Upgrade guide for OBi21xx

Hello,

First off, these are my own observations on a single OBI2182 device I own and use. I don't have other devices to test, but others have used the same firmware and process many times successfully for the OBi21xx series phones. If you have a device you are willing to donate for testing, please reach out to me through Reddit DMs.

This guide likely contains errors. I've done all I can to test this myself, but I am human and I make mistakes. Your experience could be different from mine and I make no guarantees. Attempting this guide is at your own risk and I will accept no responsibility if you turn your OBi into a really terrible paperweight.

For me, the long and short of it is that the OBi is worthless as it stands, so even if I had bricked it, there was no loss. I am only attempting to develop a step-by-step guide to help others who want to give it a whirl.

I am providing steps that ask you to reboot your computer, power cycle the OBi, and open a fresh Incognito Browser window after many steps. This is simply out of an overabundance of caution. You may want to skip these, but these are tried and true steps help ensure success.
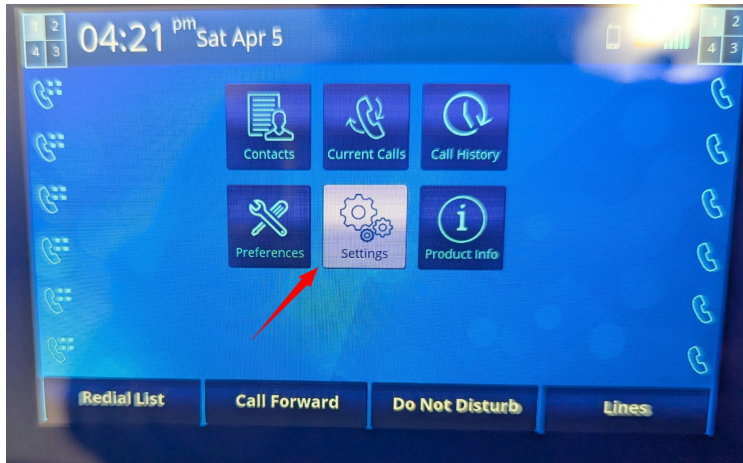
I did not develop any of the firmware or anything else other than this guide. ALL props go to the developers, testers, and supporters of obifirmware.com!

Thanks,

/u/PrimeRisk

Section A: Prepare your OBi

1. Plug in and wait for your OBi2182 to fully boot.

2. Go to the Settings with the arrow keys and press the center circle button.

3. Record (as in write it down now) the IP address displayed in the Network tab. If the IP address is not shown here, then make sure your network cable is plugged in. **Do not attempt to update firmware over WiFi (OBi or Computer)**. Plug your phone into an ethernet cable. **Make SURE that WiFi displays disabled**. If not, go into the WiFi settings and disable it and then Reboot the OBi.

4. Open a Chrome browser and go to the IP address you wrote down. Others have reported issues with other browsers, especially FireFox, so everything here is based on a current Chrome browser.
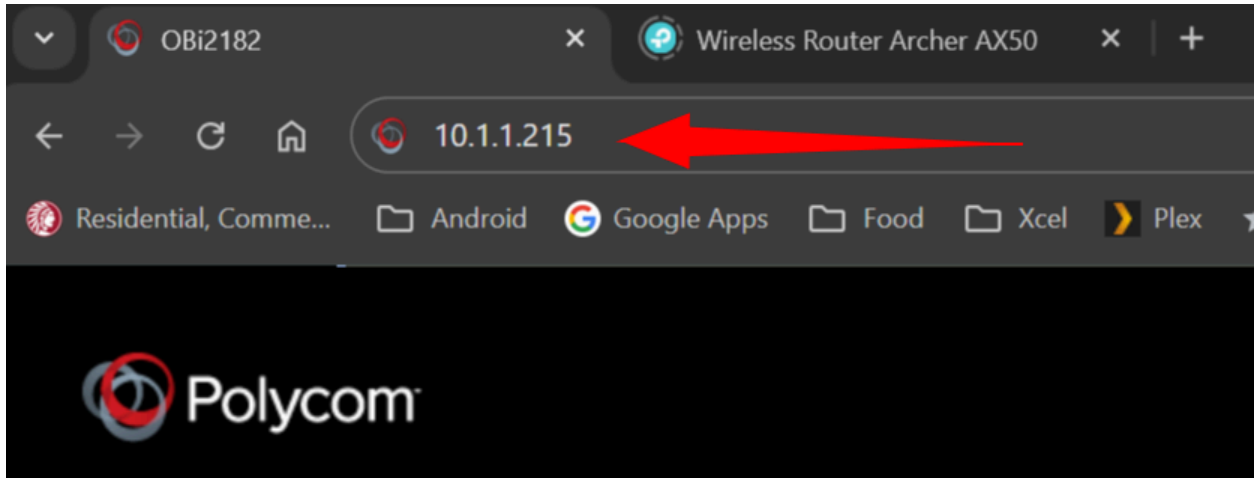
5. Login with the Username 'admin' and password 'admin'. If this password has been changed and you don't have it, well you're going to need to go look for a guide on how to conduct a factory reset without the admin password. I can't help you with that.

