

# Transcript

March 25, 2026, 4:33PM

**DA** **David Amos** 12:54  
Hey, Emily.

**EM** **Emily Malin** 12:55  
Hello, how are you?

**DA** **David Amos** 12:58  
Good, good. So I see we got people in the lobby. I guess we're just gonna keep it in the lobby until 2 minutes before or something.

**EM** **Emily Malin** 13:04  
Yep, Yep, I will open up the lobby and then everything. All of the settings should be good to go. But now that you're on here, let's try and share your screen.

**DA** **David Amos** 13:06  
OK.  
OK.  
OK.  
How how's my overall like lighting and the background and everything like do you think this is appropriate or OK OK cool cause I I can do like this.

**EM** **Emily Malin** 13:22  
Yeah, it's fine. Yeah, yeah, yeah, you're good.  
Oh, that's actually a little bit better. Yeah, that's better. Yep. There. Right. Oh, right there. Yep, that's it. That's the one. Perfect.

**DA** **David Amos** 13:32  
OK, I got a dimmer here, so go in the middle like there, right there. OK, cool.

**EM** **Emily Malin** 13:42  
And then I am going to real quick. I'm gonna write in the chat here just so that way

you can mute the chat. So I'm just gonna write testing.

OK.

So then you can mute the chat for now.

**DA** David Amos 14:05

OK.

John Shaw is gonna be joining and if needed software questions we can we can send his way too. So just but I can yeah.

**EM** Emily Malin 14:17

OK, perfect. I will add him to the people that can unmute themselves. Hold on.

**DA** David Amos 14:22

Oh, OK, sweet. It's good. Good that you have all that control. I'm I'm so tempted to hit this like let people join button. Well, I guess view lobby because I'm just used to like, Oh yeah, join. But yeah, it's still up. We don't want that, yeah.

**EM** Emily Malin 14:25

Yes, yes.

Yeah, we don't want that. Get out of there.

**DA** David Amos 14:38

Sorry, what's what's the testing in the chat? Is that about?

**EM** Emily Malin 14:39

Yeah.

Oh, just so that way you can mute it. Did you mute the chat? Did it come up on your window? Actually, it'd be better if you share your screen 1st and then I'll do that again for you.

**DA** David Amos 14:47

Oh.

OK, OK, here, yeah.

**EM** **Emily Malin** 14:54  
So do the do the live share real quick.

**DA** **David Amos** 14:55  
'Cause I didn't.  
Yeah, I didn't see the.

**EM** **Emily Malin** 15:00  
Oh, the ping, it didn't come up for you.

**DA** **David Amos** 15:01  
It didn't. I didn't see the ping, but I think it might still be muted maybe from last time. I wonder if that's it. But do you want to just maybe just run one more test real quick?

**EM** **Emily Malin** 15:06  
Okay. Oh, yeah, yeah, yeah, maybe. Yeah.  
Yes, but um, share your yeah, share your screen 1st and then.

**DA** **David Amos** 15:14  
Hold on. Well, like, yeah, it's still, it's still working on it. So, uh, oh, we're having difficulty loading your presentation. No, it's not.

**EM** **Emily Malin** 15:17  
Oh, got it. OK, perfect. Perfect. And I.  
Oh no, that's not good. That's not what we want.

**DA** **David Amos** 15:27  
There it goes, finally.

**EM** **Emily Malin** 15:28  
OK.  
See if I can see it. Sorry, I was gonna. Yep.

**DA** **David Amos** 15:33

I just wanna make sure I got the right one here.

**EM** **Emily Malin** 15:35

Yep, fly through it a little bit. I'm gonna forward this to John.

**DA** **David Amos** 15:46

OK.

Yeah, I put a bunch more thermostats in there to show different thermostats and.

**EM** **Emily Malin** 15:54

I saw that. Yeah, yeah, yeah. I think that looks good.

**DA** **David Amos** 15:59

Yeah, not to visuals. This is all about visuals. You notice I got like no text on any of these slides. It's all just pictures.

**EM** **Emily Malin** 16:02

Yeah.

Yeah. No, I think that'll be good. Well, and two, then it's good because then it's like, you know, you can just kind of fly through a lot of them and if people have questions, we'll stop them and make sure. So that's good.

**DA** **David Amos** 16:13

Yeah, I try to avoid the thing where you've got a slight, you know, text walls in your slides and then you're just reading the reading the text off the slide that everybody can read anyways, you know, just as a general sort of rule of presentation.

**EM** **Emily Malin** 16:22

Yeah, yeah, yeah.

I like that. I feel like that works the best.

**DA** **David Amos** 16:28

OK, why?  
Why did it stop?

**EM** **Emily Malin** 16:32

Let's see.  
It didn't stop a while.

**DA** **David Amos** 16:38

Seems to me no, no, it's just struggling like like I'm getting the spinny wheel as I maybe it's just 'cause I'm going through them so fast, but it's like it's struggling a bit. Like right now I'm stuck on slide.

**EM** **Emily Malin** 16:42

I don't think so.  
Uh oh.  
34.

**DA** **David Amos** 16:54

34 with a spinny wheel when I try to go next.

**EM** **Emily Malin** 16:57

Uh oh.

**DA** **David Amos** 17:01

It might just be because I'm going through it really fast there. Yeah, I think. I think it's OK. I think when we when we're doing it, I'm not gonna be jumping. I'm not gonna be trying to spin through 70 slides in one minute, so.

**EM** **Emily Malin** 17:07

I mean into, yeah.  
Yeah, yeah. And it'll hopefully have loaded up by then too, so that's good.

**DA** **David Amos** 17:17

I think that's part of it 'cause it's like online, so it's sort of buffering.

**EM** **Emily Malin** 17:20

Yeah.

Yeah, at the same time.

**DA** **David Amos** 17:24

As I'm loading it, yeah, so it's probably like looking a slide or two ahead and OK, so anyways, every everything looks good. All my notes are there. Good. Yeah, ready to roll.

**EM** **Emily Malin** 17:31

Mhm.

Yep, I looked at all the Legos and you're good there. So that was good. I'm gonna type in this chat testing one more time to see if you get a ping while it's on then.

**DA** **David Amos** 17:36

OK. Thank you.

Sure. Yeah, please. And I did. And I got the ping and I and I zed it. I zed it. So we should be good now. Yeah. Thanks.

**EM** **Emily Malin** 17:45

Get anything? OK, see it.

Perfect. Then you won't be getting those over and over again, so that's nice. Now I'm going to paste.

**DA** **David Amos** 17:56

Yeah.

I think what happened is when you did the first test, the the lobby thing was already there, so it was like over top of it maybe. I'm guessing that's what happened.

**EM** **Emily Malin** 18:05

Oh, yeah, yeah.

Yeah, Pamela said. We have 156 registrants, so we got quite a few on that last one.

So hopefully we'll get probably right around 100 people. So we'll see. We'll probably start right at.

**DA** **David Amos** 18:15

OK.

OK.

Yeah, yeah. For for some reason the other day I thought you said we were like 200 or something, but maybe I misunderstood that. Oh, OK.

**EM** **Emily Malin** 18:28

I thought we were, but maybe I was looking at the one from last month. I was maybe looking at Zach's.

**DA** **David Amos** 18:33

Yeah. Oh, OK. OK. Yeah, too bad. I understand, though. It's like our, you know, a lot of part for a lot of partners, they're like, oh, why would we use PDS? They're just trying to take Eric away from us.

**EM** **Emily Malin** 18:36

I I know partners and PDS. It's like.

I know, I know. And that's what we're trying to tell them. Like, guys, come on, those are the ones that we want to join this webinar. So I don't know. We'll see. We'll we'll shove it down their throats. They'll eventually like us. It's fine.

**DA** **David Amos** 18:50

Yeah.

Yeah, it's OK. We'll.

Yeah.

Yeah.

We're not. Either way, we do, yeah.

**EM** **Emily Malin** 19:05

Or not, you know. But that is life. Such is life. Let me see here.

**DA** **David Amos** 19:11

There you go.

