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UnForm 7.1.03 and above

eDeliver, eArchive INTEGRATION

readme document Contents

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Requirements

- UnForm version 7.1.03 or higher for eDeliver, unForm 7.0.14 or higher for eArchive
- your enhancement rule file (if custom), or use the demo sample one included in zip file.
- eDeliver_sdsi*.rul – Included in zip file. Pre-configured parallel rule-file(s).
- eDeliverEngine_sdsi*.rul – Included in zip file. Contains the “engine” to process eDeliver functions.
- eArchive_sdsi*.rul - Included in zip file. Pre-configured parallel rule file for archiving.
- other requirements which may apply are mentioned in the applicable sections of this document.

If you have not already, please see the e1_readme_sdsi_v71-1.pdf document which contains the download instructions and also a description of the files included in the zip file.

The zip file you download contains a fully operational demonstration of eArchive and eDeliver functions with very minimal rule-set pre-configuration, if the instructions are followed properly.

Features in the esdsi_v71-1.rul enhancement rule file and the parallel eArchive and eDeliver rule files

- Laser and PDF form enhancements for sample forms, including company logo, borders and boxes, form label shading, and proportional font usage for easy readability
- Multiple form copies with added copy identifier text
- e-Delivery: Fax and/or Email each document if accessible servers for those products exist
- Store each document in an archive library; this can be optionally enabled if the UnForm license includes the UnForm's Document Archiving and management component, or is an evaluation license
- Designate which copy to print, for example, when doing a reprint for a customer, suppress printing of an internal- use file copy
- Document Logging in conjunction with the e-Delivery function.

Additional eDeliver details

Fax, Email and/or selectively Print laser copies of documents using any one of four methods for passing recipient address/phone, copy number(s) and other pertinent form data to UnForm.

The **eDeliver_sdsi_v71-1.rul** file which enables this has been preconfigured by SDSI with standard settings, requiring a minimum of integrator setup work to implement.

Additional eArchive details

Store archival copies of documents in UnForm's Document Archiving and Management system, optionally place barcodes on documents for later scanning using the UnForm Image Manager tool.

Features in the UnForm system provide for retrieval via browser interface, including rich drill-down and search capabilities for fast access of archived documents.

The **eArchive_sdsi_v71-1.rul** file which enables this has been preconfigured by SDSI with standard archive system settings and properties. Use of these features requires the separate purchase of a license for the archiving component if not already included in the license.

Help Resources

In addition to the configuration help and other info in this document:

- At <http://unform.com> - **NewsPages Article about eDeliver eArchive Rule-Sets:**
http://synergetic-data.com/sdsi.cgi?h=NewsPages_2007_2nd_Qtr_e-Del_e-Arc *This NewsPages article is the most detailed description of the architecture employed, and should be read first!*
- **Flow Chart Image:** **Img_eArceDel_flow.png** showing parallel rule-set structure, pseudo-code, and merge command placement. In **/help/** folder.
- **Webinar Powerpoint:** **eArchive_eDeliver.ppt** ... in **/help/** folder.
- 4-session Archiving Webinar powerpoint slides ... request zip file.

eConfig 101: Demo and Setup Steps

Demonstration: this download contains a fully operational demonstration of eArchive and eDeliver functions with very minimal rule-set pre-configuration, if these instructions are followed properly.

Zip File Install and unzip Location: the zip file should be extracted from the main uniform server folder into the main uniform server folder, such that the contents of the zip file populate the main uniform server folder with no additional intermediate directory in between. Accepting the default folder specification in the unzip or gunzip file extract process may result in a wrong folder tree structure for demo purposes.

BEFORE beginning to configure eArchive or eDeliver for production use, by making rule-set changes, **we recommend that the Demo process be used to prove that all needed components or functionality are configured and working.** After you're satisfied that the demo functionality works on your system, move on to the customizing steps, if any, that take the package into readiness for full production mode.

