VICON

What's new in Vicon Nexus 2.6

Contents

VICON

About Vicon Nexus 2.6

Vicon Nexus 2.6 is a point release that provides features and enhancements in addition to those that were included in earlier versions of Nexus 2.

For links to descriptions of the features and enhancements that are specific to Nexus 2.6, see Vicon Nexus 2.6 new features and functions on page 10. For a description of the other features and enhancements that have been released since Nexus 2.0, see the PDFs *What's New in Vicon Nexus 2.5* and *What's New in Nexus 2.4.*
For information about requirements and systems supported for this version of Nexus, see:

❚ Requirements for Nexus 2.6 on page 4

❚ Systems supported for Nexus 2 on page 5

❚ Upgrading Nexus on page 6

> ⓘ **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 documentation website, docs.vicon.com/.)

Requirements for Nexus 2.6

Nexus 2.6 is supported under the following operating systems:

❙ **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.

❙ **Microsoft Windows 7** : Supported and has undergone limited testing.

Although Nexus may install and function under other Microsoft Windows operating systems, this is not officially supported or recommended by Vicon.

Basler video cameras and Nexus 2.6

If Basler digital cameras will be connected to Nexus 2.6, 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 both Windows 10 and Windows 7.
>
> ❙ Basler FireWire cameras (A600 series) under Windows 7 only.

MATLAB and Nexus 2.6

If you are planning to use MATLAB with Nexus 2.6, ensure that, in addition to installing MATLAB, you install the .Net Framework version 4.5.

Systems supported for Nexus 2

Before you install Vicon Nexus 2.6, 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 2.6 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 Vicon Nexus 1.x

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

Nexus 2.6 installs into its own folder, called Nexus2.6. If you already have Nexus 1.x installed, it will remain installed alongside the new Nexus installation.

On installation, Nexus 2.6 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 2.6.

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 2.6.
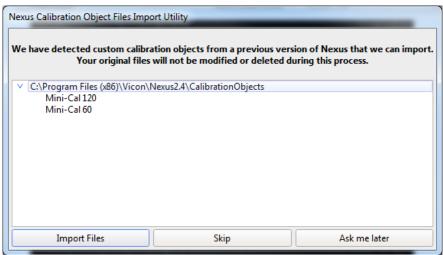
For more information on the installation and licensing process, see *Installing and licensing Vicon Nexus* .

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 Automated gap-filling in the *Vicon Nexus User Guide* and Quick Reports on page 24. To add the additional button(s) to your toolbar, click **Upgrade Files**.

On first launch, Nexus 2.6 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 2.6 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.

Regulatory information

For Vicon Nexus regulatory information, see Vicon Nexus regulatory information in the Nexus documentation area of the Vicon documentation website (docs.vicon.com/).

Vicon Nexus 2.6 new features and functions

For information on the new features and enhancements provided by Nexus 2.6, see the following topics:

Improvements to Data Management

Location: **Communications** pane > **Data Management** tab

The **Data Management** tab is now easier to use and navigate, and has added archiving functionality. For details, see:

▌ Drag to customize the display on page 11

▌ Enhanced live link on page 11

▌ Clearer selection/marking highlights on page 12

▌ Improvements to searching on page 13

▌ Updated FP column display on page 14

▌ Additional options for custom data fields on page 15

▌ New archive/backup feature on page 16
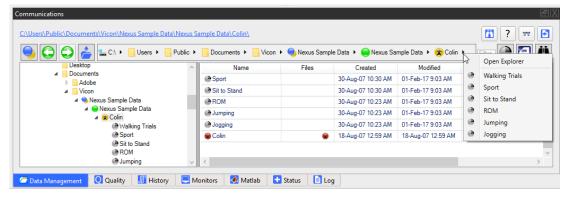
Drag to customize the display

To hide some or all of the tree view and expand the data pane, drag the splitter:

Enhanced live link

The live path link at the top of the pane now contains icons and arrows that, when clicked, give access to other folders at the selected level, and enable you to open Windows Explorer.
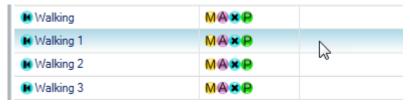
If you click on an icon or the related text, the right pane displays the selected level and Windows Explorer displays the relevant files.

Clearer selection/marking highlights

When you hover the mouse pointer over a trial row, it is highlighted in blue.

