

TREASURY SERVICES

CD-ROM Image ViewerSM

User Guide

Contents

OVERVIEW	4
INSTALLATION REQUIREMENTS	5
SUPPORTED PLATFORMS	5
UNSUPPORTED PLATFORMS	5
INSTALLATION INSTRUCTIONS	6
OVERVIEW	6
INSTALLATION VIA WEB	6
INSTALLATION VIA CD-ROM	7
FIRST TIME USE	7
SETUP OF USERS	8
USER FUNCTIONALITY	8
SIGNING ON	8
NETWORK USER SIGNON	8
ADDING A LOCAL USER	9
ADDING A NETWORK USER	10
MODIFYING A USER	11
DELETING A USER	12
ENABLING/DISABLING USER ACCOUNTS	12
QUICK REFERENCE USER GUIDE	13
REGISTER A CD	13
UNREGISTER A CD	13
RUN A QUERY	13
VIEW AN IMAGE	14
EXPORT CHECK INDEX WITH/WITHOUT IMAGES	14
STORING BOTH CHECK INDEX AND IMAGES ON A HARD DRIVE	15
OVERVIEW	15
VOLUME	15
REGISTRATION	15
CONFIGURATION	15
VOLUME COPY INSTRUCTIONS	16
REGISTRATION OF MULTIPLE CD-ROMS	16
DETAILED USER GUIDE	17
DATA MANAGER	17
<i>Functionality</i>	17
<i>Volume Sets</i>	20
<i>Copying Volumes to Hard Disk</i>	20
<i>Distributed Mode Considerations</i>	20
RUNNING DATA MANAGER	21
<i>Volume Configuration</i>	21
<i>Adding Volume Folders</i>	21
<i>Subfolder Search</i>	22
<i>Modifying Volume Folders</i>	22
<i>Deleting Volume Folders</i>	23
<i>Security Keys</i>	23
<i>Attach Volume Label</i>	23
<i>Attach Volume Set Label</i>	24
<i>Refresh Volume Location</i>	24
VOLUME OPERATION MENU OPTIONS	25
<i>Register</i>	25

<i>Register All</i>	25
<i>Re-register</i>	26
<i>Re-register All</i>	26
<i>Unregister</i>	26
<i>Unregister All</i>	27
<i>Delete</i>	27
<i>Delete All</i>	27
VIEW MENU OPTIONS	28
<i>Volume Details</i>	28
<i>Paid Items Details</i>	28
<i>Deposited Items Details</i>	28
<i>Report Details</i>	29
<i>Summary Report</i>	29
VOLUME COPY	30
<i>Functionality</i>	30
<i>Copying a CD Volume</i>	30
<i>Move Volume</i>	31
<i>Deleting a CD Volume</i>	32
MAINTENANCE	32
<i>Disk Maintenance</i>	32
GLOSSARY	33
APPENDIX A (MIGRATING AN INSTALLATION TO DIFFERENT HARDWARE)	35
LOCAL MODE INSTALLATIONS	35
DISTRIBUTED MODE INSTALLATIONS	37
APPENDIX B (INITIAL ADMINISTRATOR ACCOUNT LOCKOUT)	38

Overview

CD-ROM Image Viewer offers clients a convenient way to retrieve, sort and categorize check images. Images of the front and back of checks, reconciliation reports, bank statements, and deposit tickets are captured and stored on CD-ROM for easy access. Clients can use the export feature to export check index and image data for upload into an Excel file or their own internal document image archive. They can also print copies of these images, incorporate them into word processing applications or an email, or send them as faxes directly from their own workstation.

Clients have the option of creating their own archive on their local PC or server so that they can search and view for check or deposit ticket information without having to reference the CD again. Using the share drive feature, associates from any physical location within a company can access images without needing a copy of the CDs.

Installation Requirements

Supported Platforms

CD-ROM Image Viewer Standard v8.x is supported on the following Microsoft operating systems:

- Windows Vista Business (with Service Pack 2)
- Windows Vista Ultimate (with Service Pack 2)
- Windows Vista Enterprise (with Service Pack 2)
- Windows 7 Professional (with Service Pack 1)
- Windows 7 Enterprise (with Service Pack 1)
- Windows 7 Ultimate (with Service Pack 1)
- Windows 8/8.1 Professional
- Windows 8/8.1 Enterprise
- Windows Server 2003 Standard or Enterprise (with Service Pack 2)
- Windows Server 2008 Standard or Enterprise (with Service Pack 2)
- Windows Server 2008 R2 (with Service Pack 1)
- Windows Server 2012
- Windows Server 2012 R2

For the above platforms, both 32-bit and 64-bit versions are supported. **Note:** Server 2008 R2, and Server 2012/2012 R2 are only available in 64-bit versions.

Unsupported Platforms

The following platforms are not supported:

- * Home/Home Premium/Media Center editions of Vista or Windows 7.
- * Windows 8/8.1 basic (consumer) edition.
- Retired versions of Windows, such as Windows 2000 (Server and Professional), Windows XP, Windows 9x, ME, and Windows NT 4.
- Supported versions of Windows which do not have the latest service pack installed as listed above e.g. Vista SP1.
- Novell networks: the CD-ROM Image Viewer application has been qualified on Microsoft Windows networks, using the Windows Server 2008/Server 2003 network operating systems. Yojna has not qualified this application in the Novell environment.

* Supported versions of Windows must have the ability to be joined to a Windows Server domain with Active Directory services.

Operation System Control

You will need to sign in to your desktop as an Administrator in order to install the software. If you do not have administrator rights, please contact your local desktop support.

All operating system level user accounts must have "Full Control" permissions assigned to the CD-ROM Image Viewer folder, subfolder and files in order for CD-ROM Image Viewer to operate correctly.

The "Full Control" permissions also apply to folders and files installed in a "Shared Mode" as well as all application folders/files stored on mapped network drives.

The two application files that are stored in <winnt>/System32, FORMAIDE.OCX and FORMAIDE.DBG require "Full Control" permissions.

Installation Instructions

Overview

These instructions provide you with the step-by-step instructions on how to install the CDROM Image Viewer software. There are two convenient methods, you can download the software via the JPMorgan Chase online web link, or you can install from a CD.

Note: If you are upgrading from an older version, please ensure that you make a full backup of your existing CD-ROM Image Viewer installation.

Installation via Web

The following steps/actions are used when installing the CD-ROM Image Viewer via the Web:

Step	Action
------	--------

- | | |
|---|---|
| 1 | Open your Internet browser program and enter our Web site:
http://www.jpmorgan.com/visit/CD-ROM Image Viewerer |
| 2 | Select CD-ROM Image Viewer Install link |
| 3 | Select Viewer Download |
| 4 | Select Run when asked if you want to Run or Save the file. |

A security warning will display. Select **Run**.

Within the WinZip Self-Extractor dialog box that opens, select the **Browse** button and choose the location to save the files to. Select **Unzip**.

Note: You need to create a new folder as there are several files that are extracted in this process.

- | | |
|---|--|
| 5 | When the download is finished, open Windows Explorer and select the folder where you saved the downloaded files. |
|---|--|

Double click on the **Setup.exe** file. Select OK to begin the installation.

- | | |
|---|--|
| 6 | Click on Install or Next for each prompt window that appears. Accept the default values for all destination folders and settings required. Click Yes if prompted to allow the program Setup Launcher to make changes to the computer |
| 7 | After the viewer is installed, if you had a prior viewer installed, you will be prompted with the question 'Do you want to start data upgrade?' Select Yes ; this will migrate your prior registered data to make the images available in the new viewer. |

Installation via CD-ROM

The following steps/actions are used when installing the CD-ROM Image Viewer via CDROM:

Step	Action
1	Load the CD with the software into your CD-ROM drive.
2	If the installation does not run automatically, open Windows Explorer, or use Start Run Browse , and navigate to your CD-ROM drive.
3	Within the CD-ROM drive, double click on the folder named SETUP . Double click on the zip file named CD_ROM_I . Within the WinZip Self-Extractor dialog box that opens, select the Browse button and choose the location to save the files to. Select Unzip . The installation process will install the viewer and any other required components on your hard drive. Click on Install or Next for each prompt window that appears. Accept the default values for all destination folders and settings required. Click Yes if prompted to allow the program Setup Launcher to make changes.
4	After the viewer is installed, if you had a prior viewer installed, you will be prompted with the question 'Do you want to start data upgrade?' Select Yes ; this will migrate your prior registered data to make the images available in the new viewer.

First Time Use

Step	Action
1	Double-click on the CD-ROM Image Viewer v8.x icon on your desktop.
2	<p>If you migrated data in the First Time Installation steps, your old user ID and password migrated over and you will be prompted to enter them.</p> <p>If you did not migrate data, a window will open prompting you to create a user ID and password.</p> <p>Once the user ID and password have been entered, a second window will open for entry of two security questions for password resets. Please enter questions and answers that are easy to remember.</p> <p>CD-ROM Image Viewer v8.x has stricter password validation requirements than previous versions. Passwords in version 8 must contain:</p> <ul style="list-style-type: none">• Alphabetic characters (A – Z, a – z)• Numeric characters (0 – 9)• Special characters. Any character except the space character (spacebar) may be used. <p>Note: Passwords are <u>case-sensitive</u>.</p> <p>For example, your password may need to contain 3 alphabetic characters, 1 numeric character, and 1 special character to be successfully validated.</p> <p>Note: The exact number of characters from a given character set can be configured under Administration System Configuration Password.</p>

Setup of Users

User Functionality

In CD-ROM Image Viewer Standard v8.x, application functionality and access rights can be assigned at either the group level or the individual user level. All application users are assigned to at least one group. Groups and users are defined in the CD-ROM Image Viewer Profile Manager component.

Additional application configuration is performed in the CD-ROM Image Viewer System Configuration component. Settings defined in System Configuration are applied to all users.

Signing On

There are two methods of signing on to CD-ROM Image Viewer Standard v8.x, depending on whether your application user ID is defined as a local user or as a network user. All application user IDs are defined in the Profile Manager component.

- Local user: a local user exists only within the CD-ROM Image Viewer application.
- Network user: a network user is imported into Profile Manager from Windows Active Directory. Network users only need to sign on to their computer; the CD-ROM Image Viewer application will start automatically when launched, provided that your Windows user ID has been imported into Profile Manager. **Note:** network users have the option of signing off CD-ROM Image Viewer and logging back on as a local user. To do this, select the File | Sign On As menu option.

