

tn3270 X Release Notes
Version 3.4.0
November 9, 2013

System Requirements

tn3270 X version 3.4.0 is supported for these versions of OS X:

- OS X 10.3.9 “Panther”
- OS X 10.4.11 “Tiger”
- OS X 10.5.8 “Leopard”
- OS X 10.6.8 “Snow Leopard”
- OS X 10.7.5 “Lion”
- OS X 10.8.5 “Mountain Lion”
- OS X 10.9 “Mavericks”

Version 3.4.0 is a 32-bit universal binary which runs natively on both PowerPC and Intel Macs.

Previous versions of tn3270 must be used for older version of the MacOS:

Previous versions of OS X: use tn3270 X version 3.1.7

Classic Mac OS: use the final Classic version of tn3270, 2.5b5

Installation

tn3270 X is a self-contained application, and is distributed using a disk image (.dmg) file. To install tn3270 X, mount the disk image, and drag tn3270 X to a convenient location. Alternatively, you can drag the entire disk image, while holding down the Option key, to create a folder with the set of distribution files. To install the optional Bitstream Vera fonts, follow the installation directions in the Bitstream Vera folder.

When installing a new version of tn3270 X, be sure to remove any older versions you may have. When older versions are present, the

Finder may launch one of them instead of the latest version. If you want to save older versions on your hard drive, keep them in a form which is not executable. For example, save the .dmg files the older versions were distributed on, use Disk Utility to create your own .dmg files, or compress the older executables.

Major New Features in Version 3.4

- Support for OS X 10.9 Mavericks
- Experimental support for the tn3270e protocol
- Experimental support for SSL client certificates

Major New Features in Version 3.3

- Universal binary version
- New (fixed) beep sound code
- New icons

Major New Features in Version 3.2

- Support for Kerberos 4 and Kerberos 5 authentication and encryption
- Support for negotiated SSL using the Telnet Start TLS option

Major New Features in Version 3.1

- SSL support (enabled under "Special" in the "New Session" dialog)
- Support for the standard "Get URL" Apple Event
This allows tn3270 X to be used as a helper application for "tn3270:///" and "telnet:///" URLs.

- Support for additional fonts and sizes besides the built-in ones

Notes for Release 3.4

Version 3.4 is completely compatible with version 3.3. It corrects a bug that prevented the *FKeys* menu from working under OS X 10.9 Mavericks. It also includes experimental support for connecting to hosts that require the tn3270e protocol, and for connecting to hosts that require client SSL certificates.

The experimental support is not available in tn3270 settings dialogs. To enable use of the tn3270e protocol, add the line

```
use_tn3270e=1
```

to a tn3270 settings file. To enable client certificates, add the line

```
use_client_cert=1
```

to a settings file, and also add

```
client_cert_name="cert_name"
```

where “cert_name” is the common name of a certificate located in the default keychain. Then use the modified settings file to open a session.

Notes for Release 3.3

Version 3.3 is completely compatible with version 3.2. No changes in usage or settings files should be needed. However, the 3270 beep sound is no longer built-in to tn3270 X. Instead it is provided as a separated sound file, PC 3270 Beep.aiff. When the AIFF file is installed, it is available for tn3270 X, and for any other uses of beep sounds. The AIFF file can be installed in */home/Library/Sounds* for a specific user, or in */Library/Sounds* for all users.

Notes for Release 3.2

Version 3.2 adds new options for using Kerberos and for negotiated SSL. The new options are selected under the *Special* settings for

New Session... from the *File* menu. Selecting *Kerberos* (using the radio button) automatically enables Kerberos authentication and encryption. However, encryption can be disabled by deselecting the *Kerberos encryption* check box. When Kerberos encryption is enabled, tn3270 will warn you if a new session is not encrypted. The warning dialog box requires selecting whether to continue or close the session.

When SSL is selected, the new *Negotiate SSL* checkbox can be used to enable negotiating use of SSL when a new session is being established. *Negotiate SSL* should not be enabled unless your host requires it. Most hosts which use SSL support it without negotiation, and enabling negotiation will prevent a connection.

Notice Concerning Kerberos 4 Support in Release 3.2

Version 3.2 of tn3270 X provides support for both Kerberos 4 and Kerberos 5. The Kerberos 4 support is intended only as an aid to sites which are transitioning from Kerberos 4 to Kerberos 5, or otherwise plan to discontinue use of Kerberos 4. MIT has announced end-of-life status for Kerberos 4, and the security of Kerberos 4 is considered inadequate by current standards. For more information, see the MIT announcement at <http://web.mit.edu/kerberos/krb4-end-of-life.html>. Whenever possible, hosts should be configured to use Kerberos 5 or a secure alternative to Kerberos instead of Kerberos 4.

When Kerberos authentication is selected, tn3270 X will attempt to use Kerberos 5, then revert to Kerberos 4 if the host does not support Kerberos 5. To determine which version of Kerberos is in use, after a session is established, select *Connection Status* under the *Network* menu. The Security information shown will include the version of Kerberos which is in use.

Due to the end-of-life status of Kerberos 4, it is expected that Apple will discontinue support for Kerberos 4 in a future version of OS X. tn3270 X depends on the Kerberos 4 support in OS X, and will not be

able to support Kerberos 4 when that support is not present.

