Installing the FreePBX version on the PIKA Warp
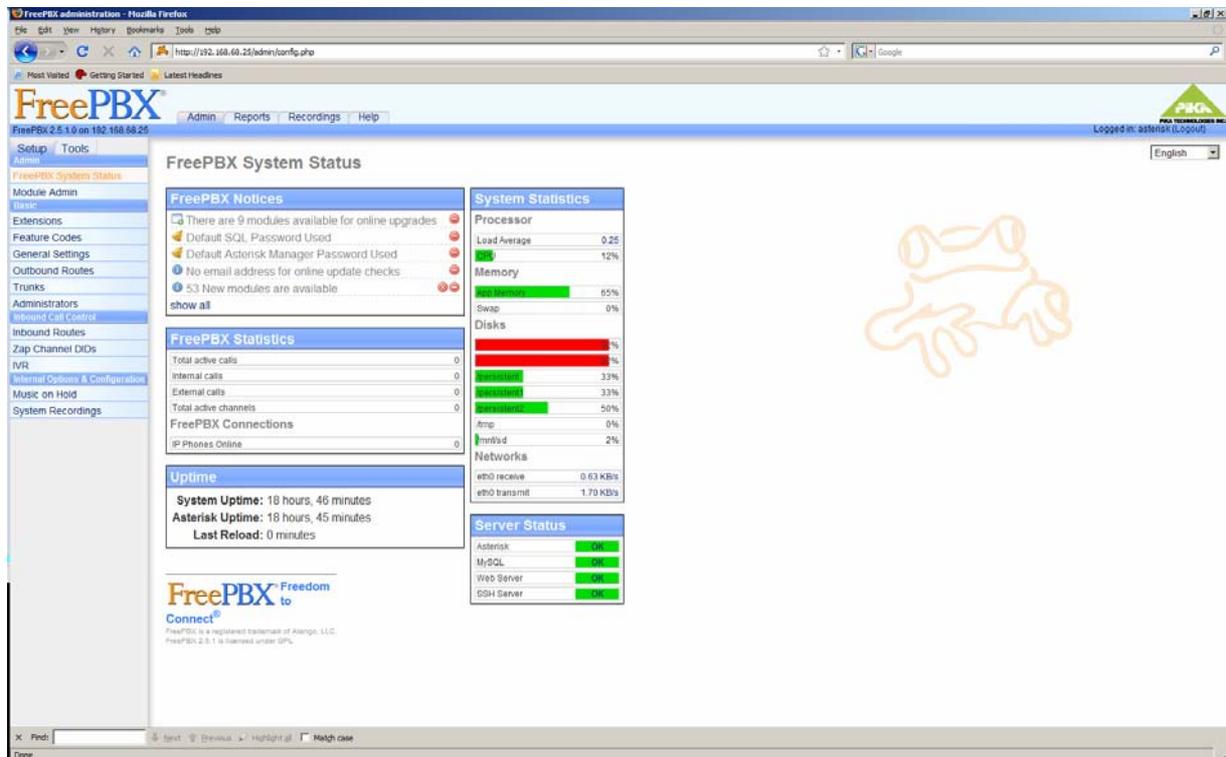
The FreePBX distribution can be programmed on the PIKA Warp by following these simple steps.

1- On your desktop, download and un-archive all the freePBX related files from ftp://ftp.pikatech.com/outgoing/pads/extras/freepbx/freepbx-mysql-intl-2.0.2.5.tar.gz to a directory of your choice.

2- To flash the images to the WARP, take the five files (cuImage.warp, image.jffs2, image1.jffs2, image2.jffs2, uRamdisk) within your previously downloaded FreePBX directory and place them in the base directory of a USB key or SD card. Now you can use the automatic upgrade (Quick and dirty) procedure or the manual procedure (100% failsafe) to upgrade the unit

    a. Automatic upgrade procedure

        i. You also need to copy the ./packages/patches/autoflash/autorun file and place it into the base directory of the USB key or SD card as well. Now take your USB key or SD card and place it into your WARP. Once your USB key or SD card is inserted, the autorun file will be executed automatically and burn the images to your WARP. After the burn, the WARP will be rebooted.

    b. Manual upgrade procedure (preferred)

i. Now take your USB key or SD card and place it into your WARP and login into the unit either through ssh (by default the ip-address=192.168.1.80) or through the serial port.

ii. Change directory to the USB or SD mounted volume

```
1. warp # cd /mnt/usb   ;for the USB
2. warp # cd /mnt/sd    ;for the SD
```

iii. Copy the files to the Warp

```
1. warp # warploader -p kernel cuImage.warp
2. warp # warploader -p root uRamdisk
3. warp # killall httpd
4. warp # killall tftpd
5. warp # umount /persistent
6. warp # umount /persistent1
7. warp # umount /persistent2
8. warp # warploader -p persistent image.jffs2
9. warp # warploader -p persistent1 image1.jffs2
10.warp # warploader -p persistent2 image2.jffs2
```

iv. Reboot the PIKA Warp unit.

3- After the images are burnt, the FreePBX image on the WARP will need to run some configuration. During this configuration and initial set up, the WARP will need to reboot 3 times. You will know it is ready to access when the LCD screen shows the line status of the modules in the WARP. This version of the FreePBX requires a username and password to access it. The factory default admin username is **asterisk** with a password of **amp109**.

4- There are two ways to add PIKA channel types in the FreePBX GUI. You can use the PIKA channel types defined in the GUI (see Note 1 below) or use the custom types. The PIKA channel types custom dial strings are:

a. **PIKA/fxs/#** for the FXS lines. The # can be between 1 and 9 depending on the number of FXS ports present.

b. **PIKA/fxo/#** for the FXO lines. The # can be between 1 and 8 depending on the number of FXO ports present. See Note 2 below.

c. **PIKA/digital/g%/#** for the BRI lines. The % is the group number of the BRI span and # is the channel number. The channel number is 1 or 2 for the first span, 3 or 4 for the second, and so on. See Note 2 below.

NOTES:

1. If you update the FreePBX core module using the module admin functionality of FreePBX, the PIKA channel type functionality of the GUI will be removed. You can still use and edit the channels you have added already and add new ones. You will just need to add them as custom types.

2. When adding the PIKA FXO and BRI lines as custom trunks, the should have $OUTNUM$ added to the end in order to properly make calls. So PIKA/fxo/1 should be PIKA/fxo/1/$OUTNUM$ This is only required if you are adding PIKA types as a custom trunk type.
For more detail information on the above mentioned procedure, please refer to
http://pikawarp.org/?p=239