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## 1. Introduction

# About the Discovery Cracker Electronic Discovery Software 

Discovery Cracker provides a full suite of options needed to support electronic discovery projects of all sizes.

This chapter contains the following sections:

- About the Discovery Cracker Electronic Discovery Software
- How This Guide Is Organized
- Who Should Use This Guide
- Training is Available
- Contact Us
- Obtaining Updates

The Discovery Cracker electronic discovery software easily processes terabytes of electronic files and e-mail messages in over 500 file formats and supports a wide range of automated electronic data processing needs. Due to its scalability and ease of use, Discovery Cracker is well-suited for corporate legal departments, law firms, litigation support service bureaus, forensic consulting firms, and government agencies. It is ideal for mat-ter-based discovery or proactive systemic-based discovery related to risk management and federal compliance.

Discovery Cracker supports high-volume extraction of electronic file metadata and conversion of data to Tagged Image File Format (TIFF) images or Portable Document Format (PDF) files and text files. It creates searchable databases of images, fulltext files, and metadata from e-mail messages and electronic files (including Microsoft ${ }^{\circ}$ Office, $\mathrm{IBM}^{\ominus}$ Lotus Notes $^{\circ}$, and hundreds of additional file formats). And because Discovery Cracker supports the Unicode ${ }^{\text {rex }}$ Standard, which is an international standard that provides a single character set for all the world's languages, it can process and display data in any language (see page 223 for limitations).

Discovery Cracker features the DC Detective preview tool. DC Detective is a feature-rich tool that provides early visibility into the electronic discovery process. This includes instant access to the extracted metadata, allowing those with login permission to filter files, view files natively, and select/tag individual files for processing. Since the DC Detective tool is Internet browserbased, it is well suited for in-house collaboration as well as for
providing a valuable service for vendors looking to increase their electronic data discovery (EDD) offering.
a note to our users: Discovery Cracker is a sophisticated tool for serious users. Our product offers a wide range of options presented in a manner intended to support a wide range of user needs and workflows. Allowing yourself the time to become familiar with the product is essential and will leave you with a high-powered solution capable of supporting your needs not only today but also your growth needs tomorrow.

Here are some examples:
Focusing on a new streamlined workflow, Discovery Cracker uses a unique concept of data: groups and views. A group is a specified set of data files. A view is a subset of data that is pulled from across all the groups in a project. The DC Detective tool can also be used to create views by remote reviewers using a host of thorough search and filtering options. Reviewers tag specific records with particular processing instructions, and these in turn become a view. Processing views versus traditional volumes of data greatly increases the efficiency of any workflow by greatly improving the culling process.

Improving on its unique distributed processing ability, the Discovery Cracker software makes it easy to recruit multiple computers to work together on one or more or projects. Innovative features such as greater task automation and priority settings allow you to devise the proper workflow for your projects and adjust priorities to shift computer resources to add greater efficiency to meet pressing deadlines. These features, all controlled from a single command center, save time and resources and significantly lower the overall costs associated with electronic discovery.

Discovery Cracker processes files that are embedded in or attached to other files while preserving their parent-child relationship. The benefit is thorough electronic capture of content from files of differing native formats (i.e., a Microsoft Word document containing a Microsoft Excel ${ }^{\circ}$ spreadsheet).

Discovery Cracker exports to other AD Summation products (with DII file and EDRM XML file support), the Concordance
viewer, Ringtail, and other prominent litigation information management systems and imaging platforms.

# How This Guide Is Organized 

This guide first presents information to help you understand the components that make up the Discovery Cracker product and important concepts in Discovery Cracker. You read this in Chapter 2, "Understanding Discovery Cracker," on page 13.

In Chapter 3, "Getting Started," on page 25, you learn about logging in to Discovery Cracker for the first time, you become familiar with Discovery Cracker's main user interface, and you learn what initial administrative setup tasks you need to perform. Chapter 4, "Administrative Tasks," on page 34, provides instructions for performing those and other administrative tasks.

The following chapters provide instructions for performing Discovery Cracker activities in a typical workflow order:

- Chapter 5, "Processing Setup," on page 61
- Chapter 6, "Processing," on page 81
- Chapter 7, "Previewing Documents," on page 93
- Chapter 8, "Quality Control," on page 101
- Chapter 9, "Postprocessing," on page 127
- Chapter 10, "Exporting," on page 149
- Chapter 11, "Paper Printing," on page 170

You will find more information about setting processing settings to accomplish your goals in the following locations:

- Chapter 12, "Performing Optical Character Recognition," on page 172
- Chapter 13, "Endorsing Documents," on page 185
- Chapter 15, "Working With Languages," on page 208
- Chapter 16, "DC Engine Selection," on page 225
- Appendix A, "Task Settings," on page 234

This guide is written for Discovery Cracker administrators and operators. It is intended to be used as a reference by new users as well as by users of previous versions of Discovery Cracker.

The following chapters provide information especially for Discovery Cracker administrators.

- Chapter 2, "Understanding Discovery Cracker," on page 13
- Chapter 3, "Getting Started," on page 25
- Chapter 4, "Administrative Tasks," on page 34
- Chapter 7, "Previewing Documents," on page 93


## Training is Available

Our team is dedicated to helping you become familiar with the product and understand the processing power that is available so you can use it fully in the shortest time possible.

Please do not hesitate to ask us about the wide range of training options available to you-at your site, at our site, or on the Web.

Please feel free to contact us with any comments or questions you may have.

Our business office hours are 8 a.m. to 5 p.m. Eastern time, Monday through Friday.

Hours for Discovery Cracker Product Support are 8 a.m. to 7 p.m. Eastern time, Monday through Friday.

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## 2. Understanding Discovery Cracker

## Understanding the Discovery Cracker Components

Before you start using the AD Summation Discovery Cracker electronic discovery software, we recommend that you take a few minutes to read this chapter to help you better understand the Discovery Cracker components and the basic Discovery Cracker concepts.

This chapter contains the following sections:

- Understanding the Discovery Cracker Components
- Understanding Discovery Cracker Concepts

Discovery Cracker is a data processing system that consists of the components listed below. You can install all of the components on one computer as a standalone, single-box solution for your electronic discovery needs or you can install the components on separate computers as a distributed, scalable solution.

Refer to the Discovery Cracker Environment Setup and Installation Guide for complete system and network requirements for installing the Discovery Cracker components and the software required for using Discovery Cracker.

A brief description of the Discovery Cracker components is provided here for your convenience.

- Discovery Cracker Console

Discovery Cracker Console is the main control console (the user interface) for working with the Discovery Cracker software. You can install the Discovery Cracker Console on any number of computers.

- DC Engine

DC Engine is the workhorse of the Discovery Cracker system. It processes the files-extracts metadata, renders (creates TIFF images or PDF files and text files)—and sends the data to Workflow Manager, which then writes it to the SQL Server database.

In a multiple-computer environment, this component is distributed for improved performance. You can install DC Engine on as many computers as your license allows.

Through the DC Engine user interface, you can monitor the project, item, and task that the local computer is processing.

- Workflow Manager

Workflow Manager is the task manager and communication center for the Discovery Cracker system. It manages the workflow for the Discovery Cracker components, controlling all events and balancing the load among the DC Engine computers for faster processing.

You install the Workflow Manager component on only one computer in a Discovery Cracker system. The Workflow Manager computer requires a software license dongle.

The Workflow Manager user interface displays the following panes:

- DC Engine Computers - displays a list of all the computers that have DC Engine running and the date Workflow Manager last saw the DC Engine. Workflow Manager pings the DC Engines at regular intervals.
- Items Being Processed - displays the items that are being processed by each DC Engine.
- QC Server

QC Server manages the DC Detective function of the Discovery Cracker system. It is installed on the computer with Workflow Manager and only needs to be running when working with DC Detective.

- DC Detective Web Application

DC Detective is a secure browser-based data preview tool that provides an early visibility window into the database for both in-house and client use.

## Understanding Discovery Cracker Concepts

When using the Discovery Cracker electronic discovery software, it is helpful if you understand some basic concepts and terms.

This section discusses the following topics:

- User Accounts and Roles
- The Discovery Cracker Hierarchy
- Task Settings
- Cracking Documents
- Rendering Documents
- Placeholder Pages
- Sessions
- Document Types and Document Type Groups
- File Extensions
- Full-Text Search
- Document Relationships
- Optical Character Recognition
- Endorsing Documents
- Discovery Cracker and EDRM
- Working with Languages

You manage security within Discovery Cracker by creating user accounts. Before anyone can log in to Discovery Cracker, they must have a user account with a user ID and password.

The program comes with only one user account: admin. This account allows the administrator to log in, make appropriate settings, and create other user accounts.

When creating user accounts, as the administrator you control the activities each Discovery Cracker user is permitted to perform by assigning one or more roles to each account. A role is a collection of permissions and can be assigned to multiple user accounts.

There are two types of user roles:

- Security roles
- DC Detective access roles

Security roles allow users to perform specified activities in Discovery Cracker and in the DC Detective tool. Discovery Cracker comes with four security roles: Administrator, Man-
ager, Quality Controller, and Guest. As the administrator, you create other roles that suit your business needs.

DC Detective access roles allow users to have access to selected Discovery Cracker projects and views when using the DC Detective tool.

See "Managing Users and Security" on page 39.

## The Discovery Cracker Hierarchy <br> Discovery Cracker provides a hierarchical system for organizing

 your data. There are the following levels:- Manager database
- Folders
- Projects
- Groups and Views
- Jobs

The manager database is the central repository for projects, common settings, and user information. The manager database is established during Discovery Cracker installation.

The folder level allows you to organize projects. For example, you can organize projects by client, case, and custodian. This level is optional.

The project level contains all the data for a particular project.
At the group level, you select the folders within your domain or workgroup that contain the files you want to process.

At the view level, you create a subset of data by filtering the files from the groups in a project. You can include files from all the groups or specify a particular group.

At the job level, you tell Discovery Cracker what actions to perform on the files in a group or in a view, such as extract metadata, render, postprocess, and export to load files.

## Task Settings

When Discovery Cracker processes your files, it needs to know what settings to use for the various tasks involved. Discovery Cracker includes default task settings that apply on a system level (at the manager database level). The pre-established settings allow you to process files right "out-of-the-box," or you

## Cracking Documents

When Discovery Cracker "cracks" a document, it extracts document metadata. The actions Initial Spin Through, File Spin Through, and Extract Metadata are all part of cracking. The extracted metadata is stored in the Items table and the IntItems table of the project database. You can consult the Discovery Cracker Field List for a list of the metadata that is collected in both tables. (For more information, see "Selecting Actions" on page 85.)

## Rendering Documents

Rendering is the Discovery Cracker activity that produces TIFF
can customize the settings to fit your particular business needs. (See "Setting Task Settings" on page 61.)

By default, each level inherits the settings from those set immediately above it. Then, if it suits your needs, you can further customize the settings at each level. images or PDF files and, optionally, text files of documents. You choose which file type to render to: TIFF or PDF.

If you choose the PDF file type, the Render action will produce a searchable PDF file if the native document contains text. If the native document is a nonsearchable document (such as an image-only file), the Render action will produce an image-only PDF file.

For both TIFF and PDF render file types, you can choose the option of creating a text file during the Render action. If the native document contains text, the text file will contain that text.

If the native document does not contain text (is nonsearchable), you have the option of performing optical character recognition (OCR) to get searchable text. You have this option as part of the Extract Metadata action for certain native document file types. For file types that are not included in that list of native document file types, you have to render the native documents to the TIFF file type. Then as part of the same Render action, you can choose to create OCR text from the rendered TIFF image.

The PDF file type is not one of the native document file types for which you can perform OCR during the Extract Metadata action. If you have a native document that is a nonsearchable

PDF file, to get searchable text you must render the document to the TIFF file type and select the Render OCR option.

For more details about the OCR feature in Discovery Cracker and the list of native file types on which you can perform OCR, see "Performing Optical Character Recognition" on page 172.

For Render settings instructions, see page 240 of Appendix A, "Task Settings."

In this guide, we use the term "rendered document" to refer to a TIFF image or a PDF file created by means of the Render action. The term "rendered output" refers to the TIFF image or PDF file and the text file produced by means of the Render action.

## Placeholder Pages

Placeholder pages display messages. Placeholder pages fall into two categories:

- Those that only display messages.
- Those that display messages and take the place of a rendered document.

Discovery Cracker inserts the pages automatically in certain circumstances. Also, you can manually insert such pages. For an explanation of placeholder pages and how they are used, see "Inserting Placeholder Pages" on page 116.

Sessions To perform certain activities in the Discovery Cracker program, you first have to create work sessions. These sessions and activities are:

1. QC Session - Perform quality control (QC) on processed documents.
2. Export Session - Export data delimited text files.
3. Import Session - Import data delimited text files.
4. Postprocessing Session - Define a document numbering scheme and a folder naming and creation scheme to package your document for delivery to your client.

All sessions apply at the project level. They are available to all groups, views, and jobs in the project.

## Quality Control Sessions

Other Sessions

## Document Types and Document Type Groups

When you access QC to perform quality control on processed documents you are placed into a QC session which is created for you. If you mark documents to be reworked, the program automatically creates a QC job to store your chosen settings for each document. As you exit QC the session is automatically closed for you.

The sessions described in items 2 through 4 in the above list are similar to templates. When you create a session, you set parameters for available options, then save those settings. Sessions allow the following flexibility:

- You can import, export, assign document numbers to, and package the same data multiple times with different settings and sequencing.
- A session maintains settings and sequencing. So you can choose the same session but different groups and views (or the same view if it is dynamic and there is new data) to continue the document number sequencing and volume number sequencing.

Discovery Cracker processes hundreds of different file types. We use the term "document" and "document type" to refer to all files and file types that Discovery Cracker processes.

A document type group is a collection of one or more document types (file types) that use the same settings for processing.

By default, all the document types that Discovery Cracker processes are assigned to predefined document type groups. When the program processes your documents, it uses the task settings that are set for document type groups.

If the predefined groups do not meet your needs, you can move document types from one group to another or create new groups to move selected document types into. You can then adjust the settings to accomplish your specific processing needs. See "Managing Document Type Groups" on page 44.

File Extensions
Discovery Cracker normally uses information in the header of a file, not the file extension, to determine the file's document type. It then processes the file according to the settings of the document type group the document type is assigned to. If Discovery Cracker can't read the file header, the document type is
unknown, and the file will not be processed or will not be processed correctly.

You can control how Discovery Cracker identifies documents, and therefore how it processes them, by creating a relationship between a file extension and a document type group. You can do one of two things:

- Assign a file extension to a document type group.

This establishes default processing settings for files that are typically unknown to Discovery Cracker.

- Override document types.

This tells Discovery Cracker to read the file extension and not the file header to identify the document type.

For further information, see "Managing File Extensions" on page 47.

Full-text search capability is available if you use Microsoft ${ }^{\circ}$ SQL Server 2005 Express Edition with Advanced Services, Standard Edition, or Enterprise Edition.
note: SQL Server 2005 Express Edition, which is installed by the Discovery Cracker installer, does not provide the full-text search capability.

Full-text search gives you the advantage of making advanced SQL queries, such as proximity searches and generation searches, when you create a view (see "Creating Views" on page 75).

Since Discovery Cracker creates a full-text index when it cracks documents, be aware that this additional activity increases processing time.

Full-text search is also available in the DC Detective tool (see "Preview Using the DC Detective Tool" on page 93).

For more information about full-text search, see Microsoft's SQL Server 2005 Books Online, "Introduction to Full-Text Search," at http://msdn.microsoft.com/en-us/library/ ms142545(SQL.90).aspx.

## Document Relationships

It is important to understand the relationship of documents in Discovery Cracker. In the user interface you see references to terms such as "Item," "Item Number," "Parent," "Child," "Main Item," "Main Item Number," "Parent Item," and "Parent Item Number." These terms have their origin in the Items table of the project database. The following paragraphs explain these terms and their relationships.

## Item

In the Items table of the project database, every row is an item. The rows contain references to different types of items: virtual items, container items, and document items.

- Virtual items are groups and jobs.

Virtual items are used for organizational purposes.
They belong to the document type groups JOB and GROUP. (See "Managing Document Type Groups" on page 44.)

- Container items are folders, PST files, and NSF files.

Container items belong to one of the following document type groups: FOLDER, OUTLOOKSTORE, or LOTUSSTORE.

- Document items are the files contained within folders, PST files, or NSF files.
Document items get processed. They include e-mail messages, archive files, Microsoft Word files, Microsoft Excel files, etc. They belong to all other document type groups.


## Parent

A parent is an item that contains another item.
Container items (folders, PST files, and NSF files) are parent items.

Document items are parent items if they contain attached or embedded files.

## Child

A child is a item that has a parent, that is, it is inside of, attached to, or embedded in another item.
Child items can be parents if they have attachments or embedded files.

## Main Item

A main item is a document item that is the child of a container item (a folder, a PST file, or an NSF file).

A main item can have children (attachments or embedded files) or be childless.

When this user guide or a dialog box in the user interface uses the term "parent," it is referring to a "main item."

## Item Number

All items have an item number, which is the number of the row in the Items table.

## Parent Item Number

All items have a parent item number, either zero or greater than zero.

- Zero

This means the item does not have a parent. This applies to groups, folders, and jobs.

- Any number greater than zero
- For PST files and NSF files, their parent item number is the item number of the folder that contains them.
- For main items, the parent item number is the item number of its container, which is a folder, a PST file, or NSF file.
- For child items, the parent item number is the item number of the item it is attached to or embedded in.


## Main Item Number

The main item number is the item number of the main item.

All items have a main item number except for container items (folders, PST files, NSF files) and virtual items (groups and jobs). Their main item number is <NULL>. An item's main item number indicates the family of documents it belongs to.

Table 2.1, "Document Relationships Illustrated," illustrates the previous explanation.
Table 2.1: Document Relationships Illustrated

| Item <br> Number | Parent Item <br> Number | Main Item <br> Number |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 10 | 0 | <NULL> | Folder |  |  |  |  |
| 11 | 10 | <NULL> |  | PST |  |  |  |
| 12 | 11 | 12 |  |  | E-mail |  |  |
| 13 | 12 | 12 |  |  |  | Attachment |  |
| 14 | 13 | 12 |  |  |  |  | Embedded file |
| 15 | 13 | 12 |  |  |  |  | Embedded file |
| 16 | 12 | 12 |  |  |  | Attachment |  |
| 17 | 16 | 12 |  |  |  |  | Embedded file |
| 18 | 16 | 12 |  |  |  |  | Embedded file |

## Optical Character Recognition

Endorsing Documents

Discovery Cracker can perform optical character recognition (OCR) on image files. The OCR process translates images of text on an image file into actual text characters. That makes it possible to search and export the text displayed on image files.

See "Performing Optical Character Recognition" on page 172.

Discovery Cracker allows you to endorse documents. Endorsing places text on the page. Documents have to be rendered before they can be endorsed. Rendering creates a TIFF image or a PDF file of the document. You can endorse the rendered document during postprocessing or you can print the rendered and postprocessed document to paper and endorse the printed page.

See "Endorsing Documents" on page 185.

## Discovery Cracker and EDRM

The Federal Rules for Civil Procedure (FRCP) put organizations under a rigid and rapid schedule for producing electronically stored information (ESI). ESI is data that is subject to the electronic discovery (e-discovery) process.

ESI must be collected, stored, reviewed, and produced. Doing this across multiple systems in multiple formats is a very costly and complex process.

The Electronic Discovery Reference Model (EDRM) was created to provide a common, flexible, and extensible framework for e-discovery products and services. Please refer to the EDRM Web site at http://edrm.net for complete information about EDRM.

A goal of the EDRM project was to produce a standard schema for EDRM Extensible Markup Language (XML) files. The EDRM XML Schema Definition (XSD) provides a standard that facilitates the movement of ESI from one step of the e-discovery process to the next, from one software program to the next, and from one organization to the next. It allows all parties to consistently describe scanned paper documents, e-mail messages, attachments, and standalone electronic files.

The December 18, 2007, version of the EDRM XML XSD defines the most common elements found in ESI and its associated metadata.

Organizations can leverage this standard to increase efficiency, improve accuracy, and minimize the time and cost involved in transferring ESI throughout the discovery life cycle. They will realize the benefits of EDRM XML only if their systems and processes are compliant with the standard.

Discovery Cracker provides an EDRM XML export that can be used with other vendors' similarly compliant data formatted in the same EDRM XML XSD schema, though field mapping and/or data types may need some manual intervention.
AD Summation Enterprise Data Manager ${ }^{\text {rex }}$ for AD Summation Enterprise version 2.6 accepts the EDRM XML export.

For instructions for using the EDRM XML export, see "EDRM XML Export" on page 167.

## Working with Languages

The Discovery Cracker program supports the Unicode ${ }^{\text {rw }}$ Standard, which is an international standard that provides a single character set for all the world's languages. Therefore, it can process and display data in any language (see page 223 for limitations).

For a discussion of how Discover Cracker processes multilingual documents with basic settings and advanced settings, see Chapter 15, "Working With Languages," on page 208.

## 3. Getting Started

This chapter is designed to help you get started using the Discovery Cracker program. It describes:

- Log In
- Discovery Cracker Console
- Initial Administrative Setup Tasks
- The Discovery Cracker Workflow

To $\log$ in:

1. Start Workflow Manager. (Double-click the Workflow

Manager icon on the desktop.)
NOTE:

- For an advanced solution, you must go to the Workflow Manager computer to start Workflow Manager.
- DC Engine must be started prior to running a job. However, you do not need to start it before logging in to Discovery Cracker Console.

2. Start Discovery Cracker Console. (Double-click the Discovery Cracker Console icon on the desktop.)
note: For an advanced solution, you can do this from any computer on which Discovery Cracker Console is installed.
The AD Summation Discovery Cracker login screen is displayed.
3. Type your user ID and password.

The first time you log in, the default user ID is "admin" and the default password is "password".

You can change the password and create additional user accounts and set their passwords. See "Creating User Accounts" on page 40.
4. If you want Discovery Cracker to remember the user ID and password for the local computer, select the Remember Log In check box.
5. Select Log In.

The main user interface for Discovery Cracker is displayed.

## Discovery Cracker Console

The main user interface of the Discovery Cracker program is called Discovery Cracker Console and is made up of the following parts:

- Menu Bar
- Left Pane
- Right Pane
- Status Bar

Menu Bar The menu bar consists of the following menus:

- File
- Edit
- View
- Tools
- Admin
- Reports
- Help

The File menu displays the following commands:

- New
- Create Folder
- Create Project
- Create Group
- Create View
- Create Job


## - Delete

. Delete Folder

- Delete Group
- Delete View
- Delete Job
- Print Project Volumes
- Exit

The Edit menu displays the following commands:

- Deactivate Project
- Reactivate Project
- Rename Folder

The View menu displays the following commands:

- All Projects
- Active Projects
- Favorite Projects
- Inactive Projects
- Show Project Names
- Show Project ID Numbers
- Show Project Names and ID Numbers
- Settings
- Open System Settings
- Open Folder Settings
- Open Project Settings
- Open Group Settings
- Open View Settings

You can control which projects are displayed in the navigation pane (the top part of the left pane) by selecting the command that suits your needs. You can filter the view of projects in the navigation pane according to favorites.

The Tools menu displays the following commands:

- Change Your Password
- Import Click Robot Settings
- Export Click Robot Settings
- Monitor Workflow Manager Activity

The Admin menu displays the following commands:

- Manage Users
- Manage Security
- Manage Security Roles and Permissions
- Manage DC Detective Access Roles
- Manage Document Type Groups
- Manage File Extensions
- Manage Categories
- Manage Reference Files
- Manage License

The Reports menu displays the following command:

- Create Reports

The Help menu displays the commands:

- Discovery Cracker User Guide

When you select this command, the Discovery Cracker User Guide will open.

- About Discovery Cracker

Left Pane The left pane of the Discovery Cracker Console main window is where you navigate to projects, folders, groups, views, or jobs. At the top of the left pane of the Discovery Cracker Console main window you see the title All Projects. The title changes depending on your selection from the View menu.

Just below that, you see a bar with the following tabs:

- Sort\Refresh - The buttons on this tab will allow you to sort your projects, folders, groups, views, and jobs in Ascending or Descending order. The Default Sort button will reload the hierarchy to the original order, by ID number in ascending order. You can also Refresh the hierarchy to show the current status of jobs.
- Mark Favorites - Use the checkbox on this tab to mark selected projects as your favorites. To do this:

1. Select a project
2. Select the checkbox on this tab to mark the project as a favorite
3. Using the View menu show only your favorite projects.

- Search - This tab provides you with the tools necessary to search through your projects and folders for the specific one you want. You can search by the ID or the name of a project or by the name of a folder. When you are searching by name type the full or partial name in the text field and select the Search button. The search will begin at the top of the hierarchy and highlight the first instance found. You can then use the Find Next button to continue searching for any additional projects or folders that match your criteria. When you reach the end of the hierarchy and no more items are found to match your criteria, a dialog box will appear advising that the search has been completed. If you want to change your search criteria, simply type your new criteria in the text field and select the Search button
- License Info - The information displayed in this section depends on the type of license you have.
If you have an enterprise license, you see:
- License Type


## - Expiration Date

If you have a limited DC Engine license (shown onscreen as a click license), you see:

- License Type
- Expiration Date
- Processing PCs
- Documents Remaining
- Pages Remaining

When you approach a license limit, the information presented changes color.
For an explanation of the license status colors and further information about Discovery Cracker licenses, see "Managing Your Discovery Cracker License" on page 59.
On the status bar, you see the name of the manager database that you chose during Discovery Cracker installation.

Once you create folders, projects, groups, views, and jobs, those are listed in the navigation pane in a hierarchical structure similar to that of Microsoft Windows Explorer. You can select projects to mark as your favorites.
When you create a group or a view, the Discovery Cracker program automatically inserts a level labeled Groups or Views for identification purposes. You see a level labeled Groups and/or a level labeled Views under each project that has groups and/or views.

Right Pane The right pane of the Discovery Cracker Console main window displays various types of information, depending on what you have selected in the navigation pane.

When you select the manager database or a folder, the right pane is titled Workflow Manager Settings. You see the following areas:

- Network
- Default Directories
- System Timeout Settings

When you select a project name or the group-level or view-level identifier, the right pane displays the following tabs:

- Project Information. Displays information for the selected project.
- Jobs. Displays a list of all the jobs in the project.
- Status Counts. Displays a list of all document statuses and the total number of documents in the project that currently
have each status. The count is presented per group and view in the project.

When you select a group name, the right pane displays the following tabs:

- Group Information. Displays information for the selected group.
- Jobs. Displays a list of all the jobs in the group.
- Status Counts. Displays a list of all document statuses and the total number of documents in the group that currently have each status.

When you select a view name, the right pane displays the following tabs:

- View Information. Displays information for the selected view.
- Jobs. Displays a list of all the jobs in the view.
- Status Counts. Displays a list of all document statuses and the total number of documents in the view that currently have each status.

When you select a job ID, the right pane displays the following tabs:

- General Job Information. Displays information for the selected job.
- Job Settings. Displays the task settings for that particular job.

Status Bar The status bar at the bottom of the Discovery Cracker Console main window displays the name of the logged in user, the name of the manager database you are using, and one or more of the following, depending on what you have selected in the navigation pane:

- PROJECT
- GROUP
- VIEW
- JOB ID


## Initial Administrative Setup Tasks

Before you can start working with the Discovery Cracker program, you must perform the following administrative setup tasks:

1. Define Workflow Manager Settings
2. Set up reference files
3. Create user accounts and roles
4. Analyze document types, document type groups, and file extension relationships
5. Set task settings

Each task is described below and includes a reference to the appropriate location in this user guide where you can find instructions for performing the task.

## - Define Workflow Manager Settings

When you $\log$ on to Discovery Cracker for the first time, in the Workflow Manager Settings pane you need to make the following settings:

- Network
- Default Directories
- Projects
- Reference files
- Work items
- System Timeout Settings

For an explanation of these settings, see "The Workflow Manager Settings Pane" on page 34.

## - Set up reference files

Reference files are files of various types that the Discovery Cracker program needs to perform various tasks. Types of reference files are:

- Archive Application
- Lotus Notes ID
- Lotus Notes Password
- Separator Template
- Endorsement Template
- Metadata Template

For a description of the reference files and an explanation of how to set them up from the Admin menu, see "Managing Reference Files" on page 51.

- Create user accounts and roles

The Discovery Cracker program comes with one user account: admin. This account is assigned the Admin security role and has permission to all the functions of the program. In order for others to use the Discovery Cracker
program, you must create accounts for those users and assign appropriate roles to them.

The Discovery Cracker program comes with four security roles: Admin, Guest, Manager, Quality Controller. Each one has a different set of permissions. The permissions control which activities a user is permitted to perform. If the predefined security roles do not fit your needs, you can create your own custom security roles. Roles can be assigned to multiple user accounts.

If your clients will use the DC Detective tool to preview their processed documents before you postprocess them, you need to create a security role with the proper DC Detective permissions. You also need to create DC Detective access roles to give Discovery Cracker user accounts access to the appropriate projects and views.

See "Managing Users and Security" on page 39.

- Analyze document types, document type groups, and file extension relationships

Discovery Cracker has predefined document type groups. A document type group is a collection of one or more document types (file types) that use the same settings for processing.

In most cases, the default processing settings are sufficient. However, if you have special business needs, you may want customized settings for particular document types or documents that have specific file extensions.

See "Managing Document Type Groups" on page 44 and "Managing File Extensions" on page 47.

## - Set task settings

When Discovery Cracker processes your files, it needs to know what settings to use for the various tasks involved. Discovery Cracker includes default task settings that apply on a system level (at the manager database level). The default settings allow you to process files right "out-of-thebox." However, you can customize the settings to fit your particular business needs. See "Setting Task Settings" on page 61.

# The Discovery Cracker Workflow 

Once you have made the initial settings as described in "Initial Administrative Setup Tasks" on page 30, you are ready to start using the Discovery Cracker electronic discovery software. The basic workflow consists of the following steps:

1. Processing Setup (see page 61)
2. Processing (see page 81)
3. Previewing Documents (see page 93)
4. Quality Control (see page 101)
5. Postprocessing (see page 127)
6. Exporting (see page 149)
7. Paper Printing (see page 170)

If you need more information about setting up your processing parameters to accomplish your goals, refer to the following:

- Chapter 12, "Performing Optical Character Recognition," on page 172
- Chapter 13, "Endorsing Documents," on page 185
- Chapter 15, "Working With Languages," on page 208
- Chapter 16, "DC Engine Selection," on page 225
- Appendix A, "Task Settings," on page 234


## 4. Administrative Tasks

## The Workflow Manager Settings Pane

This chapter describes Discovery Cracker administrative tasks. You perform administrative tasks from the following locations:

- The Workflow Manager Settings Pane
- The Tools Menu
- The Admin Menu

The following information describes the tasks you perform at each location.

When you log on to Discovery Cracker for the first time, in the Workflow Manager Settings pane of Discovery Cracker Console, you need to make settings in the following areas:

- Network
- Default Directories
- System Timeout Settings

The topics below explain these settings.

Network In the Network area, you need to select an operating domain or workgroup. All Discovery Cracker computers, the SQL Server computer, source files, output files, and reference files must be on the same domain or workgroup.

The network operating domain or workgroup that you select becomes the starting point for the share folder browsers and the default directory paths when you set parameters in Discovery Cracker Console.

## Default Directories

Projects

In the Default Directories area, you need to select default directories for projects, reference files, and work items.

You need to select the root directory for the folders that Discovery Cracker creates to receive the output files after processing. It creates four output folders:

- The Items folder contains detached copies of attachments and embedded files.
- The Images folder contains the rendered output (TIFF and/ or PDF and, optionally, text files).
- The Export folder contains export files, such as data delimited text files and Concordance export files.
- The Volumes folder contains the files that are ready for you to deliver to your client. Such files can include some or all of the following: document numbered rendered output (TIFF and/or PDF and, optionally, text files), TIFF images generated from rendered PDF files, native files, and attachments.

Reference Files Reference files are files of various types that the separate processing engines and other components of the Discovery Cracker application need in order to perform various processing tasks. Examples are the archive application, Lotus Notes user.id files, Lotus Notes passwords, separator templates, endorsement templates, metadata templates, and other items such as images, job settings exports, and placeholder pages. (See also "Managing Reference Files" on page 51.)

Work Items Work items are your source files. In the Select a default root directory for work item selection box you select the default location of the files you want to process. When you create a group to select the files to process, the folder selector brings you to the location you select. (See "Creating Groups" on page 74.)

System Timeout Settings Timeout settings determine how long a process is allowed to continue before the document is marked as Problem and the program moves on to the next document. Timeout settings apply to the following:

- Processing

With regard to timeout settings, the term "processing" includes the actions of Initial Spin Through, File Spin Through, and Extract Metadata. (For a discussion of actions, see Chapter 5, "Processing Setup," on page 61.)

You set the processing timeout value in minutes per document.

- Rendering

Rendering is the Discovery Cracker activity that produces TIFF images or PDF files, and, optionally, text files of documents.

The rendering timeout value is the maximum time Discovery Cracker has to complete creating the TIFF image or PDF file, and, optionally, the text file of a document.

You set the rendering timeout value in minutes per document.

- OCR

Optical character recognition (OCR) is the activity Discovery Cracker performs on image files that converts images of text to actual text characters.

The OCR timeout value is the maximum time Discovery Cracker has to perform OCR on a page of the document. If one page times out, the document is marked as Problem, but Discovery Cracker attempts to perform OCR on the remaining pages.

You set the OCR timeout value in seconds per page.
The timeout values that you select on the Workflow Manager Settings pane are system level settings. They are inherited by each lower-level unit (folder, project, group, view, or job) until you change the settings at a particular level.

To make settings on the Workflow Manager Settings pane: Prerequisites:

- You may need to ask the network administrator for the name of the network to select and the default directories to use for output files, reference files, and source files.
- The network administrator needs to ensure that the folders specified as the default directories are shared network folders, with permission Full Control assigned to the Everyone user.
- You are logged in to Discovery Cracker Console.

Steps:

1. On the Workflow Manager Settings pane, in the Network area, select an operating domain or workgroup.
note: You will not be able to change the setting once you select Save.
2. In the Default Directories area:

When selecting default directories, you must enter a shared network folder. You can browse to the location or type the path in the text box.

If you browse to the location, you must select My Network Places\Entire Network\Microsoft Windows Network $\backslash$ domain] or [workgroup $] \backslash[$ computername $\backslash \backslash$ [shared folder].

If you type in the text box, you must use the UNC format, i.e., <br>[computername]\[shared folder].

In the Select a default directory for projects box, enter the root path for your project output files.
note: You will not be able to change this setting once you select Save. However, you can make changes when creating a project.
a. In the Select a default directory for reference files box, enter the default path where the reference files will be stored.
note: You will not be able to change the setting once you select Save.
b. In the Select a default root directory for work item selection box, enter the root directory where your source files are located.
note: You can change the default directory setting for work items as needed.
3. In the System Timeout Settings area, accept or change the timeout values.
4. Select Save.

## The Tools Menu On the Tools menu, you see the following commands:

- Change Your Password
- Import Click Robot Settings
- Export Click Robot Settings
- Monitor Workflow Manager Activity

The following topics explain how to use the commands on the Tools menu:

- Changing Your Password
- Click Robot Settings


## Changing Your Password

Changing passwords does not have to be a task for administrators only. When you set up user accounts, you can give users permission to change their password. The following procedure applies to administrators and other users.

To change your password:

1. From the Tools menu, select Change Your Password.
2. The Change Password dialog box is displayed.
3. Type the old password in the Old Password box.
4. Type a new password in the New Password box.
5. Type the new password again in the Confirm Password box.
6. Select Save.

From time to time, while files are being processed, the native applications generate dialog boxes (such as Printing dialog boxes) with questions that require a response before processing can continue. (These dialog boxes are also referred to as pop-up messages.) The Click Robot in the Discovery Cracker program responds to these messages, using instructions contained in the wdwlist.xml file.

If a message occurs that the Discovery Cracker program cannot handle, you can contact the Discovery Cracker Product Support desk to obtain instructions to configure the wdwlist.xml file to respond to the message. Call 1-866-833-5377, or send an email message to dc.support@accessdata.com.

You can import and export Click Robot settings.
To import Click Robot settings:

1. From the Tools menu, select Import Click Robot Settings.

The Import Click Robot File dialog box is displayed.
2. In the Select a properly formatted Click Robot XML file to import box, browse to and select the file you want.
3. Select Import.

To export Click Robot settings:

1. From the Tools menu, select Export Click Robot Settings. The Export Click Robot File dialog box is displayed.
2. In the Save exported file as box, open the Save As dialog box.
3. Type a file name and browse to the location in which to save the file, then select Save.
4. In the Export Click Robot File dialog box, select Export.

## The Admin Menu

On the Admin menu, you see the following commands:

- Manage Users
- Manage Security
- Manage Security Roles and Permissions
- Manage DC Detective Access Roles
- Manage Document Type Groups
- Manage File Extensions
- Manage Categories
- Manage Reference Files
- Manage License

The following topics explain how to use the commands on the Admin menu.

- Managing Users and Security
- Managing Document Type Groups
- Managing File Extensions
- Managing Categories
- Managing Reference Files
- Managing Your Discovery Cracker License

Managing Users and Security
You manage security within the Discovery Cracker program by creating user accounts. Before anyone can $\log$ in to the Discovery Cracker program, they must have a user account with a user ID and password.

The program comes with only one user account: admin. This account allows the administrator to $\log$ in, make appropriate settings, and create other user accounts.

When creating user accounts, as the administrator you control the activities each Discovery Cracker user is permitted to perform by assigning one or more roles to each account. A role is a collection of permissions and can be assigned to multiple user accounts.

There are two types of user roles:

- Security roles
- DC Detective access roles

Security roles allow users to perform specified activities in the Discovery Cracker program and in the DC Detective tool. The Discovery Cracker program comes with four security roles:

- Admin
- Guest
- Manager
- Quality Controller

As the administrator, you create other roles that suit your business needs.

DC Detective access roles allow users to have access to selected Discovery Cracker projects when using the DC Detective tool.

You manage users and security by:

- Creating User Accounts
- Creating Security Roles
- Creating DC Detective Access Roles

The following topics explain how to perform these activities.

Creating User Accounts

Before others can log in to and use the Discovery Cracker program, you must create Discovery Cracker user accounts for them.

To create a user account:

1. From the Admin menu, select Manage Users.

The Manage Users dialog box is displayed.
You see two panes:

- System Users

On the System Users pane, you see the Security Roles button (which displays the Manage Security Roles and Permission dialog box) and the DC Detective Roles button (which displays the Manage DC Detective Access Roles dialog box).

You see a list of user IDs (out-of-the-box, you see one user ID: admin).

You also see a Delete button and a New button.

## - User Information

On the User Information pane, you see the user information for the user ID that is highlighted in the list on the System Users pane.
2. Select New at the bottom of the System Users pane.
3. On the User Information pane, complete the following boxes:

- User ID
- First Name
- Last Name
- Password
- Reenter Password
- Department (optional)
- Start Date (optional; the user cannot $\log$ in until this date)
- End Date (optional; the user cannot log in after this date)

4. Select the check box Can Change Own Password if you want to give the user permission to change his or her password.
5. Select Create.

The value in the User ID box is displayed in the list of user IDs on the System Users pane.
6. Assign one or more roles to the user by selecting roles from the Available Roles box and moving them to the Assigned Roles box.

The roles you assign users control the activities within the Discovery Cracker program and the DC Detective tool they have access to.

All security roles and DC Detective access roles are listed in the Available Roles box. If you need roles with different permissions, select the Security Roles button or the DC Detective Roles button and create the necessary roles. Refer to the procedure "To create a security role:" on page 42 and the procedure "To create a DC Detective access role:" on page 43, if necessary.
7. Select Save to save the role assignments.

As administrator, you may decide that additional security roles are necessary within your organization. For example, you may want to create an Operator role or a DC Detective User role.

When you create a role, you need to decide which permissions to assign the role.

To create a security role:

1. From the Admin menu, point to Manage Security, then select Manage Security Roles and Permissions.

The Manage Security Roles and Permission dialog box is displayed.

You see two panes:

- Roles

On the Roles pane, you see a Manage Users button, which displays the Manage Users dialog box.

You see a list of roles.
You also see a Delete button and a New button.

## - Permissions

On the Permissions For: [Role Name] pane, you see a list of all the permissions that are available, along with a check box for each permission. The check boxes indicate which permissions have been assigned to the role that is highlighted in the Roles pane.

You also see a button with a double arrow, an All Permissions check box, a Save button, a Cancel button, and an Apply button.

You can expand and collapse the permissions list by selecting the button with a double arrow.
2. On the Roles pane, select New.

The Security Role Creation dialog box is displayed.
3. Type a name in the Role Name box.
4. Select Create.

The new role name is displayed in the list on the Roles pane.

The Permissions For: [Role Name] pane displays all the permissions with no check boxes selected.
5. Select the check boxes of the permissions you want the role to have. To select all the check boxes, select the All Permissions check box.
note: The system permissions Can Edit the Project Root
Path, Can Edit the Reference File Root Path, Can Change
the System Domain give you a one-time opportunity to set the paths and the domain, not to change them.
6. Select Save to save the settings and close the dialog box.

Creating DC Detective Access Roles
As administrator, you need to create DC Detective access roles for your Discovery Cracker program users who are permitted to use the DC Detective tool to preview processed documents. Decide which projects each role will have access to.

