ePhoenix
Document Capture User Manual
Version 1.6

Summary

This manual describes the process of converting paper documents into digital images and index data, using the ePHOENIX indexing and scanning modules.

It is intended for users with the responsibility for indexing, scanning and loading documents into PXI.

Copyright notice

© European Patent Office 2005

You may only copy and distribute this publication together with the software program to which it applies in accordance with the terms of the applicable licence. You must reproduce this copyright notice without alteration. You are granted no rights in or to any of the European Patent Office trademarks or logo. The names of actual companies and products mentioned herein may be the trademarks of the respective owners.

European Patent Office
Postbus 5818
NL-2280 HV Rijswijk
The Netherlands

Document information

Document title
Document capture user manual

Document number
USR2.0DepoScan B.doc

Contact point in case of questions or problems	
Person	Peter Dedman
Location	Shell
Room	SO1M34
Extension	2542

Configuration history			
Version	**Date**	**Changes**	**Author**
0.1	16 JAN 04	Edited into new format	R.Burnham
0.2	21 JAN 04	Edited from A.van Bart's latest version	R.Burnham
1.2	20 APR 04	Fully revised including additions of new chapters on DB Management and QA from A.van Bart	G. Szamocki
1.3	27 MAY 04	Revised	A.van Bart
1.4	09 DEC 04	Edited into new format from A.van Bart's latest version. No changes except to correct major errors in English, or to change references to refer to EPTOS documents.	P.G.Dedman
1.5	20 DEC 04	Corrected and updated	P.G.Dedman
1.6	21 JAN 05	Corrected and updated	P.G.Dedman
2.0	01 MAR 05	Corrected and updated	P.G.Dedman
2.0a	09 MAY 05	Adapted for Open Source	P. Tubbing

Reviews			
Version being reviewed			
Reviewed by (Position in CAPITALS)	**Reviewed by (Name in CAPITALS)**	**Reviewed by (Signature)**	**Date reviewed**

Sign-off			
Version being signed off			
Signed off by (Position in CAPITALS)	Signed off by (Name in CAPITALS)	Signed off by (Signature)	Date signed off

Table of contents

Copyright notice 2

Document information 2

Table of contents 6

Table of figures 11

1 Introduction 15

1.1 Audience 15

1.2 Overview 15

2 Overview 16

2.1 Before using this manual 16

2.2 Overview of the document capture process 16

3 Indexing 17

3.1 Starting and using MADRAS/ePHOENIX 17

3.2 Creating and modifying batches 17

3.3 Indexing information 17

3.4 Pre-indexing 17

3.5 Indexing steps 17

3.6 Indexing terms 18

3.7 Indexing tools 19

3.8 Indexing procedure 19

3.8.1 Creating a batch 19

3.8.2 Sticky procedure 22

3.8.3 Transfer batch after release 22

3.8.4 Code helper 23

3.8.4.1 To see all the codes beginning with a particular letter or number 24

3.8.4.2 To search for a specific DocCode by keyword 25

3.8.4.3 To search in a specific document set 26

3.9 Contents of the batch 27

3.9.1 Sheets 27

3.10 Indexing corrections 29

3.10.1 Corrections during data entry 29

3.10.2 Corrections before releasing the batch 29

3.10.3 Corrections after releasing the batch 29

3.10.4 Rejected package 31

3.10.5 Re-scanning 32

3.11 Adding packages to batches 35

3.12 Correcting XX batches ... 36
4 Batch transfer ... 37
5 Preparing the scanner for scanning ... 38
5.1 Calibration Manager ... 38
6 Login ... 39
7 epoScan initial screen ... 40
8 Batch ... 44
8.1 Scanning mode ... 46
8.2 Scanning in stop mode ... 46
8.3 Scanning in non-stop mode ... 47
8.4 Scanning configuration ... 48
8.4.1 Page orientation ... 48
8.4.2 Software rotation ... 48
8.5 Image ... 48
8.6 Colour scanning ... 49
8.6.1 Automatic colour detection ... 49
8.7 Auto-start ... 50
9 Error handling ... 51
9.1 General errors ... 51
9.1.1 Scanner not switched on, or wrong scanner selected ... 51
9.1.1.1 Message ... 51
9.1.1.2 Problem ... 51
9.1.1.3 Action ... 51
9.1.2 DMS data not transferred ... 51
9.1.2.1 Message ... 51
9.1.2.2 Problem ... 51
9.1.2.3 Action ... 51
9.1.3 Batch already scanned ... 51
9.1.3.1 Message ... 51
9.1.3.2 Problem ... 51
9.1.3.3 Action ... 51
9.2 Index errors ... 52
9.2.1 Wrong page count by indexer ... 52
9.2.1.1 Message ... 52
9.2.1.2 Problem ... 52
9.2.1.3 Action ... 52
9.2.2 Scanner misfeed ... 53

9.2.2.1 Message 53
9.2.2.2 Problem 53
9.2.2.3 Action 53
9.2.3 Barcode sheet errors 53
9.2.4 DSS missing 54
9.2.4.1 Message 54
9.2.4.2 Action 54
9.2.5 DSS in front of PDS 55
9.2.5.1 Message 55
9.2.5.2 Problem 55
9.2.5.3 Action 55
9.2.6 Packages in wrong order in batch 55
9.2.6.1 Message 55
9.2.6.2 Problem 55
9.2.6.3 Action 56
9.2.7 Pages not scanned properly 56
9.2.7.1 Problem 56
9.2.7.2 Action 56
10 Troubleshooting 58
11 Resetting the epoScan settings 60
11.1 Options 61
11.1.1 General 61
11.1.2 Kodak 63
11.1.3 ISIS 63
11.1.4 Databases 64
11.1.5 Magnifier 64
11.2 Barcode reading 65
11.2.1 Scanner configuration 65
11.2.2 For a Kodak scanner 68
11.3 Image enhancement 68
11.3.1 Image enhancement preview 71
11.3.2 While scanning 71
11.3.3 While generating CD 72
11.3.4 As a separate process 72
12 Document correction 73
12.1 Magnifying images 74

12.2 Modifying display options ... 74
12.3 Correcting page order ... 75
12.4 Page deletion, insertion, and replacement ... 75
12.4.1 Deleting pages ... 75
12.4.2 Replacing pages ... 76
12.4.3 Inserting pages ... 76
12.5 Correcting inverted images ... 76
12.6 Enhancing images ... 76
12.6.1 Enhancement table ... 77
12.6.2 Tuning enhancement parameters ... 77
12.6.3 Batch image enhancement mode ... 78
12.6.4 Interactive image enhancement ... 78
12.7 Ending the correction process ... 79
13 CD-ROM creation ... 80
13.1 CD generation ... 80
13.2 CD generation problems ... 81
13.2.1 Page count mismatch ... 81
13.2.2 More than one operator ... 81
13.2.3 Batch status modification ... 82
13.3 CD-ROM writing ... 84
13.4 Quality control ... 84
13.4.1 Overview ... 84
13.4.2 CD-ROM quality control ... 85
13.4.3 Systematic Quality Control ... 85
13.4.4 Interactive Quality Control ... 87
13.4.5 Random sample ... 88
13.4.5.1 Random Quality Control troubleshooting ... 89
14 CD-ROM loading ... 90
14.1 Settings ... 90
14.2 Loading a CD or DVD-ROM ... 92
15 Paper storage ... 95
15.1 Rules ... 95
15.1.1 General ... 95
15.1.2 Retrieval of packages ... 95
15.2 Storage of batches ... 96
15.2.1 Paper storage recording ... 96
15.2.2 Creating a new box ... 96
15.2.3 Editing box details and adding batches ... 97

15.2.4 Searching for boxes 98
15.2.4.1 Searching by matching criteria: 99
15.2.4.2 Searching for a box containing a particular batch: 99
15.2.5 Deleting a box 99
15.2.6 Transferring a box 100
15.2.7 Acknowledging receipt 100
15.2.8 Returning a box 100
15.2.9 Exporting a list of boxes 100
16 Database management 101
16.1 Database information 101
16.2 Using the Info screen 102
17 Sample control sheets 105
18 Status diagram 110
Glossary 111
Index 112

Table of figures

Figure 1: eposcan process 16
Figure 2: create batch - administration 19
Figure 3: add documents to dossier (application) 20
Figure 4: batch transfer dialogue 23
Figure 5: document codes 24
Figure 6: add documents to dossier 24
Figure 7: document codes description tab 25
Figure 8: completed document codes description tab 25
Figure 9: document codes search 26
Figure 10: add documents to dossier 26
Figure 11: batch sheets 27
Figure 12: edit batch 30
Figure 13: package details 30
Figure 14: edit package 31
Figure 15: select package for editing 31
Figure 16: edit package 32
Figure 17: open dossier 33
Figure 18: details 33
Figure 19: document details 34
Figure 20: select package for editing 34
Figure 21: add packagers to batch 35
Figure 22: batch transfer 37
Figure 23: set scanning area 38
Figure 24: epoScan login 39
Figure 25: eposcan initial screen 40
Figure 26: epoScan initial screen 44
Figure 27: batch id entry 44
Figure 28: batch id entry 45
Figure 29: output path 46
Figure 30: scan complete 47
Figure 31: prepare scanner 47
Figure 32: process results 47
Figure 33: reported errors 48
Figure 34: image tabs 48
Figure 35: color detection settings 49
Figure 36:auto-start 50
Figure 37: scanner not switched on, or wrong scanner selected 51

Figure 38: problems 52
Figure 39: indexation error 52
Figure 40: package rejected 52
Figure 41: problems 53
Figure 42: misfeed 53
Figure 43: barcode sheet errors 53
Figure 44: DSS sheet? 54
Figure 45: DSS missing 54
Figure 46: PDS image? 55
Figure 47: PDS phsically present 55
Figure 48: error message 55
Figure 49: specific PDS image? 55
Figure 50: PDS? 56
Figure 51: is package present 56
Figure 52: message 56
Figure 53: resume batch scanning 57
Figure 54: scanning batch 57
Figure 55: troubleshooting 58
Figure 56: single package scan 58
Figure 57: scanning completed 59
Figure 58: epoScan initial screen 60
Figure 59: setup screen 60
Figure 60: setup screen: options 61
Figure 61: configuration options: general 61
Figure 62: configuration options: Kodak 63
Figure 63: configuration options: ISIS 63
Figure 64: scanner selection 64
Figure 65: magnifyer default zoom 64
Figure 66: barcode reader configuration 65
Figure 67: scanner settings 66
Figure 68: advanced settings colour 66
Figure 71: advanced settings black and white 67
Figure 70: advanced settings black and white 67
Figure 71: Kodak scanner configuration 68
Figure 72: setup of image enhancement 69
Figure 73: image enhancement configuration 69
Figure 74: image rotation 70
Figure 75: image enhancement setup 71
Figure 76: image enhancement while scanning 71
Figure 77: image enhancement while generating CD 72

Figure 78: set scanning area 72
Figure 79: result list 73
Figure 80: magnifying images 74
Figure 81: magnifying images 74
Figure 82: moving a page 75
Figure 83: page deletion, insertion, and replacement 75
Figure 84: inserting pages 76
Figure 85: image enhancement options 76
Figure 86: batch image enhancement 78
Figure 87: generate cd 81
Figure 88: mismatch error 81
Figure 89: multiple users 82
Figure 90: cd already exists 82
Figure 91: main window 82
Figure 92: batches with this status 83
Figure 93: batches to be modified 83
Figure 94: easy cd creator example 84
Figure 95: systematic cd-r quality control 86
Figure 96: image explorer 87
Figure 97: random sample 88
Figure 98: rqc troubleshooting 89
Figure 99: single package scan 89
Figure 100: settings 90
Figure 101: cd loader 92
Figure 102: cd loader 93
Figure 103: cd loader 94
Figure 104: paper storage 96
Figure 105: box details 97
Figure 106: batch contents error 97
Figure 107: paper storage 98
Figure 108: box details 98
Figure 109: paper storage 99
Figure 110: return box 100
Figure 111: information on scanned data 103
Figure 112: detailed information on scanned data 103
Figure 113: information on scanned data 104
Figure 114: Batch Cover Sheet (BCS) 105
Figure 115: Package Data Sheet (PDS) 106
Figure 116: Document Separator Sheet (DSS) 107
Figure 117: Document Separator Sheet with extra information to help indexers 108

Figure 118: Batch Terminator Sheet (BTS).....109
Figure 119: status diagram.....110

1 Introduction

This manual describes the process of converting paper documents into digital images and index data by using the *epoline*® Phoenix (ePHOENIX) indexing and scanning modules.

1.1 Audience

This document is intended primarily for users with the responsibility for indexing, scanning and loading documents into PXI.

It may also be required by managers and system administrators.

1.2 Overview

This document has the following general structure:

- chapter 2 gives an overview of document capture using ePHOENIX and epoScan
- chapter 3 covers indexing
- chapter 4 describes batch transfer
- chapter 5 defines preparing the scanner
- chapter 6 covers login
- chapter 7 describes the epoScan initial screen
- chapter 8 defines the batch concepts
- chapter 9 gives detailed information about error handling
- chapter 10 covers troubleshooting
- chapter 11 defines how to reset the epoScan settings
- chapter 12 gives examples of document correction
- chapter 13 contains information about CD-ROM creation
- chapter 14 describes CD-ROM loading
- chapter 15 covers paper storage
- chapter 16 describes database management
- chapter 17 gives sample control sheets
- chapter 18 contains the status diagram.

2 Overview

2.1 Before using this manual

Users should first familiarise themselves with the ePHOENIX system, as described in the ePHOENIX documentation.

Users should be familiar with:

- Windows basics
- general MADRAS operations
- other ePHOENIX operations as specified in the procedures in this manual.

Advanced users who wish to make configuration changes should refer to the *epoScan Installation and Configuration* document.

Note

Only those sufficiently qualified and experienced should attempt to use the advanced options to modify the default installation and configuration settings.

2.2 Overview of the document capture process

This document covers

- paper handling
- indexing of documents and creation of batches
- transfer of batch data
- scanning of batches
- image enhancement
- CD-ROM creation
- CD-ROM loading
- paper storage.

It also describes error handling and troubleshooting associated with these procedures.

There is also one annex containing a sample quality control programme and another containing the various sheets used as part of the process.

The following diagram shows the process.

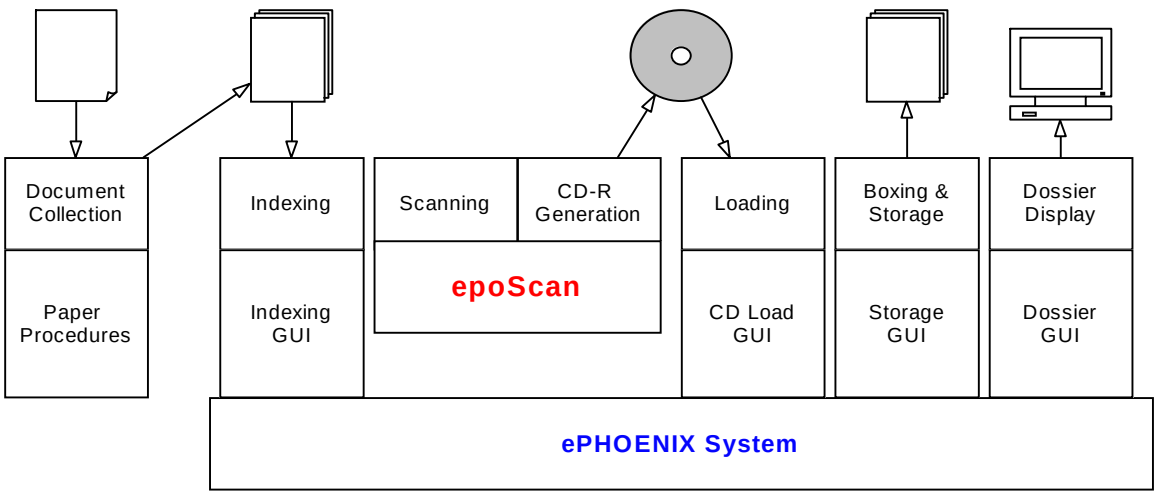


Figure 1: eposcan process

3 Indexing

3.1 Starting and using MADRAS/ePHOENIX

This manual assumes that users know how to start the MADRAS program, that they know how to use the MADRAS menu, and how to close the program at the end of work.

3.2 Creating and modifying batches

The ePHOENIX system can be used to create and modify batches of incoming mail or other documents. All documents entering the ePHOENIX system must be placed into batches and be indexed.

Note:

In ePHOENIX, indexing is equivalent to creating a batch.

3.3 Indexing information

It is important to enter the correct indexing information. After batches have been transferred for scanning (Batch Transfer), it can be difficult and time consuming to correct mistakes. It requires reindexing and/or rescanning.

The information entered during indexing of documents determines what happens to those documents in the system. Documents are stored inside dossiers and, within dossiers, inside procedures such as PCT.

3.4 Pre-indexing

Each document receives a Document Code and this determines whether a MADRAS user will receive a Message and which user that is. Hence, the Document Code given at this stage determines who will process the document later on. Once that person has seen the document they may determine that a different code is more appropriate. Hence, this initial indexing is sometimes called pre-indexing since the values used may be changed later on.

3.5 Indexing steps

Some manual actions may be necessary to make it easier to scan the paper and to improve quality and efficiency. Examples are

- the removal of anything which could cause a jam, such as staples, rivets, ribbons, seals etc.
- counting pages.
- if required, enlarging or reducing documents that are smaller or larger than the standard A4 size by photocopying.
- separating sets of documents or batches with different dates or with different urgency and marking or identifying them clearly.
- separating sets of documents requiring different scanners or settings such as
  - single sided
  - double-sided
  - colour
- entering the index data
- inserting the Documents Separator Sheet (DSS) in the correct place
- inserting the printed Package Data Sheet (PDS) in the correct place.

3.6 Indexing terms

Indexing terms	
Term	**Meaning**
Batch	A set of packages with the same date of indexing. A batch is a conveniently-sized stack of paper which is handled as a unit during scanning and later storage. A batch may be scanned in black and white, in greyscale or in colour, when the scanner supports it. A batch consists of single sided pages or double sided pages.
Batch Cover Sheet	A (coloured) sheet printed at the indexing station containing basic information about the Batch, including the unique Batch ID printed in both character and barcode format.
Document	A set of one or more pages relating normally to the same application and dealing with one or more subjects. A document has a single date of receipt by the Office. If a document relates to more than one application, it is scanned into one application dossier and copied using the ePHOENIX copying feature. A document is either single sided or double sided.
Document Separator Sheet	A pre-printed (coloured) sheet with a barcode, indicating that what follows is another document in the same package. A DSS is usually pre-printed and available in large quantities for indexing staff. Several types of DSS may be produced with extra, human-readable text, checkboxes etc. on them. As long as the barcode is in the correct place the system will simply regard it as a regular DSS.
Leading document	The first document in a package. Any Message generated by the package and it's routing by the distribution program depends on the characteristics of the leading document and not on any subsequent documents in that package.
Message	A Message is an ePHOENIX object which links a package to a target user or mailbox. This message then appears in the relevant mailbox and opening it displays the document(s) in the package together with the rest of the dossier. The system decides automatically whether to trigger a message or not depending on the Document Code given to the leading document. The indexer is shown default values but these can be overridden by allocating specific distribution details to the current package. In such a case a message will be generated containing information about the leading document code and some ad hoc text if necessary.
Package	A set of one or more documents relating to the same application, with the same date of receipt (or dispatch, in the case of outgoing documents). Once entered into the system, a package cannot be deleted. Users can close all the documents in a package in order to hide them to others, but the data of that package remains recorded in ePHOENIX for ever. In some cases, the data of a package can be modified. If the images of a package have been loaded into the system, the number of modifications permitted is very restricted.
Package Data Sheet	A (coloured) sheet printed at the indexing station, containing basic information about a package, including the unique Package ID in both character and barcode format. A PDS indicates that what follows is a new package.

3.7 Indexing tools

This is the list of indexing tools provided by MADRAS. Please see the *MADRAS user manual* for full details.

Indexing tools	
Term	**Meaning**
Create Batch	Create a batch by adding documents to dossiers or adding packages to the batch. This module is used to add documents to newly filed documents.
Edit Batch	To edit or close package(s) or to print PDS. After editing a batch a new Batch Cover Sheet (BCS)is printed. When editing a batch before scanning, a new Index file is required.
Create Backfile	Similar to Create Batch, but used for indexing backfile (existing) dossiers. No messages are generated and documents with a date for which a package already exists are not added to this package.
Edit Package	To correct indexing errors, for example, a package rejected owing to page count errors discovered during scanning.
Batch Transfer	During the batch creation the Document Management System (DMS) index file created during batch creation is copied to the scanning server, in order to enable error checking.
Paper Storage	Used to manage the physical location of boxes used to store scanned and loaded documents. This feature is only used if original paper copies must be retained for some period for legal reasons

3.8 Indexing procedure

3.8.1 Creating a batch

Choose **Create Batch** in the MADRAS menu,. The **Create Batch- Administration** screen is displayed.

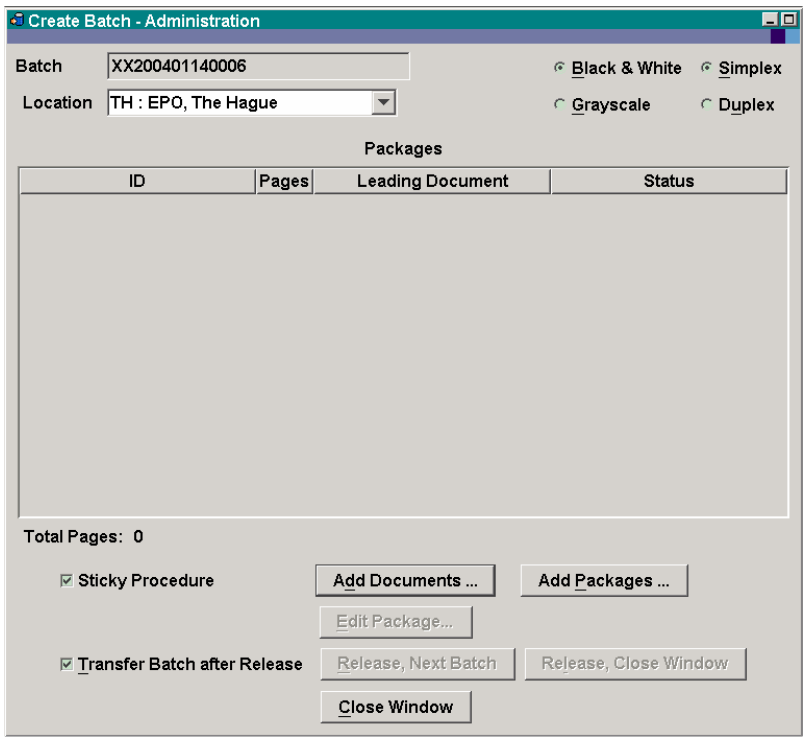


Figure 2: create batch - administration

The Batch field is automatically filled in with the batch number. When the batch is released, the XX in the Batch ID is replaced with the letters identifying the user`s location.

The Location field is linked to the team of which the user is a member. If the location is not correct, select it from the drop-down list.

Select the options by clicking on a radio button.

Options	
Option	**Result**
Black & White	Monochrome images for black on white pages
Grayscale	If batch contains colour images select the **Grayscale** radio button. A flag in the DMS file will ensure that the scanner automatically switches to colour if the connected scanner supports this. If this is not supported then the batch can not be scanned on this scanner.
Simplex	Single-sided documents
Duplex	Double-sided documents

Note

A batch can contain only either single side or double sided documents; a mix is not possible.

Double-sided documents must be scanned separately on a duplex scanner. They must be put into separate, duplex batches and indexed separately. The reverse pages of single-sided documents in duplex batches should be marked, for example. with an X or a stamp, to make it clear that it is a blank page.

Click on **Add Documents…** The **Add Documents to Dossier** (application) dialogue appears.

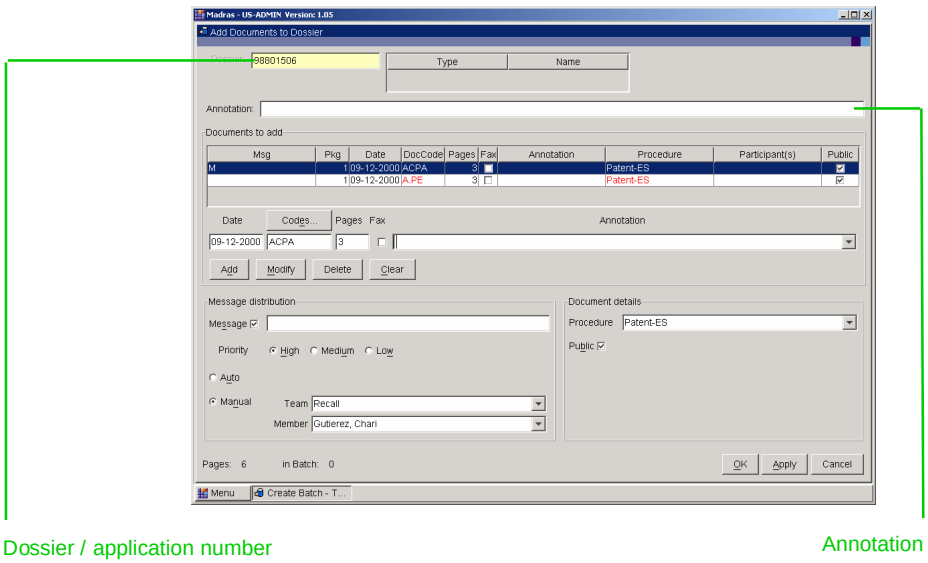


Figure 3: add documents to dossier (application)

Enter the Dossier / application number, including check digit if required. The background colour of the dossier number changes

- from red to green if the number is entered correctly
- from red to yellow if the application is not yet in the DMS.

After a check, the cursor is automatically positioned in the **Date** entry field.

The date in the **Date** field is always initially set to the current date. If a user needs to change the date

- they can type in the new date in the format ddmmyyyy
- or to change the day, press the **Up Arrow** or **Down Arrow** key
- or to change the month, press the **Page Up** or **Page Down** key
- or they can select part of the date by double-clicking on it, then change it by clicking on the **Up** or **Down** button next to the date.

The date will now stay the same until the user changes it, or when they start a new dossier.

Enter the document **Codes** in the field next to the date. If a user is not sure of the code they can select one from the complete set of codes by clicking on **Codes** to gain access to the DocCode helper. See 3.8.4 Code helper.

Note

Document Code attributes are set up by the ePHOENIX Administrator using the Management Tool.

Use the **Tab** key or **Shift + Tab** keys to switch between fields.

Go to the **Pages** field and enter the number of pages. For double-sided documents, this is always an even number. If in the **Pages** field, press **Tab** then **spacebar** to tick the Fax box. Alternatively the user can click on the **Fax** box. A tick will appear in the box.

If a user wishes to add an annotation for the document, they must select it from the drop down menu, or type it into the **Annotation** field. If the cursor is in the **Annotation** field, pressing the • button will also display the drop down menu. Press the • button again to select an annotation and then press **Enter** to add.

The annotation should include any relevant information which may help the further processing of the documents. An example might be that the indexing officer has noticed that the applicant has failed to file a set of claims, or that the quality of the pages is bad, or some pages are missing. This information assists the end-user in further processing of the dossier.

Note

A user can ask the ePHOENIX Administrator to add frequently used annotations to the list.

The **Message**, **Priority**, and **Team and Members** field contents are automatically inserted, the contents depending upon the DocCode.

Message distribution	
Field	**Insertion**
Message	Yes or No, *Auto* or *Manual*
Priority	*High*, *Medium* or *Low*
Team and Member	By default, based on the distribution algorithm

To change the **Team**, tick **Manual**, and select the option from the drop-down list. Overriding the default setting and manually selecting a specific team should only be done by prior arrangement.

If a user needs to or wants to specify a particular individual in a team they can then select the **Member** from the drop-down list.

Depending on the DocCode, a certain **Procedure** is automatically selected, for example, Search/Examination, Opposition, Appeal. If instructed by the pre-indexing staff, users should change the **Procedure** field contents. Select an option from the drop-down list as indicated on the indexing card.

If users are instructed by the pre-indexing staff to indicate, for example, the participant in (for example) the opposition procedure, select the option from the **Participants** drop-down list as indicated on the indexing card.

To finish the document, click on **Add**, or press the **Enter/Return** keyThe document is added to the **Documents to Add** list.

Repeat the steps between the red, dashed lines to add further documents to the same dossier. This should be done as often as there are documents for the same dossier with the same date. The assumption is that a given piece of mail will often contain several documents which are all relevant for the same dossier, for example a covering letter and several attachments. As successive documents are added a Document Separator Sheet (DSS) should be inserted between them. To finish the dossier, click on **Apply**.

At this point a package is created in the DMS. A Package Data Sheet (PDS) will be automatically printed on the local (default) printer. The PDS should be put on top of the package with the DSS inserted between individual documents in the package.

The PDS and the DSS contain barcodes that are required for scanning. It is very important to keep the PDSs, DSSs and the documents in the same order as they are indexed. Misplaced packages will cause problems during scanning. The number of pages in the batch is indicated in the bottom left corner.

To add documents belonging to other dossiers to the batch, repeat the steps between the blue, solid lines, using the appropriate dossier numbers.

To complete the whole the batch, click on **OK**. The **Add Documents** window closes, and the user returns to the **Create Batch** window.

If required, select **Sticky Procedure** or deselect it. This depends on the National Office (NO) having ticked the **Sticky Procedure** box.

If required, select **Transfer Batch** after Release.

To finish creating the batch, click on:

- **Release, Next Batch** if creating another batch
- **Release, Close Window** if finished.

The **Create Batch** window closes and a Batch Cover Sheet is printed.

3.8.2 Sticky procedure

When checked, all documents for the same application will be put in the same procedure as the leading document of the first package.

When unchecked, documents will be added to the default procedure of the leading document of each package.

Hence if National and PCT documents arrive together they can be added to the procedure relevant for whatever happened to be the first document to arrive (sticky) or they can be added to their own procedures (non-sticky).

3.8.3 Transfer batch after release

When the user chooses **Release** and they have selected **Transfer Batch after Release**, the batch index data, which is a DMS file, is ready to be transferred. If, for whatever reason, they do not want to transfer the Batch Index file at this stage, they must uncheck the **Transfer Batch after Release** box before releasing the batch.

To transfer a batch at some other time please see 4, Batch transfer.

If the user has selected the transfer option, the **Batch Transfer** dialogue screen opens, with the **Batch** field already completed.

