

IPNetTunerX Release Notes  
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April 17, 2008 - IPNetTunerX 1.6.9

- Fixed bug in checking code signature of admin only tools when run from non admin account.
- Cleanup system.log messages when run from non admin account.

Mar 31, 2008 - IPNetTunerX 1.6.8

- Fix bug in opening Location Helper items.
- Apply any matching Location Helper items upon wake from sleep to restore AirPort MTU.

Mar 20, 2008 - IPNetTunerX 1.6.7

- Added "speed test" button to compare tuning results.
- Updated some tuner presets for Leopard.
- Allow launching as a Mac OS X startup item by dragging /L/AS/IPNetTunerX/HelperTools/IPNetTunerX\_startup to startup items folder (see Location Helper for details).
- Cleanup WindowM classes with MenuDispatch.
- Confirm identity of signed IPNetTunerX app.
- Demo Startup Dialog: center on screen.
- Register: remember window position.
- Check For Update: remember window position.

Dec 12, 2007 - IPNetTunerX 1.6.6

- Removed default setting for kern.maxvnodes since Mac OS X 10.5 adjusts this itself.
- Select last applied tuner preset when a tuner document is opened.
- Relocate "Tuner Documents" folder to "/Library/Application Support/IPNetTunerX".
- Save new documents to "Tuner Documents" folder by default.
- Load tuner presets menu from "Tuner Documents" folder.
- Update tuner presets menu to include any newly saved documents.
- Link Rate: improve RTT calculation by ignoring second response of each pair.
- Help: search only the localized help book for the page requested.
- Use standard help button from latest Interface Builder.
- Display and load presets from both ~AppSupport and AppSupport to allow user specific settings.
- Change "Load Defaults" to "Apply Defaults" for consistency.
- Removed support for launching as a Mac OS X startup item pending further work on Leopard.
- Relocate helper tools to "/Library/Application Support/IPNetTunerX/HelperTools".

- Move other modifiable resources out of Application bundle.
- Sign each helper tool using Leopard Code Signing.
- Sign IPNetTunerX app.

Nov 27, 2007 - IPNetTunerX 1.6.5

- Build with Xcode 3.0 under Leopard.
- Catch NSInternalConsistencyError when threads terminate normally.
- Check for interrupted system call on read().
- Update to use Leopard default settings when running on Leopard.
- Link Rate: reduce probe size for improved compatibility.
- Link Rate: fixed bug in One Second Window Size calculation.
- Set default directory to "/Library/Application Support/Sustainable Softworks/Tuner Documents" when saving a new document for use with the Location Helper tool.

Jun 27, 2007 - IPNetTunerX 1.6.4

- Added buttons to "Save as login item" and "Remove login item" to simplify the most common configuration.
- Added [net.link.ether.inet.proxyall](#)
- Open help files in Apple Help Viewer by default, or the users default web browser if the Option key is down when help is selected.

May 18, 2007 - IPNetTunerX 1.6.3

- Fixed Link Rate bug in recognizing target address.

May 8, 2007 - IPNetTunerX 1.6.2

- Fixed possible authorization conflict when launching as a login item.

May 1, 2007 - IPNetTunerX 1.6.1

- Don't report "File could not be opened" when we're just delaying to see if any interfaces become available.
- Incorporate latest code fixes from IPNetRouterX.

Mar 14, 2007 - IPNetTunerX 1.6.02

- Fixed possible exception if PPP interface with no user name encountered.

November 19, 2006 - IPNetTunerX 1.6.01

- Fixed loss of ICMP responses from thread layering conflict uncovered by terminating threads explicitly.

Nov 15, 2006 - IPNetTunerX 1.6

- Release as version 1.6
- Fixed to work on Leopard Preview (Mac OS X 10.5).
- Terminate threads explicitly to avoid possible APE conflict.
- Wait up to 10 seconds for network interface to become available to accommodate other startup items.

Oct 19, 2006 - IPNetTunerX 1.6c4

- Add description of Motorola SURFboard preset.
- Log settings file read and settings applied to system console.

Oct 12, 2006 - IPNetTunerX 1.6c3

- Added Selective ACK (SACK) parameters for Mac OS X 10.4.8.
- Fixed bug in opening Help files.

Aug 15, 2006 - IPNetTunerX 1.6c2

- Add "Motorola SURFboard" preset that sets net.inet.tcp.delayed\_ack=0 for use with DOCSIS capable modems.
- Verify all helper tools build as Universal Binaries.
- Open help files in default web browser more consistently.
- Remove last vestiges of MoreSCF.

