



Airline Product Set Configuration Commands

Use the commands in this chapter to configure and monitor the Airline Product Set. For Airline Product Set configuration information and examples, refer to the “Configuring the Airline Product Set” chapter in the *Bridging and IBM Networking Configuration Guide*.

alps a1-map a2-map

Use the **alps a1-map a2-map** ALPS ASCU submode command to specify the A1 and A2 logical ASCU identification information.

alps a1-map *a1-value* **a2-map** *a2-value*

| Syntax Description | <i>a1-value</i> | <i>a2-value</i> |
|--------------------|--|---|
| | A1 logical ASCU identification. A hexadecimal number in the range 0x00 to 0x7F, except 0x10, 0x16, and 0x17. | A2 logical ASCU identification. A hexadecimal number in the range 0x00, 0x10, 0x16, 0x17, 0x40, 0x50, 0x51, 0x52, and 0x53. |

Defaults No values are predefined.

Command Modes ALPS ASCU submode

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 11.3 T | This command was introduced. |

Examples The following example specifies the A1 identification as 40 and the A2 identification as 20:

```
alps a1-map 40 a2-map 20
```

| Related Commands | Command | Description |
|------------------|-----------------------|---------------------------------------|
| | show alps ascu | Displays the status of the ALPS ASCU. |

alps ascu

Use the **alps ascu** interface configuration command to specify a physical ASCU identity. Use the **no** form of this command to remove the ASCU from the interface and delete any messages queued for transmission to the ASCU or the network.

alps ascu *id*

no alps ascu *id*

| | |
|---------------------------|--|
| Syntax Description | <i>id</i> ASCU interchange address. Valid range is between 41 and 7E, except 43, 44, 47, 50 to 57, 60, 64, and 7B. |
|---------------------------|--|

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|-----------------|---------------------------|
| Defaults | No values are predefined. |
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|----------------------|-------------------------|
| Command Modes | Interface configuration |
|----------------------|-------------------------|

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|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 11.3 T | This command was introduced. |

| | |
|-------------------------|--|
| Usage Guidelines | If an ASCU already exists on the interface, the alps ascu command initiates the ALPS ASCU submode for that ASCU. If the ASCU does not exist, an ASCU is created and the ALPS ASCU submode is initiated. |
|-------------------------|--|

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|-----------------|--|
| Examples | The following example specifies the interchange address as 4B: alps ascu 4B |
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| | | |
|-------------------------|----------------|---------------------------------------|
| Related Commands | Command | Description |
| | show alps ascu | Displays the status of the ALPS ASCU. |

alps circuit

Use the **alps circuit** global configuration command to specify an ALPS circuit at the remote CPE across a TCP/IP connection. Use the **no** form of this command to remove the circuit definition from the configuration, send a close message on the ALPS circuit, and delete any queued messages for the circuit.

alps circuit *name*

no alps circuit *name*

| Syntax Description | <i>name</i> | Name given to identify an ALPS circuit. |
|--------------------|-------------|---|
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| Defaults | No values are predefined. |
|----------|---------------------------|
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| Command Modes | Global configuration |
|---------------|----------------------|
|---------------|----------------------|

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 11.3 T | This command was introduced. |

| Usage Guidelines | Entering this command causes a circuit control block to be created. the command also initiates the ALPS circuit submode. If the circuit already exists, the only action is the initiation of the ALPS circuit submode. |
|------------------|--|
|------------------|--|

Note that this command is used to statically create an ALPS circuit at the remote CPE. ALPS X.25 circuits (at the central CPE) are always dynamically created and are never created using this command.

| Examples | The following example specifies the name of the ALPS circuit at the remote CPE as CKT1: |
|----------|---|
|----------|---|

```
alps circuit CKT1
```

| Related Commands | Command | Description |
|------------------|---------------------------|--|
| | show alps circuits | Displays the status of the ALPS circuits. If a circuit name is specified, than only the status of that circuit will be displayed; otherwise, the status of all circuits will be displayed. |

alps connection-type permanent

Use the **alps connection-type permanent** ALPS circuit submode command to specify that this circuit should be established when the circuit is enabled.

alps connection-type permanent [*retry-timer*]

no alps connection-type permanent [*retry-timer*]

| | | |
|---------------------------|--------------------|--|
| Syntax Description | <i>retry-timer</i> | (Optional) Specifies the maximum interval between consecutive attempts to establish a circuit in the event of a failure. The default for <i>retry-timer</i> is 30 seconds and the range is 1 to 180 seconds. |
|---------------------------|--------------------|--|

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| Defaults | The default is 30 seconds. |
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| Command Modes | ALPS circuit submode |
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|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 11.3 T | This command was introduced. |

Examples The following example specifies that the circuit is established when enabled and that the CPE will retry the connection every 30 seconds in the event of a failure:

```
alps connection-type permanent 30
```

| | | |
|-------------------------|---------------------------|--|
| Related Commands | Command | Description |
| | show alps circuits | Displays the status of the ALPS circuits. If a circuit name is specified, than only the status of that circuit will be displayed; otherwise, the status of all circuits will be displayed. |

alps default-ckt

Use the **alps default-ckt** ALPS ASCU submode command to specify the ALPS circuit that this ASCU uses.

alps default-ckt *name*

no alps default-ckt *name*

| Syntax Description | <i>name</i> | Name given to identify an ALPS circuit on the remote CPE. |
|--------------------|-------------|---|
|--------------------|-------------|---|

| Defaults | No values are predefined. |
|----------|---------------------------|
|----------|---------------------------|

| Command Modes | ALPS ASCU submode |
|---------------|-------------------|
|---------------|-------------------|

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 11.2 T | This command was introduced. |

| Examples | The following example specifies that ALPS circuit to be used is CKT1: <pre>alps default-ckt CKT1</pre> |
|----------|---|
|----------|---|

| Related Commands | Command | Description |
|------------------|---------------------------|--|
| | show alps circuits | Displays the status of the ALPS circuits. If a circuit name is specified, than only the status of that circuit will be displayed; otherwise, the status of all circuits will be displayed. |

alps enable-alarms ascu

Use the **alps enable-alarms ascu** global configuration command at the remote CPE to enable alarms for the ALPS ASCUs. Use the **no** form of this command to disable alarms for the ALPS ASCUs.

alps enable-alarms ascu [*interface id*]

no alps enable-alarms ascu

| | |
|---------------------------|---|
| Syntax Description | <i>interface id</i> (Optional) ASCU identifier. Enable alarms for the specified ASCU. |
|---------------------------|---|

| | |
|-----------------|--|
| Defaults | If no interface and interchange address combination is specified, then alarms (SYSLOG messages and SNMP traps) are enabled for all ALPS ASCUs. |
|-----------------|--|