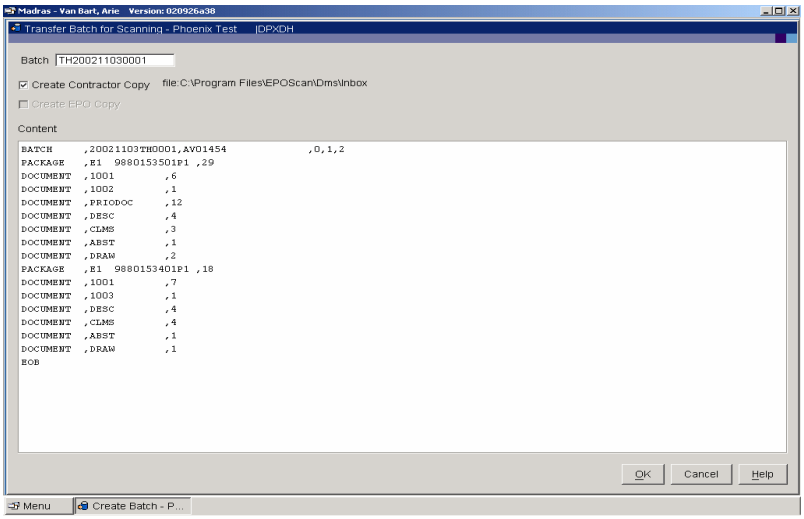


Figure 4: batch transfer dialogue

Click on **OK**. The Index file is transferred to the scan server. Any ticked boxes in the dialogue show the exact location to which the file will be copied. From here the scanning software can collect the data to allow scanning to proceed.

Note

The server and directory to which the index is transferred are specified in two places:

- by the System Administrator, using the Management Tool
- as part of the configuration of the scanning software.

If there is a technical problem, and the batch index file must be transferred later or a second time, use the Batch Transfer procedure please see 4, Batch transfer.

3.8.4 Code helper

The **Code Helper** helps the user find the right code for a document if unsure of the code to be used:

Click on **Codes...** The **Document Codes** screen is displayed.

3.8.4.1 To see all the codes beginning with a particular letter or number

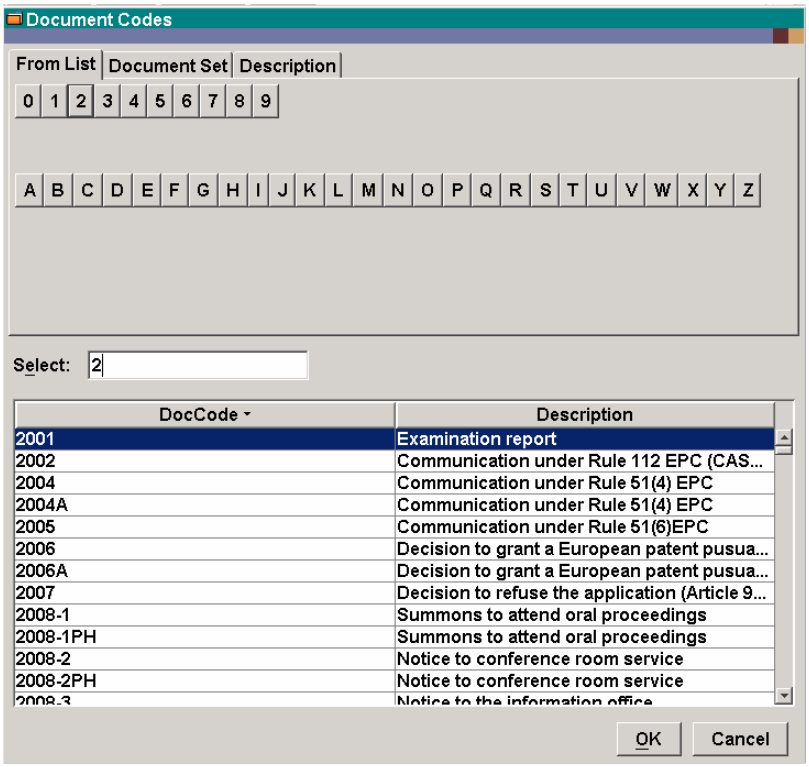


Figure 5: document codes

- click on the appropriate button:
  - example:
    - clicking on **2** shows a list of all DocCodes beginning with the number 2 and clicking on **P** shows a list of all DocCodes beginning with the letter P
- type the first letters of the required code in the **Select** box. The first code beginning with those letters is highlighted.
- select the code from the list.

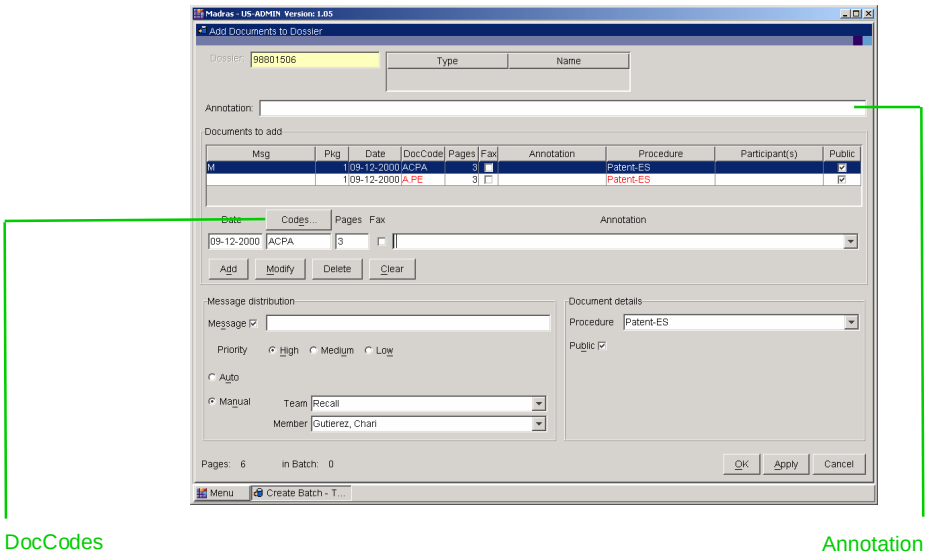


Figure 6: add documents to dossier

3.8.4.2 To search for a specific DocCode by keyword

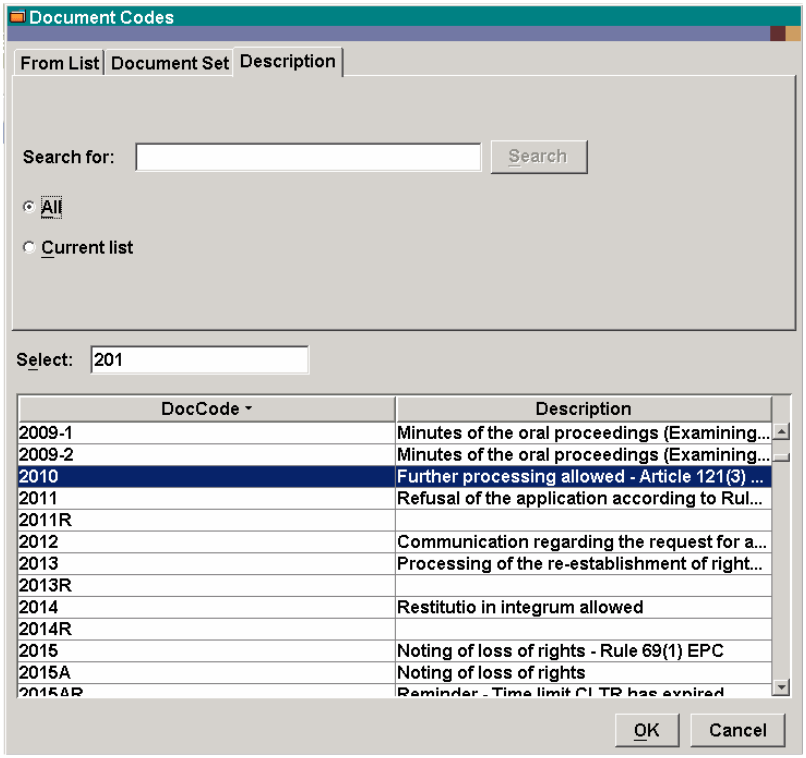


Figure 7: document codes description tab

Select the **Description** tab. Type in a key word, for example invent.

Select the option **All** to search though all DocCodes, or **Current List** to search the currently displayed list. Click on **Search**. A list appears of all DocCodes containing the key word for example invent, inventor, or invention

Select the code from the list.

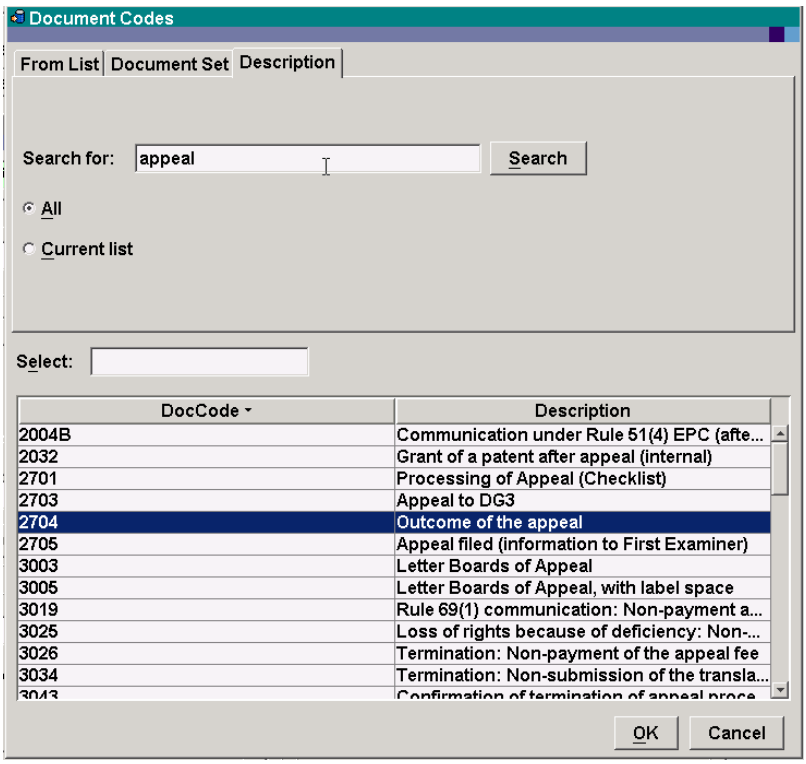


Figure 8: completed document codes description tab

3.8.4.3 To search in a specific document set

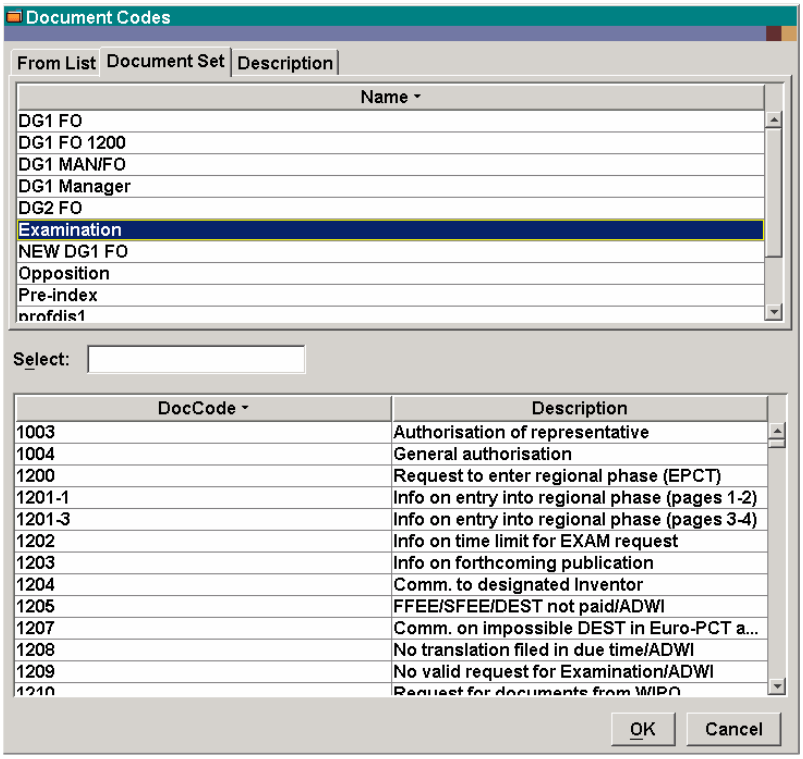


Figure 9: document codes search

Document Sets are sets of document codes related to a specific task.

To search for a specific document set:

- select the **Document Set** tab
- select the document set to see
- select the code from the document set
- Click on **OK**.

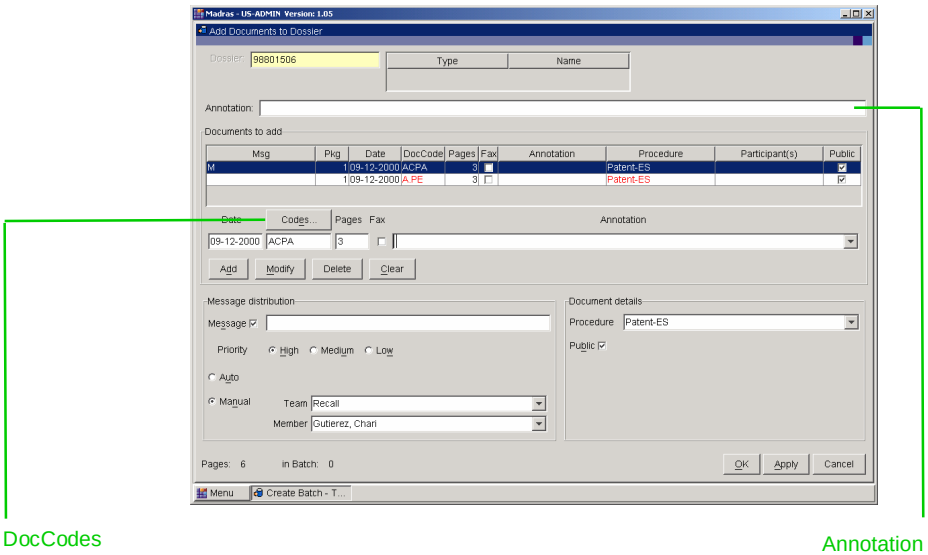


Figure 10: add documents to dossier

3.9 Contents of the batch

3.9.1 Sheets

The result of the indexing operation is a batch containing sheets.

Sheet names	
Sheet	**Function**
Batch Cover Sheet (BCS)	Lists all the packages in the batch
Package Data Sheet (PDS)	Lists all the documents in a package
Document Separator Sheet (DSS)	Separates documents in a package
End of Batch identifier (DSS or BTS)	This is a DSS which is recognised by the scanning software as the end of the batch. A special DSS can be created containing scanner quality/calibration marks and this is then called a Batch Terminator Sheeet or BTS

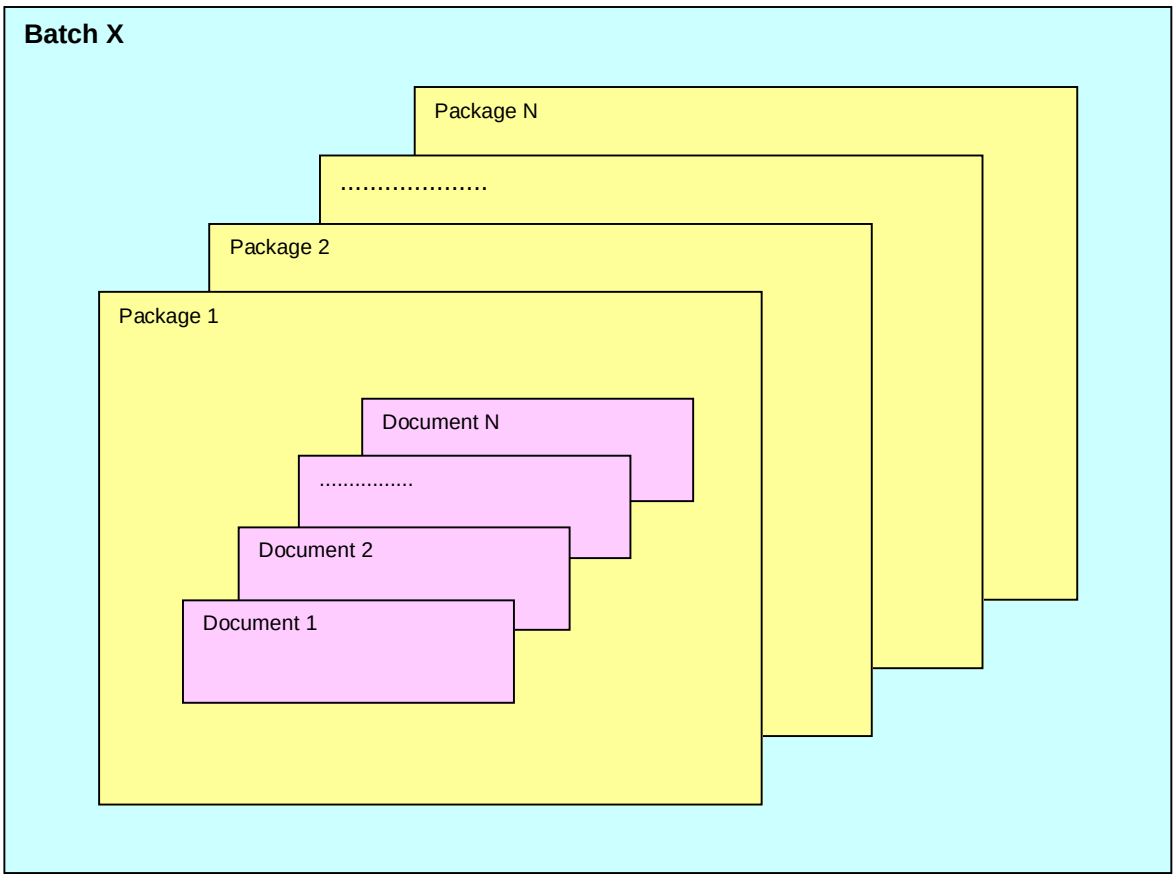


Figure 11: batch sheets

Note

The BCS must NOT be scanned

It is recommended that a Barcode Reader is attached to all indexing and scanning workstations.

Batch sheets	
Sheet	**Comment**
Batch Cover Sheet (BCS)	On coloured paper, for example, blue.
Package Data Sheet (PDS)	On coloured paper, for example, blue.
Document Separator Sheet (DSS)	On different coloured paper, for example, yellow.
Document	
Document Separator Sheet	
Document	
Package Data Sheet (PDS)	Other dossier, or document for the same dossier but with a different date.
Document Separator Sheet	
Document	
Document Separator Sheet	
Document	
End of Batch identifier	Document Separator Sheet (DSS) or Batch Terminator Sheet (BTS).

Note

For reasons of efficiency the total number of sheets in a batch should be kept below 500 pages.

The user must always insert a DSS or BTS as the last page of the batch.

Keep packages in the same order that they are indexed. Misplaced packages cause problems during scanning and may result in rejection of the whole batch.

3.10 Indexing corrections

Index errors made while entering the index data can be modified immediately, but page count errors discovered during scanning can only be corrected by editing the data in the DMS and then repeating the scanning process.

All index items can be modified during indexing.

Only page count errors are detected during scanning.

3.10.1 Corrections during data entry

To correct the indexing:

- Select the document in the **Add Documents** window (see Figure 3: add documents to dossier).

  When highlighting the document, bring the index data back to the indexing line.
- Make the required corrections.
- Click on **Modify**.

The user can continue to work in the batch as usual.

3.10.2 Corrections before releasing the batch

After finishing the batch (**OK** has been pressed), but before releasing it, errors can still be corrected by editing the indexing data.:

- The user will be in the Create Batch dialogue which will the list of packages added so far.
- Select the **Package** the user needs to edit.
- Click on **Edit Package.** This produces the Edit Package window which is the same as the Add Documents window. Select the document in the **Edit Package** window.
- Make the required changes to the indexing data.
- Click on **Modify.**
- Click on OK.
- A new, corrected, PDS is printed. Discard the old PDS.

  Note

  If the user changes the date of a document when editing a package then this will produce a new package (all documents in a package have the same date). More than one PDS may be produced.

- **Release** the batch.

3.10.3 Corrections after releasing the batch

If the user discovers errors after they have released the batch, but before the batch is scanned, they can still correct the errors.

Note

Editing of batches should only be done if the whole paper batch is physically present. Editing the data while the batch is being scanned is technically possible but should be avoided at all costs.

The user must remove the package to be edited from the batch, and put it in another.

Click on **Edit Batch** from the **MADRAS** Menu. The **Edit Batch** screen will be displayed.

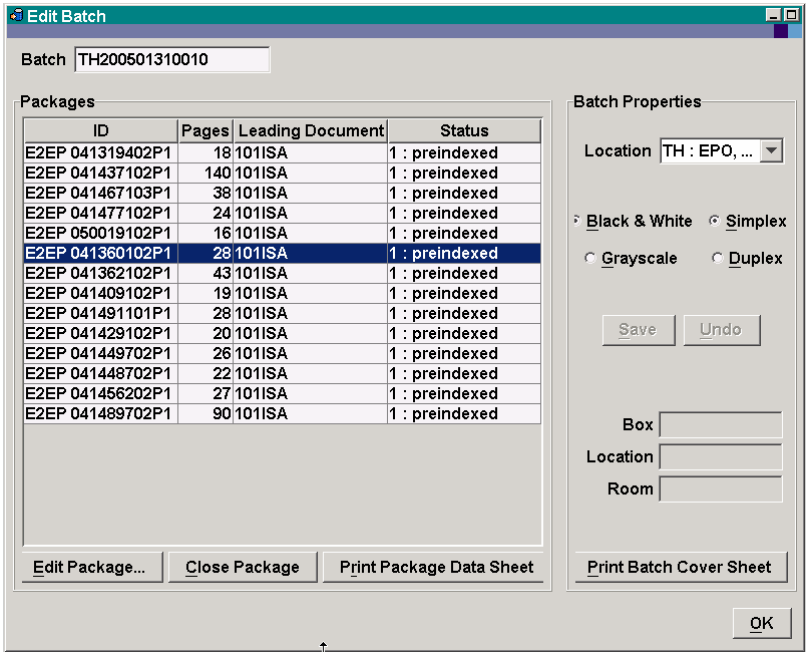


Figure 12: edit batch

Enter the Batch ID, preferably using a barcode reader. The package details are displayed.

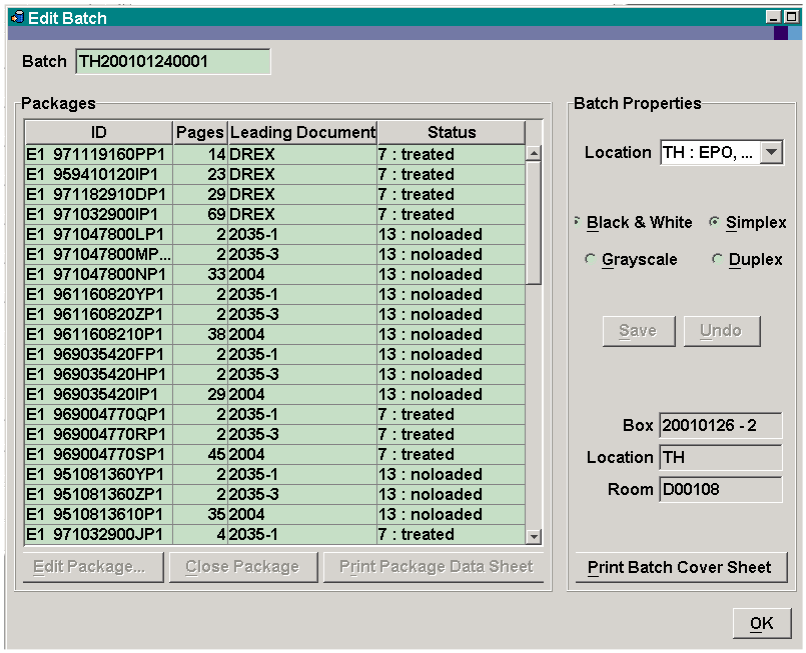


Figure 13: package details

Select the package to be edited.

Click on **Edit Package**.

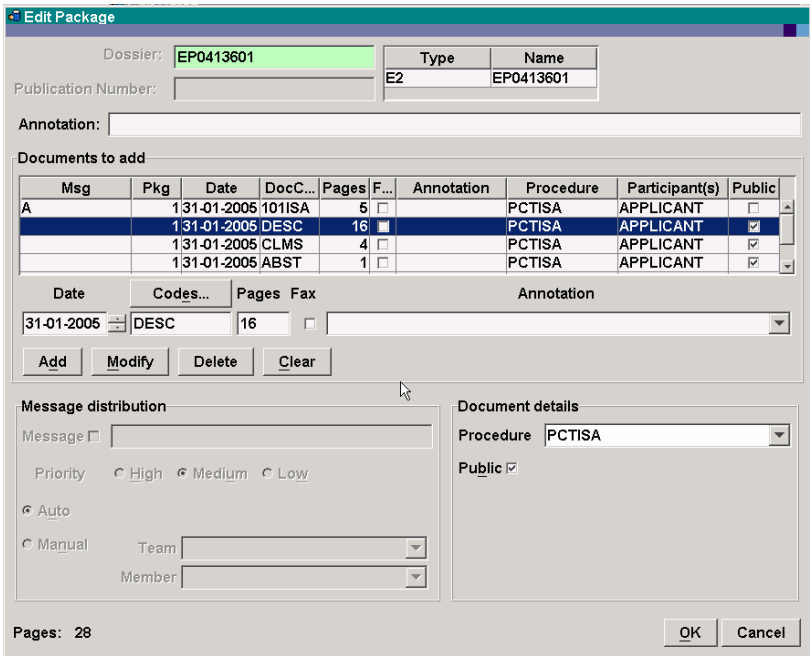


Figure 14: edit package

Highlight the document in the **Edit Package** window.

Make the required changes to the index data.

Click on **Modify**.

Click on **OK**. A new corrected PDS is printed. The package is deleted from the batch and disappears from the list in the **Edit Batch** window.

Click on OK. A modified BCS is printed. Discard the old BCS and put the new one on top of the Batch.

Note

When the user edits the batch before scanning, a corrected index file must be transferred to the scan server. Use the Batch Transfer procedure.

3.10.4 Rejected package

When an index or counting error is discovered during scanning, the scanning software rejects the complete package. The error package must be returned to the indexer and corrected in ePHOENIX.

Rejected packages can be corrected.

Choose **Edit Package** from the **MADRAS** menu. The **Select Package for Editing** screen is displayed.

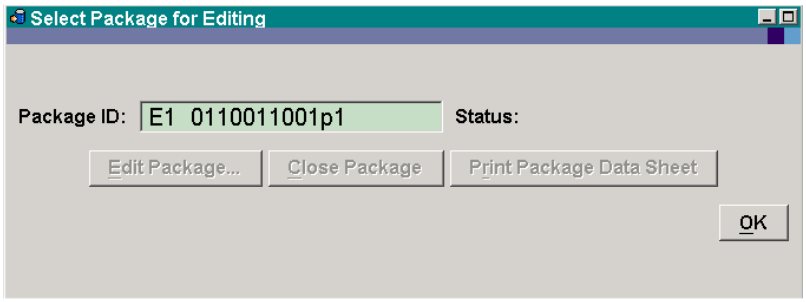


Figure 15: select package for editing

Enter the **Package ID**, preferably using a barcode reader. To type the ID, type, for example, E1(two spaces)0110011001P1(one space)

Click on **Edit Package…**

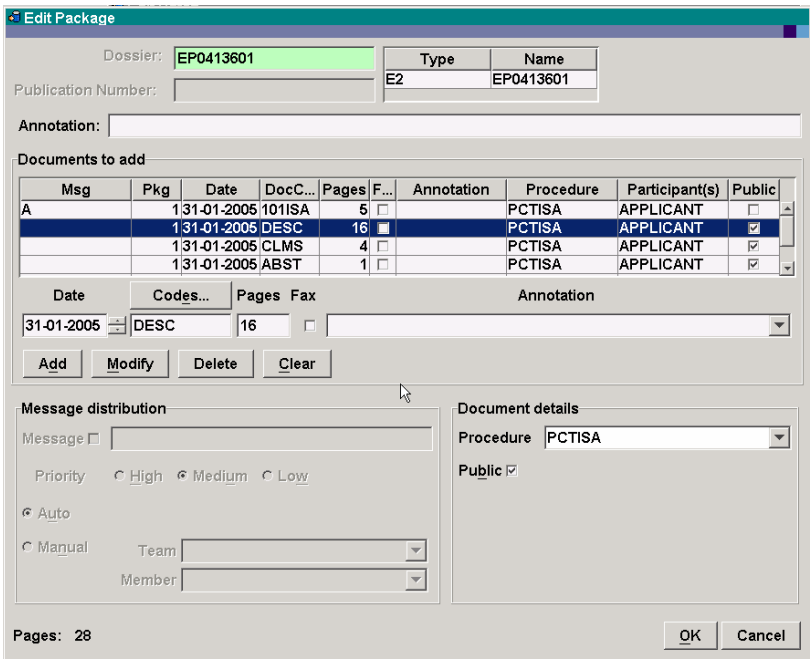


Figure 16: edit package

Select the document to be edited in the **Edit Package** window. When the user selects the document, they bring the index data back to the indexing line.

Make the required changes.

Click on **Modify**.

Click on **OK**. A modified PDS is printed.

Click on **OK,** or repeat this procedure again commencing with entering the Package ID, to edit other packages.

Note

The corrected package is no longer part of the batch. Make sure that the corrected package is added to a new batch.

3.10.5 Re-scanning

After images have been loaded into ePHOENIX, it may be necessary to re-scan documents, perhaps to improve the quality of the images. Re-scanning of documents can be done only on whole packages. When one document in the package has poor quality, the whole package must be re-scanned.

Batches that have been scanned and loaded are stored in boxes. The storage information can be found in the Dossier • .Document • Details • Storage

Open Dossier MADRAS main menu, , entering the dossier number.

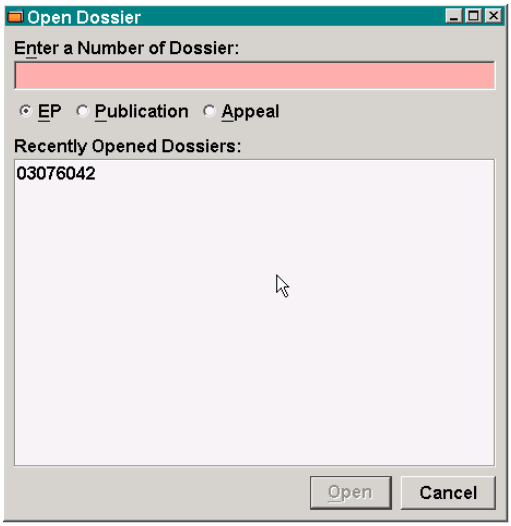


Figure 17: open dossier

In the TOC, select the document to be corrected.

Right click on the document, and choose **Details…** from the pop-up menu.

