

WHAT'S NEW IN SHOGUN 1.3?

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About Shogun 1.3

About Shogun 1.3

Shogun 1.3 is the third point release of Vicon's entertainment market software.

It includes new features such as the first phase of Vicon's new high fidelity finger solver and retargeting feature.

For a more detailed description, see [New features in Vicon Shogun 1.3 on page 4](#) or watch the Vicon Shogun videos:



On YouTube:

[What's new in Shogun Live 1.3?¹](#) and [What's new in Shogun Post 1.3?²](#)



On Vimeo:

[What's new in Shogun Live 1.3?³](#) and [What's new in Shogun Post 1.3?⁴](#)

This release also benefits from ongoing maintenance, with a large number of issues having been addressed (see [Addressed issues in Vicon Shogun 1.3 on page 46](#)).

For information on requirements for installing and running Shogun, see PC requirements in *Installing and licensing Vicon Shogun*, visit the FAQ, '[What is the recommended computer specification to run my Vicon Shogun system⁵](#)' on the Vicon website, or contact [Vicon Support⁶](#).

1 <https://youtu.be/MxJEybpylrs>

2 <https://youtu.be/RbYnnr04gS8>

3 <https://vimeo.com/377607918>

4 <https://vimeo.com/377607989>

5 <https://www.vicon.com/faqs/operating-systems-and-pc-specification/what-is-the-recommended-pc-specification-to-run-my-vicon-shogun-system>

6 <mailto:support@vicon.com>

About Shogun 1.3

About this guide

This guide describes the new features in Vicon Shogun 1.3.

The following documentation is available for Shogun, both as online documentation and as PDFs that you can download from docs.vicon.com⁷:

Document	Description
<i>What's New in Vicon Shogun</i>	Describes new features in the latest release.
<i>Installing and licensing Vicon Shogun</i>	Installation and licensing instructions.
<i>Getting started with Vicon Shogun</i>	Provides an end-to-end workflow overview, including system preparation, initial capture steps, data cleanup and solving, retargeting and export.
<i>Getting more from Vicon Shogun</i>	More advanced information to help you to take your use of Shogun further, for example, to add your own customizations, or to automate capture.
<i>Vicon Shogun Scripting Guide</i>	Scripting guidelines and commands.
<i>Getting started with Vicon Retarget</i>	Basic information on using Vicon's retargeting application.

For more documentation related to Shogun and other Vicon products, visit docs.vicon.com⁸.

⁷ <https://docs.vicon.com>

⁸ <https://docs.vicon.com>

New features in Vicon Shogun 1.3

New features in Vicon Shogun 1.3

For descriptions of the new features in this release of Shogun, see the following topics:

- [Shogun Live 1.3 on page 5](#)
- [Shogun Post 1.3 on page 23](#)
- [Other new features on page 37](#)

New features in Vicon Shogun 1.3

Shogun Live 1.3

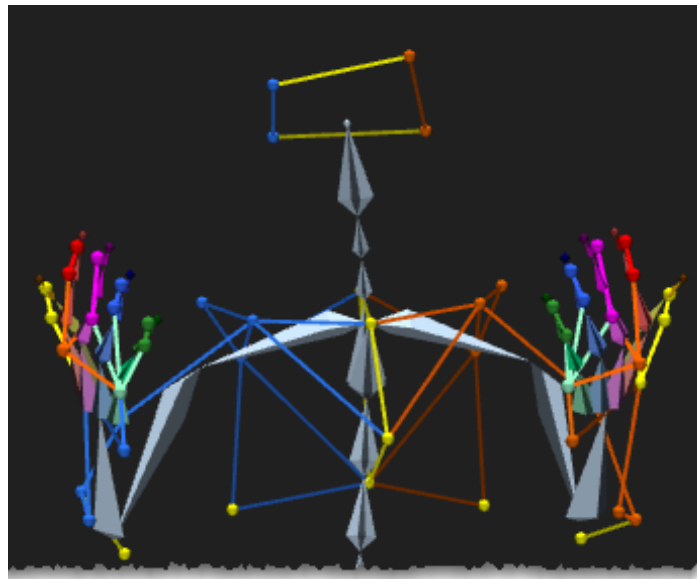
For descriptions of the major new features in this release of Shogun Live, see the following topics:

- [High fidelity finger solver on page 6](#)
- [New retargeting feature on page 8](#)
- [Multi-machine capability on page 9](#)
- [A-pose for subject calibration on page 10](#)
- [New Production marker set on page 11](#)
- [Ability to align props to world axis on page 12](#)
- [Reconstruction volume and subject calibration hotspot on page 13](#)
- [Custom L-frame and set origin workflow on page 14](#)
- [Rotating cameras on page 15](#)
- [New matrix display for view filters on page 16](#)
- [Marker count on current selection on page 18](#)
- [Camera mask painting on page 19](#)
- [Low disk space warning on page 20](#)
- [Marker reconstruction radius on page 21](#)
- [MCP review via Shogun Live SDK on page 22](#)

New features in Vicon Shogun 1.3

High fidelity finger solver

Shogun 1.3 features a new, high-resolution finger-solver, which supports a full finger model that is capable of capturing high fidelity motion, including palm motion.



Not only are fingers now calibrated based on the performers' real hands, but the labeling process also uses the new feature, so that the data is cleaner and more accurate.

In addition, the [new retargeting feature on page 8](#) also makes use of the improved finger animation, enabling you to see realistic finger motion on your own game characters as they interact with props in real time.

For more information on using the new high fidelity finger marker sets in Shogun, see Create subjects in *Getting started with Vicon Shogun*.

New features in Vicon Shogun 1.3

Note for users of finger markers in Shogun 1.2

If you used marker sets that included fingers in previous versions of Shogun, note the following points:

- The 6Z marker set is no longer included.
- For the current (Shogun 1.3) 3 finger-marker set, the marker names are identical to the former 5-from-3 model (LTHM3, LIDX3, LPNK3, etc.). This ensures that you do not need to re-label sequences that were previously captured and labeled with Shogun 1.2.1.
- If you re-label old (pre-Shogun 1.3) ROMs from scratch using the new skeletons, T-pose booting may not work as expected, due to the change to A-pose booting (see [A-pose for subject calibration on page 10](#)).

New marker cluster workflow

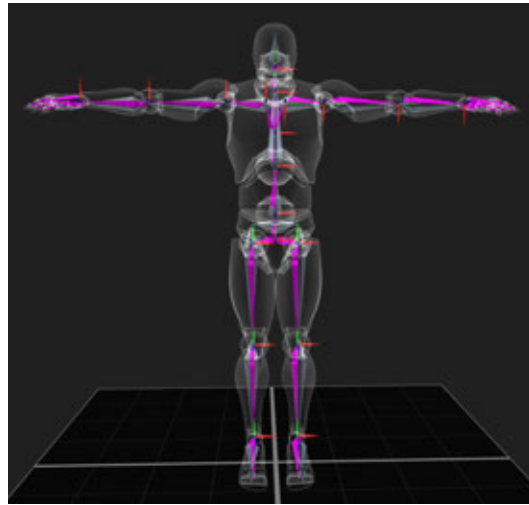
If you're using a labeling cluster for a subject who is wearing a marker set that includes high fidelity fingers, before you calibrate the subject, select the required labeling cluster from the **Labeling Cluster To Use** list on the **Subject Calibration** tab.