The currently selected node is highlighted in gray:

When you mark a node, it is highlighted in red:
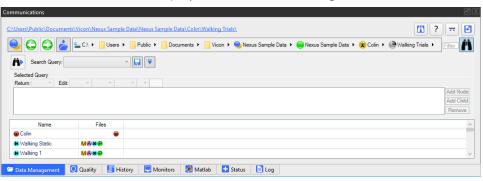
Improvements to searching

To configure searching for trials according to specified criteria:
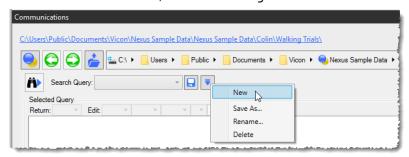
1. Click the Search button:

    The search controls are displayed on the **Data Management** tab:

2. In the **Search Query** line, either select an existing search from the drop-down list, or to start a new search, click the **Configuration menu** button and then **New**.

3. To specify a new search, in the **Selected Query** area, select the required options, working from left to right. To add further criteria to your search, click the **Add Node** button or **Add Child** button to the right of the pane.
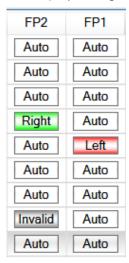
    Note that the criteria available for selection change depending on the currently selected line.

---

4. To run the current search, click the **Execute Search** button at the left of the pane.

5. To save the search, click either the **Save** button or from the **Configuration menu** list, click **Save As**.

6. To close the search controls, in the toolbar at the top of the pane, click the **Search** button again.

Updated FP column display

For trials that include force plates, the FP columns now distinguish Left and Right with the standard Nexus convention of red for left and green for right (invalid foot strikes are displayed in gray):

Additional options for custom data fields

You now have more options for adding and configuring custom data fields.

To add custom data fields to Data Management:

1. In the **Data Management** window, click the **Show main proEclipse menu** button
   .

2. Click **Configure Column Types** and under the **Defined Column Types** list, click **Add Column Type**.

3. Click on ENTER LABEL and in the **Edit Selected Column Type** section, change the text in the **Column Identifier**, **Header Text** and **Metadata Key** fields as required (to display a tooltip, hover the mouse pointer over the relevant field).

4. Ensure that the correct option is chosen in the **Column's base type** field.

> ⓘ **Note**
>
> In addition to adding custom data fields, you can change the available options for the existing field types. To do this, in the **Defined Column Types** list, click a field type to select it and in the **Edit Fixed Values for Selected Column Type** section, change the values as required.

5. Click **OK** at the bottom right of the dialog box to save the new column type(s).

New archive/backup feature
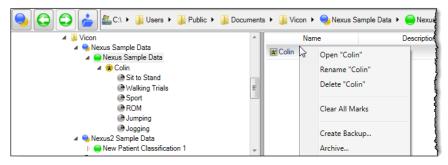
The new archive feature enables you to save your data (optionally in compressed format), so that it can be restored when required.

Archiving (moving files to a specified location (optionally a .zip file) so that they can be restored when required) can be applied to the Session node and all nodes above it in the hierarchy. When you archive a node, data from the node and all nodes below it in the hierarchy are moved to the archive and can be restored to the same location when required. The archived node is indicated by a red cross over its icon 🗙 . This is useful if you need to save space.

Creating a backup (creating a zipped copy of a node, but leaving the original node(s) in place) can be applied to all nodes in the hierarchy. When you back up a node, data from the node and all nodes below it in the hierarchy are copied to the backup (a .zip file) and can be restored to the same location when required. This is useful if you want to share files with Vicon Support or with your colleagues.

Archive a node:

1. On the **Data Management** tab, in the pane on the right, right-click the required node.

2. On the context menu, click **Archive** and in the **Create Archive** dialog box:

    a. Enter or browse to the required location.

    b. Ensure that the **Options** line is as required.

    c. Click **Start/Stop**.

    The bar displays the progress of the archiving.

3. When all the files have been processed, click **Close**.
    The node is saved to the specified location, as a zip file if this option was selected in step 2.
    On the **Data Management** tab, the archived node is shown with a red cross over it and cannot be used until it is restored.

Restore an archived or backed up node:

1. In the **Data Management** hierarchy, locate the node that you want to restore and in the pane on the right, right-click the required node.

