

IBM® Rational® Rhapsody® Developer for Ada Code Generator

Changes Document





Release Notes

- Animation limitation in generating events via Rhapsody – When two or more classes have the same event reception, using animation to invoke the event may result in sending the event to the wrong target. There are 2 possible workarounds.
 1. Use unique events for different classes.
 2. Create a driver actor with unique events, such that when an event is received, the driver sends an event to the correct receiver. The trace back from the unique event to the reused event can be done by a stereotyped dependency for example.
- Important upgrade considerations
 1. The Ada code generation rules now generates an incomplete type declaration for a class record when the class has its “Ada_CG.Class.Visibility” property set to “public”. If you have modeled such an incomplete type declaration on previous Rhapsody versions using a type of the kind “Language”, you might end up with duplicate incomplete type declarations. In such cases, your model needs to be updated by deleting the “Language” Rhapsody type from the model.
 2. Since the migration Ada code generation rules from the UML metamodel to the Rhapsody metamodel, the generated framework code is generated quite differently from before. Most of the time this is related to ordering since most elements are now sorted by their qualified name. You shall find such changes in areas related to :
 - Context clauses
 - Relations
 - Statecharts

Changes

Version	Defect #	Description
7.6 build 11		Removed roundtrip options Update with new Rhapsody API
7.6 build 10 7.6 build 9		Update with new Rhapsody API
7.6 build 8		Fixed variant record type generation.
		Removed roundtrip prototype

Version	Defect #	Description
7.6 build 7	RTC - 144508	Types can be defined in a class with stereotype "Type" for type "ArrayType" for array type "RangeType" for range type "VariantRecordType" for variant record type
	RTC - 144523	
	RTC - 146932	
	RTC - 159815	Booch components are not installed anymore. User must install them manually if needed.
		DescriptionTemplate property is added on operations, attributes, type, relations and ports.
8.0 build 1	RTC - 159413	Ada framework compilation is removed from installation process and added to BuildFramework feature.
	RTC - 148661	RE : improved Incremental reverse engineering of Ada, when "Preserve folders as packages" option is selected
	RTC - 145320	Roundtrip implementation. Rhapsody API are implemented to provide full roundtrip.
7.5 build 41	RTC – 156795	SELEX Fixes
	RTC – 156934	
	RTC – 156758	
	RTC – 158024	
	RTC – 154674	
	RTC - 156931	Package nested in Generics are generated as generic in the code [s]
		Fixed generation of multiline comments on enumeration type
	RTC - 157615	Fixed initialization of links between ports, when inheritance.
	RTC – 157616	Fixed erroneous code generation using Ada_Std_Lib
7.5 build 40	RTC - 156493	Fixed gcc crash takes place on installation Rhapsody
7.5 build 39	RTC - 156286	Fixed RE unmapped comment for types is removed.
7.5 build 38	RTC - 155547	Fixed animation defect. Notification of transition terminated was not always processed.
7.5 build 37	RTC - 152859	RE : does not correctly generate standard function UNCHECKED_CONVERSION.
	RTC - 152783	RE: Tasks Body are generated in a wrong position. Forced to be generated at end of declaration.
	RTC - 152785	RE: fixed Ada Standard generic types instantiation.
	RTC - 152786	RE: fixed Procedures renaming tasks entries.

