

TWS/Audit

Change Management for TWS



What's new

HORIZONT
Software for Datacenters

Garmischer Str. 8
D- 80339 München
Tel ++49(0)89 / 540 162 – 0
www.horizont-it.com

TWS/Audit Change History

TWS /Audit 5.1

TWS /Audit 5.0

TWS /Audit 4.1

TWS /Audit 4.0

TWS/Audit 5.1

TWS/Audit 5.1 has following new functions:

- TWS/Audit Version 5.1 is compatible to TWS for z/OS V8R3 (Load module names end with B)
- “R”-Line command for TWS/BatchAD Generator allows selecting the “previous version” if the record was updated.
- The Options Panel allows specifying a row limit for the dialog.

TWS/Audit 5.0

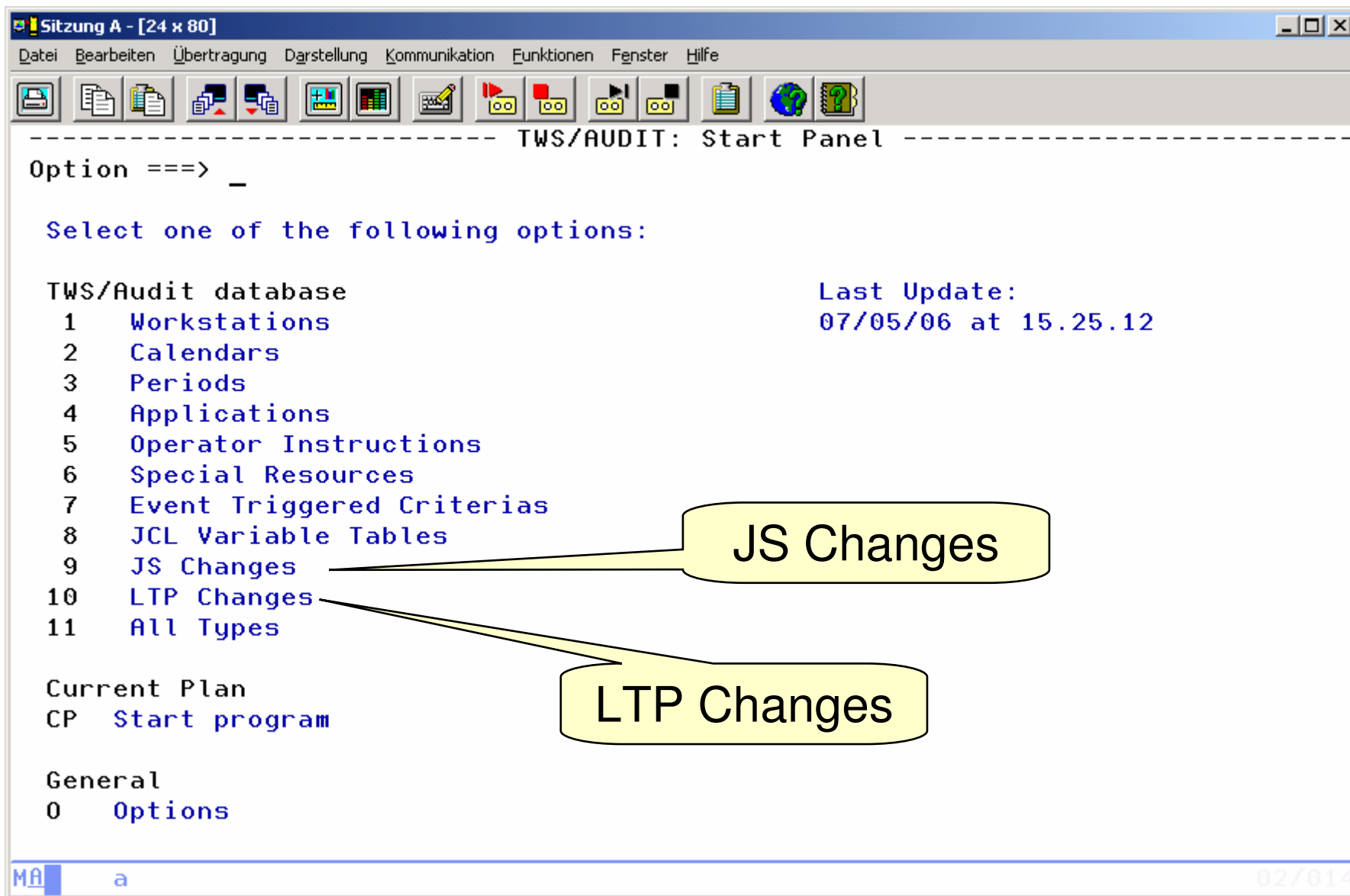
TWS/Audit 5.0 has following new functions:

- Tracks the JS file (JCL)
- Tracks the LTP (Long Term Plan)
- Generates TWS/BatchAD statements.
 - If a user has TWS/BatchAD, he can restore now all definitions, e.g. applications, resource definitions, ett, calendars etc.
(Batchloader supports only application description)

TWS/Audit 5.0

- Sample job OPAJSPLT is much faster
- CP-Audit program OPAICP needs fewer resources (CPU, REGION, and EXCP)
- Compatible to TWS for z/OS V8R2 with “WLM
- SE Integration PTF
- Dialog shows date for last processed tracklog record
- Dialog allocates VSAM file JTWK only when it is really needed
- Job OPAJUPD is needed to use existing VSAM from older releases

TWS/Audit 5.0



TWS/Audit 5.0 - JS Changes

```
Sitzung A - [24 x 80]
Datei Bearbeiten Übertragung Darstellung Kommunikation Funktionen Fenster Hilfe

----- Search Arguments for JS (JCL) Changes -----
Command ==> _

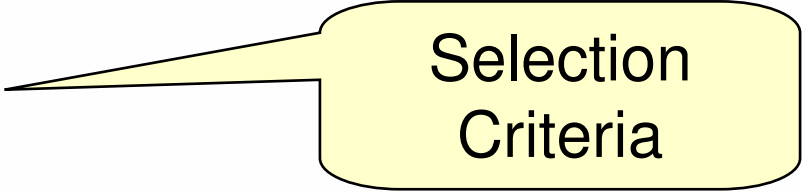
Application      ==> H1*12
Operation Number ==>

Earliest input arrival:
Date             ==>
Time             ==> (HH.MM)
Latest input arrival:
Date             ==>
Time             ==> (HH.MM)

Criterias for the Change Action

Action          ==> (D - Delete I - Insert U - Update B - Browse)
User            ==> P*

Interval        ==> (Hours) (Leave blank to specify dates)
Date from       ==> Time from ==> (HH.MM)
Date to         ==> Time to   ==> (HH.MM)
```



TWS/Audit 5.0 - JS Changes

Sitzung A - [24 x 80]

Datei Bearbeiten Übertragung Darstellung Kommunikation Funktionen Fenster Hilfe

TWS/Audit:JS Changes ----- ROW 008 TO 012 OF 012
Command ==> _ SCROLL ==> CSR

Command: SORT Report
LnCmd : S Select B Browse C Compare P Print

L	Application	IADate	IATime	ON	A	Date	Time	Userid
_	H1PTWS00012	07/03/06	00.00.00	010	U	07/03/06	21.08.27	PS49
_	H1PTWS00012	07/03/06	00.00.00	010	R	07/03/06	21.17.04	PS49
_	H1PTWS00012	07/03/06	00.00.00	010	D	07/03/06	21.17.09	PS49
_	H1PTWS00012	07/03/06	00.00.00	010	R	07/03/06	21.17.12	PS49
_	H1PTWS00012	07/03/06	00.00.00	010	U	07/03/06	21.17.47	PS49

