Note
Before using this information and the product it supports, be sure to read the information in “Notices,” on page 39.

Second Edition (February 2006)
This edition applies to version 5, release 4, modification 0 of Cryptographic Support for AS/400 (product number 5722-CR1) and to all subsequent releases and modifications until otherwise indicated in new editions. This version does not run on all reduced instruction set computer (RISC) models nor does it run on CICS models.

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Add Cross-Domain Key (ADDCRSDMNK)

Where allowed to run:
- Interactive job (*INTERACT)
- Interactive program (*IPGM)

Threadsafe: No

The Add Cross-Domain Key (ADDCRSDMNK) command allows you to specify a new cross-domain key that is added into the cross-domain key table.

This command prompts you for the name of the key, its use, and the key value.

There are no parameters for this command.

Parameters
None

Examples
None

Error messages
Unknown
Change Cross-Domain Key (CHGCRSDMNK)

Where allowed to run:
- Interactive job (*INTERACT)
- Interactive program (*IPGM)

Threadsafe: No

The Change Cross-Domain Key (CHGCRSDMNK) command allows you to change the value of a cross-domain key in the key table.

This command prompts you for the name of the key, its use, and the new key value.

There are no parameters for this command.

Parameters

None

Examples

None

Error messages

Unknown
Change Master Key (CHGMSTK)

Where allowed to run:
- Interactive job (*INTERACT)
- Interactive program (*IPGM)

Threadsafe: No

The Change Master Key (CHGMSTK) command displays the Change Master Key prompt. Using this prompt, you can change the host master key on the system. You supply the values for two key parts, which are exclusive-ORed together to produce the new host master key. The new host master key must have odd parity in every byte.

The values in the cross-domain key table are reencrypted under the new host master key value.

To use this command, the system must be in a restricted state; enter the End System (ENDSYS) command to get to a restricted state. Once the master key is installed, you can return your system to a normal state by restarting your subsystems.

There are no parameters for this command.

Parameters

None

Examples

None

Error messages

Unknown
Cipher Data (CPHDTA)

Where allowed to run:
- Batch program (*BPGM)
- Interactive program (*IPGM)

Threadsafe: No

The Cipher Data (CPHDTA) command is used to encrypt or decrypt a variable length of data.

### Parameters

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<th>Choices</th>
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<td>Input data</td>
<td>Character value</td>
<td>Required, Positional 1</td>
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<td>DTALEN</td>
<td>Input data length</td>
<td>1-65528</td>
<td>Required, Positional 2</td>
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<td>CPHK</td>
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<td>Character value</td>
<td>Required, Positional 4</td>
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<tr>
<td>OPTION</td>
<td>Option</td>
<td>*ECPH, *DCPH, *SCPH</td>
<td>Required, Positional 5</td>
</tr>
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<td>KTYPE</td>
<td>Key type</td>
<td>*CLEAR, *CIPHER</td>
<td>Optional, Positional 6</td>
</tr>
<tr>
<td>CHAIN</td>
<td>Chain option</td>
<td>*NO, *YES</td>
<td>Optional, Positional 7</td>
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<tr>
<td>ICV</td>
<td>Initial chaining value</td>
<td>Character value, *NONE</td>
<td>Optional, Positional 8</td>
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<td>PAD</td>
<td>Pad option</td>
<td>*NO, *YES</td>
<td>Optional, Positional 9</td>
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<tr>
<td>PADCHAR</td>
<td>Pad character</td>
<td>Character value, X'00'</td>
<td>Optional, Positional 10</td>
</tr>
<tr>
<td>RTNDTALEN</td>
<td>CL var for returned length</td>
<td>Decimal number</td>
<td>Optional, Positional 11</td>
</tr>
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</table>

### Input data (DATA)

Specifies the data or, a variable containing the data, to be encrypted or decrypted. The data must be at least as long as the length specified in the **Input data length** prompt (DTALEN parameter). If *SCPH (specific encryption) is specified in the **Option** prompt (OPTION parameter), only values 0-9 and A-F may be specified in this parameter. This is a required parameter.
Input data length (DTALEN)

Specifies the length or a variable containing the length of the data to be encrypted or decrypted.

