## **CertWare Status**

Last update: March 8, 2011 MRB

## **Evaluation Requests**

- Recommend useful ways to integrate SAEM evidence model content with ARM or ARM-derived (GSN, CAE, EUROCONTROL) arguments. Should one or the other metamodel be adjusted to acccommodate the other, or should an intermediary be introduced so as to not modify a standardized metamodel?
- Recommend other kinds of examples and patterns we can include in the examples wizard.
- Recommend additional project-related content that should be added to the CPN model for export to Microsoft Project via MSPDI.
- The current argument model editors use only one editor type using a tree structure.
   Other layouts are possible for editing, especially in conjunction with the outline view.
   Recommend different view arrangements or editor arrangements (for multi-page editors) that are useful for the various argument types.
- Recommend useful project metrics suites. We currently provide support for the Royce Software Project Management (SPM) metrics suite as a model built from the OMG Software Measurement Metamodel, but other metrics suites may be popular elsewhere.
- Recommend argument structure or content validators that could be implemented for live or batch validation.

## **Anticipated Enhancements and Open Work**

- The current GSN to ARM M2M translator is incomplete.
- Additional M2M translators should be made available for CAE-ARM, EURO-ARM, CAE-GSN, EURO-GSN, and EURO-CAE.
- The software change order collector presumes the EGit team provider. Ideally this
  functionality should use a team provider interface that is agnostic to the
  implementation, so as to support version control with Subversion, CVS, etc.
- The various argument types will be packaged separately as features, supported by a core feature, so that users need not install all of the argument types if not wanted.
   These will collectively belong to a CertWare category for provisioning.
- The CPN DSL does not currently support roll-up of calculations according to the imported argument model structure. This was originally intended, but others feel it should roll up. Anticipate adding a term to the DSL to indicate where roll-up should be performed.
- The Hugin NET model edit-time validators are not yet implemented. Notes of the types of validation that should be performed are in comments at the bottom of the Xtext grammar file.
- The import of a Word document template to be used for formatting Word exports has not been completed. The idea here is to define the styles in a document, use a wizard

- to identify this document, read the document, write the model content back into the document using the named styles, then write the result. The named styles may have to be identified through plugin extension mappings, as already used, but the synchronization of these requires some more thought.
- The graphical model editors use different property sheets from the tree editors. The latter use the EEF components, but we have not used EEF together with Epsilon to produce the graphical editors.
- The metrics model does not gather change order data from Mylyn, as suggested in the
  metrics design document. Rather, change data is gathered from EGit only, and a
  change order model editor is provided to enter these raw statistics. Mylyn tasks do
  not contain enough information to suit this particular metrics model, although it may
  serve other less-descriptive suites. Connections to Bugzilla or Trac for instance will
  however provide automated collection of these metrics.

## **Known Issues**

- In some cases a workbench selection does not adapt properly when the SCO view is open in the workbench. The expected repair is to skip the container identification in the view's selection listener for resource or unknown types. This has been fixed in other views.
- The prototype export of GSN to PDF leaves an annoying red watermark meant for debugging but appears by default in the external library. Turning this off requires settings in the Apache logging service configuration. Multiple logging configuration files cannot appear in the build as the service uses only the first one it finds. Unfortunately it appears the ordering also depends upon whether the bundle is loaded. A solution may be to create a plugin that is always loaded early (or perhaps located in the CertWare core plugin), and putting all Apache log4java configuration instructions there.
- The graphical editor figures do not remember wrapping dimensions when undergoing undo or copy-paste commands. Not sure whether this is an issue demanding attention.
- The graphical editor figure for the parallelogram does not contain the text inside of it. The boundaries must be computed differently.
- The graphical editor properties for line styles and fill colors are not enabled on many of the parts, but should be enabled. These properties should be enabled prior to generation using the source models.