

Kofax Communication Server

TC/LINK-RS IBM CM Integration Technical Manual

Version: 10.3.0

Date: 2019-12-13

The KOFAX logo is displayed in a bold, blue, sans-serif font. The letters are thick and closely spaced, with a clean, modern appearance.

Legal Notice

© 2019 Kofax. All rights reserved.

Kofax is a trademark of Kofax, Inc., registered in the U.S. and/or other countries. All other trademarks are the property of their respective owners. No part of this publication may be reproduced, stored, or transmitted in any form without the prior written permission of Kofax.

Table of Contents

Preface.....	5
Related documentation.....	6
Chapter 1: System Requirements.....	7
IBM DB2 Content Manager Enterprise Server Support.....	7
Requirements for TC/LINK-RS Computer.....	7
Operating system.....	7
Additional software.....	7
Privileges.....	8
Chapter 2: Installing the Export Connector.....	9
Installation Instructions.....	9
Chapter 3: Source Code.....	10
Chapter 4: Logging on to the Export Connector.....	12
Chapter 5: Features.....	15
Kofax Capture Values / Content Manager Attributes.....	15
Child Components Attribute Supported.....	15
Export Connector Information Interchange Supported.....	15
Dynamic Item Types.....	15
Access Control / Permission Support.....	16
Multiple Values.....	16
Folder Searching.....	16
Processes and Priorities.....	16
Online Help Available for Release Setup.....	16
Image Support.....	17
Kofax PDF: Not Supported by TC/LINK-RS.....	17
Adobe Acrobat Capture PDF: Not Supported by TC/LINK-RS.....	17
OCR Full Text: Not Supported by TC/LINK-RS.....	17
eDocument Support: Not Supported by TC/LINK-RS.....	18
Chapter 6: Additional Information.....	19
Text Searching Options: Not Supported by TC/LINK-RS.....	19
Multi-Value Separator Option.....	19
Searching for Folder Child Component Attributes.....	20
Sharing Data Among Export Connectors.....	20
Invalid Characters.....	20
Chapter 7: Setting Up the Export Connector.....	22

Document Settings Tab.....	22
Folder Settings Tab.....	23
Document Routing Tab.....	24
Image Format Tab.....	25
General Settings Tab.....	26
Save Release Setup: Warnings About Unused Fields.....	27
Chapter 8: Activating a Configuration.....	29
Chapter 9: Application Maintenance.....	30
Repairing the Export Connector.....	30
Removing the Export Connector.....	31
Chapter 10: Known Problems.....	32
Problems When Uninstalling the Export Connector.....	32
User-Defined Ranges for Document Attribute Values.....	32
Releasing Single Page TIFFs.....	33
Releasing Date Fields.....	33
Upper ASCII Character Limitations.....	33
Using the Dynamic Item Types Feature with Child Component Attributes.....	34
Dynamic Process.....	34
Using NULL Values.....	34
Minimum Cardinality Not Met.....	35
Required Child Component Attributes and Minimum Cardinality of Zero.....	35
Time Stamp Data Type Must Have a Value.....	35
“Unable to Check Out Item” Error.....	36
Linking Only Child Component Attributes.....	36

Preface

This document explains how to use the **Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise** together with TC/LINK-RS (KCS link to export connectors).

The Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise supports DB2 Content Manager Enterprise Edition V8.3, 8.4, and 8.4.1.

Together with *TC/LINK-RS*, this export connector releases fax images and fax metadata from the Kofax Communication Server into your DB2 Content Manager system.

Related documentation

This document refers to the following documentation:

- Help for Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise
- Release Notes for Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise
- *TC/LINK-RS Technical Manual*

For more information about IBM DB2 Content Manager Enterprise Edition or other IBM products, contact your IBM Content Manager representative or refer to the documentation available with the IBM DB2 Content Manager Enterprise Edition product.

The full documentation set for Kofax Communication Server is available at the following location:

https://docshield.kofax.com/Portal/Products/en_US/KCS/10.3.0-SihMvq5oti/KCS.htm

Chapter 1

System Requirements

This section lists the supported IBM DB2 Content Manager versions as well as the system requirements for installation of the Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise.

IBM DB2 Content Manager Enterprise Server Support

The Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise requires the following network server components:

- DB2 Content Manager Enterprise Edition 8.3/8.4 (Windows, AIX)
- DB2 Content Manager supported database

Note Refer to the Release Notes of the Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise for a list of tested DB2 Content Manager and DB2 Database versions.

Requirements for TC/LINK-RS Computer

This section contains the requirements for TC/LINK-RS computer.

Operating system

Refer to the Technical Specifications document.

Additional software

- The Microsoft .Net runtime files must be installed. These files are needed by the TCReleaseConfig application, which is installed together with TC/LINK-RS. You can download the .Net runtime version 2.0 from the Microsoft web page
- TC/LINK-RS
The link must be installed prior to installation of the export connector. When running the TC/LINK-RS setup for the first time, select the **Install CAP tools** checkbox.
- DB2 Runtime Client V8.1 with Fix Pack 7A or DB2 Runtime Client V8.2 with Fix Pack 7A
- DB2 Content Manager Client for Windows 8.3
- DB2 Information Integrator for Content 8.3

Privileges

To install the Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise, you must have Windows administrator privileges. If you do not have administrator privileges and install this export connector, you may receive error messages and several of the files may not install correctly.

Chapter 2

Installing the Export Connector

You must install the Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise on every TC/LINK-RS workstation.

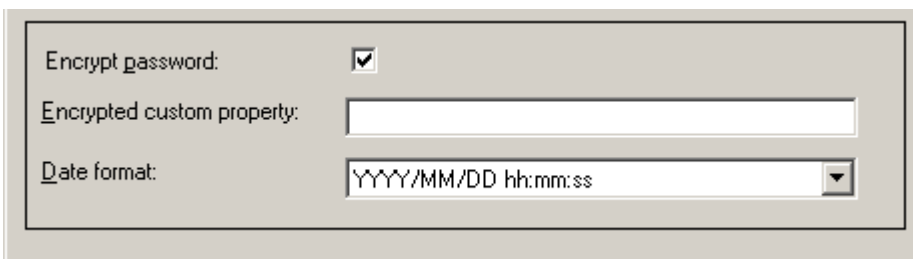
Installation Instructions

Use the following instructions to install the Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise.

1. Insert your Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise installation CD into your CD drive.
2. From your Windows task bar, select **Start | Run**, browse to the IBM\CM8 folder on the CD, and run **Setup.exe**.
The installation program will start.
3. Follow the instructions on the screen to install the export connector.
4. When the installation is complete, a message is displayed that indicates the export connector was successfully installed.
5. Start the TCReleaseConfig application to register the export connector in the TC/LINK-RS configuration folder:
 - a. In the Release scripts panel, click the **Add** button.
 - b. Select the CMRel8_v7.INF file in the working folder of the Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise.
 - c. Click **Install**.

