



PI Notifications 1.1

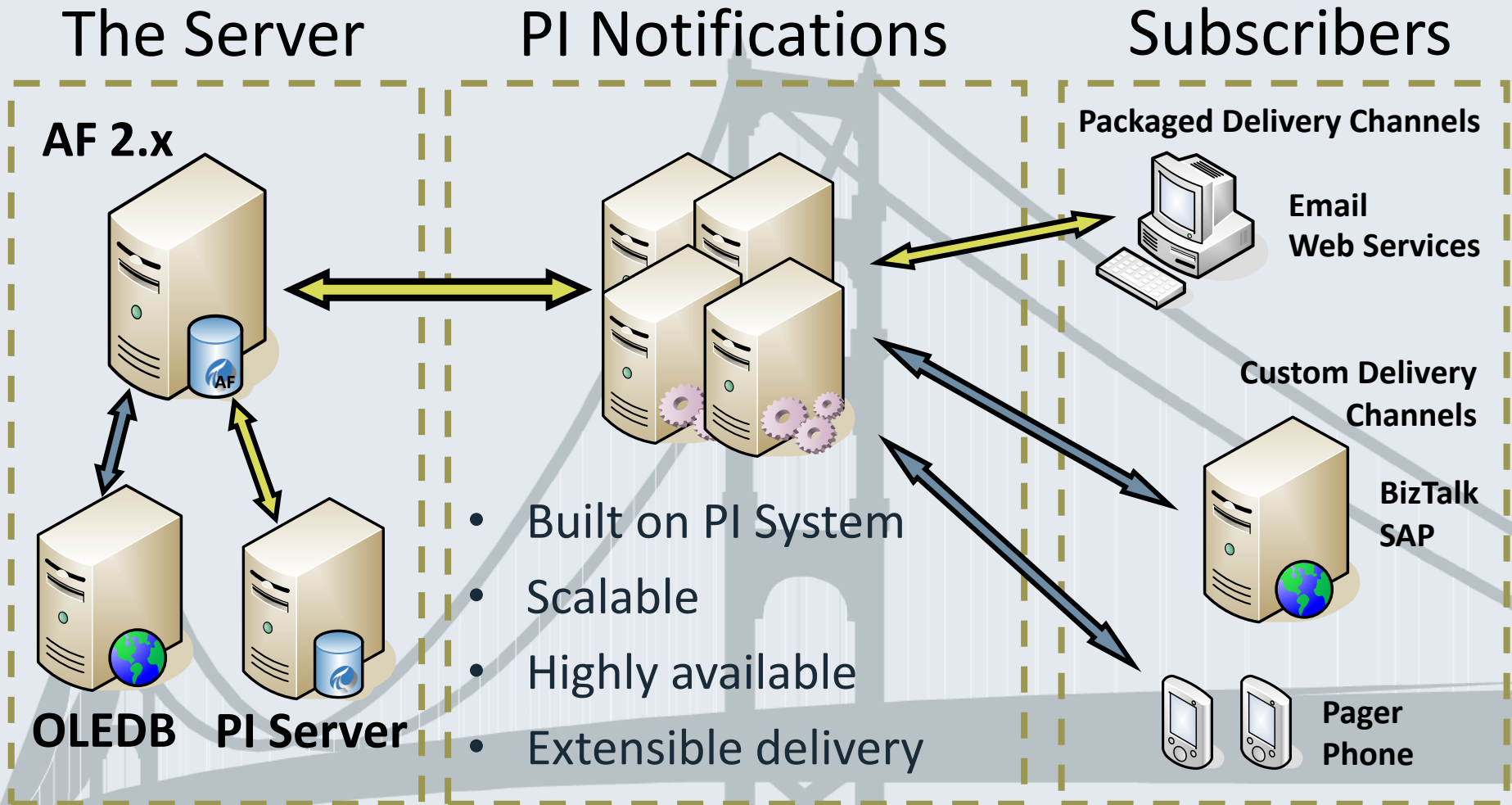
Tim Drews, QA Developer
David Moler, Developer

Empowering Business in Real Time
PI Infrastructure for the Enterprise

What is PI Notifications?

