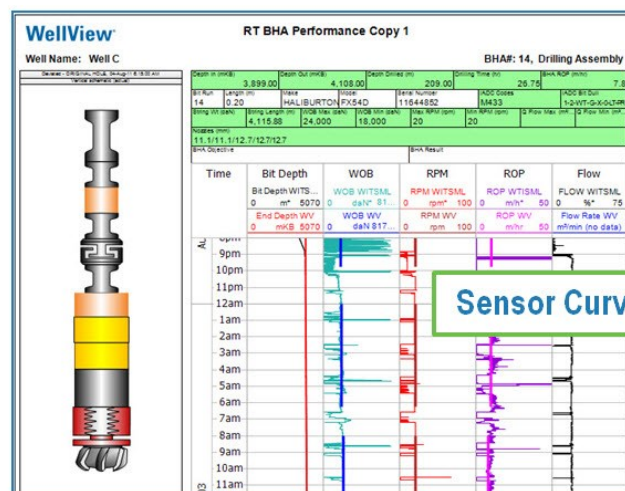


WellView 10.3: Drilling Parameter Automation & Sensor Data Analysis

We've always believed the focus for the rig user is to verify results as well as provide context and detail for activities that cannot be derived (other category). Data that is captured electronically or that can be interpreted from sensors should be imported, not manually re-keyed!

Historically, a daily drilling report has presented one depth for the 24-hour period and one ROP value per bit run. Imagine if you could have 10-second detail available for display and analysis!

The report on the left shows a typical Daily Drilling report, in combination with a graph showing the rig sensor details. The report on the right displays the Bit & BHA components tracked in WellView with raw sensor data.



Article continued on pages 2 & 3.

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HIGHLIGHTS INSIDE WINTER/SPRING 2018 REVIEW:

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WellView 10.3: Drilling Parameter Automation & Sensor Data Analysis (continued from page 1)

Time Tracks

The download of rig activity provides a whole new level of detail for a time log. In this example, the Time Log column in the Time Tracks tool has been manually coded. The Rig Activity Column shows a much more detailed interpretation of the time. It isn't practical to type in this level of detail. The great news is that you don't need to! The data can be derived from the raw curves and imported into WellView.

The combination of the rig sensor curves, and rig activity allows you to populate the drilling parameters. No more manual entry!

- Summarize Rig Activity by Day, Phase, BHA, Job, Rig Crew, Formation, Wellbore
- Daily & Rig Crew KPIs (Dur On/Off Btm, Dur/Depth/ROP Sliding & Rotating)

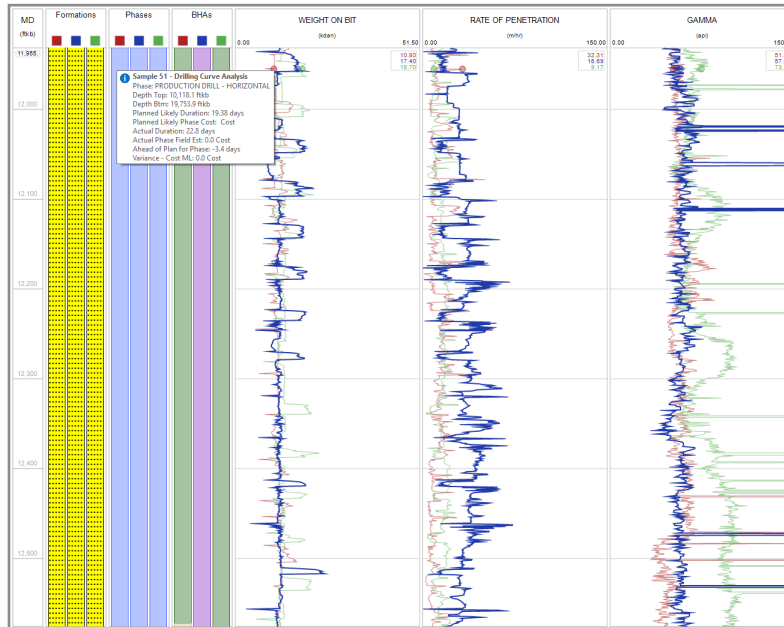
Display the results in Time Tracks, single and multi well reports, and even the schematic.

