

SESSION ID: II1555PR

ACCELERATING TIME TO VALUE USING NEW THINGWORX CAPABILITIES FOR SERVICE

SPEAKER(s): Anthony P Moffa, LSS MBB PTC Sr. Dir. Sales & Strategic Programs

Lora Estey PTC Product Manager, SCP Solutions

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New ThingWorx capabilities for Field Service teams enable improved time-to-value and lower the total cost of system ownership.

Learn how that new functionality simplifies deployment and maintenance while delivering lower costs and pathways to higher revenue

We are currently in field validation. SCPA is available to all customers through a VRD

Lora Estey



Product Manager SCP Solutions





Sr. Director, Sales & Strategic Programs

"There are risks and costs to a program of action, but they are far less than the long-range risks and costs of comfortable inaction."

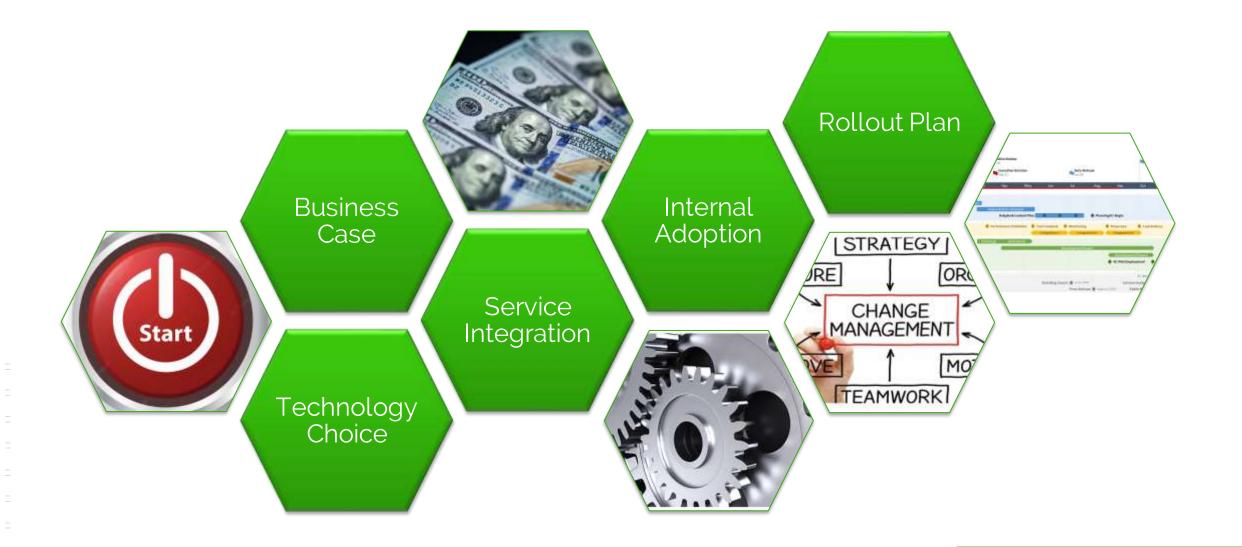
John F. Kennedy

This is why implementing change is so difficult – it's comfortable to not change

A PLAN OF ACTION...



A PLAN OF ACTION...



"In preparing for battle, I have always found that plans are useless, but planning is indispensable"

Dwight D. Eisenhower

"No campaign plan survives contact with the enemy" Carl von Clausewitz

"Perfection is the enemy of progress"

Winston Churchill



Plan your change, but be prepared to adapt

Flexibility is the key to success

NEW CAPABILITIES FOR SERVICE OPTIMIZATION

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BUSINESS CASE

Premise – IoT will have a positive impact on service operations

- Reduced Dispatches & Mean Time to Resolution
- Increased Customer Satisfaction, Revenue and Margin

Dependencies

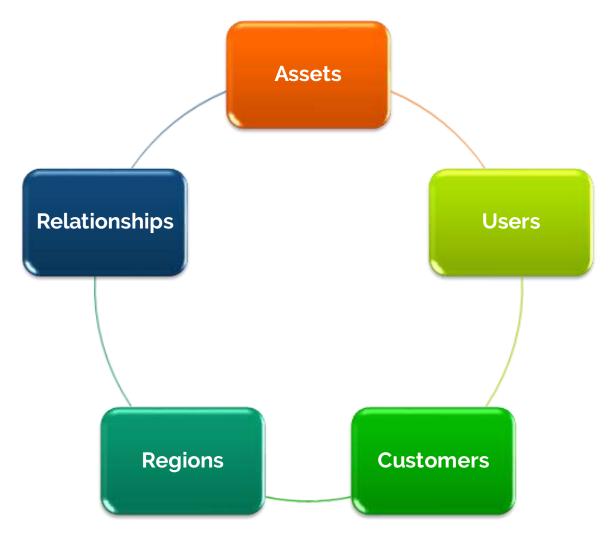
- Integration into Service Operations
 - Expose Data & Information
 - Process Integration
 - Internal Use & Acceptance
- External Acceptance
 - Hardware & Software Solution
 - Marketing
- Return on Investment
 - A f(x) x = Number of Connected Assets
 - A *f(t)* Cost increases with duration of the rollout