To create a DC Detective access role:
Prerequisite:

- The projects that you want the role to have access to must be created.

Steps:

1. From the Admin menu, point to Manage Security, then select Manage DC Detective Access Roles.

The Manage DC Detective Access Roles dialog box is displayed.

You see two panes:

- DC Detective Access Roles

On the DC Detective Access Roles pane, you see a button Manage Users, which displays the Manage Users dialog box.

You see a list of roles (out-of-the-box, no roles are listed).

You also see a New button and a Delete button.

- DC Detective Objects

On the DC Detective Objects pane, you see a list of all the objects (projects and views) that are available, along with a check box for each object. The check boxes indicate which objects the role has permission to access in the DC Detective tool.

You also see a button with a double arrow, an All
Objects check box, a Save button, a Cancel button, and an Apply button.

You can expand and collapse the objects list by selecting the button with a double arrow.
2. Select New at the bottom of the DC Detective Access Roles pane.
3. The DC Detective Access Role Creation dialog box is displayed.
4. Type a name in the Role Name box.
5. Select Create.

The new role name is displayed in the list on the DC
Detective Access Roles pane.
The DC Detective Objects pane displays all the objects with no check boxes selected.
6. Select the check boxes of the projects you want the role to have access to in the DC Detective tool. To select all the check boxes, select the All Objects check box.
note: Discovery Cracker grants access at the project level. You cannot grant access to individual views. When you select a project, the role has access to all the views in the project.
7. Select Save to save the settings and close the dialog box.

## Managing Document Type Groups

A document type group is a collection of one or more document types (file types) that use the same settings for processing.

From the Admin menu, when you select Manage Document Type Groups, the Manage Document Type Groups dialog box is displayed. You see the list of document type groups. You can click the plus sign ( + ) to the left of each document type group to view the document types and file extensions assigned to each group.

By default, all the document types that the Discovery Cracker program processes are assigned to predefined document type groups. However, if the predefined groups do not meet your needs, you can move document types from one group to another, create new groups, and delete groups.

The Discovery Cracker program processes a document type according to the task parameters that are set for the document type group it is assigned to. If multiple document types are assigned to one document type group, all the document types are processed with the same settings.

If you want to customize settings for a specific document type or document type version, you have to create a new document type group, move the document type into the new group, then adjust the task settings.

There is no inherent relationship between document type groups and task settings. However, default task parameters are set to work appropriately with the document types included in the document type groups.
note: When moving document types into new or different document type groups, you need to be aware that certain document types influence the tasks that are associated with the File Spin Through action.

For most document type groups, the File Spin Through action has two task tabs: OLE Spin Through and Archive Application. However, the document type groups LOTUSDOCUMENT, LOTUSSTORE, OUTLOOKDOCUMENT, and OUTLOOKSTORE have a third task tab. The additional task tab is not determined by the document type group, but by the document types within the groups. So if you were to move any of the document types that are assigned to those document type groups to a different document type group, the additional task tab would follow the document type. Table 4.1, "Document-Type-Dependent Tasks," identifies those tasks and the document types that influence them.

Table 4.1: Document-Type-Dependent Tasks

| Task | Document Type |
| :--- | :--- |
| Spin Through Lotus Notes Documents | Lotus Notes Document |
| Spin Through Lotus Notes Files | Lotus Notes File |
| Spin Through Outlook PST Files | Outlook File |

Table 4.1: Document-Type-Dependent Tasks (Continued)

| Task | Document Type |
| :---: | :---: |
| Spin Through Outlook PST Items | Appointment |
|  | Contact |
|  | Distribution List |
|  | Journal |
|  | Mail |
|  | Meeting |
|  | MS Outlook |
|  | Note |
|  | Outlook Document |
|  | Post |
|  | Report |
|  | Task |

Other than the exceptions above, there are no dependencies between document types and tasks.

Document type groups can be edited, created, and deleted at will, allowing you to customize how the Discovery Cracker program processes your documents.

To create a new document type group:

1. From the Admin menu, select Manage Document Type Groups.
2. In the Manage Document Type Groups dialog box, select Create.

The Document Type Group Creation dialog box is displayed.
3. Type a name in the Document Type Group Name box.
4. Type a description in the Description box (optional).
5. Select Save.

The new document type group name is displayed in the list of document type groups.

To move a document type or file extension to a different document type group:

1. From the Admin menu, select Manage Document Type

## Groups.

2. In the Manage Document Type Groups dialog box, expand the document type groups to display the document types and file extensions assigned to the groups.
3. Select the document type or file extension you want.
4. Drag it to a different group.
5. Select Save.

To delete a document type group:

1. From the Admin menu, select Manage Document Type Groups.
2. In the Manage Document Type Groups dialog box, select the document type group you want to delete and expand it.
3. Move all the document types and file extensions to another group.
4. When the document type group is empty, select Delete, then select Save.

# Managing File Extensions 

Discovery Cracker normally uses information in the header of a file, not the file extension, to determine the file's document type. It then processes the file according to the settings of the document type group the document type is assigned to. If Discovery Cracker can't read the file header, the document type is unknown, and the file will not be processed or will not be processed correctly.
note: When Discovery Cracker detects an unknown document type, it automatically assigns that document type to the Unassigned document type group.

You can control how the Discovery Cracker program identifies documents, and therefore how it processes them, by creating a relationship between a file extension and a document type group. You can do the following:

- Assign a file extension to a document type group.

This establishes default processing settings for files that are typically unknown to Discovery Cracker.

If the Discovery Cracker program cannot determine a file's document type by reading the file header, the program then checks the file's extension to determine if that file extension is assigned to a document type group. If so, it processes the file with that document type group's settings.

- Override document types.

This tells Discovery Cracker to read the file extension and not the file header to identify the document type.

You can assign a file extension to a document type group, then override Discovery Cracker's normal method of identifying the document type.

For example: Suppose you process files with the extension .log. Discovery Cracker may determine that some files with this extension are the document type Rich Text Format, some files are the document type Text Mail, and other files are unknown. If you want to ensure that all of these different document types are processed with the same settings, assign the file extension .log to a specific document type group and override the document type. Now, regardless of the document type of a file with the .log extension, Discovery Cracker processes it according to the settings of the document type group that you assigned the .log file extension to.

To create a relationship between a file extension and a document type group:

Prerequisite:

- If necessary, create a new document type group to assign the file extension to (see the procedure "To create a new document type group:" on page 46).

Steps:

1. From the Admin menu, select Manage File Extensions. The Manage File Extensions dialog box is displayed.

You see a File Extensions area that contains a table with the following column headings:

- File Extension
- Document Type Group
- Override Document Type


## 2. Select Create.

3. The Create File Extension area is displayed.
4. Type a file extension in the File Extension box, using no more than 15 alphanumeric characters.
5. Select a document type group in the Document Type Group box.
6. Select the Override Document Types check box if you want the Discovery Cracker program to read the file extension and not the file header to identify the document type.
7. Select Create.

The selections you made are displayed in the File Extensions area. In the Manage Document Type Groups dialog box, the file extension is listed under the document type group you selected.

# Managing Categories 

A category is an element that is assigned to a document that
identifies text for Discovery Cracker to endorse on the rendered TIFF image or PDF file of the document. You create and view the list of categories in the Manage Categories dialog box. The quality controller assigns categories to documents in a QC Session.

From the Admin menu, when you select Manage Categories, the Manage Categories dialog box is displayed. In the Categories area, there are two columns, Category Name and Category Display Text. The category name is a short version of the endorsement text. It's used like a label to identify the endorsement text, which is displayed in the Category Display Text column.

Discovery Cracker does not include predefined categories. However, examples of categories you may want to create are shown in Table 4.2, "Endorsement Categories."

Table 4.2: Endorsement Categories

| Category Name | Category Display Text |
| :--- | :--- |
| CONF | Confidential |
| DUCR | Document under confidential- <br> ity review |
| FAEO | For attorney's eyes only |
| MINOR | Minor child |

Table 4.2: Endorsement Categories (Continued)

| Category Name | Category Display Text |
| :--- | :--- |
| PRIV | Privileged |
| REVIEW | Review for additional circum- <br> stances |

You can create categories as necessary to suit the needs of your projects. All categories are available to be used with all of your projects.

To create a category:

1. From the Admin menu, select Manage Categories.

The Manage Categories dialog box is displayed.
2. Select Add a Category.

The dialog box expands and the Create Category area is displayed.
3. In the Category Name box, type a short name.

The category name is a descriptive label that identifies the category display text. Whether you type uppercase or lowercase letters, the name will be displayed in uppercase letters. You can use up to 25 characters.
4. In the Category Display Text box, type the text you want to have endorsed on documents.

The category display text is case sensitive; type uppercase or lowercase letters. You will be able to customize the appearance of the text (font, font style, size, etc.) when you create an endorsement template.

The category display text can be up to 100 characters. However, text that is wider than the page width is truncated.
5. Select Save.

The new category name and category display text are displayed in the Manage Categories dialog box.

For more information about using categories with endorsements, see Chapter 13, "Endorsing Documents," on page 185.

Reference files are files of various types that the separate processing engines and other components of the Discovery Cracker system need to perform various tasks.

From the Admin menu, when you select Manage Reference Files, the Manage Reference Files dialog box is displayed. You see a list of reference file types:

- Archive Application
- Lotus Notes ID
- Lotus Notes Password
- Separator Template
- Endorsement Template
- Metadata Template

The following topics explain what each reference file is used for.

## - Archive Application

If you want to process archived (compressed) files, Discovery Cracker needs to use an archive application during the File Spin Through action. WinZip32 and Discovery Cracker Archiver (a Discovery Cracker internal solution) are listed in the Manage Reference Files dialog box as archive applications. Discovery Cracker Archiver is a Discovery Cracker internal solution. You can use it with no further action on your part. To use WinZip32, you must first install it. However, you don't need to add it to the reference files since it is already there. If you want to use one of the other archive applications listed in the Discovery Cracker system requirements, you must first install it and then add it to the list of reference files.

## - Lotus Notes ID

If you want to process Lotus Notes Store files (NSF files), the Discovery Cracker program needs to reference the Lotus Notes user.id file. Starting Lotus Notes Client for the first time generates the default user.id file (located in C:\Program Files\lotus\notes\dataluser.id). However, some NSF files need a specific user.id file.

You need to create a Lotus Notes ID reference file for each user.id file that you want the Discovery Cracker program to work with, including the default user.id file. The reference files point to the locations of the user.id files.

## - Lotus Notes Password

If you process NSF files, some of them may be password protected, and they may use different passwords. You need to create a Lotus Notes Password reference file for each password you want the Discovery Cracker program to use. If no passwords are needed to process NSF files, you need to create a blank Lotus Notes password reference file.
note: The Discovery Cracker program can only handle passwords at the store file (NSF) level. If individual e-mail messages are password protected, it cannot process them.

## - Separator Template

The Discovery Cracker program allows you to print paper copies of rendered TIFF images or PDF files after the documents are postprocessed. When you print paper copies, you can include separator pages, which are inserted between each document. The separator pages can be blank or display information that you create or document metadata that you select. During printing setup, you can choose to use a different color for the separator pages so the document breaks are easier to see.

To use separator pages, you need to create at least one separator template.

## - Endorsement Template

The Discovery Cracker program allows you to print rendered TIFF images or PDF files to paper after the documents are postprocessed. It can endorse the printed pages in the top margin (header) and in the bottom margin (footer) with custom wording, such as "Confidential," or with metadata, such as the document number.

The Discovery Cracker program also allows you to endorse the rendered documents themselves as part of the packaging process during postprocessing.

To endorse printed pages or rendered documents, you need to create at least one endorsement template.

## - Metadata Template

If you want don't want to render certain document types (such as system files or EXE files), but you do want to capture the metadata from those document types, you can create a metadata template displaying the metadata fields that you want. You can insert an image, such as a company logo, in the template. When you select Metadata Viewer as the
user-selected render application for the Render action, you can select the metadata template you want the Discovery Cracker program to use. When it renders those document types, it creates a TIFF image or a PDF file of the template.

To add a reference file:

1. From the Admin menu, select Manage Reference Files.

The Manage Reference Files dialog box is displayed.
2. Select Add.

The Add a Reference File dialog box is displayed.
3. In the Select a Reference File Type box, select the type of reference file you want to add, then provide the other information asked for on the dialog box. The information you need to provide depends on the reference file type that you select. Use the following instructions.

Archive Application
When you select Archive Application, perform the following steps:

1. In the Archive Executable File box, browse to and select the correct executable file for the archive application you want to use. Examples:

If you want to use WinRAR, the file is winrar.exe
If you want to use Power Archiver, the file is POWERARC.EXE.
2. In the File Display Name box, type a display name.
3. In the Description box, type a description.
4. In the Extract Switch box, type an extract switch appropriate for the archive application you want to use. Examples:

- For WinRAR:

Type e to extract from an archive ignoring paths.
Type $x$ to extract from an archive with full paths.

- For Power Archiver, type -e.
note: For more information about extract switches, contact your archive application provider.

5. Select Add.

Lotus Notes ID
When you select Lotus Notes ID, perform the following steps:

1. In the Lotus Notes ID File box, browse to and select a Lotus notes user.id file.
note: You must create Lotus Notes ID reference files for each user.id file you want the Discovery Cracker program to use during processing. At a minimum, you must create a Lotus Notes ID reference file for the default user.id file.
The default user.id file is generated when you start Lotus Notes Client for the first time after installing it. Its location is, by default, C:|Program Filesllotus\ notesldataluser.id.
2. In the File Display Name box, type a display name.
3. In the Description box, type a description (optional).
4. Select the System check box if you want this file to be the system default Lotus Notes ID file.

Note: If this is the only entry for Lotus Notes ID, the Discovery Cracker program makes it the system default file whether you select System or not.
5. Select Add.

Lotus Notes Password

When you select Lotus Notes Password, perform the following steps:

1. In the Password box, enter the password you want the Discovery Cracker program to use when processing Lotus Notes store files (NSF files).
note: You must create Lotus Notes password reference files for each password you want the Discovery Cracker program to use during processing.

If no passwords are needed to process NSF files, you need to create a blank Lotus Notes password reference file. Leave the Password box blank.
2. In the Display Name box, type a display name.
3. In the Description box, type a description (optional).
4. Select the System check box if you want this password to be the system default Lotus Notes password.
note: If this is the only entry for Lotus Notes Password, the Discovery Cracker program makes it the system default password whether you select System or not.
5. Select Add.

When you select Separator Template, perform the following steps:

1. In the Template Name box, type a name.
2. In the Template Description box, type a description.
3. On the Fields tab, select Select Fields to display the Field Selector dialog box.
4. In the Available Fields list, select one or more metadata fields that contain the information you want to appear on the page, and move them to the box on the right (select the arrow pointing right or double-click the field).
Select USER CUSTOM TEXT in order to add custom wording at top of the page.
5. In the Display Name column:

- If you selected a metadata field, by default the system field name is displayed. The name appears on the page to identify the metadata. You can modify the text or delete it. If you delete it, the metadata is displayed without an identifying label.
- If you selected USER CUSTOM TEXT, type your custom text.

6. In the Align column, select Left, Center, or Right.
7. In the Date Format column, choose a date format if applicable.
8. Select Save to save your work and return to the Add a Reference File dialog box.
9. If you want to change the order of the metadata fields in the list, select the field, then select either the up arrow or the down arrow.
10. Select the Image tab if you want to add an image, such as a company logo, to the template.
11. In the Select a new image box, browse to and select the image you want to add.
12. Select Add Image to add the image to the Image List box.
13. Select the image that you want from the Image List box.
14. In the Image Alignment box, select where you want the image to appear at the top of the page: left, center, or right.
15. When the template is finished, select Save.

Endorsement Template

When you select Endorsement Template, perform the following steps:

1. In the Template Name box, type a name.
2. In the Template Description box, type a description.
3. Select the Header Fields tab to set up information to display at the top of the endorsed page.
4. Select Select Fields and Categories to display the Field Selector dialog box.
5. In the Available Fields list, select one or more metadata fields that contain the information you want to appear on the page, and move them to the box on the right (select the arrow pointing right or double-click the field).

Select USER CUSTOM TEXT to endorse with custom wording. All rendered TIFF images and PDF files in the volume for which this template is used will be endorsed with this text.
6. In the Available Categories list, select one or more category names that represent the endorsement text and move them to the box on the right (select the arrow pointing right or double-click the field).

The only rendered documents that will be endorsed with the selected text are those to which categories were assigned. The categories will be ignored when endorsing rendered documents that don't have the category assignment. See "Assign Endorsement Categories to Documents" on page 195.

NOTE: If you use the template for paper printing, the category selection does not apply.
7. In the Display Name column:

- If you selected a metadata field, you can enter the display name. The display name provides an identifying label for the metadata that will be endorsed on the page.
- If you selected USER CUSTOM TEXT, type the text that you want endorsed on the rendered TIFF images and PDF files.
- If you selected a category, you cannot edit the display name.

8. In the Align column, select Left, Center, or Right.
9. In the Date Format column, choose a date format if applicable.
10. In the Font column, make selections in the Font dialog box.

- Select only Microsoft Windows-based fonts. If you select an unsupported font, the Microsoft Sans Serif font will be used.
- If you select a color for the font and endorse black-andwhite rendered TIFF images or PDF files, the color of the endorsement is lost. The endorsed text will be shades of black and white.
note: If you use the template for paper printing, the font selection does not apply.

11. Select Save to save your work and return to the Add a Reference File dialog box.
12. If you want to change the order of the fields in the list, select the field, then select either the up arrow or the down arrow.
13. Select the Footer Fields tab to set up information to display at the bottom of the endorsed page.
14. Repeat steps 4 through 12.
15. When the template is finished, select Save.

Metadata Template When you select Metadata Template, perform the following steps:

1. In the Template Name box, type a name.
2. In the Template Description box, type a description.
3. On the Fields tab, select Select Fields to display the Field Selector dialog box.
4. In the Available Fields list, select one or more metadata fields that contain the information you want to appear on the template, and move them to the box on the right (select the arrow pointing right or double-click the field).
5. The text in the Display Name column appears on the page to identify the metadata. By default, the text is the system field name. You can modify the text or delete it. If you delete it, the metadata is displayed without an identifying label.
6. In the Date Format column, choose a date format if applicable.
7. Select Save to save your work and return to the Add a Reference File dialog box.
8. If you want to change the order of the metadata fields in the list, select the field, then select either the up arrow or the down arrow.
9. Select the Image tab to add an image, such as a company logo, to the template.
10. In the Select a new image box, browse to and select the image you want to add.
11. Select Add Image to add the image to the Image List box.
12. Select the image that you want from the Image List box.
13. In the Image Alignment box, select where you want the image to appear at the top of the page: left, center, or right.
14. If you want to preview what the template looks like, select Preview.
15. When the template is finished, select Save.

## Managing Your Discovery Cracker License

To use the Discovery Cracker program, you must have a USB dongle. (A dongle is a security device that enables the use of software. The Discovery Cracker program does not support parallel port dongles.) Information in the dongle represents your license agreement. You install the dongle on the computer that runs the Workflow Manager component.

The following topics explain:

- License Information
- Renewing Your Discovery Cracker License
- Replacing Your USB Dongle

The Discovery Cracker Console displays the current status of your license in the License Information area. The information that is displayed depends on the type of license you have.

If you have an enterprise license, you see only License Type and Expiration Date.

If you have a limited DC Engine license (shown onscreen as a click license), you see:

- License Type
- Expiration Date
- Processing PCs (indicates the maximum number of computers that can run the DC Engine component simultaneously)
- Documents Remaining
- Pages Remaining

When you approach a license limit, the data changes color to indicate how much time remains on your license. Table 4.3, "License Status Colors," describes the meaning of the colors.

Table 4.3: License Status Colors

| For | If the color <br> is | Your license has the <br> following status |
| :--- | :--- | :--- |
| Expiration <br> Date | Green | More than 90 days <br> remaining |
|  | Orange | 31 to 90 days remaining |
|  | Red | 30 or fewer days remain- <br> ing |

Renewing Your Discovery Cracker License
To prevent interruption in your processing workflow, you need to renew your Discovery Cracker license before it expires.

To renew your Discovery Cracker license:

1. Contact your Discovery Cracker sales manager to discuss renewal options and payment methods.
2. Provide payment information.

After payment information is received, you will receive a text file from dckeys@discoverycracker.com with the new license code.
3. Save the license file in a location on your network which is accessible by the Discovery Cracker Console computer you are working on.
4. Import the license file by doing the following:
a. In the Discovery Cracker Console, from the Admin menu, select Manage License.

The Manage License dialog box is displayed.
b. In the Select License Import File box, browse to and select the license file.
c. Select Import. Your Discovery Cracker license is updated for the extended time that you purchased.

If you lose your USB dongle or if your USB dongle is damaged or nonfunctional, contact dckeys@discoverycracker.com.

## 5. Processing Setup

Discovery Cracker processing setup includes the following activities:

- Setting Task Settings
- Creating Folders
- Creating Projects
- Creating Groups
- Creating Views

Detailed instructions for each of these activities are provided in the sections that follow.

Once you have created projects and groups or views, you create jobs to tell Discovery Cracker how to process your documents (which actions to perform). Creating jobs is described in Chapter 6, "Processing," on page 81.

## Setting Task Settings

When Discovery Cracker processes your files, it needs to know what settings to use for the various tasks involved. Discovery Cracker includes default task settings that apply on a system level (at the manager database level). These pre-established settings allow you to process files right "out-of-the-box" since they work well with the pre-established document type groups.
However, you may find it necessary to customize the settings to fit your particular business needs.

You can adjust the settings on a system level, a folder level, a project level, a group level, a view level, or a job level. Each sublevel inherits the settings from the previous level and can be further customized.

You adjust the settings in the [Level] Settings dialog box. The name of the dialog box changes depending on the level you are displaying: System Settings, Folder Settings, Project Settings, Group Settings, View Settings or Job Settings.

To set task settings from the [System, Folder, Project, Group, or View] Settings dialog box:

1. From the navigation pane in the Discovery Cracker Console, select the specific item you want (the manager data-
base for system settings or the specific folder, project, group, or view), then right-click.

A submenu is displayed.
2. Select Open [System, Folder, Project, Group, or View] Settings.
The [System, Folder, Project, Group, or View] Settings dialog box is displayed. You see three panes: Actions, DocType Groups, and Tasks. For a description of the panes, see "The [Level] Settings Dialog Box" on page 63.
3. Select an action.
4. Select a document type group (applicable only for the File Spin Through, Extract Metadata, and Render actions).
5. In the Tasks pane, select a tab and adjust the settings as needed.

For instructions, refer to the locations listed in Table 5.2, "Task Settings Instructions," on page 66.
6. If you want to apply the settings of the tab you are currently on to additional document type groups, do the following:
a. Select Select Additional Document Type Groups while you are still on the tab.

## NOTE:

- This button is available only when you change one or more settings on the tab.
- This button is displayed only on the tabs for which you can select additional document type groups.
- Be sure the settings on the current tab are appropriate for the additional document type groups you select.

The Select Additional Document Type Groups dialog box is displayed with a list of all the document type groups. The document type group you are currently working in is selected, and you cannot change that selection.
b. Select the document type groups for which you want to apply the settings of the current tab, or select Select All.
c. Select OK.

The Apply Selection dialog box is displayed with the message, "Depending on the number of document type
groups you selected, this could take a few seconds. Do you want to proceed?"
d. Select Yes to proceed, or select No to return to the Select Additional Document Type Groups dialog box and change your selection.

Once you select Yes, Discovery Cracker records the selected document type groups, then returns you to the task tab.
7. Repeat steps 3 through 6 as needed.
8. When you have finished making all your settings, select Save and Close.

To set task settings from the Job Settings dialog box, see "Creating a Job" on page 81.

The [Level] Settings Dialog Box
In the [System, Folder, Project, Group, View, or Job] Settings dialog box, you see three panes: Actions, DocType Groups, and Tasks. The panes are described below.

- The Actions Pane

The actions displayed on the Actions pane depend on which level you are in.

The System Settings and the Folder Settings dialog boxes display the following actions:

- File Spin Through
- Extract Metadata
- Render

The Project Settings, Group Settings, View Settings, and Job Settings dialog boxes display the actions in the following list, except that in Job Settings you see only the actions you select for the job:

- File Spin Through
- Extract Metadata
- Render
- Postprocessing
- Data Delimited Text File Export
- Concordance Viewer Export
- IPRO Export
- Ringtail Export
- AD Summation DII Export
- Import Data
- DocuLex 5 Export
- EDRM XML Export
- The Document Type Groups Pane

For the File Spin Through, Extract Metadata, and Render actions, the Document Type Groups pane displays the list of document type groups.

The default document type groups are the following:

- ACCESS
- ACROBAT
- DATABASE FORMATS
- EMAIL FORMATS
- EXCEL
- GENERIC TEXT
- GRAPHIC FORMATS
- HTML
. LOTUSDOCUMENT
- LOTUSSTORE
- MEDIA
- OUTLOOKDOCUMENT
- OUTLOOKSTORE
- POWERPOINT
- PRESENTATION FORMATS
- SPREADSHEET FORMATS
- UNASSIGNED
- VISIO
- WINPROJ
- WINWORD
- WORD PROCESSING
- ZIP

You can customize the list of document type groups and the document types that are assigned to each group. See "Managing Document Type Groups" on page 44.

- The Tasks Pane

The Tasks pane of the [System, Folder, Project, Group,
View, or Job] Settings dialog box displays the tasks that are associated with the action selected. Each task is displayed on its own tab in the Tasks pane. The settings for the task are displayed on the tab. The particular settings that you see depend on the document type group you select and the options you select on the task tab.

Table 5.1, "Action - Document Type Groups - Tasks," presents a list of the task tabs that you see depending on the action and document type group that you select.

Table 5.1: Action - Document Type Groups - Tasks

| Action | Document Type Groups | Task Tabs |
| :---: | :---: | :---: |
| File Spin Through | All document type groups listed individually | - OLE Spin Through <br> - Archive Application |
|  | LOTUSDOCUMENT | - Spin Through Lotus Notes Documents* |
|  | LOTUSSTORE | - Spin Through Lotus Notes Files* |
|  | OUTLOOKDOCUMENT | - Spin Through Outlook PST Items* |
|  | OUTLOOKSTORE | - Spin Through Outlook PST Files* |
| Extract Metadata | All document type groups listed individually | - User-Selected Application <br> - OCR Options <br> - Missing Metadata Check <br> - Identify Scripts <br> - Get Body Comments <br> - Get Body Text |
| Render | All document type groups listed individually. | - Document Rendering <br> - User-Selected Application <br> - Blank Pages (this tab is not displayed when the None render output file type is selected) <br> - OCR Options (this tab is not displayed when the None or PDF render output file types are selected) |
| Postprocessing | All document type groups. No selection list. | - Numbering and Packaging <br> - Populate All Text |
| Data Delimited Text File Export | All document type groups. No selection list. | - Data Delimited Text File Export |
| Concordance Viewer Export | All document type groups. No selection list. | - Concordance Viewer Export |
| IPRO Export | All document type groups. No selection list. | - IPRO Export |
| Ringtail Export | All document type groups. No selection list. | - Ringtail Export |
| AD Summation DII Export | All document type groups. No selection list. | - AD Summation DII Export |

Table 5.1: Action - Document Type Groups - Tasks (Continued)

| Action | Document Type Groups | Task Tabs |
| :--- | :--- | :--- |
| Import Data | All document type groups. No <br> selection list. | • Import Data |
| DocuLex 5 Export | All document type groups. No <br> selection list. | • DocuLex 5 Export |
| EDRM XML Export | All document type groups. No <br> selection list. | • EDRM XML Export |
| *These tasks are document-type dependent. For an explanation, see the note on page 45 in the section "Managing Doc- <br> ument Type Groups." |  |  |

Table 5.2, "Task Settings Instructions," presents a list of the actions you can select and where you can find instructions for adjusting the task settings.

Table 5.2: Task Settings Instructions

| For tasks associated with this action | Look here for instructions |
| :--- | :--- |
| File Spin Through | Appendix A, page 234 |
| Extract Metadata | - "Performing Optical Character Recognition," page 174 <br> - "Working With Languages," page 212 <br> - Appendix A, page 237 |
| Render | - "Performing Optical Character Recognition," page 176 <br> - "Working With Languages," page 215 <br> - Appendix A, page 240 |
| Postprocessing | "Postprocessing," page 127 |
| Data Delimited Text File Export | - "Previewing Documents," page 96, for exporting before postprocessing <br> - "Exporting," page 153, for exporting after postprocessing |
| Concordance Viewer Export | "Exporting," page 153 |
| IPRO Export | "Exporting," page 154 |
| Ringtail Export | "Exporting," page 155 |
| AD Summation DII Export | "Exporting," page 160 |
| Import Data | "Previewing Documents," page 98 |
| DocuLex 5 Export | "Exporting," page 167 |
| EDRM XML Export | "Exporting," page 167 |

# Creating Folders 

You can create folders to organize your projects for viewing purposes in the navigation pane. For example, you can organize projects by client, case, and custodian. This level is optional.

You can create folders before or after you create projects. Once folders and projects are created, you can reorganize them by using a drag-and-drop operation.

To create a folder:

1. In the navigation pane, select the manager database or another folder and right-click.
2. Select Create Folder.
3. Type a folder name.

## Creating Projects

When you create a project, Discovery Cracker creates a project database to keep track of all project data and it creates the folders that receive the output files after processing.

Project databases can reside on different instances of SQL Servers. During project creation, you can select the SQL Server instance for the project database. You also select project-level settings, such as a path different from the default directory for project output files, the time zone, timeout settings, whether to use full-text search, deduplication settings, and filtering criteria.

To create a project:

1. In the navigation pane, select the manager database or a folder and right-click.
2. Select Create Project.

The Project Information tab is displayed in the right pane of the Discovery Cracker Console main window. You see a Create Project panel with an Information area, a Project Preferences tab, a Database Preferences tab, a Deduplication tab, and a Filtering tab.
3. In the Information area:

- Type a project name.
note: Discovery Cracker does not allow you to use any Windows illegal characters in the project name; how-
ever, it does not restrict you from using other characters such as the ampersand (\&). We recommend that you do not use these types of characters as that will cause problems with the export files and third-party software such as Concordance or Summation. In addition, you will experience problems with DC Detective connecting to the project database.
- Accept or change the default project path.
- Accept or change the time zone.
- Type a project description (optional).

4. On the Project Preferences tab:
a. In the Project Timeout Settings area, accept or change the processing timeout value, the rendering timeout value, or the OCR timeout value. (For an explanation of timeout settings, see "System Timeout Settings" on page 35.)
b. In the Advanced Paths area, accept or change the paths for project items, project images, project export files, and project volumes.

- The Items folder will contain detached copies of attachments and embedded files.
- The Images folder will contain the rendered output (TIFF and/or PDF and, optionally, text files).
- The Export folder will contain export files, such as data delimited text files and Concordance export files.
- The Volumes folder will contain the files for you to deliver to your client. Such files can include some or all of the following: document numbered rendered output (TIFF and/or PDF and, optionally, text files), TIFF images generated from rendered PDF files, native files, and attachments.

5. On the Database Preferences tab:

In the Database Full-Text Search Settings area, you see one of the following:

- The statement Full-text search functionality is not supported for the installed SQL Server version.
You see this statement if you use SQL Server 2005
Express Edition (without Advanced Services).
- Allow full-text indexing of the project database check box

Full-text search capability is available if you use SQL Server 2005 Express Edition with Advanced Services, Standard Edition, or Enterprise Edition.
a. If you want to use full-text search, select the Allow fulltext indexing of the project database check box.
Full-text search gives you the advantage of making advanced SQL queries, such as proximity searches and generation searches, when you create a view (see "Creating Views" on page 75).

Discovery Cracker creates a full-text index when it cracks documents. Be aware that the additional activity of creating a full-text index increases processing time.
note: This selection is a one-time option. If you do not select it when you create the project, you cannot go back and change it later.
b. If you select the Allow full-text indexing of the project database check box, in the Full-text language box, select the language to use for full-text indexing and searching.
note: With SQL Server 2005, you can index and search based on only one language. If a document contains different languages, the search based on the fulltext index may yield inaccurate results.
You can select only one full-text language per project. You cannot change the language to be used for a fulltext index after a project is created. To specify a different language, you would need to create a new project. SQL Server 2005 stores some high-end Asian characters as two Unicode characters. Searching and filtering based on these characters may yield inaccurate results.
The Project Database area displays the name of the local computer and the name of the SQL Server instance that was selected during installation (where the manager database resides).
c. If you want the project database to reside on a different SQL Server instance, do the following:

- In the Server Name box, select or type the name of the SQL Server on which you want the project database to reside.
- In the Login box, type the SQL Server login name.
- In the Password box, type the SQL Server password.
- Select Connect.

If the login and password are correct, the label Connection Valid is displayed.
If the login and password are not correct, the label Connection Invalid is displayed.

You must have a valid server connection to create a project.
6. On the Deduplication tab:
a. Select the Enable Deduplication check box to enable deduplication.
b. If you select the check box, select other settings to fit your business needs. Use the following guidelines:

- Deactivate items identified as duplicates check box. You can see deactivated documents in a QC Session and you can export deactivated documents.
- Email Fields to Check area. These settings apply to Outlook and Lotus Notes e-mail messages.
- Attachments are deduplicated using the following default settings. You cannot change the settings. Use MD5 Hash for attachments Use file display name for attachments
- Examples of some of the fields you might choose are:


## Author Email

BCC
Body
CC
Sent On
Subject

- E-files area. These settings apply to all other electronic files.
- Use MD5 Hash for E-files. You cannot change this default setting.
- Use file display name for e-files. Select this check box if you want Discovery Cracker to check the file display name in addition to the MD5 Hash value of documents.

7. On the Filtering tab:
a. Select the Enable Filtering check box to enable filtering.

This is an "excludes" filter. Documents that meet the criteria are deactivated.
b. Select Create Expression to display the Filter Expression Builder dialog box and create a filter expression.

In the Filter Expression Builder dialog box:

- Create a working statement by doing the following as many times as needed:

1. Select a field from the Select a Field to Search list.
2. Select an operator from the Select an Operator list.

The operators displayed in the list depend on the type of field you select in the Select a Field to Search list.
3. Enter the data you want to search for in the Add a Text Value box.

The name of the box and the type of data you can enter depends on the operator you select in the Select an Operator list.
Some operators allow you to enter multiple values so that you can search the same field for multiple expressions.

## 4. Select Add to Working Statement.

- When the working statement is like you want it, add it to the Final Statement.
- Select Save Final Statement to return to the Filtering tab.
The filter expression is displayed in the Filter Expression box.


## NOTE:

- If you need help building a filter expression, see the following resource:
For basic query creation-http://msdn.micro-soft.com/en-us/library/bb264565.aspx
- The rules about filter creation do not apply to folders, PST files, or NSF files. They are not documents; they are container items (see "Document

Relationships" on page 21). These items will not appear in a view regardless of the filter expression you create.

- To create a project filter based on languages, see "Creating Project Filters and Views" on page 218.
- To create a complex filter expression, you need to use the Working Statement and the Final Statement areas to switch between the AND and the OR joining conditions in the query.
Each addition to the same working statement needs to consist of the same joining condition (AND or OR). To create complex statements such as ( $(A=1$ AND $B=2)$ OR $C=3)$, you would first create the $\mathrm{A}, \mathrm{B}$ working statement with AND, add the statement to the final statement, create the C working statement, and then add it to the final statement using OR.

What you create in the working statement and then add to the final statement controls the parenthesis groupings. You can create $((\mathrm{A}=1 \mathrm{AND} \mathrm{B}=2)$ OR C=3) or ( $\mathrm{A}=1$ AND ( $\mathrm{B}=2$ OR C=3)). Think of the working statement as a place to create a substatement that will be added to the final statement as a parenthesis addition.

- When creating a project, the Does Not Contain and the Is Not Like operators apply only to individual documents or families of documents where all documents within the family meet the criteria.
For example, you create a project filter selecting the option Consider family relationships. Examine all documents and apply the Does not contain operator with the keyword "giraffe" and the field Body. The desired result is to include documents in the project that contain the word "giraffe" in the Body field. There are three e-mail messages with attachments. E-mail \#1 does not contain the word "giraffe" in the body, but the attachment to this email message does. E-mail \#2 contains the word "giraffe" in the body and so does its attachment. Email \#3 does not contain the word "giraffe" in either the e-mail message or the attachment. The
end result is that E-mail \#1 and E-mail \#2 would be included in the project.
- When you select an operator such as Contains, Does

Not Contain, Is In, or Is Not In, you can add multiple values for which to search in one field. In the area where you add a value, you can manually create an Expression List or you can import a list of keywords. To use the Import List feature, you must first create a .txt file containing a single list of values, with each value on a separate line.

- When you add a date to the working statement, the date format is converted to the international format (yyyy-MM-dd hh:mm:ss) for processing purposes. The metadata remains unchanged.
c. In the Filter Instructions area, select an option.

When selecting an option, you choose how to apply the filter: (1) Whether to disregard or consider family relationships. (2) Whether to examine all documents or only main items. A main item is the child of a folder, a PST file, or an NSF file. (For additional information, see "Document Relationships" on page 21.)
Your options are:

- Disregard family relationships. Examine all documents.
Deactivate individual documents that match the filter.
- Consider family relationships. Examine only documents that are main items.
If a main item matches the filter, deactivate the main item and all of its children.
- Consider family relationships. Examine all documents.

If a document matches the filter, deactivate the main item of the document and all of the main item's children.
note: The results of the second and third option are the same. The difference is what is being examined.
8. Select Create.

The right pane of the Discovery Cracker Console displays the Project Information tab, the Jobs tab, and the Status Counts tab.

You can add a view to the project, add a group to the project, deactivate the project, edit the project, and view the project settings.

## Editing an Active Project

## Opening Project Settings

## Creating Groups

To edit an active project:

1. Select an active project in the navigation pane.
2. On the Project Information tab, select Edit.
3. You can edit the following fields:

- In the Information area: Project Name and Description
- On the Project Preferences tab: Project Timeout Settings

4. Select Save.

To access the settings for a project:

1. Select the project in the navigation pane and right-click.

## 2. Select Open Project Settings.

The Project Settings dialog box is displayed.

You create a group to select the folders that contain the files you want to process.

To create a group:

1. Select a project in the navigation pane and right-click.
2. Select Create Group.

The Group Information tab is displayed in the right pane of the Discovery Cracker window. You see the Create Group panel with an Information area, a Selected Folders tab, and a Group Preferences tab.
3. In the Group area of the Information area, type a group name and, optionally, a description.
4. On the Selected Folder tab, select the folders that contain the files you want to process.
5. On the Group Preferences tab in the Group Timeout Settings area, accept or change the processing timeout value, the rendering timeout value, or the OCR timeout value.
(For an explanation of timeout settings, see "System Timeout Settings" on page 35.)
6. Select Create.

The right pane of the Discovery Cracker Console displays the Group Information tab, the Jobs tab, and Status Counts tab.

You can add a job to the group, delete the group, edit the group, and view the group settings.

## Editing a Group To edit a group:

1. Select a group in the navigation pane.
2. On the Group Information tab, select Edit.
3. You can edit the following fields:

- In the Information area: Name and Description
- On the Group Preferences tab: Group Timeout Settings 4. Select Save.

Opening Group Settings To access the settings for a group:

1. Select the group in the navigation pane and right-click.
2. Select Open Group Settings.

The Group Settings dialog box is displayed.

Your project may include hundreds or thousands of documents. You may want to find and process only documents that meet specific search criteria. You can do that by creating views. You create a view by creating a SQL query, or filter expression, that searches the entire project data source (the documents from all the groups in the project). The search creates a subset of data that you can then process according to specified settings.

To create a view:

1. Select a project in the navigation pane and right-click.
2. Select Create View.

The View Information tab is displayed in the right pane of the Discovery Cracker Console main window. You see the Create View panel with an Information area, a View Configuration tab, and a View Preferences tab.
3. In the View area of the Information area, type a view name and, optionally, a description.
4. On the View Configuration tab:
a. In the View Type box, do one of the following:

- Select Static to search only documents that currently exist in the project.
- Select Dynamic to search all documents that currently exist in the project and those that will be added in the future.
note: If you want to create views, especially dynamic views, that are based on OCR text, see "Creating Views Using OCR Text" on page 179 for an explanation of when OCR text is available to be searched. Also, do not attempt to create a dynamic view while processing as this will cause errors.
b. In the Filter Instructions area, select an option.

When selecting an option, you choose how to apply the filter: (1) Whether to disregard or consider family relationships. (2) Whether to examine all documents or only main items. A main item is the child of a folder, a PST file, or an NSF file. (For additional information, see "Document Relationships" on page 21.)

Your options are:

- Disregard family relationships. Examine all documents.
Deactivate individual documents that match the filter.
- Consider family relationships. Examine only documents that are main items.
If a main item matches the filter, deactivate the main item and all of its children.
- Consider family relationships. Examine all documents.
If a document matches the filter, deactivate the main item of the document and all of the main item's children.
note: The results of the second and third option are the same. The difference is what is being examined.
c. Select All Items if you want the view to contain all items in the project.

Use this option to process jobs at a project level, such as exporting metadata and postprocessing. When you
select the option, it is most useful if you also select Dynamic in the View Type box.

When you select the All Items option, you don't have access to Filter Instructions.
d. Select New Filter to display the Filter Expression Builder dialog box and create a filter expression. When you create a filter expression, Discovery Cracker searches for the documents that match the expression and includes them in the view.