6. Screenshot this information on the System Status Page. You may need the Hardware and Software version so you know which 3rd party software to download.

7. Disable Auto Provisioning settings for Auto Firmware and ITSP Provisioning, by unchecking the Default and changing Method to Disabled for BOTH SETTINGS even if they are already defaulted to Disabled.
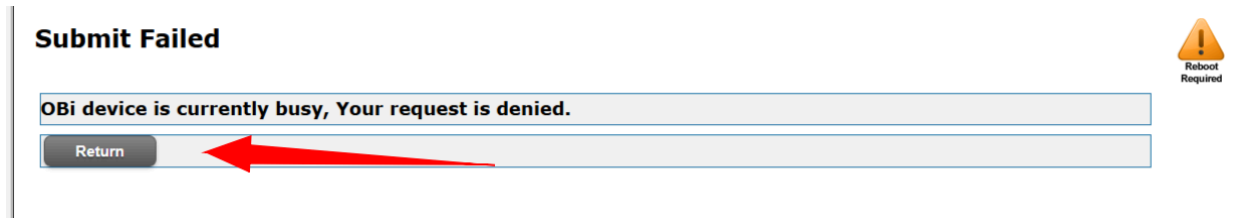
8. Click Submit at the bottom of the page and ensure that you get a Configuration Update Successful message. If it fails, click return and then try again. If it still doesn't work, then unplug the OBi, wait 30 seconds, and start this guide over.
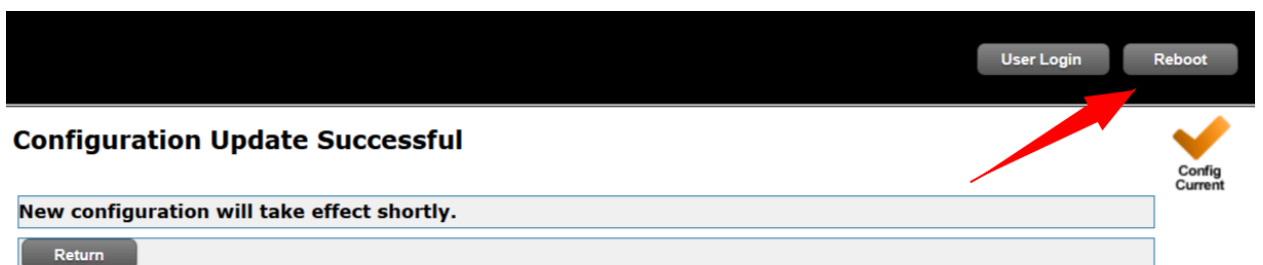

Good:

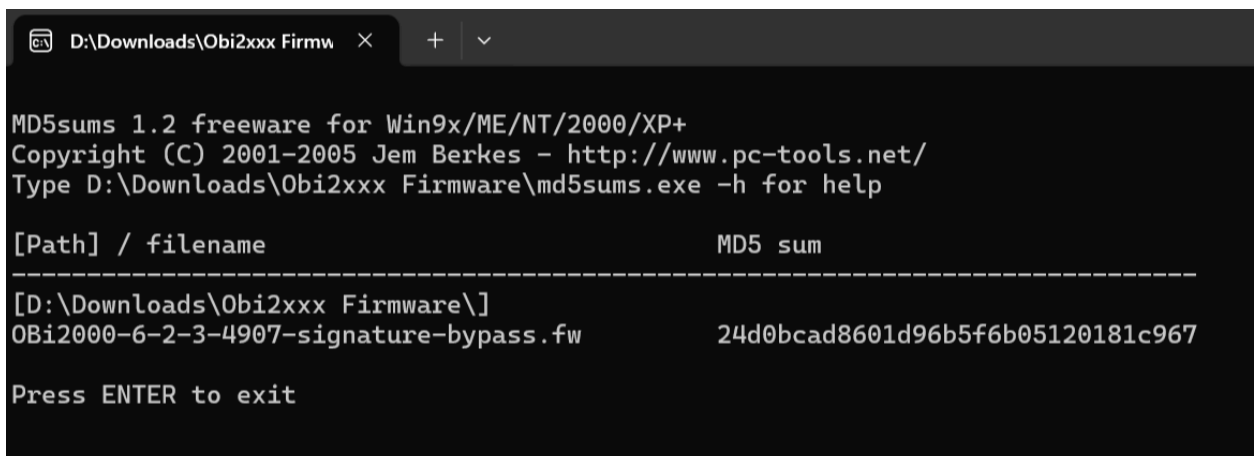Bad:
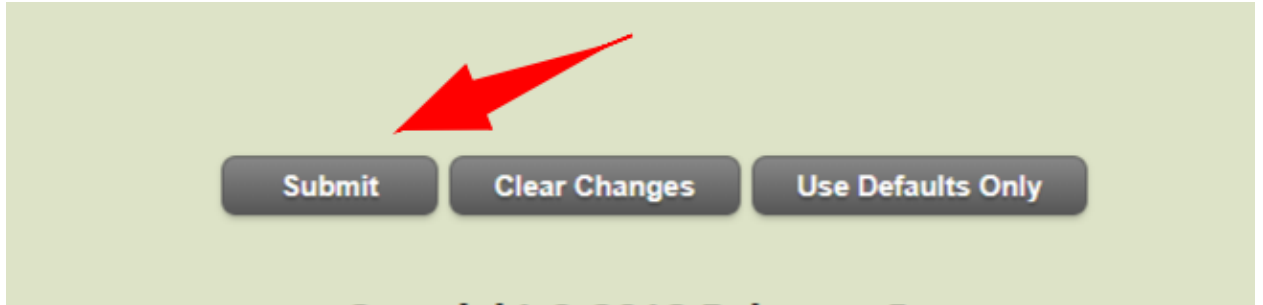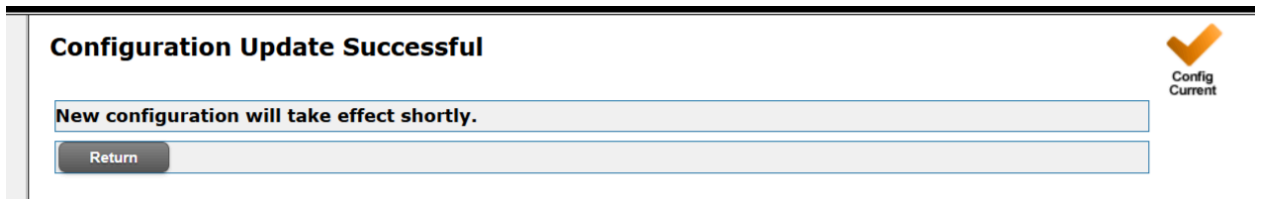
9. Reboot the OBi at the top right of the page.

