VICON NEXUS

WHAT'S NEW IN VICON NEXUS 2.10?

WHAT'S INSIDE?

About Vicon Nexus 2.10

Vicon Nexus 2.10 is a point release that provides features and enhancements in addition to those that were included in earlier releases of Nexus 2. For more information, see , and .

Nexus 2.10.2 new features and functions

Nexus 2.10.2 provides the following new features and enhancements:

- Improved Autocorrelate Events pipeline operation, page 4

Improved Autocorrelate Events pipeline operation

Location: **Pipeline Tools** pane > **Events & Timebar** > **Autocorrelate Events** pipeline operation > **Advanced Properties** > **Correlation Method**

You can now choose the correlation method to automatically place events at the correct location in the time bar.

To choose the required correlation method:

1. With a trial loaded in Nexus, in the **Pipeline Tools** pane, either
    *   Expand **Events & Timebar** and add the **Autocorrelate Events** pipeline operation to the current pipeline.
        or
    *   Select the **Plug-in Gait Dynamic** pipeline and then select the **Autocorrelate Events** operation.

2. With **Autocorrelate Events** selected, in the **Properties** pane, ensure that Advanced properties are displayed and then click in the **Correlation Method** field to select from the options:
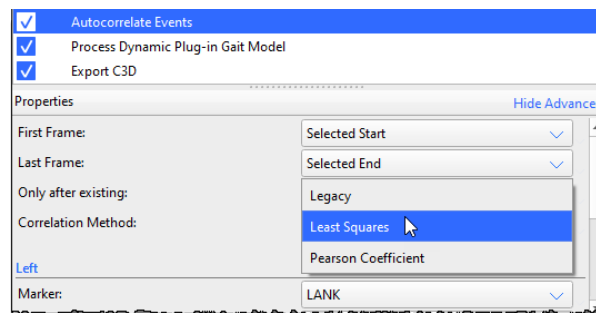
*   **Legacy** (reproduces the behavior from Nexus 2.5 and earlier)
    Maximizes the value of:

$$\frac{2 \sum xy}{\sum x^2 + \sum y^2}$$

*   **Least Squares** (default)
    Minimizes the value of:

$$\frac{\sum (x - y)^2}{n}$$

Nexus 2.10.2 new features and functions

- Pearson Coefficient
  Maximizes the value of:

$$\frac{\sum (x - \bar{x})(y - \bar{y})}{\sqrt{\sum (x - \bar{x})^2}\sqrt{\sum (y - \bar{y})^2}}$$

Where $\bar{x}$ indicates the mean of x over the sample range

3. Ensure the other properties are as required and then run the pipeline.

Nexus 2.10.1 new features and functions

Nexus 2.10.1 provides the following new features and enhancements:

- Ability to identify selected Blue Trident devices in the 3D workspace,

Ability to identify selected Blue Trident devices in the 3D workspace

In the 3D Perspective view pane, Nexus 2.10.1 indicates the Blue Trident devices you've selected so that you can identify which set of axes correspond to each device when the names of the devices are not visible.

When a Blue Trident is selected, the color of the border around the label of the selected device changes from white to the color selected in the **General View Options** (see below), in the following example, blue (the default color).

Blue Trident devices that aren't selected are displayed with a white border.
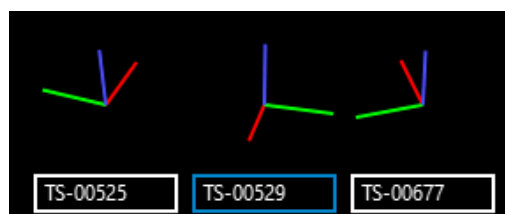
To change the color for selected devices:

- In the Options dialog box (F7), select **General View Options** in the left column and in the **Properties** on the right, under **General Colors** click the **Selected** color to change it.

Nexus 2.10 new features and functions

Nexus 2.10 provides the following new features and enhancements:

- Full integration of Blue Trident sensor (IMU) data, page 9
- Ability to include Tobii Eye Tracker, page 11
- Stream data in Open Sound Control format, page 12

For a description of the other features and enhancements that have been released since Nexus 2.0, see the PDFs, *What's New in Nexus 2.9*, *What's New in Nexus 2.8*, *What's New in Nexus 2.7*, *What's New in Vicon Nexus 2.6*, *What's New in Vicon Nexus 2.5* and *What's New in Nexus 2.4*.