In the Filter Expression Builder dialog box:

- Create a working statement by doing the following as many times as needed:

1. Select a field from the Select a Field to Search list.
2. Select an operator from the Select an Operator list.

The operators displayed in the list depend on the type of field you select in the Select a Field to Search list.
3. Enter the data you want to search for in the Add a Text Value box.

The name of the box and the type of data you can enter depends on the operator you select in the Select an Operator list.

Some operators allow you to enter multiple values so that you can search the same field for multiple expressions.

## 4. Select Add to Working Statement.

- When the working statement is like you want it, add it to the Final Statement.
- Select Save Final Statement to return to the View Configuration tab.
The filter expression is displayed in the View Filter Expression box.

NOTE:

- If you need help building a filter expression, see the following resources: For basic query creation-http://msdn.micro-soft.com/en-us/library/bb264565.aspx

For advanced SQL queries using FreeText-http://
msdn.microsoft.com/en-us/libraryl
ms187787(SQL.90).aspx
For advanced SQL queries that can be written against Full-Text indexes-http://msdn.micro-soft.com/en-us/library/ms142559(SQL.90).aspx

- The rules about filter creation do not apply to folders, PST files, or NSF files. They are not documents; they are container items (see "Document Relationships" on page 21). These items will not appear in a view regardless of the filter expression you create.
- To create a view based on groups, in the Filter Expression Builder dialog box, select Group ID in the Select a Field to Search list, and then select the appropriate operator and enter the appropriate group ID number.
- To create a view based on OCR text, see "Creating Views Using OCR Text" on page 179.
- To create a view based on endorsement categories, see "Create Views Based on Endorsement Category Assignments" on page 197.
- To create a view based on languages, see "Creating Project Filters and Views" on page 218.
- To create a complex filter expression, you need to use the Working Statement and the Final Statement areas to switch between the AND and the OR joining conditions in the query.
Each addition to the same working statement needs to consist of the same joining condition (AND or OR). To create complex statements such as ( $(A=1$ AND $B=2)$ OR $C=3)$, you would first create the $\mathrm{A}, \mathrm{B}$ working statement with AND, add the statement to the final statement, create the C working statement, and then add it to the final statement using OR.
What you create in the working statement and then add to the final statement controls the parenthesis groupings. You can create $((\mathrm{A}=1 \mathrm{AND} \mathrm{B}=2)$ OR C=3) or ( $\mathrm{A}=1$ AND ( $\mathrm{B}=2$ OR $\mathrm{C}=3$ )). Think of the working statement as a place to create a sub-
statement that will be added to the final statement as a parenthesis addition.
- When creating a view, the Does Not Contain and the Is Not Like operators apply only to individual documents or families of documents where all documents within the family meet the criteria.
For example you create a view selecting the option Consider family relationships. Examine all documents and apply the Does not contain operator with the keyword "giraffe" and the field Body. The desired result is to exclude documents with the word "giraffe" in the Body field. There are three email messages with attachments. E-mail \#1 does not contain the word "giraffe" in the body, but the attachment to this e-mail message does. E-mail \#2 contains the word "giraffe" in the body and so does its attachment. E-mail \#3 does not contain the word "giraffe" in either the e-mail message or the attachment. The end result is that E-mail \#1 and E-mail \#3 would be included in the view.
- When you select an operator such as Contains, Does

Not Contain, Is In, or Is Not In, you can add multiple values for which to search in one field. In the area where you add a value, you can manually create an Expression List or you can import a list of keywords. To use the Import List feature, you must first create a .txt file containing a single list of values, with each value on a separate line.

- When you add a date to the working statement, the date format is converted to the international format (yyyy-MM-dd hh:mm:ss) for processing purposes. The metadata remains unchanged.
e. Select Manual Entry to enter your own SQL search query instead of using the Filter Expression Builder dialog box. You may type directly into the Manual Entry box or use a copy-and-paste operation to enter the search query. You must use a valid SQL WHERE clause using valid SQL syntax. Because the metadata you may be trying to query is stored in multiple tables, you need to reference the table name as well as the field you are looking in. For assistance in creating the WHERE clause, please contact Discovery Cracker


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5. On the View Preferences tab, accept or change the processing timeout value, the rendering timeout value, or the OCR timeout value. (For an explanation of timeout settings, see "System Timeout Settings" on page 35.)
6. Select Create.

The right pane of the Discovery Cracker Console displays the View Information tab, the Jobs tab, and the Status Counts tab.

You can add a job to the view, delete the view, edit the view, and view the settings for the view.

## Editing a View To edit a view:

1. Select a view in the navigation pane.
2. On the View Information tab, select Edit.
3. You can edit the following fields:

- In the Information area: Name and Description
- On the View Preferences tab: View Timeout Settings

4. Select Save.

Opening View Settings To access the settings for a view:

1. Select the view in the navigation pane and right-click.
2. Select Open View Settings.

The View Settings dialog box is displayed.

## 6. Processing

Once you have created a group or a view, you must create a job to process the documents. In this context, the term "process" means that the Discovery Cracker program performs one or more actions on the documents in a group or view. For a list of actions, see Table 6.2, "Action Selection," on page 87.

This chapter includes the following topics:

- Creating a Job
- Selecting Actions
- Editing a Job
- Job Status
- Jobs Tab

You create jobs from groups and from views.
note: Before you run a job, make sure to start your DC
Engines. (Double-click the DC Engine icon on the desktop of each DC Engine computer.)

To create a job:

1. In the navigation pane, select a group or a view and rightclick.
2. Select Create Job.

The General Job Information tab is displayed, with two main areas: Information and Details.
3. In the Information area, under Job, in the Description box, type a description of the job.

Discovery Cracker automatically assigns a job ID number to every job. The description acts as the job name, helping you identify what the job is when you view it on the Jobs tab. (See "Jobs Tab" on page 90.)

In the Details area, do the following:
4. Select the DC Engine selection mode:

- Automatic: Discovery Cracker selects the DC Engines to assign to a job.
- Manual: You select one or more DC Engines to assign to a job.

If you select Manual, select Select DC Engines to open the DC Engine Selection dialog box and assign DC Engines to the job. For complete instructions, see Chapter 16, "DC Engine Selection," on page 225.

## 5. Select When to run.

You can leave the setting as Immediately, select Scheduled and enter a different date and time, or select Follow Job and select a job from the list.

NOTE:

- If you create a job to run following the completion of another job within the same project and group, but the second job depends on the first job for count of items, the second job may not perform the requested action on all items.

For example, if you create a group to process data in a folder and then create a job to perform the first three actions (Initial Spin Through, File Spin Through, and Extract Metadata) on that group, and immediately create a job to perform the Render action and have the second job follow the first, the job for Render will run after the first job as requested, but because there were no items for it to perform the action on at the time it was created, no documents are rendered.

- After a job is created, you can change when it runs. See "Pausing a Job" on page 88.

6. Select Job priority.

You can leave the job priority set to Normal, or you can select High, Above Normal, Below Normal, or Low.

This setting controls the amount of system resources assigned to a job. A job with a priority of High gets more system resources. A job with a priority of Low gets fewer system resources. Discovery Cracker considers job priority only when multiple jobs are running at one time. The jobs can be within one project or across multiple projects.

NOTE: After a job is created, you can change its priority. See "Editing a Job" on page 88.
7. Select Job timeout settings.

Accept or adjust the Processing timeout, the Rendering timeout, and the OCR timeout settings. For an explana-
tion of timeout settings, see "System Timeout Settings" on page 35 .
8. Select Actions to be performed.

You must select at least one action. Refer to "Selecting Actions" on page 85 to determine which actions to select.
nOTE: The first time you create a job for a particular selection of documents, you must select the Initial Spin Through action.
9. You have the following options:

- Proceed to step 16.
- Select Import Settings to import the settings from a previous job. Then proceed to step 16.
- Select Edit Settings to display the Job Settings tab and edit the task settings. Then proceed with step 10.

10. On the Job Settings tab, in the Actions pane, select an action (only the actions that you selected are listed).
11. Select a document type group (applicable only for the File Spin Through, Extract Metadata, and Render actions).
12. In the Tasks pane, select a tab and adjust the settings as needed.

For instructions, refer to the locations listed in Table 6.1, "Task Settings Instructions."

Table 6.1: Task Settings Instructions

| For tasks associated with this action | Look here for instructions |
| :--- | :--- |
| File Spin Through | Appendix A, page 234 |
| Extract Metadata | - "Performing Optical Character Recognition," page 174 <br> - "Working With Languages," page 212 <br> - Appendix A, page 237 |
| Render | - "Performing Optical Character Recognition," page 176 <br> - "Working With Languages," page 215 <br> - Appendix A, page 240 |
| Postprocessing | "Postprocessing," page 127 |
| Data Delimited Text File Export | - "Previewing Documents," page 96, for exporting before postprocessing <br> - "Exporting," page 153, for exporting after postprocessing |
| Concordance Viewer Export | "Exporting," page 153 |

Table 6.1: Task Settings Instructions (Continued)

| For tasks associated with this action | Look here for instructions |
| :--- | :--- |
| IPRO Export | "Exporting," page 154 |
| Ringtail Export | "Exporting," page 155 |
| AD Summation DII Export | "Exporting," page 160 |
| Import Data | "Previewing Documents," page 98 |
| DocuLex 5 Export | "Exporting," page 167 |
| EDRM XML Export | "Exporting," page 167 |

13. If you want to apply the settings of the tab you are currently on to additional document type groups, do the following:
a. Select Select Additional Document Type Groups while you are still on the tab.
note:

- This button is available only when you change one or more settings on the tab.
- This button is displayed only on the tabs for which you can select additional document type groups.
- Be sure the settings on the current tab are appropriate for the additional document type groups you select.

The Select Additional Document Type Groups dialog box is displayed with a list of all the document type groups. The document type group you are currently working in is selected, and you cannot change that selection.
b. Select the document type groups for which you want to apply the settings of the current tab, or select Select All.
c. Select OK .

The Apply Selection dialog box is displayed with the message, "Depending on the number of document type groups you selected, this could take a few seconds. Do you want to proceed?"
d. Select Yes to proceed, or select No to return to the Select Additional Document Type Groups dialog box and change your selection.

Once you select Yes, Discovery Cracker records the selected document type groups, then returns you to the task tab.
14. Repeat steps 10 through 13 as needed.
15. When you have finished making all your settings, select Back To Job Creation.
16. On the General Job Information tab, select Create.

The Confirm dialog box is displayed with the question, "Are you sure?"
17. Select Yes to create the job.

On the General Job Information tab, the Import Settings button changes to Export Settings. You can export the settings from this job so that you can import them into a job you create in the future.
The job runs according to the settings you made.

# Selecting Actions 

Discovery Cracker gives you great flexibility in processing your documents.

You may only want a count of how much data you have to process. Select Initial Spin Through and File Spin Through to get that count. For certain document type groups, metadata is collected as well.

You may want to just crack the documents and then let your client preview them (see "Previewing Documents" on page 93.). To crack documents, select Initial Spin Through, File Spin Through, and Extract Metadata.

You may want to crack and render the documents all in one job. In that case, select Initial Spin Through, File Spin Through, Extract Metadata, and Render.

Typically, you would then check the quality of the processed documents (see "Quality Control" on page 101) before proceeding to postprocess them (see "Postprocessing" on page 127). In that case, select Postprocessing by itself after you perform quality control.

If you don't want to perform quality control before postprocessing, you can set up a job to include Initial Spin Through, File

Spin Through, Extract Metadata, Render, and Postprocessing all at one time. However, to include Postprocessing without performing quality control, you must change some of the postprocessing default settings. When creating a postprocessing session, you must select Cracked OR Rendered as Documents to include (see "Creating a U.S. Session" on page 133). If you use those postprocessing settings, problem documents will not be included in your final output.

However, that's as far as you can go in selecting multiple actions at one time. To import or export data, you have to create a separate job and select the appropriate import or export action.

Table 6.2, "Action Selection," on page 87, lists the processing actions you can choose from and explains the purpose of each one.

## NOTE:

- Having groups and views allows you to run different jobs against the same documents. If Discovery Cracker has already performed Initial Spin Through, File Spin Through, Extract Metadata, or Render on a document, it will not redo one of those actions. You can create a job to redo those actions on a document level through a QC Session. See "Recracking, Rerendering, or Redoing the OCR Process on Documents" on page 120. However, once you postprocess documents, you cannot recrack them.
- Export jobs. If you run more than one job of the same type of export (for example, two AD Summation DII Export jobs) at the same time within the same project, the jobs will not run simultaneously; they will run consecutively. However, multiple exports of different types (for example, one AD Summation DII Export job and one Concordance Viewer Export job) will run simultaneously.
- With regard to the first 4 actions on the Actions to be performed, you must complete these actions in the order in which they appear on the list before preceding to the next action. For example if you attempt to Render your documents before performing the Extract Metadata action, the Render job will not complete successfully. In the case where a job is run out of sequence, you must pause the job with the missing prerequisite action (the Render job in this case), create a job to complete the prerequi-
site action (create an Extract Metadata job) and once the job is done, you can restart the original job (the Render job).

Table 6.2: Action Selection

| Select this action | To do this |
| :---: | :---: |
| Initial Spin Through | Receive a count of the number of files in the folders to be processed. You must select this action the first time you create a job for a selection of folders. |
| File Spin Through | Extract all the attachments and all the embedded files* from the selection of folders to be processed. This gives you a total item count for the job. <br> *If you installed Microsoft Office 2007 on your DC Engine computers, you will not be able to extract embedded files from PowerPoint documents created with versions of PowerPoint earlier than Microsoft Office PowerPoint 2007. We recommend that, if possible, you install Microsoft Office 2003 with Microsoft Office 2007 forward compatibility on one of your DC Engine computers. Send PowerPoint documents to that DC Engine for processing. |
| Extract Metadata | - Collect the metadata from your documents. This is also referred to as "cracking." <br> - Enable optical character recognition of native image files. <br> - Change the default encoding for extracting metadata when using the Discovery Cracker Extractor. <br> - Identify scripts. |
| Render | - Create TIFF images or PDF files and, optionally, text files of your documents. <br> - Change the default encoding for creating the text files. <br> - Enable optical character recognition of rendered TIFF images. <br> - Enable deactivation of blank pages. |
| Postprocessing | - Assign numbers to documents or document pages. <br> - Package processed files to deliver to your client. <br> - Endorse documents. <br> - Populate the AllText field in the database. (This task copies the data from the text files produced during rendering and stores it in the database so you can select the AllText field when exporting.) |
| Data Delimited Text File Export | Export a text file for loading into a third-party software, either before postprocessing or after postprocessing. |
| Concordance Viewer Export | Export your documents to a file that can be loaded into Concordance for use with the Opticon viewer. |
| IPRO Export | Export your documents to a file that can be loaded into an IPRO product. |
| Ringtail Export | Export your documents to a file that can be loaded into Ringtail. |
| AD Summation DII Export | Export your documents to a DII file that can be loaded into other AD Summation products. |
| Import Data | Import a text file containing documents that your client has previewed and returned to you for further processing. |

Table 6.2: Action Selection (Continued)

| Select this action | To do this |
| :--- | :--- |
| DocuLex 5 Export | Export your documents to a file that can be loaded into DocuLex Professional Cap- <br> ture or DocuLex IP Studio. |
| EDRM XML Export | Export your documents to an EDRM XML-compliant file that can be loaded into <br> applications that accept such files, such as AD Summation Enterprise Data Manager <br> for use with AD Summation Enterprise version 2.6. |

Editing a Job
If a job is waiting to run or if it is in a Paused state, you can edit the description, when the job runs, and the job priority.

To edit a job:

1. In the navigation pane, select a job.

The General Job Information tab is displayed.
2. Select Edit.
3. In the Information area, under Job, in the Description box, you can type a different description.

In the Details area, you can do the following:
4. Under When to run, you can make a different selection.
5. In the Job Priority box, you can select a different priority.
6. Select Save.
note: To change the DC Engine selection, you don't need to select Edit. For information about changing the DC Engine selection, see page 228.

Pausing a Job

After you create a job, a Pause button appears at the bottom of the General Job Information tab and remains there until the job is finished. If you select Pause, the button changes to Restart. The job will not run until you select Restart; then it runs immediately.

You may want to pause a job for the following reasons:

- To change when the job runs if you selected Scheduled or Follow Job in the When to Run area on the General Job Information tab.
- To allow other jobs to finish first if you have multiple jobs running and decide that one or more are not critical at that time.

To pause a job:

1. In the navigation pane, select a job.

The General Job Information tab is displayed.
2. Select Pause.

The Pause button changes to Restart.
The job will run as soon as you select Restart. Do not select Restart until you want to run the job.
3. Select Save.

The job runs according to the settings you made.
note: Discovery Cracker does not allow you to pause a postprocessing or an export job. Pausing a postprocessing job or an export job could cause problems with document numbering or with the export text file.

Job Status
All jobs have a status. You see the status in the Status column of the Jobs tab (when you select a project, group, or view).
note: Do not confuse job status with document status. Please see Appendix B, "Document Status," on page 273.

Table 6.3, "Job Status Descriptions," explains what each status means.

Table 6.3: Job Status Descriptions

| Icon | Job Status | Description |
| :--- | :--- | :--- |
|  | Scheduled | The job will run at the time you selected, or it will follow another job that you selected. |
|  | Active | The job is currently running. |
| Indicates an open QC session. |  |  |
|  | Problem | There was a problem during the creation of the job. You need to re-create the job. <br> The job is not currently running. You paused the job or it is a QC job that you have not <br> started. <br> The job will run when you select Restart on the General Job Information tab. |
|  | Completed with <br> errors | The job is finished. <br> Thevel. Selecting the View hyperlink in the Errors column of the Jobs tab will display the <br> errors that occurred at the job level. The pane is displayed at the bottom of the tab. |

After you create projects, groups, and views, the Jobs tab is displayed in the right pane of the Discovery Cracker Console main window. After you create a job, the information about the job is displayed in the Jobs tab.

You see the following information on the Jobs tab:

- Refresh Rate (seconds) - You can choose a time interval (every $30,60,90$, or 120 seconds) by which to automatically refresh the information displayed on the Jobs tab.
- Refresh Now icon - Selecting the icon refreshes the information displayed on the Jobs tab manually.
- The following columns:
- Parent (displayed only in the Jobs tab from a project level) - Identifies the group or view the job belongs to.
- Job ID - Identifies the job by Job ID number. Selecting the number takes you to the General Job Information tab for the job.
- Description - Displays the description you entered for the job.
- Priority - Displays the priority you set for the job.
- \% Complete - Displays the percentage of the job that has completed.
- Status - Displays one of the following statuses: Scheduled, Active, Problem, Paused, Completed, Completed with errors. (For descriptions of the statuses, see Table 6.3, "Job Status Descriptions," on page 89.
- Errors - Provides a View hyperlink when the job completes with errors. When you select View, error messages for the job are displayed at the bottom of the Jobs tab.
- DC Engine Selection - Displays the DC Engine selection mode (automatic or manual) of the job if the job has not finished running. Selecting Automatic or Manual opens the DC Engine Selection dialog box. You can change the mode or the DC Engines assigned to the job. (See "DC Engine Selection" on page 225.)
- Job to Follow - The job will process after the job that is listed.
- Scheduled Start - Displays the time the job is scheduled to start.
- Created By - Displays the user who created the job.

The jobs that are displayed on the Jobs tab depend on how you access it. See Table 6.4, "Accessing the Jobs Tab."

Table 6.4: Accessing the Jobs Tab

| If you select this from the <br> navigation pane | The Jobs tab displays this |
| :--- | :--- |
| - Project name | All the jobs in the project |
| - Group-level identifier |  |
| - View-level identifier |  |$\quad$.

Once jobs are processing, you can monitor the processing activity: which items are being processed and which DC Engine computer is doing the processing.

You can do this from the Workflow Manager user interface or from the Monitor Workflow Manager Activity dialog box in Discovery Cracker Console. See the following topics for instructions.

## The Workflow Manager User Interface

Workflow Manager is the task manager and communication center for the Discovery Cracker system. It manages the workflow for the Discovery Cracker components, controlling all events and balancing the load among the DC Engine computers for faster processing.

The Workflow Manager component is installed on only one computer in a Discovery Cracker system.

To access the Workflow Manager user interface, you must go to the computer that hosts the Workflow Manager component.

The Workflow Manager user interface displays the following panes:

- DC Engine Computers - displays a list of all the computers that have DC Engine running and the date Workflow Manager last saw the DC Engine. Workflow Manager pings the DC Engines at regular intervals.
- Items Being Processed - displays the items that are being processed by each DC Engine.


## The Monitor Workflow Manager Activity Dialog Box

If you don't have access to the Workflow Manager computer, you can monitor the job processing activity by using the Monitor Workflow Manager Activity dialog box in Discovery Cracker Console. From the Tools menu, select Monitor Workflow Manager Activity.

When you open this dialog box, you see a detailed snapshot of the items that are being processed at that moment in time. You can choose to display the items according to DC Engine computer or according to job.

You can manually refresh the snapshot or select to have the snapshot refreshed automatically at regular intervals.


Figure 6.1.

## 7. Previewing Documents

Your clients can preview their documents before they are postprocessed. This gives them a preview into their data so they can cull down what you are to deliver back to them. This allows them to reduce their cost for production since you will not have to produce all of the documents they provided to you for processing. It also reduces your cost because you do not have to complete a full production of the data before your client previews it.

Your clients can preview documents that have been processed through a cracked stage (the Discovery Cracker program has collected the metadata) in two different ways:

- They can preview the documents by using the DC Detective tool.
- You can export a text file for loading into AD Summation iBlaze, WebBlaze, or Enterprise; Concordance Viewer; or any other software that accepts a delimited text file.

It is not necessary to render documents for this preview process to take place. It is also not necessary to quality check the documents prior to a preview process. However, you may want to look at any problem documents for possible missing metadata, then recrack those documents if you feel that Discovery Cracker may be able to collect more metadata.

The rest of this chapter explains what is necessary for you to do as the Discovery Cracker administrator to make it possible for your clients to:

- Preview Using the DC Detective Tool
- Preview Using Data Delimited Text Files


# Preview Using the DC Detective Tool 

DC Detective is a secure browser-based data preview tool that enables lawyers, paralegals, and others to preview any or all electronic documents that have been cracked by the Discovery Cracker program.

In the DC Detective tool, previewers can view the documents, decide what action is needed, and indicate what that action is. They do that by creating tags that are meaningful for their objective and assigning appropriate tags to the documents they
choose. They can also include notes (comments) about the documents for other previewers to read. When finished, DC Detective then sends that information to the Discovery Cracker database.

## DC Detective Administration

DC Detective is administered by the Discovery Cracker administrator.

You need to ensure that the DC Detective Web application is installed on a Web server on your network. You or your network administrator can perform the installation. (For installation instructions, see the Discovery Cracker Environment Setup and Installation Guide. In Chapter 1, "Installation Overview," refer to Table 1.1, "Checklist for Preinstallation, Installation, and Postinstallation Tasks." Note the column for DC Detective.)

If your network administrator installs DC Detective, he or she needs to provide you with the Web address for accessing the DC Detective Web site from computers other than the Web server hosting DC Detective.

You perform the following DC Detective administration tasks:

- You set up DC Detective users.
- You ensure that DC Detective users receive the necessary information to preview their data.

Setting up DC Detective Users
The DC Detective Web site requires users to $\log$ in with a user name and password. You assign login information to DC Detective users.

You do this by setting up Discovery Cracker user accounts with DC Detective permissions. Each Discovery Cracker user account has a user name and password. DC Detective users log in to DC Detective using their Discovery Cracker user name and password.

You control who has access to the DC Detective tool, which activities each DC Detective user is authorized to perform, and which projects they have access to. (See "Managing Users and Security" on page 39.)

For example: If you are a Discovery Cracker administrator who works in a service bureau, you can have many different clients
using the DC Detective tool to preview their data. You need to make sure that previewers from Firm A can see only their case information and not case information from other firms. You also need to make sure that User 1 from Firm A can see only the cases they are authorized to work on and not cases other users from Firm A are working on.

To set up a DC Detective user:

## Prerequisite:

- Projects, groups, and, optionally, views must be created.

Steps:

1. Create a Discovery Cracker user account (see "Creating User Accounts" on page 40).
2. Assign the appropriate security role to the user.

The security role controls the activities the user is allowed to perform in the DC Detective tool by means of the permissions you set for the role. If necessary, create a new security role (see "Creating Security Roles" on page 41) with the proper DC Detective permissions.
3. Assign the appropriate DC Detective access role to the user.

The DC Detective access role controls the projects the user is allowed to access in DC Detective. If necessary, create a new DC Detective access role (see "Creating DC Detective Access Roles" on page 43) with access to the appropriate projects.

Communicating with DC Detective Users
You need to ensure that your client is informed when data is ready for previewing and that DC Detective users have the following information:

- The DC Detective Web site address.
- Their Discovery Cracker user ID and password to use as their DC Detective user name and password.
- A description of the DC Detective activities they are permitted to perform.
- The list of projects they have access to.
- DC Detective user instructions. A copy of the DC Detective User Guide in PDF format is located in the Documentation folder of the Discovery Cracker program folder.
- Instructions to install applicable software on their local computer in order to view native files.
- Instructions to install supplemental language support on their local computer in order to display the correct characters for all languages (Start>Control Panel>Regional and Language Options $>$ Languages $>$ Supplemental language support. Select Install files for complex script and right-toleft languages (including Thai) and Install files for East Asian languages).


## Preview Using Data Delimited Text Files

After cracking documents but before postprocessing them, you can send delimited text files of the data to your clients to preview and send back to you with instructions about how to further process the documents. You then import the delimited text files and continue processing them according to your client's instructions.

The following procedures describe exporting and importing data delimited text files before postprocessing.

To create a data delimited text file export:

## Prerequisite:

- You have processed the documents you want to export with the Initial Spin Through, File Spin Through, and Extract Metadata actions.

Steps:

1. Create a job from a group or a view.

On the General Job Information tab, complete the job Description, DC Engine selection, When to run, Job priority, Job timeout settings.
(If necessary, refer to the instructions for "Creating a Job" on page 81.)
2. Under Actions to be performed, select Data Delimited Text File Export.

NOTE: If your client uses another AD Summation product as a preview tool, see "AD Summation DII Export" on page 160 or "EDRM XML Export" on page 167.
3. Select Edit Settings to display the Jobs Settings tab.
4. On the Data Delimited Text File Export task pane, do one of the following:

- Select a previously created session (see "To select a previously created session:" on page 97).
A document is only exported once per session. It is useful to select an existing session to:
- Do incremental exports as you receive data from your client.
- Ensure that documents are not exported twice if you are exporting from a dynamic view.
- Create a new export session (see "To create a new export session:" on page 97).
Create a new export session to export documents for the first time or if you want to export the same documents again.

5. Select Back To Job Creation.
6. On the General Job Information tab, select Create.

The Confirm dialog box is displayed with the question, "Are you sure?"
7. Select Yes to create the job.

To select a previously created session:

1. On the Data Delimited Text File Export task pane, from the Select a session list, select the session you want.

The settings displayed are the ones you chose when you created the export session.
2. Change or accept the settings.
3. Select Update Session to save your settings.
4. Continue with step 5 in the procedure "To create a data delimited text file export:".

To create a new export session:

1. On the Data Delimited Text File Export task pane, select Create Session.

The Session Creation dialog box is displayed.
2. Type a name in the Session Name box and, optionally, a description in the Session Description box, then select Create.
3. From the Select a session list, select the session you just created.
4. In the Select name and location for the output file box, accept the path and file name or browse to and select different ones.
5. For Select an export type, select Before Postprocessing.
6. Make appropriate selections in the Export Configuration, Documents to Process, and Replacement Characters areas.
note:

- In the Export Configuration area, the Use Unicode check box is selected by default. The export is created using Unicode (UTF-16) encoding.
- If you clear the Use Unicode check box, the export is created using ASCII encoding. In that case, in the Replacement Characters area, you need to select values less than 128 (0-127).
- In the Replacement Characters area, for Unicode or ASCII encoding, be sure to select different values for each delimiter.

7. On the Selected Fields tab, select the fields to be included in the export file.

- Select Edit Fields to add fields.
- Select Save Fields to save the selected field set for future data delimited text file exports.
- Select Use Saved Fields to used a previously saved data delimited text file field set.
- If you plan to import the data back into the Discovery Cracker program, at a minimum you must select the fields Project_UID and ItemNumber (they are selected by default). These fields are necessary so that Discovery Cracker can recognize which project and which items are being imported.

8. When you have finished setting all parameters, select Update Session to save the settings.
9. Continue with step 5 in the procedure "To create a data delimited text file export:".

To import data delimited text files:

1. Create a job from a group or a view.

On the General Job Information tab, complete the job Description, DC Engine selection, When to run, Job priority, Job timeout settings.
(If necessary, refer to the instructions for "Creating a Job" on page 81.)
2. Under Actions To Be Performed area, select Import Data.
3. Select Edit Settings to display the Job Settings tab.
4. On the Tasks pane, do one of the following:

- In the Select an Import Session box, select a session you previously created.
The Discovery Cracker program loads the settings from the selected session. You can adjust the settings if necessary, then proceed to step 8.
- If you want to create a new session, proceed with step 5 .

5. Select Create Import Session.

The Session Creation dialog box is displayed.
6. In the Session Creation dialog box, do the following:

- Type a name in the Session Name box.
- Type a description in the Session Description box (optional).
- In the Import Session area, decide if you want to select the following check boxes:
- Maintain parent-child relationships
- Allow documents to be imported from different sessions
- Select Create.

7. In the Select an Import Session box, select the session you just created.
8. In the Select an Import File box, select the text file you want to import.

You can browse to the location or type the path in the text box.

If you browse to the location, you must select My Network Places\Entire Network\Microsoft Windows Network $\backslash$ domain] or [workgroup $]$ [computername $]$ [shared folder].

If you type in the text box, you must use the UNC format, i.e., $\backslash \backslash[$ computername $\backslash$ [shared folder].

The import file must have the Project_UID and ItemNumber fields in order for the Discovery Cracker program to know which documents are being imported.
9. Make appropriate selections in the following boxes:

- Text Identifier
- Field Delimiter
- Start Import at Row

10. When you have finished setting all parameters, select Back

To Job Creation, then select Create.
A new view is created and is displayed in the navigation pane under the appropriate project. The name of the view is derived from the session name you provided: "Import_[Session Name]".

## 8. Quality Control

Discovery Cracker provides the capability of performing quality control on the documents you process to ensure the quality of the end product that you deliver to your clients. Consistent with the flexibility offered by Discovery Cracker, you can also bypass this step at your discretion for faster delivery to your client.

Should you decide to perform quality control, that is done in a QC session window. This chapter explains how to use the QC session and contains the following subjects:

- Opening a QC Session
- Getting Acquainted with the QC Session User Interface
- Performing Quality Control Activities
- Closing a QC Session
- Starting a QC Job


## Opening a QC Session

When you select a project, group, view, or job in the navigation pane, the information panel about that selection is displayed in the right pane. At the bottom this pane is a Start QC button. You can also right mouse click on a project, group, view, or job and select Start QC from the menu.

This section explains the following topics:

- Opening a QC Session from a Project
- Opening a QC Session from a Group, View, or Job
- QC Pre-Filter

Opening a QC Session from a Project

From the project level, the QC session window opens in readonly mode. When you open a QC session in read-only mode, you can:

- navigate through the documents
- search and sort the documents
- view the documents and document information via the panels
- customize the QC Session window
- set the QC session options


## Opening a QC Session from a Group, View, or Job

You can open a QC session from a group, a view, or a job. When you open a QC session, you can perform the quality control activities, such as:

- approving documents
- inserting placeholder pages
- replacing pages
- marking documents to be recracked, rerendered, or to redo OCR
- assigning endorsement categories to documents
- deactivating documents and pages

When you perform a rework activity such as recrack, render, or OCR, the program automatically creates a QC job for you. After you close the QC session, you will be prompted to start the QC job immediately or put the job in a paused state so you can start it at a later time. See "Closing a QC Session" on page 125 and "Starting a QC Job" on page 125

QC Pre-Filter

After selecting Start QC from the navigation panel or from the information panel, the QC Pre-Filter dialog will appear. This allows you to choose what items you will see when the QC Session window opens.


The options available for filtering are:

- Maintain Family Relationships
- Consider Family Relationships - Selecting this option considers the family relationship of items that meet the filter criteria. Therefore, if at least one member of an item family meets the filter criteria, all other members of that item family will be displayed.
- Disregard Family Relationships - Selecting this option ignores the family relationships when applying the filter criteria and displays only the item that meets the filter criteria.
- Select Item State
- Active Items - Display only active items.
- Inactive Items - Display only inactive items
- Both Active and Inactive Items - Display both active and inactive items.


## - Select Status

- Any Status - Display all items regardless of their current status.
- Items with a specific status - Display items with specific statuses. Additional options are:
- Marked as a problem during
- Any Action - Display items with any problem status.
- Exporting - Display items that encountered a problem during an export.
- Importing - Display items that encountered a problem during import.
- Postprocessing - Display items that encountered a problem during postprocessing.
- Processing - Display items that encountered a problem during processing. This includes problems during: Initial Spin Through, File Spin Through, Extract Metadata, and Render.
- QC'ing - Display items that have been QC'd and marked as a problem.
- Not marked as a problem during:
- Any Action - Display items with any action that did not encounter a problem during processing, QC, postprocessing, exporting, or importing.
- Exporting - Display items that successfully completed exporting.
- Importing - Display items that successfully completed importing.
- Postprocessing - Display items that successfully completed postprocessing.
- Processing - Display items that successfully completed processing. This includes the actions of Initial Spin Through, File Spin Through, Extract Metadata, and Render.
- QC'ing - Display items with the status of QC’d - Approved.
- Select Document Type Group - Display items within a specific Document Type Group.
- Save selected settings - Saves the selected filter settings for the user that is logged into Discovery Cracker Console. Each user can save their own filter settings.


# Getting Acquainted with the QC Session User Interface 

The QC Session window is a modeless window. This means that the window can be moved or minimized to allow you to do other work within the DC Console while you are QC'ing.

The QC Session window is made up of a ribbon that contains three tabs of groups with controls for activities within QC and panels. By default, you see:

- The title bar of the QC Session window which displays the current project and group or view that you have selected to QC.
- The ribbon which contains three tabs of groups.
- The groups within the tabs.
- Controls for QC activities within the groups.
- Multiple panels in the middle of the screen.

This section explains the following topics:

- Customizing the QC Session User Interface
- The Ribbon Groups
- Panels
- Setting QC Session Options


## Customizing the QC Session User Interface

You can customize the QC Session window to meet your needs. For a description of the ribbon groups and their associated controls see "Ribbon Groups" on page 105.

By default, the Data Panel is displayed in the left pane of the QC Session window and other panels are displayed on the right. You can display all panels or only the Data Panel. For a description of the panels, see "Panels" on page 109.

You can control where the panels are located by using a drag-and-drop operation. You can hide all the panels except the Data Panel.

Ribbon Groups The following tables describe the groups within the ribbon tabs and the controls that appear in each.

Table 8.1: Main tab

| Group | Control | Actions |
| :--- | :--- | :--- |
| Action | Approve All | Approves all documents in the QC session without validation. This <br> applies to all documents that met the pre-filter criteria that you selected <br> prior to entering the QC session. This will not approve documents that <br> have a status of problem, inactive, or QC'd. <br> Note: This will approve documents that may not be currently visible in <br> the Data Panel due to any filtering that has taken place while in the QC <br> session. |
|  | Approve | Approves the selected document(s) without validation. This allows you to <br> override a problem status. |
|  | Render | Opens the Take Action dialog which allows you to send the selected doc- <br> ument(s) back through processing to redo rendering or to perform the <br> render action on documents that have not yet been rendered, but have <br> been processed through extraction of metadata. |
|  | Recrack | Opens the Take Action dialog which allows you to send the selected doc- <br> ument(s) back through processing to reprocess the selected document(s). <br> You may choose to perform more or less actions on the selected docu- <br> ment(s) by selecting or deselecting the desired actions. |
|  | OCR | Opens the Take Action dialog which allows you to OCR the image pages <br> of the selected document(s). |
|  | Mark as Problem | Marks the selected document(s) as a problem. |

Table 8.1: Main tab (Continued)

| Group | Control | Actions |
| :--- | :--- | :--- |
|  | Assign Categories | Opens the Select Categories dialog which displays a list of available cate- <br> gories which you can assign to the selected document(s). |
|  | Insert Placeholder Pages | Opens the Take Action dialog which allows you to insert a placeholder <br> page to the selected documents). |
|  | Activate Document | Activates the selected document(s). |
|  | Deactivate Document | Dctivate/Deactivate <br> Pages |
|  | Allows you to select one or more pages from a document to activate or <br> deactivate. This action cannot be taken if you have selected multiple doc- <br> uments. |  |
|  | Replace Pages | Opens the document in the native application. This option is only avail- <br> able for single documents. <br> (note: The native application must be installed on the local computer.) |
| Grid Data | Add Note | Replaces the existing TIFF image or PDF pages with others that you have <br> created. You can replace a single page within a document or all of the <br> pages of the document. This action cannot be taken if you have selected <br> multiple documents. |
|  | Refresh | Opens the Add Note dialog which provides you with a text field area in <br> which to enter a note for the selected document(s). |
|  | Reloads the data from the project, group, view, or job that is currently <br> loaded in the QC session with the same filter or you may choose different <br> filter options. This is beneficial if you are processing while QC'ing on the <br> same project, group, view, or job as it will update the data grid with any <br> new items that have been processed while you were in the session. |  |
|  | Updates the status of the currently loaded documents in the current QC <br> session. This will not update the grid with new items if you are QC'ing <br> while processing. |  |

Table 8.1: Main tab (Continued)

| Group | Control | Actions |
| :--- | :--- | :--- |
|  | Search/Filter | $\begin{array}{l}\text { Provides an expression builder to search for specific documents within } \\ \text { the QC session. When selected, a Filter Builder dialog will appear in } \\ \text { which to build your filter criteria. To use this builder: } \\ \text { 1. Select the field you wish to use for searching } \\ \text { 2. Select the correct operator such as equals, contains, begins with, etc. } \\ \text { 3. Select the <enter a value> area and enter the criteria you are searching } \\ \text { for. }\end{array}$ |
|  |  | $\begin{array}{l}\text { 4. You can add additional fields using And, Or, Not And, and Not Or } \\ \text { operators. }\end{array}$ |
|  | 5. Select the Apply button to view the results in the Data Panel and |  |
| then you can add more criteria or conditions to meet your needs. |  |  |
| 6. Select the OK button to apply your criteria to the Data Panel and |  |  |
| close the Filter Builder dialog. |  |  |$\}$ 7. Select the Cancel button to cancel the expressions that have not yet | been applied and close the Filter Builder dialog. |
| :--- |

Table 8.2: Auto QC tab

| Group | Control | Actions |
| :--- | :--- | :--- |
| Auto QC/Auto <br> Paging Settings | Start | Initiates the Auto QC function using the your selected settings for valida- <br> tion. |
|  | Stop | Halts the Auto QC function. |
|  | View Image and Text | When selected, during Auto QC the Image and Text panels are visible. If <br> not selected, the Image and Text panels will be closed during Auto QC. |

Table 8.2: Auto QC tab (Continued)

| Group | Control | Actions |
| :---: | :---: | :---: |
|  | Approve and Validate | When selected, the Auto QC function will validate that all images that should be present are present in the appropriate Images folder and that all attachments are present in the Items folder of the project directory. It will also change the status of each item to QC'd - Approved if that item has successfully completed processing and succeeds validation. <br> If not selected, the Auto QC function will scroll through the items but will not validate that images exist or that attachments have been saved. In addition the status of the items will not be changed to QC'd - Approved. <br> If you also have the View Images and Text option selected, the image and text panels will display the appropriate images and text while Auto QC is running. With this combination of selections you have an auto paging capability without approving documents. |
|  | Stop on Error | When selected along with the Approve and Validate option, the Auto QC function will stop if the validation of the page or attachment locations have failed. If not selected, the Auto QC function will continue through until completion or you select the stop button. In both cases, if the Approve and Validate option is selected, the item's status will be changed to QC’d - Marked as problem. |
|  | Review Pages | Determines how many pages will be cycled through during Auto QC before moving to the next document. You can select from the pre-defined options of All pages, or the first $1,5,10,25$, or 50 pages, or you can type in your own value for the number of pages you would like to review. |
|  | Page Interval | Determines the length of time in seconds that each page will be displayed before moving to the next page during Auto QC. The smallest interval is .01 and the largest interval is 999999 . |
|  | Select Start | Determines where Auto QC begins to function within the Data Panel. If you select First, Auto QC will start from the first record in the Data Panel. If you select Current, Auto QC will start from the record you are on within the Data Panel and move down the data set. |
| Action | This group is repeated from the Main tab for your convince so that while performing Auto QC you can stop and take an action if you need to without switching back to the Main tab. |  |
| Exit | Close QC | Closes the QC session. |

Table 8.3: Tools tab

| Group | Control | Actions |
| :--- | :--- | :--- |
| Panels | Reset Layout | Resets all of the default settings for the panel placement and visibility. |
|  | Visibility | Displays a list of the available panels that can be displayed or hidden. |
| Tools | Options | Opens the Options dialog which provides the ability to change the View <br> Options and the Color Scheme. |
|  | Manage Placeholder <br> Pages | Opens the Manage Placeholder Pages dialog which allows you the ability <br> to import new placeholder pages or to create placeholder pages. |
| Exit | Close QC | Closes the QC session. |

Panels The Visibility control on the Tools tab allows you to control which panels you see in while in a QC session. The following panels are available:

## Data Panel

Displays the metadata of the processed documents that are in the project, group, or view that you select in the navigation pane.
You also see FOLDER, PST, and NSF items unless you have excluded them in the QC Pre-Filter dialog. These items are not documents that have been processed. They are container items (see "Document Relationships" on page 21). They are displayed for informational purposes only, but can be selected for recracking if a problem occurred during the Initial Spin Through action.
The Data Panel displays fields from the Items table and the IntItems table. By default, you see at least the following fields: Item Number, Parent Item Number, and Main Item Number.

