Quick Start Guide

GR*i*NS-Lite for RealSystem G2

Version 1.5

Windows and Macintosh

Important Notices

This is the revised version of the GR*i*NS-Lite for RealSystem G2 *Quick Start Guide* for Version 1.5. All of the information has been verified, but incremental product updates may impact part of this guide.

This version of the GR*i*NS-Lite for RealSystem G2 *Quick Start 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-Lite for RealSystem G2 version 1.5-win32-0 for Windows-95|98|NT-4. While the look of other versions of GRiNS are slightly different because of adherence to common conventions on those other environments, the functionality described is similar for all versions of GRiNS. 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-Lite for RealSystem G2 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-Lite for RealSystem G2 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*.

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GR*i*NS Version 1.5 Distribution Roadmap

Thank you for downloading the *GRiNS-Lite for RealSystem G2* (or, GR*i*NS/G2*L* for short) editor for creating presentation for RealNetworks RealSystem G2.

This publication will help you understand how GR*i*NS/G2*L* works, and how it can help you to create high-quality multimedia presentations for the Web easily and effectively.

Distribution Package Contents

The GR*i*NS/G2*L* distribution package consists of the following components:
- *GRiNS-Lite for RealSystem G2 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. (This is this guide.)
- *Templates*: a set of templates used in the *GRiNS-Lite for RealSystem G2 Tutorial Guide* and which you may use to build you own presentations;
- *Examples*: a collection of SMIL demonstrations, some of which are referenced in the *Quick Start Guide*;
- *GRiNS-Icons*: a directory containing Icons used by GR*i*NS/G2*L*;
- *Software:* depending on the distribution you downloaded, a GR*i*NS distribution for Windows-95/98/NT or the Apple Macintosh.

Once you have installed GR*i*NS/G2*L*, you will be given information on how to obtain the *GRiNS-Lite for RealSystem G2 Tutorial Guide*: a step-by-step guide to both basic and advanced features of GR*i*NS/G2*L*. (These are not included in the standard distribution because of the size of the tutorial documents themselves. They are available for free download from GR*i*NS Web site.)

GR*i*NS/G2*L* Quick Start Guide

The GR*i*NS/G2*L Quick Start Guide* will help you learn how to make SMIL presentations easily and quickly. It is divided into four sections:

1. *Introduction to GRiNS and* GR*i*NS/G2*L*: a description of the GR*i*NS architecture and a discussion on how you can protect your authoring investment by using the GR*i*NS multi-targeting approach to presentation design and maintenance.
2. *Installing and Running GRiNS*: a overview of how to load GR*i*NS/G2*L* on to your system and what to expect when you load an existing G2 presentation in the GR*i*NS/G2*L* Editor.
3. *Bird's-Eye View of GRiNS*: a quick tour of the basics of the GR*i*NS/G2*L* environment. Spending five minutes here will get you ready to create and edit complex presentations without ever having to type a single line of SMIL code.
4. *GRiNS Editor Quick Reference*: an overview of the data types supported by the GR*i*NS/G2*L* environment and other useful reference information for getting started with the GR*i*NS/G2*L* Editor.

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. (Most people find it useful, for example, to learn about installing the system before trying to use it.)

Once you install GR*i*NS, you should obtain the *GRiNS-Lite for RealSystem G2 Tutorial Guide*, which provides a step-by-step introduction to building your own presentations.

Introduction

GR*i*NS-Lite for RealSystem G2 is an authoring environment for creating, editing and maintaining streaming media documents for the RealSystem G2 player. GR*i*NS/G2 allows you to take source materials such as audio, video, image and text *assets*, and integrate them into a presentation that can be distributed via the Web. GR*i*NS/G2 is one product in a range of tools that help you create compelling presentations for Web-based multimedia — go to *http://www.oratrix.com/GRiNS/* for more details.

Fundamental to GR*i*NS/G2 is that the complex task of presentation authoring is partitioned so that you have the freedom required to build and manage presentations easily. At the "assets-end," the you can work with the asset types, management tools and editors that best meet the requirements of the task at hand. At the "presentation end," GR*i*NS allows presentations to be either published to Real's G2 format and datatypes for local presentation, or to be published and uploaded to a streaming server of your choice.

The GR*i*NS/G2 environment has native support for the W3C SMIL language. This means that you can open and edit existing presentations, whether or not they were made with GR*i*NS/G2. This gives you an advantage by reducing your development time: you can update earlier versions of presentations made by others, or you can choose one of the standard templates issued with GR*i*NS/G2.[1]

Key Features of Version 1.5 of GR*i*NS/G2

GRiNS Lite for G2 has been designed to help you produce compelling productions that are targeted directly to Real's popular G2 player. This gives you access to over 70,000,000 users who have G2 installed on their systems.

GRiNS Lite for G2 has been based on the feedback we have gotten from the thousands of GRiNS users world-wide. The key features of this release are:

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1. Note: If you want to create new templates by hand, or have complete creative and technical control over your presentation, check out the full GRiNS environment at *http://www.oratrix.com/GRiNS*.