Full integration of Blue Trident sensor (IMU) data

Location: **System Resources** tab > **Devices**

Blue Trident is the latest Vicon Inertial Measurement Unit (IMU).

Nexus 2.10 provides full integration of Blue Trident sensor data, enabling you to:

- Use a higher number of sensors (up to 18) than was previously possible.

- Stream and capture Blue Trident data including global angles.

- Synchronize your IMU sensor data to your Vicon system:
  - Use hard sync for a high degree of precision, and with high sensor counts (Vicon Beacon required)
  - Use soft sync via Bluetooth, for systems where no Beacon is present

- Within Nexus, align IMUs to the Vicon world.
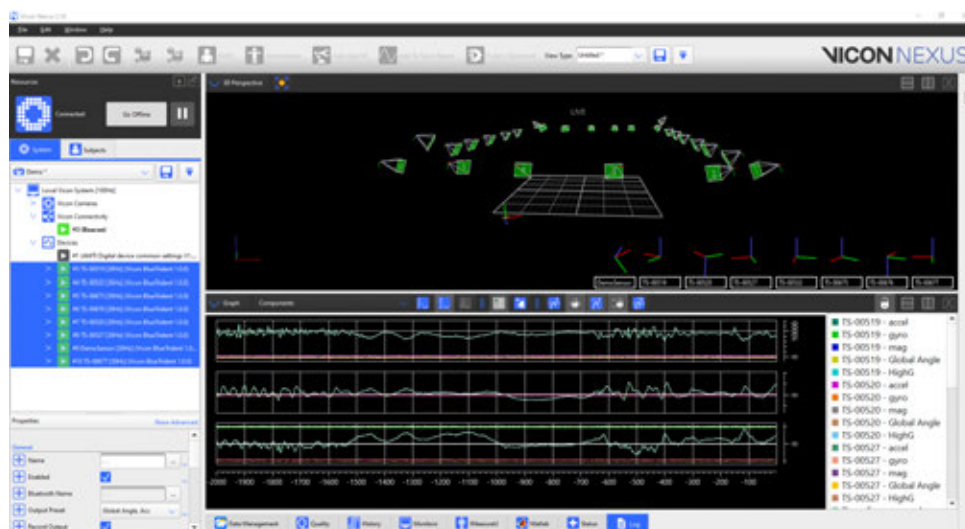
For information on how to use Blue Trident sensors with Nexus 2.10, see:

Vicon Nexus User Guide

- Configure Vicon IMUs

- Work with Vicon IMUs

Nexus 2.10 new features and functions

▶ To find out more about Blue Trident sensors, see the Vicon video, Capture.U Tutorial - Unboxing Blue Trident[1], available on YouTube.

> ⚠ Blue Trident sensors
> - Windows 10 and above only is supported. Ensure the latest Windows 10 updates are installed.
>
> Blue Thunder sensors
> - Blue Thunder IMU sensors are not supported in Nexus 2.10. If you want to capture Blue Thunder data, use Nexus 2.9.x.
> - You can load existing processed trials with Blue Thunder data into Nexus 2.10 and view the captured IMU data.
> - The IMeasureU plug-in is not available in Nexus 2.10.

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1 https://youtu.be/Rs71f9behFo

Ability to include Tobii Eye Tracker

Location: **System Resources** tab > **Devices** > **Add Digital Device** > **Add Tobii Pro Glasses 2**

Nexus 2.10 lets you directly integrate a Tobii Eye Tracker in your Vicon system, enabling you to output eye tracker position and gaze direction, with binocular gaze tracking.