- Demo and testing require that the target (3rd party) e-delivery server(s) (smtp email server and/or fax server and/or UnForm Windows support Server) be running. Read and follow any applicable instructions found in the **eConfig 102** section that relate to making sure the appropriate servers are configured and running.
- For Email testing, the global **EDOC_CCFORCE** can be used to specify an internal email address for testing without editing the demo text files. Note that if successful, SDSI will receive a copy of the test email, which we are happy to do if it streamlines the process of demonstration and testing for our customers.
- The **following indented items are optional**, but should be checked in the event that there are problems when using the demo scripts or when launching demo forms from the design tool.
 - ✓ At the top of the esdsi_v71-1.rul make sure the "client install" eArc and eDel paths are enabled and the SDSI development paths are disabled. In each of the global setup rule sets referenced in the eDel and eArc rule files referenced in the item below, also make sure the "client install" paths at the top of the rule set are enabled and the SDSI development paths are disabled.
 - ✓ Make sure that the **EDEL_FORCE_*** global(s) in the **[X EDELIVER GLOBAL SETUP]** ruleset in eDeliver_sdsi_v71-1.rul for the function(s) that you want to test are set to **1** (one), and the **EARC_FORCE_ARC** global in **[X EARCHIVE GLOBAL SETUP]** ruleset in eArchive_sdsi_v71-1.rul is set to **1** (one). See Appendix A and Appendix B for a sample of each.
 - ✓ If you want to customize the archive library name prefix from **MyClient** to something different like a client name, simply change the related global string in the global setup rule-set(s) mentioned in the previous paragraph.
- Use the script **esdsidemo.sh** (Unix/Linux) or the VB script **esdsidemo.vbs** (Windows) to build demo archives and test the configuration. These scripts launch the UnForm client to archive and e-deliver documents using the sample text files in the /edemotxt/ folder as input.

OR

- Manually, using the UnForm Design Tool, load the esdsi_v71-1.rul enhancing rule-file and individually preview each form. Only the sample Invoice form is configured for eDeliver, but all of the other form or report samples are pre-configured for archiving.

eConfig 102:

Preparation for eDeliver Deployment

Determine which eDeliver delivery methods you wish to enable AND which retrieval method will be used for each function selected.

Note: For demonstration purposes, eDeliver comes pre-configured for **retrieval method 3 using text CSV files**.

Also note that UnForm's GUI design tool will greatly simplify maintaining and editing the rule-set(s) required delivery information. The design tool can display a grid of the document allowing easy access to page locations of fields like dates and ids. If you do not have the design tool, contact your dealer for purchasing.

Email

- If the emailing function will be used, make sure that mailcall.ini file, found in the UnForm "prog" directory, is configured with the SMTP server name or ip address. A default from email address can be setup, as well as a login and password for authentication purposes.

Fax

- If the faxing function will be used with MS-Fax, make sure the UnForm Windows Support Server is configured and ready, and that MS-Fax is installed and running.
- If the faxing function will be used with a 3rd party faxing software, like VSI-Fax, you will need knowledge of the command line syntax that drives your faxing software.

Address Retrieval

- If retrieval method 1, fixed location(s) on document will be used, knowledge of the location of the information will be needed.
- If retrieval method 2 for delimited line(s) on document will be used, knowledge of the layout of the delimited lines will be needed.
- If retrieval method 3, text-file retrieval will be used, the file(s) must be available, and knowledge of the layout of the file will be needed.
- If retrieval method 4, ODBC retrieval will be used, make sure the UnForm Windows Support Server is configured and ready, and knowledge of the layout of the database will be needed.

Background 1 : eDeliver and eArchive parallel rule-file Flow

To understand how the new eDeliver / eArchive model works also please see the files mentioned in the Help resources section above.

