VANGUARD
INTEGRITY PROFESSIONALS, INC.
enterprise security software

Beyond Best Practices: The DISA STIGs

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Outline

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Terms and Terminology
History of the STIGS
Categories of STIG Checks
Individual STIGS
Anatomy of a STIG

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Terms and Terminology

Defense Information Systems Agency (DISA)

A United States Department of Defense combat support agency with the goal of providing real-time information technology (IT) and communications support to the President, Vice President, Secretary of Defense, the military Services, and the Combatant Commands.

National Institute of Standards and Technology (NIST)

Publishes configuration controls that must be used by each Federal Agency and by all contractors processing data for a federal agency.

Security Technical Implementation Guide (STIG)

A configuration document used to standardized security controls for software and hardware systems. Each **STIG** check in the SRR checklist is mapped to IA Controls defined in **DoD Directive 8500.2.**

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Information Assurance (IA)

Measures that protect and defend information and information systems by ensuring their availability, integrity, authentication, confidentiality, and non-repudiation. This includes providing for restoration of information systems by incorporating protection, detection, and reaction capabilities.

Department of Defense (DoD)

The U.S. federal department charged with coordinating and supervising all agencies and functions of the government relating directly to national security and the United States armed forces.

DoD Directive 8500.1

Requires that "all IA and IA-enabled IT products incorporated into DoD information systems shall be configured in accordance with DoD-approved security configuration guidelines" and tasks **DISA** to "develop and provide security configuration guidance for IA and IA-enabled IT products in coordination with Director, NSA."

5

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DoD IA Controls

The Department of Defense Information Assurance (IA) program establishes a baseline set of controls to be applied to all DoD information systems. Each control is uniquely named and can be referenced, measured, and reported against throughout the life cycle of a DoD information system.

Security Readiness Review (SRR)

The audit performed at designated sites to review compliance with the **DISA STIGs.**

SRRAUDIT

The name assigned to the **SSR** audit process to validate compliance with the **DISA STIG**s.

DHS

Department of Homeland Security

6

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Terms and Terminology

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Checks

A specific vulnerability test or configuration control. Each Check gets its first few characters from the category of checks it is in.
For example, ACP00282 – Access Control Program (ACP)

Checklist

Refers to the list of **checks** that are to be performed as part of the **SRR**

Checklist Result

Outcome of a check - Open, Not A Finding, Not Reviewed, Not Applicable

Finding Severities

Category I - Vulnerabilities that allow an attacker immediate access into a machine, allow superuser access, or bypass a firewall.

Category II - Vulnerabilities that provide information that have a high potential of giving access to an intruder.

Category III - Vulnerabilities that provide information that potentially could lead to compromise.

7

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NCP

National Checklist Program (Part of the NVD)

NVD

National Vulnerability Database (hosted by NIST and DHS)

Vulid

Vulnerability Identification

XCCDF

eXtensible Configuration Checklist Description Format

SCAP

Security Content Automation Protocol

OMB

Office of Management and Budget

8

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History of the STIGS

History of the STIGS

DOD issues Directive 8500.1 (OCT 2002)

Its purpose is to establish policy and assign responsibilities in order to achieve Department of Defense (DoD) information assurance (IA).

DISA created the STIGS in response to DoD 8500.1

The term STIGS was coined by DISA who creates configuration documents in support of the United States Department of Defense (DoD). The implementation guidelines include recommended administrative processes and span over the lifecycle of the device.

History of the STIGS

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NIST Publishes Security Configuration Controls.

They do not include mainframe configuration controls.

NIST controls lead to the SCAP standard.

NIST Co-hosts with DHS a security configuration checklist at the NVD.

NIST 800-53 rev 3 included security controls in its catalog for both national security and non-national security systems.

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History of the STIGS

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DISA converts STIGS to SCAP format

DISA converts the STIGS to XCCDF format, the first step toward SCAP.

SP 800-126

NIST adopts STIGS

The NVD now contains checklist for the mainframe in the NCP.

OMB mandate

If NIST has a standard, all Federal agencies and all contractors processing data for a federal agency must conform to those standards.

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History of the STIGS

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Version 4, Release 1.3, Feb. 2004

Version 4, Release 1.4, Oct. 2004

Version 4, Release 1.5, July 2005

Version 5, Release 1.1, April 2006

Version 5, Release 2.1, Nov. 2006

Version 5, Release 2.2, March 2007

Version 5, Release 2.3, May 2007

Version 5, Release 2.6, Nov. 2007

Version 5, Release 2.10, Dec. 2008

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History of the STIGS

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Version 5.2.10

The last release of the STIG Guideline (1000 page booklet that contained all the rationale behind the configuration control).

Version 6.1

This release and all subsequent released as SRR checklists only.

Version 6.2

XCCDF expressed checklist in line with Security Content Automation Protocol (SCAP). NIST 800-126

Version 6.14

Released on Jan 25, 2013 is the current release.

