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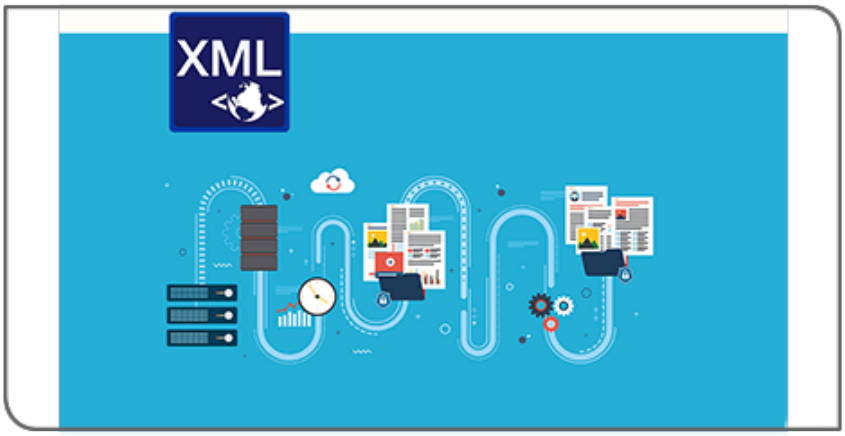

Manual

i4XML

Exposé

This document explains the commands and parameters in the product i4XML

In this manual the following commands are documented one by one:

- CRTGENMAP
- EXTXMLDTA
- GENXML
- PARSEXML
- PARSEXMLB
- WRKPARSE
- WRKHRY
- EVALXML
- MULTIPARSE
- CPYPRSMAP
- RSTPRSMAP
- WRKGENMAP
- MERGEXML

Command: CRTGENMAP

With this command a Mapping is created, which contains all information that is needed to extract data and create XML output with the command EXTXMLDTA.

The command CRTGENMAP has the following parameters:

TAGNAM	XML Tag Mapping Name	
	Name of a previously defined Mapping	
	*CREATE	Brings up Dialog to develop a new mapping.
	*DEFAULT	Generates a standard mapping without dialog.
	*SELECT	Shows a list of exiting Mappings to select and so Re-Generate.
INPUTTYPE	Input Object Type	
	Defines the type of input file.	
	*QRYDFN	Input is an existing Query Definition.
	*FILE	Input is a single file.
	*MAPQRY	Input is a special, with i4XML created Query-Mapping file.
QBJNAME	Object Name	
	Name of the Object. This depends on the OBJTYPE parm.	
QBJLIB	Object Library Name	
	Library of Input Object	
HIRDEF	XML Hierarchy Definition Name	
	Name of a XML Hierarchy (Defined by WRKHRY)	

The command CRTGENMAP has the following parameters:

TMPXML	Template XML Refers to a XML file that allows a F4-Function at field level.
RUNOPT	Replace Controls whether an existing mapping will be overwritten. *YES — In case the Mapping does already exists, it will be overwritten. *NO — If the Mapping already exists the processing will be stopped.
MAPOPT	Mapping Load Error Action This parameter defines what should happen in case of mapping loading errors. *BREAK — Processing will be cancelled in case of errors. *IGNORE — Errors will be ignored.
TAGSOURCE	Source of Tagnames When a new mapping is created, i4XML determines the XML tag names either from the text of the file field description or from the field names itself. *TEXT — XML tag names are determined from the text of the file field description, i.e. "customer name" results in "<customer_name>" *NAME — XML tag names are determined from the field names itself, i.e. "CUSTNM" results in "<CUSTNM>"

Command: EXTXMLDTA

With the command EXTXMLDTA the XML generation and executed based on a predefined generator mapping (refer CRTGENMAP command).

