

Chumby Offline Instruction Manual



This Manual was created to be used to allow chumby users to alter the configuration of their devices to not require the chumby servers to operate. Since the company has ceased to exist, this will help keep your chumby working .

Special thanks to Zurk, who created the modified software and all who
Have contributed to the Chumby community to keep it going!
Written by Amigafin 2012

Ok, so you have a chumby, and you've heard of a way to make it work when the company servers go dark. But how is it done? Well. There is several things you will have to do, and a couple programs you will have to use. And it will look complicated, but really, it isn't. I have created this guide to help everyone with this task, and make it as simple and painless as I can. Just follow the instructions, and hopefully things will turn out ok.

DISCLAIMER: I did not write the original or replacement software. I am also not an expert. I am simply writing of the method that successfully worked *for me*. Use this guide and any alternative firmware/widgets/programs etc... **AT YOUR OWN RISK**. I or anyone else involved with this project do not claim any responsibility for any damages or loss of data from your actions. I offer no warranty of any kind, implied or expressed, period. I also suggest the use of third party software to achieve this goal, and I do not endorse or wish to infringe on any rights involved in their use or distribution. I also have "simplified" things a bit, so if something is a little "inaccurate" just go with it. Like I said, I'm no expert....

So good luck, be careful, pay attention!

Written for offline firmware Version 12-13 Using Chumby 8 / Windows XP Pro. Your mileage may vary.
5/7/12

STEP ONE: Load some software.

You will need some software to complete the modification. You do not need to know every little thing about these programs, you will be using only a few of their functions. These programs are capable of much more than what will be explained here, so do not feel overwhelmed by how complex it may look. I will walk you through the steps necessary to use them. The programs I used were:

PuTTY, a program that will allow communication between your chumby and your computer. It is available here: <http://www.chiark.greenend.org.uk/~sgtatham/putty/> Read a little about it, and click the “[Download PuTTY!](#)” link and the PuTTY.exe link on the next page. Install it on your computer.

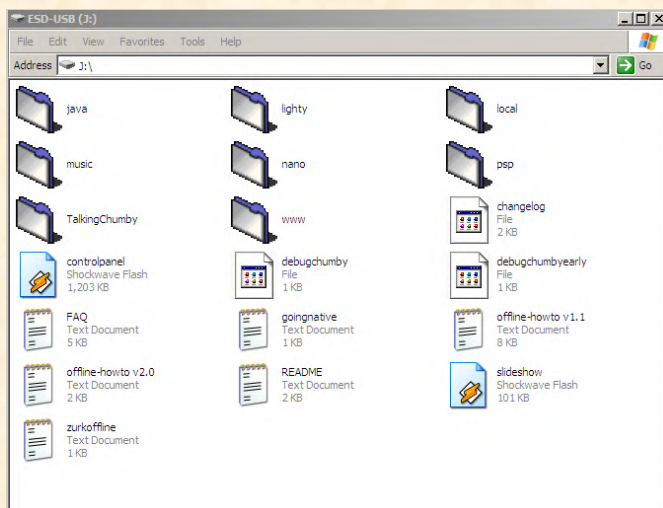
WGET, This is a program you will use to retrieve your widgets from the chumby server so you can save them on the flash drive. NOTE: not all widgets will work. Some require the server to operate, so will not work with this software. WGET is available Here: <http://users.ugent.be/~bpuype/wget/> Install wget on your c: drive .

Zurks offline firmware. See below:

This section deals with simple installation of the offline firmware without modifying the widgets.

You will need a blank USB drive and the latest version of Zurks offline firmware available from this site: <http://sourceforge.net/projects/zurk/files/> .

Download the appropriate version for your device and unzip it to the usb drive so it looks like this:



NOTE: If you only have a single folder visible when you open the contents of your USB drive , open the folder, click edit then select all, and move them to the outside of the folder.

Zurks firmware will work as-is, the only changes to be made are involving the changes for the weather and time zone information. Information for this can be found here: <http://forum.chumby.com/viewtopic.php?id=7832> or on the download site.

CONTINUE ONLY IF YOU WISH TO MODIFY THE FIRMWARE TO INCLUDE YOUR EXISTING WIDGETS AND PROFILE. REMEMBER: USE THESE INSTRUCTIONS AT YOUR OWN RISK!

The next few pages will walk you through the process of modifying the firmware to include your existing widgets.