- integrated Preview Player that lets you evaluate your presentation as you create it, before you publish to G2;
- integrated bandwidth simulation at multiple level of performance to show if your presentation will 'fit thru the pipe';
- automatic conversion of nearly all data types into G2 formats, including:
  - *images*: JPG, GIF, PNG, BMP formats to single images or RealPix,
  - *video*: AVI or MPEG movies to RealVideo,
  - *audio*: AIFF or WAV to RealAudio,
  - *text*: plain text or simple HTML to RealText
- drag and drop editing, using both source assets or pre-converted RealMedia files (allowing you to fine-tune asset conversion with RealProducer — or any other conversion tool — before placing it in your production);
- support for SMIL's SWITCH, allowing you to build presentations that can optimize your production to the available bandwidth;
- the ability to open previously created SMIL files, even those created with Real's Slideshow, TAG Composer, or a text editor;
- automatic generation of a Web page announcing your presentation;
- automatic inclusion of your presentation in a Web page if you wish;
- easy upload to a RealSystem RealServer for hosting your presentation;
- a simplified template-based interface to GRiNS that allows you to build presentations within minutes.

The basis of GR*i*NS ⁄ G2 remains the unique GRiNS Structure View, so that you can create logical presentations that can be easily edited and updated without having to worry about detailed timing interactions among or within objects.

The GR*i*NS/G2 Work Flow

Creating compelling streaming media presentations is a complex task. The challenges that must be addressed are:
- creating or selecting appropriate media objects for the presentation
- structuring the presentation to convey the message you want
- defining a presentation that 'fits' through the network connection available to the viewer of your presentation

Designing presentations for the Web presents you with both opportunities and problems. The basic opportunity is that you can reach a world-wide audience

with your message. The basic problem is that the world is a non-standard place. People speak different languages, people use different computers, people have access to the Web via connections of varying speeds.

GR*i*NS/G2 helps you manage the complexity of the Web by giving you control over the essential parts of your presentation. Want to quickly get out Version 1? No problem: the GR*i*NS/G2 template-based approach lets you get started in seconds. Want to make new versions that are tailored to specific groups of users, or to specific architectures or to users with high- or low-bitrate connections? Again, no problem: GR*i*NS/G2 gives you the freedom to edit, update and maintain your presentations and to target as many specific groups as you like.

The following illustration gives you an overview of the steps in the GR*i*NS/G2 workflow.
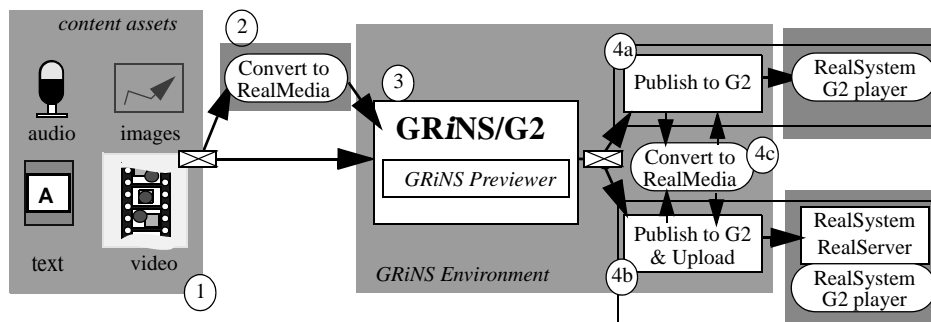
1. Creating content is perhaps the most challenging part of making a compelling presentation. You should keep in mind that the Web is not TV: the Web is a delivery vehicle that can vary widely in performance, while TV is a predictable delivery vehicle that 'looks good' in spite of supporting relatively low bandwidth audio and video information. In a similar vein, be careful with image data and with text: create or select each datatype carefully, keeping your intended audience, their equipment and their patience in mind. GR*i*NS/G2 allows you to use nearly all popular audio, video and image formats available, including AIFF, AVI, BMP, GIF, JPEG, MPEG-1&2, and PNG.

2. An optional second step in the process is the encoding of your media assets into one of RealNetworks' RealMedia formats, such as RealAudio, RealText, RealVideo or RealPix. You can also choose to have GR*i*NS/G2 do the conversion for you, but you can sometimes exercise more control over the coding of your data by using a separate tool, such as Real's RealProducerPro. GR*i*NS/G2 allows you to insert both converted and unconverted objects into your presentation.

3. One your media objects have been selected, GR*i*NS/G2's unique structure-based approach allows you to combine, edit and maintain your presentations in a flexible and easy manner. We look at this process in detail in section 3. GR*i*NS/G2 allows you to open existing presentations for editing, whether or not initially created with GR*i*NS/G2. GR*i*NS/G2 also allows you to preview your presentation incrementally, while creating it, using the GR*i*NS/G2 Preview Engine.

4. Once your presentation is made, you can publish it for use with Real's G2 player. You can do this in two ways:

    (a) publish to G2 for presentation on your local computer. Using this option allows you to playback the entire presentation using G2's player and to identify if the entire presentation meets the bandwidth constraints identified for the system.

    (b) publish and upload your presentation to a remote Real server. You can upload the main presentation and the associated data objects to one server and send the HTML page announcing your presentation to another location.

    In both cases, GR*i*NS/G2 will convert any objects to RealMedia equivalents for you (labelled 4c in our diagram), unless of course, you already did this conversion directly in Step 2.

