HORIZONT

IWS/Audit

The Audit System for IWS for z/OS (aka TWS for z/OS)

What is IWS/Audit?

IWS/Audit is a change documentation system for IWS z/OS:

- IWS/Audit tracks and documents all user modifications made to
  - The definition database

    (WS, Calendar, Period, AD, OI, Specres, ETT, JCLVAR, RunCycle)
  - The LTP (long term plan)
  - The CP (current plan)
  - The JS file (JCL)
- IWS/Audit tracks and keep versions
- IWS/Audit allows to compare versions
- IWS/Audit allows to restore old versions

How does it work?

- IWS/Audit consists of
    - VSAM database
    - ISPF Dialog
    - Set of Batch Jobs for reporting, housekeeping and maintenance.
- IWS/Audit is reading the IWS job tracking log files

    (JT-Files and/or the daily EQQTROUT file)
- IWS/Audit detects what happened and writes the change information to the VSAM file.
- IWS/Audit automatically creates (old) versions of all IWSz definition objects and keeps them as long as you want
- The ISPF Dialog enables you to search for these changes

    (see next slides)

IWS/Audit - Main Panel


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Sitzung C - [32 x 80]

-------------------------- TWS/AUDIT V7R3M0: Start Panel --------------------
Option ===> _

  TWS/Audit database                        Subsystem: TXGC
    1     Workstations
    2     Calendars                          Last recorded Update:
    3     Periods                            24.03.2016 at 11.56.31
    4     Applications
    5     Operator Instructions              Last processed record:
    6     Special Resources                  24.03.2016 at 17.07.02
    7     Event Triggered Criterias
    8     JCL Variable Tables
    9     JS Changes (JCL)
   10     LTP Changes
   11     Run Cycle Groups
    A     All Types


  Current Plan
  CP    Start program
  MCP   Audit of MCP                         Last recorded MCP Update:
                                             24.03.2016 at 12.38.58

  O     Options


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This is the main panel of IWS/Audit.
Select the desired option.

IWS/Audit - Applications

IWS/Audit - Applications

IWS/Audit - Applications

Use line commands to e.g. Browse or Compare Versions, Select compares with the previous version

IWS/Audit – Applications, compare

The old version

The new version

IWS/Audit – Applications, compare

IWS/Audit – Applications, find changes

Here for example, operation 012 was changed: WS CPU to DMY and Duration to 00:01:30

IWS/Audit – Applications, restore to IWS

IWS/Audit – Applications, restore to IWS

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IWS/Audit – Applications, restore to IWS

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   File   Edit   Edit_Settings   Menu   Utilities   Compilers   Test   Help

EDIT         P390K.S0W1.SPFTEMP1.CNTL                    Columns 00001 00072
Command ===> _                                            Scroll ===> CSR
****** *************************** Top of Data *********************************
000001 //P390KA    JOB ,'HORIZONT',MSGCLASS=T,CLASS=A,
000002 //      NOTIFY=&SYSUID
000003 //*
000004 //*
000005 //S1        EXEC PGM=EQQYLTOP,REGION=2M
000006 //STEPLIB  DD DISP=SHR,DSN=SYSH.TWS920.SEQQLMD0
000007 //EQQMLIB  DD DISP=SHR,DSN=SYSH.TWS920.SEQQMSG0
000008 //EQQDUMP  DD SYSOUT=*
000009 //EQQMLOG  DD SYSOUT=*
000010 //SYSPRINT DD SYSOUT=*
000011 //SYSUDUMP DD SYSOUT=*
000012 //SYSIN    DD *
000013 OPTIONS
000014   ACTION(ADD)
000015   SUBSYS(TXGC)
000016   CHECK(Y)
000017   ADID(EBCDIC)
000018   OWNER(EBCDIC)
000019   MSGLEVEL(2)
000020   DURUNIT(SECONDS)
000021 ADSTART
000022   ADID(HOR1111        )
000023   ADSTAT(A)
000024   ADTYPE(A)
000025   ADVALFROM(120430)
000026   DESCR('asap demo            ' )
000027   OWNER('BRIAN          ' )
MA   C                                                              04/015
```

> Submit the generated Job to load it back to IWS

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IWS/Audit - Main Panel


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Sitzung C - [32 x 80]

-------------------------- TWS/AUDIT V7R3M0: Start Panel --------------------
Option ===>  _

TWS/Audit database                      Subsystem: TXGC
  1     Workstations
  2     Calendars                       Last recorded Update:
  3     Periods                         24.03.2016 at 11.56.31
  4     Applications
  5     Operator Instructions           Last processed record:
  6     Special Resources               24.03.2016 at 17.07.02
  7     Event Triggered Criterias
  8     JCL Variable Tables
  9     JS Changes (JCL)
 10     LTP Changes
 11     Run Cycle Groups
  A     All Types


Current Plan
CP      Start program
MCP     Audit of MCP                    Last recorded MCP Update:
                                        24.03.2016 at 12.38.58

O       Options
```

