



## Victus™ Simulation v2.3.8.1 Release Notes

Welcome to Victus™ Simulation v2.3.8.1. This version of Victus™ Simulation contains several new features, enhancements, and some bug fixes. For a full list of the updates in v2.3.8.1, refer to the sections below.

In addition, installation and upgrade guides for Victus™ Simulation v2.3.8.1 may be downloaded from the [Weatherford Software Solutions Site](#)

### Note

If you currently have Victus™ Simulation v 2.1.4 or older installed, you must uninstall the existing version of Victus™ Simulation before installing Victus™ Simulation v2.3.8.1. All previously stored data will be lost. If you need to retain your existing data, contact the Victus™ Simulation Support Team for assistance prior to installing Victus™ Simulation v2.3.8.1. See "[Reporting problems](#)".

## What's new

The features in this section are new for Victus™ Simulation v2.3.8.1. For additional information about any of these features, please refer to the Victus™ Simulation user guide. You can open the user guide by pressing the **F1** key when you are using Victus™ Simulation.

- Victus™ Prerequisites have been updated to SQL Server 2019 and LabVIEW2019. WISE 1076625.
- Added the ability to specify the annular pressure setpoint in **Connection** mode through the **AP Setpoint** option in the **C** window. This enhancement allows you to set the desired **AP setpoint** alongside existing parameters, ensuring precise control during drilling operations.
- When you change the set point for a pressure control mode, the confirmation message will include the updated value.
- Added the ability to automatically calibrate pump efficiency based on the volume of fluid flowing in and out of the well. To calibrate pump efficiency, go to the **Setup > Surface Equipment > Equipment Configuration** tab, select the pump you wish to calibrate and click the **Automatic Pump Efficiency** button (↻).
- In the past, when 90% of the high limit was reached, Victus™ Simulation automatically switched to SBP mode, and this setting was fixed. Now, you can select 90%, 80%, or 70% of the high limit in the **Setup> Control Algorithms > Limits** tab. 90% of the high limit remains the default option.
- In the past, the minimum AP setpoint was preset to **Hydrostatic + Friction**, now you can select between **Hydrostatic**, **Hydrostatic + Friction**, and **Low Limit**. **Hydrostatic + Friction** remains the default option.



- Before, when the SBP reached 98% of the high limit, the chokes would open to 100%. Now, in the **Setup > Control Algorithms > Limits** tab, you can choose to open the chokes to 100% which is the default option, or go to the low limit when the SBP reaches 98% of the high limit.
- The default color for the low limit on the graphs has been changed from dark red to dark salmon.
- Victus™ Simulation allows overriding the high limit during kick auto control. When a kick occurs and **Auto Control** is active, the high limit will be updated to a predefined value. Enable the **Override the high limit during kick auto-control** option in the **Setup > Control Algorithms > Limits** tab.
- Added the ability to use a high pressure flow meter as a rheometer source without requiring it to also be selected as a flow-in source. Configure these options in the **Setup > Surface Equipment > Equipment Configuration** tab. WISE 1073854.
- Added the ability to show data from the high pressure flow meter in dashboards when it is not configured as a flow-in source or rheometer source. Enable the options **HPFM1**, **HPFM2**, and **HPFM3** in the **Setup > Surface Equipment > Equipment Configuration** tab. WISE 1073854.
- When a high pressure flow meter (HPFM) is selected as a main flow-in source and it fails, Victus™ Simulation will automatically switch the pressure control mode to **SBP** mode and will change the main flow-in source to the **Pump Source/Instrumentation** option. When the HPFM that failed is selected as a rheometer source, the rheometer source will be set to **None**. WISE 1073854.
- A **HPFM Totalizers** template has been added to calculate the total fluid volume pumped through the high pressure flow meter. The template is available on the **Setup > OneClick > Calculations** tab. WISE 1073854.
- Victus™ Simulation supports connection to the **Weatherford SPMS Gen 2 PRV**. This option is available in the **Pressure Relief Valve** field under **Setup > Surface Equipment > Equipment Configuration**.
- Added a percentage (%) unit to display **Proportional Gain (P)** values as percentages instead of decimals. The percentage (%) unit is available in the **Setup > Units** page.
- The choke model SRI SCM4 3" is supported for all manifold types.
- Victus™ Simulation is able to import MCD files that were exported from CENTRO® Engineer.
- Enhanced the **Player** mode to accurately replicate the real-time data and alerts from Victus Operation®.
- Victus™ Simulation will display job information in the banner such as country, rig name, and operator company.
- Removed the **OneClick® Events, Conditions, Flows**, and **Run** tabs from Victus™ Simulation.
- The **Pipe Fill SPP Threshold** maximum value has been increased from 350 psi to 1000 psi in **Connection** mode.
- Added the ability for Victus™ Simulation to update the current fluid with the rheology values read from a high pressure flow meter in real-time.



