



VAN HELVOIRT AUTOMATISERING

Systems Management Modernization

10 June 2020



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VAN HELVOIRT AUTOMATISERING

Sponsors - Donators

i-UG (UK)

Education Information Communication

FRESCHÉ SOLUTIONS



ESSIST



precisely

CYBERNETICS



Proximity



In support of our **NHS**



VAN HELVOIRT AUTOMATISERING

Does systems management need modernization?

If systems management is done with application...

Why would you think it can skip modernization...

Just because you are comfortable with them...

Or just because they are okay.....

Allow me to give you some ideas!



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The Future.....  am ready



VAN HELVOIRT AUTOMATISERING

Agenda

- Does systems management need modernization?
- Old versus New – a comparison?
- Feedback



Old

```
Columns . . . : 1 71 Browse
SEU==>
FMT ** ..... 1 ..... 2 ..... 3 ..... 4 ..... 5 .....
0045.00      QSYS/STRSBS SBSD (QCMN)
0046.00      MONMSG MSGID (CPF0000)
0047.00
0048.00      /* Start QSNADS */
0049.00
0050.00      QSYS/STRSBS SBSD (QSNADS)
0051.00      MONMSG MSGID (CPF0000)
0052.00
0053.00      /* Start SafeNet/400 */
0054.00
0055.00      PCSECLIB/STRTRP
0056.00      MONMSG MSGID (CPF0000)
0057.00
```



New

```
0040.00      MONMSG MSGID(CPF0000)
0041.00      QSYS/STRSBS SBSD(QBATCH)
0042.00      MONMSG MSGID(CPF0000)
0043.00      QSYS/STRSBS SBSD(QCMN)
0044.00      MONMSG MSGID(CPF0000)
0045.00
0046.00 /* User Additions */
0047.00
0048.00          CALL          PGM(HA_STRUP/STREND_MNG) PARM('*START')
0049.00          MONMSG      MSGID(CPF0000)
0050.00
0051.00 /* End of User Additions */
0052.00 DONE:
0053.00      QSYS/STRSBS SBSD(QSPL)
0054.00      MONMSG MSGID(CPF0000)
0055.00      QSYS/RTVSYVAL SYSVAL(QSTRPRTWTR) RTNVAR(&STRWTRS)
0056.00      IF COND(&STRWTRS = '0') THEN(GOTO CMDLBL(NOWTRS))
0057.00      CALL PGM(QSYS/QWCSWTRS)
0058.00      MONMSG MSGID(CPF0000)
0059.00 NOWTRS:
```




Old

WORK WITH DATA IN A FILE	Mode :	CHANGE
Format : <u>STREND_MAN</u>	File :	STREND_MAN
*RECNR: 1		
SEQUENCE: <u>20</u>		
OMGEVING: <u>GEELTJE</u>		
Actief: <u>*YES</u>		
JOBNAAM: <u>SYSTEM_STR</u>		
GEBRUIKER: <u>RUDI</u>		
STRCMD: <u>SBMJOBJS JOB (SYSTEM_STR) TIME (*IMMED)</u>		

STOPCMD: <u>SBMJOBJS JOB (SYSTEM_END) TIME (*IMMED)</u>		

DLYBEFORE: <u>*NONE</u>		
DLYAFTER: <u>*NONE</u>		
F3=Exit	F5=Refresh	F6=Select format
F9=Insert	F10=Entry	F11=Change



New

File Edit View Run VisualExplain Monitor Options Connection Tools Help

1 select * from ha_strup.strend_man for update;

SEQUENCE	OMGEVING	ACTIEF	JOBNAAM	GEBRUIKER	STRCMD	STOPCMD
10	GEELTJE	*YES	SYSTEM_STR	RUDI ...	SBMJOBJS JOB(SYSTEM_STR) TIME(*IMMED)	... SBMJOBJS JOB(SYSTEM_END) TIME(*IMMED)
20	GEELTJE	*YES	WAIT	RUDI ...	DLYJOB DLY(60)	... CALL PGM(HA_STRUP/WAIT) PARM('CONTINUE QRPLOBJ ' '000030')



Old

```
QUSRIJS                      Work with Jobs                      ██████████
                                                                    30-10-19  13:46:41
Position to . . . . . _____ Starting characters

Type options, press Enter.
  1=Add    2=Change    3=Hold    4=Remove    5=Display    6=Release/Reset
  7=Submit immediately  8=Change command list  9=Change job LDA ...

  Job      Group      Grp      Schedule  Schedule
Opt Name   Name        Seq      Date      Time      Schedule
-----
  SYSTEM_END *NONE      0    *READY   *NONE     0:00    *NONE
  SYSTEM_STR *NONE      0    *READY   *NONE     0:00    *NONE

  █

Parameters for options 2, 5, 7, 11, 12, 18, 19, 20 or command
===>
F3=Exit    F4=Prompt    F5=Refresh    F11=Job statistics    F12=Cancel
F13=Repeat F15=Sort date F23=More options    F24=More keys
```

Bottom



New

Scheduled Job Properties

***General**

Batch Information
Notification
Documentation
Problem Recovery
Communication
Local Data Area
Last Run

*Job name: SYSTEM_STR
Group name:
Sequence: 0 0 - 99

Type of job
 Scheduled
 Non-scheduled
 Alternate

Description: Normal System Usage Startup

Commands

Select	Enabled	Commands
<input type="radio"/>	<input checked="" type="checkbox"/>	QSYS/CALL PGM(HA_SYS/RAPCL000)
<input type="radio"/>	<input checked="" type="checkbox"/>	PCSECLIB/STRTRP
<input type="radio"/>	<input type="checkbox"/>	QSYS/VRFCFG CFGOB: ██████████ CFGTYPE(*NWS) STATUS(*ON) RESESYS(*YES)
<input type="radio"/>	<input checked="" type="checkbox"/>	STRDOMSVR SERVER ██████████)
<input type="radio"/>	<input checked="" type="checkbox"/>	STRDOMSVR SERVER ██████████)
<input type="radio"/>	<input checked="" type="checkbox"/>	STRDOMSVR SERVER ██████████)
<input type="radio"/>	<input checked="" type="checkbox"/>	QSYS/VRFCFG CFGOB: ██████████ CFGTYPE(*NWS) STATUS(*ON)
<input type="radio"/>	<input checked="" type="checkbox"/>	QSYS/VRFCFG CFGOB: ██████████ CFGTYPE(*NWS) STATUS(*ON)
<input type="radio"/>	<input checked="" type="checkbox"/>	QSYS/VRFCFG CFGOB: ██████████ CFGTYPE(*NWS) STATUS(*ON)

Page 1 of 1 | 1 | Go | Rows 9 | Total: 9 Selected: 0

Run as remote command

Application: SYSTEMCTL

Report distribution list: Use entry from below

Use start time of day

Buttons: Add, Add Based On, Remove, Move Up, Move Down, Properties, OK, Cancel



Old

```
Work with Job Schedule Entries
30-10-19 14:03:43 CET

Type options, press Enter.
 2=Change  3=Hold  4=Remove  5=Display details  6=Release
 8=Work with last submission 10=Submit immediately

-----Schedule-----
Opt  Job          Status  Date      Time      Frequency  Recovery  Next
-----Action-----  Submit
-----Date-----
01  QEZDKWKMTH    SCD     *SUN      08:00:00  *MONTHLY  *NOSBM    03-11-19
02  QORDPTFGRP    SCD     *MONTHSTR 00:01:00  *MONTHLY  *SBMRLS   01-11-19
03  QSJERRRPT     SAV     07-02-18  10:34:36  *ONCE     *SBMRLS
04  QSJHEARTBT    SCD     *ALL      09:55:00  *WEEKLY   *NOSBM    31-10-19
05  QS9AUTOPTF    SCD     *SAT      08:30:00  *WEEKLY   *SBMRLS   02-11-19
06  QS9SACOL      SCD     *ALL      10:25:00  *WEEKLY   *NOSBM    31-10-19

Bottom

Parameters or command
===>
F3=Exit  F4=Prompt  F5=Refresh  F6=Add  F9=Retrieve
F11=Display job queue data  F12=Cancel  F17=Top  F18=Bottom
```



New

Welcome rudi

Welcome x Scheduled Jobs x

Scheduled Jobs - [redacted]

Refresh | Print | [icon] | Actions

No filter applied

<input type="checkbox"/>	Job Name	Status	Next Run	Schedule
<input type="checkbox"/>	Ajspmrtst	Held from running	3 Nov 2019 13:23:00	Weekly
<input type="checkbox"/>	Anzbrmmnt	Ready to run	—	
<input type="checkbox"/>	Brmckexp	Ready to run	31 Oct 2019 12:00:00	Weekly
<input type="checkbox"/>	Brrmntgtlj	Ready to run	31 Oct 2019 11:25:00	Weekly
<input type="checkbox"/>	Brrmovpcy	Ready to run	31 Oct 2019 07:00:00	Weekly
<input type="checkbox"/>	Brrsreorg	Ready to run	3 Nov 2019 11:25:00	Weekly
<input type="checkbox"/>	Cleanup	Ready to run	—	
<input type="checkbox"/>	Db2iamngt	Ready to run	—	
<input type="checkbox"/>	Db2pcmgnt	Ready to run	30 Oct 2019 22:45:00	Weekly



Old

```
13/05/20 16:38:
CPU %:    10,9    Elapsed time:    00:01:10    Active jobs:    678

Type options, press Enter.
  2=Change  3=Hold  4=End  5=Work with  6=Release  7=Display messa
  8=Work with spooled files  13=Disconnect ...

Current
Opt  Subsystem/Job  User      Type  CPU %  Function      Status
---  ---            ---      ---   ---    ---            ---
 1   EDIFTPSBS      QSYS     SBS   0,0    DEQW
 2   RUNFTPAUTO    LIMS     ASJ   0,1    DLY-10      DLYW
```



New

Scheduled Job Properties

General

Schedule

Batch Information

Notification

Documentation

Problem Recovery

Communication

Local Data Area

Last Run

October 2019 Refresh

Sun	Mon	Tue	Wed	Thu	Fri	Sat
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

30/10/2019 -- 31/12/2039 Additional Calendars...