The command EXTXMLDTA has the following parameters:

TAGNAM	XML Tag Mapping Name Name of the XML Mapping, created with CRTGENMAP.
PATH	Path of XML Name of the XML file to be generated incl. path in exact IFS-Names, i.e. /home/xml/sampleoutput.xml
GENDTD	Generate DTD Controls whether a DTD (XML file description) is to be generated. *INT – DTD is generated internally, meaning within the newly generated XML file. *EXT – DTD is generated externally, in a separate file (to be entered at parameter DTDPATH). *WEB – A reference to an existing URL is generated into the XML file. At parameter DTDPATH a complete URL can be assigned. *NO – No DTD.
FTP	Transfer by FTP Controls whether the generated file should be transferred to an Server by FTP *YES *NO
REPLACE	Replace File Controls whether an existing file will be overwritten. *YES *NO

The command EXTXMLDTA has the following parameters:

DTDPATH	DTD File Name of the DTD file to be generated incl. path in exact IFS-Names, i.e. /home/xml/sampledesc.dtd
FTPTOF	To FTP Path Path where the file has to be FTP-ed to.
RMTSYS	FTP Server Name of the FTP-Server *INTNETADR — Instead of a server name an IP-address is to be used. (Special value)
INTNETADR	IP address
USRID	FTP-User
PASWRD	FTP-Password
XSLPATH	Path of XSL This parameter can be used to reference a XSL file.
SLTRCD	Additional WHERE Criteria Additional WHERE condition, which must be syntactically correct SQL.

The command EXTXMLDTA has the following parameters:

MASTTAG	MASTER Tag Tag name, which leads the XML structure. *DEFAULT — A standard name is inserted. *NONE — No name is inserted. The tag is determined from the structure.
HEADING	Heading Data that is to put to the Head of the XML.
RECLVLTAG	Record Level Tag Tag name that leads each record. *DEFAULT — A standard name is inserted. *NONE — No name is inserted. The tag is determined from the structure.
USESCH	Use Existing Schema For XML files which references the special Schema files, i.e. x-schema:OpenShipments.xdr" *NONE — No Scheme to be used. *NOHEAD — No XML-Head is generated. Use this to generate XML parts which can later be combined. See command MERGEXML for more informations on this.
SOXTYPE	SOXTYPE Enables the SOXTYPE-Mode, which does not start with "<?xml..." but with "<?soxtype..."
XMLENC	Encoding Encoding entries. *DEFAULT — A standard entry is inserted: encoding="ISO-8859-1"

The command EXTXMLDTA has the following parameters:

DECFMT	Decimal Format	
	Controls the decimal comma.	
	","	Decimal indicator is a comma.
	"."	Decimal indicator is a period.
I4CLIENT	Start i4Client	
	Controls the communication with the Windows-Client "i4Client". This can be used for opening the output file directly at the Windows session.	
	*LOCAL	A transfer on the local PC will be started.
	*NONE	i4Client will not be used.
	*LOCALSUI	Special mode for infor's BRAIN AS
ONE2ONE	One Input Record to one struct	
	Controls whether each input record should result in one XML structure, regardless of whether there are any structures defined.	
	*YES	
	*NO	
UCCSID	Use CCSID	
	Special use of CCSID or Codepage.	
	*DEFAULT	The current CCSID is used.
GENTYPE	Generator Type	
	Type of the generator.	
	*DOM	Standard method with IBM API.
	*OWN	Own method (about 50x faster).
JSONRCD	# of Record for JSON	
	For JSON Output this controls the number of records to put into one JSON file.	

Command: GENXML

With the command GENXML a XML file can be generated from a physical file without a dialogue or a predefined mapping. For a detailled processing use the CRTGENMAP command.

