Flux XML Connector

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1   Usage

In order to use the XML Hotfolder feature, a Hotfolder must be configured as "XML Hotfolder" in the Hotfolder configuration user interface.

Once an XML Hotfolder is set up, job files can be copied into the Hotfolder in order to import the job. These files usually include one XML file with the job description and one or more (PDF/PS) source files. A job will only be imported if all source files are available, therefore it is advisable to copy the source files into the hotfolder before copying the XML file.

Note that, by default, the XML file as well as all source files belonging to the job will be deleted after importing. It is recommended to copy the files into the hotfolder instead of moving them.

Make sure that you adhere to XML syntax rules, especially that all tags are closed properly and that the closing tag names exactly match the opening tag names, including capitalization.

2   XML File Description

The job description in the XML file consists of two main parts: The order information section, containing general information about the order, and the order items section which describes all order items the order consists of.

The order information section contains information about addresses associated with the order (submitter/delivery/billing) as well as the delivery type (including the duration and the planned delivery date) and overall pricing information.

Both sheet-based and roll jobs are supported, however an XML file can only contain one type of job at a time. Sheet-based order items are described inside the *orderItems* tag, while roll-based order items are described inside the *rollOrderItems* tag. For roll-based jobs, only one *rollOrderItem* per XML is supported.

For sheet-based jobs, the *orderItems* section, describes every order item, including print settings and/or manual services, page sources (PS or PDF source files for the order item) as well as individual price information.

NOTE: Total prices are not calculated automatically. The XML creator has to ensure that the price information is complete.

For roll-based jobs, the rollO*rderItems* section, describes every roll order item, including print settings and page sources (PS or PDF source files for the order item) as well as individual price information.

For detailed information, refer to the tables below and the bundled example files.

3   XML Structure Reference

Sheet-based jobs

Tag	Description	Type
`<order>`	Root node	
`<orderInformation>`	Container node for order information	
`<prefix></prefix>`	Custom order ID prefix	String
`<orderId></orderId>`	(Optional) order ID for reference (not used)	String
`<creationDate></creationdate>`	Order creation date in ISO 8601 format	ISO 8601 String
`<submitterNote></submitterNote>`	Customer note for the order	String
`<projectName></projectName>`	Project name to identify related orders	String
`<delivery>`	Container node for delivery information	
`<id></id>`	Optional, will try to use delivery type from the Flux Database with this ID	String
`<name></name>`	Name of the delivery type	String
`<date></date>`	Planned delivery date for the order	ISO 8601 String
`<note></note>` (DEPRECATED)	Customer note for the delivery NOTE: This is deprecated as of Flux 7.8 and no longer supported.	String
`<text></text>`	Description of the delivery type	String
`<days type="..."></days>`	Number of days this delivery type normally takes. The "type" attribute can be either "work" or "week" to represent work or week days, respectively.	Integer Attribute "type": String
`</delivery>`		
`<price>`	Container node for price information	
`<subTotal></subTotal>`	Net total without delivery cost (e.g. 12.34)	Float
`<delivery></delivery>`	Delivery cost	Float
`<totalNet></totalNet>`	Net total including delivery cost	Float
`<total></total>`	Total gross price	Float
`<deliveryVat></deliveryVat>`	VAT for delivery in %	Float
`<currency></currency>`	Currency symbol for display purposes (e.g. $)	String
`</price>`		
`<customerAccountId><customerAccountId>`	(Optional) ID of a customerAccount from Flux Server database. USE customerAccountId OR addresses	String
`<billingAddressId><billingAddressId>`	(Optional) Use a different address of that customerAccount for billing.	String
`<deliveryAddressId><deliveryAddressId>`	(Optional) Use a different address of that customerAccount for delivery.	String
`<addresses>`	Container node for address information. At least the submitter address must be present.	
`<submitter>`	Container node for submitter address information	
`<name></name>`	First and last name(s).	String
`<shortName></shortName>`	Short name / handle	String
`<organisation></organisation>`	Company or organization name.	String
`<street></street>`	Street address	String
`<postalCode></postalCode>`	ZIP / Postal Code	String
`<city></city>`	City	String
`<region></region>`	Region or federated state	String
`<state></state>`	Country	String
`<tel1></tel1>`	Telephone number	String
`<tel2></tel2>`	Alternative telephone number	String
`<telfax></telfax>`	Fax number	String
`<email></email>`	E-mail address	String
`<project></project>`	Project / Department	String
`<projectNumber></projectNumber>`	Account number	String
`<custom1></custom1>`	Custom / additional address information	String
`<custom2></custom2>`	Custom / additional address information	String