Dates to run

Frequency:

On selected dates

Weekly

Monthly

Yearly

Details

Sunday

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Skip count:

Select as working days

Schedule name: Go

Times to run

On specific times Example: 12:30

Periodically

Frequency: hours minutes

Start time: Example: 12:30:00

End time: Example: 12:30:00



VAN HELVOIRT AUTOMATISERING

New

Scheduled Job Activity						
Name	Group	Sequence	Completion Status	Started	Ended	Elapsed Time (HH:MM)
SYSTEM_STR		01	Successful	5/5/20 8:34:12 PM	8:34:48 PM	00:01
SYSTEM_STR		01	Successful	3/28/20 9:47:22 PM	9:48:05 PM	00:01
SYSTEM_STR		01	Successful	2/17/20 6:34:29 PM	6:35:11 PM	00:01
SYSTEM_STR		01	Successful	12/18/19 10:32:16 PM	10:32:53 PM	00:01
SYSTEM_STR		01	Successful	12/17/19 9:50:13 AM	9:50:51 AM	00:01
SYSTEM_STR		01	Successful	11/26/19 1:40:30 AM	1:41:06 AM	00:01
SYSTEM_STR		01	Successful	11/2/19 6:34:24 PM	6:35:00 PM	00:01
SYSTEM_STR		01	Successful	9/23/19 8:10:32 PM	8:11:11 PM	00:01
SYSTEM_STR		01	Successful	8/27/19 1:13:48 AM	1:14:28 AM	00:01
SYSTEM_STR		01	Successful	8/22/19 9:34:46 PM	9:35:21 PM	00:01
SYSTEM_STR		01	Successful	7/31/19 8:37:01 PM	8:37:51 PM	00:01
SYSTEM_STR		01	Successful	7/24/19 9:22:17 PM	9:23:08 PM	00:01

Elapsed Time (HH:MM)

Page 1 of 2 | 1 | Go | Rows 12 | Total: 22

Cancel



New

Scheduled Job Properties

General

Batch Information

Notification

Documentation

Problem Recovery

Communication

Local Data Area

Last Run

Send completion message

Message queue: Use job control value Browse...

Library: Use job control value

Notify if job completes successfully

Recipient: Use job control value

Message: Use job control value

Notify if job fails

Recipient: Use job control value

Message: Use job control value

Notify if job does not start within limit

Recipient: Use job control value

Limit: Use job control value

Notify with error messages

Recipient: Use job control value

Message: Use job control value

OK Cancel



VAN HELVOIRT AUTOMATISERING

New

Recipient Properties

*General

Report

E-mail

Path

*Recipient: SUPPORT

Description: support@vanhelvoirt.nl

OK Cancel



Old

```
Work with TCP/IP Interfaces                                     System:  ICLIENT1
Type options, press Enter.
  1=Add   2=Change   4=Remove   5=Display   9=Start   10=End

Opt  Internet      Subnet      Interface   Alias
   |  Address      Mask        Status      Name
---|-----
  1  127.0.0.1      255.0.0.0   Active      LOCALHOST
  2  192.168.25.100 255.255.255.255 Inactive     *NONE
  3  192.168.69.91  255.255.255.248 Active       ICLIENT1

F3=Exit   F5=Refresh  F6=Print list  F11=Display text description
F12=Cancel F17=Top     F18=Bottom
```

Bottom



New

```
Work with TCP/IP Interfaces

Type options, press Enter.
 1=Add  2=Change  4=Remove  5=Display  9=Start  10=End

Opt  Internet      Subnet      Interface   Alias
     Address      Mask        Status      Name
-----
     127.0.0.1    255.0.0.0   Active     LOCALHO
█    172.31.31.147 255.255.255.0 Active     MNGTIP
     172.31.31.150 255.255.255.0 Active     AS400
```



Old

Opt	Subsystem/Job	Current User	Type	CPU %	Function	Status
■	QUSRWRK	QSYS	SBS	.0		DEQW
—	QSCliceV	QSYS	BCH	.0		DEQW
—	QSCWCHMS	QUSER	BCH	.0		DEQW
—	QZDASOINIT	RUDI	PJ	.0		TIMW
—	QZDASOINIT	RUDI	PJ	.0		TIMW
—	QZDASOINIT	QSECOFR	PJ	.0		TIMW
—	QZDASOINIT	RUDI	PJ	.0		TIMW
—	QZDASOINIT	RUDI	PJ	.0		TIMW
—	QZDASOINIT	QWQADMIN	BCI	.0		TIMW

More

Parameters or command
===>



New

Refresh Subsystem: Qusrwrk Elapsed time: 00:00:00

Refresh Print Filter Actions

11 of 11 items shown. Clear filter

<input type="checkbox"/>	Job Name	Detailed Status	Current User	Type	CPU %
<input type="checkbox"/>	Qzdasoinit	Waiting for time interval	Rudi	Prestart batch - Server	0.00
<input type="checkbox"/>	Qzdasoinit	Waiting for time interval	Rudi	Prestart batch - Server	0.00
<input type="checkbox"/>	Qzdasoinit	Waiting for time interval	Qsecofr	Prestart batch - Server	0.00
<input type="checkbox"/>	Qzdasoinit	Waiting for request	Quser	Prestart batch - Server	0.00
<input type="checkbox"/>	Qzdasoinit	Waiting for time interval	Rudi	Prestart batch - Server	0.00
<input type="checkbox"/>	Qzdasoinit	Waiting for request	Quser	Prestart batch - Server	0.00
<input type="checkbox"/>	Qzdasoinit	Waiting for time interval	Qwqadmin	Batch immediate - Server	0.00
<input type="checkbox"/>	Qzdasoinit	Waiting for time interval	Qwqadmin	Batch immediate - Server	0.00
<input type="checkbox"/>	Qzdasoinit	Waiting for time interval	Qwqadmin	Batch immediate - Server	0.00
<input type="checkbox"/>	Qzdasoinit	Waiting for request	Quser	Prestart batch - Server	0.00
<input type="checkbox"/>	Qzdasoinit	Waiting for request	Quser	Prestart batch - Server	0.00



New

Active Jobs - Columns

Available Columns:

- Title
- Entered System
- User
- Interactive Transactions
- Number
- Subsystem
- Subsystem Library
- Status
- Asynchronous Disk I/O Rate
- Average Response Time
- CPU Time
- CPU DB %

Current Columns:

- Title
- Job Name
- Detailed Status
- Current User
- Type
- CPU %
- Run Priority
- Thread Count
- Temporary Storage Used(MB)

Buttons: Add >, < Remove, Add All >>, Move Up, Move Down

OK Cancel Help



New

Active Jobs - Geeltje.vanhelvoirt.nl
Refresh Subsystem: Qusrwrk Elapsed time: 00:00:00

2 of 2 items shown. Clear filter

Job Name	Detailed Status	Number	Current User	Type	CPU %
Qzdr...	Waiting for time interval	283301	Rudi	Prestart batch - Server	0.00
Qzdr...	Waiting for request	284142	Quser	Prestart batch - Server	0.00

Context menu for the first job:

- Reset Statistics
- Printer Output
- Job Log
- Details
 - Call Stack
 - Library List
 - Locked Objects
 - Open Files
 - Threads
 - Transactions
 - SQL
- Reply...
- Hold...
- Release
- Move...
- Delete/End...
- Performance
- Properties



New

SQL Details for Jobs

Filters:

Job Name: QZDASSINIT
Job User: QUSER
Job Number: 283301
Current User: RUDI

Status: Complete

Name	User	Number	Subsystem	Current User	Type	Detailed Status
QZDASSINIT	QUSER	283301	QUSRWRK	RUDI	Batch	Waiting for time interval

Show Details

- Start SQL Performance Monitor...
- Job Log
- End Job...

SQL statement and details:



New

SQL statement and details:

```
select * from ha_strup.strend_man for update
```

Detail	Value
Query options schema	QUSRSYS
Interface type	JDBC
Interface name	IBM Toolbox for Java
Interface version	V7R4M0 PTF 3
Client user	rvanhelvoirt
Client accounting string	Mac OS X;SSL=true;admin_user=false
Client application	IBM i Access Client Solutions - Run SQL Scripts
Client program	file:/Applications /IBM%20i%20Access%20Client%20Solutions.app/acsbundle.jar Version: 1.1.8.4 Build id: 0160 2020-04-13 10:09:01
Client workstation	10.211.55.2
Client port	49692
Client host name	HAMB01.VANHELVOIRT.NL
Client IP address (IPv4)	192.168.69.100
Statement	
Statement status	Completed
Statement name	STMT0001
Statement CCSID	13488
Statement length	44
Resource	



Old

```
MAIN                                Hoofdmenu IBM i                                Syst
Kies een van de volgende mogelijkheden:

1. Gebruikersfuncties
2. Office-functies
3. Algemene systeemfuncties
4. Bestanden, bibliotheken en mappen gebruiken
5. Programmeerfuncties
6. Communicatiefuncties
7. Het systeem definiëren of wijzigen
8. Problemen verwerken
9. Een menu afbeelden
10. Opties voor AS/400 Information Assistant
11. Functies voor IBM i Access

90. Afmelden van het systeem

Optie of opdracht
===> █

F3=Afsluiten    F4=Aanwijzingen    F9=Terughalen    F12=Annuleren
F13=Information Assistant    F23=Beginmenu instellen
```