> ⚠ **Restrictions:**
> - Tobii integration for only the Tobii Pro Glasses 2.
> - Supports only one pair of glasses at a time.
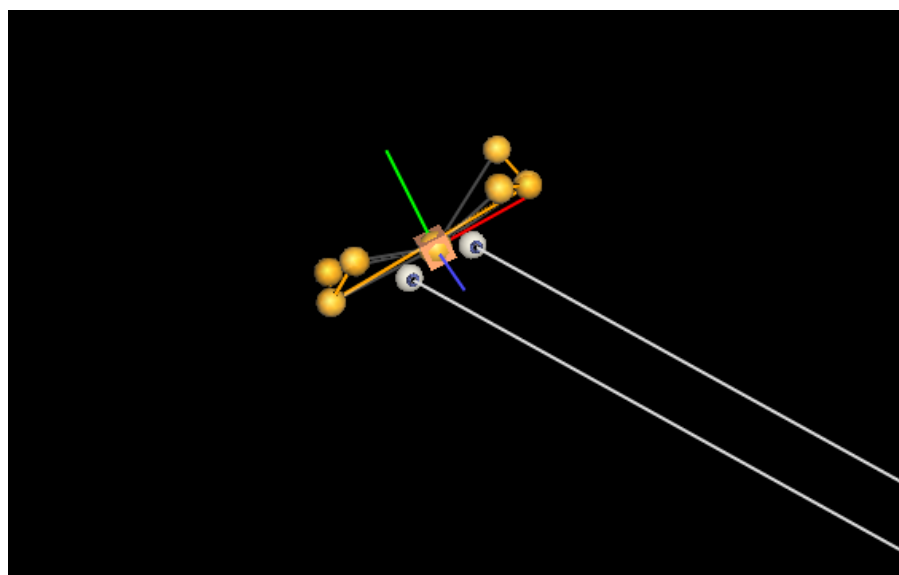
For information about setting up and using Tobii Pro Glasses 2 with Nexus, see Use Tobii Eye Tracker with Nexus in the *Vicon Nexus Reference Guide.*

Stream data in Open Sound Control format

Location: **System Resources** tab > **Local Vicon System** > **Advanced** properties > **OSC Stream** section

Nexus 2.10 enables you to stream data from Nexus over UDP using the Open Sound Control format, so that you can access live data in your OSC server application.

For more information, see OSC Stream section in the *Vicon Nexus Reference Guide*.

Requirements and upgrading

For information about requirements and systems supported for this version of Nexus, see:

- Requirements for Nexus 2.10, page 14

- Systems supported for Nexus 2, page 16

- Upgrading Nexus, page 17

> ⓘ Note
>
> The Vicon motion capture system and the Nexus software, manufactured by Vicon Motion Systems Limited, have been tested prior to shipment and meet the metrological requirements as detailed in the Medical devices directive.
>
> (See *Regulatory information* in the Nexus documentation area of the Vicon website, docs.vicon.com/[2].)

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2 http://docs.vicon.com/

Requirements for Nexus 2.10

Note the following requirements for Nexus 2.10.

- Operating systems for Nexus 2.10, page 14
- Basler video cameras and Nexus 2.10, page 15
- MATLAB and Nexus 2.10, page 15
- ProCalc and Nexus 2.10, page 15
- Vicon IMUs and Nexus 2.10, page 15

For information on graphics cards, see Graphics processors for Nexus, page 22.

Operating systems for Nexus 2.10

Nexus 2.10 is supported under the following operating system:

- **Microsoft Windows 10, 64-bit** (this is the Vicon-recommended OS): Compatible with and fully supported. Installation, software operation and required third-party drivers tested.

Although Nexus may install and function under other Microsoft Windows operating systems, Vicon does not support or recommend this.

Basler video cameras and Nexus 2.10

If Basler digital cameras will be connected to Nexus 2.10, ensure you have updated to the Basler Pylon5 SDK and drivers (v5.0.0), which are available from the Vicon website.

If you are using an Intel i340, i350 or i210 network card, when you install the drivers, select the option for **Filter drivers**, not **Performance drivers**.

> ⚠ Important
>
> The Pylon5 driver supports Basler GigE cameras under Windows 10.

MATLAB and Nexus 2.10

If you are planning to use MATLAB with Nexus 2.10, ensure that, in addition to installing MATLAB, you install the .Net Framework version 4.5[3] or later.

