



Hug Your Users!

Performance Team
NetBeans



The Only IDE You Ever Need!

- Feature rich NetBeans 6.5
- Overwhelmed by functionality
- Majority needs just tiny pieces
 - > Bloated
 - > Slow
 - > Memory hog
- Everyone wants it all
- Failure to deliver on the promise

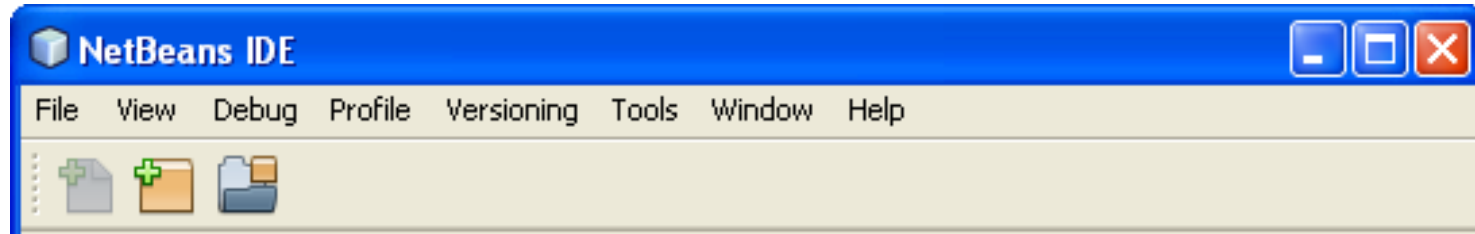
Voices of Customers

- *"IDE is getting big and heavy. Some improvements on performance could be."*
- *"The only drawback I see with NetBeans is the amount of memory being consumed. If I could minimize it i dare to do it."*
- *"I would like to make the base IDE lighter. It takes too much time on my system to load. I would prefer to load the base IDE 1st and then other plugins etc after editor."*
- *"MyEclipse feels snappy... NB feels constipated..."*

Solution: Ergonomics IDE!

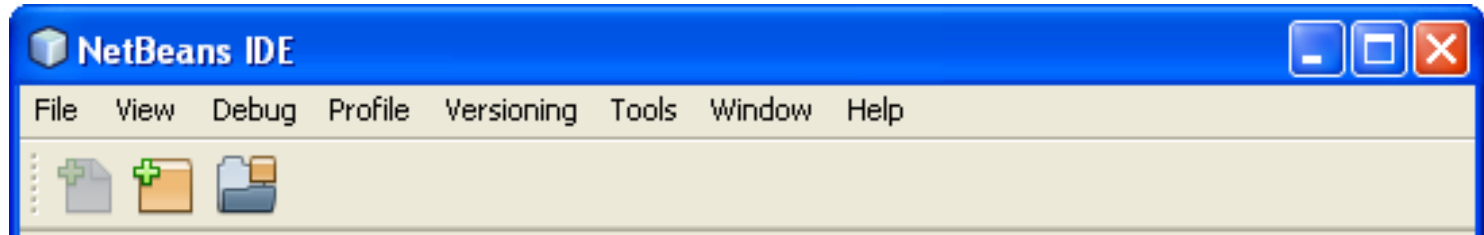
- Embrace our users
 - > starts empty
 - > adjust to their needs
 - > be instantly ready
- Lower memory consumption
- Shorter startup time
- Less bugs reported
- Faster responsiveness
- Less memory leaks

Ergonomics IDE



- xDesigned by HIE
- Reviewed by Tech Council
 - > one TCR
- Tested by QE
 - > Go!

Why it this is Safe?



- Reuse existing features
 - > enable/disable of modules
 - > pack boundaries
 - > tiny runtime add-on
- Build infrastructure
 - > static analysis
 - > dynamic verification

Ergonomics Project Goal

The goal is to decrease by 20% the overall consumption of system resources for users downloading full edition and using only limited functionality.

Ergonomics Project Reality

Without any project	Full IDE	Ergonomics IDE	%
warm	10750ms	6339ms	-42%
cold	21291ms	16605ms	-23%
With J2SE project	Full IDE	Ergonomics IDE	%
warm	11845ms	8660ms	-27%
cold	23164ms	19852ms	-14%
PHP AirAlliance sample	Full IDE	Ergonomics IDE	%
warm	11648ms	7998ms	-32%
cold	22021ms	17622ms	-20%
Ruby Depot sample	Full IDE	Ergonomics IDE	%
warm	11893ms	8142ms	-31%
cold	22778ms	18039ms	-21%
C++ Freeway Simulator sample	Full IDE	Ergonomics IDE	%
warm	11595ms	7798ms	-33%
cold	22122ms	18081ms	-18%

Outstanding Work

- Implemented, integrated, fixed
- Infrastructure enhancements
 - > implemented by performance team
- Bugs rediscovered
 - > already present
 - > just made more important
 - > usually missing listener (gsf, j2eeserver)
- Eliminate “needs restart”
 - > misused (gsf, libraries)

Outstanding Work cont.

- Interaction with surroundings
 - > Installer cooperation (in progress)
 - > Debugger static analysis (planned)
 - > Project static analysis (planned)
 - > Profiler API (nice to have)
 - > Open file support (planned)
- General architecture flaws
 - > extensible project types

Embrace our users!

Q&A



<http://wiki.netbeans.org/FitnessForever>