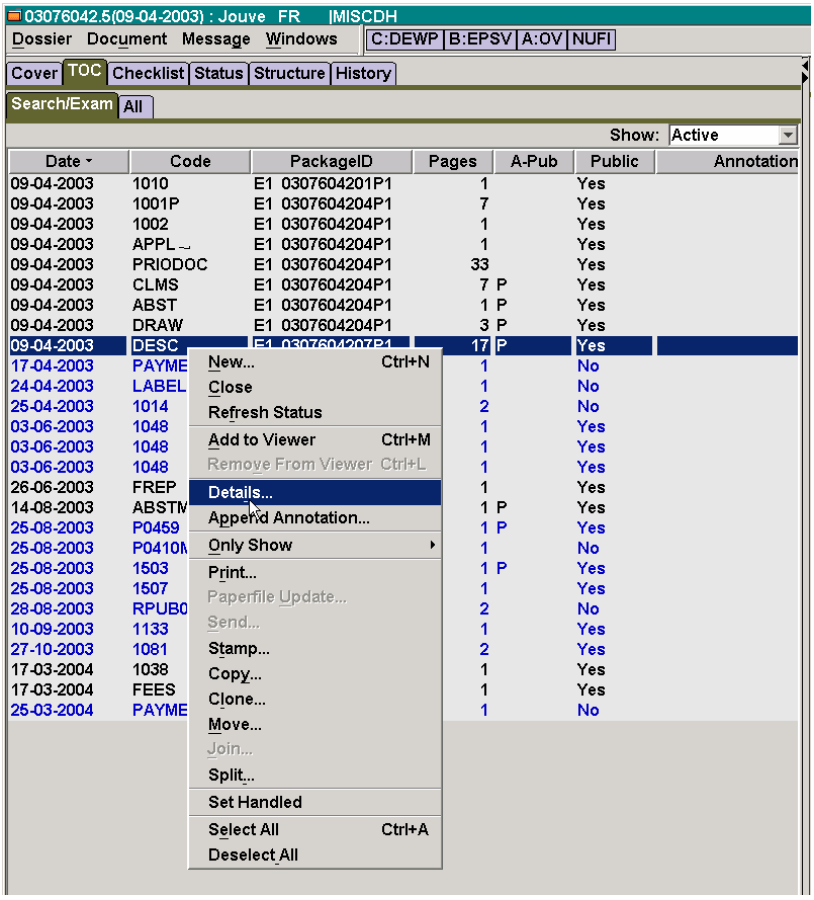


Figure 18: details

Select the **Storage** tab.

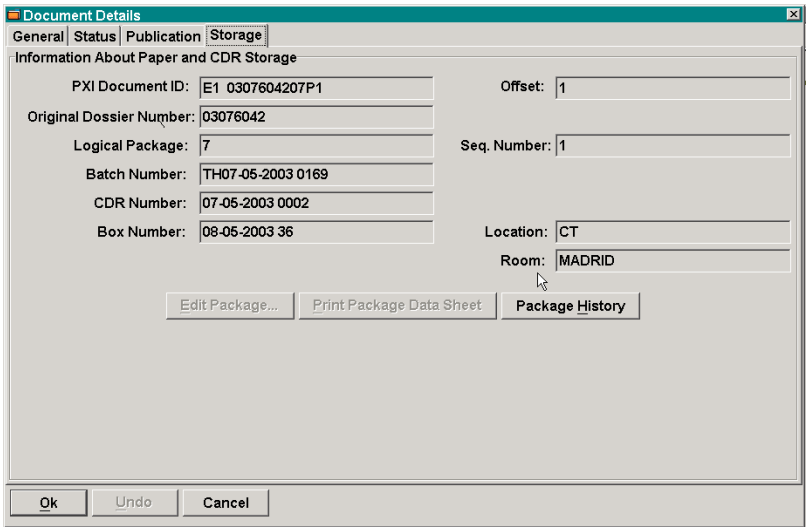


Figure 19: document details

Note the location. Use whatever procedures are in place to remove the affected package from the box and return the package to the indexing/scanning section. If there is no box location shown then the package is still somewhere in the scanning environment and will have to located.

When the user has the paper package with its PDS select **Edit Package** in MADRAS.

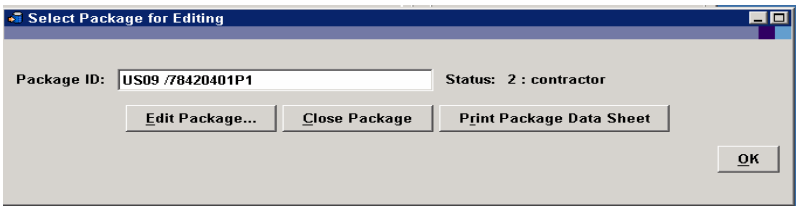


Figure 20: select package for editing

Type in or scan the Package ID and select **Edit Package**.

Highlight the relevant document and make the necessary changes to the index data, usually the page count.

Click on **Modify**.

Repeat the process if other documents need to be edited.

Click on **OK**. A new PDS is printed. Destroy the old PDS.

Note

The corrected package is no longer part of the original batch. Make sure that the corrected package(s) are added to a new batch.

3.11 Adding packages to batches

Packages created and indexed by other staff, and rejected packages, must be added to a batch. In most cases, scanning staff will do this. This procedure must also be carried out on corrected packages.

In the Create Batch window, shown in Figure 2: create batch - administration, choose **Add Packages…** The **Add Packages to Batch** screen is displayed.

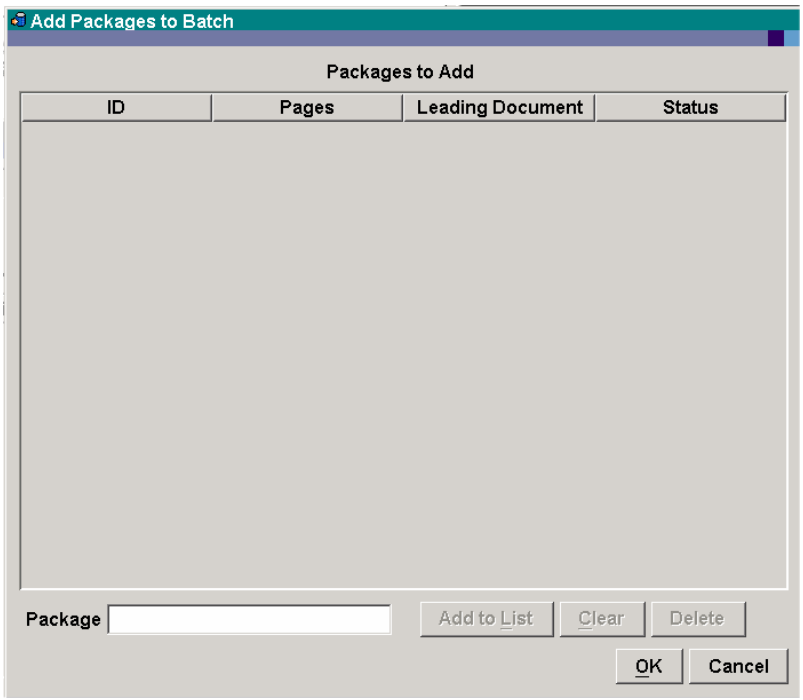


Figure 21: add packagers to batch

Enter the complete package number in CAPITALS into the **Package** field, or use a barcode reader to enter the number.

Click on **Add to List**.

To remove any package wrongly entered, select it in the list and click on **Clear.**

To add further packages enter the package number of each and click on **Add to List** in turn.

Click on **OK**.

Repeat if more packages have to be added.

3.12 Correcting XX batches

If the ePHOENIX system fails during creation of a batch, the data for the documents the user has already entered is present in the database, but the batch is not properly created. The corrupted batch is given an XX number as its Batch ID.

In the **MADRAS** menu (see 2.1), choose **Dossier**, then

- enter the dossier number of a document that is part of the corrupted batch, and click on **Open**.
- go to the TOC tab and select the document.
- right-click on the document and choose **Details…** from the pop-up menu.
- in the **Document Details** dialogue, select the **Storage** tab.
- write down the Batch ID:
  - example:
    - XX-29-01-2001 0001.
- click on **OK** to close the Document Details dialogue.
- close the Dossier.
- choose **Edit Batch** from the **MADRAS** menu.
- type in the Batch ID in the **Batch** field:
  - example:
    - XX-29-01-2001 0001.
- select the correct location from the **Location** drop-down list,.
- enter any other details as appropriate.
- click on **Save**.
- click on **Print Batch Cover Sheet**. The BCS is printed.
- click on **OK** to close the **Edit Batch** screen.

4 Batch transfer

After a batch has been finished, the index data (DMS file) must be copied to the correct directory of the scan server.

Note

The location of the target directory is specified in ePHOENIX using the Management Tool with the Global variable SCANF_XX.

Choose **Batch Transfer** from the **MADRAS** menu, . The **Transfer Batch for Scanning** screen is displayed

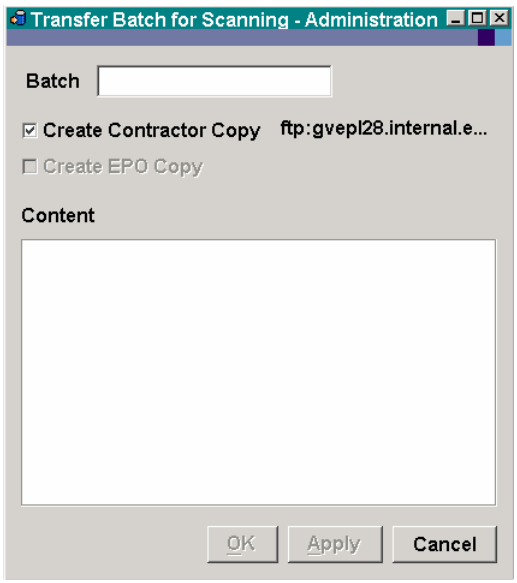


Figure 22: batch transfer

Enter the Batch ID. The batch information appears in the **Content** box. Ensure the Create Contractor Copy box is ticked and then click on **Apply**.

Repeat for all batches to be transferred and then click on **OK** to close the dialogue.

The file transfer is then complete.

5 Preparing the scanner for scanning

The scanning operator can scan the indexed batches once the DMS file has been transferred using the batch transfer function,

It is assumed that epoScan has been properly installed on the user`s workstation with the appropriate settings for their scanner. For more information consult the epoScan Installation and Configuration document.

Before starting the scanning process, make sure to:

- clean the scanner (this should be done regularly).
- calibrate the scanner
- use the Calibration Manager to ensure that the proper scanner settings are used.
- decide the page orientation required, portrait or landscape; landscape gives a 25% performance improvement because the paper is fed along the width and not along the length.

5.1 Calibration Manager

The Calibration Manager should be used to calibrate the scanner. In the main window:

- select **Setup**.
- select **Calibration Manager**.

The wizard will guide the user through the calibration process.

If the quality of the image is not satisfactory then changes to the scanner settings, such as brightness and contrast, can be made.

Changes to the scan area can also be made.

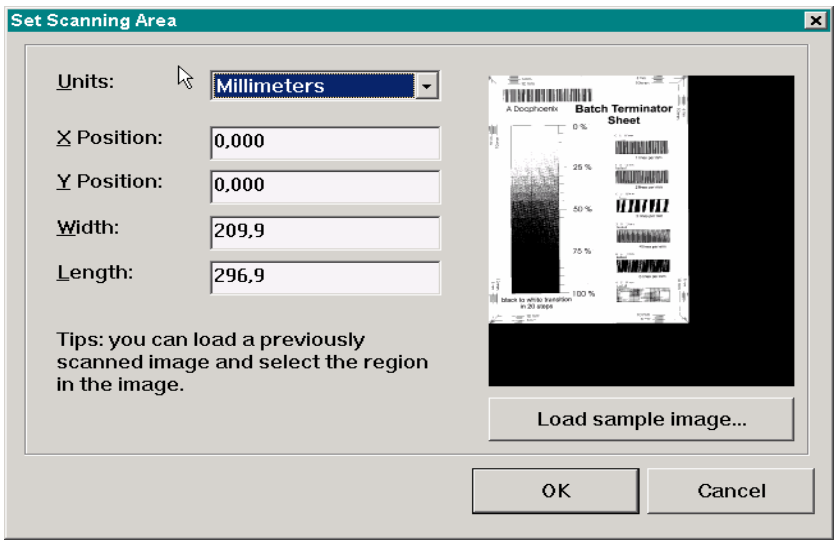


Figure 23: set scanning area

Use the batch terminator sheet as a calibration sheet.

6 Login

Double click on the epoScan icon on the desktop to start epoScan. The login window will be displayed.

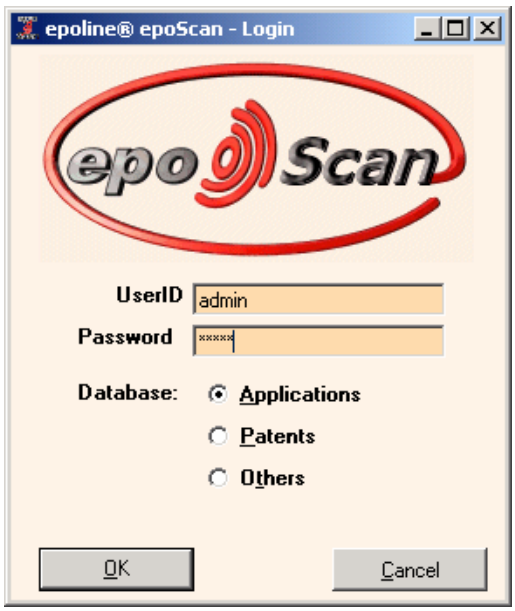


Figure 24: epoScan login

Enter the UserID and Password, and select the database.

Login UserID and Password	
Field	**Default**
UserId	admin
Password	ADMIN (Case sensitive)

These values can be changed by the administrator. Please see section 12.1.1 in *epoScan installation and configuration*.

In order to use epoScan the settings have to be configured.

Note:

Only those sufficiently qualified and experienced should attempt to use the advanced options to modify the default installation and configuration settings.

7 epoScan initial screen

Note:

The scanner is configured and set up by the administrator. Any changes made to these settings may cause image quality problems.

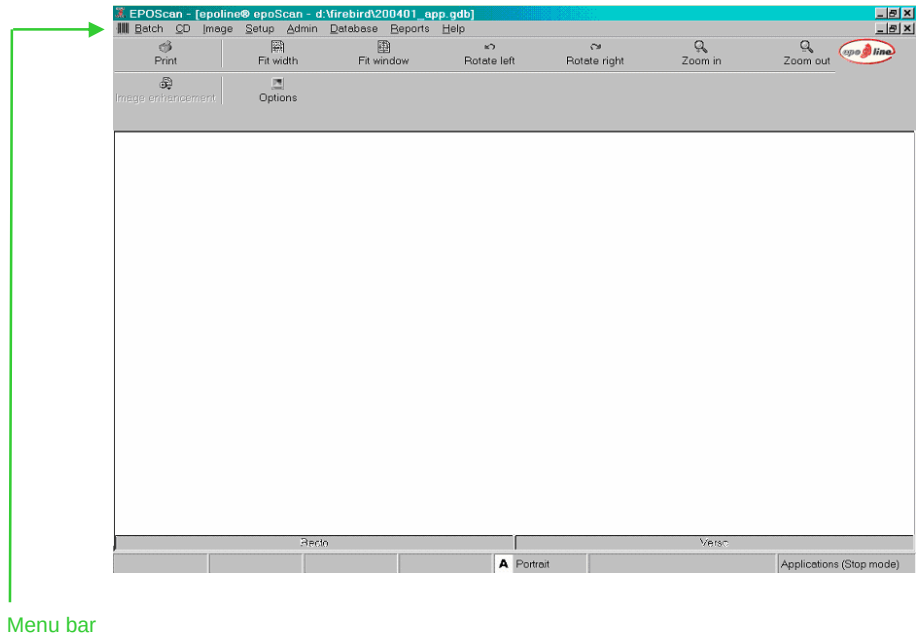


Figure 25: eposcan initial screen

The menu bar gives access to all of the available functions.

EPOScan functions		
Function	**Meaning**	**Availability**
Batch	Scan List Troubleshooting Exit	
CD	Generate Re-generate RQC Troubleshooting Quality control • Systematic • Interactive • Random Sample Maintenance	

EPOScan functions		
Function	**Meaning**	**Availability**
Image	View	
	Print	
	Print Setup	
	Uploading	Not available for applications
	Downloading	Not available for applications
	Cleaning	Not available for applications
	Send Email	
	Transfer by FTP	For use with "Flowport"™
	Automatic post-indexing	Not available for applications
	Manual post-indexing	Not available for applications
	Indexing correction	Not available for applications
	Batch image enhancement	
	Clipping	Not available for applications
	Test incrustation	
	Quality control	
Setup	Options	
	Bar code reading	
	Image enhancement	
	Email options	For use with "Flowport"™
	FTP options	For use with "Flowport"™
	Calibration manager	
Admin	Users	
	Permissions	
Database	Info	
	Select • Application • Patents • Others.	
	Batch status modification.	
Reports	Daily production	
	Rejected package	
	Batches partially scanned	
	CD Contents	
	Quality control	
	Scanning	
Help	Contents	
	About	

EPOScan functions		
Function	**Meaning**	**Availability**
Batch	Scan List Troubleshooting Exit	
CD	Generate Re-generate RQC Troubleshooting Quality control • Systematic • Interactive • Random Sample Maintenance	
Image	View Print Print Setup Uploading Downloading Cleaning Send Email Transfer by FTP Automatic post-indexing Manual post-indexing Indexing correction Batch image enhancement Clipping Test incrustation Quality control	 Not available for applications Not available for applications Not available for applications For use with "Flowport"™ Not available for applications Not available for applications Not available for applications
Setup	Options Bar code reading Image enhancement Email options FTP options Calibration manager	 For use with "Flowport"™ For use with "Flowport"™
Admin	Users Permissions	
Database	Info Select	

EPOScan functions		
Function	**Meaning**	**Availability**
	• Application • Patents • Others	
Reports	Daily production Rejected package Batches partially scanned CD Contents Quality control Scanning	
Help	Contents About	

8 Batch

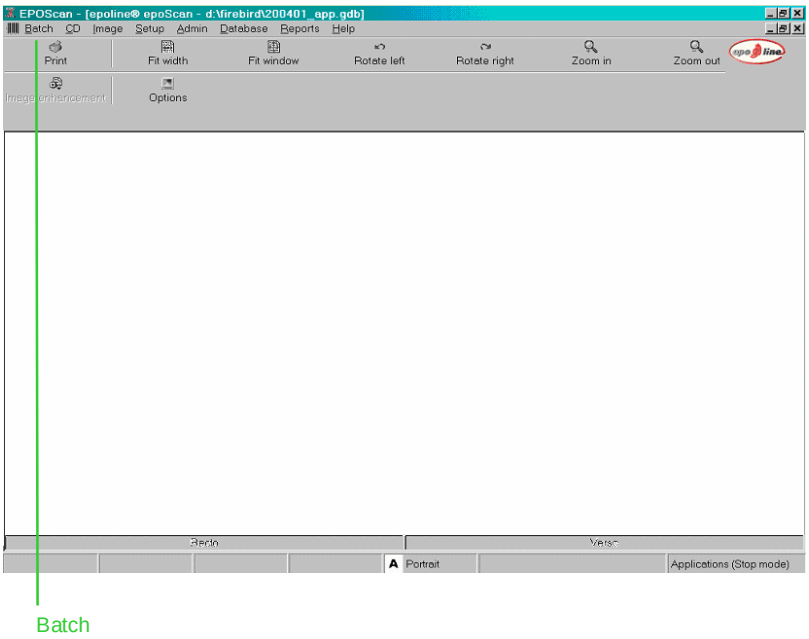


Figure 26: epoScan initial screen

Click on **Batch**. The batch drop-down menu will be displayed. Select **Scan**, and the **Batch ID Entry** screen will be displayed.

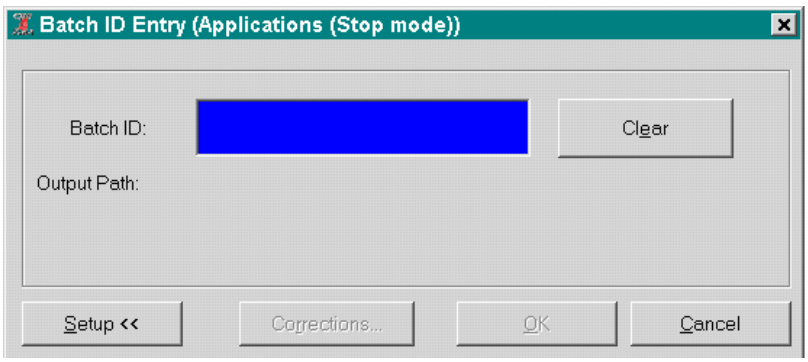


Figure 27: batch id entry

Click on **Setup**.

The **Batch ID Entry** screen is displayed

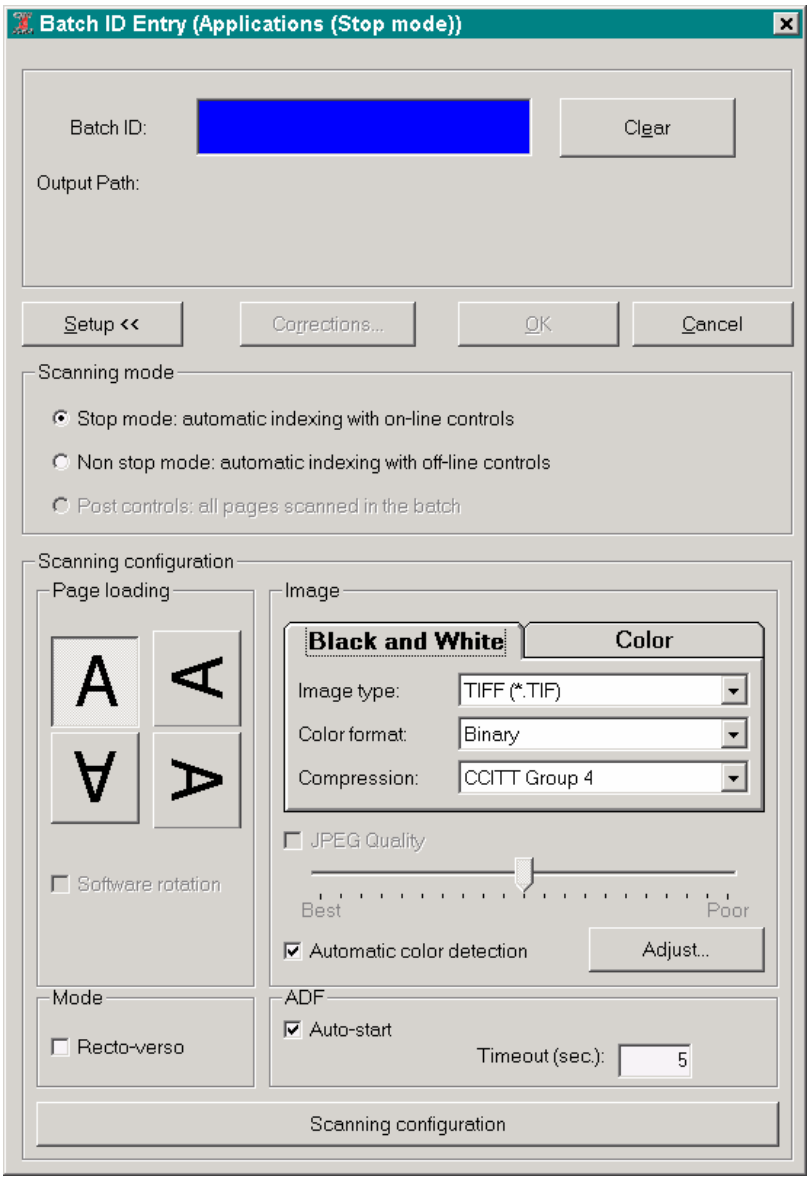


Figure 28: batch id entry

Enter information and adjust the settings as required. Click on **Setup** to return to the initial screen.

Note

A scanner must have already been set up.

8.1 Scanning mode

Options	
Option	**Result**
Stop	Index file is used during scanning. Scanning will stop if a mismatch between pages indexed and pages scanned is found. Scan operator is able to correct scan/index errors immediately.
Non stop	Index file is used during scanning but scanning doesn't stop. When scanning is complete an automatic index process will run. During this process the comparison between pages indexed and pages scanned is made. If errors are found they are displayed in a list and the operator can correct the errors using the Document Correction functionality.
Post controls	No index file required. Used for scanning other- and patent documents. If patent document are scanned in this mode, images can be used for manual indexing afterwards

8.2 Scanning in stop mode

Once the setup is complete and the paper batch with its Batch Cover Sheet is available. The indexed data for the batch will already have been sent to the scanning sever by means of Batch Transfer.

Type or scan in the Batch ID.

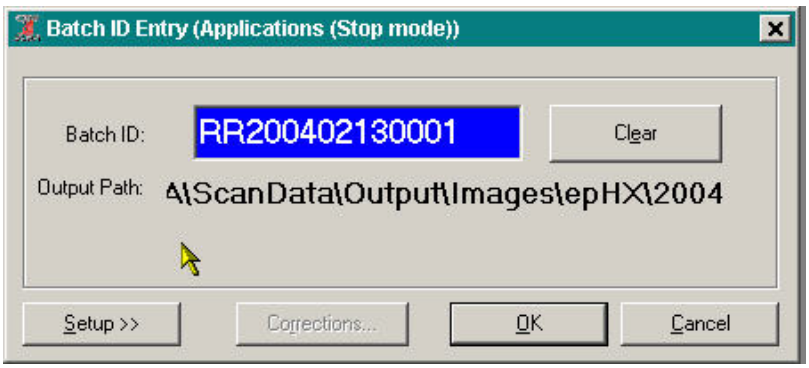


Figure 29: output path

The output path is shown indicating that the corresponding index file has been found in the DMS\inbox and that the data will be written to the specified output path.

To start scanning

- make sure that paper is in the automatic document feeder
- click on **OK**.

Depending on the scanner type, scanning will start automatically or after pressing the Start/Run button of the scanner.

During the scanning process the user is able to view the images.

Note

Do NOT scan the BCS. Start at the first PDS.

The **scan complete** message is displayed:

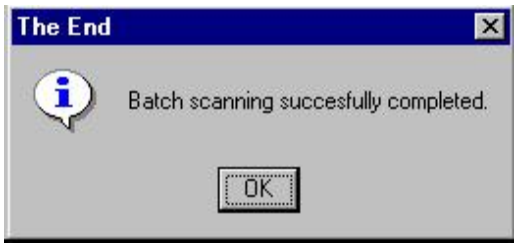


Figure 30: scan complete

Click on **OK**.

8.3 Scanning in non-stop mode

If scanning batches in Non-Stop mode the comparison between pages indexed and pages scanned is executed after batch scanning is complete (Automatic Indexing).

To start scanning proceed in the same way as in Scanning in stop mode

- make sure that paper is in the automatic document feeder
- click on **OK**.

Depending on the scanner type, scanning will start automatically or after pressing the Start/Run button of the scanner. During the scanning process the user is able to view the images.

When the whole batch has been scanned the **prepare scanner** message appears.

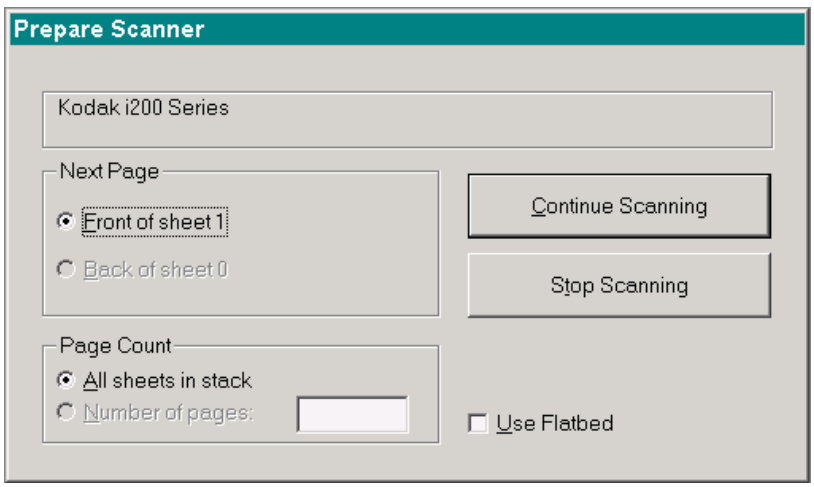


Figure 31: prepare scanner

Select Stop Scanning. The automatic indexing process will start. The **indexing results** are displayed.

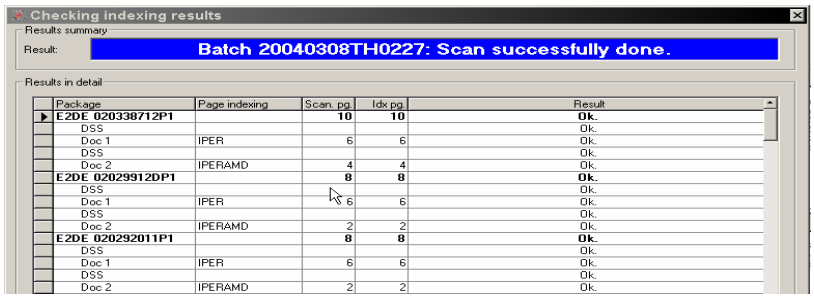


Figure 32: process results

If errors occurred a **warning** screen is displayed.

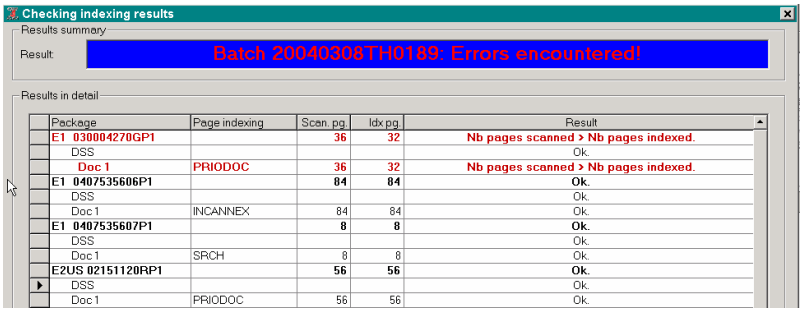


Figure 33: reported errors

To correct the reported error(s) select **Corrections** to open document correction.

8.4 Scanning configuration

8.4.1 Page orientation

Dependent on the paper quality (for example; position of staple holes, position of perforated date) specific page orientation can be selected.

Scanning in landscape mode gives a 25% performance increase.

8.4.2 Software rotation

Most scanners can cope with pages fed in widthways and will rotate the image accordingly. However, some devices may have difficulties in which case this setting will allow the epoScan software to do the rotation (this is slower).

Checking this box will solve a known problem with Kodak 1500D.

8.5 Image

This setting determines the quality of the image scanned. Use binary for plain black text on white paper and for documents with shades of grey use the appropriate level of grey. The more shades of grey the larger the image file becomes.

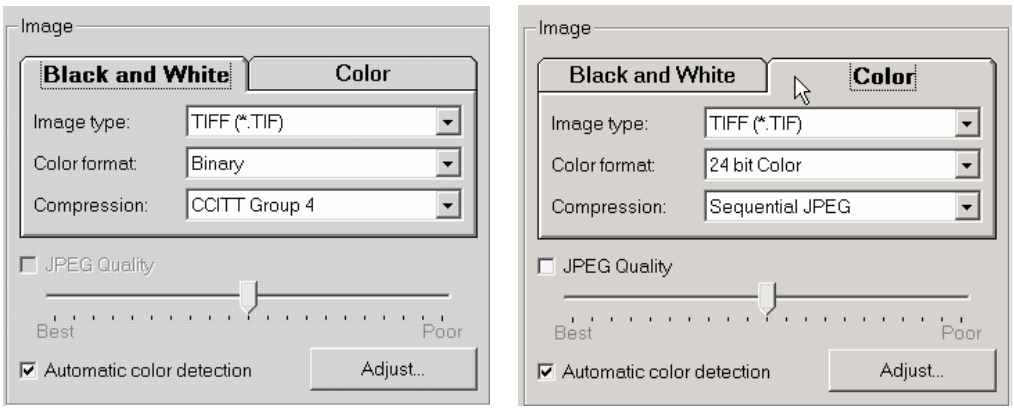


Figure 34: image tabs

Click on **Adjust**. The **Color detection settings** screen is displayed

8.6 Colour scanning

Colour scanning is available in all scanning modes, for all document types.