For more information on using labeling clusters, see Create and calibrate a subject, in *Getting Started with Vicon Shogun*.

New features in Vicon Shogun 1.3

New retargeting feature

You can now retarget from the Vicon Shogun character onto any custom biped skeleton in FBX format, enabling you to see your own characters being driven by the motion capture data rather than the standard Vicon one.



Working with Vicon Shogun retargeting in conjunction with the new Vicon game engine plugins for Unity and Unreal, you can see your character in the game engine within seconds.

For more information on retargeting with Shogun, see:

- Retarget with Shogun Post in *Getting started with Vicon Shogun*
- *Getting started with Vicon Retarget*

and the relevant videos on YouTube:

 [Vicon Shogun 1.3 Post Tutorial - Retargeting Setup](https://youtu.be/S5otK-hx8QM)⁹

 [Vicon Shogun 1.3 Post Tutorial - Retargeting Test](https://youtu.be/FFYwa2_FSak)¹⁰

 [Vicon Shogun 1.3 Post Tutorial - Streaming Retargets into Unreal](https://youtu.be/3vUuTgp0PTE)¹¹

⁹ <https://youtu.be/S5otK-hx8QM>

¹⁰ https://youtu.be/FFYwa2_FSak

¹¹ <https://youtu.be/3vUuTgp0PTE>

New features in Vicon Shogun 1.3

Multi-machine capability

Shogun Live's new multi-machine capability lets you boost processing performance, resulting in fewer dropped frames, by running a standalone agent on one or more other machines on the same network.

For setup information, see:

Run Shogun processing on multiple machines in *Getting more from Vicon Shogun*

and

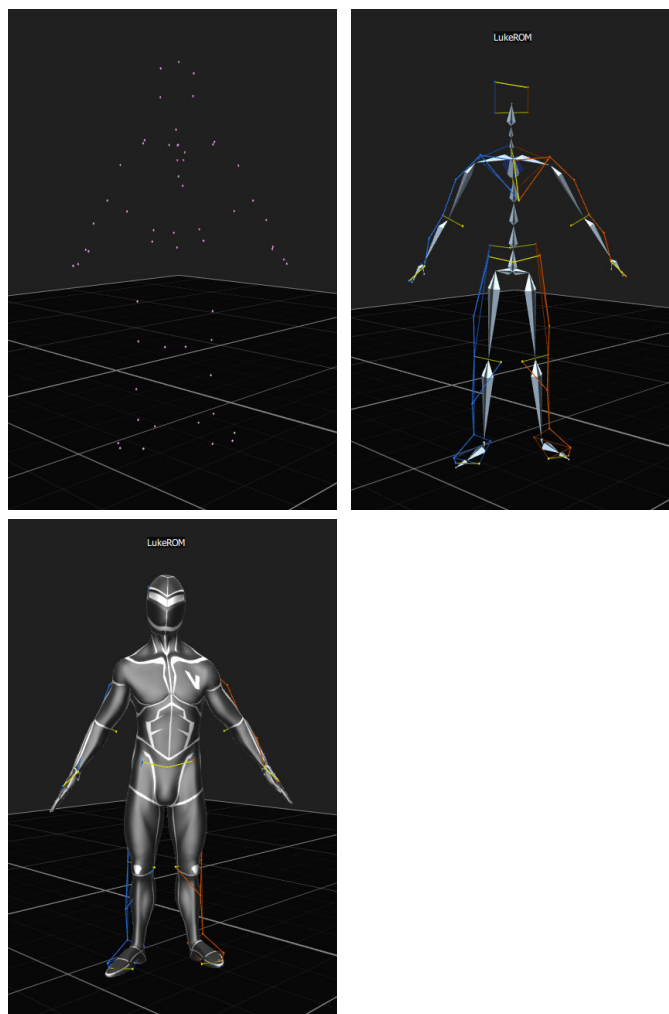
 [Vicon Shogun 1.3 Live Tutorial - Multi-machine Workflow](https://youtu.be/41bv18ULhAQ)¹² on YouTube.

¹² <https://youtu.be/41bv18ULhAQ>

New features in Vicon Shogun 1.3

A-pose for subject calibration

To enable performers to adopt a more natural pose for subject calibration, subjects are now calibrated in an A-pose, rather than a T-pose.



New features in Vicon Shogun 1.3

New Production marker set

Shogun 1.3 includes a new Production marker set and templates. The Production marker set helps to avoid marker occlusion and includes extra markers for the back and top of the shoulders to help with gap-filling and solving. Four variations are included:

- Standard Production marker set
- Production marker set plus 10 finger-markers
- Production marker set plus 5 finger-markers
- Production marker set plus 3 finger-markers



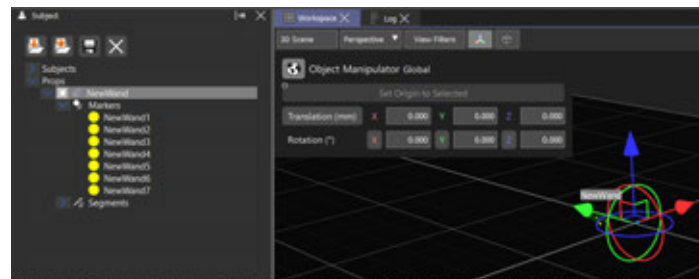
For more information, see Create subjects in *Getting started with Vicon Shogun*.

New features in Vicon Shogun 1.3

Ability to align props to world axis

You can now quickly align a selected prop to the world axis.

With the prop selected, display the Object Manipulator, ensure it is set to Global and change all the prop's values to zero.

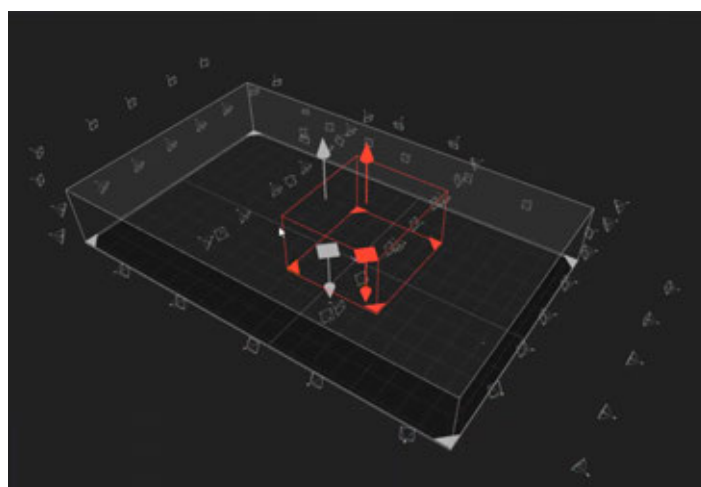


For more information, see Move props in *Getting started with Vicon Shogun*, Create props.

New features in Vicon Shogun 1.3

Reconstruction volume and subject calibration hotspot

The new reconstruction volume feature lets you set aside a part of your volume specifically for subject calibration ROMs, leaving the rest of the volume free for scene setup/rehearsals, etc. You can now avoid having to clear the volume whenever you want to calibrate or re-calibrate a subject.



