**Asset Boot Camp from AssetWorld**

0:00  
Ladies and gentlemen, please give a warm round of applause to Director of Solution Engineering Randy Walsh.

0:24  
How many of you were here in Scottsdale, AZ?

0:28  
So you probably got that.

0:31  
I don't know if you guys have got a sense of the presentations over the past few years, but James always likes to have dance routines involved in every session.

0:41  
So you saw a little bit of Tony Ravano in an Iron Man costume.

0:47  
If you were here last year, you saw a lot more of of me than than you do this year.

0:54  
So when I got Volun told that I needed to do a general session this year, I said, James isn't partnering with me, is he?

1:02  
And they said, no, I said, all right, I'll do it.

1:06  
So so we're here for the asset boot camp.

1:08  
So when you guys kind of did your your introductions yesterday, there were a lot of new hands that were raised that hadn't been here before and for a number of years since our Atlanta conference, how many people were here in Atlanta 2014?

1:25  
Yeah.

1:25  
So a lot of you guys that were here, one of the things we did was our asset workshop.

1:30  
So as asset became a much more prominent function and concept and increased importance to your organizations and in the AIM application, we went about trying to educate you guys as much as possible on that and we did a full day workshop.

1:46  
So I got tasked with all right, take what you did in a full day and condense it to an hour.

1:53  
All right.

1:53  
So I got the the dubious challenge to accomplish that.

1:57  
So that's that's what we're here to do today.

1:59  
So for those of you that know, know me, I've been with Assetworks.

2:03  
I actually just celebrated my 10th anniversary with Assetworks.

2:06  
Thank you.

2:09  
It feels like 50 years in Assetworks years.

2:13  
So, but I've actually been in the industry for about 22 years now.

2:18  
I can't believe it's, it's been that long.

2:19  
But I really have a strong passion for facilities management.

2:23  
I love what I do.

2:24  
I've sat on your guy's side of the table, so I understand your guy's business problems as well as I I have the vendor perspective on it and I got a technical background.

2:32  
So I've gotten a lot of exposure and a lot of experience working with organizations like you guys.

2:38  
So that's why I got tasks to come up here and talk to you guys today and, and try and teach you some more about our assets, especially for you new folks that haven't been here before.

2:47  
And this is your first time at Asset World.

2:49  
So if you hadn't guessed based off all the film and Iron Man and everything like that, we kind of have a, a Film Festival theme going on this year.

2:58  
And so I needed to come up with how would I incorporate that into an Asset boot camp session?

3:06  
So I kind of brainstormed a little bit with James.

3:08  
And in typical James fashion, he provided some insights.

3:13  
So his first suggestion was Footloose.

3:18  
I don't think I want to do Footloose.

3:20  
I can't do all those bar things and my feet don't work very well when I when the music starts playing.

3:25  
So he said, all right, how about Dirty Dancing?

3:31  
And I asked him who's going to wear the dress and we quickly moved off of that one.

3:37  
And of course, then he suggested flashdance, which I got to.

3:42  
I, I went ahead and incorporated that one a little bit.

3:45  
For those of you that were in, we're here in Scottsdale.

3:48  
If you were here, or you probably have actually had rumors about it.

3:52  
At one point, I actually leaned back on the chair and James poured water on me.

3:56  
So that will never be repeated again, but I'll admit it.

4:02  
So then I thought, boot camp.

4:03  
All right, well, Full Metal Jacket Bread didn't get more intense than that.

4:08  
But I thought, you know, this is a family friendly event.

4:11  
I don't know that I can edit it effectively enough to get the message across and not offend everyone in the audience.

4:19  
GI Jane.

4:20  
That was another good one, but this didn't quite feel right for me.

4:25  
One of my favorite movies.

4:26  
Heartbreak Ridge.

4:28  
But Clint unfortunately used quite a bit of colorful language in that.

4:34  
So I figured, yeah, maybe not.

4:37  
I'm kind of in the Glen boat here.

4:39  
I wasn't sure if everybody got that.

4:43  
I told my wife maybe I should do a stripes team.

4:44  
And she goes, what's stripes?

4:45  
And I go.

4:48  
So I thought, oh boy, am I?

4:49  
Am I that old?

4:50  
Is everybody going to get it?

4:52  
But I thought the thing that would probably work the best is probably Dodgeball the movie, 2 dodge Ballers.

5:03  
Then you've got to learn the 5DS of dodge ball, dodge, duck, dip, dive and dodge.

5:10  
If you master the 5DS, no amount of balls on earth can hit you.

5:15  
Go ahead, me or yeah, shouldn't we like learn by dodging balls that are thrown at us?

5:24  
Or that's what this sack of wrenches is for.

5:33  
If you can dodge a wrench, you can dodge a ball.

5:36  
What?

5:48  
Any other questions?

5:49  
Oh my God, yeah.

5:53  
Patches, Are you sure that this is completely necessary?

5:58  
This is, Sir.

6:00  
If you're going to leave this squad on the floor, you've got to learn to do the dance and the dark.

6:06  
Put that on.

6:08  
All right, Lilies, buckle up.

6:11  
It's short, hard.

6:12  
There you go.

6:27  
I've got three weeks to whip you \*\*\*\* \*\*\* beer junkies in the sheep.

6:32  
Come on.

6:33  
I get better runs than my shorts.

6:36  
Catch them all.

6:36  
One of their guys goes up whenever our guys comes back in.

6:41  
That's the way you hurdle.

6:43  
That's the way you win.

6:47  
Let's go a little huckle here.

6:58  
So what does that have to do with asset Boot camp?

7:03  
Well, all you in the front row may be rethinking that seat.

7:11  
All right, you can dodge a wrench.

7:16  
You can set up your assets.

7:20  
But seriously, what are we here to do?

