure; directory server sabotage; accidental deletion of LDAP entries; or some other unforeseen predicament. Use the up and down arrows to change the percentage threshold value.

Abort If Deletes Exceed – If the percentage of deletions exceed the designated percentage, the job will not do any deletions at all. However, the administrator has an option to allow the job to continue to perform the Adds and Modifies.

☀ **Note:** *Version 2 no longer supports the discrete **Number of Users** count for the threshold value as in Version 1. Use the up and down arrows to change the threshold.*

Continue adds and modifies – When checked, the job will continue to perform Adds and Modifies even if the deletion percentage threshold is exceeded. If left unchecked, the synchronization job will terminate. If the threshold is exceeded, the users who were meant to be deleted will be added to a control queue for later deletion if the Administrator increases the threshold value to continue with the deletions upon the next job execution.



The Activity Log above shows that the tool terminated because the threshold value had been exceeded. We had deleted 3 users in the DB file which is 9 percent exceeding the threshold value was 5 percent.

Domino Aliases

For Lotus Domino users, PostiniSync 2 now allows for the creation of mail aliases.

File Action Help

Mail Server Info Postini Info Search Info Exception Lists Reporting/Misc

Reporting

SMTP Relay Host:

Email Address(es):

Log Settings

Maximum age for logs: Days Logging Level: **Verbose** ▼

Maximum disk space for logs: Mb

Delete Protection

Abort if deletes exceed: % Continue processing adds and modifies

Domain Aliases

Domain(s): Separator(s): **_and_** ▼

Domain(s) – Enter the mail domains for the Domino environment for which you want to create aliases.

Separator – Select from the pull-down list, the type of formed alias(es).

The user should specify the attribute used for creating the SMTP username in Alias Attribute input field under Mail Server Info tab. Suppose for our example *cn* is specified with the separators “_ and .” are selected: The aliases: *joe_bloggs@aliasdomain.com*, *joe.bloggs@aliasdomain.com*, *joe_bloggs@supernova.com*, and *joe.bloggs@supernova.com* would be created for the user with *cn=Joe Bloggs*.

The screenshot shows the 'Mail Server Info' tab in the PostiniSync Administrator. The window has a menu bar with 'File', 'Action', and 'Help'. Below the menu bar are five tabs: 'Mail Server Info' (selected), 'Postini Info', 'Search Info', 'Exception Lists', and 'Reporting/Misc'. The configuration area is divided into several sections:

- Mail Server Type:** A dropdown menu set to 'Lotus Domino'. To its right is a checkbox labeled 'Use SSL' which is unchecked.
- Primary LDAP Host:** A text input field containing '192.168.0.20'. To its right is a 'Port:' label and a text input field containing '3268'.
- Backup LDAP Host:** An empty text input field. To its right is a 'Port:' label and an empty text input field.
- User DN:** A text input field containing 'cn=Administrator,cn=users,dc=bgtech,dc=local'.
- Password:** A text input field with seven dots.
- Confirm:** A text input field with seven dots.
- Mail Attribute:** A text input field containing 'mail'.
- Alias Attribute(s):** A text input field containing 'cn'.

At the bottom of the configuration area is a button labeled 'Test LDAP Connection'.

Indicate the directory attribute that will be used for form the user side of the SMTP alias. Here we will use cn (common name) attribute.

Appendix A – Understanding LDAP Filters

Operators

The following table lists frequently used search filter operators.

| Operator | Description |
|----------|--|
| = | Equal to |
| ~= | Approximately equal to |
| <= | Lexicographically less than or equal to |
| >= | Lexicographically greater than or equal to |
| & | AND |
| | OR |
| ! | NOT |

Examples

The following filter will return all objects.

```
(objectclass=*)
```

The following filter will return all users in the Exchange 2000 that have a userid that starts with “U”

```
(&(objectclass=user)(samaccountname=U*))
```

The following filter will return all objects with the last name of Jones or Jackson

```
(&(objectclass=person)(|(sn=Jones)(sn=Jackson)))
```

The following Exchange 2000 filter will exclude all users that are hidden from the address book or disabled.

```
(&(objectclass=user)!((msexchhidefromaddresslists=TRUE))(msexchuserAccountcontrol=0))
```