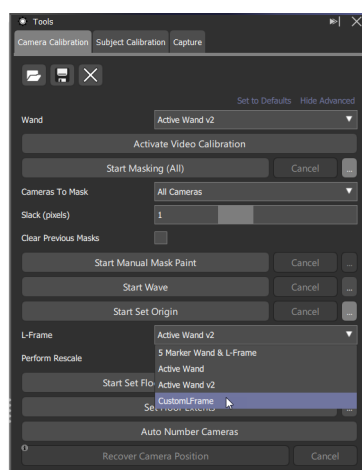
For details, see Create a subject calibration hotspot in *Getting more from Vicon Shogun*.

New features in Vicon Shogun 1.3

Custom L-frame and set origin workflow

In Shogun Live you can now use a custom L-frame to set the origin of your system.

You can use a Vicon Active Wand to set up your volume coordinate system quickly and easily. However, using a larger, custom calibration object (in this case, markers embedded in the volume floor and/or wall) can improve calibration stability and consistency over time.



For more information, see:

Set the origin with a custom L-frame in *Getting started with Vicon Shogun*,
Calibrate cameras

and

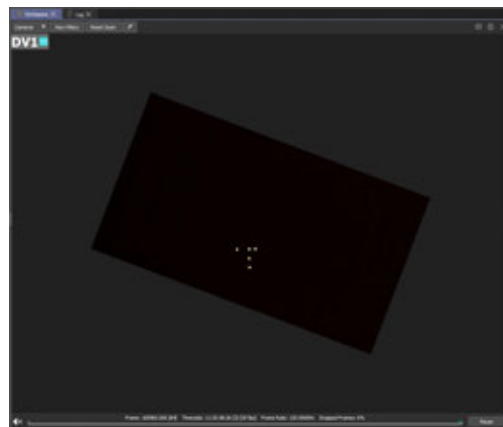
 [Vicon Shogun 1.3 Live Tutorial - Custom L-Frame Workflow](https://youtu.be/l4-zV9253ho)¹³ on YouTube

¹³ <https://youtu.be/l4-zV9253ho>

New features in Vicon Shogun 1.3

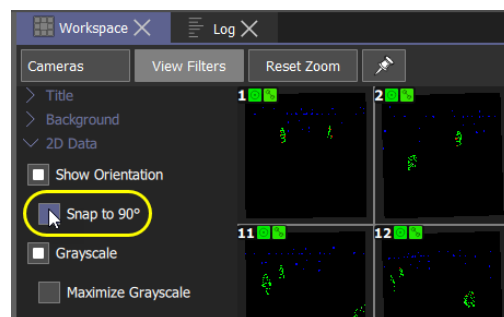
Rotating cameras

When cameras are physically rotated, Shogun Live adjusts to display the cameras with the correct rotation.



After system calibration, the camera 'tunes' itself to update its rotation based on calibration.

To set the rotation to snap to the nearest 90 degrees, in the **Cameras** view, display the **View Filters** and in the **2D Data** section, select the **Snap to 90°** check box.



New features in Vicon Shogun 1.3

New matrix display for view filters

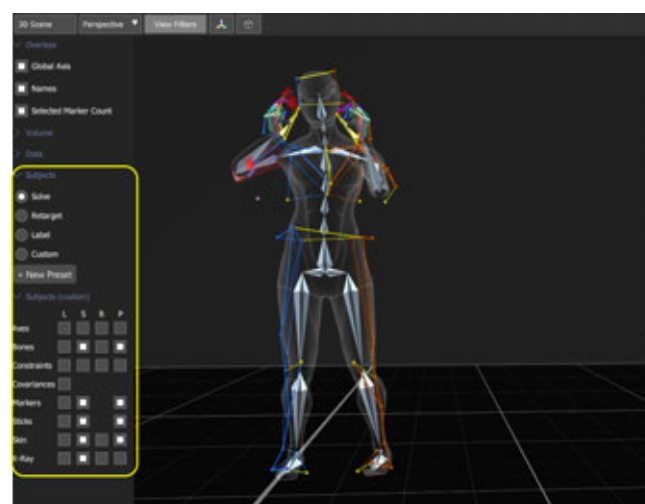
To find out about the new View Filters options, see:

[▶ Vicon Shogun 1.3 Live Tutorial - View Filter Matrix¹⁴](#) on YouTube.

The View Filters for the 3D Scene view have been enhanced and reorganized to make them easier to use.



The view options are displayed in a matrix, with columns for **L**abeling, **S**olving, **R**etargeting and **P**rops, enabling you to choose a view configuration that suits your current task.

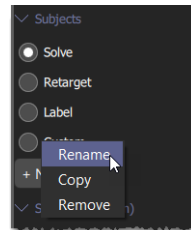


¹⁴ <https://youtu.be/8w7pt7hoBLI>

New features in Vicon Shogun 1.3

The default view filter sets are for solving, retargeting, and labeling, but you can add your own filter sets by clicking **New Preset**.

To rename, copy or remove any filter sets, right-click on a filter set and then click the required option.



Your settings, including any custom presets, are automatically saved, so that you can easily re-use them for different workflows.

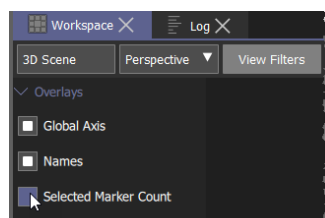
New features in Vicon Shogun 1.3

Marker count on current selection

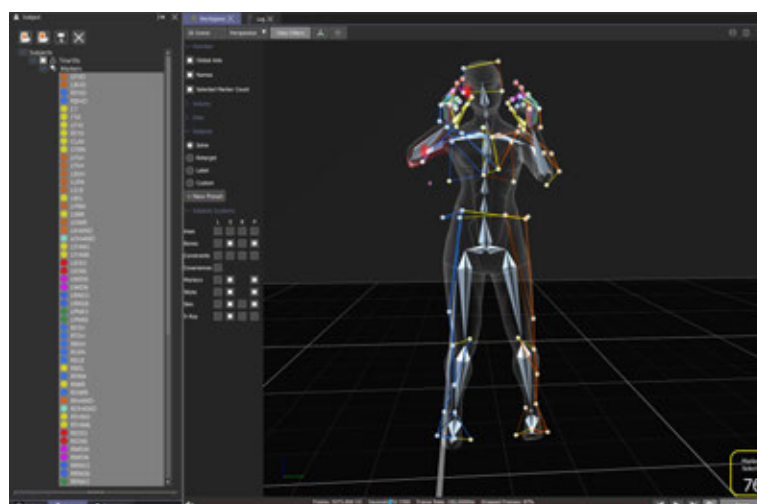
The new Marker Selection counter enables you to easily check the number of markers currently selected. This is useful if, for example during subject calibration, you need to check that the required number of markers have all been placed on a subject, or within a particular set of markers (for example, facial markers).

To display the number of selected markers:

1. In the 3D Scene view, ensure **View Filters** is selected and in the **Overlays** section, select the **Selected Marker Count** option.



2. As you select markers (in either the Subject pane (left) or the view pane), the Marker Selection counter at the bottom right of the view pane changes to display the number of selected markers.