Note: if the initial administrator password becomes disabled and you have no other user IDs available to access Profile Manager, you will need to contact either the JPMorgan chase. It is suggested that you create at least one additional administrator user account.

Note: Valid users must be predefined in the CD-ROM Image Viewer database using Profile Manager. As a security measure, the user name and password are validated against the database.

Network User Signon

CD-ROM Image Viewer network users are user IDs that have been imported into Profile Manager from Windows Active Directory. Network user IDs are then assigned to groups just like local users, and application functionality is determined by group membership.

Network user signon procedure:

- a) Log on to your computer using the standard Windows logon process.
- b) Double-click the CD-ROM Image Viewer icon in the CD-ROM Image Viewer program group folder. CD-ROM Image Viewer will start and display the application main screen. The CD-ROM Image Viewer signon dialog box is bypassed.

Network users can log out of their session and log back on to CD-ROM Image Viewer using a local user ID.

Adding a Local User

This section describes the procedure for adding a local user.

- a) On the Profile Manager tree, right-click the Users node and click Add User from the popup menu.

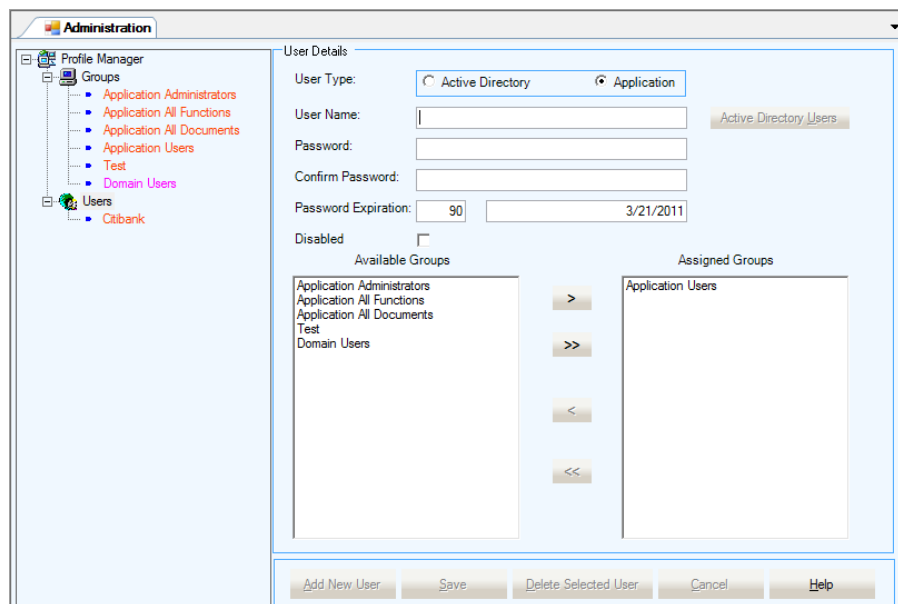


Figure 59: User Details page – Add User mode

- b) In the User Details frame, enter the following:
 - User Type: select the Application option.
 - User Name: enter the user name. **Note:** alphanumeric characters (A – Z, a – z, 0 -9) should only be used for user names.
 - Password: enter the user's password.
 - Confirm Password: re-enter the password.
 - Password Expiration: the password expiration interval is defined on the System Configuration | System | Password page. This value cannot be changed in Add User mode.
 - **Note:** when a user is added, the password expiration date will show as the date on which the user was created. The password expiration date will be updated after the user has successfully authenticated and changed their password.
 - Disabled: place a check in the box if the user should initially be disabled e.g. for a user that is currently on leave.
 - Groups: assign any additional groups to which this user should belong. **Note:** all new users belong to the Users group by default.
- c) Click Save to save the new user account. A confirmation message will be displayed indicating that the user record was saved successfully.

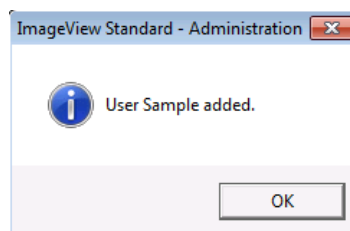


Figure 60: Confirmation message

Adding a Network User

The CD-ROM Image Viewer administrator may find it more convenient to first create a network group. CD-ROM Image Viewer v8 can identify the users who belong to the network group and automatically add them to the list of network users when they start CD-ROM Image Viewer for the first time.

This section describes the procedure for adding a network user from Windows Active Directory. Do the following:

- a) On the Profile Manager tree, right-click the Users node and click Add User from the popup menu. The User Details page will now be visible.
- b) In the User Details frame, enter the following:
 - User Type: select the Active Directory option. The Active Directory Users button will now be enabled
 - Click the Active Directory Users button. The Active Directory Users browse dialog box will be displayed.

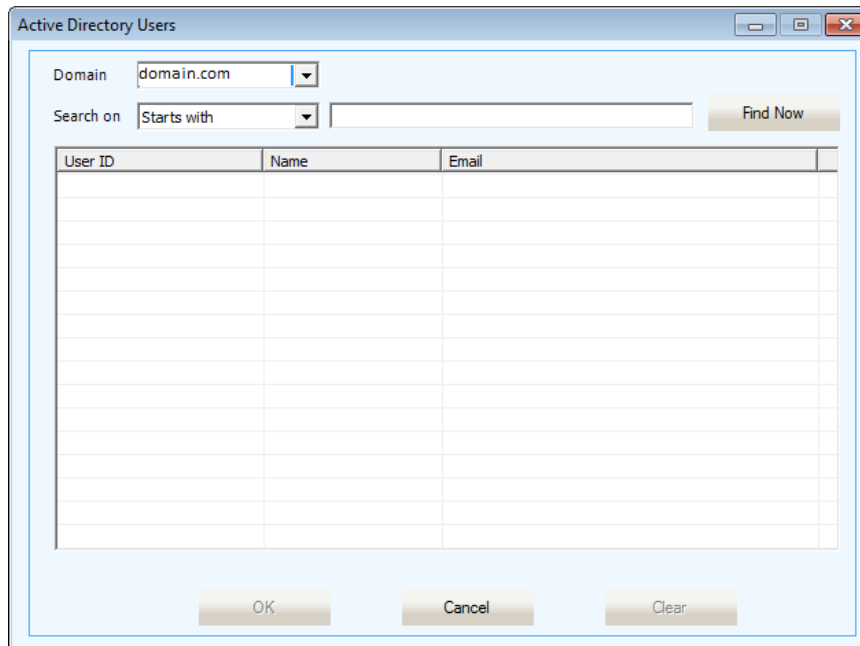


Figure 61: Active Directory Users browse dialog box

- i) Domain: select the desired Active Directory domain from the dropdown list.
- ii) Search on: you can search for specific users from the selected domain by choosing an option from the dropdown list and then entering the desired text into the text box to the right.
 - Starts with: search for all users whose user name begins with the specified text.
 - Is Exactly (equals): search for a user whose user name contains the exact specified text.
 - Contains: search for all users whose user name contains the specified text.
 - Alternatively, to find all users for the selected domain, just leave the text box empty

After making your selection, click the Find Now button. The Active Directory Users dialog box will refresh to show any matching results.

If the results displayed in the Active Directory Users dialog box do not contain the user(s) that you are looking for, change the selections, and/or enter different text into the Search on text box, and search again.

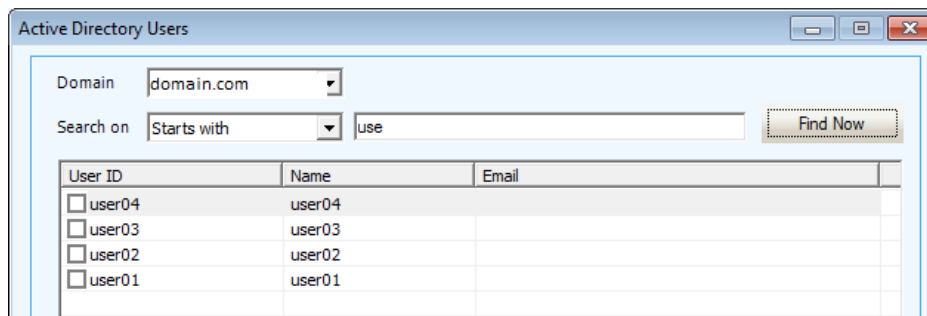


Figure 62: Active Directory dialog box with results displayed

- c) Click the OK button to close the Active Directory Users dialog box. A confirmation message will be displayed indicating that the user record was saved successfully.
- The selected user ID, along with their domain name, will be entered into the User Name text box.
 - Password: a password does not need to be entered for a network user.
 - Confirm Password: a password does not need to be entered for a network user.
 - Disabled: place a check in the box if the user should initially be disabled, e.g. for a user that is currently on leave
 - Groups: assign any additional groups to which this user should belong. **Note:** all new users belong to the Users group by default

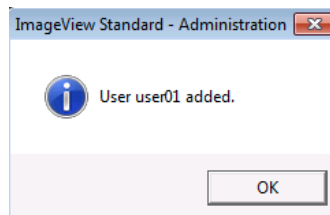


Figure 63: Network user added confirmation message

Modifying a User

Modifications to a user profile are made from the User Details page for a given user (this page is the standard view mode for a user profile).

To modify a user profile:

- On the Profile Summary screen, expand the Users node and highlight the user to be modified from the list of users.
- The User Details screen will appear.

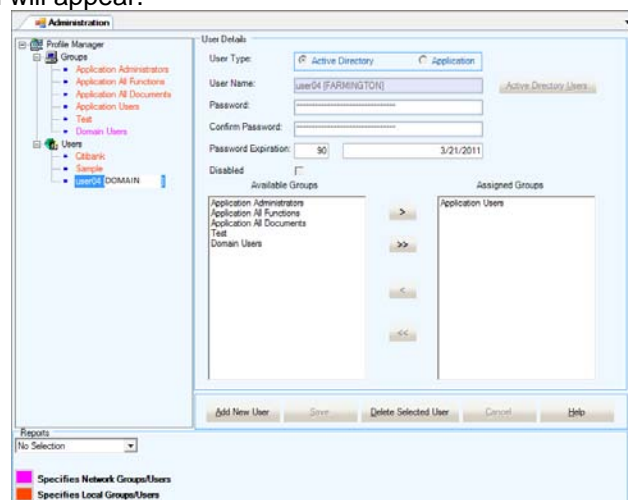


Figure 64: User Details page

- c) Use the mouse or Tab key to move from field to field and to modify information as required. Refer to the appropriate sections on adding a user profile if you need further information.
- d) Click the Save button to save your changes. A confirmation message will be displayed: click Yes to save the modifications.