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Categories of STIG Checks

Categories of STIG Checks

z/OS Data Analysis (AAMV)
Security Server (RACF) Data Analysis (ACP, RACF)
CA-1 (Tape Management System) Data Analysis (ZCA1)
CICS Data Analysis (ZCIC)
CL/Supersession Data Analysis (ZCLS)
DBMS Data Analysis (ZDBM)
Front End Processor Data Analysis (ZFEP)
IBM Communications Server Data Analysis (IFTP,ISLG,ITCP,ITNT,IUTN)
Integrated Cryptographic Services Facility (ZICS)
Integrated Database Management System (IDMS) Data Analysis (ZIDM)
BMC Control-D, Control–M, Control-O and IOA checks (ZCDT, ZCDM, ZCDO,ZIOA)
CA – Auditor checks (ZADT)
JES2 Data Analysis (ZJES)
NC-Pass Data Analysis (ZNCP)

Categories of STIG Checks

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SDSF Data Analysis (ZISF)
DFSMS Data Analysis (ZSMS)
TSO Data Analysis (ZTSO)
UNIX System Services Data Analysis (ZUSS)
VTAM Data Analysis (ZVTM)
WebSphere Application Server for z/OS Analysis (ZWAS)
WebSphere MQSeries for z/OS Analysis (ZWMQ)
Hardware Configuration Definition (ZHCD)
Tivoli Asset Discovery (ZTAD)
Catalog Solutions (ZCSL)
Roscoe (ZROS)
SRR Audit (ZSRR)
Transparent Data Migration Facility Data Analysis (ZTDM)
NetView Data Analysis (ZNET)
Vanguard Security Solutions (ZVSS)

17

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Categories of STIG Checks

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CA Common Services (ZCCS)
CA MIM (ZMIM)
CA VTAPE (ZVTA)
Compuware Abend-AID (ZAID)
IBM CSSMTP (ZSMT)
IBM Health Checker (ZHCK)
IBM SDSF (SDSF)
QWEST NC-PASS (ZNCP)

18

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Individual STIGS

OS/390 & z/OS Data Analysis (AAMV)

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AAMV0010 A CMP (Change Management Process) is not being utilized on this system
AAMV0012 Unsupported system software is installed and active on the system
AAMV0014 Site does not have a formal migration plan for removing or upgrading OS systems software prior to the date the vendor drops security patch support
AAMV0016 The IAO or Site does not subscribe to the DOD-CERT/VCTS (Vulnerability Compliance Tracking System) bulletin mailing list.
AAMV0018 Site does not maintain documented procedures to apply security related software patches to their system and does not maintain a log of when these patches were applied
AAMV0030 LNKAUTH=APFTAB is not specified in the IEASYSxx member(s) in the currently active parmlib data set(s).
AAMV0040 Inaccessible APF libraries defined
AAMV0050 Duplicated sensitive utilities and/or programs exist in APF libraries
AAMV0160 Inapplicable PPT entries have not been invalidated
AAMV0325 Non-existent or inaccessible Link Pack Area (LPA) libraries
AAMV0350 Non-existent or inaccessible LINKLIST libraries
AAMV0370 Non-standard SMF data collection options specified
AAMV0380 Required SMF data record types not being collected
AAMV0400 An automated process is not in place to collect and retain SMF data
AAMV0410 ACP database is not on a separate physical volume from its backup and recovery datasets.
AAMV0420 ACP database is not backed up on a scheduled basis documented correctly

OS/390 & z/OS Data Analysis (AAMV)

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AAMV0430 System DASD backups are not performed on a regularly scheduled basis
AAMV0440 PASSWORD data set and OS passwords are utilized
AAMV0450 System programs (e.g., exits, SVCs, etc.) are in use without DAA approval and/or are not documented correctly
AAMV0500 Sensitive and critical system data sets exist on shared DASD

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Security Server Data Analysis (ACP)

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ACP00010 SYS1.PARMLIB is not limited to only system programmers.
ACP00020 Access to SYS1.LINKLIB is not properly protected
ACP00030 Update and Allocate access to SYS1.SVCLIB is not limited to system programmers only
ACP00040 Update and allocate access to SYS1.IMAGELIB is not limited to system programmers only.
ACP00050 Update and allocate access to SYS1.LPALIB is not limited to system programmers only
ACP00060 Update and allocate access to all APF authorized libraries are not limited to system programmers only
ACP00070 Update and allocate access to all LPA libraries are not limited to system programmers only.
ACP00080 Update and allocate access to SYS1.NUCLEUS is not limited to system programmers only.
ACP00100 Update and allocate access to libraries that contain PPT modules are not limited to system programmers only
ACP00110 Update and allocate access to LINKLIST libraries are not limited to system programmers only
ACP00120 Update and allocate access to ACP files and/or databases are not limited to system programmers and/or security personnel
ACP00130 Access Greater than Read to the System Master Catalog is not limited to system programmers only.
ACP00135 Allocate access to system user catalogs are not limited to system programmers only.
ACP00140 Update and allocate access to all system-level product installation libraries are not limited to system programmers only

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Security Server Data Analysis (ACP)

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ACP00150 Update and allocate access to the JES2 System data sets (e.g., Spool, Checkpoint, and Initialization parameters) are not limited to system programmers only

ACP00170 Allocate access to SYS1.UADS is not limited to system programmers only and read and update access is not limited to system programmer personnel and/or security personnel

ACP00180 Update and allocate access to SMF collection files (i.e., SYS1.MANx) are not limited to system programmers and/or batch jobs that perform SMF dump processing.

ACP00190 Update and allocate access to data sets used to backup and/or dump SMF collection files are not limited to system programmers and/or batch jobs that perform SMF dump processing.

ACP00200 Access to SYSTEM DUMP data sets are not limited to system programmers only

ACP00210 Update and allocate access to System backup files are not limited to system programmers and/or batch jobs that perform DASD backups.

ACP00220 Access to SYS(x) TRACE is not limited to system programmers only

ACP00230 Access to System page data sets (i.e., PLPA, COMMON, and LOCALx) are not limited to system programmers.

ACP00240 Update and allocate access to Libraries containing EXIT modules are not limited to system programmers only

ACP00250 Update and alter access to all system proclib datasets are limited to system programmers only

ACP00260 Memory and privileged program dumps are not protected in accordance with proper security requirements

ACP00270 Dynamic lists are not protected in accordance with proper security requirements.