- Real-time alarming infrastructure
- Leverages strong foundation of PI System
- Configurable and Extensible
- Configuration and authoring using
PI System Explorer
- Exposed in DataLink and ProcessBook

PI Notifications Architecture



PI Notifications: Present and Future

v1.0: Flexibility
Jan 2008

- Built on AF 2.0
- Plug-in infrastructure
 - Analysis Rules
 - Time Rules
 - Delivery Channels

v1.1: Scalability
Q2 2009

- Performance
Improvements in **startup time**
and **throughput**
- Configuration
Templates enable **rapid** creation
of **maintainable** notifications



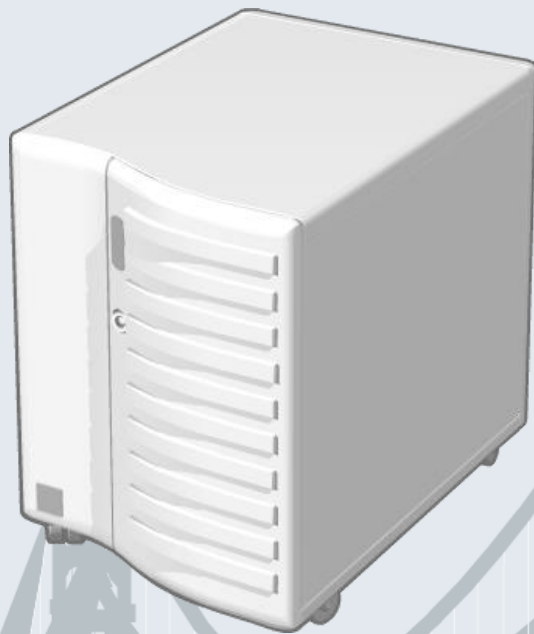
Scalability: PERFORMANCE

More Notifications Supported

- Notifications start up 3 times faster
- Throughput increase up to a factor of 30
- Less load on the PI Server
- Faster history retrieval in Client Products