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|----------------------|----------------------|
| Command Modes | Global configuration |
|----------------------|----------------------|

| | | |
|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 11.3 T | This command was introduced. |

| | |
|-------------------------|--|
| Usage Guidelines | If an interface and interchange address combination is specified, then the alarms are enabled only for the ASCU matching that combination. Up to eight alps enable-alarms ascu commands can be entered to allow a set of ALPS ASCUs to be monitored. ALPS ASCU alarms are only generated at the remote CPE. |
|-------------------------|--|

| | |
|-----------------|---|
| Examples | The following example enables alarms for ALPS ASCU 42 on serial interface 1: <pre>alps enable-alarms ascu Serial1 42</pre> |
|-----------------|---|

| | | |
|-------------------------|-----------------------|---------------------------------------|
| Related Commands | Command | Description |
| | show alps ascu | Displays the status of the ALPS ASCU. |

alps enable-alarms circuit

Use the **alps enable-alarms circuit** global configuration command to enable alarms for the ALPS circuits. Use the **no** form of this command to remove the circuit definition from the configuration.

alps enable-alarms circuit [*name*]

no alps enable-alarms circuit [*name*]

| | |
|---------------------------|--|
| Syntax Description | <i>name</i> (Optional) Name given to identify an ALPS circuit on the remote CPE. |
|---------------------------|--|

| | |
|-----------------|---------------------------|
| Defaults | No values are predefined. |
|-----------------|---------------------------|

| | |
|----------------------|----------------------|
| Command Modes | Global configuration |
|----------------------|----------------------|

| Command History | <table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>11.3T</td> <td>This command was introduced.</td> </tr> </tbody> </table> | Release | Modification | 11.3T | This command was introduced. |
|------------------------|---|---------|--------------|-------|------------------------------|
| Release | Modification | | | | |
| 11.3T | This command was introduced. | | | | |

| | |
|-------------------------|--|
| Usage Guidelines | If a valid circuit name is specified, then the alarms are enabled only for the circuit matching the name. Up to eight alps enable-alarms circuit commands can be entered to allow a subset of ALPS circuits to be monitored. ALPS circuit alarms are generated at both the remote (ALC) CPE and the central (X.25) CPE. |
|-------------------------|--|

| | |
|-----------------|---|
| Examples | <p>The following example enables alarms for the ALPS circuit named CKT1:</p> <pre>alps enable alarms circuit CKT1</pre> |
|-----------------|---|

| Related Commands | <table border="1"> <thead> <tr> <th>Command</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>show alps circuits</td> <td>Displays the status of the ALPS circuits. If a circuit name is specified, than only the status of that circuit will be displayed; otherwise, the status of all circuits will be displayed.</td> </tr> </tbody> </table> | Command | Description | show alps circuits | Displays the status of the ALPS circuits. If a circuit name is specified, than only the status of that circuit will be displayed; otherwise, the status of all circuits will be displayed. |
|---------------------------|--|---------|-------------|---------------------------|--|
| Command | Description | | | | |
| show alps circuits | Displays the status of the ALPS circuits. If a circuit name is specified, than only the status of that circuit will be displayed; otherwise, the status of all circuits will be displayed. | | | | |

alps enable-alarms peer

Use the **alps enable-alarms peer** global configuration command to enable alarms for the ALPS peers. Use the **no** form of this command to remove the circuit definition from the configuration, send a close message on the ALPS circuit, and delete any queued messages for the circuit.

alps enable-alarms peer [*ip-address*]

no alps enable-alarms peer [*ip-address*]

| | |
|---------------------------|--|
| Syntax Description | <i>ip-address</i> (Optional) IP address of the remote peer for which alarms are enabled. |
|---------------------------|--|

| | |
|-----------------|---------------------------|
| Defaults | No values are predefined. |
|-----------------|---------------------------|

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|----------------------|----------------------|
| Command Modes | Global configuration |
|----------------------|----------------------|

| | | |
|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 11.3T | This command was introduced. |

| | |
|-------------------------|--|
| Usage Guidelines | If an IP address is specified, then the alarms are enabled only for the remote peer matching the IP address. Up to eight alps enable-alarms peer commands can be entered to allow a set of ALPS peers to be monitored. ALPS peer alarms are generated at both the remote and the central CPE. |
|-------------------------|--|

| | |
|-----------------|---|
| Examples | The following example enables alarms for the ALPS peer at IP address 172.22.0.91: <pre>alps enable alarms peer 172.22.0.91</pre> |
|-----------------|---|

| | | |
|-------------------------|------------------------|---|
| Related Commands | Command | Description |
| | show alps peers | Displays the status of the ALPS remote peers. If an IP address is specified, than only the status of that peer will be displayed; otherwise, the status of all peers will be displayed. |

alps enable-ascu

Use the **alps enable-ascu** ALPS ASCU submode command to move the previously defined ASCU from the inactive poll list to the active poll list. This move results in the protocol handler polling the ASCU and rendering it ready for handling terminal traffic. Use the **no** form of this command to remove the ASCU from the active poll list to the inactive poll list. This action prevents the ASCU from being polled, rendering it not ready for handling terminal traffic.

alps enable-ascu

no alps enable-ascu

Syntax Description This command has no arguments or keywords.

Defaults No values are predefined.

Command Modes ALPS ASCU submode

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 11.3T | This command was introduced. |

Examples The following example moves the ASCU to the active poll list:

```
alps enable-ascu
```

| Related Commands | Command | Description |
|------------------|-----------------------|---------------------------------------|
| | show alps ascu | Displays the status of the ALPS ASCU. |

alps enable-circuit

Use the **alps enable-circuit** ALPS circuit submode command to enable the circuit to be activated when data is received from an ASCU. Use the **no** form of this command to disable the circuit.

alps enable-circuit

no alps enable-circuit

Syntax Description This command has no arguments or keywords.

Defaults The circuit is disabled by default.

Command Modes ALPS circuit submode

| Command History | Release | Modification |
|------------------------|----------------|------------------------------|
| | 11.3T | This command was introduced. |

Examples The following example specifies the circuit to be activated when data is received from an ASCU:

```
alps enable-circuit
```

| Related Commands | Command | Description |
|-------------------------|---------------------------|--|
| | show alps circuits | Displays the status of the ALPS circuits. If a circuit name is specified, than only the status of that circuit will be displayed; otherwise, the status of all circuits will be displayed. |

alps error-display

Use the **alps error-display** ALPS ASCU submode command to specify where error messages about service availability or network problems are displayed. Use the **no** form of this command to return to the default values.

alps error-display *number1 number2*

no alps error-display *number1 number2*

Syntax Description

| | |
|----------------|--|
| <i>number1</i> | For ALC, specifies the terminal address where these service messages are to be sent. Valid numbers are hexadecimal numbers in the range 0x40 to 0x7F. The default address is 0x72. |
| <i>number2</i> | For ALC, specifies the screen line number where service messages are to be displayed. Valid numbers are hexadecimal numbers in the range 0x40 to 0x7F. The default screen line number is 0x66. |

Defaults

The default terminal address for ALC is 0x72.

The default screen line for ALC is 0x20.