MAJOR INTEGRATION AND ROLLOUT ACTIVITIES

- Create a Digital Representation of your Thing
- Connecting Things
- Adding Individual Things to the Database
- Adding & Managing Users to the system
- Creating your Service Business Configuration
- Adding Customers into the Database and organizing them
- Organizing Assets & Customers

TWX now provides a fully functioning interface to accelerate these tasks

ORGANIZE, CREATE AND ALIGN



- Start with Asset Models
- Create & Connect Assets
- Add users to work with the assets
- Create customers (asset owners)
- Define Regions to organize assets
- Establish relationships:
 - Users Regions
 - Users Assets/Asset Classes
 - Customers Assets
 - Assets Regions

The order is somewhat flexible, but all the steps are necessary

IN A PLATFORM YOU START WITH DESIGN....

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With solutions you fast forward to CONFIGURATION

KEY SERVICE USE CASES

- Where are the assets we support
 - Thing Template & Properties
 - Select which properties to display
 - Customize your menu options
 - Customize your display pins
- Organize Assets
- Create User Roles
- Create Users
- Assign Users to Roles & Regions

- Which Assets need attention
 - Properties we need to monitor
 - Properties that highlight issues
- Diagnose an issue
 - Historical data
 - RAC
 - Chalk
- Resolve an Issue
 - RAC
 - Chalk
 - □ SCM
- Customizations to the UI





Before we can see them here, we need to add them to the system

1A) CREATING A THING TEMPLATE (COMPOSER)

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This is the only activity that requires access to Composer

1B) SELECTING A TEMPLATE & PROPERTIES (SCPA)

=	SCP Accelerator			Helio, Administrator	😒 ptc
A	Admin	Asset Model Configuration		Additional Settings	65
	Q, Soanth	Tell the application which assets can be configured by this application. Add only your top level thing temptate below. Once the thing temptate is added, the	a child thing templates and thing shapes will be automatically configured.	If you have added additional Templates or Thing Shapes a configuration, click this butter configured Thing Templates a Shiapas.	ther your initial to update the
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	Asset Configuration		PTCTDD.SimulatorFleetTracking NonVebicleAEMPData_TS		
	Remote Access and Control				

Add a class of assets using a top-level Thing Template

2) SELECT PROPERTIES TO DISPLAY (SCPA)

=	SCP Accelerator										Helo, Admonstrator	😒 ptc
*	Admin	Select Entity Type * Thing	*	Displayed Prop	perties					Show All Configured	Properties	
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Identify the Properties you want to display for the Asset Class

RESULT

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At this point, we have a list of accessible assets

DISPLAY RESULTS (SCPA)



3) CUSTOMIZE YOUR MENU OPTIONS (SCPA)

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55	Machine Alarms
70	Location History
90	Utilization
99	🗆 вем
99	Tickets

Remote Access

100



4) CUSTOMIZE YOUR DISPLAY PINS (SCPA)

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A	Admin	Configuration Management Configu	ration		
	Q, Sourch	Modify configuration data used by Configuration Manag	ement.		
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	Association Details				
	Manage Distributeds				



Your Customer

- Parent Company
 - Division or Child Organization
 - Geographic Region
 - Sub-region
 - Site Name

Your Service Organization

- Division
 - Geographic Region
 - Sub-Region
 - District
 - Office

This is often a matrix, where customer sites cross the service organization

Now you accelerate to configure rather than design and build the network

ADDING A REGION

=	SCP Accelerator			Helio, Administrator	😂 ptc
↑ 51	Admin Q. Search	Configure Association Hierarchy Add and remove associations, and modify the hierarchy of associat	tons.		
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Example - we need to add a Central Region to the list

ADDING A REGION (CENTRAL)