New

```
File Edit View Run VisualExplain Monitor Options Connection Tools Help
/Volumes/home/Rudi/SQL Scripts/Create special ODBC subsystems.sql - R
1 /* Procedure to create special Subsystem for ODBC tasks */
2
3 CL:CRTSBSD SBSDB(QGPL/ODBC_SBS) POOLS((1 *SHRPOOL1)) TEXT('Subsystem for ODBC jobs');
4
5
6 CL:CRTJOBQ JOBQ(QGPL/ODBC_JOBQ) TEXT('Jobqueue for ODBC jobs');
7
8
9 CL:QSYS/ADDJOBQE SBSDB(QGPL/ODBC_SBS) JOBQ(QGPL/ODBC_JOBQ) MAXACT(*NOMAX);
10
11
12 CL:QSYS/ADDRTGE SBSDB(QGPL/ODBC_SBS) SEQNBR(7) CMPVAL('RUNPTY07') PGM(QSYS/QCMD) CLS(QSYS/QSYSCLS07);
13
14
15 CL:QSYS/ADDRTGE SBSDB(QGPL/ODBC_SBS) SEQNBR(20) CMPVAL('RUNPTY10') PGM(QSYS/QCMD) CLS(QSYS/QSYSCLS10);
16
17
18 CL:QSYS/ADDRTGE SBSDB(QGPL/ODBC_SBS) SEQNBR(30) CMPVAL('RUNPTY20') PGM(QSYS/QCMD) CLS(QSYS/QSYSCLS20);
19
20
21 CL:QSYS/ADDRTGE SBSDB(QGPL/ODBC_SBS) SEQNBR(40) CMPVAL('RUNPTY25') PGM(QSYS/QCMD) CLS(QSYS/QSYSCLS25);
22
23
24 CL:QSYS/ADDRTGE SBSDB(QGPL/ODBC_SBS) SEQNBR(50) CMPVAL('RUNPTY35') PGM(QSYS/QCMD) CLS(QSYS/QSYSCLS35);
25
26
27 CL:QSYS/ADDRTGE SBSDB(QGPL/ODBC_SBS) SEQNBR(60) CMPVAL('RUNPTY50') PGM(QSYS/QCMD) CLS(QSYS/QSYSCLS50);
28
29
30 CL:QSYS/ADDRTGE SBSDB(QGPL/ODBC_SBS) SEQNBR(2210) CMPVAL('WATCHEVENT') PGM(QSYS/QSCWCMON) CLS(QSYS/QSYSCLS25);
31
32
33 CL:QSYS/ADDRTGE SBSDB(QGPL/ODBC_SBS) SEQNBR(2211) CMPVAL('WATCHLICEVENT') PGM(QSYS/QSCLICEV) CLS(QSYS/QSYSCLS25);
34
35
36 CL:QSYS/ADDRTGE SBSDB(QGPL/ODBC_SBS) SEQNBR(9999) CMPVAL(*ANY) PGM(QSYS/QCMD) CLS(QSYS/QSYSCLS50);
37
38
39 /*****/
40
41 CL:QSYS/ADDPJE SBSDB(QGPL/ODBC_SBS) PGM(QSYS/QZDASOINIT) INLJOBS(1) THRESHOLD(1) JOBDB(QGPL/QDFTSVR) CLS(QSYS/QPWFSEVER);
42
43
44 CL:QSYS/ADDPJE SBSDB(QGPL/ODBC_SBS) PGM(QSYS/QZDASSINIT) INLJOBS(1) THRESHOLD(1) JOBDB(QGPL/QDFTSVR) CLS(QSYS/QPWFSEVER);
45
46
```

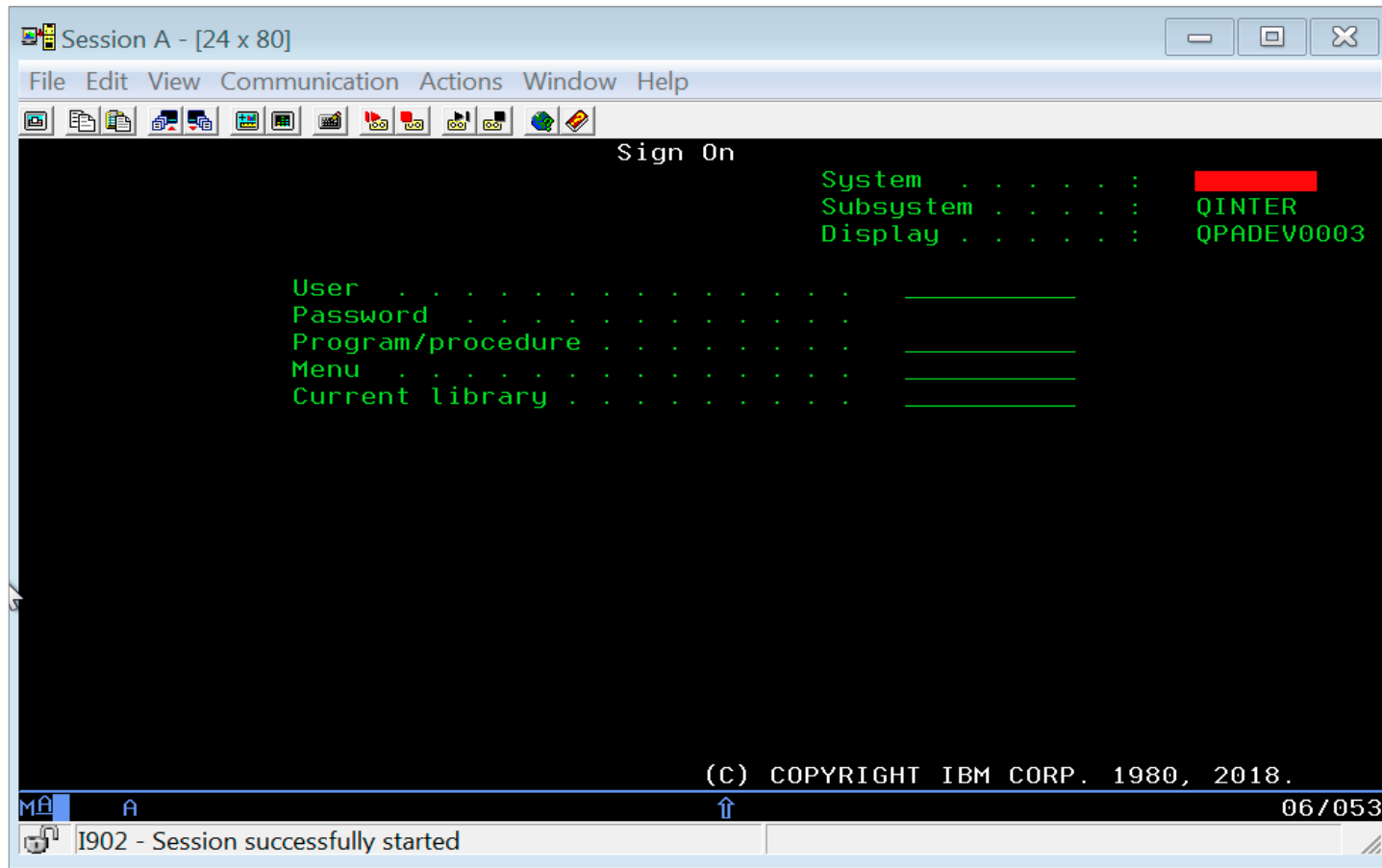


New

```
Untitled* - Run SQL Scripts - Geeltje.vanhelvoirt.r
File Edit View Run VisualExplain Monitor Options Connection Tools Help
SQL SQL SQL SQL
1  -- category: IBM i Services
2  -- description: Work Management - SET_SERVER_SBS_ROUTING and ad hoc users
3
4  --
5  -- Construct a subsystem that will constrain the amount of system resources
6  -- available to users who are known to execute ad hoc queries.
7  --
8  CL: CRTSBS SBSD(QGPL/ADHOCBS) POOLS((1 *BASE)) TEXT('Ad hoc users SBS');
9  CL: CRTJOBQ QGPL/ADHOCJOBQ TEXT('Ad hoc users job queue');
10 CL: ADDJOBQE SBSD(QGPL/ADHOCBS) JOBQ(QGPL/ADHOCJOBQ) MAXACT(100) SEQNBR(40);
11 CL: CRTCLS CLS(QGPL/ADHOCCLS) RUNPTY(55) TIMESLICE(100) TEXT('Ad hoc class');
12 CL: ADDPJE SBSD(QGPL/ADHOCBS) PGM(QSYS/QRWTSRVR) JOBQ(QGPL/QDFTSVR) CLS(QGPL/ADHOCCLS);
13 CL: ADDPJE SBSD(QGPL/ADHOCBS) PGM(QSYS/QZDASOINIT) JOBQ(QGPL/QDFTSVR) CLS(QGPL/ADHOCCLS);
14 CL: STRSBS SBSD(QGPL/ADHOCBS);
15 --
16 -- Relocate SCOTT's server jobs to the ADHOCBS
17 --
18 CALL QSYS2.SET_SERVER_SBS_ROUTING('SCOTT','*ALL','ADHOCBS');
19
20 --
21 -- Review existing configurations for users and groups
22 --
23 SELECT * FROM QSYS2.SERVER_SBS_ROUTING;
24
25
```