IMPORTANT NOTES READ THIS!!!!!!:

All of these instructions were tried on a Chumby 8, and may not work on other versions. Use at your own risk! File names and locations are different for the other models, I have added a few of the changes but I need someone to test it and let me know what needs to be corrected. Also the software is constantly changing, check to see if another version of this guide is available that may be more compatible. This is a work in progress!

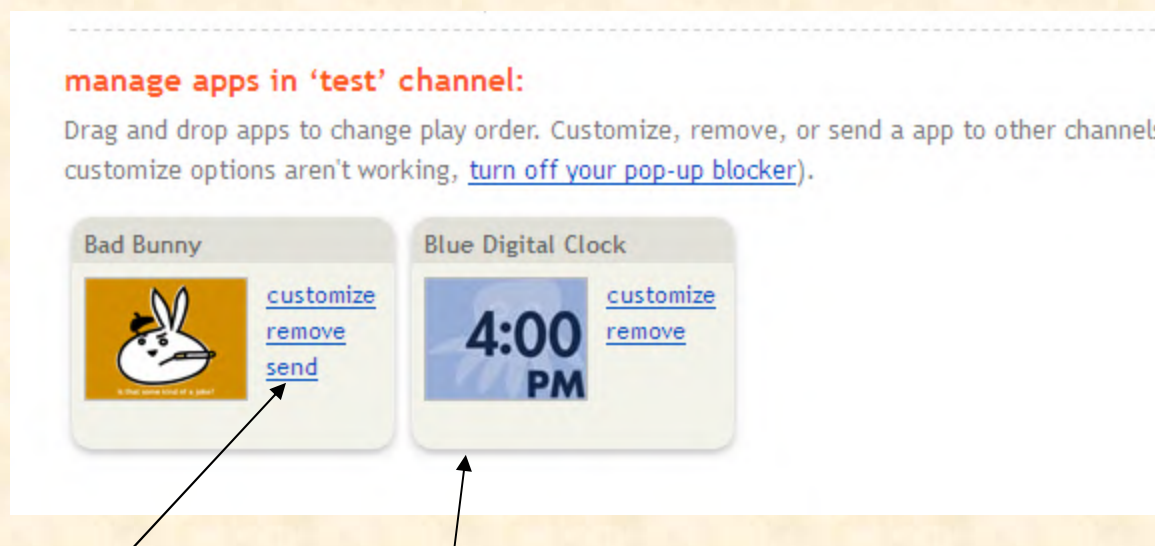
I make typos! If something looks weird, DON'T DO IT!!

I am not responsible for anything that you do to your chumby!

NOT ALL the widgets are capable of working offline. DO NOT be surprised if only some are operational.

Delete all but one channel. If you only have one channel, go to the next page. OTHERWISE:

Go to the management screen on your chumby and click the SEND selection on your widgets and move them to the default chumby channel. After you move them all, you can delete the widgets you do not want, and rename the channel if you wish.



The SEND selection. You cant remove this widget until others are installed on this channel.

This should bring you back to where you started, I would reboot the device just in case, and when it returns to normal, go to the next page....

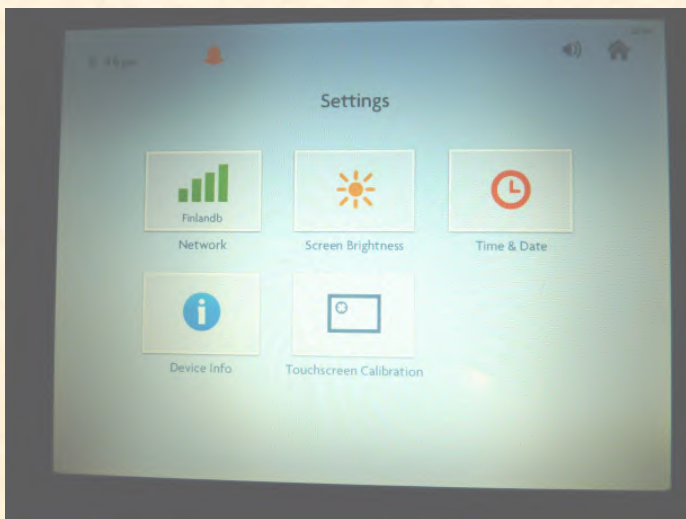
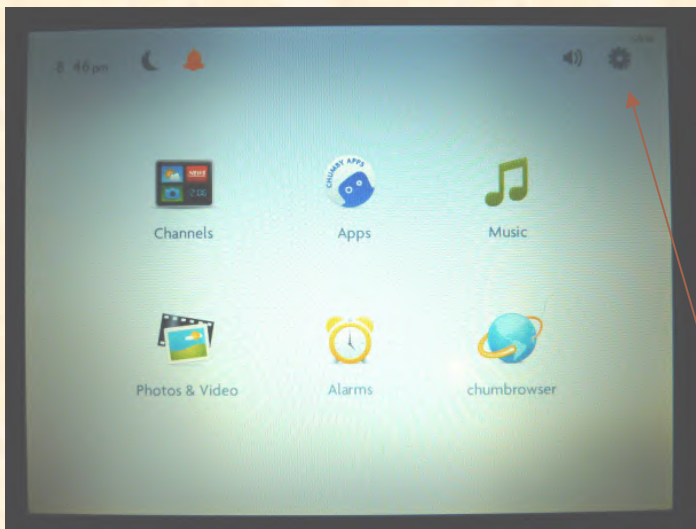
HOW TO SAVE YOUR WIDGETS AND PROFILE