7:24  
We're here to talk about the design intent of the asset, expose you guys to the concepts of why did we create that, why did we set it up the way we did it and get you really to think about your AIM implementation and how you can better use assets in that implementation.

7:42  
I know almost all of you, it felt like we're in the kind of impromptu Ana session.

7:47  
So that is a very, very asset dependent function.

7:52  
So if you want to move to that, you're going to have to embrace these concepts.

7:57  
All right?

7:57  
So the first thing before you can start doing asset management, kind of need to do an asset inventory, right?

8:05  
So why, why would you want to do that?

8:08  
What's the importance of that?

8:10  
There's lots of organizations that have gone out there and done studies.

8:12  
I'm not going to say that I've done all of that research.

8:16  
There's lots of other smarter people that have time to do that.

8:20  
I did a 200 plus demos last year, so I didn't do a whole lot of researching last year.

8:25  
But basically if the asset inventory is not in there, your organization is probably not going to be effective.

8:32  
And it really boils down to the old adage of you can't manage what you don't measure, right.

8:38  
You have to have the data in the system.

8:40  
So you don't know.

8:41  
If you don't have the assets in there, you don't have the work management tied to it, you don't have the life cycle tied to it, you're not going to be able to manage it.

8:50  
So if I don't have an effective asset inventory, what's the potential impact?

8:57  
All right, So we did this before, so none of the people that were here last year.

9:02  
But who would guess that the impact to the US if by having an inefficient inaccurate partial inventory, what do you think the potential impact is to the US by not having that?

9:16  
Who thinks it's more than we already said a million.

9:19  
Who thinks it's more than 100 million?

9:23  
Who thinks it's more than a billion?

9:26  
Who thinks it's more than 10 billion?

9:29  
15.8 billion is what they estimate and this is from 2004.

9:35  
So do you think it's getting better or worse?

9:39  
All right.

9:40  
So while this isn't a workshop, what we're trying to do here is in the course we'll have these presentations available for you after the fact to take back to your organization's.

9:49  
But it's a think about specific examples in your organization where if you had a better asset inventory, if you had more accurate information, what could you have potentially saved or what cost avoidance could you potentially have had, right.

10:05  
And so some of the examples that you might have where you potentially lost money or that you were hit with fines, this is you don't have all of your, your utility systems in there defined correctly.

10:17  
You may be spending a lot of more money on energy than you need to.

10:21  
Well, guess what?

10:22  
AIM has an energy management module to track all of those utilities within there.

10:28  
You may be contracting with a maintenance provider and you give them an estimate of what you have, of what you know about.

10:34  
And then when they actually get out there in the field, it's, it's X percent higher than that.

10:38  
And so then you get significant change orders due to that regulations, right?

10:43  
Do you have everything in there?

10:44  
Are you in compliance?

10:46  
Do you end up getting fines, right?

10:48  
So can we avoid that by having all those fire life safety system assets within the system and doing the preventive maintenance?

10:54  
So when we're asked and called the task that we're able to answer those questions, safety for your campus, making sure that you don't have loss of life and the potential associated costs with with dealing with that, not to mention just the loss of life.

11:09  
So asset inventory basics, all right, there's a lot of different types of inventory.

11:16  
So there are some of you that are on one end of the spectrum and there's other of you that are on another end of the spectrum.

11:24  
I go out and I visit a lot of customers, existing customers and they're somewhere in those first two bullets.

11:30  
Typically they've got some assets in their system.

11:35  
The ones that are feel that they're pretty good and that have a well established preventive maintenance program typically have a pretty good set of the assets that they're maintaining.

11:45  
But what we frequently see that they're missing is they're missing the levels above it.

11:50  
They have the componentized asset that their person is going out and actually turning the wrench on, right?

11:55  
So that what's missing there is these higher levels, these levels above that that that particular asset is part of a larger air distribution system and that air distribution system is part of an overall building, right?

12:10  
So we have high level systems, components and then a complete inventory.

12:15  
So this is where you have really embraced the entire concept.

12:18  
You have your entire organization, your entire portfolio represented in your asset system.

12:25  
So everything from the the buildings or the properties down to the major systems, down to their components, components of components, durable items, everything within your organization that you're managing is now within a system.

12:38  
And it takes a while to get there, right.

12:40  
It requires a process of going through and capturing that information.

12:45  
So the challenge here is, is to think about where you guys are on that spectrum.

12:51  
Are you at the partial that we just have some assets in there?

12:56  
Do we have all of our preventive maintenance or are we all the way at the complete inventory state, right.

13:01  
And almost nobody ever gets to the complete inventory state because your institution is ever evolving.

13:07  
You're constantly replacing those assets, you're constantly evolving that All right.

13:14  
Now when we think about assets, another thing that we frequently see when we go out to to customer sites is, is how do you identify your assets, all right?

13:24  
And a common practice is, is that you will do system based, right that you're identifying that an asset is a return pump versus a supply pump, right?

13:34  
And what's the problem with that is, is a lot of times those assets are essentially interchangeable.

13:41  
That pump could be pulled out of its one job and put could potentially be placed somewhere else in your your implementation, in your organization's asset hierarchy.

13:53  
So what happens then is, is you now have this asset that's been classified as a condensate return pump that eventually you move over and it suddenly becomes a supply pump because you reuse it someplace else in the organization.

14:05  
So one of the things that we would encourage as a best practice is as you look at your asset identification is to look at them more from an object based perspective.

14:14  
Yes, it's a pump, but let's more if we want to, we want to be specific, we can call it a centrifugal pump or an axial flow pump, right?

14:22  
So that's where we get the more granular nature that we want to potentially drive down on there.

14:27  
We can use attributes to identify that this is right now a return pump so that we can still capture that information.

14:33  
But rather than identifying that asset group as a return pump, we want to just identify that it's a centrifugal pump, All right?