Demo: Machine Configuration

Virtual Machine Server



Machine 1

Machine 2

Machine 3

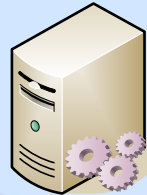
Machine 4

Virtual Machines



PI Server 3.4.375.80

Windows Server 2003
2 x 500 MHz, 2.5 GB RAM



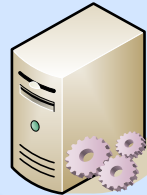
PI Notifications 1.0 Service

Windows Server 2003
2 x 1.0 GHz, 2.5 GB RAM



PI Server 3.4.375.80

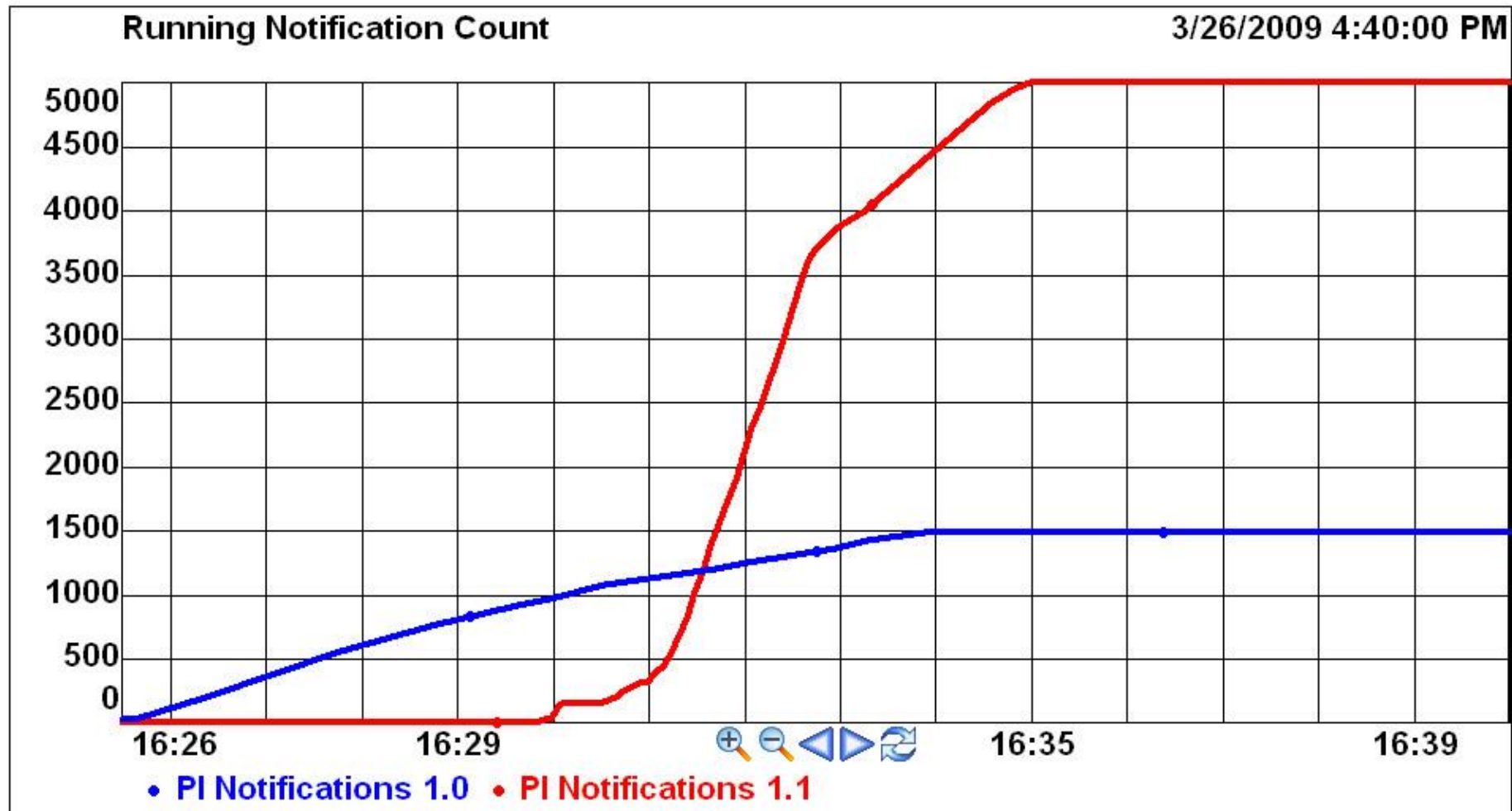
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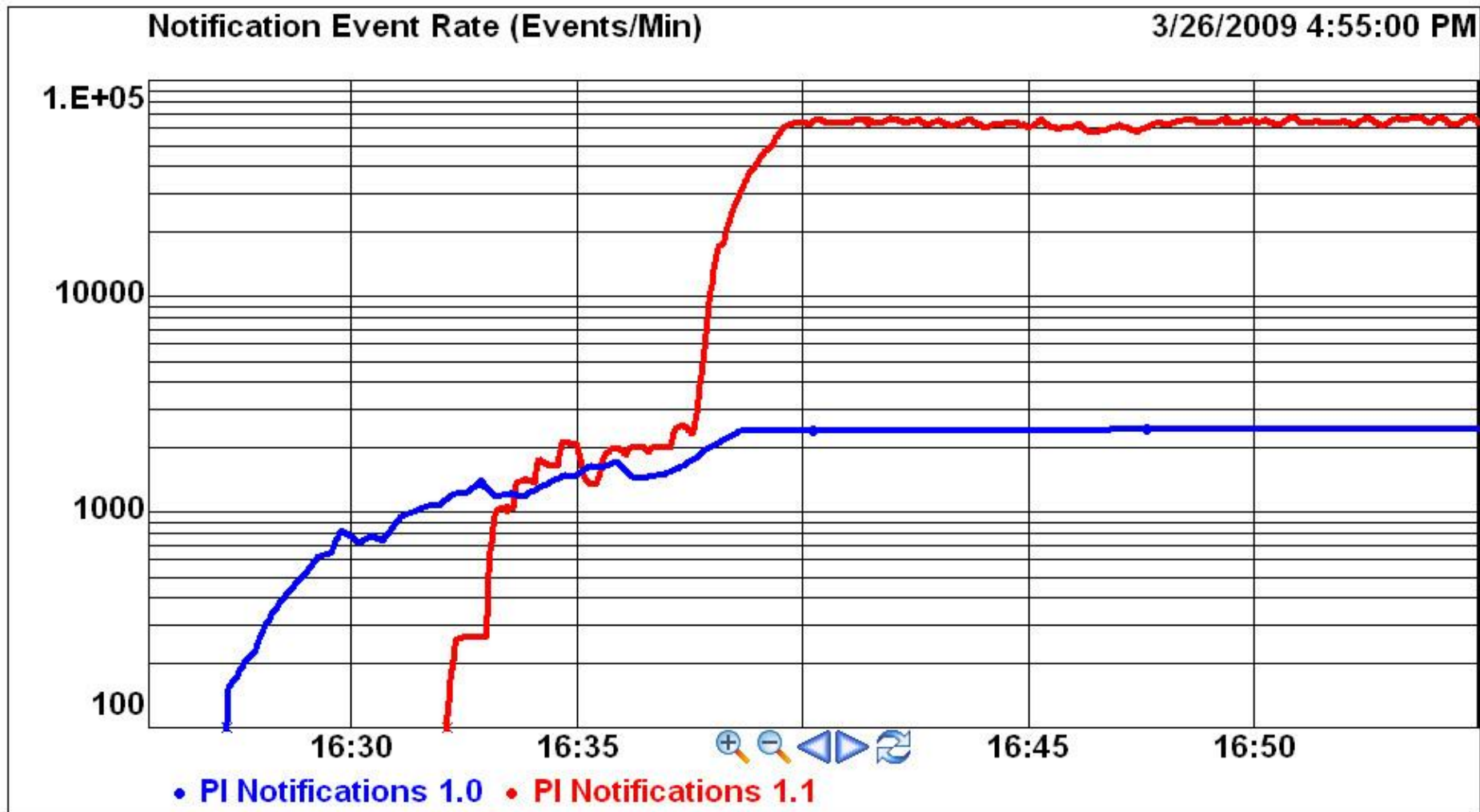
PI Notifications 1.1 Service