10. Verify that the settings have remained on the Auto Provisioning page.

Section B: Getting The Firmware

1. Go to the Crowdsourced Firmware page here: www.obifirmware.com/#cta and look for the OBI2000 series section (taoman - for OBi2xxx series). Download all of the firmware packages into a separate folder.

2. Verify the MD5 sum for your downloaded files. Linux desktops will have this tool already, but there are limited options for Windows. If you do not know how to use MD5Sum, they search for a YouTube video. The MD5Sum verifies that the files you downloaded are not corrupted in any way. This is very important as if there is corruption in the firmware files you risk bricking your OBi.

   https://www.pc-tools.net/win32/md5sums/ has a very old windows executable that I used to compare MD5 sums on the downloaded firmware files on a Windows 11 as of 4/6/25 and they checked out 100% vs my linux box. YMMV, so this is at your own risk.

   To use, just unzip the files in the same folder with your firmware files and then drag the firmware file onto the md5sums.exe in the folder. A command window will pop up looking like this.
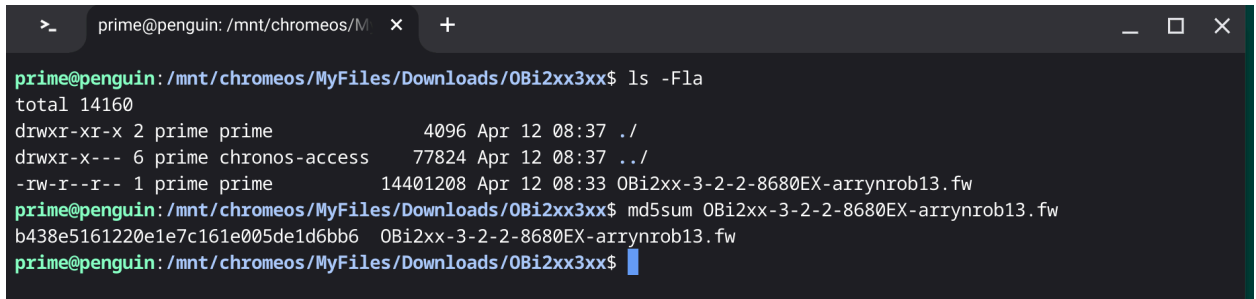
3. If you are running a Linux variant, make sure the md5sum package is installed and use the command line syntax **md5sum <filename>**

Section C: Prepare to Flash

1. Reboot your computer. (Recommended! You don't want anything else triggering weirdness when flashing any firmware, an unintended page refresh can ruin your entire day).