Version	Defect #	Description
	RTC - 153045 RTC - 27202	RE : captured pragmas in the model.
7.5 build 36	RTC - 154277	getFileName returns class file name, when it is called on operation (not separate).
7.5 build 35	RTC - 154043	Fixed animation call of operation with argument.
7.5 build 34	RTC - 149639	Fixed animation of language independent types.
	RTC - 154277	Updated behavior of getFileName operation in order to support roundtrip on separate operations.
	RTC - 137560	Fixed error when a class inherits from a super class and an interface
7.5 build 33	RTC - 45977	RE : constant variable are reversed to be generated at start of declaration.
	RTC - 151508	A renamed package can be modeled with a usage dependency. RE can reverse renamed package by setting the new property of the dependency to the package GenerateRenamesPackage to true. CG generates a renamed package if the dependency to this package has stereotype "Usage", and this new property set.
	RTC - 152834	Changed RiA version (7.6 -> 7.5.3)
7.6 Build 5	RTC -151660	Fixed Relations are not initialized if sequential class as active and sequential parts
	RTC - 152538	Fixed Cannot invoke operation from environment
	RTC - 132574	RiA tm(5000) fails to wait 5 seconds during stepped
7.6 Build 2/3/4	RTC - 137560	Error in ADA on when a class inherits from a super class and an interface
	RTC - 137576	Support for Accept event by Ada code generator
	RTC - 149639	RiAda: Generated Code is not compilable if language independent types are used
	RTC - 150643	RiA Anim : Operation invocation doesn't work after "Go" command.
	RTC - 151531	Ada-CG: bidirectional associations between global objects (and instantiated by links): invalid Code generated
	RTC - 149250	Fixed calling operations via animation.
7.6 Build 1	RTC - 149254	Fixed initialization of active context of instance of reactive class in main file.
	RTC - 145125	Ada TC support : Added instrumentation into generated code to be able to send an operation in animated mode

Version	Defect #	Description
7.5 Build 31	RTC - 146705	Added animation FWK library build in code menu
	RTC - 148965	Change property "RhpVersion" to value "7.5.2.1" in file rhapsody.ini
7.5 Build 30	RTC - 147064	Added Apex Clearcase.
7.5 Build 29		Added documentation about RiA in Eclipse
	RTC - 142531	Fixed creation of com.sodius.mdw.rulesplayer.log into user tmp folder. Allows possibility to use Rhapsody with several login.
7.5 Build 28	RTC - 142372	Fixed RE copy body file if "keep source Order" option is checked
7.5 Build 27		Fixed code order respect
7.5 Build 26	RTC - 141757	Fixed Linux installer
	RTC - 141034	Fixed code order respect
7.5 Build 25		Fixed Linux installer
7.5 Build 24		Fixed Linux installer
7.5 Build 23	RTC - 50819	Removed property CG:Config:Gen.Dir.PerModelComp. It is replaced by CG:Package:Gen.Dir.
7.5 Build 22	RTC - 128522	Implemented Apex compiler for Linux
	RTC - 132914	Added code order respect
	RTC - 48760	Removed "About Ada-folders in Share" : ADA FWKs are located in /share folder instead of /share/langAda.
7.5 Build 21		Added multicast ports
7.5 Build 20	RTC - 123527	Fixed Timeout animation in output window
	RTC - 123529	
7.5 Build 19	RTC - 50851	Fixed send action on statechart
	RTC - 125347	Fixed animation of user defined type
	RTC - 126119	Fixed Reverse Ada, comment in package
	RTC - 48760	Ada FWKs are moved into Share\langAda folder
	RTC - 132915	Fixed RE preserve folder hierarchy

Version	Defect #	Description
	RTC - 46238	Fixed RE types of attributes and parameter are referenced to an existing type in the model (not depending on case).
	RTC - 127063	Fixed batch file missing with SPARK and RAVEN configuration
7.5 Build 15	124650	- Fixed RE : Ada reverse engineering doesn't correctly resolve dependencies to other packages
	124651	- Fixed RE : Ada reverse engineering confused by nested generics
	122872	- fixed ADA reverse engineering ignores "with clauses" in separates operations.
7.5 Build 14		- fixed sources.gpj file is regenerated even if not changed.
	110358	- added a new property Ada_CG.Class.IsStatic, which enables generation of static class, which contains only static attributes and operations. - RE sets this new property to true if there is no record type in the file.
7.5 Build 13		- RE : added a new "visualization only" option. Causes the model to contain external references to the reverse engineered source code so that other model elements can add references, but the existing source code will be used at compile time and no new code will be generated for the reverse engineered model elements.
		- custom makefile generation
7.5 Build 12	22933	- document bluewash in sodius folders
7.5 Build 11	224677- 223866- 215629	- Removed Conditional statement in ports. The new property "Ada_CG.Port.AddNullCheckToPortWiringCode" is used to remove it. This property is set on a port.
	224609- 224407	- fixed models with booch components and ports for AdaMulti
	220325	- fixed send action state
	219128- 217488- 215917- 215874	- fixed animation issues
	110358	- Improved ruleset generation to support clean Ada 83 code and static classes
		- generated requirement comments inside code.

