



DI-Guy 13.7 Release Notes

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Systems Supported

For information about platform and system support, see the Product Specifications & Dependencies page on the MAK website at: <https://www.mak.com/mak-one-specs>.

For hardware requirements, see <https://www.mak.com/mak-one/support/help/hardware-recommendations>.

Compiler Compatibility on Windows

MAK provides versions of product releases that have been compiled with different versions of Microsoft Visual C++. MAK ONE products built with VC 14 and later are binary compatible and will work together. When you run MAK ONE products together on the same computer, for example, VR-Vantage, we strongly recommend that you run versions compiled with the same compiler or binary compatible compilers.

Renderer

DI-Guy 13.7 supports these renderers for Windows (64-bit): OpenGL, OpenGL Graphics API, OSG Graphics API.

License Manager

DI-Guy 13.7 uses FLEXlm 11.17.1. You must install the license management software to run DI-Guy.

The MAK License Manager files are not part of the DI-Guy installer. You can download them from the MAK ONE Product Downloads page (<https://www.mak.com/mak-one-downloads>).

Installation of the license manager is covered in the *MAK ONE Installation Guide*, available online at <https://mak.com/mak-one-installation-guide>. Support is also available at <https://www.mak.com/mak-one/support/portal>.

Network Compatibility

HLA Only

DI-Guy 13.7 was built against VR-Link 5.9 and is compliant with:

- RPR-FOM 1.0 and 2.0.
 - MAK RTI 4.1 or later.
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DIS Only

DI-Guy 13.7 supports DIS 4, 5, 6, and 7.

Major Updates

DI-Guy 13.7 has the following new features and updates.

Application Changes

This section describes changes to the DI-Guy products.

- You no longer need the DIGUY environment variable to run DI-Guy applications. If you have it specified for a previous release, you can remove it if you install the SDK data in the default location. If you want, you can choose to use it to point to the data location.
- Added new drive type for 2-animation blends, allowing for an even split between the actions.
- You can use the new Remove State button in the Geometry Viewer to remove old material states.

DI-Guy Motion Editor

- Added Import and Export Motion buttons to the Motion Editor for greater ease when importing and exporting motions. The Import Motion button is in the Project window and the Export Motion button is in the Timeline.
- Added a Send to Timeline button in the Motion Arcs tab of the Action Table Editor window and the context menu in the Project window. This allows you to quickly add motions to the timeline for the purpose of editing and previewing them.

Character Viewer

- Improved the ability to jump the camera to a point at a newly selected point (geometry/bone/link) when using **Shift**+click to select it.

API Changes

- Added API methods for specifying the muzzle flash duration. See the class documentation for details.

Fixed Bugs

Table 1. Fixed Bugs

Key	Summary	Release Notes	Fix Version/s
DIG-423	Appearance and Geometry windows change size of docked widget when switching between them.	Fixed issue where stacked/docked windows in Character Viewer would resize the dock container when switching between them.	DIG-IPB17, DIG-13.7
DIG-428	Dockable CV windows can't be resized in certain configurations.	Fixed layout issues that prevented users from resizing docked windows.	DIG-IPB17, DIG-13.7
DIG-430	Improve delayed motion loading logic so metadata doesn't require full motion loading.	Improved motion loading behavior when requesting metadata about action. Motions only load when the user requests metadata about the action if the metadata is not available.	DIG-IPB19, DIG-13.7
DIG-522	Uninstall doesn't uninstall data.	The uninstaller now removes data directories as well as any build files generated by building the examples.	DIG-13.7
DIG-534	Remove environment variable page from installer	The DIGUY environment variable is no longer needed to run the DI-Guy applications. Previously, it could cause issues when users had multiple versions of DI-Guy installed on a single machine. It has been removed from the installer. You can still set DIGUY variable if needed for your configuration. (If you have it set for a previous release, you should change or remove it, depending on where your DI-Guy SDK data is installed.)	DIG-IPB17, DIG-13.7
DIG-541	Aiming at high angle causes erratic animation.	Fixed angle calculation logic when aiming at extreme angles (for example, 90 degrees up).	DIG-IPB19, DIG-13.7
DIG-599	Script save button doesn't open save dialog to default location.	Saving scripts from Character Viewer now creates a user folder if it doesn't exist.	DIG-IPB17, DIG-13.7
DIG-607	Fix intermittent crash in DIGuyDigest.	Fixed intermittent crash in shader matrix set update logic.	DIG-IPB19, DIG-13.7
DIG-640	bdiScenario always creates max number (9) of secondary views even if not used.	Disabled automatic instantiation of secondary views on scenario creation. Secondary views must now first be created by a call to diguyScenario::create_new_secondary_view().	DIG-IPB17, DIG-13.7
DIG-643	item_override configuration for hand appearances don't actually replace hands.	Fixed issue where hands specified using item_override configuration were not applied.	DIG-IPB17, DIG-13.7

