

caWorld¹⁰

CA MICS[®]

observations:
practical best practices

MR230SN

Mainframe and Application Development



Have you ever thought that your CA MICS implementation might be a bit different than other sites? Being different does not make it wrong, being different could mean getting it right. The reality is that CA MICS can and should be implemented in such a way that it supports your unique configuration. There is flexibility in your implementation; for example, are two units sufficient or do you need twenty plus? In this session you will hear how to apply best practices in a practical manner.

Agenda

- Create a balanced complex
- Optimize SMF data collection
- Define and maintain accurate Account Codes
- Know your users
- Stay current on technology
- Use parameter and maintenance shortcuts
- Automate reporting
- Outside of the box reporting

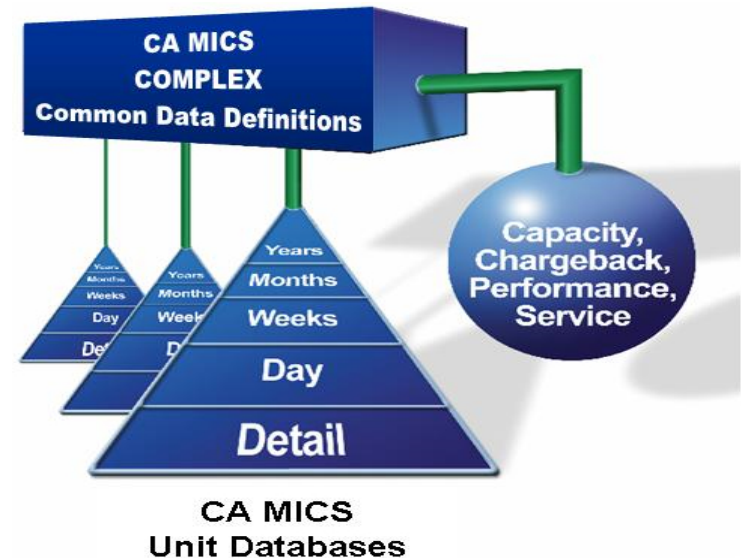
create a balanced complex

- How will the data be used?
- Where is data?
- How much detail?
- What are the operational service levels?
- What are prerequisites and dependencies

create a balanced complex

– How many complexes?

- Business drivers
 - Processing data for multiple clients
 - Contracts require separation of data
- Location of data/processors
 - Data from one location
 - Logistics of transferring data
- Volume of data
 - Require more than 36 units
- Consider reporting requirements

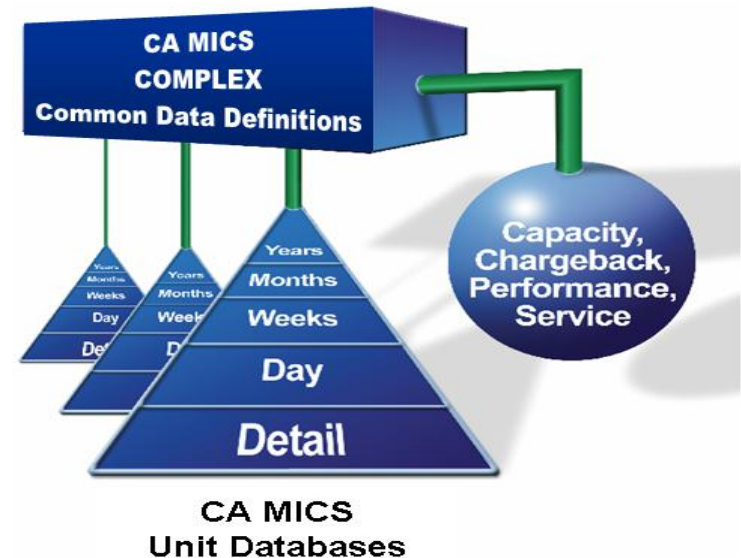


create a balanced complex

– How many units

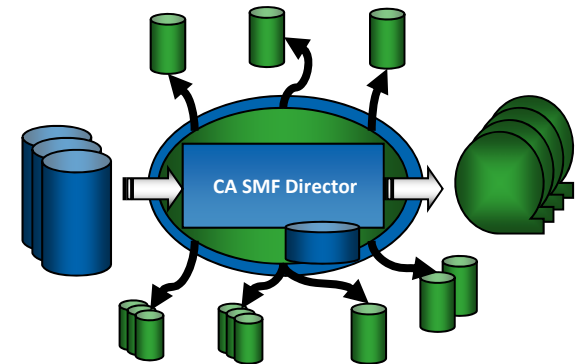
- One unit per component
 - Only for large components like CICS and DB2
 - What fits logically together (SMF & RMF)
 - Process by sysplex, by workload type
- One unit per complex
 - Only for small environments
 - Only for specialty complexes
- Consider reporting requirements