Version	Defect #	Description
		- generated exception handler at active and reactive level. 2 new properties are created : <ul style="list-style-type: none"> • Ada_CG:Class:ActiveExceptionHandler • Ada_CG:Class:ReactiveExceptionHandler
		- the property "CG:CODE:ActiveStacksize" adds "pragma Storage_Size(size);" inside task declaration.
		- fixed make file generation for Integrity5 environment
7.5 Build 10	224576	- fixed packaging issue
7.5 Build 09		- updated user guide document <ul style="list-style-type: none"> . changed comments about ports (§4.14) . added comments about new FWK95 build (§2.1.1) . added comments about differences between old and new FWK95 (§6.3.2, §6.3.7) . added comments about ravenscar (§6.3.2, §6.3.11) . added §7.1.1 animation of user defined type
7.5 Build 08	223055	-- fixed Reversed engineered classes without record types need to have animation disabled.
		- fixed compilation of FWK at install
7.5 Build 07	222998	- added a model of Ada Standard Library
7.5 Build 06	219532	- fixed qualified relations with Ada95 and Booch95. User may need to define equal function of subtype in some cases. (see Ada user guide § 4.12.6)
		- improved Ada Reverse Engineering
	222422	- Removed splash screen and about box of Ada reverse engineering.
7.5 Build 05	221949	- Ada compatibility files are situated in folder Share\Profiles\BackwardCompatibility
	221508	- Fixed active class animation
	220959	
	216573	
	216574	- Fixed order of timeouts in generated code
	221074	- Fixed "And States" in substatechart
7.5 Build 04	221075	- Fixed automatic dependency with user defined type used in event arguments declared into an interface
	221698	- Fixed prefix missing in user defined type in operations defined in <class>_port package, if type is defined into interface.

Version	Defect #	Description
	218265	- fixed RiA RE does not recognize the delta keyword
7.5 Build 03		- fixed runtime fails with ObjectAda
	220816	- fixed ports in class with stereotype <<AdaTaskType>>
	220802	- fixed limited interface in Ada2005
	220801	- fixed active reactive class with "provides" contract
	215620	- fixed Implement user active classes in a Ravenscar compliant way
	219857	- fixed Naming an association
	109235	- fixed Use case associations
	216215	- fixed Any active class in threads dialog has its own name
		- added constant multiplicity on ports -
		- added ports features (needs the use of Ada2005) <ul style="list-style-type: none"> • Multiple contracts • Multiplicity > 1 • Unbounded ports • Send procedure, function, events and triggered operations • Fast ports - ports with Ada95 should not compile in some case - modified events management. No changes for user.
7.5 Build 02		- integration of new rules player
7.5 Build 01		- fixed animated parameterized events with user defined type - fixed animated interface - fixed animation of static operation - added switch to chose Booch components at install
7.4 Build 04	217760	- fixed user active-reactive class start with animation
7.4 Build 03		- fixed RulesComposer and RuleEditor defect
7.4 Build 02	217325	- fixed signature of reactive singleton with constructor
7.3 Build	215992	- active context of a reactive class can be set with a composition
	215575	- fixed interfaces animation

