

XINFO 4.2

What's new



XINFO 4.2

Release 4.2 is available since June 2020.

Two fundamental differences from previous releases:

- TCP/IP communication:

| Version | Listener | Server Modules | Client Version | Note |
|---------|----------|----------------|-----------------|---|
| 4.0 | ROTISHD | XXRIXD4 | > 4.0 | |
| 4.0 | ROTISHB | XXRIXD5 | >= 4.1 Build 67 | Not included in package. Only available on request. |
| 4.1 | ROTISHB | XXRIXD5 | >= 4.1 Build 67 | |
| 4.2 | HORILST | XXRIXD6 | >= 4.2 Build 79 | Shared Package >= V1R0 |

- Shared Package:
Load modules commonly used by HORIZONT products are in a separate package.



XINFO 4.2

General enhancements:

- Improved/simplified TCPIP communication
 - New listener HORILST communicates directly with XINFO server – no UWORK
 - One XINFO server task supports all encryption modes
 - Prepared for future TLS 1.3 support
- XINFO installation
 - Convert SMF times from seconds to cent seconds (cs)
 - SHRLEVEL REFERENCE in Db2 load statement – avoid -911
- ISPF dialog
 - Display load date in result panel – no adaption of panels and REXX
 - XINFO batch query (pgm XXRIWT1) supports long SQL > 5000 lines
- PC Client
 - JCL highlighting



XINFO 4.2 – Workload Manager

Enhancements for workload manager scanner:

- Automic
 - New table “Unused Objects”
 - Added information when Agents were active, i.e. Start Time and End Time
 - Table “Processing” shows name of included object to answer “Which objects use specific JOBI?”
- CA 7
 - Improved error handling, adapted data types, i.e. Submit Time (TRSBTM)
- Control-M
 - Support Control-M 8.0 up to 9.0.20
 - New table “Capture“
 - Added “Mail CC“, “Mail Attach Sysout“, “Mail Urgency“
 - Enterprise Manager: New table for EM-Hosts (NODEIDs)



XINFO 4.2 – Workload Manager

Enhancements for workload manager scanner:

- IWS
 - Support IWSz 9.5 (Operation Dead Line/Start Alert)
 - New table XXRTCPI for CP Workstation Intervals
 - Further improvements
 - Job Run Times in "No. of seconds"
 - Extend columns ADRRDAYP, ADRRDAYN
 - Added length to IWS z/OS - JCL Variable Tables
- New IWSd scanner
 - Support IWSd 9.4.0.0 – 9.5.0.3
- StreamWorks
 - 64-bit scanner to prevent database connection problems
 - Support StreamWorks 2019



XINFO 4.2 - JCL

Support of z/OS 2.4 JCL enhancements:

- NOTIFY statement
 - New JCLERR and SECERR keywords of WHEN parameter
- DD statement
 - SMBVSPI, is added to AMP parameter
- Scan messages are available in XINFO → new table XXRTJSM



Scanner enhancements:

- Beta 92 EJM
 - Changed CHAR to DATE, TIME DB2 data type
 - Enhanced script scanner for #PSSTEP, ##EVENTSTEP, ##REMOTESSH, ##JSLPARM
- Beta 93
 - Added field LREFD (Last_Referenced_Date)
- CICS CSD
 - CICS 5.5 support (new field JOBUSERID)
- DB2
 - Added SYSTEM.SYSTABLES columns CREATEDBY, CREATEDTS, ALTEREDTS to XXRTD22



Scanner enhancements:

- Load module:
 - Changed CHAR to DATE, TIME DB2 data type
- IT Charts
 - Recording of historical runtime data of a period in ITC table.
- SMF
 - CPU times in cent seconds (cs - 1/100 seconds)
 - Added SMF30_Highest_Task_CPU -> Determine the "CPU-intensive" tasks
 - Interval activity (STCs) – record 30 subtype 2
 - CICS 5.5 support (compatibility support for 5.6)
- Space
 - Merged migrated and backup data into one table
 - Added LRECL to migrated and backup data
 - Added ATTRIBUTES, ENCRYPTIONDATA data set data



XINFO 4.2 – Source

Scanner enhancements:

- Natural:
 - Which Natural programs use MAPs?
 - Save Time and Catalog Time added to “Natural – Libraries”



XINFO 4.2 – TCP/IP Listener

New listener
HORJLST

HORILST is contained
in Shared Package

No UWORK ...

```
Session A - zPDT_DEMO_default.WS - [32 x 80]
File Edit Edit_Settings Test Help
VIEW SYSH.PROCLIB(HORJLST) - 07 Columns 00001 00072
Command ==> Scroll ==> CSR
000001 //HORJLST PROC
000002 //* START PROCEDURE FOR THE HORIZONT TCP/IP LISTENER
000003 //HORILST EXEC PGM=HORILST,REGION=32M,TIME=1440
000004 //* MAKE SURE THAT ALL (!) STEPLIB DATA SETS ARE APF AUTHORISED !
000005 //STEPLIB DD DISP=SHR,DSN=SYSH.SHARED.V1R1.LOAD
000006 // DD DISP=SHR,DSN=SYSH.TCPIP.V4R4M0.LOAD
000007 //SYSPRINT DD SYSOUT=*
000008 //SYSTSPRT DD SYSOUT=*
000009 //SYSOUT DD SYSOUT=*
000010 //CEEDUMP DD SYSOUT=*
000011 //TCPPARM DD *
- - - - - 18 Line(s) not Displayed
000030 CONLOGMSGLEVEL=1
000031 --HOSTIPADDR=NNN.NNN.NNN.NNN
000032 --MSGCLASS=T
000033 PORTID=15200
000034 TCPMSGLEVEL=3
000035 USERISSTEPNAME=YES
000036 --
000037 -- Whitelist for Servers
000038 --
000039 SERVER=XX4*
000040 SERVER=EZ*
000041 SERVER=IX*
000042 SERVER=IWS*
***** ***** Bottom of Data *****
MA A 04/015
```



XINFO 4.2 – Server task

```
Session A - zPDT_DEMO_default.WS - [32 x 80]
File Edit Edit_Settings Menu Utilities Compilers Test Help
VIEW      SYSH.XINFO.V4R2.PROCLIB(XXRJSV42) - 01.01      Columns 00001 00072
Command ==> _____ Scroll ==> CSR
***** ***** Top of Data *****
000001 //XXRJSV42 PROC LSTOPT=LSTOPT
000002 //          EXPORT SYMLIST=(LOSYM)
000003 //          SET    LOSYM=&LSTOPT
000004 //*****
000005 //* START PROCEDURE FOR THE XINFO SERVER
000006 //* IF TASK IS CANCELED BY THE SYSTEM WITH SYSTEM ABEND CODE 522, ADD
000007 //* TIME=1440 OR ANOTHER APPROPRIATE VALUE.
000008 //*****
000009 //SERVER EXEC PGM=XXRIXD6,
000010 // PARM=( 'RPTOPT(OFF)',
000011 //        '/UID=&UID' ),
000012 // REGION=128M
000013 //* MAKE SURE THAT ALL (!) STEPLIB DATA SETS ARE APF AUTHORISED !
000014 //STEPLIB DD DSN=SYSH.XINFO.V4R2.LOAD,
000015 //          DISP=SHR
000016 //          DD DSN=SYSH.SHARED.LOAD,
000017 //          DISP=SHR
- - - - - 8 Line(s) not Displayed
000026 //SYSIN DD DSN=SYSH.XINFO.V4R2.PARM(XXRKXD6),
- - - - - 5 Line(s) not Displayed
000032 //TCPPARM DD DSN=SYSH.XINFO.V4R2.PARM(TCPKSRV),
000033 //          DISP=SHR
000034 //LSTOPTDD DD *,SYMBOLS=JCLONLY
000035 &LOSYM
000036 //DEFGLBI DD DSN=SYSH.XINFO.V4R2.DEFGLB,
000037 //          DISP=SHR,FREE=CLOSE
000038 //LIBSYM DD DSN=SYSH.XINFO.V4R2.LIBSYM,
MA A 04/015
```

TCP/IP connection data from listener

New server program

No UWORK



XINFO 4.2 – Installation

```
Session A - zPDT_DEMO_default.WS - [32 x 80]
File Edit Edit_Settings Menu Utilities Compilers Test Help
VIEW      SYSH.XINFO.V4R2.CNTL(XXRJUPD) - 01.00      Block command incomplete
Command ==>                                         Scroll ==> CSR
000242 //SYSIN      DD *
000243 SORT FIELDS=COPY
000244 //*****
000245 //* COPY JOB RUN TIME RECORDS
000246 //*****
000247 //SORTSMF EXEC XXRJSORT,COND=(4,LT)
000248 //SORTIN DD DSN=SYSH.XINFO.V4R1.DATA.XXRTSMF,
000249 //          DISP=SHR
000250 //SORTOUT DD DSN=SYSH.XINFO.V4R2.DATA.XXRTSMF,
000251 //          DISP=(,CATLG),
000252 //          SPACE=(TRK,(2500,2500),RLSE),
000253 //          DCB=(DSORG=PS,RECFM=FB,LRECL=524)
000254 //SYSIN      DD *
000255 SORT FIELDS=COPY
000256 OUTREC OVERLAY=(110:112,9,119:C'00',
000257                  121:123,9,130:C'00',
000258                  132:134,9,141:C'00',
000259                  192:194,9,201:C'00',
000260                  203:205,9,212:C'00',
000261                  368:370,9,377:C'00',
000262                  379:381,9,388:C'00',
000263                  402:404,9,411:C'00',
000264                  413:415,9,422:C'00',
000265                  512:13X)
000266 //*****
000267 //* COPY PRINTER RECORDS
000268 //*****
000269 //SORTSMP EXEC XXRJSORT,COND=(4,LT)
MA      A
04/015
```

Convert SMF Job/Step times from seconds ...

... to cent seconds (cs)



XINFO 4.2 – Installation

```
Session A - zPDT_DEMO_default.WS - [32 x 80]
File Edit Edit_Settings Menu Utilities Compilers Test Help
EDIT      P390C.S0W1.SPFTEMP2.CNTL      Columns 00001 00072
Command ==>                               Scroll ==> CSR
000162 /* GRANTPUB YES/NO SHOULD TABLES BE GRANTED FOR SELECT TO PUBLIC */
000163 /* CREVIEW YES/NO CREATE A SELECT * VIEW FOR EACH TABLE? */
000164 /* SHRLVL YES/NO SHOULD CONCURRENT ACCESS TO THE TABLESPACE OR */
000165 /* PARTITION ALLOWED? */
----- 30 Line(s) not Displayed
000196 /*-----*/
000197 DB2SSID = "DBCG"
000198 DB2CLOCA = ""
000199 DB2VER = "12"
000200 COLLID = "COLXXR42"
000201 DB2PDSN = "DSNC10.DBCG.RUNLIB.LOAD"
----- 24 Line(s) not Displayed
000226 SHRLVL = "NO"
000227 DEFIQTY = YES
000228 MAXPARTS = "2"
000229 DSSIZE = "1G"
000230 SEGSIZE = "4"
000231 DBSPREF = "XXRS"
000232 DBSSUFF = ""
000233 DBTPREF = "XXRT"
000234 DBTSUFF = ""
000235 DBVPREF = "XXRV"
000236 DBVSUFF = ""
000237 DBXPREF = "XXRX"
000238 DBXSUFF = ""
000239
000240 /*-----*/
000241 /* JOBCARD FOR USE IN BATCH PROGRAMS WHICH WILL USE DB2 */
MA A 10/002
```

