



IBM Software Group

Selected Excerpts from 2011 AOTC Session A02: Recently Delivered Capabilities of AF/Operator, OMEGACenter Gateway, and AF/IRM



@business on demand.

New AF/Operator and OMEGACenter Gateway Features added via PTF's

UA46597 – New Internal Status Variables

- Four new internal status variables, 2 system & 2 global, added to aid the user in managing automation resources.
 - ▶ System variables:
 - **AOFREMAT** - Number of unused matches
 - Integer type variable
 - Read only
 - Calculated by subtracting the number of active matches from the defined maximum number of matches (MAXMAT)
 - If this value reaches zero (0), no further matches can be added
 - **AOFRETRP** – Number of unused traps
 - Integer type variable
 - Read only
 - Calculated by subtracting the number of added traps from the defined maximum number of traps (MAXTRP)
 - If this value reaches 0, no new traps can be added (TODs excepted)

UA46597 (cont)

- ▶ Global variables:
 - **AOMSGCNT** – Number of messages issued for a match
 - Integer type variable
 - Read only
 - If this number reaches the currently defined message limit, MSGLIM, the match is terminated with a U722 abend

 - **AOCPUVAL** – Amount of CPU used by a match in milliseconds
 - Integer type variable
 - Read only
 - If this number reaches the currently defined CPU time limit, CPULIM, the match is terminated with a U322 abend
 - CPULIM can be reset during match processing with the CPULIM REXX function

UA50926 – System Managed Cache Rebuild

- Support has been added for system-managed rebuild of the coupling facility cache data structure used for the “SYSPLEX” REXX shared variable pool.
 - ▶ Allows a planned SYSPLEX reconfiguration where the structure is moved.
 - ▶ AF tasks remain active and connected to the structure during the rebuild.
 - Any matches accessing the structure during the rebuild are merely suspended during the rebuild, they will resume normally when complete.
 - ▶ All connected AF tasks should have the PTF applied and the option selected in the startup parameters.
 - ▶ The structure must be defined with the appropriate attributes.

UA55377 – WLM information retrieval

- A new REXX function allows WLM information to be extracted for a selected job.
 - ▶ Syntax: **RC=WLMQUERY(jobname or jobname.stepname)**
 - ▶ WLMQUERY returns information including:
 - Performance group number.
 - Domain number.
 - CPU time.
 - Elapsed time.
 - Current workload name.
 - Current service class name.
 - Current service class period.
 - Current resource group.

UA46967 – Sort SHOW RSV Command Output

- The output from the AF command SHOW RSV (REXX Shared Variables) is not in an ordered sequence.
- This PTF provides sample REXX code to sort the command output in alphabetical order.
 - ▶ Member **KOGSORTV** in *hilev.TKANSAM*
 - ▶ Any valid SHOW RSV keywords can be provided as arguments. e.g.
 - EX KOGSORTV 'POOL(SYSPLEX)'
 - ▶ Utilizes the AFSHOW REXX function.

z/OS Currency Support

- z/OS Version 1.11 Currency Support – UA47948 and UA52245.
 - ▶ Without these PTFs, AF may fail to start.
 - System abends 806, 206 or 0C4 may occur at startup.
 - ▶ If AF does start:
 - No data is written to VSAM checkpoint dataset.
 - Data is restored normally so TOD's, RSV's etc. are re-loaded at startup, but updates do not take for when next recycled.
 - An S378-0C may occur at shutdown.
- z/OS Version 1.12 Currency Support – UA53173.
 - ▶ A non-critical update to XCF communications.
- z/OS Version 1.13 Currency Support – No PTF's at this time.

IMS Currency Support

- IMS Version 10 generic names processing – UA48066.
 - ▶ /DIS commands with generic names (e.g. /DIS TRANS ABC*) issued through the SLF DFSCMTI interface return a null response or message DFS1267 if this PTF is not applied.
- IMS Version 11 support – UA50986.
- IMS Version 12 support – UA58173.