When encrypting data, the length must be a multiple of 8 bytes if *NO is specified for both the Pad option prompt (PAD parameter) and the Chain option parameter (CHAIN parameter). The length must be less than 65,528 if the Pad option prompt (PAD parameter) is specified as *YES. The length must be less than or equal to 65,528 if the Pad option prompt (PAD parameter) is specified as *NO. If *SCPH (specific encryption) is specified in the Option prompt (OPTION parameter), this value must be 16.

When decrypting data, the length must be a multiple of 8 bytes unless cipher block chaining was used when the data was encrypted. The length must be less than or equal to 65,528. This is a required parameter.

Cipher key (CPHK)

Specifies an 8-byte value, or a variable containing an 8-byte value, to be used as the key for the Data Encryption Algorithm. There are no restrictions on the value of this parameter. This is a required parameter.

CL var for returned value (RTNVAR)

Specifies a variable to receive the results of the cipher operation. If *YES is specified for the Pad option (PAD parameter) and *ECPH is specified for the Option (OPTION parameter), the variable must be at least as long as the next 8-byte multiple past the value specified for the Input data length prompt (DTALEN parameter). Otherwise, it must be at least as long as the value specified for the Input data length prompt (DTALEN parameter). This is a required parameter.

Option (OPTION)

Specifies the cipher function to be performed. This is a required parameter.

The possible values are:

*ECPH
A copy of the data in the Input data prompt (DATA parameter) is encrypted and placed in the variable specified in the CL var for returned value prompt (RTNVAR parameter).

*SCPH
The Input data prompt (DATA parameter) contains 16 hexadecimal characters representing 8 bytes of data to encrypt (for example, 'C1' represents 'A'). A copy of these 16 hexadecimal characters is converted to an 8-byte field and encrypted. The resulting 8 bytes of ciphertext are converted back to 16 hexadecimal characters and placed in the CL var for returned value prompt (RTNVAR parameter).

*DCPH
A copy of the data in the Input data prompt (DATA parameter) is decrypted and placed in the variable specified in the CL var for returned value prompt (RTNVAR parameter).
**Key type (KTYPE)**

Specifies the format of the key specified in the Cipher key prompt (CPHK parameter).

The possible values are:

* **CLEAR**
  - The cipher key is specified in plaintext. If *SCPH is specified for the Option prompt (OPTION parameter), the value specified must be *CLEAR.

* **CIPHER**
  - The cipher key is enciphered under the host master key. If *YES is specified for the Chain option prompt (CHAIN parameter) or the Pad option prompt (PAD parameter), the value specified must be *CIPHER.

**Chain option (CHAIN)**

Specifies whether cipher block chaining is to be used during the cipher operation.

The possible values are:

* **NO**
  - Cipher block chaining will not be used. If *SCPH is specified for the Option prompt (OPTION parameter) or *CLEAR is specified for the Key type prompt (KTYPE parameter), *NO must be specified.

* **YES**
  - Cipher block chaining will be used.

**Initial chaining value (ICV)**

Specifies an 8-byte value, or a variable containing an 8-byte value, to be used as the initial chaining value when performing cipher block chaining. This parameter is ignored if *NO is specified for the Chain option prompt (CHAIN option).

The possible values are:

* **NONE**
  - There is no initial chaining value.

  **initial-chaining-value**
  - Specify the value to be used as the initial chaining value for cipher block chaining. There are no restrictions on the value for this parameter. A value must be specified if *YES is specified for the Chain option prompt (CHAIN option).

**Pad option (PAD)**

Specifies whether padding is to be performed.

The possible values are:
**NO**  Padding will not be performed. *NO must be specified if *SCPH is specified for the **Option** prompt (OPTION parameter).

**YES**  Before encrypting, the data is padded out to the next 8-byte multiple using the pad character specified in the **Pad character** prompt (PADCHAR parameter). The last byte is then replaced with a count of the number of pad characters.

After the data is decrypted, the pad characters and count byte are left appended to the data. The length of the data without the pad characters is returned in the variable specified in the **CL var for returned length** prompt (RTNDTALEN parameter).

---

**Pad character (PADCHAR)**

Specifies a 1-byte value, or a variable containing a 1-byte value, to be used as the pad character when *ECPH is specified for the **Option** prompt (OPTION parameter) and *YES is specified for the **Pad option** prompt (PAD parameter). The default (1-byte pad character) is hex 00.

