

Amateur Radio Notes

by Toshen, KE0FHS

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Upgrading to Pi-Star V4

Revised: Jan 2021, CC BY-SA [↗](#); PDFs [↗](#)

As of Jan 1, 2024, this site is no longer being updated. It will remain available for some time for legacy reference.

Most up-to-date version: amateurradionotes.com/pi-star-upgrading-to-v4.htm

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Note: This is an extract from the full Pi-Star notes article.

21) Upgrading to Pi-Star V4

If you're upgrading an existing hotspot from Pi-Star V3.# or V4.0 to Pi-Star V4.1 or newer: You can't just click the Upgrade link or run `sudo pistar-upgrade`. However, there's a shortcut that makes the upgrade easier.

I've tested this on Mac and Windows 10, and it worked well. Here are the steps:

1. Backup the Pi-Star configuration on your existing hotspot. See [Backing up and restoring Pi-Star](#) [↗](#).
Hint: Be sure to keep the original name of the backup file; changing the name can cause it to be not unpacked and restored.
2. Download the Pi-Star V4.1 or newer image:

- Release candidates (RC) are available from [Pi-Star Beta Downloads](#) .
 - Full releases, when available, will be available from [Pi-Star Downloads](#) .
3. Insert a microSD card into your computer and flash a download of the Pi-Star V4.1 or newer image to a microSD card. For more info, see [Flashing Pi-Star](#) 
Note: If using Windows, dismiss the system Format Disk message.
 4. After flashing the Pi-Star image to the microSD card, eject it, and then reinsert it.
Note: If using Windows, once again dismiss the Format Disk message.
 5. Copy the backup zip file to the boot partition of the freshly imaged microSD card, and then eject it again.
 6. Insert the microSD card into the RPi and power it up. The first boot up will take a bit longer than usual because V4.1 now automatically expands the filesystem (sweet!) and then unpacks and restores your backed up configuration. The good news is that subsequent boot ups are even quicker than they were previously.

Hint (thanks to Larry, KF7L): If the image doesn't connect to your WiFi network and instead goes into Auto AP mode, the issue could be because your router doesn't broadcast SSIDs. In that case, you might want to try adding:

```
scan_ssid=1
```

to the `/etc/wpa_supplicant/wpa_supplicant.conf` file, between `ssid` and `psk`:

```
network={  
    #ssid="WirelessNetworkName"  
    ssid=576972656c ...  
    scan_ssid=1  
    #psk="WirelessNetworkPassword"  
    psk=364b8070f60 ...  
    id_str=""  
    priority=100
```

7. Log into Pi-Star in order to open the Configuration page.
 - *User Name* – This your hotspot's hostname, either the default, pi-star, or whatever you changed it to in your backed up configuration.
 - *Password* – Even if you used your own Remote Access Password in the configuration you backed up, for security reasons, the Pi-Star backup does not back up this password, so you must use the default password to log in: raspberry.

8. It's a good idea to double-check your configuration settings. Some settings are not backed up, so if you changed them to something other than the default, you'll find that they are back on the default settings of a new install, for example:
- *General Configuration*:
 - System Time Zone (default Europe/London)
 - Dashboard language (default English_uk)
 - *D-Star Configuration* – Time Announcements (default: On) and Use DPlus for XRF (default: Off). If you change the Use DPlus for XRF setting, you must run a Pi-Star Update to put the new setting into effect.
 - *Firewall Configuration* – Auto AP (default: On)
 - *Remote Access Password* – Since Pi-Star backup does not back up this password, if you want to use your own password, **which is a good idea**, you'll need to enter your own password.
 - *Expert Editor > CSS Tool* – Prior to Pi-Star V4.1.3/20210125, Custom CSS settings weren't backed up.
 - *SSH Public Key Authentication (PKA)* – This is a bit of an edge case, but if you are using PKA to access Pi-Star via SSH, Pi-Star doesn't back up the custom settings (public key stored in an authorized_keys file in a custom folder named .ssh in the user's home directory). So if you do this (as an alternative to logging into Pi-Star via SSH using your Remote Access Password), you'll need to configure this again after booting up your fresh install.
9. It's also a good idea to make a backup of your new Pi-Star V4.1 or newer configuration. For more info, see [Backing up and restoring Pi-Star](#) ↗.
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