IBM zSecure V1.13

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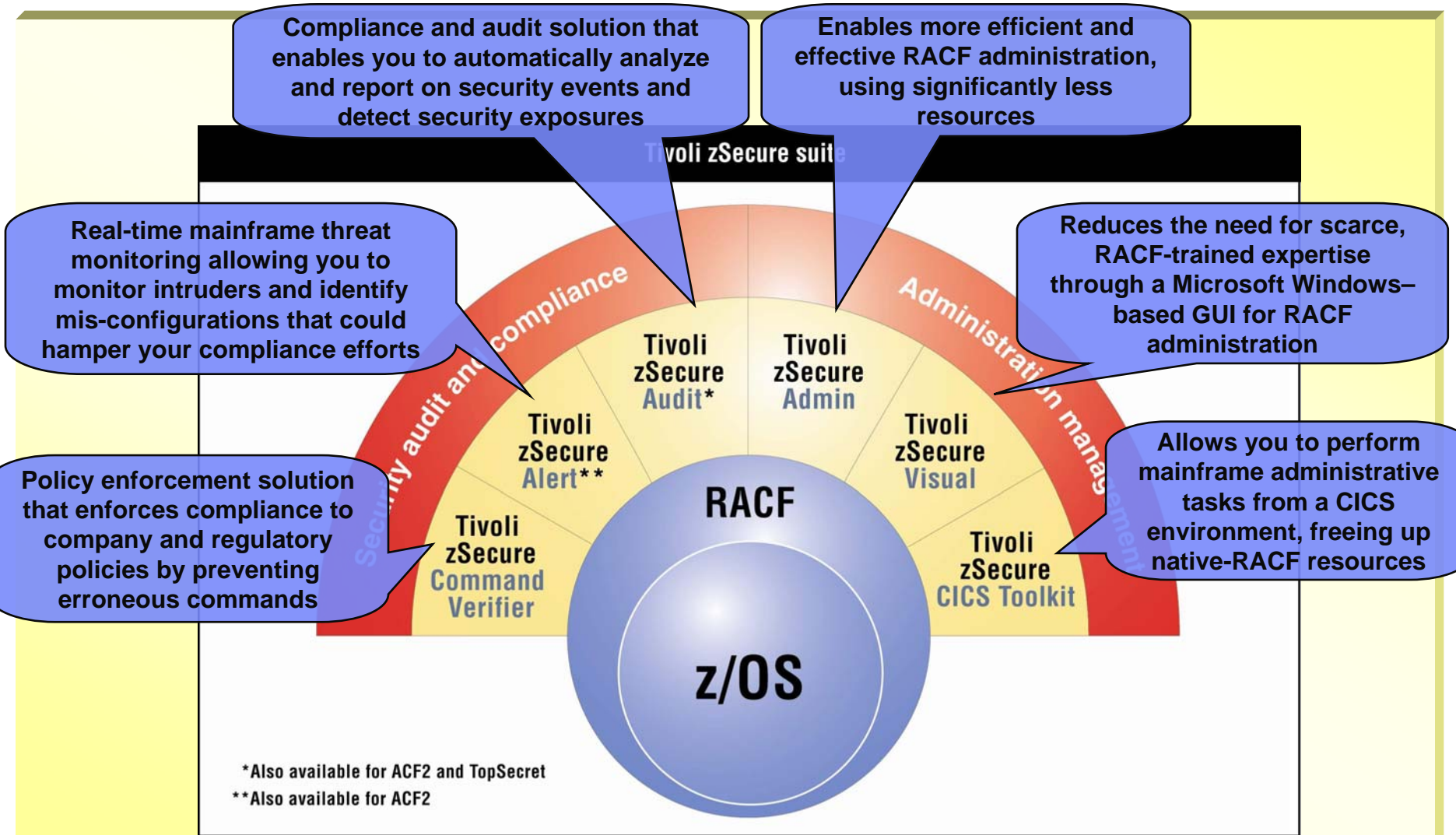*delia_lavolpe@it.ibm.com*

zSecure 1.13

- **Announcement on October 4, 2011**
- **Availability in November, 2011**
- **Designed for use with z/OS 1.13**
  - **Also runs on z/OS release 1.9 – 1.12**
  - **Use of 64 bit hardware functions**
  - **No new release of zSecure Manager for RACF z/VM this year**
- **Extend the scope of zSecure to transaction and data managers**
- **Access monitor extensions**
- **User interface improvements**
- **RACF Offline**
- **zSecure Visual**
- **zSecure Command Verifier**

Introducing the IBM Tivoli zSecure Suite

Compliance and audit solution that enables you to automatically analyze and report on security events and detect security exposures

Enables more efficient and effective RACF administration, using significantly less resources

Real-time mainframe threat monitoring allowing you to monitor intruders and identify mis-configurations that could hamper your compliance efforts

Reduces the need for scarce, RACF-trained expertise through a Microsoft Windows–based GUI for RACF administration

Policy enforcement solution that enforces compliance to company and regulatory policies by preventing erroneous commands

Allows you to perform mainframe administrative tasks from a CICS environment, freeing up native-RACF resources

Tivoli zSecure suite

Security audit and compliance

Administration management

Tivoli zSecure Audit*

Tivoli zSecure Admin

Tivoli zSecure Alert**

Tivoli zSecure Visual

RACF

Tivoli zSecure Command Verifier

Tivoli zSecure CICS Toolkit

z/OS

*Also available for ACF2 and TopSecret
**Also available for ACF2

Note: ACF2 and Top Secret are either registered trademarks or trademarks of CA, Inc. or one of its subsidiaries.

zAdmin, zAudit, zAlert architectural view
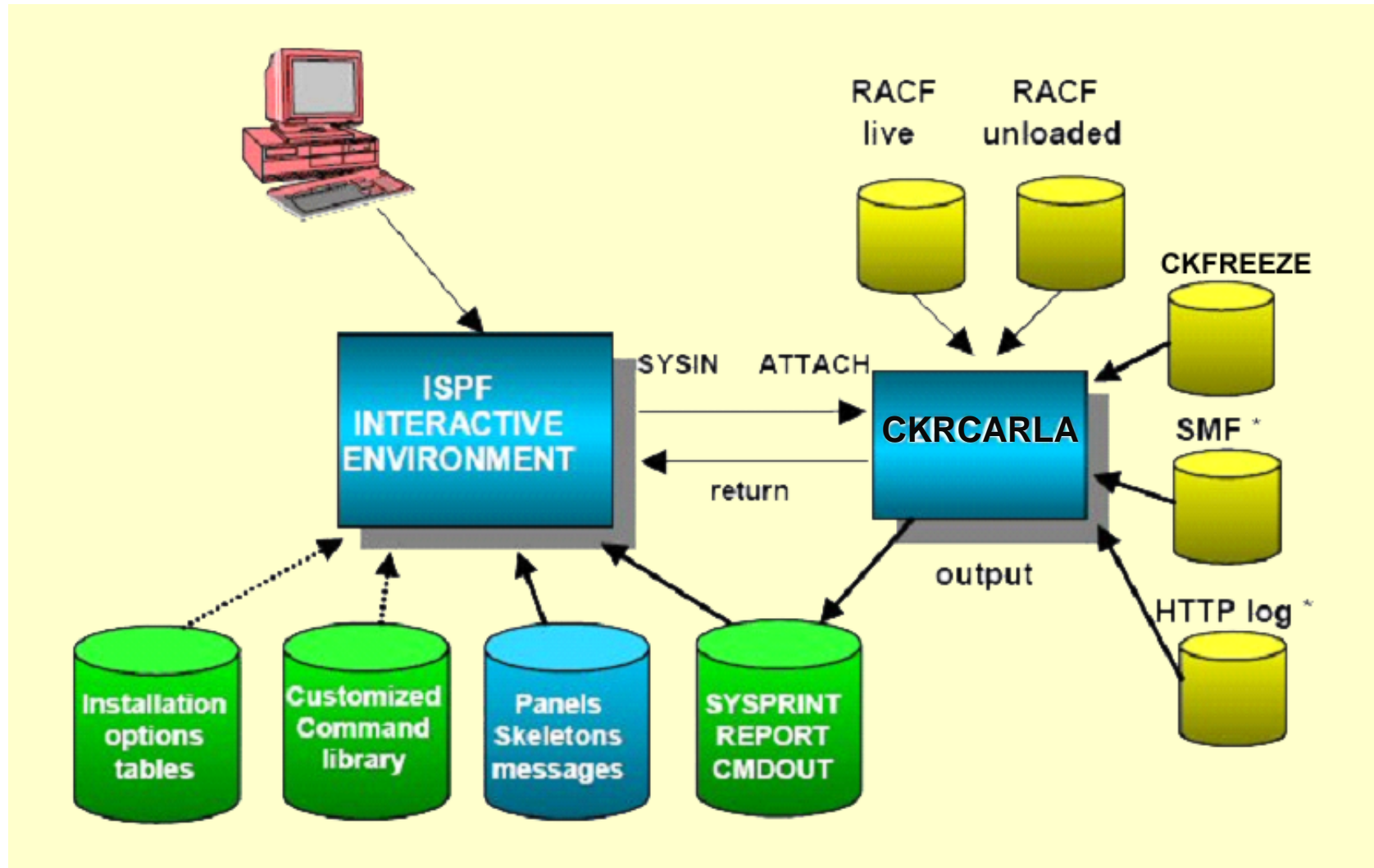
zSecure Admin