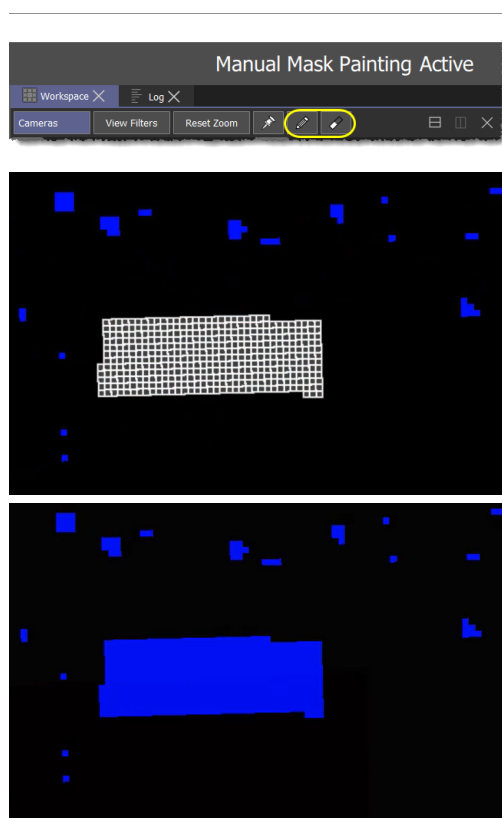


New features in Vicon Shogun 1.3

Camera mask painting

If you add equipment or markers into the volume after you've finished auto-masking, or if you have an issue with specific camera(s), it is time-consuming to have to repeat the masking process.

Instead of re-starting the whole auto-masking procedure, you can now keep your original masking and add to it using further auto-masking, and/or manually paint out any additional reflections.



For more information, see Mask cameras in *Getting Started with Vicon Shogun*.

New features in Vicon Shogun 1.3

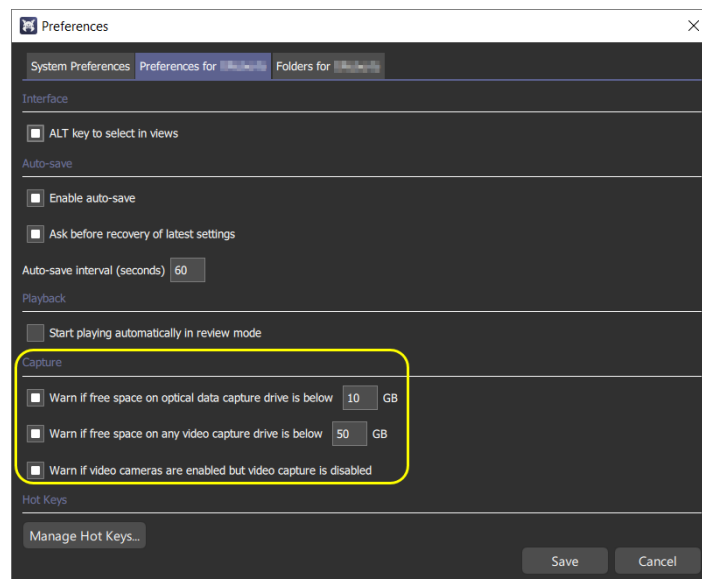
Low disk space warning

Shogun Live now warns you if your capture drive(s) reaches a specified capacity.

To change the amount of free space remaining before Shogun Live alerts you:

1. In the **Settings** dialog box (**Settings > Preferences**, or Shift+P), click the **User Preferences** tab.
2. In the **Capture** section, make the required changes.
The default free space remaining is:
 - For optical data capture: 10 GB
 - For video capture: 50 GB

You can also select or clear the check box to enable a warning if video cameras are enabled, but video capture is disabled.

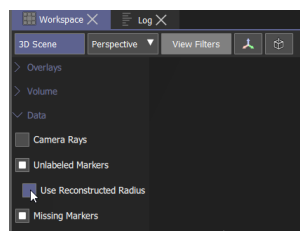


New features in Vicon Shogun 1.3

Marker reconstruction radius

In Shogun Live, a new option in the **View Filters** in the **3D Scene** view enables you to display markers based on their physical size, instead of the default (7 mm) size.

This is particularly useful if you have a high density of small markers, for example for facial motion capture, or if you're using the new fingers marker sets.



New features in Vicon Shogun 1.3

MCP review via Shogun Live SDK

You can now launch and control MCP review using the Live SDK.

For more information, see the Live SDK sample script included in the API package (by default installed in *C:\Program Files\Vicon\ShogunLive1.3\SDK*) and the information in the supplied code.

The sample script (*playback.py*), enables you to open an MCP for review in Shogun Live by specifying a capture name, as shown in the following example, or just review live data if no name is specified.

```
python playback.py --name Jack_Fin_2019-10-15_17-19-26
```

New features in Vicon Shogun 1.3

Shogun Post 1.3

For descriptions of the major new features in this release of Shogun Post, see the following topics:

- [High fidelity finger support on page 24](#)
- [Retarget support on page 25](#)
- [Enhanced scene visualization on page 26](#)
- [Additional export formats on page 30](#)
- [Ability to resample data on page 31](#)
- [Gap-filling made easier on page 32](#)
- [In and Out smoothing for filters on page 34](#)
- [View Filters reorganized in Post on page 35](#)
- [New scripting commands on page 36](#)

New features in Vicon Shogun 1.3

High fidelity finger support

Shogun Post supports the new high fidelity fingers marker sets and works with the **Subject Setup** panel and offline workflow.

You can change various parameters to get the best results, for example, you can scale the hands if they are too large or add pre-rotations to joints to get a better fit.

 For more information, see [Vicon Shogun 1.3 Post Tutorial - Finger Solve Adjustments](#)¹⁵ on YouTube.

¹⁵ <https://youtu.be/IU4BMD1-5IU>

New features in Vicon Shogun 1.3

Retarget support

You can now import your own FBX or USD file and use it for retargeting in Shogun Post. After you've prepared it, adjusted its pose and added constraints, you can export to FBX, USD, or VSR for use in other takes in Post or to use the VSR in real time in Live.

For more information, see:

Retarget with Shogun Post in *Getting started with Shogun*

and the relevant videos on YouTube:

 [Vicon Shogun 1.3 Post Tutorial - Retargeting Setup](#)¹⁶

 [Vicon Shogun 1.3 Post Tutorial - Retargeting Test](#)¹⁷

 [Vicon Shogun 1.3 Post Tutorial - Streaming Retargets into Unreal](#)¹⁸

¹⁶ <https://youtu.be/S5otK-hx8QM>

¹⁷ https://youtu.be/FFYwa2_FSak

¹⁸ <https://youtu.be/3vUuTgp0PTE>

New features in Vicon Shogun 1.3

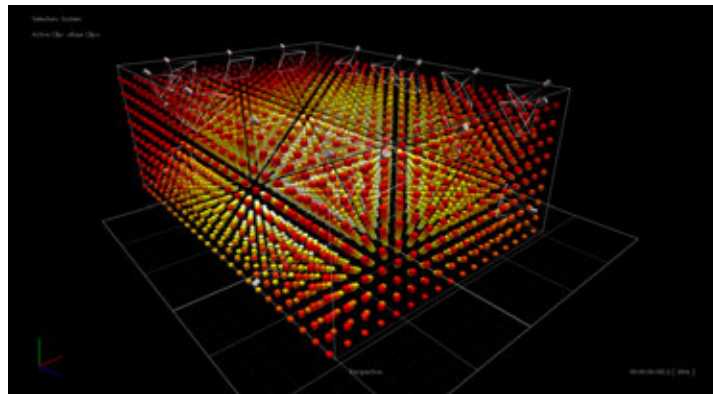
Enhanced scene visualization

Shogun Post now offers the following features for better scene visualization.