Db2 statements with SHRLEVEL REFERENCE



XINFO 4.2 – ISPF Dialog

Show load time of table

```
Session A - zPDT_DEMO_default.WS - [32 x 80]
----- JCL - EXEC Statements ----- ROW 001 TO 013 OF 013
Command ==> _                               SCROLL ==> CSR

Top   : Legend  SAVE  SORT  Find  STAT  LIBS  BATCH  Arrange  EXit
        ALL  FIX  SHOW  EditSQL  Info  Tables  Group  REfresh
Bottom: ? List all Line Commands S Select  DP Dependencies B Browse Job
        JU JCL+Proc  BP Browse Proc  J Job  PJ PGM/PROC  DS Dataset
        PC ProcParm  SM SME  US SME/DSN  IT Job/Table  JB Job/DBD  O Oper ...

LOAD: 2021-01-31-01.07.44.11, TAB: XXRTEXE
-----
Jobname  SNr  Type  Program  ProcStep  Procedur  F  JobStep  Proclib (called)  Calli
-----
X40JJUPU  3  PGM  JUPIPO  JUPIPO  JUPIPO
X40JJUP1  2  PGM  JUPIPO  JUPIPO  JUPIPO
X40JJUP2  2  PGM  JUPIPO  JUPIPO  JUPIPO
X40JJUP3  2  PGM  JUPIPO  JUPIPO  JUPIPO
X40JJUP4  3  PGM  JUPIPO  JUPIPO  JUPIPO
X41JJUPU  3  PGM  JUPIPO  JUPIPO  JUPIPO
X41JJUP1  3  PGM  JUPIPO  JUPIPO  JUPIPO
X41JJUP2  2  PGM  JUPIPO  JUPIPO  JUPIPO
X41JJUP3  2  PGM  JUPIPO  JUPIPO  JUPIPO
X42JJUPU  3  PGM  JUPIPO  JUPIPO  JUPIPO
X42JJUP1  3  PGM  JUPIPO  JUPIPO  JUPIPO
X42JJUP2  3  PGM  JUPIPO  JUPIPO  JUPIPO
X42JJUP3  3  PGM  JUPIPO  JUPIPO  JUPIPO
***** BOTTOM OF DATA *****
MA  A  02/015
```



XINFO 4.2 – PC Client

The screenshot displays the XINFO PC Client interface. On the left, a 'Workspace Tree' shows a hierarchy of JCL-related items, with 'EXEC Statements' selected. The main window, titled 'XINFO PC Client - JCL - EXEC Statements', shows a code editor with the following JCL content:

```
1 //X42JJUP1 JOB (ACCOUNT), 'HORIZONT', MSGCLASS=T, CLASS=A,  
2 // NOTIFY=&SYSUID  
3 //*  
4 //*  
5 //LIBS JCLLIB ORDER=(SYSH.XINFO.V4R2.PROCLIB)  
6 //* HORIZONT (ORIGINAL) JOB NAME: X42JJUP1  
7 //* HORIZONT (ORIGINAL) CORRESPONDING FINAL LOAD JOB NAME: X42JLD01  
8 //JOBLIB DD DSN=SYSH.XINFO.V4R2.LOAD,  
9 // DISP=SHR  
10 // DD DSN=SYSH.SHARED.LOAD,  
11 // DISP=SHR  
12 //*****  
13 //* EXTRACT INFORMATION FROM JCLLIBS  
14 //*****  
15 //*****  
16 //* DELETE DATASET(S)  
17 //*****  
18 //DELETE EXEC X42JJUP1  
19 //SYSIN DD *,SYMBOLS=EXECSTATS  
20 DEL SYSH.XINFO.V4R2.DATA.XXRT7ID.TWS  
21 DEL SYSH.XINFO.V4R2.DATA.XXRTCXJ.TWS  
22 DEL SYSH.XINFO.V4R2.DATA.XXRTD2P.TWS  
23 DEL SYSH.XINFO.V4R2.DATA.XXRTIMP.TWS  
24 DEL SYSH.XINFO.V4R2.DATA.XXRTDDF.TWS  
25 DEL SYSH.XINFO.V4R2.DATA.XXRTDDH.TWS  
26 DEL SYSH.XINFO.V4R2.DATA.XXRTDDP.TWS  
27 DEL SYSH.XINFO.V4R2.DATA.XXRTTEXE.TWS  
28 DEL SYSH.XINFO.V4R2.DATA.XXRTJES.TWS  
29 DEL SYSH.XINFO.V4R2.DATA.XXRTJOB.TWS
```

A yellow callout box with a black border points to the JCL code, containing the text 'JCL highlighting ...'. The code editor has a search bar at the bottom with the text 'Search for' and buttons for 'Search', '<<', and '>>'. At the bottom right of the window, it says 'Lines: 13'. The main application window has a menu bar with 'File', 'Home', 'Table', 'Netplan', 'Barchart', and 'Chart'. Below the menu bar is a ribbon with various icons and options like 'Copy', 'Select All', 'Toggle Selection', 'Customize', 'Use Default', 'Use Custom', 'Group', 'Statistics', 'Subtable', and 'Graph'. A 'Workspace Tree' on the left lists various JCL-related items, with 'EXEC Statements' selected. Below the tree is a table with columns 'Jobname' and 'SI', listing job names like X40JJUPU, X40JJUP1, X40JJUP2, X40JJUP3, X40JJUP4, X41JJUPU, X41JJUP1, X41JJUP2, X41JJUP3, X42JJUPU, X42JJUP1, X42JJUP2, and X42JJUP3. The status bar at the bottom left says 'Connected as: p390c, file: XX42L#25'.



XINFO 4.2 – Control-M Scanner

The screenshot displays the XINFO PC Client interface for the 'Scheduler - Control-M - Capture' window. The main window features a menu bar (File, Home, Table, Netplan, Barchart, Chart, Script, View) and a toolbar with various options like Copy, Select All, Toggle Selection, Customize, Use Default, Use Custom, Group, Statistics, All, Show SQL, Show criteria, Inverse Filter, and New. A 'Workspace Tree' on the left lists various job-related items, with 'Capture' selected. The main area shows a table with columns: MEMNAME/Filename, DS-Jobname, C, and Search String. A yellow callout bubble points to the 'Capture' item in the tree, containing the text: 'Report of Job output capture into a variable'. The table contains the following data:

| MEMNAME/Filename | DS-Jobname | C | Search String |
|------------------|--------------|-------|---------------|
| <all> | <all> | <all> | <all> |
| T01J001 | | W | ERROR |
| | Job3-capture | C | error |
| | Job3-capture | W | wam |

A 'Details' window is open on the right, showing the following configuration parameters:

| Name | Value |
|------------------|------------------------------|
| MEMNAME/Filename | T01J001 |
| Jobname (d) | |
| By (Words/Chars) | W |
| Search String | ERROR |
| Skip Lines | 3 |
| Skip Columns | 0 |
| Delimiter | |
| Take/Capture | 2 |
| Into Variable | %%VE1 |
| Control-M System | ZOS-V90 |
| Schedule Lib (z) | SYSH.IOA90I.CTM.OPR.SCHEDULE |
| Application | |
| Group/Sub Appl. | TESTGROUP |
| Table/Folder | TEST01 |
| Type (Job/Table) | J |
| Unique Number | 14 |

The 'Details' window has buttons for OK, Copy, Print..., and Save As... at the bottom.



XINFO 4.2 – Control-M Scanner

The screenshot displays the XINFO PC Client interface. The main window shows a table of job steps under the 'Control-M ON PGMST / Steps' table. The 'Details' dialog box is open, showing configuration parameters for the selected job step. A yellow callout bubble points to the 'Mail Cc' field, which is highlighted with a red box.

| MEMNAME/Filename | Mail-Subject |
|------------------|-----------------------------|
| POS#99T08V | POSI TEV-Status per %\$DATE |
| POS#99F23V | POSI TEV-Status per %\$DATE |
| POS#99T09V | POSI TEV-Status per %\$DATE |
| POS#99F25V | POSI TEV-Status per %\$DATE |
| POS#99T10V | POSI TEV-Status per %\$DATE |
| POS#99F27V | POSI TEV-Status per %\$DATE |
| POS#99T11V | POSI TEV-Status per %\$DATE |
| POS#99F29V | POSI TEV-Status per %\$DATE |
| POS#99T12V | POSI TEV-Status per %\$DATE |
| POS#99F31V | POSI TEV-Status per %\$DATE |
| POS#99T13V | POSI TEV-Status per %\$DATE |
| POS#99F33V | POSI TEV-Status per %\$DATE |
| POS#99T14V | POSI TEV-Status per %\$DATE |
| POS#99F35V | POSI TEV-Status per %\$DATE |
| POS#99T15V | POSI TEV-Status per %\$DATE |
| POS#99F37V | POSI TEV-Status per %\$DATE |
| POS#99T16V | POSI TEV-Status per %\$DATE |
| POS#99F39V | POSI TEV-Status per %\$DATE |

| Name | Value |
|---------------------|---|
| Rerun Member (z) | |
| Interval (z) | |
| Variable Name | |
| Value | |
| Shout Destination | |
| Shout Urgency | |
| Shout Message | |
| Sysout Option | |
| Sysout Pam | |
| Sysout From Cls (z) | |
| IFRERUN Fr PGM (z) | |
| IFRERUN Fr PROC (z) | |
| IFRERUN To PGM (z) | |
| IFRERUN To PROC (z) | |
| Mail Subject | POSI TEV-Status per %\$DATE - MS05 - Beladung Ergebnisdaten SAP ... |
| Mail Recipient | 1653S_Posl_IT-Prod-Betreuung@LBBW |
| Mail Cc | 3345V_RVD_PROD@lbbw.de |
| Mail Attach Sysout | D |
| Mail Urgency (d) | R |
| Control-M System | CTM_D01 |
| Schedule Lib (z) | |
| Application | POSI |
| Table/Folder | POSI_STATUS_TGL |
| Type (Job/Table) | J |
| Unique Number | 829 |



XINFO 4.2 – Control-M Scanner

The screenshot displays the 'Scheduler - Control-M/EM - Hosts' configuration window. The interface includes a menu bar (File, Home, Table, Netplan) and a workspace tree on the left. The main area contains a list of configuration fields for a Control-M/Server, each with a dropdown menu and an input field. A red box highlights the following fields:

- Host
- Host Group
- Control-M/EM System
- Control-M/Server

A yellow callout box points to these fields with the text: "List Hosts and Host Groups defined for a Control-M/Server".

Other visible fields include:

- Application Type
- Last Updated (DD.MM.YYYY HH:MM:SS)
- Participation (P/C)
- Condition Name
- Condition Date
- Date Type
- Date From (DD.MM.YYYY)
- Date To (DD.MM.YYYY)
- Weekday From
- Weekday To
- Monday
- Tuesday
- Wednesday
- Thursday
- Friday

The workspace tree on the left shows a hierarchy of folders including Scheduler, A-AUTO, AOCS, Automic, CA-Scheduler, CA7, Control-M, Control-M/EM, Job Definitions, Scheduling, Resources, In/Out Conditions, On Do, Variables, Notifications, Capture, Job Script/JCL, Hosts, EJM, IWS z/OS, and IWSd. The 'Hosts' folder is currently selected.



XINFO 4.2 – Automic Scanner

The screenshot shows the XINFO PC Client interface. The main window displays a list of unused objects in a table. A yellow callout box highlights the criteria for these objects.

Objects which are not

- used as a task in any Workflow or Schedule
- activated in a script
- executed manually by Execute Recurring
- included by :INC statement

| System | Clnt | Object Name | Obj-Type |
|--------|------|-----------------------------|----------|
| PROD | 9000 | B21REP.XBA.530.15_LOAD.JOBP | JOBP |
| PROD | 9000 | B21REP.XBA.530.16_LOAD.JOBP | JOBP |
| PROD | 9000 | B21REP.XBA.530.17_LOAD.JOBP | JOBP |
| PROD | 9000 | B21REP.XBA.530.18_LOAD.JOBP | JOBP |
| PROD | 9000 | B21REP.XBA.530.19_LOAD.JOBP | JOBP |
| PROD | 9000 | B21REP.XBA.530.20_LOAD.JOBP | JOBP |
| PROD | 9000 | B21REP.XBA.530.21_LOAD.JOBP | JOBP |
| PROD | 9000 | B21REP.XBA.530.22_LOAD.JOBP | JOBP |
| PROD | 0010 | TESTS1 | SCRI |
| PROD | 0010 | SCRI_PARALLEL_DB2LOAD_BSP | SCRI |
| PROD | 0010 | JOBZ.XINFO32.ORA.XXRJCOB | JOBS |
| PROD | 0010 | JOBZ.XINFO32.ORA.XXRJFT0J | JOBS |
| PROD | 0010 | JOBZ.XINFO32.XXRJLD0X | JOBS |
| PROD | 0010 | JOBZ.XINFO31.ORA.#SMFORAD | JOBS |
| PROD | 0010 | JOBZ.XINFO32.XXRJFILM | JOBS |
| PROD | 0010 | JOBZ.XINFO32.XXRJLD12 | JOBS |
| PROD | 0010 | JOBZ.XINFO32.XXRJLD03 | JOBS |
| PROD | 0010 | JOBZ.XINFO32.XXRJLADM | JOBS |
| PROD | 0010 | JOBZ.XINFO32.XXRJLAD1 | JOBS |

