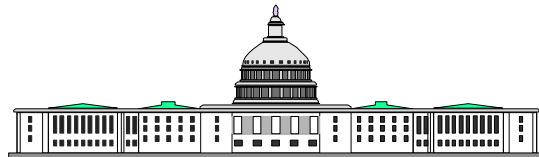

Compatibility to Goal Mode Migration Considerations

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TOPICS

- Naming Conventions
- IEAIPSxx Parameters
- IEAOPTxx Parameters
- Mode Changes
- DUMPSRV and WLM
- Service Definition Version Management
- Enqueues and WLM
- References
- Questions

Naming Conventions

- Beyond the scope of this project to define your naming conventions
- However,
 - Goal mode introduces new constructs which should be named using a convention
 - Be aware of sort sequence
 - Names will be contained in monitor data
 - Should be able to identify type of construct

BATCH_WKL

WORKLOAD

BATHISC

SERVICE CLASS

BATLORG

RESOURCE GROUP

IEAIPSxx Parameters

<u>User Specified Option</u>	<u>IPS Parm</u>	<u>Goal Mode</u>
MPL control	CNSTR(a,b)	No External
Storage isolation	CPGRT,CWSS,PGGRT,PWSS	No External
User dependent coeff.	CPU,IOC,MSO,SRB	Service Definition
Dispatch priority	DP=	Goal
Estore control	ESCRTABx	No External
I/O priority	IOQ=FIFO/PRTY IOP= YES/NO *	PRTY=YES No External
I/O service time	SRVC=TIME/COUNT	No External
Workload performance	Performance Group	Service Class
Privileged dispatch	PVLDP	No External
Response time for 1st. period TSO	RTO	N/A
Time slicing	TSDP,TSGRP,TSPTRN	N/A
Duration units in seconds	UNT=R	N/A

* As of OS/390 V1R3

IEAOPTxx Parameters

<u>User Specified Option</u>	<u>Parameter</u>	<u>Goal Mode</u>
Tape device selection	SELTAPE	YES
Special options	CNTCLIST, DVIO	YES
ENQ residence constants	ERV	YES
SRM interval constant	RMPTTOM	YES
MPL adjustment constants	RCCCPUT, RCCPTRT, RCCUICT	NO
Logical swap constants	LSCTMTE, LSCTUCT, LSCTFTT, LSCFET	NO
CPU management constant	CCCSIGUR	NO
Pageable storage shortage constants	MCCFXEPR, MCCFXTPR	YES
Central and expanded storage threshold constants	MCCAFTCH, MCCAECTH	YES
Maximum swap set size	MCCMAXSW	NO

IEAOPTxx Parameters

<u>User Specified Option</u>	<u>Parameter</u>	<u>Goal Mode</u>
Expanded storage constants	ESCTPOC,ESCTSTC, ESCTSWTC,ESCTSWWS, ESCTVIO,ESCTVF, ESCTBDS	NO
Selective enable for I/O constant	CPENABLE	YES
Swap rate scaling factor	SWAPRSF	NO

Mode Changes

- WLM IPL mode is controlled by IEASYSxx
 - IPS=xx statement present Compat mode
 - IPS=xx statement missing Goal mode

- WLM mode after IPL
 - F WLM,MODE=GOAL
The sysplex member switches to goal mode

 - F WLM,MODE=COMPAT
The sysplex member switches to compat mode
 - IPSxx members used if system used compat mode during this IPL
 - Uses default PGNs if system never in compat mode during this IPL
WTO issued to identify this situation
You do NOT want to run this way. Issue the required SET IPS command

DUMPSRV & WLM

- DUMPSRV can cause performance problems for OS/390 systems during dump processing
 - Caused by ESTOR being polluted with DUMPSRV pages at the expense of other workloads
 - COMPAT mode solution was the use of ESTOR Criteria tables. Described in APAR OY55972

```
SCHEDxxx
      PPT PGMNAME(IEAVTDSV) KEY(0) NOPRIV SYST NOSWAP NOPASS
IEAICSxxx
      TRXNAME=DUMPSRV , PGN=5
IEAIPSxxx
      DMN=5 , ESCRTABX=3
      PGN=5 , ( DMN=5 )
IEAOPTxxx
      ESCTPOC(3)=32767
      ESCTSTC(3)=32767
```

- Goal Mode automatically directs DUMPSRV pages to AUX. unless 'significant' space is available in ESTOR

Enqueues & WLM

- **Compatibility Mode**
 - ERV and PVLDP values used to manage enqueue contention dispatch priority adjustments
- **Goal Mode**
 - PVLDP is gone
 - Adjustment period is still controlled by ERV
 - Enqueue dispatch priority is adjusted dynamically
 - Priority is set so 40% of workload has a higher priority

Service Definition Version Management

- The user defined PDS should be used for version management
- Updates to the service definition should use the following steps:
 - Load service definition from the couple data set
 - Store the service definition in a new user defined PDS. This PDS will contain all subsequent changes to the service definition.
 - All saves and exits from the WLM Administration Application will store the updated definition in this PDS.
 - Update the service definition
 - Store the new service definition in the couple data set
 - Activate the new service policy
 - Exit the WLM administration application
 - The new PDS and production couple data sets are in synch
 - The previous PDS contains the previous version of the service definition.

References

- MVS Planning: Workload Management GC28-1761-04
- MVS Programming: Workload Management Services GC28-1773
- MVS System Commands GC28-1781-04
- [HTTP://WWW.S390.IBM.COM/WLM](http://www.s390.ibm.com/wlm)