Template Design Guide

Important Notices

This document is the GR*i*NS Editor for Real, Version 2.0 *Template Design Guide*. All of the information has been verified, but incremental product updates may impact part of this guide.

This version of the GR*i*NS Editor for Real, Version 2.0 *Template Design Guide* has been produced for use as an off-line reference. Images and page layout have been optimized for printing on a 600-dpi (or greater) laser printer. For best reproducibility, the use of a color printer is recommended, although every effort has been made to make illustrations readable on other printers as well. If you wish to use it as an on-line reference via a PDF reader, we recommend that you increase the level of display magnification when viewing images.

The images used in this publication were taken from the GR*i*NS Editor for Real, Version 2.0 build 2.0-win32-93 for Windows 2000. While the look of other versions of GR*i*NS are slightly different because of adherence to common conventions on those other environments, the functionality described is similar for all versions of GR*i*NS. In order to reduce document size, only images from the Windows version have been included in this document.

We welcome your questions on GR*i*NS Editor for Real, Version 2.0 and comments on this documentation. Please submit all questions and comments to our support desk at *grins-support@oratrix.com*. We maintain a list server dedicated to sharing experiences among GR*i*NS Editor for Real, Version 2.0 users. See the on-line release notes that come with the software distribution for details of this listserver. Finally, if you wish to submit your own SMIL files as examples for other users, please send a request for submission to: *grins-examples@oratrix.com*.

Table of Contents

GR*i*NS Editor for RealONE Distribution Roadmap

Congratulations on selecting the GR*i*NS Editor for RealONE (GR*i*NS/RealONE) for creating SMIL-2.0 presentations. GR*i*NS/RealONE lets you harness the full power of the RealNetworks RealONE player in an easy and intuitive manner.

Distribution Package Contents

The GR*i*NS/RealONE distribution package consists of the following components:
- *GRiNS Editor for RealONE Template Design Guide*: A quick and easy description of the standard *GRiNS/RealONE* template set can get you started making RealONE presentations. (This is this guide.)
- GR*i*NS Editor for RealONE *Quick Start Guide*: an overview of the installation instructions for GR*i*NS and a tour of the basics of the GR*i*NS Environment.
- *Templates*: a set of templates for use in building your own presentations;
- GR*i*NS-*Icons*: a directory containing Icons used by GR*i*NS/RealONE;
- *Software:* depending on the distribution you downloaded, a GR*i*NS distribution for Windows-95/98/2000/XP or other platform.

Once you have installed GR*i*NS/RealONE, registered owners will be given information on how to obtain the GR*i*NS Editor for RealONE *Tutorial Guide* and the tutorial assets set. The Tutorial Guide is a step-by-step guide to both basic and advanced features of GR*i*NS/RealONE. The Guide and Assets are not included in the standard distribution because of the size of the tutorial documents themselves. Registered owners of GR*i*NS may download the tutorials from the GR*i*NS Web site at an address provided in the purchase receipt. The site also contains example presentations created with GR*i*NS. (The tutorial set is not available to users with an evaluation-only license.)

GR*i*NS and GR*i*NS/RealONE

GR*i*NS is available in several configurations: a *Pro* edition, intended for users who want full control over authoring and publishing to various SMIL-2.0 engines, and editions (such as GR*i*NS/RealONE) for particular streaming players. This manual will identify features which are available in the particular editions of GR*i*NS.

GR*i*NS/RealONE Template Design Guide

After reading the GR*i*NS/RealONE *Quick Start Guide,* we encourage you to build some sample presentations with the GR*i*NS/RealONE Template set. The *Template Design Guide* has been written to help you on your way quickly. It is divided into seven sections:

1. *Overview of GRiNS/RealONE Templates*: a summary description of the available template types and their purpose.
2. *Slideshow Templates*: a description of how you can build simple and not-so-simple slideshows with GR*i*NS.
3. *Video Templates:* Got some footage that you are dying to get on the Web? We'll show you how RealONE can help add some spice.
4. *Adaptive Templates:* The Web is a complex place — different people, different bitrates, different languages. GR*i*NS can help manage this complexity without driving you crazy.
5. *Empty Templates:* Want to start from scratch? No problem, we'll show you how.
6. GR*i*NS *Version Comparison Information*: an overview of the differences in functionality offered in the various editions of GR*i*NS.
7. GR*i*NS *Editor Quick Reference*: an overview of the data types supported by the GR*i*NS/RealONE environment and other useful reference information for getting started with the GR*i*NS/RealONE Editor.
8. *Where Next?*: A set of pointers to GR*i*NS/RealONE resources and other hints to help you on your way to creating presentations for the RealONE Player.

