CA ACF2™ for z/OS

The Road Leading to r16 and a Sneak Peek into What's Coming to Better Protect your Enterprise

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Agenda

1 WHAT HAVE WE BEEN UP TO?   WE ARE AGILE!

2 POST CA ACF2 R15 GA ENHANCEMENTS

3 CA ACF2 R16 – RELEASE CHARTER & PLAN

4 R16 ENHANCEMENTS – THINGS YOU NEED TO CONSIDER

5 Q & A

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Many changes – all for the good!

EXTREME PROGRAMMING
I CAN'T GIVE YOU ALL OF THESE FEATURES IN THE FIRST VERSION.
AND EACH FEATURE NEEDS TO HAVE WHAT WE CALL A "USER STORY."
OKAY, HERE'S A STORY: YOU GIVE ME ALL OF MY FEATURES OR I'LL RUIN YOUR LIFE.
www.dilbert.com
scottadams@aol.com
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1/10/03

Source: http://dilbert.com/strip/2003-01-10

CA ACF2 is now Agile

ag·ile

/ˈajəl/

Adjective

Relating to or denoting a method of project management, used especially for software development, that is characterized by the division of tasks into short phases of work and frequent reassessment and adaptation of plans.

"agile methods replace high-level design with frequent redesign"

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Is it too late to join the CA ACF2 r16 Beta Program?

A Big Fat NO!!!!!!!!

How to Join the ACF2 r16 Beta Program

- Go to validate.ca.com
- Register and sign CA's Beta Agreement
- Once accepted, you will have access to the code and documentation for ACF2 r16
- Next, create a sandbox in your environment if you haven't already
  - r16 is not GA and should NOT be brought into a production environment at this time
- From validate.ca.com, download and IPL the PAX file and latest cumulative PTF file into your sandbox
- Schedule a test plan call with ACF2 Product Owner, john.pinkowski@ca.com

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What have we been up to?

CA ACF2™ for z/OS
r15 post GA enhancements

CA ACF2 r15 post GA enhancements

- 🎯 Role Based Security Refinements.
- Improved Resource Utilization.
- Improved Usability.
- Additional IMS Enhancements.
- New ACFAESAGE Unload Utility.
- Additional SHOW Command Options.
- 🎯 New Passphrase Support for CTS.
- z/OS 1.13 Support
  - 🎯 ECC Keys can be stored and retrieved for ICSF.
  - 🎯 User Mount and UNMount granularity
- z/OS 2.1 Support.
  - 🎯 BPX.DEFAULT.USER no longer valid.
  - 🎯 Controlling Access to JobClass
  - 🎯 POSIX CHOWN Unrestricted

🎯 **Addressed Customer Compliance Requirement**

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Post ACF2 r15 GA enhancement details

Compliance Assist

- **Role Based Security Updates**
  - Enhanced Model and Archive commands
    - Role records now included
    - Builds ACF commands to generate a modeled user
    - Builds ACF commands to re-add an Archived user to role records
  - Clean-up X-ROL Role records when a user account is deleted
  - Role Include/Exclude fields updated for non-masked values
  - Incorporate Role rule sets in CA ACF ACCESS command
  - Prevention of changing Role record type
    - X(ROL) records defined as ‘role’ or ‘group’ record type
  - Role Based API Enhanced (ACF00RBS)
    - New SYSID parameter to report on all role record types defined on the security database.
    - Returns list of users for a give role.

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Post ACF2 r15 GA enhancement details

- **ACFVSAM Reserve Enqueue Name**
  - Allows the minor name for ACFVSAM ENQ/RESERVE name to be associated with a dataset name instead of the DDBNAME.
  - Better granularity for users with multiple security files in same Sysplex.
  - Reduces contention on ACF2 VSAM usage.
- **Improved CSA Storage Utilization**
  - Profile Directories Moved to 64-Bit CSA Storage
  - Certificate Tables Moved to 64-Bit CSA Storage
  - Results in improved REFRESH processing.
- **Cross Reference Record Expansion**
  - x(ROL), x(RGP) and x(SGP) records increase for 4K to 16K
- **GSO INFORDIR Expanded**
  - Now able to support double the amount of entries, 512.

