

Archiving Work Items Using SAP ADK



Applies to:

SAP ECC6. For more information, visit the [Content Management homepage](#).

Summary

This article discusses about archiving work items using the SAP ADK tool. It also helps in understanding the business effects and discusses the specific case, when the work items are still retained in the database.

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Author Bio



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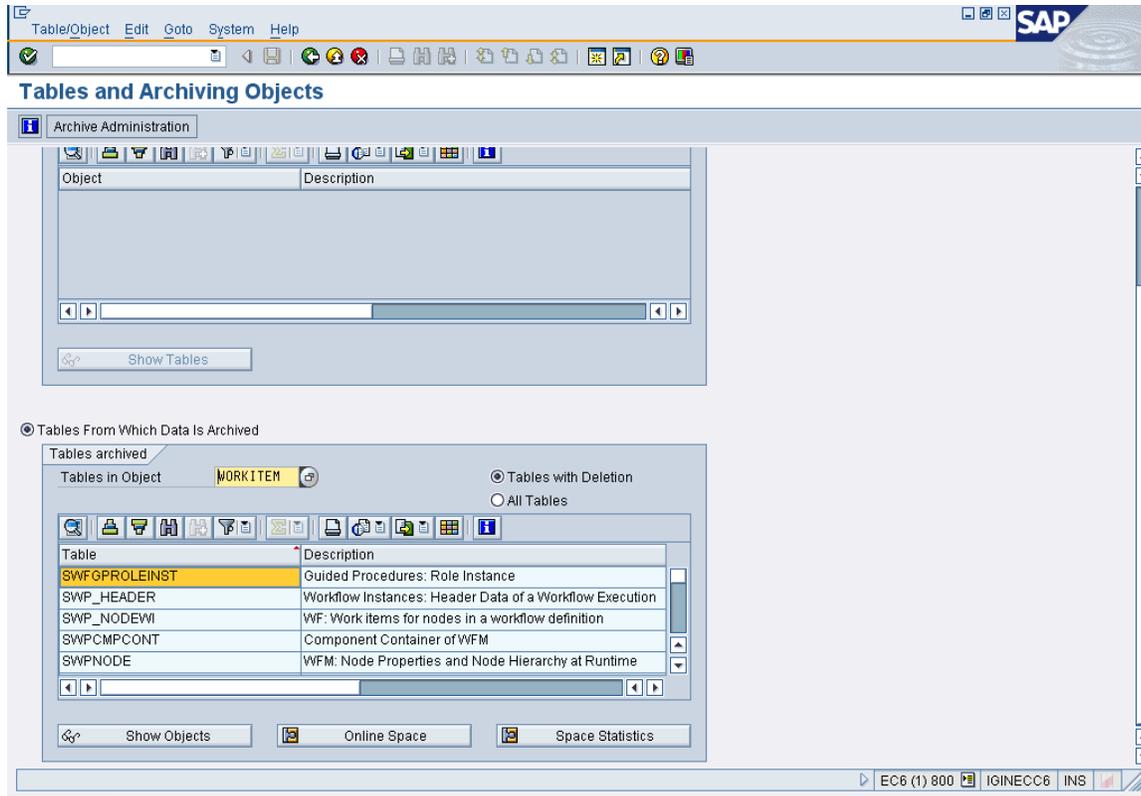
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Archiving Work Items

Over course of time depending on the usage of the workflows by an organization the tables tend to grow bigger in size in a very small time frame. In such a situation the organization needs to consider the option to archive its older work items which would considerably reduce the size of the database and at the same time improve the relative performance. Archiving Development Kit (ADK), delivered by the SAP Netweaver provides us with the required tools needed for archiving.

Tables Linked to the Archiving Object

The corresponding archiving object for archiving work items is the object 'WORKITEM'. The linked tables from which data would be archived can be found using the transaction 'DB15'. The header table for this archiving object is 'SWWWIHEAD'.



