SoDA 2002.05.00 (UNIX) Release Notes

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Chapter 1 Important Facts about SoDA 2002.05.00 5

Publishing Tool Requirements 5

If Upgrading from SoDA 2001a.04.00 5
- Platform Compatibility 6
- License Version 6
- Rose Domain 6
- Rose RealTime Domain 6

Documentation 6

Chapter 2 Changes 7

Rose Domain 7
- Rose Templates 8
- Ghostscript Support 8

Rose RealTime Domain 8

Apex Domain 8

TestMate Domain 9

ClearCase Domain 9

ClearQuest Domain 9

Chapter 3 Known Limitations 11

General Limitations 11
- Cut and Paste 11
  - FrameMaker+SGML Cut and Paste 11
- Hanging Text 12
- Conditional Text in Master Elements 12
- SodaHidden Tag Not Removed When Objects Reappear 13
- FrameMaker+SGML Files 13
- Lock files on HP-UX 11.0 14
- Replicators 14
  - Infinitely Recursive Replicators 14
  - Unique-Only Sorting 14
- Checking a Document Without an Insertion Point 15
- Persistence in the Frame Domain 15

Iconified Windows 15
Iconifying During Generation 15
Documents Not Automatically Uniconified 16
Documents Marked as Changed 16
Display Problems 16
Flashing Tables 16
Scrolling of the Structure View 16
Disappearing Structure View 16
Dialogs During Generation 16
Automounter Problems 17
Using sodamsg on HP-UX 17
Apex-Related Limitations 17
Check Out All 17
Locking of Books 17
TestMate-Related Limitations 18
TestMate Switches Must Be Set 18
Rose-Related Limitations 18
Virtual Pathmap Support 18
Ghostscript 18
Using SoDA with Exceed 19
Using SoDA with Rose on HP-UX 19
ClearQuest-Related Limitations 20
Chapter 4 Fixes 21
General Fixes 21

Chapter 1

Important Facts about SoDA 2002.05.00

Read this chapter FIRST if you are upgrading from a previous release of SoDA.

Publishing Tool Requirements

In this release of SoDA, SoDA is not bundled with FrameMaker+SGML. An existing release of FrameMaker+SGML is necessary in order to install SoDA. Note that versions of FrameMaker without SGML (for unstructured documents only) are not sufficient, full FrameMaker+SGML is required. When you install SoDA 2002.05.00, the installation process will prompt you for the location of the installed FrameMaker+SGML. If you know where FrameMaker+SGML is installed, enter the directory location. If not, enter none. If you enter none, SoDA will not work until you specify a valid directory for a FrameMaker+SGML installation on a host server. Note that users upgrading from SoDA 3.0.1, 3.0.3, or 3.1.0 may configure SoDA 2002.05.00 to use the installed version of FrameMaker+SGML bundled with SoDA.

This release of SoDA supports FrameMaker+SGML 5.5 and 6.0.

If Upgrading from SoDA 2001a.04.00

This section highlights important changes since the SoDA 2001a.04.00 release.

Platform Compatibility

The SoDA 2002.05.00 release is supported on the following platforms:

- HP-UX 10.20, HP-UX 11.00, HP-UX 11.11 on HP 9000 series workstations
- Solaris 2.6, Solaris 7 and Solaris 8 on Sun SPARCstation or UltraSPARC workstations.

License Version

The FLEXlm license.dat file must include a SoDA feature line with version 3.000. See the Installation Guide for more information.

Rose Domain

The Unix versions of SoDA include the Rose 2001a and Rose 2002 domains. In order to use one of these domains you must have the appropriate version of Rose installed (even if you don't upgrade your Rose licenses).

Rose RealTime Domain

SoDA now includes a domain compatible with Rose RealTime 2002.05.00 for Unix.

Documentation

The users guide for SoDA 2002.05.00 is available only via the online help. No printed version of the users guide is shipped with this release of SoDA.

Chapter 2

Changes

Read this chapter if you are upgrading from a previous release of SoDA. It describes the changes made to SoDA between the SoDA 2001a.04.00 and SoDA 2002.05.00 releases.