Table 1. Fixed Bugs (continued)

Key	Summary	Release Notes	Fix Version/s
DIG-647	ME Motion playback stops after one loop	Fixed issue with the Motion Editor camera that was affecting motion playback.	DIG-IPB17, DIG-13.7
DIG-648	Additional hand item appearances configured in autoload_hand_item_appearances don't work.	Fixed some issues preventing hand items from being overridden from the custom directory. Added support for the class_type parameter for hand item appearances to allow for easier configuration.	DIG-IPB18, DIG-13.7
DIG-655	A-Pose and null_pose should only show in action list for human characters.	Fixed issue where A-Pose and Null-Pose items were added to action list for non-human characters.	DIG-IPB17, DIG-13.7
DIG-656	Issues using display names configured at the motion arc level.	Moved display name configuration to the action info to avoid conflicts when using the same motion arc for different actions.	DIG-IPB19, DIG-13.7
DIG-660	Character Viewer's About box looking for wrong image filename.	Fixed issue with splash screen and About dialog box images not displaying when installed with VR-Vantage or VR-Forces.	DIG-IPB17, DIG-13.7
DIG-661	Update aimer so it works with aiming at angle.	Calls to aim-at-angle logic now actually adjust character's aiming using the given angles instead of converting to a look-at point and using that.	DIG-IPB19, DIG-13.7
DIG-663	Character Viewer expands bottom panel instead of top if hand items and equipment UI isn't shown.	Fixed layout issues that occurred when hand items and equipment lists weren't shown for a given character.	DIG-IPB17, DIG-13.7
DIG-666	Character Viewer's aim widget is stretched out when locomotion widget not shown.	Fixed issue where Aim widget was distorted when the Animation Velocity widget was hidden.	DIG-IPB17, DIG-13.7
DIG-669	Pressing Alt+Tab causes skeleton to disappear from view.	Fixed bug where skeleton visualization would turn off with unrelated keyboard input.	DIG-IPB17, DIG-13.7
DIG-671	Memory leak in character sorting logic.	Fixed memory leak in LOD calculation logic.	DIG-IPB17, DIG-13.7
DIG-674	Human heads can be applied to animal characters - type validation broken.	Ensured that the application checks whether a head is compatible with a DI-Guy entity. This prevents human heads from being applied to animal entities.	DIG-IPB19, DIG-13.7
DIG-683	Unable to clear geometry nodes selected through Geometry Viewer.	Fixed selection logic to allow users to clear selections regardless of whether they selected them through the 3D View or the Geometry Viewer.	DIG-IPB18, DIG-13.7
DIG-688	Crash if skeleton initialization is delayed a frame.	Fixed issue where skeleton could remain uninitialized for a frame.	DIG-IPB18, DIG-13.7

Table 1. Fixed Bugs (continued)