Command Modes

ALPS ASCU submode

Command History

| Release | Modification |
|---------|------------------------------|
| 11.3T | This command was introduced. |

Examples

The following example specifies that error messages are displayed at terminal address 6d, on screen line number 78:

```
alps error-display 6d 78
```

Related Commands

| Command | Description |
|-----------------------|---------------------------------------|
| show alps ascu | Displays the status of the ALPS ASCU. |

alps host-hld host-link

Use the **alps host-hld host-link** interface configuration command to enable ALPS on the X.25 interface. Use the **no** form of this command to disable ALPS on the X.25 interface.

```
alps host-hld hld host-link number {{ ax25 [damp-tmr value] } | { emtox x.121 [pseudo-conv] } }
    [life-tmr value] [reply-tmr value]
```

```
no alps host-hld hld host-link number {{ ax25 [damp-tmr value] } | { emtox x.121 } } [life-tmr
    value] [reply-tmr value]
```

| Syntax Description | |
|-------------------------------|--|
| <i>hld</i> | Host high-level designator. A hexadecimal number in the range 1 to 7f7f. |
| <i>number</i> | Host-link identifier. A number in the range 1 to 255. |
| ax25 | Specifies airline X.25 implementation of X.25. |
| damp-tmr <i>value</i> | (Optional) Specifies the AX.25 PVC damping timer. The <i>value</i> argument is the length of time that a PVC can be inactive before it is destroyed and the corresponding ALPS circuits are closed. The default is 10 seconds. |
| emtox | Specifies EMTOX implementation of X.25. |
| <i>x.121</i> | X.121 address of the EMTOX host (called address on calls to the EMTOX host). |
| <i>pseudo-conv</i> | (Optional) Specifies the pseudo-conversational format of emtox packets. |
| life-tmr <i>value</i> | Specifies the maximum amount of time (in seconds) that a message may be queued for transmission to the host X.25 system before it is discarded. The <i>value</i> argument is time (in seconds). |
| reply-tmr <i>value</i> | (Optional) Specifies the duration of the no-reply timer. If the X.2 line is idle for this duration, and the X.25 transmit window is full, then ALPS sends an X.25 reset message on the virtual circuit to reset the transmit/receive windows. The no-reply timer can be configured for between 10 and 600 seconds. |

| Defaults |
|---|
| The default damping timer value is 10 seconds. |
| The default no-reply timer value is 60 seconds. |

| Command Modes |
|-------------------------|
| Interface configuration |

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 11.3T | This command was introduced. |

| Related Commands | Command | Description |
|------------------|--------------------------|--|
| | encapsulation x25 | Specifies operation of a serial interface as an X.25 device. |

alps hostlink

Use the **alps hostlink** ALPS circuit submode command to specify information required to establish an X.25 virtual circuit at the central CPE. Use the **no** form of this command to remove the circuit definition from the configuration, send a close message on the ALPS circuit, and delete any queued messages for the circuit.

```
alps hostlink number {ax25 lcn | emtox x121-addr} [winout val1] [winin val2] [ops val3][ips val4]
```

```
no alps hostlink number {ax25 lcn | emtox x121-addr} [winout val1] [winin val2] [ops val3][ips val4]
```

Syntax Description

| | |
|---------------------------|---|
| <i>number</i> | Interface at the host CPE. Decimal number in the range 1 to 255. |
| ax25 | Specifies airline X.25 implementation of X.25. |
| <i>lcn</i> | Local channel number for AX.25 connections. |
| emtox | Specifies EMTOX implementation of X.25. |
| <i>x121-addr</i> | X.121 calling address for EMTOX connections. This is the X.121 calling address for X.25 call packets sent from the central CPE to the EMTOX host. This address is the source address in a call to the host. |
| winout <i>val1</i> | (Optional) Specifies the X.25 transmit window. The <i>val1</i> argument is a decimal number in the range 1 to 7. |
| winin <i>val2</i> | (Optional) Specifies the X.25 receive window. The <i>val2</i> argument is a decimal number in the range 1 to 7. |
| ops <i>val3</i> | (Optional) Specifies the maximum output packet size. The <i>val3</i> argument is one of the following numbers: 128, 240, 256, 512, 1024, 2048, or 4096. |
| ips <i>val4</i> | (Optional) Specifies the maximum input packet size. The <i>val4</i> argument is one of the following numbers: 128, 240, 256, 512, 1024, 2048, or 4096. |

Defaults

If no values are specified, the default values at the X.25-attached central CPE are used.

Command Modes

ALPS circuit submode

Command History

| Release | Modification |
|---------|------------------------------|
| 11.3T | This command was introduced. |

Examples

The following example establishes an X.25 virtual circuit at the central CPE. The configuration specifies airline X.25 implementation. The host CPE interface is 3, the local channel number for airline X.25 connections is 120, and the X.25 transmit window is 3.

```
alps hostlink 3 ax25 120 winout 3 winin 3
```

| Related Commands | Command | Description |
|-------------------------|---------------------------|--|
| | alps circuit | Specifies an ALPS circuit at the remote CPE across a TCP/IP connection. |
| | show alps circuits | Displays the status of the ALPS circuits. If a circuit name is specified, than only the status of that circuit will be displayed; otherwise, the status of all circuits will be displayed. |

alps idle-timer

Use the **alps idle-timer** ALPS circuit submode command to specify (for dynamic circuits) the length of time that can elapse before an idle circuit is disabled. Use the **no** form of this command to return to the default idle-timer value.

alps idle-timer *timer*

no alps idle-timer *timer*

| | | |
|---------------------------|--------------|---|
| Syntax Description | <i>timer</i> | Length of time that can elapse before an idle circuit is brought down. The range is 10 to 600 seconds. The default is 60 seconds. |
|---------------------------|--------------|---|

Defaults The default length of time that can elapse before an idle circuit is brought down is 60 seconds.

Command Modes ALPS circuit submode

| | | |
|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 11.3 T | This command was introduced. |

Examples The following example specifies that an idle circuit is maintained for 90 seconds before it is disabled:

```
alps idle-timer 90
```

| | | |
|-------------------------|---------------------------|--|
| Related Commands | Command | Description |
| | alps circuit | Specifies an ALPS circuit at the remote CPE across a TCP/IP connection. |
| | show alps circuits | Displays the status of the ALPS circuits. If a circuit name is specified, than only the status of that circuit will be displayed; otherwise, the status of all circuits will be displayed. |

alps keepalive

Use the **alps keepalive** global configuration command to enable TCP keepalives for ALPS TCP peer connections. A TCP keepalive request will be sent to the remote peer if the TCP connection to the remote peer is silent for a time period larger than the interval specified. The TCP connection to the ALPS host will be closed when a count equal to the retry count specified is missed consecutively. Use the **no** form of this command to disable keepalives for ALPS.

alps keepalive [*interval time*] [*retry count*]

no alps keepalive [*interval time*] [*retry count*]

Syntax Description

| | |
|----------------------|--|
| interval time | (Optional) Interval for keepalive requests. The <i>time</i> argument is the keepalive interval, in the range of 10 to 300 seconds. The default is 30 seconds. |
| retry count | (Optional) Indicates how many times keepalive requests will be sent before the connection is closed. The <i>count</i> argument is the retry count, in the range 1 to 10. The default is 3 retries. |

Defaults

The default keepalive interval is 30 seconds.
The default retry count is 3.

