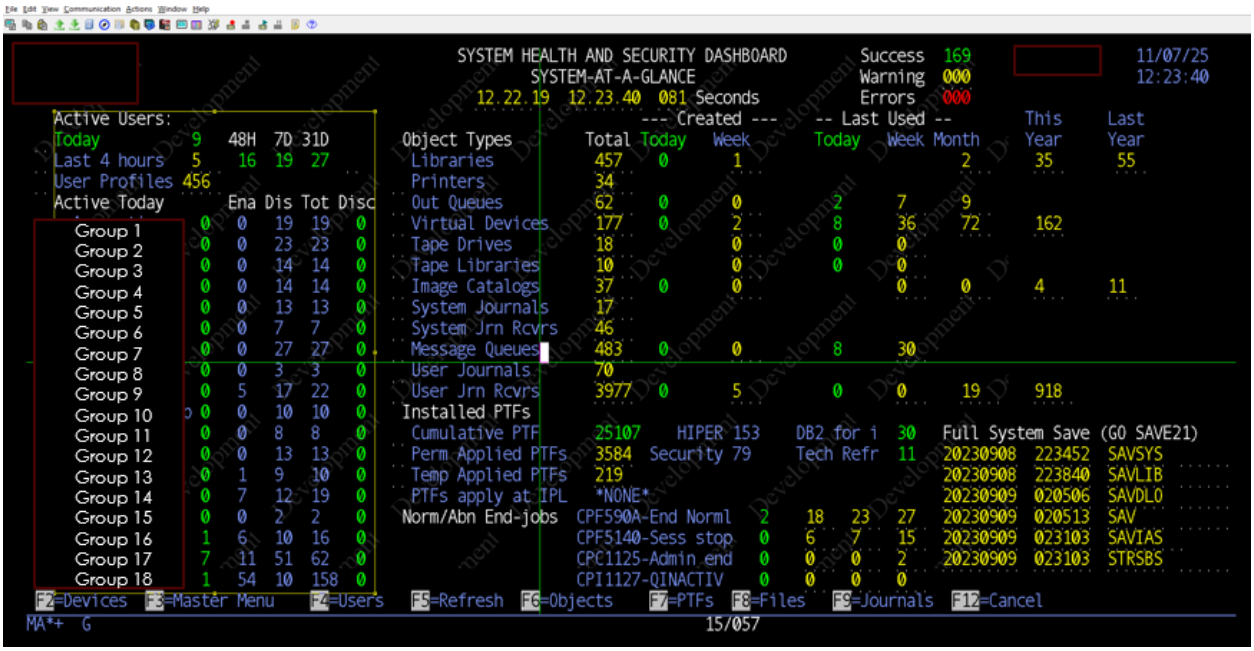
Connecting the Dots...with IBM SQL Services

Presentation Handout

Customized SQL Services for objects, devices and users



1. **Libraries on the system**

```
SELECT count(*)
        FROM table (qsys2.object_statistics('*ALL', '*LIB')
```

2. **Who created the new library?**

```
SELECT *
        FROM table (qsys2.object_statistics('*ALL', '*LIB') )
        WHERE date(objcreated) = date(current_date)
```

3. **How many virtual devices have been created in the last 7 days?**

```
SELECT count(*)
        FROM  table (qsys2.object_statistics('QSYS', '*DEVD') )
        WHERE objat00001 like '%VRT%' and
                date(objcreated) >= date(current_date - 7 days)
```

4. **How many different users have signed on in the last 9 hours?**

```
SELECT count(*)
        FROM    user_info
        WHERE  time(previous_signon) >= time(Current_time - 9 hours) and
                date(previous_signon) =  date(current_date)
```

5. **How many disconnected sessions are there on the system now?**

```
SELECT count(*)
    FROM  TABLE(QSYS2.ACTIVE_JOB_INFO(DETAILED_INFO=>'ALL'))
    WHERE job_type <> 'SYS' and job_status = 'DSC'
```

A Sample of the different types of jobs on your system

6. **List of ODBC/JDBC <u>unencrypted</u> jobs (data jobs) in subsystem QUSRWRK QZDASOINIT**

```
SELECT count(*)
    FROM  TABLE(QSYS2.ACTIVE_JOB_INFO(
          JOB_NAME_FILTER => 'QZDASOINIT',
          SUBSYSTEM_LIST_FILTER => 'QUSRWRK'))
```

7. **List of IFS <u>unencrypted</u> jobs in subsystem QUSRWRK (Rem App Svr) QPWFSERVSO**

```
SELECT count(*)
    FROM  TABLE(QSYS2.ACTIVE_JOB_INFO(
          JOB_NAME_FILTER => 'QPWFSERVSO',
          SUBSYSTEM_LIST_FILTER => 'QUSRWRK'))
```

