



REALSYSTEM PRODUCTION GUIDE UPDATE NOTE

Release 8

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REALSYSTEM PRODUCTION GUIDE UPDATES

Periodically, RealNetworks updates its documentation to reflect changes in RealSystem products. This documentation update for *RealSystem Production Guide* explains new features and corrects mistakes found in the previous versions of the guide. This update document contains information on the following:

- Release 6.1 Update. See page 2.
- Release 7 Update. See page 5.
- Release 8 Update. See page 8.
- Release 8.5 Update. See page 10.



RELEASE 6.1 UPDATE

This section lists additions, deletions, and corrections to the *RealSystem G2 Production Guide* for Release 6.1. The printed, PDF, and HTML versions of the Release 6.1 production guide reflect these changes.

Additions

Ad Serving Support

RealServer now includes an optional ad streaming feature that allows it to place ads in SMIL presentations. Chapter 9 has been revised to explain how to use ad streaming. Note, however, that ad streaming features first must be configured by the RealServer administrator.

New High Frequency Response RealAudio Codecs

The RealProducer G2 Release 6.1 encoding tools include two new RealAudio codecs:

- 20 Kbps Music—High Response
- 32 Kbps Music—High Response

These codecs provide higher frequency response than the standard RealAudio G2 20 Kbps and 32 Kbps mono codecs. RealProducer users can set these codecs as the defaults when encoding music requiring a high response rate.

Additional Information

See “RealAudio Codecs” on page 35 for information on all RealAudio codecs.

New RealVideo Scalable Video Technology (SVT) Codec

RealNetworks encoding tools now use RealVideo SVT as their default codec. With Scalable Video Technology, a high frame rate clip can scale down its frame rate on slower machines.

Additional Information

See “Scalable Video Technology” on page 54.

Captions Authoring

The RealPlayer G2 preferences window has an option to enable captions for the hearing-impaired. You write the captions as a RealText clip. The section “Displaying Captions for the Hearing Impaired” on page 215 explains how you then use SMIL to turn captions on or off based on the viewer’s preference.

Reliable Image Transmission

A `reliable=true` option ensures that images in SMIL presentations are transmitted to RealPlayer under extremely adverse network conditions. See “Ensuring Reliable Image Transmission” on page 126.

Broadcasting with SMIL

The broadcasting chapter includes a new section, “Using SMIL with a Broadcast” on page 186, about using a SMIL file when broadcasting. This section explains how to use the `wallclock` option to synchronize multiple broadcast streams.

Deletions

RealFlash Tuning Tools Moved to Authoring Kit

The RealFlash Bandwidth Tuner and RealFlash Bit Rate Calculation Spreadsheet have been removed from the HTML version of the production guide. They are now available as part of the RealSystem G2 Authoring Kit, available through registration at <http://www.real.com/products/tools/authkit/index.html>.

Information on Bundling RealPlayer Presets Removed

The section on bundling RealPlayer presets for download has been removed from the chapter on delivering presentations. See the *RealPlayer G2 Manual* or online help for information about bundling presets.

Corrections

Flash 3.0 Features in RealFlash

Previously, Chapter 5 stated that RealFlash supported Flash 3.0 features with the exception of transparency. This is not correct. RealFlash does not support most Flash 3.0 features, including transparency and Alpha channels. Flash 3.0 morphing (“shape tweening”) is supported but should be used in limited

instances. Although you can use Flash 3.0 to prepare RealFlash clips, you must create a Shockwave Flash 2.0 file when exporting animation.

NOLABELS for RealPlayer 5.0 Only

For presentations embedded in a Web page, the NOLABELS option of the <EMBED> and <OBJECT> tags works only for RealPlayer 5.0. It does not affect RealPlayer G2.

Additional Information

See “NOLABELS” on page 152.



RELEASE 7 UPDATE

This section lists additions, deletions, and corrections to the *RealSystem G2 Production Guide* for the Release 7 update to RealSystem G2. This release comprises RealServer 7, RealProducer 7, and RealPlayer 7. The printed, PDF, and HTML versions of the *RealSystem G2 Production Guide* for Release 7 reflect these changes.

Additions

PNG Image Support

RealPlayer 7 includes support for the Portable Network Graphics (PNG) image format (.png file extension) in addition to JPEG and GIF formats. You can now use PNG images in both SMIL and RealPix presentations.