Connected as: p391p, file: XX42L#25 Lines: 500



XINFO 4.2 – Automic Scanner

The screenshot shows the XINFO PC Client interface for Automic Agents. The main window displays a table with columns for System, Client, Agent, Agent Version, Platform, Hardware, Software, Software Version, IP Address, Port, and various status flags (A, R, W, E). The Start Time and End Time columns are highlighted with a red box. A yellow callout points to the row for agent PC155, which has a filled End Time of 08.08.2019,08:32:54, indicating it is a stopped agent.

| Syst... | Clnt | Agent | Agent Ver... | Platform | Hardware | Software | Software Ver... | IP Address | Port | A | R | W | E | Start Time | End Time |
|---------|-------|---------|---------------|----------|----------|----------|------------------|----------------|-------|-------|-------|-------|-------|---------------------|---------------------|
| <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> |
| PROD | 0010 | PC22 | 12.3.1+bui... | WINDOWS | x86/1/64 | WinNT | 6.1.7601 | 192.168.47.22 | 2300 | Y | Y | Y | Y | 27.01.2021,23:38:40 | |
| PROD | 0010 | P390 | 12.3.1+bui... | MVS | 1090-306 | OS/390 | 7.2.3 | 192.168.47.14 | 2300 | Y | Y | Y | Y | 01.02.2021,18:29:38 | |
| PROD | 9000 | P390 | 12.3.1+bui... | MVS | 1090-306 | OS/390 | 7.2.3 | 192.168.47.14 | 2300 | Y | Y | Y | Y | 01.02.2021,18:29:38 | |
| PROD | 0010 | PC21 | 12.3.1+bui... | UNIX | x86_64/1 | Linux | 3.0.13-0.27-d... | 192.168.47.21 | 2222 | Y | Y | Y | Y | 28.01.2021,07:56:06 | |
| PROD | 0010 | PC12 | 12.3.1+bui... | UNIX | x86_64/4 | Linux | 3.11.6-4-default | 192.168.47.12 | 2222 | Y | Y | Y | Y | 01.02.2021,18:29:40 | |
| PROD | 0010 | UC4SERV | 12.3.1+bui... | WINDOWS | x86/4/64 | WinNT | 10.0.17763 | 192.168.47.6 | 2300 | Y | Y | Y | Y | 26.01.2021,04:02:09 | |
| PROD | 0010 | PC155 | 12.3.2+bui... | UNIX | x86_64/1 | Linux | 3.10.0-957.el... | 192.168.47.155 | 2300 | Y | Y | Y | Y | 27.07.2019,03:00:14 | 08.08.2019,08:32:54 |
| PROD | 0010 | PC01 | 12.3.2+bui... | WINDOWS | x86/4/64 | WinNT | 10.0.17763 | 192.168.47.1 | 2308 | Y | Y | Y | Y | 28.01.2021,07:23:33 | |
| PROD | 0010 | PC133 | 12.3.2+bui... | WINDOWS | x86/2/64 | WinNT | 10.0.14393 | 192.168.47.133 | 2300 | Y | Y | Y | Y | 27.01.2021,14:16:42 | |

Stopped Agents have End Time filled



XINFO 4.2 – Automatic Scanner

The screenshot shows the XINFO PC Client interface. The main window displays a table with columns: System, Clnt, Object Name, Obj..., Platform, Script Type, Line, Content, and Include Name. A callout box points to the 'Object Name' column, stating: "JOB# name is in separate column to enable search for all objects where it is included". A red box highlights two rows in the table:

| System | Clnt | Object Name | Obj... | Platform | Script Type | Line | Content | Include Name |
|--------|------|-------------------------------------|--------|----------|-------------|------|---------------------------------------|----------------------------|
| PROD | 9000 | JW.SY.P.XINFO_REPORT_FORECAST_NE... | JOBS | WINDOWS | Post-Script | 4 | ! Kurzbeschreibung: Suchen in Report | |
| PROD | 9000 | JW.SY.P.XINFO_REPORT_FORECAST_NE... | JOBS | WINDOWS | Post-Script | 5 | ! | |
| PROD | 9000 | JW.SY.P.XINFO_REPORT_FORECAST_NE... | JOBS | WINDOWS | Post-Script | 6 | ! | |
| PROD | 9000 | JW.SY.P.XINFO_REPORT_FORECAST_NE... | JOBS | WINDOWS | Post-Script | 7 | ! | |
| PROD | 9000 | JW.SY.P.XINFO_REPORT_FORECAST_NE... | JOBS | WINDOWS | Post-Script | 8 | ! Ermitteln FAULT_OTHER in Report | |
| PROD | 9000 | JW.SY.P.XINFO_REPORT_FORECAST_NE... | JOBS | WINDOWS | Post-Script | 9 | ! Empfang und Setzen Vorgabeparameter | |
| PROD | 9000 | JW.SY.P.XINFO_REPORT_FORECAST_NE... | JOBS | WINDOWS | Post-Script | 10 | :RSET &Pfad# | |
| PROD | 9000 | JW.SY.P.XINFO_REPORT_FORECAST_NE... | JOBS | WINDOWS | Post-Script | 11 | :RSET &BCH# | |
| PROD | 9000 | JW.SY.P.XINFO_REPORT_FORECAST_NE... | JOBS | WINDOWS | Post-Script | 12 | :SET &LOG# = '&Pfad#\out\&BCH#.txt' | |
| PROD | 9000 | JW.SY.P.XINFO_REPORT_FORECAST_NE... | JOBS | WINDOWS | Post-Script | 13 | :SET &SUCHSTRING# = 'FAULT_OTHER' | |
| PROD | 9000 | JW.SY.P.XINFO_REPORT_FORECAST_NE... | JOBS | WINDOWS | Post-Script | 14 | :SET &RC_NOK = '88' | |
| PROD | 9000 | JW.SY.P.XINFO_REPORT_FORECAST_NE... | JOBS | WINDOWS | Post-Script | 15 | ! | |
| PROD | 9000 | JW.SY.P.XINFO_REPORT_FORECAST_NE... | JOBS | WINDOWS | Post-Script | 16 | ! Suchen String in Datei | |
| PROD | 9000 | JW.SY.P.XINFO_REPORT_FORECAST_NE... | JOBS | WINDOWS | Post-Script | 17 | :INC IN.##.POST_POSITIV_MELDUNG | IN.##.POST_POSITIV_MELDUNG |
| PROD | 9000 | JW.SY.P.XINFO_REPORT_FORECAST_NE... | JOBS | WINDOWS | Pre-Script | 1 | : INCLUDE IN.##.PRE_STD | IN.##.PRE_STD |
| PROD | 9000 | JW.SY.P.XINFO_REPORT_FORECAST_NE... | JOBS | WINDOWS | Pre-Script | 2 | ! | |
| PROD | 9000 | JW.SY.P.XINFO_REPORT_FORECAST_NE... | JOBS | WINDOWS | Pre-Script | 3 | ! Datum: 15.12.2009 | |
| PROD | 9000 | JW.SY.P.XINFO_REPORT_FORECAST_NE... | JOBS | WINDOWS | Pre-Script | 4 | ! Autor: RZWH | |



XINFO 4.2 – IWSd Scanner

The screenshot displays the XINFO PC Client interface for IWSd - Job Netplan. The main window shows a job netplan diagram with various nodes and connections. A yellow callout box highlights the text: "XINFO shows IBM Workload Scheduler definitions, including a Job Netplan". The workspace tree on the left is circled in red and lists the following items: IWSd, Workstations, Workstation Classes, Folders, Jobstreams+Jobs, Dependencies, Jobstreams, Job Definitions, Output Conditions, Calendars, Resources, Prompts, Run Cycle Groups, Run Cycles, Variable Tables, Event Rules, Events, Actions, Job History, Job Netplan, and Streamworks. The diagram includes nodes such as "FINAL PC128", "FIIITA HRC DMS", "Ad-Hoc Prompt Dependencies Text", "FIIITA HRC DMS PC128", "FIIITA P2R HRC DMS EXTRACT PC128", "opt/walserver_wauser/TWS/wbadmin/ PC128", "PROMPT1", and "REST PC128". The status bar at the bottom indicates "Connected as: p391p, file: XX42L#25" and "Lines: 30 Nodes: 10 Links: 17".



XINFO 4.2 – IWSd Scanner

All information about Workstations

| IWD-Sys | Folder | Workstation | Type | Domain |
|---------|--------|--------------|----------------------|----------|
| PC128 | | F128 | Fault-Tolerant Agent | MASTERDM |
| PC128 | | PAVELP_WS | Fault-Tolerant Agent | MASTERDM |
| PC128 | | PAVELP_DM | Extended Agent | MASTERDM |
| PC128 | | PC128 | Domain Manager | MASTERDM |
| PC128 | | PC128QA | Fault-Tolerant Agent | MASTERDM |
| PC128 | | PC128_DWB | Workload Broker | MASTERDM |
| PC128 | | PAVELP_SA | Standard Agent | MASTERDM |
| PC128 | | XXXX | Fault-Tolerant Agent | MASTERDM |
| PC128 | | KON_WS | Fault-Tolerant Agent | MASTERDM |
| PC128 | | X-AGENT_56 | Extended Agent | |
| PC128 | | X-AGENT_9 | Extended Agent | |
| PC128 | | X-AGENT_0 | Extended Agent | |
| PC128 | | MASTERAGENTS | Pool | |
| PC128 | | X-AGENT_17 | Extended Agent | |
| PC128 | | X-AGENT_47 | Extended Agent | |
| PC128 | | X-AGENT_72 | Extended Agent | |
| PC128 | | X-AGENT_94 | Extended Agent | |
| PC128 | | X-AGENT_89 | Extended Agent | |

| Name | Value |
|---------------------|----------------------|
| IWSd System | PC128 |
| Folder | |
| Workstation | PC128 |
| Type | Domain Manager |
| Domain | MASTERDM |
| Node | pc128.horizont-it.de |
| Full Status Y/N | Y |
| Operating System | UNIX |
| Description | MANAGER CPU |
| Variable Table Fol | |
| Variable Table | |
| Time Zone | |
| Ignore In Plan Y/N | N |
| TCP/IP Port | 31111 |
| SSL Communication | Disabled |
| SSL Port | 0 |
| Mailman Server | |
| Behind Firewall Y/N | N |
| Auto Link Y/N | Y |
| Access Method | |
| Host Master Y/N/D | |
| Host | |
| Workload Broker | |
| Updated By | wauser |
| Updated On | 12.04.2019,10:04:02 |



XINFO 4.2 – IWSd Scanner

List of Jobs in Jobstreams

| IWD-Sys | Folder | Jobstream | Workstation Fol... | Workstation | Valid From | Job Folder | Job Name | Job Alias |
|---------|-------------------|-----------------|--------------------|-------------|------------|------------|---------------------------------|-----------------|
| PC128 | /CRIT/JOBSTREAMS/ | JOBSTREAM-CRIT1 | | PC128 | | /CRIT/ | JOB-CRIT1 | JOB-CRIT1 |
| PC128 | /CRIT/JOBSTREAMS/ | JOBSTREAM-CRIT1 | | PC128 | | /CRIT/ | JOB-CRIT2 | JOB-CRIT2 |
| PC128 | /CRIT/JOBSTREAMS/ | JOBSTREAM-CRIT1 | | PC128 | | /CRIT/ | JOB-CRIT3 | JOB-CRIT3 |
| PC128 | /CRIT/JOBSTREAMS/ | JOBSTREAM-CRIT1 | | PC128 | | /CRIT/ | JOB-CRIT4 | JOB-CRIT4 |
| PC128 | /CRIT/JOBSTREAMS/ | JOBSTREAM-CRIT1 | | PC128 | | /CRIT/ | JOB-CRIT5 | JOB-CRIT5 |
| PC128 | /CRIT/JOBSTREAMS/ | JOBSTREAM-CRIT1 | | PC128 | | /CRIT/ | JOB-CRIT11 | JOB-CRIT11 |
| PC128 | /CRIT/JOBSTREAMS/ | JOBSTREAM-CRIT1 | | PC128 | | /CRIT/ | JOB-CRIT12 | JOB-CRIT12 |
| PC128 | /CRIT/JOBSTREAMS/ | JOBSTREAM-CRIT1 | | PC128 | | /CRIT/ | JOB-CRIT13 | JOB-CRIT13 |
| PC128 | /CRIT/JOBSTREAMS/ | JOBSTREAM-CRIT1 | | PC128 | | /CRIT/ | JOB-CRIT14 | JOB-CRIT14 |
| PC128 | /CRIT/JOBSTREAMS/ | JOBSTREAM-CRIT1 | | PC128 | | /CRIT/ | JOB-CRIT15 | JOB-CRIT15 |
| PC128 | /S339/JS_FOLDER1/ | S339_JS_2 | | PC128 | | / | S339_JOB_1 | S339_JOB_1 |
| PC128 | /S339/JS_FOLDER1/ | S339_JS_2 | | PC128 | | / | S339_JOB_2 | S339_JOB_2 |
| PC128 | /FOLDER3/ | NOT_COND3 | | X-AGENT | | /FOLDER3/ | SET | SET |
| PC128 | /FOLDER3/ | NOT_COND3 | | PC128 | | /FOLDER3/ | SET | SET |
| PC128 | /PAVELP/ | TEST_START_FILE | | PC128 | 01.11.2019 | / | T_2168565F-120E-3058-8611-F8... | JOBN_CREATED |
| PC128 | /PAVELP/ | TEST_START_FILE | | PC128 | 01.11.2019 | /PAVELP/ | TEST_COMMAND_RECOVERY | ALIAS_COMMAND |
| PC128 | /PAVELP/ | TEST_START_FILE | | PC128 | 01.11.2019 | /PAVELP/ | TEST_DESCRIPTION | TEST_DESCRIPTOR |
| PC128 | /PAVELP/ | TEST_START_FILE | | PC128 | 01.11.2019 | /PAVELP/ | TEST_SCRIPT_RECOVERY | TEST_SCRIPT_RE |