---

**CL var for returned length (RTNDTALEN)**

Specifies a variable to receive the length of the returned data. When *DCPH is specified for the **Option** prompt (OPTION parameter) and *YES is specified for the **Pad option** prompt (PAD parameter), this length is the length of the deciphered data without padding. Otherwise, this variable contains the length of the data placed in the variable specified in the **CL var for returned value** prompt (RTNVAR parameter).

---

**Examples**

None

---

**Error messages**

Unknown
Encrypt Cipher Key (ENCCPHK)

Where allowed to run:

- Batch program (*BPGM)
- Interactive program (*IPGM)

Threadsafe: No

The Encrypt Cipher Key (ENCCPHK) command enciphers a plaintext data-encrypting key under the host master key.

### Parameters

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<td>Clear key value</td>
<td>Character value</td>
<td>Required, Positional 1</td>
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<tr>
<td>CPHK</td>
<td>CL var for encrypted key</td>
<td>Character value</td>
<td>Required, Positional 2</td>
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### Clear key value (CLRK)

Specifies an 8-byte value, or a variable containing an 8-byte value, of a plaintext data-encrypting key. There are no restrictions on the value of this parameter. This is a required parameter.

### CL var for encrypted key (CPHK)

Specifies an 8-byte variable to receive the value of the data-encrypting key specified in the Clear key value prompt (CLRK parameter) after it is encrypted under the host master key. This is a required parameter.

### Examples

None

### Error messages

Unknown
Encipher From Master Key (ENCFRMMSTK)

Where allowed to run:
- Batch program (*BPGM)
- Interactive program (*IPGM)

Threadsafe: No

The Encipher From Master Key (ENCFRMMSTK) command reenciphers a data-encrypting key from encryption under the host master key to encryption under one or two sending cross-domain keys.

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<td>Character value</td>
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<td>Name</td>
<td>Required, Positional 2</td>
</tr>
<tr>
<td>KRTNVAR1</td>
<td>CL var for re-encrypted key</td>
<td>Character value</td>
<td>Required, Positional 3</td>
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<tr>
<td>CRSDMNK2</td>
<td>*SND cross-domain key name</td>
<td>Name, *NONE</td>
<td>Optional, Positional 4</td>
</tr>
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<td>KRTNVAR2</td>
<td>CL var for re-encrypted key</td>
<td>Character value</td>
<td>Optional, Positional 5</td>
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Enciphered key value (CPHK)

Specifies an 8-byte value, or a variable containing an 8-byte value, that is the value of a data-encrypting key enciphered under the host master key. There are no restrictions on the value of this parameter. This is a required parameter.

*SND cross-domain key name (CRSDMNK1)

Specifies the name, or a variable containing the name, of a sending cross-domain key. The value in the Enciphered key value prompt (CPHK parameter) is decrypted using the host master key and encrypted using this sending cross-domain key. This is a required parameter.

CL var for re-encrypted key (KRTNVAR1)

Specifies an 8-byte variable to receive the data-encrypting key encrypted under the sending cross-domain key. This is a required parameter.
*SND cross-domain key name (CRSDMNK2)

Specifies the name of a second sending cross-domain key. The value in the Enciphered key value prompt (CPHK parameter) is decrypted using the host master key and encrypted using this second sending cross-domain key.

The possible values are:

*NONE
No sending cross-domain key is to be used to encrypt the data-encrypting key.

sending-cross-domain-key-name
Specify the name, or a variable containing the name, of a sending cross-domain key.

CL var for re-encrypted key (KRTNVAR2)

Specifies an 8-byte variable to receive the data-encrypting key encrypted under the second sending cross-domain key.

Examples
None

Error messages
Unknown
Encipher To Master Key (ENCTOMSTK)

Where allowed to run:
- Batch program (*BPGM)
- Interactive program (*IPGM)

Threadsafe: No

The Encipher To Master Key (ENCTOMSTK) command reenciphers a data-encrypting key from encryption under a receiving cross-domain key to encryption under the host master key.

