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www.mdt.net

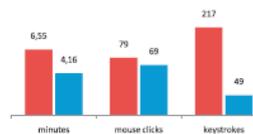
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Benchmark Tests

The comparison was performed using MDT Professional Edition 1.0.0 and Emacs provided with Smallworld CST 4.1.1. Test cases were carried out by four Magik developers with different skill level, trained in both Emacs and MDT.

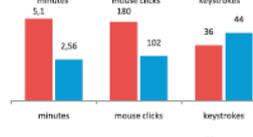
Test 1: File Reviewing
Discovering given artefacts in a large Magik file: variables, definitions, methods declarations, etc.



Test 2: File Comparison
Comparing and finding differences in two slightly different Magik files.



Test 3: Navigating among Files
Opening and navigating among many files edited in the development environment.



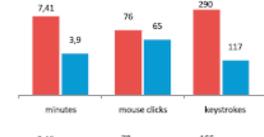
Test 4: Traversing Source Code
Jumping to method definitions of given methods contained in a Magik file.



Test 5: Code Writing
Creating a new file and typing in a Magik class source.



Test 6: Misspelling Correction
Finding, correcting syntax errors contained in a Magik file and formatting the source code.



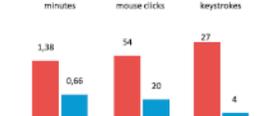
Test 7: Building Products and Modules
Creating folder structure and template files.



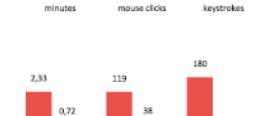
Test 8: Searching in Files
Searching a group of files for a given text.



Test 9: Loading Products and Modules
Loading sources of products and modules to a session.

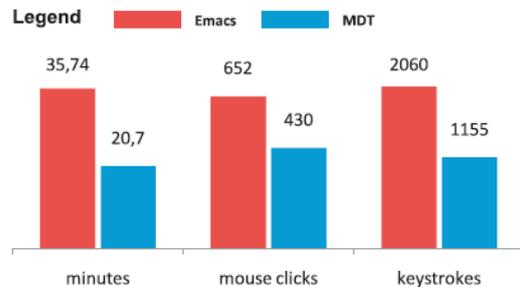


Test 10: Creating Load List
Creating load lists containing given Magic source files.



Summary

The test results show that, in context of productivity and work ergonomics, work with MDT is more efficient than with Emacs. In comparison with Emacs, using MDT reduced development time by 38%. Also the work ergonomics has been improved over 30% thanks to reducing of mouse clicks and keystrokes. The results confirm that MDT significantly accelerates the software development process.



Tests were performed using only mouse clicks or only keystrokes. Given time is a calculated average from those two parallel tests.

Benefits

For the Developers:

- Transparent resources for better project organization
- Easier and faster code development thanks to various helpers
- Full and quick access to code information at micro and macro scale
- Integrated Debugger
- Support for MUnits
- Extendable by dedicated UML Modeler
- Quality Assurance with dedicated MStyle plug-in tool
- Integration with all common Version Control Systems
- Extensibility by various third party plug-ins and high customizability

For the Project Managers:

- One project standard
- Visual presentation of project resources
- Convenient way of tracking code changes through VCSs
- Supports task organization for large teams of developers
- Design, Document, Track, Develop, Build, Analyze, Deploy and Maintain – all steps done in one place

For the Company:

- Up to 30% faster code development
- Up to 40% shorter time-to-customer for Smallworld GIS Solutions
- Up to 40% faster introduction of Smallworld technology to new employees
- Time and cost reduction of performing various tasks (bugfixing, patching, refactoring, developing)
- Improved quality of code
- Ensured technology continuity: Magik becomes easier to learn and easier to teach

Full description of all of the features and functionalities offered by MDT Professional Edition on www.mdt.net or in [MDT White Paper](#).

References

Currently over **35 companies** from all over the world are using MDT. Among them **T-Systems, Videotron, Ubisense** and **GE Energy** with divisions in Ratingen (Germany), Cambridge (UK) and Hyderabad (India). Another reference is an inclusion in **Smallworld CST 4.2** and **4.3** installation package and full support from GE Energy proven during various conferences and presentations.

[Full Customer List](#)

Our goal is to provide a comprehensive and friendly support and always attempt to stay in touch with our customers in pursue of quickly responding to their problems, needs and requests. This results in numerous satisfied users varying in age and experience. All agreeing that they work faster, more comfortably and deliver better quality code since they started working with MDT. Here's what some of them think about it:

"Although I got familiar enough with Emacs since I started working for Smallworld, I have been keeping an eye on MDT and looking for it to bring efficiency and convenience into the Magik software development."

Jun Gang – GE Smallworld

"To me, Emacs programming is something of the last millennium. Its useable but not state of the art and miles away from being user-friendly. So I'm happy something like MDT is available."

Frank Butzek – Ubisense

"When I walk through our offices today, I see MDT more often than Emacs. In my opinion, an everyday work in the field of software development will be easier and better owing to MDT."

Oliver Löken – GIS Consult

"Simply put, Eclipse is a better IDE to teach Magik and app development with support for collaborative team environments. I've downloaded and configured the MDT trial version and I'm very impressed with the smooth operation in Eclipse and integration with Smallworld."

Peter Glenday – University of Waterloo

"Debugger is mandatory! Nowadays, every modern piece of software is developed using modern tools including a debugger."

Jan Kiefer – NIS AG

"Is a must combination during parallel Java code development (i.e. SIAS developers)."

Uli Naedelin – GIT HydroS Consult