Each of the sections has been written to be relatively stand-alone, but we suggest that you read them all to get a good overview of the system.

In the examples and text given in this document, we will use "GR*i*NS/Pro" to identify features available only in the *Pro* edition of GR*i*NS, and "GR*i*NS/RealONE" to identify features available in the RealONE edition of GR*i*NS. Unless otherwise marked, all features in GR*i*NS/RealONE are available in GR*i*NS/Pro.

Overview of GR*i*NS/RealONE Templates

The GR*i*NS/RealONE comes with a basic set of design templates that can help you build presentations quickly. The RealNetworks RealONE player is based on the SMIL-2.0 language, developed by the World Wide Web consortium (W3C). The SMIL-2.0 specification is an imposing document that describes a wealth of features for making your media presentations more attractive, effective and interactive than was previously available. The GR*i*NS/RealONE template set gives you access to the basic facilities of the language, and the GR*i*NS Editor provides unprecedented support for manipulating all of SMIL-2's constructs.

GR*i*NS/RealONE Template Collection

The basic set of templates delivered with the GR*i*NS/RealONE Editor contains four classes of templates:

- *Slideshow templates,* for creating presentations consisting mainly of images and (optional) music, spoken audio and text annotations;
- *Video templates*, for creating a sequence of one or more videos, with transitions and animations on video placement. The videos may also be accompanied with optional text and audio captions;
- *Adaptive templates*, for creating presentations that can "adapt" to the environment that the user has at the time of presentation delivery;
- *Empty templates*, for creating custom presentations without having to worry about the XML mumbo-jumbo required to format your presentation.

There are several types of templates in each class, each building upon the other. Overtime, extra templates will be released by Oratrix or our GR*i*NS partners.

If you are interested in creating new templates, you may want to upgrade to GR*i*NS/Pro. GR*i*NS/Pro provides extra facilities for creating templates and for enhanced SMIL and RealONE editing support. GR*i*NS/Pro also allows you to create templates for other variants of SMIL, such as Microsoft's HTML+TIME in InternetExplorer 6, or the 3GPP variant of SMIL Basic. For upgrade information, see: *http://www.oratrix.com/GRiNS/*.

After GR*i*NS/RealONE is installed, registered owners may download the expanded tutorial set from the GR*i*NS/RealONE Web site:
>*http://www.oratrix.com/GRiNS/*.

If you would like us to showcase your work, please send a message to
>*grins-support@oratrix.com*.

Important Notice

During development of GR*i*NS/RealONE, we have had access to early releases of the RealNetworks RealONE product. The state of this product can best be described as "evolving". Since there will undoubtedly be bug fixes in both the GR*i*NS/RealONE Editor and in the RealONE Player, registered owners will receive product updates from time to time. We strongly recommend that you install these upgrades as soon as practical.

GR*i*NS/RealONE Slideshow Templates

GR*i*NS/RealONE Video Templates

GRiNS/RealONE Adaptive Templates

GR*i*NS/RealONE Empty Templates

GRiNS Edition Comparison Information

GRiNS Packaging Information

The GRiNS Editor for RealONE is one member of a family of editing products for the SMIL-2.0 standard. This section provides a feature differentiation and compatibility matrix for each of the available editions.

The features of each product are subject to change without notice.