2. On the context menu, point to **Restore Backup** and then click the required file name.

3. In the **Restore Backup** dialog box:

    a. Ensure the path is as required, or enter or browse to the required location.

    b. Ensure that the **Archive Name** field displays the name of the required archive.

    c. Click **Start/Stop**.

    The bar displays the progress of the restoration.

4. When all the files have been processed, click **Close**.

Back up a node:

1. In the **Data Management** hierarchy, right-click the required node.

2. On the context menu, click **Create Backup**.

3. In the **Create Backup** dialog box:

    a. Ensure the path is as required, or enter or browse to the required location.

    b. Ensure that the **Options** line is as required.

    c. Click **Start/Stop**.

    The bar displays the progress of the backup.

4. When all the files have been processed, click **Close**.
    A .zip file containing the backup is saved to the specified location. This can be sent to Vicon Support or shared within your organization as required. The original node is unaffected.
    To restore a backup, follow the procedure in .

Improved event detection

Location: In **Offline** mode > Time bar

The following updates to the Nexus time bar make it easier to work with events:

▌ In normal mode (ie when **Event identification** is not selected ⏻): When you click **Jump to next event** ↪ or **Jump to previous event** ↩ , the current time indicator now jumps to the frame of the event. This function was previously only accessible when in **Event identification Mode** ⏻ .

▌ In event identification mode (ie when **Event identification** is selected ⏻): When you click **Jump to next event** ↪ or **Jump to previous event** ↩ , the time bar view zooms to 20 frames on either side of the event, and selects the event's context.
New hotkeys, Alt+Left/Right, moves the event at the current frame in the current context back or forward one frame as well as moving the frame.

▌ Custom events are now identified by a caret (∧) on both the time bar and in its context menu in event identification mode.
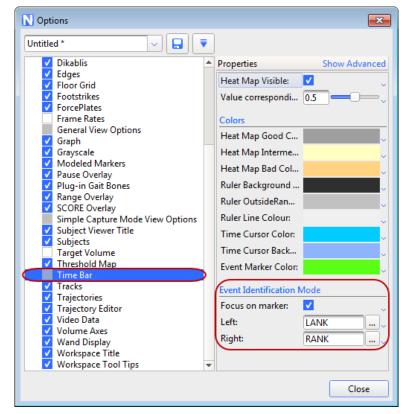
When you exit event identification mode, the time bar zooms back to the current region of interest.

Nexus now also enables you to select the markers that are focused on when you select event identification mode.

To customize options that affect event identification mode:

1. Open the **Options** dialog box (press F7).

2. On the left of the dialog box, click **Time Bar**.

3. In the **Event Identification Mode** section on the right, select (or clear) **Focus on marker** and enter or select the markers to focus on for **Left** and **Right** contexts.

Automatic numbering of cameras

Location: **System Preparation Tools** pane > **Manage Camera Calibration** section > **Auto number cameras** button

The **Auto number cameras** button enables you to quickly number the currently connected Vicon cameras in ascending order, according to their position in the capture volume.

Automatic numbering starts with the camera that is furthest from the volume origin. The cameras are then numbered in a clockwise direction around the volume. If your cameras are positioned at different levels, the cameras in the level that contains the most cameras are numbered first.
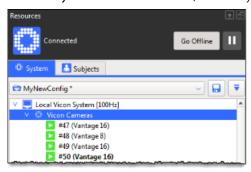
To automatically number Vicon cameras:

1. Ensure Nexus is in Live mode and that you have aimed the cameras (see Aim Vicon cameras).

    > ⊘ **Tip**
    >
    > You can auto-number the cameras at any point after you have performed the **Aim Cameras** operation: you do not need to perform a complete camera calibration to auto-number the cameras.
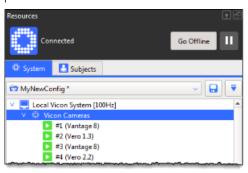
2. On the **System Resources** tab, ensure you can see a list of Vicon cameras.

3. On the **System Preparation Tools** pane, in the **Manage Camera Calibration** section, click **Auto number cameras**.
    The cameras are automatically numbered in ascending order, according to their position in the volume.