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Post ACF2 r15 GA enhancement details

- **Symbolic Substitution in Dataset Rules**
  - Reduces rule administration by allowing &LID as a substitution string
  - The &LID is used on the rule line during adjudication.
- **Optional Use of Cancelled LID for RACROUTE EXTRACTS**
  - Equivalent support for al ESM's
  - Reduces amount of potential down time.
- **Logonid Exclusion from Password/Passphrase Violations**
  - Password violations will not be incremented for special use userids.
  - Prevents application outages due to violations.
- **Datacom A/D support for CIA and Compliance Event Manager**
  - Added CA Datacom A/D support for both CIA and Compliance Manager.
  - Datacom A/D Black-box installs with base products

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Post ACF2 r15 GA enhancement details

- **IMS for z/OS Enhancements**
  - Security for the IMS DBCTL environment.
  - Security for PSBs and AOI commands.
  - /ACF command now available in OM environment.
  - Removal of CA ACF2 IMS requirement to use the IMS Security Macro.
- **New ACFESAGE Utility**
  - Similar to CA ACF2 TSSCFILE giving a fixed formatted version of the CA ACF2 database.
- **Additional SHOW Commands**
  - SHOW ALL now contains output from SHOW RSRCTYPE.
  - SHOW AUTOERASE displays erase-on-scratch options in effect.

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Post ACF2 r15 GA enhancement details

z/OS 1.13 compatibility and new functionality

- **New R_ usermap function to return Userid from DN or Realm name**
- **Password Phrase support**
  - CESL transaction supports sign-on with password or password phrase
  - ACFM UL function updated
  - Idle time-outs (locktime)
- **Certificate Key display changes**
  - CHKCERT command now displays Public/Private key size and type
  - Certificate Utility (SAFCRRPT) displays key size and type in header
- **ECC (Elliptic Curve Cryptography) Keys and ICSF**
  - Certificate commands allow for ECC key to be stored and retrieved from ICSF
- **Kerberos address checking**
  - New CHKADDRS field in REALM record
  - Allows ticket address checking in Kerberos server
- **User mount and unmount**
  - Privilege checking accomplished by resource checks
  - No need for all users to have superuser privilege

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Post ACF2 r15 GA enhancement details

z/OS 2.1 compatibility and new functionality

See ACF2 Technical Document TEC599992

- **TYPE ENF71 Notification Event (ENF)**
  - CACF2 will send an ENF signal to CICS when a Security Administrator
  - Suspends or Cancels a signed-on remote user
  - Deletes the logonid for a signed-on remote user
- **Controlling Access to JobClass**
  - New SAF call for JES2 and JES3 controlling use of JOBCLASS
  - Authorization Checking is activated if the new FACILITY profiles exist
- **BPX.DEFAULT.USER no longer valid**
  - Assign UID/GID values using GSO AUTOIDOM record
  - Callable Serviced for UID/GID are now CPF eligible
  - New trace facility to identify workloads currently using default values
  -

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Post ACF2 r15 GA enhancement details

z/OS 2.1 compatibility and new functionality

- **Symbolic in OMVS Segment**
  - The home field can now use ‘&LID’ to represent the user’s LOGONID value
  - Useful when using the MODEL record.

- **POSIX CHOWN Unrestricted**
  - New restrictions on non-superusers modifying ownership of their files

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Post ACF2 r15 GA enhancement details

z/OS 2.1 compatibility and new functionality

- **Certificate Protection after GENREQ**
  - GENREQ command used to create a Certificate Request based on existing certificate.
  - After certificate is generated and signed by CA, it is reinserted over the old certificate.
  - CA ACF2 will not allow the private key before the re-insert.
  - Increased protection for ROLLOVER process
- **Certificate CHAIN Support on CHKCERT**
  - Each certificate in the chain's content is now displayed.
  - New summary displaying the number of certificates in the chain.
  - Keyrings the certificates have in common.
  - Indicator if the chain contains expired or untrusted certificates.