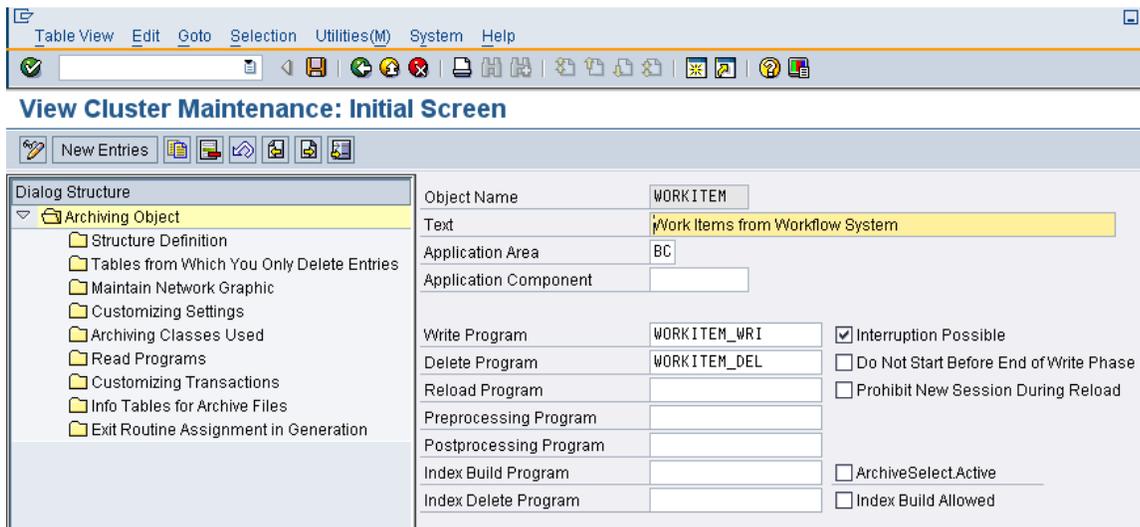
The tables linked to this archiving object are

SWFGPROLEINST	SWWCNTPO
SWP_HEADER	SWWCNTPADD
SWP_NODEWI	SWWEI
SWPCMPCONT	SWWLOGHIST
SWPNODE	SWWLOGPARA
SWPNODELOG	SWWWIDEADL
SWPSTEPLOG	SWWWIHEAD

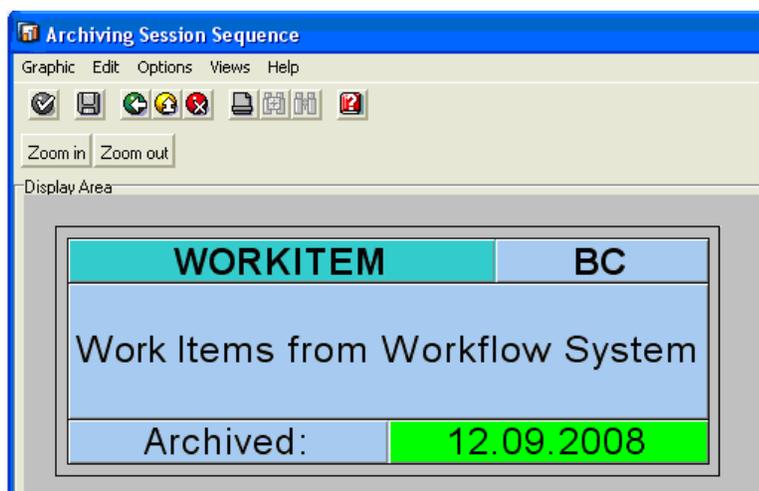
SWW_CONT SWWWIRET
 SWW_CONTOB SWZAI
 SWW_WI2OBJ SWZAIENTRY
 SWZAIRET

Deletion and Write Program

The archiving process is considered complete when the creation of the archived files in the content server or the file system is followed by deletion of the records from the corresponding tables. The write program and the deletion program associated with an archiving object can be found using the transaction 'AOBJ'. The standard SAP programs associated with the write and the deletion process are 'WORKITEM_WRI' and 'WORKITEM_DEL'. The interruption possible option indicates that the write phase for an archiving session for this object can be interrupted and resumed.