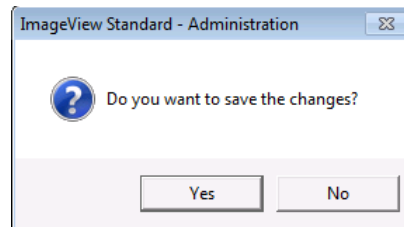


Figure 65: Save changes confirmation message

- e) A message will be displayed indicating that the changes were saved

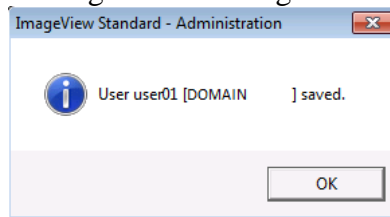


Figure 66: User modified confirmation message

Deleting a User

A user profile can be deleted at any time. To delete a user:

- a) On the Profile Summary screen, expand the Users node and highlight the user to be modified from the list of users.
- b) The User Details screen will appear.
- c) Click the Delete Selected User button. A confirmation message will appear. Click Yes to confirm the deletion or No to cancel.

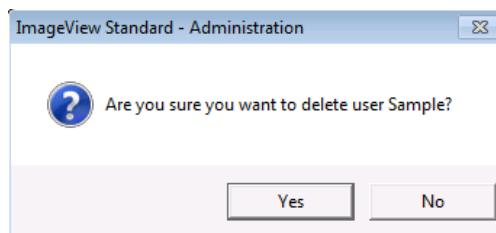


Figure 67: Delete user confirmation message

- d) A confirmation message will be displayed, indicating that the user record was successfully deleted.

Enabling/Disabling User Accounts

An administrator can enable or disable a user account as necessary.

Note: Users can disable their accounts by entering an invalid password a pre-defined number of times.

To disable a user account:

- a) Highlight the user name and right-click it to display the User Details page, and then click the Disable checkbox.
- b) Click the Save button.

To enable a user account:

- a) Highlight the user name and right-click it to display the User Details page, and then remove the check mark from the Disable checkbox.
- b) Click the Save button.

Quick Reference User Guide

Register a CD

The following procedures support the process to register a CD:

Step	Action
1	Open the Viewer by double clicking on the CD Viewer v8.3 icon.
2	Insert your CD into the CD-ROM drive. Note: if you are going to register a multi-volume set from a CD-ROM drive, ensure that the last disk of the set is loaded.
3	Click on the Data Manager option on the left side of the screen.
4	Click on Register from the Volume Operation drop down menu at the top of the screen or click on the Register icon below the Volume Operation drop down menu.
5	Select Browse to find the drive/folder that contains the CD-ROM images then select OK
6	If the CD-ROM has a Decryption Key that has not previously been entered into this loaded version of the CD-ROM Image Viewer you will be prompted to enter it. Enter the 24-character CD Data Decryption Key provided for the CD-ROM. Only three attempts are allowed, so enter the key exactly as provided.

Note: If you have a CD-ROM profile that has more than one CD for a given cycle, you only need to register the last CD.

Unregister a CD

The following procedures support the process to unregister a CD.

Step	Action
1	From the Data Manager screen, select/highlight the volume you wish to remove from the list of registered entries.
2	Select the Unregister icon or right click and unregister.
3	Select Yes from the confirmation box.

Run a Query

The following procedures support the process to run a query for paid checks:

Step	Action
1	From Paid Items
2	Select the CD volume you wish to search, click the drop down button to sort thru CD Volumes. To fine tune the search, the field name column provides multiple search drop downs, including account, dollar amount, check number, etc.
3	Select Execute and Close. The Check Query screen opens to display the results of the query.

View an Image

The following procedures are useful when viewing an image:

Step	Action
1	From the Query Results box, double click on the item you would like to view.
2	There are list of icons above the check that will allow you to switch to the back of the image, enlarge the image, print the image or copy to the clipboard for pasting into another application.
7	You can view the Details of an item by selecting Document, View Details.
8	To close the screen select Return.

Export Check Index With/Without Images

The following procedures are useful when exporting check indexes with and without images:

Step	Action
1	Run a Query for desired records to export.
2	Select Export to extract a check index record file in CSV format.
3	A message box will open that displays the total number of items to be exported. Select Yes to continue.
4	Select the file name and path for saving the export file. Note: Items are exported in Comma Delimited format.
5	Select Export All Images to extract check image and index record files.
6	A message box will open that displays the total number of check images and records to be exported. Select Yes to continue.
7	Select the format for the check images (BMP, JPEG, PDF, PNG, TIFF). TIFF and PDF formats have the "append" option, which will export the images within a single file. If append is not selected, all images will be in individual files. A text file for the check record information will also be created. Enter a file name and choose the path for saving the export file.

Storing Both Check Index and Images on a Hard Drive

Overview

CD-ROM Image Viewer has functionality that allows you to add your check images along with your index to your hard drive (local or shared). Adding your images to your hard drive means you will no longer have to insert a CD to view a check image after a query. These steps provide you with the instructions on how to maintain both your check index and images on a hard drive using CD-ROM Image Viewer.

Step One: Use the **Volume Registration Configuration** function to default your hard drive as the location for your images. This is only done once.

The next two steps are done each time you wish to register new CD(s).

Step Two Copy the CD files to your hard drive via the **Volume Copy** function.

Step Three Register the CD(s) via the **Mass Volume Operation** function.

Volume Registration Configuration

Before you can register your CD(s) to your hard drive you must set the hard destination folder as the default for your image files. We recommend you first open a new folder for the storage of your CD image files within your hard drive, then perform the following steps:

Step	Action
1	From the CD-ROM Image Viewer Main Menu Select Tools .
2	From the Tools Menu select CD-ROM Image Viewer – Data Manager .
3	From the View Menu select Configuration and Volume Registration .
4	In the Volume Folder click on Add .
5	Using the Browse feature select the folder within your hard drive that you want your image files to be stored. Next check off the box for Subdirectory Search below the browse window. Click OK . Click OK again to confirm.

Now you are ready to begin using the CD-ROM Image Viewer Volume Copy function.

Volume Copy Instructions

Volume Copy is a separate utility outside of the viewer. It is included in the upgrade but must be accessed separately. You will have the same user ID and password for Volume Copy. Volume copy is used to copy the image files of one or more CDs to your hard drive in the folder you set up in Step One:

Step	Action
1	From your workstation, select Start, Programs, CD-ROM Image Viewerer 7.04.24 or higher and then Volume Copy .
2	Sign in to Volume Copy using your CD-ROM Image Viewer User ID and password.
3	From the Main Volume Copy Menu select File and Copy .
4	From the Browse window select the CD-ROM to be copied as the Source and the destination should be the location that you entered in the " Volume Copy Registration " section above.
5	Insert the first CD-ROM to be copied and click Start .
6	Continue with the next CD-ROM.

Registration of Multiple CD-ROMs

After Volume Copy is completed, you will need to register all of the new CDs copied to your hard drive so that you may view them using CD-ROM Image Viewer.

Step	Action
1	Log in to CD-ROM Image Viewer and from the Main Menu select Tools .
2	From the Tools Menu select CD-ROM Image Viewerer – Data Manager .
3	From CD-ROM Image Viewerer – Data Manager select Mass-Volume-Operation and New . This will register all CDs located in the destination that you selected that have not been previously registered. If you want to register all CDs select All .
4	When the registration process has completed you will receive a confirmation box "Mass Registration Completed Successfully." Click OK and then click OK again when the volumes registered are displayed.

You can now view these images and indexes without loading the CD

Detailed User Guide

Data Manager

Data Manager is the CD-ROM Image Viewer component used to perform CD volume management functions, including CD volume registration and un-registration.

Functionality

Data Manager provides the ability to manage check or document transaction data contained on multiple volume sets. It allows enterprise-wide access to the transaction(s) and image data from any LAN / WAN connected workstation at anytime. The program assures manageability and security of volume sets by centralizing and controlling access.

The Data Manager program has the following functionality:

- Define options to track volume information and folder location.
- Register, unregister, and delete volumes.
- Attach an identification label to a single volume set or to individual discs of a multi-volume set.
- Perform operations on multiple volume sets at one time e.g. register multiple volume sets, unregister multiple volume sets.
- Import files from the financial institution that can be processed and registered as CD volume data.

Access to Data Manager can be restricted to assigned users through the Profile Manager application, using function templates.

Typically, the first step is to configure the registration options and then volume sets are registered and/or files can be imported and registered. After this procedure is complete, a number of actions are available on the volume sets using the toolbar buttons and associated menu bar items.

The registration options consist of the following:

- Defining the CD-ROM drives and/or disk folders from where CD volumes are registered. In Data Manager, these locations are known as volume folders.

The Data Manager Summary screen (figure 85) includes as its basic module the ability to:

- Configure volume registration options.
- Register, unregister, and delete volume sets.
- Attach volume set labels.
- Attach volume labels.
- View volume set details.
- Perform mass volume operations.
- Refresh a volume location.
- Import data files and register them as volume sets.
- Import exception files for ARP processing and register them as volume sets.
- View an overall summary report on the status of volume sets.

Items in the Summary screen main window are displayed in grid form.