GR*i*NS/G2 has been designed to let you make template-based presentations. You can use the set of GR*i*NS/G2-supplied templates, and fill them with the objects you need in your presentation.

You can also open any SMIL file and edit it with GR*i*NS/G2, whether it was made with GR*i*NS/G2 or via a text editor or another editing product.

Installing GR*i*NS-Lite for RealSystem G2

GR*i*NS-Lite for RealSystem G2 (GR*i*NS/G2*L*) is currently available on Windows-based PCs and Apple Macintosh PowerPCs; a Linux port will be released in early 2000. Each implementation of GR*i*NS/G2*L* has been developed to meet the expectations of the user community for that platform, but all versions can edit and play presentations made by any GR*i*NS/G2*L* authoring environment.

Obtaining GR*i*NS/G2*L*

The GR*i*NS/G2*L* environment can be obtained from the GR*i*NS Web site:
        http://www.oratrix.com/GRiNS/Lite4G2

The GR*i*NS/G2*L* Editor is a visual authoring environment that is coupled with an internal GR*i*NS PreviewPlayer: you can create, preview, edit, review and publish your presentation from within a single GR*i*NS framework.

Installing GR*i*NS/G2*L*

The instructions for installing GR*i*NS depend on the platform that you use. This section reviews the general instructions. See the release notes shipped with the GR*i*NS software for the latest details on installing GR*i*NS.

> NOTE:
> 1. The first time you execute GR*i*NS/G2*L*, you must provide your GR*i*NS License Key. Instructions for using this key are provided when the key is issued.

Installing GRiNS/G2L on Windows 95/98/NT-4.0 systems

To install GR*i*NS/G2*L* for Windows, execute the file grins_L4G2_inst.exe. This program will install GR*i*NS/G2*L* and related files in the location you give during the installation process.

When complete, the GR*i*NS/G2*L* icon will be added to your desktop. The default location for starting GR*i*NS/G2*L* from the Start Menu is:

    c:\program files\oratrix\grins_g2L\GRiNS_g2L.exe

NOTES:

1. While Administrative privileges are NOT required to install GR*i*NS/G2*L*, some systems may restrict your access to shared disks or certain directories. Contact your local administrator if you have problems.
2. You can remove all of the GR*i*NS/G2*L* Components via the 'Add/Remove Programs' program in the control panel or via the Uninstall tools provided with the distribution. Administrative rights are typically required to uninstall GR*i*NS/G2*L*.
3. The GR*i*NS/G2*L* components have been architected to be as unintrusive to your system as possible, but care should always be taken when removing or replacing system files.
4. In the Windows release, the file extensions *.smi* and *.smil* are claimed by RealSystem G2. GR*i*NS/G2*L* places its local information in a file with the *.grins* extension.

## *Installing GRiNS on the Apple Macintosh*

To install GR*i*NS∕G2*L* distributions for the Macintosh, you should download the self-extracting installer. During installing, nothing is placed in the System Folder except a small preferences file, so removing GR*i*NS∕G2*L* can be done by moving the entire distribution folder to the Macintosh Trash icon.

A Bird's-Eye View of GR*i*NS-Lite for RealSystem G2

Once GR*i*NS ⁄ G2*L* is loaded onto your system, you should open a simple presentation (such as those found in the *Examples* folder in the GR*i*NS ⁄ G2*L* distribution) and look at both the presentation and the Structure view, available under the Window pull-down menu.

Using GR*i*NS/G2*L*

If GR*i*NS ⁄ G2*L* was successfully installed, a window with the following menu and activation options is presented when you start the Editor:
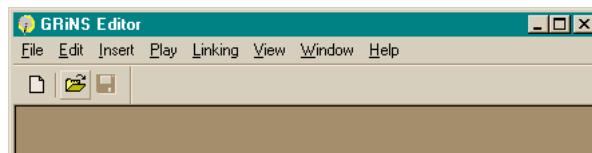
The pull-down menus contain functions that allow you to create and preview RealSystem G2 documents:
- The File pull-down menu allows standard file open/save/close operations. It also lets you publish your documents to G2 and (optionally) upload them to a RealServer. You can also set document properties via this menu.
- The Edit pull-down menu contains standard cut/copy/paste/delete operations. It also lets you access the property sheet for a selected node. If you have a content editing program installed for the datatype of the node (such as Adobe Photoshop for images), you can edit the content directly with that program via the Edit Content button. Finally, you can set general prefences for this editing session (such as the bandwidth used for simulation or the language settings for previewing) using the Preferences command.
- The Insert menu lets you insert new nodes into your presentation (both structure and data nodes), and lets you wrap new structure nodes around existing ones;
- The Play pull-down menu allows you to Start, Stop and Pause the current presentation;

- The Linking menu allows you to create anchors and links within your presentation (so that you can jump to them from elsewhere in the presentation — a handy way of providing logical navigation to your users;
- The View menu lets you manage the complexity of the display in the Structure view (letting you selectively zoom in or out of your presentation). It also lets you see the bandwidth constraints of your presentation and it lets you see which object will get played at the current simulation settings (as set in the Edit menu's Preferences command).
- The Window pull-down menu allows you to open or close the activce editor views (the Preview, Structure and Source views).
- the Help menu gives you access to the on-line help files.