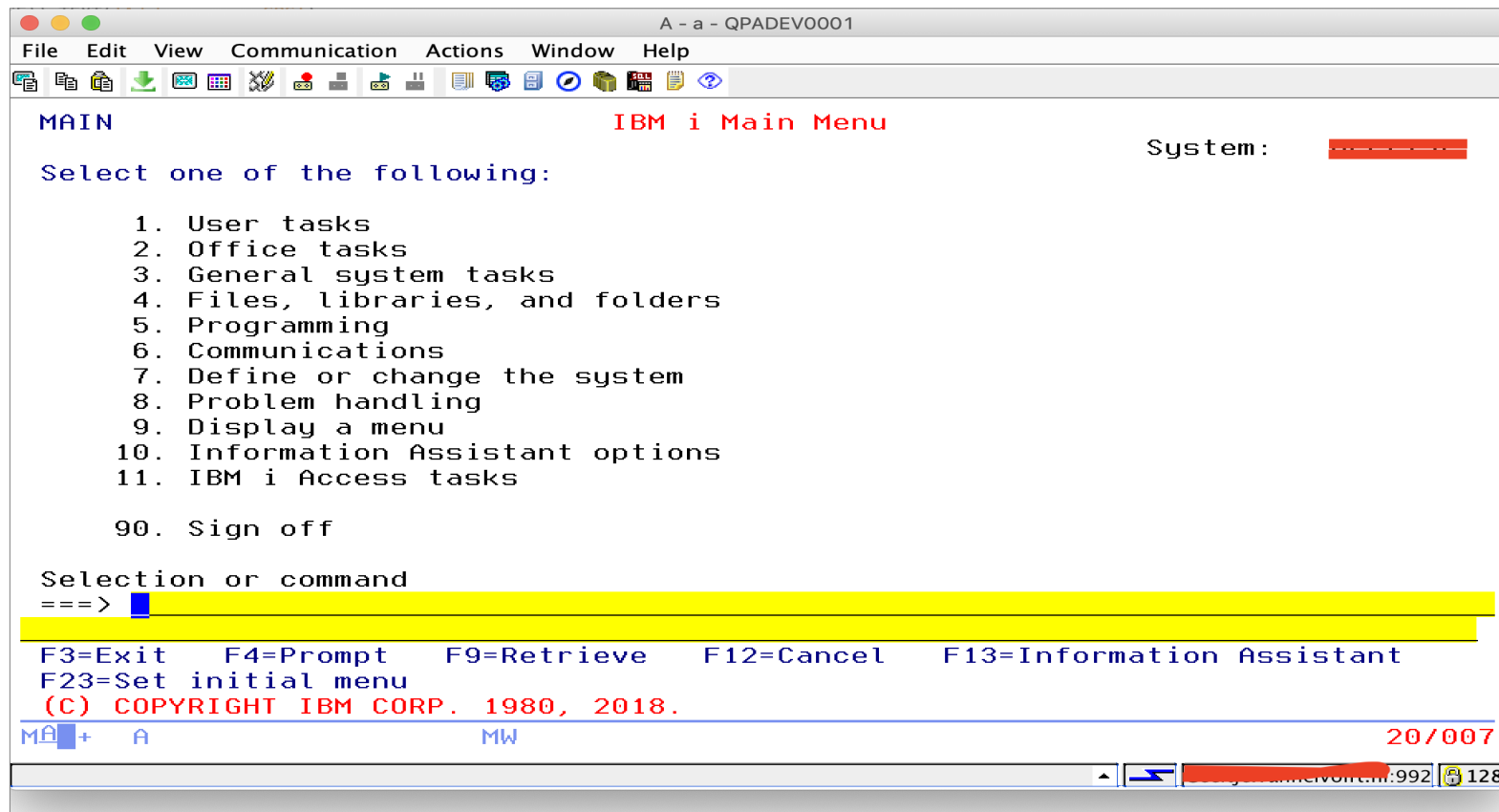


Old





New





Old

```
A - a - QPADEV0001
File Edit View Communication Actions Window Help
Work with Image Catalog Entries
Catalog . . . : FIXCENTRAL          Status . . . : System:
Type . . . . : Optical             Device . . . : Not ready
Directory . . . . : /FixCentral
Type options, press Enter.
  1=Add    2=Change    4=Remove    6=Mount    8=Load    9=Unload
 10=Initialize volume 12=Work with volume
Opt  Index  Status  Image File Name
 1  *AVAIL
 1  1  Mounted  C9151740_1.bin
```



New

Selection or command

==> **S**NDPTFORD PTFID((SF99741)) CHKPTF(*YES)

F3=Exit F4=Prompt F9=Retrieve F12=Cancel F13=Information
F23=Set initial menu

MA + A

MW



New

```
1 -- category: IBM i Services
2 -- description: PTF - Group PTF Currency
3
4 --
5 -- Derive the IBM i operating system level and then
6 -- determine the level of currency of PTF Groups
7 --
8 With iLevel(iVersion, iRelease) AS
9 (
10 select OS_VERSION, OS_RELEASE from sysibmadm.env_sys_info
11 )
12 SELECT P.*
13 FROM iLevel, systools.group_ptf_currency P
14 WHERE ptf_group_release =
15 'R' CONCAT iVersion CONCAT iRelease concat '0'
16 ORDER BY ptf_group_level_available -
17 ptf_group_level_installed DESC;
18
```

PTF_GROUP_CURRENCY	PTF_GROUP_ID	PTF_GROUP_TITLE	PTF Group Level	PTF_GROUP_LEVEL_INSTALLED	PTF_GROUP_LEVEL_AVAILABLE	PTF_GROUP_LAS
-	SF99652	SF99652 740 Content Manager OnDemand for i - 5770-RD1 7.4		2		2 03/20/2020
INSTALLED LEVEL IS CURRENT	SF99661	SF99661 740 WebSphere App Server V8.5		3		3 03/15/2020
INSTALLED LEVEL IS CURRENT	SF99663	SF99663 740 Performance Tools		2		2 04/17/2020
INSTALLED LEVEL IS CURRENT	SF99664	SF99664 740 Backup Recovery Solutions		11		11 03/20/2020
INSTALLED LEVEL IS CURRENT	SF99665	SF99665 740 Java		6		6 03/24/2020
INSTALLED LEVEL IS CURRENT	SF99666	SF99666 740 High Availability for IBM i		3		3 04/16/2020
INSTALLED LEVEL IS CURRENT	SF99668	SF99668 740 IBM Db2 Mirror for i		5		5 01/24/2020
INSTALLED LEVEL IS CURRENT	SF99675	SF99675 740 Hardware and Related PTFs		2		2 01/16/2020
INSTALLED LEVEL IS CURRENT	SF99704	SF99704 740 DB2 for IBM i		6		6 01/21/2020
INSTALLED LEVEL IS CURRENT	SF99737	SF99737 740 Technology Refresh		1		1 11/14/2019
INSTALLED LEVEL IS CURRENT	SF99738	SF99738 740 Group Security		7		7 04/21/2020
INSTALLED LEVEL IS CURRENT	SF99739	SF99739 740 Group Hiper		22		22 04/21/2020
INSTALLED LEVEL IS CURRENT	SF99740	Current Cumulative PTF Media Documentation		19304		19304 12/19/2019
INSTALLED LEVEL IS CURRENT	SF99741	SF99741 740 All PTF Groups except Cumulative PTF Package & MQ		6		6 11/18/2019
PSP IS DOWNLEVEL - RELATED GROUP	SF99653	SF99653 740 Db2 Web Query for i V2.2.1		8		7 01/20/2020
PSP IS DOWNLEVEL - INSTALLED	SF99662	SF99662 740 IBM HTTP Server for i		5		4 04/11/2020



New

IBM Administration Runtime Expert for i

Console > Result > Summary Report > Fix Problems

Fix Problems

System name: iclient1
Problems found by: PTF Verifier

Delayed apply - The PTF will be set as delayed apply.
 Savf file only - Just send save files from source system to endpoint system without load and apply. If this option checked, image catalog will be disabled.

Select Description

- Group PTF SF99662 - IBM HTTP SERVER FOR I level does not meet group level. Group level: 2 Current level: 1
- Product 5770SS1 PTF SI71020 status is not what is expected
- Product 5770SS1 PTF SI70726 status is not what is expected
- Product 5770SS1 PTF SI70727 status is not what is expected
- Product 5770SS1 PTF SI70443 status is not what is expected
- Product 5770SS1 PTF SI71164 status is not what is expected
- Product 5770SS1 PTF SI70827 status is not what is expected
- Product 5770SS1 PTF SI70830 status is not what is expected
- Product 5770SS1 PTF SI71298 status is not what is expected
- Product 5770DG1 PTF SI71127 status is not what is expected
- Product 5770DG1 PTF SI70961 status is not what is expected
- Product 5770DG1 PTF SI71097 status is not what is expected
- Product 5770SS1 PTF SI70542 status is not what is expected
- Product 5770DG1 PTF SI70862 status is not what is expected
- Group PTF SF99653 - DB2 WEB QUERY FOR I V2.2.1 (level 6) could not be found on the system

Select all Deselect all

Processed problems

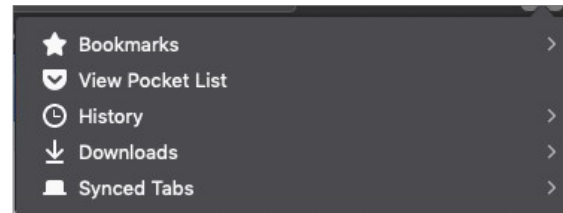
Result	Description
This table is empty.	

Fix Back



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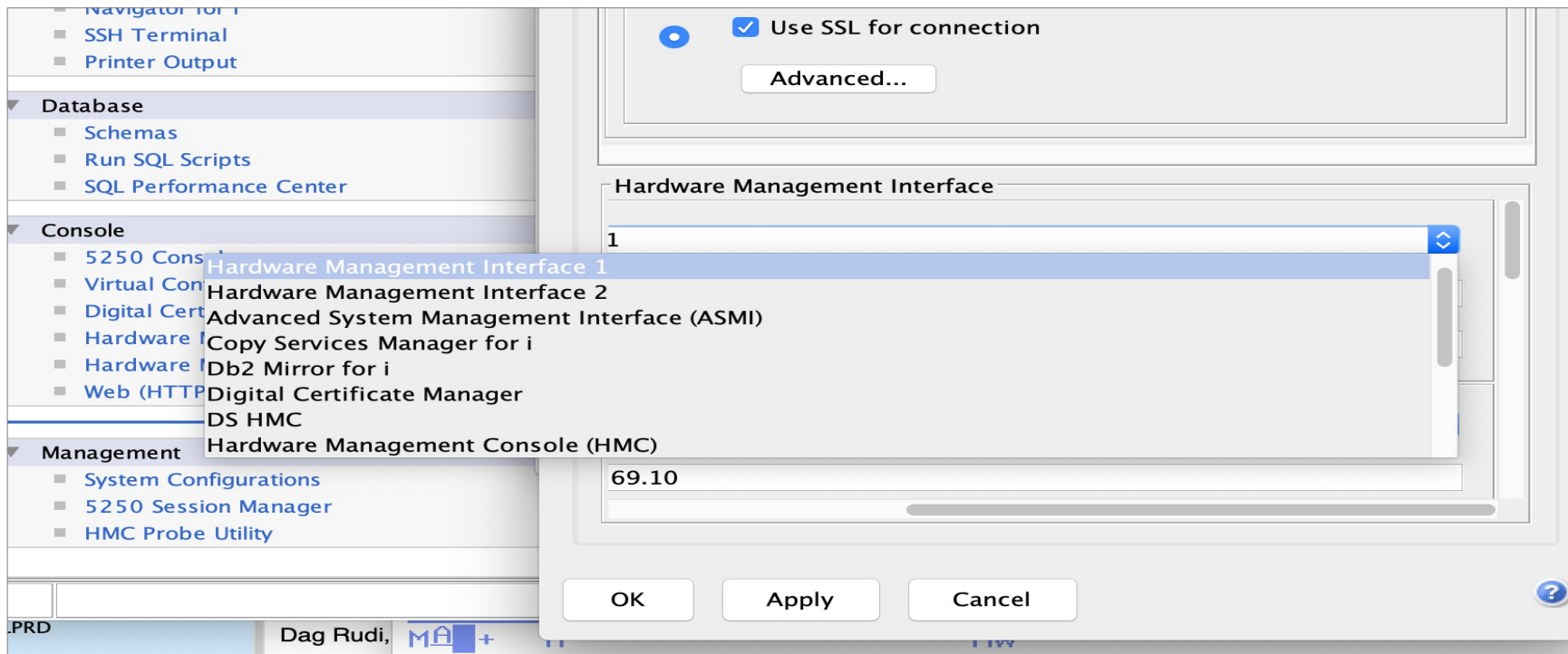
Old