Command Modes

Global configuration

Command History

| Release | Modification |
|---------|------------------------------|
| 11.3T | This command was introduced. |

Examples

The following example specifies that a TCP keepalive request will be sent to the remote peer if the TCP peer connection is idle for 60 seconds. The connection will be closed after 3 consecutive keepalive requests are sent.

```
alps keepalive interval 60 retry 8
```

Related Commands

| Command | Description |
|------------------------|---|
| alps local-peer | Specifies the IP address of the local peer. |

alps lifetime-timer

Use the **alps lifetime-timer** ALPS circuit submode command to specify the maximum amount of time messages can be queued in the ALPS circuit queue awaiting transmission to the central CPE. Use the **no** form of this command to return to the default lifetime-timer value.

alps lifetime-timer *timer*

no alps lifetime-timer *timer*

| | | |
|---------------------------|--------------|---|
| Syntax Description | <i>timer</i> | Length of time, in seconds, that a message can be queued. The range is 1 to 20 seconds. The default is 4 seconds. |
|---------------------------|--------------|---|

Defaults The default length of time that a message can be queued in the ALPS circuit queue is 4 seconds.

Command Modes ALPS circuit submode

| Command History | Release | Modification |
|------------------------|----------------|------------------------------|
| | 11.3T | This command was introduced. |

Usage Guidelines Messages that exceed the timer limit are discarded.

Examples The following example specifies that a message remains in the ALPS circuit queue for no longer than 3 seconds:

```
alps lifetime-timer 3
```

| Related Commands | Command | Description |
|-------------------------|---------------------------|--|
| | alps circuit | Specifies an ALPS circuit at the remote CPE across a TCP/IP connection. |
| | show alps circuits | Displays the status of the ALPS circuits. If a circuit name is specified, than only the status of that circuit will be displayed; otherwise, the status of all circuits will be displayed. |

alps local-hld remote-hld

Use the **alps local-hld remote-hld** ALPS circuit submode command to specify the local and remote HLDs (in hexadecimal) to use for this ALPS circuit. Use the **no** form of this command to remove the definition from the configuration.

```
alps local-hld loc-hld remote-hld rem-hld
```

```
no alps local-hld loc-hld remote-hld rem-hld
```

| Syntax Description | | |
|--------------------|----------------|--|
| | <i>loc-hld</i> | Local HLD to use for ALPS circuit. Hexadecimal number in the range 1 to FFFF. |
| | <i>rem-hld</i> | Remote HLD to use for ALPS circuit. Hexadecimal number in the range 1 to FFFF. |

Defaults No values are predefined.

Command Modes ALPS circuit submode

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 11.3T | This command was introduced. |

Examples The following example specifies the local HLD as 4b10 and the remote HLD as 5c00:

```
alps local-hld 4B10 remote-hld 5c00
```

| Related Commands | Command | Description |
|------------------|---------------------------|--|
| | alps circuit | Specifies an ALPS circuit at the remote CPE across a TCP/IP connection. |
| | show alps circuits | Displays the status of the ALPS circuits. If a circuit name is specified, than only the status of that circuit will be displayed; otherwise, the status of all circuits will be displayed. |

alps local-peer

Use the **alps local-peer** global configuration command to specify the IP address of the local peer. Use the **no** form of this command to remove all subsequent ALPS configuration commands from the router.

alps local-peer *ip-address* [**promiscuous**]

no alps local-peer *ip-address* [**promiscuous**]

| Syntax Description | | |
|--------------------|--------------------|---|
| | <i>ip-address</i> | IP address of the local peer. |
| | promiscuous | (Optional) Keyword specified at the central CPE to accept incoming TCP connections from any remote CPE. |

Defaults No values are predefined.

Command Modes Global configuration

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 11.3T | This command was introduced. |

Examples The following example specifies the local peer IP address as 172.22.0.91 and specifies that the CPE accepts incoming TCP connections from any CPE:

```
alps local-peer 172.22.0.91 promiscuous
```

| Related Commands | Command | Description |
|------------------|------------------------|---|
| | show alps peers | Displays the status of the ALPS remote peers. If an IP address is specified, than only the status of that peer will be displayed; otherwise, the status of all peers will be displayed. |

alps max-msg-length

Use the **alps max-msg-length** ALPS ASCU submode command to specify maximum input message length. Use the **no** form of this command to return to the default maximum input message length.

alps max-msg-length *value*

no alps max-msg-length *value*

| | | |
|---------------------------|--------------|--|
| Syntax Description | <i>value</i> | Maximum input message length. The range is 1 to 3840. The default is 962 characters. |
|---------------------------|--------------|--|

| | |
|-----------------|---|
| Defaults | The default maximum input message length is 962 characters. |
|-----------------|---|

| | |
|----------------------|-------------------|
| Command Modes | ALPS ASCU submode |
|----------------------|-------------------|

| Command History | Release | Modification |
|------------------------|----------------|------------------------------|
| | 11.3T | This command was introduced. |

| | |
|-----------------|---|
| Examples | The following example specifies that the maximum length of a message is 1000 characters: <pre>alps max-msg-length 1000</pre> |
|-----------------|---|

alps mpx

Use the **alps mpx** ALPS circuit submode command to specify the multiplexing and the ASCU identification header for this circuit. Use the **no** form of this command to remove the definition from the configuration.

```
alps mpx {group | single} hdr {a1a2 | none}
```

```
no alps mpx {group | single} hdr {a1a2 | none}
```

Syntax Description

| | |
|---------------|--|
| group | Specifies that multiple ASCUs will be multiplexed on the ALPS circuit. |
| single | Specifies that only one ASCU will use this circuit. |
| hdr | Specifies the ASCU identification header for the circuit. |
| a1a2 | ASCU identification via A1, A2. |
| none | No ASCU identification. |

Defaults

The default for multiplexing is **group**.

The default header is **a1a2**.

Command Modes

ALPS circuit submode

Command History

| Release | Modification |
|---------|------------------------------|
| 11.3T | This command was introduced. |

Usage Guidelines

If **alps mpx group** is specified, multiple ASCUs will be multiplexed on this ALPS circuit and the **none** option is not applicable. If **alps mpx single** is specified, then only one ASCU uses this ALPS circuit. If **alps mpx single hdr none** is specified, the A1 and A2 ASCU identification information is not added to the front of data frames sent across this circuit, and it is assumed that it does not exist in frames received on this circuit. The exclusion of ASCU identification should only be specified when the EMTOX protocol is used.

alps n1

Use the **alps n1** interface configuration command to specify the threshold of consecutive errors logged before an ASCU is declared down. Use the **no** form of this command to reassert the default number of consecutive errors before declaring an ASCU down.

alps n1 errors

no alps n1 errors

| | | |
|---------------------------|---------------|---|
| Syntax Description | <i>errors</i> | Error count limit. The valid range is 1 to 30 errors. The default is 30 errors. |
|---------------------------|---------------|---|

| | |
|-----------------|---------------------------------------|
| Defaults | The default error count is 30 errors. |
|-----------------|---------------------------------------|

| | |
|----------------------|-------------------------|
| Command Modes | Interface configuration |
|----------------------|-------------------------|

| | | |
|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 11.3T | This command was introduced. |

| | |
|-------------------------|--|
| Usage Guidelines | The error count limit is a threshold value. If the ASCU state is UP and the error count threshold is exceeded, the ASCU state changes to DOWN and it is moved to the inactive poll. If alarms are enabled for the ASCU, a SYSLOG message is displayed and an SNMP notification is sent to the SNMP network management station. |
|-------------------------|--|

| | |
|-----------------|---|
| Examples | The following example specifies that an ASCU is declared down when the error count exceeds 1: <pre>alps n1 1</pre> |
|-----------------|---|

| | | |
|-------------------------|-----------------------|---------------------------------------|
| Related Commands | Command | Description |
| | alps ascu | Specifies a physical ASCU identity. |
| | show alps ascu | Displays the status of the ALPS ASCU. |

alps n2

Use the **alps n2** interface configuration command to specify the number of polls that must be correctly replied to before an ASCU is declared up. Use the **no** form of this command to reassert the default number of polls that must be correctly replied before an ASCU is declared up.