Version	Defect #	Description
0.13	215718	- fixed stop timeout manager with animation
7.3 Build 0.12	216405	- fixed newFWK95 compilation and runtime error with Object Ada and Integrity
		- fixed reverse engineering defect.
7.3 Build 0.11	215544	- fixed thread names in animation
7.3 Build 0.10	215546	- fixed null transition animation in trace with old and new FWK95
	103096	- fixed line wrap length on protected bodies
		- updated CGCompatibilityPre73Ada.sbs
7.3 Build 0.9		- Removed bc-support-indefinite_reference package from booch95 components
7.3 Build 0.8		- added CGCompatibilityPre73Ada.sbs. force UseAdaFramework property to "FWK95" and UseBoochComponant property to "Booch83"
		- updated RiA_CG_User_Guide.doc
	215542	- remove CGCompatibilityPre71Ada from Sample RS232_95
7.3 Build 0.7		- fixed some defects with booch components
		- fixed a defect with terminate_behavior
	214893 215156	- fixed instance code generation
7.3 Build 0.6		- Added Booch 95 components
		- fixed timeout animation
		- new Framework is ravenstar compliant
	214776 214777	- removed dependency between new and old FWK
7.3 Build 0.5	214773	- added ada sample at install
	214801	- added new RS232 sample for Ada95
	214804	- fixed animation of events in sequence diagram.
		- added property Ada_CG.componant.UseAdaFramework. FWK can be chosen between FWK83, FWK95 and NewFWK95.

Version	Defect #	Description
7.3 Build 0.4		<ul style="list-style-type: none"> - fixed FWK compile at install - fixed parameterized trigger
7.3 Build 0.3		<ul style="list-style-type: none"> - added animation - added triggered operations - available <ul style="list-style-type: none"> - events and parameterized events - null transitions - timeouts - triggered operations - user active class - active reactive class - class with reactive part - reactive class with reactive part - reactive class which uses user active class (using "active context" dependency) - Singleton of active and reactive classes are not working - parameterized trigger is not working
7.3 Build 0.2		<p>Added new FWK</p> <ul style="list-style-type: none"> - The new FWK replaces FWK 95. - timeouts are now available - Singleton of active and reactive classes are not working - Animation is not available
7.2 Build 0.8		Fixed packaging issue
7.2 Build 0.7	109123	Fixed error with deeply nested reactive parts
7.2 Build 0.6	105384	Fixed reverse engineering of enumeration literals with comments
	213050 109085	Fixed partial generation errors.
	212779	Moved compatibility profiles to \Share\Profiles\BackwardCompatibility Set compatibility profiles stereotype to "setting"
7.2 Build 0.5		Fixed compile error in FWK95 : removed property Model.Attribute.IsTemplateParameterType in parameterized_event/signal_kind
7.2 Build 0.4		Now the installer updates the rhapsody.ini in the rhapsody directory if it exists. If not, it tries the Windows directory
7.2 Build 0.3		Added property RemoveAnnotationsExceedingLineWrapLength in Properties.ini Now annotations ---++ are removed when line are too long
		Improved performance of reverse engineering

Version	Defect #	Description
7.2 Build 0.2	105384	The Reverse Engineering Toolkit has been updated to retain more comment in the source code and several bugs were corrected related to comments.
	105379	
	105188	
	105187	
	105186	
	104275	
	94207	
	94053	
	105181	SPARK annotations are now reverse engineered.
	90020	Enumerations are reverse engineered correctly.
	94320	Initializer arguments are now reverse engineered.
	76268	
	94383	Default argument values are now reverse engineered
7.1 Build 2.5	106844	Reverted sorting of reactive parts before calling their start behavior method for composite classes.
7.1 Build 2.4		Updated Ada 95 behavioral framework to work around ObjectAda specific compile error.
7.1 Build 2.3		Introduced a new implementation for bidirectional relations. It is possible to select it by setting the following property to the "IntermediateParentClasses" value <ul style="list-style-type: none"> Ada_CG.Relation.BidirectionalRelationsScheme
7.1 Build 2.2	103096	Added support for the CG.Configuration.LineWrapLength property.
	95283	It is now possible to change the predefined Integer, Natural and Positive types used for relations with Nary multiplicities by editing the <Rhapsody>\Sodius\RiA_CG\PredefinedTypes.ini file.
	90929	It is now possible to control whether the unique instance for <<Singleton>> classes is generated in the body or in the private part of a package by setting the following property to the appropriate value Ada_CG.Class.SingletonInstanceVisibility
	105955	<ul style="list-style-type: none"> Code for relations to <<entrypoint>> classes is no longer generated.
	105954	Fixed defect on history connectors in singleton reactive classes when using the Ada 95 framework.
	105895	Fixed defect on enterExit points when using the Ada95 framework
		Record types of classes participating in bidirectional relations with "SubtypingAndRenaming" implementation scheme are now sorted by inheritance depth first in RiA_Bidirectional_Relations package so as to avoid compilation errors.