4. In the volume, check that the cameras are now numbered as required.
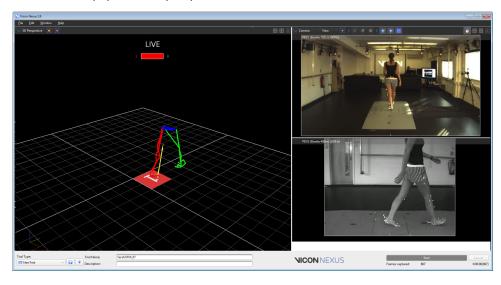
Quicker Capture Mode

Location: **Window** menu > **Simple Capture Mode**

After you have set up your system within Nexus, you can use **Simple Capture Mode** to capture sequences of trials quickly and efficiently, using the same setup information for each trial. It enables you to use a workspace that maximizes your view of the capture volume, and exposes a focused subset of controls required for repeated captures, allowing you to concentrate on the movement you are capturing.

In **Simple Capture Mode**, only the currently selected view type is displayed, together with controls that enable you to specify the trial type, name, and description, and to start and stop (or cancel) captures.

To display a simplified capture view:

1. Ensure that you have set up your Vicon system as required, that Nexus is in Live mode, and that you have set up your trial types, including any post-capture pipeline required, auto-start triggers, etc.
    By default, Simple Capture Mode displays a single **3D Perspective** view. You can customize the view to include other panes (eg, a video pane alongside the **3D Perspective**), as described in the following steps.

2. Associate a custom view type with **Simple Capture Mode**. To do this:

    a. Open the **Options** dialog (press F7) and on the left click **Simple Capture Mode View Options**.

    b. On the right, from the **View Type** list, select **On**.

    c. From the **User Specified Simple Capture Mode View** list, select one of the following:

      ▮ To use the Vicon-supplied **Simple Capture** view type (which displays the view pane with a **3D Perspective** view on the left, and **Camera** views with video cameras selected on the right, as shown above), ensure **Simple Capture** is selected; or

      ▮ To use your own view type (for a reminder of the controls that enable you to define and save a view type, see Get to know Vicon Nexus in the *Vicon Nexus User Guide*), select the required option.

3. Turn on Simple Capture Mode. To do this:

    ▮ On the **Window** menu, select **Simple Capture Mode**; or

    ▮ Press CTRL+H

    The simplified capture view that you selected in the **Options** dialog box is displayed.
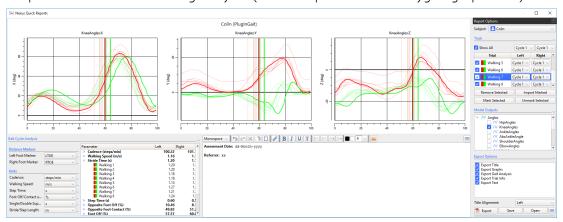
4. To capture trials, at the bottom right of the Simple Capture view, click **Start**.

5. To exit Simple Capture Mode, either press Esc, or press CTRL+H again. (You can also click the **Window** menu and clear **Simple Capture Mode**.)

Quick Reports

Location: **Window** menu > **Quick Reports**

A new window, **Nexus Quick Reports**, enables you to display multiple graphs of model outputs normalized over the gait cycle (like a simplified Vicon Polygon graph view).

To display model outputs in Nexus Quick Reports:

1. On the **Window** menu, click **Quick Reports**, or press F4 to open the **Nexus Quick Reports** window.

2. In the main Nexus window, ensure that the trial (*.C3D file) that you want add to Quick Reports is the current trial.

3. From the **Pipeline Tools** pane, expand **Data Processing** and double-click the pipeline operation, **Add Trial to Quick Report** to add it to the current pipeline.

4. In the **Current Pipeline** list, right-click the **Add Trial to Quick Report** operation and click **Run select Op**.

5. For each trial that you want to add, repeat step 2–4.

> ⊘ **Tip**
>
> To add trials to Quick Reports, you can also:
>
> ▎ Drag and drop one or more trials (*.C3D files) from Windows Explorer into the **Quick Reports** window; or
>
> ▎ Click the **Add To Quick Report** button on the Nexus toolbar (adds the current trial).
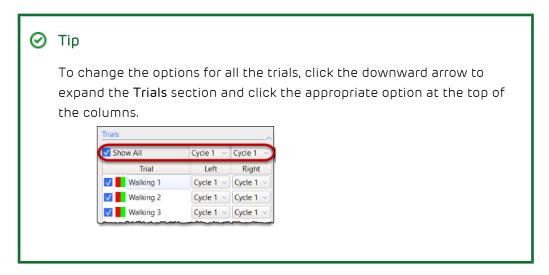
6. In the Nexus **Quick Reports** window, the added trials are displayed in the **Trials** list, by default on the right of the window.
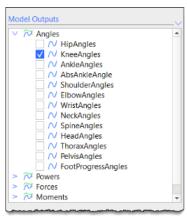
7. Ensure the required cycle is selected in the **Left** and **Right** columns.