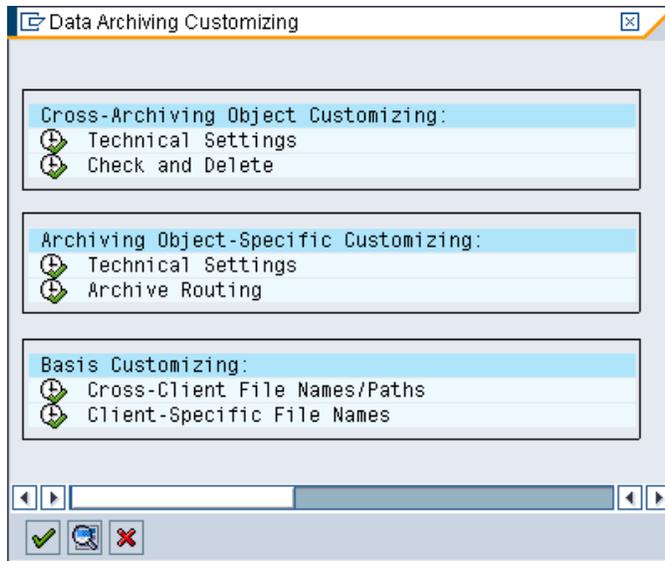
There are no dependencies for the object 'WORKITEM' and this can be confirmed using the transaction SARA. Accessed using SARA->Ctrl+F1



File Configuration

Before we start archiving the work items please check the path where the archived files are going to be created. This has to be maintained via the 'Customizing Settings' of the archiving object WORKITEM. The technical settings for this object 'WORKITEM' to define the logical file name where the archived files are going to be created and the archive file size are defined in the customizing view of SARA.

Accessed using transaction SARA->Shift+F1



The logical file path where the archived files are going to be stored is defined in the technical settings of Archiving Object Specific Customizing View. The variant for the deletion program has to be defined in this view. The deletion jobs will run immediately after the archiving jobs are completed, this setting can be changed in this view.

Change View "Customizing View for Archiving": Details

The logical file path and the logical file name for configurations should be defined using the transaction 'FILE'.

Transaction FILE-> Logical File Path Definition

Table View Edit Goto Selection Utilities(M) System Help

Change View "Logical File Path Definition": Overview

New Entries

Dialog Structure

- Logical File Path Definition
 - Assignment of Physical Paths to Logical Path
 - Logical File Name Definition, Cross-Client
 - Definition of Variables
 - Syntax Group Definition
 - Assignment of Operating System to Syntax Group

Create a logical file path

Logical file path	Name
Z_ARCHIVE_DATAFILE_MM_EKKO	PURCHASING DOCUMENTS
Z_ARCHIVE_DATAFILE_MM_MATBEL	MATERIAL DOCUMENTS
Z_ARCHIVE_GLOBAL_PATH	Example:Logical path Demo
Z_ARCHIVE_GLOBAL_PATH_F1_DOCUMNT	Global path for achiving FI_DOCUMNT
Z_BASIS_L06	Log files of basis
sab1ne	Test Sabine

Table View Edit Goto Selection Utilities(M) System Help

Change View "Assignment of Physical Paths to Logical Path": Overview

New Entries

Dialog Structure

- Logical File Path Definition
 - Assignment of Physical Paths to Logical Path
 - Logical File Name Definition, Cross-Client
 - Definition of Variables
 - Syntax Group Definition
 - Assignment of Operating System to Syntax Group

Logical path Z_ARCHIVE_GLOBAL_PATH

Syntax grp	Name
UNIX	ix compatible
WINDOWS_NT	Microsoft Windows NT

Transaction FILE-> Physical file path assignment to logical path

Table View Edit Goto Selection Utilities(M) System Help

Change View "Assignment of Physical Paths to Logical Path": Details

New Entries

Dialog Structure

- Logical File Path Definition
 - Assignment of Physical Paths to Logical Path
 - Logical File Name Definition, Cross-Client
 - Definition of Variables
 - Syntax Group Definition
 - Assignment of Operating System to Syntax Group

