IBM Security zSecure V2.4.0

*Enhancements for compliance
automation and usability
IBM Security zSecure Messages Guide*

IBM

Chapter 1. About this document

This document describes the documentation updates as a result of the zSecure enhancements for compliance automation and usability (for APAR numbers OA60419, OA60420, and OA60459 - December 2020).

The following enhancements were made:

- More control automation for RACF, and some for ACF2 and Top Secret.
- Upgrade to STIG Version 6 Release 47 (6.47).
- New library: SCKACUST
  In previous zSecure versions, following a PTF, customers had to run job CKAZCUST to create new CKACUST members in the customer's Site and User CKACUST data sets.
  Starting with this SSE, the new SCKACUST library is added to the concatenation for DDname CKACUST. New CKACUST members that are introduced in compliance controls are now automatically provided in SCKACUST. Following specification of the relevant zSecure configuration information, these new members are automatically copied from SCKACUST to the customer's Site or User CKACUST data sets.
- New library: SCKACUSV
  The CKACUST data set has records that are limited to 80 characters. The CKACUSV data set allows specifying longer values. The issuer name of a digital certificate is an example of a value that can be much longer. Your zSecure configuration (by default, C2R$PARM) must define which data set is to be used as the CKACUSV data set, or it must be set up manually through option Setup Command files (SE.8).
- Additional VM events for SIEM.
- Background run capabilities for RA.3.2, AM.8, and AM.9.
- Support for SMF relocate section 443 and ID token extensions.
- New report types:

  CERTIFICATE
  : A record in the TYPE=CERTIFICATE report type describes a digital certificate as it is present on a particular system.

  IOAENV
  : The IOAENV report type shows the security settings of active BMC INCONTROL IOA environments, and it includes information on the IOA, Control-D, Control-M, and Control-O products.

  IP_INETD
  : The IP_INETD report type shows configuration of network services that the inetd daemon manages.

  JES_DEVICE
  : The JES_DEVICE report shows the available JES2 devices and the information that is used to secure them.

  JES_REMOTE
  : The JES_REMOTE report shows the available remote JES2 workstations, and the information that is used to secure them.

  SSH_DAEMON
  : The SSH_DAEMON report shows the configuration of the z/OS OpenSSH SSH daemons that run in the UNIX address spaces in the system.

  SUPSESS_REGION_CP
  : The SUPSESS_REGION_CP newlist type can be used to report about IBM CL/SuperSession. Each record in the TYPE=SUPSESS_REGION_CP report describes a Network Access Manager Control Point.

  For details, see the documentation updates for the *zSecure CARLa Command Reference*.

- New ACF2_SENSDSN_ACCESS fields link logonids with started task to better determine their authorization.
- Enhancements for parsing parameter members.
- zSecure Alert enhancements:
  - zSecure Alert provides an option to exploit a CKRCARLA internal restart to refresh environment information while retaining job information.
  - Batch jobs are now provided to ease upgrade, maintenance, test, and roll-out of zSecure Alert configuration changes.
- The ability to run CKXLOGID authorized.

The documentation updates apply to V2.4.0 zSecure Admin, zSecure Audit, and zSecure Alert. The following publications were updated:

- *zSecure CARLA-Driven Components Installation and Deployment Guide*
- *zSecure Messages Guide*
- *zSecure Admin and Audit for RACF User Reference Manual*
- *zSecure Audit for ACF2 User Reference Manual*
- *zSecure Audit for Top Secret User Reference Manual*
- *zSecure CARLa Command Reference*
- *zSecure Alert User Reference Manual*

The following product name and terminology changes were applied throughout the zSecure documentation:

- "CA Roscoe Interactive Environment" to "Advantage CA-Roscoe"
- "Tivoli NetView" to "Z NetView"
- "Whitelist" to "allowlist".

Note:

- Referenced topics that have not changed are not included in this document. You can find them in the publication that the chapter applies to.
- The *zSecure (Admin and) Audit User Reference Manuals* and the *zSecure CARLa Command Reference* are available to licensed clients only. To access the zSecure V2.4.0 licensed documentation, you must sign in to the IBM Security zSecure Suite Library with your IBM ID and password. If you do not see the licensed documentation, your IBM ID is probably not yet registered. Send a mail to zDoc@nl.ibm.com to register your IBM ID.

