All Security All The Time: System z Security Update for CA ACF2, IBM RACF, CA Top Secret

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Session Evaluations

• QR codes

• Online for up to 72 hours after the session
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Agenda

• IBM RACF Update
• CA ACF2™ for z/OS Update
• CA Top Secret® for z/OS Update
• Open Discussion/Questions
IBM RACF update
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RACF 1.13

- Current RACF 1.13
- z/OS on 2-year cycle
- Are you making use of the valuable features?
With z/OS V1.13, you can link RRSF nodes using TCP/IP instead of APPC! This means that you can now:

- Manage your RRSF network using the same skills as the rest of your TCP/IP network.
- Ensure that the same network security policy (IDS, IPS, etc.) is in place for your RRSF network as in place for the rest of your z/OS TCP/IP network.
- Utilize the encryption and peer-node authentication of AT-TLS
- Keep up with improvements in z/OS Communications Server Security.
- Convert a node from using APPC to TCP/IP without stopping communication
RACF 1.13
Identity Propagation

Propagate userid between applications

• Now you can achieve end-to-end security identity consistency and auditing for key system environments such as:
  • CICS
  • DB2
  • WebSphere
  • DataPower

• This provides consistent end-to-end auditing of z/OS transactions that originate from the internet by maintaining the user’s distributed identity information, without impacting the performance characteristics of transaction providers.
RACF 1.13
Digital Certificates

RACF support for hardware-generated Elliptic Curve Cryptography (ECC) secure keys,

• Provides the ability to issue and use certificates with hardware protection
• ECC keys added
• RACDCERT support enhanced for greater usability
Support of DB2 for PKI Services Databases

- Both PKI Services databases can be stored in DB2
- Object store – holds records to track active certificate requests and posting objects for certificates and CRLs
- Issued Certificate List – permanent record for each certificate issued
RACF 1.13
Certificate Revocation Lists

Larger Certificate Revocation Lists (CRLs)
• When LDAP posting is enabled, 32K limit is removed by storing the CRLs in the HFS or zFS instead of in VSAM

Enhanced support for Web Browsers
• Previously, PKI Services only supported IE to use a smart card for the Windows Logon certificate generation
• Now Mozilla-based browsers on both the Windows and Linux platforms can use a smart card to generate certificates
What are You Doing About BPX.UNIQUE.USER?

- Many of us use a FACILITY class rule named **BPX.DEFAULT.USER** which provides a default USS identity (UID and GID) for RACF userids that don’t have an OMVS segment. This makes it easier for us when we suddenly have to let hundreds of users who don’t have OMVS segments access FTP for example.
- IBM plans to stop supporting **BPX.DEFAULT.USER** after RACF Release 1.13.
RACF 1.13
Summary

What was new with z/OS V1.13 RACF?
• RACF Remote Sharing (RRSF) over TCP/IP
• Identity Propagation extensions
• RACF Support for Elliptic Curve Cryptography (ECC)

What was new with z/OS V1.13 PKI Services?
• Support of DB2 for PKI Services Databases
• Larger Certificate Revocation Lists (CRLs)
• Enhanced support for Web Browsers

Remember: BPX.DEFAULT.USER
General RACF 2.1

No specifics as yet – watch for pre-announce at SHARE this week
CA ACF2™ for z/OS r15 Incremental Enhancements (CY2013)
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CA ACF2™ for z/OS r15 - Incremental Enhancements (CY2013)

• Role Based Security
  - Enhanced Model/Archive/Compare commands to include users defined roles
  - Clean-up Role records when a user account is deleted
  - Incorporate Roles in ACF ACCESS command
  - Prevention of changing Role record type

• Cross-Reference record expansion
  - X(ROL), X(RGP) and X(SGP) from 4K to 16k

• Digital Certificates
  - Movement of internal certificate table to 64-bit storage
  - Unsupported Signature Algorithm checking
  - E DAYS(nn) parameter in Certificate Utility reports
CA ACF2™ for z/OS r15 - Incremental Enhancements (CY2013)

- **Symbolic substitution in Dataset Rules**
  - Reduces rule administration by allowing &LID as substitution string
  - The &LID is used on the rule line within the dataset rule set

- **GSO LINKLIST enhancements**
  - System Symbolic substitution allowed as defined in SYS1.PARMLIB (IEASYM)
  - Masking capabilities now permitted for Datasets