=	SCP Accelerator		Helio, Aprovanator	😂 ptc
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	Asset Configuration			
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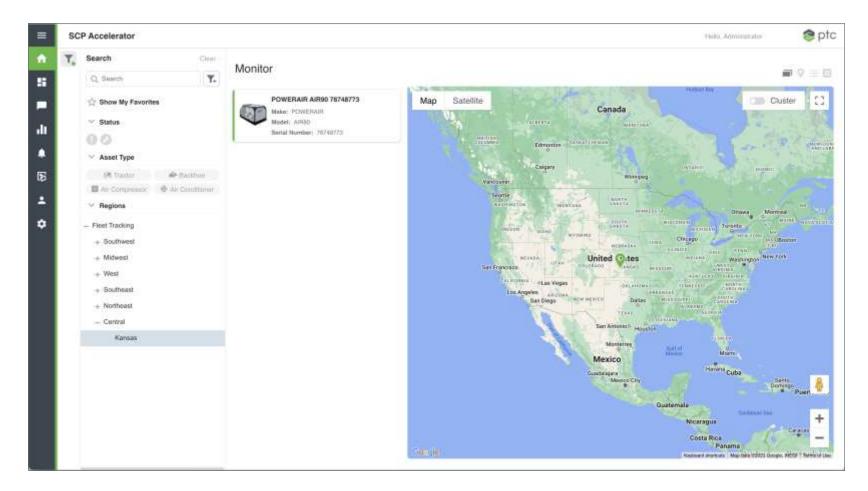
Adding a Central Region to the list, we'll also add a sub-region

ADDING AN ASSET TO THE REGION

=	SCP Accelerator			Hubo, Agrocognator	😒 ptc
•	Admin	Assign Assets to Associations			
	Q, Search	Select which assets are included in each Association. Adding	an asset to a lower level Association makes it visible by all parent Associa	ifore.	
-	DapagSettings Configuration	Select an Association: *	Add or Remove Assets from Association	Kansas	
	Alerts	Kalamazoo_DWTWN_RA516		D Show Only Unassigned Assets	
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	Display Softings	E Southeast		ACME_EG_POWER-H_56168419	
	IAM Administration	El PanHandia		ACME_POWERAIR_AIR90_36832136	
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	Marage Users	Panama_City_RA269 Pensaccia, RA267		ACME_POWERAIR_AIR90_62156641	
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		Manchester_FIA044			
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	Asset Configuration	Add New Association	Remove Selected From Association	Add Released To Association	
10 B.	Remote Access and Control				

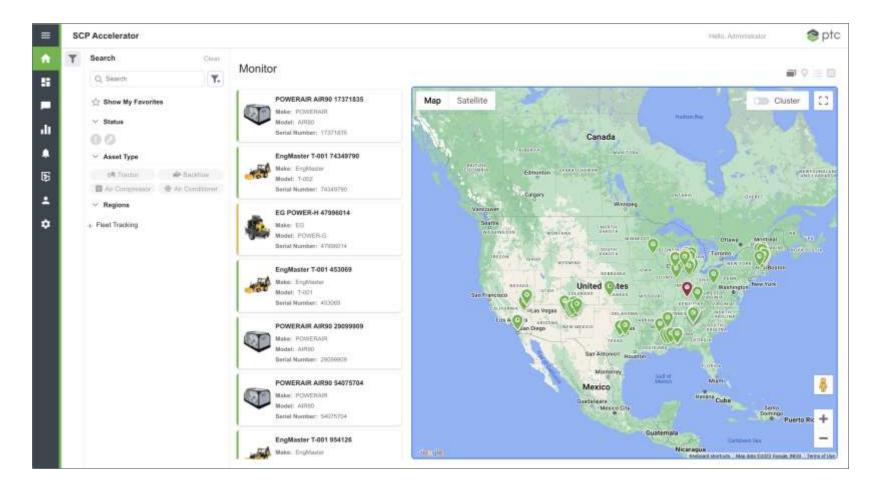
We added Central & Kansas, now we can add an asset

UPDATED TREE AND FILTER



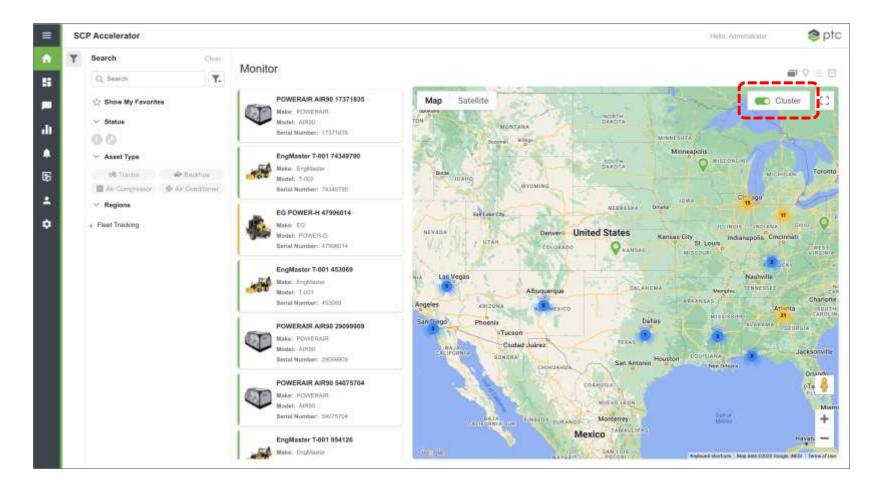
The Tree acts as a filter for the list/map

