
REAL-TIME PERFORMANCE MANAGEMENT FOR THE ENTERPRISE
RtPM
SAN FRANCISCO PHILADELPHIA HOUSTON FRANKFURT
OSISOFT USER CONFERENCES 2005
REAL-TIME PERFORMANCE MANAGEMENT FOR THE ENTERPRISE
RtPM

How the SIG Influenced OSIsoft's Product Roadmap

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PI Server Development Lead

(What we learned in Las Vegas)

- AKA: Sin City
- $1.6 billion gambled a month
- $1.5 billion lost
- Awful lot of weddings at the Bellagio
  - Chapel Utilization: Holy grail of resource planning?

(What we learned in Las Vegas)

- Gambling—lots of it

Reasons the SIG could fail:

- Never did a SIG
  - Used to just telling you what we are doing
- Would OSIsoft actually listen?
- OSIsoft is getting big
  - Can a big company actually act on things heard?
- Whose rules are we playing by

We Did Listen

- From the Vegas SIG came:
  - New product development paths
  - Development path changes
  - Confirmation of existing development paths
  - Quick enhancements
  - Approaches that make the SIG more useful

Background on Vegas SIG

- September 2004
- Special Interest Groups?
- No—Strategic Influence Group
  - Supported by industry influence groups
- Attendees
- Format
  - Domain experts
  - Recorder
  - Facilitator

Analysis, Modeling and Alerts

- Prejudiced?

Analysis, Modeling and Alerts

Analysis, Modeling and Alerts

- Arguments for killing Performance Equations
  - Inflexible, simple language
  - No good tools for creating and testing
  - Unsophisticated scheduler
  - No formula library
- ACE addresses all these issues

WRONG!

"Performance equations are configuration; ACE is coding. Configuration is easy to validate; coding is hard to validate."

Rob Gamber

Amgen

Analysis, Modeling and Alerts

- Very compelling argument
  - Especially if you have ever been through a Pharmaceutical vendor audit
- Supported by many other vocal participants
- Clearly, Performance Equations are needed
  - How do we address deficiency in PE's

Analysis, Modeling and Alerts

- Project code name: PIANO
  - Address PI System analyses and notifications
  - Holistic approach
    - Configuration
    - Testing
    - Scheduling
    - Publishing
    - Subscribing
  - Alex Zheng is presenting

Project PIANO

- Example of new development as result of the SIG
- Several sessions influenced this development
  - For example, alerting session

Data Integrity

- We were focused on the wrong problem
  - PI Server Archive
- Bigger issue:
  - Trusting the data in PI
    - Stale
    - Flat lined
    - Stuck
  - Many places for data to be lost

Perilous Life of an Event

- Transmission & Distribution example
- All industries have similar issues

Perilous Life of an Event

- Measurement on an asset
  - Owned by different organization
- First collected by a local monitor package
- Transferred to a SCADA or maintenance
  - May not own this either
- SCADA may linearize or convert
  - 4-20mA to engineering units
- ICCP interface to PI

Real Issues

- Many possible failure points
- Many approaches required to address all the points
- Once again—must treat as a process

We Listened and Understood

- What are we doing about it?
  - We are still thinking about
- Quality tags are a necessity
- Interface Status Utility not the answer
- Redundancy plays an important role

Quality Tags

- Just Tags not enough
- Client applications must interpret
  - Trends that change color based on quality
- PI Server based rules applied to mark data as bad or questionable
  - Use case for analysis & notification project
  - (Project codenamed: PIANO)

Quality Tags

- Relating value tag to quality tags
  - Likely done in at a higher level
- Business issues ***will*** be addressed

Redundancy

- Remove single point of failures
- Interfaces
- Interface nodes
- PI Server

Data Integrity

- Realize certain approaches need to be redirected
  - Interface Status Utility
  - Quality Tags
  - Interfaces Nodes
- Some development road maps validated
  - PI Server Replication
  - Of course, keep commenting

Were all sessions informative?

- Yes…but
- Some were not so friendly
- No obvious consensus
- In fact some total disagreement

Why?

- Many reasons—biggest:
  - Not well prepared—OSI and customers
  - Communication
  - Explaining our position
  - Explaining technology
- Bottom line—OSIsoft and customers were not in position to offer constructive input

Solution

- Users' Conferences
- Changed the UC format to help
  - Less talk conflicts
  - Several locations so more people can attend
- SIG meetings to follow the UC
- Identified format of formal requests
  - Prioritized lists

Customer challenges

- Listen to the OSIsoft presentations with a critical ear
  - What are OSIsoft's reasons for the product?
  - What is problem OSIsoft trying to solve?
  - How does the product fit your needs?
  - How does the product fit into your architecture?

Customer Challenges

- It’s your SIG
- Let OSIsoft know if we are not informative enough for you to supply influence
- Don’t let the house tip rules in its favor

Customer Challenges

- Likewise on customer & vendor talks
  - Are solutions being applied as you would
  - Does their understanding of problems differ from yours

OSIsoft challenges

- Speakers—identify areas where you think you need input from the SIG
- Explain motivation behind development effort
  - Business reasons
  - Problems being addressed

Project Foundation

- Very significant development effort
  - (Foundation was not a randomly assigned code name)
- OSIsoft wants to be strategically influenced
- Attend this talk and be critical!

Conclusion

- Have fun at the UC
- Listen critically to the presentations
- Do not be afraid of questioning and challenging OSIsoft!