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<th>Notes</th>
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<td>CL var for re-encrypted key</td>
<td>Character</td>
<td>Required, Positional 1</td>
</tr>
<tr>
<td>CRSDMNK</td>
<td>*RCV cross-domain key name</td>
<td>Name</td>
<td>Required, Positional 2</td>
</tr>
<tr>
<td>ENCCPHK</td>
<td>Enciphered key value</td>
<td>Character</td>
<td>Required, Positional 3</td>
</tr>
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</table>

CL var for re-encrypted key (CPHK)

Specifies an 8-byte variable to receive the data-encrypting key encrypted under the host master key. This is a required parameter.

*RCV cross-domain key name (CRSDMNK)

Specifies the name, or a variable containing the name, of a receiving cross-domain key. The value in the Enciphered key value prompt (ENCCPHK parameter) is decrypted using the receiving cross-domain key and encrypted using the host master key. This is a required parameter.

Enciphered key value (ENCCPHK)

Specifies the 8-byte value, or a variable containing the 8-byte value, of a data-encrypting key enciphered under the receiving cross-domain key specified in the *RCV cross-domain key name prompt (CRSDMNK parameter). This is a required parameter.
Examples
None

Error messages
Unknown
Generate Cipher Key (GENCPHK)

Where allowed to run:
• Batch program (*BPGM)
• Interactive program (*IPGM)

Threadsafe: No

The Generate Cipher Key (GENCPHK) command generates a data-encrypting key enciphered under the host master key and optionally under a sending and/or receiving cross-domain key.

Parameters

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<th>Description</th>
<th>Choices</th>
<th>Notes</th>
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<td>CL var for generated key</td>
<td>Character value</td>
<td>Required, Positional 1</td>
</tr>
<tr>
<td>SNDCRSDMNK</td>
<td>*SND cross-domain key name</td>
<td>Name, *NONE</td>
<td>Optional, Positional 2</td>
</tr>
<tr>
<td>SNDRTNVAR</td>
<td>CL var for generated key</td>
<td>Character value</td>
<td>Optional, Positional 3</td>
</tr>
<tr>
<td>RCVCRSDMNK</td>
<td>*RCV cross-domain key name</td>
<td>Name, *NONE</td>
<td>Optional, Positional 4</td>
</tr>
<tr>
<td>RCVRTNVAR</td>
<td>CL var for generated key</td>
<td>Character value</td>
<td>Optional, Positional 5</td>
</tr>
</tbody>
</table>

CL var for generated key (CPHK)

Specifies an 8-byte variable to receive the value of the generated data-encrypting key encrypted under the host master key. This is a required parameter.

*SND cross-domain key name (SNDCRSDMNK)

Specifies the name of a sending cross-domain key that is to be used to encrypt the generated data-encrypting key.

The possible values are:

*NONE

No sending cross-domain key is to be used to encrypt the data-encrypting key.

sending-cross-domain-key-name

Specify the name, or a variable containing the name, of a sending cross-domain key.
CL var for generated key (SNDRTNVAR)
Specifies an 8-byte variable to receive the value of the generated data-encrypting key encrypted under the sending cross-domain key specified on the *SND cross-domain key name prompt (SNDCRSDMNK parameter).

*RCV cross-domain key name (RCVCRSDMNK)
Specifies the name of a receiving cross-domain key that is to be used to encrypt the generated data-encrypting key.

The possible values are:
*NONE
   No receiving cross-domain key is to be used to encrypt the data-encrypting key.
receiving-cross-domain-key-name
   Specify the name, or a variable containing the name, of a receiving cross-domain key.

CL var for generated key (RCVRTNVAR)
Specifies an 8-byte variable to receive the value of the generated data-encrypting key encrypted under the receiving cross-domain key specified on the *RCV cross-domain key name prompt (RCVCRSDMNK parameter).

Examples
None

Error messages
Unknown
Generate Cross-domain Keys (GENCRSDMNK)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Generate Cross-Domain Key (GENCRSDMNK) command generates random key values, installs them in the cross-domain key table, and prints a listing of the keys generated. The spooled file containing this listing is sent to the output queue associated with the job from which the command is submitted.

Note: To avoid any security exposure, you should use the Generate Cross-Domain Key (GENCRSDMNK) command only in a secure environment. Print the listing immediately and store it in a safe place.