To understand the meaning of the numbers in these fields you need to understand what an item is, what a parent item is, and what a main item is. For an explanation, refer to "Document Relationships" on page 21.
Another field that is displayed by default is the Status field. The field displays the status of each document loaded into
the QC session. The status is the last action Discovery Cracker performed on the document, the last action you took on the document, or the current state of the document. For more information, see Appendix B, "Document Status," on page 273.

You can control which fields are displayed and how they are displayed. When you right-click on the field name title bar, you have a menu of formatting options to choose from.

The Data Panel contains navigation elements at the bottom of the panel. The Record x of y box displays location within the Data Panel that you currently have selected. You can navigate up or down the data panel by using your up or down arrow keys on the keyboard or you can navigate through the records by using the navigation arrows surrounding the Record x of y box.

## Errors Panel

When Discovery Cracker encounters an error while processing a document, it logs an entry in the Errors table of the project database. If the document you select in the Data Panel generated errors, the following information from the Errors table is displayed: SystemMessage and CustomMessage. By default the Error Panel is located directly below the Data Panel so as you move through the records on the data panel, errors for problem items will appear.

## Image Panel

Displays the TIFF image or PDF file of each page of the document that you select in the Data Panel. This panel will also display any placeholder pages you have inserted. If no TIFF, PDF, or placeholder page is associated with the selected document, this panel will be blank. From this panel you can:

- Navigate to the previous page
- Navigate to the next page
- Rotate the display window
- Rotate the physical image
- Rotate all of the pages in the document
- DeactivatelActivate the current page
- Zoom in on the page
- Zoom out on the page
- Change the size of the displayed page
- Open the folder in which the page exists


## Thumbnail Panel

Displays thumbnail images (if TIFF images or PDF files exist) of each page of the document that you select in the Data Panel. From this panel you can:

- Zoom in
- Zoom out


## Text Panel

Displays the text of the page displayed in the Image panel. From this panel you can:

- Navigate to the previous page
- Navigate to the next page


## Discovery Cracker Viewer Panel

Displays the document that you select in the Data Panel in a print preview mode through the Discovery Cracker Viewer.

The Discovery Cracker Viewer cannot view all document types, for example, Access files. For such documents, nothing is displayed in the Discovery Cracker Viewer panel.

## Action Status Panel

Displays the status of each action performed on the document that you select in the Data Panel.

## Large Field Viewer Panel

Allows you to view the text of a large field for the document that you select in the Data Panel. The panel contains a Fields list. From the list you select the field you want to view.

## Categories Panel

Displays the categories that have been assigned to the document you select in the Data Panel.

## Scripts Panel

Displays the scripts that are used in the document you select in the Data Panel.

## Setting QC Session Options

To set QC session options, select the Options control on the Tools tab. The Options dialog box is displayed with the following tabs:

- View Options
- Color Scheme

On the View Options tab, you can select one or more of the following check boxes:

- Use QC mode - Selected by default, this provides the ability to take actions on items. If this is not selected, QC will operate in a read only mode which allows you navigation and viewing capabilities, but you cannot take any actions on items.
- Show active page - Displays the active rendered pages. By default this option is selected.
- Show inactive page - Displays the inactive pages. By default this option is not selected so you will only see active pages.
- Save session layout when closing - Saves the current layout for each user that is logged in. Each user can set their layout as they wish. With this option selected upon closing of a QC session, each time you log into a QC session on any computer that hosts DC Console, your last layout will be presented to you.
- Missing Document Check - When selected, this option invokes an additional check during QC to validate the existence of the native document in the expected location. This check will take place during manual QC as well as AutoQC.
- Set Default for Cracking. Apply to Main Items. - When selected, this option will apply any recrack action to the main item regardless of whether or not you were on the main item within a family of documents when you requested the recrack action.

On the Color Scheme tab, you can select colors for the following items:

- Approved
- Not QC'd
- Problem
- Inactive


## Performing Quality Control Activities

Quality control activities include checking the quality of rendered documents (TIFF images or PDF files); approving documents; inserting placeholder pages; recracking, rerendering, and redoing the OCR process on documents; assigning categories to documents; adding notes about the action you take on a document; replacing pages in a document; and deactivating documents or pages.

You perform these activities from the following locations:

- The Main tab on the ribbon
- Auto QC tab on the ribbon
- The shortcut menu when you right-click a document in the


## Data Panel

You can perform quality control activities on multiple documents at one time. In the Data Panel, select the first document you want, then while holding down the Shift key, select the last document you want. You can also select non-consecutive documents by holding the CTRL key as you select the documents you want. Then follow the instructions later in this chapter for the quality control activity you want to perform.

Many of the activities in a QC session can be performed by selecting a menu option from a right click on the Data Panel or by using a hotkey (for a list of the hotkeys available see Appendix C, "QC Hotkeys," on page 276). For the purposes of this document only the controls on the ribbon will be discussed, but the activities function the same way regardless of how you invoke them.
(Note: some actions cannot be performed on multiple documents)

Instructions for each of the QC activities are provided in the following topics:

- Checking the Quality of Rendered Documents
- Approving Documents
- Inserting Placeholder Pages
- Recracking, Rerendering, or Redoing the OCR Process on Documents
- Adding Notes
- Replacing Pages
- Deactivating a Document or Pages


## Checking the Quality of Rendered Documents

You may want to check the quality of the rendered TIFF image or PDF file of each document. By using Auto QC with the View Image and Text option selected. You can automatically cycle through each document.

Settings are available that allow you to customize how Discovery Cracker automatically pages through your documents. You can select the cycle speed, the number of pages of each document to display, and the size of the view.

If you need to take action on a specific document, with that document showing in the Image Panel, select the Stop button in the Auto QC group and take the appropriate action from the Action group.
note: Using the Auto QC feature without selecting the Approve and Validate option does not approve your documents.

In a QC session, you can approve documents manually or automatically.

- Manually.

You can manually approve documents in two ways:

- Scroll through the documents one by one in the Data Panel. As you step on and off a document, it is approved.
- Select one or more documents in the Data Panel. Select the Approve icon on the Action group.
- You can insert a placeholder page and approve documents. (For more information, see "Inserting Placeholder Pages" on page 116.) You may want to use this method to approve problem documents so they can be postprocessed.
- Automatically.

To automatically approve documents without validation and without viewing rendered pages:

1. On the Main tab of the ribbon select the Approve All icon.
2. A confirmation dialog will appear informing you of what will be QC'd.
3. Select Yes to continue or select No to cancel this operation.

This method will not perform any validation. When you select this option, the approval occurs on all documents that met the pre-filter conditions you set when entering into the QC session. Some documents may not be visible in the Data Panel if you have applied additional filtering since entering the session, however, whether visible or not, all documents will be approved. This will not approve any documents that are inactive, problem, locked by another process, or already QC'd. Also, because this is a bulk operation, the only notification you will have is a dialog that advises that the activity is going on at the database level.
To automatically approve documents with validation and optionally with viewing rendered pages:

1. Select the Auto QC tab on the ribbon.
2. Select the Approve and Validate checkbox.
3. Accept or change the settings for View Image and Text and Stop on Error.
4. Select Start.

Auto QC approves each document loaded into the QC session except those that are missing a rendered page or native file. Inactive, problem, and currently locked documents are disregarded. If you have applied any filtering after you have entered a QC session, only those documents that are visible after the filtering will be QC'd.

- With the Stop on Error check box cleared, when Auto QC finds a document that is missing a rendered page or native file the document is assigned the status QC'd - Marked as Problem. Auto QC continues checking all loaded documents. You can go back later and take action on problem documents.
- With the Stop on Error check box selected, when Auto QC finds a document that is missing a rendered page or native document, Auto QC stops. A dialog box displays the item number of the problem document. You can then go to the document in the Data Panel and take the appropriate action. To continue Auto QC, you must select the Start icon again.
When you select Start, an Auto QC Status dialog will appear and display the following information:
- Documents failed validation - Displays the number of documents that had missing pages or native documents.
- Documents approved - Displays the number of documents that have been approved.
- Documents skipped - Displays the number of documents that were skipped. Documents that are inactive, problem, or locked by another process will be skipped.
- Documents left to process - Displays the number of documents left to be QC'd.

You can manually stop Auto QC by selecting the Stop icon.

## Inserting Placeholder Pages

Placeholder pages are TIFF or PDF files that display messages within the page that take the place of a rendered document. Once a placeholder page is inserted, you see those messages in the Image panel.

Discovery Cracker comes with the placeholder pages in the following list. They are located in the Discovery Cracker program folder. (By default that location is C:\Program Files $\backslash$ Discovery Cracker\DCPages.) The pages display the messages shown.

## 1. Document Not Rendered

"The Discovery Cracker program cannot render some types of documents due to one of the following reasons:

- EXE - Executable file. There is nothing to render.
- DLL - Dynamic Linked Library. There is nothing to render.
- HTML - The page is not available offline and cannot be rendered.
- URL - The page is not available offline and cannot be rendered.
- LNK - The link or shortcut is not available and cannot be rendered.
- There are also a number of proprietary file types that are not accessible outside their native program and therefore cannot be rendered."


## 2. Password Protected or Encrypted Document

In addition, you can manually insert a placeholder page, such as when you need to explain why a rendered document (TIFF or PDF) is not available. You can use Discovery Cracker-provided
placeholder pages, or you can create placeholder pages with a custom message.

To use Discovery Cracker-provided placeholder pages, you must first import them (see instructions later in this topic). The default location of those files is C:|Program Files $\backslash$ Discovery CrackerlDCPages.

You have two options for creating custom placeholder pages:

- Create a TIFF image or a PDF file and, optionally, a corresponding text file and import them into the Discovery Cracker program.
note: The text file must be a .txt file. The text file contains the text that is represented in the TIFF image or the PDF file.
- Create a placeholder page from within the Discovery Cracker program. The program automatically creates the proper TIFF or PDF file and, optionally, text file.

When you import or create placeholder pages, they are saved in the default directory for reference files.

The instructions below describe how to do the following:

- Import a placeholder page
- Create a placeholder page
- Delete a placeholder page
- Insert a placeholder page

To import a placeholder page:
Prerequisite:

- You have created a TIFF image or PDF file with the message you want and, optionally, a corresponding text (.txt) file

Steps:

1. Open a QC session.
2. Select the Tools tab on the ribbon.
3. In the Tools group, select Manage Placeholder Pages.

The Manage Placeholder Pages dialog box is displayed.
4. Select Import.

The Import Placeholder Page dialog box is displayed.
5. In the Select TIFF or PDF file box, browse to and select the file you want.
6. If you want to include a corresponding text file, select the check box Include text file.

The path of the corresponding text file is displayed in the box.
7. Type a name in the Name this placeholder page as box.
8. If you want the Discovery Cracker program to use this as the default placeholder page, select the check box Set as default placeholder page.
9. Select OK.

The new placeholder page appears in the list of placeholder pages on the Manage Placeholder Pages dialog box.

To create a placeholder page:

1. Open a QC session
2. Select the Tools tab on the ribbon.
3. On the Tools group, select Manage Placeholder Pages. The Manage Placeholder Page dialog box is displayed.
4. Select Create.

The Create Placeholder Page dialog box is displayed.
5. After Select format, select TIFF or PDF.
6. In the Enter content box, type or copy and paste the message for your placeholder page.
7. By default, Discovery Cracker will create a corresponding text file for the placeholder page. If you do not want a text file, clear the check box Create text file with placeholder page.
8. Type a name in the Name this placeholder page as box.
9. If you want the Discovery Cracker program to use this as the default placeholder page, select the check box Set as default placeholder page.
10. Select OK.

The new placeholder page appears in the list of placeholder pages on the Manage Placeholder Pages dialog box.

To delete a placeholder page:

Prerequisite:

- You must have imported or created at least one placeholder page.

Steps:

1. Open a QC session.
2. Select the Tools tab on the ribbon.
3. On the Tools group, select Manage Placeholder Pages. The Manage Placeholder Page dialog box is displayed.
4. Select a placeholder page from the list.
5. Select Delete.

Confirm that you want to delete the placeholder page.
6. Select OK.

To insert a placeholder page:
Prerequisite:

- You must first import or create a placeholder page.

Steps:

1. Open a QC session
2. Select one or more documents in the Data Panel for which you want to insert a placeholder page.

Select the Insert Placeholder Pages icon in the Action group of the Main or Auto QC tabs.

The Take Action dialog box is displayed.
3. The Take Action dialog box should already have the Insert placeholder page check box selected for you.
4. Select TIFF or PDF, then select a placeholder page from the box on the right.
5. Select OK.
note: There are some documents for which you cannot insert a placeholder page, such as the following:

- An item that is a FOLDER, a PST, or an NSF. These items are not documents that have been processed. They are container items (see "Document Relationships" on page 21).
- Items that are attachments that could not be saved into the Items folder during processing due to one of the following reasons:
- The attachment was removed from an e-mail message, but the attachment indicator still exists within the email message.
- The attachment is actually a shortcut link.
- The attachment is actually a link to another document.

When you select such documents in a QC session, you receive a message that the file could not be found in the Items folder of your project. You need to deactivate those documents.

## Recracking, Rerendering, or Redoing the OCR Process on Documents

When documents have a problem status, you can recrack, rerender, or redo the OCR process. Documents receive a problem status in the following ways:

- Discovery Cracker assigns a problem status when it cannot complete an action on a document.
- You can manually mark a document as problem so you can recrack, rerender, or redo the OCR process.

To recrack, rerender, or redo the OCR process:

1. Open a QC session.
2. Select one or more documents in the Data Panel.
3. Select one of the following icons from the Action group on either the Main or the Auto QC tabs:

- Render
- Recrack
- OCR

The Take Action dialog box will appear with the appropriate selection already made for you.
4. Select Edit Settings to open the Rework Settings dialog box.
5. Select an action.
6. Select a document type group.
7. Select the appropriate tab and make your desired changes to the appropriate task settings. (If necessary, refer to "Setting Task Settings" on page 61.)
8. If you want to apply the settings of the tab you are currently on to additional document type groups, select Select Additional Document Type Groups while you are still on the tab.
note: Be sure the settings on the current tab are appropriate for the additional document type groups you select.
9. Repeat steps 5 through 8 as needed.
10. When you have finished making all your settings, select Save and Close to return to the Take Action dialog box.

## 11. Select OK.

- You can recrack a document after it has been postprocessed, however it will need to be postprocessed again to get a new document or page number associated with it.
- When rerendering a document, you can select a different render output file type.
- You can select a FOLDER, a PST, or an NSF for recracking if a problem occurred during the Initial Spin Through action. However, they cannot be rendered because these items are not documents that have been processed. They are container items (see "Document Relationships" on page 21).
- When marking items to recrack, if you select a main item document, you will receive a prompt that one of your items is a main item or a parent item. If Discovery Cracker sees that the child item has also been selected and is locked because you are recracking the main item for this child item, another prompt will appear after the recrack action has been applied advising you that you cannot perform that action on the child item. When you have marked the main item to recrack, the child items will disappear from your screen. (see "Document Relationships" on page 21).
- With regard to the Status field, if a main item document is marked to recrack, the child items of this main item will not be updated to a status of QC'd - Marked to Recrack. Recracking a main item will automatically recrack the child items as well so it is not necessary to update the status of a child item if the main item is already in a QC'd - Marked to Recrack status.
- For more information about document statuses, see Appendix B, "Document Status," on page 273.
- For more information about OCR text options in a QC session, see "Checking OCR Text in a QC Session" on page 180 .


## Assigning Categories to Documents

## Adding Notes

When you select one or more documents in the Data Panel, then select the Add Note icon in the Action group, the Add
Note dialog box is displayed. In addition, when you take actions on the documents such as a rework actions, you can leave yourself a note as to what you are doing and why in the Add the following notes box.

You may enter up to 44 characters for each note. Each note you add will be preceded with the term NOTE:.

Replacing Pages If Discovery Cracker could not render a document or if you are
If Discovery Cracker could not render a document or if you are
not happy with the way it was rendered, you can manually render the document and replace pages.

For TIFF images in the single-page format, you can replace one page or the entire document. For multipage TIFF images and PDF files, you must replace the entire document.

## NOTE:

- TIFF images created outside of the Discovery Cracker program must be one of the following formats: Group IV TIFF, Color TIFF with JPEG, or Packbits. Otherwise, Discovery Cracker cannot read the image format and you will not be able to view the image in the QC session. You can convert unsupported image files by using image conversion software.
- If you create TIFF images outside of the Discovery Cracker program with a corresponding text file and import them into Discovery Cracker for processing, the text file, if multipage, will not be parsed correctly into individual pages.
In a QC session, you can assign categories to documents. When you select one or more documents in the Data Panel, then select the Assign Categories icon in the Action group, the Select Categories dialog box is displayed with a list of category names. Select the check box of one or more categories, and then select Save to return to a QC session.

For more information about assigning categories in a QC session, including removing and viewing category assignments, see "Assign Endorsement Categories to Documents" on page 195.
, not be able to view the image in the QC session. You can page, will not be parsed correctly into individual pages.

To manually render a document:
Prerequisite:

- If you are using a single-box solution, you must close the DC Engine before you manually render a document.

Steps:

1. Open a QC Session
2. Select a document in the Data Panel.
3. Select the Open Original icon on the Actions group.
4. Print the document from within the open application.

- Select a DOXPrinter to print TIFF and text files.
- Select the DCPDFPrinter to print a PDF file in multipage format. No text files will be created for the PDF file.

To replace pages:

1. Open a QC session
2. Select a document in the Data Panel.

Select the Replace Pages icon on the Actions group.
The Replace Pages dialog box is displayed.
3. In the Select TIFF or PDF file box, browse to and select the appropriate TIFF or PDF file.
4. If you want to include a corresponding text file, select the check box Include text file.

The path of the corresponding text file is displayed in the box.
5. For PDF files, proceed to step 6. For TIFF files, make the following selections.
a. If the Select compression format box is available, accept the default compression format of CCITT Group4 Fax, or select RGB No Compression or RGB Packbits Compression.
b. If you want to replace all the pages of a multipage document using the single-page TIFF file format, accept the Single page option.
c. If you want to replace all the pages of a multipage document using the multipage TIFF file format, select the Multipage option.

## d. If you selected the Single page option and you want to replace only one page of a multipage document, select the Replace this page only check box, and then select the page number.

6. Select OK.

You see the page or pages you replaced in the Image panel.

## Deactivating a Document or Pages

You can deactivate a document or pages in a document.
To deactivate a document:

1. Open a QC session.
2. Select a document in the Data Panel
3. Select the Deactivate Document icon from the Action group.

The document is deactivated. The row in the Data Panel changes to the color you selected for deactivated documents (Tools>Options>Color Scheme>Inactive).

To deactivate pages:

1. Open a QC session
2. Select a document in the Data Panel.
3. Select the Activate/Deactivate Pages icon from the Actions group.

The Activate/Deactivate Pages dialog box is displayed.
4. Select the page or pages you want to deactivate.
5. Select OK.

The pages are deactivated. When the pages are displayed in the Image panel, you see a red box in the top left corner of the page with the word Inactive.

## Closing a QC Session

You can close a QC session at any time.
To close a QC session:
Click on the Close QC button from any tab in the ribbon or click on the upper right corner of the QC session window.

If you were in a QC session and performed any rework actions such as recrack, render, or OCR, the Rework Job Pending dialog box is displayed with the message, "There is a rework job present (JobID: X). Would you like to start the job immediately? If you choose no, the job will remain in a paused state."
6. Select one of the following:

- No if you do not want to run the job immediately or have additional settings that you need to apply to the job such as adjusting timeout values, selecting specific engines to run the job, etc.
- Yes if you are ready to run the job.

The session closes and the QC job item is displayed in the navigation pane. The job name will contain the user that created it. On the Jobs tab, the description of the job is Rework Auto-Create.

When you close a QC session with rework items and the QC job is not run immediately, it will have the status of Paused. You need to start the QC job in order for Discovery Cracker to process it.

To start a QC job:

1. In the navigation pane, select the desired QC job.

The General Job Information tab is displayed in the right pane.
2. Make any necessary adjustments to the settings on that tab.

If necessary, refer to "Creating a Job" on page 81.
To make changes other than selecting a DC Engine, you must first select Edit. After making changes, select Save.
3. Select Restart.

The Confirm dialog box is displayed with the question, "Are you sure?"
4. Select Yes.

Discovery Cracker runs the job according to its settings.

# Handling Errors 

You can get assistance with handling errors generated during processing. You can export a project's Errors table and send the file to Discovery Cracker Product Support.

To export a project's Errors table:
Prerequisites:

- You must have processed at least one job.

Steps:

1. Select a project from the navigation pane and right-click.
2. Select Save Errors.
3. The Save Errors File dialog box is displayed.
4. Select a location to save the file
5. Send the file to Discovery Cracker Product Support at dc.support@accessdata.com

## 9. Postprocessing

After your documents are processed (cracked, rendered, or both), you can:

1. Assign numbers to documents and pages.
2. Endorse rendered documents (TIFF and/or PDF).
3. Package files for delivery to your client.
4. Export metadata files in an appropriate format to use with third-party software.

To accomplish item 4, you create a job using the appropriate export action. See "Exporting" on page 149.

To accomplish items 1,2 , and 3 , you create a job using the Postprocessing action. To understand how to set up a postprocessing job, you need to understand what numbering, packaging, and sessions mean in the context of Discovery Cracker postprocessing.

This chapter explains those subjects in the following topics:

- Understanding Document and Page Numbers
- Understanding Packaging
- Understanding Sessions
- Creating a Postprocessing Job
- Pausing a Postprocessing Job

Discovery Cracker assigns numbers to documents during postprocessing.

- When you postprocess documents for which you rendered single-page TIFF images, Discovery Cracker assigns numbers sequentially to each page of each document. The number is recorded in the database. During packaging, the number becomes the file name of the TIFF and text files and it is included in the file name of native files and attachment files.

If you processed documents with the setting to produce multipage TIFF images or PDF files (Discovery Cracker renders only to multipage PDF files), the TIFF or PDF file name is the number of the first page of the document, which is known as the BegDoc (beginning document)
number. The BegDoc number is also the file name for multipage text files.

The file names of the native files and attachment files include the number of the first page of the document (the BegDoc number), a period, and the file extension. That naming scheme keeps the native files and attachment files associated with their TIFF or PDF and, optionally, text files.

- When you postprocess documents for which you did not render TIFF or PDF files (metadata-only documents), numbers are assigned at the document level. Discovery Cracker assigns numbers sequentially to each document. The number is recorded in the database.

You need to create a postprocessing session to set a numbering scheme and other numbering parameters (see "Creating a U.S. Session" on page 133).

## Understanding Packaging

After documents are processed, you can package them for delivery to your client. Packaging copies files from the project's Images folder and Items folder to the project's Volumes folder. The endorsement of rendered documents (TIFF images and/or PDF files) also takes place during packaging (see "Endorsing Documents" on page 185).

You can package the following items:

- Rendered documents: Based on your Render options, the Discovery Cracker program created one single-page TIFF image for every page of every document, one multipage TIFF image for every document, or one multipage PDF file for every document.

If you chose PDF as your render output type, during packaging you can choose to generate TIFF images from rendered PDF files. They will be single page TIFF images.

- Text files: If you enabled text file output for document rendering, for every TIFF image or PDF file, Discovery Cracker created a corresponding text file.
If you chose the single-page TIFF render option, you can choose to package text files in one of two ways:
- A separate text file for every page of every document.
- Text from all the pages of a document contained in one text file.
- Text files without rendering: You can include text files without having rendered your documents. The option to include text files (from all text if it exists else body) generates a text file from the data contained within the All Text field if it has any data. If it does not contain data, the text file is generated from the Body field.
- Native files:

A native file is a document in its original form, copied from the source data location.

- You can package originals of electronic files (e-files) and their attachments.
- You can package an Outlook PST file as a PST file or as separate MSG files.
- You can package attachments to Outlook documents.
- You can package attachments to Lotus Notes documents.
- You can include the original file name as part of the new file name.

You can package the following combination of items:

- Rendered documents (TIFF and/or PDF) only.
- Rendered documents (TIFF and/or PDF) and text files.
- Rendered documents (TIFF and/or PDF) and native files.
- Rendered documents (TIFF and/or PDF), text, and native files.
- Generated text files with native.
- Native only.
- Generated text only.
- Rendered documents with generated text.

NOTE: If you choose the option to generate TIFF images from rendered PDF files, those files are automatically included in the package.
For an explanation of the term "TIFF and/or PDF," see page 130.

When the Discovery Cracker program produces TIFF or PDF and, optionally, text files, by means of the Render action, it places them in the project's Images folder.
note: If you run the OCR process when rendering to TIFF and enable text file output, the OCR-created text files replace the
render-created text files in the Images folder. (See "Storage of OCR Text" on page 173.)

During packaging, the Discovery Cracker program copies TIFF and/or PDF and text files from the project's Images folder to subfolders in the project's Volumes folder and includes the document number in the file name.

## Volumes Folder

The Volumes folder is used in U.S. packaging only. It contains two levels of subfolders. Level 1 consists of the folders that contain the folders containing the rendered output (TIFF and/or PDF and text files) and generated TIFF images, folders that contain the native files, folders that contain attachments, folders that contain PST files, and folders that contain MSG files. Level 2 consists of the folders containing the rendered output (TIFF and/or PDF and text files) and generated TIFF images. This is illustrated in Table 9.1, "Volumes Folder for U.S. Packaging."
an explanation of "tiff and/Or pdF": The Images folder and the Volumes folder can contain both TIFF and PDF files because of the following circumstances:

- Even though you can choose only one render output type per job, a project's Images folder contains the output from all of its jobs and you may have chosen different render output types for different jobs within the project.
- Even if you chose only PDF as your render output type for the entire project, if you choose to generate TIFF images from rendered PDF files, the Level 2 subfolder in the Volumes folder will contain the generated TIFF images.

Table 9.1: Volumes Folder for U.S. Packaging

| Folders |  | Description |  |
| :--- | :--- | :--- | :--- |
| Volumes |  |  | This is the volume root folder |
|  | $[$ Level 1] | [Level 2] |  |
|  | Vol001 <br> Level 1 rendered <br> output subfolder |  | This folder contains folders |

Table 9.1: Volumes Folder for U.S. Packaging (Continued)

| Folders |  | Description |  |
| :--- | :--- | :--- | :--- |
|  |  | 001 <br> Level 2 rendered <br> output subfolder | This folder contains rendered output (TIFF and/or PDF and, <br> optionally, text files) and, optionally, generated TIFF images. <br> The TIFF and PDF files may be endorsed. |
|  | Level 2 rendered <br> output subfolder | This folder contains rendered output (TIFF and/or PDF and, <br> optionally, text files) and, optionally, generated TIFF images. <br> The TIFF and PDF files may be endorsed. |  |
|  | Vol002 <br> Level 1 rendered <br> output subfolder |  | This folder contains folders |
|  | Level 2 rendered <br> output subfolder | This folder contains rendered output (TIFF and/or PDF and, <br> optionally, text files) and, optionally, generated TIFF images. <br> The TIFF and PDF files may be endorsed. |  |
|  | Vol001_ATTACH <br> Level 1 attachment <br> file subfolder | Level 2 rendered <br> output subfolder | This folder contains rendered output (TIFF and/or PDF and, <br> optionally, text files) and, optionally, generated TIFF images. <br> The TIFF and PDF files may be endorsed. |
|  | Vol002_ATTACH <br> Level 1 attachment <br> file subfolder |  | This folder contains attachments to electronic files or e-mail <br> messages |
|  | Vol001_DOC <br> Level 1 native file <br> subfolder | Vol002_DOC <br> Level 1 native file <br> subfolder | Vol001_PST <br> Level 1 PST file <br> subfolder |

Table 9.1: Volumes Folder for U.S. Packaging (Continued)

| Folders |  | Description |  |
| :--- | :--- | :--- | :--- |
|  | Vol001_MSG <br> Level 1 MSG file <br> subfolder |  | This folder contains MSG files that were postprocessed from <br> an original PST file. |

You copy the contents of the Level 1 subfolders to the medium of your choice (CD, DVD, etc.) to deliver the files to your client.

You control the name and the size of the Level 1 and Level 2 subfolders by creating a volume session (see "Creating a U.S. Session" on page 133).

## Understanding Sessions

To define a numbering scheme for your documents and to define a folder naming and creation scheme to package your documents for delivery to your client, you first have to create a session.

Note: Creating a session will differ when creating a session for the U.S. and when creating an International session.

Sessions are similar to templates. When you create a session, you set parameters for available options, then save those settings. Sessions apply at the project level. They are available to all groups, views, and jobs in the project.

Sessions allow the following flexibility:

- You can assign numbers to and package the same data multiple times with different settings and sequencing.
- A session maintains settings and sequencing. So you can choose the same session but different groups and views (or the same view if it is dynamic and there is new data) to continue the document number sequencing and volume number sequencing.

The following topics explain:

- Creating a U.S. Session
- Creating an International Session


## Creating a U.S. Session

When you create a U.S. session you do the following:

- Create the numbering scheme with which to identify the documents in the project.
- Set other parameters that tell Discovery Cracker how to assign numbers to the documents or document pages.
- Create the folder naming and creation scheme for packaging files for delivery to your client: rendered output (optional) (TIFF and/or PDF and, optionally, text files), TIFF images generated from rendered PDF files, native files, and attachment files.
- Set image and text file packaging options, which includes endorsing rendered documents (TIFF and/or PDF) and generating TIFF images from rendered PDF files.
- Set native file packaging options.

To create a U.S. session:

1. From the [Project, Group, View, or Job] Settings dialog box, select Postprocessing on the Actions pane.
2. On the Postprocessing Session tab, select Create New Session.

The New Postprocessing Session dialog box is displayed.
3. Type a name in the Session Name box.
4. Type a description in the Session Description box (optional).
5. In the Criteria, Document Numbering, Packaging, and Files to Include areas, make the appropriate selections to fit your business needs. Use the guidelines in"U.S. Session Guidelines" on page 134.
6. Click Create.

Table 9.2: U.S. Session Guidelines

| Label | Options |  |
| :--- | :--- | :--- |
| Guidelines |  |  |
| Documents to <br> include | - Approved Only <br> - Cracked AND Rendered <br> - Cracked OR Rendered | Choosing Approved Only allows only documents that you <br> have already approved to be in the directory. <br> Choosing Cracked or Rendered allows Discovery Cracker <br> to assign document numbers to documents with a prob- <br> lem status for which rendered documents (TIFF or PDF) <br> could not be created. <br> Consider the Documents to include option very carefully. <br> If you choose Cracked AND Rendered, documents will <br> only be included if they have successfully gone through all <br> of the first four job actions: Initial Spin Through, File <br> Spin Through, Extract Metadata, and Render. If a docu- <br> ment fails during any one of these actions, it will not be <br> postprocessed. However, in a QC Session you have the <br> option to approve a document that has failed, which over- <br> rides the document's problem status. If you choose to do <br> this, you also need to approve any other documents that <br> you want to be included during postprocessing, and be <br> sure that you have selected the Approve Only option. |

Table 9.2: U.S. Session Guidelines (Continued)

| Label | Options | Guidelines |
| :---: | :---: | :---: |
| Process documents as | - Family (Maintain Parent-Child Relationship) <br> - Separate Documents | - When you select Family (Maintain Parent-Child Relationship), Discovery Cracker considers the parentchild relationship of documents when applying the Approved Only option and Sort Fields parameters. <br> - If you select the Approved Only option, if one document does not meet the criterion in the Documents to include box, document numbers are not assigned to the entire document family of the document's main item. <br> - Discovery Cracker sorts based on the main item's metadata and keeps the children together with the main item. <br> - When you select Separate documents, Discovery Cracker considers each document separately when applying the Approved Only option and Sort Fields parameters. <br> - If you select the Approved Only option, only the documents that do not meet the criterion in the Documents to include box are not assigned document numbers. <br> - The program sorts based on each document's metadata. <br> note: When making a selection for the Process documents as parameter, choosing Family (Maintain Parent-Child Relationship) will also have an effect on what is included. All members of the document family must be in the same status in order to be included. If any one document of the document family does not meet the criteria for inclusion in postprocessing, the whole family of documents will be left out of the process. |

Table 9.2: U.S. Session Guidelines (Continued)

| Label | Options | Guidelines |
| :--- | :--- | :--- |
| Sort fields | Any metadata field | Documents are assigned document numbers based on the <br> selection and order of metadata fields. By default, Discov- <br> ery Cracker assigns document numbers based on the order <br> in which the documents were processed (using the Item- <br> Number field). <br> To choose a different order, select Get Sort Fields. In the <br> Sort Field Selector dialog box, select the fields you want to <br> sort by and whether you want to sort in Ascending or <br> Descending order. |
| Location of Vol- <br> ume | This is the root folder for the Level 1 <br> subfolders. By default, this is the path <br> for the Volumes folder that you <br> selected when you created the proj- <br> ect. | Accept the default, or select a different path and/or change <br> the folder name. |
| Numbering and <br> Packaging Style | - U.S. <br> - International | Select U.S. if you are processing a document in the United <br> States and want to use United States numbering. Or, select <br> International if you are processing a document outside of <br> the United States and want to use international number- <br> ing. |
| Skip Deactivated <br> Pages | Check box <br> Document Numbering | Check to skip pages that have been deactivated. |
| Prefix | Any alphanumeric character except <br> the forward or backward slash | Check box <br> Any alphanumeric character except <br> the forward or backward slash |

Table 9.2: U.S. Session Guidelines (Continued)

| Label | Options | Guidelines |
| :---: | :---: | :---: |
| Separator | - None <br> - _ (underscore) <br> - . (period) <br> - - (hyphen) <br> - (space) | You can use a separator to create a visual break between the different sections of the document number. <br> note: There are five possible sections for a document number scheme, which gives you the possibility of using four separators. If you do not use all of the sections in your document number scheme and you want to use separators between the sections you do use, be sure to select the separator to the left of the section. |
| Starting Number | Numeric characters, limited to 12 digits | - Leave this set to one if you do not require a specific starting number. <br> - The Starting Number value is used as a starting point for the counter. This starting value will apply to either the document number (if the Number by Document option is selected) or to page number (if the Number by Document option is not selected. |
| Number by Document | Check box | - Check to number by document rather than page. <br> - If this option is selected and you have rendered your documents to single page images and you have included the images as a part of your volume, the page counter will be added automatically as a suffix to the document counter. In this case, the page counter will always start at one for each new document. <br> - Zero Fill: Check to include a zero fill. <br> - Separator: Select one of the following separators: None, underscore, period, space, or hyphen. <br> - Padding: Sets the maximum number of characters that will be used for the counter. Make sure to select enough characters to accommodate the number of documents that you will be including in the session. |

Table 9.2: U.S. Session Guidelines (Continued)

| Label | Options | Guidelines |
| :---: | :---: | :---: |
| Child Document <br> Numbering | Check box | - This option is available only when you check Number by Document. <br> - If you do not check this, Discovery Cracker only uses the main item document counter. <br> - Check if you want document number counting for child documents in addition to main item documents. <br> - Zero Fill: Check to include zero fill. <br> - Separator: Select one of the following separators: None, underscore, period, space, or hyphen. <br> - Padding: Sets the maximum number of characters that will be used for the counter. Make sure to select enough characters to accommodate the number of documents that you will be including in the session. |
| Number by Page | Check box that adds a page counter. Often used if you have rendered items. | - Check to number by page rather than document. <br> - Zero Fill: Check to include a zero fill. <br> - Separator: Select one of the following separators: None, underscore, period, space, or hyphen. <br> - Padding: Sets the maximum number of characters that will be used for the counter. Make sure to select enough characters to accommodate the number of documents that you will be including in the session. <br> Note: The option must be included if you selected to include rendered pages. Otherwise, this is an optional feature. |
| Packaging |  |  |
| Volume | Check box | Check to select options for the volume of the file. This is a required check box. |

Table 9.2: U.S. Session Guidelines (Continued)

| Label | Options | Guidelines |
| :---: | :---: | :---: |
| (Volume)Prefix | Naming of Level 1 rendered output subfolders: The volume prefix and volume number combined make up the name of the Level 1 rendered output subfolders. Example: Vol001 <br> Naming of native file subfolders: The volume prefix and volume number combined, in addition to an underscore and DOC, make up the name of the Level 1 subfolders that contain native files. Example: Vol001_DOC <br> Naming of attachment file subfolders: The volume prefix and volume number combined, in addition to an underscore and ATTACH, make up the name of the Level 1 subfolders that contain attachment files. Example: Vol001_ATTACH <br> See also Table 9.1, "Volumes Folder for U.S. Packaging," on page 130. | Enter your choice for the volume prefix. <br> note: You can use any ASCII characters permitted by Windows in a folder name. Windows does not permit the following characters: \/: : ? " < > \| <br> You can use no more than 26 characters in the Prefix box. Windows limits the length of a path expression (e.g., C: 1 DCIVolumes labc.tif) to 255 characters. Consequently, the limit on the total number of characters used in the Prefix box is set by the length of the path in the Volume Root Folder. |
| (Volume)Type | Size (MB) | Based on the size of the volume. Type cannot be altered for United States numbering. |

Table 9.2: U.S. Session Guidelines (Continued)

| Label | Options | Guidelines |
| :---: | :---: | :---: |
| (Volume)Max Value | By default this number is 500 megabytes (MB), which allows you to copy the contents onto one CD. You can adjust this number up to $10,000 \mathrm{MB}$. <br> If you use CDs as your delivery medium, it is recommend leaving this number at 500 . If the option to maintain family relationships is used, Discovery Cracker does not break document families across multiple volume folders. Therefore, a single family of documents could cause the folder size to exceed the parameter you set. Setting the number at 500 allows for a buffer to make sure the contents of one Level 1 rendered output subfolder fits onto one CD. | Enter a number to limit the size of the Level 1 subfolders that contain the Level 2 rendered output subfolders. <br> a Note about endorsed documents: The volume size is determined at the time documents are assigned document numbers. Endorsing a rendered document increases the size of the file to allow space for the original image and the new endorsing text. So your volumes may have a slightly different size than originally selected. Take this into consideration when you set the Max Value parameter. <br> When the contents of all the Level 2 subfolders reach the size limit of the Level 1 subfolder, Discovery Cracker creates another folder and increments the volume number by one. <br> If you are packaging native files and/or attachments, every time Discovery Cracker creates a new Level 1 rendered output subfolder, it also creates a new Level 1 native file and/or attachment subfolder. |
| (Volume)Start | The starting number is used for the first Level 1 rendered output subfolder created using this session. When subsequent jobs use this session, Discovery Cracker numbers the folders starting with the number after the last one used. | Enter the starting number for the Level 1 subfolder. |
| (Volume)Zero Fill | Check box | Check to include zero fill. |
| (Volume)Padding | Numeric Character | Increase or decrease the padding on the number. |
| Folder | Check box | Check to set folder options. This is a required check box. |
| (Folder)Max <br> Value | Numeric Character | Increase or decrease the file size for the folder based on the type of folder that you selected. |
| (Folder)Zero Fill | Check box | Check to include zero fill. |
| (Folder)Padding | Numeric Character | Increase or decrease the padding on the number. |
| Files to Include and Other Options |  |  |

Table 9.2: U.S. Session Guidelines (Continued)

| Label | Options | Guidelines |
| :--- | :--- | :--- |
| Include Rendered <br> Images or PDFs | Check box | Check to include rendered images or PDFs. |
| Endorse rendered <br> documents (TIFF <br> images and PDF <br> files) | You can endorse rendered documents <br> (TIFF images and PDF files). For full <br> instructions, see "Endorsing Docu- <br> ments" on page 185. | Select the check box Endorse rendered documents (TIFF <br> images and PDF files) to endorse rendered documents. |
| Select endorse- <br> ment template | To endorse rendered documents <br> (TIFF and PDF), you need to select <br> an endorsement template. Existing <br> endorsement templates are included <br> in the list. | Select an existing template from the list if one fits your <br> needs. |
| Create Template | You can create an endorsement tem- <br> plate if necessary. | Select Create Template to create a new endorsement tem- <br> plate. (See "Create Endorsement Templates" on <br> page 189.) |
| Generate TIFF <br> images from ren- <br> dered and, <br> optionally, <br> endorsed PDF <br> files | You can generate TIFF images from <br> the rendered PDF files. If you <br> selected Endorse rendered docu- <br> ments (TIFF images and PDF files), <br> the TIFF images are created from the <br> endorsed PDF files. | Select the check box Generate TIFF images from ren- <br> dered and, optionally, endorsed PDF files. |
| DPI | The DPI (dots per inch) determines <br> template list. the template from the Select endorsement |  |
| the output quality of the generated |  |  |
| TIFF images. If this option is set too |  |  |
| low, the image quality is poor, caus- |  |  |
| ing the text within the image to be |  |  |
| unreadable. If this option is set to the |  |  |
| highest level, 600, the image quality |  |  |
| is excellent, but the file size of each |  |  |
| TIFF image will be larger and addi- |  |  |
| tional processing time will be |  |  |
| required. The default setting of 300 is |  |  |
| most commonly used within Discov- |  |  |
| ery Cracker. |  |  |$\quad$| Select an appropriate DPI for your generated TIFF |
| :--- |
| images. |

Table 9.2: U.S. Session Guidelines (Continued)

| Label | Options | Guidelines |
| :--- | :--- | :--- |
| Include text files <br> (from Render) | Check box | Select the check box Include text files (from Render). <br> Creates a text file that matches the images if the files have <br> been rendered. |
| For single-page <br> rendered TIFF <br> images, create a <br> single text file for <br> each document <br> (required by Ring- <br> tail) | By default, Discovery Cracker cre- <br> ates a separate text file for each page <br> of single-page TIFF documents. You <br> can choose to have the text from all <br> the pages of a single-page TIFF docu- <br> ment contained in just one text file. <br> This is required for the Ringtail <br> export, but is useful for other exports <br> as well. | Select the check box For single-page rendered TIFF <br> images, create a single text file for each document <br> (required by Ringtail) if you want all the text from all the a single-page TIFF document contained in just <br> one text file. |

Table 9.2: U.S. Session Guidelines (Continued)

| Label | Options | Guidelines |
| :--- | :--- | :--- |
| Include attach- <br> ments to e-file or <br> e-mail documents | You can package attachments, includ- <br> ing embedded files, to electronic files, <br> Outlook documents, or Lotus Notes <br> documents. | Select the option Include attachments to e-file or e-mail <br> documents. |
| Include original <br> file name as part <br> of the new file <br> name | You can include the original file <br> name along with the document num- <br> ber to create the new file name for <br> original e-files and attachments <br> (ABC00001_[filename].doc). Other- <br> wise the new file name becomes only <br> the document number <br> (ABC0001.doc). | Select the option Include original file name as part of the <br> new file name. |

## Creating an International Session

When you create an international session, you follow the same steps as you would for creating a U.S. session with a few exceptions.