REMEMBER: You must move all of your widgets into the primary channel and delete all the other channels before using this method!!!!

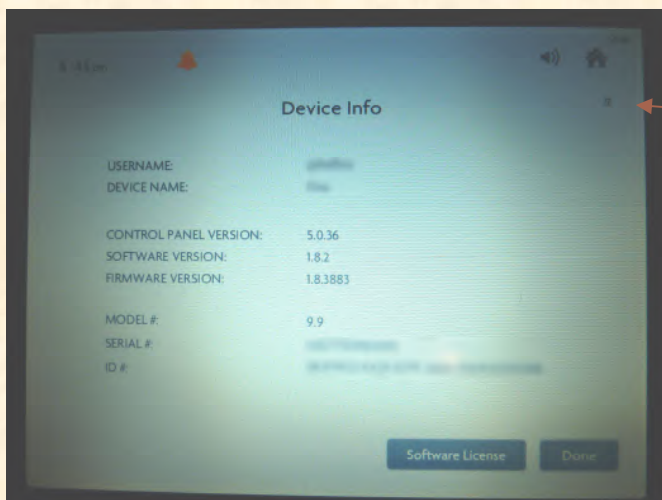
To enable a SSH or Secure Shell is a way to allow access to the chumbys file structure via your network. This is necessary to “log in” to the device and make changes.

First, copy down a list of your widgets, their names and the order they appear in your channel. Then exit to your home screen.

Then click the gear in the upper right corner

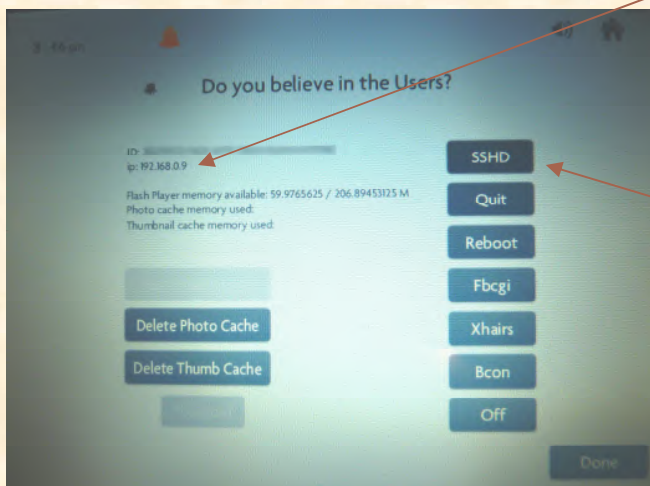


Then click on “Device Info”



Click the little “Pi” symbol in the corner.

Copy down the IP address you see on your screen, you will need it later.

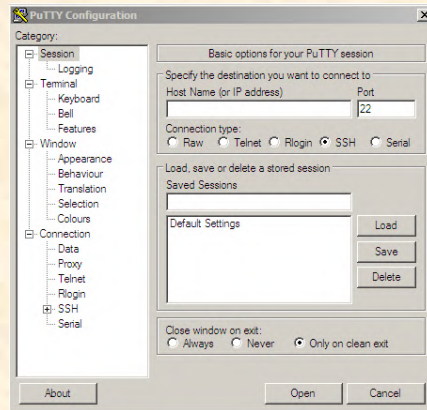


Click the SSHD button. A squid will appear and disappear. It is still active even though it does not stay on. You may exit this screen and return to your home page and activate your channel if you wish, the SSH will remain available until you reboot the device.