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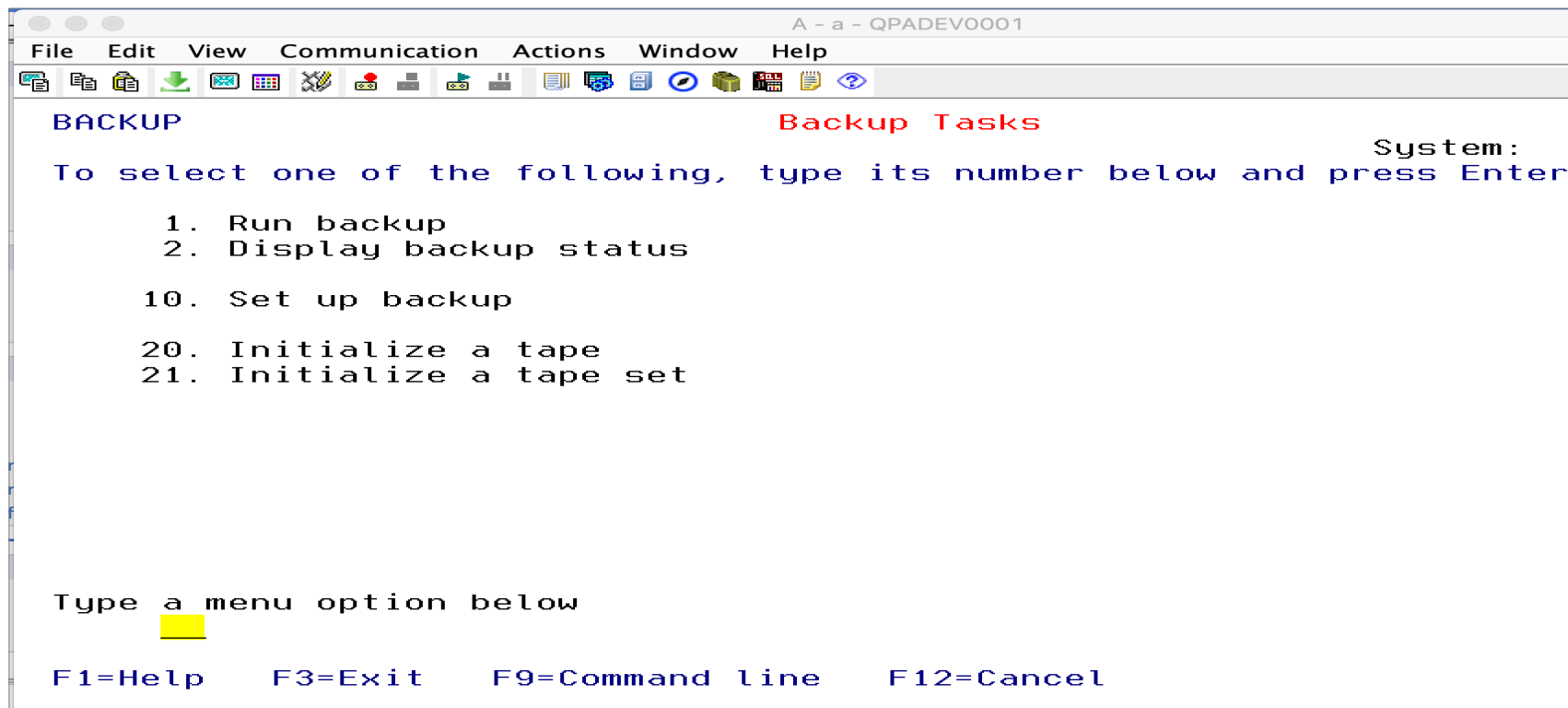


New





Old





New

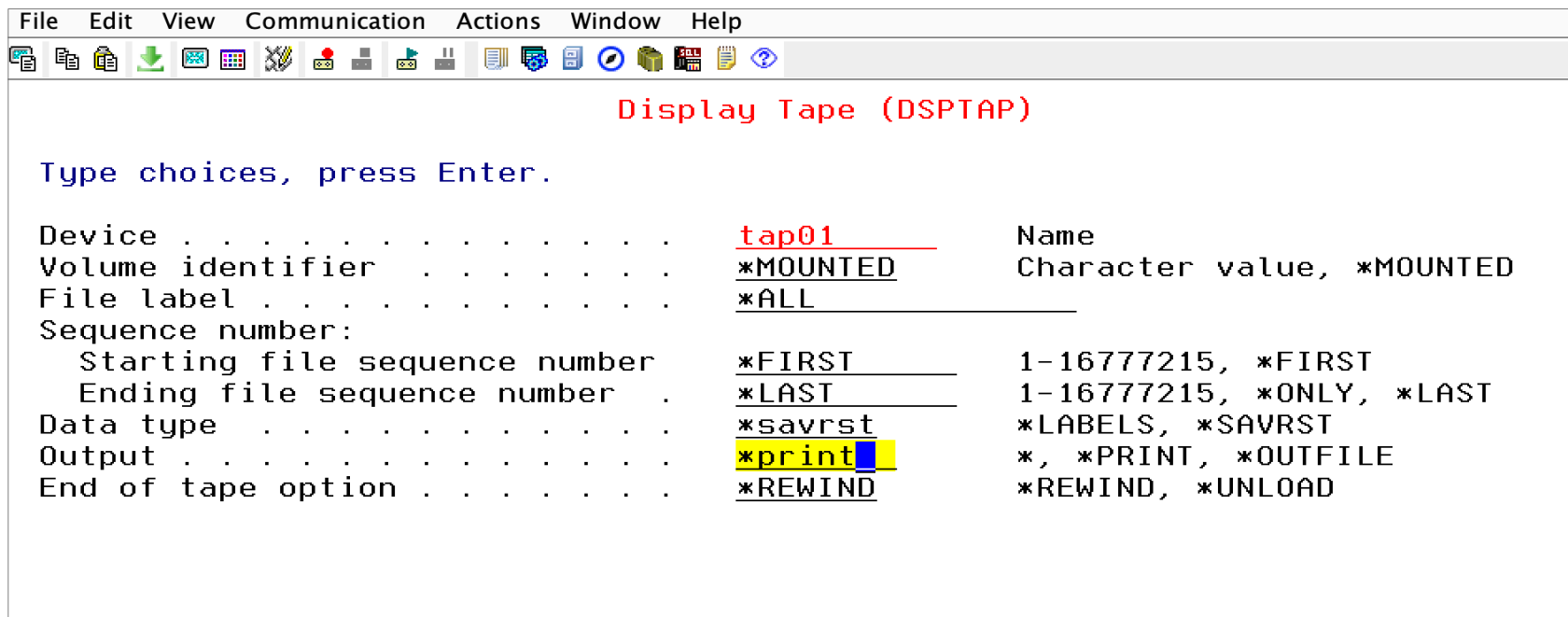
The screenshot shows a software interface with a table of services. At the top, there are several icons (add, delete, edit, print, refresh) and a dropdown menu labeled "Select Action". The table has two columns: "List" and "Description".

List	Description
Backup, Recovery, and Media Services for IBM i	Select actions such as displaying the system policy properties, restoring data, printing reports, and managing devices.
Enterprise Services	Manage BRMS systems through a BRMS Enterprise network.
Archive Control Groups	Create, run, display and maintain archive control groups
Backup Control Groups	Create, run, display and maintain backup control groups
Media Policies	Display media policies information
Move Policies	Display move policy information
Volumes	Display volume information
Media Pools	Display media pool information
Tasks	Tasks which are scheduled, executing, or have been completed

Page 1 of 1 1 Go Rows 9 Total: 9 Filtered: 9



Old





New

File Edit View Communication Actions Window Help

Work with Saved Objects (WRKOBJBRM)

Type choices, press Enter.

Object	> <u>qclsrc</u>	Name, *ALL
Library	> <u>qqpl</u>	Name, *ALL
Type	<u>*ALL</u>	Character value, *ALL
Auxiliary storage pool	<u>*ALL</u>	Name, 1-255, *ALL, *SYSTEM
Select dates:		
From date	<u>*BEGIN</u>	Date, *BEGIN, *CURRENT, nnnn
To date	<u>*END</u>	Date, *END, *CURRENT, nnnnn
Save status	<u>*ALL</u>	*ALL, *ERROR, *NOERROR
Object information	<u>*ALL</u>	*ALL, *DLO, *MBR, *OBJ
Sequence option	<u>*SAVDAT</u>	*SAVDAT, *LIB, *OBJ
From system	<u>*LCL</u>	
Output	<u>*</u>	*, *PRINT



New

File Edit View Communication Actions Window Help

Work with Saved Objects

Position to Date _____

Type options, press Enter.
4=Remove 5=Display 6=Work with media 7=Restore object
9=Work with saved members

Opt	Object	Library	Type	Save Date	Save Time	Volume
█	QCLSRC	QGPL	*FILE	18-03-15	22:57:49	DAG03
_	QCLSRC	QGPL	*FILE	31-03-15	22:53:20	DAG02
_	QCLSRC	QGPL	*FILE	31-07-18	21:12:06	FS01
_	QCLSRC	QGPL	*FILE	4-08-18	9:32:21	FS02
_	QCLSRC	QGPL	*FILE	23-08-18	19:32:03	FSS01
_	QCLSRC	QGPL	*FILE	26-07-19	19:49:23	U7FSS1
_	QCLSRC	QGPL	*FILE	23-08-19	18:06:12	U7FSS2
_	QCLSRC	QGPL	*FILE	26-08-19	23:17:07	U7FSS3
_	QCLSRC	QGPL	*FILE	27-09-19	23:52:45	U7WK05
_	QCLSRC	QGPL	*FILE	28-09-19	23:53:51	U7WK05

F3=Exit F12=Cancel



New

File Edit View Communication Actions Window Help

Work with Link Information (WRKLNKBRM)

Type choices, press Enter.