**EM** **Emily Malin** 19:29  
You can also hit the little C on the waiting I because once we once it hits, I mean it doesn't matter once it hits.

**DA** **David Amos** 19:33  
Oh yeah, there we go.  
Yeah.

**EM** **Emily Malin** 19:41  
12:00 I'll just open the lobby and it won't make that sound for anybody, so that's always nice too.

**DA** **David Amos** 19:47  
Yeah.

**EM** **Emily Malin** 19:49  
And then I can.

**DA** **David Amos** 19:49  
OK, cool. So we got nine people in or eight people in the lobby. Most of them look like actual customers other than Amman I saw there.

**EM** **Emily Malin** 20:05  
OK, I just need to make sure I have all my things. Yep, I see everything I.

**DA** **David Amos** 20:11  
close Slack so I don't get Slack popping up and I'll close Webex too. Not gonna close teams. That's not gonna be good if I do that.

**EM** **Emily Malin** 20:14  
Oh yeah, yeah.  
Yeah.  
No, keep that one open.

**DA** **David Amos** 20:25  
Yeah.

**EM** **Emily Malin** 20:28  
I'm gonna quickly go run and get a coffee refill, but we should be.

**DA** **David Amos** 20:32  
Sounds good. OK.  
Good, good.

**JS** **John Shaw** 20:40  
Hey Dave, I'm here just in the background.

**DA** **David Amos** 20:43  
John, how you doing?

**JS** **John Shaw** 20:45  
Uh, it's been an interesting couple days, but good. How about you?

**DA** **David Amos** 20:49  
Yeah.  
Good like work wise or?

**JS** **John Shaw** 20:54  
No, just personal stuff.

**DA** **David Amos** 20:55  
Everything. Yeah. Can I see your shirt?  
Very nice. All right. Very presentable. Yeah. You can. Yeah. You don't have to have your camera on. Just maybe, maybe if we get to it, like, like, you know, like you're thinking if we get to a question.

**JS** **John Shaw** 21:05  
Work.

**DA** **David Amos** 21:12

From the on the software side, which I wouldn't be surprised if the bulk of the questions are software and I think just by default I'll try to handle it, but if I but if I can't or if you hear me say something.

**JS** **John Shaw** 21:23

Yeah.

**DA** **David Amos** 21:28

You know that's wrong or I'm missing a major thing. You can feel free to also jump in.

**JS** **John Shaw** 21:33

For sure, yeah. So I'm just writing up specs in the background. Sorry for the late notice for attending. I actually had a whole open at this time this morning, so that's the only reason I'm here. But yeah, if I get, if I have things that I can answer pretty quickly, I will just post it in.

**DA** **David Amos** 21:44

OK, great. Yeah.

**JS** **John Shaw** 21:53

Slack for you so that you know um, you can reference that and.

**DA** **David Amos** 21:56

Oh, OK, I actually.

I turned Slack off because, but actually, no, that'll work. I got Slack on my phone, so I can have my phone here. Yeah, that'll work perfect. That'll work perfect. Yeah, I just didn't want it popping up on my computer and being distracting.

**JS** **John Shaw** 21:59

It's.

OK.

Yeah, and then.

Yeah, for sure. And then that way if there there are things that I can answer on the software side, I'll try and have it there. You can answer them from your side. And if there are like really technical questions or if you want to just pass it off to me, you know, just say my name and I'll appear.

**DA** **David Amos** 22:14

OK.

Sounds good. Sounds good. Awesome.

Um.

Yeah, apparently we've got like 150 sign ups or something. So we're like half of what Zach. So Zach with his Intellivault had like by far the most he had 300 and then all the other webinars have been like around the same like 150 or something.

**EM** **Emily Malin** 22:47

Yeah.

**JS** **John Shaw** 22:53

Yeah, no worries.

**DA** **David Amos** 22:53

So, yeah, Intelisk, sorry, yeah.

**JS** **John Shaw** 22:57

Yeah, E sketch is a big one. Um.

**DA** **David Amos** 23:00

That was a big one, and that one went for like almost 2 hours too. It went well over half an hour over with questions.

**JS** **John Shaw** 23:04

Yeah.

Yeah, I got nothing after this until our end studio touch points, but I did say I'd help Shinya if I needed to. So I may be bouncing around, but I'll try and be here to support you so I can.

**DA** **David Amos** 23:14

OK.

OK, OK. Well, if you do have free time, maybe we can meet and talk about the PCN stuff earlier if you're if you want to, we could, we could just play it by ear, yeah.

**JS** **John Shaw** 23:28

1.

Yep, I should should be able to.

Yeah, I I mean, I'm open today. Whatever time we can find is is all good by me.

**DA** **David Amos** 23:39

OK, yeah, I I think I pretty much got it all put together. I just wanna get your stuff in there and go over that.

**JS** **John Shaw** 23:47

For sure. It's just normally I just, you know, I think in the future I'll just send you my numbers, but for the first one, I just wanted your feedback.

**DA** **David Amos** 23:55

Yeah. No, no, that's good. Yeah, I wanted to go over it with you anyways.

**JS** **John Shaw** 24:04

Sweet.

18 people are really nice.

**DA** **David Amos** 24:12

OK.

**JS** **John Shaw** 24:15

That'll go fine.

**DA** **David Amos** 24:17

Oh yeah, yeah, I'm not, uh, not too.

Too worried about it.

**JS** **John Shaw** 24:23  
I'm gonna go off camera here.

**EM** **Emily Malin** 24:25  
Hi, guys.

**DA** **David Amos** 24:26  
Sounds good. Yeah, Emily.

**EM** **Emily Malin** 24:29  
Hi, John. OK.

**JS** **John Shaw** 24:30  
Hey.

**DA** **David Amos** 24:32  
Sure.  
John will come on camera if and when we have a software question that we need his help on.

**EM** **Emily Malin** 24:39  
Perfect. Perfect.  
Rush in their way. Give them about two more minutes and then I'll open up the lobby and I'll give you a quick introduction and I'll copy paste all my text in here for all the other stuff and then we should be good to go. I'll start the recording. Everything will be good.

**DA** **David Amos** 24:51  
Yep.  
Good, good.

**EM** **Emily Malin** 24:58  
Perfect.

**DA** **David Amos** 25:01

And then, um, yeah, so you're gonna touch on the questions, Emily, and sort of the format we're gonna try for.

**EM** **Emily Malin** 25:04

Mhm.

Yep, Yep, exactly.

**DA** **David Amos** 25:09

Yeah. So any questions that are either too like lengthy or require a bit of research, we can always just do the, hey, we'll get back to you on this. So I imagine there might be a few of those. So I'll make you, I can make you.

**EM** **Emily Malin** 25:18

Yep, Yep, exactly. And a couple of them too. Like if it if it doesn't necessarily make sense at the time frame, I'll just make a note of that question and then I'll ask it to you at the end.

**DA** **David Amos** 25:30

Sure. OK. Yeah, that makes sense. Yeah, it was like.

**EM** **Emily Malin** 25:32

Like if it if it doesn't really fit in the narrative, but somebody had a question, I don't wanna like take a bunch of time if it's gonna be like a weird off the cuff question, so.

**DA** **David Amos** 25:36

Exactly.

Yeah, we don't need to. We don't need to sidetrack midway. We can always do that at the end, yeah.

**EM** **Emily Malin** 25:43

No, no, we don't want to be in the weeds.

**DA** **David Amos** 25:48

Yeah, not too much. This is a pretty weedy presentation to begin with, but a little weedy, yeah.

**EM** **Emily Malin** 25:50

Yeah, that's true. A little weeds, just tiny weeds, mini weeds, yeah.

**DA** **David Amos** 25:57

Yeah.

**EM** **Emily Malin** 25:58

Sounds like mini weeks.

**DA** **David Amos** 25:59

And you eat, yeah.

**EM** **Emily Malin** 26:04

It's real quick.

Thank you.

I'm gonna go ahead and open up the lobby now.

**DA** **David Amos** 26:16

OK.