Tag	Description	Type
`<custom3></custom3>`	Custom / additional address information	String
`</submitter>`		
`<billing>`		
`...`	Same as content of submitter node	
`</billing>`		
`<delivery>`		
`...`	Same as content of submitter node	
`</delivery>`		
`</addresses>`		
`</orderInformation>`		
`<orderItems>`		
`<orderItem>`	Container node for order item information. There can be one or more of these nodes.	
`<title></title>`	Title / name of the order item	String
`<price>`	Container node for order item price information	
`<copy></copy>`	Price for one copy of this order item	Float
`<auxiliary></auxiliary>`	Additional cost, independent of the number of copies	Float
`<sum></sum>`	Total price for this order item	Float
`<vat></vat>`	VAT for this order item in %	Float
`</price>`		
`<copies></copies>`	Number of copies of this order item. If *quantity* is also specified, this value is ignored.	Integer
`<submitterNote></submitterNote>`	Customer notice for this order item	String
`<quantity></quantity>`	Number of ordered items. If this is specified, *copies* is ignored.	Integer
`<document>`	Container node for print document information	
`<product id="...">`	Print product container node. If attribute id is specified, will attempt to use the corresponding print product from Flux Database.	id: String
`<name></name>`	Print product name. Can be used instead of product id to use an existing product. REQUIRED if product id is not specified. If an id is specified, the name from the database will be used.	String
`<description></description>`	Print product description. If an id is specified, the description from the database will be used.	String
`<pageSize id="...">`	Output sheet size. If attribute id is specified, will attempt to use the corresponding format from Flux Database. If this node is missing, the original page sizes will be used.	Id: String
`<name></name>`	Name of the paper size (e.g. A4, Letter)	String
`<width></width>`	Paper width in mm	Float
`<height></height>`	Paper height in mm	Float
`</pageSize>`		
`<services>`	Container node for product services (print setting or manual service). See the section "Flux default services and options" for available services.	
`<service id="...">`	Container node for a product service. There can be zero or more of these nodes. If attribute id is specified, will attempt to use the corresponding service from Flux Database.	id: String
`<name></name>`	Name of the service	String
`<option id="...">`	Container node for a service option. If attribute id is specified, will attempt to use the corresponding option from Flux Database.	String
`<name></name>`	Name of the service option	String
`</option>`		
`</service>`		
`</services>`		
`<printer>`	Container node for printer information. If not present, the default printer will be used.	
`<name></name>`	The name of the printer to use for this document. Must match the name of a printer on the flux server system.	String

Tag	Description	Type
`<settings></settings>`	The name of a set of printer settings to use for the selected printer.	String
`<autoPrint></autoPrint>`	(Optional) Use this tag to activate the autoprint feature(true or false). Requires autoprint service being enabled in Flux Server. Default option is false.	Boolean
`</printer>`		
`<cluster>`	Container node for printer cluster information. Will be ignored if the <printer> node exists.	
`<name></name>`	Name of the printer cluster to use for this document. The cluster must be present in the configuration.	String
`<autoPrint></autoPrint>`	(Optional) Use this tag to activate the autoprint feature(true or false). Requires autoprint service being enabled in Flux Server. Default option is false.	Boolean
`<printers>`	Container node for printer settings to use for the cluster. Optional.	
`<printer>`	Container node for settings for one printer. There can be one or more of these.	
`<name></name>`	The name of the printer for which a set of printer settings should be used.	String
`<settings></settings>`	The name of the set of printer settings to use for the printer.	String
`</printer>`		
`</printers>`		
`</cluster>`		
`</product>`		
`<pageSources>`	Container node for page sources of this order item. At least one page source is REQUIRED	
`<pageSource>`	Container node for information about a single page source (PDF or PS file)	
`<fileName></fileName>`	Name of the source file in the Hotfolder or the absolute path of the source file. REQUIRED	String
`<originalFileName></origi...`	Original name of the source file, for display purposes only.	String
`<keepFile></keepFile>`	(Optional) set to "true" to keep the source file after import. For source files using an absolute path, keepFile will always be true for security reasons.	Boolean
`<totalPageCount></totalPageC...`	(Optional) Specify the total number of pages of this PDF or PS file. This is mandatory for range programming features when using the "each", "list" or "sheet" range types (see chapter 4).	Integer
`</pageSource>`		
`</pageSources>`		
`<ranges>`	(Optional) Container node for range programming	
`...`	See chapter "Range programming reference"	
`</ranges>`		
`</document>`		
`</orderItem>`		
`</order>`		

