NAME

scmd - Streaming server control client. **scmd** is the user interface to **scserver,** Sensoray's 2412/2416 stream control server.

SYNOPSIS

scmd [**-d**] [**-h**] [**-t** *timeout*] ***ipaddr port command***

DESCRIPTION

The **scmd** command is used to communicate with a **scserver** installed on a Sensoray 2412/2416 device. **scserver** accepts commands that configure, monitor, and control 2412/2416 MPEG stream servers. All communications between **scmd** and **scserver** are strongly encrypted using a 128-bit Rijndael block encryption algorithm.

Options:

-d	Enables debug mode. This will cause **scmd** to display diagnostic messages.
-h	Displays a help screen.
-t *timeout*	Time to wait for a response from the 2412/2416(s) in seconds. The default is 30 s.
ipaddr	Destination 2412/2416 ip address in N.N.N.N format.
port	Ip port number at which the selected **scserver** is listening. If the 2412/2416 has more than one stream server, a different port must be used for each server.
command	Command to send to the 2412/2416's **scserver** (e.g. [get], [set], etc.).

Commands:

NOTE: Passwords are only required if passwords have been enabled. See PASSWORDS section below.

[GET^parameter]	Returns current value of a stream parameter on the remote system. These stream parameters are initially the values in the stream parameter file. On 2412/2416 systems this file is typically /usr/etc/ss*n*.conf.
[SET^parameter^value^<*config_password*>]	Sets a value of a stream parameter. The value is not saved into the stream parameter file until a save command has been issued
[SAVE^< *config_password*>]	Permanently saves the stream parameters to the stream parameter file. On 2412/2416 systems this file is typically /usr/etc/ss*n*.conf.
[RESTORE^< *config_password*>]	Restores the stream parameters to the values in the stream parameter file. . On 2412/2416 systems this file is typically /usr/etc/ss*n*.conf.
[ENCODE^RTP^destaddr^destport^<*stream_password*>]	Encodes and streams the MPEG data using the RTP protocol to the given destination ip address, **destaddr**, and port, **destport**.

[ENCODE^SSS^destaddr^destport^<*stream_password*>]

Encodes and streams the MPEG data using the Sensoray protocol to the given destination ip address, **destaddr**, and port, **destport**.

[ENCODE^SHD^dbname^rectime^circular^< *stream_password*>]

Encodes and records the MPEG data to a video database, **dbname**, for a given record time in seconds, **rectime**. If a circular database is desired, set **circular** to YES otherwise set it NO.

[ENCODE^RTPSHD^destaddr^destport^dbname^rectime^circular^< *stream_password*>]

Simultaneously streams and records the MPEG data. See **[ENCODE^RTP …** and **[ENCODE^SHD…** for parameter details.

[ENCODE^SSSSHD^destaddr^destport^dbname^rectime^circular^< *stream_password*>]

Simultaneously streams and records the MPEG data. See **[ENCODE^SSS …** and **[ENCODE^SHD…** for parameter details.

[DECODE^RTP^recvaddr^recvport^< *stream_password*>]

Decodes an MPEG stream, sent using the RTP protocol. When receiving a multicast stream, **recvaddr** is the multicast group address of the stream. When receiving a unicast stream set **recvaddr** to 0.0.0.0. The decoder listens on ip port **recvport.**

[DECODE^SSS^recvaddr^recvport^< *stream_password*>]

Decodes an MPEG stream, sent using the Sensoray protocol. When receiving a multicast stream, **recvaddr** is the multicast group address of the stream. When receiving unicast stream set **recvaddr** to 0.0.0.0. The decoder listens on ip port **recvport.**

[DECODE^SHD^ dbname^starttime^stoptime^repeat ^< *stream_password*>]

Decodes and plays back recorded MPEG data from a video database, **dbname**, starting at time, **starttime**, and **stopping** at time, stoptime. If repeated playback is desired, set **repeat** to YES otherwise set it NO. The format of **starttime** and **stoptime** is yyyy/mm/dd/hh:mm:ss.

[DECODE^SHDRTP^destaddr^destport^dbname^starttime^stoptime^repeat ^<*stream_password*>]

Simultaneously streams and plays back recorded MPEG data from a video database. The stream is sent using the RTP protocol. See **[ENCODE^RTP …** and **[DECODE^SHD…** for parameter details.

[DECODE^SHDSSS^destaddr^destport^dbname^starttime^stoptime^repeat ^<*stream_password*>]

Simultaneously streams and plays back recorded MPEG data from a video database. The stream is sent using the Sensoray protocol. See **[ENCODE^SSS …** and **[DECODE^SHD…** for parameter details.