The Release scripts panel now contains an item “IBM DB2 Content Manager Enterprise 8.3”.

6. Select this item and click **Display**. Configure date format and encryption settings as displayed in [Figure 1](#).
7. Repeat this procedure on all TC/LINK-RS workstations that will use the Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise.



The screenshot shows a dialog box with three settings:

- Encrypt password:** A checkbox that is checked.
- Encrypted custom property:** An empty text input field.
- Date format:** A dropdown menu showing the format "YYYY/MM/DD hh:mm:ss".

Figure 1. Date format

Chapter 3

Source Code

The source code for the Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise is available in the IBM\CM8 folder on the Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise installation CD. You can open the source code, edit it and compile it in Visual Basic 6.0 with Service Pack 6.

To modify the export connector:

1. When you [install the Content Manager export connector](#), you will install the required components referenced in the source code.
2. Open the source code, make changes as needed, and compile the Content Manager source code in Visual Basic.
3. Copy the newly created CMRel8_v7.dll to the installation directory (for example, C:\Program Files\Ascent\CAP\IBM\CMRel8_v7.dll). When you are prompted to replace the existing file, select **Yes**. Repeat this procedure on each TC/LINK-RS workstation that will be using the IBM DB2 Content Manager Enterprise export connector. You may want to make a copy of the file for backup purposes, and store the copy in a safe location.

Note To successfully modify and compile the export connector, development must occur on a workstation with the appropriate versions of TC/LINK-RS, CAP Tools, and the IBM DB2 Content Manager Enterprise export connector previously installed. To use the modified export connector, you must replace the IBM DB2 Content Manager Enterprise export connector CMRel8_v7.dll with the modified version on the client workstation. If you receive an "access denied" error, you will need to close TCReleaseConfig and TC/LINK-RS.

Refer to the documentation available for the DB2 Content Manager Enterprise Edition product and Visual Basic for assistance.

Source Code and the Information Integrator for Content (I14C) Connector

In order to compile the source code for Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise, the IBM DB2 Information Integrator for Content (I14C) connector must be installed to the default directory (for example, C:\Program Files\IBM). If installing the connector to a directory other than the default and attempting to compile the source code, you will receive the following error messages. (SPR 00017130)

```
Fatal error C1083: Cannot open include file: 'DFException.hpp': No such file or directory.  
Fatal error C1083: Cannot open include file: 'dkCollection.hpp': No such file or directory.
```

You must install I14C as a "development client" in order to obtain the libraries that the connector references.

Workaround: The source code for the Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise references the absolute paths to the DB2 API applications.

1. Change the KfxCM81 properties by editing the following parameters:
 - C/C++ settings: "Additional Include Directories" property must list the "include" directory of the IBM I14C (%ICMROOT%\include)
 - Linker settings: "Additional Library Directories" property must list the "lib" directory of the IBM I14C (%ICMROOT%\lib)
2. Recompile the source code.

Chapter 4

Logging on to the Export Connector

Once you have installed the export connector and associated a document class with a batch class in TCReleaseConfig, you may specify the export connector to use when releasing your documents.

Note To release to Content Manager, the process user of TC/LINK-RS must have permissions to add/read folders and add documents to Content Manager.

The same permissions are needed for configuring the export connector via TCReleaseConfig.

Contact your DB2 Content Manager system administrator for assistance.

To log on to the export connector:

1. Start the TCReleaseConfig application and log on to the configuration of the correct TC/LINK-RS instance.
2. Open the **Release setups** tab and click the **Add** button.
3. In the **New Release Setup** dialog box, select the correct document class and select the export connector "IBM DB2 Content Manager Enterprise 8.3." Click **OK**.

The Kofax Capture Content Manager Login Information dialog box is displayed as shown in [Figure 3](#).

4. Enter your IBM DB2 Content Manager user name, password and select the DB2 Content Manager library server. This information will be used to log on to the DB2 Content Manager system.

Note The Library Server combo box lists all the available DB2 Content Manager library servers obtained from the Network Table file.

The login information will be saved and used during release.

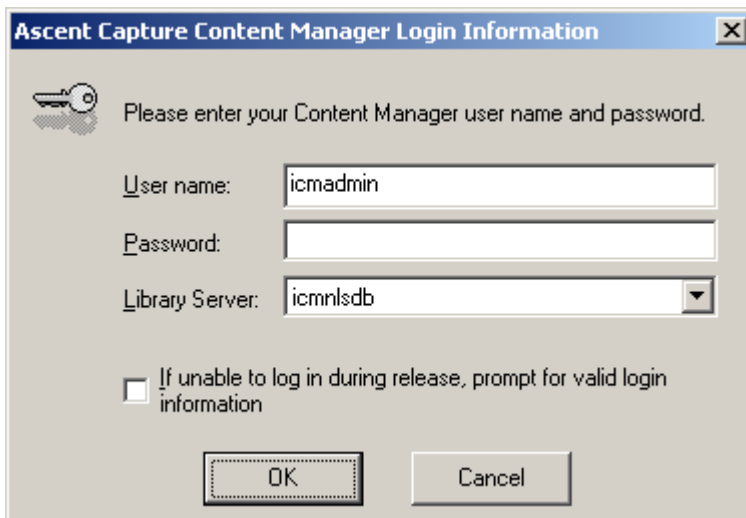


Figure 3. Kofax Capture Content Manager Login Information Dialog Box

5. Do not select **If unable to log in during release, prompt for valid login information**. Otherwise, the export connector will prompt for a user ID and password if it is not able to log in to IBM Content Manager at release time. As release is invoked by TC/LINK-RS (in a service and potentially without a user login session), such a prompt would be unrecognized and would cause problems.

6. Click **OK**. The Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise 8.3 — Release Setup dialog box is displayed as shown in *Figure 4*.

