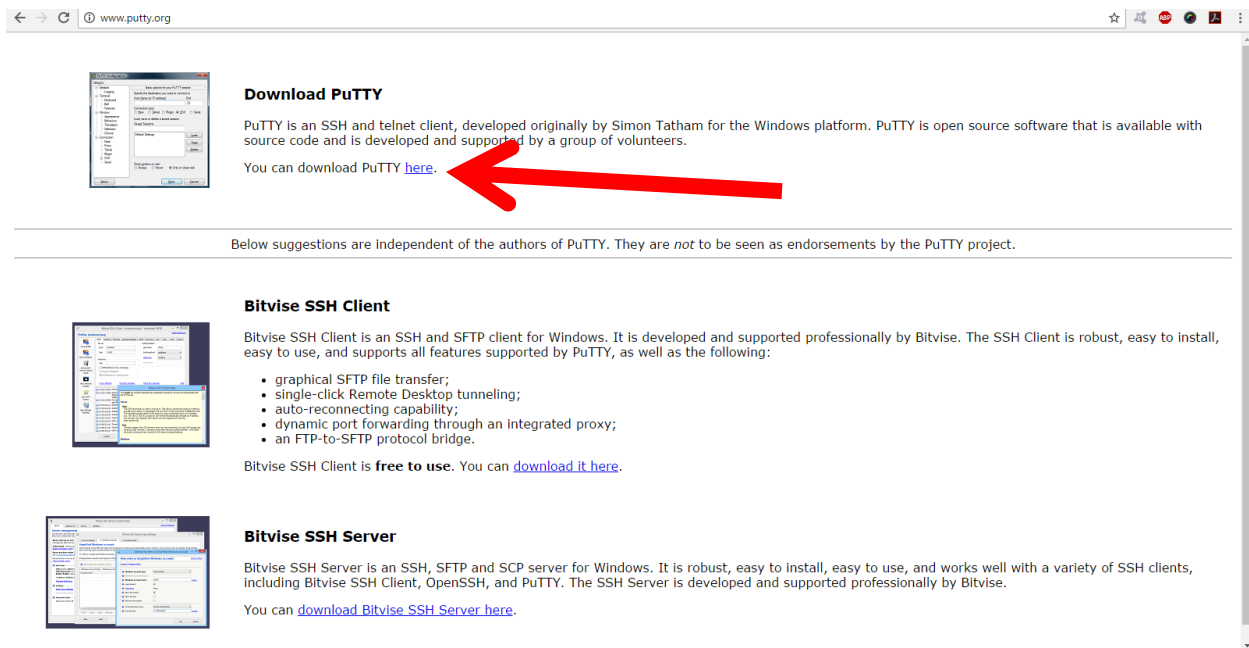


## Step 1: Download Putty from <http://www.putty.org/>



The screenshot shows the Putty.org website. At the top, there's a navigation bar with a search icon and a language selector. Below the navigation bar, there's a large section titled "Download PuTTY". On the left, there's a small image of the PuTTY application window. To the right of the image, the text reads: "PuTTY is an SSH and telnet client, developed originally by Simon Tatham for the Windows platform. PuTTY is open source software that is available with source code and is developed and supported by a group of volunteers. You can download PuTTY [here](#)." A large red arrow points from the text "You can download PuTTY here." to the link "here". Below this section, there's a horizontal line and a disclaimer: "Below suggestions are independent of the authors of PuTTY. They are not to be seen as endorsements by the PuTTY project." Below the disclaimer, there are two sections: "Bitvise SSH Client" and "Bitvise SSH Server". Each section has a small image of the application window and a description of the software. The "Bitvise SSH Client" section lists several features: graphical SFTP file transfer; single-click Remote Desktop tunneling; auto-reconnecting capability; dynamic port forwarding through an integrated proxy; and an FTP-to-SFTP protocol bridge. The "Bitvise SSH Server" section describes it as an SSH, SFTP and SCP server for Windows, robust, easy to install, easy to use, and works well with a variety of SSH clients, including Bitvise SSH Client, OpenSSH, and PuTTY. It also mentions that the SSH Server is developed and supported professionally by Bitvise.