Roll-based jobs

Tag	Description	Type
`<order>`	Root node	
`<orderInformation>`	Container node for order information	
`<prefix></prefix>`	Custom order ID prefix	String
`<orderId></orderId>`	(Optional) order ID for reference (not used)	String
`<creationDate></creationdate>`	Order creation date in ISO 8601 format	ISO 8601 String
`<submitterNote></submitterNote>`	Customer note for the order	String
`<projectName></projectName>`	Project name to identify related orders	String
`<delivery>`	Container node for delivery information	
`<id></id>`	Optional, will try to use delivery type from the Flux Database with this ID	String
`<name></name>`	Name of the delivery type	String
`<date></date>`	Planned delivery date for the order	ISO 8601 String
`<note></note> (DEPRECATED)`	Customer note for the delivery NOTE: This is deprecated as of Flux 7.8 and no longer supported.	String
`<text></text>`	Description of the delivery type	String
`<days type="..."></days>`	Number of days this delivery type normally takes. The "type" attribute can be either "work" or "week" to represent work or week days, respectively.	Integer Attribute "type": String
`</delivery>`		
`<customerAccountId><customerAccountId>`	(Optional) ID of a customerAccount from Flux Server database. USE customerAccountId OR addresses	String
`<billingAddressId><billingAddressId>`	(Optional) Use a different address of that customerAccount for billing.	String
`<deliveryAddressId><deliveryAddressId>`	(Optional) Use a different address of that customerAccount for delivery.	String
`<addresses>`	Container node for address information. At least the submitter address must be present.	
`<submitter>`	Container node for submitter address information	
`<name></name>`	First and last name(s).	String
`<shortName></shortName>`	Short name / handle	String
`<organisation></organisation>`	Company or organization name.	String
`<street></street>`	Street address	String
`<postalCode></postalCode>`	ZIP / Postal Code	String
`<city></city>`	City	String
`<region></region>`	Region or federated state	String
`<state></state>`	Country	String
`<tel1></tel1>`	Telephone number	String
`<tel2></tel2>`	Alternative telephone number	String
`<telfax></telfax>`	Fax number	String
`<email></email>`	E-mail address	String
`<project></project>`	Project / Department	String
`<projectNumber></projectNumber>`	Account number	String
`<custom1></custom1>`	Custom / additional address information	String
`<custom2></custom2>`	Custom / additional address information	String
`<custom3></custom3>`	Custom / additional address information	String
`</submitter>`		
`<billing>`		
`...`	Same as content of submitter node	
`</billing>`		
`<delivery>`		
`...`	Same as content of submitter node	
`</delivery>`		
`</addresses>`		
`</orderInformation>`		
`<rollOrderItems>`		
`<rollOrderItem>`	Container node for order item information. There can be one or more of these nodes.	

Tag	Description	Type
`<title></title>`	Title / name of the order item	String
`<submitterNote></submitterNote>`	Customer notice for this order item	String
`<document>`	Container node for print document information	
`<product>`	Print product container node.	id: String
`<signature id="...">`	Roll job template. If attribute id is specified, will attempt to use the corresponding template from the Flux Database. If id is not specified, the template will be retrieved via the name. NOTE: Either id or name must be specified	Id: String
`<name></name>`	Name of the roll job template to use. NOTE: Either id or name must be specified	String
`</signature>`		
`<services>`	Container node for product services (print setting or manual service). See the section "Flux default services and options" for available services.	
`<service id="...">`	Container node for a product service. There can be zero or more of these nodes. If attribute id is specified, will attempt to use the corresponding service from Flux Database.	id: String
`<name></name>`	Name of the service	String
`<option id="...">`	Container node for a service option. If attribute id is specified, will attempt to use the corresponding option from Flux Database.	String
`<name></name>`	Name of the service option	String
`</option>`		
`</service>`		
`</services>`		
`<printer>`	Container node for printer information. If not present, the default printer will be used.	
`<name></name>`	The name of the printer to use for this document. Must match the name of a printer on the flux server system.	String
`<settings></settings>`	The name of a set of printer settings to use for the selected printer.	String
`<autoPrint></autoPrint>`	(Optional) Use this tag to activate the autoprint feature(true or false). Requires autoprint service being enabled in Flux Server. Default option is false.	Boolean
`</printer>`		
`</product>`		
`<pageSources>`	Container node for page sources of this order item. At least one page source is REQUIRED	
`<pageSource>`	Container node for information about a single page source (PDF or PS file)	
`<fileName></fileName>`	Name of the source file in the Hotfolder or the absolute path of the source file. REQUIRED	String
`<isVdp></isVdp >`	(Optional) Whether or not to use VDP mode for this page source. if missing, VDP mode will be used if page count is higher than 10	Boolean
`<originalFileName></origi...`	Original name of the source file, for display purposes only.	String
`<keepFile></keepFile>`	(Optional) set to "true" to keep the source file after import. For source files using an absolute path, keepFile will always be true for security reasons.	Boolean
`<quantity></quantity>`	Number of items for this page source	
`</pageSource>`		
`</pageSources>`		
`</document>`		
`</orderItem>`		
`</order>`		