14:41  
So asset classification.

14:43  
So this is one that comes up and it's a discussion point in every implementation, right?

14:48  
What are we going to use for asset group?

14:50  
Do we want to use Uniformat or do we want to use Omni class?

14:54  
All right, so I named 2.

14:58  
Can anybody name a third asset 1/3 asset classification?

15:02  
And just a little yell out from this kind of first row here, somebody else throw another one out for me.

15:08  
You guys are sleepy.

15:11  
I'll give them to you.

15:12  
Master format's another one that we hear frequently.

15:16  
We've got all kinds of ISO standards out there.

15:19  
I know we've got University of Alberta, so we may be using CQIS.

15:24  
There's some Canadian quality standards as well.

15:27  
Depending on where you are and who you you potentially benchmark against, you may be using a lot of these different ones, you know, so you don't have to necessarily pigeonhole into one particular standard because what we've done in AIM and this is a recent enhancement and everybody who wants to who ultimately will like this, they should thank Glenn Adams because this was driven out of our Ana.

15:50  
The assessment needs analysis special interest groups, all those SIG members as well identified the fact that when especially when we're looking at assessment data and we're rolling up to a system or to the legislature and they're trying to look across a lot of different business units that they may want to normalize their data on different standards.

16:07  
Other than what you've called it as a centrifugal pump.

16:10  
They need to actually identify it in Omni class that it's a 2333, whatever it is, right.

16:16  
And where do we use this classification data?

16:18  
We use it in reports.

16:20  
We potentially use it for maintenance data.

16:22  
We might use it to drive rental details.

16:26  
We might be using it for tracking, sharing data between departments.

16:29  
If you guys are part of Apple, which I think a lot of you are on the higher education side, you would potentially be benchmarking against your peers and being able to provide all that data, right?

16:40  
So if we look at an AIM screen and understand where this is coming from, everybody is familiar with what we're seeing over here on this side, right?

16:48  
This is the asset group.

16:50  
So those of you, even if you're at the partial level, right, you're using asset group, it's mandatory, your name.

16:56  
So you got to at least have that.

16:57  
This is where we're going to identify that it's a pump, it's an air handler.

17:01  
The other piece is over here.

17:02  
So if you're not using it now, there's now a classification standard.

17:07  
So now we can identify multiple different classification standards for each asset.

17:14  
So for all the different governing bodies, agencies that we have to roll our data up to our peers.

17:20  
If we all want to use Omni class, if we're all insight lines and we're all using sight lines and we want to normalize in the sight lines data, we can call it an air handler.

17:28  
But then we can go in and identify that it's AD 30-40 in Uniformat or in Omni class.

17:34  
It's a 33251113, right?

17:39  
Most of your technicians aren't going to memorize Omni class unless you're Caltech, right?

17:47  
It's it.

17:48  
It was originally initiated in the Ana module, but it's available on the master asset profile as well.

17:55  
I only deal with the latest version, Scott.

17:58  
So at least 8.6.

18:00  
At least 8.6.

18:02  
Yeah, somebody just said 8.5, so there.

18:06  
8.4 do I hear?

18:07  
8.3 going once, going twice, 8.4.

18:12  
OK, So once you get to a .4, then you'll have that ability to do that.

18:16  
All right.

18:18  
Again, we only have an hour.

18:20  
So normally this would be a workshop to try and challenge you guys to name as many of the same of the seven AIM provided asset types as you can.

18:29  
So I want honesty here.

18:30  
Who thinks they actually already know all 7 asset types?

18:33  
Raise your hand.

18:36  
I saw one hand, Cheryl.

18:39  
All right.

18:40  
So the asset types are property, serialized, utility meter, vehicle, durable goods, property, component, and system.

18:50  
So I've given you a couple examples.

18:52  
So one of the things that a lot of organizations don't always think about is, is that the building is an asset.

18:58  
So it's both a place where work happens, but it is also potentially an asset that we need to look at when do we need to replace that whole building or maybe we're going to do a building based inspection and we want to be able to use that in our preventive maintenance program.

19:13  
All right.

19:15  
Then we've got the property component.

19:17  
So property component is one that's pretty open-ended.

19:20  
It's just something that's part of that building.

19:23  
So a lot of times if we want to identify those planner beds, some of those adjacent functions of that building, we can tie those in as property components.

19:31  
If you wanted to tie the rooms in as property components, that would be another example that we could potentially create there as a property component.

19:40  
So systems, so this is one of the big ones that we really are wanting everybody to start to consider more is the concept of this system.

19:47  
So this is now a grouping of assets.

19:50  
All right.

19:51  
So think of your air distribution system, your electrical distribution system, any of the things we say distribution, those would be examples of systems, but could also consider the whole exterior of the building, the whole interior of the building as a system as well.

20:08  
And then we get to what you probably already have.

20:11  
Most of you guys are doing preventive maintenance.

20:13  
So you probably have your serialized assets in there, your classic package unit air handler, right?

20:19  
Your pumps, your boilers.

20:21  
Your chillers, those big major assets, that high dollar value that you want to do the major maintenance on.

20:28  
So that's your classic serialized asset and we've got the vehicle.

20:33  
So unless you are using our motor pool module, you probably don't see this one that often.

20:39  
All right, So the vehicle is a specific type that then gets unlocked and then it has a dedicated asset profile screen within the motor pool module so that you can now rent that asset out, track all of its history related to a vehicle perspective.

20:54  
And we've got durable goods.

20:58  
You're not using our fixed asset module.

20:59  
You probably aren't doing this a whole lot.

21:01  
But these are things like furniture things that the if you if you look up what's a durable good, right?

21:08  
What the answer is, is it's it's not a non durable good and a non durable good is milk.

21:14  
So I guess you could say anything that's not milk is a durable good.

21:19  
That's the conclusion I came to.

