V1 Document Management

EDM for Sage X3 by V1

Electronic Document Management

PIA for Sage X3 by V1

Purchase Invoice Automation

SOA for Sage X3 by V1

Sales Order Automation

Release 12.1

FAQ - Crystal Report Changes

Updated - 16 March 2017

Contents

1. Introduction

This document outlines the way that Crystal Report designs should be changed for use with EDM for Sage X3 by V1's Document Delivery module (formerly EDD.)

Assumptions

- ▶ Engineer has familiarity with Sage X3's reporting functions and destination concepts
- ▶ Engineer has expertise using Crystal Reports and previous experience adding new content to reports such as text boxes and formula
- ▶ It is recommended in the interest of the environment wherever possible, emailing is the preferred method of transmission. For this reason, every effort should be made to ensure the Email: cell in both the GESBPS and GESBPC functions for all Business partners have an email address for those Sage X3 Folders / Endpoints patched

You are encouraged to bookmark the Portal which is regularly updated with information about the release:

http://support.wearev1.com/software/x3/X3EDMHELP/index.htm

2. Solution Overview

When using the AUTO destination, PDF files are created by Crystal Reports passing through a tool which searches for control directives which govern the manner in which the document(s) contained in the PDF file are to be processed.

For this process to work successfully it is necessary to embed the appropriate directives in the document by editing the Crystal Report definition.

Sample reports for the more popular document types are provided, this document covers what needs to be done to add more that are not provided as standard.

Example:

- A batch of 50 Sales Invoices are printed to the AUTO destination (SBONFACAUTO)
- When printed, a single PDF is created in the c:\temp directory on the Sage X3 Application Server. This PDF contains all the 50 Sales Invoices as one document of multiple pages
- A process is then triggered splitting the PDF in to individual documents, one per Customer
- For each of these split PDF's data is read from the document (details to follow) and the following logic is followed:
  - Is their an email address for the Customer?
    - If Yes, the customer is emailed the Sales Invoice
    - The process finishes and the process moves to the next PDF
    - If No
  - Is their a fax number for the Customer?
    - If Yes, the customer is faxed the Sales Invoice
    - The process finishes and the process moves to the next PDF
    - If No
  - What is the default destination for the default report?
    - Sales Invoices is printed to the default destination printer
- So in the above example, if 30 Customers had email addresses they would be emailed, if 10 had fax numbers they would be faxed and the remaining 10 who had neither an email nor a fax number, they are printed.

3. Crystal Report Changes

This involves adding some control directives into the source document so that they can be extracted from the PDF file as part of the automated processing. As this is an automated process these strings do not need to be visible on the output document. It is recommended to use 4pt Courier using a white font on a white background. The strings should all be on the first page **only** of a multi-page document.

The directives are all prefixed with ~~ for ease of identification and have specific purposes.

1. Use the ~~**!**:~~ control string as a document separator i.e. this identifies the first page of the document
2. Use the format ~~@[name:value] to pass specific parameters to the automation process

NOTE: Several reports are installed as part of the patching process to give you examples of supported commands. It is strongly advised you examine these examples before attempting to create custom reports. They are located on the Sage X3 Application Server in the \Folders\<EDMFOLDER>\REPORT\BRI folder and named XV1_<STANDARDREPORTNAME>AUTO.rpt.

4. Common Elements

Examples of the most common options that may be used are shown below:

Directive	Definition
$Document	The document type being processed, e.g. V1SIH
$OutputType	A specific *type* of outbound activity, these are defined later in this document

Archiving

Field Name	Tag field value
<FIELD_NAME>	The tag value to be passed for distribution e.g ~~@[INV_DATE:19/03/2012]

Mailing

Directive	Definition
$Email	The TO email address for the document
REPLY_EMAILADDRESS	The REPLY email address for the document
BCC_EMAILADDRESS	The BLIND CARBON COPY email address for this document
COMPANY_NAME	Add a company name to the bottom of outbound mails