**SP** **Sam Pradhan** 26:48

Hello. Hello.

**EM** **Emily Malin** 26:51

OK.

Hold on. Hi, everyone.

We get a couple of thumbs up in the chat. Normally we mute you all, so sorry, but just to make sure everybody can hear us, there they are.

Thank you.

Perfect. Perfect. We'll give everybody just another couple seconds here to start joining in.

Thanks everyone for being here on time. This is our timely crew. We love that.

S.

OK, just a couple more seconds here.

OK.

Just so everybody knows, we are recording this meeting. We'll go ahead and get started now. We always get about a lot of stragglers coming in in that 1st 15 minutes. So you know, they'll they'll miss the best part. It's fine. It's not the best part. The best part's coming up. But anyways, hi everyone. Good morning, good afternoon, wherever you guys are. We really appreciate.

Everybody joining, welcome to this month's webinar. We have Dave Amos doing our PDS team Professional Development Services. I'm Emily. I'm part of the marketing department. You guys can always get in touch with me for any of these webinar questions that you have. My e-mail will be in the chat over there on the right.

Just a couple of brief housekeeping items. Your guys's mics are all muted throughout this. If you've attended our past webinars, normally what we do is just have you put the chat or put the questions in the chat and then we save all those up until the end. This webinar is a little bit different just because of the subject matter. We're kind of jumping from thing to thing. So what we are going to do.

Is if you have a question, pop it into the chat and I'm going to be monitoring the chat the whole time. So just that way you know if it if it pertains to that particular section, I'll go ahead interrupt Dave and we'll get your questions answered kind of on the fly. If it's too in the weeds, if we know that the question is going to take a lot of explaining, we might save it till the end. So.

If your question doesn't get answered, don't panic. We'll still get to it at the end. We should still have some time there. Couple other things. Our next two webinars that we have planned. Our April webinar, April 28th at 10:00 AM will be a what's new in Red 5, specifically around the Red 5 Edge T1L via.

As well as a little bit on the red by field, the T1L1 will be very, very close to release if not already released by that time frame. So that'll be the heavy focus for that one. And then in May we will be doing our equip webinar and that one will be pretty cool. We're going to have two of our equip vendors, Milesite and cetera on the line. So that one will be May 21st at 8:30 AM, obviously Pacific Time and I put the registration in the chat for you guys over there. My e-mail is also there as well. And again, I'll type in there that we are doing questions on the fly as all of you start to trickle in here and as.

Always all of this content will be bundled up and sent to you guys in a link with a

survey after this. So you will get the product presentation, you will get the transcript as well as just a couple of other collateral items, anything like that and that survey itself. So nobody needs to ask that throughout, I promise.

You. I will give you all of this. And without further ado, let's hand it off to Mr. Dave Amos. Here we go.

**DA** **David Amos** 31:05

Great. Thanks, Emily. Great. Welcome everyone. Thanks for joining. So I'm going to be talking about our group PDS within Delta Controls and what we do, who we are and I'm going to go over a bunch of the variety of solutions that we've.

**EM** **Emily Malin** 31:07

David.

**DA** **David Amos** 31:23

Worked on just over the last few years and give you an idea of what we can do for you. I guess to start just what PDS is, we're essentially Delta Controls service group. So we're available to all customers. If you're a customer of Delta Controls, if you buy Delta Controls product, you can also.

Also by PDS services. Now of course, I understand most partners are very capable, so there's typically not an ongoing need for our services, but sometimes if you have a particularly challenging project or you're particularly busy.

You know, that may be a time when you're interested in getting our help or to to implement a unique solution that that we're capable of.

So yeah, what I'll be going over is basically the team, the services, sort of the the range of services we do, how we engage with customers, so how we, how we, how our agreements work. And then I'll be mostly focusing on the solutions and just giving you a sort of a smattering of the solutions we do and kind of give you an idea of the breadth of the.

Of the work that we that we have done and can do allowing for about 40 minutes I think for the presentation, 20 minutes Q&A I think as Emily mentioned Q&A will be sort of ongoing. So if anything pops up during the presentation, I think you can put it in the chat and we'll try to address it.

So, yeah, so we're we're part of Delta Controls, we're not part of PDS is not part of the product development. So we're not, we're not building products for the market,

we're building solutions for particular projects for customers. Occasionally at the conclusion of our project we have.

Maybe some cool piece of software that others could benefit from and in some cases we've pardon me, we've released those essentially. So we have, we do have PDS products so to speak in the form of like Intel web modules and essentially all of those started out as a customer project and then ended up as here's something that we can also license to.

Others as well.

Oops, wrong button. OK, so so here's what our team actually looks like. So we're we're kind of divided into three different solution teams, each with a different focus and then myself and two project managers kind of oversee all of the projects and. And especially like the contracting side and the billing side, Brad, he's a bit more involved in our sales support processes and solution development. Darren deals more with the contract delivery, legal billing processes and then myself, I kind of just oversee the.

Whole team and our and our processes and occasionally get involved a little bit in projects as well. I have a pretty long controls background so I always like to be a little bit involved myself where I can. So our three teams are sort of the control control system solutions. So this is our standard.

Control shop drawings, engineering. There's 40 plus years of controls experience amongst the the three people on that team. UX Solutions, which is essentially graphics or anything sort of graphic or drawing related.

That's led by Ryan and there's about 15 years experience between the two of them.

And then John leads our software solutions team and we've got the the four folks on the team. John has a ton of experience himself, I think 20 years of Delta experience.

And over that time, you know the software team has built, I'd say hundreds, possibly even approaching 1000, I think sort of custom software solutions. So a lot of a lot of experience there looking at the numbers of projects we do.

You can see sort of in the middle of this slide the number of projects that we did last year. So we're getting up close to 300 projects across the teams. They vary in size quite a bit. So we do projects, projects that are a few \$100 all the way up to like. \$100,000 depending on depending on the the scope of the project.

Here's a bit closer look at the the services that each team does. So as you can see the our control solutions that covers really, you know, engineering, shop drawings, programming, remote commissioning, also energy optimization. So we're familiar

with the guideline 36 sequences and implementing those.

Helping on the engineering, consulting and customer training as well. UX team, we do all sorts of graphics as well as we do the thermostat faceplate customizations. So and I'll be looking at that in just a minute here as well.

Look a bit closer to that developing templates specific to partners or end users. So following color schemes and involving logos and the styles that different different partners would like to use. And then on the software side, it's traditionally it's been mainly Intel web modules.

Now we also do what we call DLM Delta Loadable modules into the RAD 5 controllers and that allows us to do integrations at the controller level, which provides sort of an additional layer of sort of reliability. What we don't really do on the software side, we don't really get into the firmware, so we're not really.

Updating, um, sort of core updates to Intelli web or core updates to the controllers. Um, but everything's sort of, um, peripheral to the core I would say.

So how we work with customers, we sort of have two main paths that our agreements work with. One is just standard project quoting. So we got a scope of work, we put together a quote and then we work through it. The other way is that we do.

What we call a support agreement, which is essentially AT&M contract or time and material contract and that allows us to be you know obviously flexible with the scope and then it also kind of avoids some of the the time and cost involved with scoping out particularly when you have a maybe a project that.

It doesn't have a very clear scope. We do probably about, I would say about 3/4 of the projects we do involve the quotes and then probably about 1/4 of the work we do is on the TNM side.

**EM** **Emily Malin** 37:52

On that, Dave, we had a quick question about if we have published rates for this or if all of these are just quoted ad hoc based on project by project.

**DA** **David Amos** 37:54

Yeah.

Yes, we do have published rates. I believe if you go on to online ordering and you actually, you know you type in the search bar PDS, it actually brings up the PDS rates and then you'll get the rate with your multiplier applied.

So yeah, there's standardized rates. And yeah, if there's any trouble getting ahold of it, definitely just e-mail us and that can be shared, yeah.