Installation requirement

HOLD data in SMPE
APAR OA60419 is fixed by UJ04501, which includes a pre-installation job (in cover letter and ++HOLD(ACTION)). Change this job to meet your site's installation standards and then run it prior to installation.

Migration considerations

New SCKACUST and SCKACUSV libraries

- New SCKACUST and SCKACUSV libraries are distributed as part of the PTF package.
- CKACUST and CKACUSV data sets can be created through new job SCKRSAMP(CKAZSITE) for usage by a particular user. This new construction eliminates the need for maintaining Site (or customized) CKACUST instances through the CKAZCUST job for every PTF.
- For this update (only), a Site CKACUSV data set must be created and a reference to it must be added to the zSecure configuration (C2R$PARM).
- For a new installation, Site (or customized), CKACUST and CKACUSV data sets are created by using CKRZPOST; the zSecure configuration (C2R$PARM) includes provisions for both.

Chapter 2. *zSecure Messages Guide*

The following messages were updated or added:

CKF0802	Out-of-order parameter *parameter* at *source*

Explanation:
The indicated parameter was expected at a different position relative to other parameters.

User response:
See the IBM Support Community for possible maintenance associated with this message. If you cannot find applicable maintenance, follow the procedures described in Contacting IBM Support to report the problem.

Severity

04

CKF1005	Unrecognized SSI 83 header. Omitting this and following data areas in the chain. Eye catcher *eye*

Explanation:
A data area header returned by the JES Device Information Services (SSI 83) has an unrecognized eye catcher. This data area and any following data areas in the chain are not stored in the CKFREEZE file.

User response:
See the IBM Support Community for possible maintenance associated with this message. If you cannot find applicable maintenance, follow the procedures described in Contacting IBM Support to report the problem.

Severity

00

CKF1006	IEFSSREQ unexpected return code subsys *subsysname* R15 *rc* (dec) SSOBRETN *ssobrc* (dec) SSJDRETN *ssjdrc* (dec)

Explanation:
The JES Device Information Services (SSI 83) for JES subsystem *subsysname* returned an error. Use the values *rc*, *ssobrc*, and *ssjdrc* to determine the details of the error. No JES device information was stored in the CKFREEZE file.

User response:
If the return values indicate an unexpected condition, see the IBM Support Community for possible maintenance associated with this message. If you

cannot find applicable maintenance, follow the procedures described in Contacting IBM Support to report the problem.

Severity

00

CKF1008I	OPEN ERROR *abend code* on file *filename*

Explanation:
This diagnostic message is issued when a failure occurs a UNIX file with the indicated *filename* is opened. The program continues, but the information is not collected, so it will not be available for reporting.

Severity

08

CKF1009	The EZBS could not be read: *reason*

Explanation:
An unexpected error occurred in the attempt to obtain the EZBSYSLOGD token; *reason* gives the exact nature of this failure. Information about syslog daemon was not collected.

User response:
See the IBM Support Community for possible maintenance associated with this message. If you cannot find applicable maintenance, follow the procedures described in Contacting IBM Support to report the problem.

Severity

04

CKF1010	Program and argument strings: *message*

Explanation

The following *message* can occur:

configuration file cannot be opened for scanning
An SSH daemon configuration file, specified as an absolute pathname, could not be opened.

configuration DSN (member) not scanned
An SSH daemon configuration file could not be opened because only configuration file

specifications in the form of an absolute pathname are supported.

Other *message* variants show information about a problem with the internal representation of the arguments of an SSH daemon program. In all these cases, information about the configuration of an SSH daemon is not collected.

Severity

08

CKF1011	Ignoring DSN result longer than 44 - *dsname_pattern*

Explanation:
Informational message noting that the parmlib members that are being processed include a data set name pattern specification that resolved to a length larger than 44 after replacing the system symbols with their values. During IPL, that would give an ASA010I message. The data set name is ignored, just like z/OS ignores it.