ASSETS ASSIGNED TO REGIONS



At the top level we see all assets

TOO MANY ASSETS, GROUP THEM...



As the asset population grows, you can add summary pins

OR LIST THEM

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	✓ Regions	POWERAIR AIR90 29099009	29099909	Running	POWERAIR	AIR00	
	+ Fleet Tracking	POWERAIR AIR90 54075704	54075704	Running	POWERAIR	AVR80	
		EngMaster T-001 954125	954128	Running	EngMaster	T-001	
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Support tends to leverage lists more than the map

This is just configuration work. It was done without creating a single mashup or writing a service. It's all part of the Smart Connected Product Accelerator



- Commonplace to organize users based on skills and experience
- Example:
 - Tier 1 View Only
 - Initial Triage
 - Limited experience
 - Often script based
 - Tier 2– View and some Interaction
 - Detailed Triage
 - Experienced
 - Self driven
 - Knowledge base supported
 - Tier 3 View and Advanced Interaction
 - Unique issues and Triage
 - Super users and or Designers
 - Completely self driven

CREATE A USER ROLE

	SCP Accelerator		Hers Automatica 😒 ptc
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CONFIGURE THE USER ROLE

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Admin	Manage Roles								
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Configuration	PTCTS Utilization.ApplicationUser_UG	8		8	8				
Parman ar be	PTCTS Utilization. Default_UG	2	0	10	20				
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Asset Proxy Co	Proxy Configuration								
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Roles define access to features and data

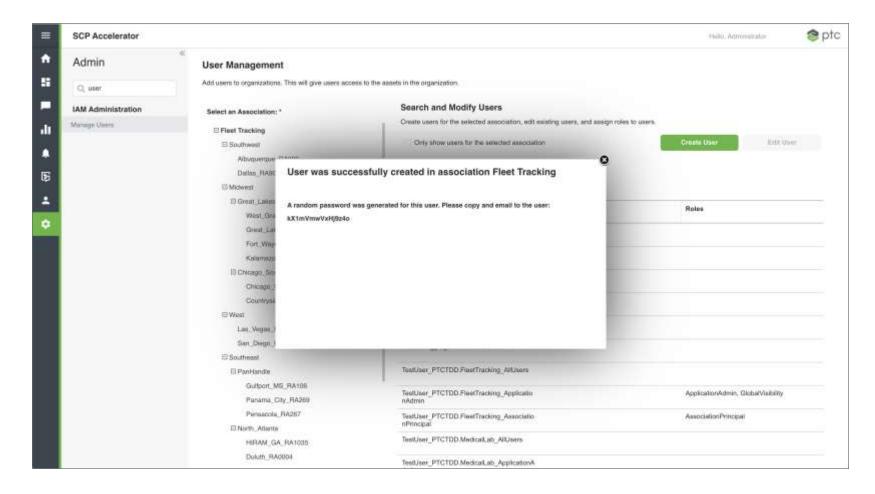
KEY USE CASE – ADD & MANAGE USERS

=	SCP Accelerator				Helio, Administrator	😂 ptc
*	Admin (C. user	User Management Add users to organizations. This will give users access to t	he assets in the organization.			
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•		Great_Lakes_Division_RA916 Fort_Wayne_RA223 Kalamazoo_DWTWN_RA516 El Chicagn_South Chicago_South_Division_RA8028 Countryside_RA382	Administrator es-authorization es-public-accese kepIAM			
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CREATE A USER

	SCP Accelerator			Hello, Admonstrator	S ptc
A	Admin	Wer Management			
5	Q, user	Add users to organizations. This will give users access to the i	assets in the organization.		
	IAM Administration	Select an Association: *	Search and Modify Users		
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6		Delas NAR Create A New User	0		
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		C PanHandle	TextUser_PTCTDD FleetTracking_Allusers		
		Gulton_M5_RA108	TestUser PTCTDD FleetTracking Applicatio	ApplicationAdmin: GlobalVisibility	
		Panama_City_RA269	nAdmin		
		Persacola_RA267	TestUser_PTCTDD.FieelTracking_Associatio nPrincipal	AssociationPrincipal	
		EI North_Atlanta			
		HIRAM_GA_RA1035	TestUser_PTCTDD.Medical.ab_AUUsers		
		Duluth_BA0004	TextUser_PTCTDD.MedicaLab_ApplicationA		