Notes for Release 3.1

Recent previous releases of tn3270 X have included two versions of the program: the regular version and a "larger fonts" version. Starting with version 3.1, the regular version of tn3270 X supports all the font sizes, so that a separate larger fonts version is no longer needed. Previous settings files will not cause larger fonts to be used, and will have to be re-saved after selecting the desired fonts. Fonts are specified as part of the "Screen Format" settings, found in the "New Session" dialog and under the "Session" menu. Due to the new font and SSL support, settings files saved by tn3270 X version 3.1 and later will not work with previous versions of tn3270 X.

Version 3.1.7 includes support for an additional font, Bitstream Vera Sans Mono. If the font is installed, it will automatically be included in the font list for the Screen Format settings. The font can be installed by copying it from the Bitstream Vera folder on the tn3270 X distribution disk. Copy the .dfont files into Library/Fonts on the boot volume to make them available for all users of the computer, or copy them into Library/Fonts in a user's home folder to provide them to that user. Tn3270 only uses Bitstream Vera Sans Mono, although the other font styles in the family are included as well.

Detailed Change List

Change after version 3.2.4 are described above.

Changes for 3.2.0 through 3.2.4:

- Added support for Kerberos encryption
- Added support for Kerberos 4 and 5 authentication
- Added support for the Telnet Start TLS option
- Removed "glue" code for 10.1.5 compatibility (since Kerberos requires 10.2.8 in any case.)

Changes for 3.1.7:

- Fixed a bug which caused tn3270 X to crash if a pending SSL connection is closed.
- Fixed a bug which caused tn3270 X to crash when opening an SSL connection on an Intel Mac (under Rosetta.)
- Added Courier 34 as a large font which is useful for vision problems. It allows a 24-by-80 window to fill a 20" display.
- Added support for the Bitstream Vera Sans Mono font, and included the font on the tn3270 disk image.

Changes for 3.1.6:

- Fixed a Tiger compatibility bug where ending a session by closing its window would cause tn3270 to crash.
- The FKeys menu code was re-written to be theme-compliant.
- The About box now includes a button for opening the tn3270 web page using the default browser.
- The KeyMap program, used for keyboard customization, was updated to version 3.1.3 to fix a minor bug with enabling menus.

Changes for 3.1.4 and 3.1.5:

- Fixed a bug which could cause tn3270 X to crash when an SSL connection is closed.

Changes for 3.1.3

- Fixed a bug which caused SSL connections to fail sometimes under Panther

Changes for 3.1.2

- Restored Cursor Select and the original positions of FKeys Menu items. The net result is that Reset replaces Delete Char in the Fkeys menu and in the double-click settings.
- Improved handling of network events

Changes for 3.1.1

- Added the ability to specify the SSL/TLS protocol level
- A wider range of custom row and column settings is allowed
- Added theme-compliant backgrounds for dialog boxes
- Adjusted the active area of popup menu controls

Changes for 3.1

- Added support for a variety of fonts and font sizes, including new "Screen Format" dialogs
- Fixed various printing bugs
- Added support for the "Get URL" Apple Event
- Replaced "Cursor Select" with "Reset" in the FKeys menu and double-click settings
- Allowed KeyMap to support copies of tn3270 X which have been renamed
- Changed the sound code to play asynchronously in the background (as well as the foreground)
- Improved telnet option negotiation debugging

Changes for 3.0b12

- Eliminated dynamic load errors under OS X 10.1.5
- Adding checking for presence of SSLSetAnyRoot for OS X 10.1.5
- Implemented terminal type and port number in "Special" dialog
- Added SSL error text
- Added 5 min. 10 sec. connection timeout, mainly for SSL handshaking failures
- Fixed a bug with a local copy following an import copy

Changes for 3.0b11

- Various SSL bug fixes

Changes for 3.0b10:

- Initial SSL support, including new "Special" dialog

Changed for 3.0b9:

- Fixed a bug which caused tn3270 X to crash when the host reset a connection
- Fixed a bug in handling network write errors

Changes for 3.0b8:

- Fixed a bug in the network code where termination was not being handled correctly

Changes for 3.0b7:

- Fixed a bug in the network code which could cause tn3270 X to hang

Changes for 3.0b6:

- Fixed a bug with paste when the clipboard contained no text at tn3270 X startup
- Changed the window activation fix to work with multiple sessions
- The New Session dialog now supports paste into the main dialog

Changes for 3.0b5:

- Fixed a bug with font activation for the .dfont file

Changes for 3.0b4:

- Fixed a bug where tn3270X would change the cursor as if a tn3270 X window were present on the screen when the window was collapsed into the dock
- Fixed a Jaguar problem where window activation would move the tn3270 X cursor
- All resources are now stored in data files in the Resources directory of the tn3270 X package folder
- Restored the original tn3270 icons (new OS X icons are still planned)

Known Problems

This version of tn3270 X does not support the following features found in the Classic version:

- printing in color, and printing using the screen fonts
- 3270 graphics
- built-in FTP server

None of these are currently planned for the OS X version.

Bug Reporting

Please report any bugs you discover. Bugs may be reported by contacting the author directly at peter@pdicamillo.org, or may be

reported on the tn3270 mailing list.

New Versions

New versions of tn3270 X will be announced on the tn3270 mailing list, and also made available on the tn3270 home page. To check for a new version, use the *Open Web Page* button under *About tn3270* to access the home page.

Resources

tn3270 mailing list: <http://listserv.brown.edu/archives/macintosh-tn3270.html>

tn3270 home page: <http://www.mac-tn3270.org/>

Peter DiCamillo
peter@pdicamillo.org

Release notes last updated: November 9, 2013