21:20  
But it's really, it's typically in higher education and in our and in government county, city, state agencies, when they're talking about these durable goods, they're typically thinking about their furniture, the chairs, conference room tables, cubicles.

21:35  
These are things that typically have subcomponents and quantities of those.

21:40  
And then we've got in our energy management module, we have the utility meter asset.

21:44  
So we actually treat the entire meter now as an asset, so we can do maintenance against it as well as it can perform all of our utility management function.

21:55  
And then we get specific meter types that then have special functionality like this one happens to be a loop that we're showing here.

22:02  
All right, so asset groups.

22:04  
So we already kind of started to broach this discussion as we've talked about system based versus object based, right?

22:10  
So this is one of the most discussed things in our implementation.

22:13  
That's not the work code on the work order phase, right?

22:17  
So this is critical for aim because everybody is going to have to use this.

22:21  
It's that core field on that header record.

22:24  
Everybody has to use it.

22:25  
So you do need to get it right and you want to make sure it's something that everybody can consume.

22:30  
It determines the what.

22:31  
And This is why we kind of delineated system versus object based.

22:36  
So what we want to use here is something that everybody can understand what this is.

22:41  
Now the asset group doesn't just classify the asset on the header screen and actually also drives behavior.

22:47  
So when we think about an air handler versus a pump versus a boiler versus a chiller, they're going to have different things that we want to track about them, different detailed information that we want to track about that.

22:58  
So the asset group is going to drive the attribute behavior.

23:02  
OK, so this is where we can say, well, this is a pump.

23:05  
Well, what kind of pump is it?

23:07  
It's a return pump versus it's a supply pump.

23:10  
And at some point in the future if it changes behavior, then we can change that attribute to to identify that if we want to track the voltage, the amperage, the whatever it may be that you want to track about that you have unlimited number of attributes.

23:24  
So attributes are different than user defined fields.

23:26  
Where user defined fields are specific to a screen, attributes are now specific to that asset group.

23:32  
So we don't have to use up user defined fields on the asset profile screens.

23:35  
We're able to use the attributes and be more specific per asset group.

23:40  
Asset group also drives a rental rate.

23:42  
So rental rate is used both in the motor pool module as well as the asset rental function that's available within the asset management module.

23:49  
So this allows you to set up a complex rate structure associated with that as well.

23:53  
So if you want to rent that scissor lift out or you want to track a tool in there and you want to track that cost against that job, you have that ability to track those complex rental rates.

24:02  
We do duration fixed, a combination of duration and fixed flat fees, discounts, whatever you might want to have there.

24:10  
So we can support anything you might want, think about a Hertz or an Avis or a Enterprise when you think above complex rate structure.

24:18  
If I take it out for 11 days, three hours and two minutes, what, what am I going to get charged?

24:24  
Am I going to get charged two weeks or am I going to get charged a weekly rate, a daily rate and an hourly rate that then comes up with what I actually get charged.

24:30  
So that's where we can set up and drive all that asset group behavior.

24:34  
And then we've got our asset filtering on the load screens, right?

24:37  
So most of the load screens that we have, when we look at like the preventive maintenance template, we can use that asset group to filter down the list of assets.

24:46  
So we can quickly get to that.

24:47  
So if I'm setting up a monthly air handler filter inspection PM right now, I can just go in and quickly set up that template.

24:55  
And when I do the load, I can then limit it down by the asset group.

24:59  
All right.

25:00  
So the other discussion, so I'm not going to say one way is right or wrong, although I would say that the right way is, is not to use a smart number, it's to use a auto generated number, right?

25:13  
So I'm not going to say it's right or wrong, but you should use an auto number, OK, Smart numbers like we talked about before, depending about that smart number, if you called it a, a, a return pump versus a supply pump.

25:28  
So you've got a, an RSP or an RP versus an SP in your smart number and you, you change its purpose.

25:36  
Is that smart number really so smart now?

25:38  
So it's the asset group that's on there that will tell you what what it is that it's a pump and the attributes will tell us that it's a supply pump versus it's a return pump.

25:47  
All right.

25:48  
So from an asset works perspective, we would encourage you to as you transition and I know there's a lot of culture and history, but we would encourage you to look at that number really just as a primary key.

25:59  
It's just an abstract number to make that record unique.

26:02  
And it's the description, it's the asset group, it's all the other attribute data about that, that make it unique and specific.

26:08  
All right.

26:09  
And the other thing is, is you can put that it's a return pump versus a supply pump, right in the description because the description is shown almost everywhere on every screen in the system.

26:19  
It's shown in the lookup list.

26:21  
It's what's that?

26:23  
Yeah.

26:23  
And the description could be changed, right.

26:25  
So that gives you the flexibility to to make changes associated with that.

26:30  
And then we have the concept of the replacement tag.

26:32  
So you can mix and match here is as you could potentially put the replacement tag and put your smart number in there if you really, really had to do it.

26:40  
But the intention of the replacement tag is, is really that when the tag falls off of the asset that you can put a new tag on it and give it a new number that we can then search off of that.

26:50  
Now we saw in the demos yesterday with the the fire product.

26:53  
So we can do the configuration.

26:55  
So we're, are we scanning for the asset tag or are we scanning for the replacement tag, right?

27:00  
So we have that ability to do that now.

27:03  
All right, so we have the seven asset types.

27:07  
How many of you think that you know the six different asset perspective screens in AIM, raise your hand.

27:16  
They're counting in their head.

27:18  
I got five, I got 4.

27:22  
So here are the six.

27:23  
So almost everyone in here owns operations and maintenance.

27:27  
So I think everybody knows master asset profile.

27:31  
We starting to have a lot more people being interested in as well as implementing the assessment needs analysis module where the primary asset screen in there is the condition assessment asset profile.

27:43  
Then we've got the utility meter asset profile.