Version	Defect #	Description
		Equality operator renaming causing compilation error is no longer generated for classes participating in bidirectional relations with "SubtypingAndRenaming" implementation scheme and having qualified relationships.
	105485	Fixed handling of default transition from history connectors when the composite states owning the connectors have not already been visited when using the Ada 95 framework.
7.1 Build 2.1	104842	Fixed defect on package reactive instances when using the Ada 95 framework.
	104840	Fixed defect on deletion of events after consumption when using the Ada 95 framework.
7.1 Build 2.0	104193	Fixed issues with animation of events in sequence diagrams when using the Ada 95 framework.
7.1 Build 1.8	104192	Fixed issue causing state entry action being executed when taking internal transitions when using the Ada 95 framework.
	104191	Fixed issue with accessing event parameters from transition guards when using the Ada 95 framework.
	104190	Fixed issue with private operations not being visible from states and transitions when using the Ada 95 framework.
	104189	Fixed generation of with clauses for packages with events using model-defined types when using the Ada 95 framework.
	103809	Fixed default active class code to no longer trigger Ada 2005 related warnings.
	104023	Fixed defect on null transition not being taken on default states with no other transitions when using the Ada 95 Framework.
	103801	Fixed warning in default entrypoint for animated models with no statecharts.
		"with", "use" and "pragma" keywords in generated code are now generated lowercase. To modify their case, update the "withKeyword", "useKeyword" and "pragmaKeyword" in the <Rhapsody>\Sodius\RI_A_CG\RI_A_CG.ini file
	89352	Added support for the following properties <ul style="list-style-type: none"> o Ada_CG.Attribute.Accessor o Ada_CG.Attribute.Mutator
		o Fixed error on active classes referring to the wrong namespace when using the Ada 95 Framework.
7.1 Build 1.7	102415	Added generation of roundtrip annotation for configuration initialization code.
	130388	Fixed support for guarded attributes and operations when using the Ada 95 Framework
7.1 Build 1.6	103350	Fixed incorrect usage of environment variables for Integrity build files.
7.1 Build 1.5		Updated documentation.
7.1 Build 1.4	103197	Fixed issue with linking objects with types derived from link base relation ends types.
		Fixed issue with event injection using the new Ada 95 framework.