8. **List of ODBC/JDBC encrypted jobs (data jobs) in subsystem QUSRWRK**

QZDASSINIT

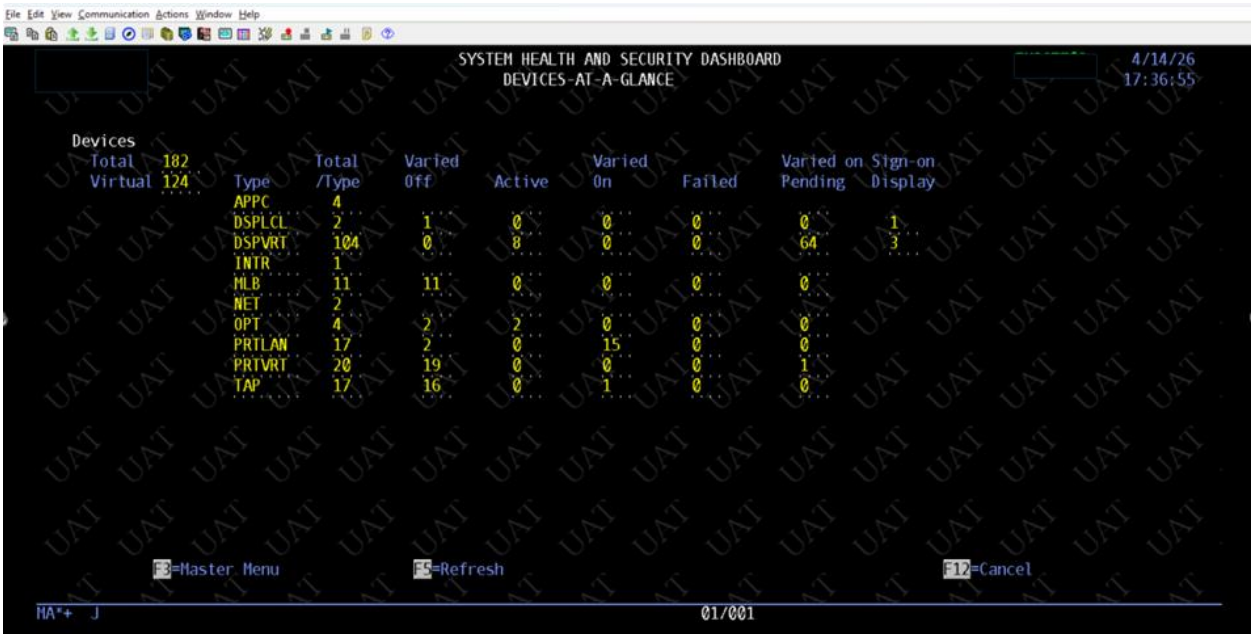
```
SELECT count(*)
        FROM  TABLE(QSYS2.ACTIVE_JOB_INFO(
              JOB_NAME_FILTER => 'QZDASSINIT',
              SUBSYSTEM_LIST_FILTER => 'QUSRWRK'))
```

9. **List of IFS encrypted jobs in subsystem QUSRWRK (Rem App Svr)**

QPWFSERVSS

```
SELECT count(*)
        FROM  TABLE(QSYS2.ACTIVE_JOB_INFO(
              JOB_NAME_FILTER => 'QPWFSERVSS',
              SUBSYSTEM_LIST_FILTER => 'QUSRWRK'))
```

Examples of using an IBM SQL Service with output from WRKDEVSTS *PRINT
(saved to a database file)



10. **List of Local Devices at a sign-on screen**

***** This would be your system console (DSP01) at a sign-on screen.**

```
SELECT substr(count(*),1,4)

    FROM    table (qsys2.Object_Statistics('QSYS', '*DEVD') ) as a
    JOIN    tmp_WRKCFG as b
    ON      a.objname = b.tmp_devdes
    WHERE   a.objat00001 like '%DSPLCL%'
            and b.tmp_devsts = 'SIGNON DISPLAY'
```

11. **List of ACS (or other 5250 Emulation) Devices currently in use (*ACTIVE)**
(joined with output from WRKDEVSTS *PRINT saved to a database file)

```
SELECT substr(count(*),1,4)

    FROM    table (qsys2.object_statistics('QSYS', '*DEVD') ) as a
    JOIN    tmp_WRKCFG as b
    ON      a.objname = b.tmp_devdes
    WHERE   a.objat00001 like '%DSPVRT%'
            and b.tmp_devsts = 'ACTIVE'
```

12. **List of Optical (DVD) Varied *OFF devices**

```
SELECT substr(count(*),1,4)
        FROM  table (qsys2.object_statistics('QSYS', '*DEVD') ) as a
        JOIN    tmp_WRKCFG as b
        ON              a.objname = b.tmp_devdes
        WHERE       a.objat00001 like '%OPT%'
                        and b.tmp_devsts = 'VARIED OFF.
```