2. Time to start flashing firmware! Unplug the OBi, wait 30 seconds, plug it in and wait for it to fully boot. Close all browsers, open an Incognito Chrome browser and go to the IP address you wrote down in step #3.
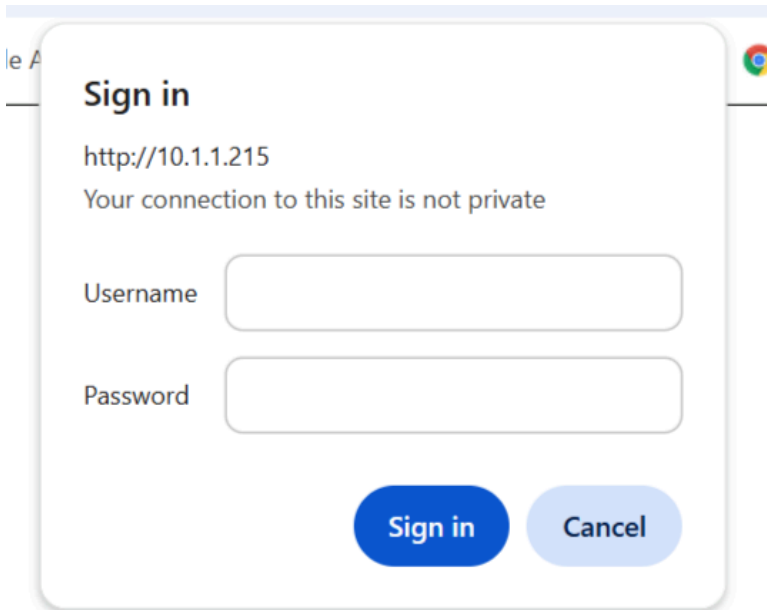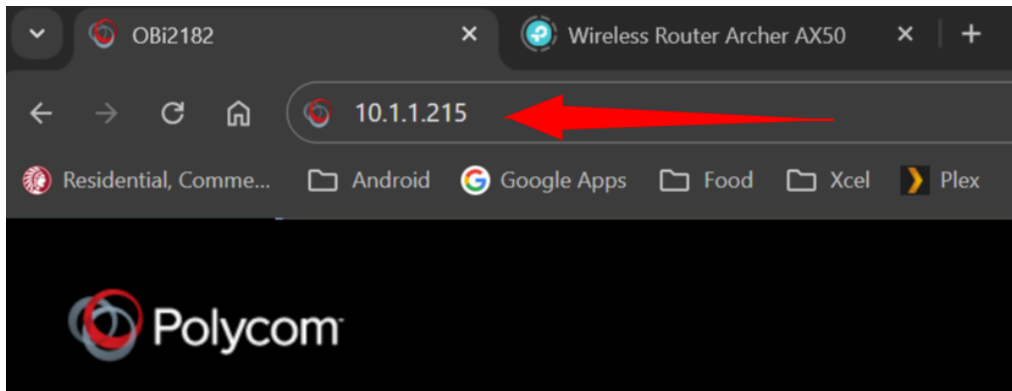
3. Login with the Username 'admin' and password 'admin' and go to the System Management -> Device Update page.
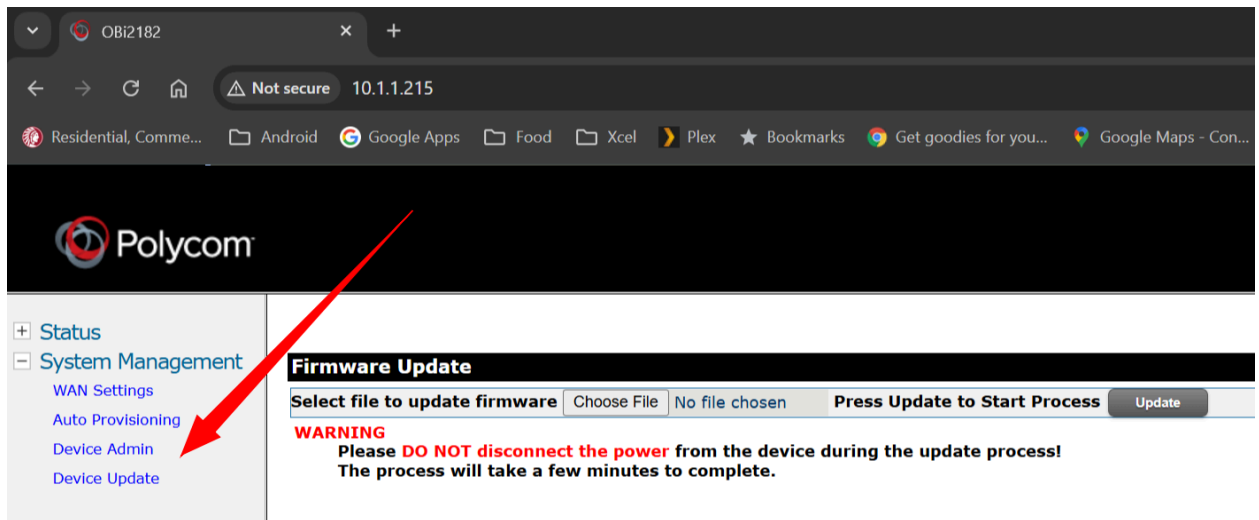
4. Click Choose File under Firmware Update and select the file to flash. Pay strict attention to the order of the updates provided on the firmware page. These are the instructions as of 4/6/25, but these may change at any time.