To create an international session:

1. Begin session creation. See the "Creating a U.S. Session" on page 133 for information on how to begin creating your session.
2. Enter basic information. See the "U.S. Session Guidelines" on page 134 for information on how to enter basic information into the New Post Processing Session dialog.
3. Enter information specific to international numbering. See the "International Session Guidelines" on page 144 for information that is specific to international numbering in the New Post Processing Session dialog.
4. Click Create.

Table 9.3: International Session Guidelines

| Label | Explanation | Instructions |
| :---: | :---: | :---: |
| Criteria |  |  |
| Numbering and Packaging Style | - U.S. <br> - International | Select U.S. if you are processing a document in the United States and want to use United States numbering. Or, select International if you are processing a document outside of the United States and want to use international numbering. |
| Document Numbering |  |  |
| Use Folder Structure to Name Files | Check box and drop-down <br> - Native <br> - Rendered TIFFs or PDFs <br> - Text File | Check to name a specific component with the folder structure as a prefix to the name of that component. Then, select either Native, Rendered TIFFs or PDFs, or Text File. |
| Start Document Numbering at 1 on Every New Folder Created | Check box | Check to start every document number at one for each new folder. If not checked, then each document will be numbered sequentially, regardless of whether or not it goes into a new folder. |
| Packaging |  |  |
| Party Code | Check box | Check to include a party code folder. The folders corresponding to boxes are contained within the party folder. |
| (Party Code)Prefix | Alphanumeric characters | Enter alphanumeric characters to name the party code. |
| Box | Check box | Check to include a box folder level. |
| (Box)Static | Check box | Check to choose the box name to be static rather than dynamic. |
| (Box)Prefix | Numeric character | Enter a value for the static. Typically numeric and three character. The box name serves two purposes: it is the name of a directory that contains folders, and it is a component in the name of an individual file. |
| (Box)Type | - Folders <br> - Documents <br> - Pages | Available if Static is not checked. Select the type of box that you want to use. |

Table 9.3: International Session Guidelines (Continued)

| Label | Explanation | Instructions |
| :--- | :--- | :--- |
| (Box)Max Value | Numeric value | Set a maximum number for the type of box <br> that you selected. After the max number has <br> been reached, the box number will incre- <br> ment. |
| (Box)Start | Numeric value | Enter the number where you want your box <br> numbering to begin. This will increment <br> when the max value has been reached. |
| (Box)Zero Fill | Check box | Check to include zero fill. |
| (Box)Seperator | - None <br> $-\quad$ - (underscore) <br> $-\quad .(p e r i o d) ~$ <br> $-\quad$ (hyphen) <br> $-\quad$ (space) | You can use a separator to create a visual <br> break between the different sections of the <br> Prefix number. |
| (Box)Padding | Numeric value | Increase or decrease the padding on the box <br> number. |

## Creating a Postprocessing Job

After your documents are processed (cracked, rendered, or both), you create a postprocessing job to:

- Assign numbers to the documents.
- Package files for delivery to your client.
- Endorse rendered documents (TIFF and/or PDF).
- Copy into the All Text field in the database all the data from the text files that were produced during rendering. This allows you to include the text file data in an export (see "Exporting" on page 149).

Before postprocessing, you would typically check the quality of the processed documents (see "Quality Control" on page 101). If you don't want to perform quality control before postprocessing, you can set up a job to include Initial Spin Through, File Spin Through, Extract Metadata, Render, and Postprocessing all at one time. However, to include Postprocessing without performing quality control, you must change some of the postprocessing default settings. When creating a postprocessing session, you must select Cracked OR Rendered as Documents to include (see "Creating a U.S. Session" on page 133). If you use those postprocessing settings, problem documents will not be included in your final output.

The steps presented in the following procedure assume you are creating a separate postprocessing job.

To postprocess documents:

## Prerequisites:

- Your selection of documents has been cracked, rendered, or both.
note: Please be aware that FOLDER, PST, and NSF items (as shown in the Data Panel in the QC Session window) are not documents that can be postprocessed. These items are not documents that have been processed. They are container items (see "Document Relationships" on page 21 ).
- Your selection may include approved and unapproved documents.
- Your postprocessing job must include the selection of a postprocessing session. It may also include the selection of the Populate All Text task.
- You must create a postprocessing session, either prior to creating the job or during job creation (see the procedure "To create a U.S. session:" on page 133).

Steps:

1. Create a job from a group or a view.

On the General Job Information tab, complete the job Description, DC Engine selection, When to run, Job priority, Job timeout settings.
(If necessary, refer to the instructions for "Creating a Job" on page 81.)
2. In the Actions To Be Performed area, select Postprocessing.
3. Select Edit Settings to display the Jobs Settings tab.
4. On the Tasks pane, select the Document Numbering and Packaging tab.
5. In the Select a postprocessing session box, select a postprocessing session from the list.
6. If you want to view all the settings for the postprocessing session, select View Session Details.

The View Session Details dialog box is displayed and presents read-only information.
7. If you want to include the text file data in an export, do the following:
a. Select the Populate All Text tab.
b. Select the Populate All Text check box.

## 8. Select Back To Job Creation.

9. On the General Job Information tab, select Create.

The Confirm dialog box is displayed with the question, "Are you sure?"
10. Select Yes to create the job.

## Pausing a Postprocessing Job

Discovery Cracker does not allow you to pause a postprocessing job because doing so could cause problems with document numbering.

Note: Though you can pause a postprocessing job, you cannot run two jobs at once.

However, Discovery Cracker may put a postprocessing job into
a Paused state for one of the following reasons:

- When creating a postprocessing job, the job may go into a Paused state even though you selected to start the job immediately. This happens if an item in your postprocessing job is currently being processed by another job.
- If you have not provided sufficient digits in the document numbering scheme to allow for all of your items to be properly numbered, the postprocessing job will pause and you will have to create another session.

When creating a postprocessing session, you need to plan ahead. The Padding fields must be set to accommodate the entire number of documents and pages in the entire postprocessing session. (See "Creating a U.S. Session" on page 133.)

Note: It is not advisable to create multiple postprocessing jobs in the same project at the same time if these jobs are created on separate groups within the same project. You will see that the second job will be run after the first job has completed the numbering and sizing portion of the postprocessing action. This is due to the need to lock the numbering so as not to create duplicate document numbers or gaps within the numbers. However, if you attempt to run multiple postprocessing jobs on the same group at the same time, the second job will receive an error message and will not be properly created.
The best practice is to not create multiple postprocessing jobs within the same project at the same time. Allow each postprocessing job within a project to run to completion before beginning another.

## 10. Exporting

You can export metadata files in an appropriate format for your clients to use with third-party software. Depending on the export, you also have the option of exporting rendered documents and native files.

This chapter contains instructions for creating the following exports:

- Data Delimited Text File Export
- Concordance Viewer Export
- IPRO Export
- Ringtail Export
- AD Summation DII Export
- DocuLex 5 Export
- EDRM XML Export (This export is compliant with the December 18, 2007, version of the EDRM XML XSD)


## NOTES ABOUT EXPORTS:

- Pausing. Discovery Cracker does not allow you to pause an export job. Pausing an export job could cause problems with the export text file.
- Saved field sets. The following exports allow you to select the metadata fields to export: Data Delimited Text File Export, Ringtail Export, AD Summation DII Export, and DocuLex 5 Export. You can save the selected fields (also known as field mappings or field sets). This allows you to reuse the same set of fields as many times as you like. In addition, you can create multiple field sets for specific clients or cases with slight variations.

Saved field sets are available across projects. However, saved field sets can only be used by the export type for which it was created.

For instructions, see the specific export in this chapter.

- Export jobs. If you run more than one job of the same type of export (for example, two AD Summation DII Export jobs) at the same time within the same project, the jobs will not run simultaneously; they will run consecutively. However, multiple exports of different types (for example, one AD Summation DII Export job and one Concordance Viewer Export job) will run simultaneously.

You can export selected metadata from your documents to a data delimited text file. You can do this before or after the documents are postprocessed. For instructions for using Data
Delimited Text File Export before postprocessing, see "Preview Using Data Delimited Text Files" on page 96.

The following instructions are for using Data Delimited Text File Export after postprocessing.

To create a data delimited text file export:
Prerequisite:

- You have postprocessed the documents you want to export.

Steps:

1. Create a job from a group or a view.

On the General Job Information tab, complete the job Description, DC Engine selection, When to run, Job priority, Job timeout settings.
(If necessary, refer to the instructions for "Creating a Job" on page 81.)
2. Under Actions to be performed, select Data Delimited Text File Export.
3. Select Edit Settings to display the Jobs Settings tab.
4. On the Data Delimited Text File Export task pane, do one of the following:

- Select a previously created session (see the procedure "To select a previously created session:" on page 151). A document is only exported once per session. It is useful to select an existing session to:
- Do incremental exports as you receive data from your client.
- Ensure that documents are not exported twice if you are exporting from a dynamic view.
- Create a new export session (see the procedure "To create a new export session:" on page 151).
Create a new export session to export documents for the first time or if you want to export the same documents again.

5. Select Back To Job Creation.
6. On the General Job Information tab, select Create.

The Confirm dialog box is displayed with the question, "Are you sure?"
7. Select Yes to create the job.

To select a previously created session:

1. On the Data Delimited Text File Export task pane, from the Select a session list, select the session you want.

The settings displayed are the ones you chose when you created the export session.
2. Change or accept the settings.
3. Select Update Session to save your settings.
4. Continue with step 5 in the procedure "To create a data delimited text file export:".

To create a new export session:

1. On the Data Delimited Text File Export task pane, select Create Session.

The Session Creation dialog box is displayed.
2. Type a name in the Session Name box and, optionally, a description in the Session Description box, then select Create.
3. From the Select a session list, select the session you just created.
4. In the Select name and location for the output file box, accept the path and file name or browse to and select different ones.
5. For Select an export type, select After Postprocessing.
6. Make appropriate selections on the rest of the pane. The minimum selections you need to make are:

- In the Export Configuration area and the Replacement

Characters area:

- The Use Unicode check box is selected by default. The export is created using Unicode (UTF-16) encoding.
- If you clear the Use Unicode check box, the export is created using ASCII encoding. In that case, in the Replacement Characters area, you need to select values less than 128 (0-127).
- In the Replacement Characters area, for Unicode or ASCII encoding, be sure to select different values for each delimiter.
- In the Documents to Process area, select one of the following options:
- Select all Document in the Selected Session
- Select Specific Folders from this Session
- On the Selected Fields tab, select the fields to be included in the export file.
- Select Edit Fields to add fields.
- Select Save Fields to save the selected field set for future data delimited text file exports.
- Select Use Saved Fields to used a previously saved data delimited text file field set.
- If you plan to import the data back into the Discovery Cracker program, at a minimum you must select the fields Project_UID and ItemNumber (they are selected by default). These fields are necessary so that Discovery Cracker can recognize which project and which items are being imported.
note: There are three fields in the Available Fields list in the Field Selector dialog box that allow you to include the text of the documents you have processed. These three fields are:
- Body. The Body field contains extracted body text of the document as identified during extraction of metadata.
- All Text. The All Text field can contain data from one of two sources: (1) the OCR text that was created during the OCR process, or (2) if you selected Populate All Text when you postprocessed, data from the text file that Discovery Cracker created when it rendered the document.
- All Text if Exists Else Body. The All Text if Exists Else Body field is a conditional field. If the All Text field is empty, Discovery Cracker will use the text in the Body field. You may want to select this field because you may not render or perform OCR on every document.
- On the Postprocessing tab:
- If you selected Select all Documents in the Selected Session in the Documents to Process area:

From the Select a Postprocessing session list, select the session that you want to export. By default, all documents in the session will be exported.

- If you selected Select Specific Folders from this Session in the Documents to Process area: From the Select a Postprocessing session list, select the session you want to export.
From the Select volumes to export list, select the volumes/boxes/folders you want to export.

7. When you have finished making your settings, select Update Session to save the settings.
8. Continue with step 5 in the procedure "To create a data delimited text file export:".

## Concordance Viewer Export

You can export images of your documents to a file that can be loaded into Concordance for use with the Opticon viewer.

To create a Concordance Viewer export:
Prerequisite:

- You have postprocessed the documents you want to export.

Steps:

1. Create a job from a group or a view.

On the General Job Information tab, complete the job Description, DC Engine selection, When to run, Job priority, Job timeout settings.
(If necessary, refer to the instructions for "Creating a Job" on page 81.)
2. Under Actions to be performed, select Concordance Viewer Export.
3. Select Edit Settings to display the Jobs Settings tab.

On the Concordance Viewer Export task pane, do the following:
4. From the Select a Postprocessing session list, select a postprocessing session to export.
5. From the Select volumes to export list, select the volumes you want to export.
6. In the Select name and location for the output file box, accept the path and file name or browse to and select different ones.

The export file will contain the full path to the rendered documents in the Volumes folder.
7. Select Back To Job Creation.
8. On the General Job Information tab, select Create.

The Confirm dialog box is displayed with the question, "Are you sure?"
9. Select Yes to create the job.

## IPRO Export You can export your documents to a file that can be loaded into IPRO.

To create an IPRO export:
Prerequisite:

- You have postprocessed the documents you want to export.

Steps:

1. Create a job from a group or a view.

On the General Job Information tab, complete the job Description, DC Engine selection, When to run, Job priority, Job timeout settings.
(If necessary, refer to the instructions for "Creating a Job" on page 81.)
2. Under Actions To Be Performed, select IPRO Export.
3. Select Edit Settings to display the Jobs Settings tab.

On the IPRO Export task pane, do the following:
4. From the Select a Postprocessing session list, select a postprocessing session to export.
5. From the Select volumes to export list, select the volumes you want to export.
6. In the Select name and location for the output file box, accept the path and file name or browse to and select different ones.

The IPRO export file will contain information such as the volume name and location of rendered documents in the Volumes folder.
7. Select Back To Job Creation.
8. On the General Job Information tab, select Create.

The Confirm dialog box is displayed with the question, "Are you sure?"
9. Select Yes to create the job.

# Ringtail Export 

You can export your documents to a file that can be loaded into Ringtail.

To create a Ringtail export:
Prerequisites:

- You have postprocessed the documents you want to export.
- When creating a postprocessing session, you must select the option Create a single text file for each document (required by Ringtail).

Steps:

1. Create a job from a group or a view.

On the General Job Information tab, complete the job Description, DC Engine selection, When to run, Job priority, Job timeout settings.
(If necessary, refer to the instructions for "Creating a Job" on page 81.)
2. Under Actions To Be Performed, select Ringtail Export.
3. Select Edit Settings to display the Jobs Settings tab.

On the Ringtail Export task pane, you see the following tabs:

- Document Number Selection
- Extra Table
- Party Table (not available unless you select Populate Party Table on the Document Number Selection tab)
- Populate Levels (not available unless you select Populate level structure on the Extra Table tab)
- Format Options

4. On the Document Number Selection tab, set the following parameters:
a. In the Select Session and Volumes area:

- In the Select a Postprocessing session list box, select the postprocessing session that you wish to perform the export for.
- In the Select a volume to export box, select the appropriate volume to export.
b. In the Export Options area:
- The Output Location box displays by default the previously selected output location for your project. To change the location, select the down arrow to browse to and select a new location.
- In the Compatibility list box, select the appropriate Ringtail compatibility format.
- The Populate Export Extra table check box is selected by default. Accept the setting if you wish to have extra metadata populated in the Export Extras table of the Ringtail database. With the check box selected, the Extra Table tab and the Format Options tab are available.
- Select the Populate Party Table check box if you wish to populate the Parties table of the Ringtail database. Selecting the check box makes the Party Table tab available for you to select which fields to use.

5. On the Extra Table tab, you can select the Discovery Cracker fields to use to populate the Export table and the Export Extras table of the Ringtail database. You can also select settings to customize the data.
a. In the Customize Export Table area:

- Populate Document_Date - Accept or clear the check box. Preset to use the CreationTime field. If selected, you can choose another field to use for this value.
- Populate Document_Type - Accept or clear the check box. If selected, will populate the Ringtail database Document_Type property with the value stored in the RecordType field.
- Populate Title - Accept or clear the check box. Preset to use the FileDisplayName field. If selected, you can choose another field to use for this value.
- Populate Description - Accept or clear the check box. Preset to use the RecordType field. If
selected, you can choose another field to use for this value.
- Populate level structure - Select the check box to create a folder structure specifically for use within Ringtail. If selected, the Populate Levels tab becomes available to allow you to choose the format of the folder structure.
- Create Host-Reference - Accept or clear the check box. Allows you to keep the parent-child relationship in tact during the creation of folder levels.
- Convert date fields to text - Select the check box to change the format for dates, which is a date format by default, to a text format.
b. In the Export Extra Table area you can select additional fields to export. The fields will go into the Ringtail Export Extras table.
If you selected the Populate Export Extra table check box on the Document Number Selection tab, you must select at least one field. By default, the AuthorEmail field is selected.
- Select Select Fields to add or remove fields.
- Select Save Fields to save the selected field set for future Ringtail exports.
- Select Use Saved Fields to use a previously saved Ringtail field set.
note: There are three fields in the Available Fields list in the Field Selector dialog box that allow you to include the text of the documents you have processed. These three fields are:
- Body. The Body field contains extracted body text of the document as identified during extraction of metadata.
- All Text. The All Text field can contain data from one of two sources: (1) the OCR text that was created during the OCR process, or (2) if you selected Populate All Text when you postprocessed, data from the text file that Discovery Cracker created when it rendered the document.
- All Text if Exists Else Body. The All Text if Exists Else Body field is a conditional field. If the All Text field is empty, Discovery Cracker will use the text in the Body field. You may want to select this


## field because you may not render or perform

 OCR on every document.6. On the Party Table tab, you can select the information to include in the Parties table of the Ringtail database. Some fields are preselected. They are SentTo, CC, BCC, AuthorName and Recipients.

If you wish to add or remove fields, select Select Fields to display the Field Selector dialog box. Make your desired selections.

You can also select whether or not to split the values into separate records if more than one party exists for any one field. You can also determine the delimiter that Discovery Cracker should look for to determine whether or not more than one party exists. For example, if within the data being processed you have an e-mail message that contains dc.support@accessdata.com; james.smith@anycompany.com; henry.jones@anycompany.com as e-mail addresses in the CC field, and you want to separate these individuals into separate records within the Parties table, you would choose the CC field. Select the check box in the Split Values column, and then select the semi-colon (;) character as the delimiter.
7. On the Populate Levels tab, you can select the format of the levels that are created when performing the Ringtail export. You can also create your own custom level structure.
a. In the Level Options area, make the following settings:

- Name files according to level structure - Select the check box to name the TIFF, PDF, text, and native files using the level structure that you have determined. This will override the previous document number that you may have selected for these files.
- Export rendered TIFF files - Select the check box to include the rendered and/or generated TIFF images in the Ringtail folder structure.
- Export rendered PDF files - Select the check box to include the rendered PDF files in the Ringtail folder structure.
- Export text files - Select the check box to include the text files in the Ringtail folder structure
- Export native documents - Select the check box to include the native files in the Ringtail folder structure.
- Folder name length - Determines the maximum number of characters that will be used for a folder name. This will allow for any folder to be named numerically, but also keep the numeric padding in tact for proper sort order. This will also prevent folders from being named with a folder name length greater than the specified number of characters. Therefore, if you happen to have a lot of data to put into a folder structure, please choose the number of characters wisely. If not enough characters are chosen, you could have problems exporting to the Ringtail folder structure.
- Page number length - Determines the maximum number of characters that will be used for a TIFF or PDF name page counter.
b. In the Custom Levels area, you can create your own custom level structure which is used by Ringtail to show a hierarchy within their program.

To create a custom level structure, you type entries or make selections in the New level label box. When you type folder names, you create your own structure. When you make selections, you create a folder structure based on the current or past location of the files.
The predefined options are:
[VOLUMENAME] - Uses the Volumes folder structure after postprocessing is complete.
[SUBFOLDER] - Uses the husbanders within each volume after postprocessing is complete.
[PATH] - Uses the original file path location of the documents before processing was initiated. If the documents were inside a PST or an NSF store file, the PATH will show the folder structure within the PST or NSF.

- In the New level label box, type a folder name or select a predefined option.
- Select Add New Level.

Your folder is added to the Custom Levels box.

- Continue typing folder names or selecting options in the New level label box and selecting Add New Level to build a folder structure.
The hierarchy is displayed in the Custom Levels box.
- To remove a folder, you need to remove any subfolders below it. Select Remove Last Level to remove, in order of hierarchy, each folder until you remove the desired folder. You then need to rebuild the folder structure from the last remaining folder.

8. On the Format Options tab, the following settings are selected by default:

- Replace null characters with blank - During the collection of metadata, some fields are not populated and Discovery Cracker leaves the field with a null character. This causes problems in the Ringtail database. Using this option prevents the problems with null characters.
- Replace invalid date with - During the collection of metadata, some date fields may be collected with invalid dates. One such date is the Microsoft default value of $1 / 1 / 4501$. To replace this date, select the option and type in the date of your choice. By default, Discovery Cracker replaces invalid dates with 01-Jan1901; however, you can use a different date.
- Create a new database if total page count is more than Some of the older Ringtail database formats have problems when a database exceeds a certain size. Using this option, you can create multiple databases based on your choice of limit within a database. By default, Discovery Cracker creates a new Ringtail database if your data exceeds 20,000 pages (TIFF images or PDF files).

9. Select Back To Job Creation.
10. On the General Job Information tab, select Create.

The Confirm dialog box is displayed with the question, "Are you sure?"
11. Select Yes to create the job.

AD Summation DII Export

You can export your data to a DII file that can be loaded into one of the other AD Summation products. You export before postprocessing to use a AD Summation product as a preview
tool. You export after postprocessing to use a AD Summation product as a review tool.

To create a AD Summation DII export:
Prerequisites:

- For Class 1 exports
- You have processed the documents through the Initial Spin Through, File Spin Through, Extract Metadata, and Render actions. The documents were rendered in the TIFF image and text file format. AD Summation iBlaze, WebBlaze, and Enterprise do not accept documents rendered in the PDF file format.
- You have postprocessed the documents.
- You selected the appropriate packaging options for attachments and PST files during postprocessing in order to put the files in the correct location. (See "Creating an International Session" on page 143.) Discovery Cracker uses the relative path for attachments and electronic files for postprocessed data.
- For Class 2 exports
- You have processed the documents through the Initial Spin Through, File Spin Through, and Extract Metadata actions. (They don't have to be postprocessed.)
- For Class 3 exports
- You have processed the documents through the Initial Spin Through, File Spin Through, Extract Metadata, and, optionally, Render actions. If rendered, the documents were rendered in the TIFF image and text file format. AD Summation iBlaze, WebBlaze, and Enterprise do not accept documents rendered in the PDF file format.
- You have postprocessed the documents.
note: For information about the AD Summation DII/eDII file, please refer to the AD Summation DIIIeDII Guide, A Guide for Service Bureaus. You can download a copy from http://
www.summation.com/Support/download/
CTSum_DII EDII Guide.pdf
Steps:

1. Create a job from a group or a view.

On the General Job Information tab, complete the job Description, DC Engine selection, When to run, Job priority, Job timeout settings.
(If necessary, refer to the instructions for "Creating a Job" on page 81.)
2. Under Actions To Be Performed, select AD Summation DII Export.
3. Select Edit Settings to display the Jobs Settings tab.

The AD Summation DII Export task pane is displayed.
4. On the DII Selection tab:
a. In the Select DII Class area, select one of the following options:

- Class 1: Converted Images and Text

Use Class 1 for documents that have been rendered to TIFF images and text files and then postprocessed.

- Class 2: Native Files

Use Class 2 for nonpostprocessed documents that have been processed through the Initial Spin
Through, File Spin Through, and Extract Metadata actions. This class export is commonly used to deliver a metadata load file to a AD Summation product end-user for the purposes of culling down the number of documents that are needed for a case. This export will allow you to create a AD Summation DII file with the required metadata fields and create a copy of the PST and/or attachments that are a part of the exported data. This export does not include NSF files or native electronic files.

- Class 3: Combined Native and Converted

Use Class 3 for native documents that have been postprocessed and for documents that have been rendered to TIFF images and text files and then postprocessed.
b. Monitor record size to be less than (in KB)

Select the check box to limit the size of each record. Your choices are 64 or 32.
c. Monitor DII file size to be less than (in KB

Select the check box to limit the DII file size to a specified number of kilobytes. If you select the check box, be sure to select a file size; your choices are 100,200 , 500,1000 . If you leave the default of 0 , you will get a blank DII file.
d. Use document separator

This applies to Class 3 exports only. Select the check box if you use a separator in the naming of native files. For example, if you package your documents using the original file name as part of the new packaged name, you may want to select this option so that the name of the file can be parsed at the underscore (_). (See"Creating an International Session" on page 143.)
e. Select name and location for the output file

Accept the path and file name for the output files or browse to and select different ones.
5. On the Select Sessions tab:

For Class 1 or Class 3, you need to select the data to export. You can select all the documents in a postprocessing session or the documents in only specific volumes of the postprocessing session.
For Class 2, this tab is not available. All the metadata from the group or view from which you created the job will be exported.

At the bottom of the Select Sessions tab, select one of the following options:

- Select a Postprocessing session

If you select this option, from the Select a Postprocessing session list at the top of the Select Sessions area, select the Postprocessing session that you want to export. By default, all documents in the session will be exported.

- Select volumes to export

If you select this option, from the Select a Postprocessing session list at the top of the Select Sessions area, select the Postprocessing session that you want to export. Then from the list in the Select volumes to export box, select the volumes you want to export.

- Populate full text

Select the check box to add the token @FULLTEXT Page or @FULLTEXT Doc to your DII file.

- Use relative file location options

Select the check box to replace the distinct file path location with a relative file path location. Select @I to use the @I token or @V to use the @V token.

- Use iterator to reduce size

Select the check box to list multiple TIFF pages in a single line rather than list each TIFF page as a separate entry.
6. On the Map Default Fields tab:

This tab is available for Class 2 and Class 3 exports only.

- Select the default field mappings or make adjustments.
- You can also select additional fields to include in your export.
- Select Select Additional Fields to add fields.
- Select Save Fields to save the selected field set for future AD Summation DII file exports.
- Select Use Saved Fields to used a previously saved AD Summation DII file field set.
note: For Class 2, do not select fields that are populated during postprocessing. BegDoc, EndDoc, and PackagedFileName are examples of fields that are only populated during postprocessing.

7. On the Mapped Field Settings tab:

This tab is available for Class 2 and Class 3 exports only.

- Remove invalid date ( $01 / 01 / 4501$ or any irregular date) Select the check box to replace the default Microsoft date of 01/01/4501 with a blank entry.
- Find and Replace CR with CR and LF for Body and Body Comment Fields
Select the check box to replace a single carriage return that exists without a line feed character with a carriage return and line feed character.
- Populate @ $\mathbf{O}$ token for eDoc and Attachment This check box is available for Class 3 exports only. Select the check box to place the text files produced during render into a folder called OCR Base.
- Use relative path for @ $\mathbf{O}$ token

This check box is available for Class 3 exports only when the Populate @O token for eDoc and Attachment check box is selected.

Select the check box to populate the @O token with a relative path rather than a distinct path to the OCR Base folder.

- Populate @OCR token for eDoc and Attachment Select the check box to place the searchable text into the DII file rather than use the text files that were produced during render.

Select one of the following options:

- Body. The Body field contains extracted body text of the document as identified during extraction of metadata.
- All Text. The All Text field can contain data from one of two sources: (1) the OCR text that was created during the OCR process, or (2) if you selected Populate All Text when you postprocessed, data from the text file that Discovery Cracker created when it rendered the document.
- All Text if Exists Else Body. The All Text if Exists Else Body field is a conditional field. If the All Text field is empty, Discovery Cracker will use the text in the Body field. You may want to select this field because you may not render or perform OCR on every document.
- Replace original path with the following path for @EDoc token
Select the check box to replace the existing path to the packaged native files with a substitute path.
nOTE: We do not recommend selecting this check box for Class 2 exports because Discovery Cracker does not actually copy files to the Export folder for eDocs for nonpostprocessed data.


## - Select Time Zone

Select the check box to adjust the time stamps on the metadata to another time zone. This is usually beneficial if your project was processed in one time zone but the data being exported should belong to another time zone. This will not affect any TIFF images produced with the original project time zone.

## - Maintain Parent-Child Relationship

Select the check box to keep the parent and children documents as one family of documents.

- Use Unicode

Select the check box if you want the export to be Unicode compliant. The export is created using Unicode (UTF-16) encoding. If not selected, the export is created using ASCII encoding. A Unicode file is larger than an ASCII file.

- Volumize PSTs

This check box is available for Class 2 exports only.
Select the check box to package your PST files. Discovery Cracker uses an absolute path to the Export folder. Your DII file will have a path similar to this: <br>Main File Server\Projects\My Project\Export\Archive.pst.

- Use relative path for @PSTFile Token

This check box is available for Class 2 exports only when the Volumize PSTs check box is selected.

Select the check box to use a relative path to the Export folder for your packaged PST files.

- Use the following PST ID

This check box is available for Class 2 exports only when the Volumize PSTs check box is selected.

Select the check box to replace the existing PST ID with an alternative ID.

- Volumize Attachments

This check box is available for Class 2 exports only.
Select the check box to package your attachment files. Discovery Cracker uses a relative path to the Export folder.

## - Sort By Parent

This check box is available for Class 2 exports only.
Select the check box to sort the records by a specific field of the parent document before creating the export.

Select Select Parent Sort Fields to select the fields to sort by and the direction by which to sort, ascending or descending.
8. On the Select Documents tab:

This tab is available for Class 2 exports only.

- Select documents to include in the export. Your options are:
- Active, Inactive, or Both Active and Inactive
- Problem, Non-problem, or Both Problem and Non-problem
- Cracked, Uncracked, or Both Cracked and Uncracked

9. When you have finished setting all parameters, select Back to Job Creation.
10. On the General Job Information tab, select Create.

The Confirm dialog box is displayed with the question, "Are you sure?"
11. Select Yes to create the job.

## DocuLex 5 Export

If you want to use a DocuLex 5 export, you need to render your documents to TIFF images using the single-page output format (see page 240 in Appendix A, "Task Settings"). Also, for document numbering, you need to use only the page by number option (see page 127 in Chapter 9, "Postprocessing").

Complete instructions for this topic were not available prior to the release of the Discovery Cracker program. If you need assistance, please contact Product Support at 866-833-5377 or dc.support@accessdata.com.

You can export your documents to an EDRM XML-compliant file that can be loaded into applications that accept such files, such as AD Summation Enterprise Data Manager for use with AD Summation Enterprise version 2.6.

The Discovery Cracker EDRM XML file is compliant with the December 18, 2007, version of the EDRM XML XSD (see "Discovery Cracker and EDRM" on page 23).

To create an EDRM XML export:
Prerequisites:

- You have processed or postprocessed the documents you want to export.
- To use the option Export metadata and rendered output, you must postprocess the documents first.

Steps:

1. Create a job from a group or a view.

On the General Job Information tab, complete the job Description, DC Engine selection, When to run, Job priority, Job timeout settings.
(If necessary, refer to the instructions for "Creating a Job" on page 81.)
2. Under Actions To Be Performed, select EDRM XML Export.
3. Select Edit Settings to display the Jobs Settings tab.

The EDRM XML Export task pane is displayed.
4. In the What to Export area, make the following settings:
a. Select one of the following options:

- Export metadata only - Select this option to export metadata only.
- Export metadata and rendered output - Select this option to export metadata, TIFF images, and PDF files.

If you select Export metadata only, no other settings are available in the What to Export area. All the metadata from the group or view from which you created the job will be exported. Native documents will not be exported.

If you select Export metadata and rendered documents:
b. From the Select a Postprocessing session list, select the Postprocessing session that you want to export. By default, all documents in the session will be exported.
c. If you want to export documents only in selected volumes of the Postprocessing session, select the option Export documents in the selected volumes only. Then from the Select volumes to export list, select the volumes you want to export.
d. Include the native documents - Select this check box to include native documents in the export.
5. In the How to Export area, set the following parameters:
a. Use Unicode - Select this check box if you want the XML file to be Unicode compliant. The export is created using Unicode (UTF-16) encoding. If not
selected, the export is created using ASCII encoding. A Unicode file is larger than an ASCII file.
b. Select time zone - Select a time zone from the list. The date of the exported metadata will be converted to the time zone you select.
c. Select a field containing searchable text - From the list, select a field that contains the searchable text you want to export. The choices are:

- Body. The Body field contains extracted body text of the document as identified during extraction of metadata.
- All Text. The All Text field can contain data from one of two sources: (1) the OCR text that was created during the OCR process, or (2) if you selected Populate All Text when you postprocessed, data from the text file that Discovery Cracker created when it rendered the document.
- All Text if Exists Else Body. The All Text if Exists Else Body field is a conditional field. If the All Text field is empty, Discovery Cracker will use the text in the Body field. You may want to select this field because you may not render or perform OCR on every document.

6. In the Where to Export area, in the Select a name and location for the output file box, accept the path and file name or browse to and select different ones.
7. Select Back To Job Creation.
8. On the General Job Information tab, select Create.

The Confirm dialog box is displayed with the question, "Are you sure?"
9. Select Yes to create the job.

## 11. Paper Printing

The AD Summation Discovery Cracker program allows you to print paper copies of TIFF images and PDF files after they are postprocessed (assigned numbers and packaged). The TIFF images can be produced from the Render action or generated from rendered PDF files during postprocessing.

When you print paper copies, you can include separator pages, which are inserted between each document. You can choose to have the separator pages display information that is custom wording or document metadata. You can choose to use a different color for the separator pages so the document breaks are easier to see. To use separator pages, you need to create at least one separator template.

The Discovery Cracker program can endorse the paper copies in the top margin (header) and in the bottom margin (footer) of the document pages with custom wording, such as "Confidential," or with metadata, such as the document number. To endorse printed pages, you need to create at least one endorsement template.
note: There are two ways to print a document with endorsements.

- Endorse the rendered document during packaging, then print the document. This method includes category endorsements. See Chapter 13, "Endorsing Documents," on page 185.
- Print an unendorsed document using an endorsement template. This method does not include category endorsements.

If documents were endorsed during packaging, you probably don't want to use an endorsement template when printing. You can end up with double endorsements.

Separator and endorsement templates are considered reference files. You can create them from the Admin menu, Manage Reference Files or from the Print Project Volumes dialog box. For instructions, see the procedure "To add a reference file:" on page 53.

Printing is done at the project level.

To print paper copies of documents:

## Prerequisite:

- You must have documents that have been postprocessed (assigned numbers and packaged). See Chapter 9, "Postprocessing," on page 127.

Steps:

1. Select a project in the navigation pane of Discovery Cracker Console and right-click.
2. Select Print Project Volumes.

The Print Project Volumes dialog box is displayed.
3. Select a Postprocessing session from the list in the Select a

Postprocessing session box.
The session and the volume folders are displayed with check boxes.
4. Select the items you want to print.

- To print all the volume folders in the session and their contents, select the session.
- To print all the subfolders in the volume folder and their contents, select a volume folder.
- To print all the TIFF images and/or PDF files in the subfolders, expand the volume folders and then select subfolders.
- To print individual TIFF images and/or PDF files, expand the subfolders and then select the files you want.

5. If you want each document to be separated by a separator page, select a template from the list in the Select a separator template box or select Create New to create a template.
6. If you want each page of the documents to be endorsed, select a template from the list in the Select an endorsement template box or select Create New to create a template.
7. Select Print.

The Print Settings dialog box is displayed.
8. Select a printer and make other selections as necessary.

If you want to use a different color of paper for separator pages, be sure to select the appropriate paper tray in the Separator Form area.
9. Select Print.

The Discovery Cracker program prints the documents.

## 12. Performing Optical Character Recognition

Discovery Cracker can perform optical character recognition (OCR) on image files. The OCR process translates images of text on an image file into actual text characters. That makes it possible to search and export the text displayed on image files.

This chapter explains the following:

- About OCR in Discovery Cracker
- Storage of OCR Text
- Setting OCR Options
- Setting Options to Perform the OCR Process on Native Image Documents
- Setting Options to Perform the OCR Process on Rendered TIFF Images
- Setting Timeout Values for Performing OCR
- Creating Views Using OCR Text
- Increasing the Accuracy of OCR Text
- Checking OCR Text in a QC Session
- View OCR text
- Replace OCR Text
- Delete OCR Text
- Selecting Text to Export


## About OCR in Discovery Cracker

Discovery Cracker can perform OCR only on image files that are one of the following file types. The following are supported image file types for OCR:

- Windows Bitmap (BMP)
- Joint Photographic Experts Group (JPEG)
- Portable Network Graphics (PNG)
- Tagged Image File Format (TIFF)
- Windows Media Photo
- Graphics Interchange Format (GIF)
note: Portable Document Format (PDF) is not a supported file type for OCR. You cannot choose to perform the OCR process on PDF files in Discovery Cracker, whether those files are searchable or nonsearchable (image-only).

If a document is an OCR-supported image file type, Discovery Cracker performs OCR on the native file. OCR takes place as part of the Extract Metadata action.

If a document is an OCR-unsupported file type, OCR takes place as part of the Render action. That is because you can render the document to a TIFF image, which is an OCR-supported image file type, and then Discovery Cracker can perform OCR on the rendered TIFF image as part of the same Render action. (You don't need to run two separate jobs using the Render action.)

The OCR process produces plain ASCII text. It does not retain text formatting, such as bold, italics, font selection, font size, etc.

Please be aware that running the OCR process slows down the overall processing speed.

# Storage of OCR Text 

## All Text Field Considerations

Text File Considerations

Discovery Cracker places the text produced during the OCR process (OCR text) in the All Text field of the IntItems table of the project database. This is true for the OCR text produced during the Extract Metadata action and the Render action.

In addition, when OCR is performed during the Render action, you can also choose to have the OCR text placed in a text file.

The OCR text is stored in only one database field, the All Text field. To delete OCR text for a document, you need to redo the OCR process without the OCR option selected.

Because of this design, you need to exercise caution when selecting the OCR option. If you choose to perform OCR during the Extract Metadata action on a selection of documents and you render the same documents, you also need to perform OCR during the Render action. Otherwise, the OCR text in the All Text field produced during Extract Metadata will be lost.

The OCR text file is located in the Images folder and will overwrite the text file created when the native document was rendered to a TIFF image.

Text files will be empty when they are created from rendered documents that were originally images or other nonsearchable documents. So you want the OCR process to overwrite the empty text file with a file containing text.

However, you may not want to overwrite the text files of rendered documents that were not images or nonsearchable documents. To prevent the OCR process from overwriting those text files, you must select the check box Create OCR text from images that have a corresponding text file size of 0 KB on the OCR Options task tab of the Render action. For more information, see step 5.a on page 176.

To enable the creation of an OCR text file:

1. In the [System, Folder, Project, Group, View, or Job] Setting dialog box, select the Render action.
2. Select the document type group.
3. In the Task pane, select the Document Rendering task tab.
4. Select the Enable text file output check box.
5. If you want to apply this setting to additional document type groups, select Select Additional Document Type Groups while you are still on the tab.
note: Be sure the setting is appropriate for the additional document type groups you select.