Parameters

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<th>Description</th>
<th>Choices</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRSDMNK</td>
<td>Cross-domain key name base</td>
<td>Name</td>
<td>Required, Positional 1</td>
</tr>
<tr>
<td>NBR</td>
<td>Number to generate</td>
<td>1-9999</td>
<td>Required, Positional 2</td>
</tr>
<tr>
<td>SEED</td>
<td>Generation seed</td>
<td>Character value</td>
<td>Required, Positional 3</td>
</tr>
<tr>
<td>KUSE</td>
<td>Key use</td>
<td>*SND, *RCV, *PIN</td>
<td>Required, Positional 4</td>
</tr>
</tbody>
</table>

Cross-domain key name base (CRSDMNK)

Specifies a valid system name, or a variable containing a name, to be used when generating the key names.

All generated key names will be 10 characters long with numerics in positions 7 through 10. When you specify a key name, any characters in positions 7 through 10 must be numeric. If you specify a key name base less than 10 characters, the name is filled in with 0’s up to the last character, which is made a 1. This becomes the name of the first key generated.

For each succeeding key value, the last 4 characters of the key name, which is always a 4-digit number, is increased by 1 to become the next key name. This command does not generate any key names past 9999. This is a required parameter.

Number to generate (NBR)

Specifies the number, or a variable containing the number, of keys to be generated. The value specified plus the 4-digit number from the first key name cannot exceed 10,000.
**Generation seed (SEED)**

Specify 16 hexadecimal characters, or a character variable containing 16 hexadecimal characters, representing the 8-byte value to be used to initialize the random number generation routine. This is a required parameter.

**Key use (KUSE)**

Specifies the use of the keys to be generated. This is a required parameter.

The possible values are:

* **SND**  The generated keys are added to the cross-domain key table as sending cross-domain keys.

* **RCV**  The generated keys are added to the cross-domain key table as receiving cross-domain keys.

* **PIN**  The generated keys are added to the cross-domain key table as personal identification number keys.

**Examples**

None

**Error messages**

Unknown
Generate MAC (GENMAC)

Where allowed to run:
- Batch program (*BPGM)
- Interactive program (*IPGM)

Threading: No

The Generate Message Authentication Code (GENMAC) command encrypts a variable length of data using cipher block chaining and returns the last 8 bytes to be used as a message authentication code.

Parameters

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<th>Description</th>
<th>Choices</th>
<th>Notes</th>
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</thead>
<tbody>
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<td>Input data</td>
<td>Character value</td>
<td>Required, Positional 1</td>
</tr>
<tr>
<td>DTALEN</td>
<td>Input data length</td>
<td>1-32759</td>
<td>Required, Positional 2</td>
</tr>
<tr>
<td>CPHK</td>
<td>Cipher key</td>
<td>Character value</td>
<td>Required, Positional 3</td>
</tr>
<tr>
<td>ICV</td>
<td>Initial chaining value</td>
<td>Character value</td>
<td>Required, Positional 4</td>
</tr>
<tr>
<td>RTNVAR</td>
<td>CL var for returned value</td>
<td>Character value</td>
<td>Required, Positional 5</td>
</tr>
<tr>
<td>PAD</td>
<td>Pad option</td>
<td>*NO, *YES</td>
<td>Optional, Positional 6</td>
</tr>
<tr>
<td>PADCHAR</td>
<td>Pad character</td>
<td>Character value, X'00'</td>
<td>Optional, Positional 7</td>
</tr>
</tbody>
</table>

Input data (DATA)

Specifies the data, or a variable containing the data, to be encrypted. The data must be at least as long as the length specified in the Input data length prompt (DTALEN parameter). This is a required parameter.

Input data length (DTALEN)

Specifies the length, or a variable containing the length, of the data to be encrypted. The length must be less than 32,760. This is a required parameter.
Cipher key (CPHK)

Specifies an 8-byte value, or a variable containing an 8-byte value, to be used as the key for the data encryption algorithm. This value must be the value of the key encrypted under the host master key. There are no restrictions on the value of this parameter. This is a required parameter.

Initial chaining value (ICV)

Specifies an 8-byte value, or a variable containing an 8-byte value, to be used as the initial chaining value when performing cipher block chaining. There are no restrictions on the value of this parameter. This is a required parameter.

CL var for returned value (RTNVAR)

Specifies a variable to receive the 8-byte message authentication code. This is a required parameter.

Pad option (PAD)

Specifies whether padding is to be performed.

The possible values are:

*NO  Padding will not be performed.

