LiveCode 6.7.0-dp-7 Release Notes

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Overview

This document describes all the changes that have been made for LiveCode 6.7.0-dp-7, including bug fixes and new syntax.

Known issues

- The installer will currently fail if you run it from a network share on Windows. Please copy the installer to a local disk before launching on this platform.

Platform support

The engine supports a variety of operating systems and versions. This section describes the platforms that we ensure the engine runs on without issue (although in some cases with reduced functionality).

Windows

The engine supports the following Windows OSes:

- Windows XP SP2 and above
- Windows Server 2003
- Windows Vista SP1 and above (both 32-bit and 64-bit)
- Windows 7 (both 32-bit and 64-bit)
- Windows Server 2008
- Windows 8.x (Desktop)

Note: *On 64-bit platforms the engine still runs as a 32-bit application through the WoW layer.*

Linux

The linux engine requires the following:

- 32-bit installation, or a 64-bit linux distribution that has a 32-bit compatibility layer
- 2.4.x or later kernel
- X11R5 capable Xserver running locally on a 24-bit display
- glibc 2.3.2 or later
- gtk/gdk/glib (optional – required for native theme support)
- pango/xft (optional – required for pdf printing, anti-aliased text and unicode font support)
- lcms (optional – required for color profile support in JPEGs and PNGs)
- gksu (optional – required for elevate process support)

Note: *The optional requirements (except for gksu and lcms) are also required by Firefox and Chrome, so if your linux distribution runs one of those, it will run the engine.*
Note: *If the optional requirements are not present then the engine will still run but the specified features will be disabled.*
Note: *LiveCode and standalones it builds may work on remote Xservers and in other bit-depths, however this mode of operation is not currently supported.*

Mac

The Mac engine supports:

- 10.6.x (Snow Leopard) on Intel
- 10.7.x (Lion) on Intel
- 10.8.x (Mountain Lion) on Intel
- 10.9.x (Mavericks) on Intel

Note: *The engine runs as a 32-bit application regardless of the capabilities of the underlying processor.*

Setup

Installation

Each distinct version has its own complete folder – multiple versions will no longer install side-by-side: on Windows (and Linux), each distinct version will gain its own start menu (application menu) entry; on Mac, each distinct version will have its own app bundle.
The default location for the install on the different platforms when installing for 'all users' are:

- Windows: <x86 program files folder>/RunRev/ LiveCode 6.7.0-dp-7
- Linux: /opt/runrev/livecode-6.7.0-dp-7
- Mac: /Applications/ LiveCode 6.7.0-dp-7.app

The default location for the install on the different platforms when installing for 'this user' are:

- Windows: <user roaming app data folder>/RunRev/Components/LiveCode 6.7.0-dp-7
- Linux: ~/.runrev/components/livecode-6.7.0-dp-7
- Mac: ~/Applications/ LiveCode 6.7.0-dp-7.app

Note: *If your linux distribution does not have the necessary support for authentication (gksu) then the installer will run without admin privileges so you will have to manually run it from an admin account to install into a privileged location.*

Uninstallation

On Windows, the installer hooks into the standard Windows uninstall mechanism. This is accessible from the appropriate pane in the control panel.
On Mac, simply drag the app bundle to the Trash.
On Linux, the situation is currently less than ideal:

- open a terminal
- *cd* to the folder containing your rev install. e.g.

```
cd /opt/runrev/livecode-6.7.0-dp-7
```

- execute the *.setup.x86* file. i.e.

```
./.setup.x86
```

- follow the on-screen instructions.

Reporting installer issues

If you find that the installer fails to work for you then please file a bug report in the RQCC or email support@runrev.com so we can look into the problem.
In the case of failed install it is vitally important that you include the following information:

- Your platform and operating system version
- The location of your home/user folder
- The type of user account you are using (guest, restricted, admin etc.)
- The installer log file located as follows:
- **Windows 2000/XP:** <documents and settings folder>/<user>/Local Settings/

- **Windows Vista/7:** <users folder>/<user>/AppData/Local/RunRev/Logs
- **Linux:** <home>/.runrev/logs
- **Mac:** <home>/Library/Application Support/Logs/RunRev

Activation

The licensing system ties your product licenses to a customer account system, meaning that you no longer have to worry about finding a license key after installing a new copy of LiveCode. Instead, you simply have to enter your email address and password that has been registered with our customer account system and your license key will be retrieved automatically.