27:46  
So if I'm in energy management, I'm seeing a specialized screen for the utility meter asset.

27:53  
All right.

27:53  
Now we're starting to get down into, we already saw the vehicle one, right.

27:57  
So we have the vehicle asset profile, that's where if we're using motor pool, we'll track that.

28:02  
And now we have the two that probably you guys are least familiar with.

28:05  
So in the past, we've had our asset works sister business unit, our appraisal group come in and talk to you guys in the past, but we actually have a full-fledged fixed asset risk management functionality within the product as well.

28:20  
So we have another business unit that can come out and help with your asset Works implementation to actually implement and look at an asset from a financial perspective.

28:29  
We're looking at the Gatsby 34, Gatsby 35, depreciation schedules, disposal of assets from a financial perspective, as well as then the risk management asset profile.

28:39  
So this is now looking at insurance category information, Fire Protection class details, things that you would typically need to provide to an insurance provider.

28:48  
All right, So a lot of different asset profiles.

28:52  
The key here is, is what's the difference is, is they all use the same asset table.

28:57  
So I only enter the asset in one time and then depending on what I do, I might flesh out the details in these in other screens.

29:06  
So it may be coming in from our financial system through a financial interface and populating the financial asset profile.

29:13  
But then you on the maintenance side would be filling out and populating the details on the master asset profile for the maintenance information that you need to do your job.

29:21  
And likewise, if it's a vehicle, right, that we want to then track the, the fuel type and the, the license plate number once we get that information.

29:30  
All right.

29:31  
So now in the asset, we also have the concept of hierarchies.

29:35  
So we have obviously a parent child relationship.

29:37  
So I think everybody uses the asset screen and they understand that there is that component detail down at the bottom of the screen.

29:43  
So basically we can create a parent child relationship between any 2 assets effectively.

29:48  
All right, So we can have components of components forever, right?

29:51  
So that air handler may be a serialized asset and it may have a supply fan in it.

29:58  
And then that supply fan has a variable frequency drive.

30:01  
Well, each of those things is an individual asset and then we then link them together creating that parent child relationship.

30:08  
All right, asset meters and utility meters, all right.

30:12  
So we have an asset meter on the in the asset management module, which is essentially a subunit of the asset versus in the energy management, we actually have utility meters.

30:23  
So we have the asset type of utility meter, but then we have utility meter types.

30:27  
So we have a loop, right?

30:29  
And then we have service meters, we have production meters, we have virtual meters.

30:34  
So we have a hierarchical relationship there when we look at our utility meters.

30:39  
And then we've got the concept of the durable goods.

30:41  
So I've got this furniture.

30:43  
I don't want to have to necessarily identify every single chair that I have.

30:47  
I just want to identify that I've got this conference room furniture and there's 10 chairs and there's 2 tables, right?

30:53  
So we can create that type of child relationship and then the property type.

30:57  
This is one where we would always kind of encourage you that as you're setting up your asset inventory, it's always the best one to to start with because when you create that property right from the get go, it does an auto child relationship so that then any asset that is associated with that location will automatically become a child of the property.

31:14  
So now we can go to the property asset and we can see all the different assets that make up that, all right?

31:22  
Now we have the concept of location.

31:24  
So there's actually two different location concepts.

31:27  
When we talk about the asset, there is where is the asset located?

31:33  
Where is it physically existing?

31:35  
All right, so this is pulling from our property location hierarchy.

31:39  
It's pulling from the property management module, but not every asset is out there in service.

31:45  
All right.

31:46  
So you have lots of spare assets.

31:49  
You may have a few pumps that are in your warehouse in case one of them goes down.

31:53  
So an asset can be located in our warehouse and then we can relocate it out to the actual location.

32:00  
And now Glenn talked a little bit about in A and A and it came up a little bit yesterday afternoon, but we now have the concept of property portfolios.

32:09  
So there isn't a direct relationship between the asset and the portfolio, but because the asset is potentially associated with a location, we would be able to identify that it's part of this portfolio.

32:19  
So this is used heavily in the assessment and needs analysis module.

32:22  
We also have the concept of GIS.

32:25  
So we can look at at GIS and there's different interpretations of GIS.

32:29  
But on the asset and if you've looked at at fire asset management, we can now locate an asset from an XY perspective.

32:36  
So we can identify, we know it's in this building, but it's a isolation valve that's right outside the building and we potentially want to identify that it's on the northeast corner.

32:45  
So now we can use the mobile device, walk there and actually say, all right, here's the asset, let's update it with the coordinates from the mobile device or you actually have gone out and you've done AGIS inventory of all of your assets.

32:59  
I think Appalachian State that's here represented that they have all of their assets, all of their utilities.

33:06  
I know Florida, University of Florida is looking at this as well of documenting all of their utility infrastructure from AGIS perspective.

33:15  
So then being able to take those feature IDs in GIS and being able to link them to an asset record in AIM, so we can create a location reference from that GIS system so we get that spatial information.

33:26  
Now the piece that I don't think is used as much as the other side.

33:30  
So I don't know how many of you have actually set up and configured location served in the master asset profile.

33:40  
Hey, they're actually some hands.

33:41  
Awesome.

33:42  
So the idea behind location served is, is yes, this unit is installed in this closet, but it is now servicing these 10 locations so that we then know potentially if we take that unit down, what's going to be the impact, what in what locations are going to be impact based off of that information.

34:01  
This also becomes very important with the energy management so that we can actually identify what percentage of each of those different locations does that asset support.

34:11  
So when we want to then do any type of build back, we actually can accurately build back to the occupants of those spaces based off of what percentage of that utility is actually being being serviced there.

34:21  
All right.

34:24  
So how do we apply all these concepts?

34:28  
So one of the ones that I would say is on the end of the spectrum of doing a really good job.