Logical path Z_ARCHIVE_GLOBAL_PATH

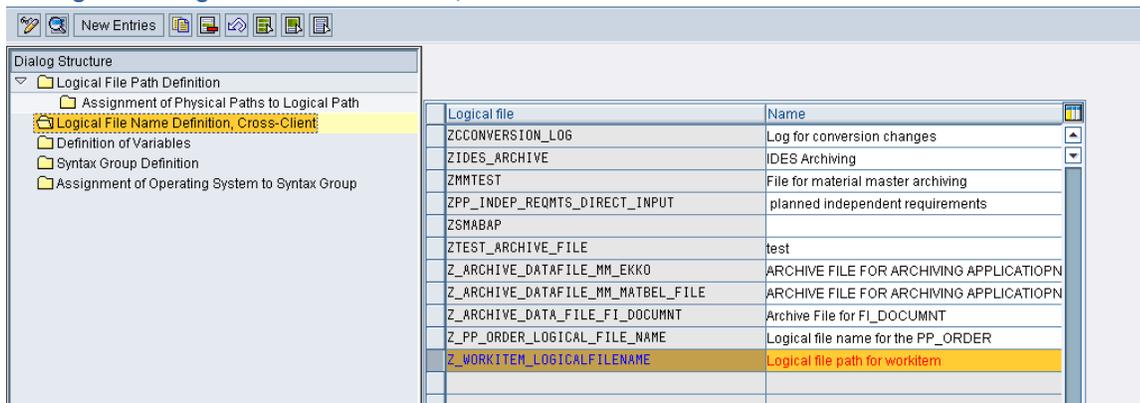
Name Example:Logical path Demo

Syntax group UNIX Unix compatible

Physical path F:\usr\sap\EC6\SY\global<FILENAME>

EC6 (1) 800 IGINECC6 INS

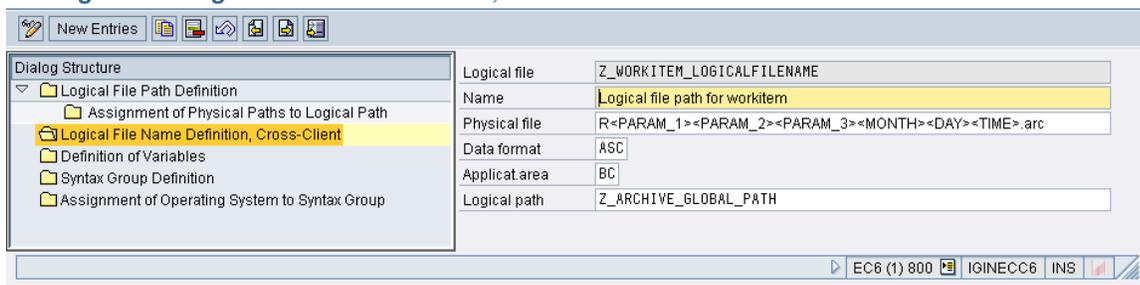
Change View "Logical File Name Definition, Cross-Client": Overview



Logical file	Name
ZCONVERSION_LOG	Log for conversion changes
ZIDES_ARCHIVE	IDES Archiving
ZMTEST	File for material master archiving
ZPP_INDEP_REQMTS_DIRECT_INPUT	planned independent requirements
ZSMABAP	
ZTEST_ARCHIVE_FILE	test
Z_ARCHIVE_DATAFILE_MM_EKKO	ARCHIVE FILE FOR ARCHIVING APPLICATION
Z_ARCHIVE_DATAFILE_MM_MATBEL_FILE	ARCHIVE FILE FOR ARCHIVING APPLICATION
Z_ARCHIVE_DATA_FILE_FI_DOCUMNT	Archive File for FI_DOCUMNT
Z_PP_ORDER_LOGICAL_FILE_NAME	Logical file name for the PP_ORDER
Z_WORKITEM_LOGICALFILENAME	Logical file path for workitem