Enables more efficient and effective RACF administration, using significantly less resources

Tivoli zSecure suite

*Also available for ACF2™ and Top Secret®
**Also available for ACF2
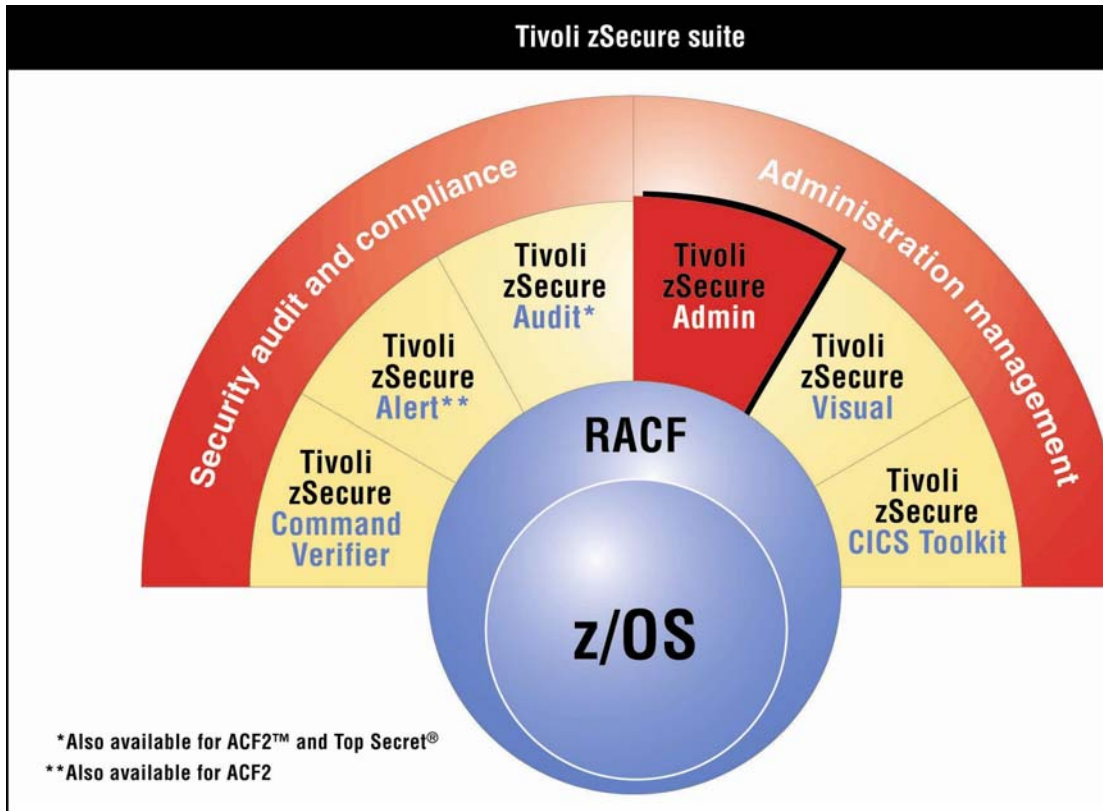
Highlights:

- Automate routine tasks to simplify administration

- Identify and analyze problems to minimize threats

- Merge databases quickly and efficiently

- Display data from the active (live) RACF database

- Integrates smoothly with IBM Tivoli zSecure Audit

RACF Administration is Now User Friendly

```
          zSecure RACF USER overview                    1 s elapsed, 0.0 s CPU
Command ===>                                            Scroll===> CSR
Users like ZP*                                   6 Apr 2007 15:45
    User      Complex   Name               DfltGrp   Owner      RIRP SOA gC LCX Grp
__  ZPU001    MVST      BANKING USER 1      ZPDEPT31  ZPDEPT31   ____ ___    X   2
__  ZPU002    MVST      BANKING USER 2      ZPDEPT31  ZPDEPT31   ____ ___    X   2
__  ZPU003    MVST      BANKING USER 3      ZPDEPT31  ZPDEPT31   ____ ___    X   2
__  ZPU004    MVST      BANKING USER 4      ZPDEPT31  ZPDEPT31   ____ ___    X   2
__  ZPU005    MVST      BANKING USER 5      ZPDEPT31  ZPDEPT31   ____ ___    X   1
__  ZPU006    MVST      BANKING USER 6      ZPDEPT31  ZPDEPT31   ____ ___    X   2
__  ZPU007    MVST      BANKING USER 7      ZPDEPT31  ZPDEPT31   ____ ___    X   2
__  ZPU008    MVST      BANKING USER 8      ZPDEPT31  ZPDEPT31   ____ ___    X   1
__  ZPU009    MVST      BANKING AUDITOR     ZPDEPT31  ZPDEPT31   ____ ___  g X   3
__  ZPU011    MVST      HR USER 1           ZPDEPT32  ZPDEPT32   ____ ___    X   2
__  ZPU012    MVST      HR USER 2           ZPDEPT32  ZPDEPT32   ____ ___    X   2
__  ZPU013    MVST      HR USER 3           ZPDEPT32  ZPDEPT32   ____ ___    X   3
__  ZPU014    MVST      HR USER 4           ZPDEPT32  ZPDEPT32   ____ ___    X   3
__  ZPU015    MVST      HR USER 5           ZPDEPT32  ZPDEPT32   ____ ___    X   3
__  ZPU016    MVST      HR USER 6           ZPDEPT32  ZPDEPT32   ____ ___    X   3
__  ZPU017    MVST      HR USER 7           ZPDEPT32  ZPDEPT32   ____ ___    X   3
__  ZPU018    MVST      HR USER 8           ZPDEPT32  ZPDEPT32   ____ ___    X   2
__  ZPU019    MVST      HR AUDITOR          ZPDEPT32  ZPDEPT32   ____ ___  g X   3
__  ZPU031    MVST      IT SPECIALIST 1     ZPDEPT33  ZPDEPT33   ____ ___    X   2
```

zAdmin: Connected groups, plus other info

zSecure Visual

Reduces the need for scarce, RACF-trained expertise through a Microsoft Windows–based GUI for RACF administration

Highlights:

- Decentralize RACF administration to optimize resources
- "Scope Down" Administrative Capabilities
- Avoid need for TSO/ISPF rollouts
- Administer from a live RACF database
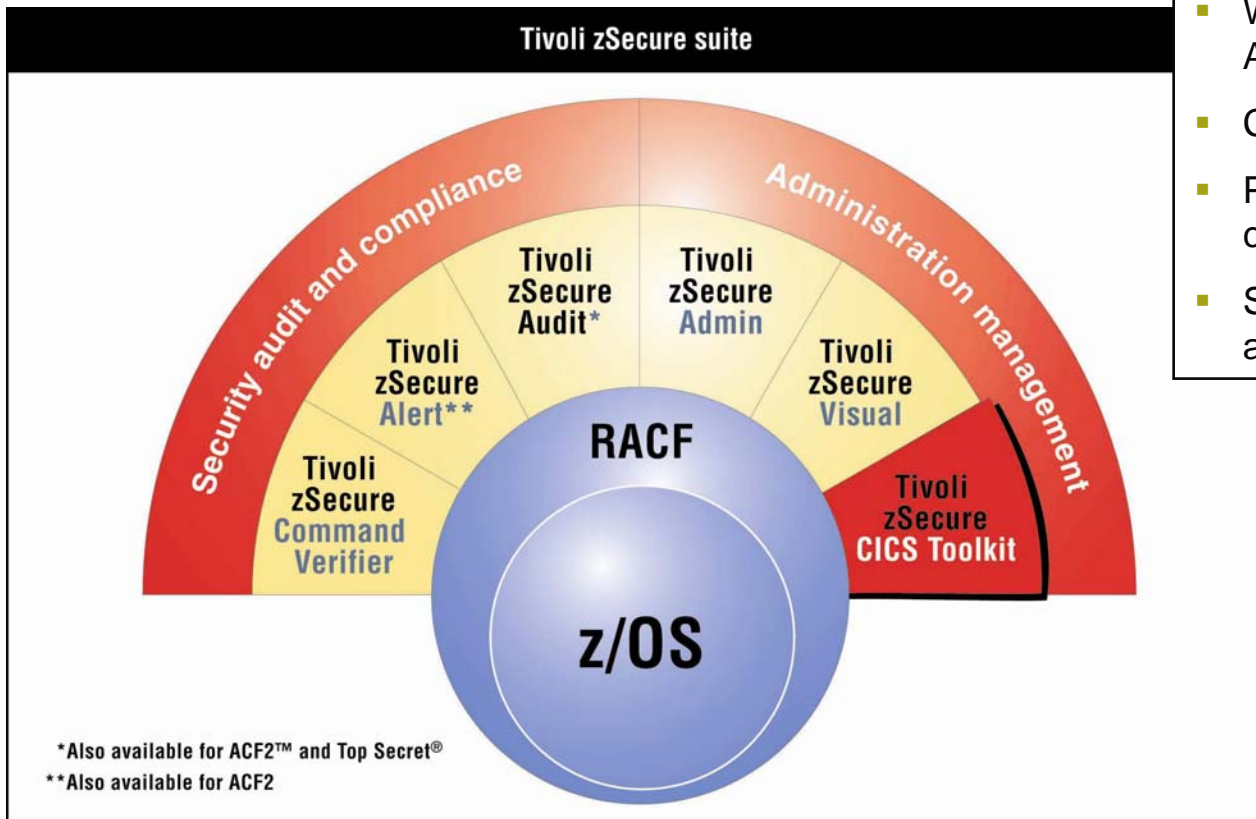- Easy Cloning of user templates
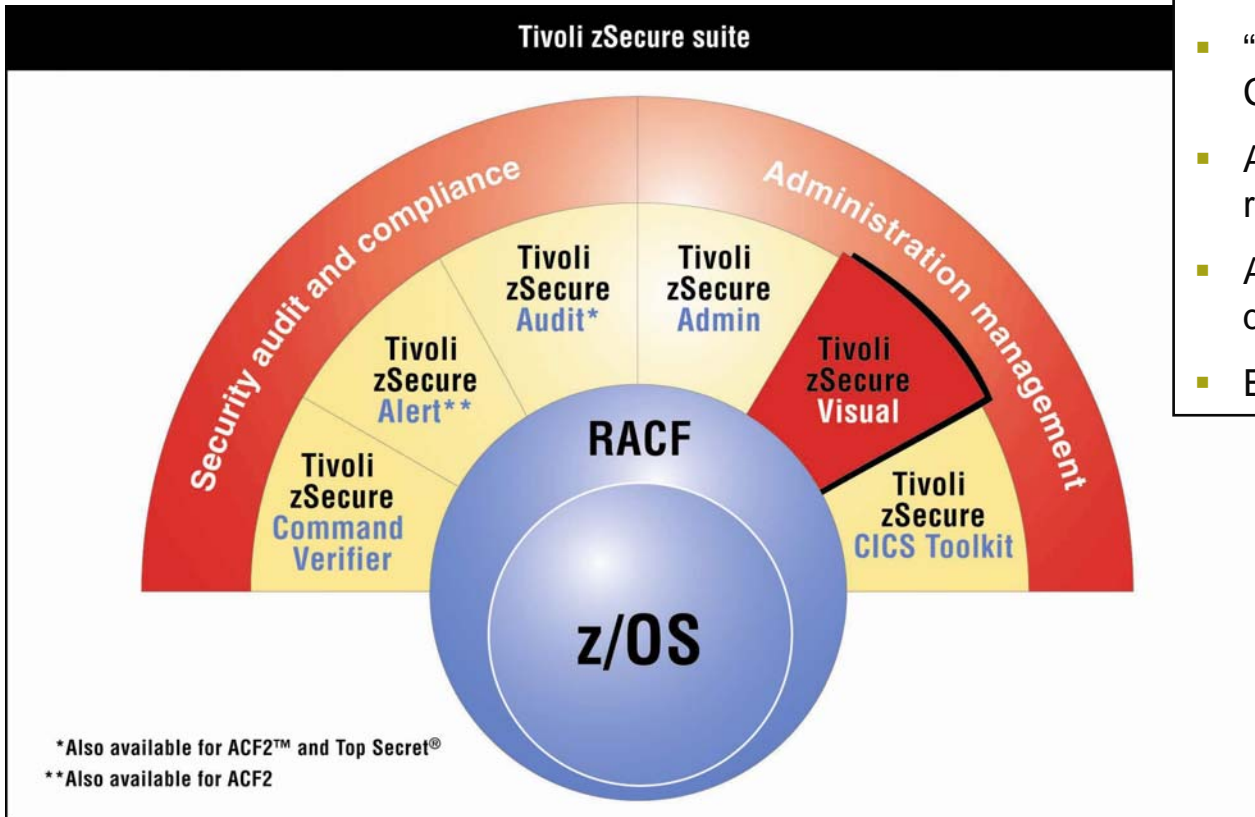
zSecure CICS Toolkit

Allows you to perform mainframe administrative tasks from a CICS environment, freeing up native-RACF resources
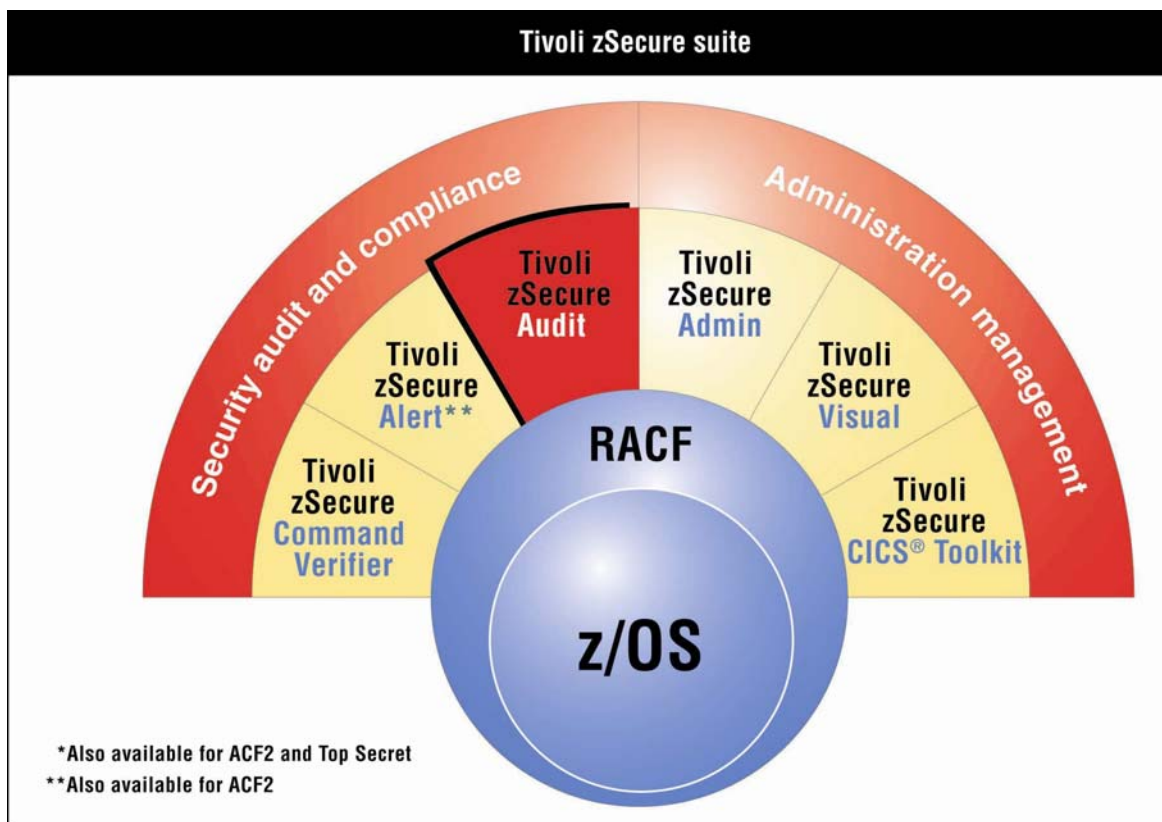
Highlights:

- RACF administration from a CICS interface

- Web-enablement CICS-RACF API

- Customize screens

- Perform resource access checks

- Support security of legacy applications

Tivoli zSecure suite

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Administration management

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RACF

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z/OS

*Also available for ACF2™ and Top Secret®
**Also available for ACF2

zSecure Audit

Compliance and audit solution that enables you to automatically analyze and report on security events and detect security exposures

Highlights:

- Live analysis of critical information

- Beyond just z/OS and RACF analysis

- Customize reports to meet specific needs with flexible report and alert language

- Analyze SMF log files to create a comprehensive audit trail

- Analyze RACF profiles and ACF2 entries to get fast answers

- Detect system changes and integrity breaches to minimize security risks

- Track and monitor baseline changes for RACF and ACF2

- Integrated remediation with Tivoli zSecure Admin

- Seamless links to enterprise audit and compliance

Trusted Userids Report – z/OS Status Audit

zSecure Command Verifier

Policy enforcement solution that enforces compliance to company and regulatory policies by preventing erroneous commands
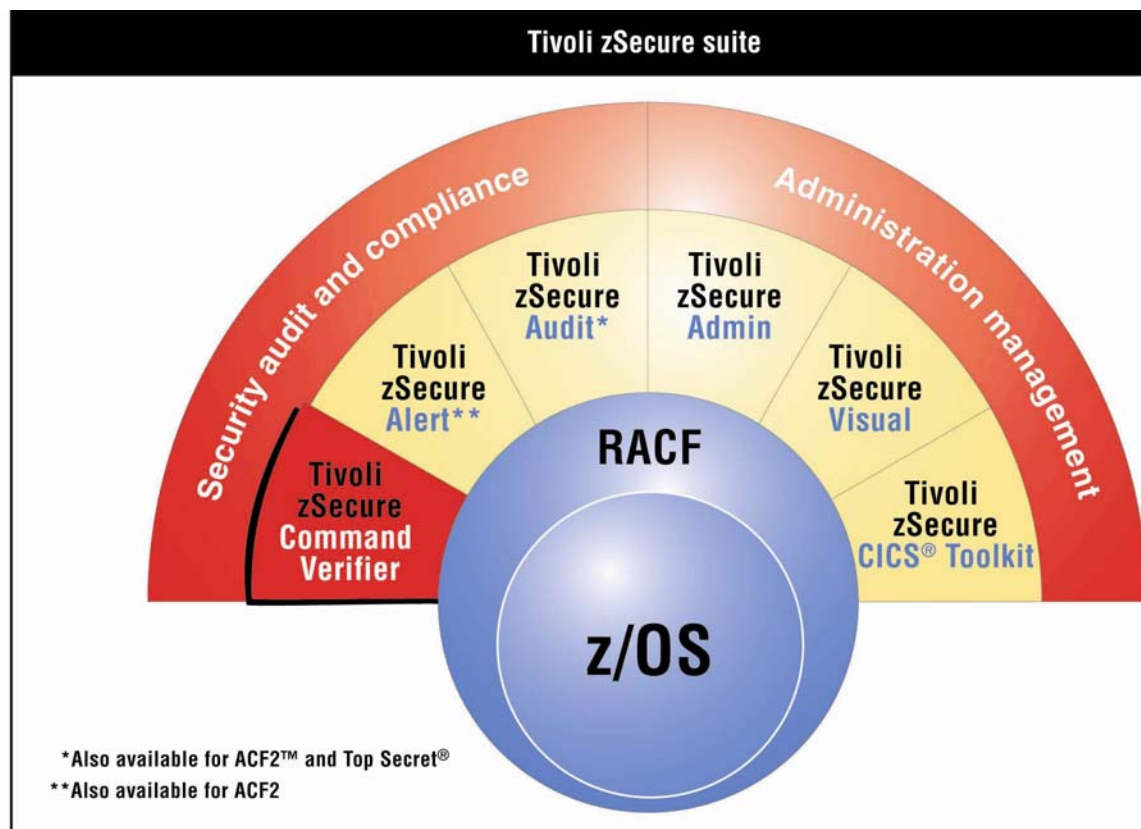
Highlights:

- Prevent noncompliant administrative command execution

- Supports policy definitions to provide mandatory and default values for which RACF does not provide appropriate defaults

- Command Audit Trail feature stores changes to profiles in the RACF database

- Easy independent installation for use on all systems for which policies must be enforced

- Grant users granular access to specific commands they would normally be unable to access

