

AudioClipstream™ Security

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About AudioClipstream Security

AudioClipstream 2.0 has added 2 security features to prevent the pirating of streams:

1. A Security ID (SID) which ties the Domain, IP or URL to the streaming clip preventing a third party from downloading a clip file (.vcs) and streaming it from their server, whether they had a valid AudioClipstream code key for their site or not.
2. A new parameter called AuthorizedDomainURL that prevents the usage of the CODEBASE statement to pirate your content and bandwidth.

Security ID (SID)

AudioClipstream™ has the option at encoding of locking the encoded stream to a Security ID (SID) created from an IP address, a range of IP addresses, or list of URLs. Once locked to the SID, each AudioClipstream encoded file will only play if the servers specified by the SID. This will effectively prevent piracy of AudioClipstream™ streams in this fashion:

Although the clip might be able to be downloaded, it will not be playable or servable, even if the site has their own AudioClipstream™ code key.

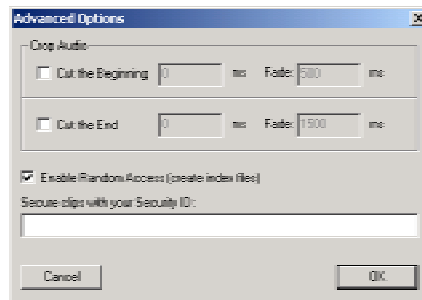
Note: Once streams have been encoded using a SID they cannot be unlocked for a different site. You will need to re-encode with a different SID to serve the content from a different site.

Using the SID

To utilize IP Stream Locking, you will need to be given a Secure ID by your Clipstream Account Manager that is tied to your IP or URL. Please note that the SID does not replace your Clipstream Code Key. In fact, it is from the SID that your code key is also created.

The SID is utilized during the encoding process. To encode secure content with your SID, follow these steps:

1. With the AudioClipstream encoder open and ready to encode, open the advanced options screen by clicking the AudioClipstream Icon in the upper left corner of the encoder.
2. If clicking in the right place, a drop menu should appear. Select "Advanced Options" to access the advanced features of the AudioClipstream Encoder.
3. The Advanced Options window should appear as follows:



Advanced Options Window

4. In the area called Secure clips with you Secure ID: type in the SID as issued to you by your Clipstream Account Manager.
5. Click OK to close the window.
6. Encode your files.

Note that as long as the SID is entered in the above box, all clips in subsequent sessions will be encoded with the SID. Remove the SID to continue to encode unsecured content.

During playback, the following happens:

1. The IP address is compared to the Code Key. If the IP serving the clip does not match the Code Key, the file will not stream.
2. The SIDs of the key and the content are compared. If the Secure IDs encoded in the code key and encoded in the content do not match, the file will not stream, even if the IP is valid for the code key.

SID Summary

- Request a SID from your Account Representative
- Your Site Code Key is created from your SID
- Content Encoded with a SID will not play on a site without a proper code key or even a local drive
- The SID is entered when encoding with the Encoder
- Previously encoded content will not run with a SID code key
- Previously encoded content must be re-encoded with a SID to be secure
- If a SID Code key is used in the applet, Codebase protection automatically toggles on.

NOTE: SID encoded content cannot be delivered via email. It can only be codebased by sites appearing in the AuthorizedDomainURL parameter list.

Codebase Protection (prevents remote referencing)

Using the codebase statement in the applet code, it is possible for other sites to copy your applet code and paste it into their web pages and thus stream your content from their site, without having downloaded any of your content. In essence, the perpetrator will not only be stealing your content, but also your bandwidth. In these situations, it is possible to protect your content using the built in codebase protection of AudioClipstream.

A new parameter has been added to Version 2.0, AuthorizedDomainURL, that allows you to specify a text file that lists sites allowed to codebase your material. If a site is not on the list, the content will not be able to be codebased. This permission to codebase can also be time based, if desired. When content is encoded using a SID, codebase protection automatically activates and you will be required to use the AuthorizedDomainURL parameter to allow people to codebase your content. Not that content can be codebase protected without using a SID.

Implementing the AuthorizedDomainURL Parameter

Create the AuthorizedDomains.txt Document

Create a txt document named something like AuthorizedDomains.txt (you can name the txt file anything you want but it must be reflected in the parameter value) and place it in a permanent folder on your remote site. In that txt document, type in all of the URLs that you want to give permission to codebase your content. Construct the format of the .txt file as follows:

URL #Comment1 ##Comment2 #EXP:YYMMDD

- URL is the URL of the site allowed to CodeBase. Sub directories can be specified. Note that when the URL is specified, all directories below are permitted.
- #Comment1 is any user definable comment
- ##Comment2 is any user definable comment
- #EXP:YYMMDD is the date that the CodeBase permissions expire for that URL (Time based permission)

A sample AuthorizedDomains.txt file might look as follows:

```
#This is the list of web sites using codebase to remote streaming
http://www.clipstream.com## Clipstream
http://clipstream.com
http://www.dsnyc.com          ## DSNY
http://dsnyc.com
http://www.videoclipstream.com/demo
http://www.videoclipstream.com/akamai/testclips      #EXP:011201
```

Notice that you can comment your authorized domains by typing # and commenting after. Whatever text comes after the # on that line will be ignored. See the example below:

Upload the AuthorizedDomains.txt file and make note of the URL.

Modifying Applet Code for AuthorizedDomainURL Parameter

In your AudioClipstream applet, now, create a new parameter called AuthorizedDomainURL. See the examples below:

```
<param name="AuthorizedDomainURL"
value="AuthorizedDomains.txt">
```

As you can see, the value of the AuthorizedDomainURL parameter identifies the location of the AuthorizedDomains.txt.

*****Note:** As with all other elements within the applet, the AuthorizedDomains.txt file must exist on the same server as the audioclipstream.zip file. This is due to Java security.

Now you can add or subtract authorized site at will, simply by modifying the AuthorizedDomains.txt file on your server.