GRiNS Feature Table	GRiNS / Ent	GRiNS / Pro	GRiNS / Real	GRiNS / IE-6	GRiNS / 3G
Standard Features					
Structured Timeline Editing	☑	☑	☑	☑	☑
Layout Editor	☑	☑	☑	☑	☑
Animation Editor	☑	☑	☑	☑	☑
Transition Selector/Editor	☑	☑	☑	☑	☑
Source View/Editor (see below)	☑	☑	☑	☑	☑
Full GUI-based editing	☑	☑	☑	☑	☑
Design from Templates	☑	☑	☑	☑	☑
Create custom presentations	☑	☑	☑	☑	☑
Import existing presentation	☑	☑	☑	☑	☑
Publish to popular players	☑	☑	☑	☑	☑
Create par/seq/excl/switch groups	☑	☑	☑	☑	☑
Integrate audio/video/text/images	☑	☑	☑	☑	☑
Drag&Drop editing	☑	☑	☑	☑	☑
Infinite Undo Stack	☑	☑	☑	☑	☑
Create (timed) links	☑	☑	☑	☑	☑
Insert events	☑	☑	☑	☑	☑
Preview Presentation	☑	☑	☑	☑	☑
Preview Individual Node/Group	☑	☑	☑	☑	☑
Preview from any Node/Group	☑	☑	☑	☑	☑
Model Network performance	☑	☑	☑	☑	☑
Preview for different bitrates	☑	☑	☑	☑	☑

GR*i*NS Feature Table	GR*i*NS / Ent	GR*i*NS / Pro	GR*i*NS / Real	GR*i*NS / IE-6	GR*i*NS / 3G
New Presentations:					
From Templates	☑	☑	☑	☑	☑
Custom Document	☑	☑	☑	☑	--
Create New Template	☑	--	--	--	--
Import:					
From Existing SMIL-2	☑	☑	☑	☑	--
From Existing SMIL-1	☑	☑	--	--	--
From Existing RP-6/7/8	☑	☑	☑	--	--
From Existing HTML+Time	☑	--	--	☑	--
Publish:					
To SMIL-2 (Generic SMIL-2)	☑	☑	--	--	☑
To RealONE	☑	☑	☑	--	--
To SMIL-1	☑	☑	--	--	--
To RP-6/7/8	☑	☑	--	--	--
To HTML+Time	☑	☑	--	☑	--
To SWF	☑	--	--	--	--
To MPEG-4	☑	--	--	--	☑
Publish & Prune to Profile	☑	☑	☑	☑	☑
Based on Bitrate	☑	☑	☑	☑	☑
Based on Language	☑	☑	--	--	--
Based on Captions	☑	☑	--	--	--
Based on Any Test Attribute	☑	--	--	--	--
Convert					
RealPix to SMIL 2.0	☑	☑	☑	☑	☑
SMIL 2.0 to RealPix	☑	--	--	--	--
Media Objects to RM	☑	☑	☑	--	☑
Media Objects to WMP	☑	☑	--	☑	☑
Content					
Link to Installed 3rd Party Editors	☑	☑	☑	☑	☑
Embedded image trimmer	☑	☑	--	--	--
TWAIN object import	☑	☑	--	--	--

GR*i*NS Editor for RealONE *Template Design Guide*

GR*i*NS Feature Table	GR*i*NS / Ent	GR*i*NS / Pro	GR*i*NS / Real	GR*i*NS / IE-6	GR*i*NS / 3G
Toolbars					
Standard Configuration	☑	☑	☑	☑	☑
Customize Configuration	☑	☑	--	--	--
UI Features					
Show Asset Thumbnails	☑	☑	☑	☑	☑
Customize Asset Thumbnails	☑	☑	--	--	--
Show Playable in Switch	☑	☑	☑	☑	☑
Customize 'Show Playable'	☑	☑	--	--	--
Structured Timeline View					
Standard Timeline View	☑	☑	☑	☑	☑
Customized Timeline View	☑	☑	--	--	--
Optimized Structured Timeline	☑	☑	--	--	--
Source View					
View Source	☑	☑	☑	--	--
Edit Source	☑	☑	--	--	--
Animation Editor					
Child Animations on Nodes	☑	☑	☑	☑	☑
Animations on Regions	☑	☑	--	--	--
Full Animation Elements	☑	--	--	--	--
Exclusive Nodes					
Create EXCL	☑	☑	☑	☑	--
Create PRIORITY CLASS	☑	☑	☑	☑	--
Transitions					
Use Standard GR*i*NS set	☑	☑	☑	☑	--
Edit Standard GR*i*NS set	☑	☑	--	--	--
Define new transitions	☑	--	--	--	--

