



SMART, CONNECTED SUPPORT WITH PERFORMANCE ADVISOR FOR PTC WINDCHILL

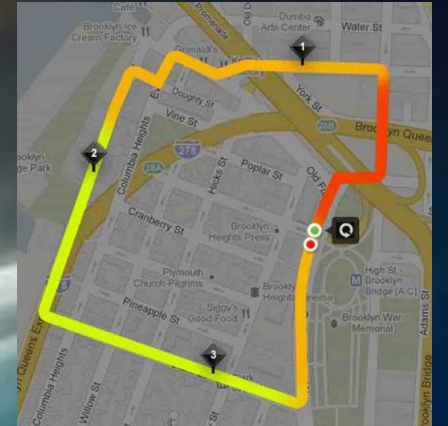
Steve Shaw and Walid Saad
PTC

June 9, 2016

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THE "QUANTIFIED SELF"



“QUANTIFIED PTC PRODUCTS”

PTC® Performance Advisor



Performance Advisor for
PTC Creo



Performance Advisor for
PTC Windchill



Performance Advisor for
PTC Integrity Lifecycle Manager

8,612

customers

are sending data to PTC

Connected proactive support



319,840

customer data sets collected

Connected proactive support



3,937

recommendations sent to customers

A decorative graphic in the top-left corner consisting of several overlapping, pointed shapes in shades of pink, yellow, and blue.

AGENDA

- Overview
- Demonstration
- Roadmap
- Call to Action

SMART, CONNECTED PTC WINDCHILL DELIVERS...



CAPABILITIES

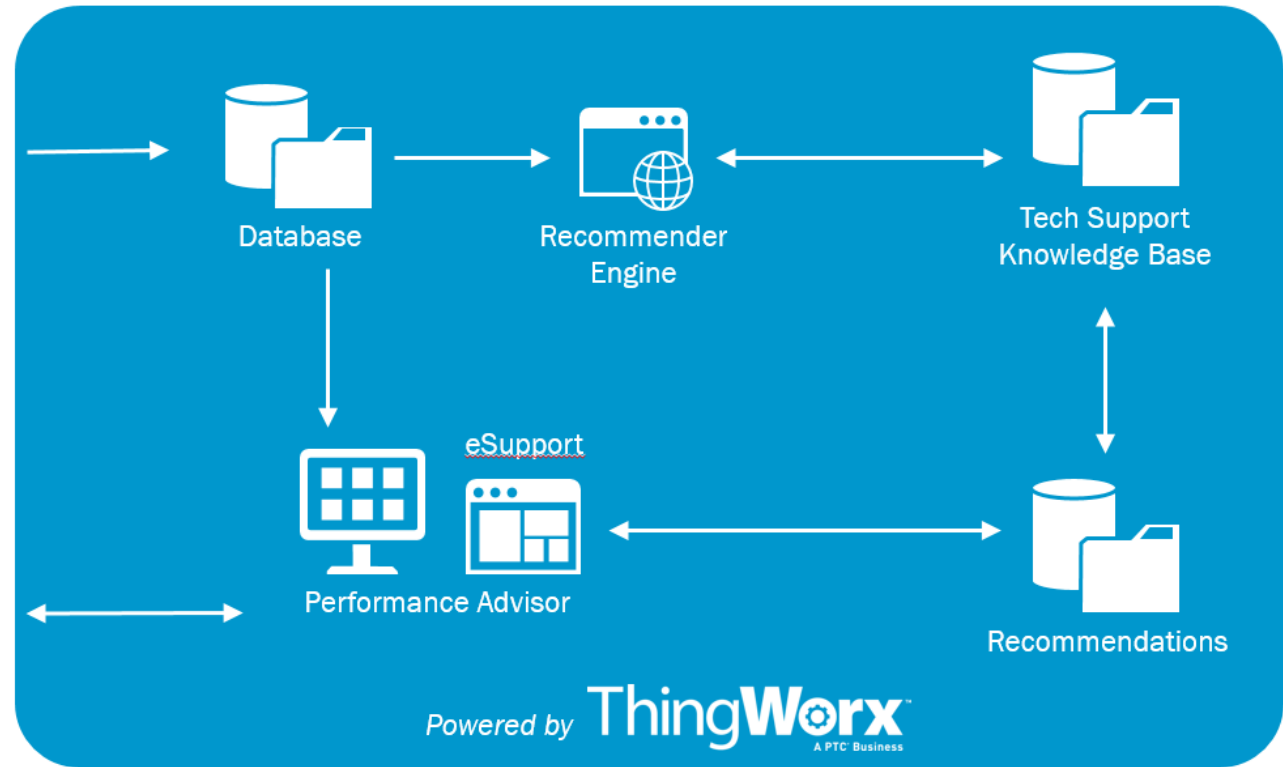
- Using IoT to better service and support PTC software
- Proactive Support – detecting issues before they become “issues”
- Configurable dashboards to help monitor systems configuration, usage and peer comparisons
- License and usage monitoring tools
- Private & Secure environment