Rose Domain

In this release, domains for Rational Rose 2001a and 2002 are provided with SoDA. The Rose domain for version 2000e is no longer included. You must have Rational Rose installed in order to use the Rose domain. During the installation process, you will be asked for the location of your Rose installation. SoDA will automatically enable the Rose domain compatible with the release of Rose that you are using.

The Rose 2002 domain operates as a client-server application, if you have Rose already running on your machine, the Rose domain will connect to that instance of Rose for retrieving model information.

The Rose 2002 domain supports JPEG, TIFF and Postscript graphics.

Note that the JPG and TIFF graphics rendered in a FrameMaker+SGML document may not always appear as cleanly as postscript images. This is most observable when a graphic is scaled to a small size. Increasing the visible size of your document (say to 140% or more) will reveal the missing detail, or printed documents will also show full image quality.

If you are using Rose for the first time, it is recommended that you run Rose at least once before attempting to generate a Rose template. This ensures that Rose properly sets up your Windows emulation environment.

By default, a.JPEG file is created for each Rose or RoseRT diagram requested from your model. This default can be overridden by using the environment variable SODA _GRAPHIC_FORMAT to specify the type of graphics files to be exported from the Rose or RoseRT domains. Setting SODA_GRAPHIC_FORMAT to **tiff** before starting SoDA, will cause TIFF files to be generated rather than JPG. Setting

SODA_GRAPHIC_FORMAT to **eps**, will cause encapsulated postscript files to be generated.

Note: At this time postscript graphics are not supported through the RoseRT domain, only jpg images can be included in your SoDA documents. Postscript graphics support for RoseRT is expected to be included in an uncoming service patch for RoseRT 2002.05.00.

If you are using SoDA on HP-UX, please see "Known Limitations" on page 11 for important information regarding using the Rose integration on that platform.

Rose Templates

Users of Rational Rose who are upgrading from SoDA 3.0.1C or earlier should note that the schema for the Rose 2001a and 2002 domains is different from that of the Rose 98 domain shipped with previous versions of SoDA. The Rose templates shipped with SoDA have been updated to the new schema, however your existing Rose templates cannot be edited or generated using newer Rose domains. An upgrade utility is provided with SoDA for upgrading older Rose templates for compatibility with Rose 2002. The utility is accessible through the **SoDA->Utilities->Upgrade Document...** menu option. See the **Upgrading SoDA** section of the online help for more information.

Ghostscript Support

SoDA is shipped with Ghostscript 2.6.1[1], which is used during generation of Rose templates to improve the appearance of postscript diagrams. Ghostscript may be optionally installed while installing SoDA.

Rose RealTime Domain

SoDA now includes a domain compatible with Rose RealTime 2002.05.00 for Unix.

Apex Domain

The Apex domain supports Apex 3.2, and Apex 4.0 in this release. The Apex domain for version 3.0 is no longer included on the distribution media. Contact Rational Customer Support if you still require this combination.

[1] Ghostscript is public domain software provided without warranty. Its use is subject to the GNU General Public License

The Apex domain for Apex 4.0 includes the Apex/ClearCase integration. Apex/ClearCase provides the Apex development environment while enabling the use of ClearCase for configuration management and version control. If you are using the Apex/ClearCase integrations, there are a few limitations to be noted:

- Apex, and hence SoDA must be started within the context of a ClearCase view. For example, you can use the **`cleartool setview`** command to activate the view through which Apex accesses versioned files.
- The **`VersionHistory`** property will return the ClearCase version for a ClearCase-versioned file.
- View-extended path names should not be used for accessing files within a ClearCase subsystem. Instead, use the VOB path, for example, `/vobs/source/project1.rss`.

TestMate Domain

The TestMate domain supports TestMate 3.2 and TestMate 4.0 in this release. The TestMate 3.0 integration domain is no longer included.

ClearCase Domain

The SoDA integration domain for ClearCase 3.0 and later is included in this release. This version of the ClearCase domain contains an updated schema for better compatibility with the ClearCase domain available on Windows. ClearCase 4.0 or later is required to use the UCM features of the ClearCase domain.