Transaction FILE->Logical File Name

Change View "Logical File Name Definition, Cross-Client": Details

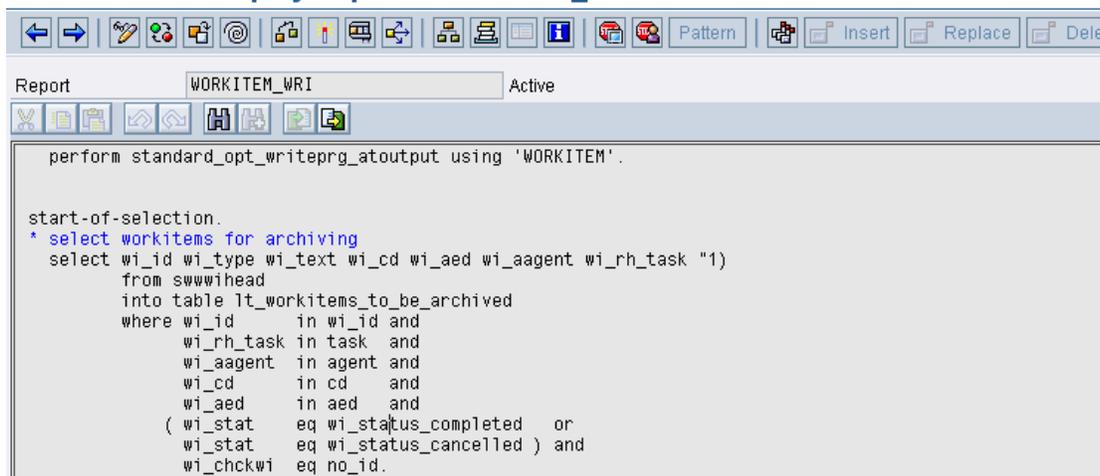


Logical file	Z_WORKITEM_LOGICALFILENAME
Name	Logical file path for workitem
Physical file	R<PARAM_1><PARAM_2><PARAM_3><MONTH><DAY><TIME>.arc
Data format	ASC
Applicat.area	BC
Logical path	Z_ARCHIVE_GLOBAL_PATH

Scope of Archiving

The most important factor to consider when archiving work items is to understand the basis on which write program would select the work items for archiving. By default the SAP write program selects only the work items with 'COMPLETED' or 'CANCELLED' status for archiving, so the archiving write program ensures that the organization does not risk losing any work items, which are currently under processing.

ABAP Editor: Display Report WORKITEM_WRI



```
perform standard_opt_writeprg_atoutput using 'WORKITEM'.

start-of-selection.
* select workitems for archiving
select wi_id wi_type wi_text wi_cd wi_aed wi_aagent wi_rh_task "1)
from swwwihead
into table lt_workitems_to_be_archived
where wi_id in wi_id and
wi_rh_task in task and
wi_aagent in agent and
wi_cd in cd and
wi_aed in aed and
( wi_stat eq wi_status_completed or
wi_stat eq wi_status_cancelled ) and
wi_chkwi eq no_id.
```

Analysis of Header Table before Archiving

The header table for the archiving object WORKITEM is SWWWIHEAD, an analysis of the table can be done using the transaction TAANA. But before deciding to delete the work items, first run an analysis on the table SWWWIHEAD using transaction TAANA to find the number of work items which are not archivable. (I.e. all work items with a status other than COMPLETED or CANCELLED).

Table Analysis: Administration

Table/Analysis/Field list	No. Entr.	Start date
BDCP (Change pointer)	535,745	06.11.2008
BKPF (Accounting Document)	263,724	06.02.2009
NAST (Message Status)	40,427	06.11.2008
REGUA (Change of payment p	21	01.04.2009
REGUC (Cluster for payment l	188	01.04.2009
REGUH (Settlement data from	203	01.04.2009
REGUHH (REGUH version be	100	31.03.2009
REGUHO (REGUH version be	31	03.2009
REGUP (Processed items for	351	01.04.2009
REGUPO (Line item status be	35	31.03.2009
REGUPW (W/tax information p	12	31.03.2009
REGUT (TemSe - Administrati	1	31.03.2009
REGUTA (Paying Company Ct	31	03.2009
REGUV (Control records for th	731	01.04.2009
SRRELROLES (Object Relatic	131,170	06.11.2008
SWWWIHEAD (Workflow Runt	1,466,288	12.06.2009
AD-HOC (Ad Hoc Analy: 1,466,288	1,466,288	12.06.2009
SWW_CONTOB (Workflow Ru	2,534	06.11.2008
TST03 (TemSe data)	16,629	06.11.2008

Technical Status	No. of Entries
COMPLETED	1,464,035
READY	1,282
STARTED	836
ERROR	128
CANCELLED	6
COMMITTED	1
=	1,466,288

After running an analysis based on the technical status of the work items, the total number of work items that can be archived are found to be 1,464,041.

