

Erasing System Data from an iPhone

Stephen Huston — June 2022

iPhone users sometimes get a warning that they need more free space before they can update their phone's operating system. iPhones store a lot of data which cannot be seen, accessed, or erased using the iOS interface. Some of this is caches and general storage by the OS itself (see the System Data right).

- Settings > General > iPhone Storage — *scroll to end*

iOS updates often require twice or even 3X as much space during installation as the size of the installer download because the installer's disc image needs to be unstuffed, then the new iOS files have to be written and verified before the older OS version is deleted, after which the installer itself might be removed.

Miscellaneous System Data may be occupying as much or more space than is used to run an iOS update.

The system uses and dumps this data in chunks, but it's beyond our control. The only way for us to clear out this System Data is by resetting the iPhone, which also removes all of our user info and personal data.

If this becomes necessary to run an iOS update, you must first do a full iPhone backup! Only then, go to

- Settings > General > Transfer or Reset iPhone

Tap on that reset option and then “Erase All Content & Settings” to completely reset the iPhone. The iPhone will restart as a new device, but just skip all of the setup steps you can until reaching the iOS updater:

- Settings > General > Software Update (and run it)

After the iOS has been updated, go back and again do another full reset of the iPhone. When you restart it this time, choose to restore from the backup you made just before the first reset. This gets you back to where you started but with the newest iOS version installed.