Version	Defect #	Description
7.1 Build 1.3	102903	Fixed issue with command line too long when using both animation and relations framework and Rhapsody is installed in a space with paths.
7.1 Build 1.2		Fixed defect on missing package when loading Ada95 behavioral framework model.
7.1 Build 1.1		Fixed defect on statecharts with only null transitions not compiling with the Ada 95 framework.
7.1 Build 1.0		Added new Ada 95 behavioral framework.
7.0 Build 19		Reactive classes using only null transitions are no longer considered as needing an active class.
	82957	Added support for discriminant overriding through the addition of the following two properties applicable to <<Discriminant>> non-static class attributes : <ul style="list-style-type: none"> Ada_CG.Attribute.RedefiningDiscriminantPolicy Ada_CG.Attribute.ParentDiscriminantValue
	96918	<ul style="list-style-type: none"> Fixed stereotype inheritance
	101839	Fixed support of “Ada_CG.Class.RelativeEventDataRecordTypeComponentsNaming” property for models where there are more than one reactive class with events.
	98719	Added option to control the case of the “Pragma” keyword when it is generated. By modifying the “pragmaKeyword” property in <RhapsodyInstallDir>\Sodius\RI_A_CG\RI_A_CG.ini file it is possible to control the case of this keyword.
	102765	Fixed regression on with clauses being generated in spec instead of body for types used in operations with body visibility
		Updated installer because of changes in the RulesComposer default scenario name.
	99399	Fixed generation of “limited” modifier for derived classes with private part.
	99519 99412 99398 97935 97582	Tags for code preservation are now based on operation GUID rather than qualified signature Fixed defect on code preservation across generation for : <ul style="list-style-type: none"> lines with tag going over 256 characters methods that have been renamed in the model overloaded operations first line of code getting commented out
	100129 97672	<ul style="list-style-type: none"> Fixed defect on relocation of access type declaration causing compile error on reactive classes when they have ports
	97658 97582	When component C1 has a <<Usage>> dependency to another component C2, C2 is now added to the sources search path for C1.
	98567 97579	Fixed defect causing sources not to be found in some cases when generating more than once.

Version	Defect #	Description
	97803	Added indentation for lines after the first one on attributes with user-defined multi-line type definitions
	97851	Synchronized reverse engineering with changes in the Rhapsody Java API.
7.0 Build 18	97245	Fixed generation of makefiles for ObjectAda compiler so that already registered files lists are deleted only when doing a clean and kept when doing partial generation.
7.0 Build 17	96170	<p>Fixed defect on combination of explicit setting of CG.Package.GeneratePackageCode property to False and Ada_CG.Package.ContributesToNamespace property to True and package not contributing to namespace anyway.</p> <p>For those models created with previous releases of Rhapsody, packages which have their CG.Package.GeneratePackageCode property set to False and their Ada_CG.Package.ContributesToNamespace property not overridden, the contribution to namespace still depends on the value of the GeneratePackageCode property.</p>
7.0 Build 16	96600	Fixed regression on generation of package name in Use clauses for <<Usage>> dependencies from a Class or Package to a Type with the Ada_CG.Dependency.CreateUseStatement property set to "Use". The qualified name of the type was generated instead.
		Fixed defect on classes with statecharts using events from packages not contributing to namespace.
	96761	<p>Fixed regression on replacement of %s in user-defined type declarations for attributes.</p> <p>Extended support of %s resolution to operations arguments types and return types.</p>
7.0 Build 15	95648	<p>Added two entries to the Tools Menu of Rhapsody :</p> <ul style="list-style-type: none"> ○ Rhapsody in Ada Rules Editor ○ Rhapsody in Ada Rules Compiler
	88462	<p>Added support for volatile and atomic pragmas on classes, types and attributes through the addition of the following tags</p> <ul style="list-style-type: none"> ○ AdaCodeGeneration.Attribute.generatePragmaAtomic ○ AdaCodeGeneration.Attribute.generatePragmaVolatile ○ AdaCodeGeneration.Class.generatePragmaAtomic ○ AdaCodeGeneration.Class.generatePragmaVolatile ○ AdaCodeGeneration.Type.generatePragmaAtomic ○ AdaCodeGeneration.Type.generatePragmaVolatile
	96611	<ul style="list-style-type: none"> ○ Behavioral framework libraries for Integrity are now generated in directories with a suffix specifying the target board they have been compiled for
	96475	Added generation of wrapper code allowing direct invocation of ports interfaces.
	95472	Default entrypoint is no longer generated when the active component is a library and CG.Configuration.MainGenerationScheme property is set to "Full" on the active configuration
	94955	Disabled generation of animation code for interfaces