More A.D. Examples

| Search For | LDAP Query Syntax |
|---------------------|---|
| Global address list | (& (mail=*)(proxyAddresses=*)(textEncodedORAddress=*)) ((objectCategory=person)(objectCategory=group) (objectCategory=publicFolder)) |
| All Users | (& (mail=*)(proxyAddresses=*)(textEncodedORAddress=*)) ((&(objectCategory=person)(objectClass=user))) |
| All Groups | (& (mail=*)(proxyAddresses=*)(textEncodedORAddress=*)) ((objectCategory=group)) |
| All Contacts | (& (mail=*)(proxyAddresses=*)(textEncodedORAddress=*)) ((&(objectCategory=person)(objectClass=contact))) |
| Public Folders | (& (mail=*)(proxyAddresses=*)(textEncodedORAddress=*)) ((objectCategory=publicFolder)) |

Domino Examples

| Search For | LDAP Query Syntax |
|------------------|--|
| Domino Groups | (objectclass=dominoGroup) |
| MailIn Databases | (objectclass=dominoServerMailInDatabase) |
| Domino Users | (objectclass=person) |

For more information and examples refer to RFC 2254 “The String Representation of LDAP Search Filters” <http://rfc.net/rfc2254.html>

Appendix B – Understanding the Local Database

After every synchronization cycle, the local database is updated. This database will be found in the install directory (typically C:\Program Files\PostiniSync) and will have the same name as the file used to save the configuration settings. (For Example: *configname.cfg* will have an associated *configname.db*.)

This database is a simple, flat text file, delimited with a pipe “|”, and has the following fields/columns

