PART III

Advanced Settings

Hops

CCcam clients have the possibility to reshare their server connections. This feature is known as "cascading", and works really well with CCcam. Let's see how it works.

For instance, we have 4 users or groups where the 1st one is directly linked to the 2nd one, the 2nd one is directly linked to the 3rd one, the 3rd one is directly linked to the 4th one.

The "cascading option" enables the 1st user or group to be linked with the 4th.

```
box1 <----> box2 <----> box3 <----> box4 
^----1 hop-----^ 
^------3 hops------^
```

If box1 receive a key from box4 (procedure known as *ECM*), this key will go through 3 groups, which are known as *HOPS*.

In the following example, the client will have access to the server local cards, as well as those located 2 hops further

F: user1 pass1 2

Therefore, if the server is located in box2, box1 will have access to box2 as well as box3 and box4

Uphops, local keyfiles and remote EMM setting procedures.

F: <username> <password> <uphops> <shareemus> <allowemm>

<username> identifies the username you assign to the client password> identifies the password you assign to the client

<up><uphops> allows the client to have access to the server's other clients cards. If set to 0, then the client will only have access to the server local cards; if set to 1, then the client will have access to the cards at a distance of 1 hop from the server; if set to 2, access will be as far as hop 2, and so on.

<shareemus> is enables the local key file sharing option. If set to 1, then the server key file is shared; else, if set to 0, it is not shared. However, the client can choose whether to accept this option or not. If the client wishes to receive the server keyfile, then this must be set by adding "yes" in the C: line as follows:

C: 192.168.1.2 12000 user3 pass3 yes

If a client does not want to use this option, the C: line will be

C: 192.168.1.2 12000 user3 pass3 no

By default, <shareemus> is set to 1. This option is very useful when there are many groups in the network. In this case, instead of updating the Softcam.key file of each client, it will be enough to update the server only.

<allowermm> enables the remote EMM autoupdate feature. If it is set to 1, then the user will have access to EMM on the local card, else, if set to 0, the client will not have access.

For instance, there is a key change at the server side. Therefore, a new key will be sent via satellite. The new key will be recognized by the server as soon as it is tuned to the correct TV service. If the remote EMM is enabled, then each client will receive the same update as soon as the client is also set to the same TV service. The client's box will perform what is called REMM (Remote EMM). By default, this is set to 1.

Example 1

F: user2 pass2 0.1.0

In this example, user1 will only receive the server local card, the server is set to share the local key file, and the remote EMM is disabled.

Example 2

F: user1 pass1 3 0 0

In example 2, user 1 can reach the cards 3 hops away from the server, in addition to the server local card; the server is set to forbid access to the local key file; the remote EMM is disabled.