The command GENXML has the following parameters:

SCRIPT	XML Script Name Name of the XML file to be generated incl. path in exact IFS-Names, i.e. /home/xml/sampleoutput.xml
OBJTYP	Data Object Type Defines the type of file. *QRYDFN — Input is an existing Query Definition. *FILE — Input is a single file. *MAPQRY — Input is a special, with i4XML created Query-Mapping file.
OBJNAM	Query Name / Library Name of the Query. Only valid for OBJTYP(*QRYDFN)
OBJNAM1	File Name / Library Name of the Input file. Only valid for OBJTYP(*FILE)
OBJNAM2	MAPQRY Name Name of the mapping. Only valid for OBJTYP(*MAPQRY)
TAGNAM	XML Tag Mapping Name Name of the Tag-Mapping *DEFAULT — A standard script will be generated.

The command GENXML has the following parameters:

GENDTD	Generate DTD	
	Controls whether a DTD (XML file description) is to be generated.	
	*INT	DTD is generated internally, meaning within the newly generated XML file.
	*EXT	DTD is generated externally, in a separate file (to be entered at parameter DTDPATH).
	*NO	No DTD.
INTNETADR	IP address	
USRID	FTP-User	
PASWRD	FTP-Password	
UCCSID	Use CCSID	
	Special use of CCSID or Codepage.	
	*DEFAULT	The current CCSID is used.
SLTRCD	Additional SELECT Criteria	
	Additional WHERE condition which must be syntactically correct SQL.	
MASTTAG	MASTER Tag	
	Tag name that leads the XML structure.	
	*DEFAULT	A standard name is inserted.
	*NONE	No name is inserted. The tag is determined from the structure.

The command GENXML has the following parameters:

RECLVLTAG	Record Level Tag	
	Tag name that leads each record.	
	*DEFAULT	A standard name is inserted
	*NONE	No name is inserted. The tag is determined from the structure.
RMTSYS	Remote System	
	Name of the FTP-Server	
	*INTNETADR	
	*INTNETADR	Instead of a server name an IP-address is to be used. (Special value)
XMLENC	XML Encoding	
	Encoding entries.	
	*DEFAULT	A standard entry is inserted: encoding="ISO-8859-1"
USESCH	Use Existing Schema	
	For XML files. Refers to special Schema files, i.e. x-schema:OpenShipments.xdr	
	*NONE	
	*NOHEAD	
FTP	Transfer by FTP	
	Controls, whether the generated file should be transferred to a server by FTP.	
	*YES	
	*NO	
MAPOPT	Mapping Load Error Action	
	Controls what should happen when an error occurs during the load process of the mapping.	
	*BREAK	Processing will be cancelled in case of errors.
	*IGNORE	Errors will be ignored

The command GENXML has the following parameters:

I4CLIENT	Start i4Client Controls the communication with the free Windows-Client i4Client This can be used after the generation of the Excel table for starting a download in the temporary windows-directory and for opening the table with Excel.It is planned to can call any PC in the network in future versions. This functionality can be provided on request. This parameter is mandatory. *LOCAL A transfer on the local PC will be started. *NONE i4Client will not be used. *LOCALSUI Special mode for infor's BRAIN AS
FTPTOF	To FTP Path Path where the file is to be FTP-ed to.
RUNOPT	Replace Controls whether an existing script is to be overwritten *YES *NO
TAGSOURCE	Source of Tagnames When a new mapping is created, i4XML determines the XML tag names either from the text of the file field description or from the field names itself. *TEXT XML tag names are determined from the text of the file field description i.e. "customer name" results in "<customer_name>" *NAME XML tag names are determined from the field names itself, i.e. "CUSTNM" results in "<CUSTNM>"
ONE2ONE	One Input Record to one struct Controls whether each input record should result in one XML structure, regardless if there are any structures defined *YES *NO

The command GENXML has the following parameters:

DECFMT	Decimal Format "," "."
DTDP	DTD Path

Command: PARSEXML

With the command PARSEXML the import of a XML file to adequate DB2 tables (and accordingly physical files) is carried out.

