



NMI End-to-End Diagnostic Advisory Group BoF

Fall 2003 Internet2 Member Meeting

Agenda

- Charter Description
- Goals of Effort
- Target Users
- Challenges
- Deliverables
- Next Steps
- Open discussion

Initial Draft of Charter

1. **Gather feature requirements from the perspective of the origin/target application developers, administrators, operations and their support staff to create a distributed diagnostic platform, which is application independent.** This will feed the design effort that will include a rich toolset for problem discovery, forensic analysis and performance measurement. While being **highly conscious of privacy requirements** with respect to the end user as well as enterprises and federations, document privacy requirements and make recommendations for an evolutionary deployment of the features over three years. This will ensure that an initial set of simple **high impact tools can be delivered quickly** without the delay of the full implementation of privacy features, which will be deferred until year two.

Initial Draft of Charter Cont.

2. **Engage** with specific high impact **NMI-EDIT** and **GRIDS** initiatives **to help foster their adoption, development and deployment efforts.**
3. **Survey** and report on market, internal and external research activities, as well as standards efforts in the distributed diagnostic space.
4. **Deliver** a simple but useful diagnostic and performance analysis toolset in year one, to quickly aid in the evolution of Internet2 middleware distributed application initiatives, which uses an extensible platform for more complex and feature rich tool deployment in year two and beyond.

Year One Goals

- Gather feature requirements from the perspective of the user, origin and target/application operators
- Be conscious of privacy feature requirements with respect to architecture, but defer implementation until year two
- Engage NMI-EDIT and GRIDS efforts
- Survey and report on market, research activities, and standards efforts in this space
- Initially focus on simple solutions to quickly aid in the analysis and evolution of middleware diagnostic support
- Create a modular architecture to prepare for a rich toolset in year two

Who Are the Target Users

- Administrators and operators of the
 - Target applications
 - Origin identity providers
 - Supporting infrastructure
- Help desk and triage support teams
- Developers
 - Applications using middleware platform
 - NMI-Edit and GRIDS developmental efforts

Year One Challenges

- **Participation** of key NMI-EDIT and GRIDS experts
- Identifying and implementing a small set of **high value** features
- Participation of beta test group that **best represents** the end user community
- **Keeping pace** with NMI-EDIT and GRIDS initiatives

Year One Deliverables

- Requirements gathering
- Survey of other efforts and products
- Define Architecture
- Initial Utilities/Tools
 - Secure log file distribution and filtering
 - Transaction normalization and correlation
 - Query engine
 - Shell query tools
 - Simple Web UI

Year Two-Three Deliverables

- Tackle privacy issues
- Morph the core platform from a centralized repository of log information to a distributed model
- Mature and extend the query toolset
- Provide a mechanism for incorporating network information (\geq layer 3) into architecture
- Active querying of specific components for management purposes

Year One Activity Timeline

Activities	Status	Month				
		Sep – Nov 03	Dec – Feb 04	Mar – May 04	Jun – Aug 04	Sep 04
Pre-Startup	Done	█				
Startup	Active	█				
End-user Requirement Definition			█			
Architecture and Design			█			
Development, Testing and Distribution				█	█	
Postmortem						█

Major Milestones

- Advisory Group Formed →
- BOF at 12 Oct 03 →
- User Requirements Finalized →
- Architecture/Design Finalized →
- Internal Release →
- Beta Release →
- 0.5 General Release → 13 October 2003

Next Steps

- Establishing requirements
 - conduct focus group interviews of key users
 - identify initial beta test groups
 - publish final requirements doc

- Discover existing methods and technologies
 - Look at existing products and research efforts
 - Review solutions to similar efforts
 - Publish findings

Open Discussion

- What are the target applications?
- What are the “pain points” of doing diagnostic or forensic analysis on these applications presently?
- What would you wish for with respect to,
 - Analysis and forensic tools?
 - Supporting infrastructure?
 - Reporting?
 - Monitoring and notification?

How to participate?

- Requirements
 - Scenario abstraction
 - Focus groups
 - Formal
 - From perspective of the end user
 - Engineering
- Survey
 - Research initiatives
 - Existing and proposed standards
 - Commercial and EDU Products
- Architecture Review
- Development
- Alpha and Beta test