Faxing

Directive	Definition
$Fax	The fax number this document will be sent to

Printing

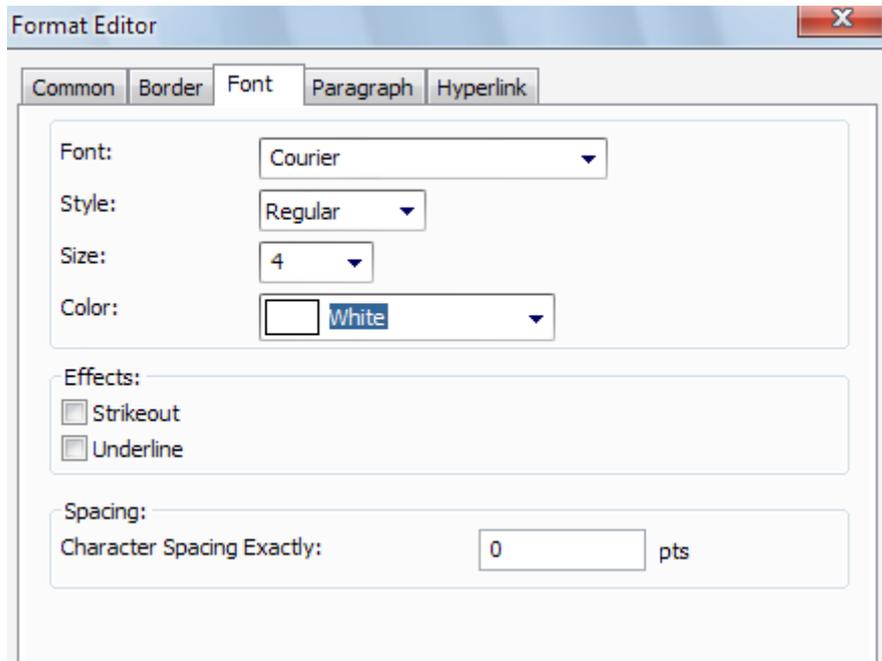| Directive	Definition
$Printer	The UNC path of a shared networked printer e.g. \\PRINTSERVER\PRINTER

NOTE: $Document directive is mandatory.

5. Example Crystal Report Layout

The Crystal Report format requires amendment to add the necessary control string directives.

These should be formatted as Courier Font (i.e. fixed pitch) and can be as small as 4 point and printed white on a white background. NOTE: Whilst developing and testing the changes we recommend that these remain visible i.e. not White on a White background.

In this example there are 3 blocks of control strings to the right of the Page Header Block.

The first is a simple text string containing the document separator and the X3 document type.
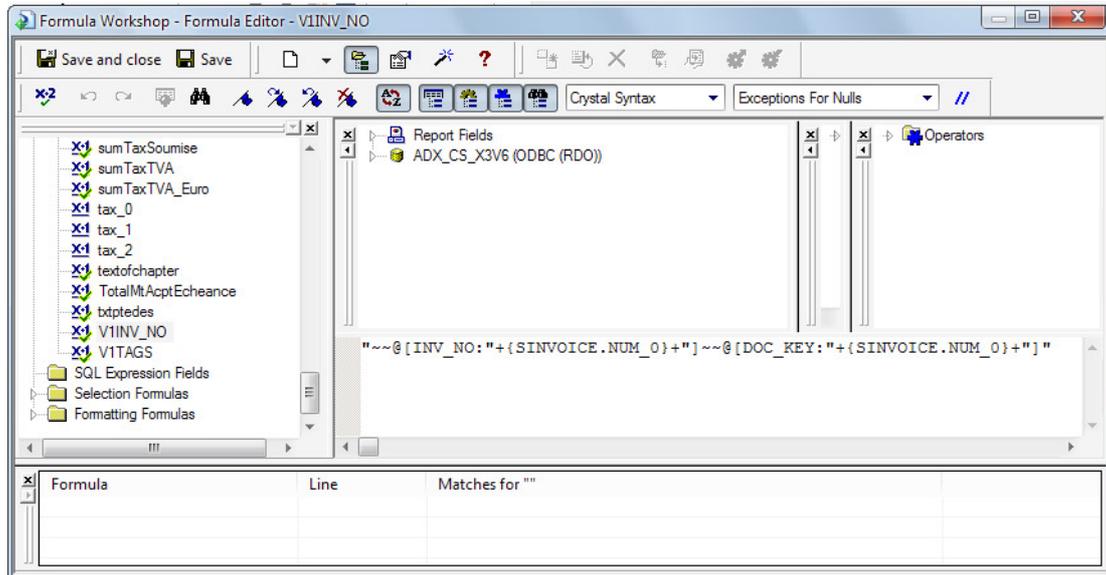
The second and third are formulae containing the other directives to be used primarily as DbArchive tag data. Creating formulae is safer than concatenating strings and data on the page.

