

ReView

WINTER 2016

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THE INTEGRATED WELL
LIFECYCLE SOLUTION

AppFrame 4.2 Arrives

AppFrame is the common framework shared by WellView, SiteView, RigView, and ProdView. The framework consists of components such as the Explorer, Edit Data, Report Engine, Synchronization, Library, and Template Manager. With the AppFrame, Peloton applications all have a consistent look and operate the same way. The AppFrame also supplies the connection to the MasterView Database, the Peloton IO Engine, application interfaces, and administration tools, such as AdminView and the Database Security & Alert Manager.

AppFrame 4.2 is Peloton's newest version of our application framework. WellView 10.1, SiteView 5.1, RigView 4.1, and ProdView 2.2 all share the benefits of these new AppFrame features.

64-Bit Support

AppFrame 4.2 now supports 64-bit, which allows Peloton applications and services to surpass any memory limitations when processing large data sets. The application runs as a 64-bit process on a 64-bit operating system and as a 32-bit process on a 32-bit OS.

As a result of supporting 64-bit, the overall size of the distributable UDL has been reduced by up to 95%.

.NET Framework 4.5.2

AppFrame 4.2 requires an upgrade of Microsoft's .NET Framework. .NET 4.5.2 Framework (available since May 2014) is the most stable and secure version of .NET. The benefit to Peloton applications is mainly in the memory management and high DPI with Windows Forms areas. Support for .NET 4.5.1 and earlier versions is ending January 16, 2016.

Reporting

The report engine includes new features, which allow you to group and aggregate record data blocks. These features are available for both single and multi reports.

WellView® Multi Well Cost Summary

Well Name	Job Type	Sum of AFE+Supp Amt (Cost)	Sum of Total Fld Est (Cost)
Sample 1	Drilling	2,165,600.00	2,172,468.00
Sample 2	Drilling	695,100.00	1,712,055.12
Sample 3	Drilling	597,100.00	224,322.39
Total (Sum)		3,457,800.00	4,108,845.51

Audit

The Simple Field Audit includes new functionality to compare data and to validate data against libraries.

Oracle Data Provider

AppFrame 4.2 applications use the Managed Oracle Data Provider for .NET 12.1.0.2.0. This version was released in June 2015, and it provides support of LDAP with OID and Kerberos5 with OSMSFT.

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WellView 10.1 Makes Its Debut!

This fall brings a new WellView maintenance release. WellView 10.1 incorporates all the AppFrame 4.2 features, plus it includes schematic enhancements, new calculations, updates to the integrity program and dashboard, and a new map visualizer. There are no changes to the physical data model in this release.

Schematic

The schematic has many exciting new features: additional menu options, scaling options, updates to annotations, enhancements to barriers, improvements to the cement plug drawing, and more icons.

Menu Options

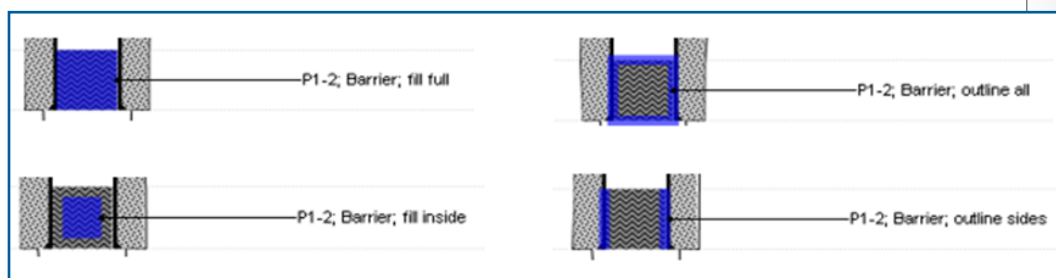
The right-click menu in the schematic gives you new options to add depth annotations, failures, and well integrity values. You can also open wellhead/BOP attachments.

Barriers

The schematic barriers have new features.

- You can now right-click the schematic to add a component to a barrier.
- The barrier has several drawing style options: such as fill full, fill OD to AD, outline all, and outline sides.

Zoom In
Zoom Out
Zoom Full
Zoom Directional
Add depth annotation...
Add failure...
Add well integrity value...
Add to barrier ▶
Wellhead/BOP Attachments ▶
Advanced ▶



Drawing options for barriers

Icons

More icons are available!

Alternate Barrier Icons

A new template option allows you to substitute alternate barrier icons for tubing and casing, based on component subtype. This option simplifies the display of the equipment in a particular schematic.



