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CUST117 - Managing PTC Creo Parametric Stability in Global Business to Increase Design Efficiency

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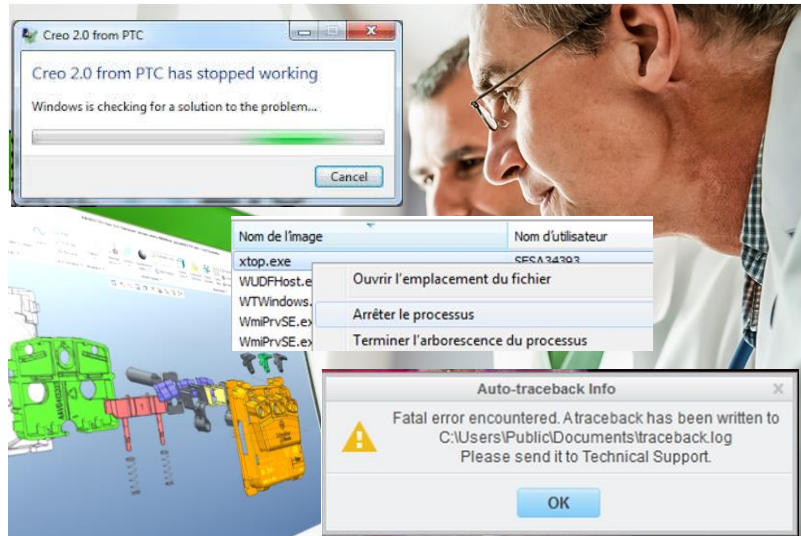
08th of June 2015



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Introducing PTC Creo Parametric stability concepts and stakes

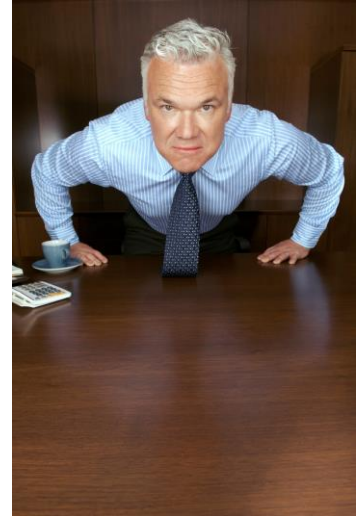
Philippe Pradoura



Stability is about session crashes, including frozen sessions killed by users



Bad stability means users losing time, projects not meeting their costs deadlines ... every one is impacted



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Time lost

- Non saved work
- Restart and resume work
- Complaint management
- Resolution



Costs

- Labor cost of time lost
- Cost of investigations and resolutions
- Project delays in case of severe situation

Quick maths

$$500 \text{ users} \times 20 \text{ mins/crash} \times 2 \text{ crash/ week} \times 60 \text{ \$/hr} = \mathbf{20 \text{ k\$ / week}}$$

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But who is impacted by stability, when, where, how often ?

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Many different situations : how can we bring a clear understanding of stability to all stake holders ?



Stability varies a lot depending on many factors

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IT and Business consensus on stability stakes and objectives is key

Business

- No crashes
- Immediate resolution
- Labor cost is worth

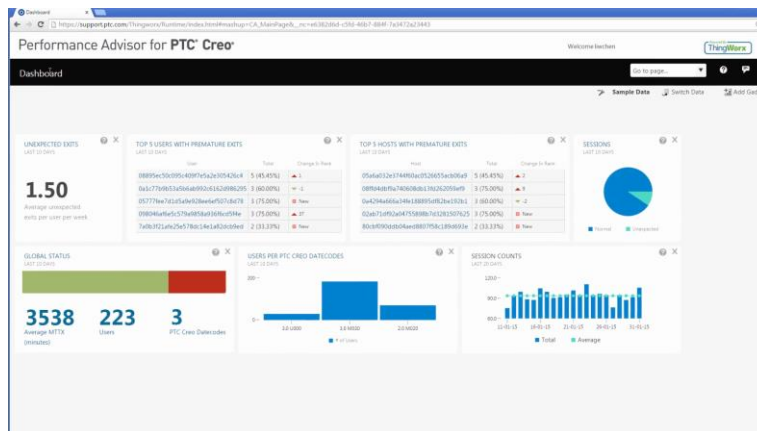


IT

- 0 crash impossible
- IT priorities, compatibilities
- Cost, resource constraints