Version	Defect #	Description
		Fixed defect on indirect reflexive compositions causing generator to hang
		Fixed regression on generation of code for bidirectional relations with unbounded multiplicities.
7.0 Build 14		Updated installer to take into account the new registry entries for RulesComposer.
7.0 Build 13	92528 89046	Added support for generation of representation clauses for enumeration types.
7.0 Build 12	95760	Fixed regression on handling of configuration and component include path and libraries options for GNAT compiler.
7.0 Build 11	95471	Fixed reverse engineering defect on operation bodies with identifiers containing the "end" substring.
7.0 Build 10	95564	Fixed installation bug causing harmless "Error reading GeneratorRulesSet and GeneratorScenarioName properties on the configuration" error message.
7.0 Build 09		Fixed installer defect on reverse engineering rules editor.
	95450	A null record type is now created for ports that do not have a contract.
7.0 Build 08		Added filtering of SysML ports before generating code.
		Fixed defect in handling of qualified names for <<entrypoint>> classes in build files for Greenhills AdaMULTI compilers.
7.0 Build 07		Updated documentation.
7.0 Build 06	90962 73380	Added support for ports code generation. This is activated by default, to disable it, set the Ada_CG.Port.Generate property to "False".
7.0 Build 05		Fixed support for remote host animation properties for INTEGRITY5 configurations
7.0 Build 04	94003	Fixed regression in handling of compiler switches
7.0 Build 03	90882	Statecharts can now use events defined in a package different from the one owning the class owning them.
7.0 Build 02		Fixed generation of build files for Greenhills compilers to support child operation units.
	93706	Code generator is now installed in <Rhapsody_Install_Dir>\Sodius\RIa_CG instead of <Rhapsody_Install_Dir>\Sodius
7.0 Build 01	91271	Fixed declaration of "Ada_CG.Operation.ThisByAccess" property in <Rhapsody>\Share\Properties\Sodius.prp

Version	Defect #	Description
	84158	Added support for private inheritance Set the Ada_CG.Class.Visibility property of the subclass to “private” or “body” and set the generalization visibility to “private” or “protected”.
	69975	Added support for user defined file extensions. Use the "CG.File.ImpExtension" and "CG.File.SpecExtension" properties (include the '.')
		Generation rules are now based on Rhapsody metamodel instead of UML metamodel
6.2 Build 03	92526	Fixed defect on handling of character sequences interpreted as regular expression escape sequences for code generated between preservation tags.
6.2 Build 02		Changed Java to COM Layer.
6.2 Build 01		Added properties to control the generation of inline pragmas for attribute accessors : <ul style="list-style-type: none"> ○ Ada_CG.Attribute.InlineAccessor ○ Ada_CG.Attribute.InlineMutator
6.1 Build 11	87679	Added property to generate tags that preserve user changes to file contents across generations for operation bodies. <ul style="list-style-type: none"> ○ Ada_CG.Operation.PreserveUserCode
		<ul style="list-style-type: none"> ○ Fixed defect on comparing files that have a path containing spaces when “smartOverwrite” option is set.
	71763	Fixed defect on misinterpretation of “Ada_CG.Class.RelativeEventDataRecordTypeComponentsNaming” property for events.
		Fixed update of <Rhapsody>\Share\Properties\Sodius.prp on install.
6.1 Build 10	89306	Added a new “exportDependenciesToAnnotations” property in <Rhapsody>\Sodius\resources\toolkit.ini file to enable customized rules to access dependencies to constraints, comments and requirements
6.1 Build 09		Updated documentation.
6.1 Build 08	89291	Added carriage return between enumeration literals in enumerated types declarations
6.1 Build 07		Added support for AdaMulti 4.0 (on Win 32 and PPC platforms).
	88461	Fixed generation of pragmas for dependencies to nested packages
	86654	Fixed generation of roundtrip annotations for classes owned by other classes
		Fixed defect on links with link ends with a type derived from the one of the matching association end
		Fixed configuration instances being ignored when their classes are owned by other classes