Customer's
PTC Windchill
Servers



PTC Windchill
Administrator

PTC Support



BENEFITS

Increased end-user
productivity

Decrease IT cost of managing
PTC Applications

Reduced incident rates

DEMO

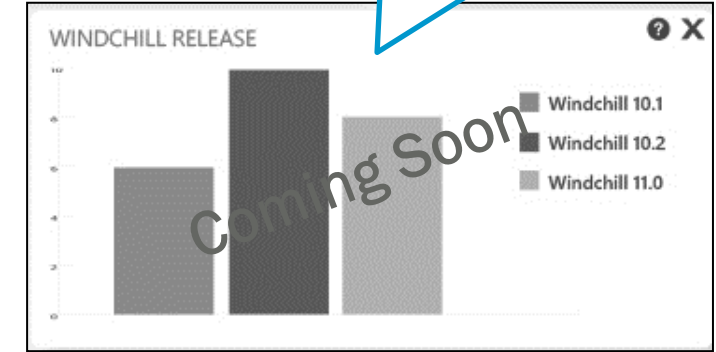
GET SMART



- Continuous delivery
 - SaaS approach
 - New Gadgets/capabilities delivered over time
- Flexibility
 - Personalize your dashboard to show reports of most interest
 - Only share the data your company is most comfortable in sharing
- Privacy
 - User information is anonymized
 - Only you have access to your data
 - Generic information aggregated for peer comparison reports

PRIMARY BUSINESS OBJECT GROWTH RATE
LAST UPDATED 2016-06-03

Object	Count	Change In Count
CAD Documents	13862	▲ 5
Change Requests	1	– 0
Documents	17	– 0
Parts	545	▲ 1
Problem Reports	1	– 0



New Gadgets delivery

Configure dashboard to your liking

Dashboard navigation: Status and Statistics, Adoption, Adoption (2), Stability, Stability (2), Recommendations, Compatibility Status, Compatibility Check

TOP 5 USERS WITH PREMATURE EXITS (LAST 10 DAYS)

User	Total	Change In Rank
4482675e36f45c1c9e17135edab54413	13 (42%)	▲ 13
64a24b70fe0457cfa8066eb55e4f1c37	9 (82%)	▲ 2
18d1f35e6d315ced90940d960e43888e	4 (25%)	❌ New
7996b10b2e635e3bb1991c0d094d8562	4 (100%)	❌ New
ca7ff1afaac9507c973f54d23c0d27b2	3 (11%)	❌ New

UNEXPECTED EXITS (LAST 10 DAYS)

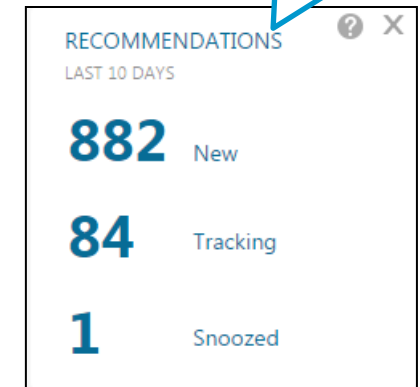
TOP 5 HOSTS WITH PREMATURE EXITS (LAST 10 DAYS)

Host	Total	Change In Rank
217e6a00a281591a8e89c00d0acfdc73	13 (42%)	▲ 15
f2075e542388590b959a64bcc8f8f6566	9 (82%)	▲ 2
381fb3efb1175166be8de5d93929ee9f	4 (100%)	❌ New
ef9c8b8218e2533da362bec1e4480956	4 (31%)	❌ New
39d8c80cc91b5f6199f99f40b8fa1332	3 (11%)	❌ New

SESSIONS (LAST 10 DAYS)

Legend: Normal, Unexpected

Technical Support Recommendations



SECURE & PRIVATE



- Security & Privacy
 - **User privacy** - UserID information is randomized using a keyless one-way hash prior to transmission to PTC
 - **Data Transmission** – connection is made over SSL (port 443)
 - **Data Security** - data resides on a set of PTC servers where it is hosted and processed. The server's security is rigorously controlled with limited access.
- Available for all Active Support customers running:
 - Windchill 11 F000 and higher
 - Windchill 10.2 M030*
 - Windchill 10.2 M020*

	System Information and Peer Comparison	License Compliance	Issue Reporting and Recommendations
Windchill System Information <small>Windchill version, configuration, OS, CPU, DB, etc...</small>	✓	✓	✓
Windchill Properties <small>All property files, clusterwide</small>	✓		✓
Windchill Performance Metrics <small>JMX, Top SQL, Long running transactions, Cache utilization metrics</small>	✓		✓
Windchill Database Statistics <small>Database row counts, SQL statement statistics</small>	✓		✓
Windchill Configuration Assistant <small>Cache settings</small>			✓
License Usage Report <small>PDMLink, ProjectLink and View Print license usage; 1 week resolution of data</small>		✓	

* Requires software patch downloadable from PTC

GET CONNECTED



Site > Utilities > Performance Advisor for PTC Windchill

- Windchill Server Setup
 - Enable at Install option
 - Post-install opt-in option
- Setup communication
 - Provide SCN and Admin credentials
 - Test data transport connection
- Configure Data Sharing
 - Select data types
 - Prescribe frequency of data transfer

Performance Advisor for PTC Windchill

Opt In

Setup frequency and enable/disable data types

Send-able data types

Evaluate nature of data to be sent before opting in

Configure credential and validate and test connection

Performance Advisor for PTC Windchill

Validation Settings

Data Category Settings

Do you want to use the Windchill Transport Mechanism to send data to PTC?

Yes, I want to send data to PTC.

No, I don't want to send data to PTC.