XINFO 4.2 – IWSd Scanner

Jobstreams display shows i.a. when each definition is valid

| IWD-Sys | Folder | Jobstream | Workstation Fol... | Workstation | Description | Valid From | Valid To | Comment |
|---------|-----------|------------------|--------------------|-------------|--------------------------------------|------------|------------|---------|
| <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> |
| PC128 | / | ACTUAL_TIME_TEST | | PC128 | Added by composer. | | | |
| PC128 | / | ACTUAL_TIMETESTX | | PC128 | Added by composer. | | | |
| PC128 | / | ACTUALTIME_TEST2 | | PC128 | Added by composer | | | |
| PC128 | / | ACTUALTIME_TEST3 | | PC128 | Added by composer | | | |
| PC128 | / | ACTUALTIME_TEST4 | | PC128 | Added by composer. | | | |
| PC128 | / | ACTUALTIME_TEST5 | | PC128 | Added by composer. | | 14.05.2020 | |
| PC128 | / | ACTUALTIME_TEST5 | | PC128 | Added by composer. | 14.05.2020 | | |
| PC128 | / | ACTUALTIME_TEST6 | | PC128 | Added by composer. | 15.05.2020 | | |
| PC128 | / | ACTUALTIME_TEST9 | | PC128 | Added by composer. | | | |
| PC128 | / | ACTUALTIMETESTX1 | | PC128 | Added by composer. | | | |
| PC128 | / | ACTUALTIMETESTX2 | | PC128 | Added by composer. | | | |
| PC128 | / | ACTUALTIMETESTX3 | | PC128 | Added by composer. | | | |
| PC128 | / | ACTUALTIMETESTX4 | | PC128 | Added by composer. | | | |
| PC128 | /FOLDER1/ | COND1 | | PC128 | Test for condition deps. First st... | | | |
| PC128 | /FOLDER2/ | COND1 | | PC128 | Added by composer. | 01.12.2020 | | |
| PC128 | /FOLDER2/ | COND1 | | PC128 | Added by composer. | | 01.12.2020 | |
| PC128 | /FOLDER1/ | COND1 | | X-AGENT | Added by composer. | | | |
| PC128 | /FOLDER2/ | COND1 | | PC128 | Added by composer. | 01.12.2019 | | |



XINFO 4.2 – IWSd Scanner

Job definitions list shows e.g. the executed command

| IWD-Sys | Folder | Job Name |
|---------|----------|-------------------|
| <all> | <all> | <all> |
| PC128 | /PAVELP/ | TEST_DESCRIPTION |
| PC128 | / | JOBHIST_DEBUG_NEW |
| PC128 | / | LOG_UPDATE |
| PC128 | / | SAP_JOB |
| PC128 | /HELMUT/ | HZJ3001 |
| PC128 | /HELMUT/ | HZJ3002 |
| PC128 | /HELMUT/ | HZJ3003 |
| PC128 | /HELMUT/ | HZJ3004 |
| PC128 | /HELMUT/ | HZJ3005 |
| PC128 | / | HELMUTHZJ4001 |
| PC128 | /HELMUT/ | HZJ4001 |
| PC128 | /HELMUT/ | HZJ4002 |
| PC128 | /HELMUT/ | HZJ4003 |
| PC128 | /HELMUT/ | HZJ5001 |
| PC128 | /HELMUT/ | HZJ5002 |
| PC128 | /CRIT/ | JOB-CRIT1 |
| PC128 | /CRIT/ | JOB-CRIT2 |
| PC128 | /CRIT/ | JOB-CRIT3 |

| Name | Value |
|---------------------|--------------------------------------|
| IWSd System | PC128 |
| Folder | / |
| Job Name | LOG_UPDATE |
| Workstation Folder | |
| Workstation | PC128 |
| Task Type | UNIX |
| Description | log rotating script for WebAdmin DS |
| Job Task Type C/S | S |
| Interactive Y/N | N |
| Command/Script | /opt/tws_webadmin3/bin/log_update.sh |
| Logon | wauser |
| Affinity Job Name | |
| Recov. Action R/S/C | S |
| R-Retry After HH:MM | 00:00 |
| R-Retry Attempts | |
| Recovery Prompt | |
| Recovery Workstat. | |
| Recovery Job | |
| Last Runtime | 11.08.2020,22:00:39 |
| Elapsed Time (Sec.) | 1000 |
| Updated By | wauser |
| Updated On | 28.02.2020,09:29:42 |
| Locked By | |
| Locked On | |
| Lock Session | |



XINFO 4.2 – Natural Scanner

Names of MAP objects used in Natural programs

| MainPrg | MainLib | Map Name | Stmt | SrcMem | SrcLib | Line | NatLine | LoadMod | System |
|---------|----------------------------------|----------|-------|---------|----------------------------------|------|---------|---------|--------|
| WN3650 | P390A.XXR.TST42.DATA.NATSRC.D004 | AUF050-2 | INPUT | WN3650 | P390A.XXR.TST42.DATA.NATSRC.D004 | 170 | 1690 | WN3650 | D004 |
| WN3650A | P390A.XXR.TST42.DATA.NATSRC.D004 | AUF061-2 | INPUT | WN3650A | P390A.XXR.TST42.DATA.NATSRC.D004 | 189 | 940 | WN3650A | D004 |
| WN3650A | P390A.XXR.TST42.DATA.NATSRC.D004 | AUF061-2 | INPUT | WN3650A | P390A.XXR.TST42.DATA.NATSRC.D004 | 194 | 965 | WN3650A | D004 |
| WN3650B | P390A.XXR.TST42.DATA.NATSRC.D004 | AUF066-2 | INPUT | WN3650B | P390A.XXR.TST42.DATA.NATSRC.D004 | 150 | 745 | WN3650B | D004 |
| WN3650B | P390A.XXR.TST42.DATA.NATSRC.D004 | AUF066-2 | INPUT | WN3650B | P390A.XXR.TST42.DATA.NATSRC.D004 | 155 | 770 | WN3650B | D004 |
| WN3650D | P390A.XXR.TST42.DATA.NATSRC.D004 | AUF063-2 | INPUT | WN3650D | P390A.XXR.TST42.DATA.NATSRC.D004 | 118 | 1170 | WN3650D | D004 |
| WN3650D | P390A.XXR.TST42.DATA.NATSRC.D004 | AUF063-2 | INPUT | WN3650D | P390A.XXR.TST42.DATA.NATSRC.D004 | 123 | 1220 | WN3650D | D004 |
| WN3651 | P390A.XXR.TST42.DATA.NATSRC.D004 | AUF051-2 | INPUT | WN3651 | P390A.XXR.TST42.DATA.NATSRC.D004 | 171 | 850 | WN3651 | D004 |
| WN3651 | P390A.XXR.TST42.DATA.NATSRC.D004 | AUF051-2 | INPUT | WN3651 | P390A.XXR.TST42.DATA.NATSRC.D004 | 176 | 875 | WN3651 | D004 |
| WN3654 | P390A.XXR.TST42.DATA.NATSRC.D004 | AUF054-2 | INPUT | WN3654 | P390A.XXR.TST42.DATA.NATSRC.D004 | 160 | 795 | WN3654 | D004 |
| WN3654 | P390A.XXR.TST42.DATA.NATSRC.D004 | AUF054-2 | INPUT | WN3654 | P390A.XXR.TST42.DATA.NATSRC.D004 | 165 | 820 | WN3654 | D004 |
| WN3659 | P390A.XXR.TST42.DATA.NATSRC.D004 | AUF080-2 | INPUT | WN3659 | P390A.XXR.TST42.DATA.NATSRC.D004 | 206 | 820 | WN3659 | D004 |
| WN3659 | P390A.XXR.TST42.DATA.NATSRC.D004 | AUF080-2 | INPUT | WN3659 | P390A.XXR.TST42.DATA.NATSRC.D004 | 211 | 840 | WN3659 | D004 |
| WN3660 | P390A.XXR.TST42.DATA.NATSRC.D004 | AUF060-2 | INPUT | WN3660 | P390A.XXR.TST42.DATA.NATSRC.D004 | 215 | 856 | WN3660 | D004 |
| WN3660 | P390A.XXR.TST42.DATA.NATSRC.D004 | AUF060-2 | INPUT | WN3660 | P390A.XXR.TST42.DATA.NATSRC.D004 | 220 | 876 | WN3660 | D004 |
| WN3661 | P390A.XXR.TST42.DATA.NATSRC.D004 | AUF088-2 | INPUT | WN3661 | P390A.XXR.TST42.DATA.NATSRC.D004 | 227 | 1130 | WN3661 | D004 |
| WN3661 | P390A.XXR.TST42.DATA.NATSRC.D004 | AUF088-2 | INPUT | WN3661 | P390A.XXR.TST42.DATA.NATSRC.D004 | 232 | 1155 | WN3661 | D004 |
| WN3662 | P390A.XXR.TST42.DATA.NATSRC.D004 | AUF062-2 | INPUT | WN3662 | P390A.XXR.TST42.DATA.NATSRC.D004 | 144 | 715 | WN3662 | D004 |
| WN3662 | P390A.XXR.TST42.DATA.NATSRC.D004 | AUF062-2 | INPUT | WN3662 | P390A.XXR.TST42.DATA.NATSRC.D004 | 149 | 740 | WN3662 | D004 |

Connected as: p391p, file: XX42L#25

Lines: 269



XINFO 4.2 – Natural Scanner

The screenshot displays the XINFO PC Client interface for 'Natural - Libraries'. The main window shows a table with columns for Object, DBID, Library, Type, M, Sav-NatVer, Sav-User, Sav-Date, Sav-Time, Cat-NatVer, Cat-User, Cat-Date, Cat-Time, and DSN. A yellow callout box labeled 'Complete Saved and Cataloged information' points to the 'Sav' and 'Cat' columns. A red oval highlights the 'Sav' and 'Cat' columns for the first 15 rows of the table.