4   Range programming reference

The following is a description of the range programming capabilities of the XML Hotfolder. Multiple ranges can be specified for a document. One range can either define service exceptions for a specific set of document pages or define slip or tab sheets that should be inserted into the document. Range programming is only supported for sheet-based jobs.

A. Service range

Tag	Description	Type
`<ranges>`	Container node for range programming	
`<range type="SERVICE">`	Range entry. There can be one or more of these.	
`<pages type=".." from=".." to=".."/>`	A description of the pages affected by this range. Type can be one of "fromto", "each", "list", "sheet". If "type" is "fromto", the range affects all pages between the values of "from" and "to" (inclusive). If "type" is "each", the range affects every n-th page, where n is the value of "from". If "type" is "list", then "from" is a comma-separated list of affected pages, e.g. "1,3,10,15". Note that for the "each", "list" and "sheet" modes to work, you need to include the <totalPageCount> tag inside the page sources tags. The "to" attribute can also be set to "end" in order to apply the settings to the whole document.	"type": String "from": Integer/String "to": Integer
`<services>`	Container node for service settings for this range.	
`...`	Contents are the same as in the <product> node	
`</services>`		
`<stopStaple option="..." />`	(Optional) Specifies whether to stop stapling at this range. "option" can be "true" or "false".	
`</range>`		
`</ranges>`		

B. Slipsheets

Tag	Description	Type
`<ranges>`	Container node for range programming	

`<range type="SLIPSHEET"`
`    insertbefore="..."`
`    multiinsert="..."`
`>`
	Range entry. There can be one or more of these.
	
	The "insertbefore" attribute is an integer value specifying before which document page the sheet will be inserted.
	
	The "multiinsert" attribute is a boolean value. If true, a sheet will be inserted behind every n-th page, where n is the value of "insertbefore".
	
	Note that for the "multiinsert" mode to work, you need to include the <totalPageCount> tag inside the page sources tags.
		"type": String
		"insertbefore": Integer
		"multiinsert": Boolean

`<services>`	Container node for service settings for the sheets inserted by this range.	
`...`	Contents are the same as in the <product> node	
`</services>`		
`</range>`		
`</ranges>`		

C. Tabsheets

Tag	Description	Type
`<ranges>`	Container node for range programming	

`<range type="TABSHEET"`
`    insertbefore="..."`
`    multiinsert="..."`
`>`
	Range entry. There can be one or more of these.
	
	The "insertbefore" attribute is an integer value specifying before which document page the sheet will be inserted.
	
	The "multiinsert" attribute is a boolean value.
	If true, a sheet will be inserted behind every n-th page, where n is the value of "insertbefore".
	
	Note that for the "multiinsert" mode to work, you need to include the <totalPageCount> tag inside the page sources tags.
		"type": String
		"insertbefore": Integer
		"multiinsert": Boolean

`<services>`	Container node for service settings for the sheets inserted by this range.	
`...`	Contents are the same as in the <product> node	
`</services>`		
`</range>`		
`<tabSheetSettings>`	Container node for tab sheet settings.	
`<name></name>`	The name of the tab sheet type.	String
`<font></font>`	The font used for tab sheet labels.	String
`<fontSize></fontSize>`	The font size used for tab sheet labels.	Integer
`<textAlignment></textAlignment>`	Text alignment of tab sheet labels. Either "center", "left" or "right"	String
`<textDirection></textDirection>`	Text direction of tab sheet labels. Can be one of "normal", "horizontal", "vertical", "rotated".	String
`<ejectUnusedTab></ejectUnusedTab>`	Whether to eject unused tabs.	Boolean
`</tabSheetSettings>`		
`</ranges>`		