# Setting OCR Options 

You set OCR options in the [System, Folder, Project, Group, View, or Job] Settings dialog box, on the OCR Options task tab of the Extract Metadata action and of the Render action. You can also set OCR timeout values.

These settings are explained in the following topics:

- Setting Options to Perform the OCR Process on Native Image Documents
- Setting Options to Perform the OCR Process on Rendered TIFF Images
- Setting Timeout Values for Performing OCR

> Setting Options to Perform the OCR Process on Native Image Documents

You can choose to perform the OCR process on native documents (that are supported image file types) to produce searchable text from nonsearchable documents. To do this, you set OCR options in the Extract Metadata action.

To set OCR options for native image documents:

1. In the [System, Folder, Project, Group, View, or Job] Settings dialog box, select the Extract Metadata action. (See
"Setting Task Settings" on page 61 or "Creating a Job" on page 81.)
2. Select a document type group.
3. In the Tasks pane, select the OCR Options tab.
4. Select the Create OCR text from native image documents check box to turn on the OCR process.
5. Make selections for the following settings:
a. Straighten skewed image before creating OCR text

Select this check box to increase the accuracy of identifying the text on a slightly skewed image of a document (the text appears at an angle that is slightly off perpendicular to the page).
b. Recognize language as

Select one of the following options: English, Spanish, French, German, Italian, Portuguese, Danish, Dutch, Norwegian, and Swedish.
English is the default setting. If you are processing documents written in one of the other languages in the list, select the appropriate language.
note: Discovery Cracker recognizes only one language during one job. It will perform OCR on all the image files in the same job using the language option you select.
c. Recognize text type as

Select Text or Numeric.
Text is the default setting. This setting enables the recognition of characters as letters, numbers, or punctuation marks. However, if you are processing documents that are predominantly numbers, setting OCR to Numeric increases the accuracy of recognizing characters as numbers.

## d. Recognize page content as

## Select Text only or Pictures and text.

Text only is the default setting. With this setting, Discovery Cracker attempts to recognize only the text on a page outside of pictures (if there are any). With the Pictures and text setting, the OCR process attempts to recognize text (if there is any) in pictures that may be
on the page in addition to the text on the rest of the page. The Pictures and text setting takes longer to process that the Text only setting.

Caution! If you perform OCR during the Extract Metadata action, if you select the Render action in the same job or a future job on the same documents, you must also perform OCR during Render, or OCR data collected during metadata extraction will be lost.

## Setting Options to Perform the OCR Process on Rendered TIFF Images

You can choose to perform the OCR process to produce searchable text from nonsearchable documents that are OCR-unsupported image file types. You do this during the Render action by selecting the TIFF image output type and the OCR options for rendered TIFF images. Discovery Cracker renders and performs OCR during the same job. You don't need to run two separate jobs using the Render action.

To set OCR options for rendered TIFF images:

1. In the [System, Folder, Project, Group, View, or Job] Settings dialog box, select the Render action. (See "Setting Task Settings" on page 61 or "Creating a Job" on page 81.)
2. Select the document type group for which you want to run OCR. (See "Managing Document Type Groups" on page 44.)
3. In the Task pane, select the OCR Options tab.
4. Select the check box Create OCR text from rendered TIFF images to turn on the OCR process.
5. Make selections for the following settings:
a. Create OCR text from images that have a corresponding text file size of 0 KB

Select this check box to perform OCR only on TIFF images that were originally image files.
note:

- To use this setting, you must also select the check box Enable text file output on the Document Rendering task tab of the Render action. Selecting that check box creates a text file when a document is rendered to a TIFF image.
. The 0 KB text file size indicates that the rendered file was originally an image, having no text to insert in the text file.
- Select this check box if you want to ensure that OCR is not performed on documents needlessly, since performing OCR slows down processing speed.
- When this check box is cleared, the OCR process runs on all rendered TIFF files. The resulting OCR-created text file will replace the text file created when the original native document was rendered, if the Enable text file output check box is selected.
You may want to perform OCR on all TIFF files of rendered documents. For example, there may be an image embedded in a Microsoft Word document. Performing OCR on the TIFF image of the document will capture the text in the image in addition to the text of the document. The OCR-created text file will replace the render-created text file.

Note: Since OCR accuracy is not $100 \%$, the text in an OCR-created text file may not be as accurate as the text in the original render-created text file.
b. Straighten skewed image before creating OCR text

Select this check box to increase the accuracy of identifying the text on a slightly skewed image of a document (the text appears at an angle that is slightly off perpendicular to the page).

## c. Recognize language as

Select one of the following options: English, Spanish, French, German, Italian, Portuguese, Danish, Dutch, Norwegian, and Swedish.
English is the default setting. If you are processing documents written in one of the other languages in the list, select the appropriate language.
note: Discovery Cracker recognizes only one language during one job. It will perform OCR on all the image files in the same job using the language option you select.
d. Recognize text type as

## Select Text or Numeric.

Text is the default setting. This setting enables the recognition of characters as letters, numbers, or punctuation marks. However, if you are processing documents that are predominantly numbers, setting OCR to Numeric increases the accuracy of recognizing characters as numbers.

## e. Recognize page content as

## Select Text only or Pictures and text.

Text only is the default setting. With this setting, Discovery Cracker attempts to recognize only the text on a page outside of pictures (if there are any). With the Pictures and text setting, the OCR process attempts to recognize text (if there is any) in pictures that may be on the page in addition to the text on the rest of the page. The Pictures and text setting takes longer to process that the Text only setting.

> Caution! If you choose to perform OCR during the Extract Metadata action in this job (or in a previous job on the same documents) and choose not to perform OCR during Render, the OCR data collected during metadata extraction will be lost.

## Setting Timeout Values for Performing

OCR

The OCR timeout value is the maximum time Discovery Cracker has to perform OCR on one page of a document. If one page times out, the document is marked as Problem, but Discovery Cracker continues to attempt performing OCR on the remaining pages.

You can change the OCR timeout value in the following locations, depending on the level at which you want to make the setting. (See "Setting Task Settings" on page 61.)

- Workflow Manager Settings pane
- Project Information tab
- Group Information tab
- View Information tab
- General Job Information tab


## Creating Views Using OCR

Text

When you create a view (see "Creating Views" on page 75), you can set up a filter to search for keywords according to criteria that you specify in the Filter Expression Builder dialog box. Only documents that meet the criteria are included in the view.

If you want to search OCR text, you must select All Text in the Select a Field to Search list in the Filter Expression Builder dialog box.

Discovery Cracker assigns documents to views after metadata is collected from the documents as part of the Extract Metadata action, which occurs before the Render action. If you select to perform OCR on native documents as part of the Extract Metadata action, OCR text from those documents is available in the All Text field for searching. Documents that meet the search criteria are included in the view.

If you select to perform OCR on rendered TIFF images as part of the Render action, the OCR text from those documents is not available when Discovery Cracker searches the All Text field to identify documents to include in the view.

NOTE: It is important to keep this in mind when creating views, especially dynamic views. If you want to create a view that searches OCR text from native image documents and rendered TIFF images, wait until you have completed all extract metadata (cracking) and render jobs for the project, including recrack, rerender and redo OCR jobs created from a QC Session, then create the view.

Increasing the Accuracy of OCR
Text

To increase the accuracy of recognizing characters displayed on an image, the image must be oriented properly. If a document is skewed (slightly crooked), upside down, or its orientation is portrait when it should be landscape or landscape when it should be portrait, the OCR engine will not recognize the characters accurately. There are several things you can do to increase the accuracy of optical character recognition.

- Straighten skewed images

An image is skewed if the text appears at an angle that is slightly off perpendicular to the page. When you select the option Straighten skewed image before creating OCR text, the Discovery Cracker program will attempt to compensate
for the skew of the image before recognizing the characters. The native document is not affected; therefore, metadata is not changed.

You find the Straighten skewed image before creating OCR text option in the [System, Folder, Project, Group, View, or Job] Settings dialog box when you select the Extract Metadata action and select the OCR Options task tab, or when you select the Render action, select the TIFF render output type, and select the OCR Options task tab.

- Rotate images

An image may need to be rotated to correct its orientation. However, native documents cannot be rotated without changing their metadata. So you must render the document to create a TIFF image and then rotate the TIFF. In a QC Session, you can rotate the image 90, 180, or 270 degrees clockwise or counterclockwise. You have the option of rotating a single page or rotating an entire document and then redoing the OCR process.
For more information about rotating the TIFF image, see Table 8.1, "Main tab," on page 105.
For instructions on redoing the OCR process, see "Recracking, Rerendering, or Redoing the OCR Process on Documents" on page 120.

- Specify the text type

In the [System, Folder, Project, Group, View, or Job] Settings dialog box, when you select the Extract Metadata action or the Render action, on the OCR Options task tab you have the Recognize text type as: option. You can select Text or Numeric.

Text is the default setting. This setting enables the recognition of characters as letters, numbers, or punctuation marks. However, if you are processing documents that are predominantly numbers, setting OCR to Numeric increases the accuracy of recognizing characters as numbers.

## Checking OCR Text in a QC Session

You can check the quality of OCR text and, if necessary, redo the OCR process on documents when you perform quality control a QC Session. (For a detailed discussion of QC Sessions, see Chapter 8, "Quality Control," on page 101.)

In a QC Session, you can:

- View OCR text
- Replace OCR Text
- Delete OCR Text

View OCR text OCR text is stored in the All Text field in the IntItems table of the project database. You can view the contents of that field to check the quality of the text created by the OCR process. You do that in the Large Field Viewer panel.

To view OCR text:

1. In the QC Session window, select a document in the Data Panel.
2. Select the Large Field Viewer panel.

If the panel is not displayed, select the Tools tab, then from the Panels group, next select the Visibility drop down list, then select Large Field Viewer.
3. In the Select field to view box at the top of the panel, select All Text.

The OCR text of the document is displayed.

# Replace OCR Text After viewing the contents of the All Text field, you may want to redo the OCR process on documents. Redoing OCR replaces the OCR text in the All Text field and the OCR-created text file, if you select to create a text file during rerender. 

To replace OCR text:

1. Open a QC session.
(See the procedure "Opening a QC Session" on page 101)
2. In the Data Panel, select one or more documents.
3. Select the OCR icon from the Action group on the Main or Auto QC tabs.
4. In the Take Action dialog box select an option:

- For rendered documents, your options are Render, Crack and render, or OCR rendered TIFF images.
- For metadata-only documents, your options are Render or Crack.

5. Select Edit Settings to display the Rework Settings dialog box.
6. Select an action.
7. Select a document type group.
8. Do one of the following:

- For the Redo Extract Metadata action:

On the OCR Options task tab, select the check box Create OCR text from native image documents and select the OCR options (see "Setting Options to Perform the OCR Process on Native Image Documents" on page 174).

- For the Redo Render action:

On the OCR Options task tab, select the check box Create OCR text from rendered TIFF images and select the OCR options

To replace the OCR text in the OCR-created text file, be sure the check box Enable text file output is selected.
(See also "Setting Options to Perform the OCR Process on Rendered TIFF Images" on page 176).

- For the Redo OCR action:

On the OCR Options task tab, select the check box Create OCR text from rendered TIFF images and select the OCR options.
(See also "Setting Options to Perform the OCR Process on Rendered TIFF Images" on page 176).
9. If you want to apply the settings to additional document type groups, select Select Additional Document Type Groups while you are still on the tab.

NOTE: Be sure the settings are appropriate for the additional document type groups you select.
10. Select Save and Close to return to the Take Action dialog box.
11. Select OK.

Delete OCR Text You may want to delete the OCR text in the All Text field. To delete OCR text, you have to redo the OCR process with the OCR option turned off.

To delete OCR text:

1. Open a QC session.
(See the procedure "Opening a QC Session" on page 101)
2. In the Data Panel, select one or more documents.
3. Select an option:

- For rendered documents, your options are Render,


## Recrack, or OCR.

- For metadata-only documents, your options are Render or Recrack.

4. In the Take Action dialog box the option you selected will be checked:
5. Select Edit Settings to display the Rework Settings dialog box.
6. Select an action.
7. Select a document type group.
8. Do one of the following:

- For the Redo Extract Metadata action, on the OCR Options task tab, clear the Create OCR text from native image documents check box to turn off the OCR process.
- For the Redo Render action, on the OCR Options task tab, clear the Create OCR text from rendered TIFF images check box to turn off the OCR process.
- For the Redo OCR action, on the OCR Options task tab, clear the Create OCR text from rendered TIFF images check box to turn off the OCR process.

9. If you want to apply the settings to additional document type groups, select Select Additional Document Type Groups while you are still on the tab.
note: Be sure the settings are appropriate for the additional document type groups you select.
10. Select Save and Close to return to the Take Action dialog box.
11. Select OK.

## Selecting Text to Export

When creating a data delimited text file export, a Ringtail export, a AD Summation DII export, or a Doculex 5 export, there are three fields in the Available Fields list in the Field Selector dialog box that allow you to include the text of the documents you have processed.

When creating an EDRM XML export, the three fields are listed in the Select a field containing searchable text box.

These three fields are:

- Body. The Body field contains extracted body text of the document as identified during extraction of metadata.
- All Text. The All Text field can contain data from one of two sources: (1) the OCR text that was created during the OCR process, or (2) if you selected Populate All Text when you postprocessed, data from the text file that Discovery Cracker created when it rendered the document.
- All Text if Exists Else Body. The All Text if Exists Else Body field is a conditional field. If the All Text field is empty, the Discovery Cracker program will use the text in the Body field. You may want to select this field because you may not render or perform OCR on every document.

For exporting instructions, see Chapter 10, "Exporting," on page 149.

## 13. Endorsing Documents

Discovery Cracker allows you to endorse rendered documents (TIFF images and PDF files). Endorsing places text on every page of the document. Text can be placed at the left side, center, or right side of the page in the header (top margin), footer (bottom margin), or in both the header and footer.

This chapter includes the following sections:

- About Endorsing Documents
- Overview
- Assign Endorsement Permissions
- Create Endorsement Categories
- Create Endorsement Templates
- Set Endorsement Options
- Tag Documents in DC Detective
- Assign Endorsement Categories to Documents
- Create Views Based on Endorsement Category Assignments
- Deliver the Endorsed Rendered Documents


## About Endorsing Documents

Documents have to be rendered before they can be endorsed. Rendering creates a TIFF image or a PDF file of the document. You can endorse the rendered document during postprocessing or you can print the rendered and postprocessed document to paper and endorse the printed page.

You can endorse rendered documents with custom text that you define (such as "Confidential"), a selection of the document's metadata (such as the document number), or a combination thereof. To endorse rendered documents, you need to create at least one endorsement template. Endorsement templates are considered reference files. (See "Managing Reference Files" on page 51.)

Discovery Cracker endorses all pages of all rendered documents in the same postprocessing job with the same endorsement. However, you can assign endorsement categories to documents, which enables you to specify different endorsements for different documents in the same job. This is called "category endorsement." Category endorsement applies only to endorsing rendered documents, not to paper printing endorsement.

Endorsing rendered documents is part of postprocessing; it takes place during packaging. You endorse paper copies if you choose to print rendered documents after they have been packaged.

There are two ways to print a document with endorsements.

- Endorse the rendered documents during packaging, then print the rendered documents. This method includes category endorsements.
Instructions for endorsing rendered documents during packaging are in this chapter.
- Print an unendorsed rendered document using an endorsement template. This method does not include category endorsements.

Instructions for endorsing rendered documents during paper printing are in Chapter 11, "Paper Printing," on page 170.

If rendered documents were endorsed during packaging, use caution if you use an endorsement template when printing. You could end up with double endorsements.

During the endorsement process, Discovery Cracker attempts to locate the specified reference file (endorsement template). If it cannot find or read the file, the endorsement process will mark the document as Problem and end processing of that document. If it finds the reference file, it reads the file and stores it locally until the job is finished.

Endorsing TIFF images and PDF files increases the size of the file to allow space for the original image and the new endorsement text.

## Overview

Many steps are involved in order to endorse rendered documents. The steps are performed by different Discovery Cracker roles, such as the Discovery Cracker administrator, the Discovery Cracker project manager, the Discovery Cracker quality controller, and the Discovery Cracker operator. The actual roles involved depend on the setup of your organization and the permissions assigned to the roles. The DC Detective user can also perform endorsement activities.

Briefly, the endorsement steps are outlined in Table 13.1, "Endorsement Steps." Each step is explained in the sections that follow. The roles are included for illustration purposes.

Table 13.1: Endorsement Steps

| Action | Performed by Role | Description |
| :---: | :---: | :---: |
| 1. Assign Endorsement Permissions | Discovery Cracker administrator | - Assign proper endorsement-related permissions to security roles <br> - Assign the proper security roles to the appropriate user accounts |
| 2. Create Endorsement Categories | Discovery Cracker project manager | At the beginning of a project: <br> - Review the list of endorsement categories in the Manage Categories dialog box <br> - Add categories that may be necessary for the particular project <br> - Discuss with the DC Detective user what endorsements are needed and what tags to use in the DC Detective tool to represent the endorsements |
| 3. Create Endorsement Templates | Discovery Cracker project manager | Create endorsement templates for the project |
| 4. Set Endorsement Options <br> - When creating a postprocessing session | Discovery Cracker project manager | - Set project-level task settings, which include creating Postprocessing session <br> - When creating a Postprocessing session, select to endorse documents, then select or create an endorsement template |
| 5. Tag Documents in DC Detective | DC Detective user | Tag documents with a descriptive tag to indicate which endorsement categories to assign to the documents |
| 6. Assign Endorsement Categories to Documents | Discovery Cracker quality controller | Assign categories to documents in a QC Session, based on one of the following: <br> - Instructions from the Discovery Cracker project manager <br> - Views created by the DC Detective user |
| 7. Create Views Based on Endorsement Category Assignments | Discovery Cracker operator | Create a view that contains only documents with endorsement category assignments. |

Table 13.1: Endorsement Steps (Continued)

| Action | Performed by Role | Description |
| :--- | :--- | :--- |
| 8. Set endorsement options |  |  |
| . When creating a post- |  |  |
| processing job |  |  | Discovery Cracker operator \(\left.\quad \begin{array}{l}- Set up a postprocessing job. <br>

- Select an existing Postprocessing session and <br>
accept or change the endorsement settings on <br>
the Document Numbering and Packaging tab\end{array}\right]\)

## Assign Endorsement Permissions

The Discovery Cracker administrator assigns proper permissions to Discovery Cracker roles. When setting up a Discovery Cracker user account, you assign one or more security roles to the account. The security role controls which activities the user is permitted to perform (see "Managing Users and Security" on page 39).

The following permissions are necessary for endorsing images:

- Can Manage Categories (in System Permissions)—To add new categories to the Manage Categories dialog box.
- Can Manage Reference Files (in Reference File Permissions)—To create endorsement templates from the Manage Reference Files dialog box.
- Can Create Postprocessing Sessions (in Session Permissions) - To create endorsement templates when setting the parameters for postprocessing.

To assign permissions to a security role:

1. From the Admin menu, select Manage Security, then select Manage Security Roles and Permissions.

The Manage Security Roles and Permission dialog box is displayed.

You see two panes:

- Roles
- Permissions For: [Role Name]

2. On the Roles pane, select a role.
3. On the Permissions For: [Role Name] pane, select the check boxes of the permissions you want the role to have.
4. Select Apply.

## Create Endorsement Categories

When endorsing rendered documents (TIFF images and PDF files), you can specify different endorsements for different documents that are processed in the same postprocessing job. To do this, you need to create categories and assign endorsement text to each category. Then in a QC Session, appropriate categories can be assigned to documents.

You can create categories as necessary to suit the needs of your projects. All categories are available to be used with all of your projects.

To create a category:

1. From the Admin menu, select Manage Categories.

The Manage Categories dialog box is displayed.
2. Select Add a Category.

The dialog box expands and the Create Category area is displayed.
3. In the Category Name box, type a short name.

The category name is a descriptive label that identifies the category display text. Whether you type uppercase or lowercase letters, the name will be displayed in uppercase letters. You can use up to 25 characters.
4. In the Category Display Text box, type the text you want to have endorsed on documents.

The category display text is case sensitive; type uppercase or lowercase letters. You will be able to customize the appearance of the text (font, font style, size, etc.) when you create an endorsement template.

The category display text can be up to 100 characters.
However, text that is wider than the page width is truncated.
5. Select Save.

The new category name and category display text are displayed in the Manage Categories dialog box.

## Create Endorsement Templates

To endorse rendered documents (TIFF images and PDF files), you need to create at least one endorsement template. You can create an endorsement template from the Admin menu or when creating a Postprocessing session.

The endorsement template allows you to specify:

- Where the text is to be endorsed on the page. Your options are:
- Header (top margin)

Aligned left, right, or centered

- Footer (bottom margin)

Aligned left, right, or centered

- What text to endorse on the page. Your options are:
- Metadata, such as the document number.

Select a metadata field from the Available Fields list.
The value of the field is endorsed on all pages of all documents of the same postprocessing job.

- Custom text.

Select USER CUSTOM TEXT in the Available Fields
list and supply your own wording in the Display Name column. This text is endorsed on all pages of all documents of the same postprocessing job.
note: Text wider than the page width is truncated.

- Predefined endorsement text.

Select a category name from the Available Categories list. The endorsement text is shown in the Display
Name column. You cannot edit the text of the endorsement. The text is endorsed only on documents that have the category assigned to them.

- The appearance of the text. Your options are:
- The font, font style, size, strikeout, underline, color, and
script.
NOTE:
- Select only Microsoft Windows-based fonts. If you select an unsupported font, the Microsoft Sans Serif font is used.
- If you select a color for the font and endorse black-and-white rendered documents, the color of the endorsement is lost. The endorsed text will be shades of black and white.
- The date format.

To create an endorsement template from the Admin menu:

1. From the Admin menu, select Manage Reference Files.

The Manage Reference Files dialog box is displayed.
2. Select Add.

The Add a Reference File dialog box is displayed.
3. In the Select a Reference File Type box, select Endorsement Template.
4. In the Template Name box, type a name.
5. In the Template Description box, type a description.
6. Select the Header Fields tab to set up information to display at the top of the endorsed page.
7. Select Select Fields and Categories to display the Field Selector dialog box.
8. In the Available Fields list, select one or more metadata fields that contain the information you want to appear on the page, and move them to the box on the right (select the arrow pointing right or double-click the field).

Select USER CUSTOM TEXT to endorse with custom wording. All rendered TIFF images and PDF files in the volume for which this template is used will be endorsed with this text.
9. In the Available Categories list, select one or more category names that represent the endorsement text and move them to the box on the right (select the arrow pointing right or double-click the field).

The only rendered documents that will be endorsed with the selected text are those to which categories were assigned. The categories will be ignored when endorsing rendered documents that don't have the category assignment. See "Assign Endorsement Categories to Documents" on page 195.

Note: If you use the template for paper printing, the category selection does not apply.
10. In the Display Name column:

- If you selected a metadata field, you can enter the display name. The display name provides an identifying label for the metadata that will be endorsed on the page.
- If you selected USER CUSTOM TEXT, type the text that you want endorsed on the rendered TIFF images and PDF files.
- If you selected a category, you cannot edit the display name.

11. In the Align column, select Left, Center, or Right.
12. In the Date Format column, choose a date format if applicable.
13. In the Font column, make selections in the Font dialog box.

- Select only Microsoft Windows-based fonts. If you select an unsupported font, the Microsoft Sans Serif font will be used.
- If you select a color for the font and endorse black-andwhite rendered TIFF images or PDF files, the color of the endorsement is lost. The endorsed text will be shades of black and white.

NOTE: If you use the template for paper printing, the font selection does not apply.
14. Select Save to save your work and return to the Add a Reference File dialog box.
15. If you want to change the order of the fields in the list, select the field, then select either the up arrow or the down arrow.
16. Select the Footer Fields tab to set up information to display at the bottom of the endorsed page.
17. Repeat steps 7 through 15.
18. When the template is finished, select Save.

## Set Endorsement Options

Rendered documents (TIFF images and PDF files) are endorsed during the packaging phase of postprocessing. To set your packaging settings, you need to create a Postprocessing session. You set endorsement options when you create a Postprocessing session. You can also set endorsement options when you create a postprocessing job.

This section includes instructions for setting endorsement options when creating a Postprocessing session and when creating a postprocessing job.

When creating a postprocessing session
To set endorsement options when creating a postprocessing ses-
sion:

1. From the [Project, Group, View, or Job] Settings dialog box, on the Actions pane select Postprocessing.
The Tasks pane displays two tabs: Document Numbering and Packaging and Populate All Text.
2. On the Document Numbering and Packaging tab, select the Package Files check box.
3. Select Create Session.

The Session Creation dialog box is displayed.
4. Type a name in the Session Name box.
5. Type a description in the Session Description box (optional).
6. In the Postprocessing Session area, make appropriate selections to fit your business needs. Use the guidelines in Table 9.3, "International Session Guidelines," on page 144.
note: Remember that when you add endorsements to a rendered document, the file size increases. So your volumes may have a slightly different size than originally selected.

Take this into consideration when you set the Size of Volume parameter when creating a Postprocessing session.
7. In the Rendered Document and Text File Options area, select the Endorse rendered documents (TIFF images and PDF files) check box.
8. Select an endorsement template. Do one of the following:

- Select an existing template from the Select endorsement template list.
- Select Create Template to create a new template (see "Create Endorsement Templates" on page 189), then select the template from the Select endorsement template list.

9. Select Create.

When creating a postprocessing job

To set endorsement options when creating a postprocessing job: 1. Create a postprocessing job, following the procedure "To postprocess documents:" on page 146 .
2. On the Document Numbering and Packaging tab, select the Package Files check box.
3. In the Select a Postprocessing session box, select a Postprocessing session from the list.
The Package Files area is populated with the settings for the selected Postprocessing session. Endorsement settings are in the Rendered Document and Text File Options area.
4. You can change the settings:

- Endorse rendered documents (TIFF images and PDF files)
Select the check box to endorse documents.
Leave the check box cleared if you do not want to endorse documents.
- Select endorsement template

If the Endorse documents check box is selected, you can select a different template from the Select endorsement template list.

You cannot create a new endorsement template from this location. If you want to create a new template before running the job, you can do so from the Admin menu, Manage Reference Files, if you have the proper permission. (See "Create Endorsement Templates" on page 189.
5. Make other necessary settings for your postprocessing job.
6. Select Back to Job Creation, and then select Create to create the job.

## Tag Documents in DC Detective

## Assign Endorsement Categories to Documents

If your clients use the DC Detective tool to preview their documents, they can use descriptive tags to indicate which documents to endorse and what endorsement phrase to use.

At the beginning of a project, the Discovery Cracker project manager and the DC Detective user need to discuss what endorsements are needed and what tags to use in the DC Detective tool to represent the endorsements.

After the DC Detective user tags and commits documents, the Discovery Cracker quality controller can then assign endorsement categories to documents. The documents are endorsed when the Discovery Cracker operator postprocesses the documents.

In a QC session, the Discovery Cracker quality controller can:

- Assign categories to documents
- Remove categories from documents
- View category assignments

Prerequisites for performing these activities:

- A list of endorsement categories must exist. (See "Create Endorsement Categories" on page 189.)
- Documents have been processed, at a minimum with the actions Initial Spin Through and File Spin Through.
- The quality controller must know which category to assign to which documents. This information is available from the Discovery Cracker project manager or from views created by DC Detective users.
- The quality controller knows how to perform activities in a QC Session. (See Chapter 8, "Quality Control," on page 101.)

Assign categories to documents

The quality controller can assign one or more categories to one document at a time or to multiple documents at the same time.

To assign categories to documents:

1. Open a QC session
2. Select one or more documents in the Data Panel.
3. Select the Assign Categories icon.
4. The Select Categories dialog box is displayed with a list of the category names of the existing categories for the project.

If you selected only one document in the Data Panel, the categories that have been previously assigned to the document are checked.

If you selected multiple documents, no categories are checked.
5. Select the check box of one or more categories that you want to assign to the documents.
6. Select Save to save the category assignments and return to the QC Session window.

Remove categories from documents
The quality controller can remove categories from documents. The procedure for removing categories when multiple documents are selected is different from the procedure for removing categories from a single document.

To remove categories from a single document:

1. Open a QC session.
(See the procedure "Opening a QC Session" on page 101)
2. Select one document in the Data Panel.
3. Select the Assign Categories icon.
4. The Select Categories dialog box is displayed. The categories assigned to the document are selected.
5. Clear the check box of one or more categories you want to remove, then, optionally, select the check box of one or more categories you want to assign.
6. Select Save to save the removal and reassignment of categories and return to the QC Session window.

To remove categories from multiple documents:

1. Open a QC session.
(See the procedure "Opening a QC Session" on page 101)
2. Select more than one document in the Data Panel.
3. Select the Assign Categories icon.
4. The Select Categories dialog box is displayed. No check boxes are selected.
5. Select the check box of one or more categories you want to remove.

View category assignments

## Create Views Based on Endorsement Category Assignments

6. Select the Clear selected categories check box (this check box appears only when you select multiple documents).
7. Select Save to save the removal of categories and return to the QC Session window.

If any of the documents in the selection contain category assignments for categories you have checked, those category assignments are removed.
8. To reassign categories, follow the procedure "To assign categories to documents:" on page 195 .

The QC Session provides the Assigned Categories panel as a convenient way to view which categories have been assigned to individual documents. The Assigned Categories panel is for viewing purposes only. You cannot make category assignments in the panel.

To view a document's category assignments:

1. Open a QC Session. (See "Opening a QC Session" on page 101.)
2. Display the Assigned Categories panel:
a. On the Tools tab, select the Visibility dropdown The list of panels is displayed.
b. Select Assigned Categories.

The Assigned Categories panel is displayed with the other panels to the right of the Data Panel. The Assigned Categories panel displays the Categories List column and the Assigned column.
3. In the Data Panel, select a document.
4. Select the Assigned Categories tab in the panels area.

All the endorsement category names for the project are displayed in the Categories List column.

After endorsement categories have been assigned to documents, you may want to process only documents with endorsement category assignments. To accomplish this, you create a view to filter all the documents in a project according to the criteria you desire.

You can create two different types of endorsement category views:

- A view that contains all documents that have been assigned any and all endorsement categories
- A view that contains only those documents that have been assigned one or more specific endorsement categories

To create a view based on endorsement category assignments:

1. Create a view (see "Creating Views" on page 75).

When creating the filter expression, in the Filter Expression Builder dialog box, do the following:
2. In the Select a Field to Search list:
a. For a view that contains all documents that have been assigned any and all endorsement categories, select PropertyGroup.
b. For a view that contains only those documents that have been assigned a specific endorsement category, select Property.
3. In the Select an Operator list, select IS LIKE.
4. In the Add a Text Value box:
a. If you selected the PropertyGroup field, type Endorsement.
b. If you selected the Property field, type the category name that you want to search for.
5. Select Add to Working Statement to add the expression to the Working Statement area.
6. If you are creating a view of documents that have been assigned more than one specific endorsement category, repeat steps $2 . b, 3$, and $4 . b$ for each endorsement category you want to search for.
7. When the working statement is like you want it, select Add to Final Statement to add it to the Final Statement area. You can add one or more working statements to the final statement.
8. Select Save Final Statement.

The filter expression is displayed in the View Filter Expression area of the View Configuration tab.

## Deliver the Endorsed Rendered Documents

Since the Discovery Cracker program endorses TIFF images and PDF files during packaging, the endorsed documents are placed in the subfolder of the project's Volumes folder that contains the TIFF, PDF, and text files. (See "Understanding Packaging" on page 128.)

You determine the location and name of the Volumes folder and subfolders when you create and select a Postprocessing session to be used during packaging. (See "Creating an International Session" on page 143.)

You copy the contents of the subfolders to the medium of your choice (CD, DVD, etc.) to deliver the files to your client.

## 14. Creating Reports

Discovery Cracker's reporting feature gives you a way to view data in the project databases and export it to a Microsoft Excel (.xls) file, a Portable Document Format (.pdf) file, or a text format (.txt) file.

## Types of Reports Available

You can create reports based on a project, a group, a view, or a Postprocessing session. When you select a Postprocessing session, you can create reports based on all the volumes in the session (the default setting) or on selected volumes only.

- Project-level reports contain data based on all the documents in the project.
- Group-level reports contain data based on all the documents in the group.
- View-level reports contain data based on all the documents in the view.
- Postprocessing session-level reports contain data based on all the documents in selected volumes of the document number session.

You have predefined reports to choose from. However, not all of the reports are available for every reporting level. When you select a reporting level, you are presented with a list of reports appropriate for that level.

Table 14.1, "Discovery Cracker Reports," lists the predefined reports available within Discovery Cracker.

Table 14.1: Discovery Cracker Reports

| Report Name | Report Description | Applicable <br> Reporting Levels |
| :--- | :--- | :--- |
| Documents Identified as <br> Duplicates | Lists all documents that were identified as duplicates. | - Project <br> Group <br> - View |
| Documents Not Packaged <br> During Postprocessing Ses- <br> sion | Lists all documents that could not be packaged during a Post- <br> processing session. | Postprocessing <br> session |
| Documents Rendered with <br> Metadata Viewer | Lists all documents that were rendered using the Metadata <br> Viewer as the render application. | Postprocessing <br> session |

Table 14.1: Discovery Cracker Reports (Continued)

| Report Name | Report Description | Applicable <br> Reporting Levels |
| :---: | :---: | :---: |
| Documents That Match the Project Filter | Lists all documents that match the project filter. These documents are culled out by filtering. | - Project <br> - Group <br> - View |
| Documents with a Placeholder Page | Lists all documents that contain a placeholder page. | - Postprocessing session |
| Documents with OCR Text | Lists all documents on which the optical character recognition (OCR) process was performed. <br> note: If you select the Populate All Text option in the Postprocessing action, run this report before postprocessing. Otherwise, the report will include all postprocessed documents. | - Postprocessing session |
| Exception Report | Lists all active error messages and their associated item identification information. <br> NOTE: If you reprocessed items that received an error message and the error message was resolved, those items will not be included in this report. This report includes those items that received an error message and you did not reprocess them or you manually approved them in order to continue processing. | - Project <br> - Group <br> - View <br> - Postprocessing session |
| File Counts by Document Type Group | Displays a count of documents grouped by document type group. | - Project <br> - Group <br> - View |
| File Counts by Document Type | Displays a count of documents grouped by document type. | - Project <br> - Group <br> - View |
| File Counts by Extension | Displays a count of documents grouped by file extension and the total file size of each group of documents. | - Project <br> - Group <br> - View |
| File Counts by Script | Displays a count of documents grouped by script. <br> note: Documents that use Greek characters in math equations will be included in the count of Greek script documents. | - Project <br> - Group <br> - View |

## Table 14.1: Discovery Cracker Reports (Continued)

| Report Name | Report Description | Applicable Reporting Levels |
| :---: | :---: | :---: |
| Processing Summary Report | Displays detailed information about your data set. This report brings together the total counts from many of the individual reports. It contains the following information: <br> Group or View Name. The name of the group or view. <br> Source Size (MB). The total size in megabytes of all main item documents. <br> Processed Size (MB). The total size in megabytes of all main item documents and their child documents before deduplication and filtering. <br> Total Documents. The total number of all main item documents and their child documents before deduplication and filtering. This number equals E-Mail Messages plus E-Files. <br> E-Mail Messages. The total number of e-mail messages before deduplication and filtering. Includes all documents in the LOTUSDOCUMENT and the OUTLOOKDOCUMENT document type groups. <br> E-Files. The total number of e-files and attachments before deduplication and filtering. <br> Duplicates. The total number of documents that were identified as duplicates. Corresponds to the Documents Identified as Duplicates report. <br> Filtered Documents. The total number of documents culled out by filtering. Corresponds to the Documents That Match the Project Filter report. <br> Documents with a Placeholder. The total number of documents that contain a placeholder page or that were rendered using the Metadata Viewer as the render application. Corresponds to the Documents Rendered with Metadata Viewer report and the Documents with a Placeholder Page report. | - Project |

## Table 14.1: Discovery Cracker Reports (Continued)

| Report Name | Report Description | Applicable Reporting Levels |
| :---: | :---: | :---: |
|  | Documents with OCR Text. The total number of documents on which the optical character recognition (OCR) process was performed. Corresponds to the Documents with OCR Text report. <br> Pages Rendered. The total number of pages rendered (includes TIFF and PDF formats). This count does not include TIFF pages produced during postprocessing. Corresponds to the Number of Pages Rendered report. <br> Items with Active Errors. The total number of items with active error messages. Corresponds to the Exception Report. |  |
| Number of Pages Rendered | Displays a count of the total number of pages rendered to the TIFF and/or PDF formats grouped by document type group. This report does not include TIFF pages produced during postprocessing. | - Project <br> - Group <br> - View <br> - Postprocessing session |
| Script Identification | Lists all documents and the scripts identified in each document. <br> note: Prerequisite for this report: You must turn on script identification in the Extract Metadata action (see page 214) before processing your documents. | - Project <br> - Group <br> - View |

## Things to Consider

When creating reports, you need to consider the following:

- The length of time it takes to create a report depends on the size of the data set you are reporting on and the specific report you select to create. Some reports take longer than others, such as Documents Identified as Duplicates, Processing Summary Report, and Script Identification.
- The length of time increases if you attempt to create the report while jobs are being processed. In addition, report creation could slow down processing time.
- Reports are generated from the data in the database at the time of report creation. If jobs are running on the same data you are running a report on, the report results will not be up to date once the job finishes. So, to get the most up-todate report results, be sure that all jobs for the reporting level you have selected have the status Complete.

You can run reports anytime after you have processed a set of documents. You create a report from the Create Report command on the Reports menu. Create Report is available when an active project, a group-level identifier, a view-level identifier, a group, a view, or a job is selected in the navigation pane of Discovery Cracker Console.

Create Report is not available when the manager database, a folder, or an inactive project is selected in the navigation pane.

When Create Report is available, you can select it from anywhere within Discovery Cracker Console.

To create a report:

1. On the Reports menu, select Create Report.

The Create Report dialog box is displayed. (See Figure 14.1.)

| Create Report |  |  |  |  |  | X |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reporting Level $\qquad$ <br> Select a project (required). <br> Project: |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 5.5 Proiect 1 |  |  | $\checkmark$ |  |  |  |
| Select one other reporting level (optional). Group: |  |  |  |  |  |  |
| (None) |  |  |  |  |  |  |
| View: |  |  |  |  |  |  |
| (None) |  |  | $\checkmark$ |  |  |  |
| Bates number session: |  |  |  |  |  |  |
| (None) |  |  | $\cdots$ |  |  |  |
| Reports |  |  |  |  |  |  |
| Select a project report: |  |  |  |  |  |  |
| Documents Identified as Duplicates |  |  |  |  |  |  |
| Documents That Match the Project Filter <br> Exception Report <br> File Counts by Document Type <br> File Counts by Document Type Group <br> File Counts by Extension <br> File Counts by Script <br> Number of Pages Rendered <br> Processing Summary Report <br> Script Identification |  |  |  |  |  |  |
| Report preview (fictional data is displayed): |  |  |  |  |  |  |
| $\square$ | Group Name | Status | Item Number | Main Item Number | Pare |  |
| - | E-Files | Rendered | 105 | 105 | 22 |  |
| 4 III ${ }^{\text {l }}$ - |  |  |  |  |  |  |
| Create <br> Close |  |  |  |  |  |  |

Figure 14.1.
2. Under Reporting Level, accept the currently displayed selections or make different selections.

The project, group, and view boxes are populated according to what is selected in the navigation pane.

- If a project is selected, the project name is displayed in the Project list box.
- If a group is selected, the project name to which the group belongs is displayed in the Project list box. The group name is displayed in the Group list box.
- If a view is selected, the project name to which the view belongs is displayed in the Project list box. The view name is displayed in the View list box.
- If a job is selected, the project name to which the job belongs is displayed in the Project list box. If the job belongs to a group, the group name is displayed in the Group list box. If the job belongs to a view, the view name is displayed in the View list box.
You must always select a project. Once you select the project you want, the groups, views, and Postprocessing sessions that belong to that project will be available in the Group, View, and Postprocessing session lists.

You can make a selection from the desired list (click the arrow at the right end of the box to display the list), or you can type the name of the project, group, view, or Postprocessing session in the appropriate box.

To create a project-level report, select only a project; make sure that (None) is selected in the group, view, and Postprocessing session lists.

To create a group-level report, select a project and then select a group from the Group list.

To create a view-level report, select a project and then select a view from the View list.

To create a Postprocessing session-level report, select a project and then select a Postprocessing session from the Postprocessing session list.
When you select a Postprocessing session, the Volumes to include list is displayed. (See Figure 14.2.) You can create a report that includes all the volumes in the session (that's the default setting), or you can select Clear All, and then select specific volumes to include in the report.


Figure 14.2.
3. Under Reports, select a report from the list.

The list of available reports changes according to the reporting level you have selected. Only the reports appropriate for the selected level are in the list.

When you move the mouse pointer over a report name in the list, a description of the report is displayed in the status bar of the dialog box. When you select a report name, you see a preview of what the report will look like under Report preview (fictional data is used). The database fields
included in the report are displayed along with sample data, not your real data.

For a detailed description of the database fields, see the Discovery Cracker Field List, which you can access from the Start menu (Start>Program or All Programs $>$ Discovery Cracker>Documentation)

## 4. Select Create.

Discovery Cracker creates the report. This could take a substantial amount of time, depending on the data set involved and the report you selected.

If you change your mind about running the report, you can select Cancel.