| Object | DBID | Library | Type | M | Sav-NatVer | Sav-User | Sav-Date | Sav-Time | Cat-NatVer | Cat-User | Cat-Date | Cat-Time | DSN |
|----------|------|----------|------------|---|------------|----------|------------|----------|------------|----------|------------|----------|------------|
| BAAIN-LM | 003 | BA-ENT | LOCAL | | 3.1.1 | FRANK | 28.05.1902 | 14:14:00 | 4.1.4 | FSYDB2A | 28.11.2008 | 06:11:18 | DATA.XXR.S |
| BAAIN-L1 | 003 | BA-ENT | LOCAL | | 3.1.1 | JOHANNES | 16.05.1903 | 15:44:00 | 4.1.4 | FSYDB2A | 28.11.2008 | 06:11:18 | DATA.XXR.S |
| BAAIN-PM | 003 | BA-ENT | PARAMETER | | 3.1.1 | FRANK | 28.05.1902 | 14:04:00 | 4.1.4 | FSYDB2A | 28.11.2008 | 06:11:18 | DATA.XXR.S |
| BAAIN-PO | 003 | BA-ENT | PROGRAM | S | 6.1.1 | FAE0115 | 12.11.2007 | 17:32:00 | 4.1.4 | FSYDB2A | 28.11.2008 | 06:11:24 | DATA.XXR.S |
| AKK001-A | 004 | P012660L | PARAMETER | | 3.1.5 | P012660 | 30.06.2005 | 11:59:57 | | | | | DATA.XXR.S |
| AKK001-A | 004 | WOR | PARAMETER | | | | | | 3.1.5 | P012571 | 14.09.2003 | 11:44:30 | DATA.XXR.S |
| AKK001-N | 004 | P012660L | SUBPROGRAM | S | 3.1.5 | P012660 | 30.06.2005 | 11:59:57 | | | | | DATA.XXR.S |
| AKK001-N | 004 | WOR | SUBPROGRAM | S | | | | | 3.1.5 | P012571 | 14.09.2003 | 11:46:18 | DATA.XXR.S |
| AKK001-2 | 004 | P012660L | MAP | S | 3.1.5 | P012660 | 30.06.2005 | 11:59:57 | | | | | DATA.XXR.S |
| AKK001-2 | 004 | WOR | MAP | S | | | | | 3.1.5 | P012571 | 14.09.2003 | 11:55:29 | DATA.XXR.S |
| AKK002-A | 004 | WOR | PARAMETER | | 3.1.5 | P012571 | 14.09.2003 | 11:44:30 | 3.1.5 | P012571 | 14.09.2003 | 11:44:30 | DATA.XXR.S |
| AKK002-N | 004 | WOR | SUBPROGRAM | S | 3.1.5 | P012571 | 14.09.2003 | 11:46:19 | 3.1.5 | P012571 | 14.09.2003 | 11:46:19 | DATA.XXR.S |
| AKK002-2 | 004 | WOR | MAP | S | 3.1.5 | P012571 | 14.09.2003 | 11:55:29 | 3.1.5 | P012571 | 14.09.2003 | 11:55:29 | DATA.XXR.S |
| AKK003-A | 004 | P012660L | PARAMETER | | 3.1.5 | P012660 | 16.09.2003 | 17:05:27 | | | | | DATA.XXR.S |
| AKK003-A | 004 | WOR | PARAMETER | | | | | | 3.1.5 | P012571 | 14.09.2003 | 11:44:31 | DATA.XXR.S |
| AKK003-N | 004 | P012660L | SUBPROGRAM | S | 3.1.5 | P012660 | 16.09.2003 | 17:05:29 | | | | | DATA.XXR.S |
| AKK003-N | 004 | WOR | SUBPROGRAM | S | | | | | 3.1.5 | P012571 | 14.09.2003 | 11:46:21 | DATA.XXR.S |
| AKK003-2 | 004 | P012660L | MAP | S | 3.1.5 | P012660 | 16.09.2003 | 17:05:31 | | | | | DATA.XXR.S |



XINFO 4.2 – IWS Scanner

The screenshot displays the XINFO PC Client interface for IWS z/OS - Run Cycles. The 'Details' window shows a table of attributes for the selected application ID, XINFO42. The 'Offset positive' and 'Offset negative' rows are highlighted with a red box. A yellow callout box points to these rows with the text: 'Enhanced from 48 to 255 bytes to support more offsets'.

| Name | Value |
|---------------------|------------|
| Application ID | XINFO42 |
| Status (A/P) | A |
| Period/Rule/RG | DAY |
| Period Def. | P |
| Type (N/X/R/E) | N |
| Free Day Rule | 3 |
| Offset positive | +001 |
| Offset negative | |
| Input Arrival Time | 06:00:00 |
| Repeat Every | |
| Repeat Until | |
| Deadline Day | 1 |
| Deadline Time | 05:59:00 |
| Run Cycle Descript. | |
| Valid To | 31.12.2071 |
| Run Cycle valid | 14.10.2020 |
| Run Cycle not valid | 31.12.2071 |
| JCL Var. Table | |
| Rule Definition | |
| Subsystem | IXJC |
| Shift type W/D | |
| Shift val. -999-999 | 0 |



XINFO 4.2 – IWS Scanner

The screenshot displays the XINFO 4.2 IWS Scanner interface. The main window shows a 'Workspace Tree' on the left with 'Operation Data' highlighted. A callout bubble points to this item with the text 'Also added here'. The 'Details' window on the right shows a table of job parameters for job X42JLOA. A red box highlights the following new fields:

| Name | Value |
|---------------------|-------|
| Deadline action | |
| Not st. Alert Day | |
| Not st. Alert Time | |
| Not st. Action Day | |
| Not st. Action Time | |
| Not st. Action | |

A callout bubble points to these fields with the text 'New fields for Deadline Action and Start Alert/Action'. The 'Details' window also shows other parameters such as 'WLM service class', 'System-Autom. Y/N', and 'SA Command-1' through 'SA Command-4'. The 'Details' window has buttons for 'OK', 'Copy', 'Print...', and 'Save As...' at the bottom.



XINFO 4.2 – IWS Scanner

The screenshot shows the XINFO PC Client interface. The main window displays a table of workstation intervals. A yellow callout box points to the 'New' button in the 'Table' ribbon, with the text 'New table for CP workstation intervals.' The 'Workspace Tree' on the left has 'Workstation Intervals' highlighted with a red box. A 'Details' dialog box is open, showing the following information:

| Name | Value |
|---------------------|----------|
| Workstation | CPU |
| Day/Date | STANDARD |
| Description | |
| Open | 20:00 |
| Closed | 24:00 |
| Destination | |
| Parallel Servers | 9 |
| Resources R1 | 99 |
| Resources R2 | 99 |
| Alternate Workstat. | |
| FTA (Y/N) | N |
| Subsystem | IXJC |

The main table in the background contains the following data:

| WSID | Day/Date | Description | Open | Close | DestName | S# | R1 | R2 | Alt. | FTA | SubS |
|------|----------|-------------|-------|-------|----------|----|----|----|------|-----|------|
| CPU | STANDARD | | 00:00 | 06:00 | | 9 | 99 | 99 | | N | IXJC |
| CPU | STANDARD | | 06:00 | 20:00 | | 7 | 99 | 99 | | N | IXJC |
| CPU | STANDARD | | 20:00 | 24:00 | | 9 | 99 | 99 | | N | IXJC |
| CPUB | STANDARD | | 00:00 | 06:00 | | 5 | 99 | 99 | | N | IXJC |
| CPUB | STANDARD | | 06:00 | 20:00 | | 5 | 99 | 99 | | N | IXJC |
| CPUB | STANDARD | | 20:00 | 24:00 | | 5 | 99 | 99 | | N | IXJC |
| DEV | STANDARD | | 00:00 | 06:00 | DEV | 9 | 99 | 99 | | N | IXJC |
| DEV | STANDARD | | 06:00 | 20:00 | DEV | 7 | 99 | 99 | | N | IXJC |
| DEV | STANDARD | | 20:00 | 24:00 | DEV | 9 | 99 | 99 | | N | IXJC |
| DMY | STANDARD | | 00:00 | 24:00 | | 99 | 99 | 99 | | N | IXJC |
| HOLD | STANDARD | | 00:00 | 24:00 | | 99 | 99 | 99 | | N | IXJC |
| INP | STANDARD | | 00:00 | 24:00 | | 99 | 99 | 99 | | N | IXJC |
| PREP | STANDARD | | 00:00 | 24:00 | | 99 | 99 | 99 | | N | IXJC |
| P133 | STANDARD | | 00:00 | 24:00 | PC133 | 99 | 99 | 99 | | N | IXJC |
| P137 | STANDARD | | 00:00 | 24:00 | PC137 | 99 | 99 | 99 | | N | IXJC |
| P139 | STANDARD | | 00:00 | 24:00 | PC139 | 99 | 99 | 99 | | N | IXJC |
| SA | STANDARD | | 00:00 | 24:00 | | 99 | 99 | 99 | | N | IXJC |
| STC | STANDARD | | 00:00 | 06:00 | | 99 | 99 | 99 | | N | IXJC |
| STC | STANDARD | | 06:00 | 20:00 | | 5 | 99 | 99 | | N | IXJC |



XINFO 4.2 – IWS Scanner

The screenshot displays the XINFO PC Client interface. The main window shows a list of JCL Variable Tables with columns for Variable-Table, Variable, and Default-Value. The 'GLOBAL' table with variable 'PT' and default value '%' is selected. A 'Details' dialog box is open, showing various attributes for this table. The 'Value length' field is highlighted with a red box and a callout bubble that says 'Added missing field.'.

| Variable-Table | Variable | Default-Value |
|------------------|----------|--------------------|
| <all> | <all> | <all> |
| BFGWKLY | GL1923 | CDDMMYY |
| BFGWKLY | \$GL0201 | GLOB0201 |
| BFGWKLY | \$GL0203 | GLOB0203 |
| BFGWKLY | \$GL0210 | GLOB0210 |
| BFGWKLY | GLOB1023 | CDDMMYY |
| CSEPRD | PROCLIB | PROC00 |
| CSEPRD | SYSTEM | A |
| CSEPRD | NODE1 | ^ |
| CSEPRD | NODE4 | ^ |
| CSEPRD | SYSTSIN | PRD.DB2.CONTROL(CS |
| GLOBAL | PT | % |
| GLOBAL | PT2 | % |
| TESTLONGTABNAME1 | LV1 | Value 1 |
| TESTLONGTABNAME1 | LV2 | Value 2 |
| TESTVARTAB1 | V1 | Test-V1 |
| ULI | V2 | Test-V2 |

| Name | Value |
|---------------------|---------------------|
| Variable-Table | GLOBAL |
| Variable | PT |
| Default-Value | % |
| Table-Description | |
| Last Update Date | 26.11.2015 |
| Last Update Time | 13:57 |
| Last Update User | P390K |
| No. of Vars in Tab. | 2 |
| Owner | TWSADM |
| Upper Case Y/N | N |
| Setup Y/N/Prompt | N |
| Verification Type | |
| Substitution Exit | |
| Input Required Y/N | N |
| Position in JCL | 0 |
| Numeric Y/N | |
| Compar. Operator | |
| Value length | 0 |
| Validation Pattern | |
| Valid Values | |
| Dialog Text | |
| Var-Description | Procent Sign |
| No. of dep. Vars | 0 |
| Timestamp | 31.01.2021,01:04:42 |
| Subsystem | IXJC |

XINFO 4.2 – IWS Scanner

The screenshot displays the XINFO 4.2 IWS Scanner interface. The main window is titled 'Details' and shows a list of job parameters. A red box highlights a group of new fields related to deadline actions and alerts. A yellow callout bubble points to these fields with the text 'New fields for Deadline Action and Start Alert/Action'.

| Name | Value |
|---------------------|-------|
| Wait f. Sched. Env. | N |
| Subsystem | IXJC |
| Shadow Job Y/N | N |
| Compl. if bind fail | |
| Rem-Opno | |
| Rem-Appl/Stream | |
| Rem-WS-Name | |
| Rem-Jobname | |
| Rem-Input A. Day | |
| Rem-Input A. Time | |
| Bind Status Shadow | |
| Waiting pend. pred. | N |
| Wait.mand.pend. pre | N |
| Wait.mand/pend pre. | N |
| Runcycle Name | DAY |
| Group Definition Id | |
| JCL Variable Table | |
| Late on Latest out | N |
| Late on Alert/Act. | N |
| Late Late/Alrt/Act. | N |
| Orig. Deadline Day | |
| Orig. Deadline Time | |
| Deadline Action | |
| Not st. Alert Day | |
| Not st. Alert Time | |
| Not st. Action | |
| Not st. Action Day | |
| Not st. Action Time | |

Workspace Tree:

- Dependencies
- Spec. Res./Oper.
- User Fields
- Run Cycles + Jobs
- Workstations
- Workstation Intervals
- Calendar
- Periods
- Operator Instr.
- Spec. Res. Def.
- EDWA Criteria
- JCL Variable Dep.
- JCL Variable Tables
- Run Cycle Groups
- Current Plan
- CP WS Intervals
- Long Term Plan
- Job Run Times