5. Click on Update and let it take its time. It will take a while for the browser page to update saying that Firmware Update Started. You can see the progress on the screen of the OBi. Do not get rushed as the OBi may go through multiple reboot cycles to complete. Once the first update is complete, CLOSE YOUR BROWSER, and go back to step #2 of this section to apply the next Firmware file.
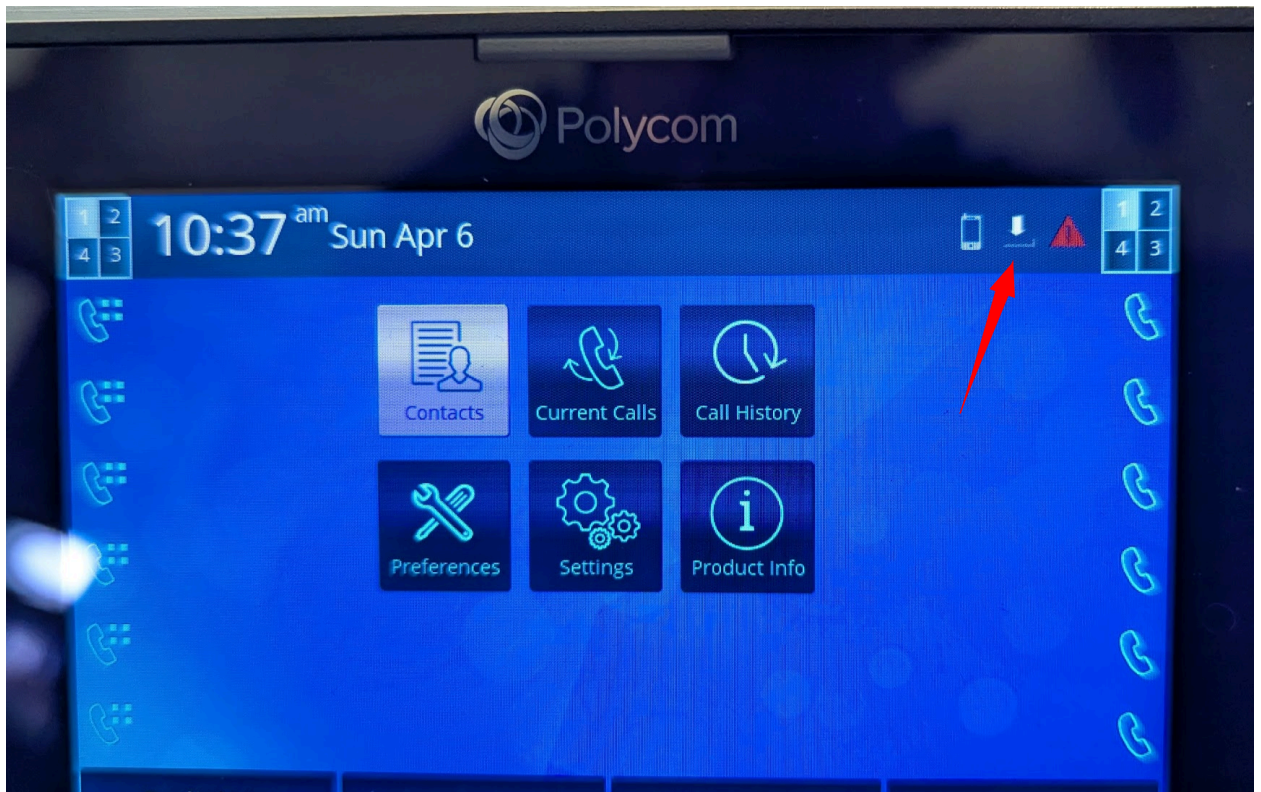
6. Unplug the OBi and wait 30 seconds one final time and log back into the interface and you should see something like this. You should now see all of the configuration items on the left-hand side of the screen available to you, including Google Voice. If so, you are good to go!