How zSecure Command Verifier Works

TSO/ISPF

zSecure Admin

RACF commands + output

Cmds

RACF commands

Policy

Command Verifier

SMF

EXIT

RACF profiles

RACF db mgr
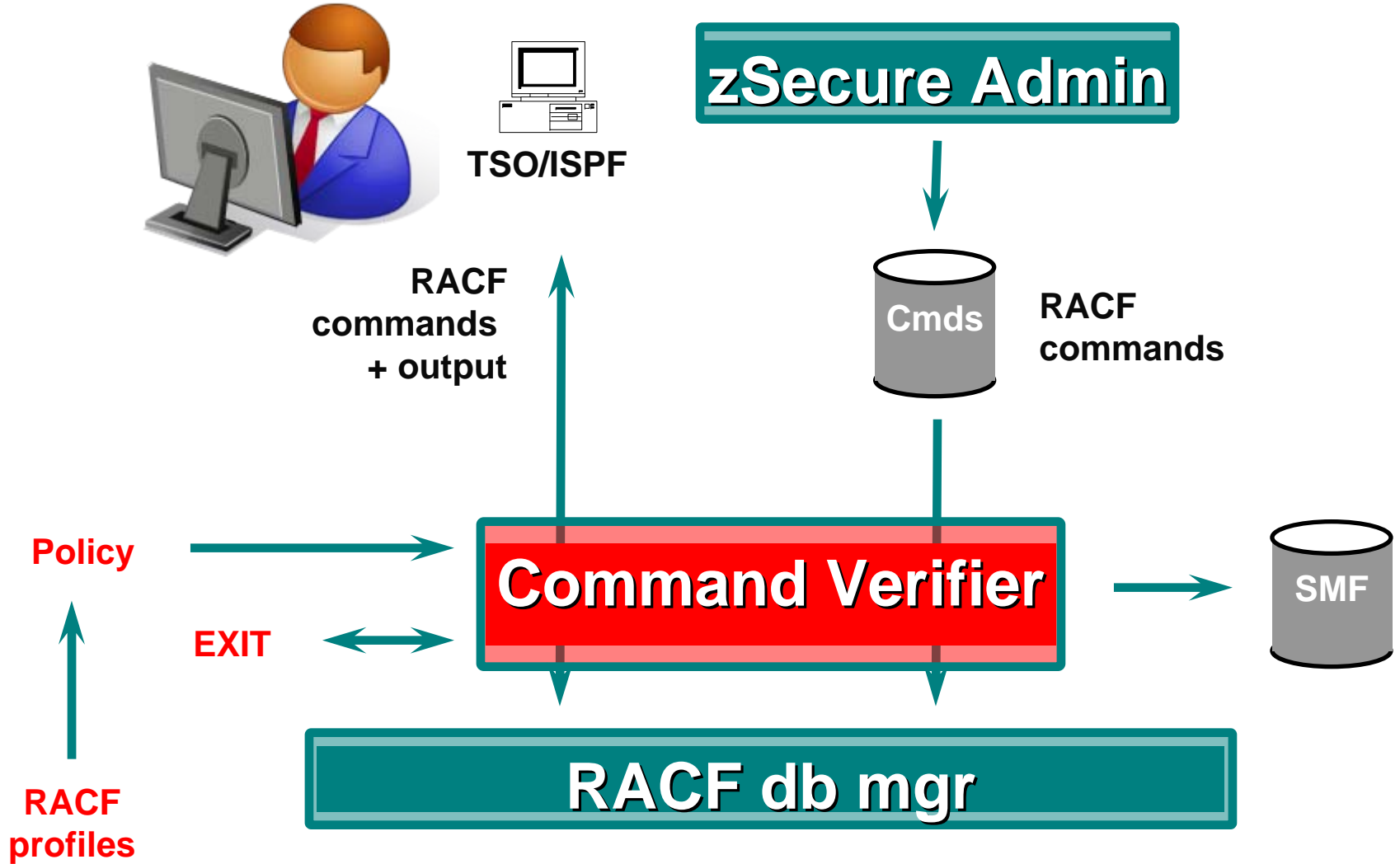
zSecure Alert

Real-time mainframe threat monitoring allowing you to monitor intruders and identify mis-configurations that could hamper your compliance efforts
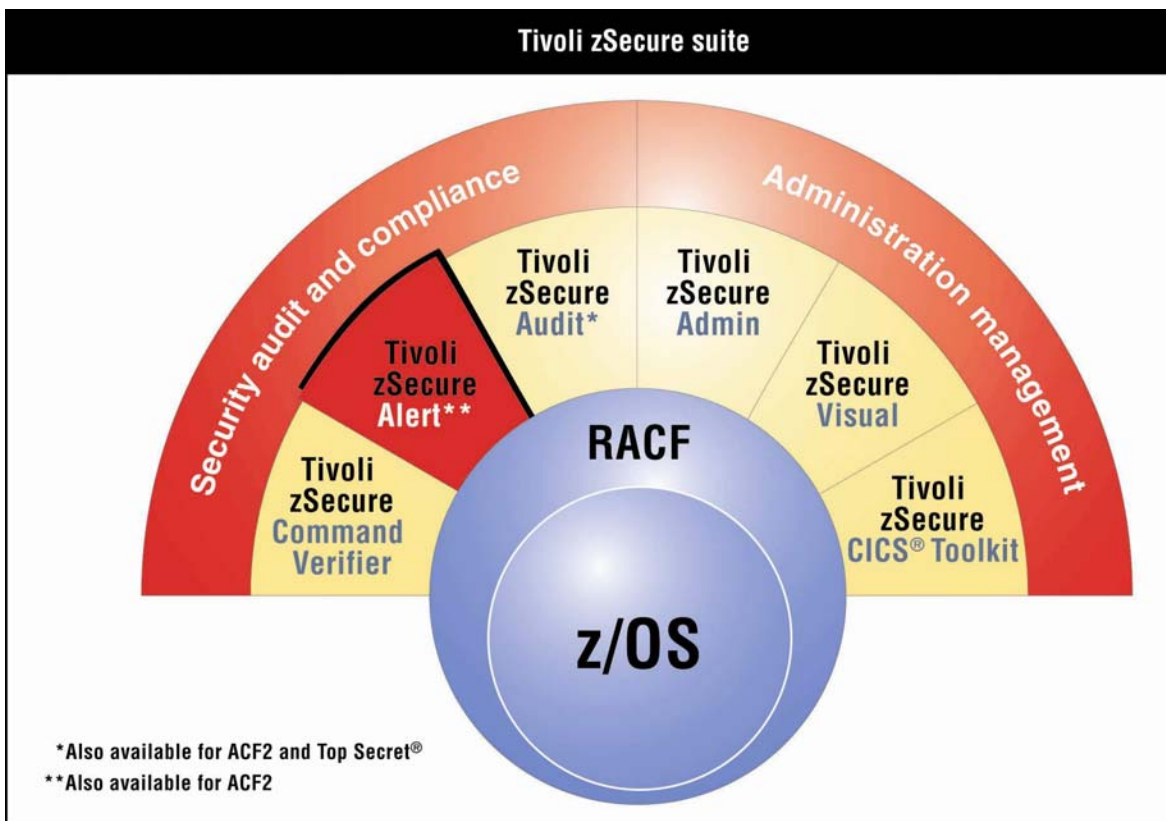
Highlights:

- Threat knowledge base with parameters from your active configurations

- Broad range of monitoring capabilities, including monitoring sensitive data for misuse on:
  - z/OS
  - IBM RACF
  - CA ACF2 and
  - z/OS UNIX subsystems.

- Easily send critical alerts to enterprise audit, compliance and monitoring solutions

- Integrated remediation with Tivoli zSecure Admin

Alerts from zSecure Alert

- **Unwanted logons and attempts**
    - Logon by unknown users
    - Logon with emergency userid
    - UNIX superuser logons
- **User behavior that violates security policy**
    - Password recycling
    - User issued USS command with uid 0, e.g. su
    - Administrator propagates his authority
- **Suspicious activity on the UNIX sub-system**
    - File access violations
    - APF or controlled program attributes assigned
    - Global write or read specified

- **Changes that violate security policy**
    - Addition or removal of system authority
    - Revoking of production userids
    - Excessive universal access granted
    - Disable system security options (SETROPTS)
    - Audit trail disabled
- **Core system resources at risk**
    - Update on a system dataset
    - Dynamic addition of APF dataset
    - SMF buffers becoming full, risking data loss
    - Started task running with unspecified authority

Reporting for CICS, IMS and DB2

- **zSecure Collect extended to retrieve information from CICS, IMS and DB2 servers**
  - **Data stored in CKFREEZE file**
- **Reporting via RE menu - Resource**

```
                        zSecure Suite - Main menu
Option ===> re.c_
                                                                More       +
SE      Setup           Options and input data sets
RA      RACF            RACF Administration
AA      ACF2            ACF2 Administration
AU      Audit           Audit security and system resources
RE      Resource        Resource reports
   I      IP stack        TCP/IP stack reports
   U      Unix            Unix filesystem reports
   C      CICS            CICS region and resource reports
   M      IMS             IMS control region and resource reports
   D      DB2             DB2 region report
AM      Access          RACF Access Monitor
EV      Events          Event reporting from SMF and other logs
CO      Commands        Run commands from library
IN      Information     Information and documentation
LO      Local           Locally defined options
X       Exit            Exit this panel

Input complex:   IDFX
```

CICS regi

- **Go to menu**

```
Option ===>

R      Region
T      Transa
P      Progra
```

```
Command ===

Show CICS

Jobname .
VTAM appli
SYSIDNT .
Complex .
System  .

Advanced s
_   Region

Output/run
_   Print f
        Back
```

```
                    CICS region display                    Line 1 of 69
Command ===>                                              Scroll===> CSR
All CICS region records                       6 Jun 2011 02:12

Region identification
   Complex name                    EEND
_  System name                     SYS1
   CICS Region job name            CICS41   Jobid STC03306 ASID 003A
   CICS Region step name           CICS41
   VTAM Specific applid            CICSTS41
   VTAM Generic applid             CICSTS41
   VTAM CICSPLEX Generic applid
   CICS System identification      CICS
   CICS System release level       TS 4.1.0
_  Default Userid                  CICSUSER    CICSA default user  Dfltgrp: SYS1
_  Region Userid                   CICSA       STC default user    Dfltgrp: STCGRP
_  PLT initialization userid       CICSPLT                         Dfltgrp: SYS1
_

SAF protection settings          SIT  Class       Act  Gen
Command security                 Yes  CCICSCMD    Yes  No
DB2 Entry security               No
Transient Data security          No
File security                    No
Journal security                 Yes  JCICSJCT    Yes  No
Started Transaction security     Yes  ACICSPCT    Yes  No
Program security                 Yes  MCICSPPT    Yes  No
PSB security                     Yes  PCICSPSB    Yes  No
Generic Resource security        Yes  RCICSRES    Yes  No
Attached Transaction security    Yes  TCICSTRN    Yes  No
Temp. Storage security           Yes  SCICSTST    Yes  No
Sessions checked in APPCLU       No
EJBeans checked in EJBROLE       Yes  EJBROLE     Yes  No
Users checked in SURROGAT        Yes  SURROGAT    Yes  Yes

SAF protection extent                      CICS SVC numbers
ESM invoked                      Yes       Supervisor Call (SVC) Number  216
Always do CMD checking           No        HPO SVC Number
Always do RES checking           No
PSB check remote users           No
PLT initialization security      ALL
Resource Prefix                  CICSA.
EJBROLE Prefix
Keyring for SSL and Web
```