Time	Time Log	Rig Activity		
	Code 2	RIGACTIVITY		
6:30	DRILL ACTUAL	DRILLING ROTATING		
7am		DRILLING ROTATING		
7:30		DRILLING ROTATING		
8am		DRILLING SLIDING		
8:30		DRILLING SLIDING		

General	29	30	31
Start Date	7/10/2014	7/10/2014	7/10/2014
Time	22:13	22:35	22:58
End Date	7/10/2014	7/10/2014	7/10/2014
Time	22:32	22:51	23:19
Start Depth (ftKB)	9,815.2	9,845.2	9,862.1
End Depth (ftKB)	9,845.1	9,862.0	9,893.3
Wellbore	Original Hole	Original Hole	Original Hole
Drilling Time (hr)	0.32	0.26	0.34
Circulation Time (hr)			
Trip Time (hr)			
Other Time (hr)			
Parameter Type	DRILLING	DRILLING	DRILLING
Parameter Subtype	ROTATING	SLIDING	ROTATING
Exclude From New Hole?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stand Ref #			
Note	Auto-generated	Auto-generated	Auto-generated
Params			
Weight on Bit (1000lbf)	15	16	13
RPM (rpm)	40		40
Flow Rate (gpm)	493	493	493
Riser Boost (gpm)			
Stand Pipe Pressure (psil)	2,031.8	1,956.0	2,013.2

Multi Curve Analysis

The Multi Curve tool allows you to overlay depth-based logs to facilitate look-backs, and plan your next campaign. You can overlay log curves from multiple wells and display the phases, BHA, and formations. To view your data in the tool, select the curves of interest, zoom in, click, and drag.



Introducing Peloton SaaS!

Peloton SaaS (Software as a Service) is a managed service for Peloton's applications (WellView, SiteView, RigView, ProdView and LandView). Peloton hosts the applications and data on its secure and backed-up servers, and users gain access using a web browser. No need for a client application installed on their machines. If users are on the move or have an unreliable internet connection, disconnected/sync access is also available. Users seamlessly receive updates, upgrades and new functionality as soon as they are available.

With Peloton SaaS, you have:

- Availability of your Peloton applications
- User access through a web browser
- Disconnected access as needed
- Automated distribution of reports
- Automated 3rd party imports
- APIs and direct database connection