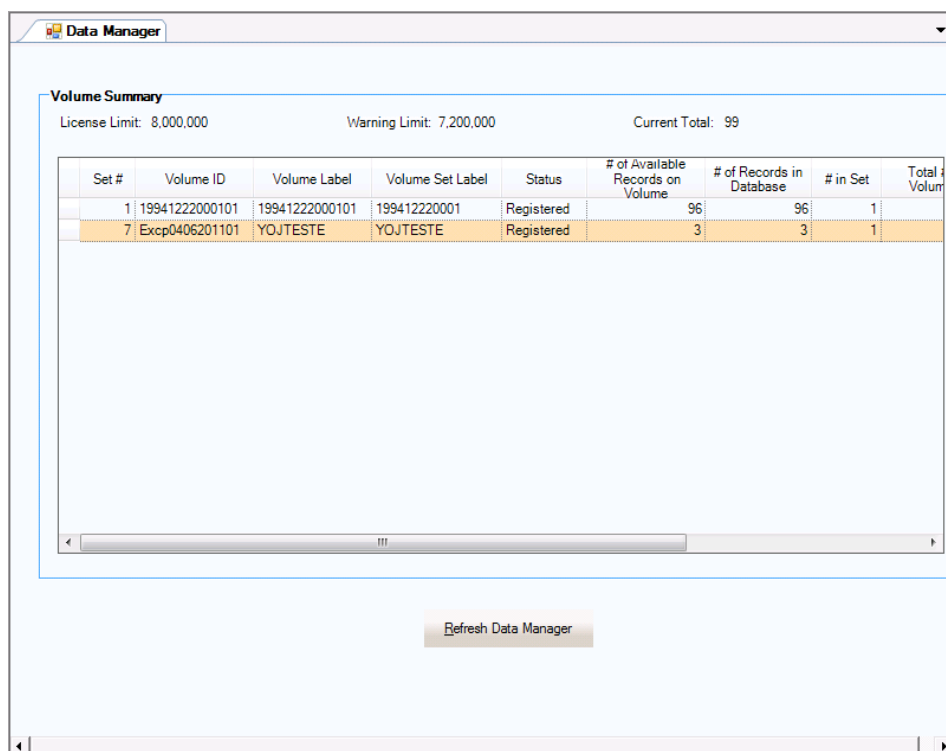


Figure 85: Data Manager Summary screen

The following information is displayed on the Summary screen:

- **License Limit:** this field indicates the total number of registered documents that your installation of CD-ROM Image Viewer is licensed to support. **Note:** the License Limit is pre-configured for the financial institution.
- **Warning Limit:** this field lists the threshold for which a warning message will be displayed indicating that you are approaching your license limit. The Warning Limit is typically configured to appear when you approach 90% of the license limit.
- **Current Total:** this field lists the current total of documents registered into the system.
- **Set #:** this is a sequential number assigned to each volume set as it is registered. **Note:** after unregistering volume sets, gaps may appear in the existing sequence numbers. This is to be expected.
- **Volume ID:** the volume ID assigned to a given disk by the financial institution when the CD was created.
- **Volume Label:** a volume label is a text label that can be assigned to any individual CD volume for identification purposes. The default volume label is the volume ID.
- **Volume Set Label:** a volume set label is a text label that can be assigned to a volume set for identification purposes. The default volume set label is the volume ID.
- **Status:** the current registration status for a volume set.
- **# of Available Records on Volume:** the number of index records on a given volume. **Note:** for multi-disk volume sets, each disk will show the total number of index records for the set, not the individual volume within the set.
- **# of Records in Database:** the number of index records that were actually imported into the database. **Note:** this field may be less than the value displayed in the # of Available Records on Volume field. If it is less, it indicates that there are defective index records on the volume.
- **# in Set:** the position of a volume in a given volume set i.e. disk 3 of a 5-volume set.

- **Total # of Volumes:** the number of volumes in a given volume set.
- **Last Operation On:** the date/time on which the last action was performed on a volume e.g. registration, unregistration, re-registration.
- **Volume Folder:** the current volume folder where the volume is stored. This field will show either a hard disk location (path), or the CD drive and computer from where the volume was registered.

The buttons on the toolbar located just below the menu represent the basic Data Manager functions:















	Exit: exits the application.
	Volume Configuration: displays the Volume Configuration dialog box
	Attach Volume Label: displays the Attach Volume Label dialog box
	Attach Volume Set Label: displays the Attach Volume Set Label dialog box
	Register: register a volume set or an imported file.
	Register All: register all available volume sets or import files.
	Re-register: re-register a volume set or an imported file.
	Re-register All: re-register all available volume sets or import files.
	Unregister: unregister a volume set.
	Unregister All: unregister all volume sets.
	Delete: delete an unregistered CD volume set.
	Delete All: delete all unregistered CD volume sets.
	Reset Window Layout: restores the default window positions
	Help: access application help.

Table 2: Toolbar buttons on the Data Manager Summary screen

Refresh Data Manager button: click this button to refresh the Summary screen.

Volume Sets

In CD-ROM Image Viewer, document image CDs are known as volume sets. When registering multi-volume sets, the last disk of the set typically is used to register the volume set as the last disk contains all of the index information that ties the set together.

Copying Volumes to Hard Disk

CD-ROM Image Viewer supports copying CD volumes to hard disk or SAN devices (**Note:** this is an optional feature). This functionality optimizes the process of retrieving image data, as you do not need to insert a CD to view transaction image data – the image data will be stored to hard disk as part of the CD image and will be automatically returned to the user when the user queries for an image stored to hard disk.

There are two methods for copying volumes to hard disk:

1. Using the CD-ROM Image Viewer Volume Copy application. This is the preferred method, as Volume Copy takes care of creating the folder structure and copies any hidden files on the CD to the hard disk. For more information on using Volume Copy, please refer to section 5 of this manual.
2. Using Windows Explorer. If you use Windows Explorer, you must manually create the folders for each CD volume, and Windows Explorer must be configured to show hidden files (this is done by selecting Tools | Folder Options | View on the Windows Explorer menu). **Note:** Failure to copy any hidden files on the CD will result in registration errors when Data Manager attempts to register the volume.

Note: when copying CD volumes to hard disk, *a unique folder must be created for each CD volume*. This applies to single disk volumes and multi-disk volumes i.e. when copying multi-disk volumes to hard disk, each disk of the set must be copied into a unique folder – do not copy each disk into the same folder.

Note: when calculating disk space requirements, consider that a full CD volume can contain up to 650 – 700 MB of data.

Distributed Mode Considerations

If you have installed CD-ROM Image Viewer in distributed mode, volume folders will need to have network share names and permissions assigned to them in order for remote users to access a CD-ROM drive and register/unregister CD volumes. Read and Write permissions will minimally be required on a volume folder.

For example: you have installed CD-ROM Image Viewer to four workstations in a distributed mode configuration, and users would like to use computer A to register/unregister CD volumes, and also to view images from their query results, while working from computers B, C, and D. On computer A, the CD-ROM drive(s) or designated folders on the hard disk will need to have shares assigned before the users on computers B, C, and D define the default volume folder(s) on their computer.

If CD volumes are going to be copied to hard disk, the designated locations must minimally have Read and Write permissions assigned, as users will be writing data to this location when volumes are copied.

Running Data Manager

To execute the Data Manager application, select Data Manager from the Application pane. **Note:** If your user ID does not have access to Data Manager, the Data Manager option will be hidden.

Volume Configuration

Data Manager allows you to define the drives/paths used for registering and storing the volume data. Before executing Data Manager in standard usage, you should define the basic configuration settings for volume registration.

To configure Data Manager, select Edit | Volume Configuration from the menu, or click the Volume Configuration toolbar button.

Adding Volume Folders

Volume folders are the source locations where Data Manager will look for new volumes to be registered. CD-ROM Image Viewer can support several locations as a volume folder source.

The following is the typical procedure for adding a volume folder in CD-ROM Image Viewer:

- a) On the Data Manager page (figure 85), select the Edit | Volume Configuration menu option
- b) The Volume Configuration dialog box will appear.

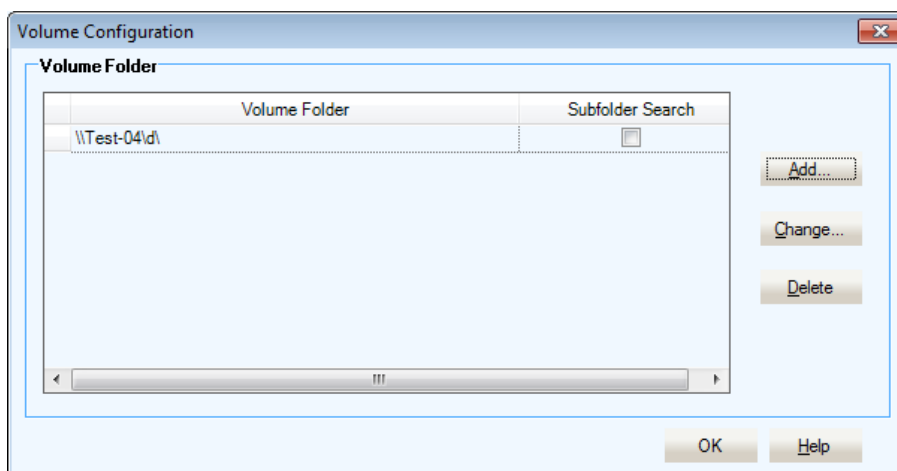


Figure 87: Volume Configuration screen

- c) Click the Add button. The Specify Volume Folder dialog box will appear.

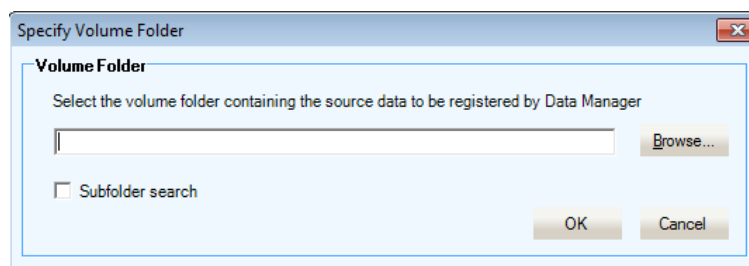


Figure 88: Specify Volume Folder dialog box

- d) Either type the desired path, or click the Browse button to select a folder. **Note:** if selecting a CD-ROM drive (either local or remote), a valid document image volume needs to be loaded into the drive.