Jobname Application

| Jobname | Application |
|----------|-------------|
| <all> | <all> |
| UNLCTMLX | XINFO42 |
| #FTPCTM5 | XINFO42 |
| UNLCTM | XINFO42 |
| UNLCTMEM | XINFO42 |
| UNLCTMUX | XINFO42 |
| UNLCEMUX | XINFO42 |
| #FTPCTM1 | XINFO42 |
| #FTPCTM2 | XINFO42 |
| #FTPCTM3 | XINFO42 |
| #FTPCTM4 | XINFO42 |
| X42JASM | XINFO42 |
| X42JCDL | XINFO42 |
| X42JCSR | XINFO42 |
| X42JC1L | XINFO42 |
| X42JCC | XINFO42 |
| X42JCI01 | XINFO42 |
| X42JCI02 | XINFO42 |
| X42JCB01 | XINFO42 |

Connected as: p390c, file: XX42L#25

XINFO 4.2 – IWS Scanner

The screenshot displays the XINFO PC Client interface. A 'Details' dialog box is open, showing job information for Application ID XINFO42, Operation No. 055, and Jobname X42JJUP1. The 'Duration in sec.' field is highlighted with a red box and contains the value 84. In the background, a table lists job run times with columns for 'Minutes' and 'Seconds'. A yellow callout bubble points to the 'Seconds' column, stating 'Duration in seconds is more precise.' The 'Seconds' column values range from 84 to 180. The 'Minutes' column values range from 2 to 5.

| | V | I.Arr.Date | IA-Time | Minutes | Seconds |
|---|-------|------------|----------|---------|---------|
| | <all> | <all> | <all> | <all> | <all> |
| Y | | 30.01.2021 | 06:00:00 | 2 | 84 |
| Y | | 29.01.2021 | 06:00:00 | 3 | 142 |
| Y | | 28.01.2021 | 06:00:00 | 3 | 135 |
| Y | | 27.01.2021 | 06:00:00 | 3 | 180 |
| Y | | 26.01.2021 | 06:00:00 | 3 | 171 |
| Y | | 25.01.2021 | 06:00:00 | 5 | 241 |
| Y | | 24.01.2021 | 06:00:00 | 2 | 105 |
| Y | | 23.01.2021 | 06:00:00 | 2 | 117 |
| Y | | 22.01.2021 | 06:00:00 | 3 | 156 |
| Y | | 21.01.2021 | 06:00:00 | 3 | 147 |
| Y | | 20.01.2021 | 06:00:00 | 3 | 152 |
| Y | | 19.01.2021 | 06:00:00 | 3 | 170 |
| Y | | 18.01.2021 | 06:00:00 | 3 | 144 |
| Y | | 17.01.2021 | 06:00:00 | 3 | 155 |
| Y | | 16.01.2021 | 06:00:00 | 3 | 125 |
| Y | | 15.01.2021 | 06:00:00 | 3 | 144 |
| Y | | 14.01.2021 | 06:00:00 | 3 | 158 |
| Y | | 13.01.2021 | 06:00:00 | 2 | 114 |



XINFO 4.2 – SMF Scanner

The screenshot shows the XINFO PC Client interface. The main window displays a table of SMF Step Information. A yellow callout box highlights the 'Duration (cs)' field in the details pane, stating: "CPU-T time in cent seconds for higher precision." The details pane also shows other fields like 'Start Time', 'End Time', 'CPU-Time 1 (cs)', 'CPU-Time zAAP (cs)', 'CPU-Time zIIP (cs)', 'CPU-Time 2 (cs)', and 'CPU-Time 3 (cs)', all of which are circled in red.

| Jobname | SNr | Owner | Program | RetCode |
|---------|-----|-------|---------|---------|
| X42JASM | 5 | IXJC | SORT | |
| X42JASM | 4 | IXJC | IDCAMS | |
| X42JASM | 3 | IXJC | XXRCSQL | |
| X42JASM | 2 | IXJC | XXRIASM | |
| X42JASM | 1 | IXJC | IDCAMS | |
| X42JASM | 5 | IXJC | SORT | |
| X42JASM | 4 | IXJC | IDCAMS | |
| X42JASM | 3 | IXJC | XXRCSQL | |
| X42JASM | 2 | IXJC | XXRIASM | |
| X42JASM | 1 | IXJC | IDCAMS | |
| X42JASM | 5 | IXJC | SORT | |
| X42JASM | 4 | IXJC | IDCAMS | |
| X42JASM | 3 | IXJC | XXRCSQL | |
| X42JASM | 2 | IXJC | XXRIASM | |
| X42JASM | 1 | IXJC | IDCAMS | |
| X42JASM | 5 | IXJC | SORT | |

| Name | Value |
|---------------------|----------------------------|
| return-code | |
| Start Time | 2021-02-02-01:13:18.530000 |
| Duration (cs) | 386 |
| Time since Submit | 369 |
| Stepname | XXRIASM |
| End Time | 2021-02-02-01:13:22.390000 |
| CPU-Time 1 (cs) | 24 |
| EXCP | 452 |
| Jesname | JOB37043 |
| System ID | S0W1 |
| Submit Time | 2021-02-02-01:13:14.840000 |
| JobStepName | XXRIASM |
| Wait for Enqueue | 2 |
| Wait for Device | 127 |
| Pgm-Stor. below(KB) | 640 |
| Sys-Stor. below(KB) | 264 |
| Pgm-Stor. above(KB) | 7732 |
| Sys-Stor. above(KB) | 10580 |
| JCL SCHEDENV Value | |
| Service Class | BATMDM |
| Work Type | JES2 |
| CPU service units | 213 |
| SRB service units | 21 |
| I/O service units | 43 |
| CPU-Time zAAP (cs) | 0 |
| CPU-Time zIIP (cs) | 0 |
| CPU-Time 2 (cs) | 34 |
| CPU-Time 3 (cs) | 1 |

Connected as: p390c, file: XX42L#25



XINFO 4.2 – SMF Scanner

The screenshot shows the XINFO PC Client interface. The main window displays a table titled "SMF - Step Information" with the following columns: Jobname, AP-T., zIIP-T., CPU-Time-2, CPU-Time-3, ATB Real (KB), ATB Slots (KB), ATB Virt-ALLOC (KB), ATB Virt-SHRD (KB), HPCPU%, and HiCPUPgm. The HPCPU% and HiCPUPgm columns are highlighted with a red box. A yellow callout bubble points to these columns with the text: "SMF30_Highest_Task_CPU_Percent", "SMF30_Highest_Task_CPU_Program", and "New fields to identify CPU-intensive tasks." The workspace tree on the left shows the SMF folder expanded, and the status bar at the bottom indicates "Connected as: p390c, file: XX42L#25" and "Lines: 5000".

| Jobname | AP-T. | zIIP-T. | CPU-Time-2 | CPU-Time-3 | ATB Real (KB) | ATB Slots (KB) | ATB Virt-ALLOC (KB) | ATB Virt-SHRD (KB) | HPCPU% | HiCPUPgm |
|---------|-------|---------|------------|------------|---------------|----------------|---------------------|--------------------|--------|----------|
| X42JASM | 0 | 0 | 8 | 0 | 1060 | 0 | 13312 | 0 | 0 | IEFIIC |
| X42JASM | 0 | 0 | 5 | 0 | 1060 | 0 | 13312 | 0 | 0 | IEFIIC |
| X42JASM | 0 | 0 | 13 | 2 | 1060 | 0 | 13312 | 0 | 0 | IEFIIC |
| X42JASM | 0 | 0 | 34 | 1 | 1060 | 0 | 13312 | 0 | 0 | IEFIIC |
| X42JASM | 0 | 0 | 37 | 0 | 1060 | 0 | 13312 | 0 | 0 | IEFIIC |
| X42JASM | 0 | 0 | 8 | 0 | 1060 | 0 | 13312 | 0 | 0 | IEFIIC |
| X42JASM | 0 | 0 | 5 | 0 | 1060 | 0 | 13312 | 0 | 0 | IEFIIC |
| X42JASM | 0 | 0 | 13 | 2 | 1060 | 0 | 13312 | 0 | 0 | IEFIIC |
| X42JASM | 0 | 0 | 35 | 1 | 1060 | 0 | 13312 | 0 | 0 | IEFIIC |
| X42JASM | 0 | 0 | 38 | 0 | 1060 | 0 | 13312 | 0 | 0 | IEFIIC |
| X42JASM | 0 | 0 | 7 | 0 | 1060 | 0 | 13312 | 0 | 0 | IEFIIC |
| X42JASM | 0 | 0 | 5 | 0 | 1060 | 0 | 13312 | 0 | 0 | IEFIIC |
| X42JASM | 0 | 0 | 12 | 2 | 1060 | 0 | 13312 | 0 | 0 | IEFIIC |
| X42JASM | 0 | 0 | 35 | 1 | 1060 | 0 | 13312 | 0 | 0 | IEFIIC |
| X42JASM | 0 | 0 | 38 | 1 | 1060 | 0 | 13312 | 0 | 0 | IEFIIC |
| X42JASM | 0 | 0 | 8 | 0 | 1060 | 0 | 13312 | 0 | 0 | IEFIIC |
| X42JASM | 0 | 0 | 5 | 0 | 1060 | 0 | 13312 | 0 | 0 | IEFIIC |
| X42JASM | 0 | 0 | 5 | 0 | 1060 | 0 | 13312 | 0 | 0 | IEFIIC |
| X42JASM | 0 | 0 | 5 | 0 | 1060 | 0 | 13312 | 0 | 0 | IEFIIC |

SMF30_Highest_Task_CPU_Percent
SMF30_Highest_Task_CPU_Program
New fields to identify CPU-intensive tasks.



XINFO 4.2 – SMF Scanner

The screenshot shows the XINFO PC Client interface. The main window displays a table titled "SMF - Interval Data" with the following columns: Jobname, Jesname, Stepname, Stepnu, Syst, Interval start time, Interval end time, CPU-Time cs, EXCP, and Submit Tim. The table contains 20 rows of data for job DBCGDBM1, step IEFPROC, system SOW1, spanning from 2021-02-01-04:30:00 to 2021-02-01-13:00:00. The CPU-Time and EXCP values vary across the intervals.

On the left, the Workspace Tree shows a hierarchy of folders including Scheduler, Distributed, JCL, DB2, CICS, IMS, SMF, Job Information, Interval Data (highlighted with a red box), Step Information, Dataset Usage, zFS file usage, CICS Monitor Tran, Printer, CA XCOM, Jobruntime Barchart, Space, PO, Output, Programs, and Source. A yellow callout box points to the "Interval Data" folder with the text "Added interval data for STCs."

At the bottom of the window, it shows "Connected as: p390c, file: XX42L#25" and "Lines: 274".