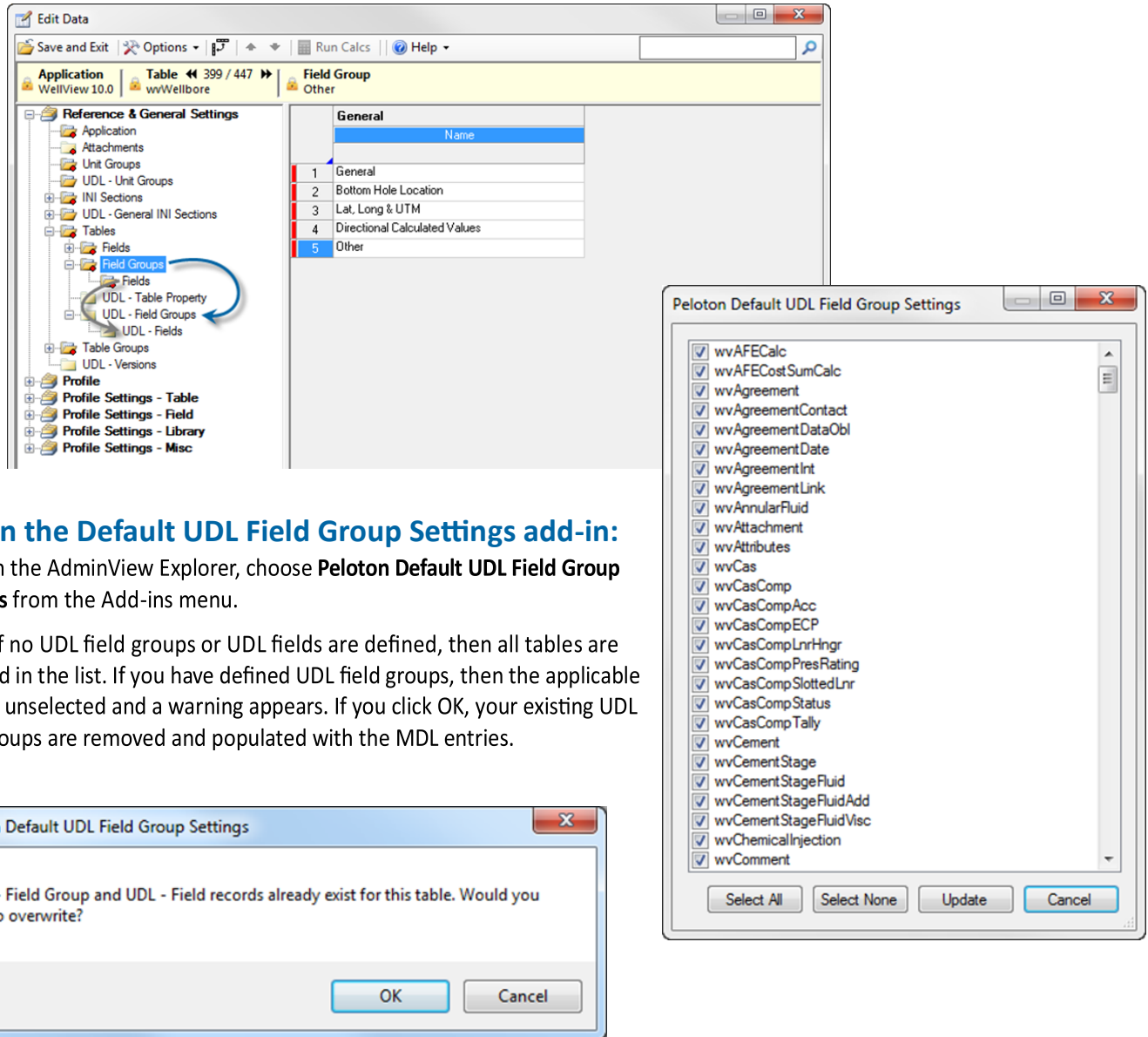


For more information about this service, contact your account manager or send an email to sales@peloton.com.

Technical Tips: Copying Default Field Groups

The Peloton Default UDL Field Group Settings add-in allows you to copy the default field groups to the UDL field groups in AdminView.

A default list of field groups are provided in the MDL (metadata layer). You can use the add-in to add the default list of field groups to your application and then make your own changes to the existing list. If you already have added field groups to a table, then you receive a warning that the add-in will overwrite the existing settings. If you run the add-in a second time, it selects only those tables that do not have field groups defined.