alps n2 *polls*

no alps n2 *polls*

| | | |
|---------------------------|--------------|---|
| Syntax Description | <i>polls</i> | Number of polls that must be correctly replied to. The valid range is 1 to 30 polls. The default is 1 poll. |
|---------------------------|--------------|---|

| | |
|-----------------|---|
| Defaults | The default number of polls that must be correctly replied to is 1. |
|-----------------|---|

| | |
|----------------------|-------------------------|
| Command Modes | Interface configuration |
|----------------------|-------------------------|

| | | |
|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 11.3T | This command was introduced. |

| | |
|-------------------------|---|
| Usage Guidelines | If the ASCU state is DOWN and the reply threshold is exceeded, the ASCU state changes to UP and the ASCU is moved to the active poll list. If alarms are enabled for the ASCU, a SYSLOG message is displayed and an SNMP notification is sent to the SNMP management station. |
|-------------------------|---|

| | |
|-----------------|--|
| Examples | The following example specifies that 2 polls must be correctly replied to before the ASCU is declared up: alps n2 2 |
|-----------------|--|

| | | |
|-------------------------|-----------------------|---------------------------------------|
| Related Commands | Command | Description |
| | alps ascu | Specifies a physical ASCU identity. |
| | show alps ascu | Displays the status of the ALPS ASCU. |

alps poll-pause

Use the **alps poll-pause** interface configuration command to specify the minimum interval, in milliseconds, between initiations of the polling cycle. Use the **no** form of this command to revert to the default interval.

alps poll-pause *msec*

no alps poll-pause

| | | |
|---------------------------|-------------|---|
| Syntax Description | <i>msec</i> | Minimum interval between polls, in microseconds. The valid range is 10 to 1000 microseconds. The default interval is 50 microseconds. |
|---------------------------|-------------|---|

| | |
|-----------------|--|
| Defaults | The default minimum interval is 50 microseconds. |
|-----------------|--|

| | |
|----------------------|-------------------------|
| Command Modes | Interface configuration |
|----------------------|-------------------------|

| | | |
|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 11.3T | This command was introduced. |

| | |
|-----------------|--|
| Examples | The following example sets a 200-microsecond minimum interval between polls. <pre>alps poll-pause 200</pre> |
|-----------------|--|

| | | |
|-------------------------|------------------|-------------------------------------|
| Related Commands | Command | Description |
| | alps ascu | Specifies a physical ASCU identity. |

alps primary-peer

Use the **alps primary-peer** ALPS circuit submode command to specify the primary TCP peer and, optionally, a backup TCP peer for this ALPS circuit. Use the **no** form of this command to remove the definition from the configuration.

```
alps primary-peer ip-addr [backup-peer ip-addr]
```

```
no alps primary-peer ip-addr [backup-peer ip-addr]
```

Syntax Description

| | |
|--------------------|--|
| <i>ip-addr</i> | IP address specified in the alps remote-peer command. |
| backup-peer | (Optional) Backup TCP peer for the ALPS circuit. |
| <i>ip-addr</i> | IP address specified in the alps remote-peer command. |

Defaults

No values are predefined.

Command Modes

ALPS circuit submode

Command History

| Release | Modification |
|---------|------------------------------|
| 11.3T | This command was introduced. |

Examples

The following example specifies a primary peer at IP address 172.22.0.91 and a backup peer at IP address 172.22.0.92:

```
alps primary-peer 172.22.0.91 backup-peer 172.22.0.92
```

Related Commands

| Command | Description |
|------------------------|---|
| alps circuit | Specifies an ALPS circuit at the remote CPE across a TCP/IP connection. |
| show alps peers | Displays the status of the ALPS remote peers. If an IP address is specified, than only the status of that peer will be displayed; otherwise, the status of all peers will be displayed. |

alps remote-peer

Use the **alps remote-peer** global configuration command to specify the IP address of a peer connection to the partner CPE. Use the **no** form of this command to remove the definition from the configuration.

alps remote-peer *ip-addr* [**dynamic** [*inact-timer*]] [**tcp-qlen** [*num*]]

no alps remote-peer *ip-addr* [**dynamic** [*inact-timer*]] [**tcp-qlen** [*num*]]

| Syntax Description | | |
|--------------------|--|---|
| <i>ip-addr</i> | | IP address of the peer. |
| dynamic | | (Optional) Allows the TCP connection to the host peer to be opened only when there is data to be transferred to the host reservation system. |
| <i>inact-timer</i> | | (Optional) Length of inactivity, in seconds, after which the connection is closed. The range is 10 to 300 seconds. The default is 60 seconds. |
| tcp-qlen | | (Optional) Specifies a default number of packets in the queue. |
| <i>num</i> | | (Optional) Number of packets allowed in the queue. The range is 26 to 100 packets. The default is 50 packets. |

Defaults

The default is length of inactivity is 60 seconds.
The default number of packets in the queue is 50.

Command Modes Global configuration

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 11.3T | This command was introduced. |

Usage Guidelines

Issuing the **no alps remote-peer** command causes the following to occur:

- Destruction of the TCP connection
- Notification to the remote TCP peer that this connection is aborted
- Notification to the ALPS circuits using this TCP peer that the connection is closed

Examples

The following example specifies a peer connection at IP address 172.22.0.92 and allows the TCP connection to be opened only when there is data to be transferred:

```
alps remote-peer 172.22.0.92 dynamic 60
```

■ alps remote-peer

| Related Commands | Command | Description |
|------------------|------------------------|---|
| | alps local-peer | Specifies the IP address of the local peer. |
| | show alps peers | Displays the status of the ALPS remote peers. If an IP address is specified, than only the status of that peer will be displayed; otherwise, the status of all peers will be displayed. |

alps retry-option

Use the **alps retry-option** ALPS ASCU submode command to configure the CPE to transmit a message to the ASCU when a message with a bad cycle check character (CCC) is received from an ASCU. Use the **no** form of this command to reassert the default action of no retry.

```
alps retry-option {resend | reenter}
```

```
no alps retry-option
```

| Syntax Description | resend | reenter |
|--------------------|--|---|
| | Specify the retry option as resend. This option causes an indicator LED to signal the operator at the ASCU to resend data. | Specify the retry option as reenter. This option causes a service message to signal the operator at the ASCU to reenter data. |

Defaults The default retry option is no retry.