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Security Server Data Analysis (ACP)

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ACP00282 z/OS system commands are improperly protected.

ACP00291 The system programmer will ensure that the CONSOLxx members are properly configured.

ACP00292 MCS consoles userid(s) are improperly protected

ACP00293 MCS consoles access authorization(s) for CONSOLE resource(s) is (are) improperly protected.

ACP00294 Users that have access to the CONSOLE resource in the TSOAUTH resource class are not properly defined

ACP00320 The ACP audit logs are not reviewed on a regular basis

ACP00330 User accounts defined to the ACP do not uniquely identify system users

ACP00340 z/OS Baseline reports are not reviewed and validated to ensure only authorized changes have been made within the z/OS operating system. This is a current DISA requirement for change management to system libraries.

ACP00350 IEASYMUP resource will be protected in accordance with proper security requirements

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Security Server Data Analysis (RACF)

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RACF0244 FACILITY resource class is inactive
RACF0246 The OPERCMDS resource class is not active.
RACF0248 MCS consoles are not active
RACF0250 The Automatic Data Set Protection (ADSP) SETROPTS value is not set to NOADSP
RACF0260 The AUDIT SETROPTS value is improperly set.
RACF0270 The CLASSACT SETROPTS has not been specified for the DATASET, USER, and GROUP Classes.
RACF0280 The CMDVIOL SETROPTS value is not set to CMDVIOL
RACF0290 The EGN SETROPTS value specified is not set to EGN
RACF0300 The ERASE ALL SETROPTS value is not set to ERASE() on unclassified systems and ERASE(ALL) on Classified systems
RACF0310 The GENCMD SETROPTS value is not enabled for ACTIVE classes
RACF0320 The GENERIC SETROPTS value is not enabled for ACTIVE classes
RACF0330 The TERMINAL SETROPTS value is not set to READ
RACF0350 The GRPLIST SETROPTS value is not set to ACTIVE
RACF0360 The INACTIVE SETROPTS value is not set to 35 days
RACF0370 The INITSTATS SETROPTS value is not set to INITSTATS.
RACF0380 The JES(BATCHALLRACF) SETROPTS value is not set to JES(BATCHALLRACF)
RACF0400 The JES(XBMALLRACF) SETROPTS value is not set to JES(XBMALLRACF).
RACF0420 The OPERAUDIT SETROPTS value is not set to OPERAUDIT.
RACF0430 The PASSWORD(HISTORY) SETROPTS value is not set to 10
RACF0440 The PASSWORD(INTERVAL) SETROPTS value is not set to 60 days

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Security Server Data Analysis (RACF)

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RACF0450 The PASSWORD(REVOKE) SETROPTS value specified is not in accordance with security requirements
RACF0460 The PASSWORD(RULEn) SETROPTS value(s) specified is/are improperly set
RACF0470 The PASSWORD(WARNING) SETROPTS value is improperly set
RACF0480 The PROTECTALL SETROPTS value specified is improperly set
RACF0490 The REALDSN SETROPTS value specified is improperly set
RACF0500 The RETPD SETROPTS value specified is improperly set
RACF0510 The RVARYPW SETROPTS value specified is improperly set
RACF0520 The SAUDIT SETROPTS value specified is improperly set
RACF0530 The SECLEVELAUDIT SETROPTS value specified is improperly set
RACF0550 The TAPEDSN SETROPTS value specified is improperly set
RACF0560 The WHEN(PROGRAM) SETROPTS value specified is not active
RACF0570 RACF users do not have the required default fields
RACF0580 There are interactive USERIDs defined to RACF that do not have the required fields completed
RACF0590 RACF batch jobs are improperly secured
RACF0595 Batch jobs are improperly defined
RACF0600 RACF batch jobs are not protected with propagation control
RACF0620 Started Tasks are not properly identified to RACF
RACF0650 Started Tasks are improperly defined to RACF.
RACF0660 There are started tasks defined to RACF with the trusted attribute that are not justified.

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Security Server Data Analysis (RACF)

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RACF0680 Maintenance USERIDs are improperly controlled
RACF0690 Emergency USERIDs are improperly defined.
RACF0710 The use of the RACF SPECIAL Attribute is not justified
RACF0720 Assignment of the RACF OPERATIONS attribute to individual userids is not fully justified
RACF0730 The use of the RACF AUDITOR privilege is not justified
RACF0740 The number of USERIDs possessing the Tape Bypass Label Processing (BLP) privilege is not justified
RACF0760 DASD Volume level protection does not exist or is improperly defined
RACF0770 Access to sensitive utilities is not properly protected by RACF

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CA-1 (Tape Management System) Data Analysis (ZCA1)

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ZCA10041 CA 1 Tape Management system password will be changed from the default.
ZCA10060 CA 1 Tape Management exits when in use will be reviewed and/or approved.
ZCA1R000 CA 1 Tape Management installation data sets will be properly protected
ZCA1R003 CA 1 Tape Management TMC, AUDIT and optional RDS and VPD data sets will be properly protected
ZCA1R020 CA 1 Tape Management command resources will be properly defined and protected.
ZCA1R021 CA 1 Tape Management function and password resources will be properly defined and protected
ZCA1R030 CA 1 Tape Management Started Task name will be properly identified and/or defined to the system ACP.
ZCA1R032 CA 1 Tape Management Started task will be properly defined to the STARTED resource class for RACF.
ZCA1R038 CA 1 Tape Management Resource Class will be defined or active in the ACP.
ZCA1R040 CA 1 Tape Management external security options will be specified properly

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DBMS Data Analysis (ZDBM)

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ZDBM0010 Database management systems do not interface with the access control product to perform identification and authentication

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Fast Dump Restore Data Analysis (ZFDR)

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ZFDR0000 Fast Dump Restore (FDR) install data sets are not properly protected.