34:34  
And those of you that were here last year, I'm sure got some insight into what their plans were.

34:39  
They are in full production now and they are doing a lot with assets.

34:46  
So this is actually Caltech's asset test.

34:49  
So this is one of those situations where one of the things that before you start to inventory all your assets is, is you need to really think about what is an asset, right?

35:00  
And you need to decide that for your organization.

35:03  
So your list may be this, but it may be something different.

35:07  
Like we heard yesterday afternoon from John Mcclane from Portland Community College that they're counting and tracking some assets that not everybody else necessarily wants to track because their legislative body is requiring them to provide that information so they can make that that accurate information.

35:24  
Not everybody in here wants to track pink color or count ceiling tiles, but they had some need to do that for some of their business reasons.

35:33  
So this list is what Caltech defines as they want to say, is it a maintainable asset?

35:38  
So does it meet that test?

35:40  
Is it regulated?

35:41  
So is this something that we have to show that we're in compliance with?

35:46  
Is it permitted?

35:48  
Oops.

35:49  
Is it tracked?

35:51  
Is it counted?

35:52  
Is it metered?

35:54  
Is it critical to our organization?

35:56  
So this is one that gets into subjectivity about what does criticality mean, right?

36:01  
And that's one where you'll have to define that at your organizational level.

36:05  
So now if we think about this, So now a little mental exercise.

36:11  
No test here, even though I say remember the asset test, but we're going to show you a couple pictures.

36:17  
And the challenge here is, is what is an asset in this picture, right?

36:22  
How many assets can you identify and don't over identify as you're going through this?

36:28  
So we can look at a picture like this and there's some obvious ones, right?

36:31  
Everybody's going to say car, right, Obvious.

36:35  
But as we look a little bit closer, right, there's a little window banger unit up there in the corner, right?

36:42  
That's an asset.

36:44  
When I was at Cal State Long Beach, we've lived in California, there are a lot of skateboarders, surfers, they love to tear up those hand rails with their skateboards, right?

36:54  
So that was one of the things we needed to track there because we needed to know how much railing did we have, How much are we replacing annually, Where are which, which hand rail are we actually fixing, right?

37:07  
Then we've got this brick exterior on the building.

37:09  
We, we probably aren't tracking every brick, right?

37:12  
I don't think anybody that crazy, not even Matt Verbay, but you might be tracking the exterior of that building.

37:19  
All right, so we have an asset there.

37:21  
We've got windows on this building.

37:23  
We've got pavement here, we've got a loading ramp.

37:26  
So you have to decide for your organization.

37:28  
Does it meet our tests?

37:30  
Are we tracking loading ramps?

37:32  
Are we tracking hand rails?

37:34  
Is it important to our organization?

37:36  
All right, now we go to a conference room.

37:41  
Hopefully one of the things you guys might be thinking is, all right, this is what a durable would be.

37:47  
All right.

37:48  
Now, do we necessarily want to track every one of these lamps?

37:52  
I don't know, maybe there's some special designer and they cost $1000 apiece and they are something that meet our regulatory financial requirements that we have to track that asset.

38:05  
Is this TV an asset?

38:07  
It used to be that if you had a big flat screen TV like this, it was $10,000, not so much anymore.

38:13  
So does it still meet the test, right.

38:15  
So you guys have to decide that the carpet, all right, this now becomes an asset potentially if we're using the the assessment needs analysis module, do we need to plan for the life replacement of that asset?

38:28  
We don't necessarily do maintenance on that, although we might be using it for custodial purposes, but most likely we just need to know when do we potentially need to be planning for the replacement of that flooring in that particular space?

38:43  
All right.

38:44  
Now Portland Community College, they may be going into a lot more detail when we look at the ceiling here, but probably what most of you guys would be focused on is this littler thing that we're seeing in the center of some of these, right?

38:56  
Our fire life safety, our Fire Protection information, right?

39:00  
It meets the the safety code regulation test.

39:03  
Does every one of these lights meet it?

39:05  
I don't know.

39:06  
It might just be part of our lighting system.

39:08  
If they're expensive enough, maybe they meet our our financial test and now we go to our classic.

39:16  
So how many assets is this right?

39:18  
How many assets do we see here?

39:21  
Obviously the package unit itself is probably going to be an asset, but what level of detail are we going to go down to?

39:27  
Are we going to track this motor?

39:28  
Are we going to track this fan?

39:32  
Maybe depends on your organization, depends on your test, right?

39:36  
So that's part of what you guys are going to have to sit down and decide is, is what are our institutions test for an asset.

39:45  
All right, So what is what is Assetworks think you should be doing?

39:52  
Step one, if you haven't heard James say this, then you weren't listening, OK.

39:59  
He has branded this concept of an asset czar.

40:03  
And I know that a number of you or a number of your organizations have actually embraced this concept.

40:08  
I know that Caltech has.

40:11  
An asset ZAR, you probably call them an asset manager.

40:13  
I don't think HR typically likes to put ZAR on anybody's actual position description.

40:17  
So it's typically the asset manager.

40:19  
But essentially they, they are the, the, the ruler of the asset process.

40:25  
I know I talked to University of Oregon who's a recent addition to the asset works family that we have the asset manager who just got hired to do that particular function here, right.

40:36  
So they are responsible for all of the assets and this is a full time job.

40:42  
This is not somebody's part time.

40:44  
I do this when I have time, all right, that this has to become a focus of the organization, all right?

40:51  
They have to be detail oriented.

40:53  
They have to care about making sure that this information is correct and accurate and they need to be focused on consistency.

41:00  
All right, So this is the problem with just allowing your supervisors, your trade managers to potentially be your asset managers.

41:09  
Is is, are all electrical supervisors and all HVAC supervisors and all carpentry supervisors, are they all going to have the same level of detail of same level of consistency?