It's basically the same for all these objects, except JS and LTP, they have no restore function and for CP there is an extra report to show all details.

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IWS/Audit - MCP


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Sitzung A - [32 x 80]

-------------------------------- Search Arguments for MCP --------------------------------
Command ===> _

Occurrence        ===> H*
Oper. Number      ===>
Workstation       ===>
Jobname           ===>
Group             ===>

Action            ===>
Modified via      ===>                (A:Auto-Rec. D:Dialog E:ETT P:PIF O:OPSTAT)
User              ===>

Medium            ===>                (EB: equal blank)
Order-Person      ===>
Text-Lines        ===>                (Number of Free-Text lines)

Interval          ===>                (Hours) (Leave blank to specify dates)
Date from         ===> 24.03.2015 (DD.MM.YYYY)    Time from    ===>          (HH.MM)
Date to           ===> 25.03.2016 (DD.MM.YYYY)    Time to      ===>          (HH.MM)

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> MCP allows to search for manual changes (Modifications) in the CP,
> e.g. in a specific time rage and done via Dialog, or PIF or other special functions.

IWS/Audit - MCP

Sitzung C - [32 x 80]

```
TWS/Audit: -------------------------------------------- ROW 001 TO 017 OF 017
Command ===> _                                           SCROLL ===> CSR

Command: SORT Report REFresh
LnCmd  : S Select T TWS update record C Copy P Paste
Medium : 0 None 1 Mail 2 Phone 3 ProcMan O Other

_ Application      Op  JobName    LC-Date    LC-Time  Userid    Action    M Order->
_ HOR94DEMO        012 AHZ00012                                 RER-OP
_ HOR94DEMO        012 AHZ00012                                 MOD-JCL
_ HOR94DEMO        012                                          CMP-OP
_ HOR95DEMO        005 HOR95005                                 RER-AD
_ HOR95DEMO        005 HOR95005                                 MOD-JCL
_ HOR99DAY         255 HOR99END                                 MOD-OP
_ HOR99DAY         005                                          CMP-OP
_ HOR99DAY                                                      ADD-AD
_ HOR85DAY                                                      CMP-AD
_ HOR35DAY                                                      CMP-AD
_ HOR25DAY                                                      CMP-AD
_ HOR01DAY         001                                          MOD-OP
_ HOR01DAY         010 HOR01010                                 MOD-OP
_ HOR01DAY         010 HOR01010                                 MOD-JCL
_ HOR90DEMO        012 AHZ00012                                 MOD-OP
_ HOR90DEMO        012 AHZ00012                                 MOD-OP
_ HOR00DAY         001
*********************************** BOTTOM OF DATA **********************
```

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The result list shows the Application id, Op no., Jobname …

… and the action, e.g. ADD-AD (add appl), MOD-OP (modify oper), RER-OP (rerun/restart oper) etc., scroll right to see the timestamp, IA-Date/time end more

IWS/Audit - MCP


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Sitzung C - [32 x 80]