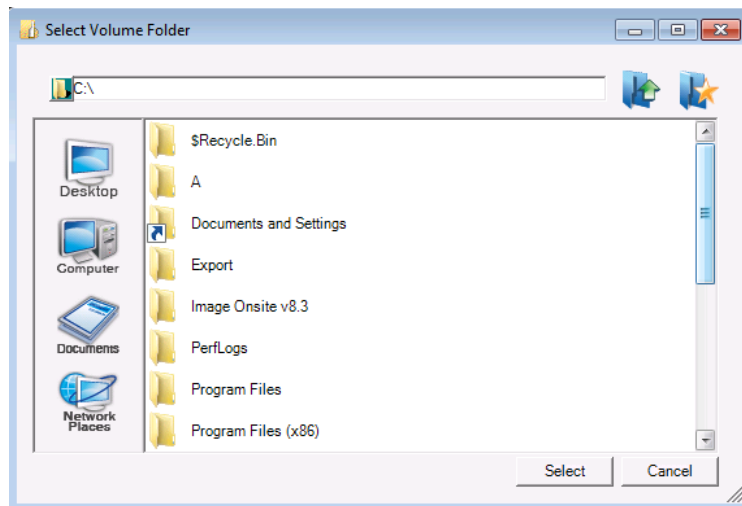


Figure 89: Select Volume Folder dialog box

- e) Select the desired folder from the directory tree. Expand tree nodes as necessary to see nested folders.
- f) Click the OK button to return to the Volume Configuration screen after selecting the desired folder.
- g) Enter a check mark in the Subfolder Search checkbox on the Specify Volume Folder screen to search all subfolders when automatically registering volume sets, if desired

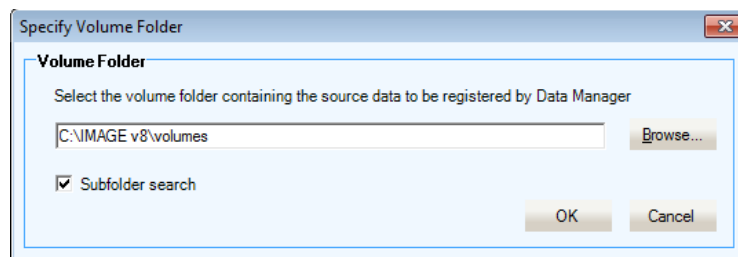


Figure 90: Specify Volume Folder dialog box with Subfolder Search enabled

- h) Click the OK button to enter the configuration. The added volume folder is saved into the system. **Note:** The program will automatically return to the Volume Configuration screen (figure 87).

Repeat as necessary to add additional volume folders.

Subfolder Search

The Subfolder Search option allows CD-ROM Image Viewer to search for and register new volumes at a specified hard disk location, where each volume is stored in a subfolder of the specified folder.

You would define the path [\\<server>\test\volumes](#) as a volume folder, and the Subfolder Search option should be enabled in order to allow Data Manager to find and register each volume, which would be in a separate subfolder under [\\<server>\test\volumes](#).

Note: Subfolder Search can only be used when a hard disk location or CD jukebox is specified as a volume folder. It cannot be used when a single CD-ROM drive is defined as a volume folder.

Modifying Volume Folders

To change a volume folder definition, do the following:

- a) Open the Volume Configuration dialog box to the Volume Folder page.
- b) Highlight a volume folder and click the Change button. The Modify Volume Folder dialog box will be displayed.
- c) Enter the new path, or enable/disable the Subfolder Search option.
- d) Click OK to save the change.

Deleting Volume Folders

To delete a volume folder, do the following:

- a) Open the Volume Configuration dialog box.
- b) Highlight a volume folder in the grid and click the Delete button.
- c) A confirmation message will be displayed. Click Yes to delete the entry.

Security Keys

For an added layer of security all CD-ROMs are encrypted requiring a security key. This key must be entered into Data Manager when you register the CD.

To add security keys:

- a) Begin registration of an image volume.
- b) If the image volume contains a security key, the Add Security Key dialog box will appear.

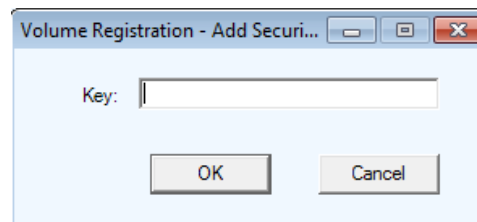


Figure 93: Add Security Key dialog box

- c) Key: enter the security key provided by the FI.
- d) Click OK to save the key. The security key will be saved into the CD-ROM Image Viewer database.

Attach Volume Label

Data Manager allows you to assign reference labels to volume sets and individual volumes. You may find this feature to be rather useful, as many users find volume IDs to be cryptic, particularly when you have a large number of CDs to search through. We suggest attaching labels at the time of volume registration to minimize the potential for later confusion.

This section describes the procedure for attaching a volume label. Volume labels are applied to individual volumes within a set, and can be applied to single disk volume sets as well as multi-disk volumes.

To assign a volume label to a volume:

- a) Open the Data Manager Summary screen
- b) On the main grid, select a volume set and do one of the following:
 - Click the Edit | Attach Volume Label menu option
 - Right-click the row and click the Attach Volume Label option from the popup menu that is displayed.
- c) The Attach Volume Label dialog box will appear. By default, the current volume ID will be displayed. Type in the desired label name, e.g. "Test volume label" (quotes are not required) and click OK.

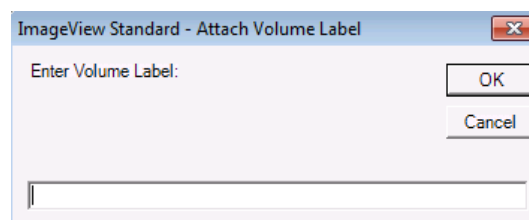


Figure 95: Attach Volume Label dialog box

- d) The Volume Label field on the summary grid will be updated to show the new volume label.

Attach Volume Set Label

This section describes the procedure for attaching a label to a volume set. As mentioned previously, a volume set can consist of either a single disk set or a multi-disk set. **Note:** we recommend attaching volume set labels for ease of identifying volumes when using the Search Criteria feature.

To assign a label to a volume set:

- a) Open the Data Manager Summary screen
- b) On the main grid, select a volume set and do one of the following –
 - Click the Edit | Attach Volume Set Label menu option
 - Right-click the row and click the Attach Volume Set Label option from the popup menu that is displayed.
- c) The Attach Volume Set Label dialog box will appear. By default, the current volume ID will be displayed. Type in the desired label name, e.g. "Test volume label" (quotes are not required) and click OK.

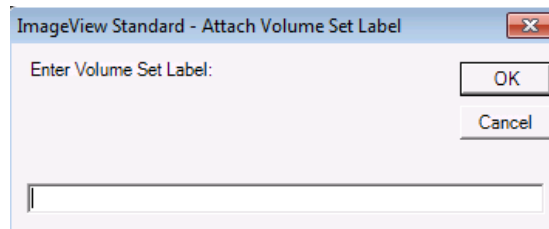


Figure 96: Attach Volume Set Label dialog box

- d) The Volume Set Label field on the summary grid will be updated to show the new volume label.

Refresh Volume Location

The Refresh Volume Location function is used to update the volume folder location for a volume, and therefore can be used as an alternative to unregistering and then re-registering a volume set to account for the need to change volume folder locations. This function should be used to update the locations for:

- Volumes originally registered from a CD drive, and which you would like to instead copy to hard disk. In this scenario, you must first copy the volume(s) to disk before running Refresh Volume Location.
- Volumes that have been copied to disk, and subsequently moved to a different folder or computer.

To update a volume location, do the following:

- a) Copy the volume(s) to disk, or move the volume(s) to the desired new folder, if you have not already done so.
- b) On the Data Manager summary grid, highlight the row containing the volume to be refreshed, and use one of the following methods:
 - Select the Edit | Refresh Volume Location menu option
 - Right-click the row on the grid and select Refresh Volume Location from the popup menu.
- c) The Refresh Volume Location dialog box will be displayed. Enter the new path containing the volume that has been moved, or click the Browse button to locate this path. **Note:** when updating a folder stored to hard disk, you should specify the path by the volume ID. For example, you have moved volumes to a folder named "[\\server B\\volumes](#)", which contains subfolders "volume 1", "volume 2", ..., etc. You would select "[\\server B\\volumes\\volume 1](#)" as the path, not [\\server B\\volumes](#).
- d) Click the Save button to update the volume folder location. A confirmation message will be displayed after a successful update.
- e) Repeat as necessary for additional volumes.

Volume Operation Menu Options

The Volume Operation menu provides access to the following functions:

- Register
- Register All
- Re-Register
- Re-Register All
- Unregister
- Unregister All
- Delete All

Register

The Register function is best used for registering single volumes from a CD-ROM drive. To register several volumes from volume folders on disk, we recommend using the Register All option.

Registration is the process of importing the index information from a volume set into Data Manager. After this process is complete, a volume set is available for querying and document images may be viewed.

Note: A volume set must be registered before any queries can be executed against the data contained on the set.

To manually register a volume set, do the following:

- a) Load a volume set into a CD-ROM drive, or copy the set to a volume folder on hard disk using either Volume Copy or Windows Explorer. **Note:** if you are going to register a multi-volume set from a CD-ROM drive, ensure that the last disk of the set is loaded. Data Manager will prompt you to load the last disk of a multi-volume set if it detects an incorrect volume during registration.
- b) Either click the Volume Operations | Register menu option or click the Register button on the toolbar. The Browse for Folder dialog box will appear.
- c) Select the appropriate volume folder from the folder tree and click OK.
- d) When registration begins, a progress meter will appear.
- e) A confirmation message will be displayed after successful registration. Click OK to close the message box.
- f) The Data Manager summary screen will be updated to show that the volume has been added to the list of registered volumes.

You may click Cancel at any time to abort the registration process.

Note: If any errors occur during registration, corresponding messages will be displayed onscreen as well as written to the log files. Errors may occur due to such factors as:

- Attempting to register a volume set that has already been registered.
- Attempting to register a volume set containing an unsupported image format.
- Defective media (scratches, dirt, cyclic redundancy errors during read, etc.).
- Defective data (errors introduced during the CD creation or image/index data capture processes, etc.)

Refer to the <date>_Client_VolumeRegistration.log and <date>_Server_<host_name>_Volume Registration.log log files, and provide those files to technical support in order to troubleshoot registration errors.

Note: If you attempt to register a volume set without supplying the decryption key, the Invalid Security Key message box will appear.

If this should occur, click OK to close this message box - registration will be aborted. Add the security key into the Data Manager configuration and then retry to register the volume set.

Register All

The Register All option is best used for registering multiple volume sets that have been copied to disk. Before using Register All, ensure that you have defined your volume folders.