PTC Creo Parametric stability – PTC Creo Performance Advisor

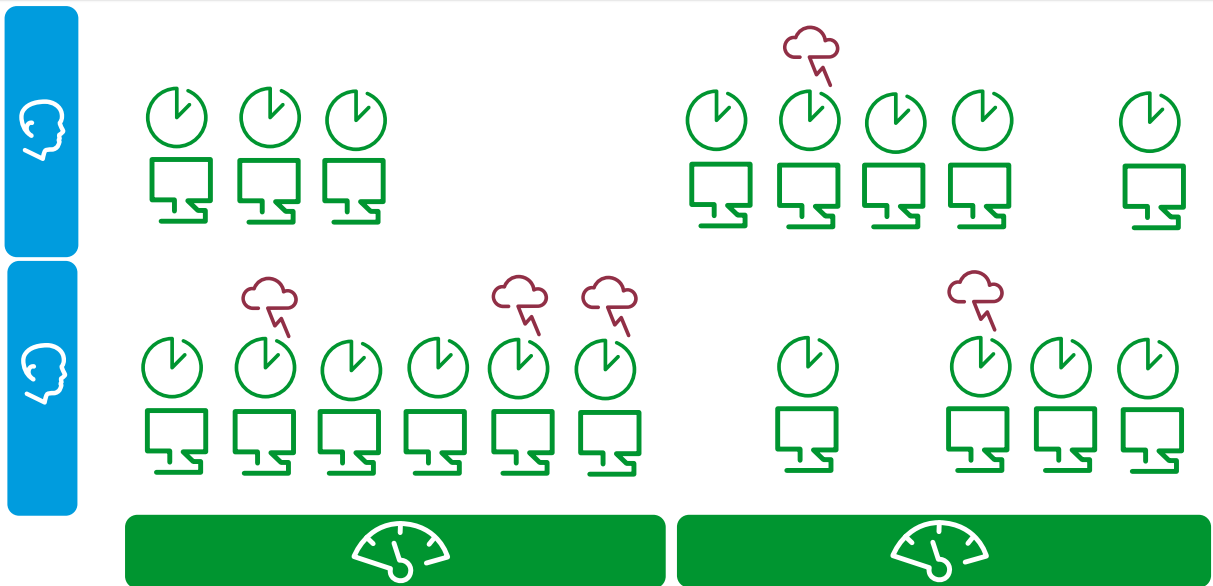
Breaking news : PTC Performance Advisor has just been released by PTC for PTC Creo Parametric 2.0 & 3.0: Let's look what we learnt and how PTC Performance Advisor can help



Foreword on session counts, crashes, stability and maths

Philippe Pradoura

Users, sessions, crashes, session durations and time survey



Crash rate in %

For a given users / time sample



Crash average / user / time

For a given users / time sample



Mean Time to abn. Exit in Hr

For a given users / time sample



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	A	B	C	D	E	F	G	H	TOP 2 MTTX		TOP 2 CRASH		
									I	J	K	L	
													10
	2	6	5	7	9	3	5	5	8	13	14	8	85
	7	27	17	32	46	19	11	55	23	17	58	98	410
	0	0	0	0	1	1	1	2	2	3	3	4	17
	0	0	0	0	1	1	1	2	2	3	3	4	1.4
	0%	0%	0%	0%	11%	33%	20%	40%	25%	23%	21%	50%	20%
	NA	NA	NA	NA	46.0	19.0	11.0	27.5	11.5	5.7	19.3	24.5	24.1

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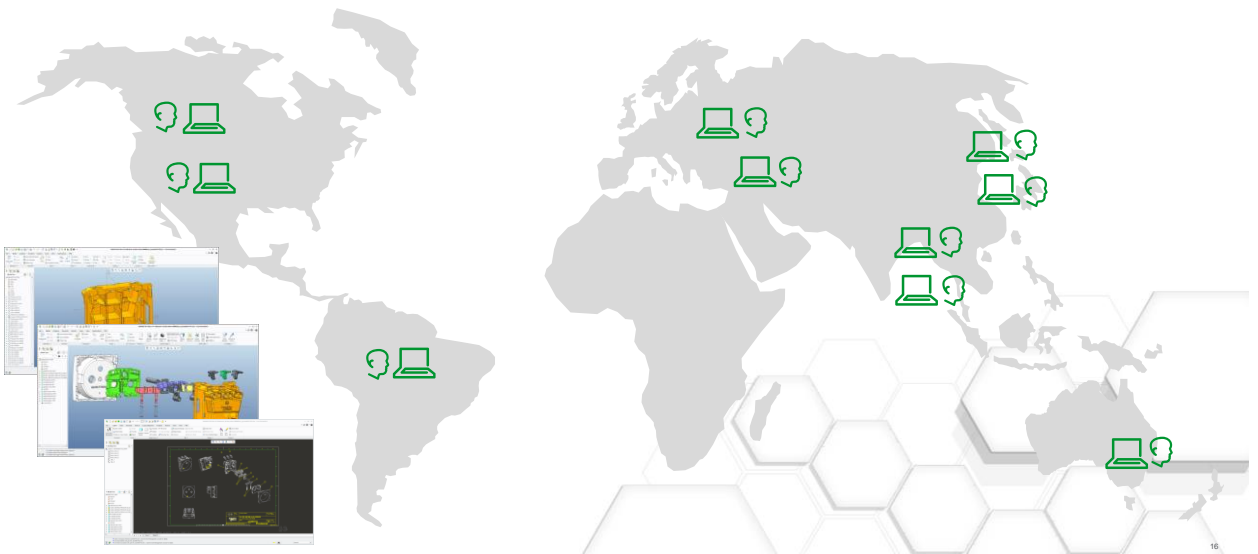
History of stability issue resolution at Schneider Electric