ProCalc and Nexus 2.10

To run ProCalc with Vicon Nexus 2.10, you must install ProCalc 1.2.1 or later.

Vicon IMUs and Nexus 2.10

To update IMU firmware for Nexus 2.10, use Vicon Capture.U Desktop. For information, see the Vicon Capture.U User Guide[4].

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3 https://www.microsoft.com/en-gb/download/details.aspx?id=30653
4 https://docs.vicon.com/display/IMU

Systems supported for Nexus 2

Before you install Vicon Nexus 2.10, note the following limitations on supported systems:

- Nexus captures data only from Vicon systems (including Vicon Vero and Vicon Vue, Vicon Vantage, Vicon Bonita, Vicon T-Series, and MX+ and MX cameras and units).

- Nexus 2.10 does not support connection to the Reference Video System (Nexus Slave application).

Upgrading Nexus

This section describes functionality that is dependent upon the version of Vicon Nexus that is being upgraded:

- Upgrading from Nexus 2.7 and earlier, page 17
- Upgrading from earlier versions of Nexus 2, page 18
- Upgrading from Nexus 1.x, page 19

> ⓘ Note
>
> Although data collected in Nexus 2.10 (ie, . *c3d* files) can be viewed in earlier releases of Nexus, you cannot reprocess this data (ie, . *x2d* with . *xcp* files) in releases earlier than 2.7.

Upgrading from Nexus 2.7 and earlier

Improvements to camera calibration that were provided by Nexus 2.7 have the following effects on compatibility of data between releases:

- Data collected in earlier releases of Nexus can be reprocessed in Nexus 2.10 because calibration (*.xcp*) files that were created in earlier releases are fully compatible with Nexus 2.10. Note that if you load a calibration (*.xcp*) file that was created in an earlier release of Nexus into Nexus 2.10 and save it, Nexus maintains its compatibility with earlier releases.

- You can use earlier releases of Nexus to view data that was collected in Nexus 2.10 (that is, you can open Nexus 2.10 *.c3d* files in Nexus 2.7 and earlier).

- However, calibration (*.xcp*) files that are created in Nexus 2.10 are not backward-compatible, that is, they cannot be read by releases of Nexus earlier than 2.7, and loading will fail if attempted.

Upgrading from earlier versions of Nexus 2

If you are upgrading from a previous version of Nexus 2, during installation a dialog box gives you the option of adding the **Auto Intelligent Gap Fill** button and/or the **Add to Quick Report** button to your Nexus toolbar. For more information on these features, see Automatically fill gaps in trial data in the *Vicon Nexus User Guide* and Quick Reports in the *Vicon Nexus Reference Guide.* To add the additional button(s) to your toolbar, click **Upgrade Files**.

On first launch, Nexus 2.10 scans the installation directories of earlier versions of Nexus 2 and offers to automatically transfer custom objects that it finds.
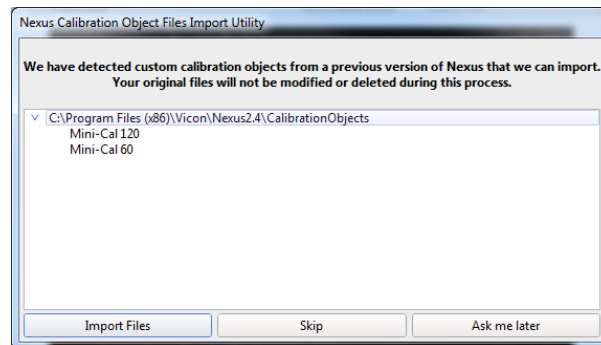
If you click **Import Files**, Nexus 2.10 copies custom calibration objects from earlier versions of Nexus (2.0 and later) to the **Public Documents** folder (eg *C:\Users\Public\Documents\Vicon\Nexus2.x\CalibrationObjects*).

> ⚠ Important
>
> When you create new custom calibration objects, ensure you save them into this folder (not to the Nexus installation folder), so that they are available to future versions of Nexus.

Upgrading from Nexus 1.x

> ⓘ Note
>
>   This section applies only to versions of Nexus that are earlier than 2.0.