GRiNS Feature Table	GRiNS / Ent	GRiNS / Pro	GRiNS / Real	GRiNS / IE-6	GRiNS / 3G
Switch Support					
Specify Bitrate	☑	☑	☑	☑	☑
Specify Language	☑	☑	☑	☑	☑
Specify Captions	☑	☑	--	--	--
Specify Audio Desc	☑	☑	--	--	--
Specify Subtitle/Overdub	☑	☑	--	--	--
Specify Screen/Depth	☑	--	--	--	--
Specify CPU / OS	☑	--	--	--	--
Specify Player/Req/Comp	☑	--	--	--	--
Custom Tests					
Play Custom Tests	☑	☑	--	--	--
Define Custom Tests	☑	☑	--	--	--
Tools					
Summary Bandwidth Usage	☑	☑	☑	--	--
Detailed Bandwidth Strip	☑	☑	☑	--	--
Align/Distribute Nodes in Layout	☑	☑	☑	--	--
Layout Support					
Define root-layout via UI	☑	☑	☑	☑	☑
Edit root-layout numerically	☑	☑	--	--	--
Define topLayout via UI	☑	☑	☑	☑	--
Edit topLayout numerically	☑	☑	--	--	--
Define regions via UI	☑	☑	☑	☑	☑
Edit regions numerically	☑	☑	--	--	--
Define reg hierarchy via UI	☑	☑	☑	☑	--
Edit reg hier. numerically	☑	☑	--	--	--
Define sub-regions via UI	☑	☑	☑	☑	--
Edit sub-region numerically	☑	☑	--	--	--
Select regPoints via UI	☑	☑	☑	☑	--
Define regPoint numerically	☑	☑	--	--	--

GRiNS Feature Table	GRiNS / Ent	GRiNS / Pro	GRiNS / Real	GRiNS / IE-6	GRiNS / 3G
Timing Specification					
Specify Duration	☑	☑	☑	☑	☑
Specify EndSync	☑	☑	☑	☑	☑
Specify Fill	☑	☑	☑	☑	☑
Specify repeatCount	☑	☑	--	--	--
Specify repeatDuration	☑	☑	--	--	--
Specify Min	☑	☑	--	--	--
Specify Max	☑	☑	--	--	--
Begin/End Specification					
Delay / NodeID / Indefinite	☑	☑	☑	☑	☑
AccessKey / WallClock	☑	☑	--	--	--
Event	☑	☑	☑	☑	☑
X-Path Based Events	☑	☑	☑	☑	☑
Restart Semantics	☑	☑	--	--	--
Media					
via Drag&Drop	☑	☑	☑	☑	☑
via local name	☑	☑	☑	☑	☑
via URL	☑	☑	☑	--	--
ClipBegin / ClipEnd	☑	☑	☑	☑	☑
ReadIndex	☑	--	--	--	--
Event Sensitivity	☑	--	☑	☑	☑
Erase	☑	--	--	--	--
Sychnronization Behavior					
Specify Sync Default	☑	☑	☑	--	--
Specify Sync Behavior	☑	☑	--	--	--
Specify Sync Master	☑	--	--	☑	--
Productivity Enhancements					
Specify Default Layouts for Groups	☑	☑	☑	☑	☑
Specify Default Timing for Groups	☑	☑	--	--	--
Specify Default Fill for Groups	☑	☑	--	--	--
Specify Default Transitions	☑	☑	--	--	--
Merge Nodes with Parents	☑	--	--	--	--

GR*i*NS Feature Table	GR*i*NS / Ent	GR*i*NS / Pro	GR*i*NS / Real	GR*i*NS / IE-6	GR*i*NS / 3G
Linking					
Create whole-node anchors	☑	☑	☑	--	--
Create partial-node anchors (X/Y)	☑	☑	☑	--	--
Create timed anchors	☑	☑	☑	--	--
Created external anchors	☑	☑	☑	☑	--
Events					
Create short-cut events	☑	☑	☑	☑	☑
Create/edit begin events	☑	☑	☑	☑	--
Create/edit end events	☑	☑	☑	☑	--

NOTE:

1. The available versions of the GR*i*NS/RealONE products are updated regularly. Please consult the following Web URL for the most recent version of the GR*i*NS product matrix at:

    http://www.oratrix.com/GRiNS/

GR*i*NS/RealONE Quick Reference Information

SMIL Compliance Information

The GR*i*NS/RealONE supports the entire SMIL 2.0 specification, although not all features are previewed during editing. Documents that make use of these constructs are parsed correctly, but the features are ignored during rendering.