Command Modes ALPS ASCU submode

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 11.3T | This command was introduced. |

Examples The following example specifies that an indicator LED signals the ASCU to resend data:

```
alps retry-option resend
```

| Related Commands | Command | Description |
|------------------|-----------------------|---------------------------------------|
| | alps ascu | Specifies a physical ASCU identity. |
| | show alps ascu | Displays the status of the ALPS ASCU. |

alps service-msg-interval

Use the **alps service-msg-interval** ALPS circuit submode command to specify the interval between transmission of a service message to an ASCU and transmission of a “PLEASE RETRY” message. Use the **no** form of this command to remove the definition from the configuration.

alps service-msg-interval *seconds*

no alps service-msg-interval *seconds*

| | | |
|---------------------------|----------------|---|
| Syntax Description | <i>seconds</i> | Interval, in seconds, between consecutive transmissions of service messages from the remote CPE to the ASCU. The range is 1 to 20 seconds. The default interval is 4 seconds. |
|---------------------------|----------------|---|

| | |
|-----------------|--|
| Defaults | The default interval between consecutive transmissions of service messages from the remote CPE to the ASCU is 4 seconds. |
|-----------------|--|

| | |
|----------------------|----------------------|
| Command Modes | ALPS circuit submode |
|----------------------|----------------------|

| | | |
|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 11.3T | This command was introduced. |

| | |
|-------------------------|---|
| Usage Guidelines | The “PLEASE RETRY” message is transmitted only to ASCUs that use circuits with a dynamic connection type. |
|-------------------------|---|

| | |
|-----------------|---|
| Examples | The following example specifies an interval of 3 seconds between transmission of service messages from the CPE to the ASCU: |
|-----------------|---|

```
alps service-msg-interval 3
```

| | | |
|-------------------------|------------------------------|---|
| Related Commands | Command | Description |
| | alps circuit | Specifies an ALPS circuit at the remote CPE across a TCP/IP connection. |
| | alps service-msg-list | Defines the service message list to be used for this circuit. |

alps service-msg-list

Use the **alps service-msg-list** ALPS circuit submode command to define the service message list to be used for this circuit. Use the **no** form of this command to remove the list from the circuit configuration, thus issuing no service messages until another list is configured.

alps service-msg-list *list*

no alps service-msg-list *list*

| | | |
|---------------------------|-------------|---|
| Syntax Description | <i>list</i> | The service message list to be used for this circuit. The valid numbers are 1 to 8. |
|---------------------------|-------------|---|

| | |
|-----------------|---------------------------|
| Defaults | No values are predefined. |
|-----------------|---------------------------|

| | |
|----------------------|----------------------|
| Command Modes | ALPS circuit submode |
|----------------------|----------------------|

| | | |
|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 11.3T | This command was introduced. |

Examples The following example specifies that message list 1 is used for this circuit:

```
alps service-msg-list 1
```

| | | |
|-------------------------|----------------------------------|---|
| Related Commands | Command | Description |
| | alps circuit | Specifies an ALPS circuit at the remote CPE across a TCP/IP connection. |
| | alps service-msg-interval | Specifies the interval between transmission of a service message to an ASCU and transmission of a PLEASE RETRY message. |

alps service-msg-list number

Use the **alps service-msg-list number** global configuration command to define the service message identity and its contents for a service message list. Use the **no** form of this command to remove a service message number from the service message list configuration.

alps service-msg-list *list number number msg*

no alps service-msg-list *list number number msg*

Syntax Description

| | |
|---------------|--|
| <i>list</i> | The service message list to be used for this circuit. The valid numbers are 1 to 8 |
| number | Specify a list number. |
| <i>number</i> | List number. Valid numbers are 1 to 8. |
| <i>msg</i> | Contents of a service message. |

Defaults

The default service message is used if no service message list number is specified.

Command Modes

Global configuration

Command History

| Release | Modification |
|---------|------------------------------|
| 11.3T | This command was introduced. |

Examples

The following example specifies the text of message list 1, message number 2:

```
alps service-msg-list 1 number 2 "Turn off the terminal NOW."
```

alps servlim

Use the **alps servlim** interface configuration command to specify the number of cycles of the active poll list to execute before polling the next ASCU on the inactive poll list. Use the **no** form of this command to reassert the default number of cycles through the normal (active) poll list allowed before the slow poll list is processed.

alps servlim *polls*

no alps servlim *polls*

| | | |
|---------------------------|--------------|---|
| Syntax Description | <i>polls</i> | Number of polls of the ASCU UP list. The valid range is 1 to 30 polls. The default is 30 polls. |
|---------------------------|--------------|---|

| | |
|-----------------|---|
| Defaults | The default number of polls of the ASCU UP list allowed between two successive polls of the ASCU DOWN list is 30 polls. |
|-----------------|---|

| | |
|----------------------|-------------------------|
| Command Modes | Interface configuration |
|----------------------|-------------------------|

| | | |
|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 11.3T | This command was introduced. |

| | |
|-----------------|--|
| Examples | The following example specifies that 5 polls of the ASCU UP list are allowed between 2 successive polls of the ASCU DOWN list. |
|-----------------|--|

```
alps servlim 5
```

| | | |
|-------------------------|----------------|---|
| Related Commands | Command | Description |
| | alps n1 | Specifies the threshold of consecutive errors logged before an ASCU is declared down. |
| | alps n2 | Specifies the number of polls that must be correctly replied to before an ASCU is declared up. |
| | alps t1 | Specifies the timeout delay between polling and response. |
| | alps t2 | Specifies the timeout delay between receipt of the first character of an I/P sequence solicited by a poll and receipt of a GA sequence. |

alps t1

Use the **alps t1** interface configuration command to specify the timeout delay between polling and response. Use the **no** form of this command to reassert the default poll timeout value of 0.5 seconds.

alps t1 *delay*

no alps t1 *delay*

Syntax Description

| | |
|--------------|---|
| <i>delay</i> | Timeout delay, in seconds, between polling and response. The valid range is 1 to 10 tenths of a second (.1 to 1 second). The default is 5 tenths of a second (.5 second). |
|--------------|---|

Defaults

The default timeout delay between polling and response is 5 tenths of a second (.5 second).

Command Modes

Interface configuration

Command History

| Release | Modification |
|---------|------------------------------|
| 11.3T | This command was introduced. |

Examples

The following example specifies a .5-second time-out delay between polling and response:

```
alps t1 5
```

Related Commands

| Command | Description |
|---------------------|---|
| alps n1 | Specifies the threshold of consecutive errors logged before an ASCU is declared down. |
| alps n2 | Specifies the number of polls that must be correctly replied to before an ASCU is declared up. |
| alps servlim | Specifies the number of cycles of the active poll list to execute before polling the next ASCU on the inactive poll list. |
| alps t2 | Specifies the timeout delay between receipt of the first character of an I/P sequence solicited by a poll and receipt of a GA sequence. |

alps t2

Use the **alps t2** interface configuration command to specify the timeout delay between receipt of the first character of an I/P sequence solicited by a poll and receipt of a Go Ahead (GA) sequence. Use the **no** form of this command to reassert the default timeout value of 6 seconds.

alps t2 *delay*

no alps t2 *delay*

Syntax Description

| | |
|--------------|---|
| <i>delay</i> | Timeout delay, in seconds, between receipt of first character of an I/P sequence solicited by a poll and receipt of Go Ahead (GA) sequence. The valid range is 1 to 10 seconds. The default is 6 seconds. |
|--------------|---|

Defaults

The default timeout delay between receipt of first character of an I/P sequence solicited by a poll and receipt of Go Ahead (GA) sequence is 6 seconds.