*YES  Before encrypting, the data is padded out to the next 8-byte multiple using the pad character specified in the Pad character prompt (PADCHAR parameter). The last byte is then replaced with a count of the number of pad characters.

Pad character (PADCHAR)

Specifies a 1-byte value, or a variable containing a 1-byte value, to be used as the pad character when *YES is specified for the Pad option prompt (PAD parameter). The default (1-byte pad character) is hex 00.

Examples

None

Error messages

Unknown
Generate PIN (GENPIN)

Where allowed to run:
- Batch program ("BPGM")
- Interactive program ("IPGM")

Threadsafe: No

The Generate Personal Identification Number (GENPIN) command generates a personal identification number that is algorithmically related to your validation data. The generated number contains 16 decimal digits of which all or part may be assigned to a customer or used as an intermediate identification number if you have a preselected personal identification number value.

### Parameters

<table>
<thead>
<tr>
<th>Keyword</th>
<th>Description</th>
<th>Choices</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PINVLDK</td>
<td>PIN validation key name</td>
<td>Name</td>
<td>Required, Positional 1</td>
</tr>
<tr>
<td>DECTBL</td>
<td>Decimalization table</td>
<td>Character value</td>
<td>Required, Positional 2</td>
</tr>
<tr>
<td>VLDDTA</td>
<td>PIN validation data</td>
<td>Character value</td>
<td>Required, Positional 3</td>
</tr>
<tr>
<td>PINRTNVAR</td>
<td>Return variable</td>
<td>Character value</td>
<td>Required, Positional 4</td>
</tr>
</tbody>
</table>

**PIN validation key name (PINVLDK)**

Specifies the name, or a variable containing the name, of a PIN validation key which is to be used to encrypt the validation data for the personal identification number. This validation key must exist in the cross-domain key table and be defined with a key use of personal identification number ("PIN specified on the Key use prompt (KUSE parameter) on the Generate Cross-Domain Key (GENCRSDMNK) or the Add Cross-Domain Key (ADDCRSDMNK command). This is a required parameter.

**Decimalization table (DECTBL)**

Specifies 16 numeric digits (0-9), or a character variable containing 16 numeric digits, to be used as the table for conversion to decimal when generating the personal identification number. This is a required parameter.
### PIN validation data (VLDDTA)

Specifies 16 hexadecimal characters, or a character variable containing 16 hexadecimal characters, representing the 8 bytes of validation data to be used for generating the personal identification number (for example, hex C1 represents the character A). This is a required parameter.

### Return variable (PINRTNVAR)

Specifies a variable to receive the 16-digit generated personal identification number. This is a required parameter.

### Examples

None

### Error messages

Unknown
Remove Cross-Domain Key (RMVCRSDMNK)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Remove Cross-Domain Key (RMVCRSDMNK) command removes one or more specified keys from the cross-domain key table.

Parameters

<table>
<thead>
<tr>
<th>Keyword</th>
<th>Description</th>
<th>Choices</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRSDMNK</td>
<td>Cross-domain name</td>
<td>Generic name, name, *ALL</td>
<td>Required, Positional 1</td>
</tr>
<tr>
<td>KUSE</td>
<td>Cross-domain use</td>
<td>*SND, *RCV, *PIN, *ALL</td>
<td>Required, Positional 2</td>
</tr>
</tbody>
</table>

Cross-domain key name (CRSDMNK)

Specifies the name or generic name of the keys, with a key use that is specified in the Cross-domain key use prompt (KUSE parameter), that are to be removed from the cross-domain key table. You can also use this parameter to specify that all keys defined with the use specified in the Cross-domain key use prompt (KUSE parameter) are to be removed.

The possible values are:

*ALL All the keys with a key use specified in the Cross-domain key use prompt (KUSE parameter) are to be removed from the cross-domain key table.

generic*-key-name

All keys with the same generic name with a key use specified in the Cross-domain key use prompt (KUSE parameter) are to be removed from the cross-domain key table. To specify a generic name, add an asterisk after the characters that are common in all the key names to be removed (ABC*, for example). If an asterisk is not included with the name, the system assumes that the name is a complete key name.

key-name

The key with the specified name with a key use specified in the Cross-domain key use prompt (KUSE parameter) are to be removed from the cross-domain key table.
Cross-domain key use (KUSE)

Specifies the key use of the key(s) specified in the Cross-domain key name prompt (CRSDMNK parameter) that are to be removed from the cross-domain key table. You can also use this parameter to specify that all key uses of the named key are to be removed.