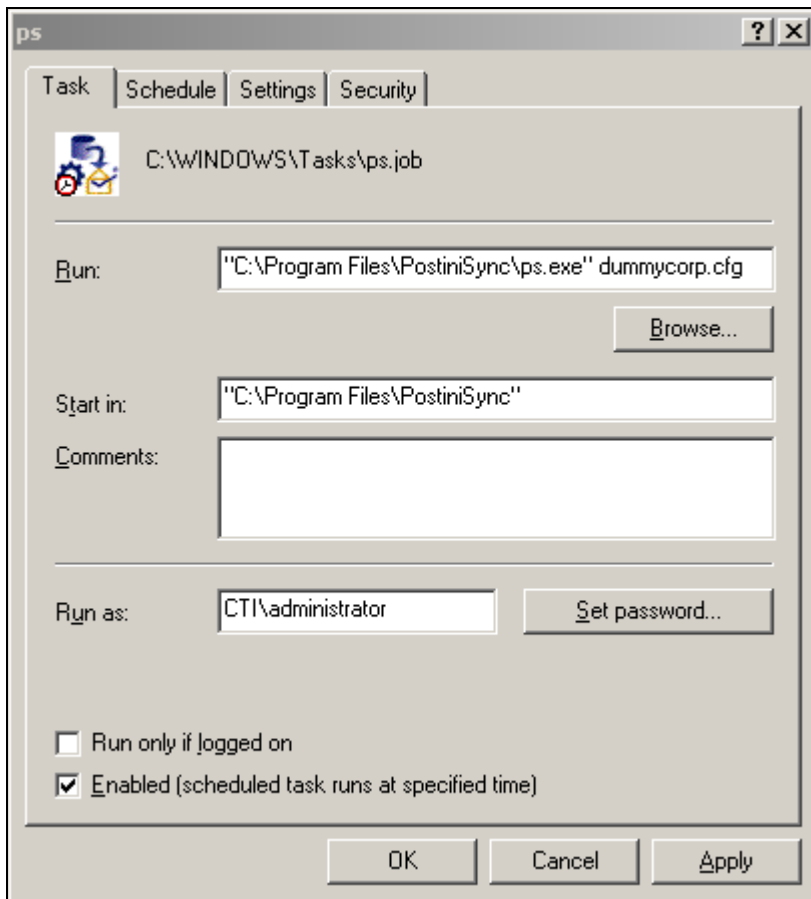
- Column 1 – The distinguished name of the entry.
- Column 2 – The primary email address of the entry.
- Column 3 – Entry status (Active, Deleted Suspended).
- Column 4 – Modify Date.
- Column 5 – Creation Date.
- Column 6 – Postini Organization.
- Column 7+ – Aliases

```
C:\Program Files\PostiniSync\sbs-demo.db
1 #PostiniSync Version 2 Database
2 #Created: Sat Jul 28 11:28:41 EDT 2007
3 #dn|mail|status|modifyDate|createDate|org|aliases...
4 cn=jesse ventura, cn=users, dc=bgtech, dc=local|jventura@bosco.gong.com|A|20070728112823|20070728112823|Repub
5 cn=mitt romney, cn=users, dc=bgtech, dc=local|mromney@bosco.gong.com|A|20070728112823|20070728112823|Republic
6 cn=al gore, cn=users, dc=bgtech, dc=local|agore@bosco.gong.com|A|20070728112823|20070728112823|Democrats
7 cn=dark horse, cn=users, dc=bgtech, dc=local|darkhorse@bosco.gong.com|A|20070728112823|20070728112823|Indeper
8 cn=barack obama, cn=users, dc=bgtech, dc=local|bobama@bosco.gong.com|A|20070728112823|20070728112823|Democrat
9 cn=bosco gong, cn=users, dc=bgtech, dc=local|bosco.gong@bosco.gong.com|A|20070728112823|20070728112823|Electi
10 cn=elmer j. fudd, ou=voters, dc=bgtech, dc=local|elmer@bosco.gong.com|A|20070728112823|20070728112823|Voters
11 cn=tommy thompson, cn=users, dc=bgtech, dc=local|tthompson@bosco.gong.com|A|20070728112823|20070728112823|Rep
12 cn=bugs bunny, ou=voters, dc=bgtech, dc=local|bugs@bosco.gong.com|A|20070728112823|20070728112823|Voters
13 cn=illegal voter1, ou=voters, dc=bgtech, dc=local|illegal1@bosco.gong.com|A|20070728112823|20070728112823|Vot
14 Cluster_bosco.gong@bosco.gong.com|bosco.gong@bosco.gong.com|A|20070728112823|20070728112823|Election Board|
15 cn=chris dodd, cn=users, dc=bgtech, dc=local|cdodd@bosco.gong.com|A|20070728112823|20070728112823|Democrats|c
16 cn=ron paul, cn=users, dc=bgtech, dc=local|rpaul@bosco.gong.com|A|20070728112823|20070728112823|Republicans
17 cn=hillary clinton, cn=users, dc=bgtech, dc=local|hclinton@bosco.gong.com|A|20070728112823|20070728112823|Den
18 cn=newt gingrich, cn=users, dc=bgtech, dc=local|ngingrich@bosco.gong.com|A|20070728112823|20070728112823|Rep
19 cn=john mccain, cn=users, dc=bgtech, dc=local|jmccain@bosco.gong.com|A|20070728112823|20070728112823|Republic
20 cn=howard stern, cn=users, dc=bgtech, dc=local|hstern@bosco.gong.com|A|20070728112823|20070728112823|Indepen
21 cn=daffy duck, ou=voters, dc=bgtech, dc=local|daffy@bosco.gong.com|A|20070728112823|20070728112823|Voters
22 cn=john edwards, cn=users, dc=bgtech, dc=local|jedwards@bosco.gong.com|A|20070728112823|20070728112823|Democr
23 cn=illegal voter2, ou=voters, dc=bgtech, dc=local|illegal2@bosco.gong.com|A|20070728112823|20070728112823|Vot
24 cn=administrator, cn=users, dc=bgtech, dc=local|administrator@bosco.gong.com|A|20070728112823|20070728112823|
25 cn=tom tancredo, cn=users, dc=bgtech, dc=local|thomastancredo@bosco.gong.com|A|20070728112823|20070728112823|
26 cn=sam brownback, cn=users, dc=bgtech, dc=local|sbrownback@bosco.gong.com|A|20070728112823|20070728112823|Rep
```

This data can be easily imported into Microsoft Excel or another spreadsheet for inspection and analysis.

Appendix C - Job Scheduling

PostiniSync can be run interactively or scheduled as an automated job. The interactive session was described in the previous section. Interactive sessions are best for testing jobs before being scheduled regularly. The administrator can use Microsoft's Task Scheduler to schedule jobs, or a third-party job scheduling utility.



The entry in the Task Scheduler > Run should follow the PostiniSync command line options. Specify the job configuration file that will be executed at the scheduled time. (In the above example, the configuration “*dummycorp.cfg*” will be run at Noon each day.)