**EM** **Emily Malin** 38:23  
Perfect.

**DA** **David Amos** 38:28

Yeah. And so how you do that is e-mail. So any proposal requests or if you want to just any questions in general about pricing contracts, proposals, sales at Delta Controls.com. So they handle all of our proposals. If we have any ongoing projects, then we usually deal with it through our PDF.

PDS e-mail so PDS at deltacontrols.com. If there's any questions also like technical questions or you just want to run ideas by us, feel free PDS at deltacontrols.com. You can throw some ideas by us and then we can tell you what we think.

Everything that we do is tracked in Zendesk, so actually with either one of these emails. So when you when you e-mail us, everybody on the team has access to it. So if somebody's on vacation, we can still pick it up. So it's not just the, it's not just one-on-one cons, it's it's the whole team is there.

So we can continue the open, open communications.

OK, now I will get into the bulk of what we're gonna look at, which is solution examples. So there's quite a wide variety and we will start with the EZNS. I'll say really should be EZNX. So any Intellisense thermostat, whether it's EZNS, EZNT.

Or any of the varieties of such, we have the capability to do these custom Mylars. I think there's a we have a few partners that do quite a bit of this and then we have a large number of partners that don't and and understandably I mean it's there is an extra cost for it.

What's you know important to understand too though is that it's it's a fixed cost. So we we don't actually there's no premium on a per stat basis there. What there is, is there's a single fixed fee to basically develop that custom Mylar regardless of the quantity. So if you have a.

You know a large project coming up and you have 400 thermostats that that initial cost, it's the same whether you had that 400 thermostats or you had one thermostat. So as you go up in higher quantities, you know it becomes much less of a of a burden.

So yeah, there's unlimited order numbers. You pay the standard price for the stat

after we've developed that custom mylar and typically we order in bunches of I think like 50 or 100. So usually what happens is if you put in a large order, we've usually we'll usually have a little.

Bit of extra stock as well that can help feed the next couple smaller orders, but it's important to kind of plan ahead and and figure out.

**EM** **Emily Malin** 41:10

So just to clarify, somebody had a question just is, is there still a setup cost for each run slash order of the custom mylar that's ordered?

So if you have multiple, I think they're meaning if you have multiple every time there's a set up cost for each run slash order.

**DA** **David Amos** 41:21

Um.

Yeah. So there's, so there's the initial cost, which I'll just say is the higher amount. So that's to create the actual design, run it sort of through the engineering to the Mylar manufacturer, get it in their system. And then there's a reorder cost, which is a lower cost, which is I think 1/4 of the price, so.

So if we do a project and you've got your 500 thermostats and then a year later that same customer wants to order more or you've got a additional expansion, there is a cost for a reorder to do another bulk order, but it's it's a much lower cost and again it's a fixed cost.

**EM** **Emily Malin** 42:04

Perfect.

**DA** **David Amos** 42:05

So it's not on a per stat basis.

**EM** **Emily Malin** 42:07

Perfect.

**DA** **David Amos** 42:11

Yeah, and of course you can always order a lot, put them in stock, have them

available, but you know, then you get into sort of warranty type thing. So does does require a bit of planning ahead.

**EM** **Emily Malin** 42:19  
Yeah.

**DA** **David Amos** 42:22  
Yeah. So I'll just show you a few examples of some of the ones. So I mean, I'm, you know, these are, these are partners that we work with. So you may recognize some of these. These are. So these are branding examples, you know, getting getting your name on the stat. So I think anytime you have a job where there is high visibility, a lot of public, you may be interested in getting your name.  
If the customer allows for it, it's it's it's not a bad way to go. Also, it's not that uncommon to have the end customer want to have their name or logo on the stats. So we see here we have like a university logo.  
The customizations. Here's some more branding examples, partners. We also get into sort of unique button layouts as well. So here we have a couple of examples of different lighting zone layouts. So we've got like a four lighting zone. Example a six lighting zone example on the right there. This this one gets really complex like the one on the left here. I'm not even I'm not even sure what all these buttons are, but it looks like one is probably a yoga room at the top there. Maybe like a meeting mode something. Can't tell what that.  
Right one is, but as you can see, it gets whatever you can think of, whatever can draw and whatever can fit on the space can be done. So it allows for quite a variety of unique layouts. Here's some more sort of branding, mission statement, inclusion.  
Um.  
Here's actually get getting some sort of language supplementation on some of the buttons. I think we've got Chinese, I think on some variety of Chinese on the buttons on the left there and also on the right here we have we actually have Braille and my understanding is we were able to work with the with our Mylar supplier and actually get them to provide a.  
Braille Mylar. So that's even a possibility, which I didn't realize till I took a closer look and ran through these.  
Great. Um.  
Moving on, I'll show you some of the graphics work that we've done. So this is just

referencing a case study that was put together by marketing. In this case we we did work, we were working for the partner, so we're not working for the end customer. Most of our work is is for partners of course.

They were looking for a graphics upgrade. I think the partner maybe wasn't as familiar with the graphics package or didn't have the time, so they involved us. So this was essentially sort of a a modernization project. So taking the version three Orcaview graphics, moving it up to Intelliviz.

And we also did a a sort of a branding at the same time. So we incorporated the customer branding colour scheme. So their colour palette is is used throughout the throughout the graphic layout. On the floor plan we have a we have a heat mapped floor plan solution so.

We have the sort of cold zones, warm zones marked out. It's also layered, so there's a little button there to switch between showing the VAV names or the room names, and that's a pretty common sort of element that we include with a lot of the floor plans is layering to show different elements. We even have ones where we where we layer on like the.

The duct work or the, you know, the piping, just so it's not so messy with everything at the same time, but how being able to, you know, toggle on each layer individually, that's a that's a fairly common thing that we have.

Um, same customer. Here's just a 3D unit graphic, still maintaining the branding throughout.

Here's an example. So this is a different project. So this is a this is what I'd sort of consider ultra high complexity system. So here we've got a high density of points. We're trying to maintain a bit of empty spacing so that it's fairly easy to read. I think this is a chilled water glycol system.

There's also color coding that's sort of included in it as well, so you can separate the primary side from the secondary side.

Yeah, there's a lot, there's a lot of data points in this and I think as well it has, it's all scalable so it can be zoomed in, zoomed out and still maintain the all the correct aspect ratios.

Here same customer, another system. So this is the interconnected chiller heat recovery system with heating water loop on one side of the chiller, chilled water loop on the other side. And again it's color-coded.

For the hot side, cold side, red, blue, there's also supply return color coatings. You got the darker red for the, you know, the hot water coming out. You got the a little

bit lighter red coming back. Same thing on the cooling side. You got the dark blue for the supply side, lighter blue for the return side.

Here is a 2D HU.

Same site. So we're finding quite an increase in popularity of the 2D graphic palettes, very sort of function focused as opposed to, you know, I guess graphically focused. So we've been getting a lot of requests for this type of graphic and anytime we do a graphic project as well, like once if we do a project with you, you now have essentially that palette. So that's that's part of the, I think the value that we provide when we do a graphic project is you now have access to that.

You know those those palettes and those templates to use so your own graphics department can use them going forward.

Here. Oh yeah, so here's I'm gonna talk about something different that we've done and I call it an end user app. It's not exactly an app, but this is this has come up quite a bit is sort of this scenario where we have a a a customer come to us and ask can we build an app?

In general, the answer is yes, we can, but it costs a ton. So app development is very expensive. We have, you know, at Delta Controls, we have entire portions of our software team with, you know, many people involved.

And it can take, you know, months or even even years I think to get sort of an app out. And then there's always the constant updates. And if you're doing it for iOS, there's there's a whole other layer of complexity. So building apps in general, like on a, I'd say on a project level is not really cost effective.

But we have found a pretty cost-effective way, sort of a workaround and I'm I'm sure probably some partners have come to sort of similar types of solutions, but I sort of call it the app that's not an app. So what you're seeing here is the.

Actual screenshot that that was actually taken from my phone. So that's this isn't just a a mock-up. This is like an actual view of of the end result. So essentially what it is, it's a mobile ready graphic. It's very reliant to to perform the solution. It's very reliant on Intelli.