ZFDR0040 FDR (Fast Dump Restore) security options are improperly specified.

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CICS Data Analysis (ZCIC)

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ZCIC0010 CICS system data sets are not properly protected

ZCIC0020 Sensitive CICS transactions are not protected in accordance with security requirements.

ZCIC0030 CICS System Initialization Table (SIT) parameter values are not specified in accordance with proper security requirements

ZCIC0040 CICS region logonid(s) are not defined and/or controlled in accordance with the security requirements

ZCIC0041 CICS default logonid(s) are not defined and/or controlled in accordance with the security requirements

ZCIC0042 CICS logonid(s) do not have time-out limit set to 15 minutes

ZCICR021 External RACF Classes are not active for CICS transaction checking
ZCICR021 IBM CICS Transaction Server SPI command resources will be properly defined and protected.

ZCICR041 CICS regions are improperly protected to prevent unauthorized propagation of the region userid

31

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Front End Processor (FEP) Data Analysis (ZFEP)

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ZFEP0011 All hardware components of the FEPs are not placed in secure locations where they cannot be stolen, damaged, or disturbed

ZFEP0012 Procedures are not in place to restrict access to FEP functions of the service subsystem from operator consoles (local and/or remote), and to restrict access to the diskette drive of the service subsystem.

ZFEP0013 A documented procedure is not available instructing how to load and dump the FEP NCP (Network Control Program

ZFEP0014 An active log is not available to keep track of all hardware upgrades and software changes made to the FEP (Front End Processor ZFEP0015 NCP Dataset Analysis

ZFEP0015 NCP (Net Work Control Program) Data set access authorization does not restricts UPDATE and/or ALLOCATE access to appropriate personnel

ZFEP0016 A password control is not in place to restrict access to the service subsystem via the operator consoles (local and/or remote) and a key-lock switch is not used to protect the modem supporting the remote console of the service subsystem.

32

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Hardware Configuration Definition (ZHCD)

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ZHCDR000 IBM Hardware Configuration Definition (HCD) install data sets are not properly protected.

ZHCDR002 IBM Hardware Configuration Definition (HCD) User data sets are not properly protected.

ZHCDR020 IBM Hardware Configuration Definition (HCD) resources are not properly defined and protected.

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IBM Communications Server Data (IFTP)

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IFTP0010 The FTP Server daemon is not defined with proper security parameters
IFTP0020 The startup parameters for the FTP include the ANONYMOUS, ANONYMOUS=, or INACTIVE keywords. The FTP daemon's started task JCL does not specify the SYSTCPD and SYSFTPD DD statements for configuration files.
IFTP0030 FTP.DATA configuration statements for the FTP Server are not specified in accordance with requirements
IFTP0040 User exits for the FTP Server are in use without proper approval or proper documentation
IFTP0050 The warning banner for the FTP Server is not specified properly
IFTP0060 SMF recording options for the FTP Server are not configured to write SMF records for all eligible events
IFTP0070 The permission bits and user audit bits for HFS objects that are part of the FTP Server component are not properly configured IFTP0080 Configuration Files Access and Audit
IFTP0080 MVS data sets for the FTP Server are not properly protected.
IFTP0090 The TFTP Server program is not properly protected
IFTP0100 FTP / Telnet unencrypted transmissions require Acknowledgement of Risk Letter (AORL)
IFTP0110 FTP Control cards will be properly stored in a secure PDS file.

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IBM Communications Server Data (ISLG)

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ISLG0010 The Syslog daemon is not started at z/OS initialization.

ISLG0020 The Syslog daemon is improperly defined and secured

ISLG0030 The permission bits and user audit bits for HFS objects that are part of the Syslog daemon component are not configured properly

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IBM Communications Server Data (ITCP)

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ITCP0010 Configuration files for the TCP/IP stack are not properly specified.

ITCP0020 TCPIP.DATA configuration statements for the TCP/IP stack are not properly specified.

ITCP0025 The hosts identified by the NSINTERADDR statement are not properly protected.

ITCP0030 PROFILE.TCPIP configuration statements for the TCP/IP stack are not coded properly.

ITCP0040 The permission bits and user audit bits for HFS objects that are part of the Base TCP/IP component are not configured properly

ITCP0050 Resources for the Base TCP/IP component are improperly protected.

ITCP0060 Started tasks for the Base TCP/IP component are not defined in accordance with security requirements

TCP0070 MVS data sets for the Base TCP/IP component are not properly protected

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IBM Communications Server Data (ITNT)

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ITNT0010 PROFILE.TCPIP configuration statements for the TN3270 Telnet Server are not properly specified.

ITNT0020 VTAM session setup controls for the TN3270 Telnet Server are not properly specified

ITNT0030 The warning banner for the TN3270 Telnet Server is not specified or properly specified.

ITNT0040 The use of Digital Certificates is not implemented in accordance with security requirements

ITNT0050 SSL encryption options for the TN3270 Telnet Server are not specified or specified properly for each statement that defines a SECUREPORT

ITNT0060 SMF recording options for the TN3270 Telnet Server are not properly specified

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IBM Communications Server Data (IUTN)

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IUTN0010 The startup user account for the z/OS UNIX Telnet Server is not defined properly

IUTN0020 Startup parameters for the z/OS UNIX Telnet Server are not specified properly

IUTN0030 The warning banner for the z/OS UNIX Telnet Server is not specified or not properly specified.

