# APPLICATION NOTE\ WIFI CONNECTIVITY

Introduction:

DigiVac has been able to expand users connectivity to their vacuum systems using the Bullseye Precision Gauge and the Bluetooth app, Vacuum Gauge, for over four years. In 2017 the app became compatible with the DigiVac Cloud, vacuumnetwork.org, a website that further expanded the customer's ability to view vacuum data while away from the system as the two viewing channels can communicate, making it possible to observe vacuum from anywhere in the world. Now, in 2018, wifi is available in the StrataVac. With a wifi card installed in the instrument, vacuumnetwork.org can be reached without the limitations of an app. It makes for even smoother delivery of real time data and better observation of system performance over time.

What is the DigiVac Cloud?

The DigiVac Cloud is an online URL, vacuumnetwork.org, that gauges with wifi cards can communicate with as a means of collecting data and viewing it from anywhere in the world. Customers are given a wifi SSID (server set identifier/name of network) and password, which can be used from any computer, tablet or phone to login and begin viewing their StrataVac's performance on a screen not attached to the gauge itself. If the StrataVac has more than one sensor or capacitance manometer, each gets their own unique customer ID and gauge ID and all appear on the same graph once connected to vacuumnetwork.org following one login.
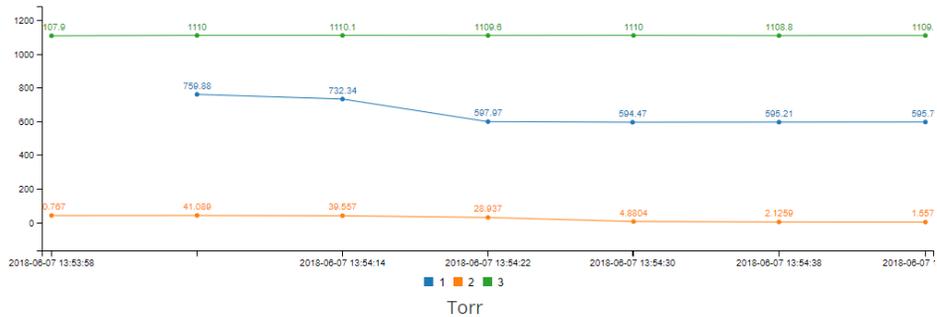
Time	Reading
2018-06-07 13:54:46	1.5578
2018-06-07 13:54:46	1109.4
2018-06-07 13:54:46	595.78
2018-06-07 13:54:38	595.21
2018-06-07 13:54:38	1108.8
2018-06-07 13:54:38	2.1259
2018-06-07 13:54:30	4.8804

How to Connect to Wifi:

The full instructions to connect your StrataVac to wifi can be found here as this is just a brief outline of the steps.

1. Locate the gauge's SSID and password on the bottom of the instrument
2. Connect to the network provided and visit http://192.168.4.1
3. In the menu options (three horizontal lines) go to gauge>customer
4. Set customer and gauge IDs for all sensors
5. Return to the menu and select "wifi"
6. Use your workplace credentials to login to your network
7. Enter your IP address
8. Test connectivity with a telecommunications program
9. Reconnect to your workplace network, if disconnected
10. Visit vacuumnetwork.org and login with one of your gauge and customer ID pairings

Application Example:

The wifi card feature for the StrataVac was just recently implemented so only a few customers have it in use, but it is expected to become a desired part of customer configurations. Customers that currently have this feature included in their instrument are the professionals working in labs and monitoring two or more sensors or capacitance manometers at once. Each sensor is generally plumbed into a different part of the system and therefore monitoring a different sector of the vacuum process. Wifi allows technicians running the tests to easily view the performance of each sensor, in comparison to the other sensors, online and in one place. This is ideal for the professionals DigiVac has spoken to because, as customers have informed, they can detect a problem almost instantly.

Gauge/Customer Setup

Vacuum 1

GAUGE ID	CUSTOMER ID
1	customer

Vacuum 2

GAUGE ID	CUSTOMER ID
2	customer

Vacuum 3

GAUGE ID	CUSTOMER ID
3	customer

A handful of professionals DigiVac team members speak to also seem interested in wifi for a much simpler reason. While yes, the fact that wifi captures their data excites all technicians, the real benefit for certain customers is the span of distance this allows. Many who work in the field cannot be in the lab or at one particular testing location for a long period of time, but if their colleagues set up a StrataVac and connect it to wifi, these individuals are still able to monitor the process from anywhere. It expands their ability to oversee and assist when troubles arise, despite being located in a different part of the country/world.

Conclusion:

The 2018 release of the StrataVac with wifi connectivity offers customers something new that expands their reach in both monitoring the process as well as troubleshooting processes. Additionally, it allows technicians involved in testing to multitask and put some focus on other projects. Wifi enables remote viewing of all sensors or capacitance manometers someone has connected to the gauge. To field technicians and supervisors who travel a good portion of the time, wifi acts as a window into the process location. They can see what the system is doing and provide assistance if any is needed. Additionally, in-house, technicians running the process can assess the run with the data found on vacuumnetwork.org to determine sensor accuracy.

DigiVac
Home of Vacuum Engineering Excellence
Precise Practical Personal