

New Feature Technical Specification

- OpenGL accelerated previews and object interaction
- Optimized render speed
- New interactors for onscreen animation control
- Bump Maps
- New 3D Primitives:
- 3D Plane (including video layers), 3D Sphere, Cube, Cylinder, Page Turn
- All of these are now true 3D objects, and support bump maps, reflections, textures, and intersections with cast shadows in 3D Model container
- Motion blur for all 3D objects
- Depth of field for 3D cameras
- Textures now default to Clip
- Extruded Pencil tool, with shortcut button on Timeline window
- Extruded objects, including text, keep colors assigned to flattened state

Title Creation and Animation

- Text tool to type directly on Composite window
- Text Generate tab: Date/Time, Timecode, Random text, Randomize user text; Shift Style; Randomize styles
- Text Jitter tab: Jitter Position, Angle, Scale, Hue, and Opacity, with controls for speed, polarization, direction (such as Positive or Negative-only) and Master Jitter
- Jitter Position, Angle and Scale added to Type On
- “Always Visible” check box for Type On
- Type on by character, word, line
- Type on forward, reverse, random
- New controls for text added to Controls window: font selection and font size, word wrap, page size, justification, Top Down, and Right to Left display, fixed font width (even for non-fixed width fonts)
- Kern using Text tool in Composition window
- Snap baseline of text elements to grid
- Visual indicator of justification in text box border
- Text on path justification
- Offset distance of path text from path
- Apply text styles from Style Palette directly to Composite window
- OTF font support
- Compatibility added for such font management packages as Suitcase
- See also Text Window section, below

Graphic Creation and Animation

- 2D and 3D charts: Pie, Bar, Line and Area charts
- New Spline Primitives: Grid, Line, and Area
- New Gradient type: Revolve
- Scale stops for gradients
- Loop gradient, with individual control for R, G and B

- Cycle gradient
- Randomize gradient colors
- Animate all gradient parameters
- Still image files up to 16,000 by 16,000 files now supported
- Support for Illustrator 10 file import
- Support for multiple masks in Photoshop files
- Extended range for Border Begin and Border End to allow looping
- Border offset may now be set and animated
- Spline Jitter velocity control
- Spline Jitter random seed may now be assigned
- Spline animation Acceleration
- Spline animation Overshoot
- Spline animation Decay
- Convert to Container option for Spline Object layers
- Spline subtrack names editable

Animation

- Motion blur for all shapes
- Motion blur may be applied separately or in combination to shapes, faces, filters and motion
- Control transform order of Tumble (X axis), Spin (Y axis), Rotate (Z axis)
- Generate Keyframes command
- Jitter Interpolation
- Swing interpolation
- Bounce interpolation

Filters

The following filters from Boris Continuum Complete are now included with Boris Red 3GL. They will only work in Boris Red 3GL. To use them as native filters in applications such as Final Cut Pro, Adobe After Effects, and Avid systems, users will need to purchase the appropriate versions of Continuum.

Colors and Blurs

- BCC Boost Blend
- BCC Colorize
- BCC Composite
- BCC Super Blend

Distortion and Perspective

- BCC Twirl

Effects

- BCC Cartooner
- BCC Colorize Glow
- BCC Emboss
- BCC Film Damage
- BCC Film Grain
- BCC Glow
- BCC Light Zoom
- BCC Multishadow

Generators

- BCC Bump Map
- BCC Brick
- BCC Rock
- BCC Steel Plate

Keys and Matte

- BCC Glow Matte
- BCC Light Matte
- BCC Pixel Chooser
- BCC Star Matte

Time

- BCC Jitter
- BCC Jitter Basic
- BCC Looper
- BCC Posterize Time
- BCC Sequencer
- BCC Time Displacement
- BCC Trails
- BCC Trails Basic

The following filters will premiere in Red 3GL:

- BCC Dust and Scratches
- BCC DeNoise
- BCC Fast Blur
- BCC Glow Edges
- BCC Match Grain
- BCC DeGrain
- BCC Light Wrap
- BCC Motion Blur
- BCC Radial Blur
- BCC Spiral Blur
- BCC Wire Remover
- BCC Z-Blur
- Optical Flow (previously available in Continuum Complete and added as a native filter to Red)

Filter Improve- ments

- Filters menu rearranged to match Continuum (we now have the same filters menu for all products)
- “Last Filter” option in Filters menu (keyboard shortcut: Control/Command F)
- Rotation and scale in Motion Stabilizer (added on new Transform tab)
- Time filters working with Host media (Avid, Final Cut Pro)
- Improved support for 3rd party After Effects filters, including dynamic presentation of controls, contextual controls, and onscreen controls

Hardware and Software Integration

- Preview to Monitor from Boris Red Engine
- Support for PTM using FireWire
- Support for PTM through Matrox Parhelia
- Support for PTM through Canopus boards
- Media 100 hardware for video out in Red Engine (previously available in plug-in only)
- Preview to Monitor from inside Red plug-in for any host, using auxiliary video output
- NLE timeline import via Automatic Duck Pro Importer, and Media 100 Composition Import
- New integration with Sony Digital Pictures Vegas
- Avid Apply to Title
- Final Cut Pro Transition integration
- Support for latest NLE releases from Adobe, Apple, Avid, and others
- Support for Adobe After Effects (Windows only; Mac support coming)