CREATE A USER



EDIT A USER

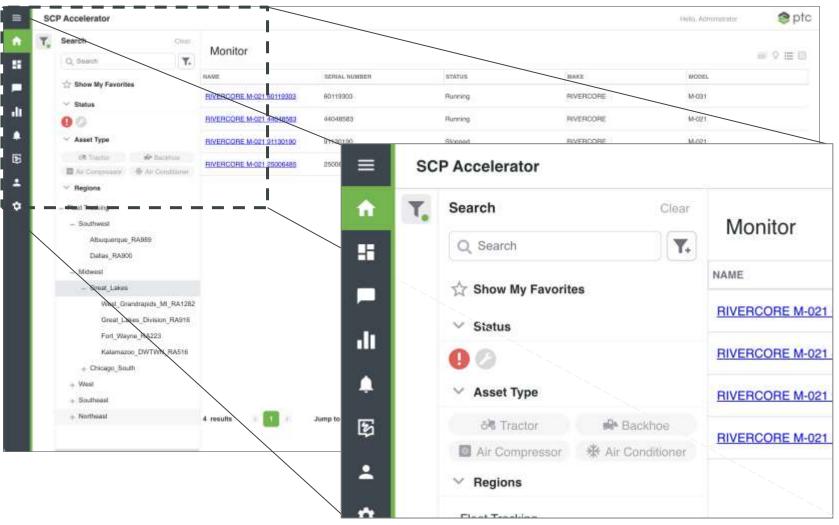
=	SCP Accelerator				Helio, Administrator	😒 ptc		
*	Admin	« User Management						
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		⊟West	amoffs is a user created for the	Assocation Name	is interited			
		Les, Vegas _RA1200 Sier, Diego, HA1206 III Southezal	Association, Region, FleetTracking_Fleet _Tracking association.	Abuquerque_RA989	8			
		[] PanHandle	Save Changes	Atlanta_Key_Account_GR P_RA981	8			
		Gultont_MS_RA108 Parama_City_RA269		Central	2			
		Pensacola_RA287	Roset Planword	West_Grandrapids_ML_R A1282	8			
		HRAM, GA_RA1035		Countryside_RA392	믠			
		Duluth_BA0004		San_Diego_RA1208	9			

KEY USE CASE – ASSIGN USER'S ROLES & REGIONS

-	SCP Accelerator					+sillo, Administrator	😂 ptc
↑ 11	Admin	User Management Add users to organizations. This will give us	ere access to the assets in the organization.				
- - - -	IAM Administration Murage Users	Select an Association: * E Fleet Tracking E Southweat Absquerque, PA989 Dallas, RA900 © Molwest	Search and Modify Us Create users for the selected F Back 18 Second Update User Roles	association, edit existing un	ers, and assign roles to users.		
•		Great, Lakos West, Grandrapiss, M, Hi Great, Lakos, Division, R# Fort, Wayne, RA223 Kniemezoo, DWTWW, R4 [3 Chicago, South Chicago, South Chicago, South, Division, Chicago, South, Chica	ApplicationAdmin AssociationPrincipal GlobalVisibility Tier-1-Support	Save Cancel	Roles - Readonly Associations - Readonly	Edit Roles Edit Associations	
		EWest Las, Veges, RA1200 Sen_Diegn, RA1205 El Southeest El PanHandle Gultport_MS_RA106 Panama_City_RA260 Pensacola_RA267 El North_Atiente HERAM_GA_RA1035 Dukuth_RA0004	Save Changes Reset Password		Association Name Abuquerque_RA989 Alianta_Key_Account_GR P_RA981 Central West_Grandrapkis_MI_R A1292 Countryside_RA392 San_Diago_RA1208	Is Inherited	

Assign users to their group function

KEY USE CASE - WHAT THINGS NEED ATTENTION?



