

Current Status of HIPL

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What was wrong?

- Code quality was not what it could have been
 - Research-focused project
 - Too many short-term workers (e.g., master students)
 - Too many ideas for the core team to maintain
 - No commercial focus
 - IETF spec churn

Improvements

- In general: Code quality, clarity, robustness
- Strong focus on main functionality
 - Removed tons of dead and unused code
 - Only main extensions in the development trunk
- Complete rewrite of the build system
 - Parallel builds (make -j x) work now

Achievements

- Developers' lives are now easier
 - New version control system (bzd)
 - Proper code documentation
- Maintenance is less burdensome
 - Strict warning handling
 - Reformatting of the complete codebase
 - Additional formatting checks and rules
 - Automatic builds and error reporting

Portability & Performance

- Better portability (let's hope so)
 - Stricter checking of C standard compliance
 - Better ways of dealing with platform-dependent code
- Currently supported:
 - Ubuntu, Fedora, CentOS, Maemo 5 (N900), OpenWRT wireless routers
- Speed improvements
 - Profiled BEX and identified unnecessary delays (eight-fold speed up)

Future Plans

- Modularization of extensions (Tim Just / René Hummen)
 - HIP specs are „modular“
 - ... so should be the code.
 - Attempt to decouple functionality and to reduce code churn
 - Code easier to read and to maintain

Future Plans (cont'd)

- Separate mobility management
 - Remove from basic HIP code
 - External mobility management triggers HIP update process
- Better support for Android
 - Tighter integration into main HIPL code
 - Plethora of Android-based devices
- Industry-compatible licensing
 - MIT License

Main Contributors

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Code Improvement Rallye (Dec/Jan)

- Everyone mentioned before
- Hanno Wirtz (RWTH, DS)
- Nicolai Viol (RWTH, DS)
- Joakim Koskela (HIIT)
- Andrei Lukuanenko (HIIT)
- Henrik Ziegeldorf (RWTH, DS)
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Future Maintenance

- TKK/Aalto University in Helsinki
 - RWTH Aachen
 - HIIT
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- New release
 - Recent snapshots

hipl.hiit.fi