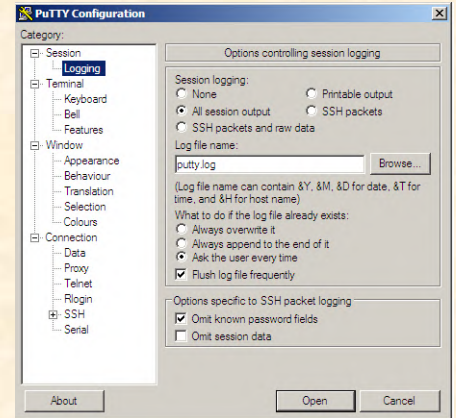
USING PuTTY

You will now use the putty program to gain access to the chumby and acquire a list of all the information that gets downloaded to it via the network. Using this list, you can duplicate those actions and permanently store the data on the flash drive.

Step one: open the putty program. It will look like this:

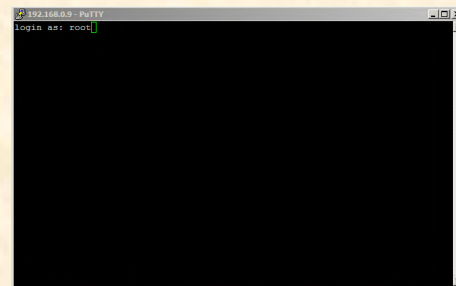
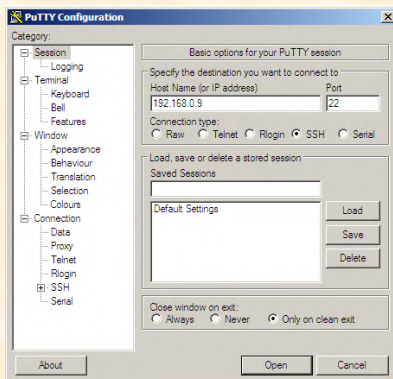


Step two: click where it says “logging” then the “all session output” option. Now click “Session” to return to the previous window.



Step three: Enter the IP address you copied from before into the “host name or IP address” box. Click “Open”

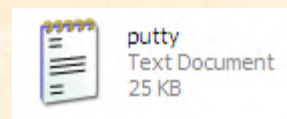
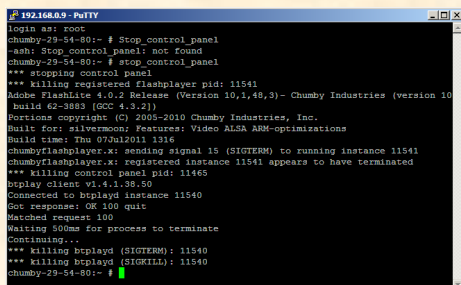
Step four: A new window will open. You are attached to your chumby, and it is asking for a login. Type “root” (no quotes) and press enter. You will get a new prompt.



Step five: Type: stop_control_panel
A bunch of text will appear, this is your chumby closing down the control panel.

Step six: type start_control_panel and hit enter.
DO NOT CLOSE THIS WINDOW

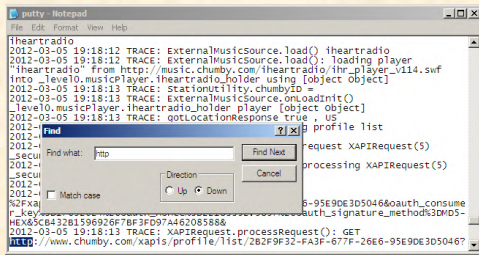
A LOT more text will appear and go by fast. Don't worry, everything you see going by is being saved into a text file (the logging option you checked earlier). This can be found in the same directory as your PuTTY program, and looks like this:



This file is accessible, even while putty is adding to it. Open it with notepad and continue with the steps on the next page....

REMEMBER: KEEP PUTTY RUNNING IN THE BACKGROUND!

...continued...