Alternatively it is possible to activate the product via the use of a specially encrypted license file. These will be available for download from the customer center after logging into your account. This method will allow the product to be installed on machines that do not have access to the internet.

Multi-user and network install support (4.5.3)

In order to better support institutions needing to both deploy the IDE to many machines and to license them for all users on a given machine, a number of facilities have been added which are accessible by using the command-line.

Note: These features are intended for use by IT administrators for the purposes of deploying LiveCode in multi-user situations. They are not supported for general use.

Command-line installation

It is possible to invoke the installer from the command-line on both Mac and Windows. When invoked in this fashion, no GUI will be displayed, configuration being supplied by arguments passed to the installer.

On both platforms, the command is of the following form:

    <exe> install noui *options*

Here *options* is optional and consists of one or more of the following:

-allusers	Install the IDE for all users. If not specified, the install will be done for the current user only.
-desktopshortcut	Place a shortcut on the Desktop (Windows-only)
-startmenu	Place shortcuts in the Start Menu (Windows-only)
-location *location*	The location to install into. If not specified, the location defaults to those described in the *Layout* section above.
-log *logfile*	A file to place a log of all actions in. If not specified, no log is generated.

Note that the command-line variant of the installer does not do any authentication. Thus, if you wish to install to an admin-only location you will need to be running as administrator before executing the command. As the installer is actually a GUI application, it needs to be run slightly differently from other command-line programs.

In what follows <installerexe> should be replaced with the path of the installer executable or app (inside the DMG) that has been downloaded.

On Windows, you need to do:

    start /wait <installerexe> install noui *options*

On Mac, you need to do:

"<installerexe>/Contents/MacOS/installer" install noui *options*

On both platforms, the result of the installation will be written to the console.

Command-line activation

In a similar vein to installation, it is possible to activate an installation of LiveCode for all-users of that machine by using the command-line. When invoked in this fashion, no GUI will be displayed, activation being controlled by any arguments passed.
On both platforms, the command is of the form:

<exe> activate -file *license* -passphrase *phrase*

This command will load the manual activation file from *license*, decrypt it using the given *passphrase* and then install a license file for all users of the computer. Manual activation files can be downloaded from the 'My Products' section of the RunRev customer accounts area.
This action can be undone using the following command:

<exe> deactivate

Again, as the LiveCode executable is actually a GUI application it needs to be run slightly differently from other command-line programs.
In what follows <livecodeexe> should be replaced with the path to the installed LiveCode executable or app that has been previously installed.
On Windows, you need to do:

start /wait <livecodeexe> activate -file *license* -passphrase *phrase*
start /wait <livecodeexe> deactivate

On Mac, you need to do:

"<livecodeexe>/Contents/MacOS/LiveCode" activate -file *license* -passphrase *phrase*
"<livecodeexe>/Contents/MacOS/LiveCode" deactivate

On both platforms, the result of the activation will be written to the console.

Proposed changes

The following changes are likely to occur in the next or subsequent non-maintenance release:

- The engine (both IDE and standalone) **will require** gtk, gdk, glib, pango and xft on Linux

Engine changes

Effective points of graphics (6.7.0-dp-7)

You can now use 'the effective points' and 'the effective relativePoints' properties of a graphic object to fetch a polygon representation of rectangle, round rectangle, oval and regular polygon graphic objects.

Threaded Rendering (6.7.0-dp-7)

In an effort to boost graphic rendering performance, when LiveCode is run on a machine with multiple cores, all stacks with accelerated rendering turned off will be split into multiple tiles, with each tile being rendered individually (and ideally concurrently). The number of tiles the stack is split into depends upon the machine the stack is running on.

So, for example, on a machine with 4 or more cores, a stack will be split up into 4 rectangular tiles - top left, top right, bottom left, bottom right. (On dual core machines, we use a top half bottom half split). Each tile will be rendered individually, meaning that in an ideal situation, we have 4 concurrent drawing operations providing a 4 fold speed increase. This is the ideal, but in reality, in the above case, we see closer to a 2 fold improvement. This will obviously vary with the number of concurrent operations the given machine can perform.