The correct syntax in Task Scheduler > Task > Run is:

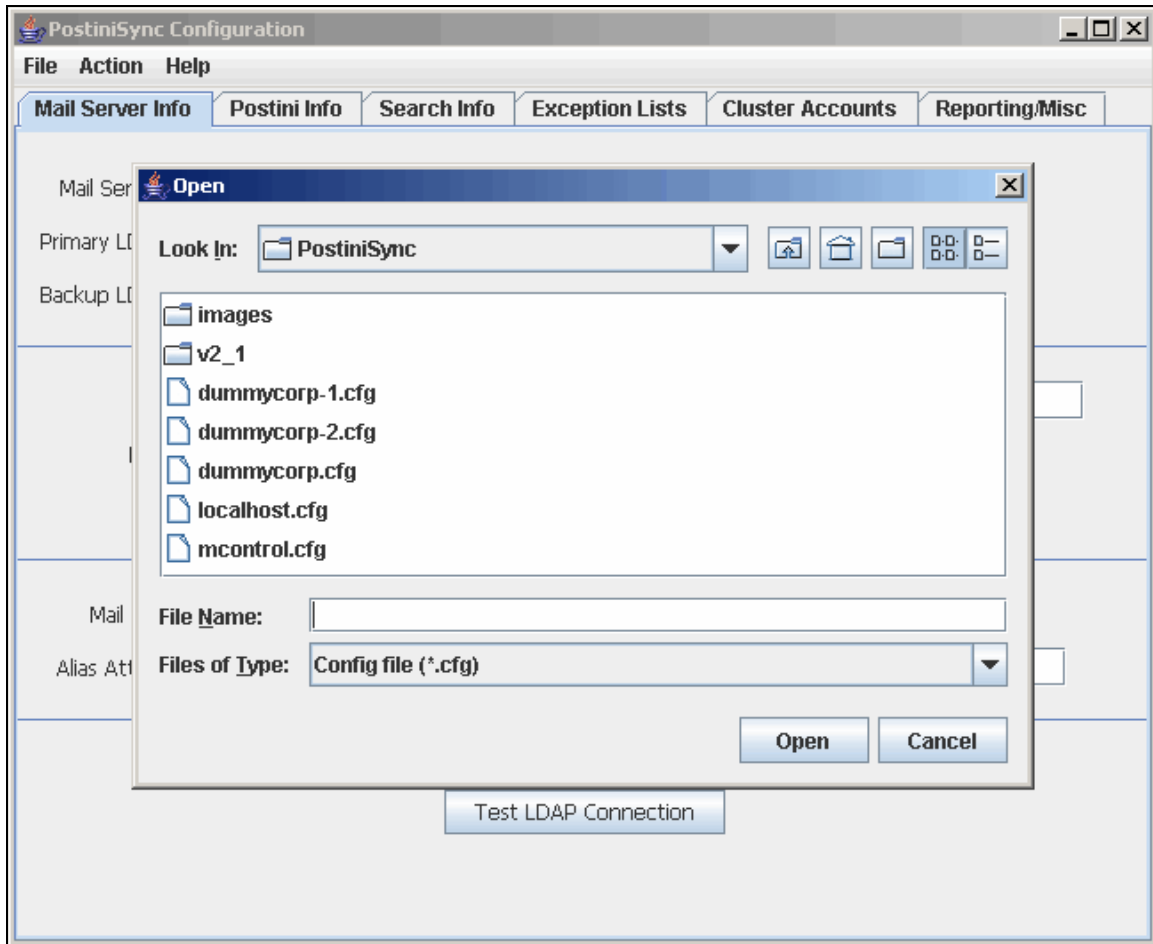
“%PostiniSync Installation Directory%\ps.exe” configurationname.cfg

Replacing the *%PostiniSync Installation Directory%* with the proper value.

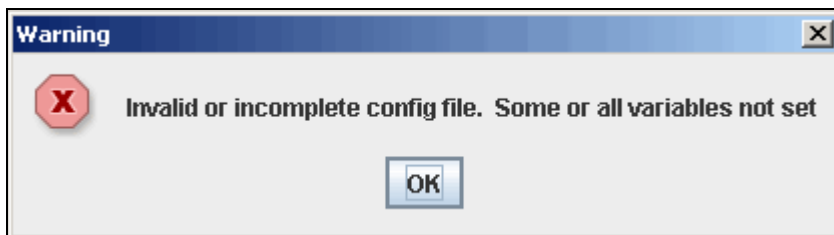
The administrator will schedule as many job runs as required for the particular (sub-)organization. **Hint:** *The name of the configuration file should match your organization name for easy reference in the future.*

Appendix D – Moving from v2.1 to v2.2

When upgrading from v2.1 to v2.2, the old configuration files will need to be saved again in v2.2 format. A dialog pop-up box warning about file compatibility will appear the first time you open a CFG file saved in the previous version. By default, the Cluster Account entries from v2.1 will appear at the top of the list for Search Info. However, the data files are compatible. After the migration, PostiniSync will continue to manage the existing user database without an issue.