- **GSO INFODIR expanded**
  - Limitation of 256 entries doubled to 512

- **Optional use of Cancelled LID for RACROUTE EXTRACTS**
  - Equivalent support for all ESM’s
  - Prevents Processes from not working
ACFVSAM Reserve Enqueue Name

- Allows the minor name for ACFVSAM ENQ/RESERVE name to be associated with dataset name instead of ddname
- Better granularity for users with multiple security files in same Sysplex
- Reduces contention on ACF2 VSAM usage

Logonid exclusion from Password/Passphrase Violations

- Password violation counters will not be incremented for defined userids
- Prevents application outages due to violations
- Controlled through new resource class and resource rules

Unique UID and GID values

- Ensures each user is accountable using a unique value
CA ACF2™ for z/OS r15 - Incremental Enhancements (CY2013)

- **IMS Enhancements**
  - Security for the IMS DBCTL Environment
    - Secures IMS TM (transaction/terminal management) environments
    - Used when data in IMS DB databases access is needed
    - Allows sharing of IMS DB data ensuring data integrity
  - Implementation of ‘/ACF’ command
    - Allows execution of ‘/ACF’ command in IMS OM environment
  - Removal of ACF2 IMS Dependence of IMS Security Macro
    - IBM is eliminating the SECURITY macro
CA Top Secret® for z/OS r15
Incremental Enhancements (CY2013)
• Reduce Storage Obtains required
• Increase MAX ACID size to 1024K
  • Allows for larger ownership records, which in turn allows for more permissions to be issued for any given resource.
• **TSSUTIL updates support specific resources and dates**
  • Enable TSSUTIL to report on a specific resource via RESOURCE(‘resourceName’) selection criteria option.
  • Enable continuation characters to allow multi-line report commands, keywords and their parameter lists (i.e. FACILITY)
ENHANCE TO RPW OPTION (SSPARAM, TSSNPW, TSSRPW)
  - New control option to allow whether or not to restrict passwords by a prefix or a string in any position in the password

Expand COMPARE Command

WHOHAS command output corrections
• **Control MODIFY with CASECAUT**
  - This feature will allow more granular authority checking for the TSS MODIFY command

• **Tracking FACILITY and IBMGROUP usage**
  - CA Cleanup: track the use of both FACILITY and IBMGROUP

• **Digital Certificates**
  - Movement of internal certificate table to 64-bit storage
  - Unsupported Signature Algorithm checking
  - EDAYS(nn) parameter in Certificate Utility reports
CA Mainframe Chorus

Security and Compliance Role Improvements in 2.5
CA Mainframe Chorus Architecture

CA Chorus Platform

Graphical Diagnostics
Integrated Workspace
Knowledge Management
Process Automation

Common platform components

DB2 DBA Discipline
Security Discipline
Storage Discipline
Infrastructure Mgmt Discipline
Future Disciplines...

DB2 Products
Security Products
Storage Products
Infrastructure Products
Other Products
CA Mainframe Chorus
an overview…

- Wizard-like process tools
- Reduces possibility of errors

Integrated Workspace
- Singular interaction model
- Fast Learning Curve

Role-Based Navigation
- Matches Job Functions
- Leverage resources across platforms

Graphical Diagnostics
- Data in human readable formats
- Solve problems faster

Knowledge Management
- Community knowledge and expertise at users fingertips
- Increases the whole team’s efficiency

Process Automation
- Data in human readable formats
- Solve problems faster
Improve staff efficiency
CA Chorus vision

Object-oriented workspace, with a new discipline-based interaction model that incorporates rich features and data visualization and leverages CA Technologies portfolio of products as a single bank of features and functions.

Mainframe Technology Stack

6 Core Disciplines

Disciplines
Collaboration
Rich Visualization
Knowledge Management
Process Automation

CCS

Base Common Services
Mainframe WS Common Services

Partner Ecosystem

DB2 Database Management
Security Management
Storage Management
Infrastructure Management
Workload Management
Systems Management

Datacom Database Management
IDMS Database Management
IMS Database Management
Operations Management

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Design goals and architecture

- Enable the converging workforce
- Provide shortened on ramp for less experienced users
- Increase productivity for experienced users

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* Includes support for RACF

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Open Discussion – Q&A

Thank you!

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