Philippe Pradoura

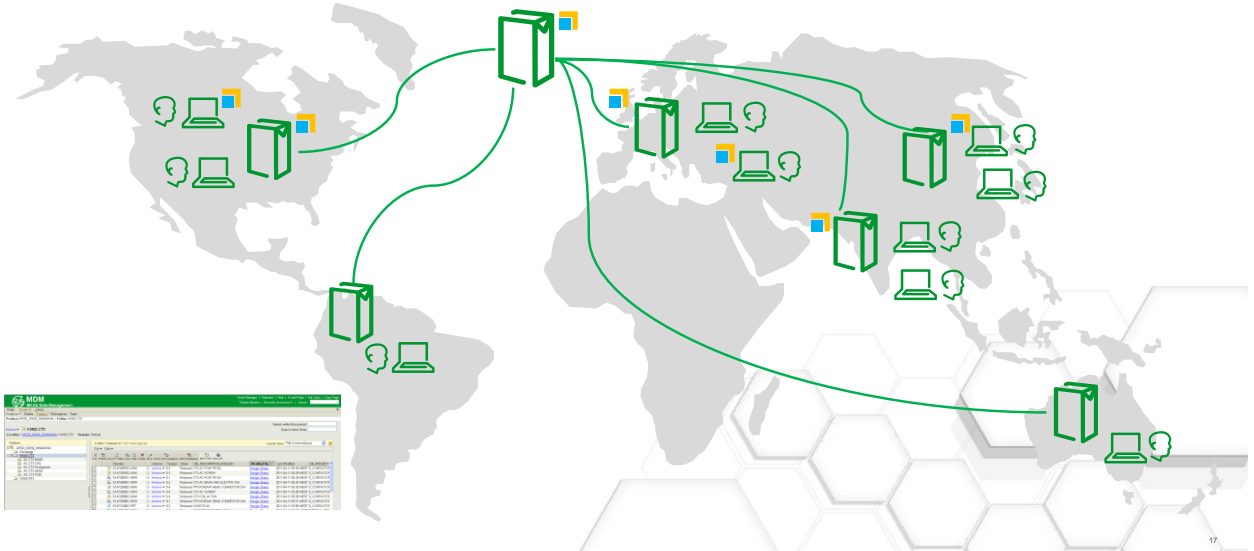
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PTC Creo Parametric at Schneider Electric

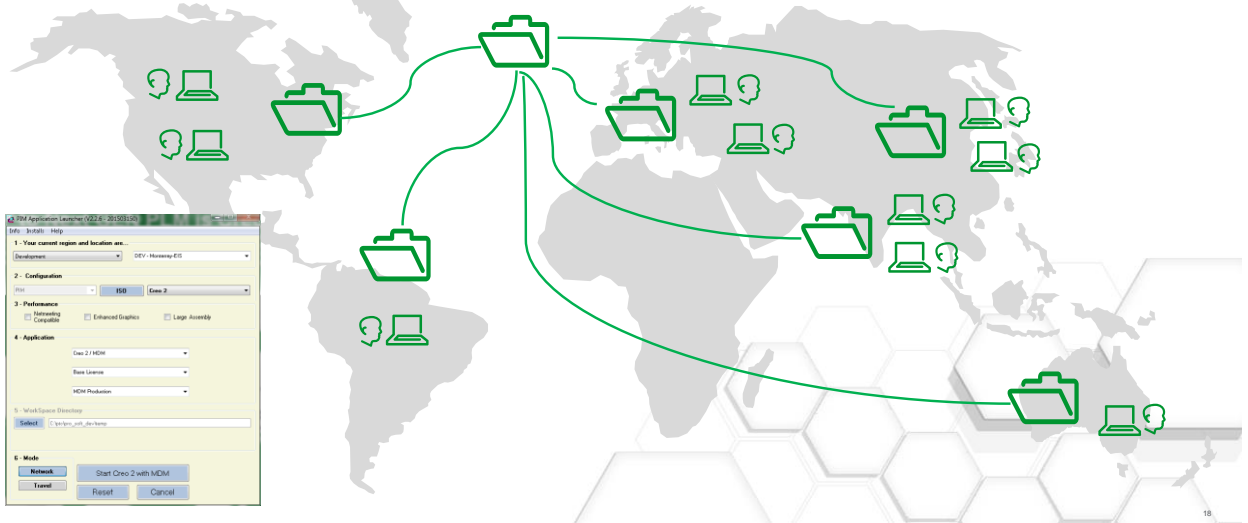
2000+ PTC Creo users distributed in **100+** locations among **20+** countries



Global design collaboration with PTC Windchill PDMLink 9.1 (30+ replicas)



PTC Creo configurations and logs managed with a home grown system
PTC Creo Parametric distributed with Microsoft SCCM



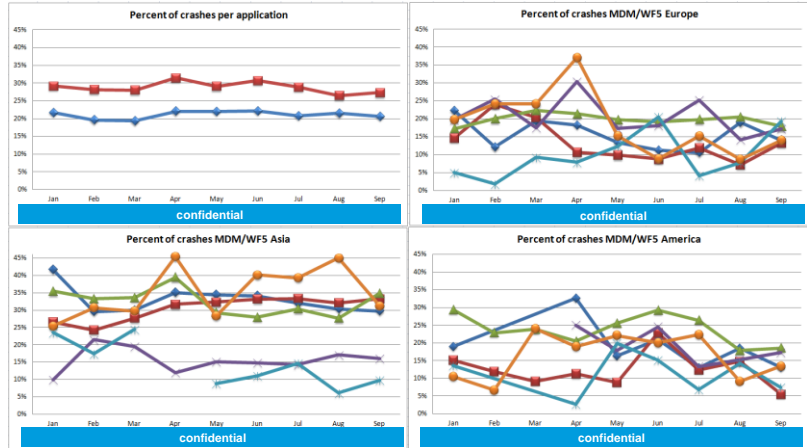
Global crash rate reports are provided every months thanks to trails mining since 2009



