Generating Xorcom Licenses

Use the following procedure to activate ports, hardware echo cancellation, and/or the TwinStar functionality by generating a software license unique to the Xorcom device at hand.

Stage 1: Determining the Existing License for the Xorcom Unit

1. Access the Asterisk server via SSH protocol.

2. Use the following command to see which USB devices are connected:

   ```
   # lsusb
   ```

   then press Enter

   Here is a sample result:

   ```
   Bus 003 Device 001: ID 0000:0000
   Bus 002 Device 001: ID 0000:0000
   Bus 001 Device 001: ID 0000:0000
   Bus 001 Device 002: ID e4e4:1162
   Bus 004 Device 001: ID 0000:0000
   ```

3. Mark down the **Bus #** and the **Device #** for the USB device with an ID that begins "e4e4:116". As per our example in step 2 above, we would indicate **Bus = 001** and **Device = 002**.

4. Use the following command to receive a listing of the current license of the unit:

   ```
   # astribank_allow –D /proc/bus/usb/[Bus #]/[Device #]
   ```

   then press Enter

   As per our example in step 2 above, our command line would be:

   ```
   # astribank_allow –D /proc/bus/usb/001/002
   ```

5. On the screen which appears, copy all text to the clipboard. The text begins with--------- BEGIN TELEPHONY DEVICE LICENSE BLOCK---- and ends with ----END TELEPHONY DEVICE LICENSE BLOCK---------

6. Save this output in a file named license.txt.

Stage 2: Purchasing the Updated License

1. Generate a purchase order to Xorcom

   a. Check the price list for ports/functionality that you want to *add* to the unit

b. Include the `license.txt` file you generated in the previous step

2. Xorcom will verify the license output and generate a new license as per your purchase order called `new-license.txt.`

3. Xorcom will send you the new license file, together with invoice.

Stage 3: Applying the Updated License to the Unit

1. Stop Asterisk using the following command:
   `/etc/init.d/asterisk stop`

2. Stop DAHDI (or Zaptel) using the following command:
   `/etc/init.d/dahdi stop` (or `/etc/init.d/zaptel stop`)
   Note: you can use both if you don't know which software is installed on the unit.

3. Use the following command to apply the updated license to the unit:
   `# astribank_allow -D /proc/bus/usb/[Bus #]/[Device #] -w`
   then press `Enter`

4. To apply the new license, paste the contents of the clipboard into the command line
   ```
   -----BEGIN TELEPHONY DEVICE LICENSE BLOCK-----
   Version: 1.0
   Timestamp: 1332317538
   Serial: X1044366
   Capabilities.Port.FXS: 8
   Capabilities.Port.FXO: 8
   Capabilities.Port.BRI: 0
   Capabilities.Port.PRI: 0
   Capabilities.Port.ECHO: 0
   Capabilities.Twinstar: 0
   Data:
   c0e4e46011010100583132334353637
   08000001010000000628d694ff215fc78
   01108793550ded611a8d2fd7
   -----END TELEPHONY DEVICE LICENSE BLOCK-----
   ```
   press `Enter`
   then press '`Ctrl+D`'

5. Next, you will need to restart the Xorcom firmware.

   DAHDI users should run the following command:
   `/usr/share/dahdi/xpp_fxloader reset`

   Zaptel users should run the following command:
   `/usr/share/zaptel/xpp_fxloader reset`

6. The new ports are now activated, but will need to be configured and tested prior to shipment.