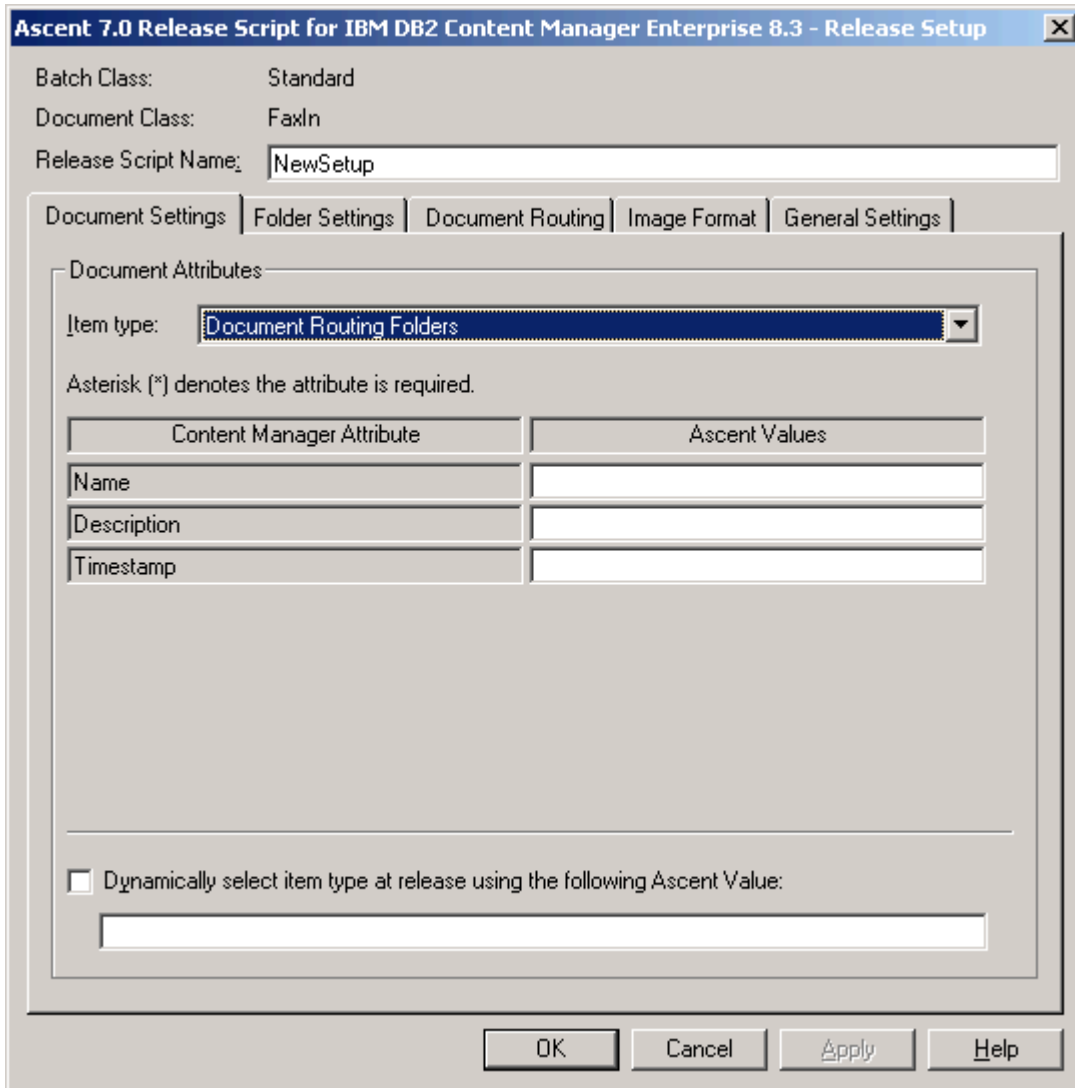


Figure 4. Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise 8.3 – Release Setup Dialog Box

7. See *Setting Up the Export Connector* for information about the set up options.

Chapter 5

Features

This section contains information about features provided with the Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise.

Kofax Capture Values / Content Manager Attributes

The Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise provides an easy-to-use interface for linking Kofax Capture values to Content Manager document attributes and folder attributes.

The main types of Kofax Capture Values are Document index fields, Batch fields, Kofax Capture Values, and Text Constants.

The names of “required” Content Manager attributes within a document class or folder class are marked with an asterisk (*), giving you a visual indicator that certain fields must be linked.

Child Components Attribute Supported

The Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise supports attributes belonging to the first level child components for folder attributes and document attributes. The display format is:

```
{ <Child Component name>}: <Attribute name>
```

Export Connector Information Interchange Supported

The Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise supports the Kofax Capture Export Connector Information Interchange feature. This feature allows the export connectors to pass information to other export connectors.

See [Sharing Data Among Export Connectors](#) for more information.

Dynamic Item Types

The Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise enables you to dynamically assign an item type to your released folders or documents at release time.

Access Control / Permission Support

The Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise will only allow the users to view the item types that they have permission to view.

Multiple Values

The Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise supports properties containing multiple values. You can specify the desired delimiter to separate the values when entering multiple values for the child component attributes, dynamic processes, and dynamic priorities using the Multi-value separator option as specified on the General Settings tab. For example, if you specified a single semi-colon (;) delimiter for the Multi-value separator option, you would have to enter the following line:

```
apple;orange;pear
```

Note No spaces should be written between the entries to separate the values.

See [Multi-Value Separator Option](#) for more information.

Folder Searching

The Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise can search the entire DB2 Content Manager repository for the first folder in the folder hierarchy defined in the Folder Settings tab at release setup. If a match is found, the first folder will be used to find the child folder hierarchy.

Processes and Priorities

The Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise enables you to specify whether to route your released documents or to route the parent folder for the current document to either statically or dynamically assigned IBM DB2 Content Manager processes. In addition, the export connector allows you to statically or dynamically assign priorities for the processes.

Online Help Available for Release Setup

The Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise Help is installed with your export connector. It is available from the TCReleaseConfig application when you are setting up your export connector.

You can click the Help button from the Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise 8.3 — Release Setup dialog box to display help information about release options.

Image Support

This export connector supports the following file formats / compression formats. Please note that some formats are only available in a full Kofax Capture installation but not with TC/LINK-RS.

Format	Supported by TC/LINK-RS
Multipage TIFF — Group 4 Compression	Yes
Multipage TIFF — Uncompressed Image Format	Yes
Single page TIFF — Group 4 Compression	Yes
Single page TIFF — Uncompressed Image Format	Yes
MO:DCA	Yes
JPG — JPEG Compression	Yes
PCX — PackBytes Compression	Yes
Kofax PDF	No
Adobe PDF from TIFF	No
Adobe PDF from JPEG	No
Adobe PDF from PCX	No

Kofax PDF: Not Supported by TC/LINK-RS

The Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise offers the image format Kofax PDF.

Please note that TC/LINK-RS is not able to provide this image format.

Kofax PDF is bundled with Kofax Capture and is only available in a standard Kofax Capture installation.

Adobe Acrobat Capture PDF: Not Supported by TC/LINK-RS

The Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise offers several Adobe Acrobat Capture PDF conversions, i.e. Adobe PDF from TIFF, Adobe PDF from JPEG and Adobe PDF from PCX. Nevertheless, these image formats are not supported with TC/LINK-RS.

They require software provided by Adobe Acrobat Capture, which is not included with the TC/LINK-RS product. It is part of the Adobe® Acrobat Capture® 3.04 Clustered or Personal Edition software.

Adobe Acrobat Capture PDF conversion has not been tested with TC/LINK-RS and is therefore not supported.

OCR Full Text: Not Supported by TC/LINK-RS

The current version of TC/LINK-RS does not provide OCR full text to the Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise. Support of textual data is planned for future releases though.

eDocument Support: Not Supported by TC/LINK-RS

The current version of TC/LINK-RS does not provide eDocuments to the Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise.

Chapter 6

Additional Information

This section contains additional information about the Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise.

Text Searching Options: Not Supported by TC/LINK-RS

The “Make documents text-searchable” check box on the General Settings tab is not useful with TC/LINK-RS. The IBM Net Search Extender (NSE) supports only the following file formats:

- Excel
- HTML
- PDF
- Text
- Word
- XML

None of them is provided by the current version of TC/LINK-RS.