Crash rate dashboards

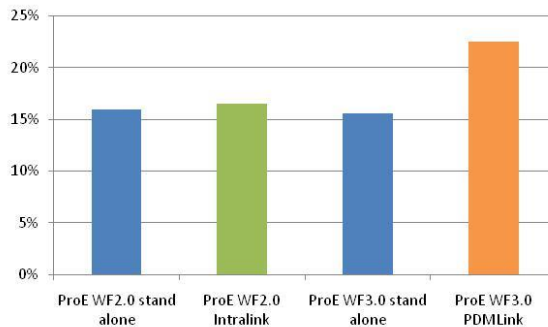
- Over 8+ months
- With/without PDMLink
- By facility

Top 10 crash users by facility



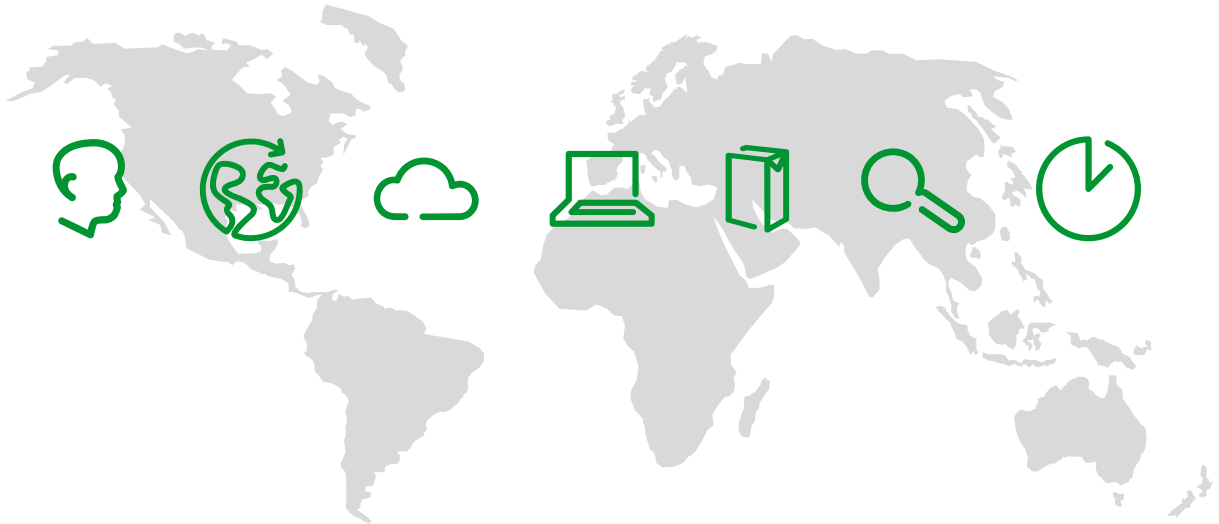
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When deploying WF3-Pdmlink we faced a strong issue in increase of crashes leading to strong complaints
And we had to carry out improvement plans



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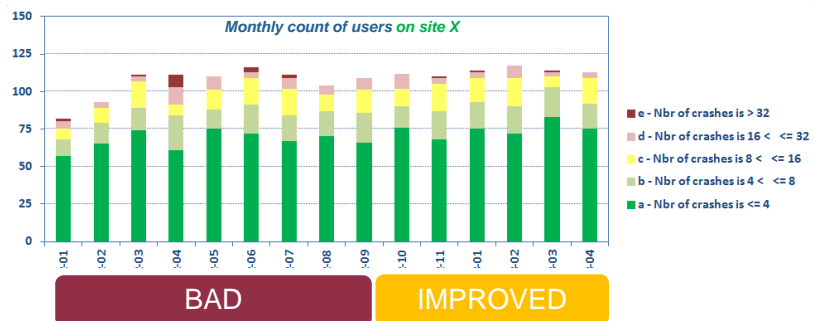
But we faced the variability of facilities, individuals, PCs, PTC Windchill, networks, data quality



PTC Creo Parametric at Schneider Electric – Crash monitoring

We had to analyze the reality of each individual user and follow statistics for each site

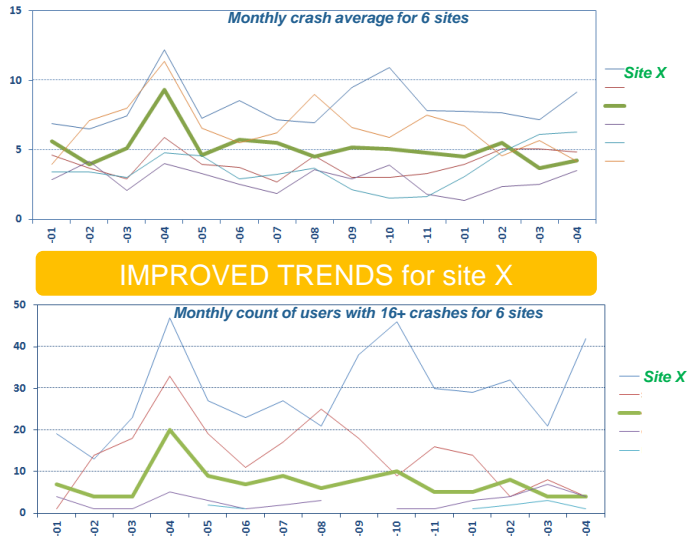
- Agreed target
1 crash / user / week
- Monthly individual crash count
- Individual crash classes
- Filter out non prod sessions
- Filter with/without PTC Windchill
- Priority to big crashers



