In This Issue

Creating Value from Sensor, Device and Equipment Data

Cards - SkySpark's All-New Data Presentation Option

Creating value from IoT device data requires four primary functional layers: *connecting to data sources, storing data, performing analytics, and presenting results to users.*

In this issue of the Insider, we focus on some of the newest presentation features including an exciting new addition we call Cards – which make it easy to create customized dashboards of operational data and performance metrics.
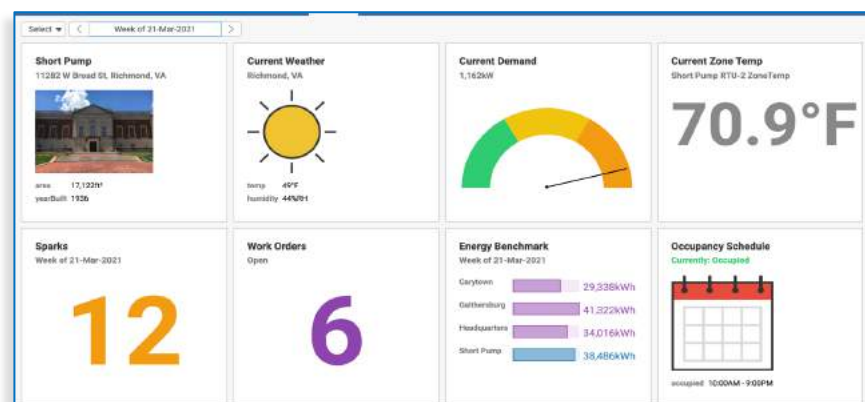
Let's take a look! →

Cards…

Create Customized Dashboards of Operational Data and Performance Metrics

As seen here, cards can display information with formatted text

Cards – our latest data visualization addition – bring easily configurable dashboarding to SkySpark. Yes, you read that right – now you can create dashboards that provide easy-to-understand summaries of key operational metrics **with both live** and static data and descriptive information.

Virtually any data in SkySpark can now be formatted to display in the user-friendly "cards" format. As seen in the example above, you can include images, formatted text, icons, charts, gauges, and numerical data – *all of the visualization widgets available in SkySpark Apps can be used in cards.*

Once defined, cards can be assembled into "tiles" with SkySpark's View Builder tools to create summary displays for users of all types. That's how the example on page 1 was created.

Cards can include graphical elements. Here is a simple card with one graphical element – a gauge which can show <u>live</u> or static values

AND make no mistake, **cards can display live**, streaming data from sensors and control systems. In the view on page 1, which is included in the latest SkySpark Demo project, the gauge and temperature values show live, updating values.