ClearQuest Domain

This release of SoDA includes support for ClearQuest 2002..05.00 on Unix. If you have Rational ClearQuest for Solaris or HP-UX, you may use SoDA to document your ClearQuest database.

The ClearQuest domain utilizes a feature of SoDA/Frame called dynamic schema generation. This feature allows SoDA to determine the schema corresponding to a particular ClearQuest database at runtime. Since different ClearQuest databases will have different schemas, the properties and relationships available within a ClearQuest template depend on the database being documented. SoDA communicates with ClearQuest to determine the schema for a particular database as needed. This may happen during template customization, or during generation. SoDA will prompt you for a login name and password for your ClearQuest database. There will be a short delay while SoDA communicates with ClearQuest to obtain the database schema.

For further information on how to use the ClearQuest integration, please see the on-line help.

Chapter 3

Known Limitations

The known limitations of the SoDA 2002.05.00 release are described below. Where possible, work-arounds are also described.

General Limitations

The following limitations apply to all SoDA users.

Cut and Paste

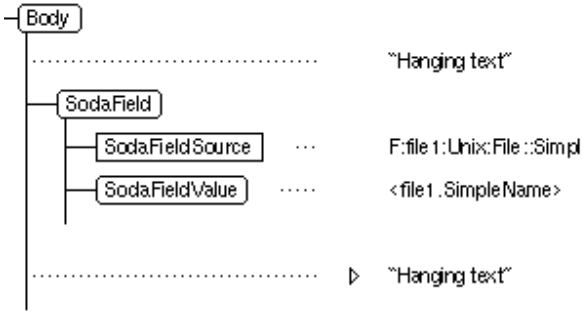
FrameMaker+SGML Cut and Paste

Cut-and-paste editing operations within and amongst SoDA documents—that is, cutting and pasting that uses FrameMaker+SGML's clipboard—can fail after FrameMaker+SGML has been running for a long time (usually multiple days).

If you encounter this problem, exit SoDA, log out, log in again, and restart SoDA. (You need not reboot your workstation).

Hanging Text

Hanging text should be wrapped in a TextRange container where possible. Hanging text is commonly created by the insertion of SoDA elements into the middle of paragraphs:



SoDA provides a utility for wrapping hanging text in a TextRange element. To run this utility on a document, choose the **SoDA:Utilities:Wrap Hanging Text** menu option. Note that the TextRange element must be defined within your EDD for the conversion to be successful (the SoDA default EDD defines a TextRange element).

Known problems with hanging text include:

- You cannot select a portion of the hanging text and then insert a field, replicator, or stipulator. A SoDA Error dialog box will appear saying that you have made an invalid selection.

  For example, if you want to select some portion of hanging text and replace it with a SoDA field, you must instead delete the text and then insert the field at the cursor position.
- You cannot add a replicator or stipulator to a container that begins with hanging text, and if you try, a SoDA Error dialog box will appear that tells you so.

  You can work-around the problem by wrapping that leading text in a container element.

Conditional Text in Master Elements

SoDA's use of conditional text to hide master elements (that is, elements with replicators attached) precludes the use of conditional text for other purposes within the master elements.

If you do tag text within a master element as conditional, those tags will be removed during document generation and will not appear in the elements added during genera-

tion. Once an element has been added, however, condition tags can be applied within it without being deleted by subsequent generations.

SodaHidden Tag Not Removed When Objects Reappear

If you have a SoDA document with a replicator over some objects, and you regenerate that document with the **Delete Mode** set to **Hide**, any elements that were previously generated for objects that have since disappeared will be hidden by the **SodaHidden** condition tag. Then, if you regenerate the document again, and some of those objects have since reappeared, the corresponding elements will remain hidden because the **SodaHidden** tag will not be removed from them.

FrameMaker+SGML Files

When generating a book or any document in a book, SoDA may encounter various difficulties in opening a document. Such difficulties, which typically cause FrameMaker+SGML to display a dialog box if you try to open the document yourself, include:

- The presence of an autosave (***.auto**) or recovery (***.recover**) file. (If you open the document yourself, FrameMaker+SGML tells you that an autosave or recovery file exists and asks if you want to open it instead.)