Multi-Value Separator Option

The multi-value separator option as specified on the General Settings tab, allows you to enter only valid printable ASCII characters. This option must not contain the following characters:

- Carriage return
- Escape
- New line
- Space
- Tab

Important Warning The multi-value separator should not be part of your value. For example, if you specify a period (.) as one of your values and you specify the period as the multi-value separator option, the export connector will assume the value is the separator.

Searching for Folder Child Component Attributes

This export connector does not support searching for folder child component attributes. Therefore, if you perform a search based on the root attributes only, the values for the child components will be lost when the search routine finds an existing folder. This occurs because the existing folder is not updated at release. This can be avoided by making sure that new folders are created at release time. You can do the following:

- Use root attribute values that are unique and do not apply to existing folders in the DB2 Content Manager system.
- Clear all the Search check boxes, which will force the export connector to create a new folder.

Sharing Data Among Export Connectors

The Kofax Capture Export Connector Information Interchange feature is useful if more than one export connector has been configured for a particular batch class and document class combination.

The sharing of information is accomplished by allowing the export connectors to pass information to other export connectors. The Kofax Capture Value {Repository Document ID} is used to store and retrieve the RepositoryDocumentID that will be used by the first invoked export connector. Therefore, the first running export connector can set this value, and subsequent export connectors can read the same value.

Note that when you are passing the RepositoryDocumentID information to a different export connector, the export connector must exist within the same document class using multiple release. In addition, the export connector passing the RepositoryDocumentID information must be the first that is assigned to a user. For example:

- IBM DB2 Content Manager Enterprise 8.3
- Kofax Capture Text

Only the first export connector can set the RepositoryDocumentID value. Subsequent export connectors can only read this value.

Invalid Characters

The Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise will not allow the following characters at validation. Content Manager data types are validated during release setup and release.

Table 1. Invalid Characters

Content Manager CHAR and VARCHAR Data Types	Invalid Characters	
Alphabetic	0 – 9 Ampersand (&) Apostrophe (') Asterisk (*) At sign (@) Backslash (\) Braces ({}) Brackets ([]) Circumflex (^) Closing Parenthesis) Colon (:) Comma (,) Dash (-) Dollar sign (\$) Double quotation marks ("") Equal sign (=) Exclamation point (!)	Grave accent (`) Greater than sign (>) Less than sign (<) Number sign (#) Opening Parenthesis (Parentheses) Percent sign (%) Period (.) Pipe () Plus sign (+) Question mark (?) Quotation marks (“ Semicolon (;) Slash mark (/) Space character () Tilde (~) Underscore (_)
Numeric	Any character outside of 0 – 9.	
Alphanumeric	Ampersand (&) Apostrophe (') Asterisk (*) At sign (@) Backslash (\) Braces ({}) Brackets ([]) Circumflex (^) Closing Parenthesis) Colon (:) Comma (,) Dash (-) Dollar sign (\$) Equal sign (=) Exclamation point (!) Grave accent (`)	Greater than sign (>) Less than sign (<) Number sign (#) Opening Parenthesis (Parentheses) Percent sign (%) Period (.) Pipe () Plus sign (+) Question mark (?) Quotation marks (“ Semicolon (;) Slash mark (/) Space character () Tilde (~) Underscore (_)
Extended Alphanumeric	Backslash (\) Braces ({}) Brackets ([])	Grave accent (`) Tilde (~)
Other	No data type validation is performed.	

Chapter 7

Setting Up the Export Connector

The following sections describe the setup options available with the Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise.

Note For more details about the setup options, refer to the Help available from the Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise 8.3 — Release Setup dialog box.

Document Settings Tab

This tab allows you to select from a list of available Content Manager item types for documents to be released. In addition, this tab allows you to link Kofax Capture values, document index fields, batch fields, and text constants to Content Manager attributes. You can optionally assign a dynamic item type to the document.

The screenshot shows a dialog box titled "Ascent 7.0 Release Script for IBM DB2 Content Manager Enterprise 8.3 - Release Setup". The "Document Settings" tab is selected. The "Batch Class" is "Standard" and the "Document Class" is "FaxIn". The "Release Script Name" is "IBM-FAXIN". The "Document Attributes" section shows "Item type" set to "NOINDEX". A table below lists Content Manager Attributes and their corresponding Ascent Values:

Content Manager Attribute	Ascent Values
Source	`\${Subject}`
User ID	OwnID
Timestamp	

Below the table, there is a checkbox labeled "Dynamically select item type at release using the following Ascent Value:" with an empty text field below it. At the bottom of the dialog are buttons for "OK", "Cancel", "Apply", and "Help".

Figure 5. Document Settings Tab

Folder Settings Tab

This tab allows you to specify new or existing folders for storing documents in the DB2 Content Manager system. In addition, you can specify a Content Manager item type to assign Content Manager attribute values to folders in the folder hierarchy. You can also specify which attributes can be used as search attributes when searching for pre-existing folders in Content Manager, and you can optionally assign a dynamic item type to each folder.