**Download PuTTY**

PuTTY is an SSH and telnet client, developed originally by Simon Tatham for the Windows platform. PuTTY is open source software that is available with source code and is developed and supported by a group of volunteers.

You can download PuTTY [here](#).

Below suggestions are independent of the authors of PuTTY. They are not to be seen as endorsements by the PuTTY project.

**Bitvise SSH Client**

Bitvise SSH Client is an SSH and SFTP client for Windows. It is developed and supported professionally by Bitvise. The SSH Client is robust, easy to install, easy to use, and supports all features supported by PuTTY, as well as the following:

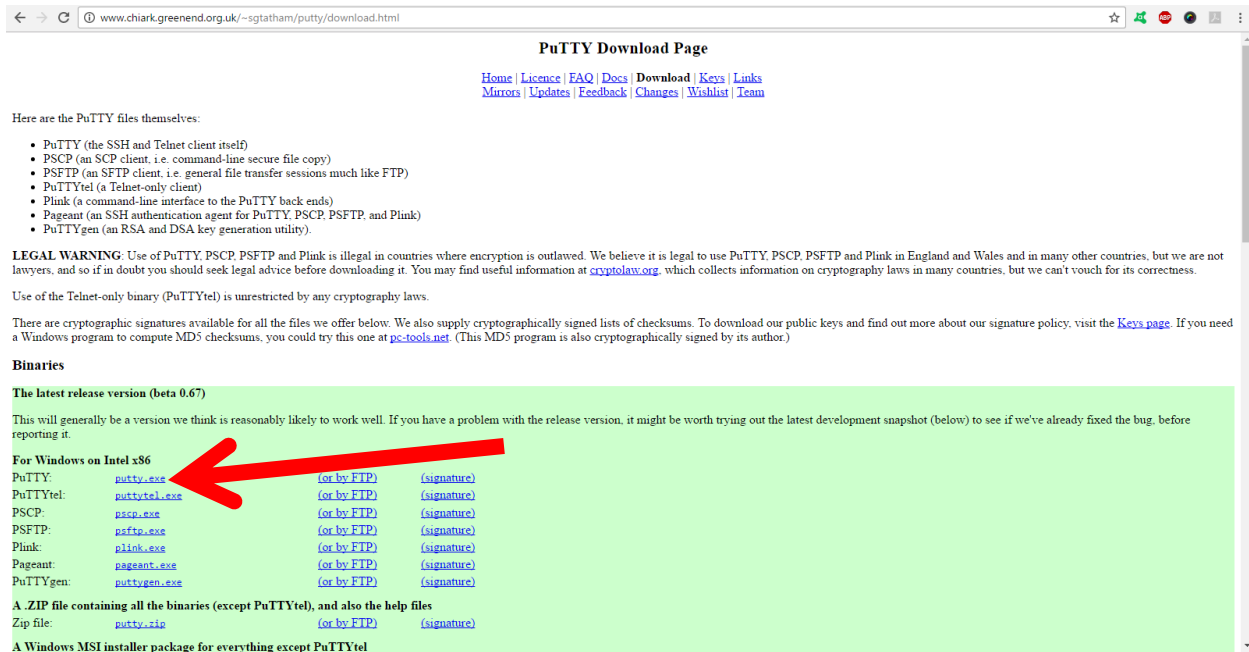
- graphical SFTP file transfer;
- single-click Remote Desktop tunneling;
- auto-reconnecting capability;
- dynamic port forwarding through an integrated proxy;
- an FTP-to-SFTP protocol bridge.

Bitvise SSH Client is **free to use**. You can [download it here](#).

**Bitvise SSH Server**

Bitvise SSH Server is an SSH, SFTP and SCP server for Windows. It is robust, easy to install, easy to use, and works well with a variety of SSH clients, including Bitvise SSH Client, OpenSSH, and PuTTY. The SSH Server is developed and supported professionally by Bitvise.

You can [download Bitvise SSH Server here](#).



