



SCTP Release 4

Stream Control Transmission Protocol (SCTP) is a reliable datagram-oriented IP transport protocol specified by RFC 2960. It provides the layer between an SCTP user application and an unreliable end-to-end datagram service such as IP. The basic service offered by SCTP is the reliable transfer of user datagrams between peer SCTP users. It performs this service within the context of an association between two SCTP hosts. SCTP is connection-oriented, but SCTP association is a broader concept than the Transmission Control Protocol (TCP) connection, for example.

SCTP Release 4 introduces the SCTP Stream Reset and SCTP Authentication features.

The SCTP stream reset feature enables SCTP to reset stream transport sequence numbers and all stream sequence numbers. SCTP stream reset enables SCTP to:

- Dynamically reset a peer's outbound streams
- Dynamically reset a local host's outbound stream
- Dynamically reset specific numbered streams

SCTP Authentication enables SCTP to:

- Set up a dynamic shared association key with no shared secret
- Allow a shared secret to be combined with an association key
- Use the shared association secret to authenticate chunks
- Negotiate which chunk types must be authenticated

Configuration Information

Configuration information is included in the “Stream Control Transmission Protocol” module of the *Cisco IOS IP Application Services Configuration Guide*, Release 12.4T, at the following URL:

http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124tgc/tiapp_c/ht_sctp.htm

The following sections provide information about this feature:

- SCTP Release 4
- Defining SCTP Chunks to be Authenticated



- Troubleshooting SCTP Associations and Parameters
- Displaying Information about SCTP Associations and Parameters
- Defining the Authentication of SCTP Data Chunks: Example

For a complete list of features included in the “Stream Control Transmission Protocol” module, see the Feature Information table located toward the end of the module.

Command Reference Information

Release 12.4T

The following command is new for this feature:

- **ip sctp authenticate**

Detailed information about this and other SCTP commands is included in the *Cisco IOS IP Application Services Command Reference*, Release 12.4T, at the following URL:

http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124tcr/tiap_r/index.htm

Master Commands Lists

Cisco IOS master commands lists provide an alphabetical list of all Cisco IOS commands in a Cisco IOS release.

Cisco IOS new, modified, removed, and replaced commands lists provide an alphabetized list of all new, modified, removed, and replaced commands in a Cisco IOS release.

Release 12.4T

Cisco IOS Master Commands List, Release 12.4T, at the following URL:

http://www.cisco.com/en/US/docs/ios/mcl/124tmcl/124t_book.html

Cisco IOS New, Modified, Removed, and Replaced Commands List, Release 12.4T, at the following URL:

<http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124mindx/124html.htm>

CCVP, the Cisco logo, and Welcome to the Human Network are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn is a service mark of Cisco Systems, Inc.; and Access Registrar, Aironet, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, LightStream, Linksys, MeetingPlace, MGX, Networkers, Networking Academy, Network Registrar, PIX, ProConnect, ScriptShare, SMARTnet, StackWise, The Fastest Way to Increase Your Internet Quotient, and TransPath are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0711R)

Any Internet Protocol (IP) addresses used in this document are not intended to be actual addresses. Any examples, command display output, and figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses in illustrative content is unintentional and coincidental.

© 2007 Cisco Systems, Inc. All rights reserved.