Key	Summary	Release Notes	Fix Version/s
DIG-689	Weapon supplemental data configuration isn't used when hand item is no_weapon.	Fixed issue preventing weapon supplemental data from being used when weapon is set to no_weapon. This configuration is needed for certain appearances with the weapon baked into the appearance.	DIG-IPB18, DIG-13.6.0c, DIG-13.7
DIG-697	Add warning for duplicate parameters.	Duplicate parameters in appearance configurations now print a warning to the log.	DIG-IPB18, DIG-13.7
DIG-698	DI-Guy log level setting doesn't adjust file logging.	Fixed issue preventing log level changes in the Character Viewer from applying to the log output written to the log file on disk.	DIG-IPB18, DIG-13.7
DIG-704	Motion Editor poser broken.	Fixed various issues with the IK poser in the Motion Editor.	DIG-IPB18, DIG-13.7
DIG-712	Fix scrubber in playback controls.	Added basic playback controls widget to Character Viewer.	DIG-IPB18, DIG-13.7
DIG-730	Motions imported into Motion Editor seem to always use actor greg.	Fixed issue where current actor was always overridden by last used actor, which was being set incorrectly on motion import.	DIG-IPB19, DIG-13.7
DIG-748	Motion loading isn't threadsafe.	Improved thread safety for loading motions.	DIG-IPB19, DIG-13.7
DIG-753	Changing motion arc file doesn't fully reload arc with new data.	Fixed issue where changes to the motion arc configuration weren't always reloading latest values.	DIG-IPB19, DIG-13.7
DIG-757	Playing action after adding it to the action table plays wrong action.	Fixed issue in action table editor that caused indexing errors.	DIG-IPB19, DIG-13.7
DIG-764	Aiming sometimes results in character looking fully off to the side.	Fixed issue where internal use of aim-at-point pipeline instead of aim-at-angle resulted in aim drift.	DIG-IPB19, DIG-13.7
DIG-767	Elevation slider for aim preview is reversed.	Aim elevation slider labels indicated negated values. Updated to match elevation angle conventions (up = positive, down = negative).	DIG-IPB19, DIG-13.7
DIG-779	Config parsing logic errors out if config lines are too long.	Improved config parsing logic to remove hard line length limits.	DIG-IPB19, DIG-13.7
DIG-794	Logs from Character Viewer run from other MAK ONE products should go to MAK Shared Logs directory.	When you run the Character Viewer from a MAK ONE application (VR-Vantage, VR-Forces, VR-Engage), any LOG and DMP files are now saved in a central location. The default is C:/MAK/logs, which you can change by using the MAK_LOG_DIR environment variable to specify a different path.	DIG-IPB19, DIG-13.7

Table 1. Fixed Bugs (continued)

Key	Summary	Release Notes	Fix Version/s
DIG-817	The diguy_scenario_ui_plugin example fails to build out of the box.	Fixed various issues related to example packaging so they build in release again.	DIG-13.7
DIG-818	Segfault in example_ig_osg when trying to load AI Crosswalks scenario.	Fixes to example as part of DIG-819 resolved issue.	DIG-13.7
DIG-819	Some examples display only a blank (black) screen.	Added missing glewInit calls to examples that didn't have it.	DIG-13.7
DIG-820	Programming examples link in classdocs doesn't load.	Fixed issue in doc generation config files that were causing failed file lookups.	DIG-13.7
DIG-822	FaceFX effects don't work.	Fixed issue with FaceFX not working in FaceFX example.	DIG-13.7
DIG-823	The simple_playback_osg example spams tons of debug output to console.	Disabled OSG debug output by default to avoid console spam. Line can be uncommented to re-enable.	DIG-13.7
DIG-828	Segfault in simple_playback_dx11 example.	Fixed member variable initialization so examples don't crash.	DIG-13.7
DIG-830	Instanced character LODs not getting updated.	Fixed issue where LODs for instanced characters weren't updated prior to rendering, which caused missing visuals.	DIG-13.7
DIG-831	Bottom half of instanced characters not updating in networking examples.	Fixed issue with stretched-out instanced characters in networking examples.	DIG-13.7
DIG-839	Australian_Army_Male_Driver reports multiple errors about sunglasses.	Fixed issue where attaching equipment to character would report a spurious error message.	DIG-13.7
DIG-843	Undoing changes to Ragdoll IK settings in Motion Editor fails due to uninitialized action table.	Fixed issue where undo would fail due to uninitialized action table.	DIG-13.7
DIG-844	Pressing Alt to adjust camera while in pose edit mode doesn't work.	Fixed broken Alt+(key) input logic.	DIG-13.7
DIG-845	Motion export into custom folder creates redundant custom subfolder, causing lookup errors.	Fixed issue with custom folders being created with wrong relative path.	DIG-13.7