After upgrading to v2.2, if you attempt to open a v2.1 job configuration file, you will get a pop-up warning that looks like the next figure.



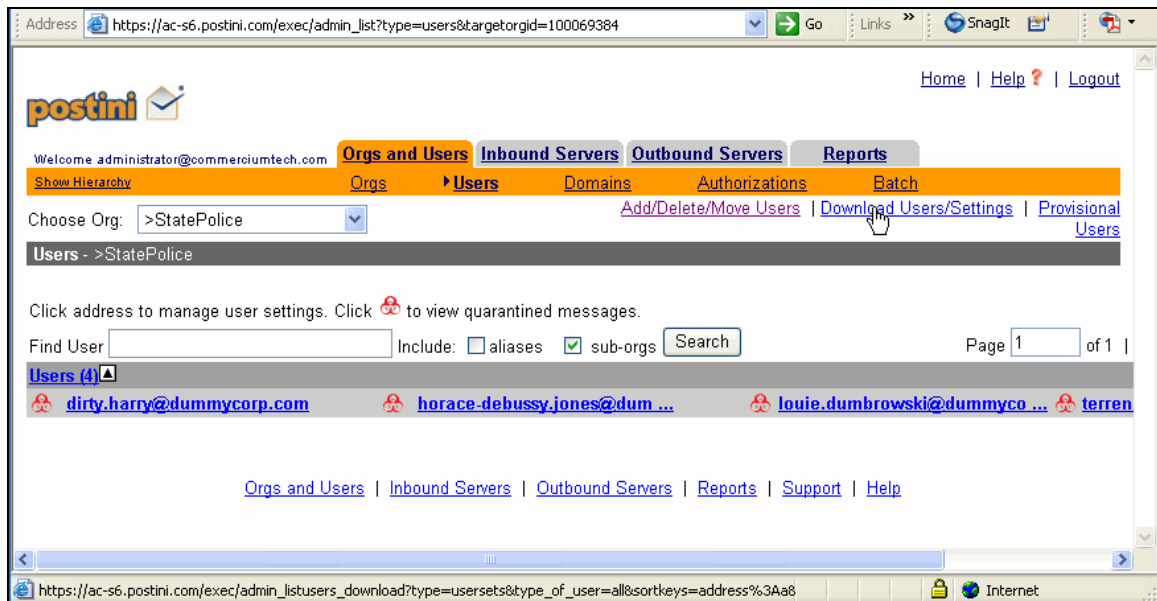
Appendix E – Migrating to PostiniSync

If your organization is already using Postini in production and you are now considering using PostiniSync to automate the management of users, the reader should follow the instructions in this section.

As discussed in the “How Does PostiniSync Work” section at the beginning of this document, PostiniSync compares the current LDAP query results against the last results to identify the required changes. If an organization is already in production with users previously added through alternative methods, it becomes necessary to establish a baseline of current accounts from the Postini database. Failure to do so will result in user that are in Postini, but not in their LDAP source. This process will also save time when the first synchronization cycle is run since it does not have to fail on users it tries to add again in the initialization process. This will serve as the last run job also known as the *configname.db* file which is compared against the *configname.new* file.

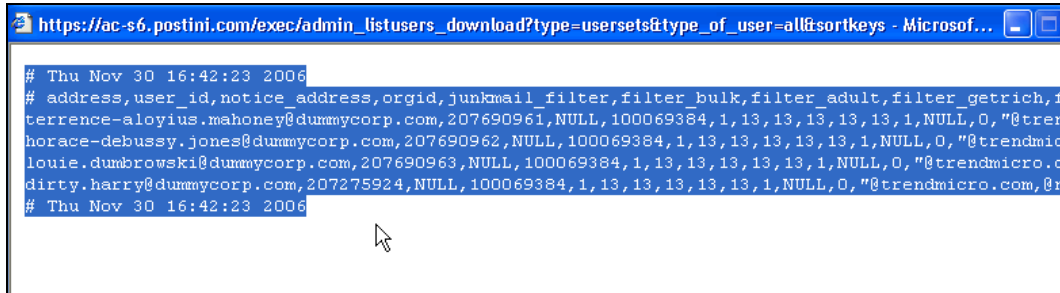
☀ **Note:** *If there is an SMTP alias address in Postini that is not listed in your current LDAP directory, the alias will become stranded in Postini. This is the same reason that existing users need to be imported into PostiniSync.*

Exporting Users From Postini



1. Login to Postini as an Administrator
2. Click on the *Orgs and Users* tab.
3. Select the organization that you need to export from (*i.e.* >*StatePolice*).