Expand notepad to fill the screen. Go to Edit and Find, and enter http in the box. Keep pressing enter until you find a string of characters that look like this: (notice it has the word “profile” in it)

http://www.chumby.com/xapis/profile/show/A7D04276-493F-10E1-9B9D-12380C727E?oauth_signature=7280103e28c5d3a6239177a7bb808&oauth_signature_method=MD5-HEX&oauth_nonce=12233527.394467&oauth_consumer_key=31296371

This is the code you will use to download your profile. Copy the entire address and paste it into the address bar of a web browser such as Firefox or Explorer. Press Enter, and a file should load on the page. Highlight the entire page, copy it, and paste it into a new notepad window. Save this file as “profile” for now. If you get an error on your browser, then one of these things could be wrong:

Putty has closed. This only works while it its still open.
You did not copy the whole address. Try again.
Try using Firefox instead of explorer.
You have the wrong address. Make sure it looks like the one above.

NOTE: This address changes each time control panel starts. You CANNOT use this address again without performing all the steps

By now, your widgets have been cycling for some time, you can close Putty AS SOON AS ALL OF YOUR WIDGETS HAVE PLAYED AT LEAST ONCE. That way you have a record of the entire process. As they play, what is known as a “URL” is saved to the putty log file. They begin with the words “http://s3movies.chumby.com?”. This is the location where your widgets are accessed from chumby. This information is also loaded from the profile. You now have to load your profile file in notepad, find all of the addresses in the profile that correspond to a widget (there may be several) , and download them to your computer using the WGET program. This will be explained on the next page.

Here is an example of what to do.
This is a chunk of a typical profile:

```
</description><version>1.1</version><play mode="timeout" time="30"/><user type="community" id="FECA68D4-765D-11DD-AC09-001E681B4C2" username="shoozhoo"/><security approval="approved" sendable="true" deletable="true" previewable="true" access="public" overlay="true" virtualable="true"/><rating count="128" value="4.2578"/><thumbnail href="http://s3movies.chumby.com/cdn/xmlthumbnail/398B20BE-E721-11DE-AACD-001E681DF646"/><template href="http://s3movies.chumby.com/cdn/xmltemplate/398EF5FE-E721-11DE-AACD-001E681DF646"/><movie href="http://s3movies.chumby.com/cdn/xmlmovie/E6A167CA-AD4F-11DD-908F-001E681DFAC2" contenttype="application/x-shockwave-flash"/><swfs><swf width="320" microphone="false" kb="false" camera="false" as_version="2" accelerometer="false" previewable="true" content-type="application/x-shockwave-flash"
```

If you notice in this text, there is a line with a <http://s3movies.chumby.com> address that also has the word “thumbnail”, then two more with “template” and movie” in the address. You will need to copy the entire address (the part WITHIN the quotes) and cut and paste it into the program WGET. Only copy/paste the addresses with “chumby.com” in them!

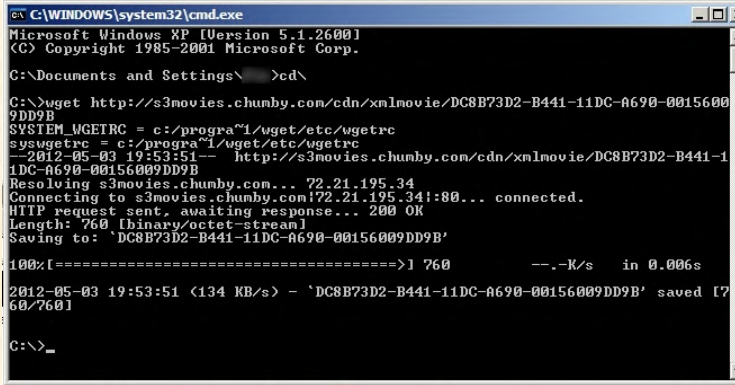
Continued:

WGET Downloader

I have found it easier to install wget directly on the c drive, as it is ran through a command line and I hate typing long paths. If you install it in another directory, you will have a lot more typing to do!

WGET is ran by clicking START>RUN on your computer and typing cmd in the box. Press enter. You will get a prompt that will probably look like this: c:\Documents and settings\(\yourname). Type cd\ (enter)
You are now in the c: directory, hopefully where you have installed WGET. If not, move it here. Now we will retrieve the widget files.