The Register All function can also be used to import several flat files, which will be processed as if they were image CDs. Once loaded, such imported files can then be queried and index/image data retrieved.

To register all volumes, do the following:

- a) Either click the Volume Operations | Register All menu option or click the Register All button on the toolbar.
- b) Progress meters will be displayed for each new volume as it is registered.
- c) When all new or added volumes have been registered, a status message will be displayed. Click OK to close this message.
- d) The summary screen will be updated to show the new registered volumes after all new volumes have been processed by Register All.

Re-register

The Re-register function is used to reload a single volume set after it has been unregistered.

To re-register a volume

- a) Select a volume in the summary grid that has status "Unregistered"
- b) Do one of the following:
 - Select the Volume Operation | Re-register menu option
 - Click the Re-register toolbar button
 - On the summary grid, right-click the selected volume and select Re-register from the popup menu.A confirmation message will be displayed: click Yes if you want to re-register the volume.
- c) The volume set will be re-registered, and a confirmation message will be displayed after registration has completed.

Re-register All

The Re-register All function is used to reload several volume sets after they have been unregistered.

To re-register several volume sets

- d) Select a volume in the summary grid that has status "Unregistered"
- e) Do one of the following:
 - Select the Volume Operation | Re-register All menu option
 - Click the Re-register All toolbar button
 - On the summary grid, right-click the selected volume and select Re-register All from the popup menu.
- f) The volume sets will be re-registered, and a confirmation message will be displayed after registration has completed.

Unregister

Unregistering a volume set deletes the index file created during registration and removes the set's data from the Viewer query search options. The program will still retain the source volume folder from where the set was registered, until a delete operation is performed.

To unregister a volume set, do the following:

- a) On the summary screen, select a registered volume set.
- b) Do one of the following:
 - Select the Volume Operation | Unregister menu option.
 - Click the Unregister button on the toolbar.
 - Highlight a row, right-click it, and select Unregister from the popup menu.
- c) A confirmation message will appear. Click Yes to unregister the volume set.
- d) Data Manager will display a progress meter while unregistering the volume set.
- e) A confirmation message indicating that the volume was successfully unregistered will be displayed. Click OK to close this message.
- f) The summary screen will be updated to show that the selected volume is now unregistered.

Unregister All

The Unregister All function will unregister all volume sets that are currently registered in Data Manager. The unregistration process will save the current volume folder location for each volume set that is unregistered. **Note:** use this function with caution, as unregistering all volume sets will prevent users from being able to retrieve any index or image data when they run queries in the viewer application(s).

To unregister all registered volumes:

- a) Select any row on the summary grid.
- b) Click the Volume Operation | Unregister All menu option, or right-click the grid and select Unregister All from the popup menu. A confirmation message will appear. Click Yes to continue.
- c) All activated volumes will be unregistered. The Data Manager summary screen will update to show the current volume registration status.

Delete

Volume sets that are no longer needed may be completely deleted from Data Manager, *after* such sets have been unregistered. All references to the set, including its original volume folder, will be deleted. The Delete function can only be used on unregistered volume sets.

Note: deleting a volume set does not delete the accounts contained in the set from the CD-ROM Image Viewer database. Also note that accounts cannot be deleted from the CD-ROM Image Viewer v8 database.

To delete a volume set, do the following:

- a) On the Summary screen, select an unregistered volume set.
- b) Do one of the following:
 - Select the Volume Operation | Delete menu option.
 - Click the Delete button on the toolbar.
 - Highlight the row, right-click it, and select Delete from the popup menu
- c) A confirmation message will appear. Click Yes to delete the volume set.
- d) A confirmation message will be displayed after successful deletion of the volume set. Click OK to close this message. The Summary screen will now be updated to show the current list of registered and unregistered volume sets.

Delete All

The Delete All function will permanently delete all volumes sets that are currently marked “Unregistered”. Deleted volumes will need to be re-registered into the system if their data is subsequently needed. The Delete All function can only be used on unregistered volume sets.

To delete all unregistered volume sets:

- a) Do one of the following:
 - Select the Volume Operation | Delete All menu option.
 - Click the Delete All button on the toolbar.
 - Highlight a row with status “Unregistered”, right-click it, and select Delete All from the popup menu
- b) A confirmation message will appear. Click Yes to continue.
- c) All unregistered volume sets will be deleted. The Summary screen will now be updated.

View Menu Options

The available menu options are:

- Volume Details.
- Volume Set Report.

Volume Details

The Volume Details screen provides information about the data contained on a selected volume set, such as the type of data, the number of records, available account numbers and so on. **Note:** for multi-disk volume sets, volume details will display the number of index records and available accounts stored on each disk of the set.

To access Volume Details, highlight a row on the Summary grid and either select the Edit | Volume Details menu option, or right-click the row and select Volume Details from the popup menu.

On all Volume Details screens, click the < and > buttons to navigate between the tabs. Click Close to exit the Volume Details screen.

Paid Items Details

The following information is displayed for Paid Items volumes:

Account Number	From Serial Number	To Serial Number
123456789	0	999999999

Figure 117: Volume Details screen – Paid Items

- Document Types tab
 - Document Types: type of document e.g. paid items checks.
 - Record Count: total number of index records for the document type found on the selected volume.
- Paid Items Check tab
 - Total index records: this field displays the total number of corresponding paid items index records available on the volume.
 - Paid Items Accounts: this screen displays the account number(s) stored on the volume.
 - Paid Items Accounts Serial Number: this screen displays a range of check numbers associated with the account numbers stored on the volume.
- Reports tab
 - Report Accounts: this screen displays accounts stored on the volume which have associated reports.

Deposited Items Details

The following information is displayed for Deposited Items volumes:

- Tabs for each type of deposit data stored on the volume e.g. checks, tickets. Click each tab to display the corresponding data.
- Total index records: this field displays the total number of corresponding index records available on the volume, for each category of deposited item data e.g. checks, tickets.
- Deposit Accounts: this tab displays the accounts stored on the volume. Each category of deposit data will have an associated deposit account tab. **Note:** Paid Items (Disbursement) check accounts will also have an account serial number tab

Report Details

The following information is displayed for Reports volumes:

- Document Type: type of document e.g. reports.
- Record Count: total number of index records for the document type found on the selected volume.

Summary Report

The Summary Report option generates a report for all volumes known to Data Manager.

The following information is displayed in the Summary Report:

- **Set #:** this is a sequential number assigned to each volume set as it is registered. **Note:** after unregistering volume sets, gaps may appear in the existing sequence numbers. This is to be expected.
- **Volume ID:** the volume ID assigned to a given disk by the financial institution when the CD was created.
- **Volume Label:** a volume label is a text label that can be assigned to any individual CD volume for identification purposes.
- **Volume Set Label:** a volume set label is a text label that can be assigned to a volume set for identification purposes.
- **Status:** the current registration status for a volume set.
- **# of Available Records on Volume:** the number of index records on a given volume. **Note:** for multi-disk volume sets, each disk will show the total number of index records for the set, not the individual volume within the set.
- **# of Records in Database:** the number of index records that were actually imported into the database. **Note:** this field may be less than the value displayed in the # of Available Documents on Volume field. If it is less, it indicates that there are defective index records on the volume.
- **# in Set:** the position of a volume in a given volume set i.e. disk 3 of a 5-volume set.
- **Last Operation On:** the date/time on which the last action was performed on a volume e.g. registration, unregistration, re-registration.
- **Volume Folder:** the current volume folder where the volume is stored. This field will show either a hard disk location (path), or the CD drive and computer from where the volume was registered.

To close the Summary Report, click the “X” button located in the upper right corner of the Summary Report window.

Volume Copy

Functionality

CD-ROM Image Viewer supports copying CD volumes to hard disk or SAN devices. This functionality optimizes the process of retrieving image data, as you do not need to insert a CD to view transaction image data – the image data will be stored to hard disk as part of the CD image and will be automatically returned to the user when the user queries for an image stored to hard disk.

The CD-ROM Image Viewer Volume Copy application is used to copy CD volumes to the specified destination location on local hard disk, network shared folder, or SAN device. Volume Copy will copy each volume to a unique folder, using the CD volume ID as the folder name. Within this folder, Volume Copy creates a mirror image of the original CD, including any hidden files on the CD. All the user needs to do is specify the source location (CD-ROM drive) and destination location for each volume that needs to be copied to hard disk.

Volume Copy supports copying of single and multi-disk volume sets. When copying multi-disk volume sets, it is recommended that each CD be copied in order i.e. copy volume 1, then volume 2, through volume n (last disk of the set).

The Volume Copy summary screen provides the following functionality through the menu options:

- Copy CD volumes to hard disk.
- Move volumes to a different location.
- Delete CD volumes from hard disk.

To open Volume Copy, select Volume Copy from the Application pane. The Volume Copy summary screen will appear.

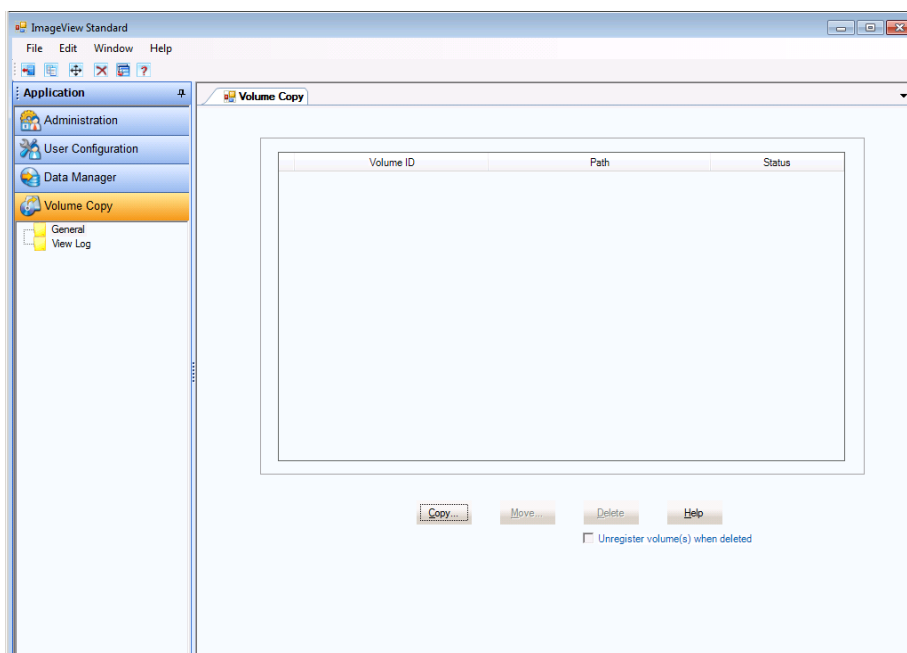


Figure 127: Volume Copy summary screen

Note: when Volume Copy is first used, the summary screen will be blank. After volumes have been copied to disk, the summary screen will show volumes copied to disk from the last logged-on session.