New Chapter on SMIL Extensions

The new Chapter 7, which starts on page 123, covers RealNetworks' extensions to SMIL. The section on extensions to the SMIL `<img.../>` tag `src` attribute has been moved to this chapter. The chapter also covers the multiple window and caching features of RealPlayer 7.

Multiple RealPlayer 7 Windows

You can write hyperlinks that open content in new RealPlayer 7 windows. This lets you pop up a new RealPlayer window when a viewer clicks a link in a SMIL or RealText presentation.

Additional Information

See “Popping Up New RealPlayer Windows” on page 127.

Graphics Caching

You can instruct RealPlayer 7 to cache image files downloaded through HTTP. This is useful for SMIL presentations that RealPlayer 7 users repeatedly view.

On reloads or revisits, RealPlayer uses cached images instead of downloading the images again from the server.

Additional Information

See “Caching Files on RealPlayer” on page 132.

Switching Clips for Different RealPlayer Versions

You can use the SMIL <switch> tag to stream different presentations to different versions of RealPlayer. This is useful if you want to use new features of a new RealPlayer, yet still want to support older RealPlayer versions.

Additional Information

See “Switching Presentations for Different RealPlayer Versions” on page 211.

SMIL Source View through RealPlayer 7

RealPlayer 7 has a **View>Source** command that displays the mark-up for the presentation’s SMIL source file in your Web browser. This helps you learn how other content authors have assembled their presentations.

Additional Information

See “Viewing SMIL Source Markup” on page 205.

Appendix Answering Common Questions

Appendix A, starting on page 189, answers basic questions for new users, such as when to use SMIL and what goes in a Ram file.

Double-Size and Full-Size Clip Playback

RealPlayer can open a presentation at double its normal size, or in full-screen mode, if you launch the presentation through a Ram file. This feature is not available with Ramgen.

Additional Information

See “Setting a Presentation’s Starting Mode” on page 176.

Deletions

None.

Corrections

SMIL Image Source Tag is <img.../>

Previous versions of the production guide incorrectly listed the SMIL source tag for GIF and JPEG images as <image.../>. The correct tag is <img.../>.

RealProducer Description becomes Clip Abstract

Previous versions of the production guide stated that clip abstracts had to be added through SMIL. RealProducer 6.1 and RealProducer 7 have a **Description** field you can fill in when encoding a clip. This text then becomes the clip abstract.

Additional Information

See “Adding Presentation Information” on page 118.

Optimum Sampling Rate for 32 Kbps and 44 Kbps RealAudio G2 Stereo Codecs

In the “Older RealAudio Stereo Music Codecs” table on page 39, the 33 Kbps and 44 Kbps RealAudio G2 Stereo codecs were incorrectly listed as having a 44.01 kHz optimal sampling rate. The optimal rate for these stereo codecs is 20.05 kHz.

“RealFlash” now “Flash with RealSystem G2”

The term “RealFlash” has been replaced with “Flash for RealSystem G2.” This manual uses “Flash” to refer to Macromedia’s Flash software, a Flash file (.fla), and Flash animation in general. It uses “Flash Player file” to refer to the compressed Flash file (.swf) used in streaming.



RELEASE 8 UPDATE

This section lists additions, deletions, and corrections to the *RealSystem Production Guide* for RealSystem Release 8. This release comprises RealServer 8, RealProducer 8, and RealPlayer 8. The printed, PDF, and HTML versions of the *RealSystem Production Guide* for Release 8 reflect these changes.

Additions

RealVideo 8 Codec

RealProducer 8 introduces the RealVideo 8 codec, which creates RealVideo clips that have significantly better visual quality than clips encoded with previous codecs. Only RealPlayer 8 can play RealVideo 8 clips. For more information, see “RealVideo 8 Codec” on page 53.

Flash 3 and Flash 4 Support

RealServer 8 can stream Flash 4, 3, and 2 clips to RealPlayer 8. This lets you create RealPlayer animations that use Flash interactive commands. If you have worked with Flash 2 in RealSystem before, note that Flash 4 commands work differently in RealPlayer. See Chapter 5 starting on page 65 for more information.