[XFER^SHDRTP^destaddr^destport^dbname^starttime^stoptime^repeat ^<*stream_password*>]

Transfers recorded MPEG data from a video database to a receiver on the network. The data is sent using the RTP protocol. See [**ENCODE^RTP …** and **[DECODE^SHD…** for parameter details.

[XFER^SHDSSS^destaddr^destport^dbname^starttime^stoptime^repeat ^<*stream_password*>]

Transfers recorded MPEG data from a video database to a receiver on the network. The data is sent using the Sensoray protocol. See [**ENCODE^SSS …** and **[DECODE^SHD…** for parameter details.

[STOP^<*stream_password*>] Stops the current encode, decode, transfer operation.

[PAUSE^<*stream_password*>] Pauses the current encode, decode, transfer operation.

[RESUME^< *stream_password*>] Resumes the current encode, decode, transfer operation.

[KILL^< *stream_password*>] Kills the stream control server.

[STATUS] Obtains the current stream server status in numerical format:

Codec state:

STOPPED	0x00000000
ENCODING	0x00000001
DECODING	0x00000002

Network protocol:

RTP	0x00000100
SSS	0x00000200
SHD	0x00000400
TCP	0x00000800

[STATUS^CODEC] Obtains the current status of the codec, i.e. ENCODE, DECODE, TERMINATED, or STOP.

[STATUS^NET] Obtains the current status of network i/o, i.e. SEND, RECEIVE, TERMINATED, or STOP.

[STATUS^DVR] Obtains the current operational status of the video database (digital video recorder), i.e. RECORD, PLAYBACK, TERMINATED, or STOP.

[STATUS^PACKETS] Obtains number of network packets transferred.

[STATUS^RECTIME] Obtains the elapsed recording time in seconds.

[STATUS^PLAYTIME] Obtains the current playback time in yyyy/mm/dd/hh:mm:ss format.

[STATUS^DESTADDR] Obtains the MPEG stream destination ip address.

[STATUS^DESTPORT] Obtains the MPEG stream destination port.

[STATUS^IFADDR]	Obtains the currently used local network interface address.
[INFO^DBCLIPCOUNT^dbname]	Obtains number of clips in database **dbname**.
[INFO^DBSTART^dbname]	Obtains start time of first clip in database **dbname**.
[INFO^DBSTOP^dbname]	Obtains stop time of last clip in database **dbname**.
[INFO^DBCLIPLENGTH^dbname]	Obtains length in seconds of a clip in database **dbname**.
[INIT^SHD^dbname^<*password*>]	Creates and initialized a video database with name **dbname**.
[ERASE^SHD^dbname^<*password*>]	Erases and removes the video database named **dbname**.
[RESTART^<*config_password*>]	Restarts the stream control server. Required for most parameter changes to take effect. Any parameter changes that have not been saved will be lost.

Multiple commands can be sent at once by attaching commands together without spaces between the brackets. For example:

scmd 10.135.2.2 17740 [GET^ SERVER_NAME][GET^SERVER_PORT][RESTART^mypassword]

If the command contains a space character, quote the whole command: For example:

scmd 10.135.2.2 17740 "[SET^SERVER_NAME^Intersection server^mypass][SAVE^mypass]"
^

NOTE: Windows and DOS command line users may need to use ^^ instead of a single ^ and /'s may need to be escaped. Verify usage in your particular environment.

Stream parameters:

For a complete list of the stream parameters that can be viewed or modified by GET and SET, see the file /usr/etc/ss***n***.conf on your 2412/2416 system. ***n*** is the stream server number (e.g. 0-3).

PASSWORDS

Passwords are only required if passwords have been enabled in the stream parameter file for the stream control server. If passwords have been enabled, two users "config" and "stream", each with their own password, must be created on the 2412/2416 system.

RETURN VALUES

Response values are returned via **stdout** (i.e. console). If no response is expected, an OK is returned. If a command contains an error, ILLEGAL_COMMAND is returned. If multiple responses are expected (i.e. after multiple commands have been sent), the responses are separated by line feeds.

FILES

The executable is **scmd** on Linux systems (usually a link to cclient).
The executable is **scmd.exe** on Microsoft Windows systems.

/usr/bin/scmd on a 2412/2416 system
/usr/etc/ss0.conf, /usr/etc/ss1.conf,, /usr/etc/ss2.conf, etc., on a 2412/2416 system.
/usr/sbin/scserver on a 2412/2416 system.

COPYRIGHT

BUGS

None documented at this time. To report bugs go to http://www.sensoray.com for contact information.

SEE ALSO

scserver