Copying a CD Volume

To copy CD volumes to a location on hard disk:

- a) Load a CD to be copied into the source drive.
- b) On the Volume Copy summary screen, click the Copy menu option or click the Copy button on the toolbar. The Volume Copy dialog box will appear.

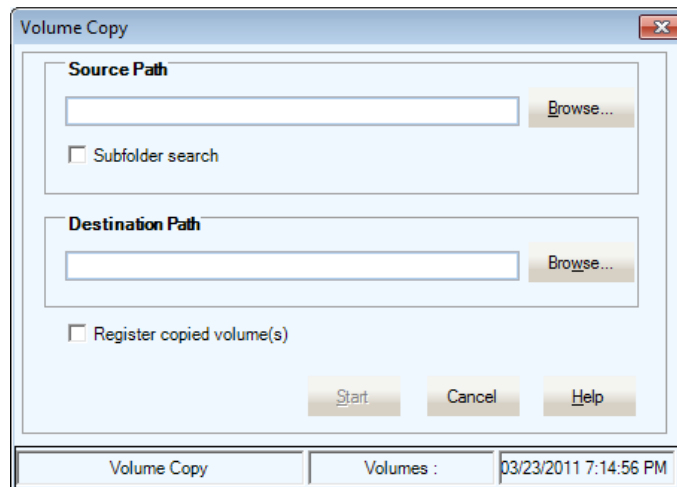


Figure 128: Volume Copy file location dialog box

- c) Source Path: enter the source location of the volume to be copied, or click the Browse button to display the Browse for Folder dialog box and search for the source drive/folder.
- d) Subfolder Search: enter a check mark if the source volume(s) is/are located in a CD jukebox. Otherwise, leave this box blank (unchecked).
- e) Destination Path: enter the destination folder where the volume image should be copied to, or click the Browse button to display the Browse for Folder dialog box and search for the destination folder.
- f) Register copied volumes(s): enable this checkbox to have Volume Copy automatically register volumes after they have been copied.
- g) Click the Start button to begin the copy operation. A progress meter will appear, indicating the copy status and estimated time remaining.
- h) When the copy process is complete, a confirmation message will appear. Click OK to close this message.
- i) Repeat steps a-h to copy additional CD volumes.
- j) Click Cancel at any time to abort the copy process once it has started.

After copying is completed, the Volume Copy summary screen will be updated to display the volumes that have been copied to disk.

Note: for best results with Volume Copy, ensure that CDs are free of scratches, dirt, etc.

Move Volume

The Move Volume feature allows you to move a copied volume to a different location on disk, or to another computer.

Note: the Move Volume feature only allows you to move volumes that have been copied to hard disk. It cannot be used to move volumes that have been registered from a standard CD-ROM drive.

To move a volume, do the following:

- a) Open the Move Volume dialog box, using one of the following methods:
 - Click the Move button on the Volume Copy summary screen.
 - Click the Move button on the toolbar.
 - Select the Edit | Move menu option.
- b) Click the Browse button to select the desired new location. A Browse for Folder button will be displayed. Select the desired folder from the directory tree and click OK to close the Browse for folder dialog box.
- c) Click the Move button to execute the move process. A moving files message may be displayed, depending on the destination folder location.
- d) A confirmation message will be displayed when the moving process has successfully completed. Click OK to close this message.
- e) The Volume Copy summary screen will be updated to show the new location for the moved volume (under the Path column).

Deleting a CD Volume

Volume Copy allows you to delete volumes from the specified hard disk location. To delete a copied CD volume, do the following:

- a) On the summary screen, select the volume(s) to be deleted. Hold down the Ctrl key to select specific volumes, or hold down the Shift key to select a contiguous block of volumes.
- b) Click the Edit | Delete menu option, or click the Delete toolbar button, or click the Delete button on the Volume Copy main screen
- c) Place a check mark into the "Unregister volume(s) when deleted" box to automatically unregister the volumes being deleted.
- d) A confirmation message will appear. Click Yes to delete the volume(s).
- e) After the delete operation has completed, a confirmation message will appear. Click OK to close this message. The Volume Copy main window will be updated.

Maintenance

Note: *It is the user's responsibility to implement a disaster recovery strategy.*

The CD-ROM Image Viewer v8.3.x application uses Microsoft SQL Server 2008 R2 Express SP2 to store application data.

Disk Maintenance

To keep the CD-ROM Image Viewer application running smoothly, it is recommended that you periodically perform maintenance procedures on your hard disk partition(s).

These procedures include:

- Deleting the contents of Temp folders. Also delete any .TMP files that periodically accumulate in the operating system folders and elsewhere.
- Running the Defrag utility to defragment the hard disk
- Running the hard disk error-checking utility.

In addition, regular security issues should be addressed:

- Install anti-virus software and keep the virus definitions up to date.
- Install spyware detectors and update the corresponding definitions.
- Apply critical security patches for the operating system.

Glossary

Administrator: any user given access rights to Profile Manager is considered an administrator and has rights to user, application, and account/lockbox management. These administrator rights can be further restricted as necessary or appropriate.

Application: in the context of CD-ROM Image Viewer, an application is one or more viewer programs available within the main CD-ROM Image Viewer e.g. Paid Items Viewer, Lockbox Items Viewer. Access to applications can be assigned using Profile Manager.

CD Report: the electronic representation of bank statements stored on a check image CD-ROM. Note that not all financial institutions choose to offer this feature.

Data Manager: the CD-ROM Image Viewer component used to register, unregister, and delete CD volumes.

Distributed mode: a configuration where CD-ROM Image Viewer is installed to several computers connected on a network segment such that the machines share a common user profile and volume set database.

Document: a record set pertaining to a specific document or check, including the index information and associated images.

Image: the electronic representation of a check photocopy as recorded by the financial institution and stored on a CD-ROM.

Index: a record set pertaining to a specific check which contains such information as the ABA/RT number, check number, check amount, date paid, etc.

Local Mode: a configuration where CD-ROM Image Viewer is installed to one computer and the user profile and volume set database resides solely on that computer.

Mount: mount means to physically place readable media into a device capable of reading the media. For example: inserting a CD into a CD-ROM drive, or inserting several CDs into a CD jukebox.

Note: a text item that may be attached to a document. Notes are the equivalent of Post-It notes, and can be up to 8,000 characters in length.

Profile Manager: the CD-ROM Image Viewer component used to define groups, users, application access rights, and account access rights.

Query: a set of criteria used to search for specific documents and retrieve the corresponding index and image information. Queries are executed from within the Viewer component.

Register: the process of entering a CD volume set into the CD-ROM Image Viewer database. Volumes must be registered before they can be used as subjects for queries.

Security Key: a code defined by the financial institution and encoded onto the CD volume used to prevent unauthorized access to the data contained on the volume. The Security Key must be defined in Data Manager before encoded CD volumes can be registered.

Tag: a marker that may be attached to a document. Tags can contain up to 50 characters, and may be used as query search criteria.

Unregister: the process of deactivating CD volumes from the CD-ROM Image Viewer database. Volumes marked as "unregistered" are skipped over when queries are executed. Once volumes are unregistered, they can subsequently be deleted.

Volume: a document or check image CD-ROM supplied by a financial institution. See Volume Set.

Volume Copy: the CD-ROM Image Viewer component used to copy CD volumes to hard disk. The hard disk location where CDs are copied can then be used as a volume folder for registering CDs.

Volume Folders: refers to the location(s) used as the source folder from which volumes are registered. These locations can be CD-ROM drives or shared folders on hard disk.

Volume ID: a label imprinted on the document/check image CD-ROM by the financial institution that typically indicates the date and time the volume was created. The volume ID also indicates the position of a specific volume within a multi-volume set.

Volume Label: a text label that can be applied by CD-ROM Image Viewer to a CD volume that aids in the process of identifying a volume in Data Manager.

Volume Set: a check or document image CD-ROM that is identified by unique characteristics such as customer name and account number(s). Volume Sets can consist of a single CD or multiple CDs. In the case of multi-volume sets, each CD volume typically has a sequential volume ID indicating it's position within the volume set (also see Volume ID).

Appendix A (Migrating an Installation to Different Hardware)

This section describes the procedures for moving an existing installation of CD-ROM Image Viewer v8.3.2.x from one computer to another e.g. in the event of hardware obsolescence or failure.

Important: Before beginning, ensure that you have backed up the existing installation of CD-ROM Image Viewer v8. The backup should include:

- The application database files (IVNet<bank>.MDF, IVNet<bank>DocXXX.MDF, IVNet<bank>_log.LDF, and IVNet<bank>DocXXX_log.LDF. **Note:** the IVNet<bank>DocXXX MDF and LDF files range from 000 to 016 – all need to be backed up)
- Any backed up Notes and Tags files (refer to the *CD-ROM Image Viewer v8.3.2.x Viewer User Guide* for more information on backing up Notes and Tags).
- The folder defined under System Configuration for Import Data Image Path, and its contents (this folder contains image files that have been extracted from imported files)
- Any configured volume folders on hard disk, and their contents (these folders contain CDs that have been copied to disk).

Local Mode Installations

As noted above, ensure that you have backed up your existing CD-ROM Image Viewer v8 installation before proceeding.

Note: a user with administrator rights should perform the procedures described in this section.

To move a local mode installation of CD-ROM Image Viewer v8 to another computer, do the following:

- Install CD-ROM Image Viewer v8 and associated third-party components on the new computer, in Local Mode.
Note: ensure that you are installing the same system version of CD-ROM Image Viewer v8 on the new computer as was installed on the old computer. The system version can be verified from the Help | About menu option of the Viewer.
- After installing the application on the new computer, do not sign on yet.
- Go to Administrative Tools | Services and stop the SQL Server (YOJNAINSTANCE) service.