  If the **Ignore .recover and .auto Files** toggle button is set on the SoDA Generator dialog box, SoDA opens the (possibly outdated or corrupted) document, displays no message, and continues with document generation. The autosave or recovery file is ignored.

  Otherwise, SoDA opens the autosave or recovery file, displays no message, and continues with document generation. The file is left open after generation so that you can decide how to save it.

- The presence of a lock (***.lck**) file. (If you open the document yourself, FrameMaker+SGML displays a Document in Use dialog box.)

  SoDA opens the document in View Only format, displays no message, and continues with document generation. SoDA will not be able to generate the view-only document, but it will be able to use the view-only document for generating other documents (which could, for example, depend on global connectors in the view-only document).

  Book files cannot be opened in View Only format, so opening a book that already has a lock file will cause an error.

- Missing fonts. (If you open the document yourself and it uses fonts that are not available on your system, FrameMaker+SGML displays an alert.)

SoDA opens the document despite the missing fonts, displays no message, and continues with document generation.

- Missing graphics. (If you open the document yourself and it imports graphics, by reference, that cannot be found, FrameMaker+SGML displays a Missing Graphic File dialog box.)

  SoDA opens the document despite the missing graphics, displays no message, and continues with document generation.

You can avoid these situations by making sure that you can open all of the documents in your book without difficulty before generating them.

Lock files on HP-UX 11.0

Under FrameMaker+SGML 5.5.6 , Frame *.lck files are not always removed when a document is closed. This is a known issue with FrameMaker+SGML. When the document is re-opened, the *Document in Use* dialog will be displayed, simply click on *Reset Lock and Open* to continue editing the document.

If you specify a filename in the “Generate Into” box on HP-UX, you may see a generation report containing the message “The specified file name is invalid”. This can occur if you previously generated another (or the same) template as the same target file. If a `.lck` file exists for the target file from the previous generation, SoDA will not be able to write the document after generation. To work around this problem, manually remove the `.lck` file prior to generation.

Replicators

Infinitely Recursive Replicators

It is possible to define recursive replicators that will cause SoDA to enter an infinite loop when you generate your document. For example, if you recurse down through the file system and encounter a symbolic link that points to a previously traversed parent directory, you will enter an infinite loop. (If you are using SoDA with Rational Apex, the symbolic links named **.Rational_Location** in Rational Subsystems can cause such loops. Adjust your recursive replicators to avoid them.)

Unique-Only Sorting

The **Unique Only** toggle button in the SoDA Replicator dialog box is significant only when there is an expression in the **Ordered By** area.

Checking a Document Without an Insertion Point

If you do not have an insertion point in your document, **Check Document** will terminate without displaying the expected consistency report.

You can avoid this problem by clicking in your document, ensuring that you have an insertion point, before choosing **Check Document** from the **SoDA** menu.

Persistence in the Frame Domain

The Frame domain uses numeric object identifiers in references to Frame document elements. The advantage of this approach is that the referenced document does not need to be modified when the reference is created (whereas standard Frame cross-references, for example, require modification of both the source and referenced documents).

The encoding used by SoDA has been modified to remove the previous limitation preventing conversion to and from Maker Interchange Format (MIF), however the approach still has two disadvantages. Objects are renumbered by:

- Hiding and then showing conditional text.
- Cut-and-paste operations (that is, selecting and moving them in the document)

The effect of object renumbering is that existing replicated document elements linked to renumbered objects will be deleted and re-created when the document is regenerated. If you have added information to these elements, that information will be lost.

Add information to elements replicated from the Frame domain with caution. (The templates delivered with SoDA do not call for any information being added to elements replicated from the Frame domain.)

Iconified Windows

Iconifying During Generation

You can iconify and uniconify documents and books during generation; however, this may occasionally cause a single internal Frame error (usually error -59) if the iconify happens just as an internal Frame call is being issued.

If this error occurs, simply uniconify the document and regenerate the section where the error occurred.