Directory	<u>' /home '</u>	
Save type	<u>*ALL</u>	*ALL, *FULL, *CUML, *INCR, ...
	+ for more values	
Select dates:		
From date	<u>*BEGIN</u>	Date, *BEGIN, *CURRENT, nnnnn
To date	<u>*END</u>	Date, *END, *CURRENT, nnnnn
From system	<u>*LCL</u>	
Output	<u>*</u>	*, *PRINT

Bottom



New

File Edit View Communication Actions Window Help

Work with Directory Information 30-10-19

Directory : /home

Type options, press Enter.
4=Remove 5=Display 7=Restore 9=Work with objects

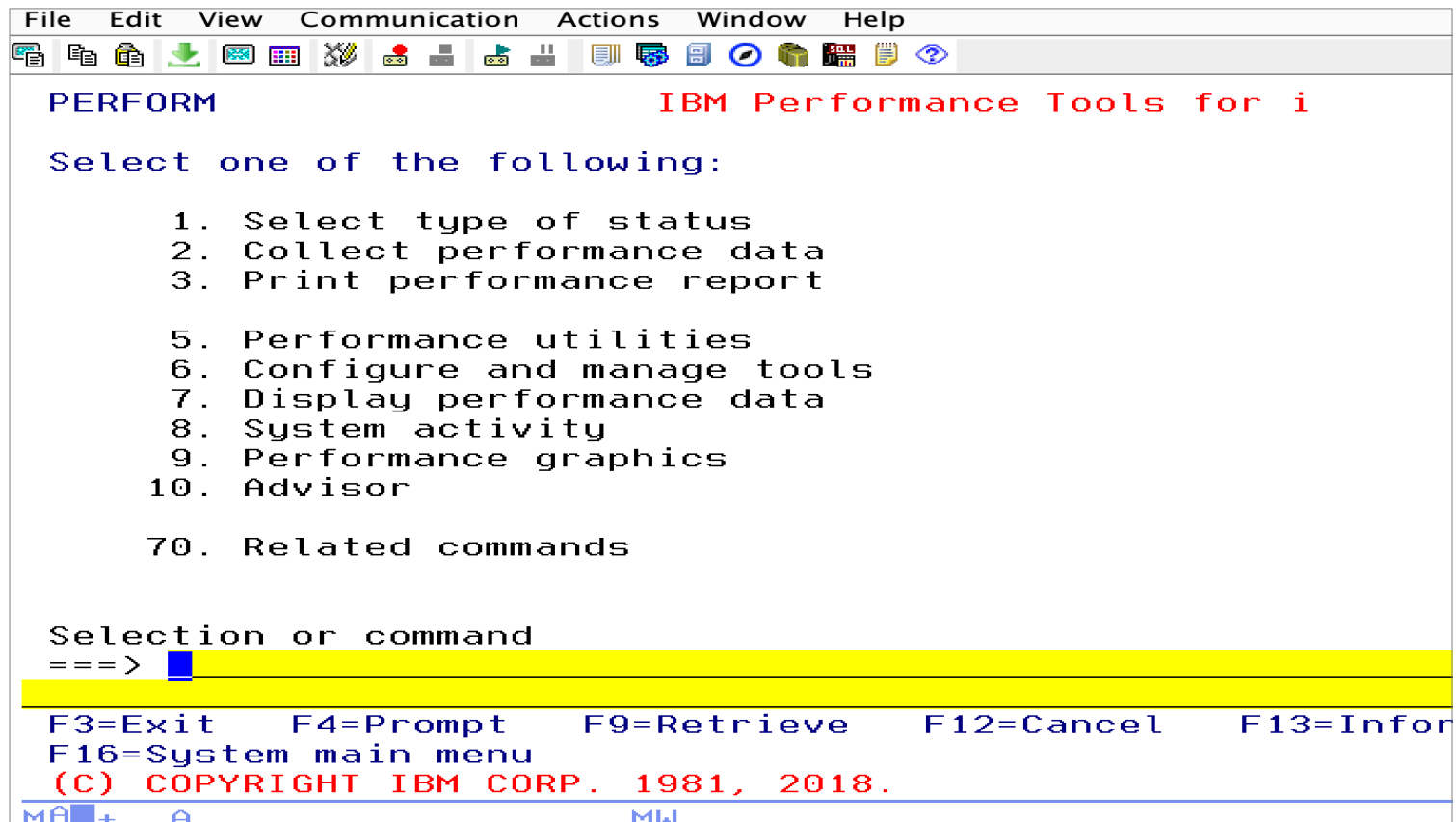
Opt	Date Saved	Time Saved	Save Type	Volume Serial	Expiration Date	Objects Saved
█	31-03-15	23:38:42	*FULL	DAG02	04-04-15	28
—	31-07-18	21:30:06	*FULL	FS01	*VER 002	38
—	04-08-18	09:49:22	*FULL	FS02	*VER 002	38
—	23-08-19	18:16:36	*FULL	U7FSS2	*VER 002	42
—	26-08-19	23:26:28	*FULL	U7FSS3	*VER 002	42
—	28-09-19	00:07:49	*FULL	U7WK05	02-10-19	42
—	29-09-19	00:09:50	*FULL	U7WK05	03-10-19	42
—	30-09-19	00:10:53	*FULL	U7WK05	04-10-19	42
—	05-10-19	00:09:49	*FULL	U7WK01	09-10-19	42

Command
===>

F3=Exit F4=Prompt F5=Refresh F9=Retrieve F12=Cancel F17=Pos
F22=Display entire field