IUTN0040 HFS objects for the z/OS UNIX Telnet Server are not properly protected

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Integrated Cryptographic Services Facility (ZICS)

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ZICSR000 IBM Integrated Crypto Service Facility (ICSF) install data sets are not properly protected.

ZICSR001 IBM Integrated Crypto Service Facility (ICSF) STC data sets are not properly protected.

ZICSR030 IBM Integrated Crypto Service Facility (ICSF) Started Task name is not properly identified / defined to the system ACP.

ZICSR032 IBM Integrated Crypto Service Facility (ICSF) Started task is not properly defined to the STARTED resource class for RACF.

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Integrated Database Management System (ZIDM)

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ZIDM0010 IDMS is not using external security and/or the resource class is not configured properly to the IDMS-CV

ZIDM0014 Each IDMS CV is not uniquely defined to the ACP IDMS resource class

ZIDM0020 IDMS data set access authorization does not restricts UPDATE and/or ALLOCATE access to systems programming personnel

ZIDM0030 IDMS regions (central versions) STC and or batch jobs are not defined in accordance with the proper security requirements

ZIDM0032 IDMS regions (central versions) Userids/ACIDs are not defined to the PROPCNTL resource class

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BMC IOA for RACF STIG (ZIOA)

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ZIOAR000 BMC IOA installation data sets will be properly protected

ZIOAR001 BMC IOA STC data sets will be properly protected.

ZIOAR002 BMC IOA User data sets will be properly protected

ZIOAR020 BMC IOA resources will be properly defined and protected.
ZIOAR030 BMC IOA Started Task name is not properly identified / defined to the system ACP.

ZIOAR032 BMC IOA Started task(s) must be properly defined to the STARTED resource class for RACF
ZIOAR040 BMC IOA configuration/parameter values are not specified properly.

ZIOA0060 BMC IOA security exits are not installed or configured properly

41

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BMC CONTROL-D for RACF STIG (ZCDT)

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ZCTD0040 BMC CONTROL-D configuration/parameter values are not specified properly

ZCTD0060 BMC CONTROL-D security exits are not installed or configured properly

ZCTDR000 BMC CONTROL-D installation data sets are not properly protected

ZCTDR001 BMC CONTROL-D STC data sets are not properly protected

ZCTDR002 BMC CONTROL-D User data sets are not properly protected

ZCTDR020 BMC CONTROL-D resources are not properly defined and protected

ZCTDR030 BMC CONTROL-D Started Task name is not properly identified / defined to the system ACP

ZCTDR032 BMC CONTROL-D Started task is not properly defined to the STARTED resource class for RACF.

42

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BMC CONTROL-O for RACF STIG (ZCTO)

ZCTO0040 BMC CONTROL-O configuration/parameter values are not specified properly.

ZCTO0041 BMC CONTROL-O configuration/parameter values are not specified properly.

ZCTO0060 BMC CONTROL-O security exits are not installed or configured properly

ZCTOR000 BMC CONTROL-O installation data sets are not properly protected

ZCTOR001 BMC CONTROL-O STC data sets are not properly protected

ZCTOR020 BMC CONTROL-O resources are not properly defined and protected.

ZCTOR030 BMC CONTROL-O Started Task name is not properly identified / defined to the system ACP.

ZCTOR032 BMC CONTROL-O Started task is not properly defined to the STARTED resource class for RACF.

BMC CONTROL-M for RACF STIG (ZCTM)

ZCTM0060 BMC CONTROL-M security exits are not installed or configured properly.

ZCTMR000 BMC CONTROL-M installation data sets are not properly protected.

ZCTMR001 BMC CONTROL-M STC data sets are not properly protected.

ZCTMR002 BMC CONTROL-M User data sets are not properly protected.

ZCTMR003 BMC CONTROL-M User/Application JCL data sets are not properly protected

ZCTMR020 BMC C0NTROL-M resources are not properly defined and protected.

ZCTMR030 BMC CONTROL-M Started Task name is not properly identified / defined to the system ACP.

ZCTMR032 BMC CONTROL-M Started task is not properly defined to the STARTED resource class for RACF.

ZCTMR040 BMC CONTROL-M configuration/parameter values are not specified properly

z/OS BMC CONTROL-M/Restart for RACF (ZCTR)

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ZCTRR000 BMC CONTROL-M/Restart installation data sets are not properly protected.

ZCTRR002 BMC CONTROL-M/Restart Archived Sysout data sets are not properly protected.

45

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z/OS CA Auditor for RACF STIG (ZADT)

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ZADTR000 CA Auditor installation data sets are not properly protected.

ZADTR002 CA Auditor User data sets are not properly protected

ZADTR020 CA Auditor resources are not properly defined and protected

46

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JES2 Data Analysis (ZJES)

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ZJES0011 RJE workstations and NJE nodes are not controlled in accordance with security requirements.

ZJES0012 NJE nodes are not controlled in accordance with security requirements
ZJES0014 RJE workstations and NJE nodes are not controlled in accordance with STIG requirements.

ZJES0021 JES2 input sources are not controlled in accordance with the proper security requirements.
ZJES0022 JES2 input sources are not properly controlled.

ZJES0031 JES2 output devices are not controlled in accordance with the proper security requirements.

ZJES0032 JES2 output devices are not properly controlled.

ZJES0041 JESSPOOL resources are not protected in accordance with security requirements.

ZJES0042 JESNEWS resources are not protected in accordance with security requirements.

