REISCHMANN INFORMATIK GmbH
Berrschestrasse 2
Munich, D-81245, Germany
www.reischmann.com
E-Mail ***info@reischmann.com***
Phone +49-89-829260-0
Fax +49-89-829260-25

TOOLBUS Interface for Advantage Gen and Rational Rose

Version 3

Data Sheet

(effective July 2002)

The TOOLBUS Interface for **Advantage Gen for Enterprise Servers** (formerly available as **IEF** / **Composer** / **COOL:Gen**) and **Rational Rose** enables the bi-directional exchange of UML Class Models and Data Models from Rational Rose with Entity-Relationship Data Models and Technical Designs in Advantage Gen.

- UML Class Diagrams from Rational Rose can be converted to Data Models for Advantage Gen, in order to facilitate using the database design and the SQL DDL generation functions of Advantage Gen.
- Data Models from Rational Rose can be converted to Technical Designs for Advantage Gen.
- Entity-Relationship Data Models which were described in Advantage Gen can be converted to UML Class Diagrams to populate new Analysis Models in Rational Rose.
- Technical Designs from Advantage Gen can be imported into Rational Rose, from which UML Class Diagrams can be created by the Reverse Engineering function of Rational Rose.

With the TOOLBUS interface both tools can supplement each other in a coexisting way.

Rose Data Modeler Support: The TOOLBUS Interface supports the Rose Data Modeler for the transformation of Rose Class Models to Advantage Gen Entity-Relationship Models, and for the migration of Physical Data Models from Rational Rose to Advantage Gen, and vice versa.

Mapping Overview:

1. Bi-directional Migration of Rose Class Models to Advantage Gen Entity-Relationship Data Models, and vice versa:
   - UML Classes, Generalizations/Specializations, Associations and Attributes are mapped to Entities, Partitionings, Relationships and Attributes in Advantage Gen, and vice versa.
   - UML Packages are mapped to Subject Areas in Advantage Gen, and vice versa.
   - UML Class Diagrams are mapped to Scoped Data Models in Advantage Gen, and vice versa.
   - The Types which are used in Rose to describe type and length of Attributes are mapped to datatype of Attributes in Advantage Gen, and vice versa.

2. Bi-directional Migration of Rose Data Models to Advantage Gen Technical Designs, and vice versa:
   - Databases, Tables, Columns, Primary Keys, Foreign Keys and Indexes are migrated from Rose Data Models to Technical Designs in Advantage Gen, and vice versa.

Customized Transformation Options:

As an alternative to the Rose Data Modeler standard, the TOOLBUS interface provides a number of special transformation options for the customization of the transformation rules according to the proprietary standards of the user:

- All Classes, or only persistent classes can be selected for the migration to COOL:Gen.
- Stereotypes can be used in Rational Rose to mark identifying Attributes, mandatory Attributes and identifying Associations. (This information is not foreseen in UML, but should be specified for database design in Advantage Gen.)
- For the mapping of Datatypes used in Rose (e.g. specified in C syntax) to the Datatypes which are defined in Advantage Gen, a mapping editor is provided, which allows to specify the mapping according to the standards of the Rational Rose users.
-

Interface Technology: The interface uses the Read/Update API to read and create Advantage Gen Toolset Encyclopedias, and the methods provided by the Rose Extensibility Interface (REI) to read and update Rational Rose models.

Platform: The TOOLBUS Interface for the Advantage Gen and Rational Rose requires Microsoft Windows 95/98/Me, or Windows NT/2000/XP, and it supports Advantage Gen releases 4.1a, 5.0, 5.1, 5.2 and 6.0, and Rational Rose 98i, 2000, 2000e, 2001, 2001A and 2002.

This TOOLBUS Interface is **ca smart** certified (Please visit http://www.ca.com/casmart).