The command PARSEXML has the following parameters:

SCRIPT	XML Document Name Name of the XML file to be parsed incl. path in exact IFS-Names i.e. /home/xml/sampleinput.xml
VALXML	Validate XML against DTD To validate XML against an existing DTD before parsing starts. *YES *NO
MAPNAM	XML Tag Mapping Name Name of a previous saved mapping. If PARSEXML is executed in Batch mode, it is mandatory to enter an existing mapping. *CREATE *SELECT — A new mapping can be defined with dialogues. *DEFAULT — The conversion process is started without additional dialogues. Data is put directly into the file referred to by the parameter FILNAM (special value).
SPLTMRG	Consider Merge / Split Mapping When a mapping is entered with this parameter, it can control whether the Merge/Split-Processing should be executed or not. *YES *NO
ACTOPT	Ignore Error Determines if errors should be ignored. *YES *NO

The command PARSEXML has the following parameters:

SINGFIL	Copy Data into one file This parameter gives the opportunity to store a complete structure to one file. (No additional dialogues are needed for this) *YES *NO
CVTATRB	Convert Attributes to Element Controls whether XML attributes are handled the same way as elements are handled. That means attributes can betransferred to physical file fields as well. *YES *NO
DECFMT	Decimal Format Controls the "decimal indicator". "," Decimal indicator is a comma. "." Decimal indicator is a period.
FILNAM	Enter new File Name / Library File to take the complete structure in the case of SINGFIL(*YES) and MAPNAM(*DEFAULT)
CVTSPEC	Convert special Characters Conversion for special (German) characters, which are not correct converted although CCSID is corrected. *YES Characters are converted. *NO Characters are not converted.
BOOST	Boost processing Special Parser call, which is optimized for larger files with no complex structures. *YES

The command PARSEXML has the following parameters:

BOOST

*NO

UCCSID — Use CCSID

If a special CCSID is to be used, it can be referred here.

*DEFAULT — The current CCSID is used

RMVDTYPE — Remove DOCTYPE entry

If a file contains a DOCTYPE-instruction, processing can be run into problems. Therefore, i4XML allows a manipulation of the input file.

*YES — DOCTYPE instruction will be removed from the original file, no way back!

*NO — DOCTYPE stays in file. Processing is probably not possible.

RPLUTF8 — Replace UTF8 to EBCDIC

Special characters handling (UTF-8)

*YES — Characters are converted

*NO — Characters are not converted

UTF8ISO — Replace UTF8 to ISO

UTF-8 coded Input files are converted to ISO before the Parser starts. Attention!!! File will be replaced.

*YES

*NO

ENCODING — Use Encoding

With this encoding an incorrect encoding (i.e. "UFT-16") can be replaced with an encoding that can be processed (i.e. "ISO-8859-1").

*DEFAULT — The encoding is not changed.

The command PARSEXML has the following parameters:

ID2ELEM	Convert ID-Attrib. to Element Special Pre-Processing which converts <Id>-Tags into Attributes, so that they can process in a proper way. *YES *NO
EDIMAP	

Command: PARSEXMLB

With the command PARSEXML the import of a XML file to adequate DB2 tables (and accordingly physical files) is carried out.

The command PARSEXMLB has the following parameters:

SCRIPT	XML Document Name Name of the XML file to be parsed incl. path in exact IFS-Names, i.e. /home/xml/sampleinput.xml	
VALXML	Validate XML against DTD To validate XML against an existing DTD before parsing starts. *YES *NO	
CVTATRB	Convert Attributes to Element Controls whether XML attributes are handled the same way as elements are handled. That means attributes can be transferred to physical file fields as well *YES *NO	
DECFMT	Decimal Format Controls the "decimal indicator"	
	","	Decimal indicator is a comma.
	"."	Decimal indicator is a period.
JOBQ	Job Queue Name of the JOBQ which the job will be submitted to.	
	*JOBD	The JOBQ will be determined according to the job description of the current job.
	*INTER	Interactive processing (special value).