During application scanning, automatic switching between black white and colour is executed based on a flag in the DMS file. Please see *ePHOENIX Document Capture User Manual*, section 3.8.1.

8.6.1 Automatic colour detection

Automatic **Color detection** causes an image to be processed as colour once the set threshold has been reached.

Note:

Automatic colour detection is only available for application scanning.

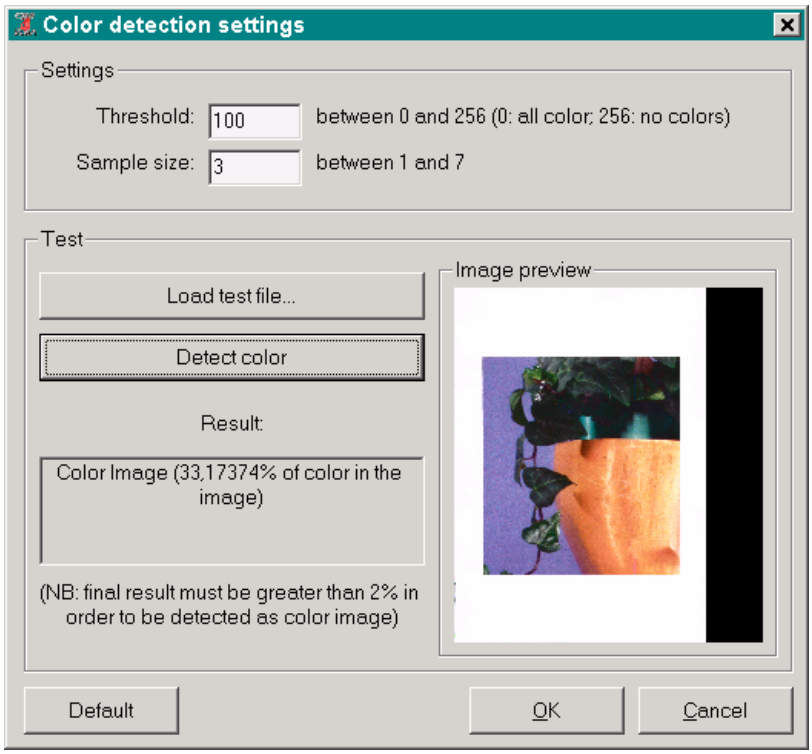


Figure 35: color detection settings

The Threshold property is the minimum colourfulness threshold level. The average threshold of a neighbourhood is compared to the threshold value that is set. If the threshold value is set to 0, then all neighbourhoods are colourful because the average threshold of each neighbourhood is probably greater than 0. If the threshold value is set to 256, then no neighbourhoods are colourful.

For most applications, the default colourfulness threshold is probably suitable. However, some applications might require adjustment of this parameter. If only bright colours should trigger colour processing, the colourfulness threshold might be increased to 200. If very pale colours need to be detected, it might be lowered to 50.

The image is broken into cells and the Sample Size property sets the cell size for checking the colour content.

For most applications, the default sampling neighbourhood is probably suitable. However, some applications might require adjustment of these parameters. If the resolution is especially low (100 dpi or less), the sampling neighbourhood might be reduced to 1 x 1 or 2 x 2, and if it is high (600 dpi or more), it might be increased to 5 x 5. Also, if the colour channel misalignment is particularly high, the sampling neighbourhood might be increased to compensate.

8.7 Auto-start

Checking the **auto start** means that the scanner will start scanning after a delay of five seconds.

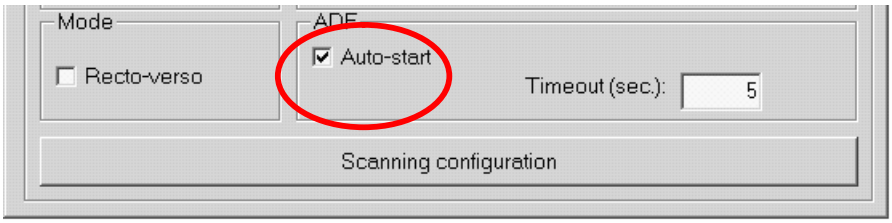


Figure 36:auto-start

If the scanner which is connected to a single PC or on several machines connected to a central server does not support automatic starting of the scanner when starting batch Scanning the Auto-start" check box must be unchecked.

- Select Batch à Scan
- Select Setup
- Uncheck Auto-start.

9 Error handling

9.1 General errors

9.1.1 Scanner not switched on, or wrong scanner selected

9.1.1.1 Message

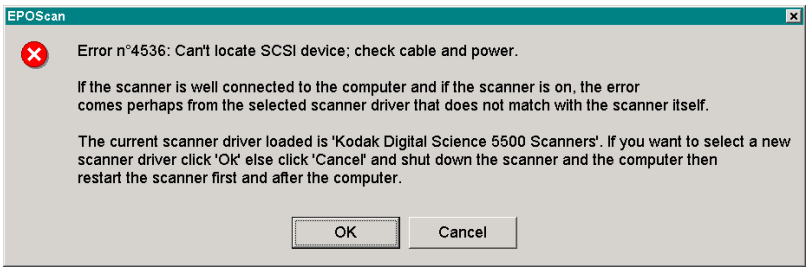


Figure 37: scanner not switched on, or wrong scanner selected

9.1.1.2 Problem

Either

- the scanner was not switched on before opening the scanner program

or

- the wrong scanner was selected.

9.1.1.3 Action

Note the on-screen instructions. Switch on the scanner and restart the scanning program.

9.1.2 DMS data not transferred

9.1.2.1 Message

ERROR: Indexation data not available.

9.1.2.2 Problem

The DMS data was not transferred to the DMS\INBOX of the scan server.

9.1.2.3 Action

Ensure that the batch is transferred and that the paths are correct.

9.1.3 Batch already scanned

9.1.3.1 Message

ERROR: Batch scanning already successfully completed.

9.1.3.2 Problem

The batch has already been scanned.

9.1.3.3 Action

None needed.

9.2 Index errors

9.2.1 Wrong page count by indexer

9.2.1.1 Message

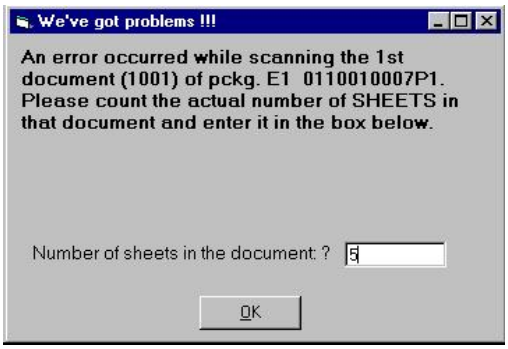


Figure 38: problems

9.2.1.2 Problem

During the scanning process the software compares the number of pages counted/indexed with the number of pages scanned. Page counting takes place between Document Separator Sheets (DSS). If a mismatch is detected, the **problems** message is displayed.

9.2.1.3 Action

Count the pages and enter the actual number of pages present. Click on **OK**. The indexation error message is displayed.

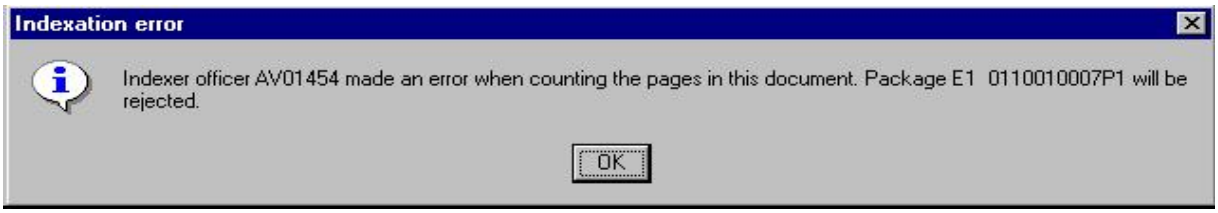


Figure 39: indexation error

Click on **OK**. The **package rejected** message is displayed.

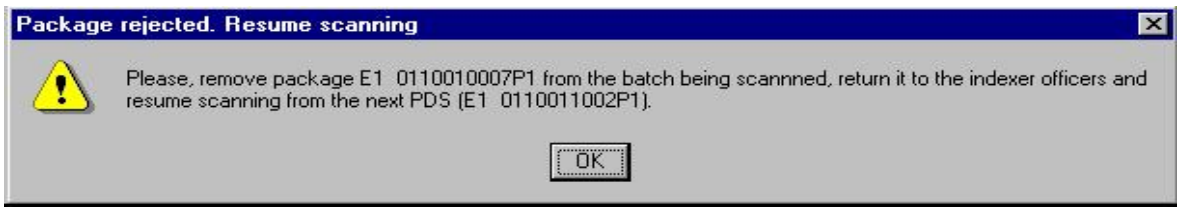


Figure 40: package rejected

Remove the package from the scanner and put in the next package in the batch.

Click on OK.

The package is deleted from the batch and has to be modified before a rescan is possible.

9.2.2 Scanner misfeed

9.2.2.1 Message

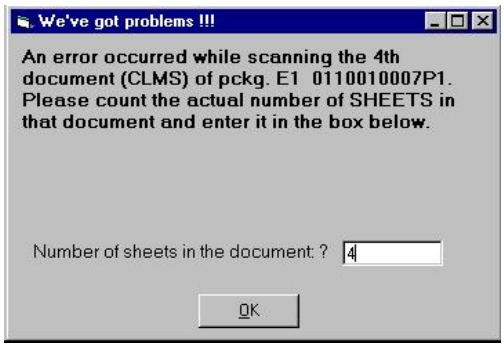


Figure 41: problems

9.2.2.2 Problem

Mismatch of pages, probably caused by scanner misfeed.

9.2.2.3 Action

Enter the number of pages.

Click on **OK**. If a misfeed occurred, the **misfeed problem** message is displayed.

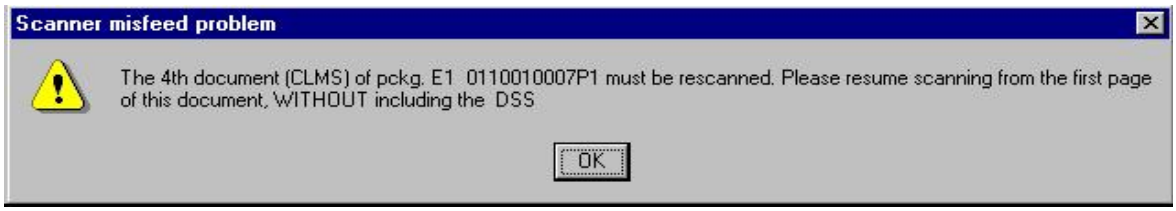


Figure 42: misfeed

Go back to the first page of the document.

Click on **OK**.

Resume scanning.

9.2.3 Barcode sheet errors

The following errors can occur with the barcode sheets:

- Barcode sheet not present, misplaced or upside down
- Barcode not recognised (perhaps due to smudging of the ink).

Whenever a barcode is not recognized the barcoded page is displayed and an error message appears.

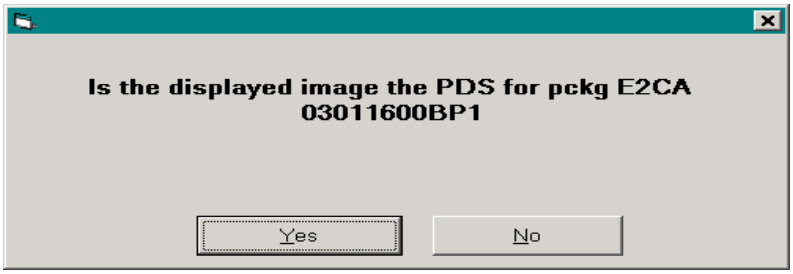


Figure 43: barcode sheet errors

If the image corresponds to the data displayed then the barcode recognition software has failed. Simply press **Yes** to confirm. If the image does not correspond then one of the other errors mentioned in this section has occurred.

Note

If barcodes are regularly not recognized then ask the administrator to check if the area where the scanning software expects the barcode to be is correctly defined.

If the barcode area is well defined and problems persist it is possible that the format of the Barcode in not correct. Contact the administrator.

9.2.4 DSS missing

9.2.4.1 Message

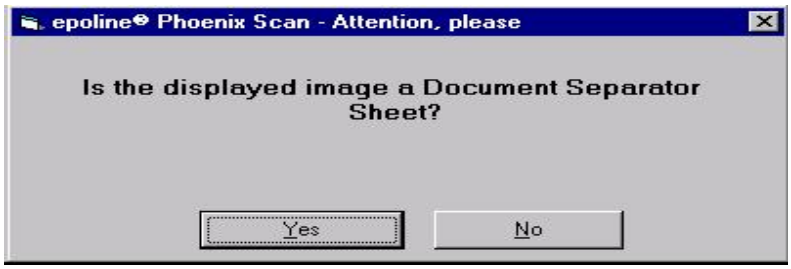


Figure 44: DSS sheet?

9.2.4.2 Action

If the scanned image is the DSS and is the right way up, click on **Yes** and resume scanning.

If the scanned image is not the DSS, click on **No**. The **DSS missing** message is displayed.

Figure 45: DSS missing

Recover the page(s) scanned since the last good document and put them back in front of the pile in the hopper, starting with the first page that should have followed the DSS (the user does not insert the DSS into the scanner)

Click on **OK**.

The user can insert a DSS after scanning if they wish.

9.2.5 DSS in front of PDS

9.2.5.1 Message

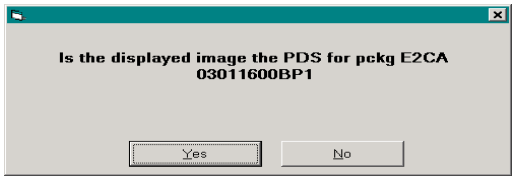


Figure 46: PDS image?

9.2.5.2 Problem

If the DSS is accidentally placed before the PDS then it will be read instead of the PDS.

9.2.5.3 Action

In this case the answer in **No**.

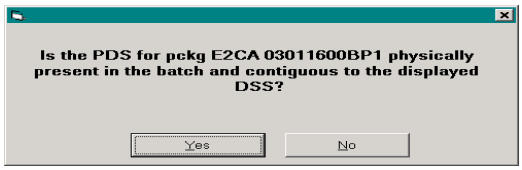


Figure 47: PDS phsically present

In this case the answer is **Yes**.

Figure 48: error message

Resume scanning as indicated. Note that the PDS does not get scanned.

9.2.6 Packages in wrong order in batch

9.2.6.1 Message

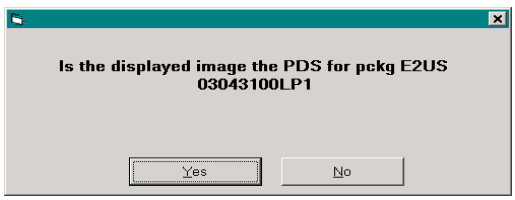


Figure 49: specific PDS image?

9.2.6.2 Problem

If the packages are inserted into the scanner in the wrong order (for instance if a large batch has been split up into separate piles and the piles have been mixed up) then the system will read the PDS barcode and determine that it is not the one it expected.

9.2.6.3 Action

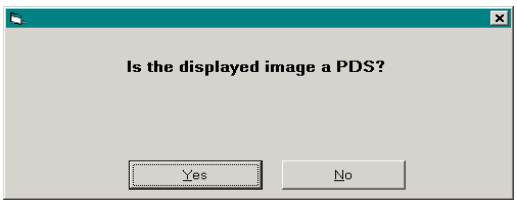


Figure 50: PDS?

If the image is not a PDS then press **NO**. If it is a PDS, select **Yes**.

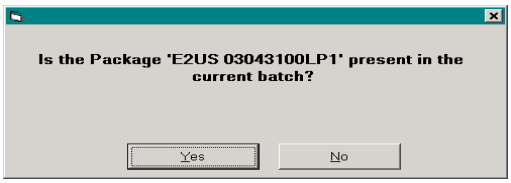


Figure 51: is package present

The expected PDS data is displayed. Select **Yes**.

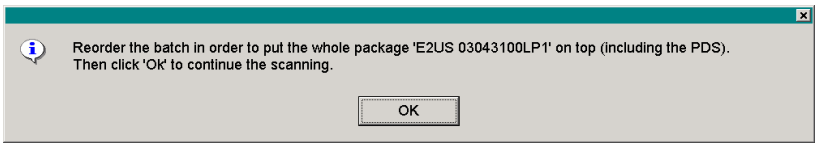


Figure 52: message

Remove the paper from the scanner and replace it with the correct Package .Select **OK** to resume scanning.

9.2.7 Pages not scanned properly

9.2.7.1 Problem

The scan operator notices that pages are not scanned properly owing to

- staples left in a document
- pages damaged or folded
- page upside down.

9.2.7.2 Action

With a misfeed the scanner may stop automatically. If not, then stop scanning by pressing the STOP button on the scanner or simply by removing the paper from the feeder. The system will respond with a dialog asking if the user wants to stop or continue. Select **Stop.** As the batch is now only partially scanned a dialogue will remind of this.

To restart just redo **Batch** / **Scan** and read the batchid again from the Batch Cover Sheet. The **resume batch scanning** message appears:

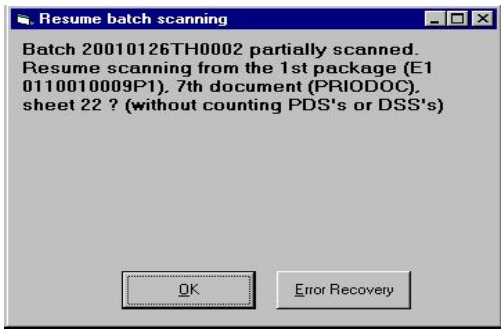


Figure 53: resume batch scanning

Click on **Error Recovery**. The last page scanned is displayed. This may be the offending page or it may be a later one because the scanner continued to scan.

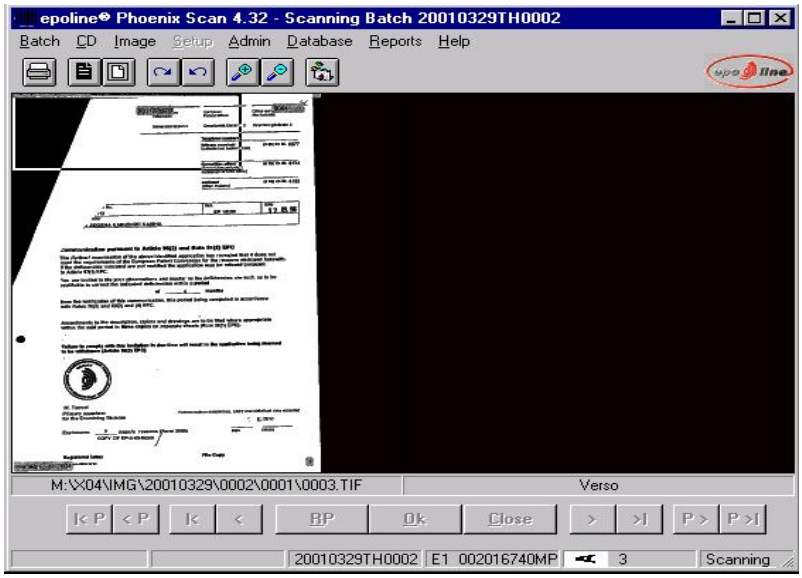


Figure 54: scanning batch

Click on the **<** button to can go backwards in the package until the (first) wrongly scanned page is found.

Go back one more to the last correctly scanned page.

Click on **OK.**

To resume scanning reload the feeder starting with the wrongly scanned page (after removing staples, creases etc. to prevent the same happening again).

The same procedure can be followed when a mistake occurred in an earlier scanned package by clicking on the **|<P** button.

Explanation of buttons	
Button	**Action**
RP	Go back to first page of first package of the batch
<	Go back page by page
<P	Go back to first page of the package being scanned
|<P	Go back to first page of last completely scanned package
OK	Resume scanning

10 Troubleshooting

This feature enables the user to correct mistakes during and after the scan process. To activate the Troubleshoot feature, choose **Troubleshoot** from the **Batch** menu. The troubleshooting window appears.

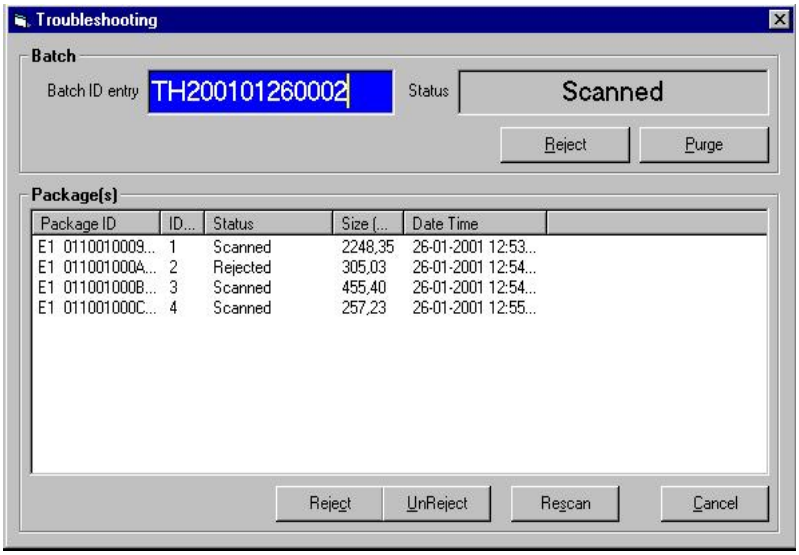
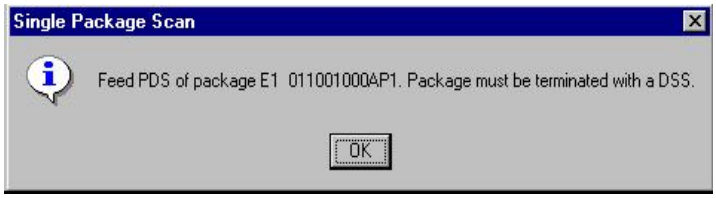


Figure 55: troubleshooting

Explanation of functions	
Function	**Result**
Purge	All scanned images are deleted, and the batch can be scanned again. This is useful when it is not possible solve problems in any other way and the complete batch must be rescanned.
Reject	The batch file is deleted from the DMS Inbox. Required if, for instance, the order of packages in the batch is completely corrupted and can only be solved by creating a new batch in ePHOENIX.

Explanation of buttons on bottom of the screen	
Button	**Action**
Reject	Reject a package. Scanned images are deleted.
UnReject	Reverse the reject procedure if a package is rejected during scanning and the package appears to be correct, and the complete batch must be rescanned..
Rescan	To rescan a rejected or error package, after successfully scanning the batch. After selecting the rejected or error package and selecting Rescan the following message is displayed:  **Figure 56: single package scan**

Explanation of buttons on bottom of the screen	
Button	**Action**
	Click on **OK** and resume scanning. **Figure 57: scanning completed**

11 Resetting the epoScan settings

Error messages and subsequent trouble shooting may suggest that the epoScan settings need to be reset.

Note:

The epoScan settings are set up by the administrator. Any changes made to these settings may cause image quality problems.

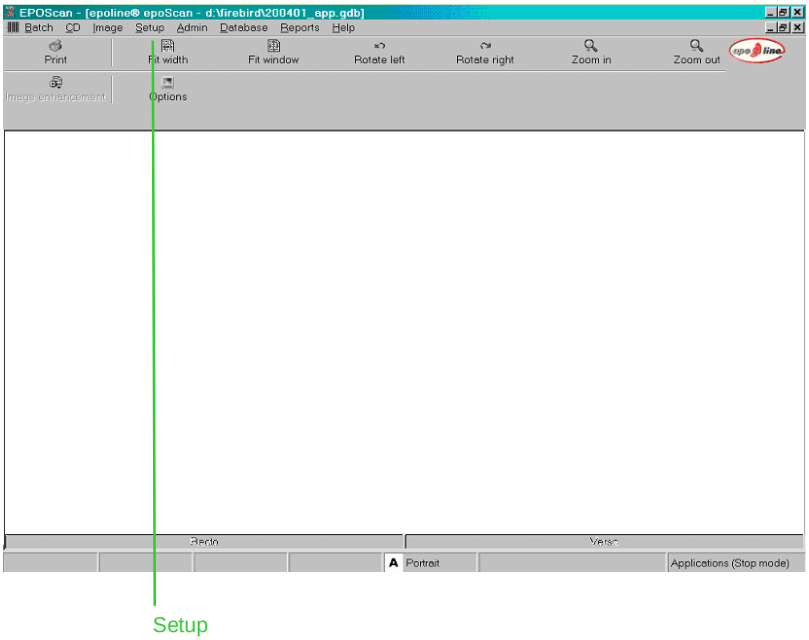


Figure 58: epoScan initial screen

Click on **Setup**. The setup drop-down menu will be displayed.

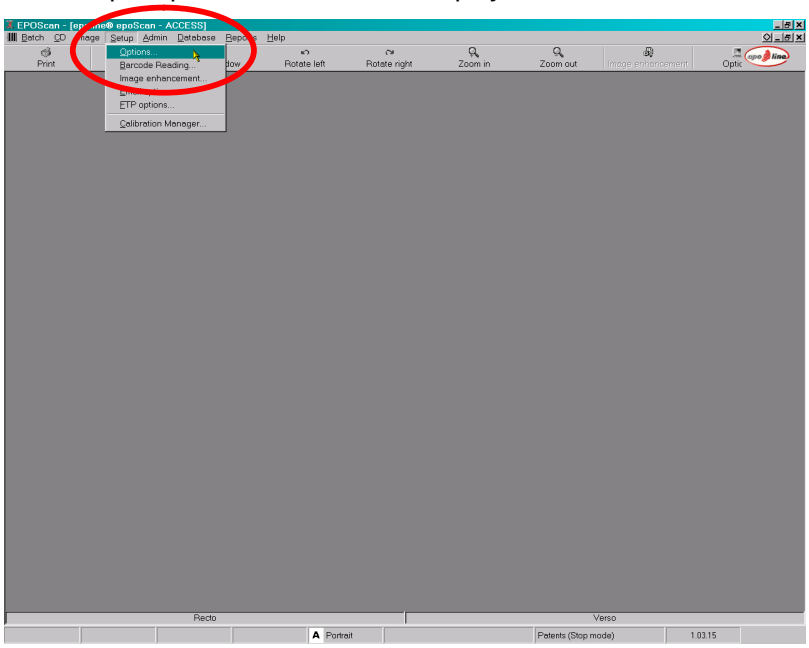


Figure 59: setup screen

Select **Options**.

An alternative is to select **Options** from the menu bar.

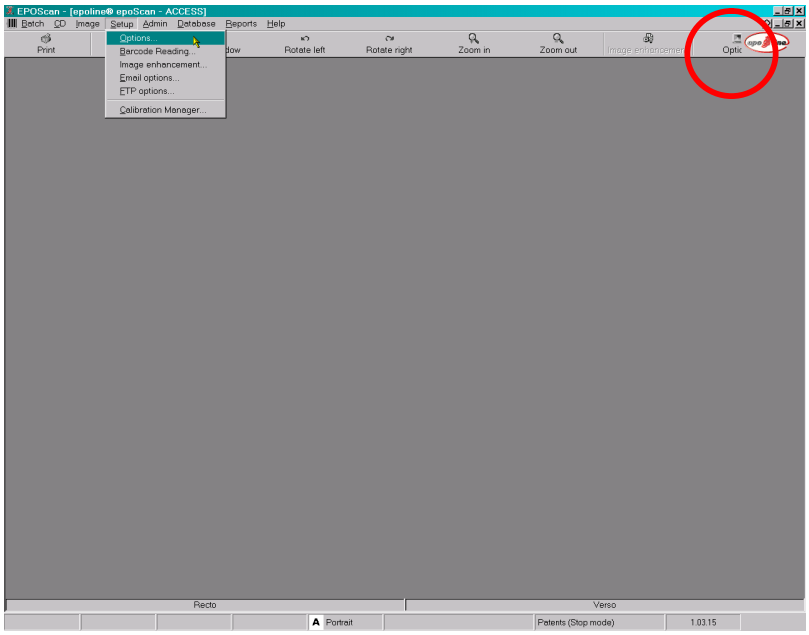


Figure 60: setup screen: options

11.1 Options

11.1.1 General

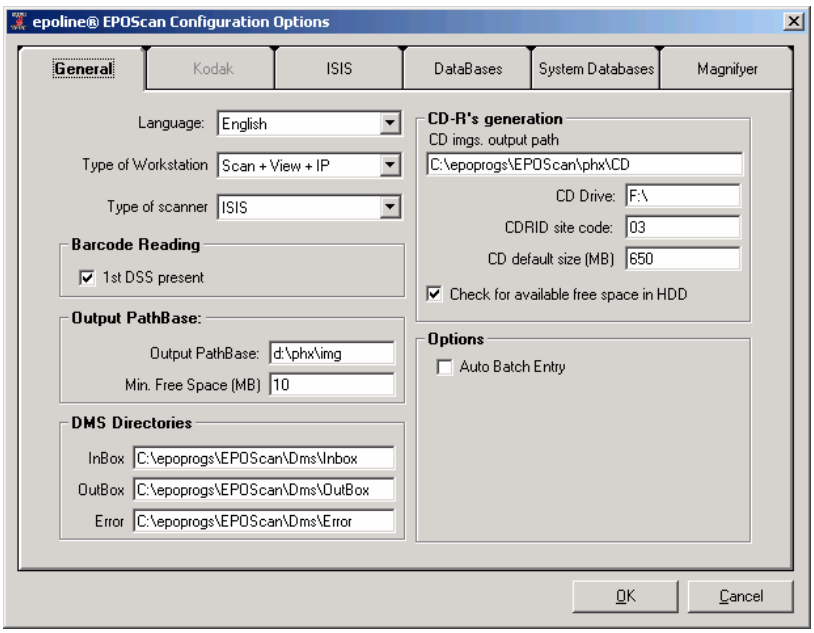


Figure 61: configuration options: general

Configuration options: general		
Item	**Explanation**	**Setting**
Language	GUI language	English or Spanish
Type of Workstation	Related to installed licenses and purpose of workstation. See 1.1	Scanning, CD generation, Quality Control
Type of Scanner	ISIS: ISIS driver used. See list under ISIS Tab, Select scanner to select/Setup your scanner. KODAK: Kodak Twain drivers used. See list under Kodak Tab	ISIS or Kodak
Barcode Reading	First Document Separator Sheet (DSS) present.	Checked Yes/No
Auto Batch	If checked the Batch/Scan window will be automatically opened after completion of a batch.	Checked Yes/No
DMS Directories	INBOX – Directory where Index files are stored. OUTBOX– Directory where results files are stored. ERROR: DMS file containing error(s) will be moved here. (E.g. Duplex batch with an odd number of pages)	Drive:\DMS\Inbox Drive:\DMS\Outbox Drive:\DMS\Error
Output PathBase	Directory where images are stored directly after scanning. Directory has to be created manually if not using the directory installed during installation.	Drive:\Images
Min. Free Space (MB)	Minimum required size to store images. If size is less than indicated a warning will be given.	Size in MB
CD-R's generation	*CD imgs. Output path* - Directory where the CD Image is stored. Directory has to be created manually if not using the directory installed during installation. *CD drive* – Location of CD for Quality Check *CDRID site code* – Site Code is part of CD number. See CD generation *CD Default size* – Maximum size of CD/DVD. Prevents creating a CD/DVD Image larger than the allowed CD size *Check for available free space in HDD*	Drive:\CD Drive letter Two digits Size in MB Checked Yes/No

11.1.2 Kodak

If Kodak is selected as **Type of scanner** then the Kodak tab will become available.