Windows Server 2003
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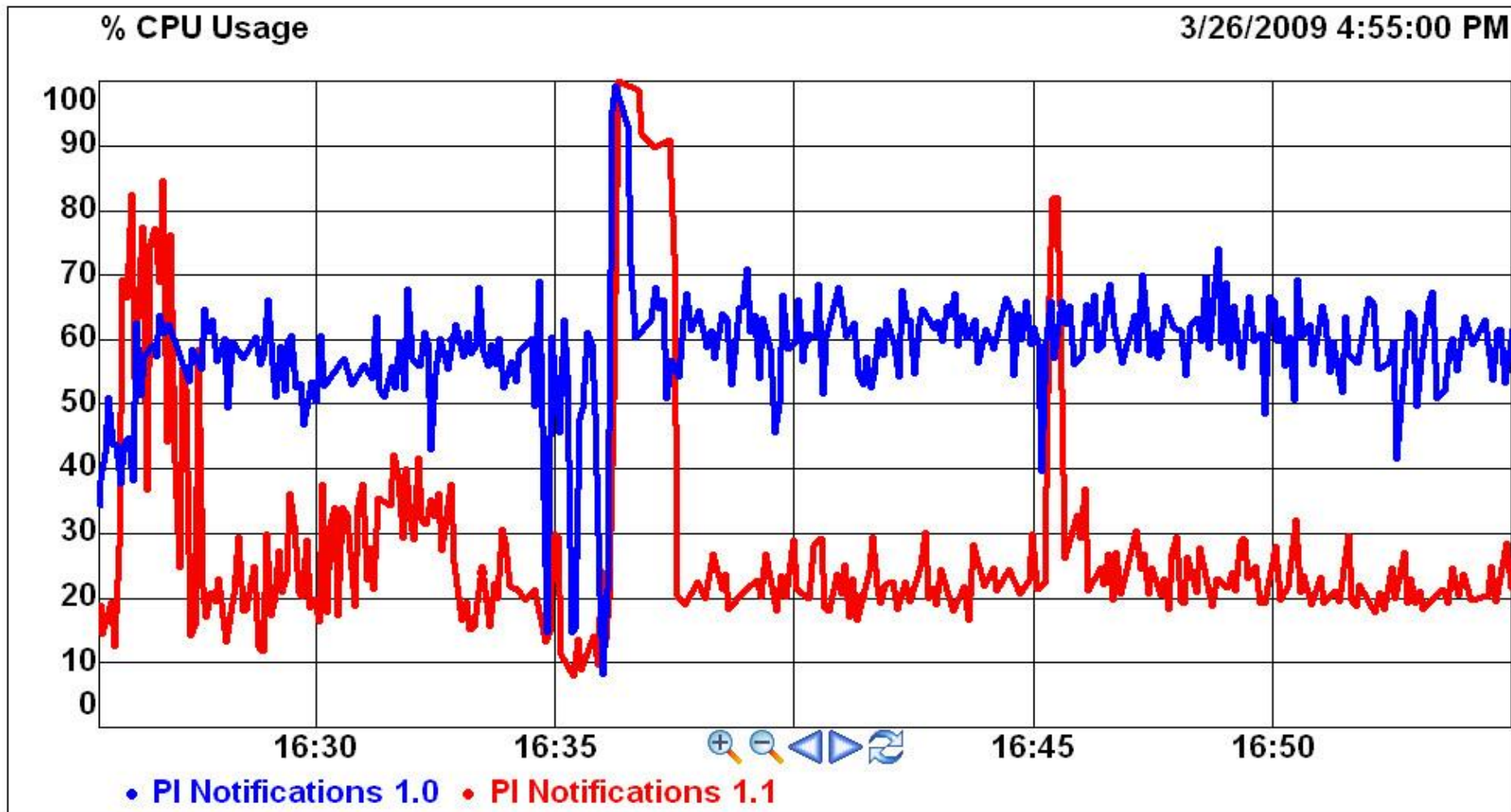
Running Notification Count