- Enabled the ability to select a choke by clicking anywhere on the corresponding row in the choke position table on the **Setup > Calibration > Chokes** tab.
- Added a safety feature that monitors how long WITSML out requests take and prevents unexpected responses from causing performance issues. WISE 1060581.
- Victus™ Simulation 2.2.8.2 included changes made to optimize the pressure loss calculation for tooljoints. On Victus™ Simulation 2.3.8.1 that logic was revised and adjusted. This will cause differences for pressure loss in certain scenarios, when compared to Victus™ Simulation 2.2.8.2 including the hydraulic analysis tools.
- While the **Daily Report** or the **RCD Daily Report** is being generated, the report generation buttons will be disabled to prevent multiple reports being processed at the same time, causing performance issues or even failures. WISE 1078059.
- Updated the **Piping and Instrumentation** tab to show the table view as the default view.

## Bugs fixed

The critical issues in this section have been fixed in Victus™ Simulation v2.3.8.1.

- Resolved an issue where analog sensor data was neither recorded nor displayed in dashboards during well simulations. WISE 1076908.
- Fixed an issue where WITS data was saved every second instead of the configured 5-second interval. WISE 1079256 .
- When you run a hydraulics snapshot analysis, the value for pressure drop in the drill pipe should now be correctly calculated.
- Fixed an issue that caused Victus™ Simulation to show two daily reports for the same date.
- Fixed an error that caused the value for pressure drop in the drill pipe to display inconsistently in the **Tools > Hydraulics > Snapshot** tab. WISE 1074578.
- Resolved an issue that caused negative ECD values to appear in the **Hydraulics > Snapshot** analysis results, which led to discrepancies in the data displayed in the graphs. WISE 1073902.



## Notes to Consider

Notes to consider for Victus™ Simulation v2.3.8.1.

- When you drag a curve in a time-based graph from one track to another track, the curve data may get corrupted and show abnormal spikes in the data.
- **Bit to Surface** time under the **Counters** menu does not consider booster flow when the bit is above the booster.
- When Victus™ Simulation is in **Player** mode and a loss is detected, the **System Virtual Trip Tank** window does not appear.
- In **Player** mode, if the MCD file and data have no changes in **MPD** mode, the **MPD** mode will show as **None** during the entire time.
- If under **Setup > Control Algorithms > Limits > 98% High Limit Reaction** you select:
  - **Fully Open Chokes to 100%**, this is the standard scenario, where even if some chokes are disabled/manual, the system will switch them to **Auto**, setting the **MPD** mode to **None**, opening all chokes.
  - **Go to Low Limit (based on Pore Pressure) – SBP Mode**, and when 98% is hit, the chokes in manual/disabled modes remain unchanged. The system will change **MPD** mode to the low limit (**SBP** mode) with the low limit value as setpoint. Only the chokes in **Auto** will respond trying to go to the new setpoint.
- In **None** mode, when the chokes are manually closed, and it crosses 70%, 80%, or 90% of the high limit (depending on what was selected under **Setup > Control Algorithms > Limits > System goes to SBP mode at**, the system will switch to **SBP** mode. This behavior differs from Victus™ Operation firmware where in **None** mode, it stays in **None** mode.
- When importing an MCD file, if you get a message similar to the below examples, it is probably because the file is empty – 0 bytes. Examples:
  - The volume on device 'C:\ProgramData\Weatherford\Victus\rdtvucvf.ygk' is empty. VERIFY DATABASE is terminating abnormally.'
  - 'The volume on device 'C:\ProgramData\Weatherford\Vcitus\dd4rlbk.nqp' is empty. VERIFY DATABASE is terminating abnormally.'



## Reporting problems

Before you submit a support ticket, it's a good idea to check for known issues and solutions. The knowledge base is included in the Victus™ Simulation user guide and contains workarounds for several known issues. The knowledge base is available in the **Welcome** section of the user guide. You can open the user guide by pressing the **F1** key when you are using Victus™ Simulation.

## Submitting a support ticket

You can submit requests for technical support, report bugs, and make suggestions for improvements to Victus™ Simulation v.2.3.8.1. Refer to the next section for details applicable to internal and external users.

### Weatherford Internal Users

To submit a WISE query:

1. Log into the [WISE website](#).
2. In the top right corner, select the **Managed Pressure Drilling** product line.
3. Click the **Submit Query** button next to the product line menu.
4. In the **Summary** field, enter a description of the type of support you are requesting.
  - o If you are requesting a new license, enter **New License**.
  - o If you are requesting technical support, enter **Technical Support**.
  - o If you are reporting a bug, enter **Bug**.
  - o If you are making a suggestion for improvements, enter **Suggestion**.
5. In the **Description** field, enter a detailed description of your request.
6. Enter the optional details to provide additional information.
7. Upload any files or screenshots related to the request.
8. Click the **Submit Query** button.

Your ticket will be submitted to the Victus™ Support Team. To check the status of your request, go to the **Reported By Me** section on the [WISE website](#). To check all opened WISE tickets, please visit the [MPD WISE Dashboard](#).

### External Users

For any additional support requirements, please contact your Weatherford local representative. If you do not have any Weatherford local representative contact in your country, please send an email to [DLMPDSoftwareLicense@weatherford.com](mailto:DLMPDSoftwareLicense@weatherford.com) with the information needed.