Data Type	Description	Frequency	Enabled?
Windchill System Information	Gather Windchill configuration and preferences information	Daily	<input checked="" type="checkbox"/>
Windchill Properties	Gathers all Windchill property files from all Cluster nodes (excludes fileserver properties)	Daily	<input checked="" type="checkbox"/>
Windchill Performance Metrics	Gathers diagnostic and metric information associated to long running database statements and transactions. Error messages, exceptions and cache information is gathered as well.	Daily	<input checked="" type="checkbox"/>
Windchill Database Statistics	Gathers database size, indexes and other statistics.	Weekly	<input checked="" type="checkbox"/>
Windchill Configuration Assistant	Gathers Windchill Cache statistics and analysis	Weekly	<input checked="" type="checkbox"/>
License Usage Report	Generates a Windchill license usage report for the given time period	Weekly	<input checked="" type="checkbox"/>

Preview Data Save Settings Reset to Default

Enter SCN (Service Contract Number):

If you do not have the SCN, please enter your ptc.com credentials in order to receive the SCN.

Username (Email Address): *

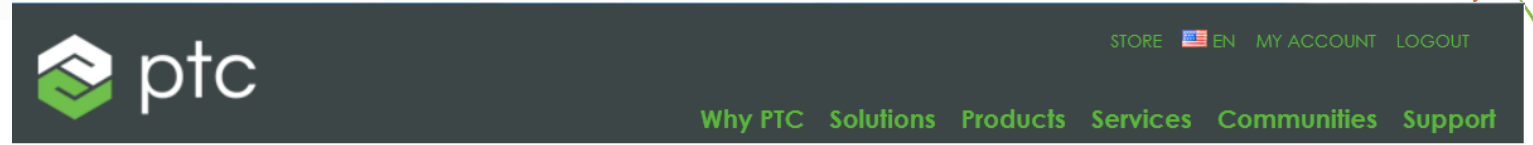
Password*

Test Transport Validate SCN

GET CONNECTED



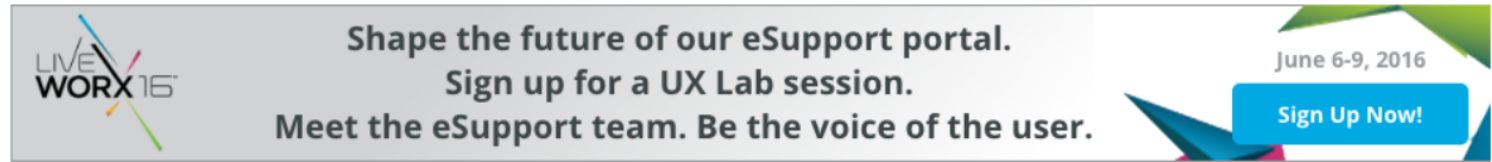
- Go to your [PTC eSupport portal](#)
- Select the “My Company” tab
- Click on the “Add Portlet” button and choose “My Connected PTC Products”
- Requires
 - PTC.COM eSupport **Online Supervisor** credentials
 - Active Windchill SCN paired with privileges for the given user required.
 - Able to Access all connected Windchill servers under common SCN



Home > Support

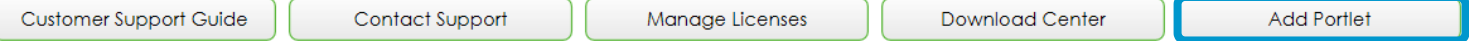
Welcome [User] from [Location] Not [User] ?

My Company Information

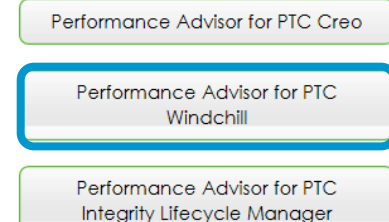


Search our Knowledge

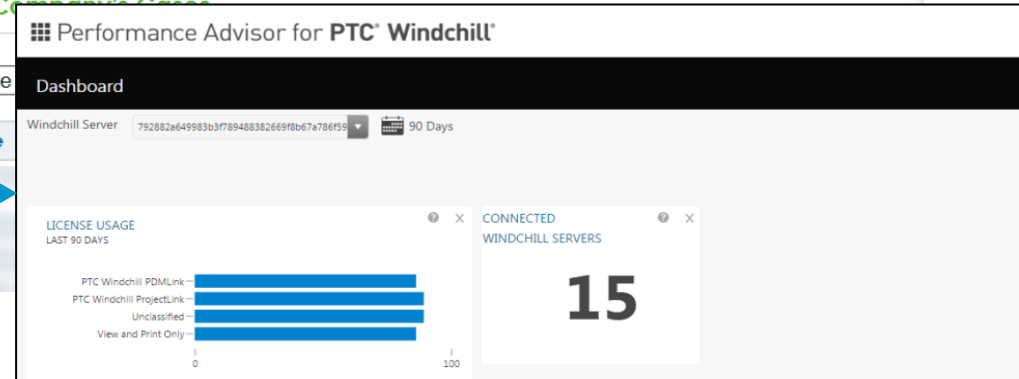
Search knowledge articles, best practices, and more ...