Notification Event Rate



PI Server CPU Usage





Scalability: CONFIGURATION

Usability Improvements

- Notification Templates
- Bulk copy subscriber configuration
- Delivery Endpoints link to Active Directory contacts

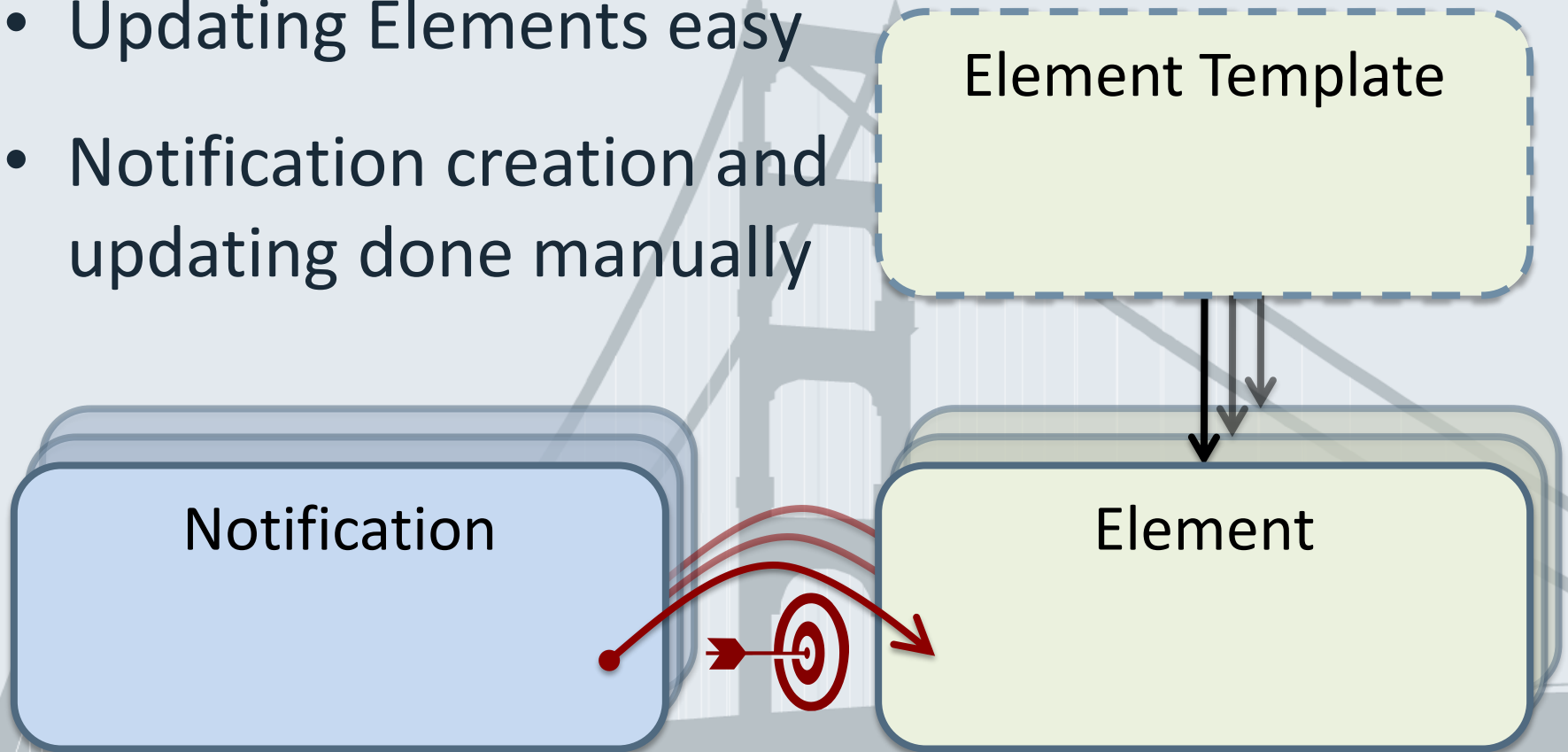
Automation of repetitive actions

Usability Improvements

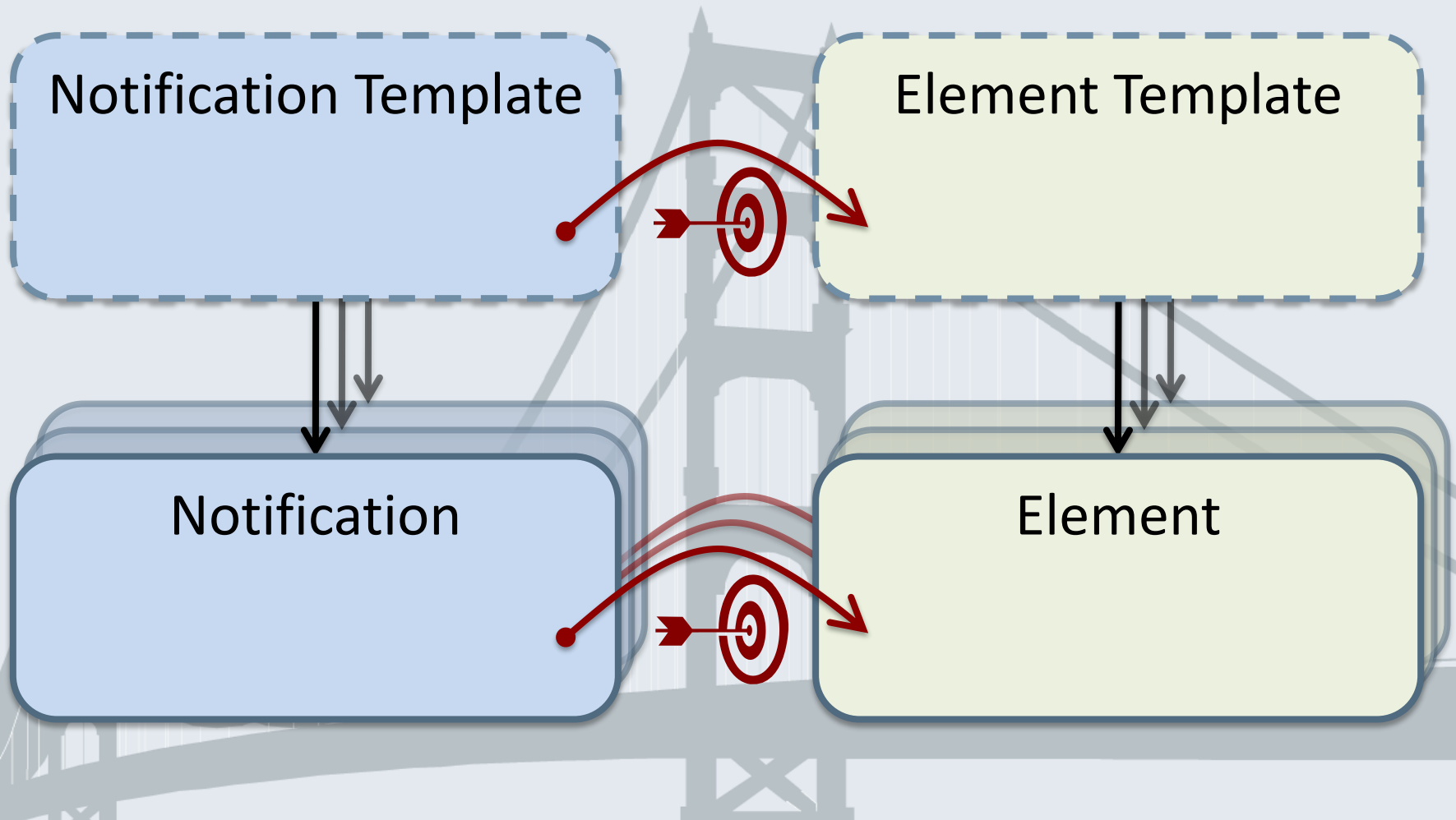
- Notification Templates
- Bulk copy subscriber configuration
- Delivery Endpoints link to Active Directory contacts