The graphic image mentioned in Help resources shows the interrelationship and Flow that occurs between the following four Rule-Sets:

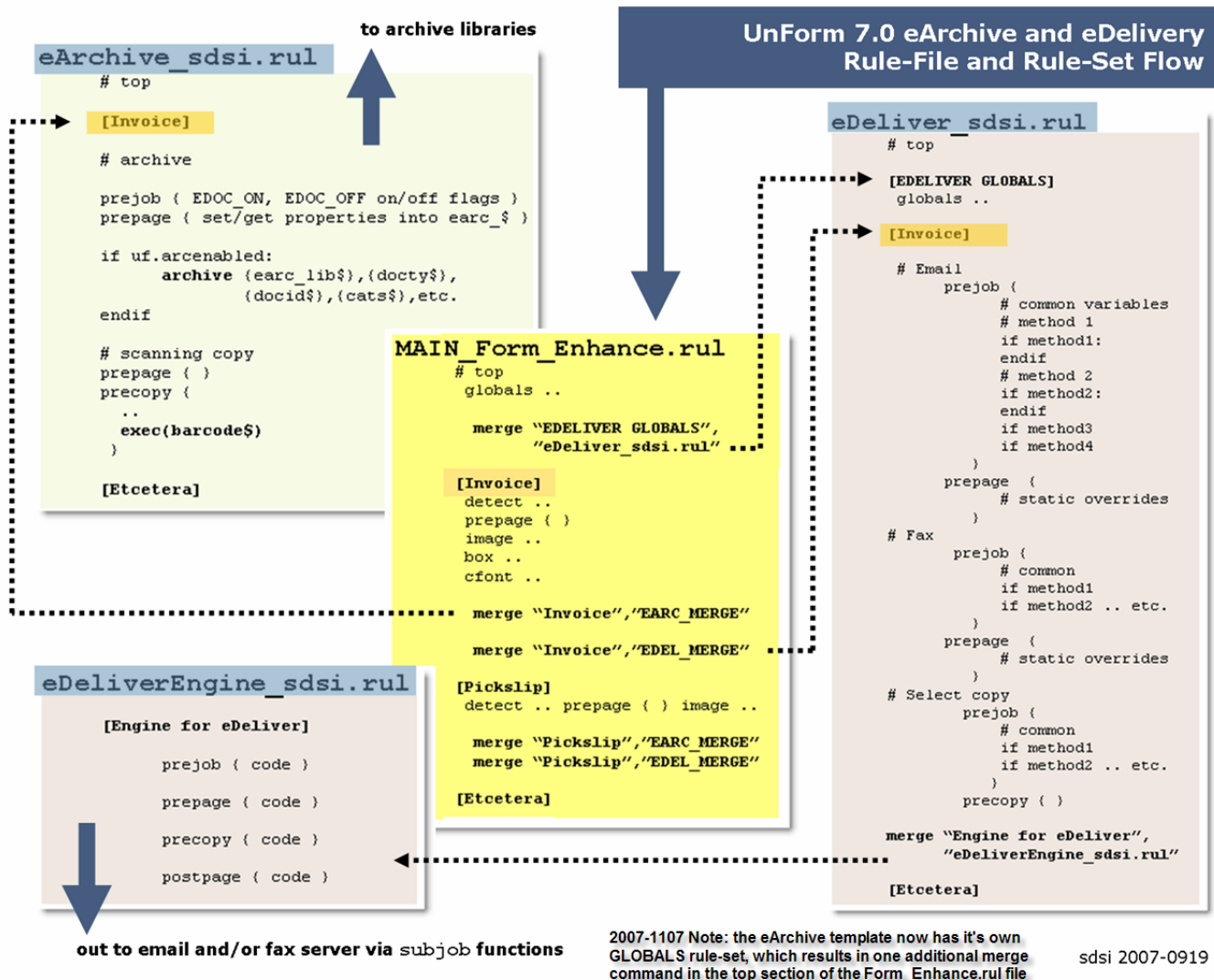
enhance_sdsi_v71-1.rul	... the main form enhancement rule file
eArchive_sdsi_v71-1.rul	... document archiving rule file
eDeliver_sdsi_v71-1.rul	... email, fax, selected copy print rule file
eDeliverEngine_sdsi_v71-1.rul	... engine for eDeliver (maintained by sdsi .. do not modify)

The graphic flow diagram is presented on the following page along with some explanation.