Version	Defect #	Description
	88827	Fixed incorrect references to events used in classes owned by other classes.
	69643	Fixed generation of compiler switches for ObjectAda when generating executables.
6.1 Build 06	83685	Added options to control the case of the “With” and “Use” keywords generated in context clauses. By modifying the “useKeyword” and “withKeyword” properties in <RhapsodyInstallDir>\Sodius\sodius.ini file it is possible to control the case of these keywords.
		When regenerating files, a comparison is now done between the new and the previous versions so that the file gets overwritten only if there is an actual difference in the contents. To turn off this behavior, set the “smartOverWrite” property in <RhapsodyInstallDir>\Sodius\sodius.ini file to “False”.
	86732	Fixed conflict with RulesComposer dll
6.1 Build 05	86449	Fixed bug on incorrect location of hide annotation for operation bodies when generating for SPARK
	86175	Fixed missing with clause to package declaring renamed operation from package declaring renamed operation via a <<Renames>> dependency.
6.1 Build 04		Fixed bug on generation of operations in classes participating to bi-directional relations.
		Added support for remote host animation properties for raven configurations : <ul style="list-style-type: none"> Configuration.RAVEN_PPC.UseRemoteHost Configuration.RAVEN_PPC.RemoteHost
		<ul style="list-style-type: none"> Added a “GNAT issues” section to documentation.
		Added support for Ada_CG.Operation.DeclarationPosition property on operations.
6.1 Build 03	85086	Added control over the generation position of “Use” or “Use Type” clauses. It is now possible to specify if they should be generated before the keyword “package” or after it using the following property : <ul style="list-style-type: none"> Ada_CG.Dependency.UsesStatementPosition
6.1 Build 02		Upgraded rules editor and rules compiler.
6.1 Build 01	80123	Added generation of annotations for transitions.
	84532	Added generation of with clauses to the packages where template operations are defined in the packages where these operations are instantiated.

Version	Defect #	Description
	84157	Added support for generation of constant modifier on a class access types through the addition of a "constant" choice to the following properties : <ul style="list-style-type: none"> Ada_CG.Class.GenerateAccessType Ada_CG.Class.GenerateClassWideAccessType
	83010 83008	Fixed issue with generic instantiations and the following properties when they are overridden : <ul style="list-style-type: none"> Ada_CG.Class.RecordTypeName Ada_CG.Class.AccessTypeName properties.
	82218 84161	Added a "BeforeForwardDeclaration" choice to the following properties <ul style="list-style-type: none"> Ada_CG.Class.DeclarationPosition Ada_CG.Type.DeclarationPosition Note that the class related property affects the declaration position of nested classes only (i.e. classes with Ada_CG.Class.IsNested property set to "True").
	82960 82549 71404	Added new properties and modified existing ones to select between the class record type, its regular access type and its class-wide access type depending on the usage context. The new properties are : <ul style="list-style-type: none"> Ada_CG.Argument.AccessTypeUsage Ada_CG.Attribute.AccessTypeUsage Ada_CG.Dependency.AccessTypeUsage Ada_CG.Operation.ThisAccessTypeUsage Ada_CG.Type.AccessTypeUsage OMContainers.Access.AccessKind The modified property is Ada_CG.Operation.ReturnTypeByAccess
	82908	Added support for a new property that controls the generation of renaming statements for attributes of a <<Singleton>> class. <ul style="list-style-type: none"> Ada_CG.Attribute.GenerateRenamesForSingleton
	82460	Added support for compiler related properties to control remote host animation. <ul style="list-style-type: none"> Configuration.<Compiler>.UseRemoteHost Configuration.<Compiler>.RemoteHost
	83009 82906	<ul style="list-style-type: none"> Fixed defect with partial generation on generics
		Fixed defect on generation of annotation for operations with an overridden Ada_CG.Operation.ImplementationName property
	82275	Fixed defect on initialization of generics when animating
	81188	Fixed defect with memory not being released when using scope based code generation.