In all cases, inactive selections are 'grayed-out' in the menus.Many of the sensible alternatives (based on what you are doing in the Editor) are also available in the context-sensitive commands provided under the right mouse button.

The use of each of the elements in the menus is discussed in the GR*i*NS ⁄ G2*L* *Tutorials Guide.*

NOTES:

1. You are not required to open a "project" or other container file to work with GR*i*NS/G2*L* -- you may freely import presentations made with a text editor or with any other SMIL editor.
2. The last step in creating a presentation is typically a *Publish to G2* operation (found under the File menu); intermediate information on your presentation is saved in a file with a *.grins* type. This is a generic SMIL-compliant version of your presentation without conversions to G2 data types.
3. For some types of changes (like global substitutes) it is often desirable to use a text editor rather than a structure editor. This is possible with GR*i*NS/G2*L*: simply open the *.grins* file with your favorite text editor and make whatever changes are necessary. You can then re-open the file from within GR*i*NS/G2*L*. (Be careful when doing this, since errors put in the file by direct text editing may make the presentation unusable from within GR*i*NS/G2*L.*)

Creating Presentations Using GR*i*NS/G2*L*

There are several key concepts about GR*i*NS/G2*L* that will help you be more productive when using the GR*i*NS:

- One of the GR*i*NS views is the Player View. This is the run-time preview of a document. Where the separate G2 Player allows a complete presentation to be viewed using conventional start/stop/pause controls, the embedded previewer allows you to play sub-parts of a document — anything from a complex sub-presentation to a single media object can be activated at any time. This is a tremendous productivity enhancement tool during authoring.
- The main GR*i*NS/G2*L* view is the Structure View. In the Structure view, you can manipulate the general structure of your presentation in a visual way. GR*i*NS/G2*L* isolates you from the details of SMIL (or any other RealMedia format), leaving you with an intuitive means of putting together presentations based on a standard set of presentation building blocks. The Structure view is the default view you get when a presentation is loaded into the Editor.
- Screen space and audio channels are managed in GR*i*NS using a concept known as the GR*i*NS/G2*L Resource Channels*. (We will call these *Channels*, for short.) You can group collections of channels into sets called *GRiNS Screens*. A Screen bundles all of the regions can you want to display in one part of a presentation. This mechanism allows you to create visually interesting presentation easily and quickly with GR*i*NS.
- GR*i*NS provides powerful Hypermedia support: you can define anchors across media objects and then define various types of links between these anchors.

GR*i*NS/G2*L* also provides full support for building adaptive presentations using the SMIL switch statements. The semantics and properties of the SMIL switch are managed in the GR*i*NS structure view. Here again, GR*i*NS worries about the syntax — you simply need to define the options available.

A Note for Macintosh and Linux Users

Although GR*i*NS is available for Windows, Macintosh and (soon) for Linux platforms, this *Quick Start Guide* provides illustrations and examples drawn only from the Windows version. We have done this to minimize the document's size. Most of the dialogs and menus are identical on all three platforms, so this guide can be used for all three platforms. However, users of the Mac and Linux versions should keep the differences summarized below in mind.

Apple Macintosh

The Macintosh has only a single-button mouse. Where the text refers to a selection using the right mouse button, you should substitute a CTRL-click selection instead. Contextual menus (selected with right-mouse on windows) will pop up on the Macintosh if you keep the mouse button depressed for about half a second.

The Macintosh does not have the concept of windows-within-windows, hence each open view has its own window. There is one point where this can be slightly confusing: it is possible to have a document open, but no views (open windows) on this document. The Window->Close closes a single view, while the File->Close closes the document (and all views).

The Player toolbar is shown when you open the Player view; there is no Editor toolbar. The keyboard shortcuts follow standard Macintosh conventions.

Linux notes

Each view in the Editor under Linux has its own window. Moreover, each window has a private menubar. The order of menus and commands within menus is the same as on Windows and Macintosh, but menus and commands that have no meaning within a certain view are omitted. Linux keyboard shortcuts follow standard Linux conventions, and are listed in the menus.

Under Linux, GR*i*NS/G*2L* uses a small separate window where you can open documents and exit the Editor, and another small window per open document where you select which views to open, save the document, etc.

An Overview of the GR*i*NS Authoring Views

This section will look at each of the views provided by GR*i*NS/G2*L* and gives you an overview of how GR*i*NS helps you to manage the work-flow during document creation and maintenance. While document creation is the focus of other commercially-available tools, the GR*i*NS/G2*L* Editor was designed to let you not only build, but also edit, tailor and refine presentations — even if they weren't made with the GR*i*NS Editor initially!

### *The Structure View: The Logical View of a Presentation*

When you open a presentation, the Editor gives you a picture of the relationship among the objects in that presentation. We call this the Structure view. The Structure view can be very simple for simple presentations, or it can be a complex presentation roadmap for large, complex presentations.

GR*i*NS takes a different approach to creating presentations than most timeline or text-based systems, so getting to know the nature of GR*i*NS now will help you to become more productive in the future.

The editing philosophy behind GRiNS is that of *structured authoring.* As with structured programming and structured design, it is often useful to create documents based on the structural relationships among components rather than getting lost in the details of a single object's activation. This not only makes initial creation easy, it also makes editing and updating a document much easier to accomplish.