Type wget a space and one of the widget url addresses listed in your profile. You can cut and paste it if you wish (NOTE: ctrl-v will not work, you will have to right click and choose paste). Press enter, and your widget data will be downloaded to your c drive. Note that there may be several addresses for each widget, a “movie” file, which is the part that plays, a template file and a thumbnail file (and possibly others). Download the urls for one widget at a time and move them to a folder of its own, then rename the folder to match the widget, so you can identify it in the future. If not, you need to make note of what file appears on your drive so you can locate it later.



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\ >cd\

C:\>wget http://s3movies.chumby.com/cdn/xmlmovie/DC8B73D2-B441-11DC-A690-00156009DD9B
SYSTEM_WGETRC = c:/progra~1/wget/etc/wgetrc
system_wgetrc = c:/progra~1/wget/etc/wgetrc
--2012-05-03 19:53:51-- http://s3movies.chumby.com/cdn/xmlmovie/DC8B73D2-B441-11DC-A690-00156009DD9B
Resolving s3movies.chumby.com... 72.21.195.34
Connecting to s3movies.chumby.com|72.21.195.34|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 760 [binary/octet-stream]
Saving to: 'DC8B73D2-B441-11DC-A690-00156009DD9B'

100%[=====] 760 --.-K/s in 0.006s

2012-05-03 19:53:51 (134 KB/s) - 'DC8B73D2-B441-11DC-A690-00156009DD9B' saved [760/760]

C:\>_
```

After you have done this for each widget, place all the files in the WWW directory on the flash drive containing Zurks offline firmware. You do not need to delete the other files.

NOTE: there only needs to be ONE copy of each widget in the WWW folder. Even if you have a widget on your chumby that appears twice, duplicates are not required and you will get an error if you try to add one that is already present. The configuration of the widget is made in the profile, not the widget itself. If you need to alter the information for a widget, such as a web address, or zip code info, etc... load your profile information, make your changes there, and save it. There are no modifications to be made within the widget itself.

Modify the profile

The final step is modifying the profile. This involves replacing the file located at lighty/html\xapis\profile\show (chumby 8) or /lighty/html/xml/profiles (chumby 1) on the usb stick with a modified version of the profile you saved earlier.

Load both the “show” file and your profile in two separate notepad windows. Click Format and wordwrap on both windows to be able to see it better.

At this point , I first saved both the original Zurk file (show C8 or profile C1) and my new profile somewhere else in case I needed a backup.

First you must modify your profile by replacing all instances of “http://chumby.com” with “file:///”. This reroutes the chumbys search for the widget on the internet to the www folder. The profile runs the widget, and adds the parameters necessary for it to run .

I used the FIND feature of notepad to search for http://chumby.com and replaced each one individually. **DO NOT REPLACE THE ENTIRE URL, JUST THE WORDS http://chumby.com** .There is also a replace function available that will do it all at once, but I like to see it for myself. **Do not change any other non-chumby related URLs as they may be necessary for the widgets function.**

Cut out everything from your profile starting and including <widget_instances count=“xx”> and paste it REPLACING the text in the SHOW/PROFILE file STARTING AT THE SAME POINT. (you may have to highlight or delete it first)

Save your modified profile as SHOW (C8) or PROFILES (C1)in the original location on the USB, replacing the file.

I removed the .txt extension, I do not know if this is necessary, but I did it anyway.

Do a clean eject of your USB drive, power down your Chumby, insert the drive and let it boot up. Check to see which widgets still work. Some may need to be deleted. The **easiest** way for a **beginner** is to restart your chumby normally, make your changes and redo this procedure from the start. Otherwise you need to modify the profile manually in notepad. If you feel comfortable doing that, it is less time consuming.

There are a few blank screens during bootup that take a few seconds to pass, don’t let them scare you, this is normal.

To go back to the original firmware, power it down, remove the drive and boot it up. CONTINUED.....

Modifying the profile

```
<profile id="A7D94276-493A-11E1-9A9D-1231380C729E"><name>finx</name><description>Default mix for your
Chumby</description><user id="77D56474-493A-11E1-8153-1231392EFFEB">johnfinx</user><info
type="Profile" updated="Wed Apr 11 12:48:45 +0000 2012" master="true" pending="0" unaccepted="0" origin=""
created="Fri Jan 27 23:00:07 +0000 2012" published="Wed Jun 11 13:19:41 +0000 2008"/><widget_instances
count="14"> <widget_instance id="9CA02EFA-83D3-11E1-9C48-1231380C729E"><name>radar2</name><info
updated="Wed Apr 11 12:41:09 +0000 2012" access="private" secure="" origin="manual" created="Wed Apr 11
12:41:08 +0000 2012"/><play mode="timeout" time="10"/><rating value="0"/><widget id="F3549C3C-A74E-
11DD-B665-001B24F07EF4"><name>ImageURL</name><description>Loads single jpg, gif or png from given
URL.
```

LongTouch is zoom in.
ShortTouch is zoom out.
Slide is reload.