Interface and Workflow

- Searchable Filter Palette
- Plug-in Filter Manager
- Ability to create saved filter sets, and dynamically load them without restarting Red
- History Palette
- Saved custom Workspaces
- Custom keyboard shortcuts
- Many new and improved keyboard shortcuts
- Shared Movies, allows multiple instances of imported movie files to be linked
- QuickTime movie playback window
- Style Editor for Gradient – opens Controls for editing directly from Style Palette
- Style Editor for Material/Extrusion – opens Controls for editing directly from Style Palette
- Color picker preview
- Optimized render of non-animated bitmap files, including video
- Keyboard shortcuts to control onscreen interactors: W for Translation, E for Rotation, R for Scale, G to toggle visibility of interactors

Controls Window

- Numeric field scrubbing
- Reset Parameter choice for interpolation pop-ups
- Display of Native/imported image file size
- Mouse wheel scrolls Controls window vertically
- Rotation Order pop-up menu
- Shift rounds dial control to nearest 45 degrees
- Control/Command rounds to nearest 10 degrees
- Shift with Control/Command rounds to nearest 5 degrees
- Mouse wheel moves dials in 1-degree increments
- Mouse wheel with Shift moves in 10-degree increments
- Mouse wheel with Control/Command moves in 0.1-degree increments
- Mouse wheel with Shift and Control/Command moves in 45-degree increments

Composite Window

- OpenGL interactors for 3D control
- Nudge selected objects one pixel with arrow keys/shift-nudge to move ten pixels

- Render progress thermometer
- Mouse wheel to scale Composite window added for Mac
- Shift-magnifying glass constrains Composition window size to scale of display
- Guides now saved with compositions
- Title Safe added to pop-up menu for onscreen controls
- Grid added to pop-up menu for onscreen controls

Timeline

- Track Sliding
- Subtracks may slide separately from master tracks
- Color track display
- Hide Mask button
- Open Library Browser button
- Add 3D Model Container button
- Center CTI button
- Timeline resolution slider
- Motion Blur button
- New colors for Timeline background
- New colors for keyframes
- Custom UI colors (Set in Preference on Preview tab)
- Drag through on ruler to CTI Thumb
- Reset Handle command for value curve handles
- Insert Track at CTI
- Page Up/Down to move CTI
- Shape/Face track selection toggle with unmodified “F” keyboard shortcut
- Keyboard shortcut for Mark In/Out changed to unmodified “I” and “O” keys
- Keyboard shortcut/menu command for Move CTI to Mark In/Out (Opt/Alt “I” and Opt/Alt “O”)
- Add User Mark with unmodified “K”
- Toggle SmartView with “S”
- Mouse wheel over track names scrolls track selection
- Mouse wheel over tracks scrolls CTI
- Alt/Opt mouse wheel in tracks selects next/previous keyframe

Text Window

- Style Hue Shift control added to main tab
- All selections show as “invisible” immediately when selecting controls for color and hue, as well as other adjustments where seeing color is helpful
- Color chips for each edge style and shadow tab, allowing direct selection and display of color choices
- “Glow” edge style renamed “Radial” to more accurately describe what it does
- Leading now selection based
- Non-proportional spacing option

Tool Window

- Text tool – selecting it allows text to be entered directly on Composite window
- Keyboard shortcut for Text tool is “T”
- Keyboard shortcut for Hollow Arrow tool changed to “A”
- Keyboard shortcut for Rotate tool changed to “D”

- Tooltips dynamically update to show new shortcuts
- All keyboard shortcuts for Tool window now work even when window is closed

Project Window

- Poster frame for saved compositions may be changed
- Files may be dragged to timeline as full tracks, or dropped on Shape tracks as Media
- Mouse wheel scrolls selected project

New Menu Items

- Align/Distribute objects (Track menu)
- Reverse Track (Track menu)
- Connect to External Monitor (Preview menu)
- Auto Update External Monitor (Preview menu)
- Title Safe and Grid menu items (Preview menu)
- OpenGL Mode selection from Preview window as well as Preferences
- OpenGL Interactors selection (Preview menu)
- Filter palette opens with Command/Control 5 (Windows menu)
- Library Browser opens with Command/Control 9 (Windows menu)

Preferences

- Button to return all changed preferences to default values
- Reset Tab button
- Project Size popup menu (General Tab)
- Select the kind of text created by default with Text tool – defaults to 3D Plane (Interface tab)
- Pre-multiplied White Alpha enabled by default (Import Media tab)
- Set custom size for Title and Action safe (Preview tab)
- Change Timeline colors (Preview tab)
- External Monitor Output (Preview tab)
- Keyframe Generator (Preview tab)
- OpenGL pop-up, default set by outcome of internal test or user defined (Render tab)
- Accelerated Draft Previews/toggle High Quality during interaction – on by default (Render tab)
- Test OpenGL Hardware (Render tab)
- Better Quality Field Rendering enabled by default (Local tab)