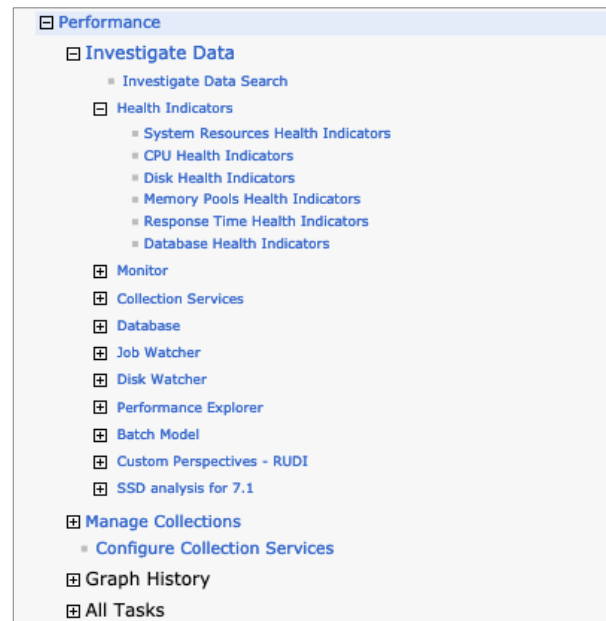


Old





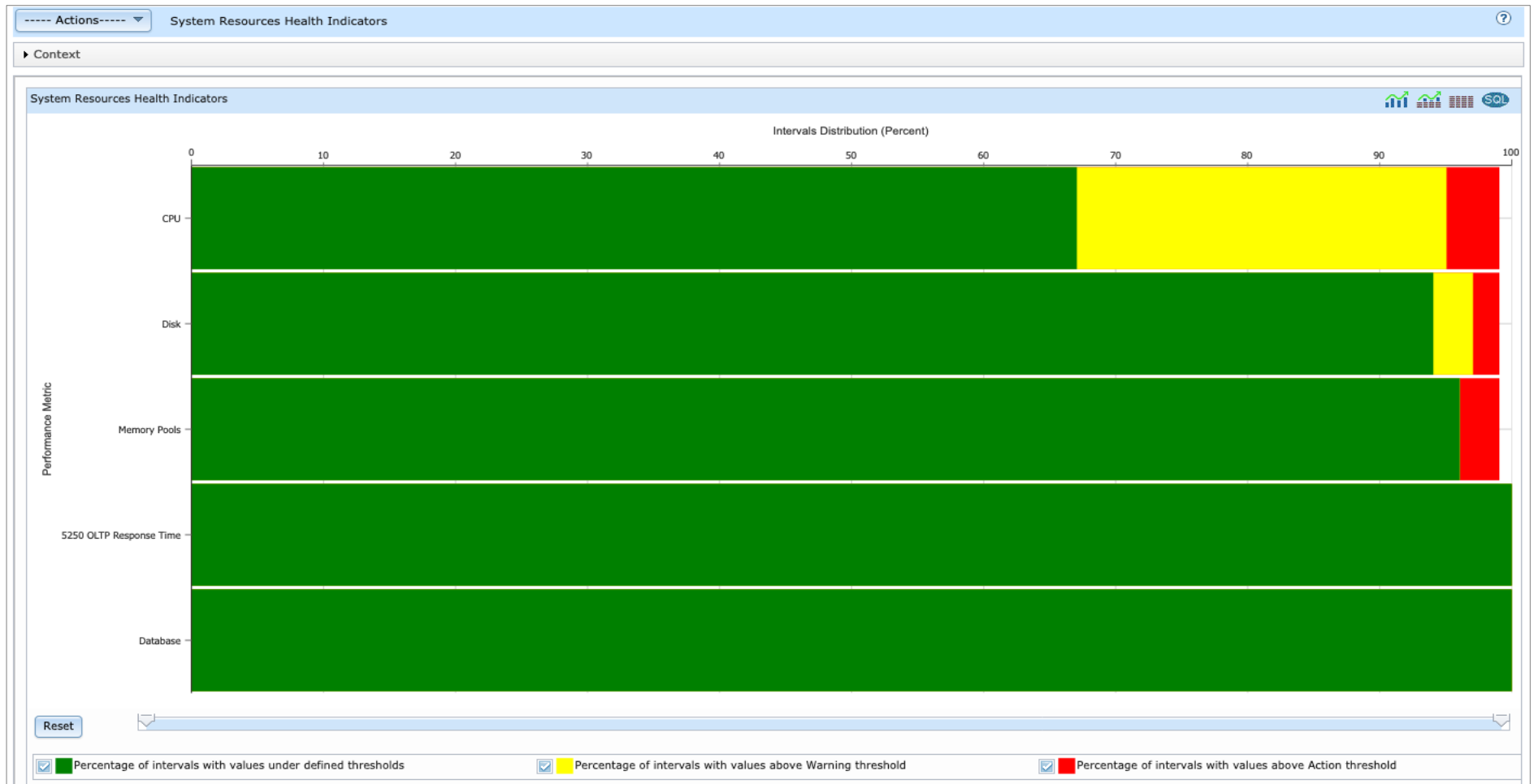
New





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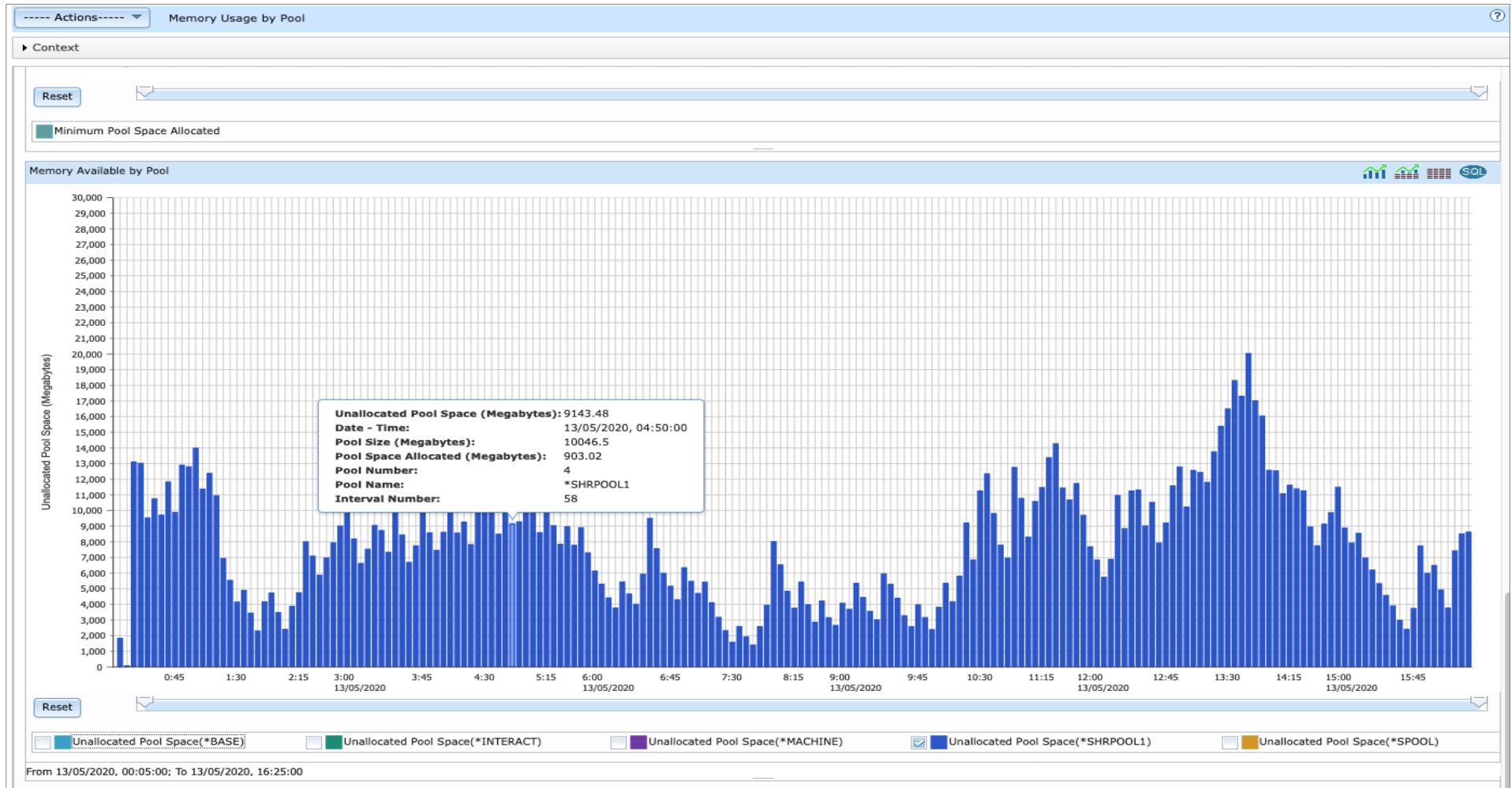
New



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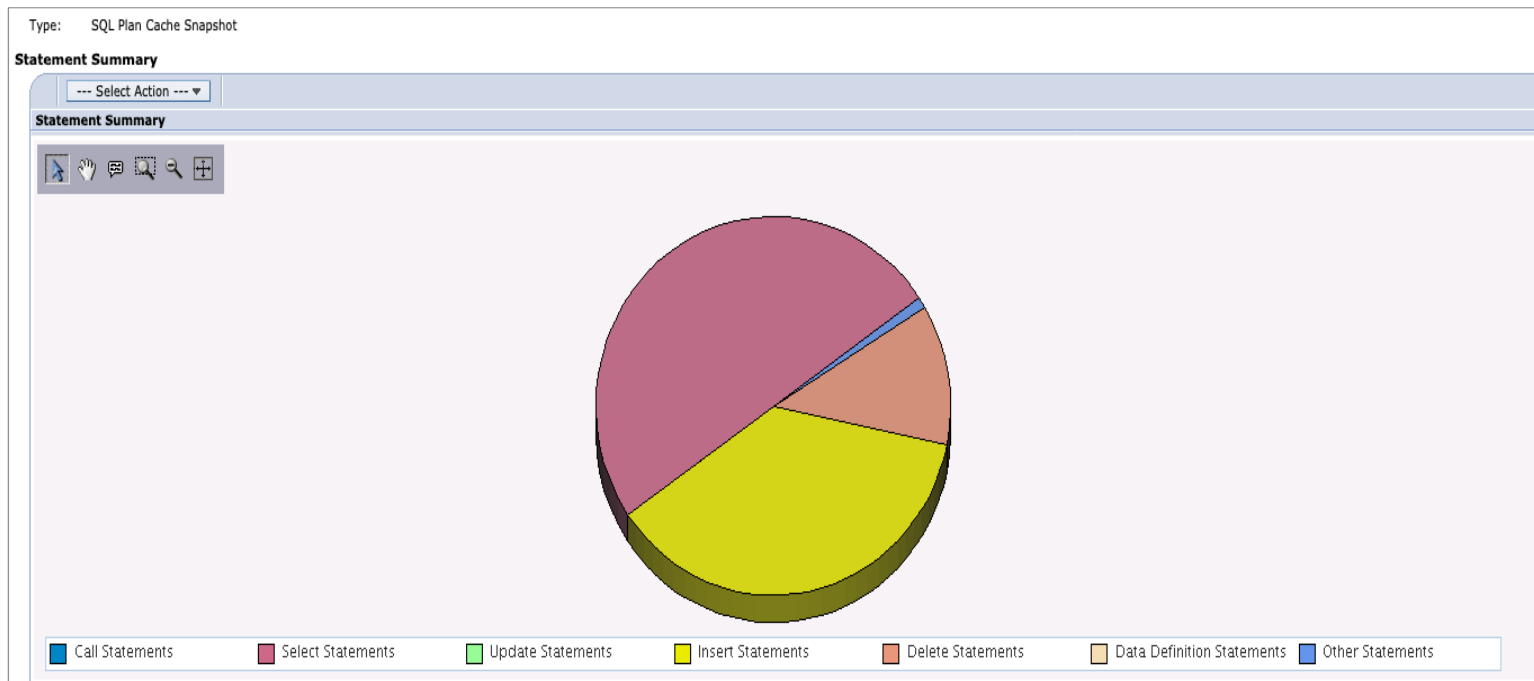
New





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New



The Future.....  am ready



Old

Power Mode Setup

Current Power Saver Mode : Disable Power Saver mode

- Disable Power Saver mode ?
- Enable Static Power Saver mode ?
- Enable Dynamic Power Saver (favor power) mode ?
- Enable Dynamic Power Saver (favor performance) mode ?
- Enable Fixed Maximum Frequency mode ?

Note: Enabling any of the Power Saver modes will cause changes in the processor frequencies, changes in processor utilization, changes in power consumption, and performance to vary. Other effects are possible as well. Please see the EnergyScale™ white paper for more information on power saving modes.

?



New

- Expand all menus
- Collapse all menus
- Power/Restart Control
- System Service Aids
- System Information
- System Configuration
 - System Name
 - Configure I/O Enclosures
 - Time Of Day
 - Firmware Update Policy
 - PCI Error Injection Policy
 - HSL Opticonnect Connections
 - I/O Adapter Enlarged Capacity
 - Hardware Management Consoles
 - Virtual Ethernet Switches
 - Floating Point Unit Computation Test
 - Virtual Trusted Platform Module
 - Hypervisor Dispatch Wheel Time
 - PCIe Hardware Topology
 - Hardware Page Table Size
 - Firmware Configuration
 - Console Type
 - Predictive Dynamic Memory Deallocation
 - Speculative Execution Control
 - Hardware Deconfiguration
 - Program Vital Product Data
 - Service Indicators
 - Power Management
 - Power Mode Setup
 - Idle Power Saver
 - Tuning Parameters

Power Mode Setup

Current Power Saver Mode : Disable Power Saver mode

- Disable Power Saver mode ?
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- Enable Dynamic Power Saver (favor power) mode ?
- Enable Dynamic Power Saver (favor performance) mode ?
- Enable Fixed Maximum Frequency mode ?