Additional SMIL Attributes Supported in RealPlayer 8

RealPlayer 8 now supports the following SMIL 1.0 attributes, which have no effect on earlier RealPlayers:

- The `dur=“indefinite”` attribute makes a clip play indefinitely, mimicking a live broadcast. For more information, see “Indefinite Durations” on page 95.
- The `repeat=“indefinite”` attribute makes a clip or group loop indefinitely. For more information, see “Looping Playback Indefinitely” on page 98.
- The `fit=“scroll”` attribute adds scroll bars to a clip that displays in a SMIL region that is smaller than the clip’s encoded size. See “Defining How Clips Fit Regions” on page 104 for more information.

RealPlayer 8 Opens in Compact Mode

Through a Ram file, you can open RealPlayer 8 in its compact mode. See “Setting a Presentation’s Starting Mode” on page 176 for instructions.

More Background Information on RealAudio and RealVideo

Chapter 3 and Chapter 4 have been expanded to include more background information on RealAudio and RealVideo, respectively.

Deletions

Bandwidth Chapter

The chapter on targeting bandwidth has been deleted. Information on target audience bandwidths is now in the section “Step 3: Develop a Bandwidth Strategy” on page 22.

Sections on Audio and Video Types other than RealAudio and RealVideo

The sections that listed streamed audio and video formats, other than RealAudio and RealVideo, have been removed. These sections were at the end of the audio and video production chapters. This information will be made available separately.

Corrections

SMIL Transparency Override Works for PNG Images

The SMIL extension that allows you to substitute a background color for transparency in a GIF image also works for PNG images. For instructions, see “Overriding GIF or PNG Transparency” on page 125.

No Multiple SMIL Files Listed in a Ram File

Previously, the section “Creating a Ram File Manually” on page 173 incorrectly stated that a Ram file could list multiple SMIL files played in sequence. A Ram file can list multiple clips played in sequence, but not multiple SMIL files.



RELEASE 8.5 UPDATE

This section lists additions, deletions, and corrections to the second version of *RealSystem Production Guide* for Release 8. This release includes RealServer 8, RealPlayer 8, and RealProducer 8.5. Unless noted otherwise, the printed, PDF, and HTML versions of the second version of *RealSystem Production Guide* for Release 8 reflect these changes.

Tip

The title page for the second version of *RealSystem Production Guide* for Release 8 indicates that the guide is for “RealSystem Release 8 with RealProducer 8.5”.

Additions

RealAudio 8 Stereo Codecs

RealProducer 8.5 introduces new RealAudio 8 stereo codecs, which create clips with better sound quality, especially at higher bandwidths. Only RealPlayer 8 can play RealAudio 8 clips. For a list of new codecs, see “RealAudio 8 Stereo Music Codecs” on page 37.

RealProducer 8.5 uses some of the RealAudio 8 codecs by default when encoding RealAudio and RealVideo clips. These two tables reflect the new standard streaming speeds for various target audiences:

- “RealAudio Standard Bit Rates” on page 34
- “Audio Bit Rates for RealVideo Clips” on page 48

RealPlayer and Flash 5

Chapter 5 beginning on page 65 has been updated with information about Flash 5. RealPlayer cannot play the Flash 5 Player format, but the Flash 5 program can automatically export a tuned Flash 4 clip, along with a RealAudio clip, for playback in RealPlayer.

Exceptions to the Two-Gigabyte Limit for Audio and Video Input Files

Some computer operating systems limit the size of files to 2 gigabytes. Certain audio and video editing programs have implemented methods of creating larger output files. RealProducer can accept some of these files as input for encoding as RealAudio and RealVideo. For more information, see “Video Source File Size Limit” on page 60.

Bandwidth and Buffering for Repeating Clips

The section “Repeating a Clip or Group” on page 97 has been updated with information about rebuffering and bandwidth use when a clip repeats in a SMIL presentation.

Deletions

None.

Corrections

Frequency Responses of RealAudio Codecs

The frequency responses of a few audio codecs in the section “RealAudio Codecs” beginning on page 35 have been corrected.

Syntax Error for systemComponent Attribute in Appendix C

In the section “Switching Presentations for Different RealPlayer Versions” beginning on page 211, there is an uncorrected syntax error for the systemComponent attribute. In the following syntax, the quoted URL is incorrect:

```
system-required="cv" cv:systemComponent="http://features.real.com/  
?feature;player=6.0.7.x"
```

The ?feature syntax should be ?component, as shown here:

```
system-required="cv" cv:systemComponent="http://features.real.com/  
?component;player=6.0.7.x"
```