For example, if a single presentation contains an audio node and an image node that are to be presented together, GRiNS puts these inside of a *parallel structure container*: the par. If, on the other hand, a presentation contains two audio nodes that get played one after the other, GRiNS puts these inside of a *sequential structure container.* If you want to define a set of alternatives (such as having both Spanish and English audio tracks available in a presentation), GRiNS puts these inside of a *switch container.* All of these notions reflect the way that SMIL works: the parallel container is equivalent to SMIL's PAR, the sequential container to SMIL's SEQ and the switch container to — you guessed it! — SMIL's Switch. (This is no accident: the designers of GRiNS were also the co-designers of SMIL.)

The following annotated view shows the basic components of the Structure view.
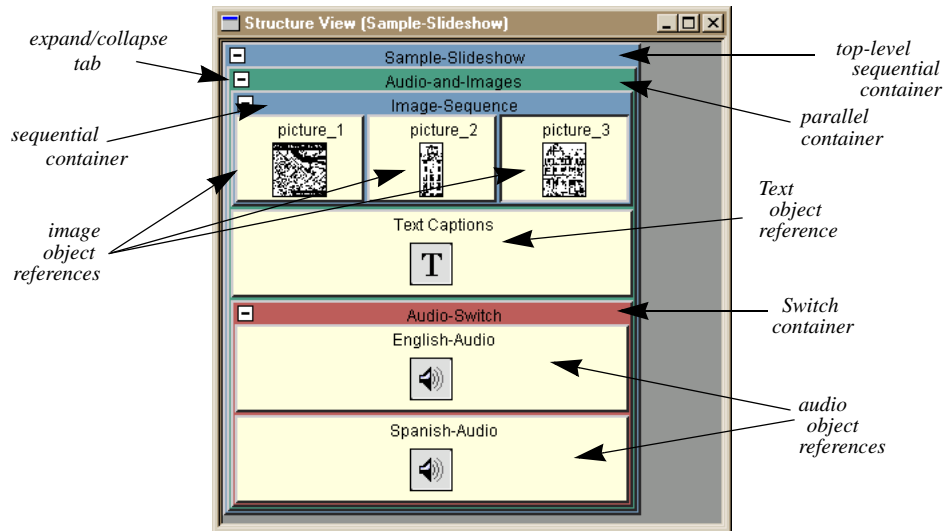
This picture describes a presentation named *Sample Slideshow*, and which contains three images played in sequence, which are presented in parallel with one Text object containing text comments and either an English-language or Spanish-language audio object (the selection of which will be determined by a user preference in the player).

Please re-read the last paragraph and look closely at the image: if you understand the correspondence, then you already understand the basics of GR*i*NS.

The purpose of the Structure view is to give a logical projection of the contents in a presentation to the author. The Structure view contains the following types of information:

1. It shows the *data object references* used in the presentation; these are pointers to a particular object located either in a local file or as a remote asset on the Web or in a database, and its associated properties for this particular use in the presentation. While *data object reference* is the full name in GR*i*NS, we also use the term *data object* when the context is clear.

2. It shows what kind of *structure containers* are used to compose the presentation. Two basic kinds of structure containers are used with SMIL: the *parallel container* (called a PAR in SMIL) and the *sequential container* (called the SEQ in SMIL). Parallel and sequential structure containers can contain a nested combination of data objects or other structure containers.
3. It shows a grouping of possible alternative data objects or structure containers within a SMIL Switch statement. At run-time, one of the options within the switch will be selected based on either user preferences or system properties. The Structure view gives you an overview of the candidates for presentation.

Each of the basic types of container objects used in the Structure view are color coded for easy recognition. With a bit of practice, you can build a mental picture of your presentation without ever hitting Play — but since GR*i*NS lets you play anything from a single node to an entire presentation during editing, save those brain cells for other activity!

You can perform nearly all of the editing operations required to create most basic presentations from within the Structure view. You can add, move, cut, copy, and paste objects (both data objects and structure containers) using the menu options or right-mouse short-cuts. You can define SMIL switch directives and identify the alternatives associated with the switch. You can create basic hyperlinks between nodes in the presentation. You can zoom in/out of parts of the Structure view. You can also access all of the properties of each of the objects in the Structure view for detailed control of the presentation.

When possible, a thumbnail image of either the contents or the type of data objects is shown in the Structure view. If the view becomes too crowded, these thumbnails are removed. (You may influence this behavior via the GR*i*NS View menu.)

You can select any object in the Structure view and then select the Play node function from the Play menu to preview that object (or structure container). If you select Play from node instead, the presentation will start at that point and continue playing through the rest of the presentation's objects. To view the entire presentation, select the Play option from the Play menu. (Selecting the Play short-cut will reactivate the last type of Play mode you selected: Play, Play node or Play from node.)

The Structure view is the default Editor view. It can be activated by selecting Structure view from the Window menu. The Structure view can be closed by using standard windows techniques for your platform.