The schematic on the right side has alternate barrier icons substituted for tubing components defined as Mandrels, Tubing, Nipples, etc. SSSV and packers are drawn with the normal icons.

Icon Distribution

The icon engine has been updated to manage incremental icon packages. This change means that you can distribute individual or small groups of icons, and the application recognizes the changes.

Well Integrity Dashboard

The Integrity dashboard has new options:

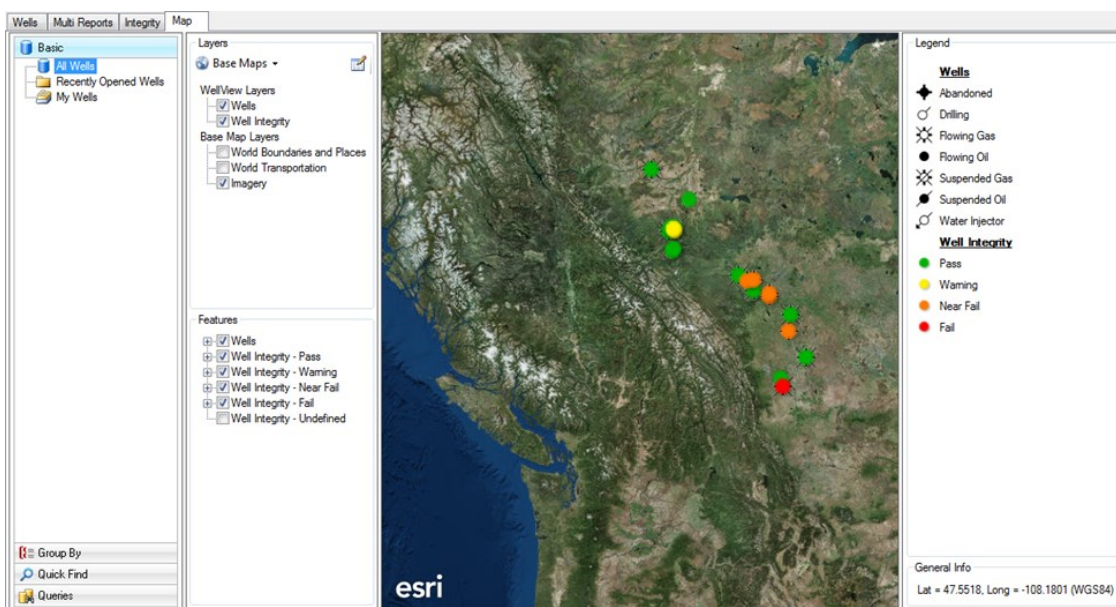
- Use the Basic, Group By, Quick Find, and Queries tabs to select wells to view integrity.
- Create templates to show your integrity information different ways.
- Select the current Integrity Program.
- Filter on the integrity states.

Map

WellView has always allowed you to depict your well downhole—now you can locate its place in the world with the multi well map visualizer. Two layers are currently available—display your wells by Well Status and/or Integrity Program Status on an ESRI base layer.

Well Name	Program State Type
Sample 12 - Phase and Prod	Pass
Sample 13 - Phase and Prod	Warning
Sample 14 - Phase and Prod (BOP and Barriers)	Warning
Sample 15 - Phase and Prod	Near Fail
Sample 16 - Phase and Prod	Warning
Sample 17 - Phase and Prod	Fail
Sample 18 - Phase and Prod	Fail
Sample 19 - Phase and Prod - Plunger Lift	Fail
Sample 20 - Phase and Prod - Abandoned (with Barriers)	Fail

14 Well(s) - 14 selected



Calculations

New calculations include the following:

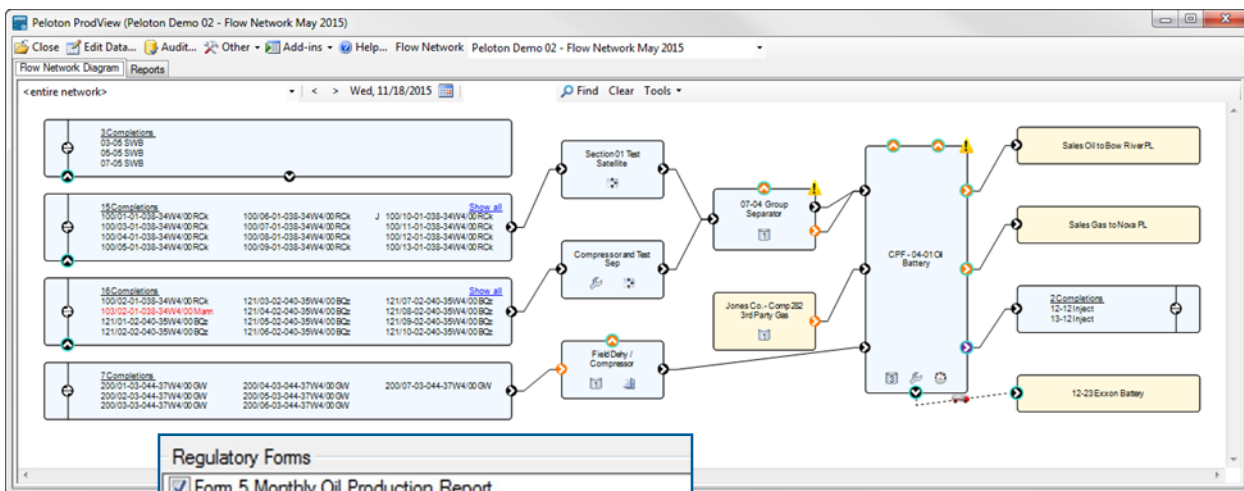
- New base tables to leverage the grouping option
- Additional mud properties
- Mud volume summary
- Daily safety incidents summary
- Daily equipment test summary

For more information on these and more updates, see the WellView 10.1 release notes.

ProdView for Allocation and Regulatory Reporting

A big challenge facing producers today is maintaining a gathering system in two separate systems: the FDC system and the Production Accounting system. Sometimes discrepancies between the two systems are missed and are found during an audit, which is too late and can carry heavy costs in fines and rework/reallocation.

ProdView is built to handle the capture, allocation, and submission of data directly to the state/Federal board (US) or to Petrinex (Canada).



ProdView's Flow Network Diagram

*Regulatory Reports for US Clients:
North Dakota Example*

*Regulatory Reports for Canadian
Clients: Petrinex Example*

Data Gathered

ProdView configuration and allocations follow physical flow of products. All changes in configuration (such as new wells, shut-in wells, changes in flow path, analyses, and fuel, flare, venting) are date effective so the data does not need to be 'faked' to be shown on the first of the month in the FDC system to match the PA system. The data matches what actually happened in the field.

Examples of the type of data gathered by ProdView:

- Well tests, tickets, tank volumes, wellhead pressures, etc.
- Downtime/operating time
- Gas and liquid analyses
- Fuel estimates (any fuel/flare/vent events)
- Changes in physical flow through the gathering system (for example, a new compressor added)
- Load/gas lift fluid volumes
- Meter calibrations
- Much more.....

The ProdView production allocation workflow follows this process:

- Daily estimates are manually entered or imported. The estimates are validated throughout the month.
- Daily entries are locked.
- Actual volumes from the purchaser statements are imported or entered and reconciled to daily estimates.
- The oil books and gas books are closed. The allocation uses the final monthly purchaser volumes.
- Regulatory reports are submitted electronically or manually to the regulatory board.

Benefits

ProdView is a complete production data management and regulatory reporting system. The same system is used to collect data and submit regulatory reports. This flexibility allows an allocation at the production accounting level to be performed within ProdView.

Once the allocation is complete, volumetric data can be passed directly to financial or revenue accounting systems.

Benefits include:

- Fewer mistakes, rework, and resubmissions
- Prior period adjustments (PPA) made in the same system
- No need for Production Accountants to re-enter data into a PA system to submit to the regulatory body
- An identical set of production volumes from the field through to accounting
- Less need for third party Production Accountants to submit volumetrics
- Fewer seats (licenses) required for the current PA system
- Time savings for Production Accountants

Many US clients are currently running their allocations in ProdView and submitting their regulatory reports.

The strength of ProdView's allocation makes it an easy step to add the regulatory reports of countries outside North America. Peloton will continue to bridge the gap between FDC and PA systems to help eliminate the redundancy of two different systems for production gathering and allocation.

For more information on the advantages of using ProdView to satisfy your allocation and regulatory reporting needs, contact your Peloton representative.

Look for Peloton at the following industry conferences & exhibitions:

- SPE/IADC Middle East Drilling Tech Conference, Abu Dhabi, January 26-28
- SPE Drilling Conference, Fort Worth, TX, March 1-3
- CSHM Conference, Calgary, March 15-16
- OTC Asia 2016, Kuala Lumpur, March 22-25
- NEFTEGAZ, Moscow, April 18-21
- Indonesian Petroleum Association Convention & Exhibition 2016, Jakarta, May 25-27
- SPE Intelligent Energy 2016, Aberdeen, September 6-8



AppFrame 4.2 Arrives (continued from page 1)

Microsoft SQL Server Compact

Microsoft does not natively support a 64-bit application connecting to a Microsoft Access database (.mdb) using the Microsoft Jet Database Engine or Microsoft Access Database Engine. Thus Peloton identified the need to support a new database format.