Data Browser: Table SWWWIHEAD: Selection Screen

Number of Entries

ID _____ to _____

Type _____ to _____

Creator _____ to _____

Work item text _____ to _____

Status COMPLETED to _____

Creation Date 01.01.2008 to 31.12.2008

Creator _____ to _____

Task _____ to _____

Width of Output List 1000

Maximum No. of Hits 100

Display Number of Entries

Number of entries which meet the selection criteria:
1,136,844

Close

The total no. of records that can be archived in the year 2008 is – 1,136,844.

Archiving and Deletion

Go to transaction SARA and enter the object 'WORKITEM' and click the button 'Write'. Give a variant name and click the 'Maintain' button, give the creation date range for which you want to archive the work items and select other criteria for archiving depending on the requirement and schedule the job.

Maintain Variant: Report WORKITEM_WRI. Variant ARCHIVE_ALL

Attributes

Work Item
Work Item ID: [] to []

Restrictions
Creation Date: 01.01.2008 to 31.12.2008
End Date: [] to []
Task ID: [] to []
Actual Agent: [] to []

Processing Options
 Test Mode
 Production Mode
 Delete with Test Variant

Detail Log: Complete
 Log Output: List and Application Log
 Archiving Session Note: Archive all the work items of year 2008

The archiving sessions are listed in Management View of SARA. If the sessions are listed under the Complete Archiving Sessions, it indicates that the archiving along with the deletion has been completed successfully, otherwise if the sessions are listed under the Incomplete Archiving Sessions then it might either imply that the deletion has not been successful or that the write process has been interrupted during the creation of the archive files.

Archive Administration: Overview of Archiving Sessions

Archiving object: WORKITEM Work Items from Workflow System

Sessions and Files for Archiving Object	Note
Archiving Sessions with Errors	
Incomplete Archiving Sessions	
Complete Archiving Sessions	
28 - 900 (18.03.1996 - 15.06.2009)	
900 - 15.06.2009	Archive all the work items of year 2008
000900-001WORKITEM	
000900-002WORKITEM	
000900-003WORKITEM	
000900-004WORKITEM	
000900-005WORKITEM	
000900-006WORKITEM	
000900-007WORKITEM	
000900-008WORKITEM	
000900-009WORKITEM	
000900-010WORKITEM	
000900-011WORKITEM	
000900-012WORKITEM	
889 - 12.09.2008	WORKITEM for the period 05/01/2008 to 05/10/2008
886 - 09.06.2008	WORKITEM-DEMO
885 - 09.06.2008	WorkItems from 2008/01/01 to 2008/01/31
872 - 30.04.2008	
168 - 06.10.1997	
165 - 29.09.1997	
163 - 22.09.1997	
28 - 18.03.1996	