ZJES0044 JESTRACE and/or SYSLOG resources are not protected in accordance with security requirements.
ZJES0046 JES2 spool resources are not controlled in accordance with security requirements.

ZJES0052 JES2 system commands are not protected in accordance with security requirements.

ZJES0060 Surrogate users are not controlled in accordance with proper security requirements.

47

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NC-Pass Data Analysis (ZNCP)

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ZNCPR000 Quest NC-Pass installation data sets will be properly protected.

ZNCPR001 Quest NC-Pass STC data sets will be properly protected.

ZNCPR020 Quest NC-Pass will be used by Highly-Sensitive users.

ZNCPR030 Quest NC-Pass Started Task name will be properly identified and/or defined to the system ACP.

ZNCPR032 Quest NC-Pass Started task will be properly defined to the STARTED resource class for RACF.

48

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SDSF Data Analysis (ZISF)

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ZISF0005 SDSF product data sets do not restrict all update and alter access to systems programming personnel.
ZISFR000 IBM System Display and Search Facility (SDSF) installation data sets will be properly protected
ZISFR002 IBM System Display and Search Facility (SDSF) HASPINDX data set identified in the INDEX parameter must be properly protected.
ZISFR020 IBM System Display and Search Facility (SDSF) resources will be properly defined and protected.
ZISFR021 IBM System Display and Search Facility (SDSF) resources will be properly defined and protected.
ZISFR030 IBM System Display and Search Facility (SDSF) Started Task name will be properly identified and/or defined to the system ACP.
ZISFR032 IBM System Display and Search Facility (SDSF) Started task will be properly defined to the STARTED resource class for RACF.
ZISFR038 IBM System Display and Search Facility (SDSF) Resource Class will be active in the RACF.
ZISF0040 IBM System Display and Search Facility (SDSF) Configuration parameters will be correctly specified.

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DFSMS Data Analysis (ZSMS) & Time Sharing Option (ZTSO)

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ZSMSR008 Active and Raclisted Classes Analysis
ZSMS0010 DFSMS STGADMIN Class resources are not protected in accordance with security requirements
ZSMS0012 DFSMS DGT resource in the PROGRAM resource class is not protected in accordance with security requirements
ZSMS0014 DFSMS DFP Resource Ownership is not configured in accordance with security requirements
ZSMS0020 DFSMS control data sets are not protected in accordance with security requirements
ZSMS0022 DFSMS control data sets are not properly protected.
ZSMS0030 SYS(x).Parmlib(IEFSSNxx) SMS configuration parameter settings are not properly specified
ZSMS0032 SYS(x).PARMLIB(IGDSMSxx), SMS parameter settings are not properly specified

ZTSO0020 There are LOGONIDs defined to SYS1.UADS for non-emergency use
ZTSO0030 Unauthorized users possess access to the resource TSOAUTH

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UNIX System Services Data Analysis (ZUSS)

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ZUSS0011 z/OS UNIX OMVS parameters in PARMLIB are not properly specified.
ZUSS0012 z/OS UNIX BPXPRMxx security parameters in PARMLIB are not properly specified.
ZUSS0013 z/OS UNIX HFS MapName files security parameters are not properly specified
ZUSS0014 z/OS UNIX security parameters for restricted network service(s) in /etc/inetd.conf are not properly specified.
ZUSS0015 z/OS UNIX security parameters in etc/profile are not properly specified
ZUSS0016 z/OS UNIX security parameters in /etc/rc not properly specified
ZUSS0021 BPX resource(s) is (are) not protected in accordance with security requirements.
ZUSS0022 z/OS UNIX resources are not protected in accordance with security requirements.
ZUSS0023 z/OS UNIX SUPERUSER resource is not protected in accordance with guidelines
ZUSS0031 z/OS UNIX MVS data sets or HFS objects are not properly protected
ZUSS0032 z/OS UNIX MVS data sets WITH z/OS UNIX COMPONENTS are not properly protected
ZUSS0033 z/OS UNIX MVS data sets used as step libraries in /etc/steplib are not properly protected
ZUSS0034 z/OS UNIX HFS permission bits and audit bits for each directory are not properly protected or specified.
ZUSS0035 z/OS UNIX SYSTEM FILE SECURITY SETTINGS are not properly protected or specified.
ZUSS0036 z/OS UNIX MVS HFS directory(s) with "other" write permission bit set are not properly defined.
ZUSS0041 Attributes of z/OS UNIX user accounts are not defined properly
ZUSS0042 z/OS UNIX each group is not defined with a unique GID.

51

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UNIX System Services Data Analysis (ZUSS) (continued)

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ZUSS0043 The user account for the z/OS UNIX kernel (OMVS) is not properly defined to the security database.
ZUSS0044 The user account for the z/OS UNIX BPXROOT is not properly defined.
ZUSS0045 The user account for the z/OS UNIX (RMFGAT) is not properly defined.
ZUSS0046 UID(0) is improperly assigned.
ZUSS0047 z/OS UNIX user accounts are not properly defined.
ZUSS0048 Attributes of z/OS UNIX user accounts are not defined in accordance with security requirements.
ZUSSR050 The z/OS Default Userid is not properly defined with the corresponding FACILITY Class Profile.
ZUSSR060 The RACF Classes required to properly security the z/OS UNIX environment are not ACTIVE.
ZUSSR070 RACF Classes required to support z/OS UNIX security are not properly implemented with the SETROPTS RACLIST command.
ZUSS0080 z/OS USS Software owning Shared accounts do not meet strict security and creation restrictions.