Severity

00

CKR0231	(SUB/TOP)TITLE must occur before fields on output line - field *field* at *ddname* line *number*

Explanation

Fields that are to be reported in a page title must be higher in the sort hierarchy than fields that do not have a TITLE, TOPTITLE, and SUBTITLE modifier. While this is a syntax error because the request cannot be honored, this message is issued with return code 00 if the field has an explicit DETAIL modifier to allow certain DISPLAY scripts to also be run in the batch. For a detail display, TITLE, TOPTITLE, and SUBTITLE can be specified regardless of record sort order.

Severity

12 or 00 (unless changed by the MSGRC parameter of the OPTION statement)

CKR0491	Convert(..,*inputformat,internalformat*) is not a supported combination

Explanation:
The conversion specified in a DEFINE ... CONVERT statement is not supported in this edition of the product.

Severity

12

CKR0802	Out-of-order parameter *parameter* at *source*

Explanation:
The indicated parameter was expected at a different position relative to other parameters.

User response:
See the IBM Support Community for possible maintenance associated with this message. If you cannot find applicable maintenance, follow the procedures described in Contacting IBM Support to report the problem.

Severity

04

CKR1115	Corrupted/truncated JES device info for system *system* record *recno* of *dd volser dsn*

Explanation:
The JES Device Information Services (SSI 83) data area as stored in the indicated CKFREEZE file record was corrupted or truncated.

User response:
Increase the CKFREEZE file's record length. If the error persists, see the IBM Support Community for possible maintenance associated with this message. If you cannot find applicable maintenance, follow the procedures described in Contacting IBM Support to report the problem.

Severity

08

CKR1308	DEFTYPE *parameter* does not contain a national character at *ddname* line *number*

Explanation:
The *parameter* of the DEFTYPE command at the given location, which can be TYPE, ABBREV2, or OBJCLASS, does not contain a national character ($, #, or @). While this is not normally a problem, conflicts might occur in the future when new TYPE, ABBREV2, or OBJCLASS values are predefined in IBM® Security zSecure. This message can be suppressed by adding the NOWARN parameter to the DEFTYPE specification.

Severity

04

CKR2024 Out of order assertion ignored
source1 using *source2*

Explanation:
The assertion read from *source1* is ignored because its time is in the future compared to the system that is running.

Severity

08

CKR2033 Duplicate ALLOWLIST/
LOOKUP_CONFIG/
LOOKUP_CONFIG_LONG=*member*
specification in domain *domain source*

Explanation:
Any ALLOWLIST, LOOKUP_CONFIG, or LOOKUP_CONFIG_LONG member name can be mentioned only once per domain.

Severity

12

CKR2110 Error loading UNIX file related
record *num* system *system*
[version] of *source*: *message*

Explanation:
An error occurred while loading records that describe contents of a UNIX file. An unexpected record was found in the CKFREEZE. This message is usually a result of a corruption in the indicated record. *message* shows the encountered inconsistency. The records with the related UNIX file are unavailable for further analysis and reporting.

User response:
See the IBM Support Community for possible maintenance associated with this message. If you cannot find applicable maintenance, follow the procedures described in Contacting IBM Support to report the problem.

Severity

04

CKR2120 *syntax error* on *ddname* line
number

Explanation:
The input parser encountered an unexpected service specification in an inetd daemon configuration file. The input parser skips all input until it encounters a valid end of line.

Severity

04

CKR2123 DEFTYPE OBJCLASS *objclass*
contains only capital letters at
ddname line *number*

Explanation:
The parameter of the DEFTYPE command at the given location does not contain even one lower case character. At least one lower case character is required to avoid the potential of conflicts with SAF CLASS names.

Severity

04

CKR2125 Unexpected inetd daemon
configuration record *recordnum* of
CKFREEZE

Explanation

More than one record describing the inetd daemon configuration on the same system was found in the CKFREEZE.