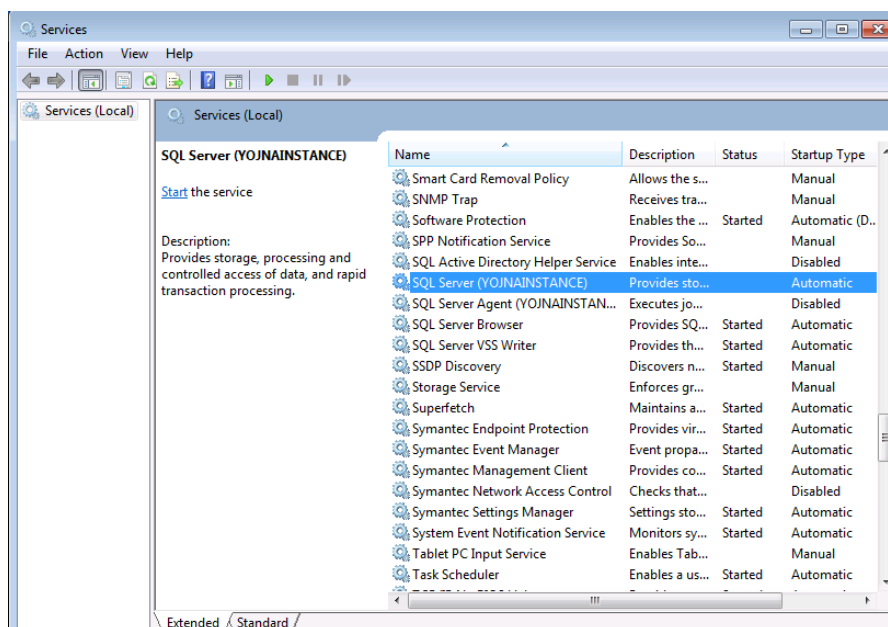


Figure A-1: Services console

- d) On the new computer, open Windows Explorer and browse to folder <Microsoft SQL Server>\MSSQL10_50.YOJNAINSTANCE\MSSQL\Data. Locate the file IVNet<bank>.MDF. Right-click the file and select the Properties option, then click the Security tab. Make a note of the users, groups, and permissions settings that are applied to the file. Do the same for the file IVNet<bank>_log.LDF.

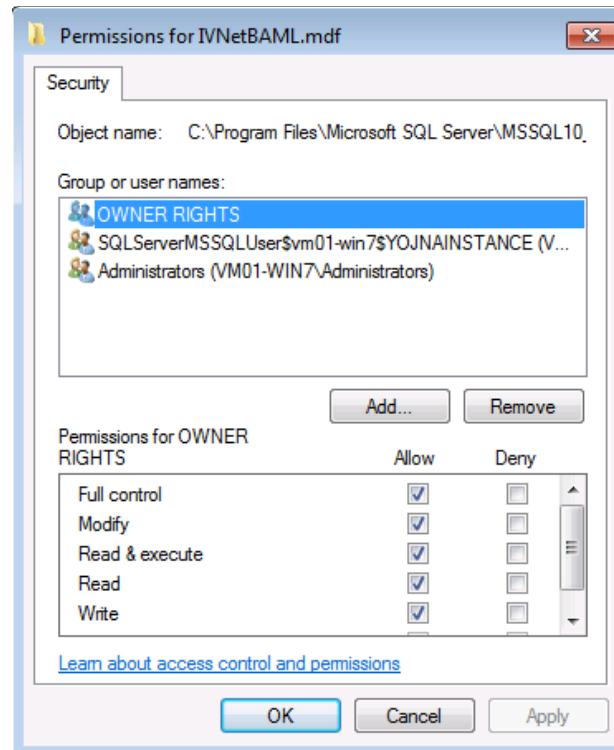


Figure A-2: IVNet<bank>.MDF default security settings (Windows 7)

- e) Save or rename the initial instances of IVNet<bank>.MDF, IVNet<bank>DocXXX.MDF, IVNet<bank>_log.LDF, and IVNet<bank>DocXXX_log.LDF that were installed on the new computer. **Note:** the IVNet<bank>DocXXX MDF and LDF files range from 000 to 016 – all need to be backed up
- f) Copy (or restore from backup media) the application database files IVNet<bank>.MDF, IVNet<bank>DocXXX.MDF, IVNet<bank>_log.LDF, and IVNet<bank>DocXXX_log.LDF from the old computer to the <Microsoft SQL Server>\MSSQL10_50.YOJNAINSTANCE\MSSQL\Data folder on the new computer. **Note:** the IVNet<bank>LDocXXX MDF and LDF files range from 000 to 016 – all need to be copied.
- g) Open Windows Explorer and navigate to the <Microsoft SQL Server>\MSSQL10_50.YOJNAINSTANCE\MSSQL\Data folder. Open the file properties (e.g. IVNet<bank>.MDF), and assign the same security settings as were applied to the default copies (refer to step c). Note the following:
- The group “SQLServerMSSQLUser\$<computer_name>\$YOJNAINSTANCE” (e.g. SQLServerMSSQLUser\$testcomputer\$YOJNAINSTANCE”) is a local group, and should have “Full Control” permissions
 - The local group “Administrators” should have “Full Control” permissions.
- h) Go back to the Services console and start the SQL Server (YOJNAINSTANCE) service.
- i) Copy (or restore from backup media) any backed up Notes and Tags files to the new computer.
- j) Copy (or restore from backup media) the saved Import Data Image Path folder to the new computer.
- k) Copy (or restore from backup media) any saved volume folders to the new computer.
- l) Sign on to CD-ROM Image Viewer.

- Open Data Manager, and update the volume folder configuration as necessary to point to the correct location(s).
- Open System Configuration to the System page, and update the Import Data Image Path as necessary. Also edit the folder permissions as necessary.
- Verify that the application is functioning correctly e.g. execute queries, view images, register volumes, etc.

Distributed Mode Installations

As noted above, ensure that you have backed up your existing CD-ROM Image Viewer v8 installation before proceeding.

Note: a user with administrator rights to local computers and domain administrator rights on the network should perform the procedures described in this section. In addition, this user needs permissions (including physical access as necessary) to install SQL Server 2008 R2 Express SP2 on a server.

To move a distributed mode installation of CD-ROM Image Viewer v8 to another computer, do the following:

- Uninstall all existing CD-ROM Image Viewer clients.
- Install CD-ROM Image Viewer v8 and associated third-party components on the new computer, in Distributed Mode. **Note:** ensure that you are installing the same system version of CD-ROM Image Viewer v8 on the new computer as was installed on the old computer. The system version can be verified from the Help | About menu option of the Viewer.
- After installing the application on the new computer, do not sign on yet.
- Perform steps c – k as described in section 9.1
- Sign on to CD-ROM Image Viewer.
 - Open Data Manager, and update the volume folder configuration as necessary to point to the correct location(s).
 - Open System Configuration to the System page, and update the Import Data Image Path as necessary.
 - Verify that the application is functioning correctly e.g. execute queries, view images, register volumes, etc.
- Reinstall CD-ROM Image Viewer clients by connecting to the NWINSTALL folder on the new CD-ROM Image Viewer server computer and running setup.exe.

Appendix B (Initial Administrator Account Lockout)

Note: this functionality requires that the JPMorgan Chase support team provides you a Bank Output Code based on the Input Code you provide.

*The information in this section applies to unlocking the initial administrator account in the event that this account becomes disabled and no other administrator accounts have been created in CD-ROM Image Viewer v8.3.x. **Note:** for all other disabled CD-ROM Image Viewer user IDs, an application administrator should re-enable the affected user account as described in section 3.1.2.5.*

During signon, the initial administrator account becomes locked out after a pre-defined number of invalid authentication attempts. In this scenario, a message similar to the following is displayed:

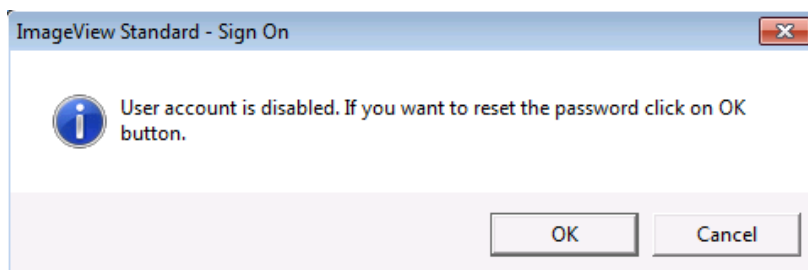


Figure B-1: Administrator account disabled message

After clicking OK, the Revalidate User Password dialog box is displayed.

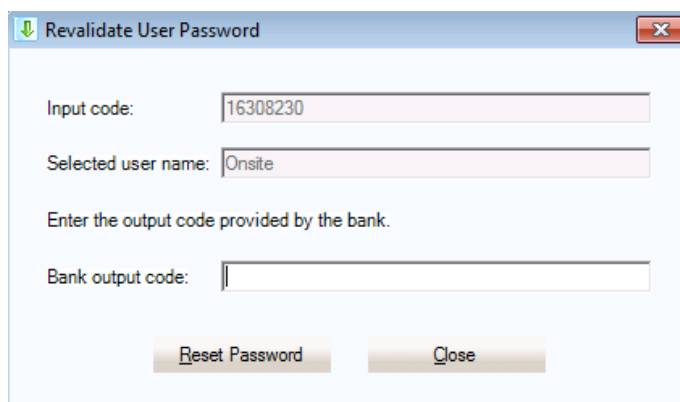


Figure B-2: Revalidate User Password dialog box

To unlock the initial administrator account, do the following:

1. When the Revalidate User Password dialog box is displayed, leave the window open.
2. Contact technical support as noted above.
3. Give technical support the Input Code that is displayed.
4. Technical support will process the input code and generate an output code.
5. Enter the output code received from technical support into the 'Bank output code' textbox.
6. Click the Reset Password button. After validating the output code, the Enter Password dialog box is displayed.
7. Enter the new password, confirm it, and click OK. Ensure that it meets the CD-ROM Image Viewer validation requirements.
8. If the Password Reset Questions and Answers dialog box is displayed, enter questions and answers (if this is a first time signon), or answer existing questions.

The CD-ROM Image Viewer Standard application will open after successful authentication.