5   Appendix: Flux default services and options

Tag	Description	Type
`<services>`	Container node for services	
`  <service id="PROOFPRINT">`	Proof print service.	id: String
`    <name>Proof print</name>`	Name of the service	String
`    <option id="ON">`	Possible Values: "ON", "OFF"	id: String
`      <name>On</name>`	Name of the option	String
`    </option>`		
`  </service>`		
`  <service id="COLORPRINT">`	Color print service.	id: String
`    <name>Color print</name>`	Name of the service	String
`    <option id="ON">`	Possible Values: "ON", "OFF"	id: String
`      <name>Color</name>`	Name of the option	String
`    </option>`		
`  </service>`		
`  <service id="DUPLEX">`	Duplex service.	id: String
`    <name>Duplex</name>`	Name of the service	String
`    <option id="ON">`	Possible Values: "ON", "ONTUMBLE", "OFF"	id: String
`      <name>Left</name>`	Name of the option	String
`    </option>`		
`  </service>`		
`  <service id="BINDINGPOSITION">`	Position service	id: String
`    <name>Duplex</name>`	Name of the service	String
`    <option id="LEFT">`	Possible Values: "LEFT", "TOP", "RIGHT", "BOTTOM"	id: String
`      <name>Left</name>`	Name of the option	String
`    </option>`		
`  </service>`		
`  <service id="PAGEFITTING">`	Page fitting service	id: String
`    <name>Page fitting</name>`	Name of the service	String
`    <option id="LEFT">`	Possible Values: "LEFT", "TOP", "RIGHT", "BOTTOM"	id: String
`      <name>Left</name>`	Name of the option	String
`    </option>`		
`  </service>`		
`  <service id="PAPERTYPE">`	Media type service	id: String
`    <name>Paper type</name>`	Name of the service	String
`    <option id="60g_white">`	Possible Values: Valid Flux paper type ids	id: String
`      <name>White, 60g</name>`	Name of the option	String
`    </option>`		
`  </service>`		
`  <service id="PUNCH">`	Punch hole service	id: String
`    <name>Punch</name>`	Name of the service	String
`    <option id="2HOLES">`	Possible Values: "OFF", "TRUE", "2HOLES", "3HOLES", "4HOLES", "2HOLESWIDE", "3HOLESWIDE", "4HOLESWIDE", "4HOLESGROUPED", "MULTIHOLE", "RINGBOUND"	id: String
`      <name>2 Holes</name>`	Name of the option	String
`    </option>`		
`  </service>`		
`  <service id="STAPLE">`	Punch hole service	id: String
`    <name>Stapling</name>`	Name of the service	String
`    <option id="1STAPLE">`	Possible Values: "OFF", "TRUE"; "1STAPLE", "1STAPLE(V)", "1STAPLE(H)", "1STAPLE(S)", "1STAPLEII", "1STAPLEII(V)",	id: String

Tag	Description	Type
"1STAPLEII(H)", "1STAPLEII(S)", "2STAPLES", "2STAPLEWIDE", "2STAPLEXWIDE", "4STAPLES", "4STAPLES(CENTER)", "1STAPLE(LOWER)", "1STAPLE(LOWERV)", "1STAPLEW(LOWERH)", "1STAPLE(LOWERS)", "1CENTER", "CENTER", "CENTER(FOLD)", "CENTER(FOLDTRIM)", "CENTER(FOLDTRIM3SIDES)", "CENTER(SQUAREFOLD)", "CENTER(SQUAREFOLDTRIM)", "CENTER(SQUAREFOLDTRIM3SIDES)"		
`<name>1 Staple</name>`	Name of the option	String
`</option>`		
`</service>`		
`<service id="FOLD">`	Punch hole service	id: String
`<name>Folding</name>`	Name of the service	String
`<option id="HALFFOLD">`	Possible Values: "OFF", "ZFOLD", "MULTIHALFFOLD", "MULTIHALFFOLDTRIM", "MULTIHALFFOLDIN", "MULTIHALFFOLDINTRIM", "MULTIHALFFOLDOUT", "MULTIHALFFOLDOUTTRIM", "MULTILETTERFOLDIN", "MULTILETTERFOLDOUT", "HALFFOLD", "HALFFOLDIN", "HALFFOLDOUT", "LETTERFOLD", "LETTERFOLDIN", "LETTERFOLDOUT", "ZIGZAGIN", "ZIGZAGOUT", "DOUBLEPARALLELIN", "DOUBLEPARALLELOUT", "GATEFOLDIN", "GATEFOLDOUT"	id: String
`<name>Half fold</name>`	Name of the option	String
`</option>`		
`</service>`		
`<service id="FLIP">`	Artwork flip service	id: String
`<name>Flip</name>`	Name of the Service	String
`<option id="OFF">`	Possible Values: "OFF", "HORIZONTAL", "VERTICAL", "HORIZONTAL_AND_VERTICAL"	id: String
`<name>Off</name>`	Name of the option	String
`</option>`		
`</service>`		
`</services>`		