



ACOUSTIC
monitoring



APC where you
NEED IT



DCS
migrations



HIDDEN
fermentation



BUSINESS
IT support



PI in the
SKY



PLANT
sequencing



PLANT
wireless



WIRELESS
machine health

Upcoming Events

- View our achieved Pi in the Sky™ Webinar seen on Ethanol Producer Magazine. [www.ethanolproducer.com / events / webinar](http://www.ethanolproducer.com/events/webinar)
Or <http://ow.ly/ln4OL>
- We will be in attendance at the plant manager's meeting and the NEC.
- Thank you to Ethanol Producer Magazine for recognizing Direct Automation's Pi in the Sky product in a recent issue.

Brain Teaser

What can travel from Wyoming to Iowa while staying in the corner?

Submit answers to CarsonM@direct-automation.com. First one wins a prize! Use the same e-mail if you have a question you would like answered in the next issue.

Last issue's winner was Dan Boon with "because you can't take a picture with a wooden leg".

ISSUE

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ETHANOL
INDUSTRIAL
AUTOMATION



Are your Spray Balls running when you CIP your tanks? Find out for sure, every time it runs with Acoustic Monitoring. We'll install sensors and program your system to recognize the sound of your properly running CIP process so that if it doesn't sound right an alarm will tell operators there is a problem that needs inspection. This reduces a possible fail point that could otherwise result in an infected batch.

THE APACS STRUGGLE

We often talk to potential clients about their frustrations with the looming Siemens APACS obsolescence. Some systems are as little as 5 years old. If you have this system, make sure to include us in your conversations on your potential options. Keep in mind, although initially more affordable, an HMI replacement will set you up for future costs and does not remedy the situation.

Building Trust.

Clients deserve platform brands that are top rated, mainstream, and easy to use. Use of nonproprietary brands allow clients flexibility to make decisions about suppliers and ensure that training is readily available. This also ensures that parts and subsequent service fees will remain competitively priced.

When we replace the automation integrators at a plant, we run into a few methods that are administered that do not allow a client's freedom of choice. These methods tie a client to a particular brand or method that reduces his or her choice of who can work on their system. But there are ways to double check the situation you are analyzing to make sure you are not getting into a situation where your options are limited. I recommend:

- Call the company of the system brand you are considering installing to vet the likelihood of signing an employee up for training.

Many systems post training sessions online, but as soon as you go to sign up, they deny your request. If you run into this, beware that it is a sign that company wants to service your account and does not want to train you or any competition to work on your future system.

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Questions? Give me a call.

-Carson 1-605-464-1667



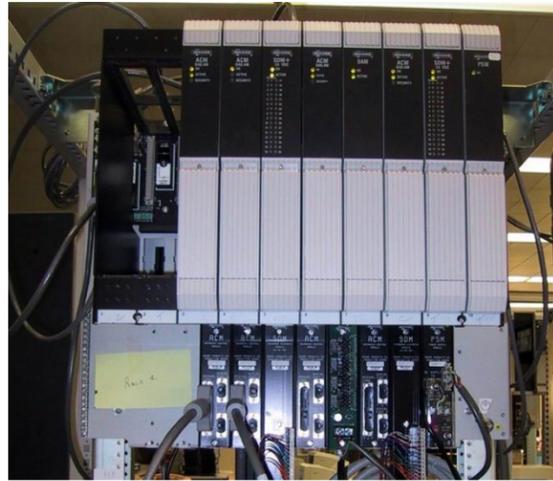
Why bother with more features?

Each new feature you add not only adds to the capital cost of obtaining that feature, but also to the time and commitment to train and accept the continued use of the feature. So when is it worth it and when is it not?

In the most basic sense, **it is worth it if you use it.** We only pitch ideas that have made sense for other clients in the past. Concept projects are only done for the most loyal clients and always done at a deep discount. Most ideas don't make it to market. We don't risk our reputation on untested concepts. But even the best projects are only successful if they are used in practice.

If you are concerned you will not use a feature, it is best to ask someone that already has it installed. Ask them if they will let you watch them use it. If it seems like something you and your employees would use, it would probably be a good project to implement at your facility.

We have clients to refer you to, if you need this type of assistance.



If APACs, Foxboro, Provox, Yokagawa or ABB System Six are in your daily vocabulary, call us for a free evaluation and proposal for a DCS Migration. 605-428-4300

The Siemens APACs DCS was installed in a majority of Ethanol plants up until 2009. During that time, Siemens issued a notice that the system would not be serviced or have parts produced after 2020. Integrators will try to get you to install PCS7 DCS with a phased HMI replacement approach.

