



SELinux: Information Assurance Through Partnership

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Richard C. (Dick) Schaeffer, Jr.
Information Assurance Director
National Security Agency



Information Assurance at NSA

- Information Assurance Directorate (IAD)
 - Provides products and services critical to protecting U.S. National Security information and Information systems
- National Information Assurance Research Laboratory (NIARL)
 - Carries out research and design of technologies needed to enable IA solutions for the National Security Community
 - Where SELinux was created and is currently maintained



IA Mission Drivers

- Rapid introduction of new technology & services
 - Vulnerability discovery capabilities must keep pace
 - IA solutions must be available at the speed of the IT business and customer cycles
- Commercial IT dominates most systems; commercial IA growing
 - Leveraging/influencing commercial activity is vital
- Global communications and connectivity expanding
- National IA needs are growing while resources remain fairly constant



The Right Security Functionality

- Lessons learned from Multi-Level Security (MLS) systems
- SELinux embodies a sound architecture for flexible Mandatory Access Control
- Open Source Community has helped to shape the end result
- Continuing to work toward further advances



Achieving Higher Assurance

- Crucial to NSA and its clients and customers
- Getting the right functionality with medium assurance through current efforts
- SELinux mechanism can be used to improve assurance of higher level components
- EAL4 is not the end of the road, just a start
 - Higher levels of assurance (EAL4+ and beyond) critical to meeting the needs of the National Security Community



Gaining Commercial Acceptance

- The technical challenges facing the National Security Community are the same, the stakes are quite different
- Unique perspective on threats and countermeasures to share with industry
- Our role is to not just “tell” industry what to do; we must also contribute to the “solution” space



Open Source Partnership

- Benefits have far exceeded our original aims of just being a reference implementation
- Community development as a key enabler
 - Overlapping of user and developer activity
 - Shared cost of development
 - Rapid evolution of the technology
- Providing benefits to a wide range of users
- Enabling relationships with industry



Reaching the Goal

- Congratulations on progress to date!
- Keep advancing in all three areas:
 - Security Functionality
 - Assurance
 - Acceptance



Questions