Note that this feature is currently disabled on Windows due to threading conflicts caused by the player object.

Player messages aren't sent correctly. (6.7.0-dp-7)

The occurrence of playStarted, playPaused and playStopped messages has been cleaned up.

The playStarted message will only be sent when the rate of the movie changes from zero to non-zero - whether via clicking the play button, setting the playRate or by using play start / play resume via script.

The playPaused message will only be sent when the rate of the movie changes from non-zero to zero - whether via clicking the pause button, setting the playRate or by using play pause / play stop.

The playStopped message will only be sent when the movie reaches the end of playback.

These are the only cases in which the messages will be sent - in particular, setting the filename will no longer send any messages and you will not get multiple messages of the same type in succession.

Showing a modal dialog confuses mouse state. (6.7.0-dp-7)

When a modal dialog is shown, the engine will now immediate reset the mouse state to ensure the context of events is the new dialog. In particular, mouseRelease will be sent if the mouse is down and mouseLeave will be sent if the mouse is within the previous window.

Specific bug fixes (6.7.0-dp-7)
(bug fixes specific to the current build are highlighted in bold, reverted bug fixes are stricken through)

13046   **Player doesn't wait to make sure currentTime has updated to where it has been set to.**
13026   **put the engine folder behaves inconsistently**
13025   **Linux GTK spinboxes were inverted**
13011   **currentTimeChanged not sent when dragging controller thumb.**

13010	If an object is in a group then mouseStillDown will not fire if it is in a behavior of the object.
13009	ImageData copying to offscreen images is broken
13007	Native encoded characters > 127 don't appear in menuPick string.
13005	Modifying selection by shift + click in the controller doesn't work correctly.
13004	Controller not updated when setting currentTime by script.
13003	selectionChanged message not sent when player selection changes via controller.
13002	Empty selection results in selection of full movie.
13001	Crash when changing focus inside openField handler.
13000	Image colours not showing correctly on Android device
12997	Changing windowShape leaves artifacts behind.
12990	Popup menus always highlight first item on Mac
12989	Player incorrectly reports timeScale and duration when using AVFoundation.
12979	Setting the rect of a player object doesn't work correctly if the stack is pixelScaled or scaled in any fullscreen mode.
12978	Development -> Plugins opens the wrong plugin
12968	ctrl z and edit -> undo are not working
12963	Player messages aren't sent correctly.
12962	Player won't play video in certain circumstances.
12961	Print dialogs do not keep new settings if displayed as sheet.
12946	play stop command does not work.
12944	Text does not align at correct tabStops in some cases.
12939	Closing a modal dialog causes a pause until a system event occurs.
12932	Stacks can receive mouseDown before resumeStack.
12930	Engine crashes when moving stack after closing its parent
12928	IDE: Development > Rev Online != menubar > user samples
12923	Setting the text style in the Text menu does not update correctly
12902	iOS standalones won't build due to missing template files.
12898	Showing a modal dialog confuses mouse state.
12897	Popup Menu crashes LiveCode 6.7.0 DP5 standalones
12894	centerRect and iconGravity need to be added to the properties
12892	Certain images have red & blue swapped when deployed to iOS
12886	the enabledTracks of a player is formatted incorrectly.
12882	Wrong button sent to mouseDown / mouseUp when targetting a card.
12879	Inspector opening at odd location
12875	Shift-click on play button doesn't create selection.
12871	Clicking in the well of a player with a selection should clear the selection.
12870	Make sure controller is redrawn after setting selection by script.
12869	Behavior of shift-click in well on player not correct.
12865	LiveCode Server process does not end when run as CGI
12864	The contents of a folder added to the Copy Files section of the Standalone Application Settings are not copied during a standalone build when it's a subfolder of the defaultFolder and the defaultFolder contains the main stack file.
12863	RevVideo Grabber preview in wrong location after resizing stack
12860	Android stack drawn at wrong scale until forced redraw of object
12844	Attempted to arrayDecode non-arrayEncoded data can cause a crash.