My Connected PTC Products



My Company's Cases



ROADMAP

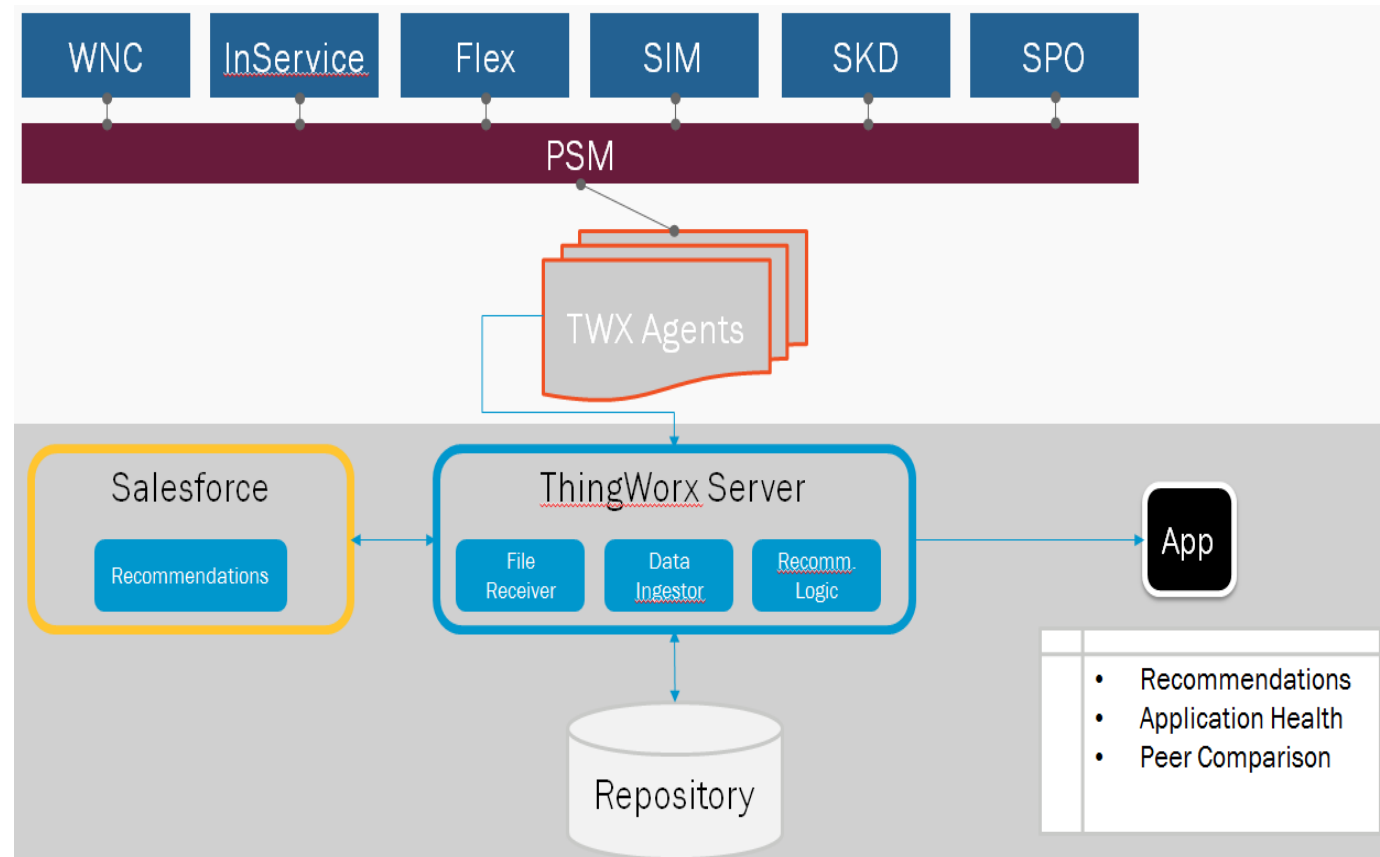
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CONNECTED PTC SYSTEM MONITOR



Capabilities

- Capture rich diagnostic data
- Visibility into feature usage
- Performance metrics
 - Application
 - Host



Fall 2016

Common Platform for PTC Products

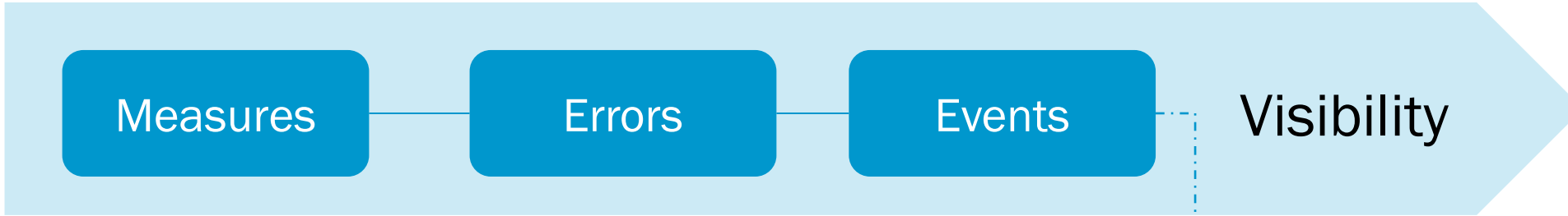
Feature Usage

Peer Comparison

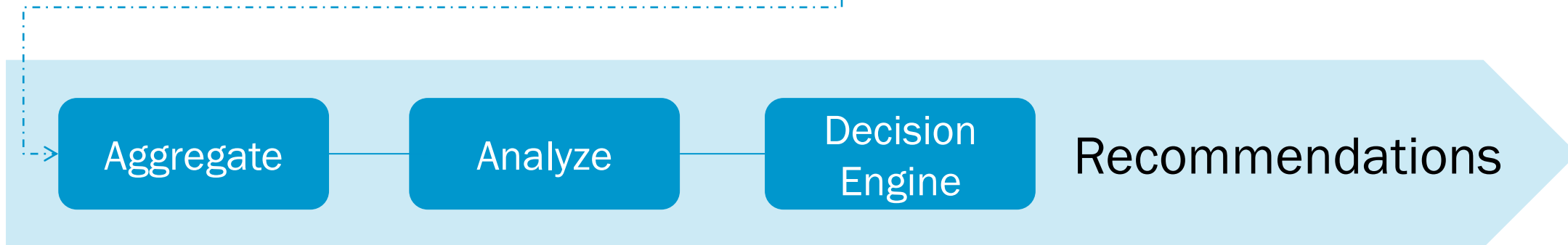
PTC SYSTEM MONITOR vs PERFORMANCE ADVISOR