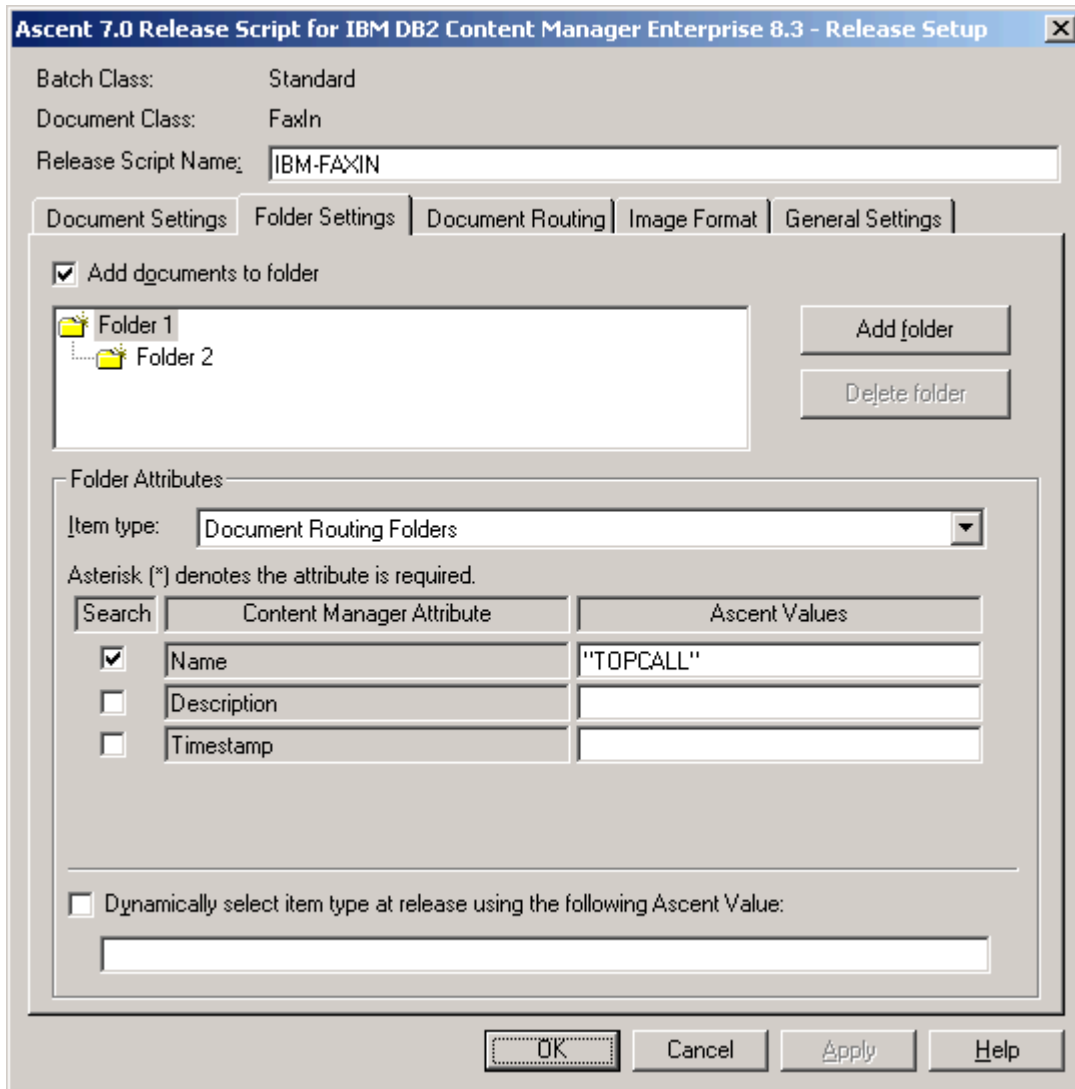


Figure 6. Folder Settings Tab

Document Routing Tab

This tab allows you to route released documents or route the parent folder for the current folder to the IBM DB2 Content Manager processes. You can either define static processes or dynamic processes. In addition, you can assign priorities for the processes.

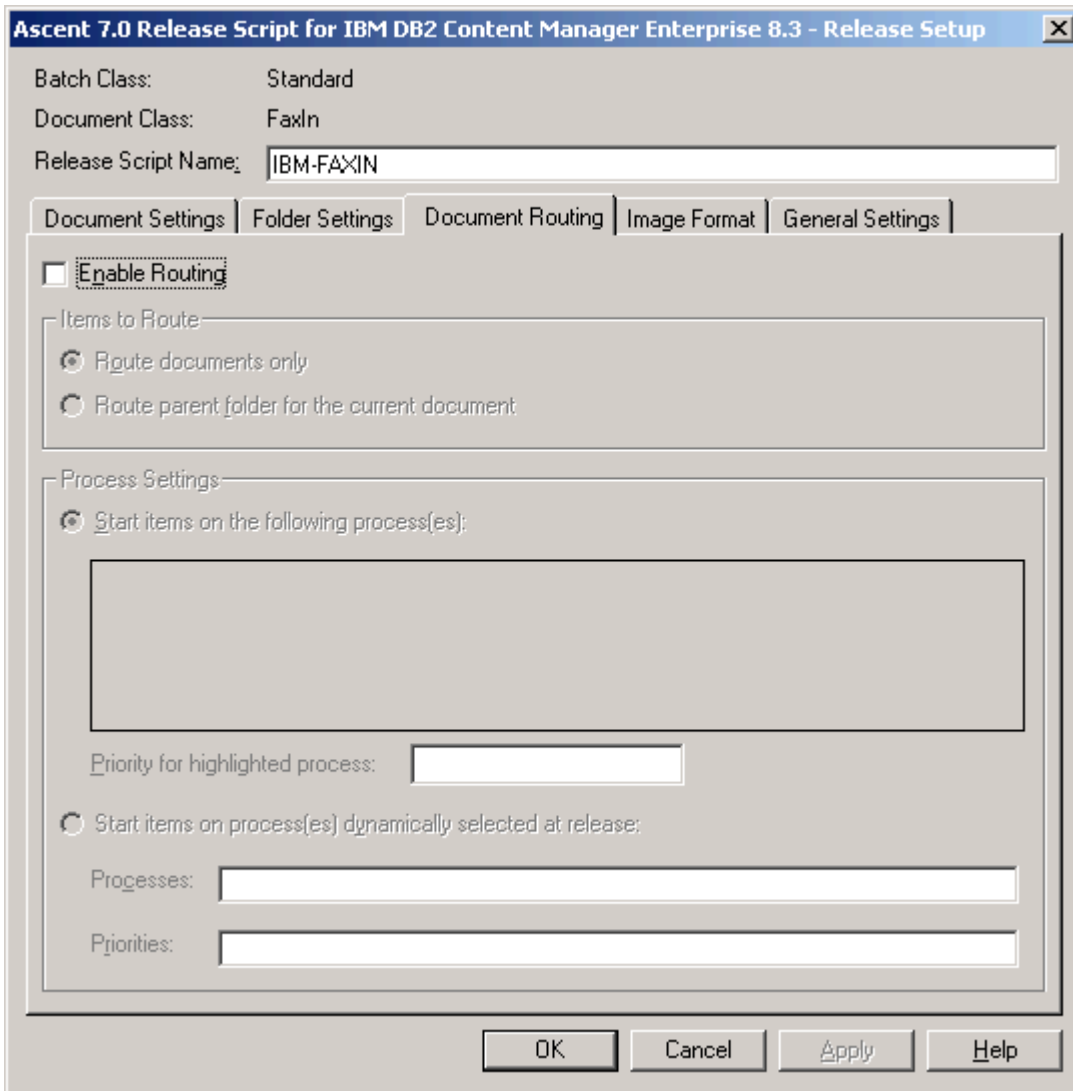


Figure 7. Document Routing Tab

Image Format Tab

This tab allows you to specify the desired image format for releasing your images.

Note TC/LINK-RS does not support some formats offered in this tab, including the Kofax PDF format. See [Image Support](#) for more information about supported image formats.