When the report is ready, the Report Results dialog box opens and displays the actual data from your project database.
5. You can do one of the following:

- View the report.
- Select Print to print the report.
- Select Save As to save the report as a Microsoft Excel (.xls) file, a Portable Document Format (.pdf) file, or a text (.txt) file.
The Save Document dialog box is displayed. A Reports folder is created in the default directory for the project's output files. By default, the Save As dialog box opens with that folder selected and with a default file name that includes the report name, the project name, and, if applicable, the group, view, or Postprocessing session name. You can accept the defaults or select a different location and type a different file name.


## 15. Working With Languages

Discovery Cracker allows you to process document sets that include documents written in any language supported by the Unicode ${ }^{\text {rw }}$ Standard.

What is the Unicode Standard? It is a character coding system that provides a set of characters that can support the written texts of the diverse languages of the world. (For more information, see Unicode Web site (http://www.unicode.org/standard/ standard.html).

The Unicode Standard does not specify how language characters are visually represented on screen or on paper. It only identifies how characters are interpreted. "The software or hardwarerendering engine of a computer is responsible for the appearance of the characters on the screen."-

## (http://www.unicode.org/standard/principles.html)

In order to take advantage of Discovery Cracker's support of the Unicode Standard, supplemental language support needs to be installed on all DC Engine computers, Discovery Cracker Console computers, and computers that DC Detective previewers use (as explained in the Discovery Cracker Environment Setup and Installation Guide: Start>Control Panel>Regional and Language Options $>$ Languages $>$ Supplemental language support. Select Install files for complex script and right-to-left languages (including Thai) and Install files for East Asian languages.)

What does that mean for you? With supplemental language support installed, you can use Discovery Cracker to process documents written in any language and:

- The correct characters are extracted from the documents and stored in the metadata fields of the database.
- The correct characters are displayed in the rendered TIFF images, PDF files, and text files. (There are a few limitations. See page 223.)
- The correct characters are displayed in the QC Session window as you view the documents and their metadata fields.
- The correct characters are displayed in DC Detective as you view the native documents and their metadata fields.
- The correct characters are printed when you choose to print paper copies of documents.

Sounds easy enough. And for basic, right out-of-the-box use, it is. However, you also have the option to use advanced features related to languages.

Before reading how to use the advanced features, it is advisable to understand some fundamentals to ensure that you get the results you want and expect from Discovery Cracker.

The rest of this chapter discusses the following topics:

- The World of Languages
- Scripts
- Languages
- Encodings
- Advanced Features Related to Languages
- Setting Task Settings
- Full-Text Indexing and Searching
- Creating Project Filters and Views
- Performing Quality Control
- Reports
- Exporting
- Using DC Detective
- Limitations Processing Multilingual Documents


## The World of Languages

Understanding the world of languages and multilingual data can be tricky. That's because we're dealing with hundreds, if not thousands, of human languages represented with different symbols (such as alphabets, syllabaries, syllabic alphabets, and abjads) and represented in different ways (such as left-to-right, right-to-left, vertical, or horizontal). We're also dealing with computers, which understand only one thing: numbers--one's and zero's.

Scripts The different symbols and different ways in which human languages are represented are known as writing systems, or scripts. There are many different scripts in the world.

According to the topic "Supported Scripts" at http://www.unicode.org/standard/supported.html, "a single script may serve to write tens or even hundreds of languages (e.g., the Latin script). In other cases only one language employs a particular script
(e.g., Hangul, which is used only for the Korean language). The writing systems for some languages may also make use of more than one script; for example, Japanese traditionally makes use of the Han (Kanji), Hiragana, and Katakana scripts, and modern Japanese usage commonly mixes in the Latin script as well."

Discovery Cracker identifies scripts. You can create a project or view filter based on scripts. The Scripts panel in the QC Session window displays the scripts contained in a document. You can generate reports based on scripts. In DC Detective, you can filter a view of documents by script and display a list of scripts per document.

Languages What's the difference between a language and a script? English, Hindi, Portuguese, Russian, Spanish, and Vietnamese are languages.

English, Portuguese, Spanish, and Vietnamese are written with the Latin script. Vietnamese can also be written with the Chinese script. Hindi is written with the Devanagari script. Russian is written with the Cyrillic script.

In the list of scripts to filter by or in the Scripts panel in the QC Session window, when you generate a scripts report, or in the property window in DC Detective, you will see a list of scripts (such as Latin, Chinese, Devanagari, and Cyrillic). You will not see a list of languages (such as English, Hindi, Portuguese, Russian, Spanish, and Vietnamese).

The Unicode Web site provides a reference for mapping scripts to languages and languages to scripts on the following pages:

- http://www.unicode.org/cldr/data/charts/supplemental/ scripts and languages.html
- http://www.unicode.org/cldr/data/charts/supplemental/ languages and scripts.html

When setting parameters for performing OCR and for selecting full-text search, you will see a limited list of languages to choose from. (See "Optical Character Recognition" on page 216 and "Full-Text Indexing and Searching" on page 217).

## Encodings

Computers store data as numbers, even textual data. So they need an encoding scheme that assigns a number to each letter, number, or character.

Encoding is the assignment of numbers (that computers can understand) to letters, digits, punctuation marks and other symbols (that computers do not understand). Many different encodings exist that define the many different scripts used throughout the world. ASCII, ANSI, Chinese Big 5, Chinese GB, Unicode (UTF-8), and Unicode (UTF-16) are examples of encodings.

The Unicode Standard provides the capacity to encode all of the characters used for the written languages of the world. By contrast, ASCII is limited to characters used in the English alphabet, which is written with the Latin script. The ANSI encoding includes characters for languages other than English, but is still limited to the Latin script. Other encodings are limited to other scripts.

For more information about the encoding forms that are supported by the Unicode Standard, see "The Unicode" Standard: A Technical Introduction" at http://www.unicode.org/standard/ principles.html.

## Advanced Features Related to Languages

In the Discovery Cracker program, you will see settings options that pertain to encodings, scripts, and languages. These settings allow you to:

- Help Discovery Cracker read your documents correctly
- Identify the scripts that are used within each document
- Choose the encoding to use for your rendered text files
- Select the language to recognize when performing optical character recognition.
- Create a full-text index and search based on a specific language
- Create a project filter based on one or more scripts
- Create a view filter based on one or more scripts
- Display the list of scripts contained in each document
- Generate reports related to the script information in your documents
- Include in export files the list of identified scripts for each document

The following topics explain how to accomplish the above list of tasks. The topics are provided in a general workflow order:

- Setting Task Settings
- Full-Text Indexing and Searching
- Creating Project Filters and Views
- Performing Quality Control
- Reports
- Exporting
- Using DC Detective


# Setting Task Settings 

The Extract Metadata Action

The Extract Metadata action and the Render action include task settings that are related to the processing of languages. You can select encodings and you can select metadata fields that you want Discovery Cracker to examine in order to identify the scripts used.

The Extract Metadata action offers encoding options and script identification options.

## Select the Encoding for Extracting Metadata

When you run a job to extract the metadata from your documents, Discovery Cracker needs to read the encoding for each document so it can interpret the characters correctly.

On the User-Selected Application task tab you can choose one of three applications to extract the metadata: Discovery Cracker Extractor, Lotus Notes, or Outlook. Your choice depends on the document type group you select.

When you select Lotus Notes or Outlook, you do not need to indicate the encoding.

When you select Discovery Cracker Extractor, in most cases Discovery Cracker can read the document's encoding and interpret the text correctly. In certain cases, however, it is impossible for Discovery Cracker to determine the encoding from the available data.

If Discovery Cracker cannot determine a document's encoding, it will use the default encoding to interpret the document's character set. By default, this is set to ASCII. You will know if that encoding choice is right or wrong for a certain document by viewing the text in the QC Session window. If the text is
unintelligible, or if you see questions marks (????), you can recrack the document and choose a different encoding (see page 220).

If you know from the start that certain documents require a specific encoding, you can make that selection before you run the job. By using the correct default encoding, you can assist Discovery Cracker in the correct conversion of your data. For more information on encoding, see "Encodings" on page 211.

To change the default encoding:

1. Open the [System, Folder, Project, Group, View, or Job]

Settings dialog box. (See "Setting Task Settings" on page 61 or "Creating a Job" on page 81.)
2. In the Actions pane, select Extract Metadata.
3. In the Tasks pane, select the User-Selected Application tab.
4. Confirm that Discovery Cracker Extractor is the userselected application.
5. In the Default Encoding box, select a different encoding.
6. Select Save and Close or Back to Job Creation.

## Identify Scripts

One document set may contain documents written in different languages. In addition, one document may contain multiple languages. Therefore, you may want to identify the languages you are working with.

As explained in the topic "Scripts" on page 209, Discovery Cracker identifies scripts that are used to write languages. In some cases, the script identifies the language-if only one language uses the script, such as with the Armenian script. In other cases, the script does not identify the language-if more than one language uses the script, such as with the Latin script. (For a chart that maps scripts to languages, see the following Web site: http://www.unicode.org/cldr/data/charts/supplemental/ scripts and languages.html)

Discovery Cracker identifies scripts by examining the characters of the data extracted from the document and placed into the metadata fields in the project database.

If you want Discovery Cracker to identify the scripts that documents are written in, you must select one or more metadata fields for Discovery Cracker to examine.

When you turn on script identification, you can:

- Create project filters based on scripts
- Create view filters based on scripts (for static views, you would first have to run a job on the document set to extract metadata)
- See a list of scripts contained in each document in the QC Session window in the Scripts panel.
- Generate reports based on script information.
- Export the script information for each document in a data delimited text file export.
- In DC Detective, filter the view of documents by one or more scripts
- In DC Detective, display a list of scripts per document in the property window.

To turn on script identification:

1. Open the [System, Folder, Project, Group, View, or Job] Settings dialog box. (See "Setting Task Settings" on page 61 or "Creating a Job" on page 81.)
2. In the Actions pane, select Extract Metadata.
3. In the Tasks pane, select the Identify Scripts tab.
4. From the Available fields list, select the fields you want Discovery Cracker to examine and add them to the Selected fields list.
note: The more fields you select, the longer the processing time.

You may want to start with the following fields: AuthorName, Body, FileDisplayName.
5. Select Save and Close or Back to Job Creation.

Results of script identification:
The names of the scripts identified in each document become part of the document's metadata and are saved in the ItemProperties table of the project database.

The script metadata is an individual, document-level property. Child documents do not inherit the parent document's script
metadata. A parent document does not receive script metadata that may be identified in any of its children. For example, if a parent document is identified as being written with the Devanagari script and its child document is identified as being written with the Latin script, the parent document's script metadata will include only Devanagari, while the child document's script metadata will contain only Latin.

If you recrack a document, its script metadata is deleted and replaced.

The Render Action The Render action offers the option to choose the encoding to use for your rendered text files.

Rendering is the Discovery Cracker activity that produces TIFF images or PDF files and, optionally, text files of documents. The text file contains the text of the document that is represented in the TIFF image or a PDF file if the native document contains text.

If you want Discovery Cracker to produce text files of rendered documents (TIFF or PDF), you must enable text file output and select the appropriate encoding for the text files. The encoding tells the printer driver which character set to use when creating the text files. This is especially important when you are processing documents containing languages written in scripts other than Latin.

When you select the TIFF render file type, your text file encoding options are ANSI, UTF-16, and UTF-8.

When you select the PDF render file type, your text file encoding options are ACSII, Unicode, UTF-16, UTF-32, UTF-7, and UTF-8.

The ANSI and ASCII encodings have the advantage of producing a smaller text file than a Unicode text file. ANSI-encoded and ASCII encoded text files process faster and save space.

ASCII is limited to characters used in the English alphabet, which is written with the Latin script. The ANSI encoding includes characters for languages other than English, but is still limited to the Latin script.

The Unicode Standard provides the capacity to encode all of the characters used for the written languages of the world.

If you are processing documents that contain languages written in scripts other than Latin, you need to choose a Unicode encoding form (Unicode, UTF-7, UTF-8, UTF-16, and UTF32). Unicode encoding forms contain the character sets for all known languages.

For an explanation of the different Unicode encoding forms, see "The Unicode Standard: A Technical Introduction" at http:// www.unicode.org/standard/principles.html.

The default encoding for text files is UTF-8.
To change the text file encoding:

1. Open the [System, Folder, Project, Group, View, or Job]

Settings dialog box. (See "Setting Task Settings" on page 61 or "Creating a Job" on page 81.)
2. In the Actions pane, select Render.
3. In the Tasks pane, select the Document Rendering tab.
4. Select the Enable text file output check box.
5. In the Text Encoding box, select the encoding you want to use.
6. If necessary, make other selections appropriate to your business needs (refer to page 240 in Appendix A, "Task Settings").
7. Select Save and Close.

Optical Character Recognition
The optical character recognition function (OCR) in the Discovery Cracker program does not support the Unicode Standard. It supports only a small number of languages that use the Latin script.

If you select to perform OCR on an image document that contains unsupported languages or scripts, the resulting text file will contain only the supported language letters (words). If the entire document is an unsupported language or script, the text file will be blank.

For more information about performing OCR, see Chapter 12, "Performing Optical Character Recognition," on page 172.

## Full-Text Indexing and Searching

When you create a project, if you connect to SQL Server 2005 Express Edition with Advanced Services, Standard Edition, or Enterprise Edition, you have the option to allow full-text indexing of the project database. (SQL Server 2005 Express Edition, which is installed by the Discovery Cracker installer, does not provide the full-text search capability.)

If you select that option, you need to specify the language for indexing and searching. English is the language selected by default. Since SQL Server 2005 creates the index and performs the search, the languages you have to choose from are the languages that SQL Server 2005 supports. The language you choose determines the rules that SQL Server 2005 uses to find word boundaries (word breaking) and to conjugate verbs (stemming). The rules differ for different languages. The word boundaries in the English language are typically white space or some form of punctuation. In other languages, such as German, words or characters may be combined together.

If you need a language that is not in the list and the language is a sublanguage (such as French Canadian) of a major language (such as French), select the major language. If you are unsure, or if a particular language is not listed, select Neutral. With the neutral word breaker, words are broken at neutral characters such as spaces and punctuation marks. However, languagebased stemming does not come into play when you specify Neutral.

For more information about selecting a language when creating a full-text index, see Microsoft's SQL Server 2005 Books Online (September 2007), "International Considerations for Full-Text Search," at http://msdn.microsoft.com/en-us/library/ ms142507(SQL.90).aspx.

To select a full-text language:

1. Create a project. (See "Creating Projects" on page 53.)
2. On the Database Preferences tab, in the Database FullText Search Settings area, select the Allow full-text indexing of the project database check box.

Note:
This selection is a one-time option. If you do not select it when you create the project, you cannot go back and change it later.

Full-text search gives you the advantage of making advanced SQL queries, such as proximity searches and generation searches, when you create a view (see "Creating Views" on page 75).
Discovery Cracker creates a full-text index when it cracks documents. Be aware that the additional activity of creating a full-text index increases processing time.
3. In the Full-text language box, select the language to use for full-text indexing and searching.

## NOTE:

With SQL Server 2005, you can index and search based on only one language. If a document contains different languages, the search based on the full-text index may yield inaccurate results.

You can select only one full-text language per project. You cannot change the language to be used for a full-text index after a project is created. To specify a different language, you would need to create a new project.

SQL Server 2005 stores some high-end Asian characters as two Unicode characters. Searching and filtering based on these characters may yield inaccurate results.

## Creating Project Filters and Views

In Discovery Cracker, you can create project filters and view filters based on languages. There are two ways to do that:

- Filter documents according to the scripts they are written in.
- Filter documents by words or phrases written in any language.

To filter documents according to scripts:
Prerequisite:

- You must turn on the Identify Scripts setting by selecting the metadata fields you want Discovery Cracker to examine for script identification. (See "To turn on script identification:" on page 214.)
note: If you don't know what scripts are contained in your documents, you may need to crack the documents first with the appropriate Identify Scripts settings, then go back and create a project or view with the appropriate filter selections.

1. Do one of the following:

- Create a project. (See "Creating Projects" on page 67.)
- Create a view. (See "Creating Views" on page 75.)

2. Display the Filter Expression Builder dialog box by doing one of the following:

- For projects, select the Enable Filtering check box, then select Create Expression.
- For views, select New Filter.

3. In the Filter Expression Builder dialog box, from the Select a Field to Search list, select Script.
4. From the Select an Operator list, select either Is Equal To or Is Not Equal To.
5. From the Select Scripts list, select the scripts you want to filter by.
6. Select Add to Working Statement.
7. When the working statement is like you want it, select Add to Final Statement to add it to the Final Statement area. You can add one or more working statements to the final statement.

## 8. Select Save Final Statement.

To filter documents by words or phrases written in any language:

1. Do one of the following:

- Create a project. (See "Creating Projects" on page 67.)
- Create a view. (See "Creating Views" on page 75.)

2. Display the Filter Expression Builder dialog box by doing one of the following:

- For projects, select the Enable Filtering check box, then select Create Expression.
- For views, select New Filter.

3. In the Filter Expression Builder dialog box, create a working statement by doing the following as many times as needed:
a. From the Select a Field to Search list, select a field.
b. From the Select an Operator list, select an operator.
c. In the Add a Text Value box, enter the text you want to search for.

You can type the text or use a copy-and-paste operation.

## d. Select Add to Working Statement.

4. When the working statement is like you want it, select Add to Final Statement to add it to the Final Statement area. You can add one or more working statements to the final statement.

## 5. Select Save Final Statement.

## Performing Quality Control

QC Sessions offer several features to help you perform quality control on documents that are written in any language.

- Display correct language characters. Characters of all languages supported by the Unicode character set are displayed when you view the metadata fields of documents in the Data Panel, when you view the contents of the other panels, and when you view the native documents.
- Display a list of scripts contained in a document. When you highlight a document in the Data Panel, the Script panel displays the list of scripts contained in the document.
- Change encoding settings and script identification settings at the document level. For individual documents you can change the default encoding, the metadata fields used to identify scripts, and the encoding used to generate text files.

To change the settings for a document:
Prerequisite:

- You have cracked and, optionally, rendered documents (see "Selecting Actions" on page 85).

Steps:

1. "Opening a QC Session" on page 101
2. In the Data Panel, select one or more documents.
3. From the action group, do one of the following:

- Select Render if you only want to change the encoding used to generate text files.
- Select Recrack, if you want to change the default encoding used for extracting metadata, if you want to change the metadata fields used to identify scripts during the Extract Metadata action, and/or you want to change the encoding used to generate text files during the Render action.

4. Select Edit Settings to open the Rework Settings dialog box.
5. Select an action.
6. Select a document type group.
7. Select the appropriate tab and make your desired changes to the appropriate task settings. (See page 213, page 214, and page 216.)
8. If you want to apply the settings of the tab you are currently on to additional document type groups, select Select Additional Document Type Groups while you are still on the tab.

NOTE: Be sure the settings on the current tab are appropriate for the additional document type groups you select.
9. Repeat steps 5 through 8 as needed.
10. When you have finished making all your settings, select Save and Close to return to the Take Action dialog box.

## 11. Select OK.

Reports You can request the following reports related to the script information in your documents:

- File Counts by Script: This is a project-level report. It displays a list of scripts identified in the project and the number of documents the scripts were identified in. The list of scripts and the number of documents are also presented per group and per view.
note: Documents that use Greek characters in math equations will be included in the count of Greek script documents.
- Script Identification: This is a project-level report. For each script that is identified, the report displays the following information: Item Number, File Name, Subject, File Path, Script, Document Type.
NOTE: It could take a substantial amount of time to run the Script Identification report if you attempt to run it during processing. In addition, it could slow down your processing.

Exporting You can include the identified script information as metadata to be included in a data delimited text file export, a Ringtail export, or a AD Summation DII export.

To be able to export script metadata, you must process documents with the Identify Scripts task turned on (see "To turn on script identification:" on page 214).

To include the script metadata in an export, from the Field Selector dialog box, in the Available Fields list, select the Scripts field.

You can access the Field Selector dialog box in the following locations:

- Data Delimited Text File Export: On the Selected Fields tab, select Edit Fields. (For instructions for Before Postprocessing jobs, see page 96. For instructions for After Postprocessing jobs, see page 150.)
- Ringtail Export: On the Extra Table tab, in the Export Extra Table area, select Select Fields. (For the Extra Table tab to be available, the Populate Export Extra Table check box needs to be selected. The check box is on the Document Number Selection tab in the Export Options area and is selected by default. For more instructions, see page 155.)
- AD Summation DII Export: For Class 2 and Class 3, on the Map Default Fields tab, in the Additional Fields area, select Select Additional Fields. (For more instructions, see page 160.)

In addition, by default, data delimited text file exports are created using the Unicode (UTF-16) encoding. In the Export Configuration area, the Use Unicode check box is selected.

## Using DC Detective

When previewing documents using the DC Detective tool, you can see a list of scripts that are contained in each document and you can filter documents by one or more scripts.
nOTE: Viewing script information and filtering by script is only possible if the documents are processed in Discovery Cracker with the Identify Scripts task turned on (see "To turn on script identification:" on page 214).

Display script information
You can see a list of the scripts that are used in each document.

To see the list of scripts for each document, ensure that the Show Property Window check box is selected in the Change Layout box in the setup pane (the area on the left side of the Web page).

When you select a document on the Home tab, the list of scripts for that document is displayed in the property window, which is below the native viewer on the right side of the Web page.

Filter by script You can filter the documents that are loaded into DC Detective so that only documents containing certain scripts are displayed. By default, DC Detective loads all scripts.

To filter by scripts

1. In the Filter by Scripts box of the setup pane, expand All Scripts.

## 2. Select Clear All.

3. Select only the scripts you want to load.
4. Select Submit.

## Limitations Processing Multilingual Documents

Because of the nearly infinite variations in file types and character representations possible with the Unicode character set and which can be processed by Discovery Cracker, it is virtually impossible to state with certainty that all characters in all languages for all file types will be rendered faithfully to the native. We have made every possible effort to validate the rendering results; however, errors are possible. We will make every effort to identify and resolve any inaccuracies. If you should notice such inaccuracies in rendered documents, please notify our Product Support team immediately and send a copy of the native file and a copy of the rendered file to us (call 866-8335377; send an e-mail message to dc.support@accessdata.com).

Known limitations are:

- Microsoft Outlook 97-2002 does not support the Unicode Standard. If Outlook PST data files created in Outlook 972002 contain languages written with scripts other than the Latin script, they need to be converted in Outlook 2003 to
the new PST format, which supports the Unicode Standard. For more information, refer to the following article:
http://office.microsoft.com/en-us/outlook/ HP010383511033.aspx?pid=CH010404871033
- When rendering, for languages that use combined characters, such as Hindi and other Indian languages, we cannot guarantee that the text files will be usable. In the text file, the combined characters are usually dropped, even though the TIFF image or the PDF file is accurate. However, the data in the Body field is correct because it is created during metadata extraction, which uses a different process.
- When rendering, for right-to-left languages, such as Arabic:
- For all document type groups, in the text files, the letters in each word are displayed in reverse order, like a mirror image.
- For Word documents, in TIFF, PDF, and text files, if the document contains a mixture of Latin script words and right-to-left script words, the Latin script words at the beginning or end of a sentence are dropped. If Latin
script words are in the middle of the sentence, they are retained.


## 16. DC Engine Selection

You can choose how to send jobs to your DC Engines for processing: automatically or manually.

- Automatic DC Engine selection-Discovery Cracker selects the DC Engines to assign to a job.
- Manual DC Engine selection-You select one or more DC Engines to assign to a job.

This chapter explains the following subjects:

- Benefits of Manual DC Engine Selection
- Selecting DC Engines Manually
- Changing the DC Engine Selection Mode
- Things to Know About DC Engine Selection
- Glossary of Terms Related to DC Engine Selection

The explanations herein assume that you know:

- How to create projects, groups, and views (Chapter 5, "Processing Setup")
- How to create jobs and how to access the Jobs tab (Chapter 6, "Processing")
- How to start a QC job (Chapter 8, "Quality Control")


# Benefits of Manual DC Engine Selection 

The following scenarios provide a few examples of the benefits of using manual DC Engine selection.

1. You get a hard drive and crack it letting Discovery Cracker automatically select the DC Engines. After the job is finished, the quality controller finds documents that should have been rendered but they weren't because your DC Engine computers did not have the necessary application installed, such as AutoCAD. The quality controller marks those documents to rerender.

You can install AutoCAD on one of your DC Engine computers. When the quality controller starts the QC job, he or she can select the specific DC Engine that has AutoCAD.
2. You want to take control of the prioritization of the workload. You have some DC Engine computers that are more powerful than others, so you select those computers for faster processing of the job.
3. Export jobs are performed on only one DC Engine at a time; those jobs are not distributed among multiple DC

Engines. For that reason, when you are ready to export your data, you may want to choose your most powerful DC Engine computer to run export jobs.
note: Manual DC Engine selection does not provide any benefit if you are using the single-box solution, which has only one DC Engine.

## Selecting DC Engines Manually

At job creation

You can select DC Engines to assign to a job. You can do that at job creation (when you initially create a job or when starting a QC job) and after job creation (before the job runs or while a job is running).

At job creation, or when starting a QC job, you make selections in the Details area of the General Job Information tab. (See Figure 16.1.)

The DC Engine selection area provides the options Automatic or Manual for choosing which way DC Engines will be selected for the job.

By default, DC Engine selection is set to Automatic, which means the Workflow Manager component of Discovery Cracker selects DC Engines to process the job. You take control of selecting DC Engines by choosing the Manual option.


Figure 16.1.
To manually select DC Engines for a job at job creation or when starting a QC job:

1. On the General Job Information tab, in the Details area, under DC Engine selection, select Manual.

## 2. Select Select DC Engines.

The DC Engine Selection dialog box is displayed. (See Figure 16.2.)


Figure 16.2.
3. Select one or more computers in the Available DC Engine Computers list and move them to the Current Job Assignment list.

The Available DC Engine Computers list displays all the computers that are available for processing. That includes all computers in the general DC Engine pool, those that have been assigned to other jobs, and offline computers. (Offline computers are indicated by a red X 限 ). A computer becomes unavailable (and therefore is not listed) only if it has been offline for 300 minutes.

For important details, see "Things to Know About DC Engine Selection" and "Glossary of Terms Related to DC Engine Selection," later in this chapter.

Move one computer at a time by selecting it and clicking the single right arrow $\boldsymbol{>}$. Move all computers at one time by clicking the double right arrow $\boldsymbol{\Omega}$.

You can remove computers from the Current Job Assignment list one at a time by selecting a computer and clicking the single left arrow $\leqslant$. You can remove all computers from the Current Job Assignment list by clicking the double left arrow
4. Select Save to return to the General Job Information tab and continue creating the job.
note: If you select Cancel, the mode remains Manual but no DC Engines will be selected.

If you don't select any DC Engine computers to assign to the job and select Save, the mode returns to Automatic. When you select Create on the General Job Information tab, the job will be created in automatic mode.

## After job creation

After you create a job, the job is listed on the Jobs tab, which includes the DC Engine Selection column. (See Figure 16.3.) If the job has not completed, you see the DC Engine selection mode of the job, either automatic $\begin{gathered}\circ \\ \text { or manual. }\end{gathered}$

The manual mode icon displays double checks if all the DC Engine computers assigned to the job are online. If one or
more of the assigned computers goes offline，the icon displays a red X $\omega$ and the label Manual with errors．

| Group Information |  |  | QC Console |  |  | Jobs |  | Status Counts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\checkmark$ Refresh Rate（seconds）： 0 Refresh Now |  |  |  |  |  |  |  |  |  |
| Drag a column header here to group by that column |  |  |  |  |  |  |  |  |  |
| Job ID | Description | Priority | \％Complete | Status | Errors | DC Engine Selection | Job To Follow | Scheduled Start | Created By |
| 1 |  | Normal | 100\％ | \％Completed |  |  |  |  | admin |
| $\underline{2}$ | Rework Auto－Cr．．． | Normal | 100\％ | \％Completed |  |  |  |  | admin |
| $\underline{3}$ | Rework Auto－Cr．．． | Normal | 1\％ |  |  | 聂 Automatic |  |  | admin |
| 4 | Rework Auto－Cr．．． | Normal | 100\％ | Completed |  |  |  |  | admin |
| 5 | Rework Auto－Cr．．． | Normal | 1\％ | 䋞 Paused |  | 最 Automatic |  |  | admin |
| 6 | Rework Auto－Cr．．． | 劅 Normal | 100\％ | \％Completed |  |  |  |  | admin |
| 7 | Rework Auto－Cr．．． | －Normal | 100\％ | \％Completed |  |  |  |  | admin |
| 8 |  | Normal | 1\％ | 乡角 Active |  | 易 Manual with errors |  |  | admin |
| $\underline{9}$ |  | Normal | 1\％ | 綃 Active |  | 魭 Manual |  |  | admin |

Figure 16．3．
If you want to change the selected DC Engines before a job runs or while it is running（on the fly），you can do so from the General Job Information tab or the Jobs tab：
－The General Job Information tab
a．Select a job in the navigation pane to display the Gen－ eral Job Information tab for the job．

You don＇t need to select Edit，if it is waiting to run，or Pause，if it is running．
b．Select Select DC Engines to display the DC Engine Selection dialog box．
c．Add or remove DC Engine computers．
d．Select Save．
－The Jobs tab
a．For the job you want to change，click the icon in the DC Engine Selection column．The DC Engine Selec－ tion dialog box is displayed．
b．Add or remove DC Engine computers．
c．Select Save．

## Changing the DC Engine Selection Mode

You can change the DC Engine selection mode（from automatic to manual or from manual to automatic）．You can do that at any time，while a job is running（on the fly）or waiting to run．

To change the DC Engine selection mode of the job:

1. Open the DC Engine Selection dialog box in one of the following ways.

- From the General Job Information tab:
a. Select a job in the navigation pane to display the General Job Information tab.

You don't need to select Edit, if it is waiting to run, or Pause, if it is running.
b. If the job is in automatic mode, select Manual.
c. Select Select DC Engines.

- From the Jobs tab, click the icon in the DC Engine Selection column for the job you want.

2. Change the DC Engine selection mode:

- To change from manual to automatic, move all the computers in the Current Job Assignment list to the Available DC Engine Computers list.
- To change from automatic to manual, move one or more computers from the Available DC Engine Computers list to the Current Job Assignment list.

3. Select Save.

- On the General Job Information tab, the DC Engine Selection option changes from Manual to Automatic or from Automatic to Manual.
- On the Jobs tab, the DC Engine Selection mode changes from Manual to Automatic or from Automatic to Manual.


# Things to Know About DC Engine Selection 

When using manual DC Engine selection, it is important that you know and take into consideration the following information:
1 Workflow Manager assigns DC Engines to jobs based on the user-selected priority levels and load balancing. Load balancing is an algorithm that Workflow Manager uses to assign tasks to multiple DC Engines to process jobs. Load balancing is performed among the DC Engines that are in the general DC Engine pool. The general DC Engine pool is made up of all of your DC Engines except those that you have manually assigned to jobs.

When you assign a DC Engine to a job, it is taken out of the general DC Engine pool.

1 At times, you may require applications other than those listed in the Discovery Cracker system requirements to render some of your documents. The advantage of using manual DC Engine selection is that you don't have to install the special applications on all of your DC Engine computers. You can install them on only one DC Engine computer or on as many as your business needs require.
note: If you set up DC Engine computers with special applications, you have to install only the required software applications listed in the Discovery Cracker system requirements. Adobe Acrobat, Lotus Notes Client, and an archive application are optional. They are required only if you need to process PDF files, NSF files, or compressed documents.

However, all DC Engine computers require Microsoft Office (whether or not you are going to process Microsoft Office documents) because the Discovery Cracker program looks for Microsoft Office Outlook during processing.
1 You can assign many DC Engines to process one job. For those jobs, Discovery Cracker uses load balancing to process the job among the assigned DC Engines.
1 You can assign one DC Engine to process more than one job. For two or more jobs, Discovery Cracker processes the jobs according to load balancing based on job priorities.
1 If you assign more than one DC Engine to process a job, the job will be processed only by the assigned DC Engines as long as at least one of those DC Engines is online. If the last of the assigned DC Engines is offline for at least one minute, then the job will be processed by the general DC Engine pool. When at least one assigned DC Engine comes back online, that DC Engine will take precedence and the general DC Engine pool computers will eventually stop processing. They will finish the tasks they are performing on the documents they have been assigned, and then drop out of the process.

For example, if you assign three DC Engines to a job and all three are taken offline by IT for maintenance, the job goes to the general DC Engine pool. When the first assigned engine becomes available, the job goes to it. Then as other DC Engines become available, the job goes to them with load balancing.

CAUTION: If you send documents to a specific DC Engine for rendering because that is where a specific application resides and that computer goes offline, your documents will be sent to other computers in the general DC Engine pool for processing.

1 When you select the manual DC Engine selection mode for a job, if the job is sent to the general DC Engine pool because all assigned DC Engines went offline, the job stays in the manual mode as indicated on the Jobs tab and on the General Job Information tab. That's because the job is still officially in the manual mode and the job will be sent to the assigned DC Engines when at least one becomes available. The mode indicator will change only when you change the manual mode to the automatic mode. You do that in the DC Engine Selection dialog box by removing all the assigned DC Engines.
1 When you make any changes in the DC Engine Selection dialog box and select Save, the DC Engine assignment is committed immediately, whether the job is running or not.

## Glossary of Terms Related to DC Engine Selection

Automatic mode. Discovery Cracker selects DC Engines to assign to a job according to user-selected priority levels and load balancing. Load balancing is performed among the DC Engines that are in the general DC Engine pool.

Available. A DC Engine computer that appears in the list of Available DC Engine Computers in the DC Engine Selection dialog box. To appear in the list, the computer must be recognized by Workflow Manager. DC Engine computers ping Workflow Manager at regular intervals. If a DC Engine computer has not pinged Workflow Manager in 300 minutes, it is dropped from the list. An offline computer can appear in the list and therefore be available for selection if it has been offline for less than 300 minutes.

DC Engine. The data processing component of the Discovery Cracker program. It processes the files-extracts metadata and renders-and sends the data to Workflow Manager, which then writes it to the database.

DC Engine computer. The computer that hosts the DC Engine component.

General DC Engine pool. The DC Engine computers that are available to process jobs in the automatic mode. DC Engine computers that you assign to jobs are taken out of the general DC Engine pool. Discovery Cracker processes jobs among all the DC Engine computers in the pool based on job priority and load balancing.

Job priority. The setting on the General Job Information tab that controls the number of system resources assigned to a job. You can set the job priority to High, Above Normal, Normal, Below Normal, or Low. A job with a priority of Low gets fewer system resources. A job with a priority of High gets more system resources. Discovery Cracker considers job priority only when multiple jobs are running at one time. The jobs can be within one project or across multiple projects.

Load balancing. An algorithm that Workflow Manager uses to assign tasks to multiple DC Engines to process a job. Load balancing is used when you have installed the DC Engine component on more than one computer. Load balancing takes into consideration the job priority.

Manual mode. You are responsible for selecting one or more DC Engines to assign to a job.

Offline computer. Workflow Manager has not received a ping from the DC Engine computer for five minutes. This could happen if the computer is turned off or disconnected from the network or if the DC Engine component is not running.

Workflow Manager. The task manager and communication center for the Discovery Cracker program. It manages the workflow for the Discovery Cracker components, controlling all events and balancing the load among the DC Engines for faster processing.

The Workflow Manager user interface displays a list of all the computers on which the DC Engine component is running and the time that the DC Engine computers last pinged Workflow Manager.

## Appendix A. Task Settings

When Discovery Cracker processes your files, it needs to know what settings to use for the various tasks involved. Discovery Cracker includes pre-established task settings that work well with the pre-established document type groups. However, you may find it necessary to customize the settings to fit your particular business needs. Use the information in the table below to help you customize task settings for the File Spin Through, Extract Metadata, and Render actions.

You can adjust these settings at the system, folder, project, group, view, or job level. Each sublevel inherits the settings from the previous level and can be further customized.