| Jobname | Jesname | Stepname | Stepnu | Syst | Interval start time | Interval end time | CPU-Time cs | EXCP | Submit Tim |
|---------|----------|----------|--------|-------|----------------------------|----------------------------|-------------|--------|------------|
| <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> |
| DBCGBM1 | STC25005 | IEFPROC | 1 | SOW1 | 2021-02-01-13:00:00.030000 | 2021-02-01-13:30:00.000000 | 241 | 88 | |
| DBCGBM1 | STC25005 | IEFPROC | 1 | SOW1 | 2021-02-01-12:30:00.140000 | 2021-02-01-13:00:00.000000 | 255 | 273 | |
| DBCGBM1 | STC25005 | IEFPROC | 1 | SOW1 | 2021-02-01-12:00:00.330000 | 2021-02-01-12:30:00.000000 | 3748 | 64006 | |
| DBCGBM1 | STC25005 | IEFPROC | 1 | SOW1 | 2021-02-01-11:30:00.020000 | 2021-02-01-12:00:00.000000 | 14475 | 167839 | |
| DBCGBM1 | STC25005 | IEFPROC | 1 | SOW1 | 2021-02-01-11:00:00.030000 | 2021-02-01-11:30:00.000000 | 180 | 21 | |
| DBCGBM1 | STC25005 | IEFPROC | 1 | SOW1 | 2021-02-01-10:30:00.030000 | 2021-02-01-11:00:00.000000 | 191 | 517 | |
| DBCGBM1 | STC25005 | IEFPROC | 1 | SOW1 | 2021-02-01-10:00:00.030000 | 2021-02-01-10:30:00.000000 | 267 | 3812 | |
| DBCGBM1 | STC25005 | IEFPROC | 1 | SOW1 | 2021-02-01-09:30:00.030000 | 2021-02-01-10:00:00.000000 | 183 | 16 | |
| DBCGBM1 | STC25005 | IEFPROC | 1 | SOW1 | 2021-02-01-09:00:00.030000 | 2021-02-01-09:30:00.000000 | 188 | 16 | |
| DBCGBM1 | STC25005 | IEFPROC | 1 | SOW1 | 2021-02-01-08:30:00.030000 | 2021-02-01-09:00:00.000000 | 198 | 16 | |
| DBCGBM1 | STC25005 | IEFPROC | 1 | SOW1 | 2021-02-01-08:00:00.030000 | 2021-02-01-08:30:00.000000 | 198 | 22 | |
| DBCGBM1 | STC25005 | IEFPROC | 1 | SOW1 | 2021-02-01-07:30:00.200000 | 2021-02-01-08:00:00.000000 | 205 | 56 | |
| DBCGBM1 | STC25005 | IEFPROC | 1 | SOW1 | 2021-02-01-07:00:00.310000 | 2021-02-01-07:30:00.000000 | 6757 | 145896 | |
| DBCGBM1 | STC25005 | IEFPROC | 1 | SOW1 | 2021-02-01-06:30:00.030000 | 2021-02-01-07:00:00.000000 | 14415 | 201444 | |
| DBCGBM1 | STC25005 | IEFPROC | 1 | SOW1 | 2021-02-01-06:00:00.030000 | 2021-02-01-06:30:00.000000 | 186 | 39 | |
| DBCGBM1 | STC25005 | IEFPROC | 1 | SOW1 | 2021-02-01-05:30:00.030000 | 2021-02-01-06:00:00.000000 | 190 | 47 | |
| DBCGBM1 | STC25005 | IEFPROC | 1 | SOW1 | 2021-02-01-05:00:00.020000 | 2021-02-01-05:30:00.000000 | 166 | 139 | |
| DBCGBM1 | STC25005 | IEFPROC | 1 | SOW1 | 2021-02-01-04:30:00.030000 | 2021-02-01-05:00:00.000000 | 180 | 21 | |



XINFO 4.2 – CICS Scanner

The screenshot displays the XINFO PC Client interface. The main window shows a workspace tree on the left with 'CICS' expanded. The central pane shows a table of CICS TDqueue entries. The 'Details' pane on the right shows the configuration for the selected entry, with 'Job Userid' highlighted by a red box. A yellow callout bubble points to this field with the text 'Added fields for CICS 5.5.'.

| CICS | LIST | GROUP | TDQu | Descri |
|------|---------|-----------|------|---------|
| TS55 | | DFH\$BAT | BATA | APPLI |
| TS55 | | DFH\$BAT | BATD | DATA |
| TS55 | | DFH\$BAT | BATX | TRAN |
| TS55 | | DFH\$FILA | LOGA | Destin |
| TS55 | | DFH\$FILA | L860 | Destin |
| TS55 | | DFH\$OSGI | JTD1 | Destin |
| TS55 | | DFH\$UTIL | L86P | Transie |
| TS55 | | DFHCOMP | CPLD | PL/I D |
| TS55 | | DFHCOMP | CPLI | PL/I S |
| TS55 | DFHLIST | DFHDCTG | CADL | CEDA |
| TS55 | DFHLIST | DFHDCTG | CCPI | CPIC M |
| TS55 | DFHLIST | DFHDCTG | CSBR | BRIDG |
| TS55 | DFHLIST | DFHDCTG | CSCC | CICS C |
| TS55 | DFHLIST | DFHDCTG | CSCS | SIGN C |
| TS55 | DFHLIST | DFHDCTG | CSDH | DOCU |
| TS55 | DFHLIST | DFHDCTG | CSDL | CEDA |
| TS55 | DFHLIST | DFHDCTG | CSFL | FILE A |
| TS55 | DFHLIST | DFHDCTG | CSJE | CICS J |

| Name | Value |
|---------------------|---------------------|
| Initial Status TDQU | |
| DISP tape Dataset | |
| Options for Tape | |
| Record Length | 0 |
| Block Length | 0 |
| Record Format | |
| Block Format | |
| Control Character | |
| Disp of Dataset | |
| Type of Destination | |
| Recovery Attributes | |
| Sys/TERM Identifier | |
| TRAN name initiated | |
| Num of Record cumul | 0 |
| For Security Check. | |
| Time for Resync. | |
| For In-doubt UOW | |
| Name of Indir. TDQU | CSSL |
| TDQU Name in Remote | |
| Sys in which TD. is | |
| Length in bytes | 0 |
| Define Timestamp | 18.01.2019,12:16:19 |
| Change Timestamp | 18.01.2019,12:16:19 |
| UsrID Change | PATRICK |
| Agent Change | CSDBATCH |
| Release Change | 0720 |
| Job Userid | |

XINFO 4.2 – DB2 Scanner

The screenshot shows the XINFO PC Client interface. The main window displays a list of tables in the 'DB2 - Cat: SYSTABLES' catalog. The table 'XXRTJOB' is selected, and its details are shown in a pop-up window. The details window includes fields for Name, Subsystem, Table Name, Creator, DataBase, Tablespace, Type, No. of Columns, Max. Record Length, Remarks, Created By, CreatedTS, and AlteredTS. A yellow callout box highlights the 'Created By', 'CreatedTS', and 'AlteredTS' fields, with the text 'New fields in SYSTABLES catalog table'.

| Subs | Table | Creator | DataBase | T-Space | Type | Cols | RecLen | Remarks |
|------|---------|---------|----------|---------|------|------|--------|---------|
| DBCG | XXRTDDH | XXR4 | | | | | | |
| DBCG | XXRTDDP | XXR4 | | | | | | |
| DBCG | XXRTEXE | XXR4 | | | | | | |
| DBCG | XXRTJES | XXR4 | | | | | | |
| DBCG | XXRTJOB | XXR4 | | | | | | |
| DBCG | XXRTOUT | XXR4 | | | | | | |
| DBCG | XXRTPRC | XXR4 | | | | | | |
| DBCG | XXRTJLB | XXR4 | | | | | | |
| DBCG | XXRTJLS | XXR4 | | | | | | |
| DBCG | XXRTSUB | XXR4 | | | | | | |
| DBCG | XXRTIFS | XXR4 | | | | | | |
| DBCG | XXRTSIN | XXR4 | | | | | | |
| DBCG | XXRTCMT | XXR4 | | | | | | |
| DBCG | XXRTCMD | XXR4 | | | | | | |
| DBCG | XXRTSET | XXR4 | | | | | | |
| DBCG | XXRTSTA | XXR4 | | | | | | |
| DBCG | XXRT... | XXR4 | | | | | | |
| DBCG | XXRT... | XXR4 | | | | | | |

| Name | Value |
|--------------------|---------------------|
| Subsystem | DBCG |
| Table Name | XXRTJOB |
| Creator | XXR41 |
| DataBase | DXINFO41 |
| Tablespace | XXRSJOB |
| Type | T |
| No. of Columns | 44 |
| Max. Record Length | 610 |
| Remarks | |
| Created By | P390C |
| CreatedTS | 25.02.2020,16:24:40 |
| AlteredTS | 25.02.2020,16:24:40 |

New fields in SYSTABLES catalog table



XINFO 4.2 – DB2 Scanner

The screenshot displays the XINFO PC Client interface for a DB2 database. The main window title is "XINFO PC Client - DB2 - Job/Pgm/Table". The interface includes a menu bar (File, Home, Table, Netplan, Barchart, Chart, Script, View) and a toolbar with various options like Copy, Select All, Toggle Selection, Customize, Group, Statistics, Show SQL, Show criteria, Inverse Filter, New, Library, and Explorer. A Workspace Tree on the left shows a hierarchy of categories (Cat: SYSINDEXSPACEST, Cat: SYSKEYS, etc.) and folders (CICS, IMS, SMF, Space, PO). The main area shows a table with the following columns: Jobname, Access, Database, TabSpace, Creator, Table Name, Alias Name, JCL-Lib, Member, Job Number, and Plan. A red box highlights the 'Plan' column, and a yellow callout bubble points to it with the text "New field".

| Jobname | Access | Database | TabSpace | Creator | Table Name | Alias Name | JCL-Lib | Member | Job Number | Plan |
|----------|--------|----------|----------|---------|------------|------------|------------------|----------|------------|----------|
| <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> |
| X42JRUNS | READ | DXINFO42 | XXRS93I | XXR42 | XXRT93I | | SYSH.IXJC.JOBLIB | X42JRUNS | 810 | |
| X42JRUNS | READ | DXINFO42 | XXRS93J | XXR42 | XXRT93J | | SYSH.IXJC.JOBLIB | X42JRUNS | 810 | |
| X42JRUNS | READ | DXINFO42 | XXRS93K | XXR42 | XXRT93K | | SYSH.IXJC.JOBLIB | X42JRUNS | 810 | |
| X42JRUNS | READ | DXINFO42 | XXRS93L | XXR42 | XXRT93L | | SYSH.IXJC.JOBLIB | X42JRUNS | 810 | |
| X42JRUNS | READ | DXINFO42 | XXRS93M | XXR42 | XXRT93M | | SYSH.IXJC.JOBLIB | X42JRUNS | 810 | |
| X42JRUNS | READ | DXINFO42 | XXRS93N | XXR42 | XXRT93N | | SYSH.IXJC.JOBLIB | X42JRUNS | 810 | |
| X42JUC4H | READ | DXINFO42 | XXRSU4R | XXR42 | XXRTU4R | | SYSH.IXJC.JOBLIB | X42JUC4H | 821 | |
| X42JUC4H | READ | DXINFO42 | XXRSU4R | XXR42 | XXRTU4R | | SYSH.IXJC.JOBLIB | X42JUC4H | 821 | |
| X42JUC4H | DELETE | DXINFO42 | XXRSU4R | XXR42 | XXRTU4R | | SYSH.IXJC.JOBLIB | X42JUC4H | 821 | DSNTEP12 |
| X42JUC4H | UPDATE | DXINFO42 | XXRSU4R | XXR42 | XXRTU4R | | SYSH.IXJC.JOBLIB | X42JUC4H | 821 | |
| X42JUC4H | READ | DXINFO42 | XXRSU4N | XXR42 | XXRTU4N | | SYSH.IXJC.JOBLIB | X42JUC4H | 821 | |
| X42JUC4H | READ | DXINFO42 | XXRSU4N | XXR42 | XXRTU4N | | SYSH.IXJC.JOBLIB | X42JUC4H | 821 | |
| X42JUC4H | DELETE | DXINFO42 | XXRSU4N | XXR42 | XXRTU4N | | SYSH.IXJC.JOBLIB | X42JUC4H | 821 | DSNTEP12 |
| X42JUC4H | UPDATE | DXINFO42 | XXRSU4N | XXR42 | XXRTU4N | | SYSH.IXJC.JOBLIB | X42JUC4H | 821 | |
| X42JUC4H | READ | DXINFO42 | XXRSU4B | XXR42 | XXRTU4B | | SYSH.IXJC.JOBLIB | X42JUC4H | 821 | |
| X42JUC4H | READ | DXINFO42 | XXRSU4B | XXR42 | XXRTU4B | | SYSH.IXJC.JOBLIB | X42JUC4H | 821 | |
| X42JUC4H | DELETE | DXINFO42 | XXRSU4B | XXR42 | XXRTU4B | | SYSH.IXJC.JOBLIB | X42JUC4H | 821 | DSNTEP12 |
| X42JUC4H | UPDATE | DXINFO42 | XXRSU4B | XXR42 | XXRTU4B | | SYSH.IXJC.JOBLIB | X42JUC4H | 821 | |



XINFO 4.2 – Load Module Scanner

The screenshot displays the XINFO PC Client interface. The main window shows a table titled "Programs - Cobol Compiler Options" with columns for Load Lib, DS-T, Module, Compiler, Comp., CompDate, CompTime, and various flags. A red box highlights the "CompDate" and "CompTime" columns. A yellow callout bubble points to these columns with the text: "Compile date/time changed from CHAR to DATE/TIME ...".