7. That's it, you're ready to configure your OBi with any service you like!

Section D: Setup Google Voice

1. If you want to register a Google Voice number, just open the Google Voice (2nd from the top), click Provisioning and follow the simple instructions!
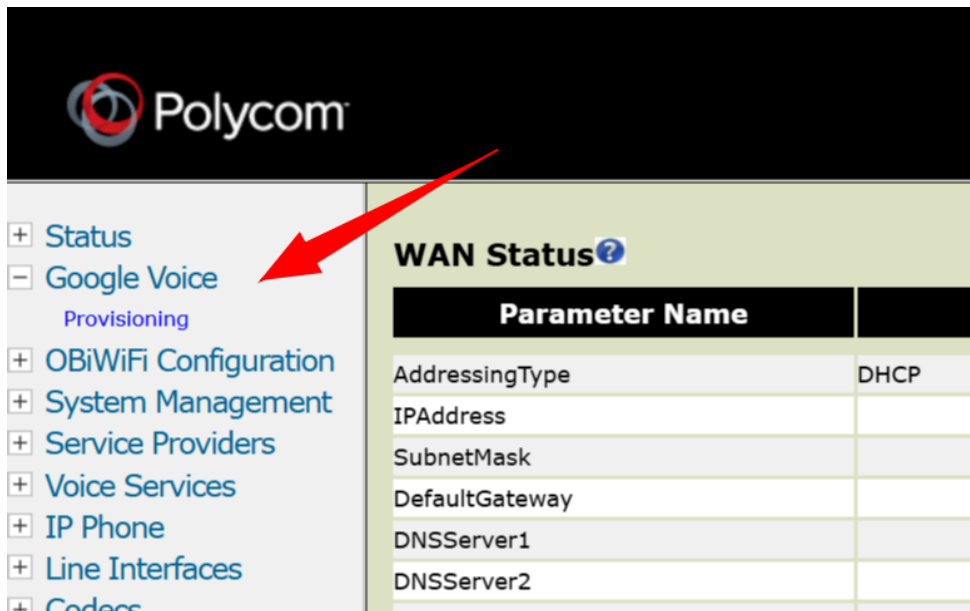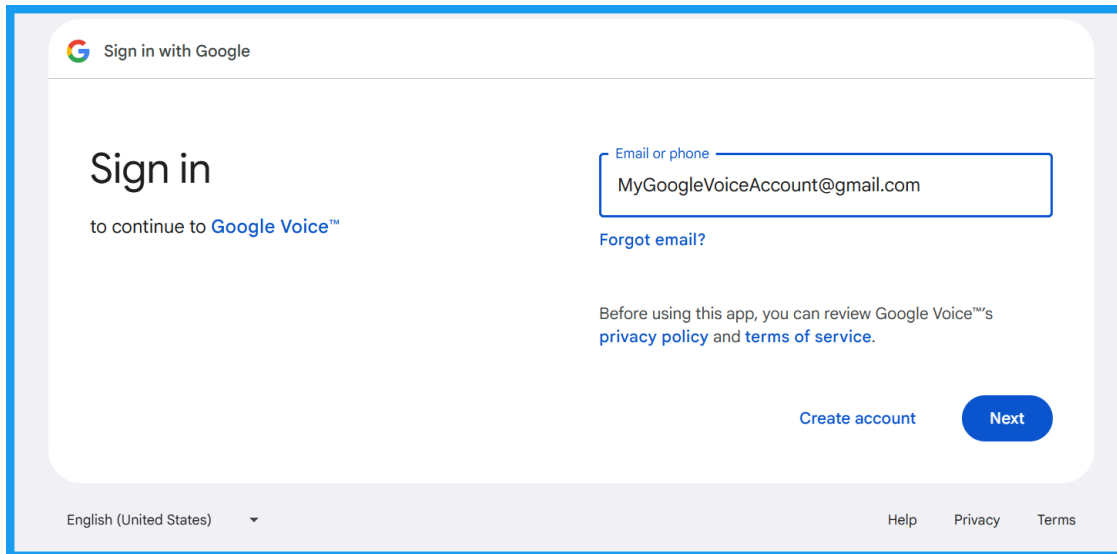

2. **Right-click** and open the "request GV oauth token" link in a new tab. You'll need to come back to this page multiple times, so just do it now!

3. Log into your Google account with your Google Voice number:

4. Agree to the terms and policies:

5. Agree to share services. Please note if you ever setup with ObiTalk before you will see a notice that you already granted some service access. If you have never done this before, this screen may be slightly different.
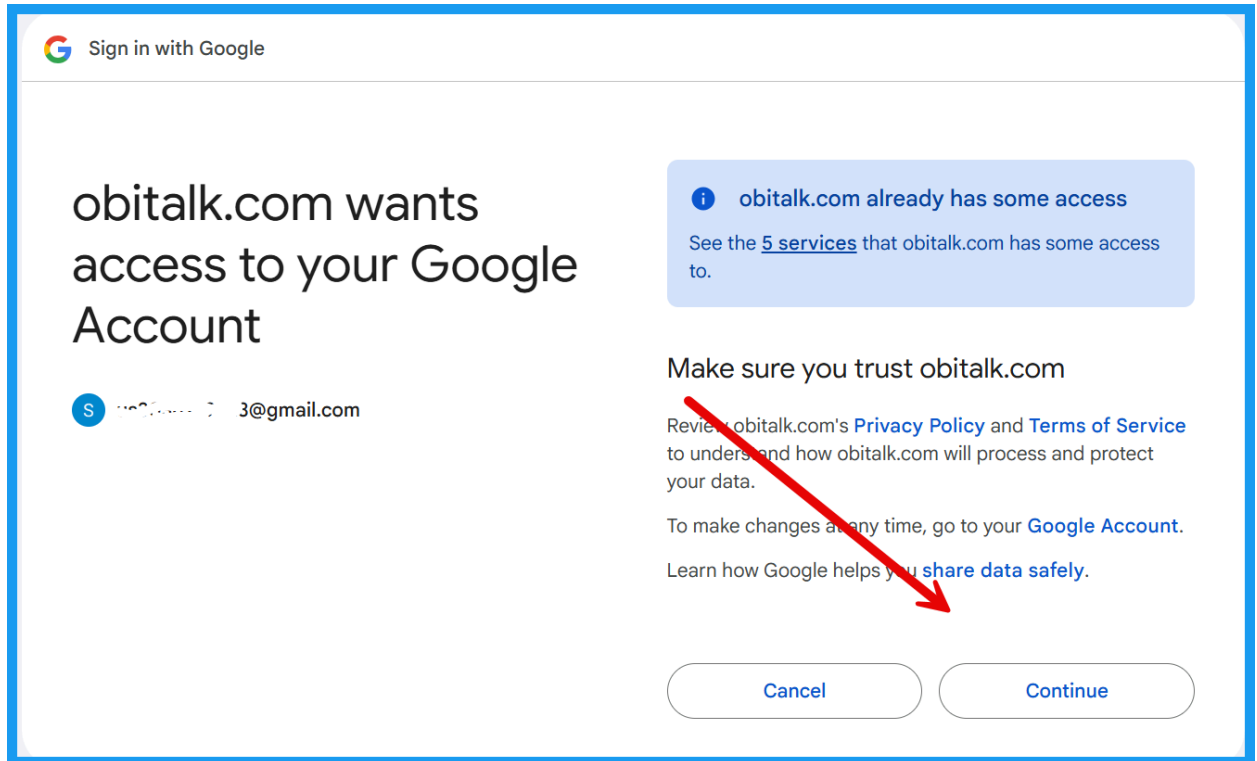
6. Get your token! This screen will look like it failed, but IT IS CORRECT. The info you need is the ENTIRE string in the URL field. Copy this!
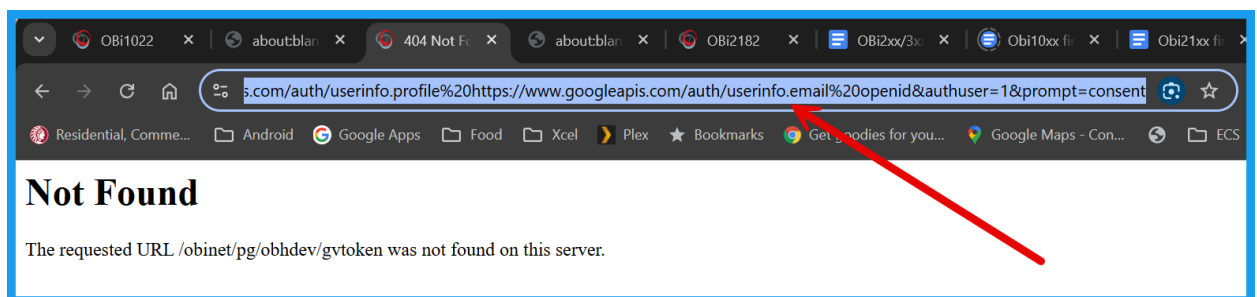
7. Go back to the Provisioning Instructions tab and paste the string in the URL box and click "Get Refresh Token From Code in URL". Copy the "Refresh Token" for the next step.