- [Volume Visualizer for checking camera coverage on page 26](#)
- [Static FBX support for scene visualization on page 27](#)
- [Create multiple objects on page 29](#)

Volume Visualizer for checking camera coverage

Shogun Post now provides a tool that lets you visualize camera coverage of real or virtual volumes based on the cameras in the scene.



The tool draws voxels for each theoretical ray intersection of cameras in the scene. This means that, within a box encompassing all cameras, every X distance from one corner to the opposite corner a box is drawn if cameras can see that position in space. You can configure how many cameras need to see that position and change other options such as whether or not to visualize camera frustums, define the volume size and the color scheme.

To configure the Volume Visualizer, click **Camera Calibration** and in the Camera Calibration panel, click the **Volume Visualization** tab.

For more information, see:

Visualize camera coverage in *Getting more from Vicon Shogun*
and

 [Vicon Shogun 1.3 Post Tutorial - Volume Visualizer](#)¹⁹ on YouTube.


¹⁹ <https://youtu.be/TqEL34lF-ng>

New features in Vicon Shogun 1.3

Static FBX support for scene visualization

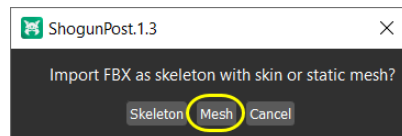
To help you visualize your scene, you can now import FBX files to use as objects in your scene. You can also create Mesh objects, to which you can attach FBX files, and manipulate them within your Shogun scene.

This might be useful when you want to visualize your existing 3D environment within Shogun to enable you to position the characters accurately, or to help with camera placement.

 For more information, see the following steps and watch [Vicon Shogun 1.3 Post Tutorial - Static FBX Meshes](#)²⁰ on YouTube.

To import an FBX file as a static object:

1. Drag the FBX file into the Shogun Post view pane.
2. When you are prompted, choose **Mesh**.

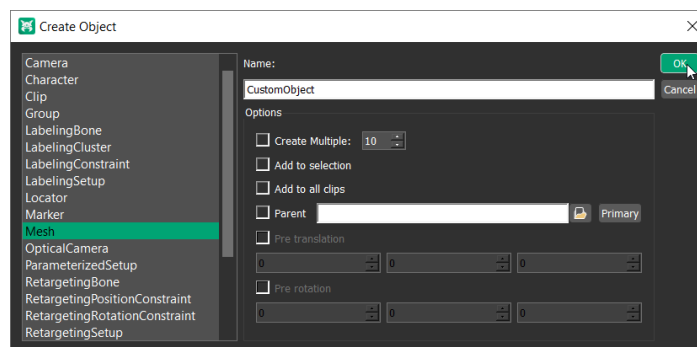


²⁰ <https://youtu.be/fq9Iz9HEsDM>

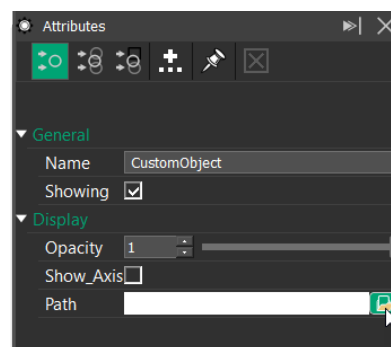
New features in Vicon Shogun 1.3

To create a static FBX object:

1. On the **Objects** menu, point to **Create objects**, then click **Create Object**.
2. On the left of the Create Object dialog box, click **Mesh**, enter a name for the new object on the right and then click OK.



3. In the Attributes panel, enter or browse to the FBX file of the required mesh.



When you have created or imported the object, you can then move the object to the required position as normal.

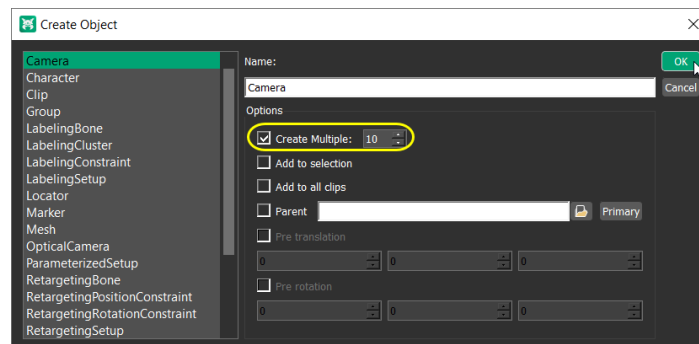
New features in Vicon Shogun 1.3

Create multiple objects


To make it quicker and easier to create multiple instances of an object (for example, if you want to create a number of cameras to help you to visualize a new capture space), you can now specify the number of objects to create when you create an object.

To create multiple objects:

1. On the **Objects** menu, point to **Create objects**, then click **Create Object**.
2. On the left of the Create Object dialog box, click the type of object you want to create (in this example, Camera).
3. On the right of the dialog box:
 - a. Enter a name for the object you're creating.
 - b. In the **Options** select **Create Multiple** and if necessary, change the value to the required number of objects.
 - c. Click OK.



4. To check that your new objects are displayed, open a **Selection** panel.
5. With the Object Manipulator, move the objects to their required positions.

 For tips on creating multiple objects and using the Selection panel, see [Vicon Shogun 1.3 Post Tutorial - Object Creation and Selection List](https://youtu.be/x2W3tsnm8gg)²¹ on YouTube.

²¹ <https://youtu.be/x2W3tsnm8gg>

New features in Vicon Shogun 1.3

Additional export formats

The following additional export formats are now available.

- [TRC file support on page 30](#)
- [USD file support on page 30](#)

TRC file support

Shogun Post has restored the ability to export marker data in TRC format.

To use this feature, with your data loaded in Shogun Post, on the **File** menu, click **Export** and from the **Save as type** list, select the **Motion Analysis Trajectory (*.trc)** option.

See also `trcExportOptions` in the *Vicon Shogun Scripting Guide*.

USD file support

With Shogun Post, you can now import and export skeletal data in USD format. This lets you quickly get animation data onto an IOS device like an iPhone or iPad and to make use of features like the new ARKit technology.

To use this feature for export, with your data loaded in Shogun Post, on the **File** menu, click **Export** and from the **Save as type** list, select the **Pixar USD** option.

See also `usdExportOptions` and `usdImportOptions` in the *Vicon Shogun Scripting Guide*.

New features in Vicon Shogun 1.3

Ability to resample data

In Shogun Post, the new **resample** command enables you to resample captured data to a different timecode standard and/or rate.

You can convert your motion capture data to a new timecode and/or rate that you specify and export the data saved at the new rate.

You can also specify whether to include unlabeled markers and gaps in the converted data.

For more information see *resample* in the *Vicon Shogun Scripting Guide*.

New features in Vicon Shogun 1.3

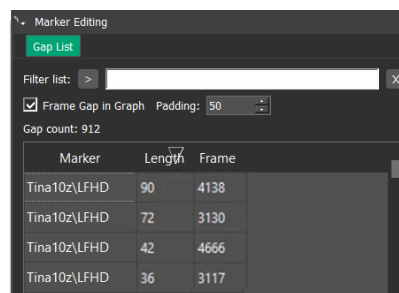
Gap-filling made easier

The following additional features have made filling gaps easier and more automated.