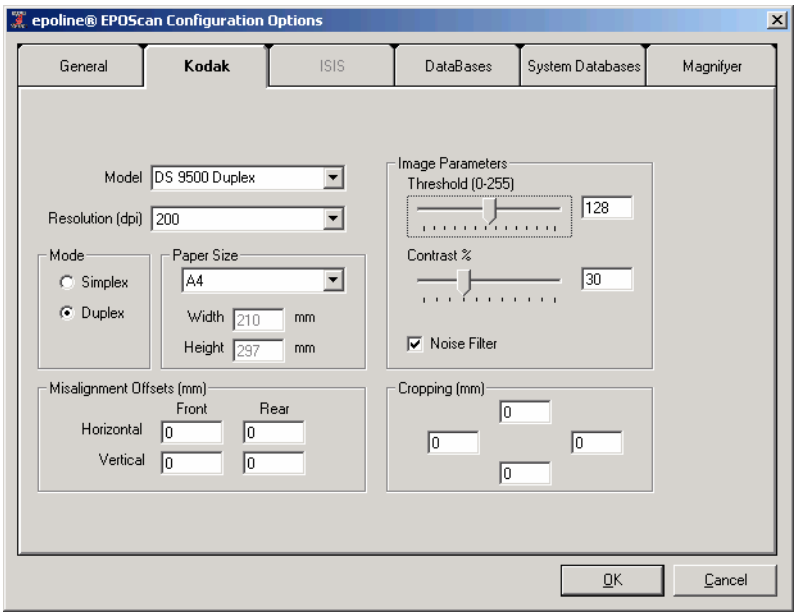


Figure 62: configuration options: Kodak

epoScan supports Twain drivers for large Kodak production scanners such as the 5500, 7500 and 9500. The scanner and configure scanner specific settings can be selected.

11.1.3 ISIS

If ISIS® is selected as **Type of scanner** then the ISIS tab will become available.

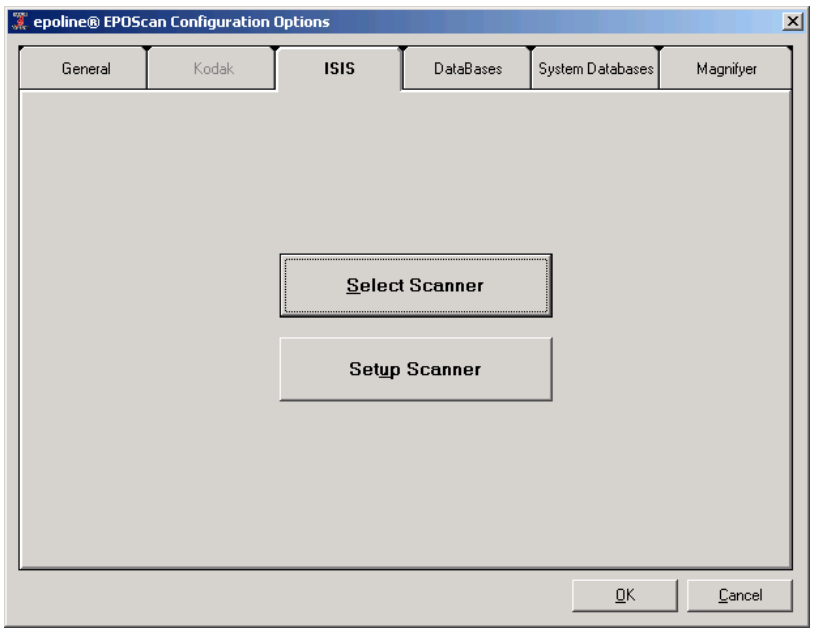


Figure 63: configuration options: ISIS

epoScan is delivered with PIXTOOL® licenses required to control the scanning process. ISIS® drivers are also available to allow epoScan to communicate with the scanner. Select ISIS® followed by Select Scanner after which the scanner which has been installed can be configured.

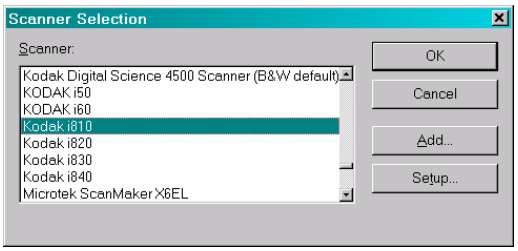


Figure 64: scanner selection

It is better to select the scanner setting later. Please refer to section 11.2.1 Scanner configuration.

The latest Kodak models (I series) are delivered with ISIS® drivers.

11.1.4 Databases

These are set up by the systems administrator. If this needs to be changed, ask the systems administrator.

11.1.5 Magnifier

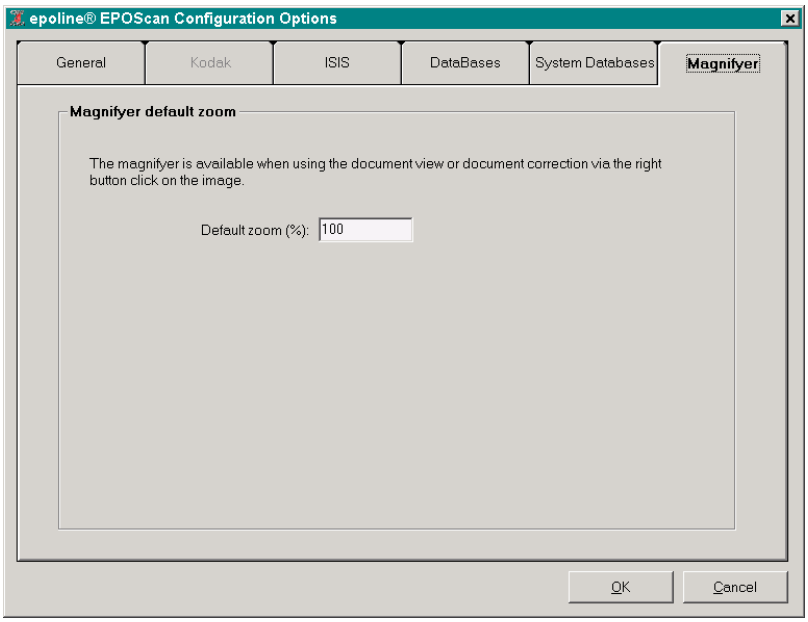


Figure 65: magnifyer default zoom

The **Default zoom (%)** can be changed in this field. The magnifier is used during image viewing and document correction.

11.2 Barcode reading

Select Setup à Barcode Reading. The Barcode Reader Configuration screen will be displayed.

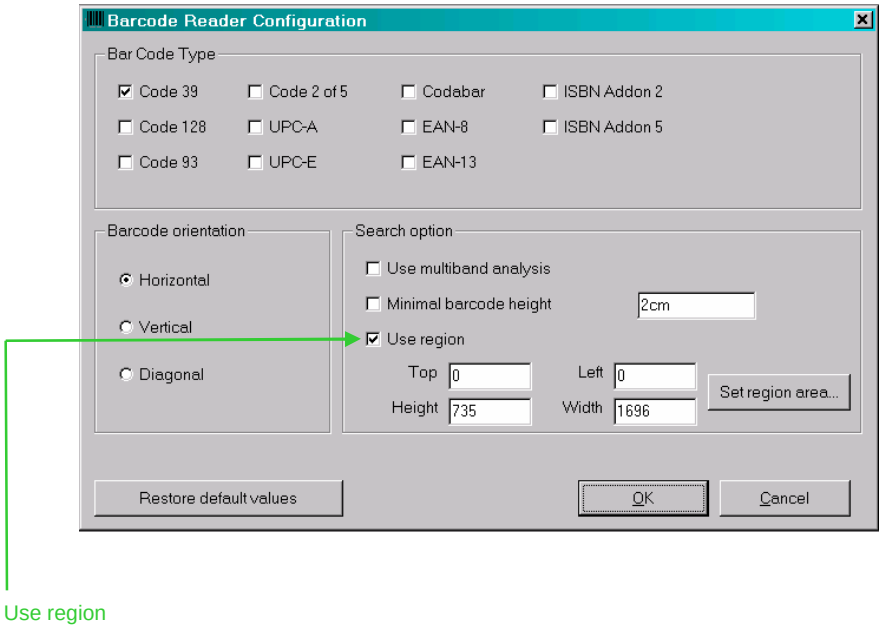


Figure 66: barcode reader configuration

In this window the region, where barcodes are located on the different barcode sheets, can be configured. To assist in this process a previously scanned barcode sheet can be selected to define this area. The size of the region will have an influence on the barcode reading performance and slows down the scanning process.

11.2.1 Scanner configuration

The scanner which is connected to a single PC or on several machines connected to a central server must be configured.

Ensure that the ASPI32 drivers have been installed

Select Setup à Options in the main window

Select Type of Scanner:

- If scanning with an ISIS® driver select ISIS® and then select the ISIS® Tab
- If scanning with a Kodak Twain driver select Kodak and then select the Kodak Tab.

To setup the chosen scanner

- select Setup
- select Default Paper size à A4
- click on **OK** twice
- select Setup Scanner.

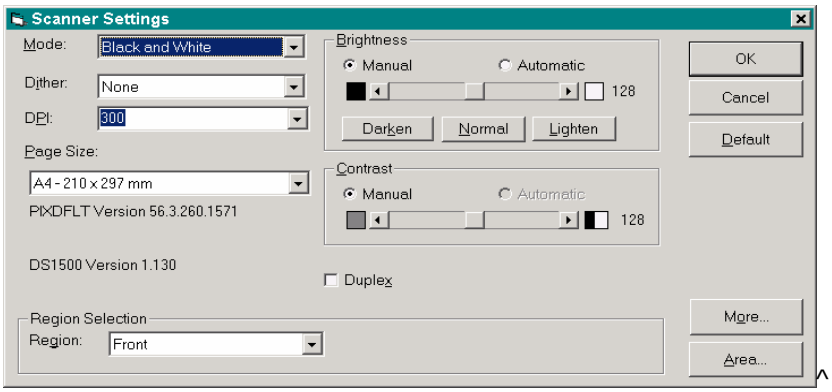


Figure 67: scanner settings

For Mode Black and white:

- select Mode: Black and White.
  - select dither:
    - none.
  - select DPI:
    - 300.
  - select Paper Size:
    - A4 (210 x 297 mm).
  - click on **More**

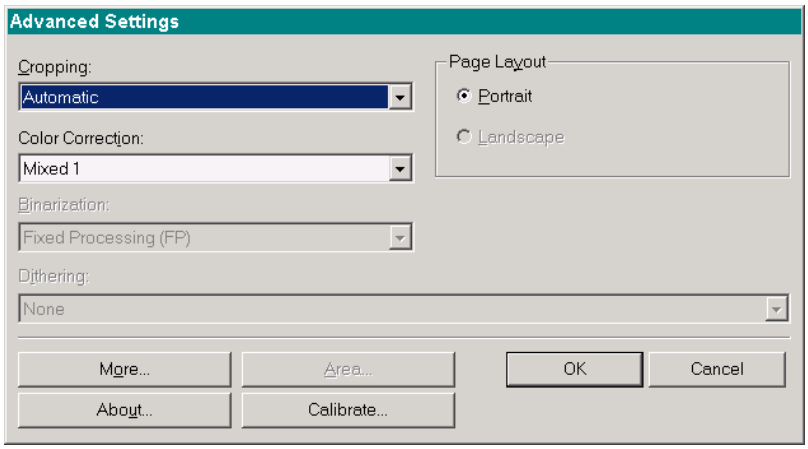


Figure 68: advanced settings colour

  - select automatic cropping
  - click on **OK.**

For Mode Color 24 bits:

- select Mode: color 24 bits.
  - select dither:
    - none.
  - select DPI:
    - 300.
  - select Paper Size:
    - A4 (210 x 297 mm).
  - click on **More**

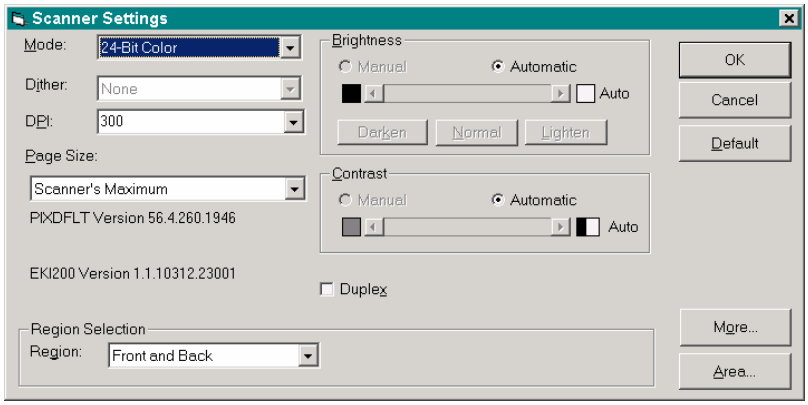


Figure 69: advanced settings black and white

- select automatic cropping
- click on **OK.**

For Mode color:

- select Mode: Black and White.
  - select dither:
    - none.
  - select DPI:
    - 300.
  - select Paper Size:
    - A4 (210 x 297 mm).
  - click on **More**

    The advanced settings colour are displayed

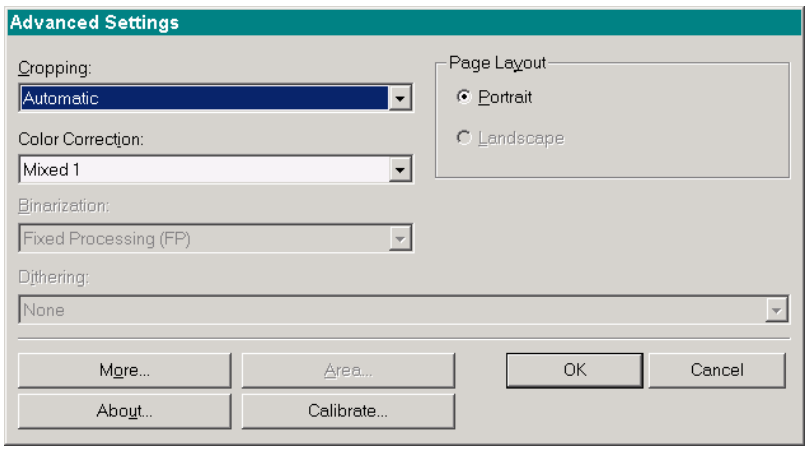


Figure 70: advanced settings black and white

- select automatic cropping
- click on **OK.**

11.2.2 For a Kodak scanner

Kodak Twain drivers are available for medium/high volume scanners, such as the 5500, 7500, and 9500 series.

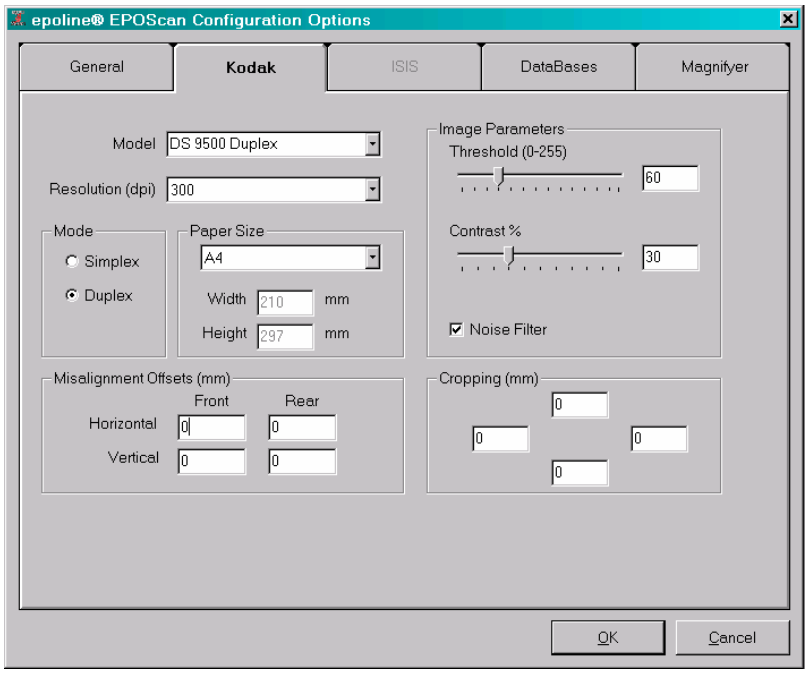


Figure 71: Kodak scanner configuration

To configure settings

- select Model
- select Resolution:
  - 300 DPI
- select Paper Size:
  - A4.

11.3 Image enhancement

During or after scanning the need to improve image quality may become apparent. With image enhancement epoScan provides a range of tools which can improve the quality of scanned images.

Note

Please bear in mind that every applied enhancement takes computer/scanner processing time and will slow down the overall scanning process.

Image enhancement implies some modification of the image. Test the settings first to ensure that they do not cause any loss of data, such as faint text.

Never perform the same enhancement twice. It can produce very strange results.

In the case of colour scanning Black Overscan Removal and Deskew2 have to be used, otherwise the pages will be produced in black and white.

epoScan scan offers the possibility to enhance the quality of images , for example de-skew and black border removal, by applying certain image enhancements. Enhancement of images can be executed in three different phases of the process:

- during scanning
- during CD generation
- as a separate process.

For the first two options the user is required to select which enhancement options they intend to apply. Select Image à Batch Image Enhancement à Setup in the main window.

The **Setup of Image Enhancement** screen is displayed. Click on **OK**.

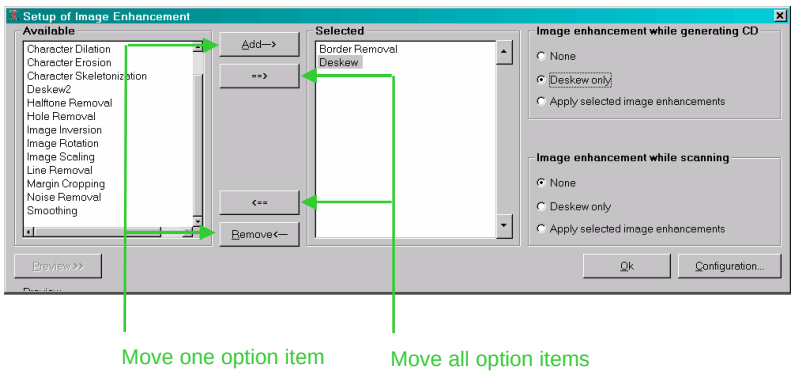


Figure 72: setup of image enhancement

Note

EPO experience has shown that the order of the options is important; the options selected in the window above, Border Removal and Deskew, are normally used and added in that order.

The image enhancement configuration screen is displayed.

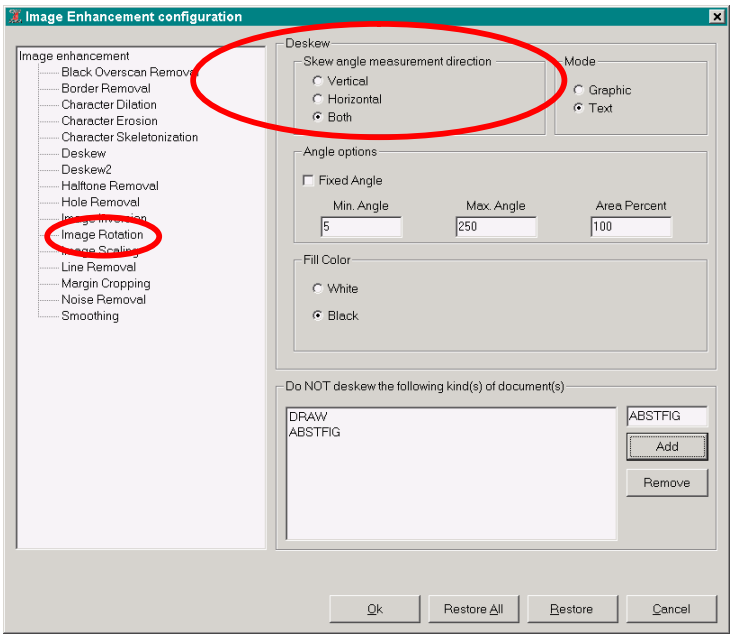


Figure 73: image enhancement configuration

When de-skewing pages, most image enhancement tools will in some cases not properly deskew drawings. To prevent this the EPO has chosen to exclude drawings from deskewing.

Click on **Image Rotation**.

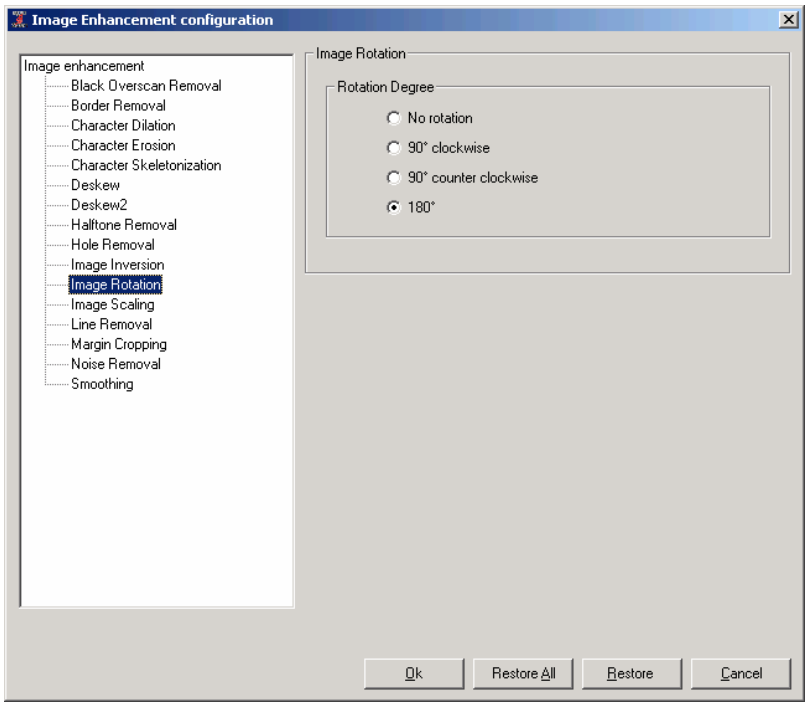


Figure 74: image rotation

Rotation Degree should be set to 180° by clicking on that radio button. This allows rotating individual pages during Document Correction, which are scanned up side down.

11.3.1 Image enhancement preview

To preview the results of the selected image enhancement options select Image à Batch Image Enhancement à Select a Batch à Select Setup à Select Preview in the main Window. In the left window the image is displayed as scanned and in the right window the image is displayed after enhancement.

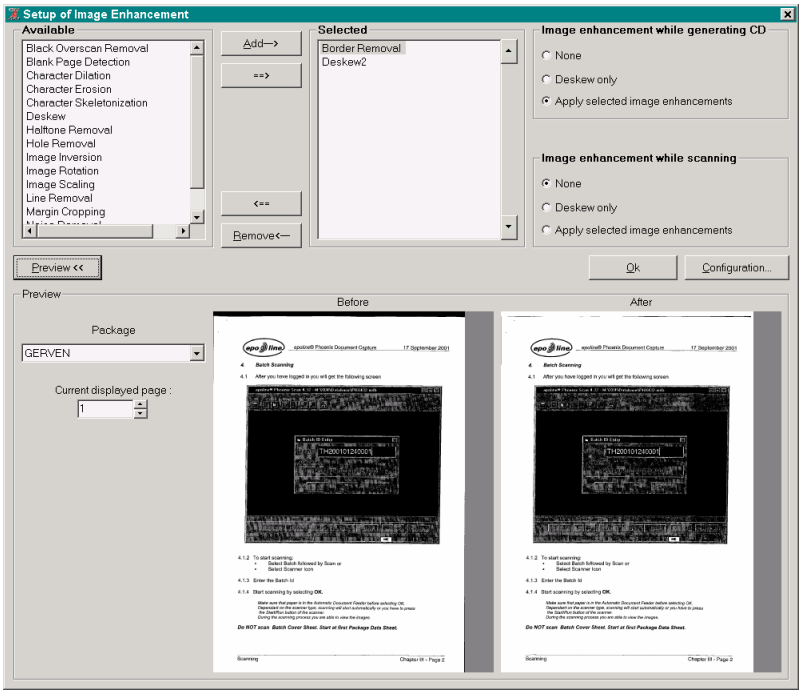


Figure 75: image enhancement setup

11.3.2 While scanning

The decision to apply image enhancement during scanning is dependent on several factors such as

- the capacity of the scan work station
- the performance of scan work station
- the type of scanner
- the page orientation (rotation) selected
- the type of documents (simplex or duplex)

because all these factors influence and can slow down the scan process.

Select Batch à Scan à Setup in the main window and select by clicking on the radio buttons.

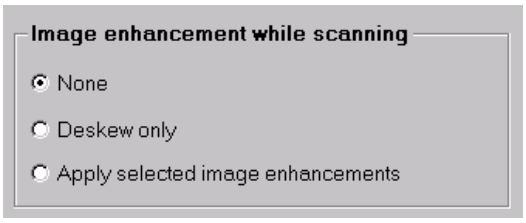


Figure 76: image enhancement while scanning

11.3.3 While generating CD

If it is decided to execute Image Enhancement during CD generation (only applicable for Application Batches) select this option on the General settings window.

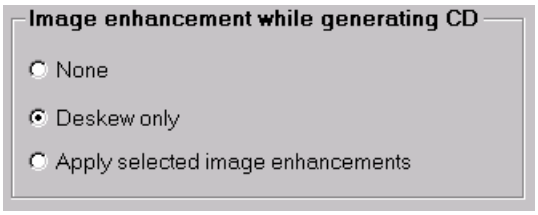


Figure 77: image enhancement while generating CD

11.3.4 As a separate process

In the main Window select Image à Batch Image Enhancement à Select Batch(es) à Select OK.

Image enhancement will now be applied to all images of the selected batches/packages.

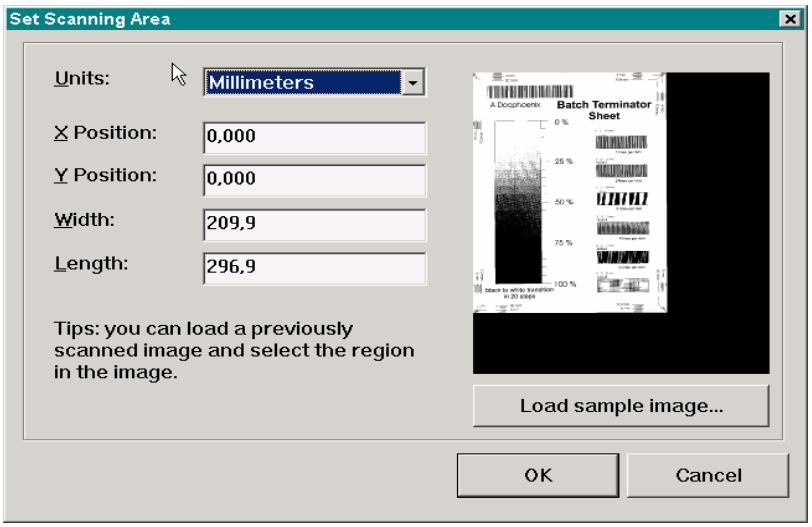


Figure 78: set scanning area

Use the batch terminator sheet as a calibration sheet.

12 Document correction

Corrections can be made at page level. Pages can be

- rotated
- replaced
- inserted

and pages out of order can be dragged to the right position.

To access document correction, select the **Batch / List** menu, select the **batch ID** that needs correcting, and then click on Go to **Document Correction**.

Select the **Batch /Scan** menu, enter the batch ID that needs correcting, and click on **Correct**.

At the end of scanning in **non stop mode** click on **Go to Document Correction** in the result list.

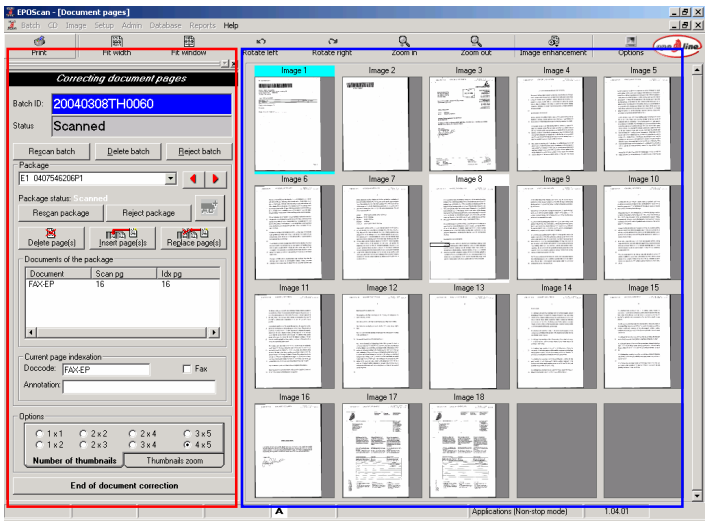


Figure 79: result list

The thumbnails of the scanned images are displayed on the right hand side. The first page of each package is framed in blue. To select an image, click on the corresponding thumbnail. The currently selected thumbnail is framed in white.

The control commands are on the left hand side.

To display a full size image, double click on the image. Double clicking on the image again will display the previous thumbnail display.

12.1 Magnifying images

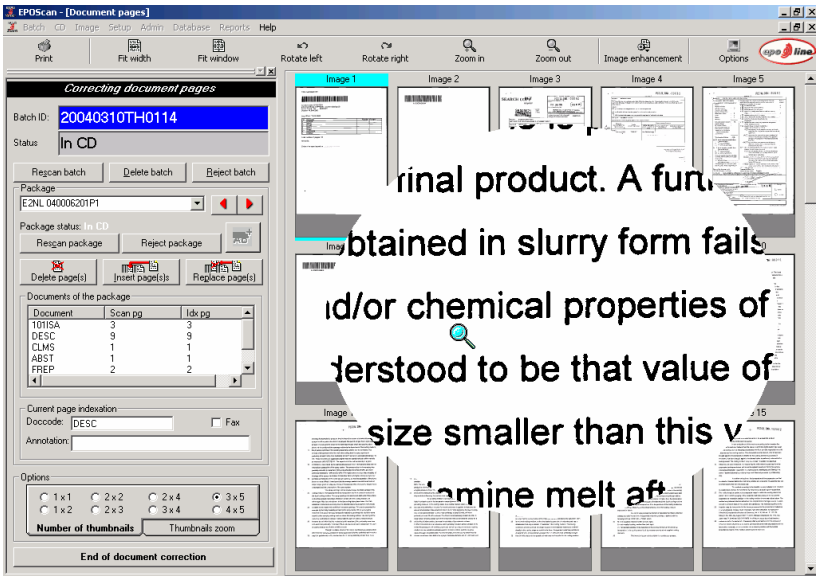


Figure 80: magnifying images

Right click on the display of the image. While keeping right key mouse pressed, move to the area to be magnified.