Severity

04

CKR2126 Resident rule simulation not
supported for *ACF2-release-level*
on *system* [*version*]; *class*/*logonid*/
typecode

Explanation:
The program was requested to reconstruct a resource rule directory from database records, mapping the indicated general resource *class* and the MUSASS that runs under the indicated *logonid* to the indicated *typecode*. This functionality is not supported for ACF2 releases older than R16.

User response:
This message is for information only.

Severity

00

CKR2127 Search for *class*/*logonid* to be
mapped to *typecode* returns
existing map to *typecode2* on
system [*version*]

Explanation:
The program was requested to associate the indicated general resource *class*, as used by the MUSASS that runs under the indicated *logonid*, with the indicated

typecode. The program found that an association already exists between the indicated *class* and *logonid* and a different typecode. This is not supported.

User response:
See the IBM Support Community for possible maintenance associated with this message. If you cannot find applicable maintenance, follow the procedures described in Contacting IBM Support to report the problem.

Severity

20

CKR2128	*Class/logonid* reuses pre-existing mapping for *MUSASSmask* to *typecode* on *system* [*version*]

Explanation

The program was requested to associate the indicated general resource *class*, as used by the MUSASS running under the indicated *logonid*, with the indicated *typecode*. The program found that an association already exists between the indicated *class* and *typecode* and a MUSASS mask matching the specified *logonid*. The program reuses the pre-existing data, rather than recreating a resident resource rule directory from database records.

User response:
This message is for information only.

Severity

00

CKR2129	LIKELIST cannot refer to a RACF newlist with a FLATTEN parameter - before *token source*

Explanation:
This message indicates that the newlist referred to in the LIKELIST parameter uses the FLATTEN parameter, which is not allowed.

Severity

12

CKR2134	Error loading IOA environment related record *num* system *system* [*version*] of *source*:*message*

Explanation:
An error occurred during loading of records that describe a BMC INCONTROL IOA environment. This message is usually the result of a corruption in the indicated record. *message* shows the inconsistency that was encountered. Depending on the severity of

the problem, either individual or groups of BMC IOA records are unavailable for further analysis and reporting.

Severity

04

CKR2135	System *system* ignores DSN result longer than 44 - *dsname_pattern*

Explanation:
Informational message that indicates that the parmlib members that are being processed include a data set name pattern specification that resolved to a length larger than 44 with the system symbol values in the indicated system. During IPL, that would give an ASA010I message. The data set name is ignored, just like z/OS ignores it.

Severity

00

CKR2137	DEFTYPE GENERATE_FIELD *field* is not supported

Explanation:
The provided GENERATE_FIELD parameter on the DEFTYPE command is not supported. To expand a NEWLIST TYPE=*deftype* report with GENERATE_FIELD, use one of the following values for the *field* parameter: VER, COMPLEX, or SYSTEM.

Severity

12

CKR2151	WRAP layout not well-defined because column length 0 and not the last in line or column floating - field *field source*

Explanation:
This warning message indicates that the WRAP output modifier was used in combination with an overriding length of zero for a column not last in line, or where another column with overriding length 0 (that is, variable length) was present on the line. Since the purpose of *field*(WRAP,0) is to fill up the rest of the output line, this is only well-defined for the last column in a line. For expediency reasons, this is allowed for printed output in the current release; the layout of the report might change in the future.

User response

Adapt the query. For example, add a / (forward slash is newline operator) before the *field*(WRAP,0) specification to force the *field* to the first position of

the next line. Alternatively, you can specify OPTION MSGRC=(2151,0) to reduce the warning to an informational message. For more information, see the OPTION statement in the *zSecure CARLa Command Reference*.

Severity

04 (unless changed by the MSGRC parameter of the OPTION statement)

CKR2191 **CERTUSAG value must be PERSONAL, SITE, or CERTAUTH - "*value*" *source***

Explanation:
The CERTUSAG field can have only one of the following values: PERSONAL, SITE, or CERTAUTH.

User response:
Specify a valid value on the select statement.

Severity

12

CKR2588 ***routine*: FLATTENed repeat group *name* without any fields in newlist *name* type *type source***

Explanation:
Initialization for FLATTEN processing failed.

User response:
See the IBM Support Community for possible maintenance associated with this message. If you cannot find applicable maintenance, follow the procedures described in Contacting IBM Support to report the problem.