- [Marker gap list with ranges and auto-selection on page 32](#)
- [New intelligent rigid body fill tool on page 33](#)

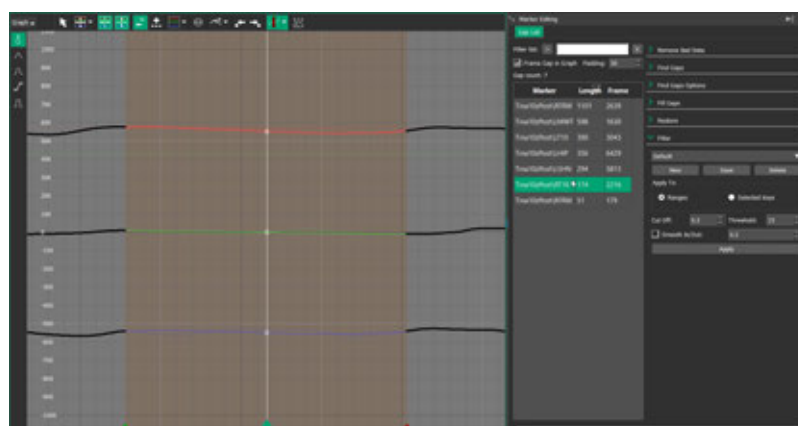
Marker gap list with ranges and auto-selection

You can now conveniently view all the gaps in your scene in the **Marker Editing** panel, in the **Fill Gaps** section, by looking at the **Gap List**. To make it easy to find the longest gaps, click the **Length** column heading to rearrange the list, with the longest gap at the top.



Marker	Length	Frame
Tina10z\LFHD	90	4138
Tina10z\LFHD	72	3130
Tina10z\LFHD	42	4666
Tina10z\LFHD	36	3117

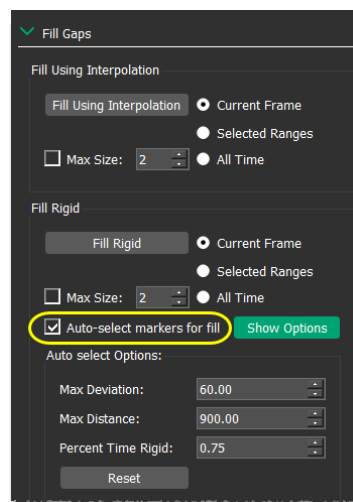
When you select a gap in the list, it is automatically displayed in the Graph view, so that you can edit the gap quickly and easily.



New features in Vicon Shogun 1.3

New intelligent rigid body fill tool

Shogun Post now enables you to automatically fill gaps using a rigid fill operation. This looks at all the markers in your scene and then compares them against the marker you are trying to fill. It then uses a combination of similarly moving markers to fill the gap. Finally, it checks the fill to make sure it looks correct and if not, it chooses another set of markers.



For more information, see:

Auto-fill with intelligent rigid fill in *Getting Started with Vicon Shogun*, Clean up data

and

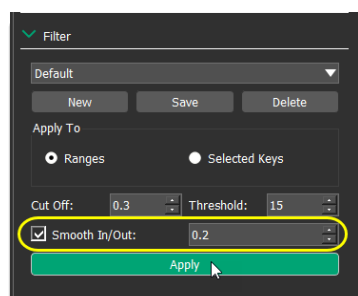
[Vicon Shogun 1.3 Post Tutorial - Gap List & Auto Rigid Fill](https://youtu.be/U3jmKTqkOE)²² on YouTube

²² <https://youtu.be/U3jmKTqkOE>

New features in Vicon Shogun 1.3

In and Out smoothing for filters

The new **Smooth In/Out** option in the **Marker Editing** panel offers smoother blending at the start and end of the filtered section of a trajectory curve.



For details, see:

Ensure smooth start and end to filtered trajectories in *Getting Started with Vicon Shogun*, Clean up data

and

 [Vicon Shogun 1.3 Post Tutorial - Filter in/out Smoothing](https://youtu.be/0csCqSmKe9E)²³ on YouTube.

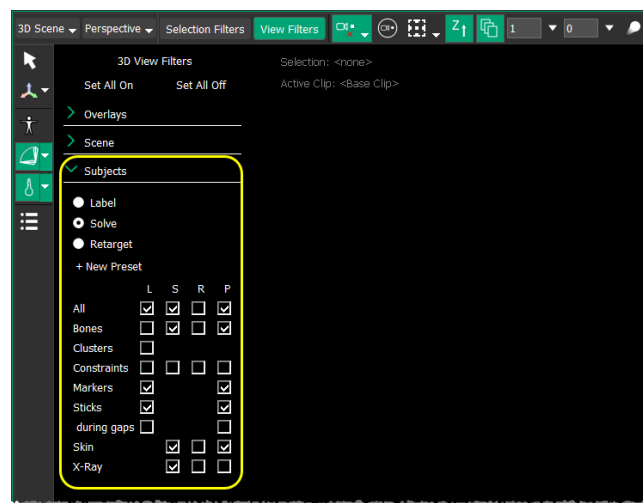
²³ <https://youtu.be/0csCqSmKe9E>

New features in Vicon Shogun 1.3

View Filters reorganized in Post

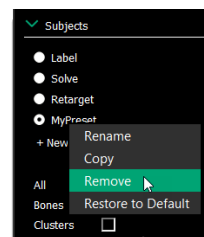
The **View Filters** for the 3D Scene view have been enhanced and reorganized to make them easier to use.

In the **Subjects** section, the view options are displayed in a matrix, with columns for Labeling, Solving, Retargeting and Props, enabling you to choose a view configuration that suits your current task.



The default view filter sets are for labeling, solving, and retargeting, but you can add your own filter sets by clicking **New Preset**.

To rename, copy, remove or restore any filter set to its default value, right-click on a filter set and then click the required option.



Your settings, including any custom presets, are automatically saved, so that you can easily re-use them for different workflows.

New features in Vicon Shogun 1.3

New scripting commands

The following new/restored scripting commands are available in Shogun Post:

- addSkinPath
- alignSubjects
- autoFillGaps
- createConstraintsScript
- createFloatingView
- duplicate
- getSkinPaths
- hierarchyView
- importMesh
- removeFloatingView
- removeSkinPath
- resample
- retarget
- scaleBones
- selectByDistance and selectByRigidity
- selectMarkersForRigidFill
- setActiveFloatingView
- setChannelSelectionFollow
- setFloatingViewPos and setFloatingViewSize
- setRetargetingMapModeEnabled
- trcExportOptions
- usdExportOptions and usdImportOptions
- volumeVisualizerOptions

For information on each command, see the *Vicon Shogun Scripting Guide*.