```
Please look at [http://d.hatena.ne.jp/shoozhoo/20081105#p2] when using it with URL that authenticate. </
description><version>1.1</version><play mode="timeout" time="30"/><user type="community" id="FECA09D4-
765D-11DD-AB09-001E681DFAC2" username="shoozhoo"/><security approval="approved" sendable="true"
deletable="true" previewable="true" access="public" overlay="true" virtualable="true"/><rating count="128"
value="4.2578"/><thumbnail href="http://s3movies.chumby.com/cdn/xmlthumbnail/398B20BE-E721-11DE-AACD-
001E681DF646"/><template href="http://s3movies.chumby.com/cdn/xmltemplate/398EF5FE-E721-11DE-AACD-
001E681DF646"/><movie href="http://s3movies.chumby.com/cdn/xmlmovie/E6A167CA-AD4F-11DD-908F-
001E681DFAC2" contenttype="application/x-shockwave-flash"/><swfs><swf width="320" microphone="false"
kb="false" camera="false" as_version="2" accelerometer="false" previewable="true" content-type="application/x-
shockwave-flash" href="http://s3movies.chumby.com/cdn/xmlmovie/E6A167CA-AD4F-11DD-908F-
001E681DFAC2" fixed_ar="true" swf_version="7" height="240" bgcolor="ffffff" supports_browser="false"
pointing="false" resolution="" scalable="false" requires_sound="false"/></swfs></
widget><parameters><parameter value="http://icons.wunderground.com/data/640x480/2xradard5.gif"
name="url"/><parameter value="10" name="reloadSec"/><parameter value="YES" name="hideLoading"/></
parameters></widget_instance><widget_instance id="A1EBF11E-83D3-11E1-9221-
1231380C729E"><name>satview</name><info updated="Wed Apr 11 12:41:17 +0000 2012" access="private"
secure="" origin="manual" created="Wed Apr 11 12:41:17 +0000 2012"/><play mode="timeout" time="10"/
><rating value="0"/><widget id="F3549C3C-A74E-11DD-B665-001B24F07EF4"><name>ImageURL</
name><description>Loads single jpg, gif or png from given URL.
```

Cut out the highlighted area, starting with `<widget_instance id+...` and ending after `</widget_instance>`.