12.2 Modifying display options

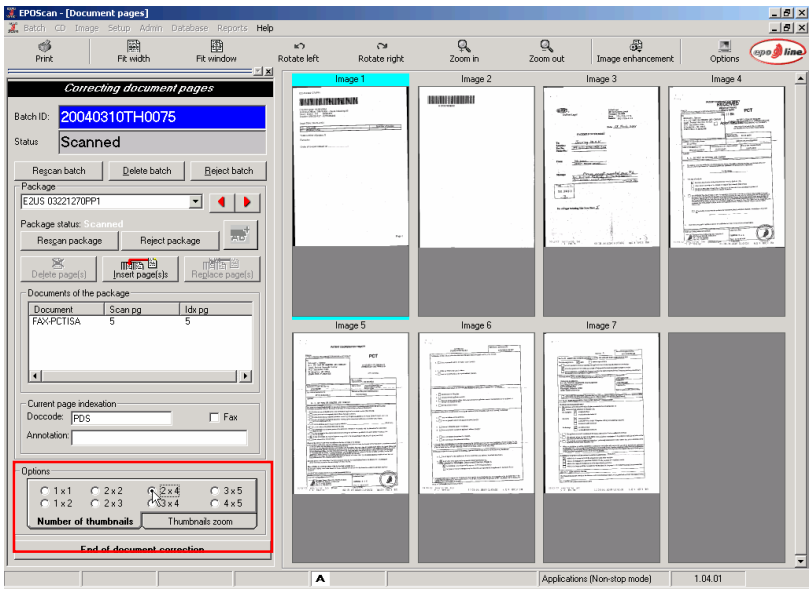


Figure 81: magnifying images

Select the **Number of thumbnails** tab and click on the required radio button values (3 x 5 means three lines of five thumbnails each).

Select the **Thumbnails zoom** tab.

Click on **Fit window** if it is expected that the height of the displayed page will fit in the whole height of the screen.

Click on **Fit width** if it is expected that the width of the displayed page fits with the whole width of the screen.

12.3 Correcting page order

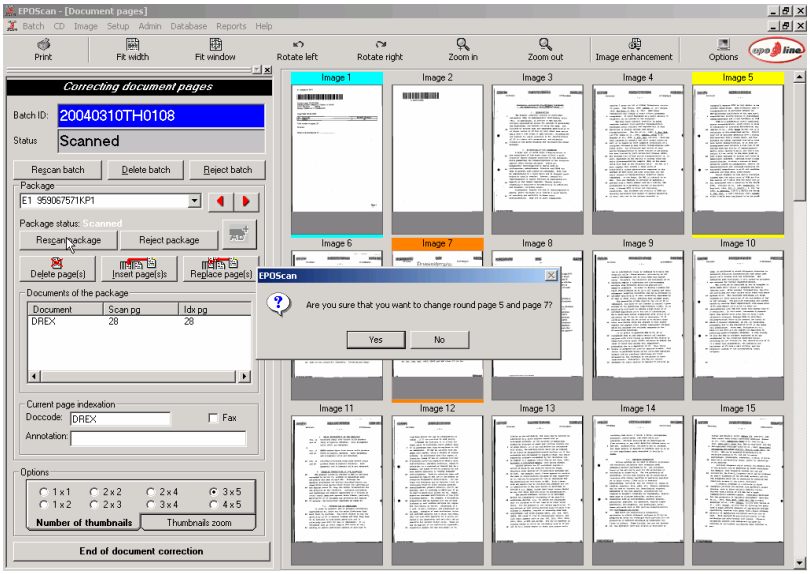


Figure 82: moving a page

Click on the page which is in the incorrect order, hold the mouse button down, and drag the page to the correct position. Release the mouse button to drop the page. A dialogue box pops up.

Note

A Package Data Sheet (PDS) can not be moved.

Click on **Yes**. The pages are swapped.

12.4 Page deletion, insertion, and replacement

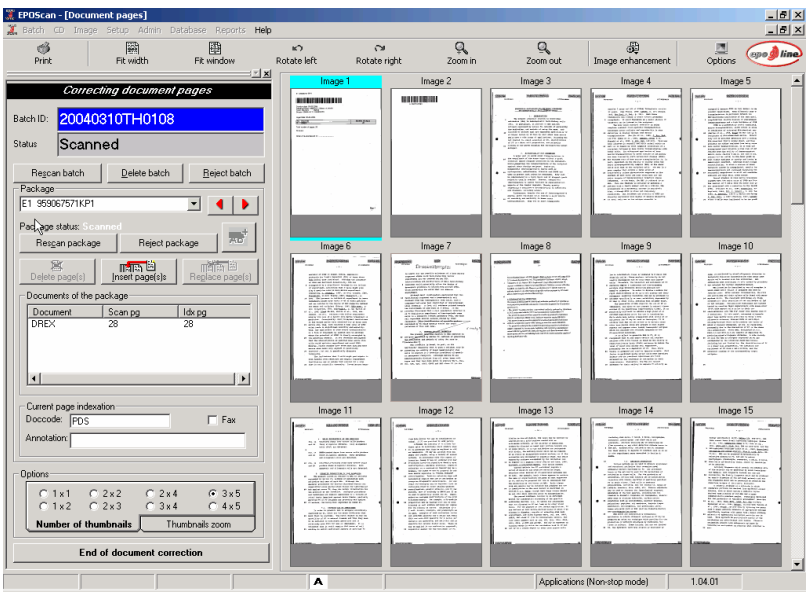


Figure 83: page deletion, insertion, and replacement

12.4.1 Deleting pages

Click on the page(s) to be deleted, select **Delete page(s)** and confirm message.

12.4.2 Replacing pages

Click on the page(s) to be replaced, select **Replace page(s)** and confirm message.

12.4.3 Inserting pages

Put page(s) to be inserted in the feeder, select **Insert page(s)** button, hold the left mouse button and move the page cursor in between pages where new page(s) must be inserted, then release the left mouse button to confirm the dialogue.

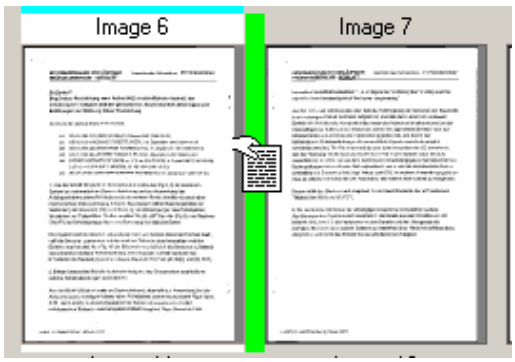


Figure 84: inserting pages

12.5 Correcting inverted images

Select the page, by clicking on it, select **Image Enhancement** or **Rotate** in the main menu bar. If the page is not correctly rotated then the function has not been properly configured in Image Enhancement setup.

12.6 Enhancing images

Select the page, by clicking on it, and click on the **Image enhancement** button. Select an image enhancement option from the dropdown list.

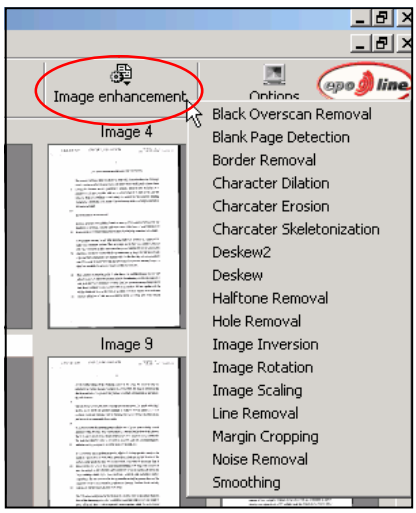


Figure 85: image enhancement options

12.6.1 Enhancement table

The enhancement table explains what each of the enhancements actually do. Please also see **Help** within epoScan.

Enhancements	
Enhancement	**Action**
Black Overscan Removal	Removes the black area created when the page scanned is shorter than the current setting (for example,. A4 when US legal is set).
Boder Removal	Removes black borders which appear when the scanned area is larger than the paper size (normal since it's better than an area that is too small).
Character Dilation	Makes characters appear fatter than they are (can help legibility, OCR etc.).
Character Erosion	Makes characters thinner (can help legibility, OCR etc.).
Character Skeletonization	Reduces characters to one pixel wide.
Deskew	Straightens images up. Note that the software looks for reference lines which it assumes are vertical and horizontal. Certain PHOENIX Document Codes can be excluded from this process if they are likely to contain other lines which are not vertical or horizontal (for example, drawings).
Deskew2	Same as above but with performance enhancements
Halftone Removal	Removes halftones such as a coloured background so that clearer text is obtained
Hole Removal	Looks for black circles and removes them. These are usually punched holes but they may be badly reproduced letter "e" s!
Image Inversion	Turns black to white and vice versa
Image Rotation	Rotates images by set amounts
Image Scaling	Enlarges smaller pages to fill the image at the current setting
Line Removal	Removes lines (such as lines and tables on forms) . Can help OCR processes
Margin Cropping	Removes any unused white border and scales up the image to fit
Noise Removal	Removes speckles (speckles can be reduced by keeping the glass clean)
Smoothing	Smooths out the edges of characters by filling in gaps or removing protrusions

12.6.2 Tuning enhancement parameters

Each available enhancement contains it owns parameters. These must be modified in order to achieve the required result.

To modify parameters of an image enhancement option

- select the "Image enhancement" item in the list
- different parameters of enhancement option are displayed
- set values according to the process to be performed.

Note that some information may be given at the bottom of screen. Information may vary according cursor location. Refer to that information to set parameters.

Once the parameters have been modified, they will be saved and the next time EPOScan is used these parameters will be used for the image enhancement.

If the user wants to come back to the original configuration (default parameters which seem to be optimised during epoScan test), click on **Restore All**. All the default parameters of all the enhancement options are replaced.

To restore the default values of only one enhancement option, click on the option in the list and then click on the **Restore** button.

Click on the **OK** button once all the required image enhancement option have been performed. This will modify the parameters.

Note :

An A4 page is about 2480x3507 pixels at 300 dpi resolution.

12.6.3 Batch image enhancement mode

If it has been decided not to perform Image Enhancement during scanning or CD generation, a separate batch image enhancement function is available in the Image menu.

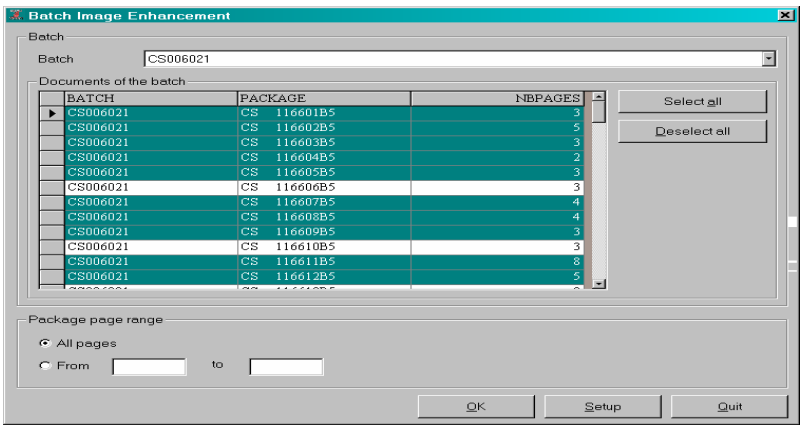


Figure 86: batch image enhancement

Click on the batch or package where image enhancement is to be applied. Clicking on one package will select all packages belonging to the same batch.

The user can select several batches whilst keeping the CTRL key pressed.

Click on the **All pages** radio button in **Package page range**, or enter a range of pages to apply image enhancement too.

12.6.4 Interactive image enhancement

Interactive image enhancement is available when page(s) is (are) displayed i.e. when processing manual indexing, when checking indexing, when correcting scanning or when viewing pages.

Image enhancement process is performed using the current image enhancement values. These values cannot be changed at that time but must be set prior to the launch of that process.

To enhance an image

- select one page by clicking once onto the corresponding thumbnail (the selected page is framed in white).
- select the **Enhancement** icon from the toolbar to display list of enhancement process.
- select the menu item that matches the image enhancement process to be performed on the selected image.

12.7 Ending the correction process

Click on the End of document correction button. Control of indexing against current scanning results is automatically performed.

The **Checking indexing results screen** gives the result of the control of the database content and the pre-indexing file.

Click

- on the **Correction** button to go back to the correction process
- on the **Write** result to file button to export that report to HTML or ASCII text file
- on the **Exit** button to end the correction.

13 CD-ROM creation

After successfully creating batches, the images must be written to a CD-ROM.

During scanning, the images are stored on the scan server, in the directory indicated in the general settings of the scanning application (Output PathBase), for example, M:\X04\IMG.

During CD generation all images are de-skewed, checked for quality and copied to the directory indicated in the general settings (CDR imgs output path), for example, D:\OUTPUT.

13.1 CD generation

As part of the CD generation process, a Systematic Quality Control (SQC) takes place in order to check the quality of the images. The system saves the quality control status of each package, batch and CD. This status can be:

- Unchecked
- OK
- Failed.

Choose **CD** in the main window of the scanning application followed by **Generate** to open the CD generation window.

A CDR-ID is generated and displayed. Part of the CDR-ID is the location where scanning takes place.

The CDR-ID format is YYYY MM DD LL SN, for example 200101309002.

CDR-ID format	
Format	**Meaning**
YYYY	Year, four digits
MM	Month, two digits
DD	Day, two digits
LL	Location indicator, two digits; this is set as the CDRID site code in the epoScan options.
SN	Sequential number.

Go to the **Available Batches** panel. Select the batches that that it is intended to generate. Hold down the SHIFT key to select more than one batch. The **Size of selected batch(es)** indicator is there to help the user not to exceed the maximum available size of the CD/DVD

Choose **Add**.

The status of the selected batches changes to SelforGen. This prevents another operator, using another workstation, from generating the same set of batches.

To remove batches that have already been added, select them in the In the **Selected Batches** panel and click on **Remove**.

Click on **Go**.

The generation process starts and the **Generate CD** screen is displayed.

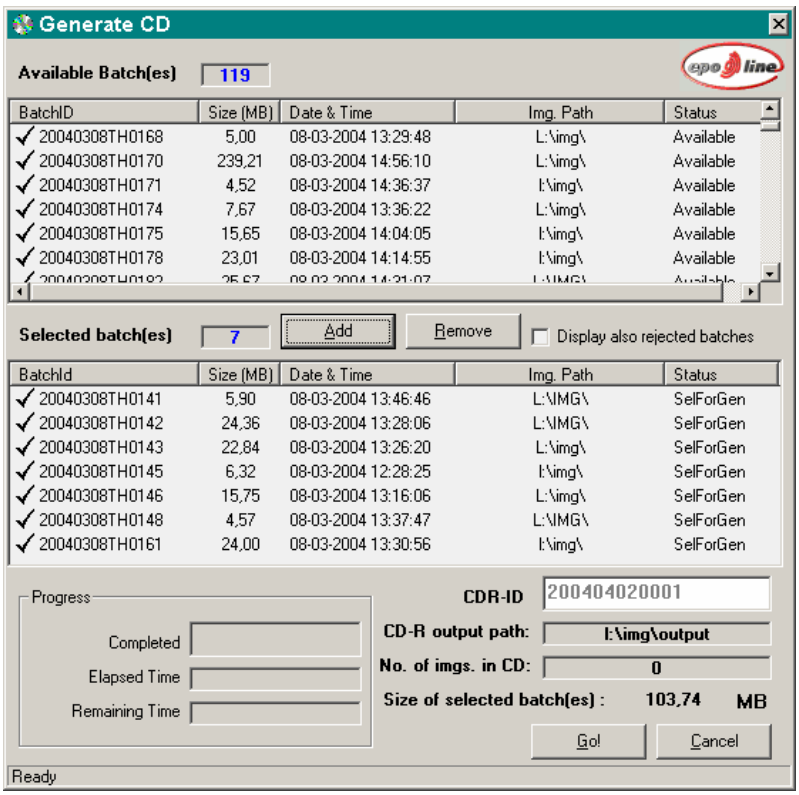


Figure 87: generate cd

13.2 CD generation problems

13.2.1 Page count mismatch

During CD generation the application compares the number of pages scanned with the number of images available on the server. If there is mismatch, the mismatch error is displayed:

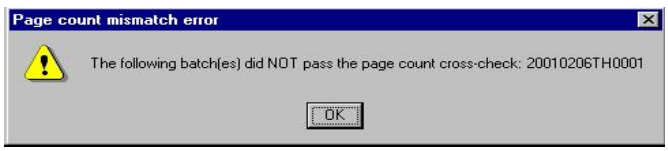


Figure 88: mismatch error

Click on **OK**, and the generation process continues.

The error batch(es) are not generated. They are recorded as partially scanned and can be found in the Partially Scanned Batches report.

To correct partially scanned batches see chapter 10 Troubleshooting.

In the troubleshooting window, package(s) causing a generation problem are marked as ERROR packages.

13.2.2 More than one operator

If there are, for example, two operators, using different workstations, and both select the same batch(es) at the same time, then one operator will, when selecting **ADD**, get a warning informing them that the same batch(es) have been selected by another user.

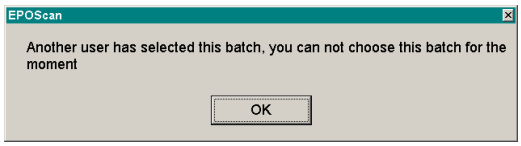


Figure 89: multiple users

After clicking **OK** the operator can decide to close CD generation in order to refresh the available batch list or select the next available batches.

Batches can be removed from the **Selected batches** window by selecting them and pressing. **REMOVE.**

Also, while selecting batches, both operators are likely to be using the same CDR-ID. If this is the case the CD already exists warning appears after selecting **GO** to start CD generation process.

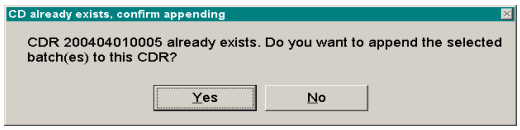


Figure 90: cd already exists

Selecting **No** will automatically generate the selected batches using the next available CDR-ID. The problem with choosing **Yes** to append the batches is that each operator only sees their own volume.

Selecting **GO** starts the generation process.

13.2.3 Batch status modification

If the scanning operator reports that a batch is no longer available for CD generation this is due the fact that the status of this batch is such that it no longer appears in the list of batches available for generation.

To correct this problem an operator with administration rights can correct or change the status of affected batches by resetting the status back to - 1 - (Scanned).

To do this the administrator has to go to the **Main** window and select **Batch status modification** from the Database tab drop-down menu.

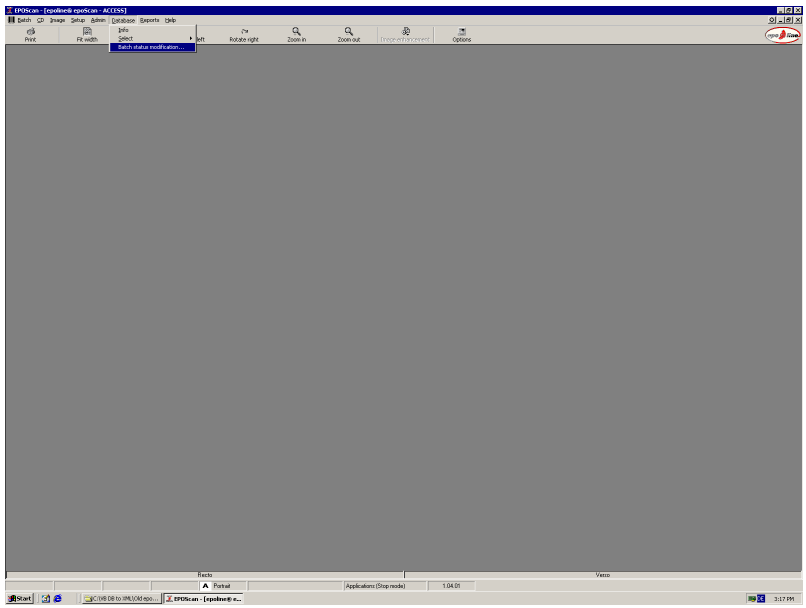


Figure 91: main window

The next window is displayed with the batches in status 9 (CurrentStatus). Another status can be selected if the batches sought are not in the list.

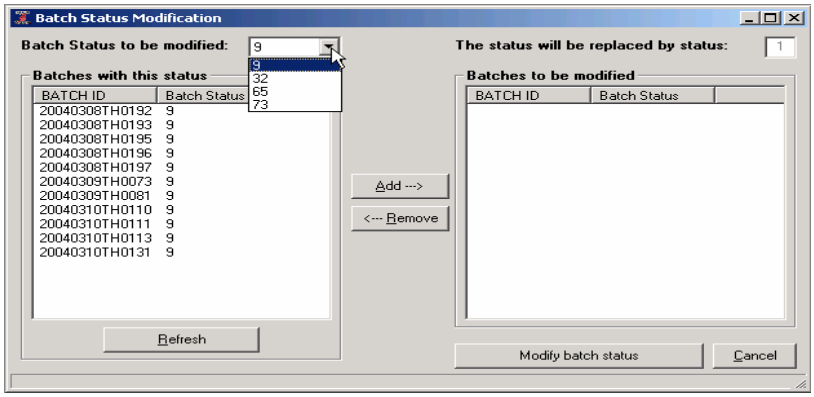


Figure 92: batches with this status

Select one or more batches from **Batches with this status** and click on **Add** to place them in **Batches to be modified.**

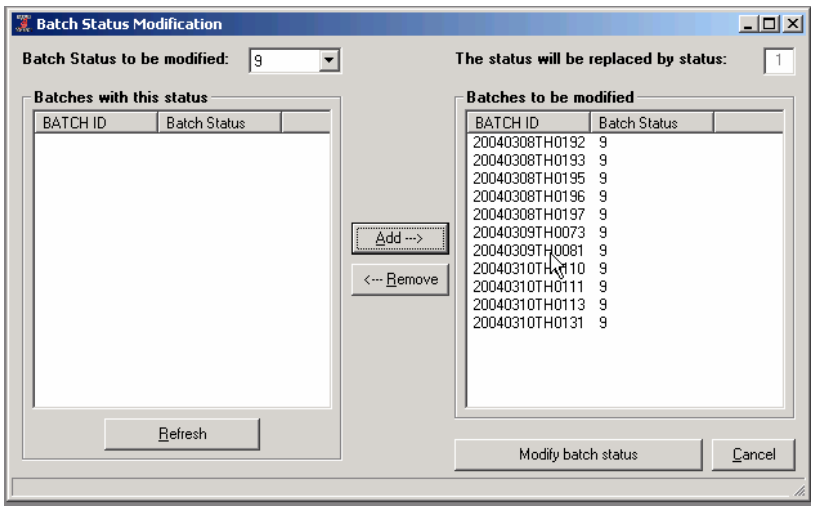


Figure 93: batches to be modified

Click on **Modify batch status**. Batches will be available again for CD generation.

13.3 CD-ROM writing

Open the application used to write CDs. In these examples Easy CD Creator was used. When the correct CD type is selected, for example DATA CD, the CD creator window is opened.

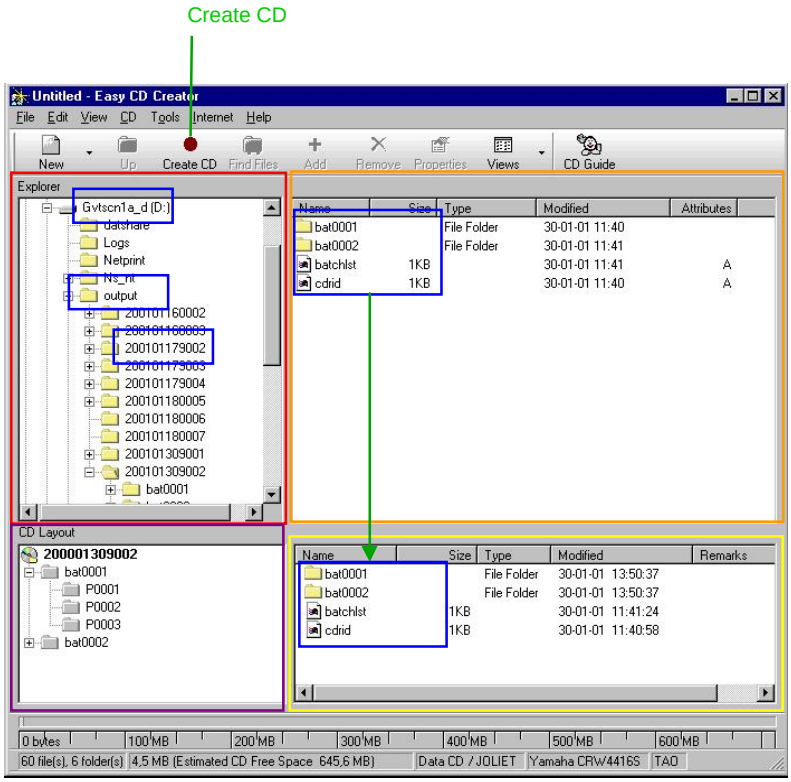


Figure 94: easy cd creator example

Select drive and directory in the Explorer panel, for example, D:\OUTPUT. Select CDR-ID from the list, for example, 200101309002, and double-click on it.

The number of batches, Batch list and CDR-ID are displayed in the top right window. Select all items by activating the window and pressing **CTRL+A**. Hold down the left mouse button, and drag and drop the items in the bottom right window.

Change the CDR-ID In the CD layout window.

Click on **Create CD**.

Note:

If the CD-ROM has to be shipped to another location it is strongly recommended that a copy is created, and keep it until notified that the CD-ROM has been successfully received and loaded.

13.4 Quality control

13.4.1 Overview

During generation images are systematically checked for Tag(ged) Image File Format (TIFF) errors. The quality control status is saved for each package, batch and CD. It can be:

- Unchecked
- OK
- Failed.

Quality control status	
Code	**Meaning**
QCS-HD	Quality Control Systematic Hard Disk
QCI-HD	Quality Control Interactive Hard Disk
QCS-CD	Quality Control Systematic CD
QCI-CD	Quality Control Interactive CD

Verification is done for all (100%) generated images. The two verification tests are

- that the image is a valid TIFF file
- that the image size and resolution are within the specifications (A4, 300 dpi).

13.4.2 CD-ROM quality control

It is possible to check the quality of the images after they have been written to a CD-ROM,

The quality check can be executed in three ways:

- Systematic
  - the application will check all images on the selected CD-ROM
- Interactive
  - the operator can select the images he wants to check.
- Random:
  - the software randomly selects images from which the operator can select the images to be rejected.

If the image does not pass the quality control validation, it should not be loaded. It is then necessary to re-scan the affected packages and regenerate the CD.

Choose **CD** In the main scan window followed by clicking on **Quality Control**.

Choose either **Systematic, Interactive** or **Random**.

13.4.3 Systematic Quality Control

If Systematic is chosen

- insert the CD in the drive.
- enter the pathname of the CD drive.
- click on **Apply**.
- click on **Start Process**.

Batches/Packages not passing the check are marked as Failed and recorded in the LOGS file. By viewing the report log it is possible to find the Batch ID and Package ID of the faulty images.

To correct the images re-scan them using Troubleshooting (see chapter 10 Troubleshooting).

Note

If the Show Images option is ticked, the images are shown in the space at the bottom of the window during the verification process.

Reported errors:

- Invalid TIFF size:
  - image contains a lot of black
- Invalid Horizontal size
  - image has black borders.

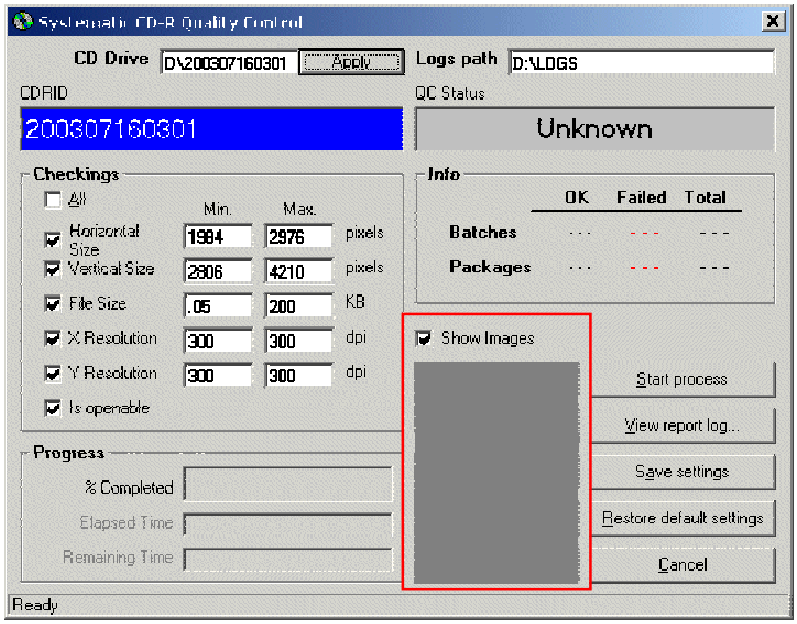


Figure 95: systematic cd-r quality control

If the show images option is ticked the images will be shown in the small window, during the verification process.

A report log is generated during the quality control and can be viewed by selecting the View report log.

Note

If required the Systematic Quality Control process can be repeated.

13.4.4 Interactive Quality Control

The quality of each image of a create CD volume can be controlled interactively.

Go to the menu **CD / Quality Control / Interactive** in Image Explorer.

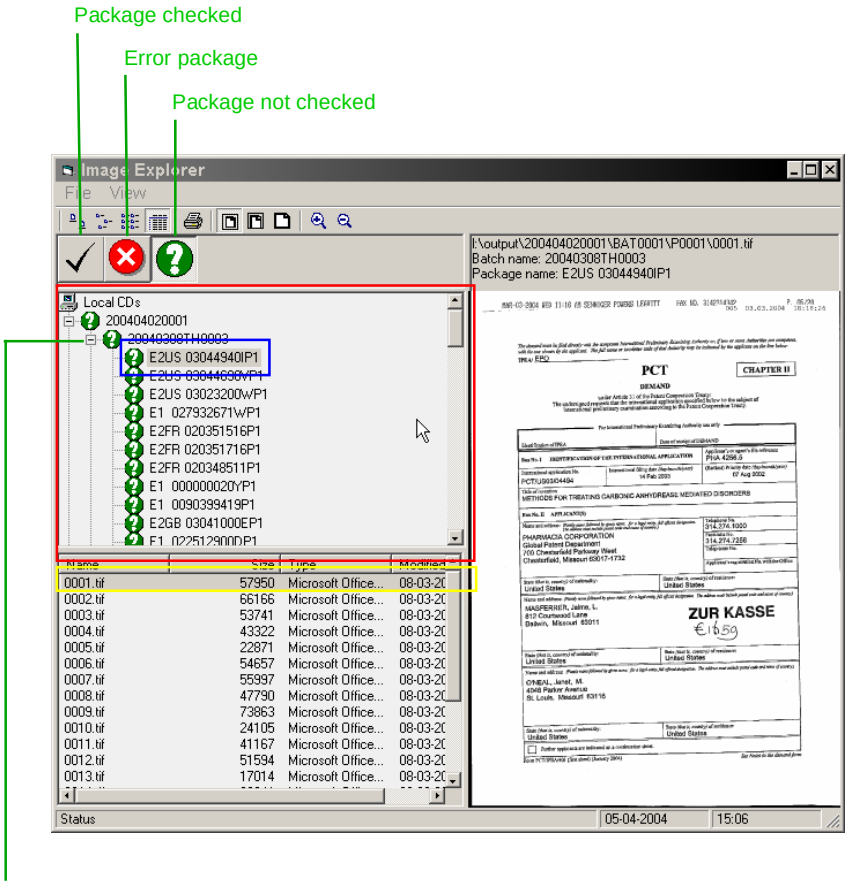


Figure 96: image explorer

A list of available CDs is displayed.