Cards…

Enabling a New Range of Possibilities for Data Presentation in SkySpark®

Here we see an example of how graphic images can be used in cards

This sample card uses bar charts to compare consumption across a portfolio of sites
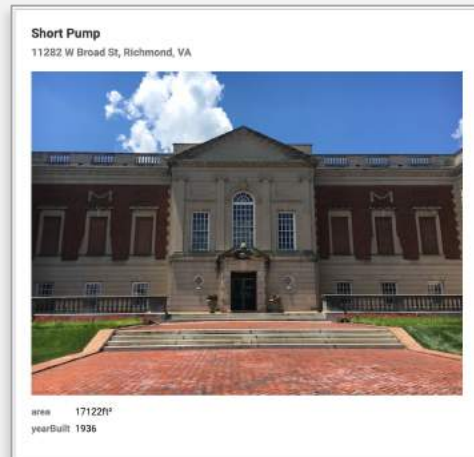
The real magic happens when you use SkySpark's "View Builder" to assemble cards into dashboard views that provide quick, easy-to-digest summaries of essential information including interactive controls to enable users to select items like date range shown below
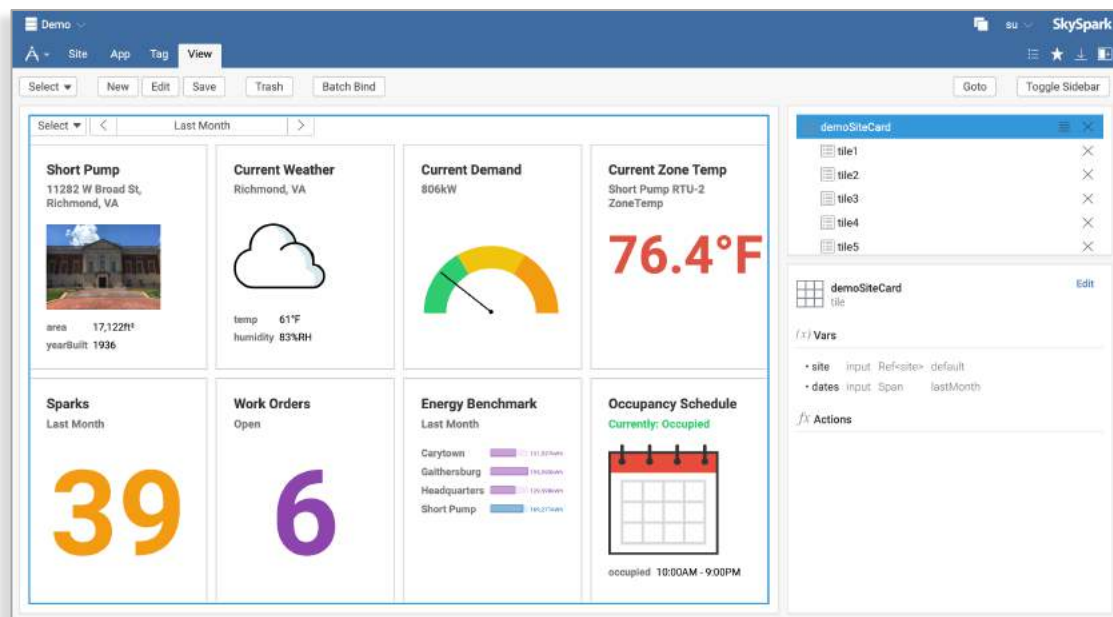
Cards add a whole new range of possibilities to SkySpark. *It's just another way SkySpark advances data visualization and presentation.*
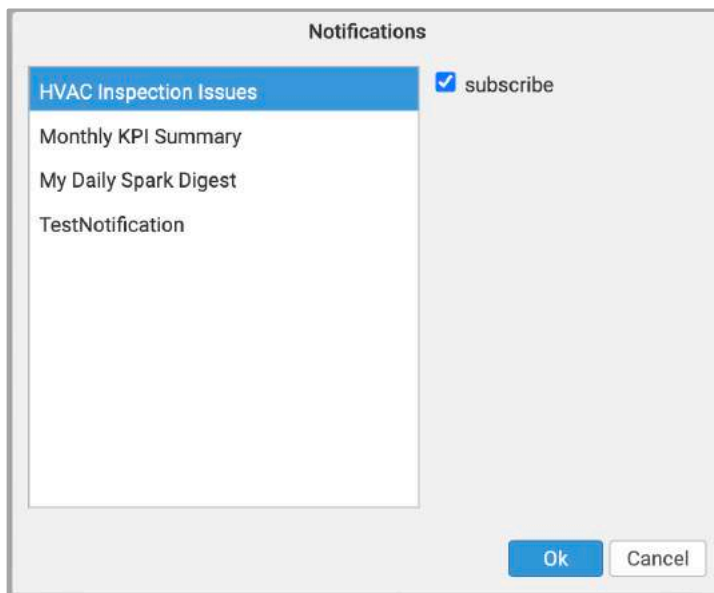
Notifications

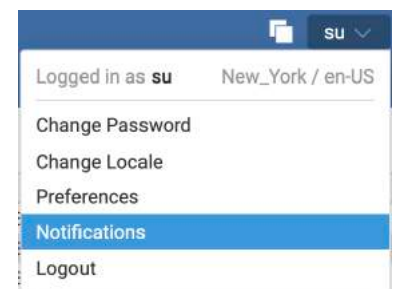## Automated Delivery of Sparks, KPI's, Reports and Cards

Another notable enhancement in the latest update to SkySpark are new features that streamline the setup of automated notifications – *automatically emailing essential information to users based on their specific areas of interest or job responsibilities.*

Notifications in SkySpark are based on the concept of "subscriptions to topics" – users subscribe to topics of interest with easy selection boxes.

Topics can include individual sparks, digests of sparks, KPI's, reports, creation or changes made to Arcs (workorders) – virtually anything that can be displayed in an HTML-style email. Plus, emails can include hyperlinks to SkySpark views and text-based **Cards** described earlier in this document.