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Post ACF2 r15 GA enhancement details

- **DB2 V11 support**
  - Support for DB2 v11 added.
- **IMS 13.1 support**
  - Support for IMS 13.1 added.
- **CTS 4.2 support**
- **Z/VM 6.3 Support**

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CA ACF2 r16 enhancements

Completed - In progress - Planned

CA ACF2 r16 Release Charter

Agile

VISION

Our customers entrust CA ACF2 with the protection of their critical business assets. As we want to continue to earn that trust, we intend to maintain the currency of the product, improve the security protection it affords and improve its efficiency, both in valuable system resources and the time and effort it takes for our customers to exploit its features.

GOALS

Reduce upgrade time:

Application of maintenance will occur within a single day, reducing upgrade time by 20-80%.

Improve performance:

Recoding of numerous modules to work in 64 bit storage will result in a minimum 30% reduction of memory utilization in ECSA. This will result in an elimination of 2 severity 1 issues per quarter for our largest customers. (First results 74-92% savings)

Improve customer productivity:

Customers using the ACF2 role feature should see a 20-40% improvement resulting from role command improvement

Improve security and compliance:

Password encryption will be improved dramatically. The new AES256 password encryption key length will be at least 100% larger than the earlier password keys. This will allow customers to provide proof to auditors that CA ACF2 helps them achieve compliance with regard to password encryption.

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CA ACF2 Release Plan *(as of July.07)*

Delivered

💡 = Customer Ideation

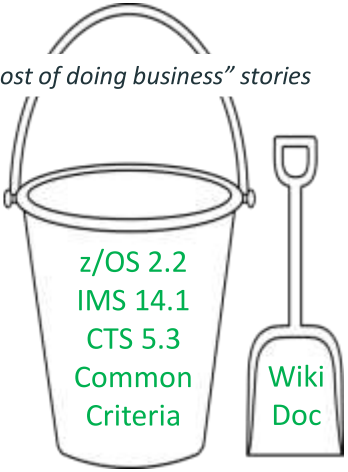
(# votes) = Ideation votes

(#) = Beta call votes

V 1/Ideas	Priority	Deliverable / Feature / Epic	Status
n/a	1	Over 15 Enhancements from CA ACF2 r15	Delivered
n/a	2	z/Next Compatibility	Delivered
B-67035	3	Decrease CSA Utilization	Delivered
B-76290	4	Sign-On Messages – PCI DSS Req 6.5.5 Compliant	Delivered
B-67038	5	Improve %CHANGE/%RCHANGE Edits On RoleSets	Delivered
B-67037	6	New XROL Validate Command	Delivered
B-82968	7	Sort Sign-On Messages releated to PCI DSS Req	Delivered
B-79876	8	Add Support for Roles to Access Report	Delivered
B-67184	9	AESAES 256-Bit Password Encryption (3)	In Progress
TBD	10	Common Criteria Certification	In Progress
B-76126	11 💡	Allow LPAR Symbolic In Rules - (8)	Under Review
TBD	12 💡	Allow a user to be able to be 'retired' (7 votes)	Under Review
TBD	13 💡	Add Passphrase Support for PSWDLC, PSWDUC, and PSWDSIM (5 votes)	Under Review
TBD	14 💡	ACF2 SHOW command to display how CA maps a profile record to a 3 character type (4 votes)	Under Review
TBD	15 💡	Allow PassTicket Expire time to be modified (1 vote)	Under Review
TBD	16 💡	Enforce Passphrase only for validation (1 vote)	Under Review
TBD	17 💡	Support a 3 out of 4 Criteria for Password Edits	Under Review
TBD	18 💡	Enhance ACF2 reporting to include use of JOBFROM ((1 vote)	Under Review

r16

💡 *Popular Ideas trending on CA Communities*


"cost of doing business" stories

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r16 enhancement details

Compliance Assist

New MSGOPTS GSO Record

- Designate signon messages to be replaced by a generic (ACF01125 Logon Credentials Invalid message.

Benefits:

- The MSGOPTS record also lets you prevent the unintentional leaking of information (existence of a valid logonid) to malicious users. When using MSGOPTS, you can determine the original cause of the invalid signon by viewing the ACFRPTPW report.