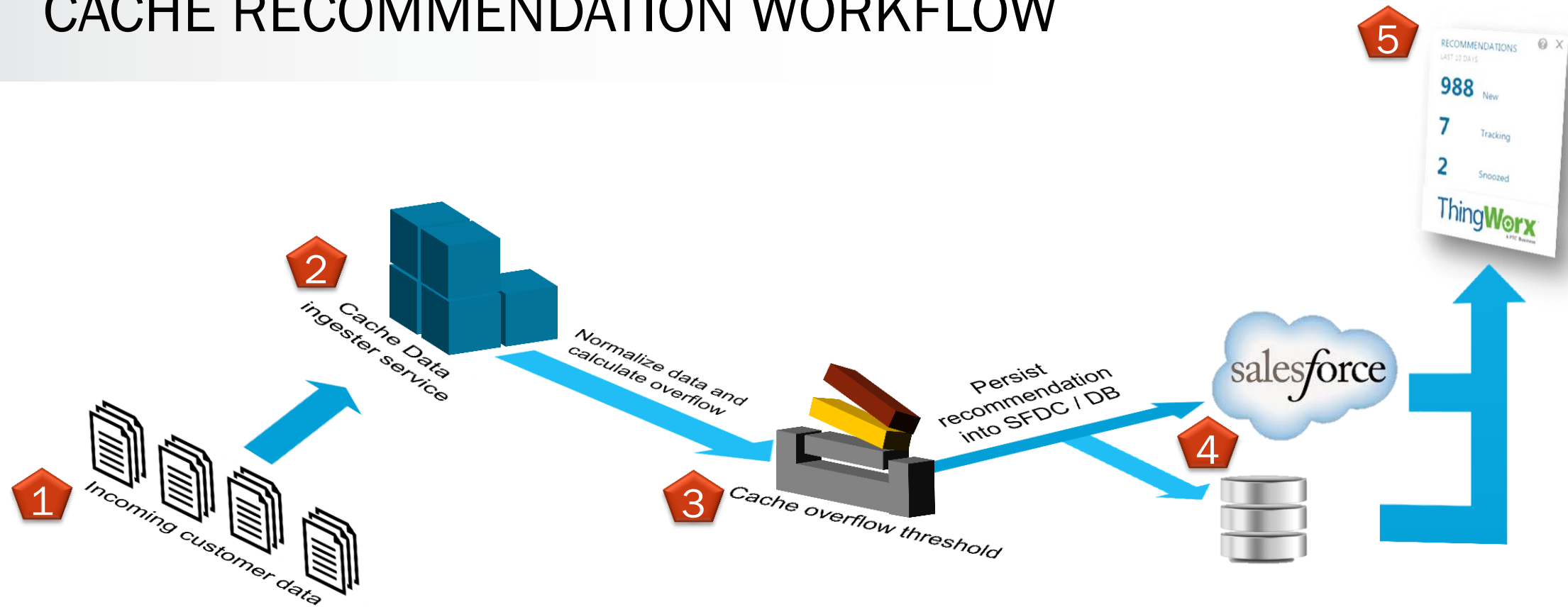
PTC System Monitor



Performance Advisor



CACHE RECOMMENDATION WORKFLOW



SYSTEM OVERVIEW

1

Incoming files are un-compressed. JMX, WCA and Customer identity data is extracted and passed on to ingester service

2

JMX Data is loaded into memory, time interval data is normalized and overflow rate is calculated per cache per JVM

3

If overflow is higher than 1/second across cluster, cache sizing recommendation is triggered based on current cache size:

- <5000 increase cache size by 100%
- >5000 and <50000 increase cache size by 50%
- >50000 contact technical support

4

Recommendations are persisted into SFDC and local DB based on overflow algorithm or WCA data

5

TWX integration hub pulls data from multiple sources into dashboard

RECOMMENDATIONS ROADMAP



- **Today**
 - Custom tailored recommendations
 - Easy to deploy

SOLUTION			
Cache Name	com.ptc.core.lwc.server.cache.StructEnumAttTemplateCache	Tracking	
Recommended Value	100	Complexity	Easy
		Effort	High (hours)
Instructions	m...xconfmanager -s wt.cache.size.PreferenceCache=1014 -t codebase/wt.properties -p		
Art...	...types and attributes cache settings are not handled by windchill Configuration Assistant on windchill PDMLink		