- Select a CD . Application retrieves CD information.
- Select + to open Batches
- Select Batch to display the Batch Terminator Sheet
- Select + to open Packages
- Select package to open list of images
- Select image (0001.tif) in the lower window to view the image(s).

The user can navigate through pages with **Up** and **Down** arrow keys.

Batches/Packages not passing the check will be marked as **Failed** and recorded in the LOGS file. It It is possible to find out the batch and package id of the faulty images by viewing the report log.

Faulty images must be rescanned.

13.4.5 Random sample

If Random Sample is selected, a list of available CD volumes or the created CD in the CD drive is displayed.

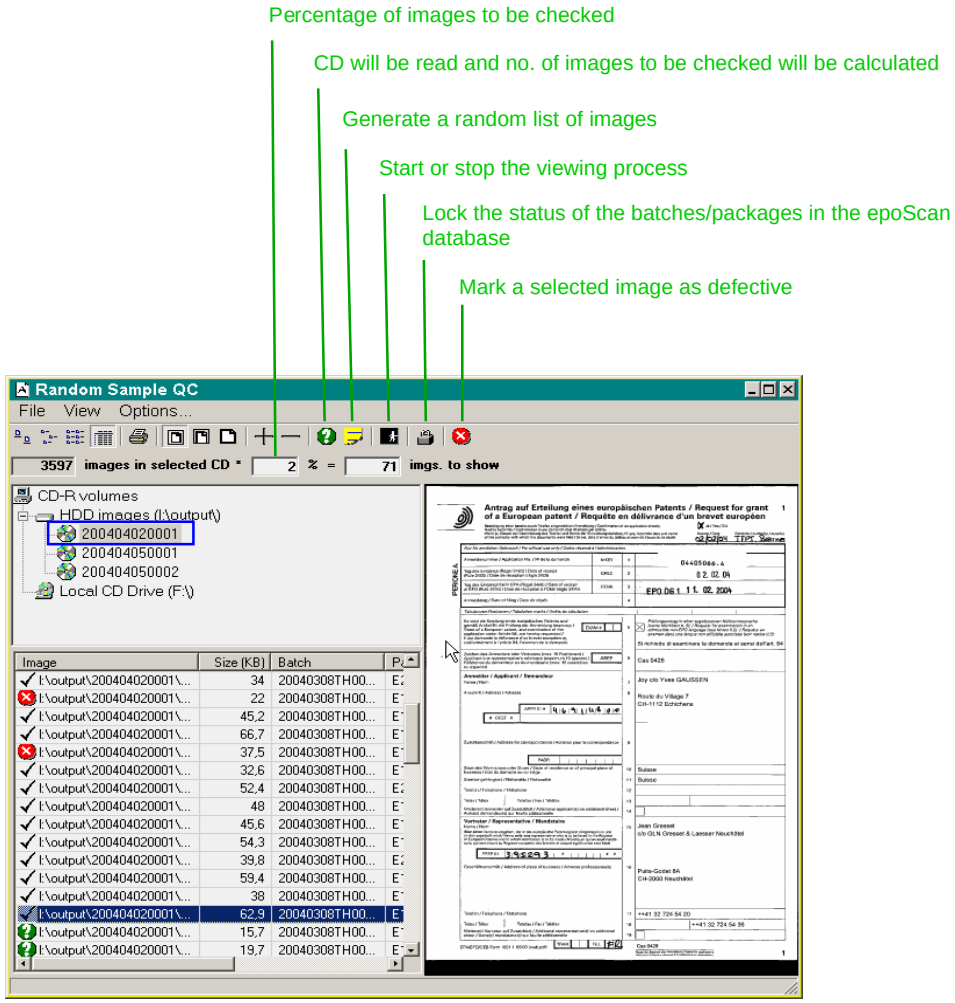


Figure 97: random sample

Select the CD volume.

Enter the percentage of images to be checked.

Press the button.The CD will be read and the number of images to checked will be calculated.

Click on the button to generate a list of images selected randomly by the software. These images are listed at the bottom. Before starting the viewing process the delay time can be set between switching images in the menu item Options (default 250 ms, more useful is 500 ms).

To start viewing process click on the or use the space bar. If a bad quality image observed, stop by pressing the **spacebar**.

The arrow key can be used to navigate backwards.

To mark an image as defective use the button or use the Esc key on the keyboard. Use the arrow key to select the next image and re-start the process.

When quality control is finished, use the button to lock the status of the batches/packages in the EPOScan database.

After doing this it is possible to correct images on the CD with the RQC TroubleShooting (see chapter 10 Troubleshooting).

13.4.5.1 Random Quality Control troubleshooting

To correct bad quality images found during the RQC, re-scan complete packages. On the main menu select **CD** and **RQC Troubleshoot**. A list of all generated CD-R images is displayed.

Select **CD** to check. The failed packages table will be populated with packages containing the images which were rejected during Quality Control:

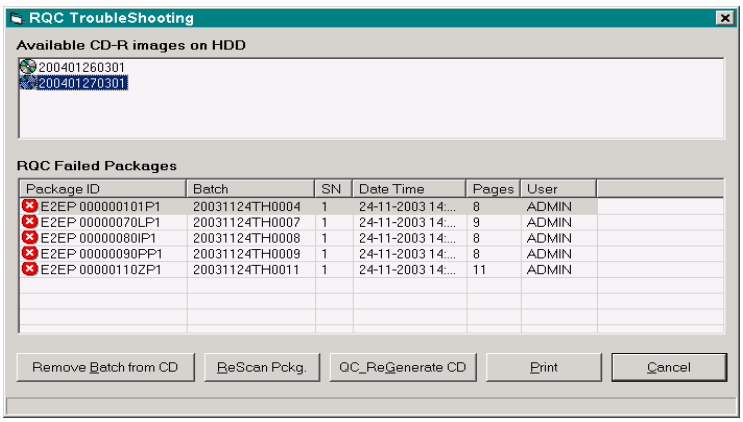


Figure 98: rqc troubleshooting

To re-scan

- find the batch and remove the failed package(s)
- select ReScan Pckg (Scan window will be opened).

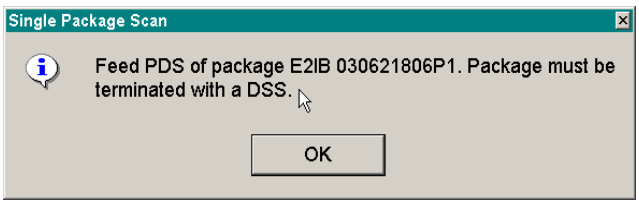


Figure 99: single package scan

Put the package, including a DSS as last page, in scanner.

- Select **OK**
- Package will be scanned.
- Repeat process for all failed packages
- Select **QC_Regenerate CD**. Only re-scanned packages will be generated.

14 CD-ROM loading

After successful creation of the CD or DVD image, the image must be loaded. During loading a check is carried out comparing the packages and images written on the CD or DVD against package data stored in the Phoenix database (DMS).

14.1 Settings

Before the CD Loader can be used, the default settings must be set up.

From the **MADRAS** menu, choose **Settings** and then select the **CD Loader** tab.

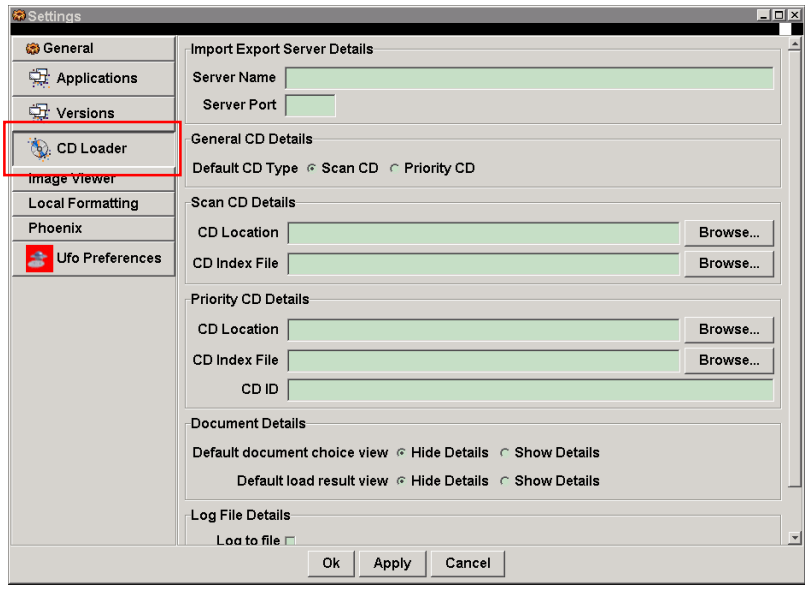


Figure 100: settings

Enter the appropriate details. For details specific to the location, consult the Support Settings Desk.

Settings	
Setting	**Function**
Import/Export Server Details	
Server Name	Automatically filled.
Server Port	Automatically filled.
General CD Details	
Default CD Type	Scan CD: CD or DVD containing scanned images Priority CD: CD or DVD containing images and data from an external source e.g. Priority Documents from WIPO).
Scan CD Details	
CD Location	Default path of CD-ROM drive, for example. E:\
CD Index File	Default path index file, for example. E:\batchlst
Priority CD Details	
CD Location	Default path of CD-ROM drive, for example. E:\
CD Index File	Default path of index file , for example. E:\contents.csv
CD ID	To be entered as part of loading process

Settings	
Setting	**Function**
Document Details	
Default document choice view	Hide Details or Show Details: selecting Show Details displays more details concerning the packages to be loaded
Default load result view	Hide Details or Show Details: selecting Show Details displays more details of the load results
Log File Details	Tick this to create a log file. The log file contains following information: • CD ID: • CD Type: Scan or Priority CD • CD Timestamp: Timestamp of read
	DocumentCount: Number of documents on the CD or DVD LoadDocumentCount: Number of documents/Packages loaded PageCount: Total number of pages on CD or DVD
	LoadedPageCount: Number of pages loaded Size: Size of data on CD or DVD (bytes) LoadedSize: Size of data loaded (bytes)
	Read Duration: Time taken to read CD or DVD contents Load Duration: Time taken to load CD or DVD into Import/Export Manager
	Transfer Duration: Time taken by Import/Export Manager to process CD or DVD

Click on **Apply** to add the details entered so far and leave the dialogue open or click on **OK** to add the details and close the dialogue.

14.2 Loading a CD or DVD-ROM

Choose **CD Load** from the **MADRAS** menu.

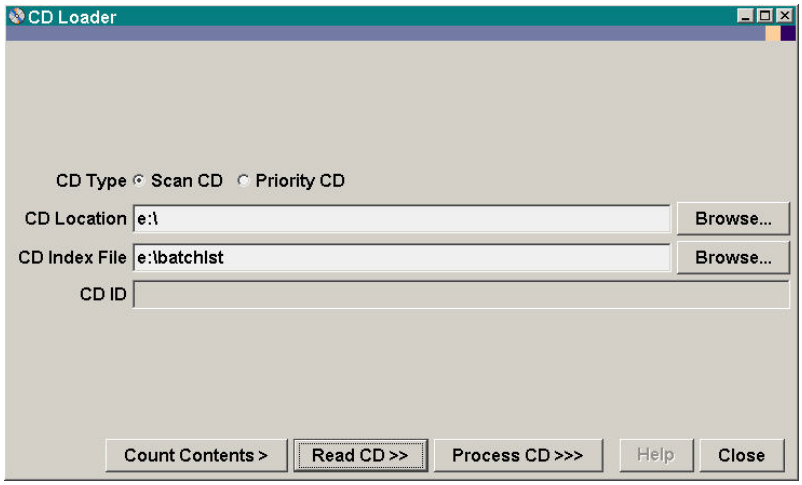


Figure 101: cd loader

Select the CD Type, **Scan CD** or **Priority CD, by clicking on the radio button**.

- **Scan CD**
  - CD or DVD containing scanned images
- **Priority CD**
  - CD or DVD containing documents and data from an external source, for example Priority Documents from WIPO.

The **CD Location**. is the default path previously set (see 11, Resetting the epoScan settings). This can be changed using the **Browse** button

Enter the location of the **CD Index file**. The user can use the **Browse** button to find it. This is normally a file called BATCHLST in the CD directory

If the CD is a Priority CD, then the user must ensure that the correct **CD ID** is displayed.

The user can now process the CD (load the images), check the contents, or just count the contents.

- **Count Contents**
  - This simply gives the CD or DVD statistics. This can be useful for record keeping purposes
- **Read CD or DVD**
  - For a Scan CD or DVD, this starts the process of comparing package data on the CD or DVD against data stored in DMS. Also during this process, the TIFF image is checked. This can save time if errors are suspected

    However, if the CD or DVD is a Priority CD, then the contents of the CD or DVD are only read as there are no corresponding data in the DMS.
- **Process CD or DVD**
  - This processes the contents. This is the same as Read CD or DVD except that the data is also loaded

When the process of reading the CD or DVD contents is finished the **CD Loader** screen appears:

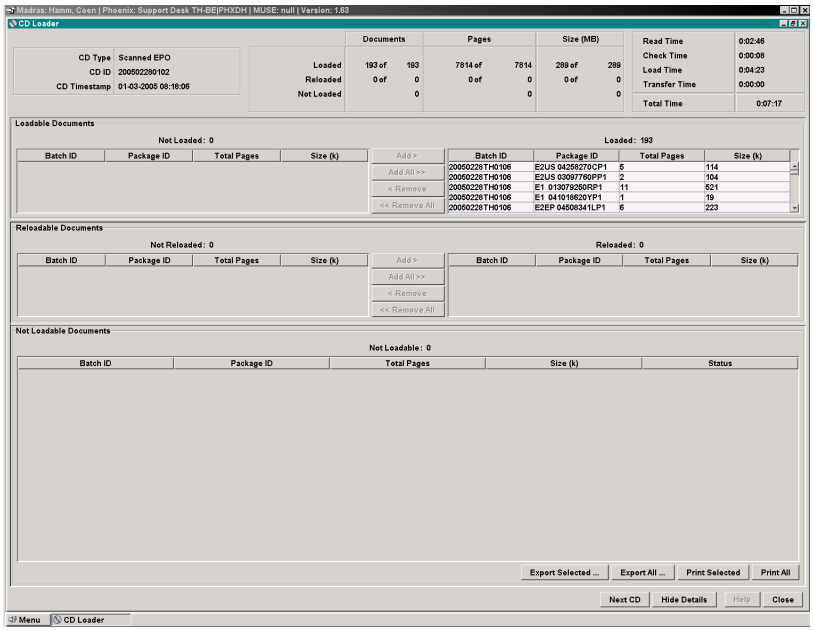


Figure 102: cd loader

If documents/packages are in the Reloaded table, a problem occurred during the transfer of data to the Import Manager, but registration has been done

If Not Loadable, corrections have to made by an indexing officer. A reason could be that the packages have already been edited and/or added to another batch or that an invalid TIFF is present on the CD or DVD.

The list of affected documents/packages can be printed or exported to a CSV file for import into, for example, a spreadsheet.

Documents/packages can be selected for loading. Click on **Load Selected** and the load process starts.

To load all loadable and re-loadable documents/packages, click on **Load ALL** or press the **Enter** key.

To cancel the load process and go back to the CD Load dialogue, click on **<<Back**.

During the load process the images are stored onto the Import server and the status of the documents/packages is updated. After successful loading of the CD or DVD the **CD Loader** window will appear.

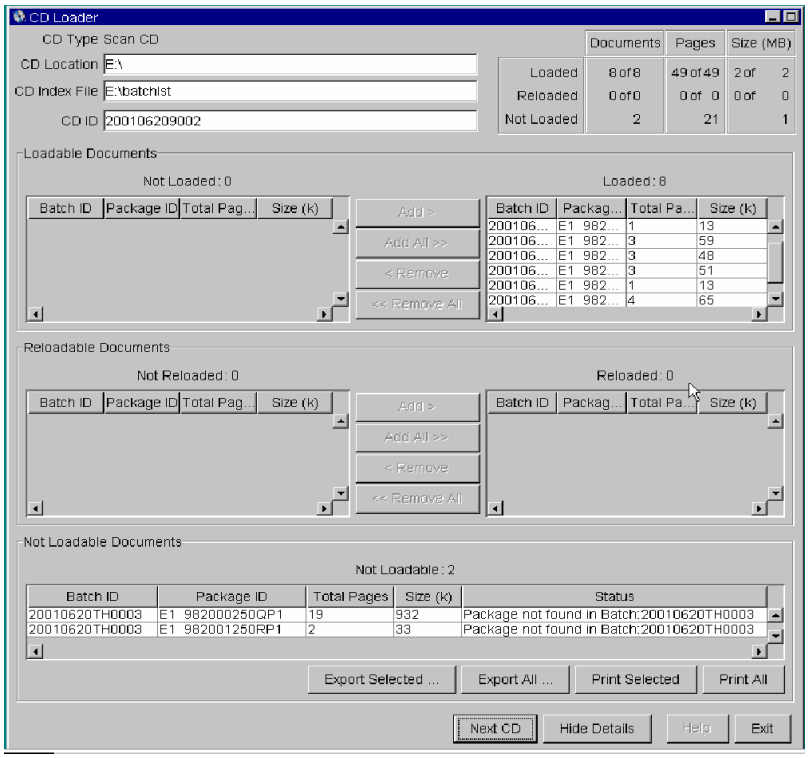


Figure 103: cd loader

To return to the CD Load screen, click on **Next CD**.

When all CDs or DVDs, have been loaded click on **Close** to close the CD Loader dialogue.

15 Paper storage

15.1 Rules

15.1.1 General

All packages entering the ePHOENIX system, which have been scanned, written to CD-ROM and successfully loaded, will normally be stored in boxes. This may be to satisfy legal requirements or just to allow rescanning should errors be discovered some time after loading.

The ePHOENIX system automatically generates sequential box numbers and a simple application allows each batch to be assigned to a given box.

However, each batch can only be assigned to a single box so it follows that a box must always contain a whole batch. Batches may not be so large that they have to be spread across more than one box. For all batches put into boxes, the box number and box location are recorded in the ePHOENIX database.

A full box is normally taken to some secure location where the identity of each box is known so that it may be retrieved if required. This may be done by simply labelling the box with the ePHOENIX box number or the box may be re-labelled by a specialist storage contractor so that it can be stored anonymously.

Whether a package can be put into a box depends on its status. By default, a batch must have a CDR Number before it can be added to a box. This is to prevent documents being taken away for storage before successful loading has taken place. Nevertheless, this can be overruled, for example in situations where the volumes are so large that logistics become an issue, by setting the BOXSTAT global in the Management Tool.

15.1.2 Retrieval of packages

To locate packages for re-scan, use the **Details** option of the **Document** menu in ePHOENIX Dossier Manager.

When a package is removed from a box, the location of the package should be marked with a card that indicates the batch/package number. The BCS must be updated by hand (cross out the removed package).

If a re-scan is required, the document receives a new Package ID, it is put into a new batch and is stored in another box. The card remains in the old box.

If a re-scan is not required, the package is stored in the original box . The card is removed when the package is returned to the box.

15.2 Storage of batches

15.2.1 Paper storage recording

ePHOENIX is used to record in which box batches are stored, and to identify the location of the box.

Choose **Paper Storage** from the **MADRAS** menu.

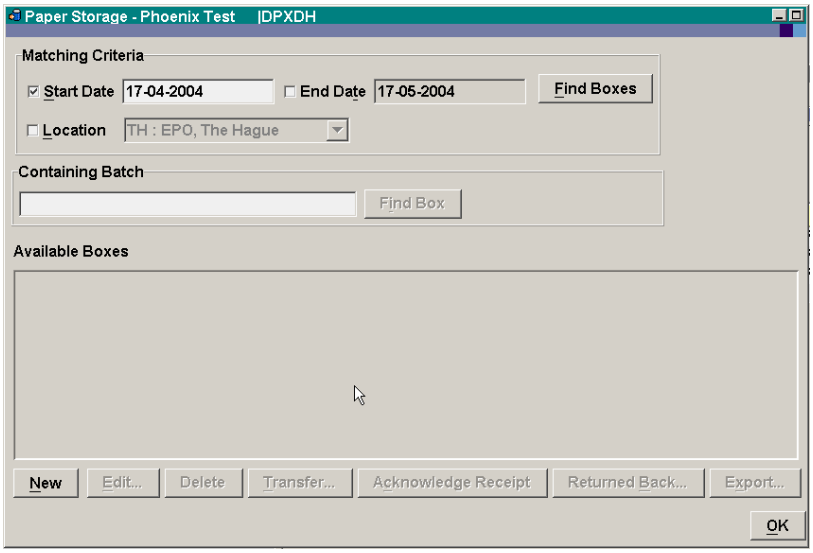


Figure 104: paper storage

15.2.2 Creating a new box

Click on **New**. A new box number is created, for example, 20010201-1.

The new box(es) appear in a list headed Newly Created Boxes.

15.2.3 Editing box details and adding batches

Select the box, and click on **Edit.** The **Box Details** screen is displayed.

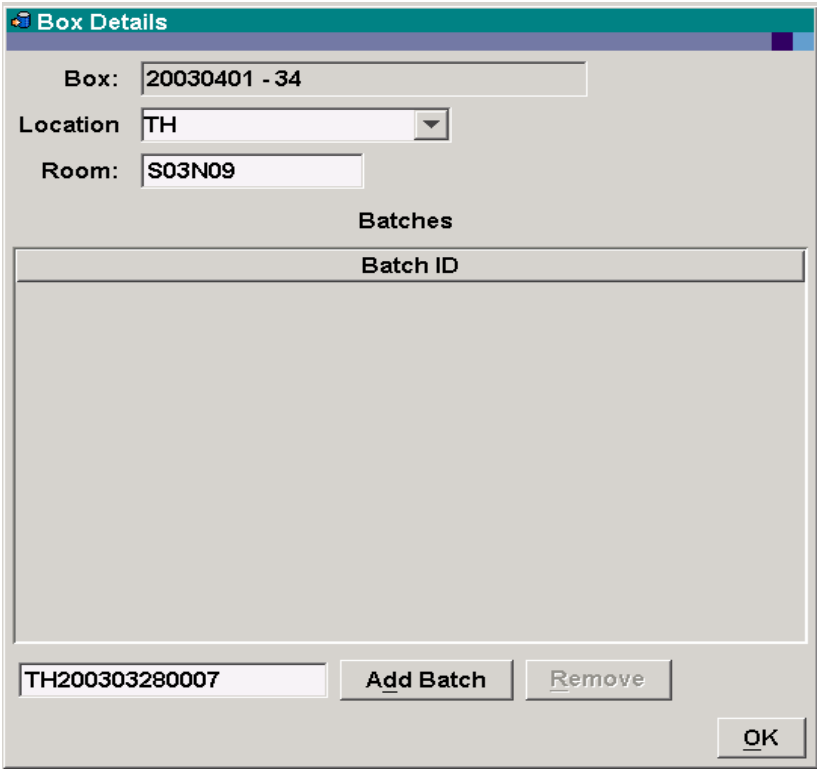


Figure 105: box details

It is then possible to change the details as required:

- To change the location of the box, select from the **Location** drop-down list. The location must agree with the Batch ID.
- To specify the room, type the room number into **Room**.
- To add a batch, type in the Batch ID and then click **Add Batch**. The batch is added to the this box, and this can be repeated to add more batches, as long as they fit in the box.
- To remove a batch added to the list, select it and click on **Remove**.

When all the batches have been added to the box, click on **OK**.

Note

The batch must have a status that allows it to be placed in a box, otherwise an error message will be displayed.

Figure 106: batch contents error

The allowed statuses depend on the local configuration, which is set up using the global BOXSTAT in the Management Tool. By default, a batch must have a CDR Number before it can be added to a box.

15.2.4 Searching for boxes

A box can be searched for by

- matching criteria
- looking for a particular batch.

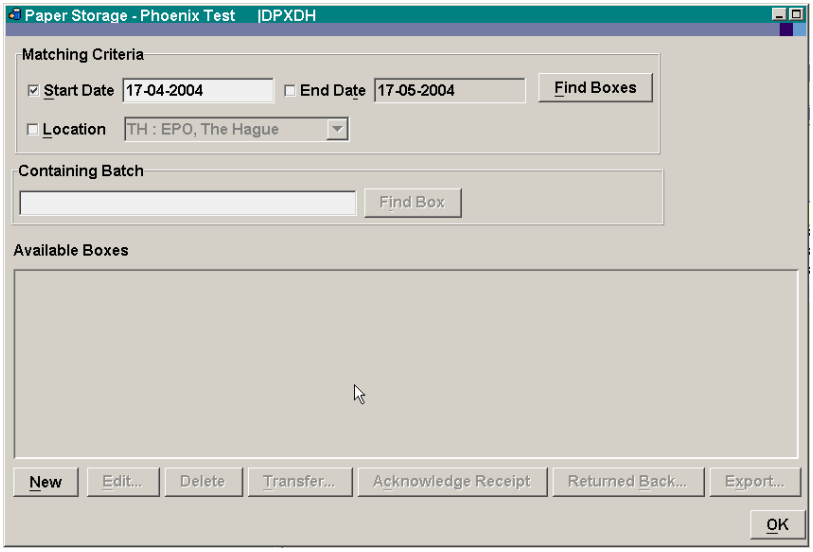


Figure 107: paper storage

Click on **Find Boxes.** The **Box Details** screen is displayed.

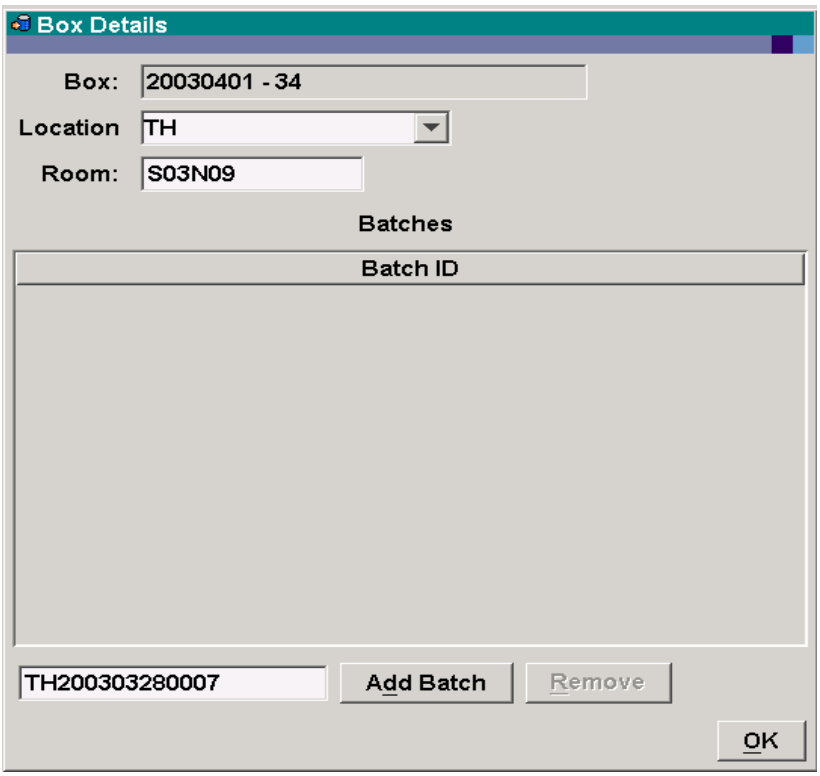


Figure 108: box details

It is then possible to change the details as required.

15.2.4.1 Searching by matching criteria:

Select the one or more criteria to use to find the box(es):

Searching by matching criteria	
Criteria	**Action**
Start Date	Tick the box and enter the date (dd-mm-yyyy)
End Date	Tick the box and enter the date (dd-mm-yyyy)
Location	Tick the box and select the location from the drop-down list

Click on **Find Boxes**.

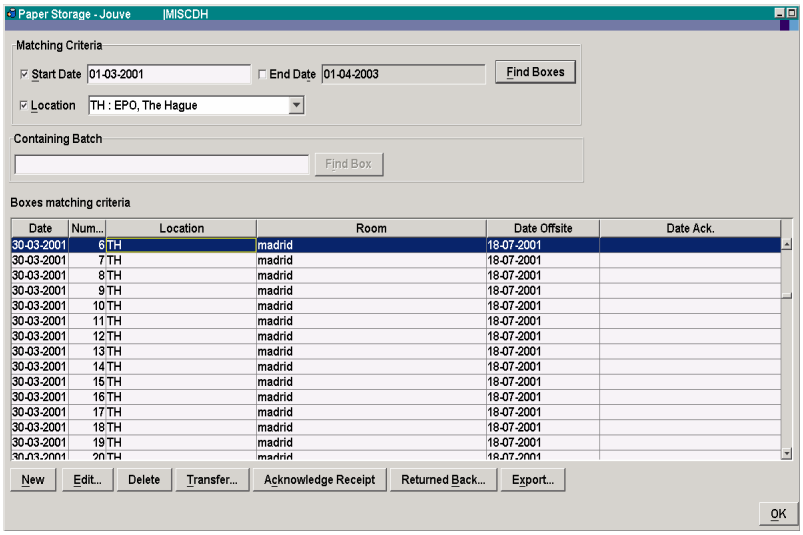


Figure 109: paper storage

15.2.4.2 Searching for a box containing a particular batch:

Enter the batch number under **Containing Batch**.and click on **Find Box**.

The found boxes are listed in the Boxes matching criteria panel.

15.2.5 Deleting a box

Select the box.

Ensure that no batches are registered to the box, as deletion is otherwise impossible. Remove batches if necessary.

Click on **Delete**.

15.2.6 Transferring a box

Select the box and click on **Edit.**

To

- change the location of the box, select from the **Location** drop-down list.
- specify the room, type the room number into **Room**.

Click on **OK** to close the Box Details window.

In the Paper Storage window, click on **Transfer.** A list containing transferred boxes is automatically printed.

15.2.7 Acknowledging receipt

This is used by an offsite storage contractor.

Select the box and click on **Acknowledge Receipt**.

The current date is marked in the **Date Ack.** column.

15.2.8 Returning a box

This is used to register boxes returned to the Office.

Select the box and click on **Returned Back...** The **Return Box** window appears.

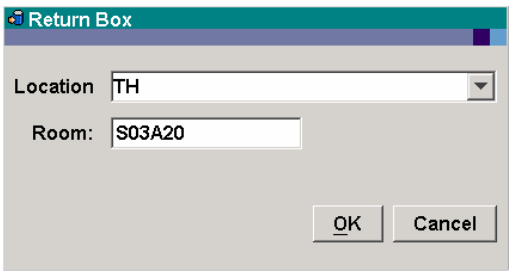


Figure 110: return box

Select the return location from the **Location** drop-down list, and type in the room number and click on **OK**. The **Date Ack.**. entry for the box in the **Paper Storage** window is deleted.