Job	Ln	Job Created	Status	Start date	Start time	Duration(sec.)	Delay (sec.)
<input type="checkbox"/>	ARV_WORKITEM_DEL20090612201813	NTWDEV	Finished	12.06.2009	20:18:14	1,587	1
<input type="checkbox"/>	ARV_WORKITEM_DEL20090612203055	NTWDEV	Finished	12.06.2009	20:56:38	1,508	1,542
<input type="checkbox"/>	ARV_WORKITEM_DEL20090612204247	NTWDEV	Finished	12.06.2009	21:21:54	1,475	2,346
<input type="checkbox"/>	ARV_WORKITEM_DEL20090612210948	NTWDEV	Finished	12.06.2009	22:35:55	1,564	5,166
<input type="checkbox"/>	ARV_WORKITEM_DEL20090612213329	NTWDEV	Finished	13.06.2009	01:15:20	1,924	13,310
<input type="checkbox"/>	ARV_WORKITEM_DEL20090612214502	NTWDEV	Finished	13.06.2009	01:15:27	1,916	12,624
<input type="checkbox"/>	ARV_WORKITEM_DEL20090615125317	NTWDEV	Finished	15.06.2009	12:53:18	1,637	0
<input type="checkbox"/>	ARV_WORKITEM_DEL20090615130514	NTWDEV	Finished	15.06.2009	13:20:58	1,837	943
<input type="checkbox"/>	ARV_WORKITEM_DEL20090615131917	NTWDEV	Finished	15.06.2009	13:51:49	1,795	1,950
<input type="checkbox"/>	ARV_WORKITEM_DEL20090615133348	NTWDEV	Finished	15.06.2009	14:28:41	1,854	3,292
<input type="checkbox"/>	ARV_WORKITEM_DEL20090615134810	NTWDEV	Finished	15.06.2009	15:01:42	2,082	4,410
<input type="checkbox"/>	ARV_WORKITEM_DEL20090615140230	NTWDEV	Finished	15.06.2009	15:35:00	3,241	5,549
<input type="checkbox"/>	ARV_WORKITEM_DEL20090615141512	NTWDEV	Finished	15.06.2009	15:37:05	3,408	4,912
<input type="checkbox"/>	ARV_WORKITEM_DEL20090615142940	NTWDEV	Finished	15.06.2009	16:29:24	2,885	7,183
<input type="checkbox"/>	ARV_WORKITEM_DEL20090615153312	NTWDEV	Finished	15.06.2009	16:34:03	2,502	6,520
<input type="checkbox"/>	ARV_WORKITEM_DEL20090615145930	NTWDEV	Finished	15.06.2009	17:16:18	2,354	8,207
<input type="checkbox"/>	ARV_WORKITEM_DEL20090615151210	NTWDEV	Finished	15.06.2009	17:17:31	2,226	7,519
<input type="checkbox"/>	ARV_WORKITEM_DEL20090615153312	NTWDEV	Finished	15.06.2009	17:57:00	1,446	8,626
<input type="checkbox"/>	ARV_WORKITEM_SUB20090612200558	NTWDEV	Finished	12.06.2009	20:05:59	1	0
<input type="checkbox"/>	ARV_WORKITEM_SUB20090615124139	NTWDEV	Finished	15.06.2009	12:41:39	1	0
<input type="checkbox"/>	ARV_WORKITEM_WRI20090615124139	NTWDEV	Finished	15.06.2009	12:41:39	10,302	0
*Summary						47,545	94,100

Post Archiving Analysis

The total space conserved due to this archiving session and the size of the archive file created can be found in the statistics of the SARA transaction.

Run Nu...	Object	Client	Date	Status	Disk Space	Header Data	DB Space (Write)	DB Table Space (Write)	DB Index ...	DB Cluste...	DB Structu...	DB
899	WORKITEM	800	12.06.2009		799.996	0.0	3070.367	2552.136	512.032	0.000	6.198	247
900	WORKITEM	800	15.06.2009		1171.582	0.0	4471.389	3717.940	744.363	0.000	9.086	446
					1971.578	-	7541.756	6270.076	1256.395	0.000	15.285	693

Archiving Sessions Found 2

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After the archiving process is complete, we may notice that there are still some records in the header table 'SWWWIHEAD' which are not yet deleted. Please note that the write program is programmed in such a way that it picks up the work items linked to only those workflows which have a 'COMPLETED' or 'CANCELLED' status. So all the work items linked to the workflows, which have not yet completed their processing still remain in the system.

Data Browser: Table SWWWIHEAD: Selection Screen

Number of Entries

ID to

Type to

Creator to

Work item text to

Status COMPLETED to

Creation Date 01.01.2008 to 31.12.2008

Creator to

Workflow to

Task to

Width of Output List 1000

Maximum No. of Hits 100

Display Number of Entries

Number of entries which meet the selection criteria: 53

Close

But this is particularly annoying with the work items, which are years old, no longer used but still remain in the workflow tables. In such cases we have the option to design a custom write program, which archives all the work items irrespective of their status or use the standard SAP program to delete work items. The program RSWWWIDE can be used to delete work items based on the following criteria.

Delete Work Item

Work item

ID to

Type F to

Status COMPLETED to

Creation date 14.06.2009 to 15.06.2009

Creation time 00:00:00 to 23:59:59

End Date to

Agent NTWDEV to

Additional Selection Criteria

Task to

Recipients to

Top-Level Work Items Only

Technical settings

Number of work items per LUW 2

Delete immediately

Delete log data as well

Related Content

[Archive Development Kit](#)

[Developing Write Programs](#)

[Developing Read Programs](#)

For more information, visit the [Content Management homepage](#).

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