NOTE: Both values and dates should be formatted to ensure conformity with the required standards. Dates must be in dd/mm/yyyy format and values should have no thousand separators.
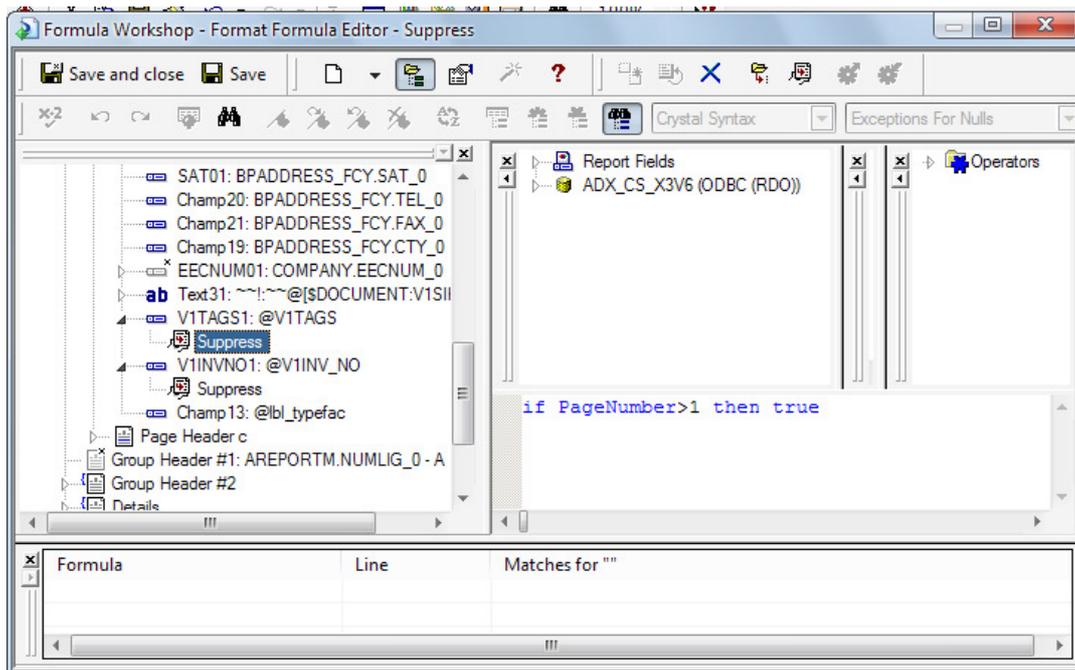
To make sure they only appear on the first page you format the fields on the report to set the Suppress property if the page number is greater than 1.

6. Directives and Process Flow Explained

Since these directives control the way in which documents are processed, it is important that they are used correctly.

Managing Output Types and Destinations

This is a key function which can be managed using one or more control directives as noted below:

6.1 $OutputType

This directive is used to *force* a particular output type for this document.

The valid list of directive values is:

- ▶ AUTO
- ▶ PRINT
- ▶ PRINTONLY
- ▶ EMAIL
- ▶ EMAILONLY
- ▶ FAX
- ▶ FAXONLY
- ▶ ARCHIVE

The default behaviour if this directive is missing is the "AUTOMATIC" mode whereby the available options for output are assessed and selection made based upon the following process flow. When one of the following is satisfied, the process flow will stop at that point. It is **essential** to understand this flow as it is critical to a successful deployment:

1. If a valid email address is found on the Crystal report, this email will be used.
2. If a valid email address is not found on the Crystal report, a lookup will be made against the BP record for an email. If found, this email will be used.
3. If the faxing module has been purchased, if a valid fax number is found on the Crystal report, this number will be used and the document faxed.
4. If the faxing module has been purchased, if a valid fax number is not found on the Crystal report, a lookup is made against the BP record for a fax number. If found, this fax number is used and the document is faxed.
5. If neither an email address nor fax number is found and a printer directive is populated in the Crystal report, the documented is printed to that printer.
6. *If neither an email address nor fax number is found and a printer directive is not populated in the Crystal report, the following occurs as per the preparation instructions:

  - ▶ The standard report name is identified
  - ▶ A lookup is done for the standard report default destination

- ▶ A lookup is done for the standard report default destination network printer share name
- ▶ A copy of the PDF copied to the \NOTEMAILEDORFAXED directory on the Sage X3 Application Server
- ▶ The ADMINEMAILADDRESS is sent an email informing them the document has not been distributed
- ▶ The document is sent to the destination printer found and printed

6.2 $Directives

These directives are used to set specific values for the Printer, To email address, Reply email address, BCC email address and Fax number respectively for the document being distributed.
In the absence of these directives the addresses will be obtained by lookups to data contained within the Sage X3 Database.

The presence of one of these directives does not in itself force the output to that destination. For example, a common usage might be to set the $Printer value to be a particular printer determined by the document type or perhaps the user or site but leave the output type as automatic either explicitly using $OutputType:Automatic or implicitly by omitting it entirely. In this manner the document will be emailed or possibly faxed if suitable addresses are available but if not the output destination printer will have been forced.

6.3 Archiving Parameters

Where a document is to be archived, the archiving destination will be taken from the $Document directive e.g. $Document:V1SIH. For archiving to take place the DOC_KEY entry e.g. ~~@[DOC_KEY:ABC123] is also mandatory as this is the X3 unique reference.

We strongly recommend that all archiving parameter values are included in the source document as directives.