New features in Vicon Shogun 1.3

Other new features

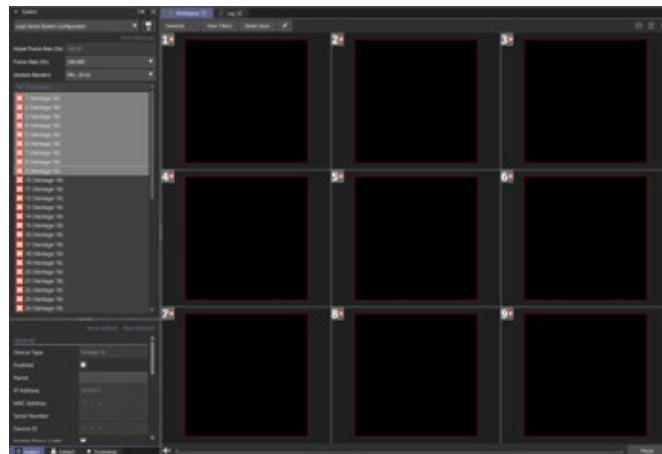
Shogun 1.3 includes the following smaller features:

- [Shogun Live minor new features on page 38](#)
- [Shogun Post minor new features on page 41](#)

New features in Vicon Shogun 1.3

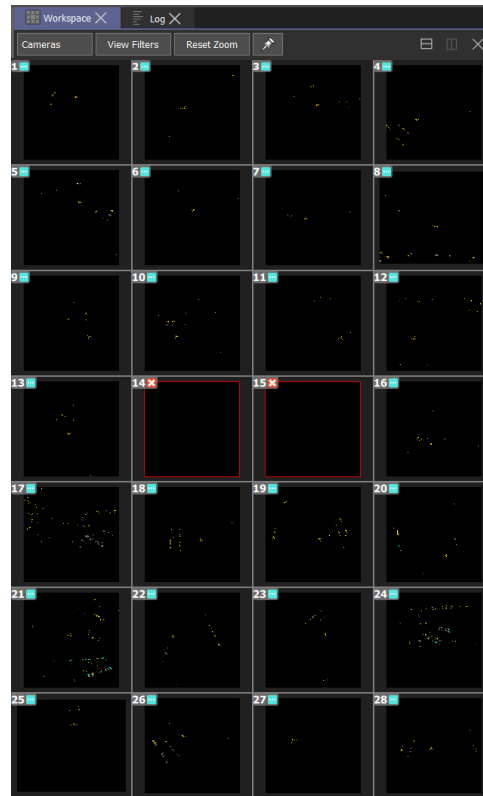
Shogun Live minor new features

- **Camera zoom:** You can zoom a camera's view by using the middle mouse button or mouse wheel.
- **Red border for disconnected cameras:** To make it easy to tell when cameras have been disconnected, camera views now display a red border to indicate this.



New features in Vicon Shogun 1.3

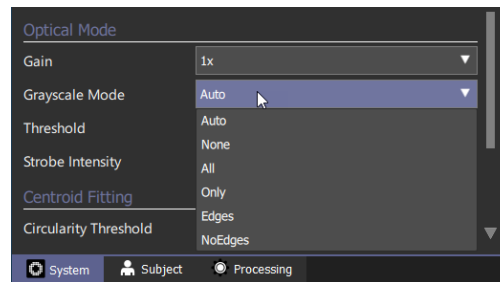
This is particularly useful for large systems, for example, with 100+ cameras.



- **Grayscale hotkeys:** You can cycle through the camera **Grayscale Mode** setting using a hotkey, which helps to speed up camera setup. You can also use hotkeys to turn the Grayscale view option on and off in the Cameras view.

New features in Vicon Shogun 1.3

To cycle through the **Grayscale Mode** options for one or more selected cameras, press Ctrl+G. This saves you from having to select the option for the camera(s) on the System tab.



To enable the **Grayscale** view option in the **Cameras** view for all or selected cameras, press G.

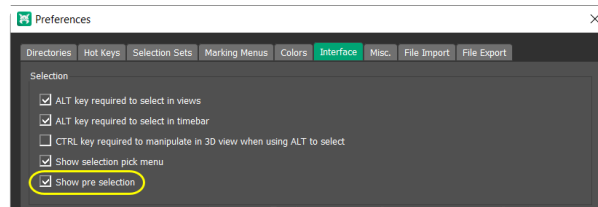
To disable the **Grayscale** view option, press Shift+G.

- **Zoom in to grayscale markers.** In the **Cameras** view, to zoom in to display any grayscale markers present, in the **View Filters**, go to the **2D Data** options and select **Maximize Grayscale**.
- **Reboot offline devices.** To reboot cameras that are part of the system, but that are currently offline, on the **System** tab, right-click a device and then click **Reboot Non-Contributing Devices**.
- **Video camera warning:** If Vue or SDI video cameras that are part of the system but that are not turned on for capture, a warning is displayed.

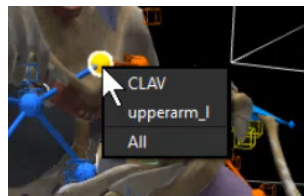
New features in Vicon Shogun 1.3

Shogun Post minor new features

- On the **Object** menu, a **Duplicate** option is now available (hotkey is Ctrl-D).
- While pre-selection (the highlighting of the marker or object that the mouse pointer is currently hovering over) is useful in some circumstances, in others it may be distracting. In the **Preferences** dialog box (**General > Preferences**), a new option on the **Interface** tab enables you to choose whether to show pre-selection in the 3D Scene view.



A related option **Show selection pick menu**, enables you to choose whether to display the menu that is displayed when you hover the mouse pointer over several markers or objects that are on top of each other. When selected, you can quickly choose from a list of markers or objects, without having to use the Selection filters.



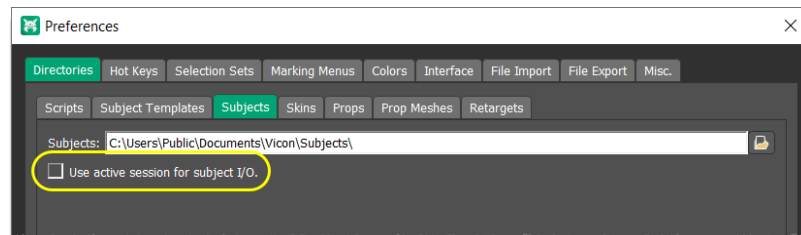
When cleared, no menu is displayed and you can select only the object that is directly under the mouse pointer.

See also [Vicon Shogun 1.3 Post Tutorial - Selection Toggles](https://youtu.be/i04aVAvYZ8w)²⁴ on YouTube.

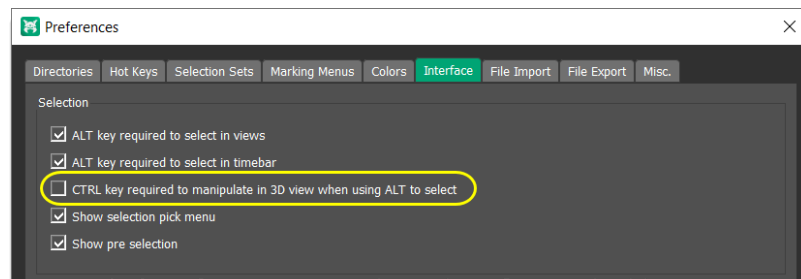
²⁴ <https://youtu.be/i04aVAvYZ8w>

New features in Vicon Shogun 1.3

- **Custom folder for saving subjects.** To change the default folder to which to save subjects, in the **Preferences** dialog box, click the **Subjects** tab, where you can browse or specify the required folder. You can also specify that the current Eclipse session is used by selecting **Use active session for subject I/O**.