 Menu   Utilities   Compilers   Help

 BROWSE      SYS16085.T124452.RA000.P390K.R0180109      Line 00000000 Col 001 080
 Command ===> _                                         Scroll ===> CSR
 *********************************** Top of Data ***********************************
 ================================================================================
 J C L   -   B R O W S E
 ================================================================================
 Application Name            : HOR94DEMO
 Occ Input Arrival Date      : 24.03.2016
 Occ Input Arrival Time      : 06:00
 Operation Number            : 12
 Jobname                     : AHZ00012
 Workstation                 : CPU
 Last Update User            : P390K
 Last Update Date            : 24.03.2016
 Last Update Time            : 10:53
 Updating Function           : MCP
 Operation Status            : Saved
 Number of JCL Lines         : 11
 Number of Variables         : 0
 --------------------------------------------------------------------------------
 J C L   T E X T
 --------------------------------------------------------------------------------
 //AHZ00012 JOB CLASS=A,MSGCLASS=T,REGION=5M,NOTIFY=P390K
 //*
 //* TESTJOB VON SYSH.TXGC.JOBLIB
 //*
 //*>OPC SCAN
 //* OADID     = HOR94DEMO
 //* OYMD1     = 160324 OHHMM = 0600
 //* OJOBNAME = AHZ00012
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```

> Linecommand T shows the IWS update record, in case of "Modify-JCL" also the JCL, stored in the JS (compare with "S")

IWS/Audit - CP Report

While IWS/Audit "MCP" keeps only key data, you can use option "CP" to create a detailed report

IWS/Audit - CP Report

Specify the tracklog to be read, JT-Files or older EQQTROUT files (GDGs)

IWS/Audit - CP Report


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Sitzung C - [32 x 80]
---------- TWS/AUDIT for CP: Specify Parameters for Actual Changes ----------
Command ===>

Jobname          ===>
Occurrence       ===>  *
User ID          ===>
Owner ID         ===>

Search for status or open interval changes on workstations:
Workstation      ===>

Search string    ===>
Interval         ===>  1             (Hours) (Leave blank to specify dates)
Date from        ===>               (DD.MM.YYYY)    Time from      ===>        (HH.MM)
Date to          ===>               (DD.MM.YYYY)    Time to        ===>        (HH.MM)
Modified via     ===>  D _          (A:Auto-Rec. D:Dialog E:ETT P:PIF,
                                      does not work for changes on special resources)




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For example: List all jobs that where changed manually (=Dialog) in the last hour

IWS/Audit - CP Report

```
----------------------------------- TWS/AUDIT for CP -----------------------------------
Command ===> _

Specify Output DSN (quotes are allowed)
Output DSN    ===> 'P390K.TWSAUDIT.CPREPORT'
Generic UNIT ===>

Specify Temporary VSAM DSN (quotes are allowed)
VSAM Cluster ===> 'P390K.TWSAUDIT.NCP'
Num. of cyl. ===> 20

   Jobcards
===> //P390KA    JOB ,'HORIZONT',MSGCLASS=T,CLASS=A,
===> //       NOTIFY=&SYSUID
===> //*
===> //*


Submit/Edit Job    ===> E       S to submit Job, E to edit Job
```

Generate and submit the job, the report will be stored in a file

IWS/Audit - CP Report


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------------------------------- TWS/AUDIT for Current Plan -------------------------------
Command ===> 3_

Please select
1   -   Actual Changes since Replan/Extend (JT Files)
2   -   Also older Changes (Tracklog)
3   -   Show Result

Data set names
NCP      :   SYSH.TXGC.NCP
Tracklog :   SYSH.TXGC.EQQTROUT
Output   :   P390K.TWSAUDIT.CPREPORT




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```

After the job ended, option 3 shows you the result

IWS/Audit - CP Report

Somebody set the job to completed

IWS/Audit - CP Report

IWS/Audit - Summary

A brief summary of IWS/Audit functions:

- IWS/Audit documents all changes made to definition database of IWSz, to the LTP, the CP and to the JS file
- IWS/Audit tracks all versions
- IWS/Audit allows searching and comparing of all versions
- IWS/Audit allows to restore old versions of application description, workstations, special resources etc.

HORIZONT

Thanks for your attention! Do you have any questions?

HORIZONT

Please feel free to visit us in Munich or send an email to
info@horizont-it.com