SQL Server Compact or SQL Server Express are Microsoft's recommended database formats when developing 64-bit applications requiring a relational database. Peloton is shipping all AppFrame 4.2 application's sample databases and master UDLs in the SQL Server Compact format.

- SQL Server Compact is a relational database residing in a single file, allowing for easy copy and backup.
- A single SQL Server Compact database can be up to 4 GB in size.
- SQL Server Compact supports the ability to encrypt the database up to a 256-bit key.
- A SQL Server Compact database automatically compacts, resulting in a smaller file size.

Deployment and Upgrade

If you are upgrading from an AppFrame 4.0 application, the AppFrame 4.2 upgrade includes physical data model changes.

If you are upgrading from an AppFrame 4.1 application, there are no physical data model changes. You have the following considerations:

- Upgrade to .NET Framework 4.5.2
- Update applications, admin tools, and services
- Migrate library and UDL files
- Review add-ins, Excel templates, and integration that use the Microsoft Jet Engine
- Review new MasterView Data Warehouse schemas to reflect new calculations

Determine your upgrade method for office and standalone users. The approximate compressed size of the 134 update files is 48 MB.

For more information on the changes in AppFrame 4.2, see the release notes for the application and the *Peloton AppFrame 4.2 Admin Guide*.

Well Lifecycle Integration—Did you know?

MasterView Well Lifecycle integration is not dependent on the versions of the Peloton commercial applications but on the versions of their transactional databases.

This design allows flexibility when you update your applications to new maintenance releases. The integration layer is not impacted as long as your data models have remained the same. All AppFrame 4.2 applications (such as WellView 10.1) use the same database as their AppFrame 4.1 counterpart (such as WellView 10.0). Therefore, WellView 10.1 uses the WellView 10.0 database.

Register for Peloton Product News!

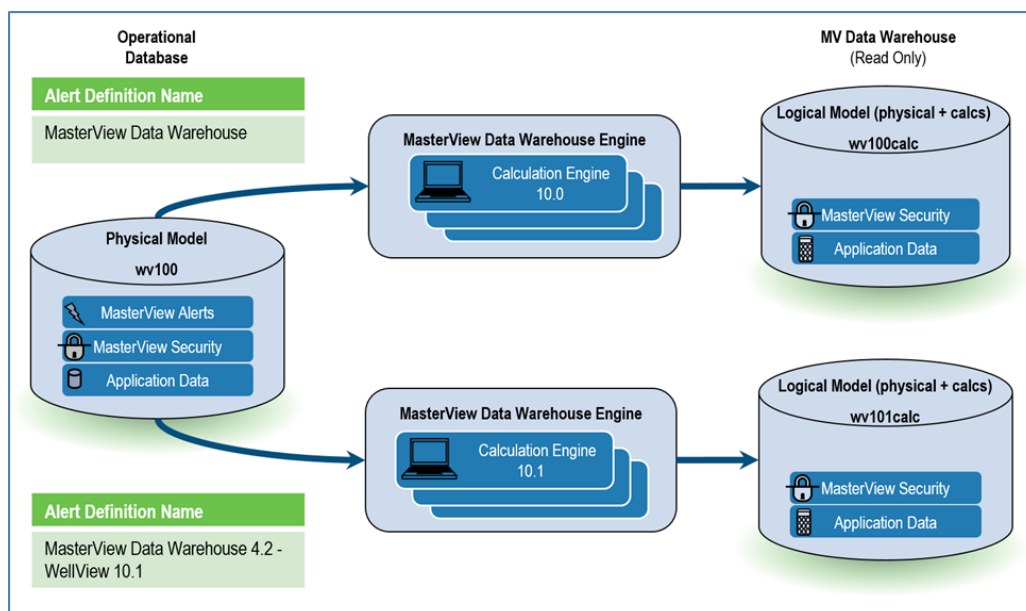
Product News is available for all users of the Peloton Premium Support site. The tool allows Peloton product managers to communicate with you more frequently. We use this forum to announce maintenance releases, and to share tips and tricks, best practices, and FAQs, plus upcoming events.

If you would like to receive an email notification each time a new item is posted, please select the 'subscribe' option in the 'My Account' section within Peloton's Premium Support site. If you have questions, contact support@peloton.com.