- **Scale missing markers.** To scale the displayed size of missing markers, in the Preferences dialog box, click the **Interface** tab and at the bottom, change the value of the **Missing Marker Size Multiplier** (the default is 2.50).
- **Hold the Ctrl to use the Manipulator.** To avoid accidentally manipulating objects when using the Alt key to select, you can turn on the requirement for the Ctrl key be held down to manipulate objects in the 3D Scene view by selecting this option on the **Interface** tab of the **Preferences** dialog box. By default, the option is set to off.



- **Manipulator is now degrees-of-freedom aware.** Only the **DOF** that are active are drawn with the manipulator, this means you can only rotate around the active axis.

Known issues in Vicon Shogun

Known issues in Vicon Shogun

The following issues are known to exist in Vicon Shogun 1.3:

Description	Workaround
In Shogun Live basic occlusion-fixing / smoothing for new high fidelity finger models may not give the required results.	Restore original data and use the new auto-rigid fill function (see Auto-fill with intelligent rigid fill in <i>Getting Started with Vicon Shogun</i> , Clean up data).
In Live, the T-pose stance may not boot.	Revert to previous (1.2.1 or beta) models.
In Live, no warning is given when a cluster is already being used by a subject.	Use a different cluster for the new subject.
In Live, the viewport can hang, for example, if a video camera is unplugged.	Change the processing level and the viewport with reboot.

Known issues in Vicon Shogun

Description	Workaround
In Live, in systems with large numbers of cameras, a high number of dropped frames occurs.	<p>Do one of the following:</p> <ul style="list-style-type: none"> Use Shogun's multi-machine feature (see Run Shogun processing on multiple machines in <i>Getting more from Vicon Shogun</i>). Use the Process in Realtime option in Shogun Live (on the System tab, select the required camera(s) and in the Capture properties below, clear the Process in Realtime option). You can use this option to exclude cameras from reconstruction, while keeping them in the captured X2D and 2D workspace. <p>Important: Remember that if you use this feature to exclude cameras, their data will not be present in the resulting MCP file. To include the data from excluded cameras, you must instead reprocess from the X2D file.</p>
In Shogun Post, position weights override rotation weights when set to default values.	Set rotation weights to 200.
In Post, there is limited rotation on hand joints when using 5 or 10 finger-markers in the model.	<p>Add left- and right-hand marker constraints to the solving skeleton.</p> <p>Set weight value to 15.</p>
In Post, pre-rotation values are set to 0,0,0 as part of Prep Unused Bones operation.	Make a note of the pre-rotation values before clicking the button and then manually set them again after clicking the button.
In Post, the solver doesn't converge or fit well at the start.	Make sure you have set the map pose which copies rotation values to pre-rotations so that the target and source skeleton axes align as closely as possible. Otherwise pad the start of your takes by a couple of seconds.
No undo in the Retarget app	None at present.

Known issues in Vicon Shogun

Description	Workaround
No mirror joints or mirror constraints in Post.	None at present.
In Post, the Selection Filter option Missing Markers doesn't work.	None at present.
The Post solving calibrator may produce different results from those produced from the same data in Live.	To produce results that are consistent with Live, re-run Solve Solving.
In Post, occlusion fixing across a range is disabled.	Occlusion fixing must only be run once on the whole take. If occlusion fixing was turned on during capture in Shogun Live (the default setting) and there are issues with your data, Vicon recommends that you restore the data to its non occlusion-fixed state using the Restore feature in the Marker Editing panel. Then fix any marker issues like swaps or mislabels before re-running occlusion fixing on the whole take by selecting the required option in the Processing panel. For information on fixing marker issues, see the Vicon videos: 5 - Shogun Post – Labeling Data ²⁵ and 6 - Shogun Post - Marker Editing ²⁶ .
In Live and Post, Graphics compatibility mode shortcuts are missing from the Windows Start menu.	You can still run Shogun in graphics compatibility mode by using the appropriate command line flag: <code>--force-gles</code> (You may want to use graphics compatibility mode if the machine on which you need to run Shogun does not have a dedicated GPU.)

²⁵ <https://vimeo.com/218945101>

²⁶ <https://vimeo.com/218945104>

Addressed issues in Vicon Shogun 1.3

Addressed issues in Vicon Shogun 1.3

Vicon Shogun 1.3 resolves a number of issues, including the selection listed here.

- [Issues addressed in Shogun Live on page 47](#)
- [Issues addressed in Shogun Post on page 48](#)

Addressed issues in Vicon Shogun 1.3

Issues addressed in Shogun Live

- High Res (4k) SDI Video causes drops in Video Calibration mode.
- If **Process In Realtime** is disabled, the camera does not collect wands during calibration.
- Prop manipulation can over-write edits from Post.
- You can't set the origin while Shogun Live is in Video Calibration mode.
- If you switch views, view settings are not remembered.

Addressed issues in Vicon Shogun 1.3

Issues addressed in Shogun Post

- Export Preferences and Batch Export resets back to current FPS if you select 30 fps.
- Labeling clusters are labeled across all clips.
- If you run the command `system`, Shogun crashes.
- `getPosition` does not return/update to the correct value.

Further resources for Vicon Shogun

Further resources for Vicon Shogun

You can access further help on using Vicon Shogun from the following resources.

- [Vicon Shogun videos on page 50](#)
- [Contact Vicon on page 53](#)

Further resources for Vicon Shogun

Vicon Shogun videos

- [New videos for Shogun 1.3 on page 51](#)
- [Videos from previous versions of Shogun on page 52](#)

Further resources for Vicon Shogun

New videos for Shogun 1.3

Watch videos on the new features and functionality of Shogun 1.3.

- [Vicon Shogun 1.3 Live Tutorials](#)²⁷ on YouTube (playlist)
- [Vicon Shogun 1.3 Post Tutorials](#)²⁸ on YouTube (playlist)

²⁷ <https://www.youtube.com/playlist?list=PLxtdgDam3USU1O76ZYN-wJ7iKPrTbeNFM>
²⁸ <https://www.youtube.com/playlist?list=PLxtdgDam3USXX3qGWqbxONpjj91SUHhI>

Further resources for Vicon Shogun

Videos from previous versions of Shogun

Note

As the videos were recorded using earlier versions of Shogun, although much of the content is still relevant, you may notice minor differences in the user interface.

Watch videos that walk you through all aspects of using Shogun:

- [Vicon Shogun playlist on YouTube](#)²⁹ (all Shogun videos)
or
- [Vicon Shogun Live tutorials playlist on YouTube](#)³⁰
(Shogun Live tutorial videos only)
or
- [Vicon Shogun Post tutorials playlist on YouTube](#)³¹
(Shogun Post tutorial videos only)
- [Vicon Shogun channel on Vimeo](#)³², beginning with [1 - Shogun Live - Introduction](#)³³.

²⁹ <https://www.youtube.com/playlist?list=PLxtdgDam3USVknig2N6QU1ARXR22LXJfJ>

³⁰ <https://www.youtube.com/playlist?list=PLxtdgDam3USXIGzI52wuo84syXxBFNtuZ>

³¹ <https://www.youtube.com/playlist?list=PLxtdgDam3USX4-COtDQtRXzSy8xVtj5-I>

³² <https://vimeo.com/channels/1249217>

³³ <https://vimeo.com/218944959>

Further resources for Vicon Shogun

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