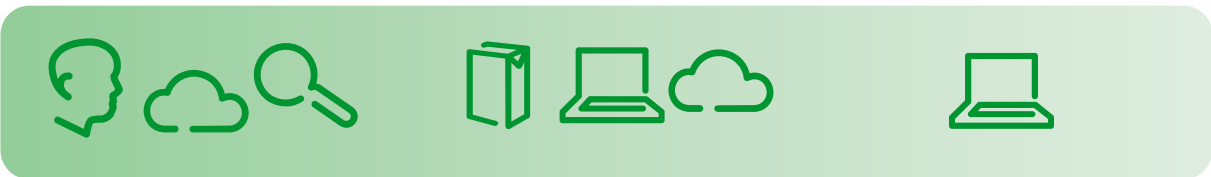
Schneider Electric had to analyze the reality of each individual user and follow statistics for each site

Setup of trend charts for facilities

- Monthly crash average
- Monthly count of suffering users



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**Quick
(2011-2012)**

- LAN
- User practices
- Data Quality

**Medium
(2012-2013)**

- Windchill server
- WAN
- WF5 M120
- X64 introduction

**Long
(2012-2014)**

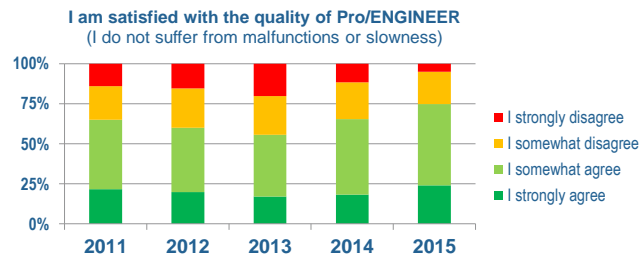
- WF5 M170
- x64 completion

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- **Crash reduction achieved**
- **Business complaints reduced**

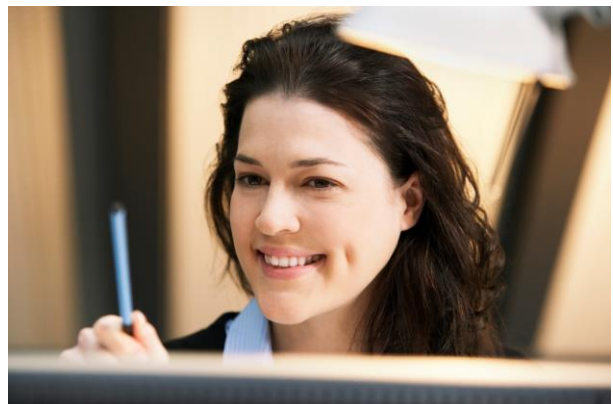
Measured satisfaction of R&D Systems in annual Corporate Quality Survey for past 5 years – 900 answers avg / year



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During the execution of those action plans **we have learned a lot**

- **PTC trusted** error codes
- **Individual MTTX** Satisfaction classes
- **18 months** Satisfaction trends
- **< 5 days** reactivity to low satisfaction
- **Advanced filters** (Geography, Windchill, relevant sessions/users)
- **Automated** satisfaction measurement



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New Schneider Electric stability monitoring system

Josh Houser

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New Schneider Electric stability monitoring : Exit Logger is the foundation

Exit Logger

- PTC trusted error codes
- LAN servers : 30+ Local Exit Logger servers hosted on replicas