52

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VTAM Data Analysis (ZVTM) and CA VTAPE

ZVTM0011 The VTAM USSTAB definitions are being used for unsecured terminals

ZVTM0018 The System datasets used to support the VTAM network are not properly secured

ZVTAR000 CA VTAPE installation data sets are not properly protected.

ZVTAR001 CA VTAPE STC data sets will be properly protected.

ZVTAR030 CA VTAPE Started Task name is not properly identified/defined to the system ACP.

ZVTAR032 CA VTAPE Started task(s) must be properly defined to the STARTED resource class for RACF.

WebSphere MQSeries for z/OS Analysis (ZWMQ)

ZWMQ0011 WebSphere MQ channel security is not implemented in accordance with security requirements.
ZWMQ0012 WebSphere MQ channel security is not implemented in accordance with security requirements
ZWMQ0014 Production WebSphere MQ Remotes will utilize Certified Name Filters (CNF).
ZWMQ0020 User timeout parameter values for WebSphere MQ queue managers are not specified in accordance with security requirements.
ZWMQ0030 WebSphere MQ started tasks are not defined in accordance with the proper security requirements
ZWMQ0040 WebSphere MQ all update and alter access to MQSeries/WebSphere MQ product and system data sets are not properly restricted
ZWMQ0049 WebSphere MQ resource classes are not properly actived for security checking by the ACP.
ZWMQ0051 WebSphere MQ "switch" profiles are improperly defined to the MQADMIN class.
ZWMQ0052 WebSphere MQ MQCONN Class (Connection) resource definitions are not protected in accordance with security.
ZWMQ0053 WebSphere MQ dead letter and alias dead letter queues are not properly defined.
ZWMQ0054 WebSphere MQ MQQUEUE (Queue) resource profiles defined to the MQQUEUE class are not protected in accordance with security requirements.
ZWMQ0055 WebSphere MQ Process resource profiles defined in the MQPROC Class are not protected in accordance with security requirements.

WebSphere MQSeries for z/OS Analysis (ZWMQ)

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ZWMQ0056 WebSphere MQ Namelist resource profiles defined in the MQNLIST Class are not protected in accordance with security requirements.

ZWMQ0057 WebSphere MQ Alternate User resources defined to MQADMIN resource class are not protected in accordance with security requirements.

ZWMQ0058 WebSphere MQ context resources defined to the MQADMIN resource class are not protected in accordance with security requirements.

ZWMQ0059 WebSphere MQ command resources defined to MQCMDS resource class are not protected in accordance with security requirements.

ZWMQ0060 WebSphere MQ RESLEVEL resources in the MQADMIN resource class are not protected in accordance with security requirements.

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WebSphere (ZWAS)

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ZWAS0010 MVS data sets for the WebSphere Application Server are not protected in accordance with the proper security requirements

ZWAS0020 HFS objects for the WebSphere Application Server are not protected in accordance with the proper security requirements.

ZWAS0030 The CBIND Resource Class for the WebSphere Application Server is not configured in accordance with security requirements

ZWAS0040 Vendor-supplied user accounts for the WebSphere Application Server are defined to the ACP

ZWAS0050 The WebSphere Application Server plug-in is not specified in accordance with the proper security requirements.

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Tivoli Asset Discovery (ZTAD)

VANGUARD INTEGRITY PROFESSIONALS, INC. enterprise security software

ZTADR000 Tivoli Asset Discovery for z/OS (TADz) Install data sets are not properly protected.

ZTADR001 Tivoli Asset Discovery for zOS (TADz) STC and/or batch data sets are not properly protected.

ZTADR030 Tivoli Asset Discovery for z/OS (TADz) Started Task name(s) is not properly identified / defined to the system ACP

ZTADR032 The Tivoli Asset Discovery for zOS (TADz) Started task is not properly defined to the STARTED resource class for RACF

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Catalog Solutions (ZCSL)

VANGUARD INTEGRITY PROFESSIONALS, INC. enterprise security software

ZCSLR000 Catalog Solutions Install data sets are not properly protected.

ZCSLR020 Catalog Solutions resources are not properly defined and protected.

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ROSCOE (ZROS)

ZROSR000 ROSCOE Install data sets are not properly protected.

ZROSR001 ROSCOE STC data sets are not properly protected.

ZROSR020 ROSCOE resources are not properly defined and protected.

ZROSR030 ROSCOE Started Task name is not properly identified / defined to the system ACP.

ZROSR032 The ROSCOE Started task is not properly defined to the STARTED resource class for RACF

ZROSR038 The Product's Resource Class for Roscoe is not defined or active in the ACP.

ZROSR040 Product configuration/parameter values are not specified properly.

SRR Audit (ZSRR)

ZSRRR000 SRRAUDIT Install data sets are not properly protected.

ZSRRR002 SRRAUDIT User data sets are not properly protected.

Transparent Data Migration Facility (TDMF)

VANGUARD INTEGRITY PROFESSIONALS, INC. enterprise security software

ZTDMR000 Transparent Data Migration Facility (TDMF) Install data sets are not properly protected.

ZTDM0040 Transparent Data Migration Facility (TDMF) configuration/parameter/option values are not specified properly.

61

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NetView (ZNET)

VANGUARD INTEGRITY PROFESSIONALS, INC. enterprise security software

ZNET0040 NetView configuration/parameter values are not specified properly.

ZNETR000 NetView install data sets are not properly protected.

ZNETR001 NetView STC data sets are not properly protected.

ZNETR030 NetView Started Task name(s) is not properly identified / defined to the system ACP.

ZNETR032 NetView Started Task name(s) is not properly identified / defined to the system ACP.