Note: Enabling any of the Power Saver modes will cause changes in the processor frequencies, possible as well. Please see the EnergyScale™ white paper for more information on power sav

Continue ?



New

```
Display Firmware Status

Service partition . . . . . : Yes
Firmware update policy . . . . . : *HMC
Server IPL source . . . . . : Temporary
Firmware product ID/release . . . . . : 5733909 V1R1M0
Update access key expiration date . . . . . : 24-09-21

--Server firmware--  -Operating system--
Fix      PTF      Fix      PTF      Update
pack     ID      pack     ID      Status
*ACTIVE  VL910_127  MH01803
          FW910.21
*TEMP    VL910_127  MH01803  *NONE    *NONE    None
          FW910.21
*PERM    VL910_122  MH01799  *NONE    *NONE    None
          FW910.20
          *NONE

Bottom

Press Enter to continue

F3=Exit  F5=Refresh  F12=Cancel
```



New

The screenshot shows a database management tool interface with a menu bar (File, Edit, View, Run, VisualExplain, Monitor, Options, Connection, Tools, Help) and a toolbar. The main window displays a SQL query with line numbers 1 through 12. The query includes comments and a SELECT statement. Below the query, a table displays the results of the query.

```
1 -- category: IBM i Services
2 -- description: PTF - Firmware Currency
3
4 --
5 -- Compare the current Firmware against IBM's
6 -- Fix Level Request Tool (FLRT) to determine if the
7 -- firmware level is current or upgrades are available
8 --
9 SELECT *
10 FROM SYSTOOLS.FIRMWARE_CURRENCY;
11
12
```

FW_CURRENCY	FW_CURRENTFIXPACK	FW_RELEASE_DATE	FW_MACHINE_TYPE_MODEL	FW_RECOMMENDED_UPDATE	FW_RECOMMENDED_UPGRADE
INSTALLED LEVEL IS CURRENT	VL930_101	2020-02-27	9009-41A	-	-



New

- System Actions
- Operations
- Attention LED
- Connections
- Templates
- Updates
- View System Information
- Change Licensed Internal Code
- for the Current Release**
- to a New Release
- Check System Readiness
- SR-IOV Firmware Update
- Legacy
- Partitions
- Partitions** 4
- Properties
- General Settings
- Processor, Memory, I/O
- Power VM
- Virtual I/O Servers
- Virtual Networks
- Virtual NICs

IBM Power S814 (8286-41A) Announcement letter

System firmware

Recommendations are available

[Version Timeline](#)

Version	Release Date	EoSPS Date	Latest version	Latest released
System Firmware SV860_138_056	2018.01.09	Not Announced	SV860_205	2019.06.18
System Firmware SV860_205_165	2019.06.18	Not Announced	SV860_205	2019.06.18

SV860_205 : This is a disruptive update requiring a system restart.

IBM FLRT => Power Systems Recommendations



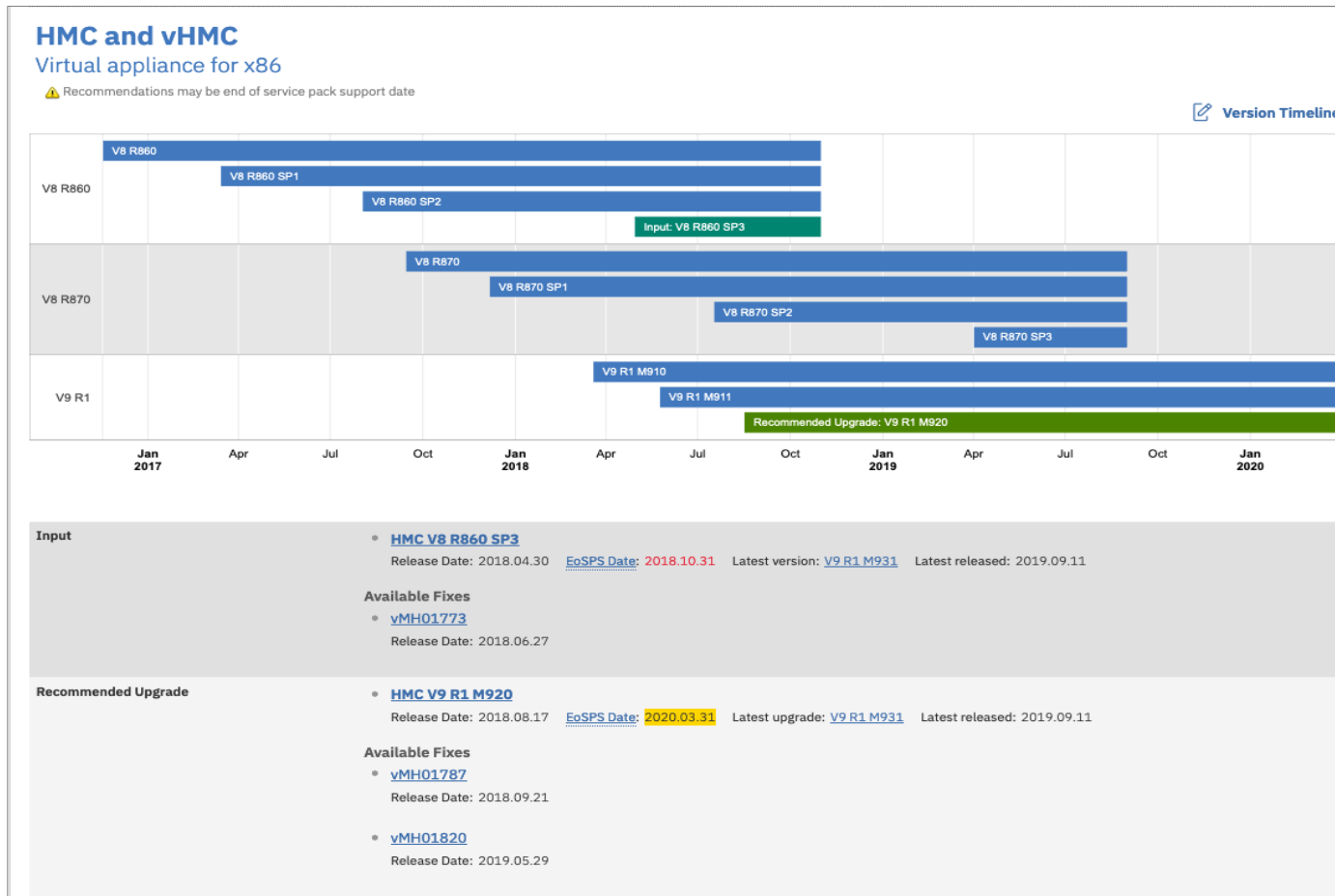
Old

The screenshot displays a user interface for the HMC (Hardware Management Console). On the left, there is a blue sign-in panel with a user icon and the text "Sign In". Below this, there are input fields for "User Name" and "Password", a link "> About HMC Interface", and a "Sign In" button. On the right, there are three green circular gauges showing system health: "1 SYSTEMS are all good", "7 PARTITIONS are all good", and "2 VIOS are all good". Below these gauges, there are two yellow numerical indicators: "1 Attention LEDs" and "61 Serviceable Events".



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New





New





New

Journal Viewer - CUS_PFRDTA.QSQJRN - [REDACTED]

Journal entries:

Filters to apply:

Starting receiver: Current

Ending receiver: Current

Bytes of specific data to display: 100

Starting entry sequence number: 1

Ending entry sequence number: 1

Starting date and time:
Oct 30, 2019 5:09:44 PM

Ending date and time:
Oct 30, 2019 5:09:44 PM

Specific job

Name:

User:

Number:

Journal codes: All

Journal entry types: All

Object details

Type: File

System schema: Use library list of server job

System name: All

Member: All

Users: All

Program: All

Additional filters:

Status: Click Apply or Refresh to load the list



New

The screenshot shows the SQL Performance Center interface. The main window title is "SQL Performance Center - [redacted]". The menu bar includes "File", "View", "Actions", "Tools", and "Help". Below the menu bar, there is a "Database:" field with a dropdown arrow. The main content area has several tabs: "Plan Cache" (selected), "Performance Monitors", "Plan Cache Snapshots", and "Plan Cache Event Monitors". Below the tabs are three buttons: "Show Statements...", "Change Configuration...", and "SQL Details for Jobs...".

The "Properties" section displays a table with the following data:

Description	Value	Value Unit
Time Of Summary	2020-05-13-17.24.34.748213	
Plan Cache Creation Time	2020-05-05-20.33.14.885824	
Active Query Summary		
Number of Currently Active Queries	199	
Number of Queries Run Since Start	588777	
Number of Query Full Opens Since Start	124290	
Plan Usage Summary		
Current Number of Plans in Cache	16665	
Total Number of Plans Built Since Start	23036	
Total Number of Unique Queries Since Start	15673	
Current Plan Cache Size	2563	MB
Current Plan Cache Size Threshold	*AUTO	
Maximum Plan Cache Size For AutoSizing	*DEFAULT (12288)	MB
Current Plan Cache Hit Ratio	82	%
Target Plan Cache AutoSize Hit Ratio	*DEFAULT (90)	%
Total Number of Plan Cache Autosizing Adjustments	7	
Last Plan Cache AutoSizing Adjustment	2020-05-12-23.42.59.589177	
Last Autosizing Limited Due to Temporary Storage	0000-00-00-00.00.00.000000	
Current Number of Job Scoped (QTEMP) Plans	629	
Total Number of Job Scoped (QTEMP) Plans Built Since Start	1785	
Total Number of Unique Queries With Job Scoped (QTEMP) References Since Start	50	
Total Times Plans Used from Cache	101254	
Total Plans Removed	5691	
Total Plans Pruned	680	
Number of Times Plan Cache Pruned	3	
Time Plan Cache was Last Pruned	2020-05-07-00.40.20.348337	
Current Number of Temporary Runtime Objects Stored in Cache	15953	
Current Total Size of Temporary Runtime Objects stored in Cache	4377	MB
Maximum Number of Temporary Runtime Objects Stored Per Plan	*DEFAULT (5)	

Done: 45 rows retrieved.



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Questions?



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Thanks

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