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XStep Café

XSteps, PI Sheet, Electronic Work Instructions

Home

Welcome to the XStep Café!

SAP offers a wide variety of solutions also for the support of manufacturing processes:

- ERP (Enterprise Resource Planning)
- MII (Manufacturing Information and Intelligence)
- SAP Net (Manufacturing Executions) for discrete industries

In ERP there is also a solution called PI Sheet (PP-PI) or Electronic Work Instructions (PP from ERP 6.03 on). Since ERP 4.7 extension 2.0 the PI Sheets can be defined using XSteps. On the pages of this blog you will find a lot usefull information like:

- Recordings of live web sessions
- Articles
- Presentations
- Tips and Tricks
- Links

Have fun!

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Have fun!

Cockpit

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Next Session:

Public

July 9, 2014

3 pm Berlin Time

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Social Media

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How many of your users use the PI Sheet / EWI productively?

☐ Only test usage

☐ 1-10

☐ 11-50

☐ 51-100

☐ 101-250

☐ 251-500

☐ >500

Vote (View Results)

Article Collections

- Top Rated Articles
- Articles from Arne Manthey

Tag cloud

ABAP Activity Approval Archiving

BAdI Batch Calculations Change

Management Characteristics

Coding Commands

Confirmation CSS Discrete

Manufacturing EBR Events

EWI External Systems

F4-Help Function

modules Generation

Scopes Maintenance MDA

MI Mobile OPC OSS

Note Overview Parameters

The SAP logo, consisting of the letters "SAP" in white on a blue background, with a registered trademark symbol (®) to the right.

Agenda

Archiving XStep Data using ADK – Follow Up

- General Information

Early Deletion of XSteps from Manufacturing Orders

- Business Requirement/Idea
- Solution
- Solution - Screenshots

Archiving XStep Data using ADK – Follow Up

General Information

General

- ADK-based archiving object CMX_XS shipped with SAP note [2062761](#)
 - Note attachment (PDF): Documentation and How To Guide
- Performance comparison ADK vs XML based archiving
 - Time for writing 500 XStep trees to archive
 - XML: 1160 sec (~ 19 min)
 - ADK: 244 sec (~ 4 min) -> ~ five times faster
 - File size on archive (for archive run data content)
 - XML: ~721 MB
 - ADK: ~100 MB -> ~ seven times less memory consumption on archive storage

Early Deletion of XSteps from Manufacturing Orders

Business Requirement/Idea

Business requirement

- Manufacturing orders that contain XSteps can't be archived or deleted yet
 - XStep trees of orders can't be deleted/archived
 - Obsolete XStep data remains in database tables (decreasing performance)

Idea

- Provide an early deletion for XSteps of such orders
- Prerequisites:
 - XStep data is **not required** in future audits
 - Proper order status *Completed/Technically Completed*

Early Deletion of XSteps from Manufacturing Orders

Solution

Solution

- SAP note [2069357 - Reorganization of XStep data of orders](#)
 - New report *RCOCR_CMx_DEL_XS*
 - Logic to detect and delete entries is encapsulated in a BAdI
 - Fallback implementation class *CL_EI_BADI_COCR_CMx_XS_DEL*
 - Productive deletion requires custom BAdI implementation

```
Method      IF_BADI_COCR_CMx_XS_DEL-DELETE_XS_TREE      Active
118      * Execute deletion
119      lo_xs_library = cl_cm_x_s_system=>get_library( ).
120
121      LOOP AT lt_xs_nid INTO lv_xs_nid.
122      IF iv_commit = abap_true.
123      * Fallback class doesn't support productive deletion. Create own
124      * BAdI implementation. Remove the following lines:
125      * START REMOVAL -----
126      lv_msg_v1 = text-cob.
127      lv_msg_v2 = text-iob.
128      lv_msg_v3 = text-bad.
129      io_msg_log->add_msg_to_log(
130      EXPORTING
131          iv_appl_log_handle = iv_msg_log_handle
132          iv_msgty           = io_msg_log->gc_msgty_error
133          iv_msgid           = io_msg_log->gc_msgid_cm_x_tools
134          iv_msgno           = io_msg_log->gc_msgno_flex
135          iv_msgv1           = lv_msg_v1
136          iv_msgv2           = lv_msg_v2
137          iv_msgv3           = lv_msg_v3 ).
138      * No entry is deleted
139      lv_count_xs_no_del = lines( lt_xs_nid ).
140      EXIT.
141      * END REMOVAL -----
142      * Productive mode: try to delete the XStep trees
143      TRY.
```

Early Deletion of XSteps from Manufacturing Orders

Solution - Screenshots

XSteps: Deletion of XStep Trees of Orders

Order Data
Order: 1000300 to 100000000000

Program Execution
☐ 'X' = Production Mode (COMMIT)
☐ 'X' = Display Detail Log
Maximum Selectable Entries: 1.000

Deletion With/Without Preselection
☐ Direct Deletion Without Preselection (ALV Grid Result List)

Display Variant (ALV Grid)

