

MIP OCL2 Parser

Written by Steve Wartik

Wednesday, 24 February 2010 20:34 - Last Updated Wednesday, 07 April 2010 19:27

The MIP OCL2 Parser is a Java library for performing syntactic and semantic analysis of OCL2 constructs. The parser helps applications ascertain whether OCL2 is syntactically valid, and semantically correct with regard to a given UML model. It fully implements syntactic analysis, and implements semantic analysis for all constructs except messages.

The parser is based on UML 2.2 (approximately). It is independent of any software development platform such as Eclipse or NetBeans. It is also independent of any vendor implementation of UML. To use the parser, one must provide an implementation of the abstract UML model expected by the parser. The library comes with implementations that support Sparx Systems' [Enterprise Architect](#) tool.

The library was developed by the [Institute for Defense Analyses](#) under contract with the United States Army, CIO/G-6 (POC:

[Mr. Bruce Haberkamp](#)

) in support of the

[Multilateral Interoperability Programme](#)

(MIP). The MIP maintains the Joint C3 Information Exchange Data Model (JC3IEDM). As part of its ongoing activities, MIP has developed a UML version of the JC3IEDM. The 4,000+ business rules for the model have been re-expressed as OCL invariants and are incorporated in the UML version of the model. One of the many uses of the OCL-based model is to ensure the correctness and consistency of the evolving JC3IEDM specifications.

Both the library and the UML version of the JC3IEDM, as well as other related resources, are available at <http://mda.cloudexp.com/> (click the Downloads button). In particular, the site includes several applications that make use of the OCL2 parser library.