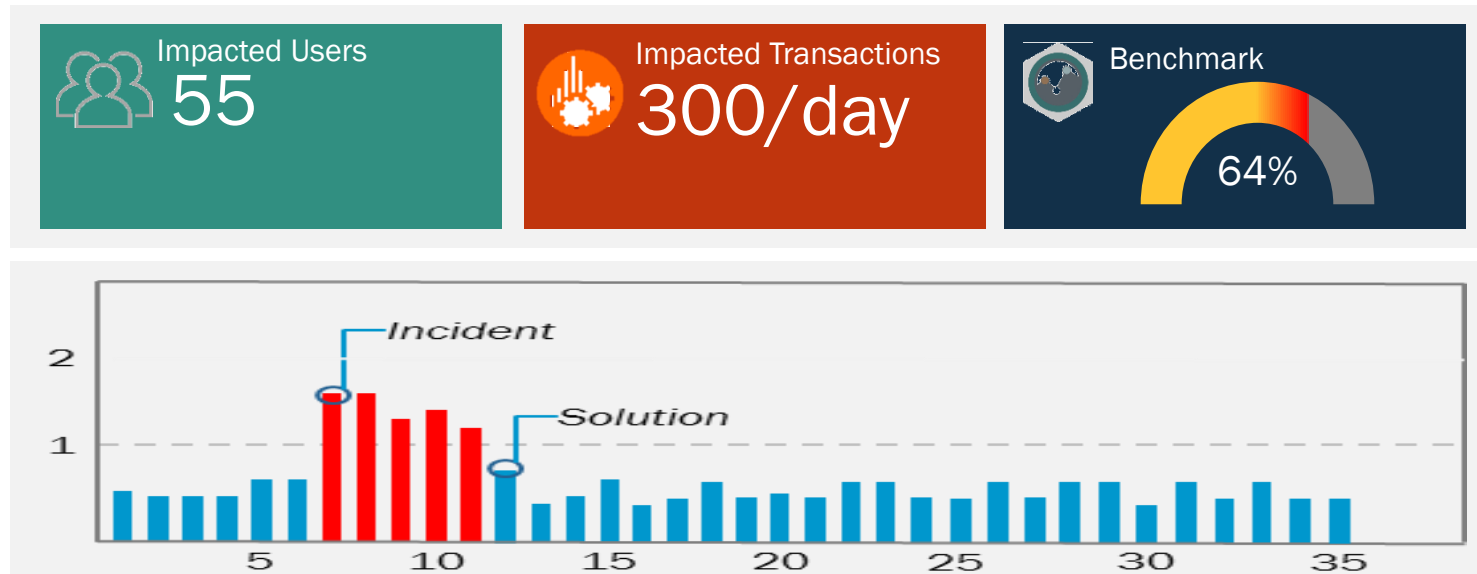
- **Phase 2**
 - Simplified deployment
 - Download solution package
 - Enables change control and automation



RECOMMENDATIONS ROADMAP



- **Phase 3**
 - Context and Impact per recommendation
 - Validation of solution
 - Automated Incident management workflow



PEER COMPARISON



- Benchmark metrics
 - Availability
 - Responsiveness
 - Profile based comparisons
 - Feature Usage
 - Configuration

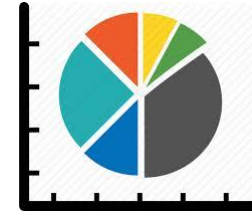
Application



Stability



Performance



Configuration

- Benefits
 - Identify anomalies
 - Identify and priorities areas for improvement

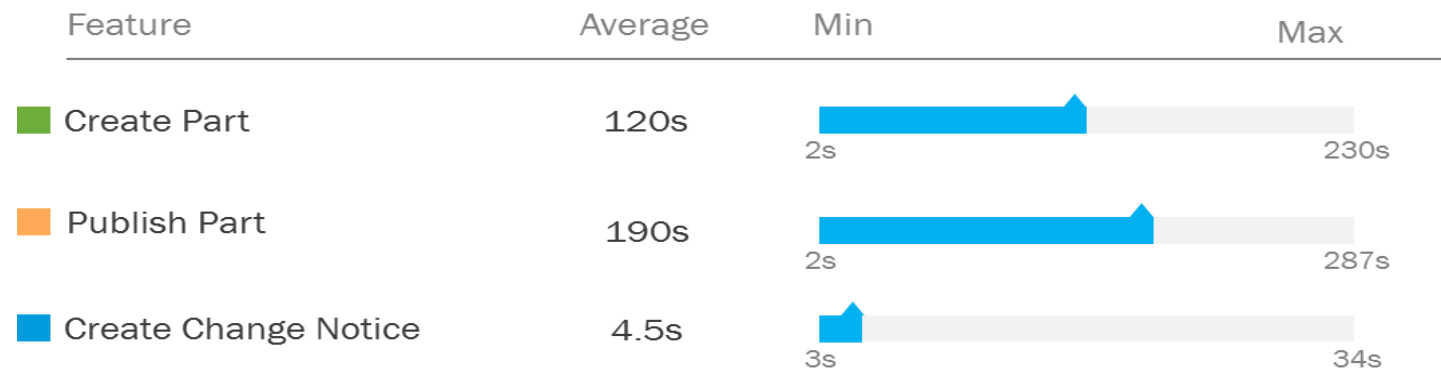
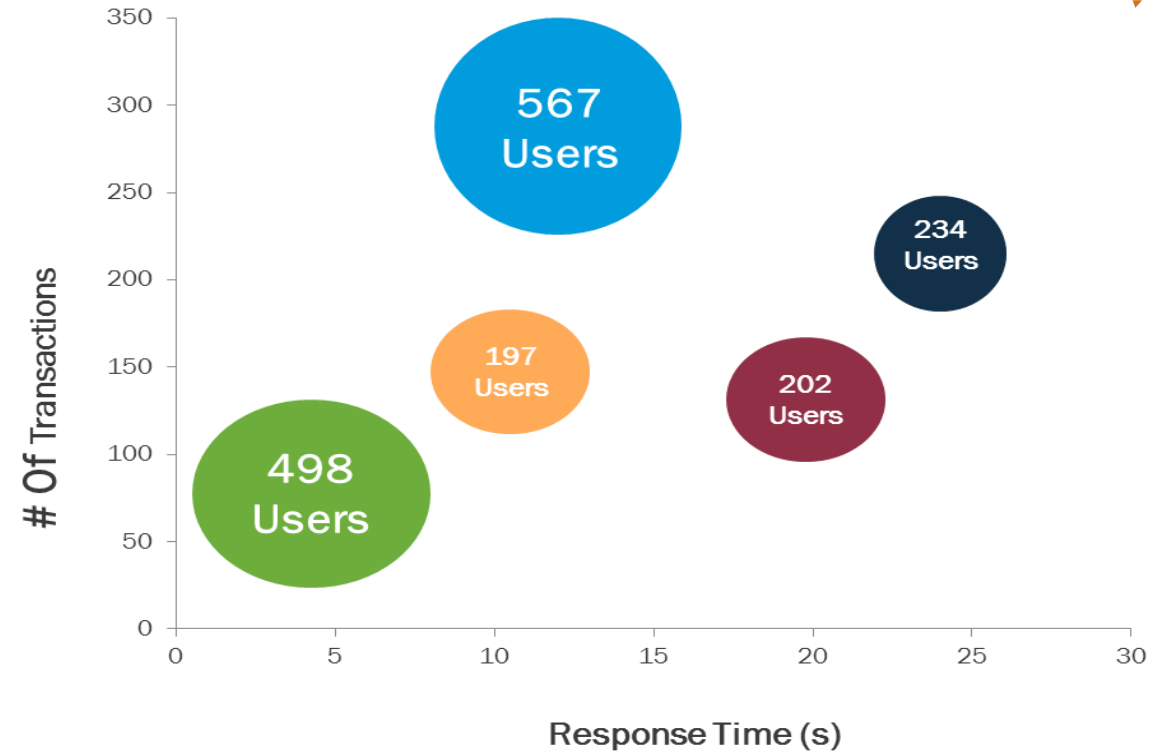
Performance