62

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Vanguard Security Solutions (ZVSS)

ZVSSR000 Vanguard Security Solutions (VSS) Install data sets are not properly protected.

ZVSSR002 Vanguard Security Solutions (VSS) User data sets are not properly protected.

ZVSSR020 Vanguard Security Solutions' resources for the FACILITY resource class are not properly defined and protected.

63

IBM Health Checker (ZHCK) and IBM CSSMTP

ZHCKR001 IBM Health Checker STC data sets will be properly protected.

ZHCKR030 IBM Health Checker Started Task name will be properly identified and/or defined to the system ACP.

ZHCKR032 IBM Health Checker Started task will be properly defined to the STARTED resource class for RACF.

ZSMTR030 IBM CSSMTP Started Task name is not properly identified and/or defined to the system ACP.

ZSMTR032 IBM CSSMTP Started task(s) must be properly defined to the STARTED resource class for RACF.

64

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Anatomy of a STIG Check

Anatomy of a STIG

Group ID (Vulid): V-3895
Group Title: ZSMS0020
Rule ID: SV-7357r1_rule
Severity: CAT II
Rule Version (STIG-ID): ZSMS0020

Rule Title: DFSMS control data sets are not protected in accordance with security requirements

Vulnerability Discussion: DFSMS control data sets provide the configuration and operational characteristics of the system-managed storage environment. Failure to properly protect these data sets may result in unauthorized access. This exposure could compromise the availability and integrity of some system services and customer data.

Responsibility: Information Assurance Officer

IAControls: DCCS-1, DCCS-2, ECCD-1, ECCD

Anatomy of a STIG

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Check Content:

Review the logical parmlib data sets, example: SYS1.PARMLIB(IGDSMSxx), to identify the fully qualified file names for the following SMS data sets:

Source Control Data Set (SCDS)
Active Control Data Set (ACDS)
Communications Data Set (COMMDS)
ACDS Backup
Automatic Class Selection Routine Source Data Sets (ACS)
COMMDS Backup

If the RACF data set rules for the SCDS, ACDS, COMMDS, and ACS data sets restrict UPDATE and ALTER access to only systems programming personnel, there is **NO FINDING.**

If the RACF data set rules for the SCDS, ACDS, COMMDS, and ACS data sets do not restrict UPDATE and ALTER access to only systems programming personnel, this is a **FINDING**

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Anatomy of a STIG

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Fix Text:

Review the SYS1.PARMLIB(IGDSMS00) data set to identify the fully qualified file names for the following SMS data sets:

Source Control Data Set (SCDS)
Active Control Data Set (ACDS)
Communications Data Set (COMMDS)
Automatic Class Selection Routine Source Data Sets (ACS)
ACDS Backup
COMMDS Backup

The RACF data set rules for the SCDS, ACDS, COMMDS, and ACS data sets must restrict UPDATE and ALTER access to only z/OS systems programming personnel.

Some example commands to implement the proper controls are shown here:

AD 'sys3.dfsms.mmd.commds.**' UACC(NONE) OWNER(SYS3) AUDIT(ALL(READ)) DATA('PROTECTED PER ZSMS0020')

PE 'sys3.dfsms.mmd.commds.**' ID(<syspaudt>) ACC(A)

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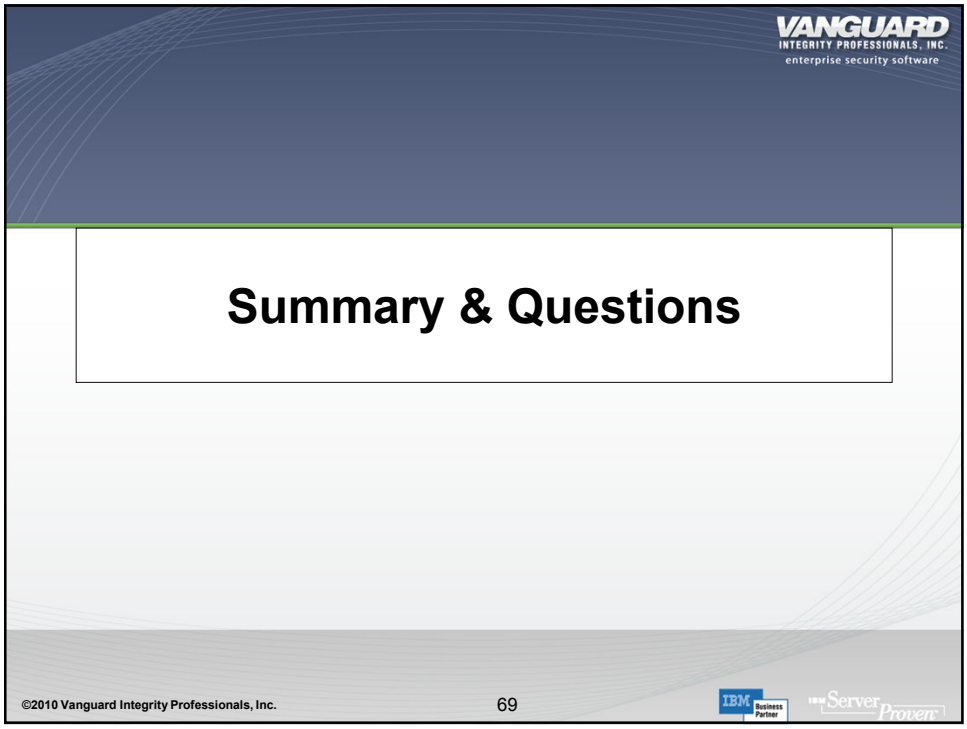
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69
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