That's because in telecloud you have a publicly accessible URL, so anybody can access it essentially from anywhere as long as they're, you know, as long as they have cell reception, which is essentially everywhere at this point.

So what the solution entails, it's basically just an Intelliviz graphic. It's mobile ready, so it's scalable for all the different phone sizes and then it's all based on the the user permissions and the groups and basically having the user set up so that they just.

Go straight to this graphic when they log in and once the sort of basics are set up, then the customer can administer it, add new users, set their starting graphic. So from a customer or say end user point of view, they're basically, you know, on their phone.

Pull up a favorite link so it would be, you know, customer whatever the name is. [intellicloud.com](https://www.intellicloud.com) login page so they'd have their unique user password and then it takes them to their, you know, to their app screen and that's all they can do so they don't have access to anything else.

In Intelli web or Intelli cloud, just that single graphic page. So it's all you know it's a it's a solution that's built into the software we already sell. There's no special add-on or anything. It's just using the software in that way. So we've we applied that for.

For this customer and it and it worked very well and of course the the cost was you know in the sort of I'll say 10s of hours as opposed to the 10s if not hundreds of thousands of dollars. So very cost effective way to kind of give that app experience without actually having to develop the app.

So we're happy to talk more about that solution if anybody's interested or have a sort of variation on it that you'd like to try.

Here I'll touch on our engineering design services. So we do of course engineering design programming. I I I'm not gonna really talk too much about programming cause I think it's there's there's not a lot really to say about it. We we're we do we do a ton of GCL programming of course.

But prior to that, of course, there's the engineering side. So this case study is looking at a particular partner that was a new partner to Delta Controls. They had sort of little to no experience with Delta Controls and they were taking on a very large complex project, so they needed help.

Help. So that's where we came in. So in this project we provided the essentially the entire suite of engineering services, design, shop drawings, programming, graphics and then we provided sort of remote commissioning support to help them.

Get the software up online and get everything set up.

One of the unique things about this project is there was a compliance review, so we got involved in that as well as part of the engineering service. So that involved going through the specification, marking it up really line by line, item by item. We had to mark whether we complied with the spec.

Or if we complied with a deviation, or if we're asking for an exception. My understanding is this is becoming more and more common in the industry. I never

saw it myself 10 years ago when I sort of last was involved in as working with a partner.

But so that's one of the sort of part of the engineering service that we can provide as well.

Here's a look at our drawings. Right now we do our drawings using a actually a a partner supplied engineering package. We use Unity, so some of you may have heard of that.

All of our drawings typically include a legend page like this and then we get into wiring panel layout details. The level of detail that we do in our drawings is largely driven by the customer, so.

Whatever your standards are usually drive what our standards become. So we do have, we do have sort of like a standard that we would fall back on. But typically when we're doing, when we're doing engineering work for a partner, they would send us a example of what their drawings typically look like and then we would try to.

Match that as best as possible.

Here's an example of a system drawing details. So we do get fairly detailed schematics, points list, bomb at along the bottom there. Here's an example of VAV diagram damper schedule.

Pretty straightforward stuff. Hot water schematic. Uh, sort of the panel layout, the Intelliweb or sorry Intellibus controller and module layout.

And then just mentioning the remote commissioning services. So particularly when we're working with partners that have newer techs in the field, this can be a really good way to enable them to be, you know, high value for their time. Also avoiding, you know, large cost of having to fly, having us to fly.

Fly out to site and and be there working with them so we can kind of be available on call as needed. So typically when we do a remote commissioning support, it's a it's done as sort of like a time and material thing where we have a, you know, a block of hours and then we're available as needed and then we just bill for whatever time is used.

And that allows us to work step by step with the tech on site. We can work through end to end checks. We can work through the equipment commissioning and start up functional testing program verification. So all of our engineers have field experience. They've got the ability to.

Work through the problems both sort of on the I'll say the mechanical side and also

control side and of course understanding the Delta controls which we have a a very good understanding of. So fairly common service that we add on.

OK, now I'm gonna touch on our software solutions which is really the when PDS started it was well it was called pass and that was that was the main thing that it was is it was it was custom software modules for Intelliweb.

We so we have, we still do Intelli web modules. We have quite a number that are available on the website. You can view them, download them. You can also trial them. So if there's any modules that you're interested just to see how it works and see if it's a fit for a particular customer, you can reach out to us and we can give you a trial. So typically we would do like a 30 day.

Or 60 day trial. To enable that, we just need to know the Intelli web serial number. So if you can send us the serial number, tell us which module you'd like to try, then we can enable that for you. And we also offer now I mentioned earlier the Delta loadable module.

Which is really sort of Python based code that lives inside the controller. And the really neat thing about the DLM solutions is that they reside in a FIL object as part of the database.

So when we have a, you know when you have a DLM solution and you need to deploy it across a large number of controllers, you're not having to individually load and configure each one. It's it's actually part of the controller database. So once you have it set up the way it needs to be, it can just be saved out, load the database along.

With whatever other programming is in it for the controls, so it's very heavily integrated with the with the normal control database.

I have a little list here of some example of DLM solutions that we've done. So there's quite a range that we've worked on. There's been integrating wireless products with Innovonix, bringing in weather data from a number of different sources, sending data to data lakes. So some of the work we've done with.

Google, Azure, IoT, it's it's all about moving data back and forth, energy integration to various meters or online energy sources.

Here is a so I guess I got three a few pages of lists of Intel web modules that we have available today. This list here it's available if you go to [pds.deltacontrols.com](https://pds.deltacontrols.com) and you go on the products page. This list is available. It's a PDF, so it's just a I think it's like a. It's like a three page PDF and it just has a list of all the. I won't say all, there's probably a couple more that we have now that might not be on this list, but most of

the modules are listed there and they have a quick little description showing you what they do. There's a couple I've highlighted that I'm just going to.

Give you a little bit more info on worth mentioning also the the Access Control Assistant. This is a module that essentially automates the process of moving from a version 3 access control system and a version 4. So if you do have any older access control and you're potentially.

Looking to upgrade, that's a that's a helpful tool to to support that. And it also supports doing card and badge printing directly from Intelliweb for for certain types of cards. So pretty pretty handy module.

So look a bit closer at the active session manager. Very super simple, lightweight little module. All it does is it tells you who's online, when is the last time they did something, the last action time, and it also gives you the ability to close out the session. So.

I think when you get to very large sites where you might have potentially a lot of people online, you may want to have that visibility. So this gives you that visibility. Simple little module.

The alarm escalation module. This is a this is a pretty popular one and what this does is it allows you to take an alarm and depending on the the filter you can.

Essentially escalate that alarm, the same alarm to successive groups for predefined time periods. So for example, a critical alarm if it's not dealt with within, you know, 5 minutes or 15 minutes.

This module allows you to say, OK, after 15 minutes, if this is still unacknowledged, go to the next level and so on. So you can have multiple layers of priority and have the alarms escalated essentially as they're until they're dealt with.

**EM** **Emily Malin** 1:00:34

Couple of quick questions that came out from this. The first one I'm gonna just go ahead and cause you're gonna talk a little bit about modules, but in the past they said why does it always take an extra month to get the VFD module updated?

**DA** **David Amos** 1:00:36

Sure.

Hmm.

I think I might have to come back to that one. I'm not, I'm not 100% sure, I guess.

**EM** **Emily Malin** 1:00:55

Perfect. Well.

OK. We'll take that question. Next question, do you offer maintenance for all of the projects, so extensions, firmware upgrades, etc.

**DA** **David Amos** 1:01:07

Yes, we do. We can. We can absolutely do maintenance, yeah.

**EM** **Emily Malin** 1:01:12

Perfect. Jack, to your question, you can click navigate back. That'll just change it for you. There you go. Next one. You mentioned being able to get 30 days of a module to test it out. Can this can these also be open for a DAT license for a longer time?

**DA** **David Amos** 1:01:30

I'm well, we can do longer trials than 30 days. So if it's if it's requested and you need 60 days or maybe 90 days, I think we can do that. I'm not sorry, I'm not familiar with the term DAT license.