Users access their notification options from the user menu

Notifications can be triggered (sent) based on pre-defined schedules, the occurrence of events, or initiated by user actions.
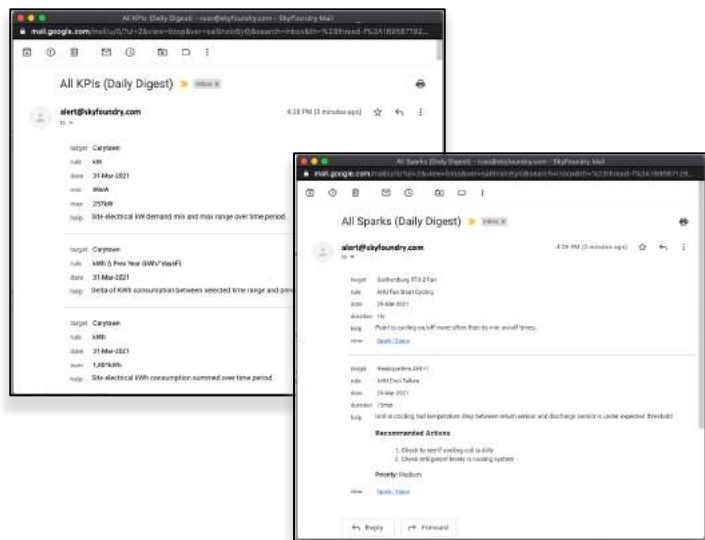
Notifications
Con't…

Below a notification is configured to be sent based on a schedule. In this example a daily digest of Sparks will be sent every day at 8 am to all users that "subscribe" to the topic – *My Daily Spark Digest.*

Notifications can be sent in a wide range of formats including HTML, formatted text, text-based **"Cards"** and links that take users directly to views in SkySpark. And multiple topics can be combined into "groups" to provide further simplification for users.

We've only scratched the surface here – as you can see SkySpark's new notification features are highly flexible and configurable, and it's easy for users to subscribe to topics of interest.
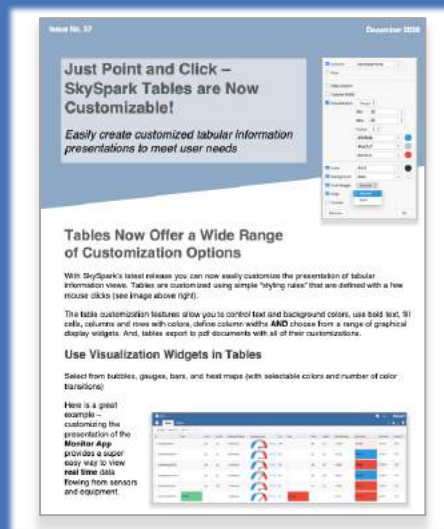
The Rest of the Story

Taking Analytics from *Identification to Resolution* with SkySpark's "Arc" Workflow Tools

Check out the Dec. 2020 issue of the Insider for details on the last major addition to SkySpark – the Arc Workflow Tools

Explore more data visualization and presentation options with SkySpark's point and click table customization

Easily customize tabular information presentations to meet user needs

The Layers of the Stack:

Connect | Store | Analyze | Present

- **Connectors to acquire data from external sources.** SkySpark supports a variety of data acquisition connectors: BACnet IP, Modbus TCP, Obix, Haystack, SNMP, Sedona, OPC UA, MQTT, SQL, CSV import (manual batch or automated), and a REST API. SkySpark also includes a connector development toolkit.

- A **database designed to store and normalize huge volumes of diverse data.** Sensor, equipment and facility data come from different systems, via different protocols, with different naming conventions and schemas. SkySpark's Folio database has been designed from the ground up to address this unique combination of challenges and unify data so that operators deal with it as if it came from one system.

- The **Analytics Engine** to process rules, algorithms, calculate KPIs, perform data transformations, pattern recognition, advanced math and machine learning. SkySpark's high-performance analytics processing engine – **Axon** – excels at providing this layer of the stack.

Find the Dec. 2020 issue of the Insider here:
https://skyfoundry.com/file/429/SkyFoundry-Insider-Dec-20---All-New-Workflow-App-Customizable-Tables-and-More.pdf

Learn More About SkySpark® and How to Apply the Industry-leading Data Analytics Solution to Your Application

Join us for a comprehensive demonstration webcast

Find our calendar of upcoming sessions and other events here: https://skyfoundry.com/calendar

Or contact us at: info@skyfoundry.com