The command PARSEXMLB has the following parameters:

UCCSID	Use CCSID	
	Special use of CCSID or Codepage.	
	*DEFAULT	The current CCSID is used.
ENCODING	Use Encoding	
	With this encoding an incorrect encoding (i.e. "UFT-16") with an encoding that can be processed (i.e. "ISO-8859-1").	
	*DEFAULT	The encoding is not changed.
CVTSPEC	Convert special Characters	
	Conversion for special (German) characters, which are not correct converted although CCSID is corrected.	
	*YES	Characters are converted.
	*NO	Characters are not converted.
RMVDTYPE	Remove DOCTYPE entry	
	If a file contains a DOCTYPE-instruction, processing can be run into problems. Therefore, i4XML allows a manipulation of the input file.	
	*YES	DOCTYPE instruction will be removed from the original file, no way back!
	*NO	DOCTYPE stays in file. Processing is probably not possible.
RPLUTF8	Replace UTF8 to EBCDIC	
	*YES	Characters are converted
	*NO	Characters are not converted
UTF8ISO	Replace UTF8 to ISO	
	*YES	
	*NO	

The command PARSEXMLB has the following parameters:

ID2ELEM	Convert ID-Attrib. to Element *YES *NO

Command: WRKPARSE

With the command WRKPARSE it is possible after the conclusion of the file analysis to continue to work with the command PARSEXMLB and define structures etc

The command WRKPARSE has the following parameters:

SCRIPT	XML Script Name Name of the XML file to be parsed incl. path in exact IFS-Names, i.e. /home/xml/sampleinput.xml
INPUTTYPE	Input Object Type
SPLTMRG	Consider Merge / Split Mapping When a mapping is entered with this parameter, it can control whether the Merge/Split-Processing should be executed or not. *YES *NO
ACTOPT	Ignore Error Determines if errors should be ignored. *YES *NO
SINGFIL	Copy Data into one file This parameter gives the opportunity to store a complete structure to one file. (No additional dialogues are needed for this) *YES *NO
MAPNAM	MAPQRY Name Name of a previous saved mapping. If PARSEXML is executed in Batch mode, it is mandatory to enter an existing mapping. *CREATE

The command WRKPARSE has the following parameters:

MAPNAM

*SELECT	A new mapping is generated with some dialogues. (Special value).
*DEFAULT	The conversion process is started without additional dialogues. Data is put directly into the file referred to by the parameter FILNAM (special value).

FILNAM — File Name / Library

File to take the complete structure in the case of SINGFIL(*YES)

TAGNAM — XML Tag Mapping Name

Command: WRKHRY

The command WRKHRY is used for the definition of complex structures. The result of this definition can then be used in the command CRTGENMAP.

The command WRKHRY has the following parameters:

HRYDEF	Hierachy Definiton	
	A new or existing Hierarchy name	
	*ANY	A dialogue appears with all existing mappings

Command: EVALXML

The command EVALXML is used for the textual verifying of a XML file.

The command EVALXML has the following parameters:

SCRIPT	XML Script Name Name of the XML file to be checked incl. path in exact IFS-Names, i.e. /home/xml/sampleinput.xml
VALXML	Validate XML against DTD To validate XML against an existing DTD before parsing starts. *YES *NO

Command: MULTIPARSE

The command MULTIPARSE is able to work off a whole group of input files with one call. Internally the command PARSEXML is actually being used.

The command MULTIPARSE has the following parameters:

DIRNAME	Directory to scan	
	Name of the path which contains the input files, i.e. /home/xml	
EXT2SCAN	Extension to scan	
	Extension to be scanned i.e. .xml	
ACTION	Processing Action	
	Controls what should happen with the input file after processing.	
	*MOVE	File is moved after processing, accordingly to DIR2MOVE and MOVACT.
	*CHGORG	File name or extension is changed after processing, accordingly to the parameter EXT2CHG, STAMPTYPE and STAMPPLACE.
	*DELETE	File is deleted after processing
DIR2MOVE	Directoy to move files to	
	Directory where the files should be moved to. Only valid when ACTION(*MOVE)	
MAPNAM	MAPQRY Name	
	Name of a previously saved mapping.	
MOVACT	Action after Move	
	Controls, what should happen with the file after the Move operation.	
	*NONE	File is not manipulated further after the move.

