z/OS Cryptographic Services

Integrated Cryptographic Service Facility

ICSF Query Facility2 CSFIQF2 — APAR OA41345

(March 25, 2013)

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Chapter 1. Overview

Applying the PTF for APAR OA41345 provides support for a new callable service, ICSF Query Facility2 - CSFIQF2. CSFIQF2 is a utility that can be used to retrieve status information about the cryptographic environment as currently known to ICSF. This callable service is not SAF protected nor does it call any cryptographic processors. CSFIQF2 returns status information that can be collected from various ICSF control blocks.

This document contains alterations to information previously presented in z/OS Cryptographic Services ICSF Application Programmer's Guide, SA22-7522-16.

Chapter 2. Update of z/OS Cryptographic Services ICSF Application Programmer's Guide, SA22-7522-16 , information

- **z/OS Cryptographic Services ICSF Application Programmer's Guide Chapter 12. Utilities.**

ICSF Query Facility 2 (CSFIQF2 and CSFIQF26)

Use this utility to retrieve the cryptographic environment as currently known by ICSF.

This callable service will:

- NOT be SAF protected.
- NOT make calls to any cryptographic processor
- Return status information that can be collected from various ICSF control blocks

Format

```
CALL CSFIQF2(
                return_code,
                reason_code,
                exit_data_length,
                exit_data,
                rule_array_count,
                rule_array,
                returned_data_length,
                returned_data,
                reserved_data_length,
                reserved_data)
```

Parameters

return_code

Direction: Output Type: Integer

The return code specifies the general result of the callable service. Appendix A, "ICSF and TSS Return and Reason Codes" lists the return codes.

reason_code

Direction: Output Type: Integer

The reason code specifies the result of the callable service that is returned to the application program. Each return code has different reason codes assigned to it that indicate specific processing problems. Appendix A, "ICSF and TSS Return and Reason

Codes" lists the reason codes.

exit_data_length

Direction: Ignored Type: Integer

This field is ignored. It is recommended to specify 0 for this parameter.

exit_data

Direction: Ignored Type: String

This field is ignored.

rule_array_count

Direction: Input Type: Integer

The number of keywords in the rule_array. This field is currently ***reserved*** and must be 0.

rule_array

Direction: Ignored Type: String

Keywords that provide control information to callable services. This field is currently ignored

returned_data_length

Direction: Input/Output Type: Integer

The length of the *returned_data* parameter in bytes. A minimum value of 11 is required. On output, this field will contain the length of the data to be returned as determined by Table 1: Format of Returned Data.

returned_data

Direction: Output Type: String/Integer

This field will contain the output from the service. The service will return only the amount of data specified by the ***returned_data_length*** field.

The format of the ***returned_data*** is defined in the following table.

Table 1: Format of Returned Data

Bytes	Description	
0-7	ICSF FMID	
8	**Bit**	**Meaning When Set On**
	0	Crypto Accelerator Available
	1	CCA Coprocessor Available
	2	Public Key Hardware Available
	3	TKDS Available
	4	SHA-1 Available in CPACF
	5	SHA-224 Available in CPACF
	6	SHA-256 Available in CPACF
	7	SHA-384 Available in CPACF
9	**Bit**	**Meaning When Set On**
	0	SHA-512 Available in CPACF
	1	DES Available in CPACF
	2	TDES Available in CPACF
	3	AES 128-bit Available in CPACF
	4	AES 192-bit Available in CPACF
	5	AES 256-bit Available in CPACF
	6	AES-GCM Available in CPACF
	7	ECC Clear Key Hardware Supported
10	**Bit**	**Meaning When Set On**
	0	ECC Secure Key Hardware Available
	1	PKCS #11 Secure Key Available
	2	FIPS No Enforcement Mode
	3	FIPS Mode Enabled
	4	FIPS Compatibility Mode Enabled
	5	RESERVED
	6	RESERVED
	7	RESERVED

reserved_data_length

Direction: Input Type: Integer

The length of the reserved_data parameter. This field is reserved and must be 0.

reserved_data

Direction: Ignored Type: String

This field is currently not used.

Required Hardware

No specific hardware is required by this callable service.