**EM** **Emily Malin** 1:01:47

I'm not sure either. Christopher, do you know what? Can you spell out DAT for me whenever you get a chance? And then just kind of a general question. Oh, Delta authorized trainer.

**DA** **David Amos** 1:01:54

Yeah.

Oh, yes, OK.

**EM** **Emily Malin** 1:02:00

So would that be can can these also be open for a Delta authorized trainer license for a longer amount of time?

**DA** **David Amos** 1:02:07

Oh, yeah, I see what you're saying. Yeah, I think, yes, I think we could do that.

Absolutely. Yeah, we can. We can, we can discuss that. Let it let us know what you're

thinking and then we can, we can go from there. But yeah, that makes sense to me. Yeah.

**EM** **Emily Malin** 1:02:20

Perfect. Oh, nice. We got a fantastic out of that one. That's always nice. And then I think just as a more general question, somebody asked, are you planning, are you doing programming in Node RED or Node dot JS as well?

**DA** **David Amos** 1:02:24

OK.

I would say very limited programming in Node RED and I would say the main reason for that is that now that we have the capability to do these DLM which is the Python based embedded.

Modules in the controllers. It's sort of supplants Node RED's capabilities. Most of what we could have done in Node RED, we can now do in the DLM. Only it from our experience is more stable moving forward. Node RED has gone through some changes over various versions of firmware, so it's caused a little.

A little bit of issues with stability moving forward. So we've we've generally avoided Node RED. I would say for sort of programming type integration solutions where Node RED has been more helpful, it's been if we've needed to do sort of like an embedded.

Embedded dashboard, so more more for the front end capabilities than than the integration capabilities.

**EM** **Emily Malin** 1:03:35

Gotcha. OK. Final question from this section. Are there any plans to make any of these services for Loytec products as well? We've merged, especially for room automation projects. Does PDS do any of that?

**DA** **David Amos** 1:03:38

Yeah.

Yes, very good question. So we don't have anything in the works now, but absolutely that is coming down the pipe as we start to integrate because Loytec has a, I'll say a similar team to PDS where they do customizations and I think we want to, we're looking now to kind of.

Join forces and have at least at the very least have sort of a road map going forward where we can share solutions between us. So yeah, I would expect that we'll see start to see Loytec integration solutions moving forward.

**EM** **Emily Malin** 1:04:21

Perfect. Perfect. Continue on the module train.

**DA** **David Amos** 1:04:25

Sure.

OK, yeah, so a couple more modules. I'm just gonna highlight commissioning module. So this is a this is really for it's it's for doing commissioning as we think of it as also it's it's also a good module for supporting A continuous commissioning or recommissioning.

It's it's session based. So what we mean by that is it's not we're not looking at the entire site as you know just a set of points and they're either commissioned or they're not if you have the ability to create a session. So you're let's just say for example your site is.

Is already up and running. You know you've been running for a year and now you want to recommission a portion of it. What it allows you to do is create a new commissioning session on, you know, whatever defined set of equipment or set of points that you want.

And now you can run through a recommissioning on it. So you're not, you're not decommissioning, you're not, you're not taking off the commissioning tag or anything. But within this module it's looking at it sort of from a fresh start is how are these points operating?

So once you've got a session, so you can sort of see at the top here, there's sort of a couple sessions defined. It tells you when it was created, how many remaining points there are in the session, so how many things haven't been commissioned.

And then as you work through, you have these interactive dialogues. So when you open each point sort of in the lower left, I don't know how well you can see it, but that's that would be the entire dialogue for for one point there. So for that point you see all of the related objects. You also see a calibration history.

So as you perform calibrations, you, you know, take your reading, enter it, that's now logged and you have an ongoing historical log of those calibrations. So you can see over time if you're drifting in a certain direction. It also has the ability to do manual

overrides for output, so you can, you know, set up positions.

Set your damper to 75%. Record the actual that you're seeing. Same thing. That's that's a sort of a calibration, so to speak. It has check tags for whether you've got, you know, your failed position, whether you've got it included in the graphics device tag status.

And all of this information is logged historically as well. You've got notes, so you have the ability to, you know, just enter, you know, checked out this device. It was the damper work, but it was squeaky, you know, that type of thing. You can put notes in it. Now you've got this ongoing continuous store of information related to. Each of the points and all of this information it's it's sitting in a database and then it can be reported on. So if you want to see all of your points for a particular session, then there's reports that tie that all together as well.

**EM** **Emily Malin** 1:07:17

What does that report actually look like? Is that a big Excel file? What does that look like?

**DA** **David Amos** 1:07:21

I mean, it's essentially a PDF kind of similar. It's it's like one of the Intelliweb reports. So if you look at sort of the existing Intelliweb, you know, trend log or points reports, it's it's that sort of style of report. Yeah, sorry, I don't have an example of that report here right now.

**EM** **Emily Malin** 1:07:40

It's OK. Yep. Perfect.

**DA** **David Amos** 1:07:40

That's a good question. Data transfer module. This is it's probably the, I think it's the most popular module over the years that we've sold. So it actually it does a lot of different things. One of its main sort of base purposes is the where it gets the data. Transfer name is transferring data between Intel websites. So you can have separate sites that have no BACnet connection, but there might be you know you want to transfer some critical chiller plant status between sites. This module allows you to do that and I believe that that functionality.

Pardon me, it's part of the the free version, so it comes in two different flavours.

There's the free version allows you to do some basic data transfer and then there's the paid version which allow which really opens up a lot of the web interconnect capabilities. And in particular one of the features that it has is the ability to transfer data from online weather services.

To the site which is which is very valuable. My experience, I've worked on sites where you know that have you know, physical weather stations which tend to be quite expensive, you know, difficult to install and at the end of the day you just get like a few points out of it. You get the temperature, humidity, the wind.

With the online Weather Service, it kind of takes a lot of that away. So the cost is is way less. You've just got the cost of the module essentially and now you have a whole array of weather and environmental data that you otherwise wouldn't have and it's and it's accurate and it's up to date and there's essentially no maintenance other than just keeping the module.

**EM** **Emily Malin** 1:09:16  
OK.

**DA** **David Amos** 1:09:17  
We're up to date with with each Intel web version and and also with.

**EM** **Emily Malin** 1:09:21  
On that one. Oh, go ahead.

**DA** **David Amos** 1:09:24  
Yeah, I was just gonna mention also you get forecast data which can be really useful for your sequencing of equipment. So you can start to look ahead and see what next day is gonna be like and possibly look at preconditioning the space as well.

**EM** **Emily Malin** 1:09:35  
On that one, does the data transfer module stop working when the Intel web license expires?

**DA** **David Amos** 1:09:45  
I'm gonna say no, it doesn't stop working. The the license licensing across the board for Intelliweb and modules. It's not a does it work or not license, it's an upgrade

capability license.

So having an up-to-date license allows you to update the software. If your license is expired, it doesn't stop it from working, but you can't upgrade it. And then eventually of course you you know you will get to a point where the software doesn't run well. Or maybe maybe there's security gaps that haven't been filled after some number of years.

**EM** **Emily Malin** 1:10:19  
Perfect.

**DA** **David Amos** 1:10:21  
Yeah, what else is there? Earthright Energy Dashboard. It's it's, you know, it's an older one. It's been around for quite a while. The intention is public kiosks, public websites. We have the ability to customize it within limits. Um, so you know, certainly we can do sort of logo customizations, a little bit of, um, you know, mucking about with the pages that are there.  
There is an there's a there's an example of it. I've got the URL here. I don't know if you can, yeah, if you can see that [pds.intellicloud.com/intelib/earthright](https://pds.intellicloud.com/intelib/earthright). So that's a that's a live demo of an earthright dashboard, you know, somewhat limited so. It is what it is. It's it works well I think for for some customers, not for everybody.

**EM** **Emily Malin** 1:11:13  
On that one, do you need to pay an extra fee for another year or just for the upgrade every time?