Database

- Data harvested & consolidated daily
- Oracle BI reports with advanced filters



Metrics

- Based on individual MTTX
- Advanced reports

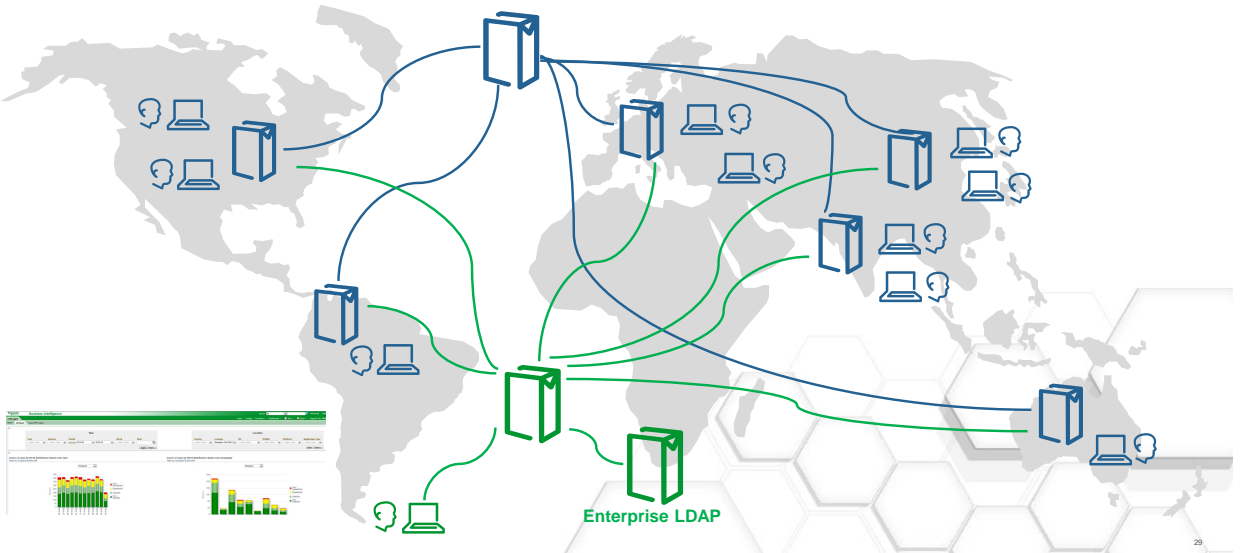


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New Schneider Electric stability monitoring at a glance

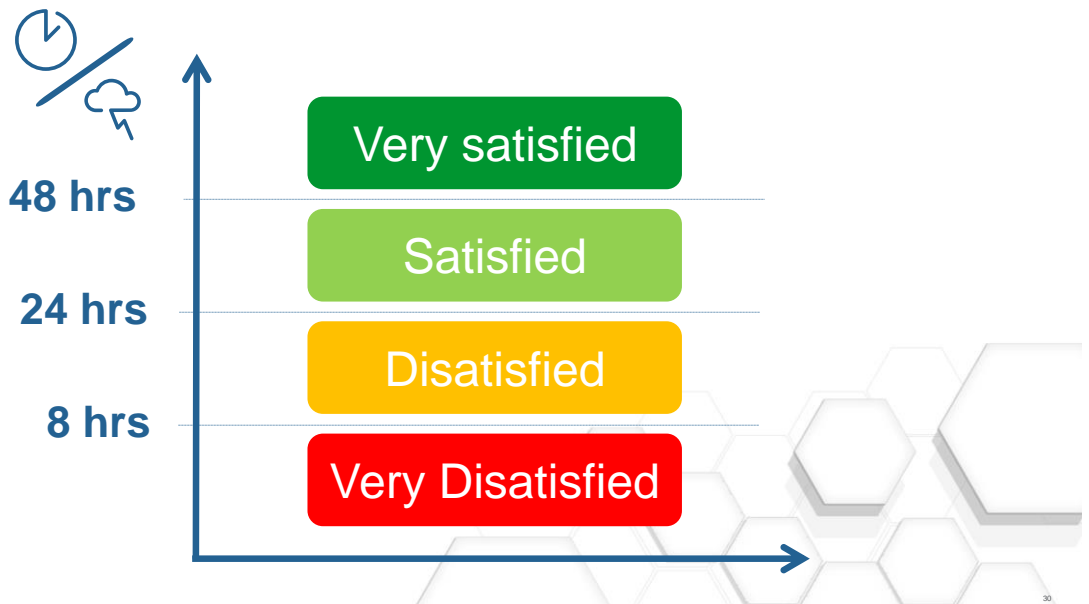
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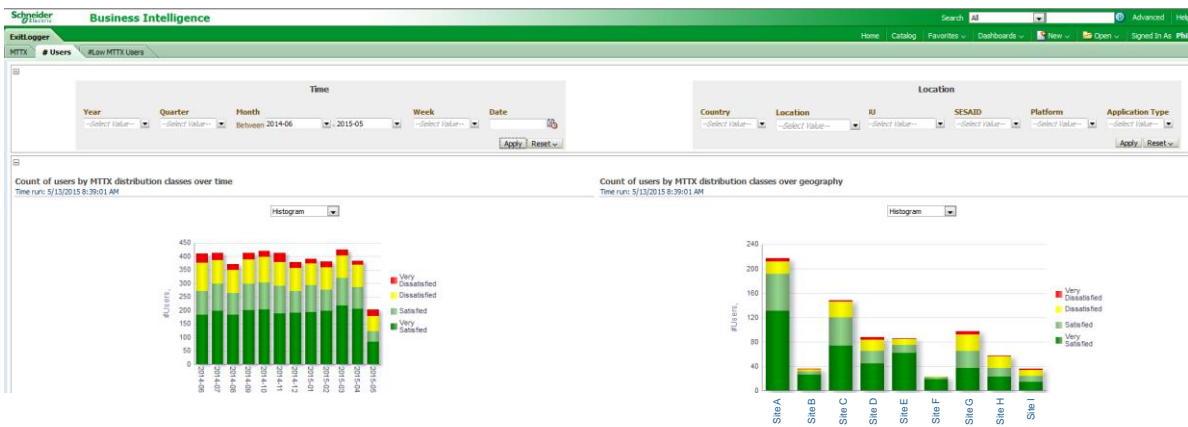
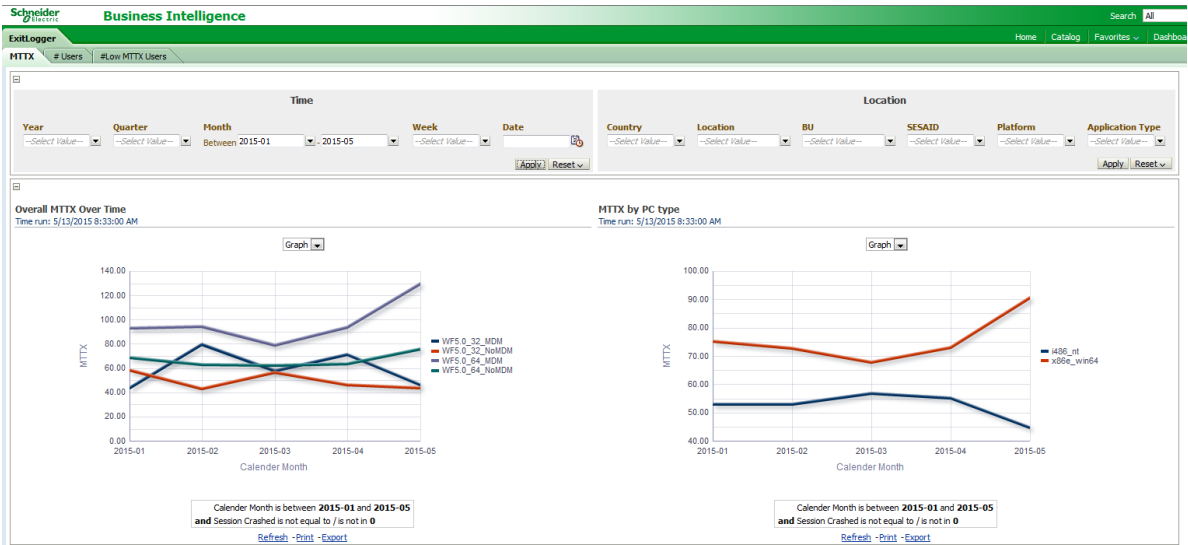
A global stability monitoring system has been implemented based on PTC Exit Logger

