

IBM Software Group

Revisiting Your Naming Conventions for z/OS

Session RAA9
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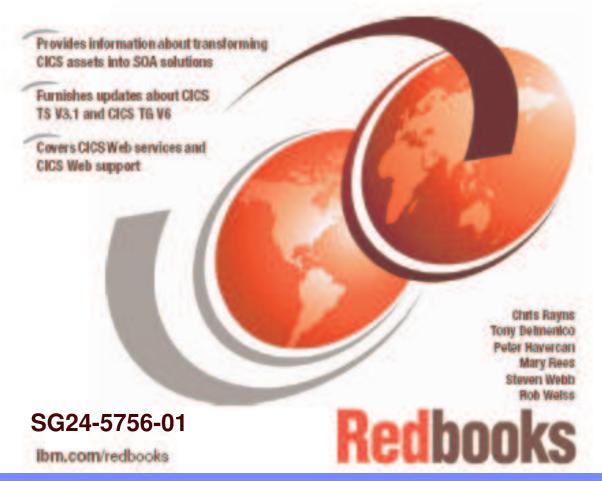
I'm a member of the WWISCP.

And, I've been in IBM for over 30 years.





Securing Access to CICS Within an SOA





How do you know when it's broken?

- Your enterprise may be living with a naming convention (or lack of same) which most customers moved away from in the early 1980s.
 - Does "T.*" and "P.*" or "TEST.*" and "PROD.*" look familiar?
 - -If so: You may be on the verge of a significant headache!





How do you know when it's broken?

- If the pattern used today causes excessive administrative headaches for
 - security,
 - -systems management,
 - data management,
 - performance management (more focused as opposed to the "workload at large"),
 - disaster recovery, and
 - other disciplines

Then it's time to address a *new* convention that relieves the headaches!



Establish a naming standard that will carry over to JCL and be informative.

Consider a Data Set Name that resembles the following:

An EXAMPLE... (only an example)

- HLQ!CreatingJobName!CreatingJobStep!CreatingDDName!description
- A name of this format will identify the source of the file and include a brief description of the file's function.
 - JOBName: The JOBNames should be in ascending order so the precedence of the JOB flow is readily apparent. It should begin with the HLQ. (Yes I know it's redundant!)
 - JOBStep name: The JOB Steps should also be in ascending order, leaving room for insertions.
 - Program name: This should have a suffix which identifies the program's function. Recognize that where software packages are acquired, this may not be possible to enforce. It should begin with the HLQ. (Yes I know it's redundant!)



Questions to consider in selecting your naming convention

- Can you look at a DSN and tell:
 - where the file was created,
 - what program created it and
 - -its general content or format?
- Can you tell what application family it belongs to?
- How do you know who is authorized to alter the program (emergency change, change control...)?



Questions to consider in selecting your naming convention

- Can you migrate to the new standard as an evolutionary process?
 - As JOBs and PROGRAMs get re-worked, that's a good time to make changes.
 - There will be a requirement to keep the old master files and such for a while. If practical, rename those which are disk resident. Hopefully, the ones on tape can just be scratched in a few months.



Guidelines

- There will always be exceptions
- Nothing is forever
- You may have several generations of naming conventions active today
 - Mergers
 - Standard Changes without consideration of migration
 - —It could just be chaos!



What are the strong points of what you have today?

- Does it just need a tweak?
- Let's hear your side
 - where you think it's working well
 - where it's not working well Why?

(I'll record the comments as we go. If you want, I'll consolidate them and make it available to anyone of YOU who request it.)

There is no single solution that suits everyone.



Migration considerations and techniques

Clean Up the existing RACF DBs

- -Eliminate redundant profiles,
- —Streamlining the RACF DB.
- That will make it easier to identify profiles that cover existing data sets, easing the transition to the (potential) new environment.



Changing the Naming Convention

- Should be done over a period of 6-8 years.
 - Time frame most applications receive significant maintenance.
 - As significant work is done to the applications, especially when the file structure is changed, the new naming convention must be fully implemented.
- At the end of the six to eight year period, 90% of the applications will be on the new standard.
 - The remaining ones can be fixed in short order.

Faster Alternative

- Build a clone of the current environment in a single image.
- Port work to that image for conversion.
- Use PROCs for the JCL with SET and other JECL cards to standardize the JCL. (Many variables to manage all situations.)
- Port the JCL back with a one time override for the "Balance Forward Master."

Gain Senior Management Support

- Gain senior management commitment to the proposed project.
- This support and approval should come from the CIO, CFO, CTO, and ISO.
- That commitment should provide multi-year funding, multi-year support as a priority
- Executive instructions to all of ISD to make this effort a priority.

Project Kickoff

- Organize a small committee with representation from each of the ISD Systems Support components represented and leaders from Application Development
- Conduct a thorough planning session to determine the best naming convention and implementation technique suitable for your installation.
- Begin implementation with an application family that is complicated enough to gain adequate experience but well enough contained that the size of the effort is quantifiable.
- Create a schedule and execute against that schedule to create a model for the next application to be migrated.
- You want all aspects of ISD to "buy into" the project.



Additional Industry BEST PRACTICES

- Critical RACF Best Practices that will improve performance
- If you are partitioned:
 - Potentially eliminate the partitioning of the RACF DB.
 - You may find the I/O rate to the RACF DBs is in the single digits.
- The KISS Philosophy works.
- Facilitates rapid adherence to legislative requirements
 - GLBA
 - SOX
 - EU Requirements including ISO-17799-2
 - And others yet to come



RACF Naming Conventions Table or Exit

- Allows internal names to RACF to be different from the actual (true) file name.
- Gives you a temporary "Band-Aid" by re-arranging or altering a DSN to facilitate the "cleanup" part of the project.
- It can easily drive your admin's crazy.
 - They will get the RACF name back rather than the true name.
 - They must administer by the RACF name.
 - Consider using DBSYNC or equivalent for creating the new profiles, with a lot of accurate editing.



Naming Convention Implementation

- An aggressive implementation plan is necessary to properly relieve the constraint on
 - RACF,
 - Catalogue,
 - –JES2 and
 - other system functions.



The Advantages of a Good Long Term Solution

- The implementation of a reasonable, best practices Naming Standard through an aggressive Implementation plan will carry your installation's ISD far into the foreseeable future.
- To avoid future issues, it is essential that your installation's ISD continue to monitor and evolve with best practices.

References

- Parallel Sysplex Application Migration GC28-1863
- SC26-7407: The z/OS Planning book Migration guide to SMS; "DFSMS: Implementing System-Managed Storage" Good ideas for subsystems.
- Numerous "panic performance" engagements
 - "Help. We're broken!"
 - Lots of RMF and GTF data
 - Piles of RACTRACE
 - Even some JMF reports!!! (for you JES3 fans)
- Informal studies and recommendations by IBM RACF, Catalog Management, DASDM, JES2, JES3, and other design teams. (The information is proprietary and not customer available.)



Discussion

DISCUSSION DISCUSSION DISCUSSION

June 13, 2007



It's going to take me a little longer to answer my e-mails now....





BLACK