41:23  
So this person needs to be responsible for making sure that they are keeping them on the straight and narrow and that they are following the test and that they are staying on top of it.

41:32  
That's not, I'll create that new asset when I get time that we just replaced and now it's three months later and it's not in the system.

41:38  
We're not doing preventive maintenance on it, right?

41:40  
That's what this person is supposed to do.

41:44  
All right, the second thing, so once you've identified that person and you start that position search and you identify the funding for that position, the next thing you need to do is you need to make sure your location data is right, all right, That it can't be broken.

41:59  
It can't be.

42:00  
Well, our update only runs once, 1/4 and the other rest of the time we just type it in the description when we feel like it, right?

42:10  
This has to be right because now we have to use that to locate our assets.

42:16  
Where are they serving, right?

42:18  
All those kinds of details.

42:20  
It's a foundational component.

42:22  
So the building answers both the, the what question, where, where is activity happening and what is it that we're doing the work against, right?

42:30  
Departmental ownership.

42:31  
So we know who is it that's responsible for that space, looking at our CAD drawings, allowing them to drive this behavior.

42:38  
So it's not so arduous for a person to be data entering this in, we have the ability to use those drawings to actually drive that behavior.

42:48  
And as more and more of your organization's move towards BIM, right?

42:52  
And we won't get into the whole BIM discussion, Revit building information management, Cobee, right?

42:57  
There's a lot of different ways that we can deal with BIM data, but embracing that concept more and more and leveraging it so that you get data into the system very early on, both the location data as well as the ACID data can come from BIM.

43:13  
All right?

43:14  
So this is a big one.

43:16  
You need to work with all your different entities, right?

43:19  
And department has a lot of different meanings.

43:22  
It could be the department that you're servicing, it could be your internal shop that's doing the work.

43:28  
What is it that they need?

43:30  
What do they need to be tracking?

43:31  
What kind of information do they need about those assets to accomplish their job?

43:36  
So that then we ensure that we're capturing and tracking that data and we map those data needs to the fields and aim, right.

43:43  
Is it a user defined field?

43:45  
Is it an attribute?

43:46  
Is it going to description?

43:48  
Where do we need to put that?

43:50  
Then you need to develop your master list.

43:52  
So essentially this is your template.

43:54  
All right, So this is where now that we've collected that data, now we're going to come up with with our standard, for lack of a better term, for what we're now calling what we're calling the master list.

44:06  
Verify that the mappings are correct.

44:08  
We're going to organize it by discipline.

44:10  
All right?

44:11  
So this is going through that process, taking that information and then kind of getting it standardized.

44:17  
Now look at what you already got in there and try and identify where you are on that spectrum, right?

44:26  
Does your current asset inventory now match what you as an organization has decided are our asset data requirements?

44:34  
Do we need to go out and collect additional data?

44:36  
Do we potentially need to re completely revamp our asset inventory?

44:40  
Do we, what are all the gaps associated with that?

44:45  
Now you need to make a prioritization plan, right?

44:49  
So you can't do everything in a night, right?

44:54  
You can't just say, all right, tomorrow we're going to have a good asset inventory.

44:58  
If we if, if that was how easy it was, we wouldn't be having this discussion.

45:03  
So you have to decide what level of detail do we have?

45:06  
What level of detail are we going to go down to?

45:09  
So a lot of you don't have a good sense of your asset inventory.

45:13  
But that's all right.

45:13  
We can start with, we know we've got buildings, so those can be our first level asset.

45:18  
We know that those buildings have major systems within there.

45:21  
So we can identify all the major systems.

45:24  
And now as we go out and we go visit those and we go to do a preventive maintenance, we don't know what air handler, it's air handler 3 or air handler 4 or boiler 6, whatever, right.

45:36  
But as we go and do the monthly boiler maintenance for that building, now we can go out and we can start to capture that information incrementally and we can grow that over time or and we and one of the ways that we can do that is that we can use fire asset management, right?

45:51  
So now it has that asset collection capability.

45:53  
So you can create both new assets as well as you can update the data within there.

45:59  
And in fact, we even have a concept called asset basics that you can configure by asset group that tell you what is the kind of information we have to make sure that we have for that for that asset.

46:10  
We want to have a picture of it so that then every time they go someplace, they can actually see what assets are we missing?

46:17  
The data that we already have in our inventory, as well as when I see something that's not tagged, I need to create that asset, right?

46:23  
So it becomes part of your ongoing evolution of that.

46:27  
So you can do it as an incremental approach.

46:29  
You could say, you know what, we're all going to just go out there with Excel spreadsheets and we're just going to brute force walk the entire campus and capture it all at once.

46:39  
Good luck.

46:41  
Or you can hire an, an appraisal firm, right?

46:45  
Or an inventory or an assessment firm.

46:48  
So you can use third parties like ISIS or sight lines or your local engineering firm or architectural firm that you're you're familiar with and you work with and that you trust.

46:56  
So you can bring in third parties.

46:58  
You give them your master list and say, this is the level of detail we want.

47:03  
This is how we're going to classify the assets.

47:05  
Go out and capture that for us.

47:07  
All right, action seven, step 7, you actually build into your construction processes that you're going to have the requirements to capture the asset data, All right, So that you're then defining ahead of time when you're going to do a renovation with us, when you're going to do a new, a new building with us.

47:31  
This is how we're expecting all the data and we want all this data.

47:34  
We want to classify this way and this is the format that we want it in.

47:37  
Do we want it in Kobe?

47:39  
Do we want it in our own custom asset template, right?

47:42  
How do we want that data captured?

47:45  
And then where in that process are you going to get it right?

47:48  
Are we getting it early on in the construction process?

47:51  
Are we getting it at the FM to operations hand off point?

47:56  
So this is one where as you guys become more sophisticated, this will Start Stop being just a hand off process.