4. Click on the *Users* Link.
5. Click on the *Download Users/Settings* Link.



6. When the pop-up window appears, highlight all of the data, right-click and select **Copy**. Close the pop-up window.
7. Open Notepad or another text editor.
8. Right-click in the editor and select **Paste**.
9. Save the file as *<Organization>.csv*.
10. Repeat the steps for other organizations as necessary.

Importing Users Into PostiniSync (Establishing a Baseline)

☀ **Note:** *The procedure outlined here is for new PostiniSync users who need to establish a baseline for their initial PostiniSync synchronization.*

1. Start PostiniSync.
2. Click on *Action > Import*.
3. Select the CSV file to be imported and click on the **Open** button.



4. Enter the Postini organization that you want to establish the baseline for, and select *Append to Database (if you need to build a database from multiple CSVs)*. Click on the **OK** button to complete the import.
5. Repeat the procedure for any other organizations.



6. Test this new baseline against a new LDAP query to confirm that the adds/deletes/moves correspond with what you expect. Select **Action > Test**, and verify the results.

| Name | Size | Type | Date Modified | Attributes |
|---------------------------|--------|------------------------|--------------------|------------|
| images | | File Folder | 3/30/2006 5:16 PM | |
| v2_1 | | File Folder | 11/30/2006 8:09 PM | |
| activation.jar | 54 KB | Executable Jar File | 8/28/2002 1:50 PM | A |
| dummyscorp-1.cfg | 3 KB | Microsoft Office Ou... | 4/20/2006 7:28 PM | A |
| dummyscorp-2.cfg | 3 KB | Microsoft Office Ou... | 9/28/2006 2:03 PM | A |
| dummyscorp-2.db | 4 KB | Data Base File | 11/30/2006 8:07 PM | A |
| dummyscorp-2.new | 3 KB | NEW File | 11/30/2006 8:07 PM | A |
| dummyscorp-2.reject | 0 KB | REJECT File | 11/30/2006 8:07 PM | A |
| dummi | 1 KB | ROTATIONINFO File | 11/30/2006 8:07 PM | A |
| dummi | 1 KB | Data Base File | 11/30/2006 8:01 PM | A |
| dummi | 3 KB | Data Base File | 9/28/2006 10:37 AM | A |
| dummyscorp-2_2.db | 5 KB | Data Base File | 9/28/2006 10:22 AM | A |
| dummyscorp-2_20060928.log | 238 KB | Text Document | 9/28/2006 2:03 PM | A |
| dummyscorp-2_20061130.log | 34 KB | Text Document | 11/30/2006 8:07 PM | A |
| dummyscorp.cfg | 3 KB | Microsoft Office Ou... | 6/3/2006 8:43 AM | A |
| dummyscorp.db | 2 KB | Data Base File | 7/13/2006 7:42 PM | A |
| dummyscorp.new | 2 KB | NEW File | 5/20/2006 11:46 AM | A |
| dummyscorp.reject | 0 KB | REJECT File | 7/13/2006 7:42 PM | A |
| dummyscorp.rotationinfo | 1 KB | ROTATIONINFO File | 7/13/2006 7:42 PM | A |
| dummyscorp_0.db | 2 KB | Data Base File | 5/20/2006 11:46 AM | A |
| dummyscorp_1.db | 2 KB | Data Base File | 5/20/2006 11:45 AM | A |
| dummyscorp_2.db | 3 KB | Data Base File | 4/21/2006 11:10 AM | A |

7. If the export and import procedures worked well, then you are ready to proceed with an initial production run. Erase all corresponding *configname.db* and *configname.new* files, if this is a first time baseline and initial run. Repeat the procedures starting from Step 2 through Step 5.

☀ **Note:** *Make sure that you understand the ramifications of deleting files.*

8. This time, select **Action > Run**, and PostiniSync will make the required changes to update the accounts in your Postini organization.

Appendix F – Contacting Technical Support

To contact CTI Technical Support for help with PostiniSync, use any of the following:

Email: Support@CTIcorp.com

Telephone: 1-800-579-1902 (Ext. 3)

Home Page: <http://www.CTIcorp.com>