***** BOTTOM OF DATA *****

MA a 02/015

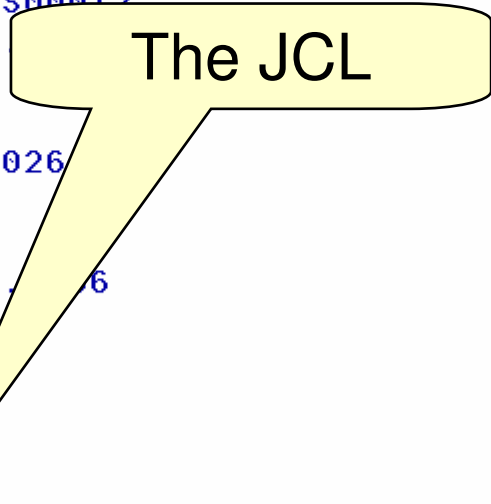
Applications with
changed JCL

TWS/Audit 5.0 - JS Changes

```
Sitzung A - [24 x 80]
Datei Bearbeiten Übertragung Darstellung Kommunikation Funktionen Fenster Hilfe
[Icons]
Menu Utilities Compilers Help

BROWSE      SYS06188.T105413.RA000.P390G.R0102191      Line 00000000 Col 001 080
Command ==> _____ Scroll ==> CSR
***** Top of Data *****
=====
J C L   -   U P D A T E
=====
Application Name      : H1PTWS00012      : H1PTWS00012
Occ Input Arrival Date : 03.07.2006      : 03.07
Occ Input Arrival Time : 00:00           : 00:00
Operation Number      : 10              : 10
Jobname                : PSTW0026        : PSTW0026
Workstation            : CPUR            : CPUR
Last Update User      : PS40            : PS40
Last Update Date      : 03.07.2006      : 03.07.2006
Last Update Time      : > 20:48         : > 20:54
Updating Function      : MCP              : MCP
Operation Status      : Saved           : Saved
Number of JCL Lines   : 109             : 109
Number of Variables   : 4               : 4
Text                   : /*>OPC SEARCH NAME=(T060703,$H1TWS)
Text                   : //PSTW0026 JOB MSGCLASS=R,NOTIFY=PS48,REGION=0M,
Text                   : //                               MSGLEVEL=(1,1)

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```



TWS/Audit 5.0 - LTP Changes

```
Sitzung B - [24 x 80]
Datei Bearbeiten Übertragung Darstellung Kommunikation Funktionen Fenster Hilfe

----- Search Arguments for LTP Changes -----
Command ==> _

Application ==>

Earliest input arrival
Date ==>
Time ==>
Latest input arrival:
Date ==>
Time ==> (HH.MM)

Criterias for the Change Act

Action ==> I (D - Delete I - Insert U - Update B - Browse)
User ==>

Interval ==> (Hours) (Leave blank to specify dates)
Date from ==> 05/31/06 Time from ==> (HH.MM)
Date to ==> 05/31/06 Time to ==> (HH.MM)

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```

TWS/Audit 5.0 - LTP Changes

```
Sitzung B - [24 x 80]
Datei Bearbeiten Übertragung Darstellung Kommunikation Funktionen Fenster Hilfe

OPC/Audit:LTP Changes ----- ROW 001 TO 003 OF 003
Command ==> _ SCROLL ==> CSR

Command: SORT Report
LnCmd : S Select B Browse C Comp. O Comp. to OPC P Print

L Application      IADate  IATime  A Date    Time      Userid
_ H1PLEB20005      06/01/06 12.30.00 I 05/31/06 23.27.06 TWSBAT
_ H1PLEB20005D1    06/01/06 12.30.00 I 05/31/06 23.27.10 TWSBAT
_ H1PLEB20005D2    06/01/06 12.30.00 I 05/31/06 23.27.12 TWSBAT
***** BOTTOM OF DATA *****
```