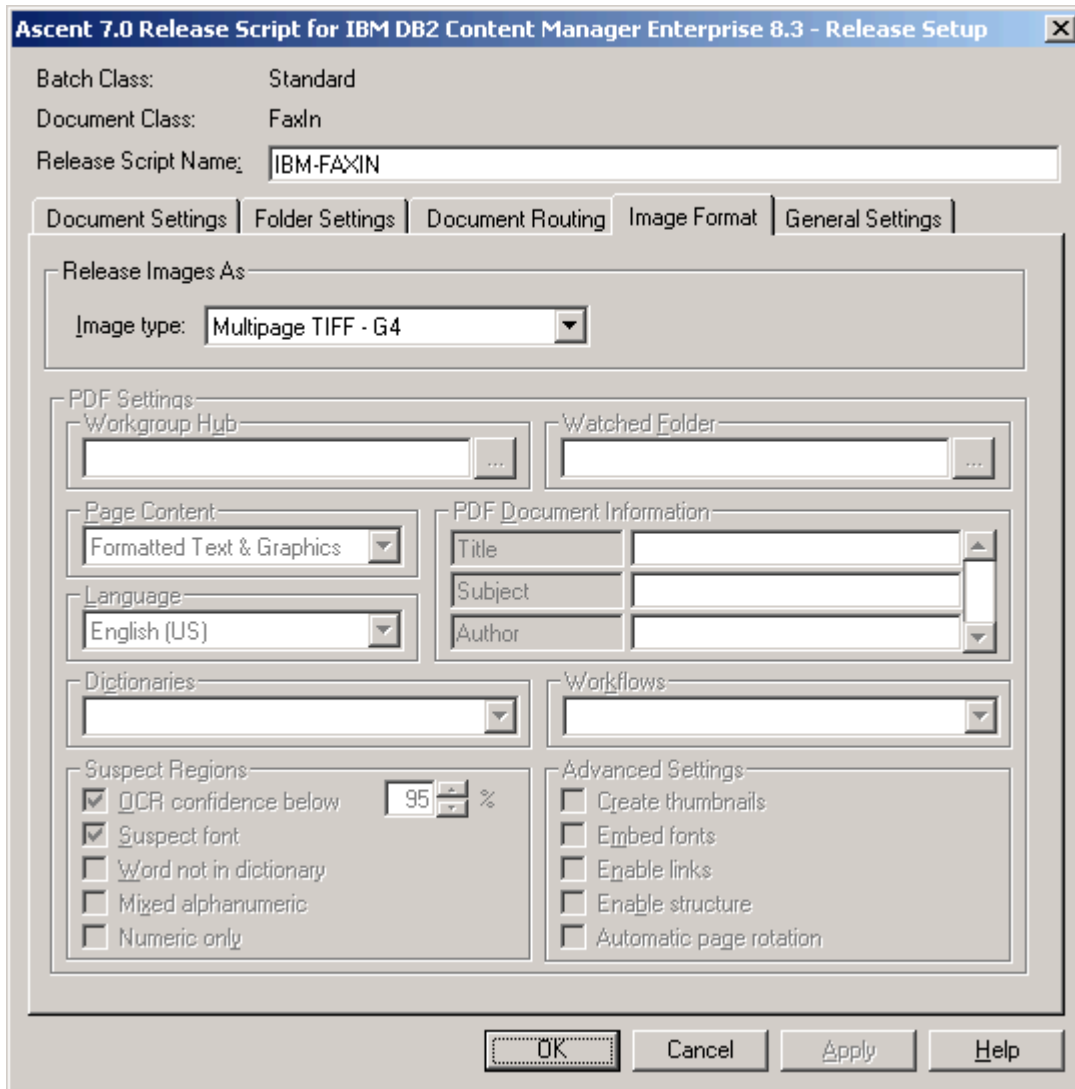


Figure 8. Image Format Tab

General Settings Tab

This tab allows you to specify a temporary storage location to be used at release time. In addition, you can specify whether to skip the first page of each document. Skipping the first page is supported with TC/LINK-RS, although it does not make much sense for fax messages. This tab also allows you to indicate whether to search the entire repository for the first folder and to specify a multi-value separator. The other options are not supported by TC/LINK-RS yet.

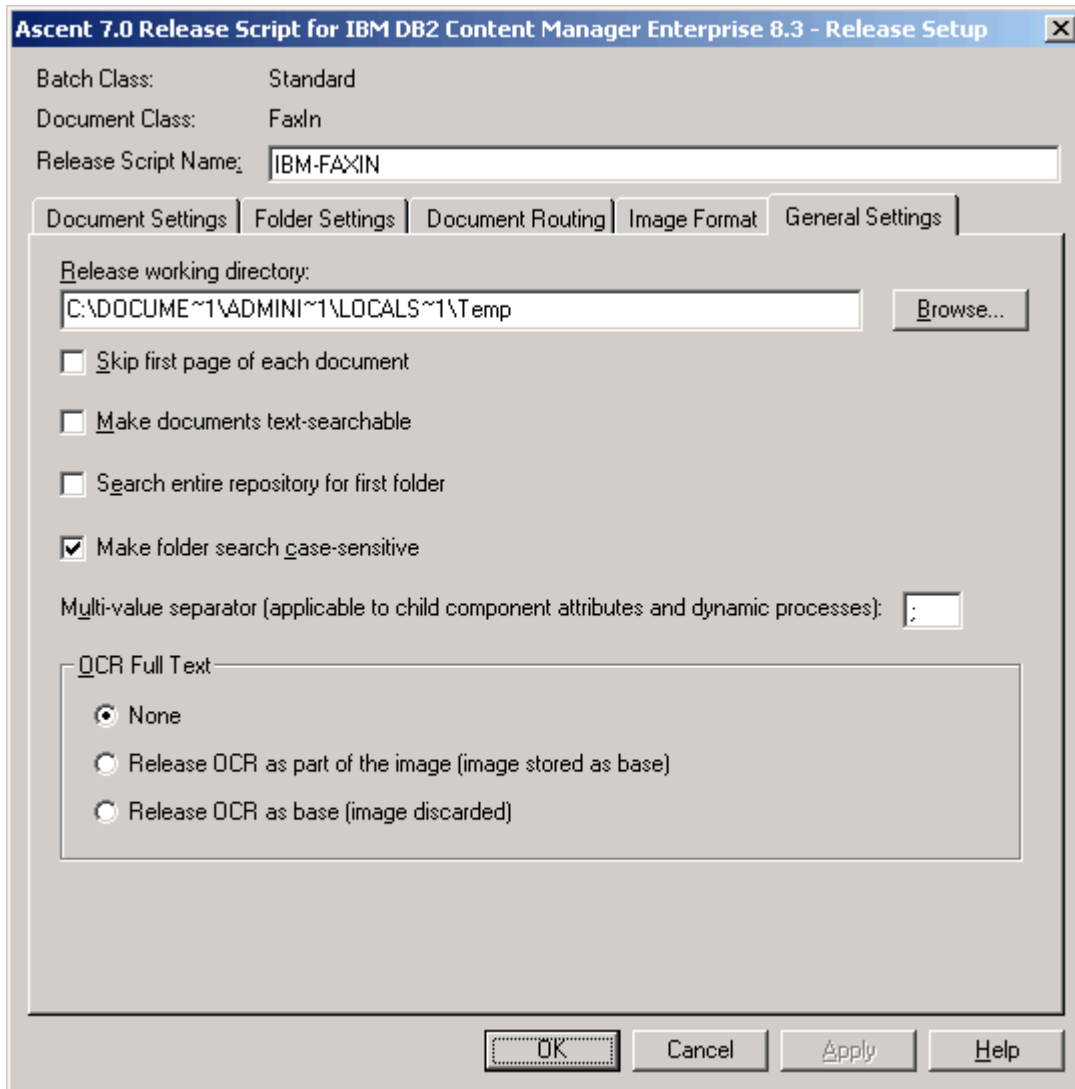


Figure 9. General Settings Tab

Save Release Setup: Warnings About Unused Fields

When saving the release setup configuration, the script displays warning messages if not all Kofax Capture Values (index fields, batch fields) have been linked to Documentum document properties. You can ignore these messages.