Notes:

1. There are often several ways of selecting a GR*i*NS editing function: you can use the pull-down menus across the top of the Editor, you often can use the context-menus under the right mouse button or you can make use of the keyboard equivalents for most commands.
2. The keyboard equivalents have been customized to meet the expectations of experienced users on each of the platforms upon which GR*i*NS is implemented. The structure of the menus is constant across all versions of GR*i*NS in as far as they are relevant for those platforms.
3. If a nested structure container is selected when Play from node is requested, only the objects activated at or after the selected node will be activated.

GRiNS Use Tip:
If you select Play->Play Node for an image or text file, the image/text will only appear if its duration is explicitly defined in the node.

The Player View: The Embedded Presentation Previewer

One of the unique features of GRiNS is the ability to incrementally preview a presentation as it is being designed. To do this, select Play from the Play menu or click on the VCR-like start button on the short-cuts bar of the Editor window:

The Player view is opened whenever any form of Play is selected from Play menu. The view can be activated/removed at anytime by selecting/deselecting Player from the View menu.

NOTES:

1. The default view in the editor, the Structure View, will pop-up on open. You can either close it using the standard window techniques for your system, or you can leave it on the screen: the Player View will be displayed on top of the Structure View.

Using GR*i*NS-Lite for RealSystem G2

This section provides you with two short tutorials to get you started with GR*i*NS/
G2*L*. After you get some practice with these presentations, you should download
the full tutorials set (including sample data assets), available at:

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

The GRiNS Work-Flow Model

To understand how GR*i*NS/G2*L* works, consider this:

- The Structure View is the main editing view for a presentation created with the
  GR*i*NS Editor. It helps you to quickly and easily define relationships among
  data objects, and allows you to define structure containers that help you
  organize, edit and maintain your presentation.
- The Player View allows you to preview your work-in-progress. Once you are
  satisfied with the presentation, you can publish it in a form that is compatible
  with the RealSystem G2 player.
- You may choose to 'pre-convert' your image, text, audio and video
  information into Real's RealMedia formats before you add them to a GR*i*NS/
  G2*L* presentation, or you may elect to have GR*i*NS/G2*L* do the conversion for
  you automatically. Pre-conversion will often yield the highest quality
  compression, since you can tweak all of the parameters on a per-object basis.
  If you let GR*i*NS/G2*L* do the conversion for you, you can influence how
  conversion and compression takes place from within the Properties sheet
  attached to each object (found under the Edit menu).

GR*i*NS/G2*L* has been designed to be a template-based editor. If you want even
more control over layout, timing and hyperlinks, you should consider upgrading
to the full version of GR*i*NS, available at: *http://www.oratrix.com/GRiNS/.*

GR*i*NS is a full SMIL editor. You can open any existing SMIL presentation with
GR*i*NS and maintain/edit/expand it to meet your needs. Do keep in mind that if
that presentation references unavailable data objects, the Editor will correctly
display the presentation's structure, but it won't include the data. If you reuse
existing presentations, respect the original copyrights on structure and data!

Tutorial 1: Creating a Simple Presentation

The purpose of this tutorial is to create a very simple SMIL file that consists of a sequence of objects that get rendered onto a default area of the screen. This presentation makes use of a GR*i*NS Template document.

Overview and Goals

In order to create this small presentation, you will perform the following steps:
1. Start the editor and select the *QSG1-Slideshow* template;
2. Go into the Structure View;
3. Select each object in the template and define a image to be associated with each block;
4. Preview the presentation
5. Publish the presentation for use with G2.

The result of building the first part of this tutorial is a series of three pictures displayed in the (player-dependent) default location on the screen. A thumbnail presentation preview is:
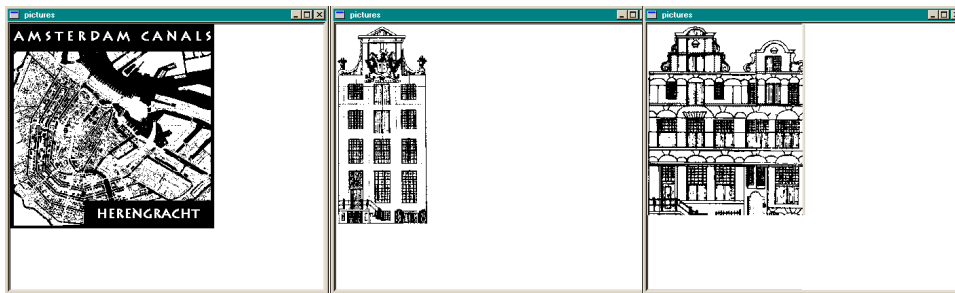

We close this tutorial with background information on GR*i*NS that will make your creation of template-based more effective.