MA b 02/015

Inserted applications

TWS/Audit 5.0 - LTP Changes

Screenshot of the TWS/Audit 5.0 interface. The window title is 'Sitzung A - [24 x 80]'. The menu bar includes 'Datei', 'Bearbeiten', 'Übertragung', 'Darstellung', 'Kommunikation', 'Funktionen', 'Fenster', and 'Hilfe'. The toolbar contains various icons for file operations and navigation. The main menu is 'Menu Utilities Compilers Help'. The screen displays the following text:

```
BROWSE      SYS06188.T105413.RA000.P390G.R0102191      Line 00000000 Col 001 080
Command ==> _____ Scroll ==> CSR
***** Top of Data *****
=====
L T P   -   I N S E R T
=====
Application Name      : H1PKFZV3105
Run Date              : 02.06.2006
Input Arrival Time    : 12:30
Update User           : TWSBAT
Update Date           : 01.06.2006
Update Time           : 11:22
Authority Group       :
Application Owner ID   : TWSBPA
Original Input Arrival Date : 02.06.2006
Original Input Arrival Time : 12:30
Deadline Date         : 02.06.2006
Deadline Time         : 20:30
Priority               : 5
Error Code            :
Marked 'Deleted' by Online : N
Added by Online Function : Y
```

MA a 04/015

Application was added manually (ISPF dialogue)

TWS/Audit 4.2 + 4.1

TWS/Audit 4.1 + 4.2 got following additional functions:

- Support for TWS 8.2
- Supports multiple planning periods within one tracklog file (e.g. one extend, one replan, another replan etc.)
- Improved CP dialog

TWS/Audit 4.0

TWS/Audit 4.0 tracks all changes made to the CP for following objects

- Occurrences
- Operations
- Dependencies
- Special Resources

```
Sitzung B - [24 x 80]
----- EXTRACT/FORMAT LOG RECORDS. SPECIFY SELECTION CRITERIA -----
Command ==>

Enter/change data below and press ENTER

Type of input   ==>  IRL           Specify JTX or TRL
Search-string   ==>  _____ To search for in input file
Start Date      ==>  _____ Start date in format YYYYMMDD
Start Time      ==>  _____ Start time in format HHMM
End Date        ==>  _____ Last date  in format YYYYMMDD
End Time        ==>  _____ Last time  in format HHMM
TRACKLOG-DSN    ==>  _____
```

```
Sitzung B - [24 x 80]
Menu Utilities Compilers Help

BROWSE P390H.EQQAUDIT.REPORT Line 00000100 Col 053 132
Command ==> _____ Scroll ==> PAGE

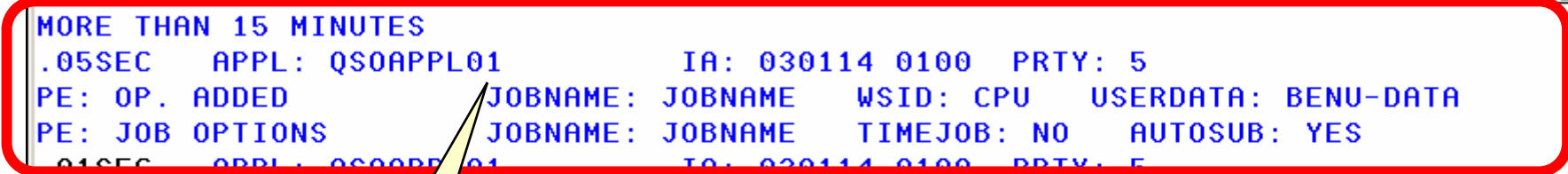
MORE THAN 15 MINUTES
.05SEC APPL: QSOAPPL01 IA: 030114 0100 PRTY: 5
PE: OP. ADDED JOBNAME: JOBNAME WSID: CPU USERDATA: BENU-DATA
PE: JOB OPTIONS JOBNAME: JOBNAME TIMEJOB: NO AUTOSUB: YES
.01SEC APPL: QSOAPPL01 IA: 030114 0100 PRTY: 5
PE: OP. ADDED JOBNAME: JOBNAME WSID: CPU USERDATA: BENU-DATA
PE: JOB OPTIONS JOBNAME: JOBNAME TIMEJOB: NO AUTOSUB: YES
PE: INT. DEP. DELETED TYPE: PRED OPNO:001
PE: INT. DEP. ADDED TYPE: PRED OPNO:001
.03SEC APPL: QSOAPPL01 IA: 030114 0100 PRTY: 5
PE: OP. ADDED JOBNAME: JOBNAME WSID: CPU USERDATA: BENU-DATA
PE: JOB OPTIONS JOBNAME: JOBNAME TIMEJOB: NO AUTOSUB: YES
PE: INT. DEP. DELETED TYPE: PRED OPNO:001
PE: INT. DEP. ADDED TYPE: PRED OPNO:001
MORE THAN 15 MINUTES
.06SEC APPL: HELMUTTIME2 IA: 030114 0800 PRTY: 5
PE: OP. ADDED JOBNAME: P390K1 WSID: CPU1 USERDATA:
PE: JOB OPTIONS JOBNAME: P390K1 TIMEJOB: NO AUTOSUB: YES
MORE THAN 15 MINUTES
EP END XXRJCOB (JOB08774) AT: 11.10.18.21 PRSTEP: IDCAMS CODE: 0000
MA b 09/2001
```