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CICS transa

- **Go to menu op**

```
Command ===> _

Show CICS trans
Transaction . 
Program . . . 
Jobname . . . 
VTAM applid . 
SYSIDNT . . . 
Complex . . . 
System  . . . 
Type of report

Advanced trans
_  Security se

Output/run opti
_  0. No summar
_  Print format
      Backgroun
```

```
CICS transaction display                    Line 1 of 53
Command ===> _____    Scroll===> CSR
All CICS transaction records                6 Jun 2011 02:12

Transaction identification
  Complex name                      EEND
_ System name                       SYS1
  Transaction name                  CEDA
  Resource name                     CICSA.CEDA
  First program name                DFHEDAP
  CICS Region job name              CICS41    Jobid STC03306 ASID 003A
  CICS Region step name             CICS41
  VTAM Specific applid              CICSTS41
  CICS System identification        CICS

Transaction security settings
Resource security checking       No     Command security checking     No

Transaction attributes
Enabled                          Yes    Enabled during shutdown       No
Task data location above         No     Use local queueing            No
Task data in user key            Yes    TWA size                      0
Task storage clearance           No     Task storage freeze           No
Trace transaction                Yes    Show user data in CICS trace  No
Transaction isolation            Yes    Transaction profile           DFHCICST
Transaction class                       Transaction Priority          1
Transaction alias                       Transaction Hex alias
Transaction PF/PA-key
Transaction APPC name

Transaction recovery attributes          Transaction remote attributes
System purgeable                 Yes     Remote transaction name
Terminal-error purgeable         Yes     Remote system name
OTS Timeout                      0       Remote transaction profile
Indoubt wait action              Yes     Dynamic routable             No
Indoubt wait time                00:00   Routable transaction         No
Indoubt backout                  Yes
Dump if abnormal end             Yes
Restart after abnormal end       No
Deadlock timeout                 0000
Runaway time                     00:00
Runaway time system              No

UACC
RACF Universal access     NONE

Class     Profile
GCICSTRN CICSA.SPRO

User      Access  ACL id   When
_ -group-  READ    SYSPROG
_ -group-  READ    SYSAUDIT
_ IBMUSER  READ    IBMUS
```

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CICS prog

- **Go to menu**

```
CICS program display                        Line 1 of 42
Command ===> _____  Scroll===> CSR
All CICS transaction records                    6 Jun 2011 02:12

Program identification
   Complex name                  EEND
_  System name                   SYS1
   Program name                  CEEADJL
   Resource name                 CICSA.CEEADJL
   Program type                  Program
   CICS Region job name          CICS41    Jobid STC03306 ASID 003A
   CICS Region step name         CICS41
   VTAM Specific applid          CICSTS41
   CICS System identification    CICS

Program attributes
Enabled                      Yes    Dynamic routable            No
Obtain new program copy      No     Allow CICS Exec.Diag.Fac.   Yes
Permanently loaded program   No     Use DPL-subset API          No
Task data location above     Yes    Task data in user key       No
Use CICS API only (defined)  Yes    Use CICS API only (deduced) Yes
Programming language(defined) Undefined  Programming language(deduced)

Programs threadsafe(defined)  No            Programs threadsafe(deduced)  No

Remote program attributes
Remote program name                    Remote transaction name
Remote system name

Java settings
JVM Profile                   DFHJVMPR  Run in Java virtual machine   No
Java main program class

UACC
RACF Universal access         NONE

Class    Profile
PROGRAM CEE*

   User    Access   ACL id  When
_  -group- READ     SYSPROG
_  -group- READ     SYSAUDIT
_  IBMUSER READ     IBMUSER

Pri Audit concern
```

```
Command =

Show CICS
Program .
Program t
Jobname .
VTAM appl
SYSIDNT .
Complex .
System .
Type of r


Advanced
_  Securit

Output/ru
_  0. No
_  Print
      Bac
```

DB2 region

- **Go to menu o**

```
Command ===>

Show DB2 regi
Jobname . . .
Local LU name
Local site na
DB2ID . . . .
Group attachm
Complex . . .
System . . .

Advanced sele
_   Region sec

Output/run op
_   Print form
      Backgro
```

```
                    DB2 region display                    Line 1 of 36
Command ===> _____     Scroll===> CSR
All DB2 region records                        6 Jun 2011 02:12

Region identification
   Complex name                   EEND
_  System name                    SYS1
   DB2 System identification      DB9G
   DB2 Region job name            DB9GMSTR   Jobid  ASID 0036
   DB2 Region step name
   Local LU name                  DB9GLU1
    Local site name               DALLAS9
   Group attachment name
   Command character              -
   Linkage table index            00180100
   Region userid                                  Dfltgrp:

Region security settings
Classification Option       2 (1=single-subsystem, 2=multi-subsystem)
Class Name Root             DSN
Class Name suffix           1


SAF protection settings      Class    Act  Gen
Buffer pool privileges class   MDSNBP   Yes  Yes
Class system privileges        MDSNSM   Yes  Yes
Collection privileges class    MDSNCL   Yes  Yes
Stored proc privileges class   MDSNSP   Yes  No
Database privileges class      MDSNDB   Yes  Yes
Sequences class                MDSNSQ   Yes  No
Java archive files class       MDSNJR   Yes  No
Table/index/view priv. class   MDSNTB   Yes  Yes
Package privileges class       MDSNPK   Yes  Yes
Tablespace privileges class    MDSNTS   Yes  Yes
Plan privileges class          MDSNPN   Yes  Yes
Schema privileges class        MDSNSC   Yes  No
User type privileges class     MDSNUT   Yes  No
Storage group privilege class  MDSNSG   Yes  Yes


Pri Audit concern
```

Access Monitor

- **Introduced in zSecure 1.11 as part of zSecure Admin**
- **The data collected for each event includes the following types of information:**
  - **Profile name used, Userid, Access intent (READ, UPDATE, ALTER, and so on), Reason the access was granted, Some attributes of the userid, Date and time, Number of events, Jobname, Port Of Entry (POE) information**
    - **Information stored in sequential data sets**
      - Consolidated into daily and (optionally) weekly, monthly or yearly files
  - **Identifies unused profiles, members, GLOBAL entries, access list entries, groups**
- **The RACF database cleanup function consists of three components:**
  - **The RACF Access Monitor program (C2PACMON) used for data collection.**
  - **The CKRCARLA program that summarizes and saves the collected data so it can be analyzed.**
  - **An ISPF menu component that allows you to specify selection criteria for reports, generate reports, analyze reports, and perform RACF database cleanup tasks.**
- **Addressed with extended capabilities in 1.13**

Access Monitor - Collection of more fields

- **Optional JOBNAME collection**
  - **Specify (list of) userids in member C2PAMJOB**
  - **Intended for shared userids such as started tasks, workload schedulers**
- **Optional Port of Entry collection**
  - **Specify Resource class, e.g., OPERCMDS in member C2PAMRCL**
  - **Specify Port class, e.g., CONSOLE, TERMINAL, in member C2PAMPCL**
  - **Useful to see where operator commands are entered, SDSF, main console, etc.**
- **Collection of user's privileges**
  - **Access granted via PRIVILEGED or TRUSTED was already shown**
  - **Access granted because of OPERATIONS and SPECIAL is added in 1.13**
    - Identity users, jobnames that rely on OPERATIONS
- **Activating these fields will increase size of your consolidation files**

Access Monitor

- **Three new control/configuration files**
  - **C2PAMJOBUserids for which to collect job names**
  - **C2PAMPCLPOE classes for which to collect POE names**
  - **C2PAMRCLResource classes for which to collect POE names**

```
---- C2PAMJOB ----

----+----1----+----2
IBMUSER   YES
C2PSUSER  NO
```

```
---- C2PAMRCL ----

----+----1----+----2
OPERCMDS  YES
```

```
---- C2PAMPCL ----

----+----1----+----2
CONSOLE    YES
TERMINAL   YES
```