Command Modes

Interface configuration

Command History

| Release | Modification |
|---------|------------------------------|
| 11.3T | This command was introduced. |

Examples

The following example specifies a timeout delay of 8 seconds between receipt of the first character of an I/P sequence solicited by a poll and receipt of a Go Ahead sequence:

```
alps t2 8
```

Related Commands

| Command | Description |
|---------------------|---|
| alps n1 | Specifies the threshold of consecutive errors logged before an ASCU is declared down. |
| alps n2 | Specifies the number of polls that must be correctly replied to before an ASCU is declared up. |
| alps servlim | Specifies the number of cycles of the active poll list to execute before polling the next ASCU on the inactive poll list. |
| alps t1 | Specifies the timeout delay between polling and response. |

alps translate

Use the **alps translate** interface configuration command to map an X.121 address to an IP address of a remote peer. Use the **no** form of this command to remove mapping from the configuration.

alps translate *x.121-addr ip-addr*

no alps translate *x.121-addr ip-addr*

| Syntax Description | | |
|--------------------|-------------------|---|
| | <i>x.121-addr</i> | X.121 address to be mapped to an IP address of a remote peer. |
| | <i>ip-addr</i> | IP address of the remote peer. |

Defaults No values are predefined.

Command Modes Interface configuration

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 11.3T | This command was introduced. |

Usage Guidelines The X.121 address is compared to the Called Address on inbound X.25 call packets to determine if the call should be accepted. The X.121 address may have an asterisk (*) at the end to indicate “all X.121 addresses prefixed with the address before the *”.

Examples The following example maps all X.121 addresses prefixed with the address 88845 to the remote peer IP address 172.22.0.90:

```
alps translate 88845* 172.22.0.90
```

| Related Commands | Command | Description |
|------------------|--------------------------|--|
| | encapsulation x25 | Specifies operation of a serial interface as an X.25 device. |

clear alps circuits

Use the **clear alps circuits** EXEC command to remove configured ALPS circuits.

```
clear alps circuits [ipaddr address | name string]
```

| Syntax Description | |
|------------------------------|--|
| ipaddr <i>address</i> | (Optional) Clear ALPS circuits for peer with specified IP address. |
| name <i>string</i> | (Optional) Clear ALPS circuits for peer with specified name. |

Defaults If no IP address or name is specified, the command clears all ALPS circuits.

Command Modes EXEC

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 11.3 | This command was introduced. |

Examples The following example clears the ALPS circuit named CKT1:

```
clear alps circuits name CKT1
```

| Related Commands | Command | Description |
|------------------|---------------------------|--|
| | alps circuit | Specifies an ALPS circuit at the remote CPE across a TCP/IP connection. |
| | show alps circuits | Displays the status of the ALPS circuits. If a circuit name is specified, than only the status of that circuit will be displayed; otherwise, the status of all circuits will be displayed. |

clear alps counters

Use the **clear alps counters** EXEC command to clear all counters relevant to the ALPS feature.

clear alps counters

Syntax Description This command has no arguments or keywords.

Defaults No values are predefined.

Command Modes EXEC

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 11.3T | This command was introduced. |

Examples The following example clears all counters for the ALPS feature:

```
clear alps counters
```

| Related Commands | Command | Description |
|------------------|---------------------------|--|
| | show alps ascu | Displays the status of the ALPS ASCU. |
| | show alps circuits | Displays the status of the ALPS circuits. If a circuit name is specified, than only the status of that circuit will be displayed; otherwise, the status of all circuits will be displayed. |
| | show alps peers | Displays the status of the ALPS remote peers. If an IP address is specified, than only the status of that peer will be displayed; otherwise, the status of all peers will be displayed. |

encapsulation alc

Use the **encapsulation alc** interface configuration command to specify that the P1024B Airline Control (ALC) protocol will be used on the serial interface. Use the **no** form of this command to remove ALC protocol handling from the serial interface, and return the default encapsulation (HDLC) to the interface.

encapsulation alc

no encapsulation alc

Syntax Description This command has no arguments or keywords.

Defaults No values are predefined.

Command Modes Interface configuration

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 11.3T | This command was introduced. |

Usage Guidelines The **encapsulation alc** command causes any ASCU configuration to be removed from the interface. As each ASCU defined on the interface is removed it is also unlinked from the ASCU circuit it belongs to. All data frames queued for transmission to the ASCU are destroyed.

This encapsulation command must be entered prior to any ASCU configuration. Note that all timer and counter values are applicable to all ASCUs on the interface.

Examples The following example specifies that the ALC protocol is used:

```
encapsulation alc
```

| Related Commands | Command | Description |
|------------------|------------------------|---|
| | show interfaces | Displays statistics for all interfaces configured on the router or access server. |

show alps ascu

Use the **show alps ascu** EXEC command to display the status of the ALPS ASCU.

show alps ascu [*interface id*] [**detail**]

| Syntax Description | | |
|---------------------|---|--|
| <i>interface id</i> | (Optional) Combined interface and interchange address. If specified, only the status of that ASCU is displayed. | |
| detail | (Optional) Long display of output. | |

Command Modes EXEC

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 11.3T | This command was introduced. |

Examples

The following is sample output from the **show alps ascu** command:

```
Router# show alps ascu
```

```
interface  dlc    ia    a1    a2    circuit    pkt_tx    pkt_rx    state
-----
Serial6    ALC    42    24    49    AX_CKT    105      105      UP
Serial6    ALC    46    46    52    EM_CKT    0        0        UP
```

The following is sample output from the **show alps ascu detail** command:

```
Router# show alps ascu detail
```

```
ascu 42 on i/f Serial6, dlc = ALC, state = UP
  default-circuit = AX_CKT, a1 = 24, a2 = 49
  retry_option = resend, max_msg_len = 962
  err_disp_terminal = 0, err_disp_line = 0
  pkt_tx = 105, byte_tx = 1050, pkt_rx = 105, byte_rx = 1050
```

```
ascu 46 on i/f Serial6, dlc = ALC, state = UP
  default-circuit = EM_CKT, a1 = 46, a2 = 52
  retry_option = reenter, max_msg_len = 962
  err_disp_terminal = 0, err_disp_line = 0
  pkt_tx = 0, byte_tx = 0, pkt_rx = 0, byte_rx = 0
```

| Related Commands | Command | Description |
|------------------|------------------|-------------------------------------|
| | alps ascu | Specifies a physical ASCU identity. |

show alps circuits

Use the **show alps circuits** EXEC command to display the status of the ALPS circuits. If a circuit name is specified, then only the status of that circuit will be displayed; otherwise, the status of all circuits will be displayed.

show alps circuits [*name name*] [*detail*]

| Syntax Description | |
|-------------------------|--|
| name <i>name</i> | (Optional) If specified, only the status of that circuit is displayed. |
| detail | (Optional) Long display of output. |

Command Modes EXEC

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 11.3T | This command was introduced. |

