
SECURE FTP AND TELNET FOR MAC OS X

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Introduction

Encrypted connections are required to use network services at Iowa State, including FTP and Telnet. To connect, you will need to use encrypted versions of FTP and Telnet. Iowa State has a site license for Fetch, which will do encrypted FTP and works with OS X 10.1 or later. Macintosh OS X comes with an encrypted Telnet client, which requires OS X 10.2 or later.

1 Installing and Configuring Kerberos

You will need to install and configure Kerberos before you can use the secure FTP or Telnet clients.

1. Download the Kerberos Extras for Mac OS X from:
<http://web.mit.edu/macdev/KfM/Common/Documentation/osx-kerberos-extras.html>
2. If you do not see the Mac OS X Kerberos Extras disk image on your desktop, open the downloaded `Mac_OS_X_Kerberos_Extras.dmg` file.
3. Open the Mac OS X Kerberos Extras disk image and then the Mac OS X Kerberos Extras file. Follow the installer steps. When the installation is complete, select "Quit" in the installer program.
4. Download the Iowa State Kerberos Configuration file from:
<http://tech.ait.iastate.edu/macosex/downloads/KerberosConfig.dmg>
5. If you do not see the Kerberos Config folder on your desktop, open the downloaded `KerberosConfig.dmg` file.
6. Open the Kerberos Config folder and then the `KerberosConfig.pkg` file and follow the installer steps.

2 Using Kerberos

To log into Kerberos, first open your hard drive and select "Applications" and then "Utilities". Run the Kerberos program. Click "Get Tickets".

To log out of Kerberos, click "Destroy Tickets".

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To contact the Editor, send email to itseditor@iastate.edu.

3 Using Secure Telnet

Once you have Kerberos installed, you can use the Telnet client built into OS X to make an encrypted connection.

1. If you have not done so already, log into Kerberos.
2. Open your hard drive. Select “Applications”, then “Utilities”, and run Terminal.
3. Type the command `telnet -fax1 netid machine.name` where *netid* is your Iowa State Net-ID and *machine.name* is the name of the remote machine. If you are trying to connect to the “isua” machines, you will have to enter the exact machine name for Telnet to work (e.g., `isua1.iastate.edu`, `isua2.iastate.edu` ... `isua5.iastate.edu`).

This Telnet command will log you into the remote machine automatically using encryption to secure the communications.

4 Using Secure FTP

Once you have Kerberos installed, you can use an encrypted FTP client to connect to a networked computer. Iowa State has a site license for Fetch, which is a graphical FTP client capable of encrypted connections.

To install Fetch, follow these steps:

1. Go to <http://www.ait.iastate.edu/downloads>. Scroll down to and select “Download MacOSX Software”. Select Fetch for download. You will need to log in with your Iowa State Net-ID and password. If the Fetch disk image is not automatically mounted, open the .dmg file.
2. Open the Fetch disk image. Drag the Fetch folder to your Applications folder.

To use Fetch, follow these steps:

1. If you have not done so already, log into Kerberos.
2. Open the Fetch folder in the Applications folder, and run the Fetch program.
3. Enter the following information:

```
Host: machine.name
User ID: Net-ID
Security: GSS
Encrypt Session: checked
```

where *machine.name* is the remote machine name and *Net-ID* is your Iowa State Net-ID. If you are trying to connect to the “isua” machines, you will have to enter the exact machine name for Kerberos to work properly (e.g., `isua1.iastate.edu`, `isua2.iastate.edu` ... `isua5.iastate.edu`).

Secure FTP and Telnet for Mac OS X was written by Thomas Kula.

For more assistance, contact the Solution Center by phone at 515.294.4000, on the web at <http://www.it.iastate.edu/help/>, by email at solution@iastate.edu, or in person at 195 Durham Center.