Selection

Test Mode

Productive

Overview of XStep Trees That Can Be Deleted

Deletion Possible?	Plant	Order	Order Status	Status Text (Order)	ID XStep Tree	Control Instructions/Recipe	Destination	Destination Type	Test	Status	Status Text
COO	0001	1000300	10046	Completed	QCvjr2Icn7X00002aA78W	100000000000000241	05	4	<input type="checkbox"/>	00005	Completed
COO	0001	1000301	10046	Completed	Uma(J)yYTSFX00002aA78W	100000000000000242	05	4	<input type="checkbox"/>	00005	Completed
COO	0001	1000366		Not Completed	CQOvKajwHqX00002aA8E0	100000000000000265	SV	4	<input checked="" type="checkbox"/>	00003	Sent
COO	0001	1000380		Not Completed	QqpK9E0acX00002aA78W	100000000000000281	SV	4	<input type="checkbox"/>	00003	Sent
COO	0001	1000381		Not Completed	nYugKSU7b6K00002aA78W	0			<input type="checkbox"/>		
COO	0001	1000382		Not Completed	7pGgKSU7b6K00002aA78W	100000000000000282	SV	4	<input type="checkbox"/>	00003	Sent
COO	0001	1000400		Not Completed	X(GMK0ra1qNX00002aA78G	100000000000000301	SV	4	<input type="checkbox"/>	00003	Sent
COO	0001	1000401		Not Completed	cISk8Qu703X00002aA78G	100000000000000302	SV	4	<input type="checkbox"/>	00003	Sent
COO	0001	1000402		Not Completed	PEOMK0ra1qNX00002aA78G	100000000000000303	SV	4	<input type="checkbox"/>	00003	Sent
COO	0001	1000403		Not Completed	N1CkX5KPMWIX00002aA78G	100000000000000304	SV	4	<input type="checkbox"/>	00003	Sent
COO	0001	1000440		Not Completed	ZickKEjYsFX00002aA78W	100000000000000321	05	4	<input type="checkbox"/>	00003	Sent
COO	0001	1000441		Not Completed	rhEgKECRMB7X00002aA78W	0			<input type="checkbox"/>		
COO	0001	1000442		Not Completed	KcggKCeDPL7X00002aA78W	100000000000000322	05	4	<input type="checkbox"/>	00003	Sent
COO	0001	1000443		Not Completed	H6wgKCeDPL7X00002aA78W	100000000000000323	05	4	<input type="checkbox"/>	00003	Sent
COO	0001	1000444		Not Completed	RNagKCeDPL7X00002aA78W	0			<input type="checkbox"/>		
COO	0001	1000445		Not Completed	rtGgKCeDPL7X00002aA78W	100000000000000324	05	4	<input type="checkbox"/>	00003	Sent
COO	0001	1000446		Not Completed	yNYgKCeDPL7X00002aA78W	100000000000000325	05	4	<input type="checkbox"/>	00003	Sent
COO	0001	1000480		Not Completed	gtnwKTSLNKX00002aA8E0	0			<input type="checkbox"/>		
COO	0001	1000481		Not Completed	VduwKTSLNKX00002aA8E0	0			<input type="checkbox"/>		
COO	0001	1000500		Not Completed	k2HKKLXlu3RX00002aA78W	100000000000000401	05	4	<input type="checkbox"/>	00001	Created
COO	0001	1000501		Not Completed	pySKLThn2RX00002aA78W	100000000000000404	05	4	<input type="checkbox"/>	00003	Sent
COO	0001	1000501		Not Completed	pySKLThn2RX00002aA78W	100000000000000405	SV	4	<input type="checkbox"/>	00003	Sent
COO	0001	1000560		Not Completed	051MIZad7jExdvDf6HoJG	0			<input type="checkbox"/>		
COO	0001	1000561		Not Completed	051MIZad7jEh3(Spn68m	0			<input type="checkbox"/>		
COO	0001	1000580		Not Completed	(XO)54FT7jE(sASK2I38W	100000000000000441	05	4	<input type="checkbox"/>	00003	Sent
COO	0001	1000600		Not Completed	051MIZad7jIDwq5TDeRFM0	0			<input type="checkbox"/>		
COO	0001	1000601		Not Completed	051MIZad7jIDwq(mOwAMW	0			<input type="checkbox"/>		
COO	0001	1000602		Not Completed	051MIZad7jIDwr4cmd6FMW	0			<input type="checkbox"/>		
COO	0001	1000603		Not Completed	051MIZad7jIDwrfSL9PFOG	0			<input type="checkbox"/>		
COO	0001	1000604		Not Completed	051MIZad7jIDwrfR9nUFNG	0			<input type="checkbox"/>		

Display logs

Type: Message Text

- Test Mode (no Update)
- Number of Selected XStep Trees: 30
- Number of XStep Trees That Are Deletable: 2
- Deleted XStep Trees: 2 XStep Trees Not Deleted: 28

Display logs

Type: Message Text...

- Production Mode (With Update)
- Number of Selected XStep Trees: 2
- Number of XStep Trees That Are Deletable: 2
- No Deletion as Fallback Class Is Active Own Implementation Required for BadI BADI_COCR_CMX
- Deleted XStep Trees: 0 XStep Trees Not Deleted: 2



Thank you

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