Feature	Percentile	Peer Average	Your Average	Min Avg	Max Avg
Create Part	78 th	89s	120s	29s	230s
Publish Part	95 th	245s	190s	50s	287s
Create Change Notice	5 th	2s	4.5s	3s	34s

FEATURE USAGE



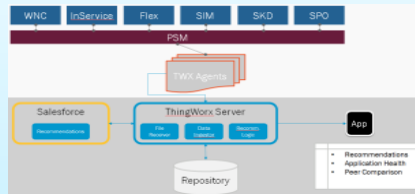
- Benefits
 - Compliance with company standards and business best practices.
 - Monitor usage of costly customizations
 - Focus testing on usage patterns
 - Improve precision learning programs for individual end-user adoption



ROADMAP



- Phase 2 Recommendations
 - Download Solution
- Browser Usage and Application Peer Comparison Reports
- Connected PSM



R1.2

Fall

- Recommendations SQL Tuning
- Phase 3 Recommendations
 - Traceability and Context



R2

Winter

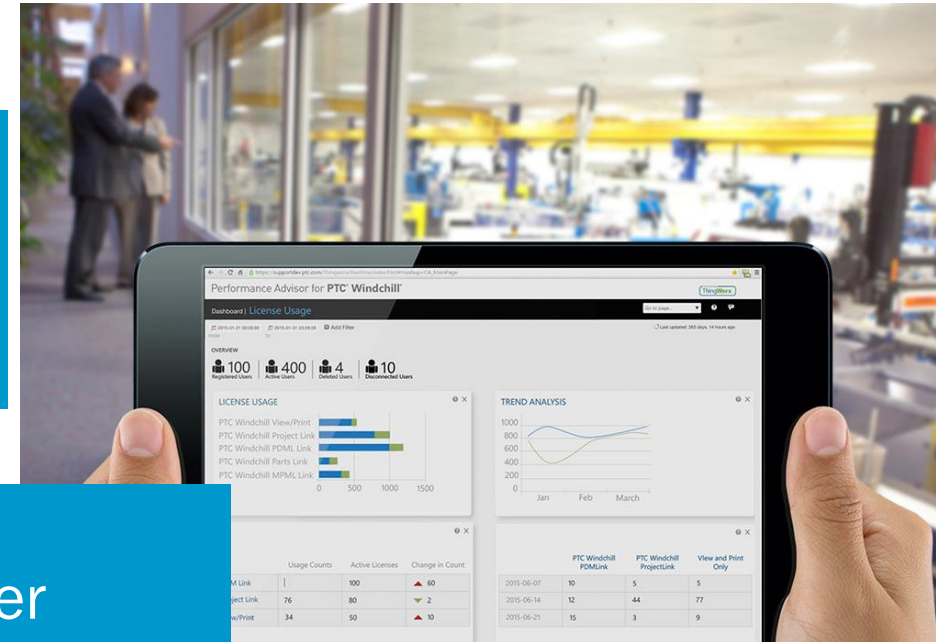
2016

SUMMARY



Benefits of Performance Advisor

Optimize System	Maximize Productivity	Control Costs	Reduce Risk
Proactive insights and recommendations	Dashboard access to help better manage your enterprise systems	Optimize IT Resources to change from “firefighting” to business process improvement	
Increased admin & support efficiency to deliver timely resolution	Decrease incident rates	Track license utilization	Protect your investment
Proactively avoid end-user performance issues	Increase productivity	Investment protection through increased uptime	Compare system configuration and information with peers
Insight into system growth	Performance metrics for “corrective-action” before impacting productivity	On-budget performance through an optimized support strategy	Peer Comparisons