Documents Not Automatically Uniconified

SoDA is not always able to automatically uniconify documents. If you perform an operation on an iconified document, it may not be readily apparent that the operation actually took place.

For example, when visiting a source element that resides in an open, iconified document, the source element will be selected, but the document will remain iconified. Uniconifying the document will reveal the selected element.

Documents Marked as Changed

If you bring up and then cancel a SoDA dialog, or if you run the **Check Document** command from the **SoDA** menu, your document is marked as having been changed even though it was not.

Display Problems

The following display issues do not affect SoDA functionality, but they do affect its usability to the extent that they can, unfortunately, be a nuisance.

Flashing Tables

You may notice that documents containing tables flash as the tables are being generated. This flashing does not indicate a problem with the generation.

Scrolling of the Structure View

The structure view is frequently scrolled to the top after SoDA editing operations.

Disappearing Structure View

Prior to document or book generation, SoDA closes the structure view to enhance performance. The structure view may be reopened after generation.

Dialogs During Generation

During generation of Rose templates, SoDA may display a dialog with the message “FrameMaker lost input focus, recovering”. This does not affect the generated document or report. Simply dismiss the dialog, and generation should proceed normally.

Automounter Problems

Document generation may fail for large documents when full pathnames that access automounted file systems are used. Use relative pathnames when feasible.

Using sodamsg on HP-UX

The `-query` option for *sodamsg* is not supported under HP-UX.

Apex-Related Limitations

The following limitations apply if you are using SoDA with Rational Apex.

Check Out All

When you do a **Control > Check Out All** from a book, the checkout command can hang on the Apex side. This problem seems to be caused by command length. Within a book, long pathnames, large numbers of documents, and documents located in other contexts can all lead to the problem.

If you encounter this problem, select the checkout job in the Apex Jobs window and then select **Kill** from the **File** menu. This will cause SoDA to return an error, but the documents will be correctly checked out in the CMVC database on the Apex side.

If you have **SODA_CMVC_LOCK** set to **TRUE**, SoDA will have locked the documents when they were checked in, and because of the error, will not have unlocked them when they were checked out. Thus, your checked-out documents will still be in FrameMaker+SGML View Only format. When you open them, you can unlock them by entering **Esc F l k**.

Locking of Books

Regardless of the value of the **SODA_CMVC_LOCK** environment variable, books are not locked because that capability is not currently supported by FrameMaker+SGML.

TestMate-Related Limitations

The following limitations apply if you are using SoDA with TestMate.

TestMate Switches Must Be Set

You must have TestMate running to use SoDA's TestMate domain, and your TestMate switches must be set. TestMate will function without the switches, but SoDA's TestMate domain will not.

Rose-Related Limitations

The following limitations apply if you are using SoDA with Rational Rose.

Virtual Pathmap Support

SoDA supports Rose virtual path maps that start with $, but not those that start with %.

Ghostscript

Rose graphics can be exported using an encapsulated postscript format. If you are running SoDA on Solaris 2, or otherwise have display PostScript loaded on your workstation, the Rose diagrams in your SoDA documents should display correctly on-line.

SoDA is shipped with Ghostscript[1], a public domain ("freeware") display utility which enables conversion of the Rose diagrams from EPSF to EPSI. EPSI contains a bitmap that facilitates online display and enables better scaling. Converting the postscript files to EPSI enables SoDA to improve the appearance of graphics in the document, for example by limiting the size of As-Is graphics to the boundaries of the objects it contains. Without Ghostscript, graphics appear with too much white space.

SoDA is shipped and tested with version 2.6.1 of Ghostscript. If you would like to use a different version of Ghostscript, simply set the environment variable SODA_GS_LOCATION to the directory containing your Ghostscript installation prior to starting SoDA.

Note that usage of Ghostscript is subject to the GNU General Public License. A copy of this license is included with the Ghostscript release.

[1] More specifically, the **gs** program.

Using SoDA with Exceed

Users using Exceed to run a Unix version of SoDA from a Windows-based personal computer may experience problems importing Rose diagrams into SoDA documents. In most cases, documents may be printed without difficulty even though the graphics may not display correctly. Note that this configuration is not supported by SoDA, users wishing to run from a PC should obtain the latest Windows version of SoDA for Frame, currently 3.1.2.