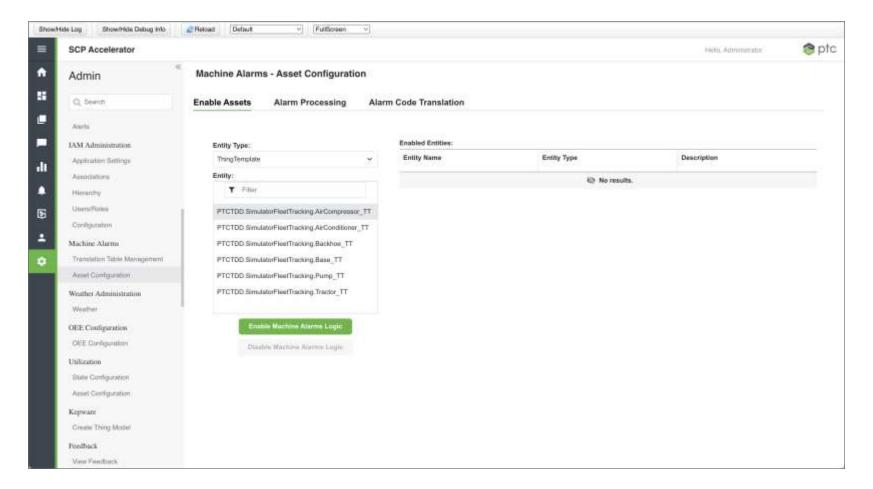
Multiple Filters to streamline access to assets

DEFINING WHAT PROPERTIES TO ALERT ON



These properties highlight Maintenance concerns

ALARMS BY ASSET CLASS (MODEL)



CREATING ALARMS

	SCP Accelerator							Hencoursestillators	😒 ptc
+ 11	Admin	Select Entity Type *		Hadanue P7CSonation	uun Equillo vun		English You Provide 1		
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dt	Minho Managoment		Add Alert		_	-	Outset Too		
	Documentation				Dawa Makaza		Tuette 1		
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*	Charts	Select Property *	Low/vo			1			
ŵ	Chief Sillings	BatteryWattage							
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	- Managa Usino Managa Dites								

LOW VOLTAGE ALARM

SCP Accelerator			Nella, Adventionator	S ptc
Admin	Select Entity Type *	LowVoltage	Enabled: Yos	Detete
	ThingTemplate ~	BatteryVoltage Bolow 11	Priority: 1	Consideration of the second se
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uma isitup	PTCTDD.SimulatorFleetTracking.Backho v			
Menu Manager	Professionautrice and period.			
Manu Management		Hasissue	Enablest: Yes	Definitio
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Jocuments			Source Entity: PTC1DD.SimulatorFlootTracking.Sees_TT	Continue
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Churt Settings	BatteryVotage ~	PTCStatusNeedsMaintenance EqualTo true	Priority: 1	Detete
Doodads	1		Source Entity: PTCTDD.SimulatorFeelTtacking.flass TT	Disatie
Doodied Betture				
JisplaySettings	Add Alert			
Indigunation				
Alerts				
Alerts				
Configuration Management				
Jonfiguration				
Configure Asset Model				
Acit Functionality to Template				
Display Settings				
IAM Administration				
Assign Assets				
Manage Users				
Mature Brites				



CAPABILITIES

- Interactive diagnostics processes by incorporating connected machine data (full remote access to edge system):
 - In-depth view into device software versions and configuration
 - Change configuration
 - Rich remote troubleshooting
 - Fix problems remotely
- Transfer files to or from remote product edge system software updates, configurations or retrieving log files.

Party and a second s	ra-test-agent.					
Performance Monitored Properties Additional Properties		Model Number.				
Remote Access		Description:	1	START SESSION		
File Transfer File Transfer History		Location: Related Lines: Related Site:		Select a remote endpoin	nt	1
	Active Sessions			HID-600		
	Remota Server		Renuts Asset P			
					54	Canol

Advanced diagnosticsN& triage = maximumdiaguptime0

More complete diagnostics increases chance of FTF Fewer Truck Rolls = Lower Cost of Service

Available directly via SCPA



CAPABILITIES

- Automated management of edge software versions
- Complete package and deployment testing
- Deployment monitoring dashboard
- Ensure security with package signing & verification
- Advanced remote triage
 and repair