12842	copying imageData between images can lead to unpredictable results
12829	6.7.0-dp-5 Mac installer fails if system security permissions are set
12825	playStopped sent for player with no filename
12822	LiveCode server fails to read from https URLs on Fedora
12821	Player callbacks not operating correctly.
12819	revAvailableHandlers works on password protected stacks.
12806	message box is slow
12804	Clipping incorrect when printing to PDF.
12764	setting the effective rect of a stack with vscroll > 0 doesn't work properly
12720	Focus gets confused if focus changes in response to a suspendStack message on Mac
12687	Can't deselect MacOS build
12594	NUL bytes in fields will cause printing to pdf to fail silently.
12429	Setting the defaultNetworkInterface more than once causes instability.
12426	iOS font selection does not work correctly.
12298	Autocomplete text in Message Box does not line up with text you are typing
12296	Browser: Closing revBrowserCef when downloading makes LiveCode unstable
12250	File view in file dialog doesn't update if you change the filtered types.
12156	Single line message box field is too large
12131	Tool Palette location forgotten between launches
12014	Stack with iOS deployment checked(mac) when opened on windows system does not allow you to disable this deployment option. This in turn breaks Android APK generation
11839	Menus in Script Editor have testSize too small
11828	Use 64-bit file APIs on Linux
11797	scriptLimits no longer enforced
11620	pixelScale global property not documented
11375	In Dictionary the search box is only apparently selected when you come from Code Editor
11346	Command click in project browser
11240	Duplicate Menu and Replicate dialog lock messages
10942	Project Browser disappears in dual screen
9405	Clear previous highlight before drawing Linux GTK button highlight

Dictionary additions

- **revBrowserOpenCef** (*function*) has been added to the dictionary.

Dictionary changes

- The entry for **do** (*command*) has been updated.
- The entry for **edit** (*command*) has been updated.
- The entry for **insert script** (*command*) has been updated.
- The entry for **revBrowserSet** (*command*) has been updated.
- The entry for **backScripts** (*function*) has been updated.
- The entry for **frontScripts** (*function*) has been updated.

- The entry for **scriptLimits** (*function*) has been updated.
- The entry for **specialFolderPath** (*function*) has been updated.
- The entry for **** (*keyword*) has been updated.
- The entry for **;** (*keyword*) has been updated.
- The entry for **engine folder** (*property*) has been updated.
- The entry for **points** (*property*) has been updated.
- The entry for **script** (*property*) has been updated.

Previous Release Notes

6.6.2 Release Notes   http://downloads.livecode.com/livecode/6_6_2/LiveCodeNotes-6_6_2.pdf

6.6.1 Release Notes   http://downloads.livecode.com/livecode/6_6_1/LiveCodeNotes-6_6_1.pdf

6.6.0 Release Notes   http://downloads.livecode.com/livecode/6_6_0/LiveCodeNotes-6_6_0.pdf

6.5.2 Release Notes   http://downloads.livecode.com/livecode/6_5_2/LiveCodeNotes-6_5_2.pdf

6.5.1 Release Notes   http://downloads.livecode.com/livecode/6_5_1/LiveCodeNotes-6_5_1.pdf

6.5.0 Release Notes   http://downloads.livecode.com/livecode/6_5_0/LiveCodeNotes-6_5_0.pdf

6.1.3 Release Notes   http://downloads.livecode.com/livecode/6_1_3/LiveCodeNotes-6_1_3.pdf

6.1.2 Release Notes   http://downloads.livecode.com/livecode/6_1_2/LiveCodeNotes-6_1_2.pdf

6.1.1 Release Notes   http://downloads.livecode.com/livecode/6_1_1/LiveCodeNotes-6_1_1.pdf

6.1.0 Release Notes   http://downloads.livecode.com/livecode/6_1_0/LiveCodeNotes-6_1_0.pdf

6.0.2 Release Notes   http://downloads.livecode.com/livecode/6_0_2/LiveCodeNotes-6_0_2.pdf

6.0.1 Release Notes   http://downloads.livecode.com/livecode/6_0_1/LiveCodeNotes-6_0_1.pdf

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