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r16 enhancement details

Validate Sub Command

- CA ACF2 V16.0 introduces the new validate subcommand. The subcommand lets you validate the existence of logonids or roles included or excluded in the target X(ROL) role records. The validate subcommand must be issued from within the SET X(ROL) setting of the ACF command.

Benefits:

- Early detection of invalid data entered by administrators.

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r16 enhancement details

Compliance Assist

AES 256-Bit Password Encryption (underway)

– CA ACF2 currently supports 128-bit AES encryption for passwords and phrases. It requires a 16 byte encryption key and can be done via software or hardware. With this support CA ACF2 will now have the ability to supply 256-bit AES encryption.

Benefits:

- Adds advanced password encryption algorithm which satisfies a current corporate as well as government compliance requirement.

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r16 enhancement details

Increase use of 64-bit CSA Storage for User Records

- The continuation of migrating data out of e/CSA into 64-Bit storage. Now rule objects are moved into 64-bit storage.

Benefits:

- Decrease in e/CSA usage and improved REFRESH processing. Initial feedback is a 74%-92% buy back. Results may vary!

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r16 enhancement details

Compliance Assist

Role Support for Logonid Access Report

- ROLE input parameter added
- Single role or role mask can be specified
- Specifying ROLE will create an access report section for each ROLE showing which rule lines grant or prevent access.

Benefits:

- Improved compliance reporting by roles.

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Why should CA ACF2 r16 be on your radar?

ACF2 r16 enhancement Benefits

- All existing CA ACF2 r15 corrective solutions incorporated into the r16 release.
  - Sourced through last week!
  - Get current and level set on maintenance as you rollout the new release
- 30+ (and counting) new features available
  - Majority of the features generated from customer requests
  - Many tied to compliance requirements (breach protection)
- z/OS 2.2 new feature exploitation
  - Get LPARs staged and ready to IPL and exploit the newly introduced z/OS 2.2 related security features.
- IBM z13 hardware certified
- Common Criteria certified

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More info and getting involved….

Where will we be showing up?

The CA Mainframe Security R&D security teams currently sponsor 4 user groups. The next set of meetings are scheduled to take place in the Fall.

Mid Atlantic Security User Group – This user group, established in Nov, 2013, is targeted for customers that reside in: NJ, DEL, Eastern PA, NY & CT areas. Next meeting Location/Date: Hosted by user group member site in **Manhattan, NY – Date Mid Oct, 2015**

DC Area Security User Group – This user group, established in May, 2015, is targeted for customers that reside in: DC, VA, MD & South Central PA Next meeting Location/Date: **CA Technologies Inc. Herndon, VA – Date To Be Determined**

North Central Security User Group – This user group, established in March, 2014, is targeted for customers that reside in: IL, WIS, IND and Iowa. Next meeting Location/Date: **CA Technologies Inc. Lisle, Illinois – – Date To Be Determined**

South Central Security User Group – This user group, established in Sept, 2014, is targeted for customers that reside in: Northeast TX, OK, AK and LS. Next meeting Location/Date: **CA Technologies Inc. Plano, TX – – Date To Be Determined**

Other participation:

SHARE Conference - Orlando, FL: 8/9-8/13/2015 **www.share.org**

Bob Hansel and Stu Henderson RACF User Groups – Fall dates being planned – details forthcoming

Vanguard Security and Compliance Conference – Las Vegas, NV: 9/28 – 10/1/2015 **www.go2vanguard.com**

CA World 2015 - Las Vegas, NV: 11/16-11/20/2015 **www.ca.com/caworld**

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CA World 2015: Mainframe Highlights

- 1.5 Days with 25+ Pre-Conference Education Sessions for IT Operations professionals that cover a wide range of topics for the Mainframe platform: Data Management, Security, Application Development, Workload Automation, Big Data Management, Performance & Monitoring, Storage Management and Output Management

- Meet and hear from customers and partners to learn how they are taking advantage of the Mainframe in the Application Economy at 15+ Theater Sessions, 20 Off the Floor Sessions, 15+ Demo Stations and Meet the Experts Stations. Sessions cover strategic themes, roadmap, strategy and specific business and technical challenges.