Instructions:
1) open this link in new tab to request a single-use authorization token for "obitalk.com": request GV oauth token

2) after logging into your google voice account and agreeing to grant obitalk.com permission to make/receive calls (click 'select all' permissions if prompted), your browser will receive a 404 error from www.obitalk.com because it is no longer functional as of 10/31/2024. however, an authorization code is present in that url

3) copy/paste the full non-functional url from the other tab into the textbox below (it will look like 'https://www.obitalk.com/obinet/pg/obhdev/gvtoken?code=xxxxxxxxxxxxxxxxxxx&scope=blah&lotsofotherstuff=junk') and then click 'Get Refresh Token From Code In URL' button below

4) copy/paste the Refresh Token contents (that will appear after button is pressed) into obi local web gui's AuthPassword field at Voice Services > SPx Service > Credentials > AuthPassword (SPx # must match config chosen in next step), then click Submit at the bottom

5) based on the desired SPx # used in step #4, choose the corresponding config URL for provisioning:
  SP1: https://www.obifirmware.com/fw/EnableGVSIPWithoutOBiTALK.xml
  SP2: https://www.obifirmware.com/fw/EnableGVSIPWithoutOBiTALK_SP2.xml
  SP3: https://www.obifirmware.com/fw/EnableGVSIPWithoutOBiTALK_SP3.xml
  SP4: https://www.obifirmware.com/fw/EnableGVSIPWithoutOBiTALK_SP4.xml
  SP5: https://www.obifirmware.com/fw/EnableGVSIPWithoutOBiTALK_SP5.xml
  SP6: https://www.obifirmware.com/fw/EnableGVSIPWithoutOBiTALK_SP6.xml