| Load Lib | DS-T | Module | Compiler | Comp. | CompDate | CompTime | A | AFP | APOST | AR | ARITH | A | B | C | C | C |
|-------------------------|-------|----------|-----------|--------|------------|----------|---|----------|-------|-------|--------|---|---|---|---|---|
| <all> | <all> | <all> | <all> | <all> | <all> | <all> | | <all> | <all> | <all> | <all> | | | | | |
| DSNC10.DBCG.RUNLIB.LOAD | PDSE | DSN8BC3 | COBOL/ENT | 060100 | 20.08.2019 | 13:46:48 | Y | VOLATILE | QUOTE | 7 | COMPAT | N | N | N | N | N |
| DSNC10.DBCG.RUNLIB.LOAD | PDSE | DSN8CC | COBOL/ENT | 060100 | 20.12.2016 | 12:36:13 | Y | VOLATILE | QUOTE | 7 | COMPAT | N | N | N | N | N |
| DSNC10.DBCG.RUNLIB.LOAD | PDSE | DSN8CLPL | COBOL/ENT | 060100 | 21.12.2016 | 13:05:28 | Y | VOLATILE | QUOTE | 7 | COMPAT | N | N | N | N | N |
| DSNC10.DBCG.RUNLIB.LOAD | PDSE | DSN8CLPV | COBOL/ENT | 060100 | 21.12.2016 | 13:15:49 | Y | VOLATILE | QUOTE | 7 | COMPAT | N | N | N | N | N |
| DSNC10.DBCG.RUNLIB.LOAD | PDSE | DSN8CLRV | COBOL/ENT | 060100 | 21.12.2016 | 13:13:47 | Y | VOLATILE | QUOTE | 7 | COMPAT | N | N | N | N | N |
| DSNC10.DBCG.RUNLIB.LOAD | PDSE | DSN8CLTC | COBOL/ENT | 060100 | 21.12.2016 | 13:05:33 | Y | VOLATILE | QUOTE | 7 | COMPAT | N | N | N | N | N |
| DSNC10.DBCG.RUNLIB.LOAD | PDSE | DSN8HC3 | COBOL/ENT | 060100 | 20.12.2016 | 12:36:27 | Y | VOLATILE | QUOTE | 7 | COMPAT | N | N | N | N | N |
| DSNC10.DBCG.RUNLIB.LOAD | PDSE | DSN8MCG | COBOL/ENT | 060100 | 20.08.2019 | 13:46:43 | Y | VOLATILE | QUOTE | 7 | COMPAT | N | N | N | N | N |
| DSNC10.DBCG.RUNLIB.LOAD | PDSE | DSN8SCM | COBOL/ENT | 060100 | 20.12.2016 | 12:36:19 | Y | VOLATILE | QUOTE | 7 | COMPAT | N | N | N | N | N |
| DSNC10.DBCG.RUNLIB.LOAD | PDSE | DSN8SCM | COBOL/ENT | 060100 | 20.12.2016 | 12:36:19 | Y | VOLATILE | QUOTE | 7 | COMPAT | N | N | N | N | N |

The configuration dialog box shows the following fields:

- Load Lib: = [dropdown]
- DS-Type (PDS/PDSE): = [dropdown]
- Module: = [dropdown]
- Compiler: = [dropdown]
- Comp. vers. VRRMM: = [dropdown]
- Comp. date: < [dropdown] 1.7.2020 DD.MM.YYYY
- Comp. time: = [dropdown] HH:MM:SS

A yellow callout bubble points to the date and time fields with the text: "... to better use the fields in queries."



XINFO 4.2 – Space Scanner

Merged HSM Migration and Backup data into one table for easier analysis.

CA Disk Migration and Backup data are merged as well.

Record type

| RT | Datasetname | GDGGen | Lvl_M | Chgl_M | C_B | Devcl | DSORG | Size | M/B-Date | M/B-Time | DATACLAS | |
|----|------------------------------------|--------|-------|--------|-----|-------|-------|------|------------|------------|----------|--|
| MD | ZCHRIS1.ISPF.ISPPROF | | ML1 | Y | | DASD | PO | 12 | 14.08.2020 | 01:05:07 | | |
| MD | ZCHRIS1.NETRC | | ML1 | Y | | DASD | PS | 2 | 02.09.2020 | 01:05:14 | | |
| MD | ZCHRIS2.S0W1.SPFL0G1.LIST | | ML1 | Y | | DASD | PS | 2 | 14.08.2020 | 01:05:06 | | |
| MD | ZCHRIS2.S0W1.SPFTMP2.CNTL | | ML1 | Y | | DASD | PS | 2 | 02.09.2020 | 01:05:18 | | |
| MD | ZRANDY1.ISPF.ISPPROF | | ML1 | Y | | DASD | PO | 6 | 10.08.2020 | 01:05:07 | | |
| MD | ZRANDY1.NETRC | | ML1 | Y | | DASD | PS | 2 | 02.09.2020 | 01:05:14 | | |
| MD | ZSCOTT1.ISPF.ISPPROF | | ML1 | Y | | DASD | PO | 8 | 14.08.2020 | 01:05:07 | | |
| MD | ZSCOTT1.NETRC | | ML1 | Y | | DASD | PS | 2 | 02.09.2020 | 01:05:14 | | |
| MD | ZSCOTT2.ISPF.ISPPROF | | ML1 | Y | | DASD | PO | 6 | 08.08.2020 | 01:05:11 | | |
| MD | ZSCOTT2.NETRC | | ML1 | Y | | DASD | PS | 2 | 02.09.2020 | 01:05:14 | | |
| BD | P390A.PM.CNTL | | | | | Y | DASD | PO | 130 | 24.02.2020 | 00:30:02 | |
| BD | P390A.ROSE.CNTL | | | | | Y | DASD | PO | 144 | 11.03.2019 | 00:30:02 | |
| BD | P390A.OPUSR.V210.CLIST | | | | | Y | DASD | PO | 26 | 22.02.2020 | 00:30:04 | |
| BD | P390A.PM.PARM | | | | | Y | DASD | PO | 154 | 24.02.2020 | 00:30:03 | |
| BD | P390A.OPUSR.V210.XINFO.V3R5.CLIST | | | | | Y | DASD | PO | 378 | 22.02.2020 | 00:30:04 | |
| BD | P390A.JCK.DEV.PLI | | | | | Y | DASD | POE | 12816 | 26.01.2016 | 00:30:05 | |
| BD | P390A.OPUSR.V210.XINFO.V3R5.DEFGLB | | | | | Y | DASD | PS | 88 | 22.02.2020 | 00:30:05 | |
| BD | P390A.ROSE.CNTL | | | | | Y | DASD | PO | 158 | 15.05.2020 | 00:30:05 | |



XINFO 4.2 – Space Scanner

New field: LRECL of migrated data set.

| RT | Recover | Cre-Date_M | Exp-Date_M | LBkp-Date_M | LBkp-Time_M | LUse-Date_M | 1stVol_B | Limit | Scr | Empty | CalcExpDt_M | LRECL_M | Syst |
|-------|---------|------------|------------|-------------|-------------|-------------|----------|-------|-------|-------|-------------|---------|-------|
| <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> | <all> |
| MD | 20 | 25.02.2020 | | | | 09.03.2020 | | | | | | 1428 | S0W1 |
| MD | 1 | 25.02.2020 | | | | 09.03.2020 | | | | | | 948 | S0W1 |
| MD | 1 | 25.02.2020 | | | | 09.03.2020 | | | | | | 481 | S0W1 |
| MD | 1 | 25.02.2020 | | | | 09.03.2020 | | | | | | 889 | S0W1 |
| MD | 3 | 25.02.2020 | | | | 09.03.2020 | | | | | | 723 | S0W1 |
| MD | 6 | 25.02.2020 | | | | 09.03.2020 | | | | | | 690 | S0W1 |
| MD | 1 | 25.02.2020 | | | | 09.03.2020 | | | | | | 238 | S0W1 |
| MD | 18 | 25.02.2020 | | | | 09.03.2020 | | | | | | 420 | S0W1 |
| MD | 34 | 25.02.2020 | | | | 09.03.2020 | | | | | | 195 | S0W1 |
| MD | 24 | 25.02.2020 | | | | 09.03.2020 | | | | | | 304 | S0W1 |
| MD | 1 | 27.08.2018 | | | | 28.08.2018 | | | | | | 0 | S0W1 |
| MD | 1 | 26.02.2020 | | | | 09.03.2020 | | | | | | 0 | S0W1 |
| MD | 10856 | 07.01.2019 | | | | 07.01.2019 | | | | | | 80 | S0W1 |
| MD | 5929 | 17.12.2019 | | | | 27.12.2019 | | | | | | 80 | S0W1 |
| MD | 2329 | 17.12.2019 | | | | 09.01.2020 | | | | | | 8192 | S0W1 |
| MD | 888 | 17.12.2019 | | | | 27.12.2019 | | | | | | 8192 | S0W1 |
| MD | 2809 | 22.08.2018 | | | | 13.09.2018 | | | | | | 80 | S0W1 |
| MD | 357 | 22.08.2018 | | | | 22.08.2018 | | | | | | 80 | S0W1 |



XINFO 4.2 – Space Scanner

The screenshot shows the XINFO PC Client interface with the 'Space - Dataset' window open. The table displays various dataset attributes. A callout box highlights the 'ENCRYPTIONDATA' and 'ATTRIBUTES' sections, which are equivalent to LISTCAT ENCRYPTIONDATA and ATTRIBUTES. Another callout points to the 'Dataset (VTOC)' in the workspace tree, noting it is also for VSAM data sets.

| Datasetname | ORCLAS | MGMTCLAS | Stogroup | Timestamp | Chg | Calc-EXPDT | Syst | PSE VerNo. | Stripe-Cnt | I | Encrypt. Key label |
|----------------------|--------|----------|----------|------------------|-----|------------|------|------------|------------|---|--------------------|
| SYSH.IWS953.SEQQCLIB | ANAGED | MCNORMAL | MAIN | 13.02.2021.01:04 | Y | | S0W1 | 0 | 0 | N | |
| SYSH.IWS953.SEQQDATA | ANAGED | MCNORMAL | MAIN | 13.02.2021.01:04 | Y | | S0W1 | 0 | 0 | N | |
| SYSH.IWS953.SEQQGENU | ANAGED | MCNORMAL | MAIN | 13.02.2021.01:04 | Y | | S0W1 | 0 | 0 | N | |
| SYSH.IWS953.SEQQLENU | ANAGED | MCNORMAL | MAIN | 13.02.2021.01:04 | Y | | S0W1 | 0 | 0 | N | |
| SYSH.IWS953.SEQQLMD0 | ANAGED | MCNORMAL | MAIN | 13.02.2021.01:04 | Y | | S0W1 | 0 | 0 | N | |
| SYSH.IWS953.SEQQMAC0 | ANAGED | MCNORMAL | MAIN | 13.02.2021.01:04 | Y | | S0W1 | 0 | 0 | N | |
| SYSH.IWS953.SEQQMISC | ANAGED | MCNORMAL | MAIN | 13.02.2021.01:04 | Y | | S0W1 | 0 | 0 | N | |
| SYSH.IWS953.SEQQMSG0 | ANAGED | MCNORMAL | MAIN | 13.02.2021.01:04 | Y | | S0W1 | 0 | 0 | N | |
| SYSH.IWS953.SEQQPENU | ANAGED | MCNORMAL | MAIN | 13.02.2021.01:04 | Y | | S0W1 | 0 | 0 | N | |
| SYSH.IWS953.SEQQPNL0 | ANAGED | MCNORMAL | MAIN | 13.02.2021.01:04 | Y | | S0W1 | 0 | 0 | N | |
| SYSH.IWS953.SEQQSAMP | ANAGED | MCNORMAL | MAIN | 13.02.2021.01:04 | Y | | S0W1 | 0 | 0 | N | |
| SYSH.IWS953.SEQQSKL0 | ANAGED | MCNORMAL | MAIN | 13.02.2021.01:04 | Y | | S0W1 | 0 | 0 | N | |
| SYSH.IWS953.SEQQTBL0 | ANAGED | MCNORMAL | MAIN | 13.02.2021.01:04 | Y | | S0W1 | 0 | 0 | N | |
| SYSH.IWS953.SEQQWAPL | ANAGED | MCNORMAL | MAIN | 13.02.2021.01:04 | Y | | S0W1 | 0 | 0 | N | |

ENCRYPTIONDATA
DATA SET ENCRYPTION---- (YES)
DATA SET KEY LABEL-----RBKD.DSN.V00001
PROTECTION-PSWD----- (NULL) RACF----- (NO)
...
ATTRIBUTES
VERSION-NUMBER-----1
STRIPE-COUNT-----1
EXTENDED

Also for VSAM data sets.

New fields equivalent to LISTCAT ENCRYPTIONDATA and ATTRIBUTES.



Thank you!