It should be noted that due to the way the system operates, the primary identifier i.e. the DOC_KEY should contain only alphanumeric data. If there is a need to include for example a date in the DOC_KEY this should be done in a suitable format e.g. 01AUG12 rather than 01/08/2012 where the slashes will cause problems when processing the data.

NOTE: The parameter values should reflect the data type of the field into which they are being stored. As noted previously all date fields should be in the form dd/mm/yyyy and values should not include the thousands separator e.g. 12345.67 rather than 12,345.67.

6.4   Directive Examples – Add BCC Email Address

▶ I wish to add a **BCC Email address** to the report so the Sage X3 customers sales department is blind carbon copied for all outbound Sales Invoices that are emailed.

   ▶ E.g. The Sage X3 customer is Joe Bloggs Ltd. They have a sales manager who has an email address of john.smith@joebloggsltd.com and wants to be BCC'd into all Sales Invoices that are sent using EDD.

1. Log on to the Sage X3 Application Server as the windows user who is installing EDD / EDM.
2. Open Crystal Reports
3. Open XV1_SBONFACAUTO.rpt
4. Find and double click on the BCC_EMAILADDRESS field:

5. You should see two double quotes indicating a blank value. Enter john.smith@joebloggsltd.com between the double quotes. (Alternatively add a formula to *find* an email address from the Sage X3 database.)
6. Save the Crystal Report.

From now on, whenever a Sales Invoice is sent to the SBONFACAUTO report, john.smith@joebloggsltd.com will be sent a blind carbon copy.

6.5 Directive Examples – Customise Reply Email Address

▶ I wish to customise the **REPLY email address** of the report for individuals instead of by transaction.

The default behaviour is to use the default reply address by transaction as configured during the installation. However, this can be over ridden by getting an email address from the report.

> ▶ E.g. Sage X3 customer is Joe Bloggs Ltd. They have a sales manager who has an email address of john.smith@joebloggsltd.com and wants his address to be replied to when a Sales Invoices is sent using EDD.

1. Log on to the Sage X3 Application Server as the windows user who is installing EDD / EDM.
2. Open Crystal Reports
3. Open XV1_SBONFACAUTO.rpt
4. Find and double click on the REPLY_EMAILADDRESS field:

5. You should see two double quotes indicating a blank value. Enter john.smith@joebloggsltd.com between the double quotes. (Alternatively add a formula to *find* an email address from the Sage X3 database.)
6. Save the Crystal Report.

From now on, whenever a Sales Invoice is sent to the SBONFACAUTO report, john.smith@joebloggsltd.com will be the reply address.

6.6   Directive Examples - Configuring the Email Footer

Assumptions:

▶ Release 12 has been installed to the D:\SAGE\v1 directory

To allow the content of emails to be customized beyond the defaults but without the need for code change, the fundamentals are stored in simple text files.

These are language specific as Release 12 continues the enhancement that BP's are emailed in the language specified in Sage X3.

The text files are prefixed by the language as specified:

D:\SAGE\v1\dbpdf\email_trans\ENG_email_content.txt (US English)
D:\SAGE\v1\dbpdf\email_trans\BRI_email_content.txt (British English)
D:\SAGE\v1\dbpdf\email_trans\FRA_email_content.txt (French)
D:\SAGE\v1\dbpdf\email_trans\POR_email_content.txt (Portuguese)
D:\SAGE\v1\dbpdf\email_trans\SPA_email_content.txt (Spanish)
D:\SAGE\v1\dbpdf\email_trans\GER_email_content.txt (German)

In each file, it is split into a simple line by line format for use in the email:

Line 1. The 'Greeting' line - Dear
Line 2. The 'Summary' line – Below is a summary of the attached
Line 3. The footer / farewell line – Accounts Team
Line 4. The column headings text for the table received with the attachment

NOTE: Subsequent lines should not be altered as they are needed by the default document types.

▶ I wish to add the **Company Name** to be used as part of the footer for an email
    ▶ E.g. Sage X3 customer is Joe Bloggs Ltd. They have 12 companies. They want the footer of emails sent to include the Company name.

1. Log on to the Sage X3 Application Server as the windows user who is installing EDD / EDM.
2. Open Crystal Reports
3. Open XV1_SBONFACAUTO.rpt
4. Find and double click on the COMPANY_NAME field:

    🖼️ COMPANY_NAME

5. You should see two double quotes indicating a blank value. Enter {COMPANY.CPYNAM_0} between the double quotes or whatever formula is required to add a suitable company name. (Alternatively hard code a value between the double quotes.)
6. Save the Crystal Report.

From now on, whenever a Sales Invoice is sent to the SBONFACAUTO report, the company name will be specified in the footer of the email along with the farewell line in the text file.

7. Creating Custom Reports

Consult the documentation 'Adding a non-standard document' which gives the step by step procedure.