Table 1. Fixed Bugs (continued)

Key	Summary	Release Notes	Fix Version/s
DIG-848	Shadows still render even when turned off in the GUI.	Fixed issue where shadows continued to render after the user turned them off in the GUI.	DIG-13.7
DIG-855	Link rebuild on creature recreation was only rebuilding position link.	Fixed issue where only position link was being rebuilt following appearance changes.	DIG-13.7
DIG-861	Memory leak in diguyPatchIdentifier and diguyCharacterTypeMapFieldValues assignment operators.	Fixed memory leak in diguyPatchIdentifier and diguyCharacterTypeMapFieldValues assignment operators.	DIG-13.7
DIG-862	Instance group addition isn't threadsafe.	Fixed crash in instancing update when updating multiple characters of the same type.	DIG-13.7
DIG-873	Soldier aims off to side when kneeling.	Updated sweep values for kneel_aim that caused broken aiming.	DIG-13.7
DIG-880	Crash when multiple characters using the same motion attempt to load at the same time.	Fixed issue with multithreaded loading when loading the same motion at the same time from different character types.	DIG-13.7
DIG-885	Newly created creatures are removed from scene during first update.	Fixed issue where newly created characters were being removed from scene prior to first update.	DIG-13.7

Feature List

Table 2. Feature List

Key	Summary	Release Notes	Fix Version/s
DIG-28	Clean up old FED Files & FOM Modules from packaging script.	Removed legacy FED/FOM files from package in favor of the latest versions.	DIG-IPB18, DIG-13.7
DIG-570	Attach camera to link/bone when clicking to select.	Fixed broken link attachment logic for camera when shift-clicking to select.	DIG-IPB19, DIG-13.7
DIG-651	Add remove button for material states.	You can use the new Remove State button in the Geometry Viewer to remove old material states.	DIG-IPB17, DIG-13.7
DIG-673	Add ability to specify muzzle flash duration.	Added API methods for specifying the muzzle flash duration.	DIG-IPB17, DIG-13.7
DIG-727	Add Send to Timeline button in motion arcs dialog.	Added a Send to Timeline button in the Motion Arcs tab of the Action Table Editor window and the right-click menu in the Project window. This allows you to quickly add motions to the timeline for the purpose of editing and previewing them.	DIG-IPB18, DIG-13.7
DIG-754	Add Import/Export buttons for ease of use.	Added Import and Export buttons to the Motion Editor to simplify the process of importing and exporting motions. You can find these in the Project and Timeline windows.	DIG-IPB19, DIG-13.7
DIG-786	Add support for even split to 2-Animation blend node.	Added new drive type for 2-animation blends, allowing for an even split between the actions.	DIG-IPB19, DIG-13.7

Known Problems

For information about resolving issues with running DI-Guy applications, see "[Troubleshooting Display Issues](#)" in the *DI-Guy Getting Started Users Guide*.

Problems can arise with any product. MAK has a knowledge base of the problems that we know about, which is always changing as new problems are identified and new solutions are found. To learn how to address known problems with DI-Guy and other MAK ONE products, access the MAK ONE Product Support Knowledge Base: <https://www.mak.com/knowledge>.

If the problem you are experiencing is not addressed in the knowledge base, contact support for assistance: <https://www.mak.com/mak-one/support/portal>.