The screenshot shows the "PuTTY Download Page" on the website [www.chiark.greenend.org.uk/~sgtatham/putty/download.html](http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html). At the top, there's a navigation bar with links: Home | Licence | FAQ | Docs | Download | Keys | Links | Mirrors | Updates | Feedback | Changes | Wishlist | Team. Below the navigation bar, the text reads: "Here are the PuTTY files themselves:" followed by a list of files: PuTTY (the SSH and Telnet client itself), PSCP (an SCP client, i.e. command-line secure file copy), PSFTP (an SFTP client, i.e. general file transfer sessions much like FTP), PuTTYtel (a Telnet-only client), Plink (a command-line interface to the PuTTY back ends), Pageant (an SSH authentication agent for PuTTY, PSCP, PSFTP, and Plink), and PuTTYgen (an RSA and DSA key generation utility). Below the list, there's a "LEGAL WARNING" section: "Use of PuTTY, PSCP, PSFTP and Plink is illegal in countries where encryption is outlawed. We believe it is legal to use PuTTY, PSCP, PSFTP and Plink in England and Wales and in many other countries, but we are not lawyers, and so if in doubt you should seek legal advice before downloading it. You may find useful information at [cryptolaw.org](http://cryptolaw.org), which collects information on cryptography laws in many countries, but we can't vouch for its correctness. Use of the Telnet-only binary (PuTTYtel) is unrestricted by any cryptography laws. There are cryptographic signatures available for all the files we offer below. We also supply cryptographically signed lists of checksums. To download our public keys and find out more about our signature policy, visit the [Keys page](#). If you need a Windows program to compute MD5 checksums, you could try this one at [pc-tools.net](http://pc-tools.net). (This MD5 program is also cryptographically signed by its author.)"

**Binaries**

**The latest release version (beta 0.67)**

This will generally be a version we think is reasonably likely to work well. If you have a problem with the release version, it might be worth trying out the latest development snapshot (below) to see if we've already fixed the bug, before reporting it.

**For Windows on Intel x86**

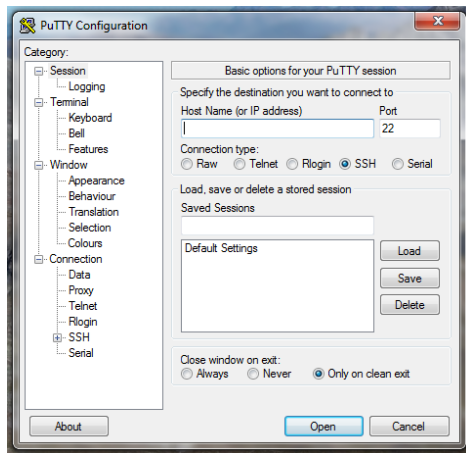
PuTTY:	<a href="#">putty.exe</a>	(or by FTP)	(signature)
PuTTYtel:	<a href="#">puttytel.exe</a>	(or by FTP)	(signature)
PSCP:	<a href="#">pscp.exe</a>	(or by FTP)	(signature)
PSFTP:	<a href="#">psftp.exe</a>	(or by FTP)	(signature)
Plink:	<a href="#">plink.exe</a>	(or by FTP)	(signature)
Pageant:	<a href="#">pageant.exe</a>	(or by FTP)	(signature)
PuTTYgen:	<a href="#">puttygen.exe</a>	(or by FTP)	(signature)

**A .ZIP file containing all the binaries (except PuTTYtel), and also the help files**

Zip file:	<a href="#">putty.zip</a>	(or by FTP)	(signature)
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**A Windows MSI installer package for everything except PuTTYtel**

Run the putty executable that you just downloaded.



Type “**imagine.mines.edu**” into the Host Name box and click **Open**

Login with your mines multipass username and password.

Then you can use ssh to get a remote shell on a lab computer.

For the lab we hold lecture in (Green Center 297), the lab computers are named **gc297-xx.mines.edu**

For the Alamo Lab (Brown Building 136), the lab computers are named **bb136-xx.mines.edu**

where the xx is computer number of the physical machine you want to connect to. The digits you use for the xx aren't super important - **just pick one that is somewhere on the range of 01 to 20 or so**. If it's not working, pick a new number and try again (the machine you are trying to connect to may be physically turned off).

For example, if you are currently running a shell on either imagine.mines.edu or from a machine connected to the Campus network, and you need to get a shell on the Lecture Lab Machines, then you can run this command:

**ssh gc297-12.mines.edu**