

Escher Technologies Product Announcement

In addition to our long-established product *Perfect Developer*, we are releasing a new tool called *Escher C Verifier*. This new tool (*eCv*) uses much of the same technology as *Perfect Developer*.

In the same way that customers may choose to use *Perfect Developer (PD)* for system and/or software modelling in conjunction with another rigorous approach (e.g. SPARK Ada) for coding, we expect that some of our customers will in future choose to use both *Perfect Developer* and *eCv* in their development projects. Indeed, we are planning to support a closer integration of *PD* and *eCv* in future releases. This will mean that, if required, high-level specifications developed and verified in *PD* can be directly related to low-level requirements and code developed using *eCv*.

Escher Verification Studio: A new name for both products:

At this stage, to facilitate the future development mentioned above, we have combined these two products into a single product family. We are calling the product family *Escher Verification Studio*. The following product variants are available:

- ***Escher Verification Studio: Critical Systems Modeller*** replaces *Perfect Developer Critical Systems Edition*. It includes the fully-functional version of *Perfect Developer* and the free (i.e. limited functionality, with licence restrictions) edition of *Escher C Verifier*.
- ***Escher Verification Studio: Embedded C Verifier*** includes the fully-functional version of *Escher C Verifier* and the free (i.e. capacity limited, with licence restrictions) edition of *Perfect Developer*.
- ***Escher Verification Studio: Critical Systems Modeller with Embedded C Verifier*** includes fully-functional versions of both *Perfect Developer* and *Escher C Verifier*.
- ***Escher Verification Studio: Free Edition*** replaces *Perfect Developer Free Edition*. It combines the free editions of both *Perfect Developer* and *Escher C Verifier*.

Diagrammatically, this appears as in the table below:

Product Combinations	PD (full)	PD (free)
eCv (full)	Critical Systems Modeller with Embedded C Verifier	Embedded C Verifier
eCv (free)	Critical Systems Modeller	Free Edition

The initial release of ***Escher Verification Studio*** is version 5.0, which follows on from *Perfect Developer* 4.10.02.

Customers of *Perfect Developer Critical Systems Edition* with current maintenance contracts are entitled to upgrade to ***Escher Verification Studio: Critical Systems Modeller*** at no additional charge. Upgrading to ***Escher Verification Studio: Critical Systems Modeller with Embedded C Verifier*** is available at additional cost.

We have taken care to minimise any disruption to existing users of *Perfect Developer*. In particular, ***Escher Verification Studio*** can import *Perfect Developer 4.x* projects. No changes to the *Perfect* specification language have been made in this release, except for a small tightening of the rules regarding functions called in class invariant declarations.

The main changes that will be noticed by users upgrading from *Perfect Developer* to *Escher Verification Studio* under Windows are as follows:

- When installing the product, you are given the choice of installing the *Perfect Developer* component, the *Escher C Verifier* component, or both.
- The default installation directory is *[PROGRAMFILES_DIR]\Escher Technologies\Verification Studio 5* instead of *[PROGRAMFILES_DIR]\Escher Technologies\Perfect Developer*.
- It may be necessary to reconfigure the global options (in the *Options* menu of the Project Manager); for example, the choice of text editor.
- The shortcut name for starting the Project Manager is *Verification Studio* (executable file name *VerificationStudio.exe*) instead of *Perfect Developer* (executable file name *PerfectDeveloper.exe*).
- When creating a new project in the Project Manager, if you have installed *Escher C Verifier* as well as *Perfect Developer*, you are asked whether you wish to create a *PD* project or an *eCv* project.
- If you are running the code generator/verifier other than from the Project Manager, you need to use the new path and executable name *EscherTool.exe* instead of *PDTool.exe*.
- The examples are installed in subdirectories of *[PROGRAMDATADIR]\Escher Technologies\Verification Studio* instead of *[PROGRAMFILES_DIR]\Escher Technologies\Perfect Developer\Examples*. This change has been made for compatibility with Windows Vista and Windows 7, so that users may run the example projects directly (writing to files in subfolders of *[PROGRAMFILES_DIR]* is not approved under these more recent versions of Windows).
- The Java runtime library was compiled using Java version 1.6. Therefore, to use it you need to be using version 1.6 or later of the Java Development Kit,

The documentation set for *Escher Verification Studio* is similar to the documentation for *Perfect Developer*, with the following changes:

- The new *User Guide* covers both *Perfect Developer* and *Escher C Verifier* projects
- If the *Escher C Verifier* feature is installed, then the *Escher C Verifier Reference Manual* is also installed.

We hope that our customers will be comfortable with these changes. Should you require further information, please ask your regular support contact, or email customerservices@eschertech.com.

Escher Technologies Limited, 7 October 2011