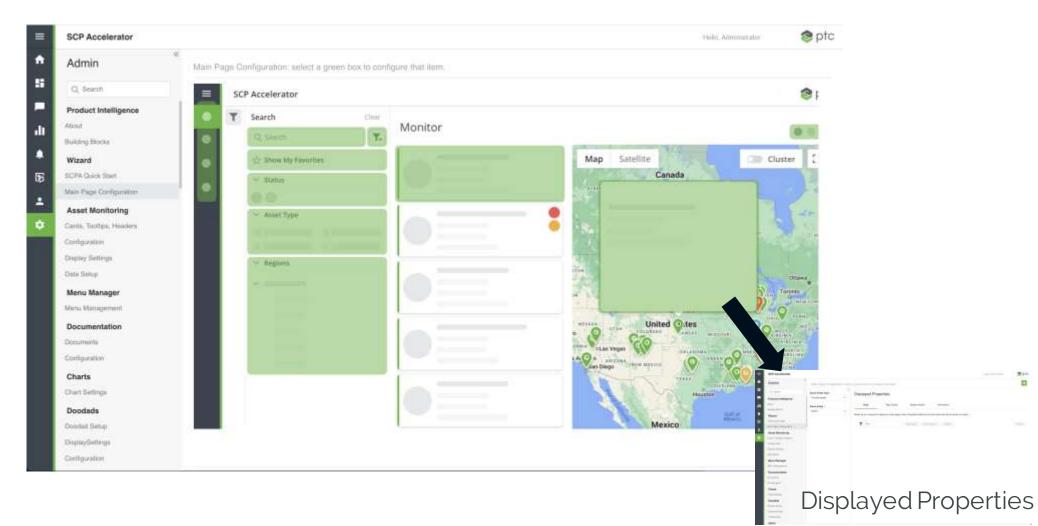


Enables continuous enhancement of devices in field Keep connected devices secure over time

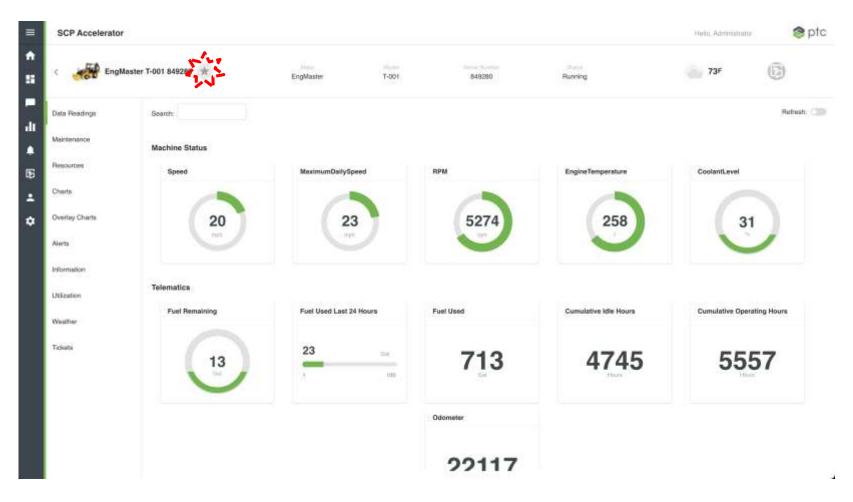
Reduce cost to maintain and service

Lower cost of service; prevent recalls

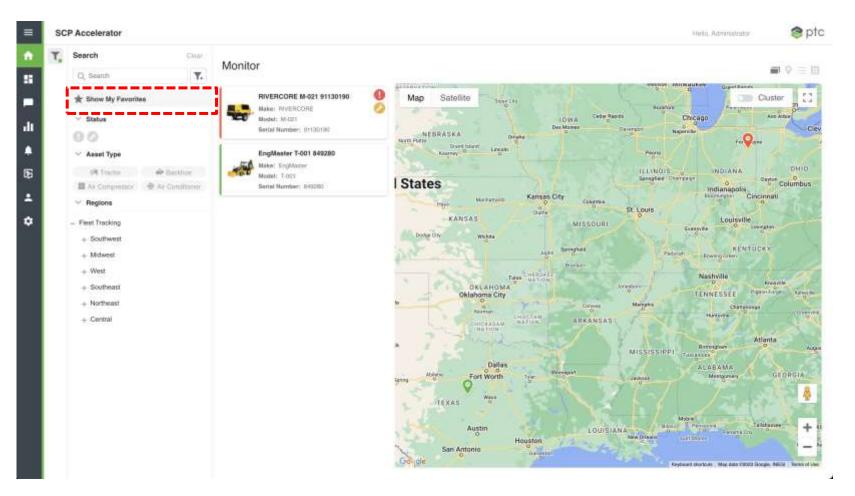
SETUP MY HOME PAGE



DEFINING MY FAVORITES



FILTERING TO MY FAVORITES



UNDERSTANDING VALUE READY DEPLOYMENTS (VRD)

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VALUE READY DEPLOYMENTS

Value Ready Deployments (VRDs) are a starting point for scoping customer projects with PTC. Each one is configured to specific project needs in mind, providing best practices for implementing and articulating business value with our out of the box solutions. VRDs help customers navigate the implementation process and reduce common risks, making for an overall smoother experience.