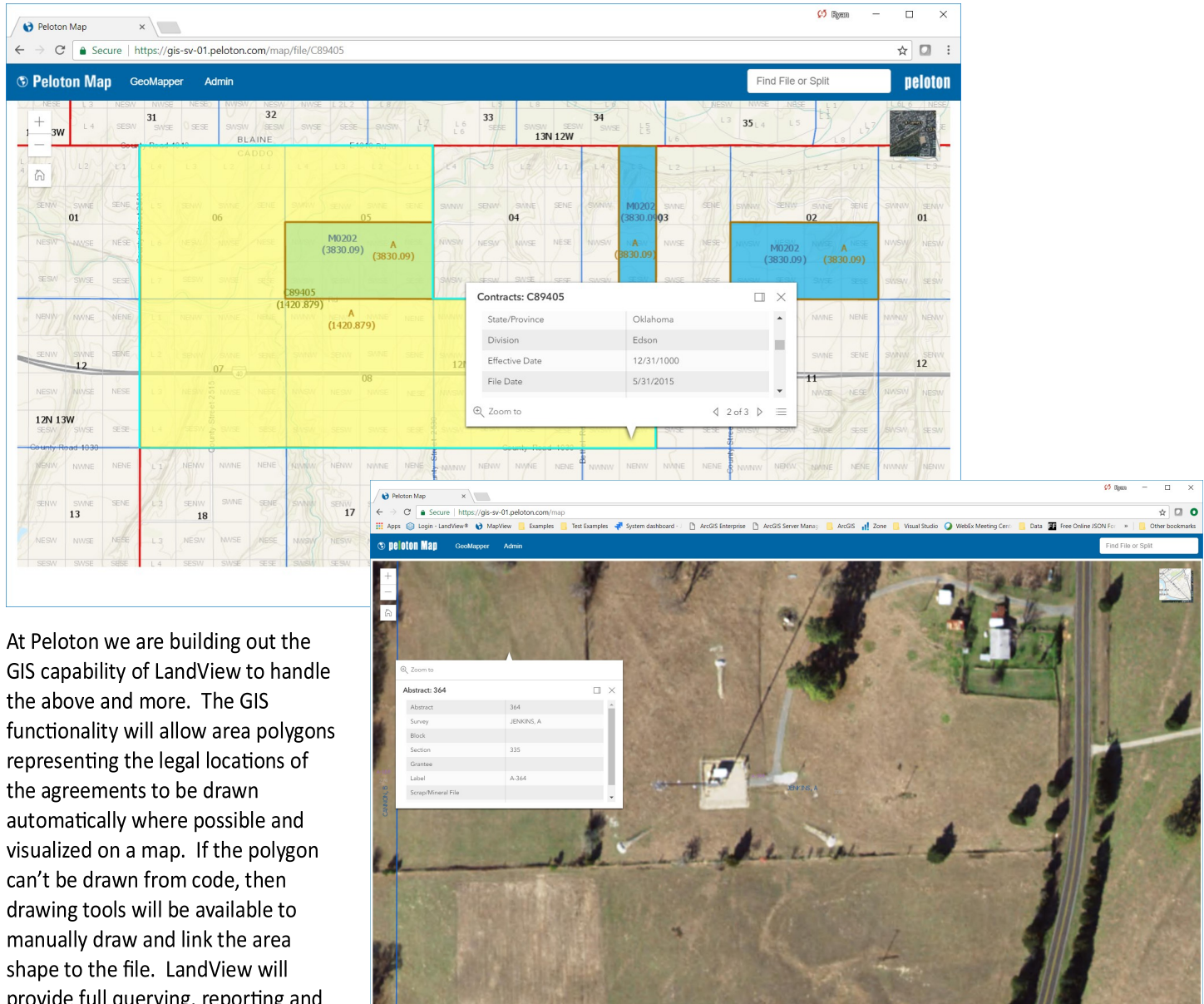


2) Select the tables you would like to copy the field groups from.

3) Click the **Update** button. The add-in notifies you once it has updated all the field groups.

Exploring LandView & GIS

One of the key components of a Land software system is the ability to visualize your leases and agreements on a map. This helps validate that legal locations have been inputted properly, and allows you to compare actual acreage values with values on the agreement and perform visual querying and filtering.



At Peloton we are building out the GIS capability of LandView to handle the above and more. The GIS functionality will allow area polygons representing the legal locations of the agreements to be drawn automatically where possible and visualized on a map. If the polygon can't be drawn from code, then drawing tools will be available to manually draw and link the area shape to the file. LandView will provide full querying, reporting and exporting functionality. Also, if you are an ESRI ArcGIS client using ArcGIS Online, Portal, or Enterprise, you will be able to connect to your existing ESRI environment and leverage all of your proprietary maps and feature layers.

As this functionality matures, Peloton plans to explore more complicated analysis such as linear project routing, assessing leases from surface hole to bottom hole, and tying in additional meta data from other Peloton applications.

Held by Production (HBP)

Held by Production: A provision in an oil or natural gas property lease that allows the lessee, generally an energy company, to continue drilling activities on the property as long as it is **producing** a minimum paying amount of oil or gas.

Challenge to the producer

The producer is required to never let a lease have more consecutive days of zero production than is allowed by the regulatory board overseeing that property. If this obligation is not met, stiff penalties can be enforced, including losing the lease.

Each lease has a “Held by Production” limit assigned to it for oil and gas. Once a well is down, there is commonly a 30, 60 or 90 day period during which the producer needs to have production from the lease or a rework (workover) plan for a well on that lease.

If there are multiple wells on a lease, at least one well needs to meet the HBP limits for that lease. Companies obviously want to identify these leases long before they get to their HBP limit to avoid potential penalties or losing the lease.

Held By Production Report								Printed: 12/5/2017 2:08 PM Date: 9/25/2017 to 9/25/2017	
Network	Well	HBP Limit	Days Remaining	Gas		Oil		Comments	Downtime
				Days Since Last Prod	Last Prod Date	Days Since Last Prod	Last Prod Date		
HBP Example	Well 1	60	-28	88	9/8/2017	88	9/8/2017	Workover issue - see WellView	
HBP Example	Well 2	30	5	25	11/10/2017	25	11/10/2017		
HBP Example	Well 3	30	24	6	9/19/2017	6	9/19/2017		

Here's how ProdView can help

The challenge can be addressed in ProdView with audits or reports that look at wells with consecutive days with no production and warn when the lease is approaching the tolerance (yellow) or past the HBP limit (red). These results can be shown on a daily/weekly report and auto emailed to the persons responsible for this compliance.

Since all the downtime is captured in ProdView, it makes sense for the alerts and reports to be generated in ProdView. As long as the company can display that they are doing work to get the well producing, they are meeting their HBP obligations. That workover information should all present in WellView.

So this story can easily be made clearer with WellView integration. Information about the workover job can also be included in the report. And, details of this contract would exist in LandView.

Peloton Product Webinars—Register Today!