MasterView Data Warehouse 4.2: Efficiency, Robustness and Performance

A much more efficient process is now available to update and maintain the MasterView Data Warehouse database schema aligned with updates on the logical data model for applications.

Each time that the logical model is altered for an application, the version of the application logical data model and the associated MVDW database increases. The new MVDW DB versioning allows different MVDW DB schemas to coexist in the same database server. This new strategy reduces upgrade costs and time as it allows you to populate several MVDW databases in parallel using a single-source transactional database.



In AppFrame 4.2, Peloton no longer allows an application to point to a version of the MVDW database that differs with the version of the logical model it supports. Enforcing versioning control between the MVDW and the application guarantees robustness during its population and use, reducing errors and confusion when the mismatch is interpreted as bugs.

When your organization adopts a new maintenance release of the application, you should also plan for an update to the MVDW if the supported logical data model has changed. Applications rely more and more on the calculations for reports and visualizers.

These new changes provide significant management benefits. Also, the MVDW enhances performance for reporting and data analysis without needing custom programming. All these advantages are key when considering an implementation of the data warehouse.

Upcoming Peloton Webinars

Peloton is planning to offer various webinars to our clients in 2016, and you won't want to miss out! Webinars will be announced through Peloton Product News, and will be listed on our website, so stay tuned. Some of the topics we're considering offering are as follows:

- WellView 10.1 Maintenance Release
- Failure Analysis
- Well Integrity
- Plug & Abandonment
- Data Auditor Tool
- SiteView Water Tracking



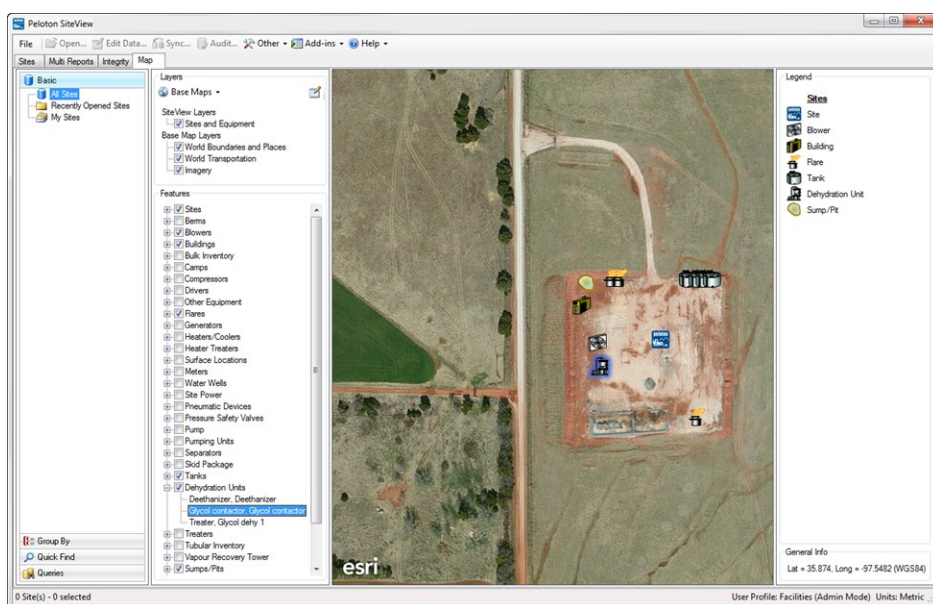
Peloton's New Map Visualizer

Peloton is pleased to announce that all AppFrame 4.2 applications now have a multi-entity mapping visualizer tab available. We have partnered with ESRI (Environmental Systems Research Institute), and all users can take advantage of this new feature.

We are shipping the applications with several default ESRI base maps that you can select with a valid internet connection. Overlaid on the ESRI base maps, you can view Peloton data layers specific to your application.

- WellView 10.1 shows well status and integrity symbols.
- SiteView 5.1 displays sites and equipment icons.
- RigView 4.1 identifies current jobs and rig moves.
- ProdView 2.2 shows units and routes as well as the connections between routes.

To narrow your search, the navigation pane is available to run queries, set up groups, or organize entities. You can zoom in the map to view specifics. Right-click a feature on the map to go directly to the record in Edit Data.



Imagery map zoomed into a site location in SiteView 5.1

Topographic map showing site locations in SiteView 5.1

Peloton has many planned enhancements to the map visualizer, including allowing existing ESRI clients to display their proprietary web-based layers. We are also looking for feedback on ways you may want to view or analyze your application data in a geospatial and visual context. Let us know once you have a chance to play with the new tool!