GET CONNECTED AND JOIN THE CONVERSATION

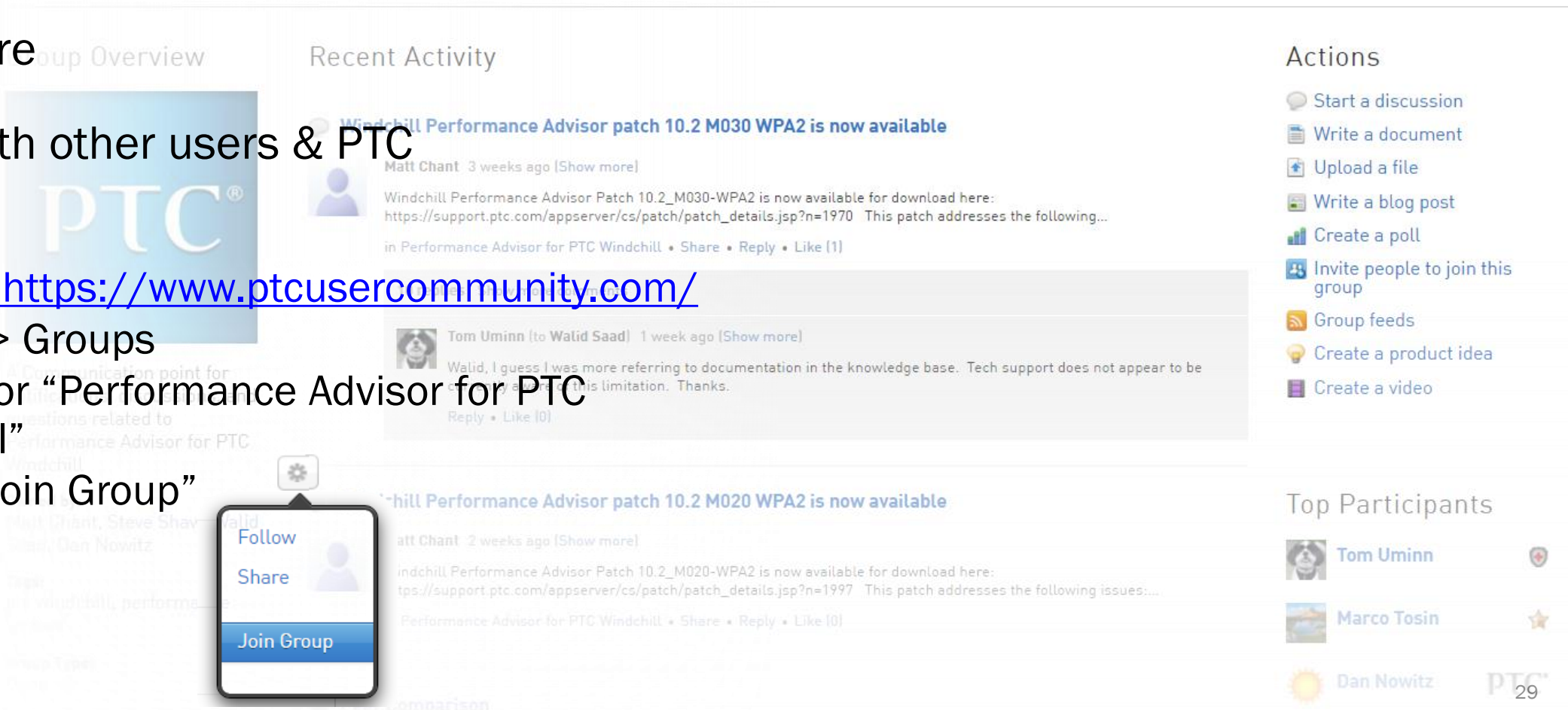


PTC® Performance Advisor for PTC Windchill

Following in 1 stream Leave this group

Actions About Share Manage

- Help shape its direction
- Find out more
- Converse with other users & PTC
- How to join
 - Go to → <https://www.ptcusercommunity.com/>
 - Browse > Groups
 - Search for “Performance Advisor for PTC Windchill”
 - Select “Join Group”



Group Overview Recent Activity

Windchill Performance Advisor patch 10.2 M030 WPA2 is now available

Matt Chant 3 weeks ago (Show more)

Windchill Performance Advisor Patch 10.2_M030-WPA2 is now available for download here: https://support.ptc.com/appserver/cs/patch/patch_details.jsp?n=1970 This patch addresses the following...

in Performance Advisor for PTC Windchill • Share • Reply • Like (1)

Tom Uminn (to Walid Saad) 1 week ago (Show more)

Walid, I guess I was more referring to documentation in the knowledge base. Tech support does not appear to be...

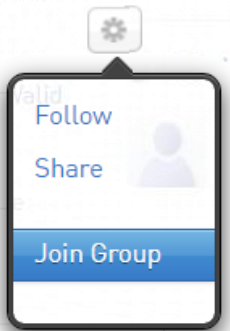
Reply • Like (0)

Windchill Performance Advisor patch 10.2 M020 WPA2 is now available

Matt Chant 2 weeks ago (Show more)

Windchill Performance Advisor Patch 10.2_M020-WPA2 is now available for download here: https://support.ptc.com/appserver/cs/patch/patch_details.jsp?n=1997 This patch addresses the following issues:...

in Performance Advisor for PTC Windchill • Share • Reply • Like (0)



Follow

Share

Join Group

The image features several colorful geometric shapes, including triangles and lines in shades of blue, green, yellow, orange, pink, and purple, scattered across the background. A large, multi-colored geometric shape is prominent on the right side.

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