> ### ✅ Tip
>
> To change the options for all the trials, click the downward arrow to expand the **Trials** section and click the appropriate option at the top of the columns.
>
>
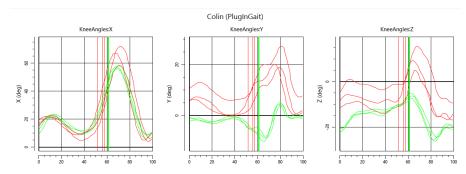
8. To display model outputs in the graphs, in the **Model Outputs** list, expand the relevant node and then select the required check box(es).

The selected outputs are displayed as graphs in the **Nexus Quick Reports** window.

⊘ Tip

By default a red line represents data from the left side and a green line represents data from the right. The trial currently selected in the **Report Options** list is represented by a heavier line on the graphs. To change green and red to solid and dashed lines, in the **Options** dialog box (press F7), on the left, click **Quick Reports** and then clear **Use Context Colors**. To change the colors displayed for each trace on the graph, click the color(s) that you want to change.

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9. Expand the **Gait Cycle Analysis** section at the bottom left of the window and ensure the **Distance Markers** and **Units** are as required.

> ⊘ Tip
>
> By default, the **Parameter** column displays average values across all selected trials. To view the average value for each trial, expand the relevant parameter.

10. To export a PDF of the data in the **Nexus Quick Reports** window:

    a. Expand the **Export Options** section and clear or select the required options.

    b. From the **Title Alignment** list, select the required option.

    c. Click **Export** and in the **Export to PDF** dialog box, enter or browse to the required location.

    d. Click **Save**.

11. To save your work, click the **Save** button at the bottom of the **Report Options** pane and select the appropriate option:

    ▌ *. *qrd* (Quick Reports Document): Saves the current Quick Report. Select this option if you have to suspend work on the report and want to carry on where you left off later.

    ▌ *. *qrt* (Quick Reports Template): Saves the layout of the **Nexus Quick Reports** window (ie the options currently selected in the Quick Reports window). Select this option if you want to produce reports of the same type of information for later trials. Quick Reports templates that are saved to the default location (*C: \Users\Public\Documents\Vicon\Nexus2.x\Configurations\QuickReports*) are listed when you click the **Apply Report Template** button ☰ .

About the Nexus Quick Reports window

The **Nexus Quick Reports** window comprises two sections:

▎ Controls are contained in a dockable **Report Options** pane, which by default is displayed to the right of the window. Expand the **Trials**, **Model Outputs** and **Export Options** sections by clicking the downward arrow to the right of each section divider. To move the controls pane, drag the **Report Options** title. The pane can be floated or docked to the left or right.

▎ Graphs of the data selected in the **Report Options** pane are shown in the main workspace. The current subject's name and model template are shown as a title at the top.

To the bottom left of the main workspace, **Gait Cycle Analysis** parameters for the loaded trials are displayed.

In the large text box on the right, you can enter a description or notes, etc, which can be formatted using the buttons on the toolbar above the text box.

Report Options controls

In the **Report Options** pane, the following controls are available:

Control	Description
Subject field	Enables you to select the subject whose data you want to view.
Trials list	Lists the trials that you have added to the report. In this list, you can select or clear the relevant check boxes to display the required trial(s). To show/hide all trials, expand the **Trials** section and select or clear the check box at the top. The outputs for selected trials are displayed in each graph.
	The **Cycle** dropdown lists at the top and in the **Left** and **Right** columns of the **Trials** list enable you to select which gait cycles to show for the left and right contexts for each trial.
	To select trials, click (or Shift+click/Ctrl+click) in the **Trial** column of the required row(s) in the list. The selected row(s) in the list are highlighted with a blue background and by thicker lines in the graph.