Access Monitor - Fast I/O

- **Consolidation process combines multiple records for similar events into a single record**
- **New ACCESS record format (V1.13 format)**
  - **Created in daily consolidation (C2PAMCVT)**
  - **Enables parallel reading and consolidation**
- **Consolidation improved**
- **Reporting unaffected**
- **Before consolidating, V1.11 format data must be converted to the V1.13 format.**
- **Installation choices**
  - **Keep the old format daily files from zSecure 1.11 and 1.12**
    - Consolidate old format and new format files into Monthly consolidation
    - Using CARLa in C2PAMCMP
  - **Convert the old format Daily files to new (zSecure 1.13) format**
    - Using CARLa in C2PAMCVT
    - Next Monthly consolidation job using UNLOAD command will work

User interface improvements

- **Profile search mask is more similar to SEARCH FILTER syntax:**
  - * at the beginning of a qualifier is supported, SYS1.*LIB finds SYS1.LINKLIB,SYS1.PROCLIB
  - **.*LIB.** finds profiles with 2nd,3rd,4th, etc. qualifier ending in LIB

- **Search for users with a specific connect authority in RA.U**
  - **Use the Attributes selection panel**

```
Menu            Options        Info      Commands      Setup

                        zSecure Suite - RACF - User Attributes
Command ===> _____
All users
Specify groups of criteria that the userids must meet:
Systemwide and group authorizations
OR    _    Special      _    Operations     _    Auditor      _    Class auth
      _    Group-special _   Group-oper     _    Group-audit

Logon status
OR    _    Revoked      _    Inactive       _    Protected       Passw expired
      _    Revoked group _   Certificate    _    Pass phrase     Phrase expired
      _    When day/time _   ID mapping

User properties
OR    _    Has RACLINK  _    Restricted     _    User audited _  Mixed case pwd

CKGRACF features
OR    _    Queued cmds  _    Schedules      _    Userdata     _  MultiAuthority

Connect authority . __        _    1. Use   2. Create   3. Connect   4. Join
```

- **Display connect owner in connects list**
  - **Under control of SETUP VIEW**

```
Menu            Options        Info      Commands      Setup

EEND C2RP3S5            zSecure Suite - Setup - View
Command ===> _____

Access list format . . . . 2  1. No        3. Explode   5. Effective
                              2. Sort       4. Resolve

ACL/Connect sort . . . . . 2  1. Id         2. User      3. Access

Show OS specific options   /  z/OS          _  z/VM

/  Add user/group info to view
   (Selecting this will use some additional storage - normally on )
/  Add summary to RA displays for multiple RACF sources (normally on)
/  Add connect date and owner to RA.U connect group section

Select view
3  1. View only profiles you are allowed to change (administrator view)
   2. View all profiles you are allowed to change or list
   3. View all profiles (normal view)

 F1=Help      F2=Split      F3=Exit      F7=Backward  F8=Forward   F9=Swap
F10=Actions  F12=Cancel
```

User interface improvements

- **RACF commands can be fitted to 72 positions**
  - **Allocate a CKRCMD data set with RECFM=FB, LRECL=80 in SETUP RUN (SE.0)**

```
   Menu          Options        Info      Commands      Setup
                       zSecure Suite - Setup - Run
   Command ===> _

   Specify run options
   Enter "/" to select option(s)
   /   Use permanent work data sets (CKRCMD is always permanent)
   _       Delete permanent work data sets on exit
           Delete CKRCMD on exit (may contain readable passwords)
   /   Allocate CKRCMD data set with RECFM=FB,LRECL=80
   /   Allocate previous input files at startup
   _   Suppress warning messages when appropriate input files not selected
   _   Display of all status messages in sequence (degrades performance)
   _   Use TSO SUBMIT (not recommended)
   _   Suppress call to RACF naming convention exit ICHCNX00
   _   Suppress use of RACF naming convention table ICHNCV00
   _   Suppress use of RACF range table ICHRRNG
   _   Touch RACF connect owner as little as possible
   _   Use ACF2 masking instead of EGN
   Server Token  . . . .  _
   Suppress messages, enter numbers separated by commas
```

- **RECREATE generates appropriate SETROPTS REFRESH commands**

```
****** *********************************************************** Top of Data **********
==MSG> -Warning- The UNDO command is not available until you change
==MSG>          your edit profile using the command RECOVERY ON.
000001      /* CKRCMD file CKR1CMD complex NANO generated 26 May 2011 11:19 */
000002      /* CKRCMD file CKRT1CMD complex NANO generated 26 May 2011 11:19 */
000003      rdefine FACILITY $$TEST$$ owner(IBMUSER) audit(failures(READ)) uacc(NONE   )
000004      rdefine FACILITY $$TEST$$.XYZZY11 owner(IBMUSER) audit(failures(READ)) uacc(NONE   )
000005      permit $$TEST$$ class(FACILITY)  id(IBMSYS1) access(NONE)
000006      permit $$TEST$$ class(FACILITY)  id(IBMSYS2) access(READ)
000007      permit $$TEST$$ class(FACILITY)  id(IBMUSER) access(READ)
000008      permit $$TEST$$.XYZZY11 class(FACILITY)  id(IBMSYS3) access(NONE)
000009      setropts refresh raclist(FACILITY)
****** *******                                  *********************** Bottom of Data **********
```

- **C line command to copy class settings in RA.S**

```
   Menu          Options        Info      Commands      Setup
                   zSecure Admin+Audit for RACF - Copy class settings
   Command ===> _

   Copy from class . . . : $CONSUL
   To class  . . . . . . : _
   CDT profile owner . . . _

   _   Generate SETROPTS CLASSACT for new class
   _   Generate SETROPTS RACLIST for new class
   _   Generate SETROPTS GENLIST for new class
   _   Generate SETROPTS GENERIC for new class
```
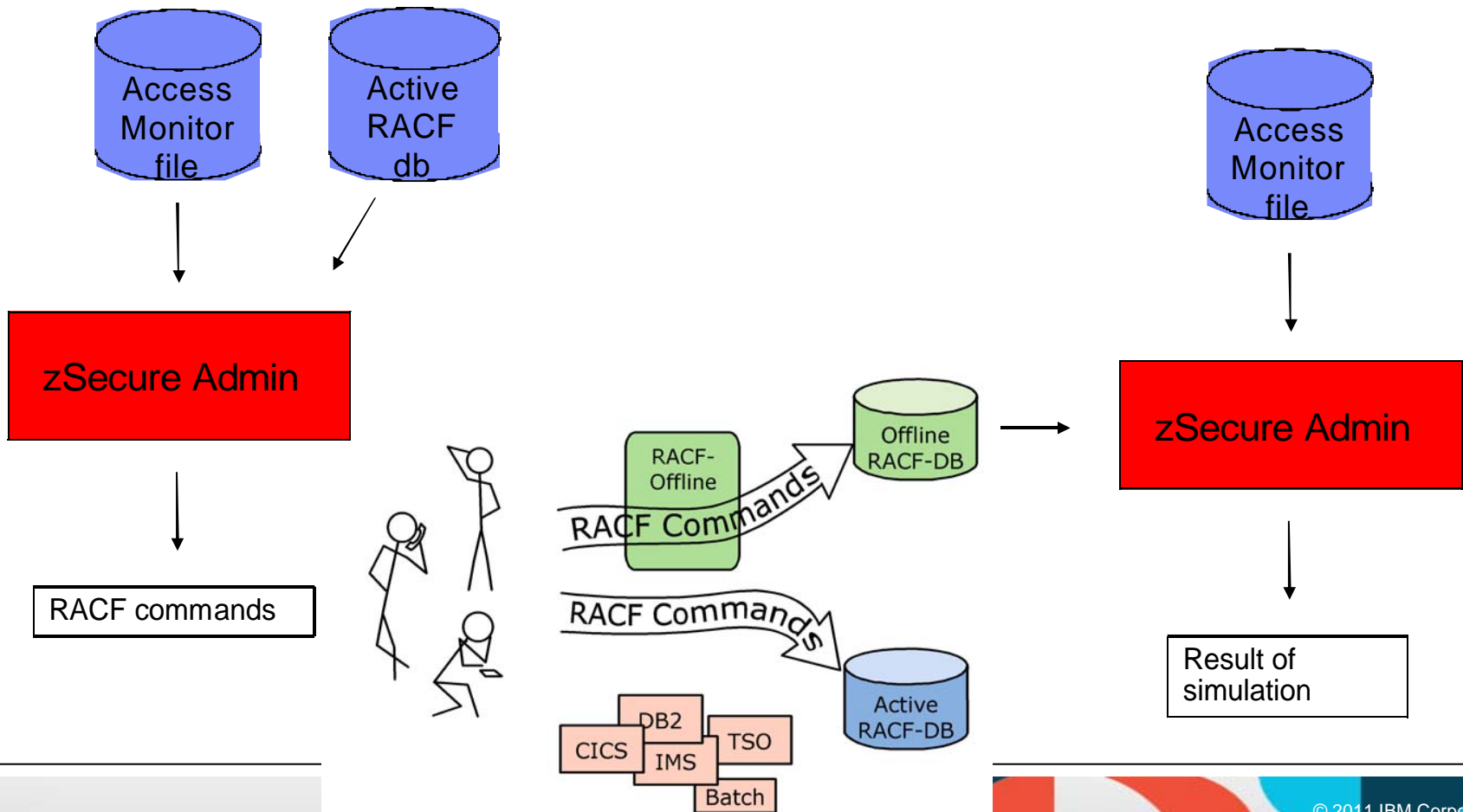
RACF Offline