– Use incremental updates



optimize data collection

- Limit passes of data
 - Use solutions (like CA SMF Director) to manage the data
 - Create splits of data records as soon as possible
 - Be specific in record type and subtype collection
- Transfer data or process on collector system



defining account codes

- How many codes do you require (1-9)?
 - Define first codes based on business structure
 - Follow these with supporting resource information
- Carry similar codes across all components
- Make meaningful for reporting
- Consider timespan masks

sample account mapping

	SMF	CIC	DB2	MQS	VCA	TAP
ACT1	Company	Company	Company	Company	Company	Company
ACT2	Division	Division	Division	Division	Division	Division
ACT3	Group	Group	Group	Group	Group	Group
ACT4	JOB	TRANS	TRANS	TRAN/ JOB/ PSB	HLQ1	HLQ1
ACT5	USER	USER	USER	USER	HLQ2	HLQ2
ACT6	ACTFLD1	REGION	Connection Type	Connection Type	HLQ3	HLQ3
ACT7	PROD or TEST	PROD or TEST	PROD or TEST	PROD or TEST	PROD or TEST	PROD or TEST
ACT8	ACTFLD2	n/a	Thread Type	n/a	n/a	n/a

sample account masking

	SMF	CIC	DB2	MQS	VCA	TAP
ACT1	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)
ACT2	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)
ACT3	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)
ACT4	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)
ACT5	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)
ACT6	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)
ACT7	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)	T(YYYYYY)
ACT8	T(YNNNNN)	n/a	T(YYYYYY)	n/a	n/a	n/a

know your users

- Who receives reports?
- What reports are viewed regularly?
- How do reports impact daily responsibilities?
- Who creates reports?
 - Which files/data elements do they use?
 - Are they aware of new CA MICS files and data elements
 - What tools are used to create reports?

benefits of knowing users

- Easy to know when reports are obsolete
- Know impact of turning files on/off
- Know impact of turning elements on/off
- Know who to notify regarding CA MICS enhancements
- Know impact
 - Reconfiguring complex
 - Modifying schedules

benefits of knowing users

- Can reduce runtime by 4 hours by removing seven(7) DB2fff TAPE datasets
 - What users will be impacted?
 - Which of the tape dataset are used?
 - How often is the data used?
 - Can the data be filtered by subsystem, connection type, user, hour of day, day of week?

stay current on technology

- Know technology supported by CA MICS
 - Monitor CA Support Online
 - Contact CA Support
 - Beta test CA MICS maintenance
- Know site technology – current and planned
 - Be proactive in upgrading CA MICS
 - Identify CA MICS elements/files associated with technology

use parameter shortcuts

– Control files and elements

- CPLXDEF
- cccGENIN option statement
- cccOPS parameters

– Share parameters

- CPLXZONE
- CPLXSID
- COMPLEXPARMS

use maintenance shortcuts

- New software delivery
 - Delivered as PAX files
 - Creating tape no longer required
- Consolidated maintenance
 - Select multiple product changes together
 - Use consolidated checklist to reduce steps

benefit of parameter shortcuts

- Updating the ZONE parameter
 - With CPLXZONE
 - Update sharedprefix.PARMS(CPLXZONE)
 - Submit sharedprefix.CNTL(CPLXGEN)
 - Without COMPLEXPARMS
 - Update prefix.PARMS(ZONE)
 - Submit prefix.CNTL(BASPGEN)
 - Repeat for every unit (could be 1 or could be 36)

automate reporting

- Visualization of CA MICS data base is key
 - Hundreds of files in database
 - Thousands of data elements in database
 - Challenge is to display data in a useful format
- Use Web Publishing
 - CA MICS Web Publishing
 - CA MICS Q&R Web Publishing

automate reporting

- Execution of routine reports should be automated
 - Schedule report jobs
 - Use CA MICS production reporting
 - Use CA MICS user reporting

