

Bitcoin version 0.7.0 is now available for download at: <http://sourceforge.net/projects/bitcoin/files/Bitcoin/bitcoin-0.7.0/>

We recommend that everybody running prior versions of bitcoind/Bitcoin-Qt upgrade to this release, except for users running Mac OSX 10.5.

Please report bugs using the issue tracker at github: <https://github.com/bitcoin/bitcoin/issues>

Project source code is hosted at github; you can get source-only tarballs/zipballs directly from there:

<https://github.com/bitcoin/bitcoin/tarball/v0.7.0> # .tar.gz <https://github.com/bitcoin/bitcoin/zipball/v0.7.0> # .zip

Ubuntu Linux users can use the "Personal Package Archive" (PPA) maintained by Matt Corallo to automatically keep bitcoin up-to-date. Just type `sudo apt-add-repository ppa:bitcoin/bitcoin` `sudo apt-get update` in your terminal, then install the bitcoin-qt package: `sudo apt-get install bitcoin-qt`

How to Upgrade

If you are running an older version, shut it down. Wait until it has completely shut down (which might take a few minutes for older versions), then run the installer (on Windows) or just copy over Code: /Applications/Bitcoin-Qt (on Mac) or Code: bitcoind/bitcoin-qt (on Linux).

If you were running on Linux with a version that might have been compiled with a different version of Berkeley DB (for example, if you were using the PPA and are switching to the binary release), then run the old version again with the `-detachdb` argument and shut it down; if you do not, then the new version will not be able to read the database files and will exit with an error.

Incompatible Changes

- Replaced the 'getmemorypool' RPC command with 'getblocktemplate/submitblock' and 'getrawmempool' commands.
- Remove deprecated RPC 'getblocknumber'

Bitcoin Improvement Proposals implemented

BIP 22 - 'getblocktemplate', 'submitblock' RPCs BIP 34 - block version 2, height in coinbase BIP 35 - 'mempool' message, extended 'getdata' message behavior

Core bitcoin handling and blockchain database

- Reduced CPU usage, by eliminating some redundant hash calculations
- Cache signature verifications, to eliminate redundant signature checks
- Transactions with zero-value outputs are considered non-standard
- Mining: when creating new blocks, sort 'paid' area by fee-per-kb
- Database: better validation of on-disk stored data
- Database: minor optimizations and reliability improvements
- `-loadblock=FILE` will import an external block file
- Additional DoS (denial-of-service) prevention measures
- New blockchain checkpoint at block 193,000

JSON-RPC API

- Internal HTTP server is now thread-per-connection, rather than a single-threaded queue that would stall on network I/O.
- Internal HTTP server supports HTTP/1.1, pipelined requests and connection keep-alive.
- Support JSON-RPC 2.0 batches, to encapsulate multiple JSON-RPC requests within a single HTTP request.
- IPv6 support

- Added raw transaction API. See <https://gist.github.com/2839617>
- Added 'getrawmempool', to list contents of TX memory pool
- Added 'getpeerinfo', to list data about each connected network peer
- Added 'listaddressgroupings' for better coin control
- Rework getblock call.
- Remove deprecated RPC 'getblocknumber'
- Remove superceded RPC 'getmemorypool' (see BIP 22, above)
- listtransactions output now displays "smart" times for transactions, and 'blocktime' and 'timereceived' fields were added

P2P networking

- IPv6 support
- Tor hidden service support (see doc/Tor.txt)
- Attempts to fix "stuck blockchain download" problems
- Replace BDB database "addr.dat" with internally-managed "peers.dat" file containing peer address data.
- Lower default send buffer from 10MB to 1MB
- proxy: SOCKS5 by default
- Support connecting by hostnames passed to proxy
- Add -seednode connections, and use this instead of DNS seeds when proxied
- Added -externalip and -discover
- Add -onlynet to connect only to a given network (IPv4, IPv6, or Tor)
- Separate listening sockets, -bind=

Qt GUI

- Add UI RPC console / debug window
- Re-Enable URI handling on Windows, add safety checks and tray-notifications
- Harmonize the use of ellipsis ("...") to be used in menus, but not on buttons
- Add 2 labels to the overviewpage that display Wallet and Transaction status (obsolete or current)
- Extend the optionsdialog (e.g. language selection) and re-work it to a tabbed UI
- Merge sign/verify message into a single window with tabbed UI
- Ensure a changed bitcoin unit immediately updates all GUI elements that use units
- Update QR Code dialog
- Improve error reporting at startup
- Fine-grained UI updates for a much smoother UI during block downloads
- Remove autocorrection of 0/i in addresses in UI
- Reorganize tray icon menu into more logical order
- Persistently poll for balance change when number of blocks changed
- Much better translations
- Override progress bar design on platforms with segmented progress bars to assist with readability
- Added 'immature balance' display on the overview page
- (Windows only): enable ASLR and DEP for bitcoin-qt.exe
- (Windows only): add meta-data to bitcoin-qt.exe (e.g. description)

Internal codebase

- Additional unit tests
- Compile warning fixes

Miscellaneous

- Reopen debug.log upon SIGHUP
- Bash programmable completion for bitcoind(1)

- On supported OS's, each thread is given a useful name

Thanks to everybody who contributed to this release:

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