Mar 8, 2006 - IPNetTunerX 1.6c1

- Add support for running as a Mac OS X startup item using settings specified in Location Helper tool.
- Restore default for any settings not specified when tuner document is opened.

Feb 14, 2006 - IPNetTunerX 1.5

- Release as version 1.5
- Universal Binary supporting Mac on Intel

Jan 9, 2006 - IPNetTunerX 1.5c1

- Support Mac on Intel (Universal Binary).

Dec 27, 2005 - IPNetTunerX 1.4

- Fix build setting that caused "Configure Interface" helper to crash.
- Build with Xcode 2.2 in preparation for Universal Binary.
- Release as version 1.4

Dec 19, 2005 - IPNetTunerX 1.4c1

- Add support for tuning SmallTree Gigabit Ethernet cards using "stegutil". Supports Small Tree's Intel line including Multi-port Gigabit Copper, 10 Gigabit Copper, and 10 Gigabit Optical Ethernet Cards <<http://www.small-tree.com/products.htm>>.
- Add tuner preset corresponding to "Apple FiOS Broadband Tuner" with the following settings:

```
kern.ipc.maxsockbuf=512000
net.inet.tcp.recvspace=358400
net.inet.tcp.sendspace=131072
net.inet.udp.recvspace=73728
net.inet.tcp.delayed_ack=0
```

Notice net.inet.udp.recvspace=73728 and net.inet.tcp.delayed\_ack=0 are suggested improvements to Apple's original configuration. For more information visit

<<http://www.macworld.com/news/2005/12/16/brdbndtuner/index.php>>.

- Add text describing the intent of each tuner preset.

Oct 3, 2005 - IPNetTunerX 1.3.2

- Add preset for "Bluetooth GPRS EDGE" connection that adjusts net.inet.tcp.slowlink\_wsize and others for high speed broadband.
- Added support for more OS X tuneable parameters:

```
net.inet.raw.maxdgram
net.inet.raw.recvspace
net.inet.tcp.do_tcpdrain
net.inet.tcp.icmp_may_rst
net.inet.tcp.isn_reseed_interval
net.inet.tcp.local_slowstart_flightsize
net.inet.tcp.minmss
net.inet.tcp.minmssoverload
net.inet.tcp.msl
net.inet.tcp.new_reno
net.inet.tcp.pcbcount
net.inet.tcp.slowlink_wsize
net.inet.tcp.slowstart_flightsize
net.inet.tcp.sockthreshold
net.inet.tcp.strict_rfc1948
net.inet.tcp.tcbhashsize
net.inet.tcp.tcp_lq_overflow
net.inet.udp.pcbcount
```

Aug 31, 2005 - IPNetTunerX 1.3.1

- Clarify use of presets under Basic tab.
- Clarify use of Location Helper tool to restore PPP settings each time PPP connects.
- Fix possible crash if socket allocation fails.
- Fix possible error in reading presets and confirm result.

Aug 4, 2005 - IPNetTunerX 1.3

- Added "Basic" and "Advanced" tabs to present simpler view to non-technical users.
- Added stepper control to step through parameter settings along with up/down arrow keys.
- Added "Step to next non default setting" checkbox to make it easy to see what settings are active.
- Update default settings for Tiger including Interface MTU.
- Release as version 1.3

May 25, 2005 - IPNetTunerX 1.3c2

- Add "Check for Updates..." item under application menu.
- Add support for BSD interfaces not specified in the System Configuration Framework.
- Fix possible crash in Location Helper tool.
- Merge AirPort Signal enhancements from IPNetMonitorX.
- Open items in the Location Helper table if launched without a settings document.
- Build with Mac OS X Tiger tools.

February 2, 2005 - IPNetTunerX 1.3c1

- Added a "Location Helper" tool that allows you to specify files or documents you want opened when your network location in the Network Preferences panel changes. You can use the Location Helper to: Quickly select between pre-configured IPNetTunerX settings files; Specify different IPNetTunerX settings based on how you are connecting to the Internet; Apply Tuner settings each time PPP connects; or Run scripts to configure other applications when the network location changes.
- Link Rate: improved visual layout.
- Merge newer code from IPNetMonitorX.