Why not using EQQAUDIT?



EQQAUDIT

```
Sitzung B - [24 x 80]
Menu Utilities Compilers Help
BROWSE      P390H.EQQAUDIT.REPORT          Line 00000100 Col 053 132
Command ==>                               Scroll ==> PAGE
MORE THAN 15 MINUTES
.05SEC  APPL: QSOAPPL01          IA: 030114 0100  PRTY: 5
PE: OP. ADDED                   JOBNAME: JOBNAME  WSID: CPU  USERDATA: BENU-DATA
PE: JOB OPTIONS                 JOBNAME: JOBNAME  TIMEJOB: NO  AUTOSUB: YES
.01SEC  APPL: QSOAPPL01          IA: 030114 0100  PRTY: 5
PE: OP. ADDED                   JOBNAME: JOBNAME  WSID: CPU  USERDATA: BENU-DATA
PE: JOB OPTIONS                 JOBNAME: JOBNAME  TIMEJOB: NO  AUTOSUB: YES
PE: INT. DEP. DELETED          TYPE: PRED  OPNO:001
PE: INT. DEP. ADDED            TYPE: PRED  OPNO:001
.03SEC  APPL: QSOAPPL01          IA: 030114 0100  PRTY: 5
PE: OP. ADDED                   JOBNAME: JOBNAME
PE: JOB OPTIONS                 JOBNAME: JOBNAME
PE: INT. DEP. DELETED          TYPE: PRED  OPNO:
PE: INT. DEP. ADDED            TYPE: PRED  OPNO:
TIME2          IA: 03
JOBNAME: P390K1
JOBNAME: P390K1
(JOB08774) AT: 11
```



EQQAUDIT:
This is an
inserted
operation

EQQAUDIT is a TWS sample program, which is part of every TWS installation, but:

- Output is difficult to read
- Output is incomplete

TWS/Audit for the CP - Output

```
Sitzung B - [24 x 80]
Menu Utilities Compilers Help
BROWSE P390A.OPA.TDATA.OUTFKARL Line 00000405 Col 001 080
Command ==> Scroll ==> CSR
-----
103 | O P E R A T I O N - A D D
-----
Application ID           : QS0ABKADC1
Input Arrival Date      : 29.12.2002
Input Arrival Time      : 09:00
Operation Text          :
Job Name                 : IN
Workstation Name        : QSIN
Operation Number        : 10
Job/Sysout Class        :
Manually Held           : N
No Operation (NOP)     : N
Execute Operation       : N
Operation IA Date       : 29.12.2002
Operation IA Time       : 09:00
Operation Deadline Date : 30.12.2002
Operation Deadline Time : 12:00
Duration                 : 6000
Parallel Servers        : 1
```

This operation was added to the current plan

TWS/Audit for the CP:

- Output is easy to read
- Output is complete

TWS/Audit for the CP - Advantages

TWS writes modifications into the JT file and EQQTROUT. Some facts:

- JT file is unreadable
- EQQTROUT is unreadable
- EQQAUDIT is not complete, it shows only key values
- TWS/Audit shows all modifications
 - Readable
 - Complete

TWS/Audit

Change Management for TWS



Thank you very much for
your attention!

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