Severity

24

C2P0538I **Prepare ALLOC statements for ExtMon**

Explanation:
This progress message is issued when DEBUG EXTMON is set.

C2P0539I *alloc_stmt*

Explanation:
This diagnostic message is issued when DEBUG EXTMON is set. It shows the generated CARLa ALLOC statement for the extended monitoring CKFREEZE data set.

C2P0540E **Cannot open SYSINRPT**

Explanation:

An open error occurred for the SYSINRPT file. This temporary file is dynamically allocated with a record format VB and an LRECL of 255. See the accompanying IEC message for more information.

User response:
See the IBM Support Community for possible maintenance associated with this message. If you cannot find applicable maintenance, follow the procedures described in Contacting IBM Support to report the problem.

C2P0541E **Could not close SYSINRPT**

Explanation:
A close error occurred for the SYSINRPT file.

C2P0717I *ddname* **Reset hard EOF**

Explanation:
If DEBUG IO is active, this diagnostic message is issued by the C2PIORTN routine to indicate that the stop/start request of the CKRCARLA subtask is converted into an internal restart request. The *ddname* shows the current internal ddname.

C2P0718I *ddname* **Restart**

Explanation:
If DEBUG IO is active, this diagnostic message is issued by the C2PIORTN routine to indicate that the internal restart request is passed to the CKRCARLA subtask. The *ddname* shows the current internal ddname.

C2P0719I *ddname* **Pseudo soft EOF**

Explanation:
If DEBUG IO is active, this diagnostic message is issued by the C2PIORTN routine to indicate that the stop/start request is treated like a soft EOF after completion of the internal restart.

C2P0720E **Error attaching sysprint-to-debug task, RC=*retcode***

Explanation:
When attaching the subtask that handles the copy of CKRCARLA SYSPRINT output to the C2PDEBUG file, a system error occurred. The error code from ATTACH is *retcode*.

C2P0721I **Successful attach sysprint-to-debug task**

Explanation:
This diagnostic message is issued after a successful start of the subtask that handles the copy of CKRCARLA SYSPRINT output to the C2PDEBUG file.

C2P0722I **Inside prt2db routine, posted with code *retcode***

Explanation:

This diagnostic message is issued to indicate that the process to copy CKRCARLA SYSPRINT output to the C2PDEBUG file is about to start. The *retcode* controls which messages are copied.

C2P0723I   **Refresh of alert reporting task uses *refresh-mode* mode**

Explanation:
This diagnostic message indicates that the OPTION REFRESHMODE statement is processed. Possible values for *refresh-mode* are `internal restart` or `stop/start`.

C2P0725I   **Refresh of alert reporting task uses *refresh-mode* mode**

Explanation:
This message is part of the response to the console operator DISPLAY command. It indicates the *refresh-mode* that has been specified. Possible values for *refresh-mode* are `internal restart` or `stop/ start`. Internal refresh mode allows longer retention of job data that is used to complete SMF records.

C2P0726I   **CKRCARLA program has been restarted *num-restart* times**

Explanation:
This message is part of the response to the console operator DISPLAY command. After the CKRCARLA program has been restarted at least once, *num-restart* shows the number of times that the CKRCARLA program has performed an internal restart.

C2P0727I   **Job tag information retained for *number* jobs**

Explanation:
This message is part of the response to the console operator DISPLAY command. After the CKRCARLA program has been restarted at least once, *number* shows the number of jobs for which information is retained.

C2P0728I   **Job tag information is not yet available**

Explanation:
This message is part of the response to the console operator DISPLAY command. This message is issued when the CKRCARLA program has not yet been restarted.

C2P0729I   **Create new SYSIN input for reporting**

Explanation:
This diagnostic message is issued as a progress indicator for the creation of the CKRCARLA input parameters.

C2P0731I   **Access Monitor captures LOCAL-RACLIST FASTAUTH events**

Explanation:
This debug only message confirms that the CAPTURELOCALRACLIST option is recognized and that FASTAUTH events for LOCAL RACLISTed resources are captured.