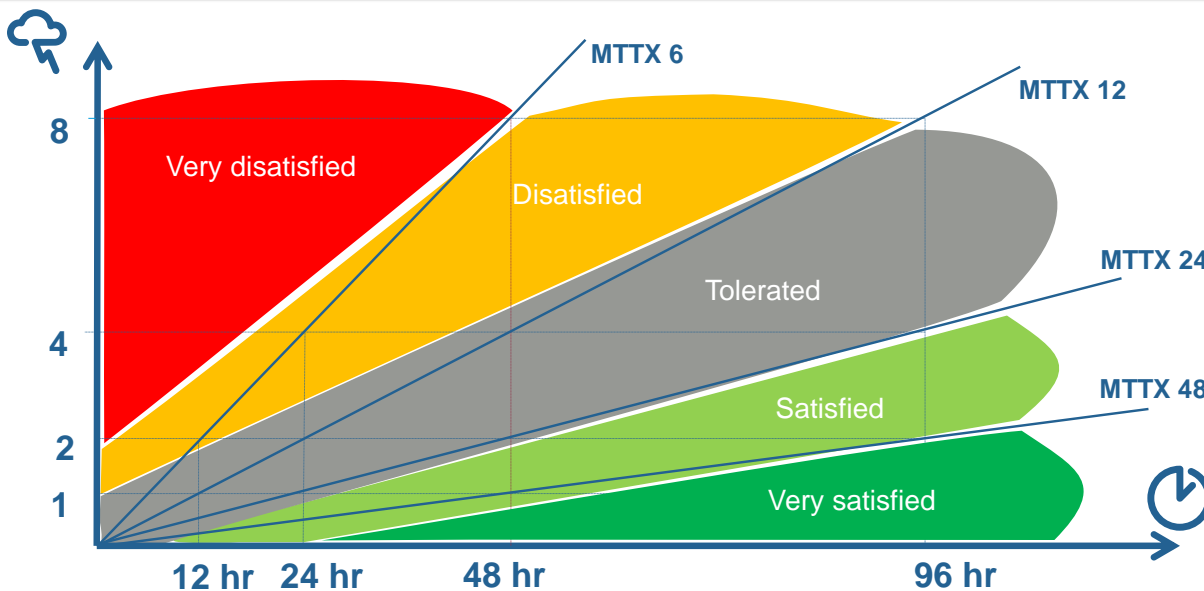
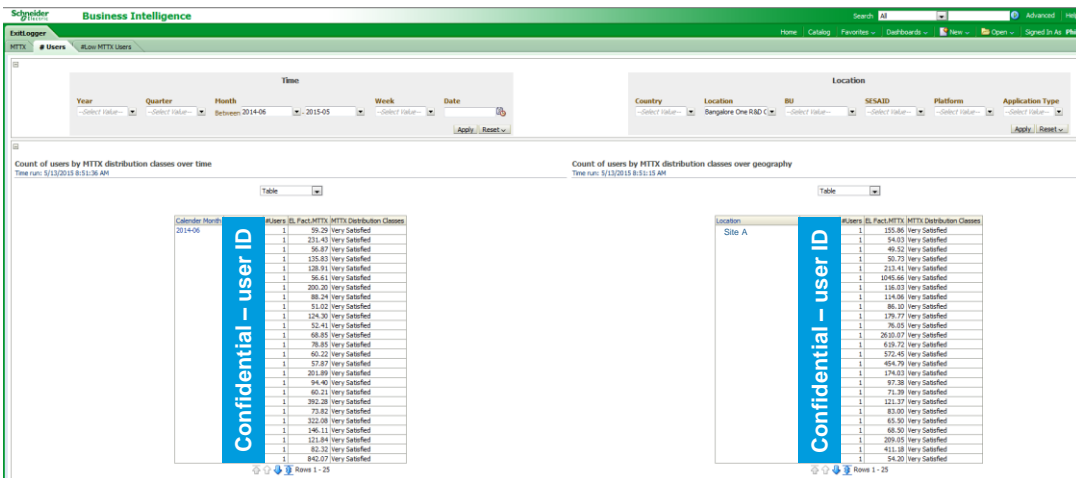