The possible values are:

*ALL  The keys named in the Cross-domain key name prompt (CRSDMNK parameter) with any key use are to be removed.

*SND  The keys named in the Cross-domain key name prompt (CRSDMNK parameter) with a key use of sending are to be removed.

*RCV  The keys named in the Cross-domain key name prompt (CRSDMNK parameter) with a key use of receiving are to be removed.

*PIN  The keys named in the Cross-domain key name prompt (CRSDMNK parameter) with a key use of personal identification number are to be removed.

Examples

None

Error messages

Unknown
Set Master Key (SETMSTK)

Where allowed to run:
- Interactive job (*INTERACT)
- Interactive program (*IPGM)

Threading: No

The Set Master Key (SETMSTK) command installs a new host master key on your system.

If an old master key exists, the values in the cross-domain key table are reencrypted under the new host master key value. You supply the values for two key parts, which are exclusive-ORed together to produce the new host master key. The new host master key must have odd parity in every byte.

To run this command, the system must be in a restricted state. (Enter the End System (ENDSYS) command to obtain a restricted state.) After installing the master key, return your system to a normal state by restarting your subsystems.

There are no parameters for this command.

Parameters

None

Examples

None

Error messages

Unknown
Translate PIN (TRNPIN)

Where allowed to run:

- Batch program (*BPGM)
- Interactive program (*IPGM)

Threadsafe: No

The Translate Personal Identification Number (TRNPIN) command reenciphers a personal identification number (PIN) from encipherment under an input PIN protection key to encipherment under an output PIN protection key.

Parameters

<table>
<thead>
<tr>
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<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>INPINPTCK</td>
<td>Input protection key name</td>
<td>Name</td>
<td>Required, Positional 1</td>
</tr>
<tr>
<td>ENCPIN</td>
<td>Enciphered PIN</td>
<td>Character value</td>
<td>Required, Positional 2</td>
</tr>
<tr>
<td>OUTPINPTCK</td>
<td>Output protection key name</td>
<td>Name</td>
<td>Required, Positional 3</td>
</tr>
<tr>
<td>RTNVAR</td>
<td>Return variable</td>
<td>Character value</td>
<td>Required, Positional 4</td>
</tr>
</tbody>
</table>

Input protection key name (INPINPTCK)

Specifies the name, or a variable containing the name, of the input PIN protection key which the identification number is enciphered under. This key must exist in the cross-domain key table and be defined with a key use of personal identification number (PIN specified on the Key use prompt (KUSE parameter) on the Generate Cross-Domain Key (GENCRSDMNK) or Add Cross-Domain Key (ADDCRSDMNK) command). This is a required parameter.

Enciphered PIN (ENCPIN)

Specifies 16 hexadecimal characters, or a character variable containing 16 hexadecimal characters, representing a personal identification number enciphered under the input PIN protection key. This is a required parameter.
Output protection key name (OUTPINPTCK)

Specifies the name, or a variable containing the name, of the output PIN protection key. The value specified in the Enciphered PIN prompt (ENCPIN parameter) is decrypted using the input protection key and encrypted using the output protection key. This key must exist in the cross-domain key table with a defined key use of sending. This is a required parameter.

Return variable (RTNVAR)

Specifies a variable to receive the 16-character value of the identification number reenciphered under the output PIN protection key. This is a required parameter.

Examples

None

Error messages

Unknown
Verify Master Key (VFYMSTK)

Where allowed to run:
• Interactive job (*INTERACT)
• Interactive program (*IPGM)

Threadsafe: No

The Verify Master Key (VFYMSTK) command compares the verification code you type in on the prompt display with the verification code of the current host master key.

If the verification codes do not match, the master key has been altered since you obtained your verification code or you have mistyped it. If the verification codes match, a message is shown at the bottom of the display, indicating that the entered verification code is correct.

There are no parameters for this command.

Parameters

None

Examples

None

Error messages

Unknown
Verify PIN (VFYPIN)

Where allowed to run:

• Batch program (*BPGM)
• Interactive program (*IPGM)

Threadsafe: No

The Verify Personal Identification Number (VFYPIN) command determines if the customer’s personal identification number is algorithmically related to the customer’s validation data. The result of the test is returned in a 1-byte variable.