Table A.1: Task Setting Descriptions

| Action | Task | Settings | Instructions |
| :---: | :---: | :---: | :---: |
| File Spin <br> Through <br> Purpose: <br> To extract attachments and embedded files from the selection of folders to be processed. <br> To identify the contents within a PST or NSF file. | OLE Spin Through | The following check boxes: <br> - Extract embedded object files <br> - Extract fully embedded files from Word, Word Perfect and RTF files <br> - Extract linked embedded files from Word, Word Perfect and RTF files <br> - Extract embedded files from PDFs | Select Extract embedded object files to enable this task. <br> Select the other two check boxes according to your needs. <br> note: If you installed Microsoft Office 2007 on your DC Engine computers, you will not be able to extract embedded files from PowerPoint documents created with versions of PowerPoint earlier than Microsoft Office Powerpoint 2007. We recommend that, if possible, you install Microsoft Office 2003 with Microsoft Office 2007 forward compatibility on one of your DC Engine computers. Send PowerPoint documents to that DC Engine for processing. |
|  | Archive Application | The following check box: <br> - Spin through archive <br> The following parameter: <br> - Archive application | Select Spin through archive to enable the ability to spin through archive files. This selection will also enable the parameter. <br> From the Archive application menu, select the archive application you want the Discovery Cracker program to use to extract the contents of the archive for the selected document type group. |

Table A.1: Task Setting Descriptions (Continued)

| Action | Task | Settings | Instructions |
| :---: | :---: | :---: | :---: |
| File Spin <br> Through <br> (continued) | Spin Through Lotus Notes Documents | The following check box: <br> - Process attachments <br> The following parameters: <br> - ID file option <br> - Password option | Select Process attachments to enable the processing of attachments to Lotus Notes e-mail messages and to enable the parameters. <br> If selected, e-mail messages and attachments are processed. If not selected, only e-mail messages are processed. <br> ID file option allows you to override the system default Lotus Notes ID file. <br> Password option allows you to override the system default password used to open Lotus Notes Store files. |
|  | Spin Through <br> Lotus Notes Files | The following check boxes: <br> - Enable spin through Lotus Notes NSFs <br> - Bypass any corrupted files <br> The following parameters: <br> - ID file option <br> - Password option | Select the Enable spin through Lotus Notes NSFs check box to process the contents of Lotus Notes Store files. When this check box is selected, the other check boxes and parameters are enabled. <br> Select Mark encrypted files as problems to allow the Discovery Cracker program to identify encrypted files even though it cannot process them. <br> Select Bypass any corrupted files to allow the Discovery Cracker program to ignore corrupted files. <br> ID file option allows you to override the system default Lotus Notes ID file. <br> Password option allows you to override the system default password used to open Lotus Notes Store files. |
|  | Spin Through Outlook PST Items | The following check box: <br> Process attachments | Select Process attachments to enable the processing of attachments to Outlook email messages. If selected, e-mail messages and attachments are processed. If not selected, only e-mail messages are processed. |

Table A.1: Task Setting Descriptions (Continued)

| Action | Task | Settings | Instructions |
| :---: | :---: | :---: | :---: |
| File Spin <br> Through <br> (continued) | Spin Through Outlook PST Files | The following check boxes: <br> - Enable spin through of Outlook PSTs <br> - Bypass corrupt documents <br> - Process mail <br> - Process appointments <br> - Process contacts <br> - Process distribution lists <br> - Process journals <br> - Process notes <br> - Process tasks <br> - Process reports | Select the Enable spin through of Outlook PSTs check box to process the contents of Outlook PST files. When this check box is selected, the other check boxes are enabled. <br> Select Bypass corrupt documents to allow the Discovery Cracker program to bypass corrupt documents and continue on. <br> Select Process mail to process e-mail documents from a PST file. <br> Select Process appointments to process calendar documents from a PST file. <br> Select Process contacts to process contact documents from a PST file. <br> Select Process distribution lists to process distribution list documents from a PST file. <br> Select Process journals to process journal documents from a PST file. <br> Select Process notes option to process notes documents from a PST file. <br> Select Process tasks to process task documents from a PST file. <br> Select Process reports to process report documents from a PST file. <br> note: If you clear a check box, you cannot go back after processing and select it. |

Table A.1: Task Setting Descriptions (Continued)

| Action | Task | Settings | Instructions |
| :---: | :---: | :---: | :---: |
| Extract Metadata <br> Purpose: <br> To collect the metadata from your documents. | User-Selected <br> Application | The following parameter: <br> - User-Selected Application with one of the following applications displayed (depending on the document type group selected): <br> - Discovery Cracker Extractor <br> - Lotus Notes <br> - Outlook <br> If the displayed application is Discovery Cracker Extractor, the Default Encoding parameter is displayed. <br> If the displayed application is Lotus Notes, Get Lotus Notes metadata is displayed with the following: <br> - Populate Extra Properties field check box <br> - Replace CR + LF in Body field check box <br> - ID file option parameter <br> - Password file option parameter <br> If the displayed application is Outlook, Get Outlook metadata is displayed with the following: <br> - Populate Extra Properties field check box <br> - Replace CR + LF in Body field check box | Depending on the document type group you have selected, select the appropriate application for the Discovery Cracker program to use to extract metadata. <br> Default Encoding allows you to select the encoding to use when Discovery Cracker cannot determine a document's encoding. (See page 212 in Chapter 15, "Working With Languages.") <br> Select Populate Extra Properties field to extract additional metadata from Lotus Notes e-mail message or Outlook e-mail message files (e.g., start time and end time of a meeting). <br> Select Replace CR + LF in Body field to enable the Replace CR + LF with parameter. <br> $\mathrm{CR}=$ Carriage Return <br> LF = Line Feed <br> Enter a number between 1 and 255 in the Replace CR + LF with box. The ANSI character corresponding to the number will be entered in place of the CR and LF. <br> note: If you choose a value greater than 127 and export that field without using the Unicode option, any characters greater than 127 will be changed to a question mark ("?"). (See "Preview Using Data Delimited Text Files" on page 96 and "Data Delimited Text File Export" on page 150 .) <br> ID file option allows you to override the system default Lotus Notes ID file. <br> Password file option allows you to override the system default password used to open Lotus Notes Store files. |

Table A.1: Task Setting Descriptions (Continued)

| Action | Task | Settings | Instructions |
| :---: | :---: | :---: | :---: |
| Extract Metadata (continued) | Get Body Comments | The following check boxes: <br> - Extract body comments <br> The following parameters: <br> - Replace CR + LF with | Select the check box to collect the body comment metadata fields from Excel, Word, and PowerPoint files and to enable the Replace CR + LF with parameter. <br> $C R=$ Carriage Return <br> LF = Line Feed <br> Enter a number between 1 and 255 in the Replace CR + LF with box. The ANSI character corresponding to the number will be entered in place of the CR and LF. <br> note: If you choose a value greater than 127 and export that field without using the Unicode option, any characters greater than 127 will be changed to a question mark ("?"). (See "Preview Using Data Delimited Text Files" on page 96 and "Data Delimited Text File Export" on page 150.) |
|  | Get Body Text | The following check boxes: <br> - Extract body text | Select Extract body text to extract data from the body of any document. <br> note: The Get Body Text option does not apply to Outlook or Lotus Notes email messages. |

Table A.1: Task Setting Descriptions (Continued)

| Action | Task | Settings | Instructions |
| :---: | :---: | :---: | :---: |
| Extract Metadata (continued) | Missing Metadata Check | The following check box: <br> - Check metadata <br> The following parameters: <br> - Minimum fields populated <br> - Metadata fields to check | Select check metadata to enable this task and to enable the parameters. <br> Enter a number for Minimum fields populated. <br> In Metadata fields to check, select the specific metadata fields you want to check. <br> With these parameters set, Discovery Cracker ensures that cracked documents have values for the specific number of metadata fields that you select. You may select fewer fields in the Minimum fields populated than you have selected in the Metadata fields to check. Discovery Cracker will use the selected number of fields to check and if at least that number of fields are populated, no errors will be given to the document. <br> Documents that do not meet the parameters are marked as Problem. |
|  | OCR Options | For an explanation of the OCR option settings, see page 174 in Chapter 12, "Performing Optical Character Recognition." |  |
|  | Identify Scripts | To enable script identification, select fields from the Available fields list and add them to the Selected fields list. Select the fields you want Discovery Cracker to examine in order to identify the scripts used in documents. (See page 213 in Chapter 15, "Working With Languages.") |  |

Table A.1: Task Setting Descriptions (Continued)

| Action | Task | Settings | Instructions |
| :---: | :---: | :---: | :---: |
| Render <br> Purpose: <br> To create TIFF files (images) or PDF files and, optionally, text files of your documents. | Document Rendering | The following check boxes: <br> - Enable text file output <br> - Compare the estimated page count to the actual rendered output page count <br> - Render output in color <br> The following parameters: <br> - Render output type <br> - Output format (not shown for PDF) <br> - Text Encoding <br> - DPI <br> - Maximum time (in minutes) to change render settings between documents <br> - Rotate landscape (not shown for PDF) <br> - Rotate portrait (not shown for PDF) | The Render output type allows you select None, PDF, or TIFF. <br> The settings options are slightly different for TIFF and PDF. When you select None, no settings are displayed. <br> note: If you select Metadata Viewer on the User-Selected Application tab, settings on the Document Rendering tab are ignored. <br> The Output format allows you to produce Single page or Multipage TIFF images. PDF files are produced in multipage format only. <br> Single page creates a separate TIFF image for each page of the documents being rendered. Multipage creates a single TIFF image for each document rendered. <br> note: The DocuLex 5 export requires that you create single-page TIFF images. <br> Selecting Enable text file output produces a text file for each document that is rendered. If you select the Single page format, a separate .txt file is produced for each page of the document being rendered. If you select the Multipage format, a single .txt file will be created for each document rendered. That is the text file output you get when you render to PDF. |

Table A.1: Task Setting Descriptions (Continued)

| Action | Task | Settings | Instructions |
| :---: | :---: | :---: | :---: |
| Render <br> (continued) | Document Rendering (continued) |  | The Text Encoding selection tells the printer driver which character set to use when creating the text files. This is especially important when you are processing documents containing international languages. For more information, see page 215 in Chapter 15, "Working With Languages." <br> The DPI (dots per inch) determines the output quality of the rendered TIFF images or PDF files. If this option is set too low, the image quality is poor, causing the text within the image to be unreadable. If this option is set to the highest level, 600 , the image quality is excellent, but the file size will be larger and additional processing time will be required. The default setting of 300 is most commonly used within Discovery Cracker. <br> The Maximum time (in minutes) to change render settings between documents is the maximum time per document that Discovery Cracker has to process the commands to change settings from one document to the next. Once this maximum time has been reached, Discovery Cracker will discontinue performing the rendering action and move on to another document. Setting this option too low will cause more documents to time out. <br> Setting this option too high will cause delays in processing if a problem document is encountered. |

Table A.1: Task Setting Descriptions (Continued)

| Action | Task | Settings | Instructions |
| :--- | :--- | :--- | :--- |
| Render | $\begin{array}{l}\text { Document Ren- } \\ \text { dering } \\ \text { (continued) }\end{array}$ |  | $\begin{array}{l}\text { Select Compare the estimated page } \\ \text { count to the actual rendered output page } \\ \text { count to use the metadata property Esti- } \\ \text { mated Pages to verify that the correct } \\ \text { number of TIFF images or PDF files have } \\ \text { been produced. This option only works } \\ \text { with documents that contain an Esti- } \\ \text { mated Pages metadata property. }\end{array}$ |
| Render output in color will render any |  |  |  |
| color document as a color TIFF image or |  |  |  |
| PDF file. However, if the document pages |  |  |  |
| are black and white, the TIFF image or |  |  |  |
| PDF file will be produced as black and |  |  |  |
| white. |  |  |  |\(\left.\left.\} \begin{array}{l}Rotate landscape will rotate any land- <br>

scape-oriented document to the right the <br>
number of degrees selected. This option is <br>
not available for PDF output.\end{array}\right\} $$
\begin{array}{l}\text { Rotate portrait will rotate any portrait- } \\
\text { oriented document to the right the num- } \\
\text { ber of degrees selected.This option is not } \\
\text { available for PDF output. }\end{array}
$$\right\}\)

Table A.1: Task Setting Descriptions (Continued)

| Action | Task | Settings | Instructions |
| :---: | :---: | :---: | :---: |
| Render <br> (continued) | User-Selected <br> Application | The following parameter: <br> - User-Selected Render Application with one of the following applications displayed (depending on the document type group selected): <br> - Adobe Acrobat <br> - Discovery Cracker Viewer <br> - Internet Explorer <br> - Kodak <br> - Lotus Notes <br> - Metadata Viewer <br> - MS Access <br> - MS Excel <br> - MS PowerPoint <br> - MS Project <br> - MS Visio <br> - MS Word <br> - None <br> - OS-Associated <br> - Outlook | Select the user-selected render application that you want to use for the selected document type group. <br> Caution: Be sure to choose an application that can render all the document types in the selected document type group. Using an application that cannot render all of the document types could cause undesirable results. <br> You see check boxes and parameters that vary depending on the application you select. <br> See Table A. 2 on page 245 for detailed instructions on how to set each parameter within the user-selected render applications. |
|  | Blank Pages | When you select the TIFF render output file type on the Document Rendering tab, you see: <br> The following check boxes: <br> - Check for and deactivate blank pages <br> - Check only pages that are smaller than <br> The following parameter: <br> - Size in KB | Select Check for and deactivate blank pages to allow Discovery Cracker to check the rendered TIFF images for blank pages. Every TIFF image regardless of size is reviewed to determine if it is blank. <br> Select Check only pages that are smaller than to limit the TIFF images that are checked for blank pages and to enable the Size in KB parameter. <br> Entering a number from 1 to 100 for the Size in KB tells Discovery Cracker to review only pages that are smaller than the number of kilobytes in that parameter. <br> note: In Discovery Cracker, a blank TIFF page is a TIFF image that has no pixels on the page. |

Table A.1: Task Setting Descriptions (Continued)

| Action | Task | Settings | Instructions |
| :---: | :---: | :---: | :---: |
| Render <br> (continued) | Blank Pages <br> (continued) | When you select the PDF render output file type on the Document Rendering tab, you see: <br> The following check box: <br> - Check for and deactivate blank pages <br> When you select the None render output file type on the Document Rendering tab, the Blank Pages tab is not displayed. | Select Check for and deactivate blank pages to allow Discovery Cracker to check the rendered PDF file for blank pages. Every PDF file regardless of size is reviewed to determine if it is blank. <br> note: In Discovery Cracker, a blank PDF page is a page with no text or images. |
|  | OCR Options | The OCR Options tab is not displayed when the None or PDF render output file types are selected. <br> For an explanation of the OCR option settings when you select the TIFF render output file type, see page 176 in Chapter 12, "Performing Optical Character Recognition." |  |

Table A.2: User-Selected Render Application Settings

| Application | Setting Category | Option | Settings | Description |
| :---: | :---: | :---: | :---: | :---: |
| Adobe Acrobat | Adobe render options | Send each document page as a separate rendering job | None available | Select Send each document page as a separate rendering job to send each page of the document to render as a separate document. This will not affect the final output of the rendered document. Therefore if you have selected the multipage TIFF or the PDF output option, you will still have a multipage document when the rendering is complete. |
| Discovery <br> Cracker <br> Viewer | Discovery Cracker Viewer render options | Default Font | The following check boxes: <br> - Print bold <br> - Print italic <br> - Use original document formatting if available <br> The following parameters: <br> - Print font: <br> - Font size: | Select the appropriate Print font to use when the font contained within the document is not on the machine processing the file or when rendering spreadsheets, databases or documents in draft form. <br> Select the appropriate Font size to use when the font contained within the document is not on the machine processing the file or when rendering spreadsheets, databases or documents in draft form. <br> Select Print bold or Print italic in addition to the Print font and Font size options that you have previously selected to render the documents with a bold or italic font if a replacement font is used. <br> Select Use original document formatting if available to maintain the original print settings stored in the document. |

Table A.2: User-Selected Render Application Settings (Continued)

| Application | Setting Category | Option | Settings | Description |
| :---: | :---: | :---: | :---: | :---: |
| Discovery <br> Cracker <br> Viewer (con- <br> tinued) | Discovery Cracker Viewer render options (continued) | Spreadsheet | The following check boxes: <br> - Print gridlines <br> - Print row and column headings <br> The following parameters: <br> - Print direction: <br> - Scaling options: <br> - Scale percentage: <br> - Width in pages: <br> - Height in pages: | Select Print gridlines to print the gridlines of each cell within rendered spreadsheets. <br> Select Print row and column headings to print the row and column headings of spreadsheets. <br> Select Print direction to control the order in which pages are rendered. <br> Print across renders the pages in the first set of rows first, then moves down and renders the next set of rows. <br> Print down renders the pages in the first set of columns first, then moves over and renders the next set of columns. <br> Select Scaling options to control the amount of data that can fit onto one page when rendered. <br> Select Scale to selected percentage to adjust the amount of data that can fit onto one page when rendered, but not to control the number of pages rendered. This option has a parameter Scale percentage which allows from 10 to $200 \%$ scale adjustment. <br> Select Fit to selected width and height to adjust how many pages will be rendered and how large the rendered cells will be on the page. <br> This option has two parameters Width in pages and Height in pages which can each be set from 1 page to 10 pages. |

Table A.2: User-Selected Render Application Settings (Continued)

| Application | Setting <br> Category | Option | Settings | Description |
| :---: | :---: | :---: | :---: | :---: |
| Discovery <br> Cracker <br> Viewer (con- <br> tinued) | Discovery Cracker Viewer render options (continued) | Database | The following check boxes: <br> - Print gridlines <br> - Print row and column headings <br> The following parameter: <br> - Scaling options: which contains the following options: <br> - Fit to page <br> - Fit to page height <br> - Fit to page width <br> - No scaling | Select Print gridlines to print the gridlines of each cell within rendered database tables. <br> Select Print row and column headings to print the row and column headings of database tables. <br> Select Scaling options to control the amount of data that can fit onto one page when rendered. <br> note: The Discovery Cracker Viewer can only process Microsoft Access databases that are version 2.0 or below. We recommend selecting MSAccess as the application to render Microsoft Access databases. |
|  |  | Bitmap | The following check box: <br> - Print Bitmap image border <br> The following parameter: <br> - Bitmap image aspect ratio: which contains the following options: <br> - Original aspect ratio <br> - Stretch to margin | Select Print Bitmap image border to render Bitmap images with a border. <br> Select the appropriate Bitmap image aspect ratio: to render Bitmap images. <br> Select Original aspect ratio to render the image without altering the aspect ratio. Note that the image will be stretched to the page margins, but that aspect ratio will remain unchanged. <br> Select Stretch to margin to stretch the image to the margin of the page, but not maintain the original aspect ratio. |

Table A.2: User-Selected Render Application Settings (Continued)

| Application <br> Category | Option | Settings | Description |
| :--- | :--- | :--- | :--- | :--- | | Discovery <br> Cracker <br> Viewer (con- <br> tinued) |
| :--- |
| Discovery <br> Cracker Viewer <br> render options <br> (continued) |

Table A.2: User-Selected Render Application Settings (Continued)

| Application | Setting Category | Option | Settings | Description |
| :---: | :---: | :---: | :---: | :---: |
| Internet <br> Explorer (continued) | Internet <br> Explorer render options (continued) | Shutdown <br> Internet <br> Explorer <br> between each attempt | None available | Select Shut down Internet Explorer between each attempt to close the Internet Explorer application between attempts to load the page into Internet Explorer. |
|  |  | Shut down <br> Internet <br> Explorer after rendering (in seconds): | The following parameter: <br> - 1 to 60 | Select length of time in Shut down Internet Explorer after rendering to determine how long after the rendering task has been completed before shutting down Internet Explorer. |
| Kodak | There are no options for this selection because it is not an application required for processing. By default, Discovery Cracker Viewer renders documents of this file type. <br> If you want better images than what Discovery Cracker Viewer can produce for this file type, you need to install the native application. Please contact Discovery Cracker Product Support at 866-833-5377 or dc.support@accessdata.com for guidance. |  |  |  |
| Lotus Notes | Lotus Notes <br> Render Options | Expand Names field content when printing | None available | Select Expand Names field content when printing to control the size of the CC and BCC fields on the rendered document (TIFF or PDF). <br> When selected, if the CC or BCC fields contain more than 3 rows of recipients, the field will be expanded to accommodate the full recipient list. <br> If not selected, only 3 rows of recipients in either field will be rendered. |
|  |  | Render Private Documents | None available | Select Render Private Documents to allow Discovery Cracker to render Lotus Notes e-mail messages that have been sent as private. <br> If this option is not selected, e-mail messages marked private cannot be rendered. |

Table A.2: User-Selected Render Application Settings (Continued)

| Application | Setting <br> Category | Option | Settings | Description |
| :--- | :--- | :--- | :--- | :--- |

Table A.2: User-Selected Render Application Settings (Continued)

| Application | Setting <br> Category | Option | Settings | Description |
| :--- | :--- | :--- | :--- | :--- | | (continued) | Lotus Notes <br> Render Options <br> (continued) |
| :--- | :--- |
| Password <br> options <br> (continued) |  |

Table A.2: User-Selected Render Application Settings (Continued)

| Application | Setting Category | Option | Settings | Description |
| :---: | :---: | :---: | :---: | :---: |
| MS Access | MS Access render options | Page setup options | The following check boxes: <br> - AutoFit column <br> - AutoFit row <br> - Wrap text <br> - Print gridlines | Select AutoFit column to adjust the column width of each column within the Access database tables to fit the contents within the column. <br> Select AutoFit row to adjust the row height of each row within the Access database tables to fit the contents within each row. <br> Select Wrap text to adjust the contents within each cell within the Access database tables to render multiple lines of text rather than a single row of text. <br> Select Print gridlines to enable the gridline borders to print on the rendered document (TIFF or PDF) for each cell within the Access database tables. |
|  |  | Margin setting options | The following parameters: <br> - Top margin which has the following options: 0.25 inches to 11 inches <br> - Bottom margin which has the following options: 0.25 inches to 11 inches <br> - Right margin which has the following options: 0.25 inches to 8 inches <br> - Left margin which has the following options: 0.25 inches to 8 inches | Select a Top margin value to adjust the distance from the top edge of the page to the first line of data within the rendered document (TIFF or PDF). <br> Select a Bottom margin value to adjust the distance from the bottom edge of the page to the last line of data within the rendered document. <br> Select a Right margin value to adjust the distance from the right edge of the page to the data within the rendered document. <br> Select a Left margin value to adjust the distance from the left edge of the page to the data within the rendered document. |

Table A.2: User-Selected Render Application Settings (Continued)

| Application | Setting <br> Category | Option | Settings | Description |
| :---: | :---: | :---: | :---: | :---: |
| MS Access (continued) | MS Access render options (continued) | Page order options | The following parameter: <br> - Page order: which has the following options: <br> - Down then Over <br> - Over then Down | Select Page order to control the order in which pages are rendered. <br> Down then over renders the pages in the first set of columns first, then moves over and renders the next set of columns. <br> Over then down renders the pages in the first set of rows first, then moves down and renders the next set of rows. |
|  |  | Scale size options | The following parameter: <br> - Scale size: which has the following options: 10 to 200 | Select a Scale size value to adjust the amount of data that can fit onto one page when rendered. |
|  |  | Orientation options | The following parameter: <br> - Page orientation: which has the following options: <br> - Portrait <br> - Landscape | Select Page orientation to control the orientation with which the page will be rendered. <br> Portrait renders the page in an $81 / 2$ by 11 format <br> Landscape renders the page in an 11 by $81 / 2$ format. |

Table A.2: User-Selected Render Application Settings (Continued)

| ApplicationSetting <br> Category | Option | Settings | Description |
| :--- | :--- | :--- | :--- | :--- |

Table A.2: User-Selected Render Application Settings (Continued)

| Application | Setting Category | Option | Settings | Description |
| :---: | :---: | :---: | :---: | :---: |
| MS Excel (continued) | MS Excel render options (continued) | Object settings (continued) |  | Select Enable chart setting to control whether or not the chart object is rendered. <br> Select Print chart object to render the chart object. If this option is not selected, but the Enable chart setting has been selected, no chart objects will be rendered. <br> Select Enable graphic objects setting to control whether or not the graphic objects are rendered. <br> Select Print graphic objects to render the graphic objects such as buttons, text boxes, drawn objects and pictures. If not selected, but the Enable graphic objects setting has been selected, no graphic objects will be rendered. |
|  |  | Worksheet function options | The following check boxes: <br> - Enable date function replacement options (body only) <br> - Enable header/ footer date function replacement options <br> - Enable header/ footer time function replacement options <br> - Enable path function replacement options (body only) <br> - Enable time function replacement options | Select Enable date function replacement options (body only) to control how date functions are handled within the body of Excel worksheets. <br> Select Enable header/footer date function replacement options to control how date functions are handled within the header and footer of Excel worksheets. <br> Select Enable header/footer time function replacement options to control how time stamp functions are handled within the header or footer of Excel worksheets. <br> Select Enable path function replacement options (body only) to control how path functions are handled within the body of Excel worksheets. |

Table A.2: User-Selected Render Application Settings (Continued)

| Setting <br> Category | Option | Settings | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |

Table A.2: User-Selected Render Application Settings (Continued)

| Application | Setting Category | Option | Settings | Description |
| :---: | :---: | :---: | :---: | :---: |
| MS Excel (continued) | MS Excel render options (continued) | Worksheet function options (continued) |  | The Original time option will render using the last printed time of the document. If the document had never been printed, the last modified time will be used. <br> The Remove Completely option will remove the function from the header or footer of the worksheet. <br> The Original Formula option which will display the formula rather than the value of the function. (i.e., you will see "Today()" rather than " $1 / 14 /$ 2008 " in the location of the function) |
|  |  | Print area options | The following check boxes: <br> - Remove rows to repeat at top <br> - Remove columns to repeat at left <br> - Remove print range | Select Remove Rows to Repeat at Top to disable the repeating rows at the top of Excel worksheets. <br> Select Remove Columns to Repeat at Left to disable the repeating columns on the left of the Excel worksheets. <br> The Set Print Range option |
|  |  | Page setup options | The following check boxes: <br> - Enable custom page setup <br> - Enable headings options <br> - Enable gridline options <br> - Enable orientation options <br> - Enable page order options <br> - Enable page size options <br> - Enable comment options | Select Customize Page Setup in order to control page setup options within Excel worksheets. <br> Select Enable Headings Options in order to control the rendering of row and column headings. <br> Select Print Row and Column Headings to render the row and column headings. If not selected, row and column headings will not be rendered. <br> Select Enable Gridline Options in order to control the rendering of cell gridlines. |

Table A.2: User-Selected Render Application Settings (Continued)

| Spplication <br> Category | Option | Settings | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |

Table A.2: User-Selected Render Application Settings (Continued)

| Application | Setting <br> Category | Option | Settings | Description |
| :---: | :---: | :---: | :---: | :---: |
| MS Excel (continued) | MS Excel render options (continued) | Page setup options (continued) |  | The None option renders no comments. <br> The As displayed on the sheet option renders comments in a comment bubble near the location of the comment entry. <br> The At the end of the sheet option renders the comments at the bottom of each worksheet with a reference to the cell that the comment was originally placed. <br> Select Scale Size to adjust the amount of data that can fit onto one page when rendered. <br> Select Remove Blank Columns and Rows (Selecting this option may substantially change the formatting) to remove blank rows and columns within each worksheet of Excel workbooks. <br> Select Enable print quality options to enable the options to render in Draft quality and to render in Black and white. <br> Select Draft quality to increase rendering speed by ignoring most formatting and graphics. This option will also remove gridlines even if the Print gridlines option has been selected. <br> Select Black and white to render fonts and borders in black and white instead of shades of gray. This option will also render cell and AutoShape backgrounds as white and renders other graphics and charts in shades of gray. |

Table A.2: User-Selected Render Application Settings (Continued)

| Application | Setting <br> Category | Option | Settings | Description |
| :---: | :---: | :---: | :---: | :---: |
| MS Excel (continued) | MS Excel render options (continued) | Worksheet options | The following check boxes: <br> - Remove Worksheet Level Protection <br> - AutoFit Row <br> - AutoFit Column <br> - Unhide Columns <br> - Unhide Rows <br> - Unhide Worksheet <br> - Color No Fill (Change Font Color to Black is recommended with this option) <br> - Change Font Color to Black <br> - Wrap Text <br> - Show all data (Remove Filtering) <br> - Show Detail (Group and Outline) <br> - Shrink to Fit | Select Remove Worksheet Level Protection to allow access to the worksheet for the other formatting adjustments that are selected. If this option is not selected and the worksheet is protected, none of the other options selected for formatting will be applied. <br> nOTE: If the worksheet is protected with a password and you select this option, Discovery Cracker will use a brute force functionality that will iterate through up to 196,000 times to attempt to crack the password on the worksheet. <br> Please note that this can make processing of Microsoft Excel spreadsheets take longer than expected if you have quite a few that are worksheet password protected. However, on those Excel documents that do not have password protection at the worksheet level, the processing will not be impeded. <br> Select AutoFit Row to adjust the row height of each row within each worksheet to fit the contents within the row. <br> Select AutoFit Column to adjust the column width of each column within each worksheet to fit the contents within the column. <br> Select Unhide Columns to render hidden columns. <br> Select Unhide Rows to render hidden rows. |

Table A.2: User-Selected Render Application Settings (Continued)

| Application | Setting <br> Category | Option | Settings | Description |
| :---: | :---: | :---: | :---: | :---: |
| MS Excel (continued) | MS Excel render options (continued) | Worksheet options (continued) |  | Select Unhide Worksheet to render hidden worksheets within workbooks. <br> Select Color No Fill to remove the background color of cells within worksheets. <br> When selecting this option it is recommended to also select the Change Font Color to Black option to enable white or light colored text to be rendered black for visibility on the rendered document (TIFF or PDF). <br> note: This option will not change a negative number from red to black, because it is red due to a format, not a font. <br> Select Wrap Text to adjust the contents within each cell within worksheets to render multiple lines of text rather than a single row of text. <br> This option cannot be used if the Shrink to Fit option has been selected. <br> Select Show all data to remove filtering. <br> Select Show Detail to remove grouping and outlines. <br> Select Shrink to Fit to reduce the size of the text font within cells of worksheets to show all of the text within the cells. <br> This option cannot be used if the Wrap Text option has been selected. |

Table A.2: User-Selected Render Application Settings (Continued)

| Application | Setting <br> Category | Option | Settings | Description |
| :---: | :---: | :---: | :---: | :---: |
| MS Power- <br> Point | MS PowerPoint rendering options | Enable custom settings | None available | Select Enable custom settings to adjust various rendering options for PowerPoint documents. <br> If this option is not selected, the document will be rendered through PowerPoint, but the pages will be rendered using the original saved document formatting. |
|  |  | Enable custom page setup | The following check boxes: <br> - Enable page orientation options <br> - Enable slide size options <br> The following parameters: <br> - Slide orientation: <br> which has the following options: <br> - Portrait <br> - Landscape <br> - Notes, handouts and outline orientation: which has the following options: <br> - Portrait <br> - Landscape <br> - Slides sized for: which has the following options: <br> - 35 mm Slides <br> - A4 Paper <br> - Banner <br> - Letter Paper <br> - On-Screen Show <br> - Overhead | Select Enable custom page setup to control the format of the pages. <br> Select Enable orientation options to control the orientation with which the page will be rendered. <br> There are two separate orientation options: <br> Slide orientation which adjusts the orientation of pages that are rendered as slides <br> Notes, handouts and outline orientation: which adjusts the orientation of pages that are rendered as notes. <br> Each of these two options have two additional options for the direction of the format: <br> Portrait renders the page in an $81 / 2$ by 11 format <br> Landscape renders the page in an 11 by $81 / 2$ format. <br> Select Enable slide size options control the size of the slides. <br> When this option is selected, the parameter Slides sized for should be set to the appropriate size of the slides when rendered. |

Table A.2: User-Selected Render Application Settings (Continued)

| Application | Setting Category | Option | Settings | Description |
| :---: | :---: | :---: | :---: | :---: |
| MS PowerPoint (continued) | MS PowerPoint rendering options (continued) | Enable custom print settings | The following check boxes: <br> - Enable print options <br> - Enable comment options <br> - Enable scaling options <br> - Enable frame options <br> - Enable hidden slide options <br> - Enable color options <br> - Print comments <br> - Scale to fit page <br> - Frame slides <br> - Print hidden slides <br> The following parameters: <br> - Print what: which has the following options: <br> - Handout <br> - Notes Pages <br> - Outline <br> - Slides <br> - Handouts orientation: which has the following options: <br> - Portrait <br> - Landscape <br> - Handouts slides per page: which has the following options: <br> - 2, 3, 4, 6 and 9 | Select Enable custom print settings to control what is rendered. <br> Select Enable custom print settings to control what is rendered. When selected an additional parameter is set to the desired output format. <br> Select the appropriate format for the Print what selection from these options: <br> - Handout <br> - Notes Pages <br> - Outline <br> - Slides <br> If the Handout selection is chosen, additional formatting options are required such as the Handouts orientation: which requires either of these two options: <br> Portrait renders the page in an $81 / 2$ by 11 format <br> Landscape renders the page in an 11 by $81 / 2$ format. <br> Additionally a selection is needed for the parameter Handouts slides per page which determines how many slides per page will be rendered on each handout page. The options available are: $2,3,4,6,9$ <br> Select Print comments to render any comments from the body of the PowerPoint presentations |

Table A.2: User-Selected Render Application Settings (Continued)

| Spetting <br> Category | Option | Settings | Description |
| :--- | :--- | :--- | :--- | :--- |

Table A.2: User-Selected Render Application Settings (Continued)

| Application | Setting Category | Option | Settings | Description |
| :---: | :---: | :---: | :---: | :---: |
| MS PowerPoint (continued) | MS PowerPoint rendering options (continued) | Enable custom print settings (continued) |  | If the rendering option of Render output in color has not been chosen, these options will determine what level of gradient will be used, but will not render the document in color. A common setting that allows for clear black and white TIFF images or PDF files is Grayscale. A common setting that removes the background image is Pure Black and White. |
|  |  | Replace <br> header / <br> footer date <br> with original <br> date | None available | Select Replace header / footer date with original date to replace an automatic date format within the headers and footers of PowerPoint presentations. <br> If this option is selected, the automatic date will be replaced with the last printed date if the document had been printed, or the last modified date if the document had never been printed. |
| MS Project | There are no options for this selection because it is not an application required for processing. By default, Discovery Cracker Viewer renders documents of this file type. <br> If you want better images than what Discovery Cracker Viewer can produce for this file type, you need to install the native application. Please contact Discovery Cracker Product Support at 866-833-5377 or dc.support@accessdata.com for guidance. |  |  |  |
| MS Visio | There are no options for this selection because it is not an application required for processing. By default, Discovery Cracker Viewer renders documents of this file type. <br> If you want better images than what Discovery Cracker Viewer can produce for this file type, you need to install the native application. Please contact Discovery Cracker Product Support at 866-833-5377 or dc.support@accessdata.com for guidance. |  |  |  |

Table A.2: User-Selected Render Application Settings (Continued)

| Application | Setting <br> Category | Option | Settings | Description |
| :--- | :--- | :--- | :--- | :--- |

Table A.2: User-Selected Render Application Settings (Continued)

| Application <br> Category | Option | Settings | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |

Table A.2: User-Selected Render Application Settings (Continued)

| Application | $\begin{array}{l}\text { Setting } \\ \text { Category }\end{array}$ | Option | Settings | Description |
| :--- | :--- | :--- | :--- | :--- |
| $\begin{array}{l}\text { MS Word } \\ \text { (continued) }\end{array}$ | $\begin{array}{l}\text { MS Word ren- } \\ \text { der options } \\ \text { (continued) }\end{array}$ | $\begin{array}{l}\text { Print setting } \\ \text { options (con- } \\ \text { tinued) }\end{array}$ |  | $\begin{array}{l}\text { Select Enable hidden text options to } \\ \text { control whether or not the hidden } \\ \text { text will be rendered. } \\ \text { Select Print hidden text to render the } \\ \text { hidden text from Word documents. If } \\ \text { this option is not selected, but the } \\ \text { Enable hidden text options has been } \\ \text { selected, no hidden text will be ren- } \\ \text { dered. }\end{array}$ |
|  |  |  | $\begin{array}{l}\text { Select Enable document properties } \\ \text { options to control whether or not the } \\ \text { properties page of each document is } \\ \text { rendered. }\end{array}$ |  |
| Select Print document properties to |  |  |  |  |\(\left.\} \begin{array}{l}render the document properties page <br>

for each Word document. If this <br>
option is not selected, but the Enable <br>
document properties options has <br>
been selected, no document proper- <br>
ties will be rendered.\end{array}\right\}\)

Table A.2: User-Selected Render Application Settings (Continued)

| Application | Setting <br> Category | Option | Settings | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |

Table A.2: User-Selected Render Application Settings (Continued)

| Application | Setting Category | Option | Settings | Description |
| :---: | :---: | :---: | :---: | :---: |
| MS Word (continued) | MS Word render options (continued) | Field options (continued) | The following parameters: <br> - Replace with: which has the following options: <br> - Original date <br> - Original time <br> - Original path <br> - Original user name <br> - Original formula <br> - Custom text <br> - Custom text: | The Replace with parameter allows you to select which method will be used to handle an automatic field codes. <br> The Original date option will render using the last printed date of the document. If the document had never been printed, the last modified date will be used. <br> The Original time option will render using the last printed time stamp of the document. If the document had never been printed, the last modified time stamp will be used. <br> The Original path option will render using the original path were the document was created and saved. <br> The Original user name option will render using the name of the original user listed when the document was created. <br> The Original formula option will render the field code used in the date function rather than an actual date value. <br> The Custom text option is used with the Custom text input field. These options allow you to type replacement text to be used instead of an automatic field code. |

Table A.2: User-Selected Render Application Settings (Continued)

| Application | Setting Category | Option | Settings | Description |
| :---: | :---: | :---: | :---: | :---: |
| None | There are no options for this selection. <br> This is the default selection for the Unassigned document type group. <br> If you process a file which is in the Unassigned document type group and leave the User-Selected Rendering Application option set to None, the rendering action is marked as finished, which does not allow you to identify the item as having a missing rendered document (TIFF image or PDF file). This is by design as it is expected that you did not want any rendered documents. <br> If this is a concern, you can do one of the following: <br> - In a QC Session perform a search for documents with a page count of zero. <br> - Select OS-Associated as the rendering application. However, selecting OS-Associated as the rendering application can result in rendered documents with no useful data on them if DC Engine does not associate the file with the correct application within Microsoft Windows. |  |  |  |
| OS- <br> Associated | There are no options for this selection. <br> If you select OS-Associated, DC Engine will attempt to render the document using the application that is associated with that document in Microsoft Windows. It will not work in every case. |  |  |  |
| Outlook | Outlook render options | Render <br> HTML body, <br> if present |  | With Outlook selected, Discovery Cracker uses Outlook to render email messages. When Outlook renders HTML-formatted e-mail messages, the current date will be included at the bottom of the page. <br> Select Render HTML body, if present to use Internet Explorer to render an HTML-formatted e-mail message. The current date will not be included on the page. |
|  |  |  | Download Pictures / <br> Videos | Select Download Pictures / Videos to render embedded pictures that are linked within an HTML-formatted document. <br> note: Discovery Cracker cannot update pictures if the link to the picture is broken. Discovery Cracker cannot render videos. |

Table A.2: User-Selected Render Application Settings (Continued)

| Application | Setting Category | Option | Settings | Description |
| :---: | :---: | :---: | :---: | :---: |
| Outlook (continued) | Outlook render options (continued) | Render HTML body, if present (continued) | Wait time for Internet Explorer to load the page (in seconds) | Select Wait time for Internet Explorer to load the page time option to control how long Discovery Cracker will wait while Internet Explorer attempts to load the page. This wait time can be set from 1 to 60 seconds. |
|  |  |  | Try download again if timed out | Select Try download again if timed out to control whether or not multiple tries should be attempted to load a page into Internet Explorer. |
|  |  |  | Shut down Internet Explorer | Select Shut down Internet Explorer to close the Internet Explorer application between attempts to load the page into Internet Explorer. |
|  |  |  | Close Internet Explorer after rendering (in seconds) | Select length of time in Close Internet Explorer after rendering to determine how long after the rendering task has been completed before closing Internet Explorer. This time can be set from 1 to 60 seconds. |

## Appendix B. Document Status

The document status reflects the last action Discovery Cracker performed on the document, the last action you took on the document, or the current state of the document.

You see document statuses in the following places:

- The Status Counts tab in the right pane of the Discovery Cracker Console main window. It displays the total number of documents in the project, group, or view (depending on what you select in the navigation pane) that currently have each status.

Status counts change when actions are taken on documents, such as running a new job, approving them in a QC Session, marking them to recrack or rerender in a QC Session, etc.

For the status counts to reflect changes, you need to select Refresh or step off of the Status Counts tab and back on.

Note: The total count does not include container items (see "Container Items and Document Statuses" on page 274.)

- The Status field of the Data Panel in the QC Session window. It displays the status of each document that you load into a QC Session.


## List of Document Statuses

The statuses are:

- The last action Discovery Cracker performed on the document
- Initial Spin Through
- File Spin Through
- Extract Metadata
- Render
- Postprocessing
- Data Delimited Text File Export
- Concordance Viewer Export
- IPRO Export
- Ringtail Export
- AD Summation DII Export
- Import Data
- DocuLex 5 Export
- EDRM XML Export
- The last action you took on the document
- QC’d - Marked to Recrack
- QC'd - Marked to Render
- QC’d - Marked to Rerender
- QC’d - Marked to Re-OCR
- QC’d - Approved
- QC’d - Marked as Problem
- The current state of the document
- Pending (The document has not been touched by any processing action)
- Inactive - Duplicate
- Inactive - Filtered
- Inactive - QC’d
- Problem - Initial Spin Through
- Problem - File Spin Through
- Problem - Extract Metadata
- Problem - Render
- Problem - Postprocessing
- Problem - Data Delimited Text File Export
- Problem - Concordance Viewer Export
- Problem - IPRO Export
- Problem - Ringtail Export
- Problem - AD Summation DII Export
- Problem - Import Data
- Problem - DocuLex 5 Export
- Problem - EDRM XML Export
- Unknown (An unidentifiable status. This should be a rare occurrence. If seen, please notify Discovery Cracker Product Support (call 866-833-5377 or send an e-mail message to dc.support@accessdata.com).


## Container Items and Document Statuses

In the QC Session window, in the Data Panel, you see FOLDER, PST, and NSF items. These items are not documents that have been processed. They are container items (see "Document Relationships" on page 21). They are displayed for informational purposes only, but can be selected for recracking if a problem occurred during the Initial Spin Through action.

The status in the Status field for container items may or may not apply to the item.

A status may not apply to a container item for the following reason. To ensure complete processing, all actions for a specific job
will be executed on all items in that job. For example, an action of File Spin Through is necessary on a folder or a PST in order to get the contents of that folder or PST. However, Render is not an action that would apply to a folder or PST. But because the job that contains the folder item included a Render action, the Render action must be displayed as being completed or not completed for that folder.

Statuses that apply to container items are:

- Initial Spin Through
- File Spin Through
- QC’d - Marked to Recrack
- QC'd - Approved
- Problem - Initial Spin Through
- Problem - File Spin Through

When container items (FOLDER, PST, or NSF) are marked to recrack, the documents in the container are either deleted from the database or marked as deleted (folder documents are deleted; PST and NSF documents are marked as deleted). The documents in such a container are deleted from the QC Session window. When the QC job is run and the container item is recracked, the documents in the container are assigned new item numbers.

When looking at the Status Counts tab, you may find that all of the items you marked to recrack are not being displayed in the appropriate status. There are family relationships that can cause this to happen. If you mark a container item (such as a PST) to recrack, the items within the container will not be included in the count for the status QC'd - Marked to Recrack because the process of recracking the container item will automatically recrack the items within the container. This also occurs when you mark a main item to recrack. The child items will not be included in the count for the status QC'd - Marked to Recrack on the Status Counts tab, but the main item will.

## Appendix C. QC Hotkeys

Table C.1: QC Hotkeys

| $\begin{aligned} & \text { Main } \\ & \text { Tab } \end{aligned}$ | Auto QC <br> Tab | Tools Tab | Button Name | Hotkey Combination | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| X |  |  | Approve All | CTRL + L | Automatically approve the Currently loaded documents with no validation. |
| X | X |  | Approve | CRTL + Z | Approve the currently selected document(s). |
| X | X |  | Render | CTRL + E | Mark the currently selected document(s) to be rendered or rerendered. |
| X | X |  | Recrack | CTRL + R | Mark the currently selected document(s) to be recracked. |
| X | X |  | OCR | CTRL + 0 | Mark the currently selected document(s) to be OCR'd |
| X | X |  | Mark as Problem | CTRL + P | Mark the currently selected document(s) as a problem. |
| X | X |  | Assign Categories | CTRL + T | Assign categories to the currently selected document(s). |
| X | X |  | Insert Placeholder Pages | CTRL + 1 | Insert placeholder pages for the currently selected document(s) |
| X | X |  | Activate Document | CTRL + X | Activate the currently selected document(s) |
| X | X |  | Deactivate Document | CTRL + D | Deactivate the currently selected document(s) |
| X | X |  | Activate/Deactivate Pages | CTRL + B | Activate or deactivate the pages of the selected document. |
| X | X |  | Open Original | CTRL + N | Opens the original document with the native application. |
| X | X |  | Replace Pages | CTRL + K | Replace image or PDF pages for the selected document. |
| X | X |  | Add Note | CTRL + M | Add a note to the selected document(s). |
| X |  |  | Reload | F1 | Displays the Pre-Filter window allowing you to change the filter and repopulate the documents in this session. |
| X |  |  | Refresh | F5 | Refreshes the currently loaded document information. |
| X |  |  | Search/Filter | F2 | Displays the search/filter options |

Table C.1: QC Hotkeys

| Main <br> Tab | Auto <br> QC <br> Tab | Tools <br> Tab | Button <br> Name | Hotkey <br> Combination | Description |
| :---: | :---: | :---: | :--- | :--- | :--- |
| X |  |  | Clear Filter | F6 | Clears all filters, grouping, and sorting from <br> the loaded documents. |
| X |  |  | Go To | Navigate to a specific document and (option- <br> ally) page within a document. |  |
|  | X |  | Start | CTRL + G | Start Auto QC. |
|  | X |  | Stop | CTRL + S | Stop Auto QC. |
|  |  | X | Reset Layout | F12 | Reset QC panels to their default location. |
|  |  | X | Visiblity | F11 | Select/Deselect visible panels. |
|  |  | X | Options | F10 | Additional QC options. |
|  |  | X | Manage Placeholder <br> Pages | F9 | Create/Manage placeholder pages |