Many other ethanol plants have the Foxboro DCS system. If you have version one, you may feel pressure to spend significant money on the upgraded version.

If you are one of the few ethanol plants with Yokagawa or ABB System Six, we can also assist you as many of those systems are outdated.

Whatever your present situation is, you have options: living with it as long as you can, rip and replace, or a phased approach.

If you want to live with your system as long as you can, it will be a test of your risk tolerance and patience for a slowing system. Having spare parts and trained programmers becomes very important, not just for the system but also the operator stations. Direct Automation has spare parts from migrations and we can help predict your critical failure points. If you want to vet this option, we'd be happy to meet and discuss the specific risks.

A rip and replace seems risky, but it is

Direct Automation's specialty. We can take your entire DCS out and replace it with a top-of-the-line DCS in the time span of a regularly scheduled fall or spring shutdown. This is the cleanest method. The downside is that its cost is not spread out over years. But after calculating all the upcoming costs of living with the old system, or using the phased approach, most GMs and PMs pick the rip and replace method. 2015 is booked solid, but let's meet so we can

Is it time to upgrade to a new DCS?

With a long useable lifetime, you should only have to replace a DCS once during your tenure at a company.

book your plant for 2016.

A phased approach is replacing only the HMI and operator stations and not the hardware. Then in a few years coming back to replace the hardware. This method is not recommended. It doesn't remove the risk of hardware failure and the need for people trained on two systems. Many times the hardware replacement is not included



in the decision. It ties you into a decision based on information for half a project. Leaving

you disappointed when the total project cost is calculated and compared in NPV.

If you are considering getting a new DCS. My best advice is to get many proposals in front of you, choose the best integrator to Rip and Replace your legacy DCS, and find the best way you can live with the one you have until then. Give us a call for a proposal. It is free and easy.

-Carson Merkwon
ChemE, MBA, PMP



"I finally know where all my data is!"

Your ethanol plant's DCS produces about 150 million data points a day!

Now, add Lab Data, PLCs, Operator Logs, Financial Data, Market Data, CMMS, and any other digital form to make interpreting a real headache.

We have all been there. Calling the operators for logs, emailing the lab for lab logs, mining a DCS historian, meeting with commodities for market data, just so the accounting department can run a report. And then have to do it all again the next week!

Direct Automation's Pi in the Sky™ has made it easier. We did this by:

1. Synchronizing all your data in one place.
2. Making the data available via the cloud.

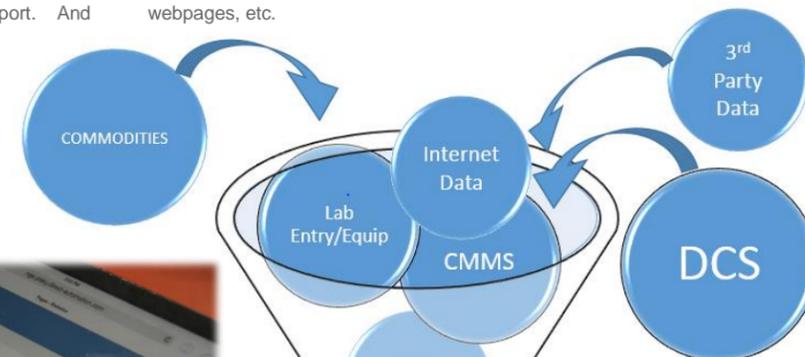
Access your data from anywhere with a secure SOX compliant login from any internet capable device. Like Cell Phones, Tablets, Display Monitors, webpages, etc.

3. Creating impressive and intuitive templates to display your data.

It is easy enough to use to create your own templates or export data to Excel, but we took it upon ourselves to make easy to use and understand graphics that our clients use every day. We will add special custom graphics for you at no extra cost!

Call me today to get a quote started for your facility.

-Carson 1.605.464.1667



EYE ON IT Current Industry Trends



Many ethanol plants do not use sequencing. Reasons not to get it include too many manual valves, turnover is low and your operators resist change, or it's not in the budget.

Despite these reasons, there is an uptick in adopting a sequencing add-on to the existing DCS. This process can make your fermentations more standard and remove human error and even result in running more batches a year.

The most popular customized sequencing packages are to carry out your SOPs on your Yeast Prop, Mash Train, and Fermentors. You can get this as an add-on to your current DCS or when you migrate to a new DCS.

Support Ethanol Production

Visit our page on Facebook or LinkedIn to help us connect with ways to promote ethanol at your plant. We can work together to get the word out on the positive effects of ethanol for our country.