Supported Media Table

The following chart gives a listing of the media types supported by various versions of GR*i*NS Editor for RealONE:

MIME type	Extensions	Windows 98/2K/XP	Mac	Linux(4)
audio/basic	au	yes	yes	yes
audio/x-aiff	aiff, aifc, aif	yes	yes	yes
audio/x-wav	wav	yes	yes (1)	yes (1)
image/jpeg	jpeg, jpg	yes	yes	yes
image/png	png	yes (2)	yes	yes
image/tiff	tiff, tif	yes	yes	yes
image/x-portable-anymap	pnm	no	yes	yes
image/x-portable-bitmap	pbm	no	yes	yes
image/x-portable-graymap	pgm	no	yes	yes
image/x-portable-pixmap	ppm	no	yes	yes
image/x-rgb	rgb	yes	yes	yes
image/x-xbitmap	xbm	no	yes	yes

MIME type	Extensions	Windows 98/2K/XP	Mac	Linux(4)
	bmp	yes	yes	yes
	ras	yes	no	no
	tga	yes	no	no
video/mpeg	mpeg, mpg	yes	yes	yes
video/quicktime	qt	yes	yes	yes
video/x-msvideo	avi	yes	yes(3)	yes (3)
video/x-sgi-movie	mov	no	no	yes
text/html (5)	html, htm	no	no	no
text/plain	txt	yes	yes	yes

Notes
1. Uncompressed WAV only.
2. Support seems to be somewhat buggy.
3. Not all encodings supported.
4. Linux information provided for planning purposes only.
5. HTML data is rendered by the GRiNS Preview Player, but not converted to RealText.

Each of these formats is converted to the appropriate RealSystem datatype. For highest quality rending of a final presentation, we recommend converting some datatypes to RealMedia before inserting them in a presentation, if possible.

RealONE Media Conversion

The following chart describes the levels of support provided in the GR*i*NS/
RealONE version for the listed RealMedia data types used in the RealNetworks
RealONE Player:

RealMedia	Extension	Importable	Auto-Generated
RealAudio	ra, rm	yes	yes
RealVideo	rm	yes	yes
RealText	rt	yes	no(1)
RealPix	rp	yes	yes

Notes
1. GR*i*NS/RealONE provides support for the automatic generation of simple
   RealText documents from immediate strings in the Editor, but it does not at
   present provide full RealText editing facilities. This is expected in a future
   release.
2. GR*i*NS/RealONE can import and convert most existing RealPix files. Limited
   support is available for creating RealPix from SMIL-2.0 constructs for users
   wishing backward compatibility.

References and Links

Please see the Links section of the GR*i*NS/RealONE Web site (*www.oratrix.com/
GRiNS*).

Where Next?

The GR*i*NS Editor for RealONE *Quick Start Guide* provides you with a general overview of GR*i*NS and a particular introduction to GR*i*NS/RealONE.

Once you have installed GR*i*NS you can either set out on your own in the process of creating multimedia presentations, or you can save your time and energy by following a set of simple and straight-forward GR*i*NS/RealONE tutorials. These can be found in the GR*i*NS/RealONE *Tutorial Guide*, which is available in on-line (HTML) or off-line (PDF) formats. Consult the documentation provided with your GR*i*NS/RealONE Editor access key to find the current set of tutorials for your version of GR*i*NS.

You should also consult the RealONE IQ Production Guide, available from RealNetworks, Inc. This guide provides an overview of the facilities supported by the RealONE player. It also provides a comprehensive introduction to the concepts of streaming media and details on the SMIL-2.0 language.

The GR*i*NS Web site (*www.oratrix.com/GRiNS*) provides a set of *release notes* and *issues reports* for each version of the GR*i*NS Editor and Player releases. This site also contains a publicly-available version of the GR*i*NS Frequently-Asked Questions list and errata to this and other GR*i*NS publications. If you purchased GR*i*NS, you will have had the opportunity to enroll for our automatic notification service for the version(s) of GR*i*NS you acquired.

We recommend that you use the Check for GRiNS update button in the Help menu. This version will poll the GR*i*NS Web site to see if an updated version of GR*i*NS exists.

We welcome your comments, criticisms, compliments and suggestions. You can reach us at: *grins-documentation@oratrix.com*.

We hope you find working with GR*i*NS a productive experience!