Add the new widget in this space by cutting and pasting from another area on the page (if adding a duplicate widget) or from an external xml file. If adding or deleting widgets, the “widgets instances count=14” parameter must also be changed.

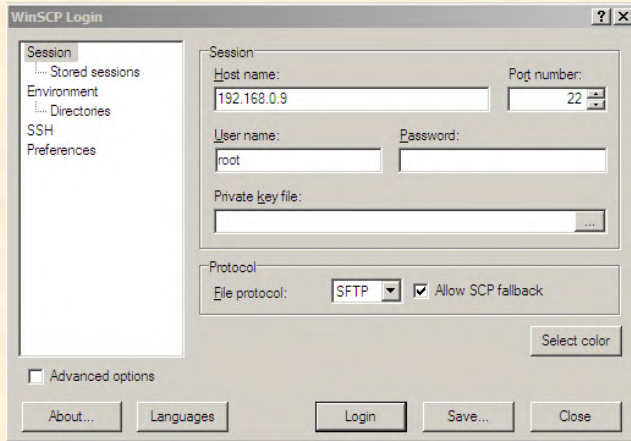
If adding a duplicate copied widget, , change the name, and parameters, such as the zipcode, url to load, etc..

Save it back to the original location and remove the .txt extension to make it a “file” (no extension) named “show” (C8) or “profiles” (C1).

More....

OTHER USEFUL TIPS:

This is for maintenance and experimenting only,
Use this program with caution. This is only a basic
outline.



Winscp (available here: <http://winscp.net/eng/download.php>) is a program that allows you to connect to your chumby and browse around the files, make changes, copy, etc...

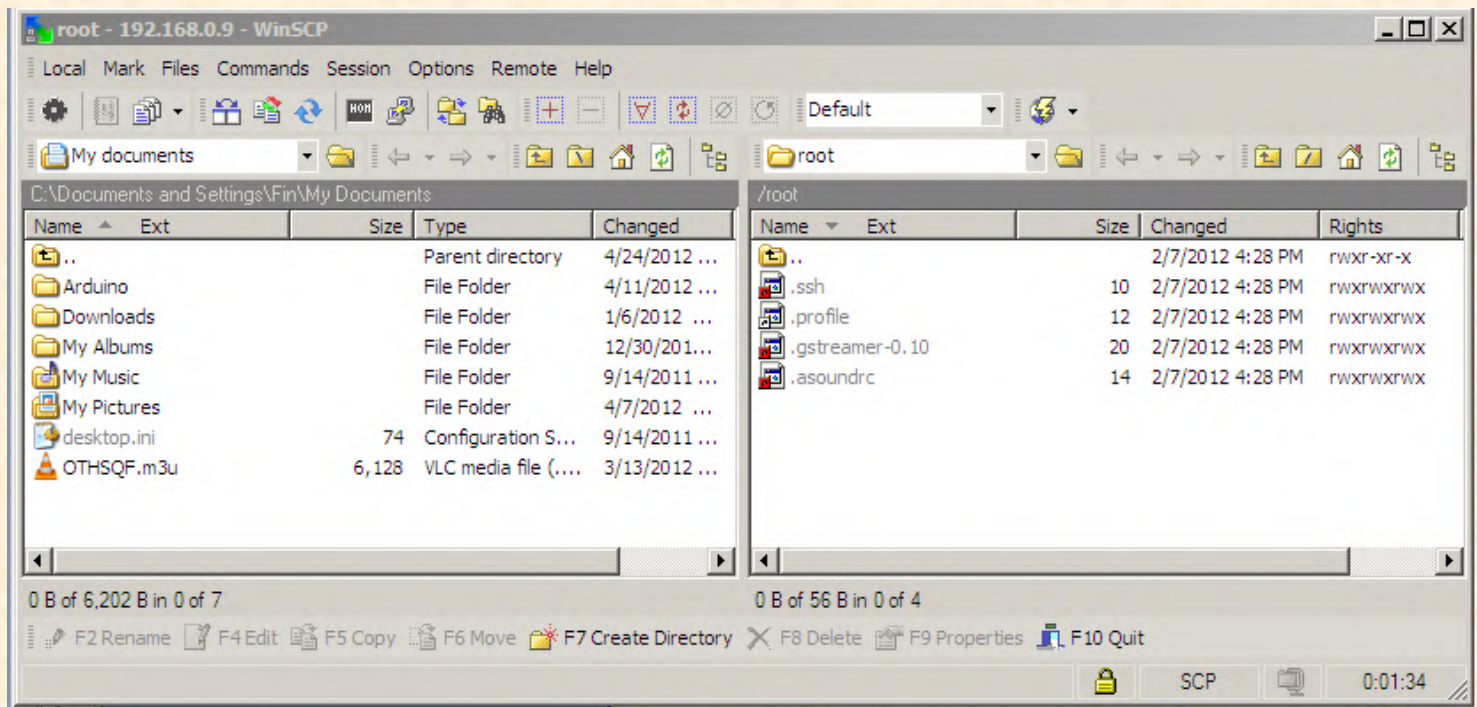
Enable ssh on your chumby as shown on page 4.

Start Winscp, enter your chumbys ip address and root as the username.

Login and you will see two panes, the one on the left is your computer, the one on the right is your chumby.

This is useful if you wish to add /delete photos or music from the sd card/flash/usb without having to remove it. These locations are found in the folder labeled "mnt" (click the yellow "up" folder once and scroll down to find it). WinSCP allows drag and drop, so copying files is easy.

CAREFUL: don't mess with the other files unless you know what you are doing, you can seriously screw things up!



What else can you do with your chumby?

Use the imgurl widget to display an image from another website to display pollen count, weather maps/radar/traffic, or a local webcam.

Use Google calendar to set up a daily "to do" list of appointments.

Attach it to an amplifier and distribute music throughout your house or patio.

Add a RSS feed to display local news, deals, or events.

Good luck!