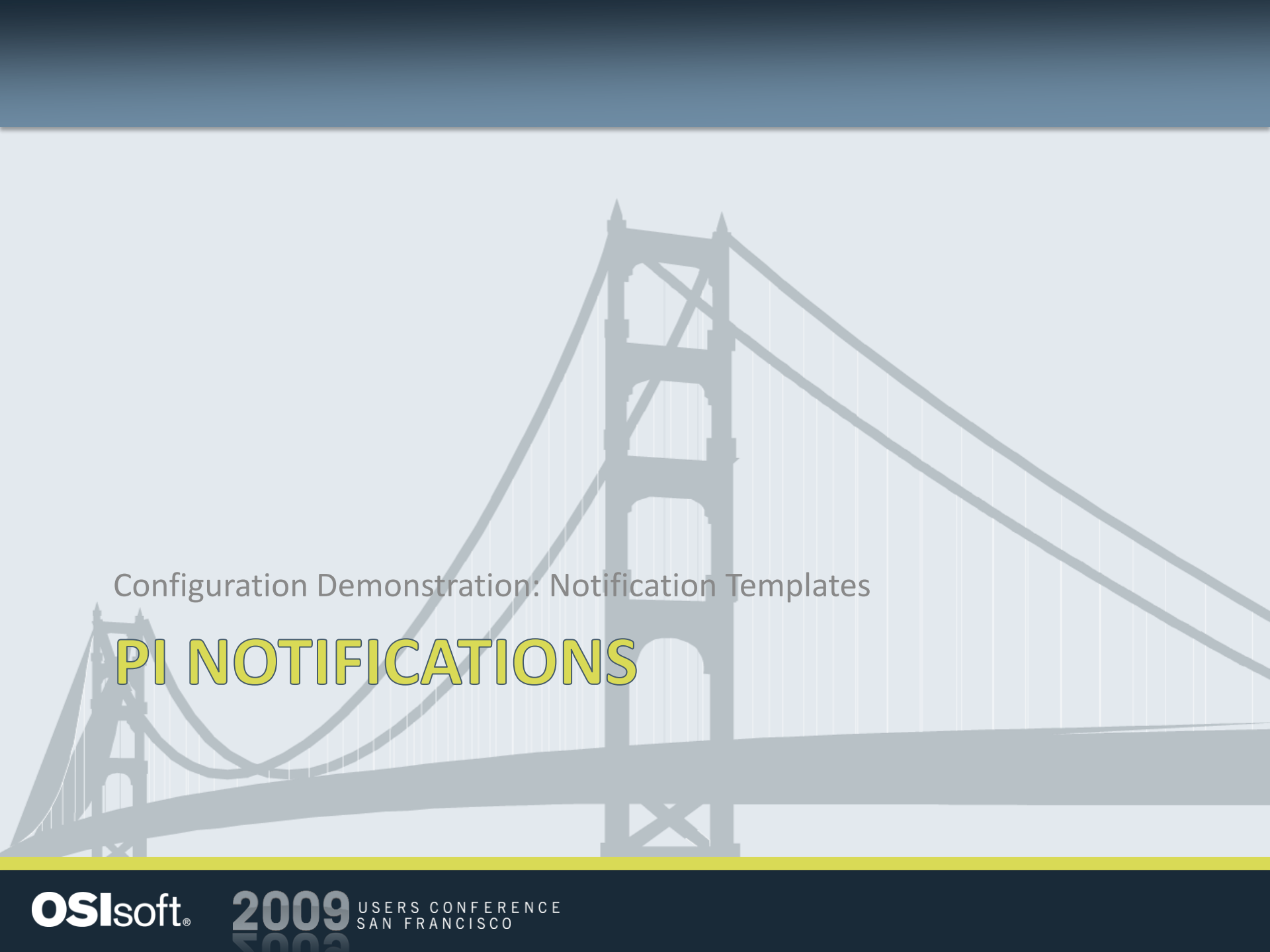
Notification Configuration in v1.0

- Updating Elements easy
- Notification creation and updating done manually



Notification Templates in v1.1





Configuration Demonstration: Notification Templates

PI NOTIFICATIONS

Usability Improvements

- Notification Templates
- Bulk copy subscriber configuration
- Delivery Endpoints link to Active Directory contacts

Usability Improvements

- Notification Templates
- Bulk copy subscriber configuration
- **Delivery Endpoints link to Active Directory contacts**

Conclusions

- Faster
- More capable
- Easier to build and maintain

Bottom Line:

Same Investment = More Value

Questions

- Beth McNeill
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- Expo Pod 3: Notifications