

# pS Standards, Interoperability, Future Directions

Jason Zurawski

September 12, 2007

pS Developers Meeting - LBL



# Interoperability Testing

- SNMP MA – RRD MA
  - Addition of New metrics
  - EventTypees vs supportedEventTypees
  - Issues
- LS – LS
  - Request Structure
  - Update Procedure
  - Query Output
  - Deregistration

# SNMP MA – RRD MA

- SNMP MA – RRD MA
  - Addition of New metrics
  - New pS-UI Plugins
  - Some minor roadblocks
    - EventTypes vs supportedEventTypes
    - Chaining vs. pS-UI Interaction

# SNMP MA – RRD MA

- Perl Based SNMP MA
  - Released Last Week
  - Support for util/errors/discards/snmp metrics
  - Deployed at Esnet/Internet2/UDel
    - Future Deployments for regional nets
  - Current Issues:
    - Working out timeout/reset issues w/ pS-UI
    - Installation procedure will change

# Addition of New Metrics

- Worked w/ Roman/David/Nina  
to  
o describe and implement errors/discards
  - Quick  
pac  
e  
(~2 weeks) from description to availability.
  - Schema  
all  
o  
ws for additional extension (SNMP Hooks)

# Closed Issues

- eventTypes vs. supportedEventTypes
- Handling of chaining
  - output from RRD-MA
  - What pS-UI expected
- 'Keys'
  - Proper way to 'cook' keys  
(i.e. single vs double blocks of parameters)
  - truly opaque?

# Open Issues

- Extension to future metrics
  - How to best organize the store file
  - subject namespaces vs eventTypes
- 'Keys'
  - Need to 'hide' some more of the details
- Id Scope
  - Local vs global vs. temporal for message/  
metadata/data Id values.

# LS - LS

- Perl LS

- Also released last week
- Uses Berkeley (Oracle) DB XML
- CGI Based Client application (Beta)
- 

n

on-issues (but things to consider in the future)

- Protocol Documentation
- Message/Service improvements

# LS - LS

- Resolved Issues
  - Request Structure
- Open Issues
  - 'Update' Messages
  - Query Output
  - De-registration

# Request Structure

- Ability to process multiple metadata/data pairs in a single message
  - For many message types (Registration/Deregistration/Query/Keepalive)
  - Fixes applied to trunk of Java LS

# 'Update' Messages

- 'Update' is a sub operation of 'register'
- Current procedure:
  - remove all 'old' data
  - add 'new' data (as specified by message)
- Proposal:
  - New protocol standards should include alternate 'update' message (separate from registration)

# Query Output

- Escaped vs. non-escaped
  - Java LS –  
use  
s  
escaped output based on prior discussions
  - Should use what is best for client applications (i.e. if everyone is con  
verting back to native xml, is it necessary?)
- Proposal
  - Messag  
e  
l

# De-registration

- De-registration message focuses on removing all
- Services w/ frequently changing data may want  
s  
electively de-register (i.e. control plane)
  - Could use 'update' message to de-register of all data, and add 'new' data

- Same  
con

# Future Goals

- Standards
  - Protocol
  - Service Level (i.e. general enough for a II service developers, not specific services)
- Improvement Plans
  - M  
A/LS/Other protocol/service improvements
- (dlm)LS

# Eye Candy

- perfAdmin – Do some  
com  
m  
o  
n  
administration tasks on an LS instance
  - Needs some protection...
  - Could offer read only vs writable instances
- pS-UI Plugins (Developed  
b  
y

Mark Gordon, Shown by Aaron Brown

