Overture 1.1.0 Release Notes - 04/08/2011

What's New in Overture 1.1.0?

This version brings numerous bug fixes to the previous official release of the Overture/VDM tool suite (1.0.0) and a few new features. This will be the last Overture version built on Eclipse 3.6.1.

System Requirements

Overture is based on the Eclipse platform. To run it, you must have a Java runtime system installed, version 5 or later.

Downloading

Overture can be downloaded from the **SourceForge** site.

Documentation, including download instructions, tutorials and a language manual, is available from the Overture portal site.

Installing

The download file is a ZIP archive. To install the tool, unzip the file in a convenient location. The main executable is in the top level directory, called *overture*.

For Windows users, it is possible to use the Overture installer which can be found in SourceForge.

Upgrading:

- ATTENTION: IF YOU ARE USING THE ZIP ARCHIVE TO UPDATE AND IF YOUR WORKSPACE WAS LOCATED INSIDE THE PREVIOUS INSTALLATION DIRECTORY, DO NOT FORGET TO BACKUP THE WORKSPACE OR IT WILL BE LOST WHEN THE OLD VERSION IS DELETED.
- If you are upgrading with the ZIP archive: do not unzip the latest version on top of the oldest one. You will need to delete the previous version before continuing the installation.
- If you are updating with the installer: the installer will automatically delete the previous version of Overture and preserve your workspace, if it was inside the previous installation directory.

Uninstalling

To uninstall Overture, remove the contents of the directory where you installed it. There are no other files stored on the system (apart from any workspace files you may have created).

For Windows users, **if the Overture installer was used previously**, it is possible to uninstall via the uninstall shortcut created by the installer in the start programs or via the Uninstall menu in the Control Panel.

New and Noteworthy

- It is possible to use literate Word and Open Office documents as source for VDM models, though these are read-only sources. Word (.doc) files can only contain 8-bit charsets (ASCII and ISO-Latin-1 are OK, but not Japanese)
- All time unit referenced in time constructs in VDM-RT (i.e. periodic and duration) are now changed from milliseconds to nanoseconds.
- It is now possible to use standard libraries in VDM-SL specifications without modules (if using VDM10).
- New standard libraries have been added (CSV and VDMUnit).
- The IO library now takes relative paths into account.

Bugs fixed since last release

The number after the bugs is the ID of the bug in Overture bug tracker

- Diverse VDMJ core bugs (3346650, 3340424, 3317745, 3314613, 3294310, 3286528, 3211201, 3207825 & 3202993)
- Saving a file causes all errors to be cleared (3297844)
- Selection of module in launch configuration (3293114)
- Launching specs with errors eventually fails in IDE (3206614)
- Closed projects present in launch list (3197398)
- Launch dialog type checking is wrong (3197397)
- XMI is not created inside the generated folder (3193287)
- PO red cross icon should change (3193289)
- No prompt on console debug (3386179)

Known Issues

The following issues are already known. You can find the full list of <u>Overture bugs</u> at the *SourceForge* site. Please check the bug list before raising new bugs.

- LaTeX coverage files and VDM-RT log files do not correctly handle international character encodings.
- Error/warning locations may not be perfect if the source line is indented with tabs, or mixtures of tabs and spaces. Similarly, LaTeX coverage output does not correctly process tabs.
- If VDM source is embedded in LaTeX, the first line of the file must be a LaTeX document, section or subsection command, or a LaTeX comment.

- When an execution stops at a breakpoint, the Debug dialogue may not open the stack of the current thread, or may focus on the stack of another thread.
- Combinatorial testing does not always refresh the results when tests are evaluated. Click the Refresh button at the top of the view to force a refresh.
- There are several known issues or limitations in the VDMJ engine. See the SourceForge bug list for details.
- The output console showing the result of an evaluation, or an error raised during evaluation, is not always visible when the evaluation completes. Click the "Display Selected Console" button to cycle through the consoles available.
- It sometimes takes a long time to generate the GUI representation of a VDM-RT log file, and the log files themselves can become guite large.
- You may find a Proof Obligation View remains open when you switch out of the Proof Obligations perspective. Just close the view.
- When you run a set of combinatorial tests, the coverage of the specification is not measured. Individual tests' coverage is measured if you "Send to Interpreter".

Troubleshooting

If you encounter a problem with the Overture IDE itself, please contact the Overture project and we will try to help. You can contact us here:

email: info@overturetool.org

• forums: <u>The Overture Help forum on SourceForge</u>

If you encounter a problem with a VDM *specification*, please try to make a small example that illustrates the problem before you contact us. If you are sure the bug is not already known in the SourceForge list, you can create a new bug report.

Frequently Asked Questions

Who produced Overture?

Overture was written by the members of the Overture project, a group of industry and academic researchers interested in the use of VDM.

How is Overture licensed?

Overture is open source. It is released under a GPLv3 license.

What can I do to help?

If you are interested in helping you can drop a mail to info@overturetool.org.

Where is Overture source code?

Overture source code is managed by **SourceForge**.

Other Resources and Links

The following links may be helpful:

- Overture Community site http://www.overturetool.org
- Overture Wiki for developers http://wiki.overturetool.org
- VDM Tutorials http://overturetool.org/?q=Documentation
- VDM Examples http://overturetool.org/?q=node/11
- VDM Portal http://www.vdmportal.org
- VDM Books http://www.vdmbook.com
- Wikipedia on VDM http://en.wikipedia.org/wiki/Vienna_Development_Method