Figure 10. Warning Message

Activating a Configuration

To activate a release setup configuration, you must assign it to a TCOSS user or (for global use) to a fax channel group on the TCOSS server. Additionally, you must define events that route messages to TC/LINK-RS.

Both steps are done via the application TCReleaseConfig and are described in detail in the TC/LINK-RS manual. This section contains step-by-step description in brief.

1. Select the release setup in the **Release setups** tab of TCReleaseConfig and click **Assign**.
The **Assignments** dialog box is displayed.
2. Type in or search for the name of the TCOSS user whose fax messages shall be released via this configuration. Click **Add** to add the name to the user list. Then click **OK**.
The **Assignment status** window opens.
3. If there is no event defined for the user, create an event - on the context menu item, select **Create event**, set the event status to **Enabled** and click **OK**.
4. Send some sample messages to test the operation of the export connector. The way of sending the test messages depends on the event type:
 - To use the Inbound Release event of a user, send a fax to the user's fax number.
 - To use the Outbound Release event of a user, log in to TCFW as this user, and compose and send a message to an external fax number.
5. Make sure the TC/LINK-RS is active.
The event messages are routed to the TC/LINK-RS message queue, and TC/LINK-RS invokes the export connector.
6. Check the resulting documents in IBM Content Manager.

All pages that belong to a document are stored in Content Manager as parts. All parts use the same Content Manager attributes, allowing a logical association of all pages in the document.

Application Maintenance

This section describes how to repair and remove the Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise.

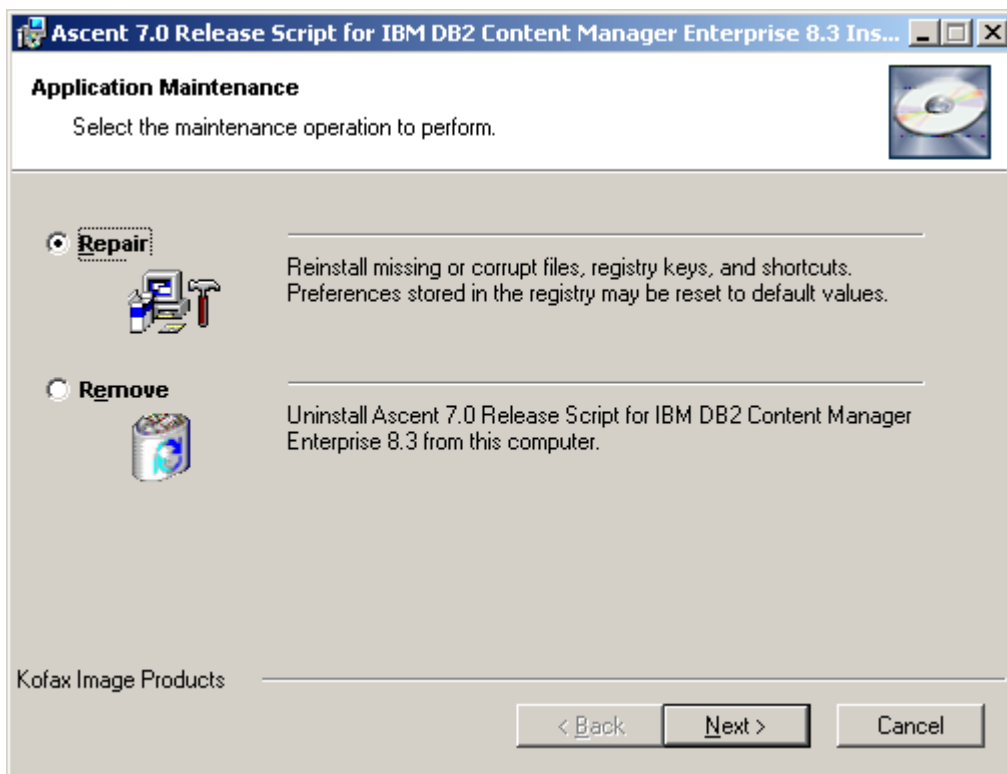


Figure 2. Application Maintenance Dialog Box

Repairing the Export Connector

The Repair option replaces missing, renamed, or deleted files.

1. Insert your Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise installation CD into your CD drive.
2. From your Windows task bar, select **Start | Run**, browse to the IBM\CM8 folder on the CD, and run **Setup.exe**.

Setup will detect an existing installation and the **Application Maintenance** dialog box is displayed as shown in [Figure 2](#).

3. Select **Repair** and then click **Next**.
4. Follow the instructions on the screen to repair the export connector.
5. When the repair is complete, a message is displayed indicating the export connector was successfully installed.

Removing the Export Connector

The Remove option will delete the export connector.

1. Insert your Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise installation CD into your drive.
2. From your Windows task bar, select **Start | Run**, browse to the IBM\CM8 folder on the CD, and run **Setup.exe**.
Setup will detect an existing installation and the **Application Maintenance** dialog box is displayed as shown in *Figure 2*.
3. Select **Remove** and then click **Next**.
4. Follow the instructions on the screen to delete the export connector.
5. When the uninstallation is complete, a message is displayed that indicates the export connector was successfully uninstalled.

Alternatively, you can use the Add or Remove Programs utility from the Windows Control Panel to uninstall the IBM DB2 Content Manager Enterprise export connector.

Refer to the Microsoft documentation for more information about the Add or Remove Programs utility.

See [Problems When Uninstalling the Export Connector](#) for information about a known problem.

Note After uninstalling, the Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise will continue to display in the TCReleaseConfig application, although it will not be functional. To remove the export connector from the list, you must select the applicable export connector from the **Release scripts** panel in TCReleaseConfig and click **Delete**.

Chapter 10

Known Problems

This section contains information about known problems with the Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise.

Problems When Uninstalling the Export Connector

If you click the Cancel button while uninstalling the export connector, all the export connector original files will remain properly installed on the system. However, depending on the point during the uninstallation that the Cancel button is clicked, the export connector may be un-registered.

In such a case, once you attempt to log on to the export connector, login will fail. (SPR 31221)

Workaround: If this problem occurs, run repair. See [Repairing the Export Connector](#) for more information.

User-Defined Ranges for Document Attribute Values

Range checking is not performed in all cases at release setup or release for Kofax Capture values linked to document attributes for which user-defined ranges have been specified in the Content Manager. At release, if a Kofax Capture value falls outside of the valid range for a document attribute, the following will occur.