Control	Description
	To remove selected trials from the report or to mark selected trials in **Data Management** (eg, for use in Vicon Polygon), click **Remove Selected** or **Mark Selected** at the bottom of the list.
Model Outputs list	Displays available model outputs from the trials that have been added to the report.
Export button	Opens the **Export to PDF** dialog box, which enables you to save the contents of the current **Nexus Quick Reports** window to a *.PDF file, with a name and location that you specify.
Save button	Enables you to save the current Quick Report either as a document (*.*qrd*) or a template (*.*qrt*).
Open button	Enables you to enter or browse to a Quick Report document (*.*qrd*) or a template (*.*qrt*).
Apply Report Template button ☰	Enables you to apply a report template that was saved to the default location (*C:\Users\Public\Documents\Vicon\Nexus2. x\Configurations\QuickReports*).
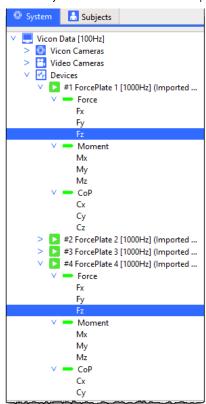
Combined output from multiple force plates

Nexus now offers the ability to combine selected outputs from multiple force plates, both in Live mode and when reviewing captured trials in Offline mode. For example, in trials where the subject's feet land on separate force plates, this feature lets you examine the combined landing force or overall CoP from both feet.

To view combined output from multiple force plates:
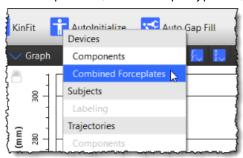
1. In the **Options** dialog box (press F7), on the left, click **ForcePlates** and in the **Properties** pane on the right, in the **Force Vector** section, ensure **Draw Combined Force Vector** is selected.

2. In the **System Resources** tree, CTRL+click to select the required outputs from each force plate.
   Ensure you select identical outputs from each force plate.
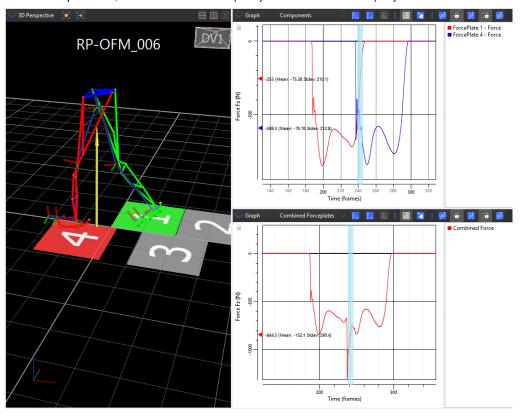
3. In a **Graph** view, in the **Graph type** list, select **Combined Forceplates**.

4. In the **Graph** view, the combined output you selected is displayed.
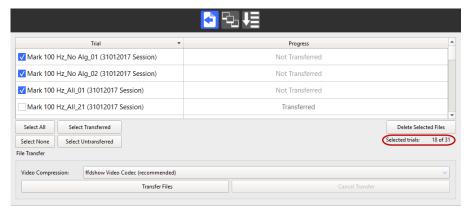
Other enhancements in Nexus 2.6

The following additional enhancements were added to Nexus 2.6:

❚ Video transfer counter on page 32

❚ Camera bump indicator on page 33

❚ Specify the region of interest on page 33

❚ Force vector threshold visualization on page 34

Video transfer counter

On the **Data Management** tab, in the **File Transfer** interface, a new **File Transfer** counter enables you to check easily on the progress of the transfer of large numbers of video files.
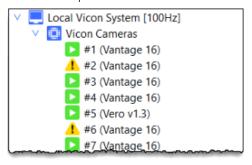
The counter displays both the number of the current video and the total number of videos that are being transferred.

Camera bump indicator

In the **System Resources** tree, bumped cameras are now indicated by a yellow warning icon. To see a tooltip containing information about the issue with the camera, hover the mouse pointer over the icon.

Specify the region of interest

Nexus has always enabled you to select a range of frames (Region-of-Interest) by moving the start- and end-of-range indicators (the blue triangles) to the required frames on the time bar. A new method now enables you to enter the required frame numbers into a dialog box.

1. On the Nexus time bar, right-click and then click **Set Region-of-Interest**.

2. In the **Set Region of Interest** dialog box, specify the **Start Frame** and **End Frame**. On the time bar, the regions of the trial outside the specified region of interest are dimmed. When you play or process the trial, only the selected region is affected.

Force vector threshold visualization

The **Force Threshold** of a force plate specifies the noise floor value in Newtons. Forces below this value are assumed to be noise and are clamped to zero.