**DA** **David Amos** 1:11:20  
So at at this point, all modules, it essentially operates the same as the Intelliweb license itself. So you have the the upfront cost to buy the software, upfront cost to buy the module.  
And then for your licensing, it's it's a percent of that initial cost on an annual basis. So that percent, it's the same percent applied to the module cost as it is to the Intel of the license.

**EM** **Emily Malin** 1:11:52

OK, perfect. So same basically as the one that we were just talking about. It'll still be there, it just won't be upgradable unless you are. Perfect. OK, makes sense.

**DA** **David Amos** 1:11:54

Hopefully it's.

Correct. Yeah. Yeah. Yeah. And it all follows the same scheme. So it's just based on the initial cost and then there's that percentage of the initial cost that's that's your annual license fee, which allows upgrades.

A couple more modules I wanna look at Enterprise Scheduler. This is one that's we've had it for a couple years. There's I think right now there's a there's a couple improvements that we're looking at making to it. But it is, it is very functional as it is already. It allows you to do.

Sort of multi level hierarchical schedule association. So you can have essentially parent schedules, child schedules and so on in a hierarchical fashion. So essentially the chair the the children schedules inherit.

From the parents, the parents don't inherit from children. So you could have your main schedule for your school district when there's a holiday that now percolates down to all the sub schedules, except you've got this one school where they've got some event going on and when you enter that, it does not backfill.

To the parent or to any other schools. So it's a simple way to kind of keep all your scheduling in line without having to go to each individual, you know, in that case a school and avoids the the labor of having to try to keep all your schedules synced. So it's it's one.

One way to manage schedules on sort of a a wholesale basis and it is it is quite effective.

Um, tenant building module. This is one we've had for a while. This one is actually free. You can download it on the PDS dot bellacontrols.com website.

**EM** **Emily Malin** 1:13:50

Real sorry, real quick before you move on from that last one, we just had a quick question come in. Is that different from facility scheduler?

**DA** **David Amos** 1:13:52

Yeah.

Yes, it is. Yeah. And that's it. Yeah, that's a very good question. So yeah, facility

scheduler, enterprise scheduler, two different things. So enterprise, so think of enterprise scheduler is you're actually setting the scheduling within Intelli web, what facility scheduler is and I know the names are confusing, facility scheduler is not. Actually a scheduling tool, so you're not setting any schedules. What facility scheduler does, it's an integration tool so it will integrate the third party schedule to your back net schedule. So if you have some other system and it could even be like like a like an Outlook schedule.

You can actually tie that Outlook schedule directly to a BACnet schedule, sort of on a one to one basis or one to many basis. So Facility Scheduler is integration tool to third party scheduling and then Enterprise Scheduler is a scheduling tool itself within Intelliweb. So if you're using Enterprise Scheduler, you wouldn't really typically have. Have a need for an for facility scheduler because that means you're using Intelli web as your scheduling tool. Hope that makes sense.

Yeah, tenant billing module. So yeah, it's a it's free. It doesn't do everything, but it does, you know, basic occupied. You can bill on occupied hours after hours or you can do 24/7 has a lot of different.

Options to manage billing related to tenants.

Intelli Vault import tool. This is a tool basically to simplify migration to Intelli Vault. It was primarily built for historian data, so bringing in the Delta, you know the Orca view historian data directly into Intelli Vault. We also added a plugin for Niagara N4 so.

Niagara 4 data can also be brought into Intelli Vault and also has the neat feature of being able to import detached trends from within Intelli Vault to Intelli Vault. So the use case for that would be if you had a point that's moved, so you now have a detached trend, but you have a bunch of data that's.

You want to have connected, but it's not. You can actually connect that data to the new point location within Intelli Vault.

The Modbus TCP module. So this is this is one of those delta loadable modules, so it resides in the controller database. We released it last summer. It's also a free paid 1. So for one Modbus TC TCP device it's free.

If you wanna go more than one and then we have licenses for 5/10/15 and it's based on number of devices endpoints. So we allow, yeah, for free it's one device up to 30 points and then the additional module or the the additional licenses is for further devices based on 30 points.

Per device essentially.

Now I'm gonna touch on an energy management solution. So this was we had a request for energy metering coming from a customer. They were looking for a multi site solution to get metering into multiple sites. So we were looking at an Intelli cloud based solution.

It also needed to be, I'll say, fairly easily installed by different electricians, not necessarily people that know Delta Controls very well. So to achieve this, we did a design for a.

An enclosure like a prebuilt enclosure with our controller and with the meter inside it that would now you know pick up the three phase metering. So essentially what we did is we outsourced the building of these panels. So we at Delta we we do have the. I'll say the ULI think it's 508 panel shop in house and depending on the job we we can also outsource the building. In this case we outsourced. So we had our you know 20 or so panels built up with the with the controllers in and we built them as.

What we call sort of plug and play. So we pre-programmed the controllers so that as soon as they were powered up and plugged in, they already had that BAC net secure connection set up so they would go up to Intellicloud. So the electrician on site installed the controllers, plugged it in and then we just log in on Intellicloud, check it and sure enough, there it is.

Is and then we could move on. So didn't require really any onsite setup beyond just, you know, plugging in the power and hooking up the three CTS to the meter.

Yeah. So this we had multiple locations, in this case many throughout North America. There are some in Europe as well.

So each site was a separate backnet, separate site on Intelli Cloud, separate backnet, secure connect, secure connect connection. All the meter data is brought into Intelli Cloud. So we went beyond just bringing the meter data. So we built a we built a dashboard, so we.

We did a live energy view dashboard and this gave us sort of a view of all the sites. Just a sort of a quick overview of of how much power is being used. So there's a there's a live gauge widget showing us how much power there is being drawn at a given time.


And there's also consumption meter, so ongoing consumption and these the each of these from the dashboard you can see it has that that button there. So each of these links to another page. So the power page links to a more detailed power view and then the consumption page links to the Intelli web consumption. So it's.


It's all encompassed within this one dashboard for for navigation, and here from the


map you can also navigate to the.


Power view. So that's what this page is. So it's a sort of consolidated view of the live power draw from that meter. So we've got the three-phase breakout, all of the information from the meter. So there's all the live data. We have the sort of alarm data. So if we were to lose a phase, we would get the.


The red alarm indicator and a bit of trending going back a few hours to see what the recent past was.


 1:20:24  
Oh.

 **David Amos** 1:20:25  
And uh, yes.

 **Emily Malin** 1:20:26  
On that one, Dave, is it are these enclosures attached to the local network or is it done through cell modem or a combination?

 **David Amos** 1:20:34  
I believe we were fortunate that all of these were attached to the local network. Yeah, and and we were. The reason we were able to do that was because of BACNET Secure Connect. So because BACNET Secure Connect is.

 **Emily Malin** 1:20:41  
local. Thank you.

 **David Amos** 1:20:50  
You know the TLS 1.3 encryption, it's not, it's not. We didn't have to get the IT to open up any special ports or anything. So that was a that was a bit easier sell. Unfortunately we were able to jump onto the existing network. We we do have situations with other customers where we've had to do the cell modem thing and it works.  
Works, but um, typically you get a little bit of network flakiness. I've I'm yet to see a cell site that's like perfectly 100% online.  
Yeah. And then we also did the, we embedded the Intelliweb Energy into this same

navigation scheme. So it's it's, you know, it's the standard Intelliweb Energy, but it's it's sort of clicks through from from this same dashboard. So when you click on the meter consumption you would get the.

The consumption dashboard here as well.

And what else? We also built in a energy use index, which gives us sort of a normalized view of the energy consumption across the sites. So what we did for that is for each site we.

Essentially divide the energy consumption by the area, which that's what energies index is. It's kilowatt hours per square meter, kilowatt hours per square foot. And in this case that's that's what we got here. So we're able to now look at the the various sites and see who is using the most energy per square meter.

And who's using the least? Uh, and there was some pretty stark differences. You know, in some case, like in this case, we've got three times as much energy use being used on one site as another.