Parameters

<table>
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<td>Required, Positional 1</td>
</tr>
<tr>
<td>ENCPIN</td>
<td>Enciphered PIN</td>
<td>Character value</td>
<td>Required, Positional 2</td>
</tr>
<tr>
<td>PINVLDK</td>
<td>PIN validation key name</td>
<td>Name</td>
<td>Required, Positional 3</td>
</tr>
<tr>
<td>DECTBL</td>
<td>Decimalization table</td>
<td>Character value</td>
<td>Required, Positional 4</td>
</tr>
<tr>
<td>VLDDTA</td>
<td>PIN validation data</td>
<td>Character value</td>
<td>Required, Positional 5</td>
</tr>
<tr>
<td>PINCHKLEN</td>
<td>PIN check length</td>
<td>1-16</td>
<td>Required, Positional 6</td>
</tr>
<tr>
<td>RTNVAR</td>
<td>Return variable</td>
<td>Character value</td>
<td>Required, Positional 7</td>
</tr>
<tr>
<td>PINPADCCHAR</td>
<td>PIN pad character</td>
<td>Character value, *NONE</td>
<td>Optional, Positional 8</td>
</tr>
<tr>
<td>OFFSET</td>
<td>PIN offset data</td>
<td>Character value, *NONE</td>
<td>Optional, Positional 9</td>
</tr>
</tbody>
</table>

Input protection key name (INPINPTCK)

Specifies the name, or a variable containing the name, of the input PIN protection key that the personal identification number is enciphered under. This key must exist in the cross-domain key table and be defined with a key use of personal identification number (*PIN specified on the Key use prompt (KUSE parameter) on the Generate Cross-Domain Key (GENCRSDMNK) or Add Cross-Domain Key (ADDCRSDMNK) command). This is a required parameter.
Enciphered PIN (ENCPIN)

Specifies 16 hexadecimal characters, or a character variable containing 16 hexadecimal characters, representing a personal identification number in 3624 format enciphered under the input PIN protection key. This is a required parameter.

PIN validation key name (PINVLDK)

Specifies the name, or a variable containing the name, of a validation key that is to be used to encrypt the validation data. This key must exist in the cross-domain key table and be defined with a key use of personal identification number (*PIN specified on the Key use prompt (KUSE parameter) on the Generate Cross-Domain Key (GENCRSDMNK) or Add Cross-Domain Key (ADDCRSDMNK) command). This is a required parameter.

Decimalization table (DECTBL)

Specifies 16 numeric digits (0-9), or a character variable containing 16 numeric digits, to be used as the table for conversion to decimal when verifying the personal identification number. This is a required parameter.

PIN validation data (VLDDTA)

Specifies 16 hexadecimal characters, or a character variable containing 16 hexadecimal characters, representing the 8 bytes of validation data to be used for verifying the personal identification number. This is a required parameter.

PIN check length (PINCHKLEN)

Specifies the number, or a variable containing the number, of digits of the personal identification number to be verified.

Return variable (RTNVAR)

Specifies a variable to receive the 1-byte verification status. If the personal identification number is valid, the status is set to 0. If the personal identification number is not valid, the status is set to 1.
PIN pad character (PINPADCHAR)

Specifies the hexadecimal character that was used to pad the personal identification number before being encrypted. It is removed from the end of the personal identification number before verification.

The possible values are:

*NONE
The personal identification number was not padded before being encrypted.

PIN-pad-character
Specify 1 hexadecimal character, or a variable containing 1 hexadecimal character, representing the value that was used to pad the personal identification number before it was encrypted.

PIN offset data (OFFSET)

Specifies a numeric value to be added to the intermediate personal identification number obtained from the validation data before comparing it with the supplied personal identification number.

The possible values are:

*NONE
No offset value should be added to the intermediate personal identification number before the comparison. Specifying *NONE for this parameter is equivalent to entering a value of zero for the parameter.

offset-data
Specify 16 numeric digits (0-9), or a character variable containing 16 numeric digits, representing the value to be added to the intermediate personal identification number before the comparison.

Examples

None

Error messages

Unknown
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