For Long/Short Integer Data Types (SPR 00009828):

- Long or short integer values that fall outside of the range specified in Content Manager will retain their values and will be released into Content Manager. No warning or error message will be generated.

For CHAR and VARCHAR Data Types (SPR 00009736):

- VARCHAR values with lengths that are less than the minimum allowed length will be released into Content Manager. No warning or error message will be generated.
- CHAR and VARCHAR values with lengths that exceed the maximum allowed length will generate the following error message at release:

The size of the attribute < attribute name> specified < attribute size> is greater than the size < maximum length> specified in the item type definition.

Workaround: When linking Kofax Capture Values to Content Manager document attributes during release setup, make sure you know the valid ranges for values. Furthermore, only link Kofax Capture Values that are valid for the attributes.

Releasing Single Page TIFFs

If you are having problems releasing documents as single page TIFFs, make sure that you have the latest Fix Packs from IBM. Releasing numerous images may cause the release to fail with the following parsing error message. (IBM PMR 30284, 004; Kofax SPR 28201)

```
Internal error occurred; an error occurred during parsing Return Code: 7047 Element ID: 129
```

In certain circumstances, release will succeed when releasing a large volume of documents; however, you will not be able to view the documents in the IBM Viewer. No error message is generated. (IBM PMR 68522, 756; Kofax SPR 28201)

This is due to a problem with IBM Content Manager.

Workaround: Use multi-page TIFFs instead.

Releasing Date Fields

When releasing date fields, you must use the forward slash, such as YYYY/MM/DD. If you use a point separator, such as YYYY.MM.DD or the German date format (DD.MM.YYYY), you are allowed to save your settings with invalid format for a text constant. However, the documents fail at release, as the IBM DB2 Content Manager Enterprise export connector is not able to validate the Date fields at release when point separators are used. (SPR 27094)

Workaround: Configure date format YYYY/MM/DD hh:mm:ss for the export connector (via TCReleaseConfig).

Upper ASCII Character Limitations

If you have Unicode enabled on your system, Content Manager will count upper ASCII characters as two characters. Therefore, it is possible to inadvertently exceed the assigned string length for an Attribute if characters with umlauts are used. For example, if you have a data type with 32 characters in length and you enter more than 16 upper ASCII characters, you may receive one of the following error messages when you attempt to link the folder or document properties with the data type. (IBM PMR 17880; Kofax SPR 00009882)

```
DGL3616A: An unexpected SQL error occurred; ICM7015: During an SQL operation in the library server, an unexpected error occurred. For details on the error, from a DB2 command prompt enter DB2?SQLnnnn. (STATE): [LS RC = 7015, SQL RC = -311].
```

Or

```
Release Script Returned -1. Your release script may need to be re-installed.
```

Workaround: Make sure your data fields are long enough to accept upper ASCII characters.

Using the Dynamic Item Types Feature with Child Component Attributes

Due to a limitation of Content Manager, you will not be able to create a child component attribute name with the same name as another child component attribute in another item type.

Therefore, you cannot use the dynamic item types feature with child component attributes. (IBM PMR 65664, 756; Kofax SPR 00010054)

Dynamic Process

When dynamically assigning a process name at release, you must use the process name. If you attempt to use the process description, you may receive the following error message. (SPR 00010053)

```
The process name length is greater than the maximum length of 32.
```

Notice that this problem also occurs with Dynamic Item Types.

Workaround: Use the process name when dynamically assigning a process. The process name must match the existing process name in the IBM DB2 Content Manager library server.

Using NULL Values

The cardinality of each set of multiple values entered in each child component attribute must be equal, even if the attribute value is left blank. Therefore, no spaces or empty quotes should appear between the entries to represent a NULL value. If you attempt to use empty quotes between the delimiter for a NULL value, you may receive the following error message. (SPR 00010080)

```
Error in document #1, 0. The value provided for the attribute < attribute> is not valid.  
Please verify that all Kofax Capture Values are correct and try again.
```

For example, let's say that you need to enter the following multiple values for the child component attributes into the export connector:

- "apple" value
- empty or NULL value
- "orange" value
- "pear" value

You would type the following (assuming that you specified a single semi-colon (;) character as the delimiter on the General Settings tab):

```
apple;;orange;pear
```

Double quotes and spaces will not be interpreted as a NULL value. Therefore, you may receive the error message depending upon which character is allowed for your item type. For example, if you enter the following in a numeric field, you will receive the error message:

```
10;" ";20;30  
10; ;20;30
```

Workaround: Do not use empty quotes or blank spaces to represent a NULL value when entering multiple values.

Minimum Cardinality Not Met

On the Content Manager back end, you can set the minimum cardinality for a child component.

If the minimum cardinality is set equal to zero (the default setting), some of the child attributes can remain unlinked. However, if the minimum cardinality is greater than or equal to one, all the child attributes must be linked. (IBM PMR 67634, 756; Kofax SPR 00010069)

If the cardinality of each set of multiple values entered for a particular child component is not equal, the release will fail with the following error message:

```
The number of child component rows provided is less than the minimum required in the  
definition of the component type (STATE):[LS RC=7981] one or more required attributes  
for this document may be missing. Please verify that all Kofax Capture Values are  
correct and try again.
```

Please consult the Release Notes of the Kofax Export Connector 7.0 for IBM DB2 Content Manager Enterprise for further information.

Required Child Component Attributes and Minimum Cardinality of Zero

If the minimum cardinality for a child component is equal to zero and one or more of its child attributes are required, Content Manager will allow you to release even if the child attribute values are unlinked or left blank. The export connector will not fail as expected. This is due to a problem with IBM Content Manager. (IBM PMR 59297, 756; Kofax SPR 30207)

Workaround: Make sure that the minimum cardinality for a child component is greater than or equal to one. This ensures that all the required and non-required child attributes must be linked.

Time Stamp Data Type Must Have a Value

If you leave the Time Stamp data type field blank and release, release will not fail as expected.

Instead, a document will be created on the Content Manager back end with a blank Time Stamp attribute. (SPR 00009820)

Workaround: Make sure that the Time Stamp data type you are releasing is not left blank.

“Unable to Check Out Item” Error

If you attempt to release simultaneously using multiple TC/LINK-RS workstations, you may receive the following error message. (SPR 00009897)

```
Release Error: Script #1 (IBM Content Manager Enterprise 8.3) [0 DGL0546A: Unable to check out item : (STATE) : [LS RC=7400]. If you are releasing to folders, the destination folder might be in use or checked out. The destination folder must be checked in before documents can be released to it.]
```

When simultaneously releasing to multiple workstations, be aware that workstations may attempt to check out the same folder. If this occurs, the first workstation that requested the folder will be able to check out that folder, subsequent workstations will run into an error.

Linking Only Child Component Attributes

If you attempt to release with only the child component attribute linked and the parent level attribute is unlinked, release will fail with an error message. (SPR 00013984)

Workaround: When releasing linked child component attributes, make certain that the parent level attribute is also linked.