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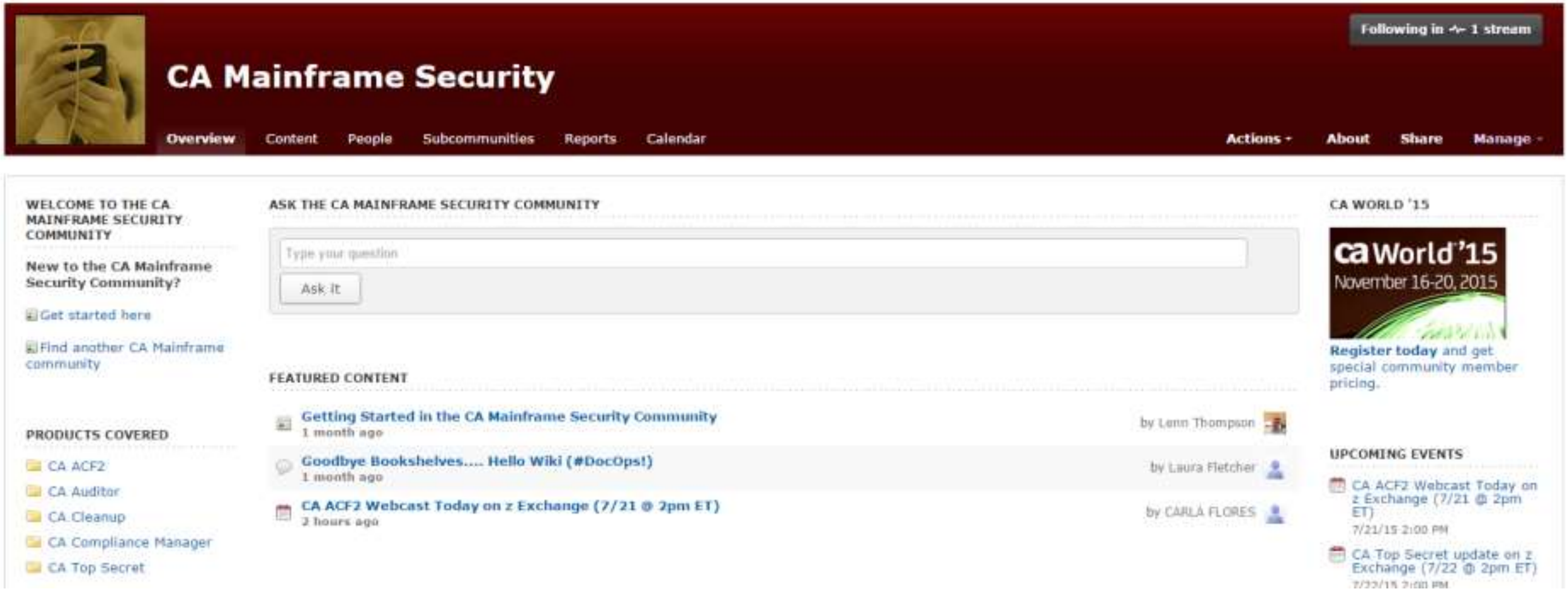
Get involved!   Communities & Ideation



WELCOME TO THE CA MAINFRAME SECURITY COMMUNITY

New to the CA Mainframe Security Community?

Get started here

Find another CA Mainframe community

PRODUCTS COVERED

- CA ACF2
- CA Auditor
- CA Cleanup
- CA Compliance Manager
- CA Top Secret

ASK THE CA MAINFRAME SECURITY COMMUNITY

FEATURED CONTENT

Getting Started in the CA Mainframe Security Community 1 month ago	by Lenn Thompson
Goodbye Bookshelves.... Hello Wiki (#DocOps!) 1 month ago	by Laura Fletcher
CA ACF2 Webcast Today on z Exchange (7/21 @ 2pm ET) 2 hours ago	by CARLA FLORES

CA WORLD '15

Register today and get special community member pricing.

UPCOMING EVENTS

CA ACF2 Webcast Today on z Exchange (7/21 @ 2pm ET)
7/21/15 2:00 PM

CA Top Secret update on z Exchange (7/22 @ 2pm ET)
7/22/15 2:00 PM

https://communities.ca.com/welcome

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Q & A

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