VRDs are built on 3 consistent components:



Best Practices-led Implementation



3 Efficient and Effective Projects

A VRD is a collection of PTC best practices in positioning, implementing, configuring, and deploying OOTB functionality of PTC software and solutions. VRDs encompass best practices and artifacts to provide standard deployment options.

You should expect:

- A starting point for scoping a customer project
- Materials built using PTC Professional Services experience, as well as industry and product best practices
- A bill of materials designed to reduce the most common risks with implementations
- A way to provide a **consistent** customer implementation experience
- A collection of artifacts to position and deliver consistent, repeatable and reproducible outcomes
- VRDs to be delivered through a Statement of Work

That leads to:

Decreased

- Risk
- Delivery Timing
- Initial cost of delivery
- Increased adoption of your solution
- Improved return on investment

You should not expect:

- A fully scoped solution
- VRDs to be delivered via Success Points

SCP USE CASES			
Services	Customers	Engineering / Product Management	Sales & Marketing
Remote Monitoring	Remote Monitoring	Product Performance & Usage Data	Customer Analytics
Remote Access & Control	Self-Service	Connected Product Management	Value Added Services
Software Content Management	Customer Portal	Consumables Replenishment	
📚 Remote Assistance		🔃 Closed Loop Quality	
Optimized Spare Parts Management	VRD focuses on	Digital product sensor modeling	
Service Instructions	these 3 use cases		
Warranty compliance			
	me use case require SCP integration windchill	with additional PTC products	

HOW DO VRDs WORK AND WHO SHOULD USE THEM?

		\Box
N	••	

A PTC or Partner expert works with the customer to determine their implementation needs



A delivery resource takes over delivering the SOW to meet the customer needs



Who should <u>us</u>e a VRD?

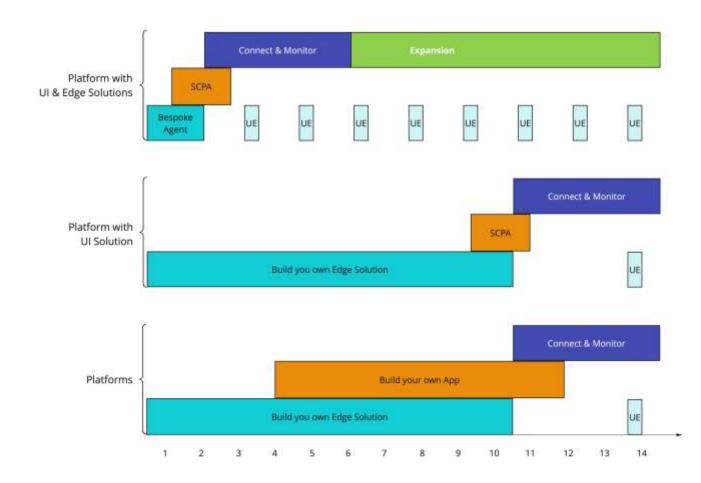
A customer looking for a "**do it for me**" approach to PTC or a System Integrator-led implementation of OOTB functionality



How do I access VRD materials?

VRDs and supporting materials can be found on: Workrails for internal PTC employees and Velocity for PTC partners

SOLUTIONS WORK FOR YOU



ADDITIONAL SESSIONS YOU MIGHT APPRECIATE

3:00 PM EDT - Monday, May 15

BREAKOUT SESSION



Drive Key Insights into your...

Monday. May 15 | 3:10 PM - 3:40 PM EDT 102 B

Connecting assets throughout your organization vastly increases the amount of data that can be used to generate valuable insights into your operations. Applying advanced Analytics to this... 11:00 AM EDT - Tuesday, May 16



[SE1780T] A New Vision for Service

Tuesday, May 16 | 11:15 AM - 11:45 AM EDT General Session | Hall B

Service plays a central role in renewing and expanding customer relationships to support business growth. Service leaders are often the first to encounter increasing product and servic...

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ADD TO SCHEDULE

1:00 PM EDT - Wednesday, May 17

PRODUCT ROADMAP



[II1563PR] PTC's ThingWorx Strategy and Roadmap for Connected...

Wednesday, May 17 | 1:00 PM - 1:30 PM EDT 104

Come to this session to get an update on PTC's vision and roadmap for smart, connected products. The session will also cover the latest improvements with PTC's Remote Service Age.

ADD TO SCHEDULE

ADD TO SCHEDULE



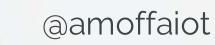
QUESTIONS?

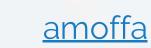
Thank you! You can find me at:



in

amoffa@ptc.com





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Your feedback provides us with valuable information on how to shape future content strategy for the event!

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