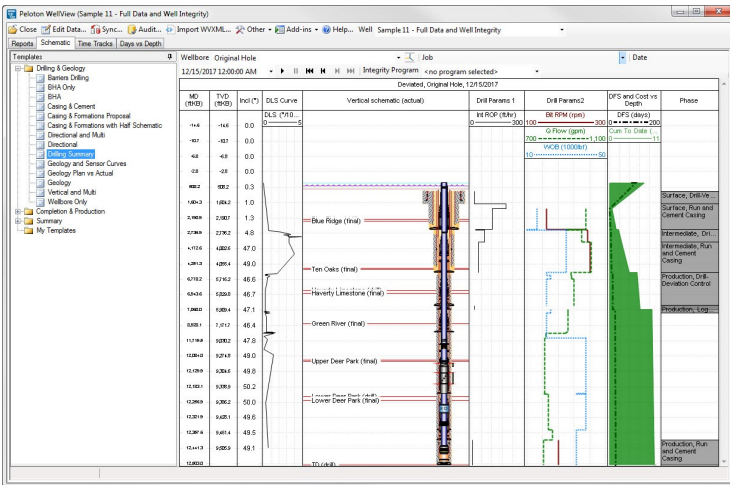
Peloton offers complimentary product webinars and you don't want to miss out! The complete webinar schedule can be found on our website under 'News and Events'. Some of the topics currently offered include::

- Introduction to LandView
- LandView Integration with WellView
- Tracking Division Orders in LandView
- LandView Integration with Peloton Map
- MasterView Task Manager & Data Warehouse Task 1.1
- WellView Vendor Data Import Strategies
- WellView Report Configuration
- WellView Schematic Configuration & Well Barriers
- SiteView Water Management—Workflows & Water Transfers
- SiteView Facilities—Inventory & Materials

Modeling a Well in WellView

What is a well? The concept of a well is one of the most misunderstood terms in the oil and gas industry. Each department's definition of a well and reference to a well depends entirely on their role and the information they need to get their job done. The concept may be further complicated in companies with assets in different countries or states/provinces, where regulators have differing definitions and data submission requirements. The good news is that Peloton's WellView solution can serve as the authoritative data source for one of your company's critical assets - the well.

To learn more, request a copy of Peloton's paper, "Modeling a Well in WellView", by emailing sales@peloton.com.

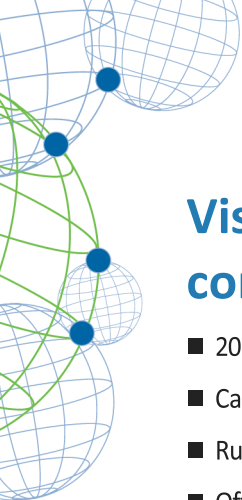


Having a visual record of the well has proven beneficial when communicating with departments who may not be as familiar with well structures and the relationship with the well's unique identifiers.

Technical Papers & Case Studies

Peloton has an inventory of technical papers and case studies available to our clients. Below are some of our most popular papers. To see all available papers, visit Peloton's website.

- Modeling a Well in WellView
- Using SiteView for Responsible Water Management
- Tubing Scan Analysis
- Tracking Lessons Learned in WellView to Improve Well Design
- Well Integrity in WellView
- Using Peloton's Data Migration Tool to Change Database Platforms
- RigView for Scheduling Management
- Implementing WellView for Directional Surveys
- Tracking Plug and Abandonment Details in WellView
- Integrating Oilfield Workflows through a Software Infrastructure
- Improving Cost Tracking Using the Work Order Manager



Visit Peloton at the following industry conferences in 2018:

- 2018 IADC/SPE Drilling Conference: March 6-8, Fort Worth, TX
- Canadian School of Hydrocarbon Measurement (CsHm): March 20-22, Calgary, Canada
- Russian Drilling Contractors Roundtable: April 12, Moscow, Russia
- Offshore Well Intervention Conference: April 24-26, Aberdeen, UK
- 2018 Unconventional Resources Technology Conference (URTEC): July 23-25, Houston, TX
- Engenious 2018: September 4-6, Aberdeen, Scotland
- Kazakhstan Drilling Contractors Roundtable: September 21, Astana, Kazakhstan
- SPE Annual Technical Conference: September 24-26, Dallas, TX

Save the date for our annual client user group conference & enjoy the Peloton Experience!

Our annual 2-day user group conference is scheduled for October 15-17, 2018, and will be held at the amazing JW Marriott San Antonio Hill Country Resort & Spa. Be on the lookout for our official invitation with details and registration information in late March!