Nexus 2.10 installs into its own folder, called *Nexus2.10*. If you already have Nexus 1.x installed, it will remain installed alongside the new Nexus installation.

On installation, Nexus 2.10 automatically scans for Nexus 1.x files, displays a list of any older files that it finds, and provides an automated system for importing these into Nexus 2.10.
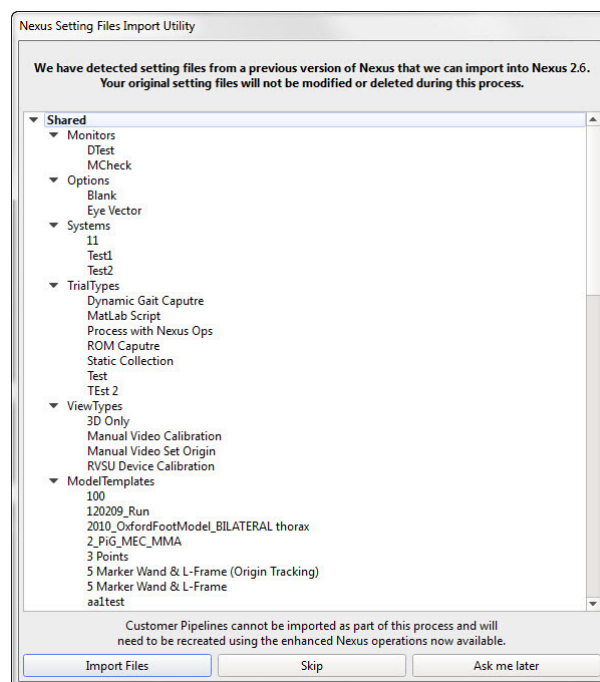
This process copies all the old files and converts the copies, ensuring that original files are not moved, altered, or destroyed.

> ⚠ Important
> Custom pipelines are not copied from earlier versions of Nexus, so if you want to use your old pipelines, copy them from the following Vicon product installation folder (by default in *C:\Program Files (x86)\Vicon* or *C:\Program Files\Vicon*):
> *\Nexus\WorkstationPlugins*
> and paste them to the following location in the Vicon production installation folder (by default in *C:\Program Files (x86)\Vicon* or *C:\Program Files\Vicon*):
>
> *\Nexus2.#\LegacyPlugins*
>
> They will then be available in the **Legacy** pipeline operations in Nexus 2.10.

For more information on the installation and licensing process, see *Installing and licensing Vicon Nexus* .

Regulatory information

For Vicon Nexus regulatory details, see Vicon Nexus regulatory information in the Nexus documentation area of the Vicon website (docs.vicon.com[5]).

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5 http://docs.vicon.com/

Graphics processors for Nexus

Nexus is tested and fully supported with NVIDIA graphics processors. This is the Vicon-recommended graphics processor for PCs that are to run your Vicon system and Nexus software.

Using other graphics processors is not recommended and may affect the performance of the software.

If you experience issues with the software and you have been informed by Vicon Support that this is due to the graphics processor, note these points:

- Issues can occur when you first start the software, or may be due to a driver or Windows update.

- If you previously had a working configuration, consider rolling back the driver version or restoring Windows to a working restore point.

- Some laptops have both a dedicated graphics processor and an integrated processor. You can select the processor for use by an application. You can usually find the option for this by right-clicking the application's shortcut. You can find further general controls in the NVIDIA control panel.

If an NVIDIA processor is not available and you experience a software crash, the following workaround may help. It involves installing an additional file to the Nexus program directory. To do this, you need read/write access to this location and may require the help of an administrator.

1. Download and unzip the file found in the OpenGL section at the bottom of this page[6].

2. Rename the file to *opengl32.dll*.

3. With Nexus closed, place the *opengl32.dll* file in the folder that contains the Nexus executable (*Nexus.exe*), for example:
   C:\Program Files (x86)\Vicon\Nexus2.10

4. Launch Nexus.

5. Repeat Step 3 for any other instances of Nexus.

This solution mitigates any crashes experienced whilst you're running Nexus, however, performance, such as redraw and general navigation, may be adversely

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6 https://www.vicon.com/software/nexus/?section=downloads

affected. This solution has been tested on a limited number of Intel graphics cards for Windows 10.