- **Allows testing of RACF commands on a copy of a RACF database**
  - **Use zSecure Admin and Audit to generate reports from the new database**
  - **Use Access Monitor to simulate access checks and find differences**

zSecure Visual

- **New in 1.13: Site-specific user data**
  - **External data sets with attributes for RACF USER profiles**
  - **Each record must contain a field with the user identification, and one or more data fields**
    - Employee number, phone number, initial password, etc.
    - User id must be in a field in the user profile, e.g., PGMRNAME or PROFILE KEY
  - **Multiple data sets supported**
    - Disparate information sources
    - Specific files for department administrators

| Userid	Name	Department	Employee	Cost Centre	State	Owner	DefaultGrp	Revoked	Inactive
C2RWQA4	TEST SUBJECT4	50064	QA-00000004	4200040	SA	C2RWQA	C2RWQA	Revoked	Inactive
C2RWQA41	TEST SUBJECT41	50064	QA-00000041	4200040	NT	C2RWQA	C2RWQA		Inactive
C2RWQA42	TEST SUBJECT42	50065	QA-00000042	4300510	VIC	C2RWQA	C2RWQA		Inactive
C2RWQA45	TEST SUBJECT45	50065	QA-00000045	4300510	WA	C2RWQA	C2RWQA3G		Inactive
C2RWQA46	TEST SUBJECT46	50065	QA-00000046	4301610	WA	C2RWQA	C2RWQA	Revoked	Inactive
C2RWQA47	TEST SUBJECT47	50065	QA-00000047	4300510	SA	C2RWQA	C2RWQA		Inactive
C2RWQA48	TEST SUBJECT48	50065	QA-00000048	4301610	TAS	C2RWQA3G	C2RWQA3G		Inactive
C2RWQA49	TEST SUBJECT49	50066	QA-00000049	4200040	VIC	C2RWQA	C2RWQA		Inactive

```
C2RWQA47QA-00000047        500654300510 SA
C2RWQA48QA-00000048        500654301610 TAS
C2RWQA40QA-00000040        500654300510 WA
```

zSecure 1.12 - Multi System Support

- **Reporting and managing multiple systems from a single session**
- **Use zSecure ISPF application, zSecure Visual and zSecure batch jobs to**
  - **Retrieve data from remote systems using a TCP/IP connection**
    - RACF profile displays
    - Audit reports from RACF and CKFREEZE
    - SMF reports from live SMF or dumped SMF
  - **Generate RACF commands for one or more systems**
  - **Command routing**
    - Execute on local system
    - Send to remote system using RRSF
    - Send to remote system using zSecure TCP/IP connection
    - Send to remote system using NJE

zSecure Network Services
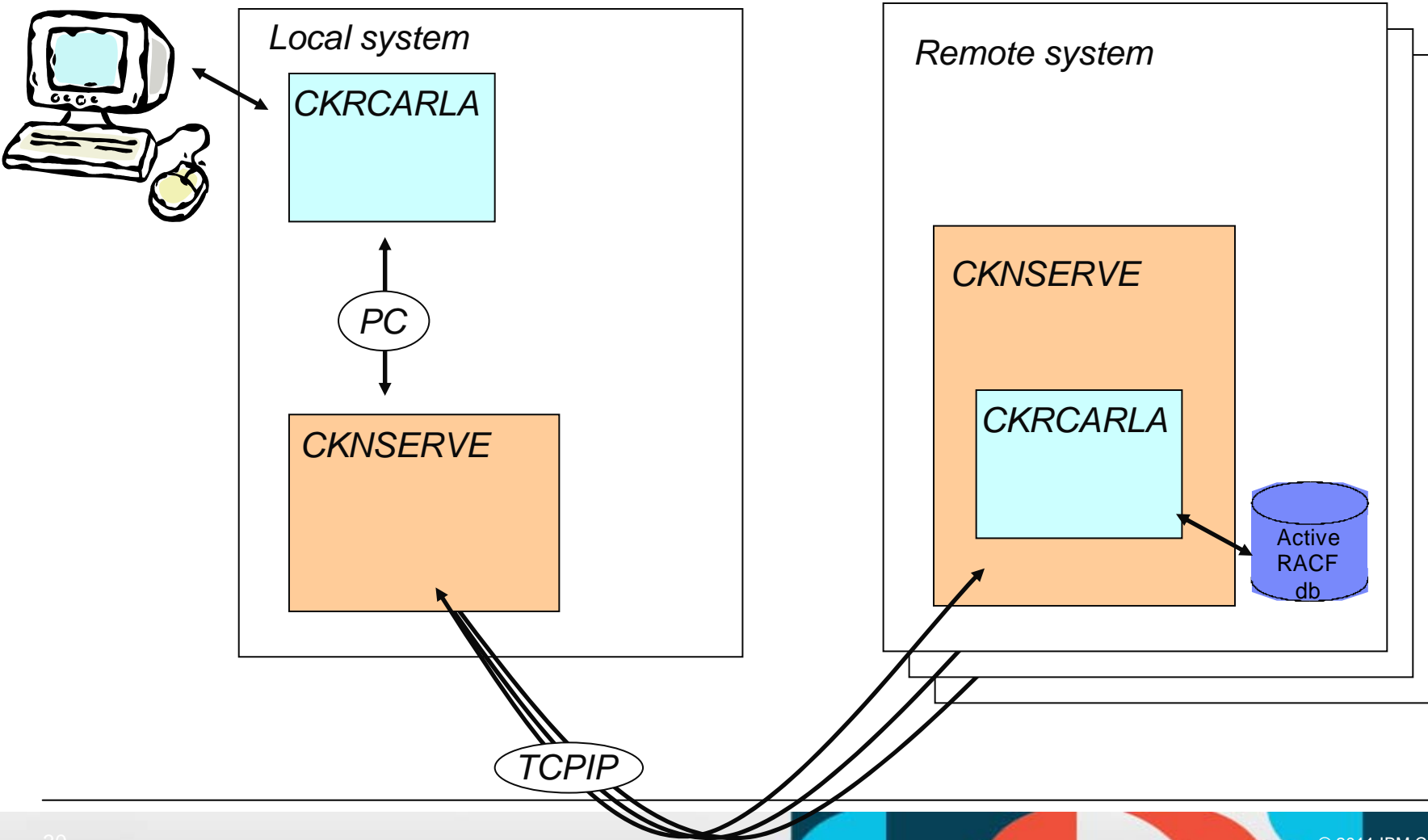
End of presentation

Obrigado
Portugal

Dziekuje
Poland

Dankschen
Austria

Thanks
United States

Takk
Norway

Toda
Israel

Gracias
Spain

Danke
Germany

Bedankt
Netherlands

Tak
Denmark

Dekuju
Czech Republic

Merci
France

Engraziel
Switzerland

Tesekkür ederim
Turkey

Tack
Sweden

Dank u
Belgium

Thank You
United Kingdom

Grazie
Italy

Jag tackar
Finland

Dakujem
Slovakia

Спасибо
Russia