Note that the Arrows in the diagram do not represent an actual internal UnForm flow from any strict timing standpoint, nor do they represent a program overlay flow, but are intended to show an output destination that is the ultimate result of the processing.

The UnForm merge command operates as an 'include' construct causing rule-set code to be merged into a rule-set for later execution.

Note also that the graphic on the next page is a smaller scaled version of the same image mentioned in the Help Resources.



Through this series of merged rule-sets, UnForm adds the eDeliver and eArchive functionality dynamically at run-time to the main form enhancement rule-set detected from the text form data passed to the server by the UnForm client. This allows the settings and parameters, and all the code-block processing logic, to be kept out of the enhancement rule-sets, which will allow all the features and functionality of the rule-sets to be maintained independently, and allow the integrator to easily turn-on and turn-off features.

See **Appendix A** and **Appendix B** for a listing of the **global setup rule-sets** in eDeliver_sdsi_v71-1.rul and eArchive_sdsi_v71-1.rul.

These rule-sets contain settings which an integrator should be familiar with in maintaining and or customizing the system.

Note in particular the EDOC_FORCE globals which can be used to globally disable or enable functions when applicable, without needing to go to individual rule-sets.

Background 2 : eDeliver delivery and retrieval methods

-- Delivery Methods

- **Email** - via interface with an accessible SMTP email server
- **FAX** - MSFAX or other commercial Faxing servers like the popular VSIFAX. Commercial faxing servers are generally more suited to high-volume faxing needs.
- **Print Copy Control** - dynamic control over which or whether any copies print to laser, independent or simultaneous with email and/or fax.

-- Retrieval Methods

The demo eDeliver rule-set is pre-configured for method 3:

Other additional methods supported by eDeliver are included in the eDeliver rule sets, but are functionally disabled by the parameter in the globals setup rule-set that chooses method 3.

A brief description of each retrieval method is provided below for informational purposes only.

- Method 1: Document Print Stream Fixed Position -- Your application places all the relevant data needed for electronic delivery at fixed positions on the text page.
- Method 2: Document Print Stream Delimited Line -- Your application places all the relevant data needed for electronic delivery in a delimited line format somewhere on the text page with a leading tag to identify the delivery method.
- Method 3: CSV Text File Lookup, entity ID in print stream -- Using an entity ID like customer or vendor number contained on the form, UnForm retrieves all the relevant data needed for electronic delivery from a CSV text file.
- Method 4: ODBC SQL Database Lookup, entity ID in print stream -- Using an entity ID like customer or vendor number contained on the form, UnForm retrieves all the relevant data needed for electronic delivery from an ODBC connected database using a custom SQL command, and parses the record returned to get all the relevant data needed for electronic delivery.

Background 3 : eArchive

eArchive is very similar to eDeliver in how it is implemented, but in many ways much simpler, because there are fewer choices and options.

The goal of eArchive is to make it easy for the integrator to populate the archive property data that is associated with every document that is stored in the archive.

Archive Function

Archive document property information is critical for effective retrieval and association of documents.

While this could be done directly inside a form rule-set in the main enhancement rule file, it can be advantageous to maintain, manage and control a separate parallel rule-set that just contains the code for archiving properties.

The Rule-set Flow image document referenced earlier shows how it works, and a review and analysis of the individual forms rule-sets in **eArchive_sdsi_v71-1.rul** is necessary to get familiarized with the methodology if changes and customizations are going to be made to the property settings that have been pre-configured for the demo.

Rule-Set Code-block variables are populated with data from the text stream, and a pre-set archive command at the bottom references them.

Barcode Function

The UnForm Image Manager component provides an automated way to upload externally scanned documents to the UnForm archives. For documents that relate to existing documents in the archive, placing barcodes on the document that identify the document type and document ID allow the scanning process to automate the assignment of those two plus other document properties, making the process more efficient. The most common example in manufacturing or distribution is the signed packing slip which serves as legal proof of delivery.