The command MULTIPARSE has the following parameters:

MOVACT

*CHGEXT	Extension of the file is manipulated according to EXT2CHG.
*STAMP	File gets a time stamp according to STAMPTYPE.
*STAMPEXT	Extension of the file is manipulated according to STAMPTYPE

DECFMT — Decimal Format

Controls the "decimal indicator".

","

"."

EXT2CHG — Extension to change to

New extension. Only valid when ACTION(*CHGORG) and accordingly MOVACT(*CHGEXT)

ID2ELEM — Convert ID-Attrib. to Element

Special Pre-Processing which converts <Id>-Tags into Attributes, so that they can process in a proper way.

*YES

*NO

STAMPTYPE — Type of Stamp

Type of stamp.

*DATTIM	Timestamp is both date and time.
*DATE	Timestamp is date only.

STAMPPLACE — Where to stamp

Controls, where the stamp is inserted

*BEGIN	At the beginning of the name.
*END	At the end of the name

The command MULTIPARSE has the following parameters:

STAMPPLACE

*EXT	At the extension.
*NONE	No manipulation

SEQKEY Sequence Key

Command: CPYPRSMAP

The command CPYPRSMAP (Copy Parser Mapping) is provided to extract and copy Parser-Mappings from the original Environment to a transport library.

The command CPYPRSMAP has the following parameters:

FROMLIB	Original library	
	Original Library where the Mappings are stored.	
MAPNAM	MAPQRY Name	
	Name of the Mapping to be exported.	
	*SELECT	Shows a list of available Mappings.
LIBNAM	Target Library	
	Target Library to receive the copied mappings.	
MBROPT	Copy option for target	
	Determines whether Data is to be added or replaced.	
	*ADD	Data will be added.
	*REPLACE	Existing Data will be replaced

Command: RSTPRSMAP

The command RSTPRSMAP (Restore Parser Mapping) enables the import of Parser Mapping Definitions from a previously saved library. The Mappings must be provided with the command CPYPRSMAP

The command RSTPRSMAP has the following parameters:

MAPNAM	MAPQRY Name	
	Mapping to be restored	
	*ALL	All existing Mappings will be restored
	*SELECT	Select one Mapping from a list
LIBNAM	Library to hold mapping	
	Library which contains the Mapping files (to be provided with command CPYPRSMAP)	
CPYOPT	Copy Option	
	Determines whether Data is to be added or replaced.	
	*ADD	Data will be added.
	*REPLACE	Existing Data will be replaced.

Command: WRKGENMAP

The command WRKGENMAP is provided to maintain the Generator Mapping Definitions.

The command WRKGENMAP has the following parameters:

GENMAP	Mapping Name	
	To assign an existing Mapping.	
	*ANY	Shows a Dialogue from where a particular Mapping can be selected

Command: MERGEXML

This command enables you to combine multiple parts of a XML-skeleton together to one valid XML stream file. Up to 3 input files plus one existing file canbe combined together

The command MERGEXML has the following parameters:

XMLA	XML Input File A First Part.	
XMLB	XML Input File B Second Part.	
XMLC	XML Input File C Third Part.	
XMLOUT	XML Output File Output File.	
REPLACE	Replace File Determines whether an existing file has to be replaced or should be used as a "Base", new data is appended.	
	*YES	Existing file will be replaced.
	*NO	Existing File won't be replaced; an error will be indicated in case there is an existing file.
	*APPEND	New Data is added to the existing file.
MRGTYPE	Merge Type Select the Processor.	
	*RPG	i4XML own Module (recommend).
	*QSH	Merge with QSH.