Addressed issues

Issues addressed in Vicon Nexus 2.10.3

- Saving trials with devices that do not generate output channels no longer crashes Nexus.

Issues addressed in Vicon Nexus 2.10.2

- Fixed a Nexus performance issue when there was a large number of log messages.

- Individual BlueTrident global angle components now output the same angle-axis representation as when you select all three components.

- Fixed a race condition in digital device initialization, which led to incorrect settings being applied.

- Fixed issues when displaying BlueTrident global angles from a C3D file.

- Added units to all BlueTrident outputs in the C3D file.

- **Add trial to Quick Report** pipeline operation no longer marks a trial as needing to be saved.

- GetDeviceChannel SDK command now respects the applied delay compensation.

Issues addressed in Vicon Nexus 2.10.1

- System configuration files created in Vicon Nexus 2.10 do not now reassign the analog pins when switching and reloading.

- Video trial transfer will export AVI files when the trial name contains non-ASCII characters, eg, Ö.

- When an individual camera calibration is reset, the latest calibration is saved.

- Vicon Blue Trident IMU global angles do not adjust after saving the C3D file.

- Unexpected behavior no longer occurs if a Blue Trident IMU disconnects during capture.

- Blue Trident IMUs with the same name display in the 3D workspace.

- The Blue Trident IMU axes and label boxes scale to the 3D workspace pane.

Addressed issues

- The Oxford Foot Model does not change the virtual marker position after re-running.

- The Oxford Foot Model runs on the cropped trial instead of the entire trial.

- Transcoded video files load in Nexus.

- Fix to video de-Bayering on integrated graphics cards.

- Left-clicking the time bar no longer plays trials.

- Preview mode enables video streams on cameras when in preview mode.

- Unexpected behavior no longer occurs when performing a Fill All operation on a large number of gaps.

- Calculate Skeleton Joint and Marker Statistics runs if unlabeled trajectories are present.

- The resampled device rate when saving a C3D disregards the rates of disabled devices.

- The Subject Preparation pane correctly re-enables after a capture failure.

- Running the CGM2 Calibration and Fitting with a " adds the suffix string to the model output name.

- If a C3D file is corrupted, Nexus attempts to load existing data from the C3D file.

Issues addressed in Vicon Nexus 2.10

The following issues are among the total that were addressed in Vicon Nexus 2.10:

- Fixed precision for trajectory channel output in the ASCII export.

- MATLAB Plug-in Gait model handles cropped C3D files correctly.

- Corrected an issue that incorrectly marked older system files as needing to be saved.

- C3D files processed outside of Nexus will load.

- Removing disconnected cameras during camera masking no longer crashes Nexus.

- Force plate context assignments are correctly retained when removing devices.

- Marker list corrected on the MATLAB SDK GetSegmentDetails command.

- Fixed a display issue with read-only parameters.

Addressed issues

- Nexus window resizes correctly when redocking the Communications pane.
- When in event ID mode, clicking on an event or the tooltip no longer marks trials as dirty.
- Improved usage examples in the MATLAB SDK.
- Removed length restriction on model output names.
- Minor division check marks are correctly displayed for the entire axis range.
- Unlabel Trajectories Backwards also unlabels the current frame.
- Go to Next/Previous Event shortcuts no longer affect the trial range handles.
- Updates to the Quick Reports paragraph formatting.
- Consistent spelling for color in options.
- Resetting the calibration occurs for all cameras selected.
- Marker reconstruction corrected when camera ray is crossing.
- Mouse scroll button can be used to start and stop recording trials.
- Updated the website link for the Version Check pop-up.
- Executing the Static Skeleton Calibration – Markers Only pipeline operation does not cause a runtime error.

Issues addressed in Vicon Nexus 2.9.3

The following general issues have been addressed in Vicon Nexus 2.9.3:

- CGM2 has been updated to version 3.2.13.
- CGM2 global angle outputs have been corrected.
- Trials that are located in paths with non-ASCII characters now process correctly.