Opening a Template File

If you have not already done so, start-up the GR*i*NS Editor; if you get a pop-up box asking if you want to create a new presentation or edit an existing one, select

New Presentation. Otherwise, if no pop-up appears, go to the File menu and select New, which allows you to select a GR*i*NS Template file. Select the *QSG1-Slideshow* file, as shown below:[1]
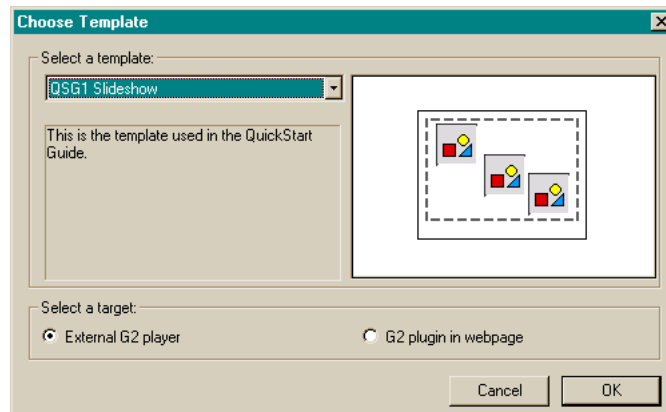
This will create a new document called *Untitled1.smil*. Before continuing, save your work-in-progress in a directory on your system. Do this by selecting Save as ... from the File menu.

Whenever you create or open a file, you see the Editor's Structure view. In this view, we see you blue outer container labelled *QSG!-Slideshow* and a series of three light-colored nodes called *picture_1*, *picture_2*, and *picture_3*. (The warning triangles indicate that the nodes are empty.

1. On Macintosh versions of GR*i*NS, you may need to navigate to the Templates folder located in the GR*i*NS application folder.

At the top-left of the structure container is an expand box. Give it a click to see one of GR*i*NS∕G2*L*'s information hiding features.

NOTES:
1. The opening screen assumes that you use the default configuration for GR*i*NS as distributed;
2. Some of the default dimensions of various GR*i*NS windows have been changed in the illustrations in these tutorials to make for a space-efficient presentation;
3. The colors used for the various GR*i*NS windows depend on the Windows color scheme installed for your system. This tutorial uses the Desert color scheme;
4. If you work on a multi-user system, make sure you don't overwrite files created by other users of this tutorial. On a multi-user system, each user should create their own copy of the Tutorials.

Inserting the Media Objects

The *QSG1-SlideShow* template contains all of the information required to create a simple presentation *except* the actual images used. To get started quickly with GR*i*NS, do the following:
1. Open the *Assets* folder in the *Tutorials* directory (typically located in the GR*i*NS root directory; this is usually *c:/Program Files/Oratrix/*GR*i*NS_*L4G2* on Windows platforms);
2. Select the image *map.gif* from the folder and drag it on to the light-colored box labelled *Picture_1*;
3. Select the image *h168.gif* and drag it on to the box labelled *Picture_2*;
4. Select the image *h218.gif* and drag it on to the box labelled *Picture_3*.

The illustration shows a 'filled' version of the structure view, containing icons for each of the images you have placed on the presentation.
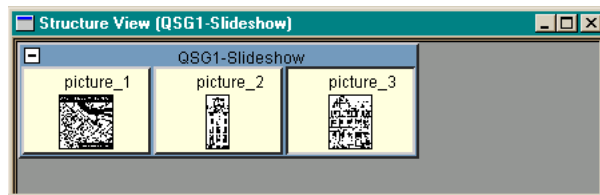
Previewing the Presentation

<u>Playing the entire presentation</u>

In the *QSG1-Slideshow* template, each object has a default duration of 5 seconds. As a result, when you play the presentation, you see each object for five seconds, with each new object replacing the old.

To see this behavior, select Play. You can do this in three ways:
1. using the triangular Play button on the shortcut bar;
2. by selecting Play -> Play command from the menu bar
3. by selecting the Ctrl+P key combination.

<u>Playing part of a presentation</u>

GR*i*NS allows you to selectively play parts of a presentation.

To get a quick taste of what GR*i*NS/G2*L* can do, select the box labelled *Picture_1* (it contains the icon of the *map.jpg* image). Go to the Play menu and select Play Node. Once you do this, you get to see the Map image. Only that single node is played. You can use Play Node on any GR*i*NS node (data nodes or structure nodes).

You can also select Play From Node in the Play menu. For example, select the box labelled *Picture_2* in the Structure View. You now see both the second and third pictures — that is, all nodes are played starting at the point that you selected Play From Node.

The ability to selectively activate and preview nodes or sub-parts of a presentation is a powerful tool that can help you fine-tune you presentation with a minimum of authoring effort.

Publishing the Presentation for G2

Publishing your presentation for G2 consists of several step, some of which are optional.

Check Bandwidth Usage

First, you should check to see if the presentation you've made 'fits thru the pipe' between the RealServer and your user. GRiNS provides several features to help you do this:
1. you should select a system bitrate from the Edit->Preferences menu.
2. next, select View->Check bandwidth usage to see if your presentation will fit thru a line with the properties defined in (1).

This version of GRiNS does not correct errors for you, but it does indicate where you should look for the problem spots in your presentation. These are indicated by red blocked pipes on data items. Items which do not cause a problem are indicated by green pipes on data items.