A new **Options** setting for force plates enables you to specify a different value for the **Force Threshold** depending on whether you are recording data or displaying a trial.

▌ The value for the **Force Threshold** that is set in the **System Resources** pane for the force plate affects the values that are written into a recorded trial. For example, if the **Force Threshold** is set to 25 N, all values below this are considered noise and values of zero are recorded.

▌ The value for the **Force Threshold** that is set in the **Options** dialog box ensures that values below this threshold are not visualized as force vectors on the plate. This prevents very small values, which are simply noise, from creating a distracting 'flickering' force vector on the plate. If you are distracted by flickering while viewing a trial, raise this value to remove the flickering. This does not affect the value for **Force Threshold** that is written into a recorded trial.

To specify the Force Threshold that is recorded for a force plate:

1. Ensure the system is in Live mode.

2. In the **System Resources** tree, select the force plate.

3. In the **Properties** pane, ensure the **Advanced** properties are displayed.

4. In the **General** section, change **Force Threshold (N)** from the default (25 N) to the required value.
   Values below this magnitude are ignored and are recorded as zero.

To specify a value for visualizing the force vector:

1. Press F7 to open the **Options** dialog box.

2. On the left click **ForcePlates**.

3. In the **Properties** pane on the right, in the **Force Vector** section, change the **Force Threshold (N)** to the required value (the default is 25 N).
   Regardless of the setting of the **Force Threshold** in the **System Resources** pane, the force vector that is displayed in the view pane is below the threshold that is set in the **Options** dialog box. For example, if you set the value to 10 in the **System Resources** pane, but left it at 25 in in the **Options** dialog box, a value of 15 would be prevented from causing flickering, but would be recorded in saved trials.

Addressed issues

The following issues have been addressed in Vicon Nexus 2.6:

▐ Right-clicking on an empty model output node no longer causes a crash.

▐ An issue that could prevent a selected subject from being activated/deactivated is now fixed.

▐ The subject is no longer selected/focused after the marker name for that subject is edited.

▐ An issue that could cause a spurious subject import when changing sessions is now fixed.

▐ Reordering markers now works reliably.

▐ Unlabeled trajectories that have no reconstructions within the current Range of Interest are no longer listed in the C3D file.

▐ The accuracy of frames selected during automated footstrike detection has been improved.

▐ Events exported to ASCII are now listed in time order within a context.

▐ A crash that prevented you from accessing disabled force plates via the SDK has been fixed.

Active Gait workflow

▐ Matlab Plug-in Gait can now update read-only subject parameters in the VST/VSK.

▐ An issue that caused a frame offset when checking for cross-plate footstrikes in Matlab Plug-in Gait has been fixed.

▐ Matlab Plug-in Gait now correctly processes KAD trials when the KNE marker is absent.

Known issues

No new issues are known to exist in this release of Vicon Nexus.

The following legacy issues are known to exist in this release.

Description	Workaround
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.
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.
Vue video 3D overlay shows a small offset when calibrated in 1080p but displayed in 720p	Upgrade firmware to FW 702 or later.
If a system contains legacy Vicon MX Controls with two ADCs, the second ADC is not read/recognized by Nexus.	Contact Vicon Support.
Running a legacy VPI operation removes non-standard model outputs.	Use the equivalent native operations.

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, update to the Basler Pylon5 SDK and drivers (v5.0.0), which are available from the Vicon website.
Cometa/Aurion ZeroWire/Wave do not work under Windows 10.	Device drivers are not available for Windows 10. Use Windows 7 instead.
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\
.NET is turned off by default on Microsoft Windows 8, which stops ProEclipse running.	Enable .NET framework 3.5 on Windows 8 machines. To do this, open the Control Panel, click Programs and then click Programs and Features. Click Turn

Description	Workaround
	Windows features on or off and select the Microsoft .NET Framework 3.5.1 check the box. You can do this before or after installing Nexus.

MATLAB/Nexus integration will not operate on Windows 7 unless the .NET framework 4.5 is installed. Attempting to run MATLAB pipeline operations reports:
 	
`Error Run MatLab Operation`
`Error using NET.addAssembly`
	Install .NET framework 4.5 from http://www.microsoft.com/en-gb/download/details.aspx?id=30653 .

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**).
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.

Description	Workaround
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.