Schneider Electric satisfaction targets in regard of individual MTTX








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GOOD

- Out Of the box 
- PTC trusted 
- Daily updates 
- Agreed targets 
- Advanced charts 
- Advanced filters 
- Concurrent access 

EXPENSIVE

- Long & costly to setup 
- Big infrastructure 
- Servers management 
- Custom components 
- Updates 

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Moving forward in PTC Creo Parametric stability monitoring

Josh Houser

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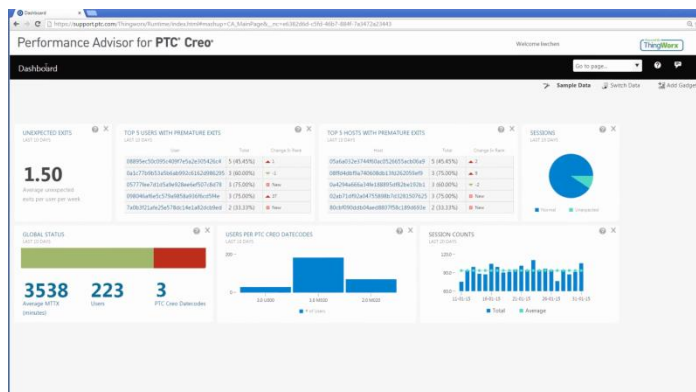
When a company is managing a PTC Creo Parametric user base at a large scale it is mandatory that its IT team manages correctly **PTC Creo Parametric distribution and configuration** and **monitors the sessions and crashes** in order to maintain over time a level of crashes well **tolerated** by product and project teams.

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Start monitoring sessions and crashes now

You must use the PTC Performance Advisor because it provides the most expensive components

- Free
- PTC trusted
- Global
- No infrastructure
- PC details included
- No latency

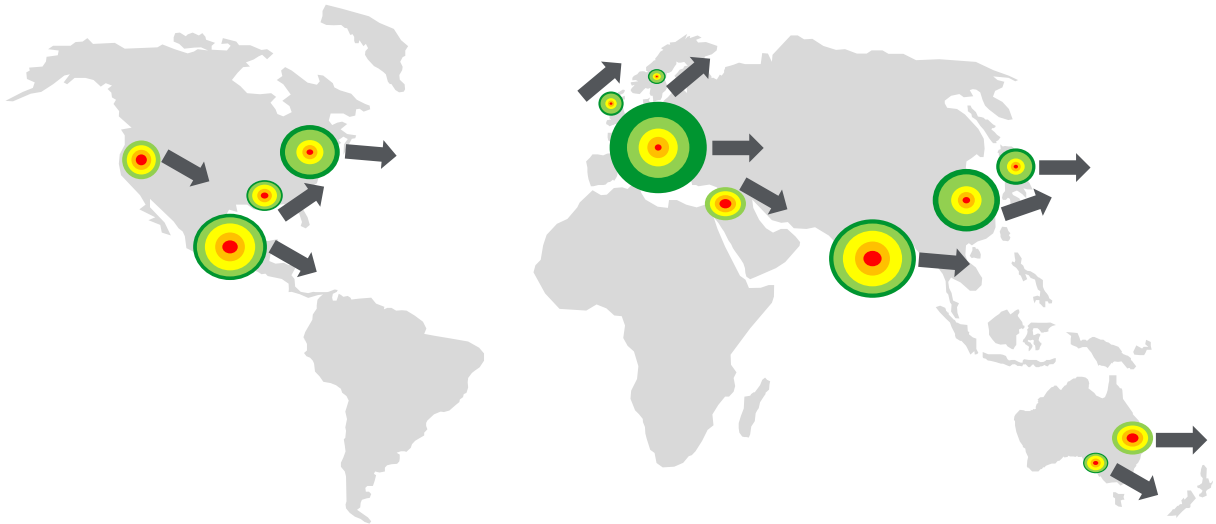


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And benefit of many possible improvements

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We think the PTC Performance Advisor has a huge potential for further & advanced analysis



Once you are started with PTC Performance Advisor

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REMEMBER

- Average with “moderation”
- Variabilities
- Internal acceptance agreement
- Software distribution and configuration management
- Be practice on low stability

JOIN WITH US

- Network with us
- Ask more to PTC with us
 - ✓ Geography / Facility filters
 - ✓ PTC Windchill / Organisation filters
 - ✓ 18 months history
 - ✓ Individual MTTX classes
 - ✓ Advanced statistics
 - ✓ Custom dashboards
 - ✓ Custom alerts and thresholds

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