So the overall goal for this project was you know plug and play. So we did the we did the plug and play enclosures and for easy install on site and also just taking all of that energy there and visualizing it and giving giving a bit more sort of.

I guess ability for facility operators to to see what's happening and take action on it, which is really the main control of or sorry, the main goal of controls in general is taking all this data and then making it look nice and.

Being able to operate a site effectively.

Very last thing I'm gonna mention is something that's being worked on right now. So this will be available in the future and I say future this year. So we're expecting it I think even in as early as summer. I think we've all heard about the embedded Intellisketch that Zach had mentioned on the last webinar.

So we're kind of trying to get ahead of that and we're building a it's a configurable sort of menu based graphic to reside on the controller and the idea is that you can build a menu system just using CSB objects so within the controller database.

Of course, following the certain format you can actually build out a set of menus, hierarchical. Of course you can go in a menu, have sub menus from there and then get to object pages and get to alarm view pages.

And then of course, as part of the controller database that can now be saved and loaded and loaded into multiple controllers. So ideal solution for local touch display interfaces. And yeah, that's all made possible by the embedded Intellisketch and we're working to.

Make it easy, I guess you could say. So that's coming down the pipe.  
I think that's my hour and thank you very much. I appreciate everybody joining and hopefully that triggered some ideas and yeah, we're we're here to help.

**EM** **Emily Malin** 1:24:46

Couple of last questions. Going back to the Modbus TCP DLM, does it work with V3 GWT objects?

**DA** **David Amos** 1:24:48

Sure.

Sorry, could you repeat that? I just trying to wrap my head around that. What was it?

**EM** **Emily Malin** 1:25:00

No worries. Does the Modbus TCP DLM work with V3 GWT objects?

**DA** **David Amos** 1:25:04

Oh.

No, it's a yeah, unfortunately not. No, it's a it's a different scheme. So the Modbus TCP DLM, it's actually configured by kind kind of similar to what I mentioned here. It's done with a CSV.

So if you look at if you if you are interested in it, if you if you go to the website, go to the [pds.deltacontrols.com](https://pds.deltacontrols.com), you go to the products page, you can download the module. You can actually use it because it's it's free for for the one Modbus TCP connection.

And it has a, it has a pretty good application guide and it kind of describes how the the CSV is built. And we also include actually an Excel sheet that helps you sort of quickly build that CSV. So yeah, it's different than the GWT, but.

**EM** **Emily Malin** 1:25:54

Perfect.

**DA** **David Amos** 1:25:56

I would say sort of equally simple.

**EM** **Emily Malin** 1:25:59

OK, another question. They're working on updating clients from V 3.4 to V4 devices. Are there any tools that you guys have that they can use to automate changing over the databases to new controllers?

**DA** **David Amos** 1:26:15

That's a very good question. I'll have to dig around and see if there's anything else. The only thing that comes to mind is we've got the access assistant for doing the V3 to V4 access control.

Yeah, nothing really comes to mind.

For the database update.

**EM** **Emily Malin** 1:26:38

Oh.

**DA** **David Amos** 1:26:39

But I may be missing something.

**EM** **Emily Malin** 1:26:41

We can take that question and just make sure that one.

**DA** **David Amos** 1:26:44

Yeah, yeah. I'll have to have to, I'll have to look into that and get back. I seem to recall that Intelliweb itself when you, I think it has some of the update capability built into it, but it's one of those like 80 or 90% things where you still have to go back and check over things.

**EM** **Emily Malin** 1:26:48

OK.

Yeah, same, same style of question. I think here it's the migration of Orca view to ewsweb. Are there any tools through you guys for that or is it the same thing?

**DA** **David Amos** 1:27:05

Happy.

Yeah, there's there's not really any. We don't really have any tools to do that directly. We it's a lot of, you know, we do a lot of projects that involve doing exactly that.

Yeah, I mean typically going Orca view to Intel web, the graphics is sort of the main thing that needs to be updated.

So we're we're quite experienced in doing those updates, but yeah, it is. It is a manual process.

**EM** **Emily Malin** 1:27:33

And that would be something that the part like the partners could utilize PDS if you know if you are working through those challenges, right, that would be kind of one of your guys's cup of teas. And is that done like a time and materials or is that done project by project?

**DA** **David Amos** 1:27:40

Yeah.

Absolutely, yeah.

We could look at it either way. It sort of depends on probably the project and how much information we have. But yeah, we can, we can do that. We could go either way with that.

**EM** **Emily Malin** 1:27:55

Yeah.

Perfect. Those were all the questions that we had and we're coming up right on that hour mark. So that was actually perfect. The way that we went through it, questions during it worked great. Is there anything else, last minute questions before we circle all this up and wrap it up and get you guys on your way?

Going once, going twice.

**DA** **David Amos** 1:28:18

All right.

**EM** **Emily Malin** 1:28:21

You guys were easy. You guys were easy on them. That's good. Perfect. OK. Oh, wait, who could I reach out to concerning PDS access for the DAT? Oh, that would just be PDS at Delta Controls.com, correct?

**DA** **David Amos** 1:28:26  
Good.

**EM** **Emily Malin** 1:28:33  
dot com correct.

**DA** **David Amos** 1:28:34  
Yes, yes, please. Yeah. If you could just PDSI, yeah.

**EM** **Emily Malin** 1:28:36  
Perfect.  
And that is in that slide there, Christopher, so you'll be able to see that. Are there any tutorials for setting up SV and FIL fill objects?  
Last question coming in.

**DA** **David Amos** 1:28:52  
Tutorials for setting them up. I would say not not in the generic sense. I mean you know in the in the application guide for the Modbest TCP you do you do deal with an FIL object cause that's actually how the.  
That's actually how the DLM module is loaded. It it lives inside of an FIL object so so it it deals with it there. But yeah, not really in the general sense. I'm I'm not aware of a tutorial. I'm like I I guess I'd.  
I'd be interested to know sort of what what you're thinking or what you're wanting to do with it, and then maybe that would help answer it a little bit better.

**EM** **Emily Malin** 1:29:32  
And Jack, maybe that's something. Yeah, maybe they can just send that over the PDS at Delta Controls.com also just to get a feedback on that.

**DA** **David Amos** 1:29:40  
Yeah.

**EM** **Emily Malin** 1:29:42  
Oh.

Okay, any last things before we wrap up?

Need to update V3, Modbus, GWT and V4. OK, yeah, so so Jack, send that over to Dave and then we'll at that PDS at [deltacontrols.com](http://deltacontrols.com) that you see there and they'll be able to get back to you on that for a little bit of the more specifics.

**DA** **David Amos** 1:30:05  
Yeah.

**EM** **Emily Malin** 1:30:05  
Perfect. Perfect. OK. Well, everybody, thank you so much for joining. We really, really appreciate it. Appreciate all your time. Like I said, if you scroll all the way back up in our chat, you will see where you can register for our next webinars. We have what's new with Red Five VAV is featuring specifically the new Edge T1L. In the Red 5 fields that's coming up April 28th at 10:00 AM Pacific Time, and then after that in May will be our equipment webinar featuring two of our equip partners. So it'll be a really informative one as well. So as always, if anybody has any suggestions, my e-mail is up there as well. You see Dave's on there. This will all be wrapped up and sent out to everybody. So we appreciate it. Do our surveys. Keep coming back. We always like that. Ed, the registration is in the very first chat. The only one that's open right now is the VAV one. So you're well. It's up there in the very beginning. Yep, there it is. Cool. OK. Thanks everyone. I really appreciate it.

**DA** **David Amos** 1:30:52  
Alright.  
OK. Thanks. Yeah.

**EM** **Emily Malin** 1:31:09  
Bye guys. Bye everyone.  
I'll just wait for everybody to hop off now. And there they go. And there they go. OK, perfect. OK, Dave, I'm gonna close this up and then I'll wrap everything up and get it to you and then we'll get it sent out.

**DA** **David Amos** 1:31:24  
Sounds good. Thanks. See ya.



**Emily Malin** 1:31:24

Cool. Thanks again. Bye, everyone.

- **Emily Malin** stopped transcription