The following situation shows the result of a bandwidth computation with settings for a 28.8 modem:
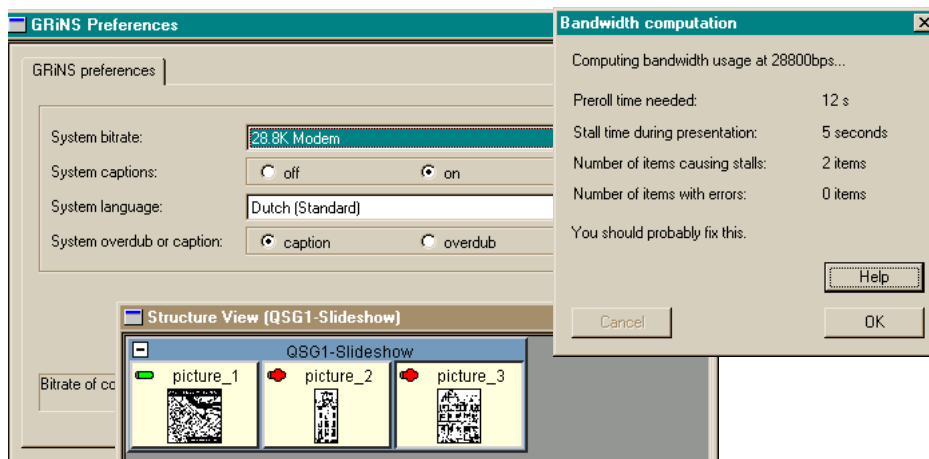
The problems shown in this report can usually be fixed in one of several ways:
• by increasing the duration given to load the image (in this case, increase the duration of picture_1 from 5 to 10 seconds); or
• by reducing the complexity of an individual data object (by using a different format or by cropping out unwanted part of the image).

Generate the G2 Presentation

The next step is to actually generate the G2 presentation. This consists of:
1. converting any non-RealMedia components to RealMedia
2. creating the various G2 control files
3. creating the HTML files for your presentation

All of these steps are automated; they are triggered by the File->Publish for G2 command.

You can now preview the presentation using G2 to see if fine-tuning is required.

Generate the G2 Presentation and Upload

Once the presentation has been created, you can also upload it automatically to a RealServer. Select Edit->Publish for G2 and Upload to do this from GRiNS.

A Note on Designing Adaptive Presentations

As a content author, you can either create a simple presentation that assumes your users/clients will be able to view all of the data objects that you send them. You can also take a broader view by specifying some alternatives to either individual objects or to entire sub-parts of the presentation. Such alternatives can be based on presentation resources (for example, during peak hours on the Web, it may be wise to substitute a slide-show presentation for a piece of video), or the choice may be based on natural language (for example, having both an English and Spanish versions of an audio and/or set of text messages available within the same document).

One of the primary reasons to support alternate content is to help users who, for whatever reason, cannot accept one format of data—such as audio for a deaf user, or video for a blind user, or high-resolution information for a user attached to a low-resolution computer —by providing a more convenient type (such as text instead of audio). It is important to realize that this is not an "us vs. them" issue: all of us are unable to accept certain types of media at certain times, depending on our work or use situations. For example, if you are working without headphones in a shared office space, you may be unable to accept audio information, even if

there is nothing wrong with your hearing — the circumstances simply don't allow you to disturb others around you!)

The RealNetworks G2 player implements SMIL's ability to control content distribution via user preferences of player interrogation of system resources. If you make use of these facilities, you can increase your potential audience and help create a richer Web environment for everyone. GR*i*NS/G2*L* was designed to make this sort of substitution easy to create, easy to maintain and easy to present to the user.

GR*i*NS/G2*L* Quick Reference Information

SMIL Compliance Information

The GR*i*NS-Lite for RealSystem G2 supports the entire SMIL v1.0 specification, with the exception of the constructs listed below. Documents that make use of these constructs are parsed correctly, but the features are ignored during rendering.
- begin and end attributes in the anchor element.
- fit="fill" and fit="scroll" attribute values in region element.
- name="pics-label" attribute value in meta element.
- alt attribute in media object elements.
- fill attribute.

These features are expected to be supported in a future release.

Supported Media Table

The following chart gives a listing of the media types supported by various versions of GR*i*NS-Lite for RealSystem G2:

MIME type	Extensions	Windows 95/98/NT	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

MIME type	Extensions	Windows 95/98/NT	Mac	Linux(4)
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
	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 purposed 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 G2 datatype. For highest quality rending of a final presentation, we recommend converting some datatypes to RealMedia before inserting them in a presentation, if possible. The following chart describes the levels of support provided in the GR*i*NS/G2*L* version for the listed RealMedia data types used in the RealNetworks G2 player:

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

Notes
1. GR*i*NS/G2*L* 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.

References and Links

Please see the Links section of the GR*i*NS/G2*L* Web site (*www.oratrix.nl/GRiNS*).

Where Next?

The GR*i*NS-Lite for RealSystem G2 *Quick Start Guide* provides you with a general overview of GR*i*NS and a particular introduction to GR*i*NS/G2*L*.

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/G2*L* tutorials. These can be found in the GR*i*NS/G2*L Tutorial Guide*, which is available in on-line (HTML) or off-line (PDF) formats. Consult the documentation provided with your GR*i*NS/G2*L* Editor access key to find the current set of tutorials for your version of GR*i*NS.

If you purchased the GR*i*NS Editor for SMIL, you will also receive information on obtaining a copy of the *GRiNS User Manual* and the *GRiNS Reference Manual*. These manuals (which are not provided with the Test Drive or Beta evaluation versions) provide a wealth of detailed information on using GR*i*NS to solve practical tasks in creating either template-based or full-featured presentations using GR*i*NS.

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 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!