Examples

The following is sample output from the **show alps circuits** command:

```
Router# show alps circuits

name          pri_peer      curr_peer      dlc           state  pkt_tx  pkt_rx
-----
AX_CKT        172.18.3.141  172.18.3.141  AX25          OPEN   57      57
EM_CKT        172.18.3.141  172.18.3.141  EMTOX         OPEN   0       0
```

The following is sample output from the **show alps circuits detail** command:

```
Router# show alps circuits detail

AX_CKT: dlc = AX25, peer = 172.18.3.141, state = OPEN, uptime = 00:00:00
        i/f = Serial2, host_link = 1, host_hld = 700, remote_hld = 145
        lcn = 33, nonstd_240 = TRUE
        damping_tmr = 10, lifetime_tmr = 4
        pkt_tx = 57, byte_tx = 1311, pkt_rx = 57, byte_rx = 1311
        src_corr = 5063224, dst_corr = 88D990
        drops_q_overflow = 0, drops_lifetime_exceeded = 0, drops_vc_reset = 0
        ascus: (24,49),

EM_CKT: dlc = EMTOX, peer = 172.18.3.141, state = OPEN, uptime = 00:00:00
        i/f = Serial3, host_link = 3, host_hld = 1200, remote_hld = 145
        lcn = 1, host_x121 = 22233, remote_x121 = 44005
        damping_tmr = 0, lifetime_tmr = 4
        pkt_tx = 0, byte_tx = 0, pkt_rx = 0, byte_rx = 0
        src_corr = 502F220, dst_corr = 88DBF8
        drops_q_overflow = 0, drops_lifetime_exceeded = 0, drops_vc_reset = 0
        ascus: (46,52),
```

show alps circuits

The following is sample output from the **show alps circuits** command:

```
Router# show alps circuits
```

| name | pri_peer | curr_peer | dlc | state | pkt_tx | pkt_rx |
|--------|-------------|-------------|-----|-------|--------|--------|
| AX_CKT | 172.18.3.27 | 172.18.3.27 | ALC | OPEN | 105 | 105 |
| EM_CKT | 172.18.3.27 | 172.18.3.27 | ALC | OPEN | 0 | 0 |

The following is sample output from the **show alps circuits detail** command:

```
Router# show alps circuits detail
```

```
AX_CKT: dlc = ALC, conn_type = DYN, state = OPEN, uptime = 00:00:00
  pri_peer = 172.18.3.27, sec_peer = 0.0.0.0, curr_peer = 172.18.3.27
  local_hld = 145, remote_hld = 700
  ax25: hostlink = 1, lcn = 33
  lifetime_tmr = 4, idle_tmr = 60, retry_tmr = 0
  pkt_tx = 105, byte_tx = 2415, pkt_rx = 105, byte_rx = 2415
  src_corr = 9A1760, dst_corr = 50333C8
  drops_q_overflow = 0, drops_ckt_disabled = 0
  drops_lifetime_tmr = 0, drops_invalid_ascu = 0
  ascus: (24,49),
```

```
EM_CKT: dlc = ALC, conn_type = PERM, state = OPEN, uptime = 00:00:00
  pri_peer = 172.18.3.27, sec_peer = 0.0.0.0, curr_peer = 172.18.3.27
  local_hld = 145, remote_hld = 1200
  emtox: hostlink = 3, x121 = 44005
  lifetime_tmr = 4, idle_tmr = 60, retry_tmr = 10
  pkt_tx = 0, byte_tx = 0, pkt_rx = 0, byte_rx = 0
  src_corr = 9A18D4, dst_corr = 8FB520
  drops_q_overflow = 0, drops_ckt_disabled = 0
  drops_lifetime_tmr = 0, drops_invalid_ascu = 0
  ascus: (46,52),
```

Related Commands

| Command | Description |
|---------------------|---|
| alps circuit | Specifies an ALPS circuit at the remote CPE across a TCP/IP connection. |

show alps peers

To display the status of the ALPS remote peers, use the **show alps peers** command in privileged EXEC mode.

```
show alps peers [ipaddress addr] [detail]
```

Syntax Description

| | |
|-----------------------|---|
| ipaddress addr | If specified, only the status of that circuit is displayed. |
| detail | (Optional) Long display of output. |

Command Modes

EXEC

Command History

| Release | Modification |
|---------|------------------------------|
| 11.3T | This command was introduced. |

Usage Guidelines

If an IP address is specified, then only the status of that peer will be displayed; otherwise, the status of all peers will be displayed.

Examples

The following is sample output from the **show alps peers** command:

```
Router# show alps peers
```

```
local_peer : ip_address = 172.18.3.141
```

```
ip_address      type      create      state      pkt_tx      pkt_rx
-----
172.18.3.27     PERM      LEARN       OPENED     1           1
```

The following is sample output from the **show alps peers detail** command:

```
Router# show alps peers detail
```

```
local_peer : ip_address = 172.18.3.141
```

```
TCP: 172.18.3.27, type = PERM, create = ADMIN, state = OPENED, uptime = 00:08:21
      pkt_tx = 0, byte_tx = 0, pkt_rx = 0, byte_rx = 0
      drops_giants = 0, drops_q_overflow = 0, drops_peer_down = 0, drops_ver_mismatch = 0
      active_ckts: CKT1, CKT2
```

Table 90 show alps peers detail Field Descriptions

| Field | Description |
|-------------------------|-------------------------|
| local_peer : ip_address | Local peer IP address. |
| TCP | Remote peer IP address. |

Table 90 *show alps peers detail Field Descriptions (continued)*

| Field | Description |
|--------------------|--|
| type | Type can either be PERM or DYN. <ul style="list-style-type: none"> PERM =Permanent; this peer will always be connected. DYN =Dynamic; this peer will go up and down based on traffic. If there is no traffic, the peer will go down. |
| create | Create can either be ADMIN or LEARN. <ul style="list-style-type: none"> ADMIN = This peer was configured on this router, and the peer was started from this router. LEARN = This is an incoming connection. |
| state | State can be one of the following: <ul style="list-style-type: none"> DISCONN = Peer is not connected. OPENING = Peer is in the process of opening. OPENED = Peer is connected and ready to exchange data. WAN_BUSY = There is traffic on our end of the TCP connection. |
| uptime | Time for which the peer is up and running. |
| pkt_tx | Number of packets transmitted. |
| pkt_rx | Number of packets received. |
| byte_tx | Number of bytes transmitted. |
| byte_rx | Number of bytes received. |
| drops_giant | Number of packets that are dropped. A giant is counted when the ALPS process receives a packet from TCP that exceeds the maximum ALPS packet size of 4096 bytes. |
| drops_q_overflow | Number of packets dropped when the TCP send queue is full. |
| drops_peer_down | Number of packets dropped when the remote peer is not reachable. |
| drops_ver_mismatch | Number of packets dropped because of mismatch between the local ALPS version and the ones received from TCP. |
| active_ckts | Configured names of the circuits that are active over this peer. |

Related Commands

| Command | Description |
|--------------------------|--|
| alps primary-peer | Specifies the primary TCP peer and, optionally, a backup TCP peer for this ALPS circuit. |
| alps remote-peer | Specifies the IP address of a peer connection to the partner CPE. |