July 30, 2004, IPNetTunerX 1.2

- Update help information
- Release as version 1.2

July 20, 2004, IPNetTunerX 1.2c1

- AirPort Signal: update to show noise level with AirPort Extreme.
- AirPort Signal: interpret "signal" and "noise" reported by AirPort API as logarithmic and update help text.
- Improved error reporting in AirPort Signal tool.
- Improved access to System Configuration Framework.
- Add Help button to "First Run" dialog and more complete error reporting when authorization is cancelled.
- Read registration data from clipboard so there's no need to paste.
- History: load default targets for each tool.
- Link Rate: remember any text in target field as part of history.
- Link Rate: added history drawer to keep a text log of recent results.
- Link Rate: record test failures in the log.
- Link Rate: automatically save log in /Library/Logs/IPNetTunerX/link rate log %Y-%m-%d.txt
- Reformat help text to match website.
- Convert to native build target.
- This version requires Mac OS X 10.2.8 or later.

Mar 14, 2004, IPNetTunerX 1.1.8

- Added AirPort Signal tool.

- Remember which windows were open between launches.

Feb 10, 2004, IPNetTunerX 1.1.7

- Allow application to run with functions disabled after trial has expired.
- Update networking and client/server code from IPNetMonitorX.

Feb 6, 2004, IPNetTunerX 1.1.6

- Add parameters for kern.maxfiles and kern.maxvnodes .
- Add help button in tuner window, open help in default web browser.

Dec 23, 2003, IPNetTunerX 1.1.5

- Fix timing synchronization bug between NSDate and UNIX gettimeofday() under 10.3.2 .

April 25, 2003, IPNetTunerX 1.1.4x

- Backout MoreSCF.

April 23, 2003, IPNetTunerX 1.1.4

- Fixed initialization bug for sysctl buffer.
- Use MoreSCF to enumerate available interfaces.

April 10, 2003, IPNetTunerX 1.1.3

- Added second popup to group parameter settings.
- Include more parameters.
- Write out non-default settings only when saving documents.
- Include settings document for "satellite" connections with long latency.
- Fixed error message for unknown parameters.
- Updated register online URL.

January 16, 2003, IPNetTunerX 1.1.2

- Link Rate: redesigned link rate calculation to be more consistent (see help for details).
- Show alert if authentication fails explaining installation requirements.
- Ignore invalid System Configuration objects.

November 8, 2002 IPNetTunerX 1.1.1

- Allow Up/Down arrow keys to navigate parameter list.
- Save registration data in file named "IPNetTunerKey".
- More ipfw parameters (net.inet.ip.fw.dyn\_count,dyn\_max,enable).

September 26, 2002 IPNetTunerX 1.1

- Release as version 1.1
- Add parameters for IP firewall logging (net.inet.ip.fw.verbose, net.inet.ip.fw.verbose\_limit)

August 27, 2002 IPNetTunerX 1.1c1

- Build with Mac OS X 10.2 (Jaguar) Tools.
- Use mib names to identify parameters instead of internal constant names.
- Added support for several sysctlbyname parameters including path\_mtu\_discovery.
- Implement version specific parameter defaults and descriptions where different between 10.2 and previous versions.
- Add "Unauthorize Tools..." to application menu to allow copying application bundle under Jaguar.
- Link Rate: redesigned link rate calculation to be more consistent and added "asymetric" button.

July 3, 2002 IPNetTunerX 1.0.2

- Add support for TCPCTL\_DELACK (net.inet.tcp.delayed\_ack).

July 2, 2002 IPNetTunerX 1.0.1

- Do not show "ioctl failure" when loading defaults and parameter is not available.
- Default to linear plot scale.
- TCP Rate: supply http:// as default URL scheme if needed.
- Display existing registration data from any location in Register dialog.

June 17, 2002 IPNetTunerX 1.0

- Released as 1.0

June 5, 2002 IPNetTunerX 1.0c1

- Fixed bug in validating registration keys.
- Add support for KIPC\_MAXSOCKBUFF.
- Use MTU 512 for download+browse settings document
- Remove June 7th expiration to allow full 21-day trial.

May 28, 2002 IPNetTunerX 1.0b1

First publicly posted beta test version of IPNetTunerX.  
Developed in Cocoa using native BSD networking.

Notes:

The BSD stack used in Mac OS X is not as tuneable as Open Transport.  
Selective ACK per RFC 2018 is not supported in Mac OS X 10.1.4

[End of Release Notes]