48:03  
It's going to become part of that ongoing integrated organic construction operation process that happens in a solution like AIM, which is an integrated workplace management system keyword being integrated, right, that we can move that data through the life cycle as we're managing our construction and our execution of our activities.

48:25  
All right.

48:25  
And then establish a sustainable process.

48:27  
So this kind of circles back to step one, which was to identify that asset ZAR, so that that asset ZAR is then going to then help you define your Sops, your standard operating procedures.

48:39  
At what point do we actually add the asset in the AIM, right?

48:44  
And that may be different for different organizations, right?

48:48  
And then use and improve all of this data incorporated in recurring meetings, show asset inventory progress, constantly test them.

48:57  
So I know I kind of interviewed Matt from Caltech who who've been doing a lot of this and they do ongoing periodic asset testing exams with all of their facilities employees.

49:11  
They regularly bring them in and we'll retest them to say, we're going to give you some random pictures, we're going to give you some random assets.

49:17  
We're going to go walk a space.

49:20  
Is this an asset?

49:21  
Is this an asset?

49:22  
What kind of asset is it?

49:23  
Why is it an asset?

49:25  
So it becomes part of your ongoing process.

49:27  
This isn't just one time.

49:28  
We designed the SOP and then we just assume that everybody's following it perfectly, right?

49:34  
We constantly test it and we constantly evolve our process.

49:40  
So kind of hinted at it before, but one of the innovative concepts is, is that we get this process going very early on in the construction and renovation process, right?

49:52  
That well before we're ready even for a hand off, right?

49:56  
Especially when you're an integrated organization that you want to be getting that data as soon as possible so that we're actually identifying the assets in AIM when they start the commissioning process potentially.

50:07  
So as soon as we know about them, we want them in AIM so that it can be be utilized and then we can leverage all these different asset functions.

50:15  
It can be tied to the capital project.

50:18  
We can then be getting all that information about it.

50:20  
It can evolve, get the warranty information once we actually get it installed and commissioned.

50:25  
And we can even integrate with our utility or energy management.

50:28  
And we have a new concept or new function in there that not everybody is is maybe familiar with called our energy management reactor.

50:35  
So that then we're then linking together the those assets tied into our automation systems.

50:42  
So that now we're tying that together so that then once the building comes online, your automation systems are actually telling AIM when things are out of condition.

50:49  
And then AIM can go do something with that.

50:51  
Maybe it's a work order, maybe it's just a message, maybe it's an action code that sends an e-mail to somebody.

50:56  
But now we then can then tie all this together, right?

51:00  
So we get it early on in the process.

51:02  
It's in living through the construction process and then it becomes an actual operational function directly in the product.

51:09  
Now if I could, if I could give you anyone take away, this is the thing that we think is more important than anything as you guys go back to your organization's is, is to really embrace this concept of an asset XAR.

51:25  
And the, the reason for this is, is if you set all this up and then you just distribute it out there and you don't have anybody who's acting in that oversight capacity for this, it's going to go off track very quickly, right?

51:40  
If it's not somebody that's going to hold the supervisors, the task to make sure that those assets are being added into the system as soon as they replace them and they're not setting up the PM templates, as soon as they've then replaced that asset or relinking them to existing PM templates, you're going to have inaccurate information.

51:59  
And that goes back to our first slide is, is that inaccurate asset inventory is going to cost you, right?

52:06  
Ultimately, it's going to cost your organization, it's going to cost you in fines, it's going to cost you in efficiency, it's going to cost you in, in, in, in real dollars, right?

52:17  
So this is, this is really that person who becomes focused and their sole purpose in life is to make sure your asset inventory is perfect at all times and helping the organization to stay on track with that and keep that a focus.

52:31  
And if you want to know more about it, I, I know that there's a lot of you that are doing it.

52:35  
The, the one that I've talked to the most, the one that I participated in, in some of their workflow processes, when they did their AIM implementation, they literally had a swim lane for asset manager.

52:46  
And where does this person impact each of their asset workflows?

52:51  
All right.

52:52  
And so Caltech, it would be a great one to talk to.

52:54  
I know some of you others are embracing it as well.

52:57  
So who in here currently has an asset czar or an asset manager?

53:05  
So there's some hands.

53:06  
So we've, I can see Michigan, I can see Broward County, I can see University of Alaska.

53:13  
The lights are in my eyes.

53:13  
I can't see everyone.

53:14  
I see Kevin from University of Oregon that I mentioned Portland Community College, the Home Depot.

53:21  
So there's those of you that aren't doing it, Memusc, right?

53:24  
So a lot of you guys are doing this.

53:26  
So those of you that aren't doing it, I have listed out some names.

53:29  
Find those people, go talk to them, find out what's working well, what are the some of their challenges?

53:34  
What do they wish they had done differently?

53:36  
Learn from that and employ that in your own organization.

53:47  
All right, but you let's do a little singing this smoke clear, play, clear play.

53:57  
Feel great.

53:59  
Wine Wither.

54:34  
The two.

54:43  
Where the hell have you been, soldier?

54:46  
Training, Sir.

54:48  
Training.

54:50  
What kind of training, son?

54:52  
Army training, Sir.

54:54  
Army training, Sir.

54:58  
So when you go back home and they ask you what did you do at ACET World, you can tell them ACET training, Sir.

55:06  
So hopefully this gives you guys some food for thought.

55:09  
They take back to your organization.

55:11  
It continue along.

55:12  
Those of you that are embracing that the assets are concept that are embracing all this, talk to your peers here.

55:20  
Take this information back to your organization.

55:22  
And if you want to do more in depth with this, certainly talk to our services team.

55:26  
Our project managers are equipped to come out and help you through this process as well.

55:31  
So thank you for your time.

55:32  
Enjoy the rest of the conference and we're really glad to have you here.