automation: production reporting

- Associate reports with operational jobs
- Catalog output for replay
- Write output to output archival system
- Publish output to the web

automation: user reporting

- Users build their own job streams
- Groups several MICF inquiries in one job
- Generates MICF inquiries
 - From Q&R Queries
 - From independent SAS Code
- Execute adhoc or in production
- Publish with MICF Web Publishing or Q&R Web Publishing

automation example

– Daily Reports execute in DAILYRPT

The screenshot shows a terminal window with a blue title bar labeled 'TS01'. The window contains a command prompt where the user has entered 'Command ==>' and 'Reporting Job'. The output shows the execution of a report named 'DAILY MQR Reports' with the following parameters:

- Command ==> -
- Scroll ==> CSR
- Catalog ==> DAILYMQR
- Catalog Group ==> *
- Run Date ==> 01MAR10 (2010/03/01:00:52)
- Inquiry Name ==> _____
- Line Cmds: S Select

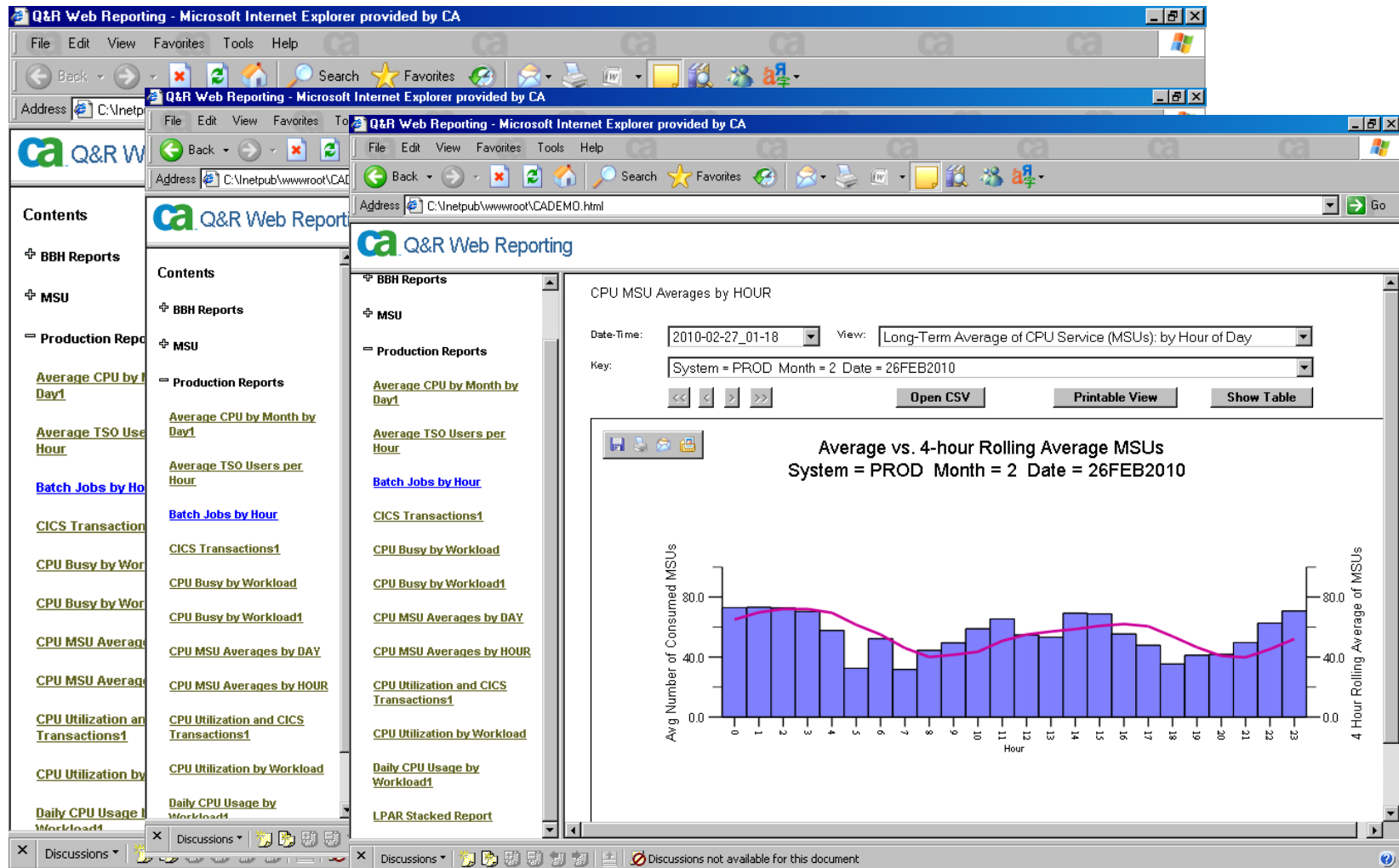
The report output is a table with the following columns: Cmd, Name, Title, Date, Time, CSV, Grf, Rpt. The data is as follows:

Cmd	Name	Title	Date	Time	CSV	Grf	Rpt
-	BATJB1	Batch Job Resources	10/03/01	00:52	Y	N	N
-	CICSTR	CICS Transactions	10/03/01	00:53	Y	N	N
-	CPUAV	Average CPU by Month by Day	10/03/01	00:54	Y	N	N
-	CPUCIC	CICS Transactions vs CPU Util	10/03/01	00:53	Y	N	N
-	CPUMSU	CPU MSU Averages	10/03/01	00:54	N	N	N
-	CPUWKL	CPU Busy by Workload	10/03/01	00:53	Y	N	Y
-	LPARSR	LPAR Stacked Report	10/03/01	00:54	Y	N	N
-	TSOAV	Average TSO Users per Hour	10/03/01	00:54	Y	N	N
-	WLMCP2	CPU Utilization by Workload	10/03/01	00:55	Y	N	Y

The output ends with a line of asterisks: '***** Bottom of data *****'.

The terminal window also shows a status bar at the bottom with the text 'Connected to tpx port 23'.

published web output



outside of the box reporting

- Do not have to wait until tomorrow
- Activate incremental update
 - Run multiple incremental updates each day
 - Run incremental on request
- Generate “near real-time” reports
 - Schedule reports from incremental databases
 - Run adhoc reports from incremental database

summary

- Balance the complex for your environment
- Limit SMF data handling
- Use accurate code and summarization levels
- Know how data is used
- Stay current on CA MICS and z/OS technology
- Use enhancement parameters and tools
- Promote automation of reports

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Q&A

mainframe networking

Mainframe MIPS Lounge —
Mainframers can relax and talk
informally

Islander D
Monday: 12 PM – 4:45 PM
Tuesday & Wednesday: 8 AM – 6PM
Thursday: 8 AM – 12 PM

Mainframe Networking Lunches

Where: Islander Ballroom, Salon B

When: Tuesday and Wednesday

Time: 12:00pm - 1:15pm



Seating is limited and
will be on a first
come, first served
basis



Mainframe-only party, Wed
night, 7-10pm, House of Blues
(Mandalay Bay)
Need entry pin, get them in the
Mainframe lounge

related sessions

SESSION #	TITLE	Day / Time Room: <u>Tropics A</u>
MR030SN	CA MICS Technology Support – You Asked, We Delivered!	Monday / 1:15
MR050SN	Have You Checked Your CA MICS Implementation Lately?	Monday / 3:45
MR230SN	CA MICS Observations: Practical Best Practices	Tuesday / 9:00
MR090SN	Digging for Gold – How to Mine and Share CA MICS Data, Quickly and Easily	Tuesday / 2:30
MR210SN	CA MICS Tape Analyzer Option – With Six You Get HYDRA	Tuesday / 3:45
MR110SN	Are You Drowning in SMF Data?	Wednesday / 9:00
MR130SN	Get Your Data Faster (and More Easily) – A User Success Story	Wednesday / 1:15
MR170SN	CA MICS Customer Panel – CA MICS <u>NOTE different room: Islander G</u>	Wednesday / 2:30
MR150SN	CA MICS Resource Management in the CA Data Center – A Success Story	Wednesday / 3:45
MR250SN	CA MICS Global User Community Meeting	Wednesday / 5:00

exhibition center

related CA technology

- CA Mainframe area
 - Booth 182 Stop by to see MICS reporting with Q&R
- Exhibition Center Tours
 - Sign up at the Info Desk in the Exhibition Center

please complete a session evaluation form

- The number for this session is **MR230SN**
- After completing your session evaluation form, place it in the basket at the back of the room

thank you