15.2.9 Exporting a list of boxes

This option exports a list of selected boxes into a comma separated values (CSV) file, for import into , for example, Excel.

16 Database management

16.1 Database information

EPOScan allows the user to view part of the database content, depending upon which item has selected (CD, Batch,...).

The chosen Information is given in an array whose content depends upon the selection.

Database information	
Item	**Description**
For CD:	
CDRID	Identifier of the CD
ODP	Output path for storage of images for the selected CD(s).
STATUS	Production status of the CD
Date time	Creation date of the CD
For batch:	
BATCHID	Identifier of the batch
STATUS	Production status of the batch
DUPLEX	Indicates if input paper data is single- or double sided
CDRID	Identifier of the CD that contains the batch
Date time	Creation date of the batch
OPERATORID	Identifier of the operator
WORKSTATIONID	Identifier of the scan workstation
For package:	
PACKAGEID	Identifier of the package
BATCHID	Identifier of the batch
DMSSN	Serial number of the package as given in the DMS file (pre-indexing file)
STATUS	Production status of the package
Date time	Creation date of the package
OPERATORID	Identifier of the operator
WORKSTATION	Identifier of the scan workstation
For operator:	
BATCHID	Identifier of the batch
STATUS	Production status of the package
DUPLEX	Indicates if input paper data is single- or double sided
CDRID	Identifier of the CD
Date time	Creation date of the package
WORKSTATION	Identifier of the scan workstation

Database information	
Item	**Description**
For workstation:	
BATCHID	Identifier of the batch
STATUS	Production status of the package
DUPLEX	Indicates if input paper data is single- or double sided
CDRID	Identifier of the CD
Date time	Creation date of the package
OPERATOR	Identifier of the operator

List of the Batch_Status values	
Code	**Meaning**
0	Partially scanned
1	Scanned
2	Unknown
3	In CD
5	Rejected Batch
9	Sel/Gen (Selected for Generation)
32	Page cross count Error
65	SelForGen
73	SelForGen

16.2 Using the Info screen

Select **Info** from the **Database** menu.

Selections can be made in this screen, for example Package, ID.

Note

Input is case sensitive.

Some example queries:

- Query
  - Packages with ID > 1 and Status is Error
- Result
  - List of Status 32 errors.

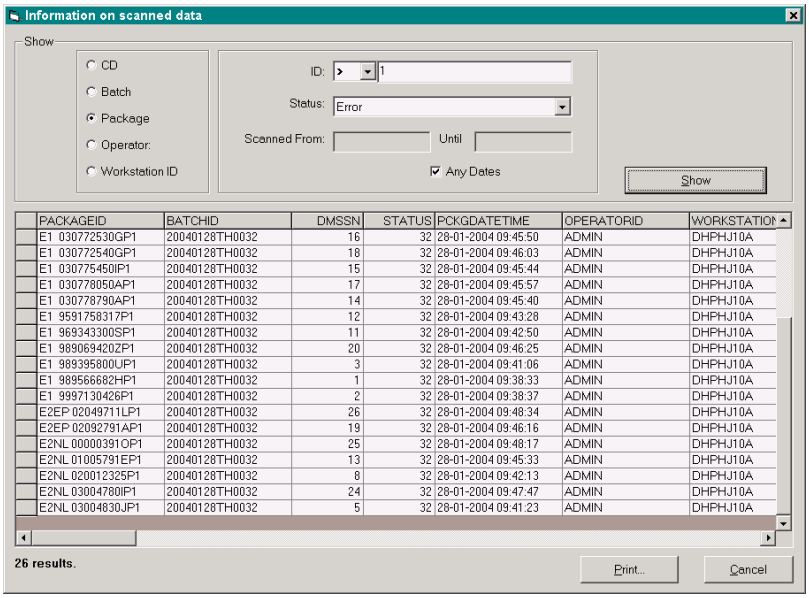


Figure 111: information on scanned data

- Query
  - Packages with ID > 1 and Status is Any
- Result
  - List of all packages in any status.

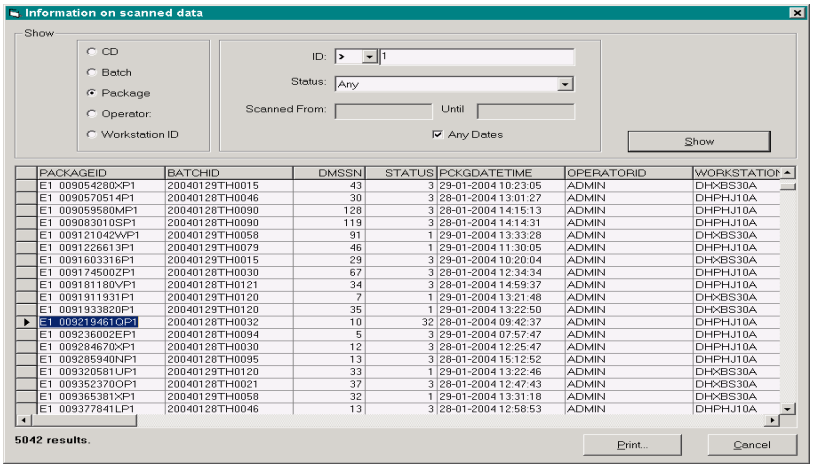


Figure 112: detailed information on scanned data

- Query
  - Operator with ID = ADMIN and Status is Partially Scanned
- Results
  - List of all Partially Scanned batches, (Status = 0).

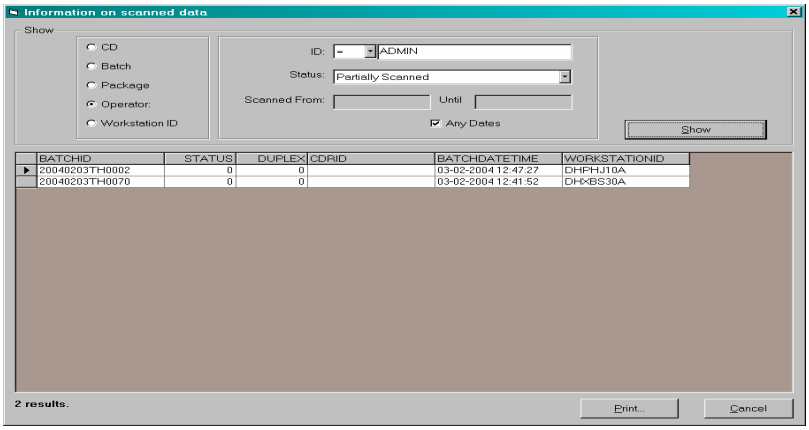


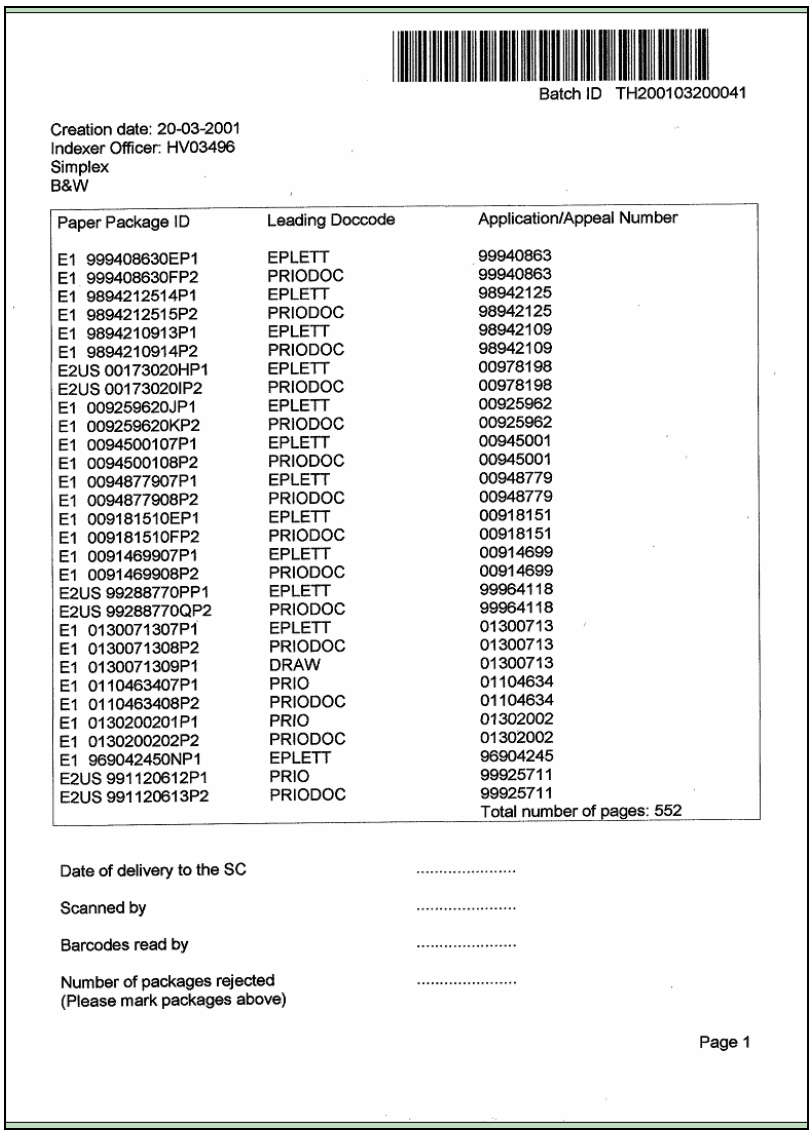
Figure 113: information on scanned data

17 Sample control sheets

The sample control sheets are

- Batch Cover Sheet (BCS)
- Package Data Sheet (PDS)
- Document Separator Sheet (DSS)
- Document Separator Sheet with extra information to help indexers
- Batch Terminator Sheet (BTS).

These pages are shown at reduced size.



Batch ID TH200103200041

Creation date: 20-03-2001
Indexer Officer: HV03496
Simplex
B&W

Paper Package ID	Leading Doccode	Application/Appeal Number
E1 999408630EP1	EPLETT	99940863
E1 999408630FP2	PRIODOC	99940863
E1 9894212514P1	EPLETT	98942125
E1 9894212515P2	PRIODOC	98942125
E1 9894210913P1	EPLETT	98942109
E1 9894210914P2	PRIODOC	98942109
E2US 00173020HP1	EPLETT	00978198
E2US 00173020IP2	PRIODOC	00978198
E1 009259620JP1	EPLETT	00925962
E1 009259620KP2	PRIODOC	00925962
E1 0094500107P1	EPLETT	00945001
E1 0094500108P2	PRIODOC	00945001
E1 0094877907P1	EPLETT	00948779
E1 0094877908P2	PRIODOC	00948779
E1 009181510EP1	EPLETT	00918151
E1 009181510FP2	PRIODOC	00918151
E1 0091469907P1	EPLETT	00914699
E1 0091469908P2	PRIODOC	00914699
E2US 99288770PP1	EPLETT	99964118
E2US 99288770QP2	PRIODOC	99964118
E1 0130071307P1	EPLETT	01300713
E1 0130071308P2	PRIODOC	01300713
E1 0130071309P1	DRAW	01300713
E1 0110463407P1	PRIO	01104634
E1 0110463408P2	PRIODOC	01104634
E1 0130200201P1	PRIO	01302002
E1 0130200202P2	PRIODOC	01302002
E1 969042450NP1	EPLETT	96904245
E2US 991120612P1	PRIO	99925711
E2US 991120613P2	PRIODOC	99925711

Total number of pages: 552

Date of delivery to the SC .....

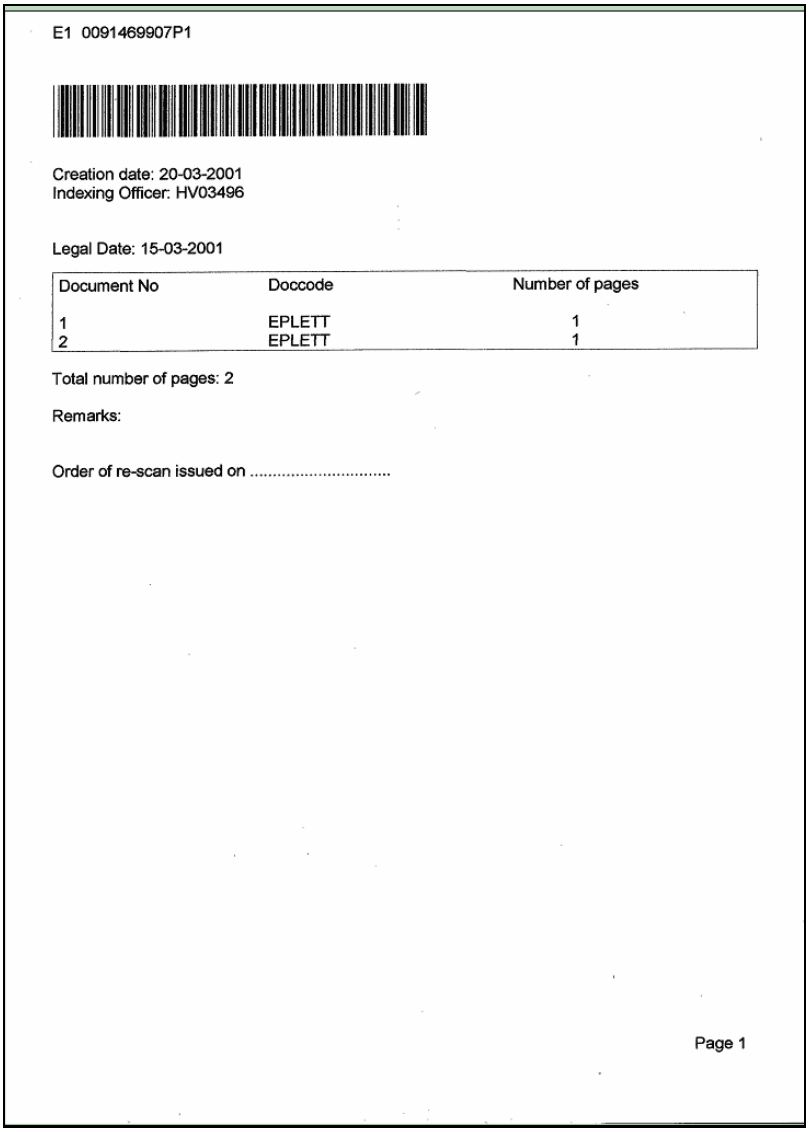
Scanned by .....

Barcodes read by .....

Number of packages rejected (Please mark packages above) .....

Page 1

Figure 114: Batch Cover Sheet (BCS)



E1 0091469907P1

Creation date: 20-03-2001
Indexing Officer: HV03496

Legal Date: 15-03-2001

Document No	Doccode	Number of pages
1	EPLETT	1
2	EPLETT	1

Total number of pages: 2

Remarks:

Order of re-scan issued on .....

Page 1

Figure 115: Package Data Sheet (PDS)

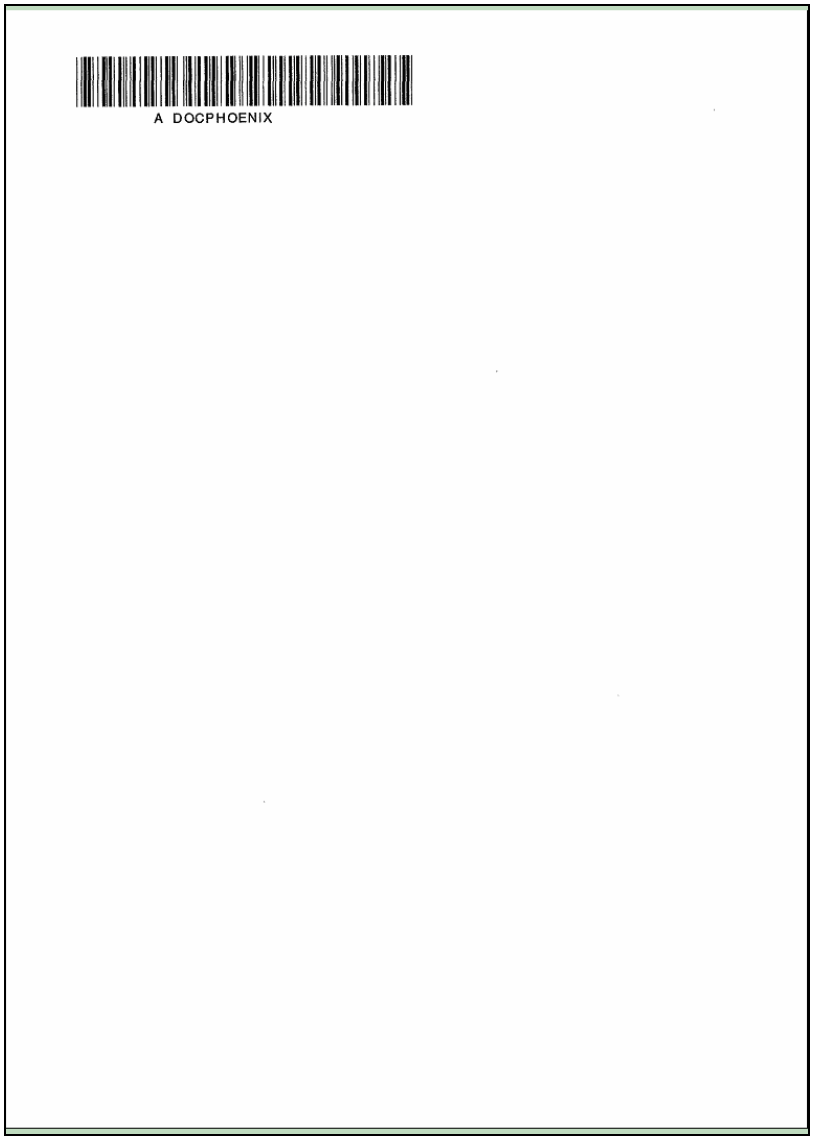
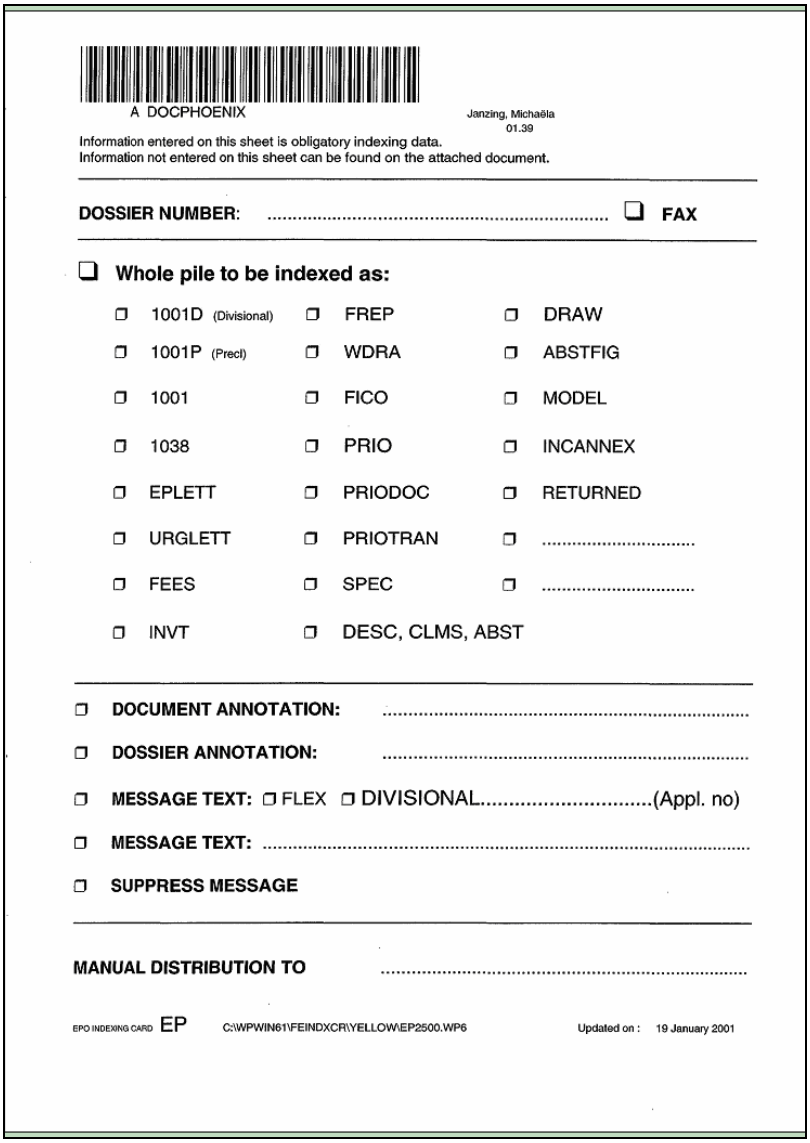


Figure 116: Document Separator Sheet (DSS)



A DOCPHOENIX

Janzing, Michaëla
01.39

Information entered on this sheet is obligatory indexing data.
Information not entered on this sheet can be found on the attached document.

DOSSIER NUMBER: ..... ❑ **FAX**

❑ **Whole pile to be indexed as:**

❑ 1001D (Divisional)	❑ FREP	❑ DRAW
❑ 1001P (Precl)	❑ WDRA	❑ ABSTFIG
❑ 1001	❑ FICO	❑ MODEL
❑ 1038	❑ PRIO	❑ INCANNEX
❑ EPLETT	❑ PRIODOC	❑ RETURNED
❑ URGLETT	❑ PRIOTRAN	❑ .....
❑ FEES	❑ SPEC	❑ .....
❑ INVT	❑ DESC, CLMS, ABST	

❑ **DOCUMENT ANNOTATION:** .....

❑ **DOSSIER ANNOTATION:** .....

❑ **MESSAGE TEXT:** ❑ FLEX ❑ DIVISIONAL.....(Appl. no)

❑ **MESSAGE TEXT:** .....

❑ **SUPPRESS MESSAGE**

MANUAL DISTRIBUTION TO .....

EPO INDEXING CARD EP C:\WPWIN61\FEINDXCR\YELLOW\EP2500.WP6 Updated on : 19 January 2001

Figure 117: Document Separator Sheet with extra information to help indexers

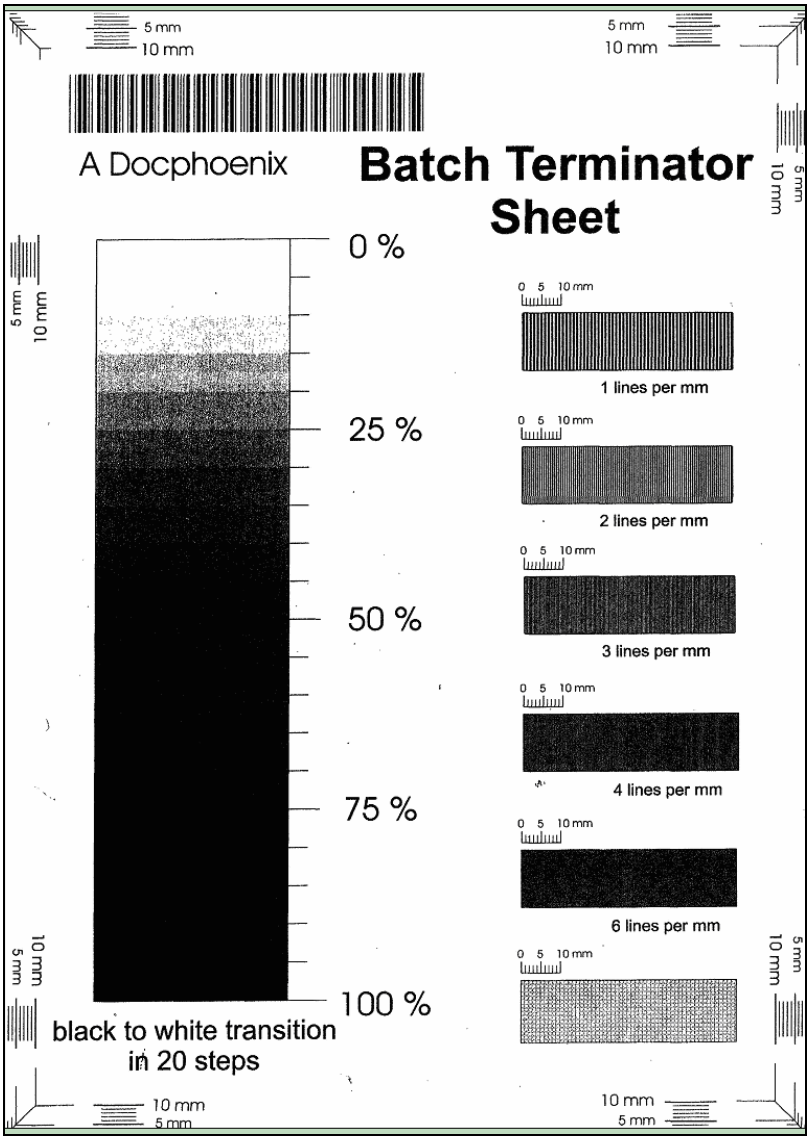


Figure 118: Batch Terminator Sheet (BTS)

18 Status diagram

The numbers indicate the package status in the Data Management System (DMS).

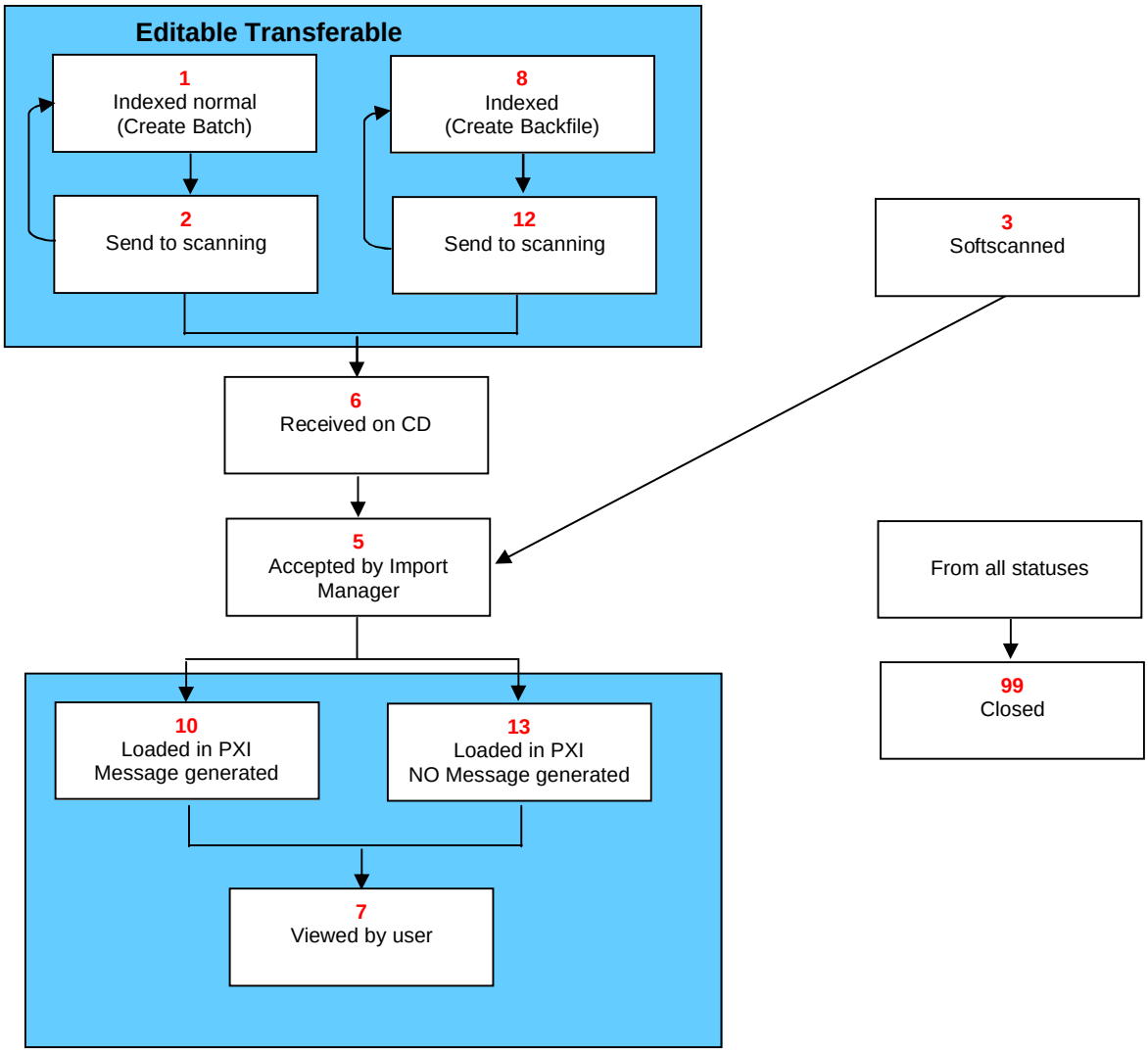


Figure 119: status diagram

Glossary

Glossary	
Abbreviation	**Meaning**
BCS	Batch Cover Sheet
BTS	Batch Terminator Sheet
DMS	Document Management System
DSS	Document Separator Sheet
EPO	European Patent Office
GUI	Graphical User Interface
HDD	Hard Disk Drive
ISIS	Image and Scanner Interface Specification
NO	National Office
OCR	Optical Character Recognition
PDS	Package Data Sheet
SCSI	Small Computer System Interface

Index

A

adding packages to batches 35
advanced settings black and white 68
advanced settings colour 67
automatic colour detection 49
auto-start 50

B

barcode reader configuration 66
barcode reading 66
batch 44
batch contents 27
batch id entry 44, 45
batch transfer 37
batches
- creating 17
- modifying 17

C

Calibration Manager 38
CD-ROM
- creation 81
- generation 81
- generation problems 82
- loading 91
- loading a CD-ROM 93
- loading settings 91
- quality control 85
- writing 85

color detection settings 49
configuration options
- general 62

correcting inverted images 77
correcting page order 76
correcting XX batches 36

D

database information 102
database management 102
default zoom (%) 65
document capture process 15
document correction 74

E

ending the correction process 80
enhancing images 77
eposcan initial screen 40
epoScan initial screen 44
epoScan login 39
error handling
- general errors 51
- index errors 52

I

image 48
image enhancement 69
image enhancement configuration 70
image enhancement preview 72
image enhancement setup 72
image enhancement while generating CD 73
image enhancement while scanning 72
image rotation 70, 71
image tabs 48
indexing 17
- corrections 29
- information 17
- pre-indexing 17
- procedure 19
- steps 17
- terms 18
- tools 19

Indexing 18, 19, 42, 47
ISIS 64

K

Kodak 64
Kodak scanner configuration 69
Kodak Twain drivers 69

L

login 39

M

magnifier 65
magnifying images 75
modifying display options 75

P

page deletion, insertion, and replacement 76
paper storage 96
password 39
preparing the scanner for scanning 38

R

resetting the epoScan settings 60

S

sample control sheets 106
scanner configuration 66
scanner selection 65
scanner settings 67
scanning
- configuration 48
- mode 46
- non-stop mode 47
- stop mode 46

scanning configuration
- page orientation 48
- software rotation 48

set scanning area 73
setup drop-down menu 60
setup of image enhancement 70
setup screen 60
- options 62

status diagram 111

T

troubleshooting 58

U

userID 39