Using SoDA with Rose on HP-UX

As of the date of publication, there was an outstanding issue related to the use of SoDA's Rose 2001a and 2002 integrations. Under some circumstances, the Rose application may abort or issue Ole exception errors while SoDA is generating a template. This is usually caused by registry entries which are incompatible with SoDA's Rose client application.

The SoDA-Rose integration is sensitive to the default registry settings, as well as to certain personalized settings you may have in the <*user*>.reg file in your home directory. Either of the following work-arounds will enable you to reliably generate SoDA templates on HP-UX:

1. Before generating a Rose template on HP-UX, make sure the Rose application is not running on your desktop. SoDA will automatically start up Rose as a background task when generating the template. Template generation should proceed normally with no errors.
2. Modify the <*user*>.reg file in your home directory, in the section `[HKEY_CURRENT_USER\Software\Rational Software\Rose\Rose]`, add the following key: `"AutoConstructMainDiagrams"="Yes"`. This key may already exist in your personal registry file, if so, ensure that the value for this key is `"Yes"`. If you do not have a <*user*>.reg file in your home directory, you may create one based on the default template provided in your Rose installation. See the Rose product documentation for further information on how to do this.

SoDA has been observed to hang for a period of time when querying the Rose domain on HP-UX 10.2 and 11.0 where excessive amount of data are returned. If you observe this scenario, modify the SoDA command (replicator or field) so that less data is returned by the query. SoDA has a limit of 8K bytes returned per query.

ClearQuest-Related Limitations

The following limitations apply if you are using SoDA with Rational ClearQuest on Unix:

- SoDA only permits a template to connect to a single ClearQuest database.
- For databases with very complex schemas, it sometimes will not be possible to select all individual relationships and attributes within the SoDA GUI when adding or modifying a SoDA command. This is due to size limitations of the display. Domain performance may also be adversely affected by schema complexity.
- SoDA will allow a template to document the results of a ClearQuest query (these are available as relationships under the database class), however, queries requiring extra parameters are not supported.
- No templates are provided for the ClearQuest domain. Since the ClearQuest schema is dynamically determined from your ClearQuest database, templates can only be customized for a specific database.

Chapter 4

Fixes

Read this chapter if you are upgrading from a previous release of SoDA. It describes the problems fixed in SoDA between the SoDA 2001a.04.00 and SoDA 2002.05.00 releases.

General Fixes

This section describes the general fixes made since the SoDA 2001a.04.00 release.

Defect ID#	Description of Defect
RATLC00009524	Error “Cannot start API client cmvc_main” appears when starting SoDA
RATLC00009757	Error “Cannot connect to Rose server” appears in Rose or RoseRT domain log file when trying to generate a Rose or RoseRT template after starting SoDA from ksh.
RATLC00003965	A dialog box containing the message “FrameMaker lost input focus, recovering” appears during generation of a Rose or RoseRT template.
RATLC00008306	cmvc_main reports missing libgen.so library on some Solaris systems.
RATLC00009766	Graphics quality using both jpeg and tiff images is not sufficient if Rose or RoseRT model diagrams contain small fonts.
RATLC00010780	RoseRT/Unix: SoDA unable to retrieve sequence diagrams from Collaborations.
RATLC00003963	FrameMaker+SGML does not work stand-alone after configuring SoDA/Frame to use the same Frame installation. There are errors about missing API clients during the startup of FrameMaker.
RATLC00003975	FrameMaker set up needs to be documented better during SoDA post_install.
RATLC00013438	Postscript graphics created by MainWin are not properly clipped and EPS Graphics don’t always print.

Defect ID#	Description of Defect (Continued)
RATLC00019448	Graphics are not always scaled properly in book documents.
RATLC00019982	Generation results in error messages like “internalError: the specified file name is invalid”, and document is not saved.
RATLC00019554	SoDA does not recover connection to Rose if Rose exits. Error messages like “Ole exception in class CModel” appear during generation.