Issues addressed in Vicon Nexus 2.9.2

The following general issues have been addressed in Vicon Nexus 2.9.2:

- The T-Series indicator light now flashes during calibration to indicate progress.
- Video calibration activates when you click Calibrate.
- When in event ID mode, selecting the next event does not deselect the video display.

Addressed issues

The following issues in Data Management have been addressed in Vicon Nexus 2.9.2:

- Data Management no longer requires a top level to use Nexus.

- Subject files are no longer renamed when renaming the parent session, even if they are not associated.

- Clicking on the column header sorts trial names.

- Double-clicking the movie icon file in ProEclipse imports all AVIs, not just the one in a placeholder when using Polygon.

- Primary and secondary sorting has been improved for the force plate columns.

- Columns can be sorted alphabetically and chronologically.

- ProEclipse recognizes capitalized C3D file extensions.

Addressed issues

Issues addressed in Vicon Nexus 2.9.

The following issues are among the total that were addressed in Vicon Nexus 2.9:

- Nexus now runs the Butterworth Filter on a trajectory with large gaps.

- External changes to a VSK are no longer reverted if the Refresh Subject > From VSK option is used after a SaveTrial operation.

- If Assume Foot Flat selected (short trials), foot segment is now correctly created.

- Nexus buffer efficiency has improved.

- Contexts are now refreshed within the time bar when moving between trials.

- Advanced Gait Workflow (AGW) Combined Processing operations parameters are now the same as the default reconstruction and labeling parameters.

- You can now load trials with the same name but from different patient sessions into Quick Reports.

- Searching for modeled markers using MATLAB or Python no longer generates a virtual marker if the marker position has changed.

- Reading of XML marker node errors has been updated.

- Events are now correctly identified when using a Boolean AND whilst scrolling through a trial.

- Repeatedly running auto-initialize subject does not shrink the labeling skeleton.

- AGW Static Trial type opens only if the AGW Lower Body workflow is selected.

- Nexus 2.8 Non-zeroed force plates now correctly assign kinetic gait cycles to the time bar.

- Plug-in Gait ground reaction force outputs now display the correct force plate units.

- Adding a segment to Plug-in Gait does not remove the existing parameterization.

Known issues

The following issues are known to exist in this release.

(For information on CGM2 issues, see Known issues for CGM2 in the *Vicon Nexus Reference Guide*.)

Description	Workaround
The sample rate value for AMTI Force Plates displayed in the System tree doesn't match the **Acquisition rate** that is selected in the Properties of the AMTI Devices Controller. Except in the case of the initial value, the sample rate that is displayed in the **System** tree is the last selected **Acquisition rate**, not the current rate.	In the Properties of the AMTI Devices Controller, temporarily change the value (up or down) for **Fz Threshold**. The sample rate for the force plates in the System tree changes to match the selected **Acquisition rate** of the AMTI Devices Controller.
When you select a connected Delsys Trigno EMG digital device and in its Properties, set the **Trigger Mode** to Triggered and then configure the correct sync port, the Delsys device disconnects, and in the **System** tree, its icon goes gray. Devices do not reconnect until you set the **Trigger Mode** back to Not Triggered.	1. In the Nexus System tree, right-click **Local Vicon System** and then click **Resynchronize**. 2. Wait for the Delsys device icon(s) to go green and during the next 4–5 seconds (while the device icons are green), press the **START Trigger** push button ⬇ at the top right (below the power indicator) on the Delsys Trigger Module. Delsys devices stay connected and green, synchronized and ready to capture a trial.