13. **List of LAN Printers Varied *ON devices**

```
SELECT substr(count(*),1,4)
        FROM  table (qsys2.object_statistics('QSYS', '*DEVD') ) as a
        JOIN    tmp_WRKCFG as b
        ON              a.objname = b.tmp_devdes
        WHERE       a.objat00001 like '%PRTLAN%'
                        and b.tmp_devsts = 'VARIED ON'
```

14, **List of System Limits messages for the last 15 days**

Spool files or Maximum number of all rows in a file/table

A. 15000-Limit on Maximum number of rows: 4,294,652,340
B. 19002-Limit on Spool files: 2.610,000

```
SELECT *
        FROM TABLE (QSYS2.HISTORY_LOG_INFO(START_TIME
                => CURRENT DATE - 15 days))
        WHERE message_id = 'SQL7062' and
                        date(messa00003) > current_date - 15 days
```

Find out how many more alerts there are to come...

*** Refer to ibm.biz/DB2forIAlerts for more detail

Customized SQL Services for PTFs

```
                                SYSTEM HEALTH AND SECURITY DASHBOARD                    1/25/25
                                          PTFS-AT-A-GLANCE                              21:46:07
     -- Last Updated --   Licensed  Group                  --Current Level--    --- Applied ---          Num of
                          Program   PTFs    Description     Installed  Available  Temp  Perm  Supd  Last IBM Upd  Days
     2025-01-06 15.34.38            SF99740 Cumulative        24319      24319                          2024-11-22    64

                                    SF99704 DB2 for i            29         29                          2024-12-12    44
                                    SF99739 HIPER               141        142                          2025-01-07    18
     2024-03-06 18.39.23  5733SC1   SF99738 Security             72         72          10    56        2024-12-10    46
                                    SF99737 Tech Refrsh          11         11                          2024-11-20    66
     2025-01-06 16.03.31  5770DG1   SF99662 HTTP                 39         39     1    75   113       2024-12-20    36
     2024-03-06 18.39.23  5770JV1   SF99665 Java                 25         25     4    58    73       2024-10-11   106
                                    SF99666 High Avail           19         19                          2024-10-11   106
                                    SF99668 DB2 Mirror for i     25         25                          2024-12-12    44
     2024-10-03 13.26.01  5770TC1   SF99667 TCP/IP               13         13          25    47        2024-09-29   118
     2024-10-03 14.22.03  5770PT1   SF99663 Perf Tools           14         15          15     3        2025-01-09    16
     2025-01-06 15.24.38  5770WDS   SF99661 IBM RationalWDS      10         10     1    39    41        2023-02-08   717
                                            Content Manager                                             0001-01-01
                                    SF99675 Hardware Relat       2          2                           2020-01-16   183
     2025-01-06 16.29.51  5770BR1   SF99664 BRMS (Backup)        45         45     1     8    20        2025-01-02    23
     2025-01-06 16.31.55  5770SS1           Operating System                   131  1774  3328        0001-01-01
     2025-01-06 15.00.26  5770999           Licensed Internal Code             50   1264  1247        0001-01-01

                                    Defective:

F2=Devices  F3=Master Menu   F4=Users   F5=Refresh  F6=Objects   F7=PTFs  F8=Files   F9=Journals  F12=Cancel
MA*+  H                                                  24/076
```

15. **When has the last CUM PTF package been installed?**

```
Select date(stattime), time(stattime)
        FROM  ptf_info
        WHERE licpgm ='5770SS1'
                        and ptfid like 'TC%'
        ORDER BY STATTIME desc fetch first 1 rows only
```

16. **When was an operating system (OS) PTF applied to your system?**

```
Select licpgm, lic_term, installed, feature
        FROM qsys2.License_Info
        WHERE Licpgm = '5770SS1' and feature = '5050'
                and installed = 'YES';
```

17. **When was the last DB2 for i PTF package installed?**

```
Select max(PTF_Group_Level)
        FROM  QSYS2.Group_PTF_Info
        WHERE       PTF_Group_Name = 'SF99704' and
                    PTF_Group_Status = 'INSTALLED'
```

18. **When was the Java PTF Group last updated by IBM?**

```
Select      GRP_ID,  substr(GRP_LVL,1,3),  substr(GRP_IBMLVL,1,3),
            GRP_lstupd,  days(current_date) - days(GRP_lstupd)

        FROM        SYSTOOLS.Group_PTF_Currency
        WHERE       GRP_ID = 'SF99665'
                    and GRP_SysSts = 'INSTALLED';
```

Example of a DEFECTIVE PTF identified by IBM

19. **Only DEFECTIVE PTFs <u>applied already to your system</u> will be shown**

```
Select      GRP_ID, substr(GRP_LVL,1,3), substr(GRP_IBMLVL,1,3),
            GRP_lstupd, days(current_date) - days(GRP_lstupd)

FROM        SYSTOOLS.Group_PTF_Currency
WHERE       GRP_ID = 'SF99665'
            and GRP_SysSts = 'INSTALLED';
```