UA49259 – IMSCMD Startup Parameter

- New IMSCMD startup parameter
 - ▶ Used to designate the interface / delivery method for IMS command processing (i.e. How IMS commands are delivered from the AF IMSCMD REXX function and SLF to the IMS control region)
 - ▶ Valid options are:
 - **ITASK** – IMS commands delivered using the DFSCMTI / ITASK method only
 - **BMP** – IMS commands delivered using only the BMP method
 - **BOTH** – Delivery of an IMS command is first attempted using the DFSCMTI / ITASK method. If this method is unavailable, the BMP method is attempted.
 - ▶ **BOTH** is the default and was the standard method prior to this PTF.
 - ▶ Coded in RKANPAR as IMSCMD(option),

UA50289 – POVILOGN Parameters

- LOGON command keyword options CYCLE, NOCYCLE and TRACE could not be coded on the POVILOGN command prior to this PTF
- A 7th argument is added to the POVILOGN command that can be used to provide any additional keyword options in a freeform format
- For example,
 - ▶ RC = POVILOGN(applid,session,,,,,'CYCLE TRACE')
 - ▶ Order, text, spelling, etc. is not validated so be careful typing!

UA48913 – Allow trapping of WTO IEA705I

- IEA705I – Message indicating an error during processing of a GETMAIN, FREEMAIN or STORAGE macro
- This PTF removes the blocking that was in place to prevent trapping the IEA705I WTO
- An IPL is required to implement this PTF

UA52936 – IMSOPER serialization update

- IMSOPER now serializes between AF tasks on the same LPAR.
 - ▶ Prior to this PTF, if two AF tasks on the same LPAR issued the IMSOPER command for the same IMS WTOR at virtually the same time only one would be honored and the other would get IEE704I REPLY NOT OUTSTANDING.

UA54120 – Honor LRECL when writing SYSOUT

- When writing SYSOUT datasets from a match the LRECL used on the ALLOC will be honored.
 - ▶ It was previously always ignored and a 133 byte record length resulted.

UA58507 – OMEGAMON for DB2 currency

- OMEGAMON for DB2 now has an alternate layout to its INFO-LINE.
- Apply UA58507 as currency for when the alternate is enabled
 - ▶ Otherwise an S0C7 may be experienced in AOOMCMD.

Classic INFO-LINE

```
_____ ZMENU   VTM     O2       V420./C NONE 01/11/11  9:04:59 106
```

Alternate INFO-LINE

```
_____ ZMENU   VTM     O2       V420./C D81D S 01/11/11  9:06   126
```

New AF/IRM Features Added via PTF's

UA53453 – System and User Variable Refresh

- When changes are made to System or User variables in the AF/IRM User Interface (Option 12), the system variables derived from these changes will now reflect the UI updates .

▶ New APL command option:

- VARLOAD

The TBL REF table_name command will now support the new VARLOAD parameter. The new format will be TBL REF table_name VARLOAD.

Sample:

If the “System MS1 Workload” field in the UI option 12.3 was changed and the TBL REF table_name VARLOAD was issued, the @APLMS1 variable in the runtime will now reflect the change.

UA51965 Max System Restriction of 24 Systems

- ▶ Max systems allowed:
 - The number of systems allowed in AF/IRM was limited to 24 in the AF/IRM User Interface.

A new system variable was added to panel KAUAP31 (Option 12.3) in the AF/IRM User Interface called “System Resource Groups” (@APLGRPS).

A number of systems can now be grouped together. The new group name can then be used as a system indicator when defining a new resource. The resource will then be managed on all systems that belongs to that system group.

UA57524 – Monitor command

- Issuing the Monitor command for a Non IRM resource.
 - ▶ If a resource was started outside AF/IRM and then introduced to automation with the Monitor command, AF/IRM will now issue message ASOA095I to inform you if recovery was intended and not activated.
 - ▶ The correct approach will be to start the resource using AF/IRM commands so the proper recovery environment can be created.