6) copy/paste chosen url into local webgui at System Management > Auto Provisioning > ITSP Provisioning > ConfigURL, set provisioning "Method" to "System Start", click Submit at the bottom, then click Reboot to force the config to download
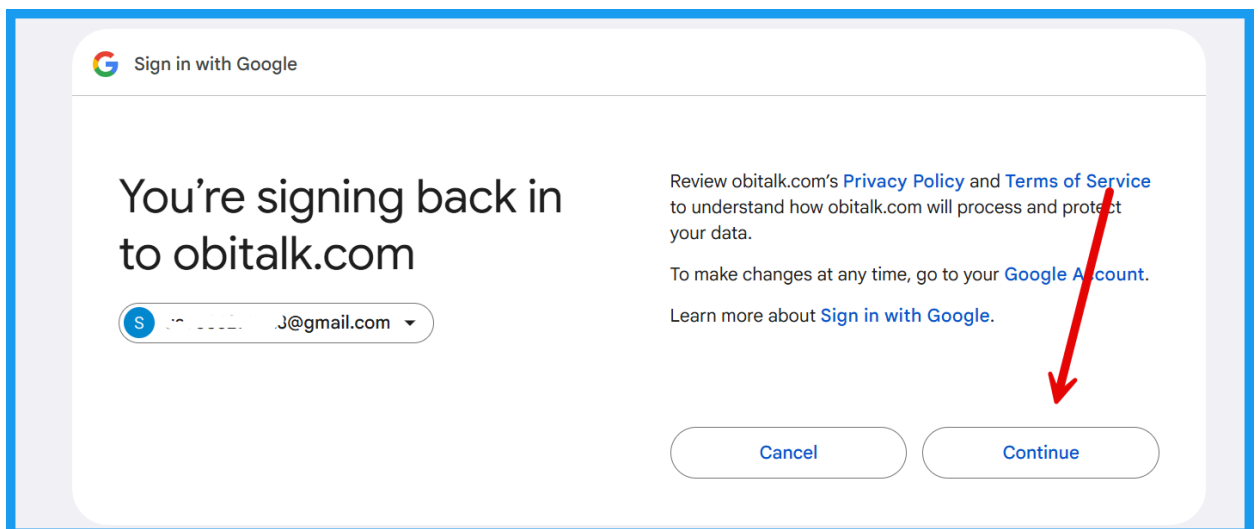
URL: https://www.obitalk.com/obinet/pg/obhdev/gvtoken?code=4/0A`_5q``.Rjod1qbQMs6u8TPE-wnnp2ExnL8ozcs_zAvrrC

[Get Refresh Token From Code In URL]

Code: 4/0Ab_5qlknRjod1qbQMs6u8TPE-wnnp2ExnL8ozcs_zAvrrCJsAvK6otOD82qleuL3Y

Response:

{
  "access_token": "ya29.a0AZ`` ``````4k4iy``````aF066sAdxe5jSP-f5oKIIuvk9xH4ltR-
AnyXq7pq-JD``lw59xAVnp`````` MHD5dVSCP`````_C8_KqIWF``````fUqRH-
SalurLGT2idN`ynJ58``drm1sIJtV`Vmg``5R5hU05``cG1``3wFBsjaC``````ARcSFO`````````L
L41DrMG3KoSkk`````g0175",
  "expires_in": 3599,
  "refresh_token": "1//04N_PF3``YnkCg`````````_ ``-L9``````````XW1Q`o`xgB-
tCh7XD1P4dwbB_WB55-vE1HGRhcbDBBk7Ldr6s_-yLCvllws",
  "scope": "openid https://www.googleapis.com/auth/userinfo.email
https://www.googleapis.com/auth/googletalk
https://www.googleapis.com/auth/userinfo.profile
https://www.googleapis.com/auth/sipregistrar-3p",
  "token_type": "Bearer",
  "id_token":
"eyJhbGciOiI`SUzI1NiIsImtpZCI6IjIzZjdhMzU4Mzc`````````````````NDE47iliMiEzNmZjYzBhOTY
0NjIiLCJ0eXA`OiJKVJ``r``.`Jpc3MiOi`.``` `` `w90cy5nb29n`GUuY29tIiwiYXpwIj``NTY1NDM2
MjMxMTc1LXYyZw``````IxYXJraTa`````` ``zMGp``3VqYXRpc``pLm`wcHMuZ``vZ2``dXNlc`NvbnRl
bnQuY29tIiwiYXVkIjoiNTY1NDM``gMxMTc1LXYy``O07``LxYXJraTa`dDQ`.GtzMGps`3Vo`XRpcTJp
LmFwcHMuZ29vZ2x1dXN``````unRlbnQuY29tIiwic3V1IjoiMTA5NjI`MP`4NTA5NDMwM``uZMTgwIiwi
ZW1haWwiOiJ1czMwMzYyNzk0MjhAZ21haWwuY29tIiwiZW1haWwxfdmVyaWZpZWQiOnRydWUsImF0X2hh

Refresh Token: 1//04N_PF3``````CgYIARAAGA`````wF-L9IrljbVXQ5rXW1Q``````gB-``7XD1P4dwbB_WB55-vE1HGRhcbDBBk7Ldr6

8. Go back to the OBi configuration page under **Voice Services > SPx Service > Credentials > AuthPassword**, Uncheck Default and paste the Refresh Token into the AuthPassword field, scroll to the bottom, and click Submit, but do not reboot at this time!

9. Go back to the Instructions tab and copy the Configuration URL for the appropriate SPx Service you pasted the AuthPassword into in the previous step.

10. Go back to the OBi configuration page under **System Management > Auto Provisioning > ITSP Provisioning > ConfigURL** and paste in the URL from the last step, set provisioning "Method" to "System Start", click Submit at the bottom, then click Reboot.

11. Once the OBi reboots, return to the configuration page to inspect your new configuration.

12. That's it! Place a call from your newly configured OBi and enjoy!

Section E: Additional Questions:

There is no formal support for these firmware upgrades, but there are a group of fine people over on https://broadbandbulletin.com/t/voip-tech-chat that may be able to help you if you get stuck or have other questions.

PLEASE make sure you search and read before asking questions. If you've run into an issue, likely someone has before and the answer is somewhere in the forum.