Known issues

Description	Workaround
When you're using a Blue Trident sensor to capture movement, and have Global Angle selected, global angles are streamed, but both global angles and 9-axis raw data is captured to the sensor.	None
When you're using Vicon Blue Trident sensors, at high device counts, some sensors begin to drop packets, so some flickering may be observed in the view pane.	When working with a large number of sensors, reduce the Bluetooth stream rate or the number of enabled axes. This issue does not affect the data recorded to the device.
If you drag the **Report Options** pane to outside of the **Nexus Quick Reports** window and release the mouse button, then try to drag it back, it does not re-attach inside the **Nexus Quick Reports** window.	To restore the **Report Options** pane to its previous docked location, double-click its title bar, then drag it to the required position within the **Nexus Quick Reports** window.
The **Nexus Quick Reports** window does not have a Close button.	To close the window, press F4.
A crash can occur if any Noraxon EMG error messages are not dismissed before shutting down Nexus.	Dismiss all Noraxon EMG error messages before exiting Nexus.
When run via the Run Python operation, the Load Trial command in the Python SDK is not able to load a trial.	Run the Python script from IDE or command line.
Some of the latest versions of the FFDShow video encoder fail to work properly.	Vicon recommends the use of ffdshow_rev3562_20100907.
Running a legacy VPI operation removes non-standard model outputs.	Use the equivalent native operations.

Known issues

Description	Workaround
AMTI digital device plugins missing required dependencies.	For AMTI Digital Device V1_00.vdd, download Microsoft Visual C++ 2008 SP1 Redistributable Package (x86) from https://www.microsoft.com/en-gb/download/details.aspx?id=5582 For AMTI Digital Device V1_10.vdd, download Microsoft Visual C++ 2010 Redistributable Package (x86) from https://www.microsoft.com/en-gb/download/details.aspx?id=5555
Basler cameras do not work under Windows 10 with Pylon drivers earlier than Pylon5.	If Basler cameras will be connected to Nexus 2.5 or later, update to the Basler Pylon5 SDK and drivers (v5.0.0), which are available from the Vicon website.
Device drivers for Cometa/Wave depend on your Windows version.	For Windows 10 device drivers, contact Cometa.
When the system frame rate is set above 80Hz, if you enable Preview mode, no preview is displayed for Vicon Vantage cameras (the **Camera** view is blank).	To use Preview mode with Vantage cameras, select a system frame rate below 80Hz.
When you right-click the **Devices** node on the **System Resources** pane, Noraxon is not available in the **Add Digital Device** menu.	When you install the Noraxon plug-in (ViconInterfaceForNoraxon - v1.0.2.1.msi), change the installation path to C:\Users\Public\Documents\Vicon\Nexus2.x\DigitalDevices\
Noraxon Telymyo DTS device halts camera and analog data delivery when Noraxon devices are housed/not charged.	Digital devices now have an **Enabled** parameter in their **Properties** pane. To prevent a given manufacturer's plugin from holding up the rest of Nexus, clear **Enabled** for ALL devices from that manufacturer.
Unable to run legacy Static Gait Model under Japanese Windows. Log entry reads: No parameter file found	The legacy Plug in Gait model does not support international character sets. Instead of using the legacy Plug-in Gait model, use the native Nexus 2 replacement gait model (found under **Data Processing** pipeline operations: **Process Static Plug-in Gait Model** and **Process Dynamic Plug-in Gait Model**).

VICON

Known issues

Description	Workaround
Export c3d at the end of a pipeline does not clear the trial and leaves the trial with a dirty flag (*).	The **Export C3D** operation does not write out the subjects associated with the trial. To remove the dirty flag on a trial, save the entire trial, which saves all associated files (x2d, xcp, etc), using the **Save Trial - C3D + VSK** operation.
Video capture duration can be limited directly after deletion from SSD storage.	After deleting your video files, wait a few seconds before starting your next capture. This is because some Solid State Drives require a few seconds to recover full Write speed after file deletion.
Spaces in variable names can cause BodyLanguage to fail.	When creating subject parameters for use in BodyLanguage modeling, use underscores instead of spaces.
Nexus can suffer many problems if Eclipse databases are created in locations that are Read-only. These problems range from data silently failing to save to crashes.	NEVER create Eclipse databases in locations that require administrator privileges to read or write.
Starting a capture very soon after a change to the system frame rate, or a resynchronization, can result in erratic capture behavior (failure or dropped frames).	Avoid starting captures soon after changing the hardware setup.
PAL or NTSC camcorders are included in Active Wand camera calibration if the MX system is set to run at the same standard (i.e. PAL or NTSC).	Before performing active wand camera calibration, disable the camcorders.