3.0.8 Release Notes

New Features:

• User Events with summary "Config file record" now additionally include the original contents of the ReportSettings.cfg file (contains size and time limits for report generation to prevent system crashes) and the /config/Bioreactor Configuration.json file (contains hardware information so the software knows what bioreactor hardware is available). These events are generated when a bioreactor's software is updated, and as part of the PBS Biotech manufacturing procedures.

Miscellaneous:

- For PBS 80 MAG bioreactors with an RPM pump installed as Addition Pump A, user attempts to set that pump to be the Base pump will be rejected.
- PBS manufacturing now supports installing PBS software on bioreactors with different sensor and pump configurations. This does not impact any bioreactors already in the field.

User Manuals:

• The following global variables have been introduced, and will be included in the "Pumps and Valves" group of Appendix 4 in the user manuals:

Variable Name	Default Deadband	Default Record	Source	Definition
Pumps&ValvesAdditionA Hardware.AllowAsBase	0.5	FALSE	System	A configuration set at the factory to tell the software if the Addition A pump can be used as the Base pump. Note that for PBS 80 bioreactors, the large RPM-controlled Addition A pump cannot be used as the Base pump. This variable should not be modified via recipe.
Pumps&ValvesAdditionA Hardware.Exists	0.5	FALSE	System	A configuration set at the factory to tell the software if an Addition A pump is installed. This variable should not be modified via recipe.

Variable Name	Default Deadband	Default Record	Source	Definition
Pumps&ValvesAdditionA Hardware.Reversible	0.5	FALSE	System	A configuration set at the factory to tell the software if the Addition A pump hardware supports bi-directional flow. This variable should not be modified via recipe.
Pumps&ValvesAdditionA Hardware.SpeedControl	0.5	FALSE	System	A configuration set at the factory to tell the software what method of speed control for the Addition A pump is supported by hardware: 0) Off/On, 1) Slow/Medium/Fast, 2) RPM control. Note that for PBS 80 bioreactors with the large RPM-controlled Addition A pump, the Hello UI displays the speed control options as Slow Medium and Fast. This variable should not be modified via recipe.
Pumps & Valves Addition B Hardware. Allow As Base	0.5	FALSE	System	A configuration set at the factory to tell the software if the Addition B pump can be used as the Base pump. This variable should not be modified via recipe.
Pumps&ValvesAdditionB Hardware.Exists	0.5	FALSE	System	A configuration set at the factory to tell the software if an Addition B pump is installed. This variable should not be modified via recipe.
Pumps&ValvesAdditionB Hardware.Reversible	0.5	FALSE	System	A configuration set at the factory to tell the software if the Addition B pump hardware supports bi-directional flow. This variable should not be modified via recipe.

Variable Name	Default Deadband	Default Record	Source	Definition
Pumps&ValvesAdditionB Hardware.SpeedControl	0.5	FALSE	System	A configuration set at the factory to tell the software what method of speed control for the Addition B pump is supported by hardware: 0) Off/On, 1) Slow/Medium/Fast, 2) RPM control. This variable should not be modified via recipe.
Pumps&ValvesMedia Hardware.AllowAsBase	0.5	FALSE	System	A configuration set at the factory to tell the software if the Media pump can be used as the Base pump. This variable should not be modified via recipe.
Pumps&ValvesMedia Hardware.Exists	0.5	FALSE	System	A configuration set at the factory to tell the software if a Media pump is installed. This variable should not be modified via recipe.
Pumps&ValvesMedia Hardware.Reversible	0.5	FALSE	System	A configuration set at the factory to tell the software if the Media pump hardware supports bi-directional flow. This variable should not be modified via recipe.
Pumps&ValvesMedia Hardware.SpeedControl	0.5	FALSE	System	A configuration set at the factory to tell the software what method of speed control for the Media pump is supported by hardware: 0) Off/On, 1) Slow/Medium/Fast, 2) RPM control. This variable should not be modified via recipe.
Pumps&ValvesSample Hardware.AllowAsBase	0.5	FALSE	System	A configuration set at the factory to tell the software if the Sample pump can be used as the Base pump. This variable should not be modified via recipe.
Pumps&ValvesSample Hardware.Exists	0.5	FALSE	System	A configuration set at the factory to tell the software if a Sample pump is installed. This variable should not be modified via recipe.
Pumps&ValvesSample Hardware.Reversible	0.5	FALSE	System	A configuration set at the factory to tell the software if the Sample pump hardware supports bi-directional flow. This variable should not be modified via recipe.

Variable Name	Default Deadband	Default Record	Source	Definition
Pumps&ValvesSample Hardware.SpeedControl	0.5	FALSE	System	A configuration set at the factory to tell the software what method of speed control for the Sample pump is supported by hardware: 0) Off/On, 1) Slow/Medium/Fast, 2) RPM control. This variable should not be modified via recipe.