The barcode function in eArchive contains the code necessary to open up a new region at the bottom of a laser or PDF document, and print barcodes in that area which help automate the scanning and upload process. There are several configurable globals and variables at the top of the barcode rule-set section. The code underneath does the work and does not need to be maintained if the default barcode style and size are being used.

INTERNAL ARCHIVE BROWSER SERVER

In addition to the CGI scripts provided for use with external web servers, UnForm 7.1 includes an **internal HTTP server**. The primary purpose of this server is to support Document Delivery and Forms functionality. **However, it can also provide access to the archive browser interface.**

By default, this server listens on port 27272, but this is configurable in the [httpd] section of the uf71d.ini file.

To access the archive browser interface, use the address **http://server.port/arc**.

Appendix A

eArchive_sdsi_v71-1.rul Globals Rule-set

Below is the main configuration rule-set in eArchive_sdsi_v71-1.rul. This gets merged into the top of every form at run-time. The integrator should understand the globals and values here and confirm that they are valid for the system during the setup and testing phase of the integration.

```
[X EARCHIVE GLOBAL SETUP]

## ----- ##
# Location of eArc parallel "shell" rulesets
# no path needed if in main uniform server dir
# if main uniform server dir set mergepath to "."
global EARC_MERGEPATH="."

## ----- sdsi dev path
# make sure the below line is commented with #
# and the above line active for any customer sites
# global EDOC_MERGEPATH="/u0/uniform_test/_sdsi/edoc_v71-1"

## do not remark, works with above
global EARC_MERGEFILE="EDOC_MERGEPATH/eArchive_sdsi_v71-1.rul"

# EDOC_FORCE "force function in all rulesets" globals.
# 0=don't force, 1=force ON all, -1=force OFF all
# values affect archiving for ALL rule-sets,
# the '0=don't force' allows the func setting configured
# in each individual rule-set to govern
# archiving
global EARC_FORCE_ARC="1"
# barcoding
global EARC_FORCE_BCD="0"

# Company Abbreviation
global EARC_COABREVSUJ="MyClient"

# Add above abbrev as library name prefix 1/0
global EARC_LIBCOABRSUB="1"

# AR statement pdf hot link library and docty
# NOTE: this feature needs consulting work before implementation
global EARC_STMLINKLIB="MyClient_Sales"
global EARC_STMLINKDOCTY="Invoice"

global EARC_ON=1
global EARC_OFF=0

# default trim setting, DO NOT CHANGE
global UFTRIM="Y"

#
## ----- ##
```

Appendix B

eDeliver_sdsi_v71-1.rul Globals Rule-set

Below is the main configuration rule-set in eDeliver_sdsi_v71-1.rul. This gets merged into the top of every form at run-time. The integrator should understand the globals and values here and confirm that they are valid for the system during the setup and testing phase of the integration.

```
[X EDELIVER GLOBAL SETUP]

## ----- ##
# Location of eDel/eArc parallel "shell" rulesets

# client or reseller path, set mergepath to "."
# for recommended install in root uniform server dir
global EDOC_MERGEPATH="."

# SDSI development path, remark with a leading '#'
# global EDOC_MERGEPATH="/u0/uniform_test/_sdsi/edoc_v71-1"

## do not remark below, works with above
global EDEL_MERGEFILE="EDOC_MERGEPATH/eDeliver_sdsi_v71-1.rul"
# Location and name of eDel "engine" rulefile/set

# mje 121907 ***** v20 ENGINE fixes !!
global DOC_ENGINE="EDOC_MERGEPATH/eDeliverEngine_sdsi_v71-1.rul"
global SET_ENGINE="Engine_for_eDeliver"

# EDOC_FORCE "force function in all rulesets" globals.
# 0-don't force, 1=force ON all, -1=force OFF all
# values affect deliv function (E/F/S) activation
# for ALL rule-sets,
# the '0=don't force' allows the func setting configured
# in each individual rule-set to govern
global EDOC_FORCE_EMAIL="1"
global EDOC_FORCE_FAXXX="1"
global EDOC_FORCE_SELCP="-1"

# delivery log detail, 1-minimal, 2-more, 3-full
global EDOC_DEBUGLEV=2

# Version-specific jobstore method parameter
# .. use the 7.0 method if you have an installation
# .. developed before 7.1 that involves code-block
# .. text moving operations, otherwise choose 7.1
#
# global EDOC_VERMETH="7.0"
global EDOC_VERMETH="7.1"

# delivery log location, separate daily log file name
# will be appended
#
global EDOC_LOGDIR="EDOC_MERGEPATH/eLog/"

# Company Abbreviation For default Subject
# Subject gets doc title and id appended to this
global EDOC_COABREVSUJ="MyClient"
```

```
# Add above abbrev as library name prefix 1/0
global EDOC_LIBCOABRSUB="1"

# EMAIL-specific globals
# disregard if email not used

# email smtp log location, used by engine to check for
# successful return status from email command, and text
# to match for a succesful submission. At log debug
# level 3 the full contents of the smtp comm file for
# each doc is written to the log
global EDOC_LOGSMTPDIR="EDOC_MERGEPATH/eLog/smtp/"
# email success ACK, do not change
global EDOC_EMOKACK="Client: QUIT"

# Force an Email CC, make "" if none
global EDOC_CCFORCE="mescobar@sdsi.us"

# FAX-specific globals
# disregard if fax not used

# use MSFAX? 0=no,1=yes
global EDOC_MSFAX=1
# fax cover MSFAX default
global EDOC_FAXCOVER="generic"
# fax cover VSIFAX default
# global EDOC_FAXCOVER="classic"

# fax from number
global EDOC_FROMFAX="530-672-9975"
# fax from phone
global EDOC_FROMPHO="530-672-9970"

# fax command if NOT msfax (this one's vsiFax)
global EDOC_FAXCMD="vfx -Fpcl -n"
# fax driver/tag/sep if NOT MSFAX
global EDOC_FAXDRV="pcl"
global EDOC_FAXTAGARG=" -t "
global EDOC_FAXTAGSEP=" "

# Retrieval method for the address & other delv info,
# global retrieval method, can be overridden by func
# or ruleset.
# Methods Supported:
# 1-Fixed Doc Loc,
# 2-Delimited Doc Line,
# 3-Delimited Textfile Lookup
# 4-ODBC SQL Lookup
#
# Note: header page uses method 1 with overrides
# and custom prepage skip logic
#
global EADDR_METHOD=3
```

```
#
# method 2 suppress print force, -1,0,1 like forces
global EADDR_M2CYSUPPR=0

# retrieval method 3 text file parameters
# Note: EADDR_FORMSUFFIX maintained in each rule-set
global EADDR_BASE="EDOC_MERGEPATH/eAddress/eAddr_"
global EADDR_EMSUFFIX="EM_"
global EADDR_FXSUFFIX="FX_"
global EADDR_SPSUFFIX="PR_"
global EADDR_EXTE=".csv"

# entity prefix and suffix
global EDOC_PFX=""
global EDOC_SFX=""

# lookup get field delim meths 2,3,4
global EDOC_2DELIM="|"
global EDOC_3DELIM=","
global EDOC_4DELIM=","

# meth 2 line header, line end
global EDOC_LINEHDRE="EMAIL"
global EDOC_LINEHDRF="FAX"
global EDOC_LINEHDRP="PRINT"
global EDOC_LINEEND=""

# default copy number(s) to deliver
global EDOC_DEFL_COPY="1"

# erase after get meth 1,2
global EDOC_ERASE=1

# rule-set level on/off switch, DO NOT CHANGE next two
# just allows the flags to read "on/off" instead of 1/0
global EDOC_ON=1
global EDOC_OFF=0

# default trim setting, DO NOT CHANGE
global UFTRIM="Y"

#
## ----- ##
```