

# TRIDENT: Trust Research in Distributed and Emerging Network Technologies

Justin Sheehy

781-271-3429 • [justin@mitre.org](mailto:justin@mitre.org)

Army MOIE



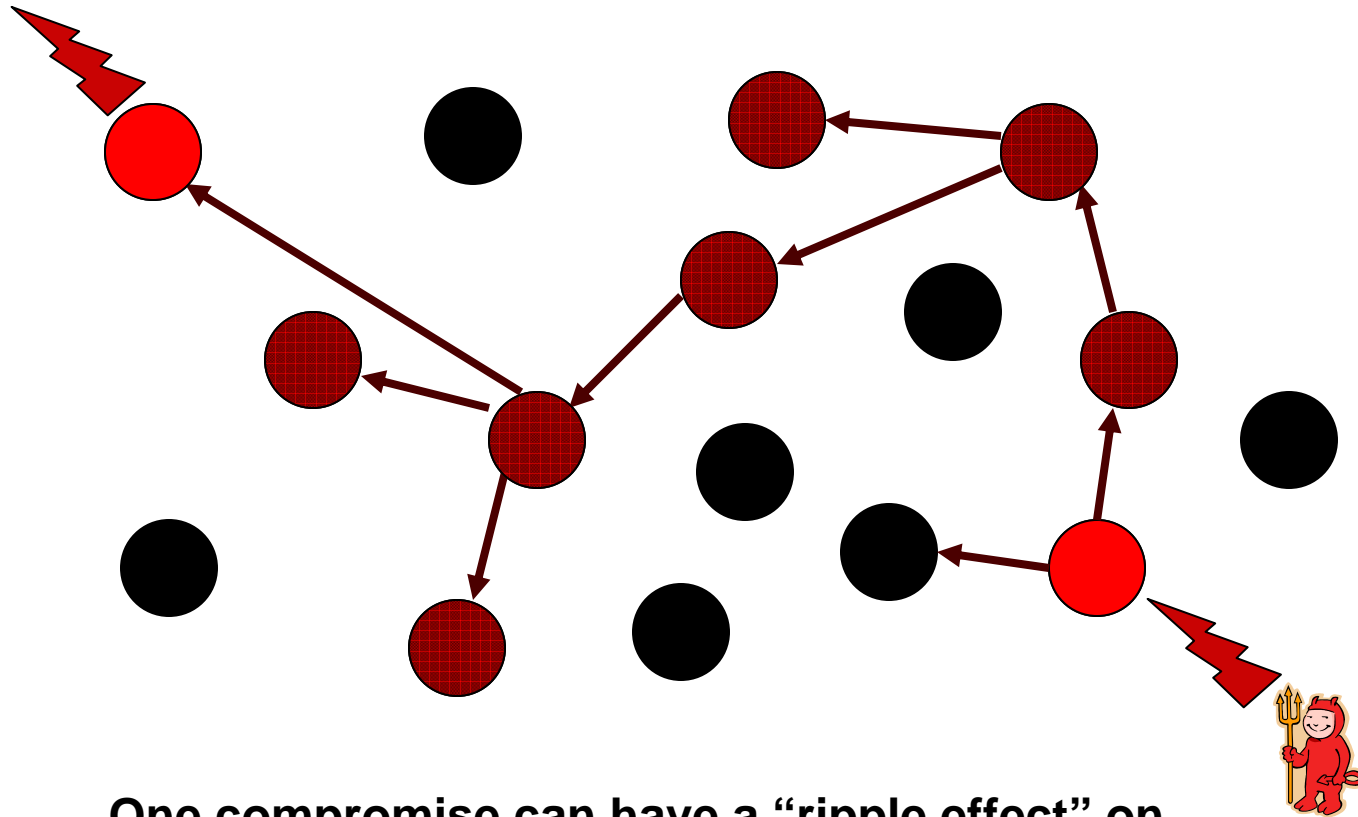
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# Problem

**Can networked services (e.g., Web services) meaningfully make claims about their trustworthiness to peers or clients?**

- **What kind of trust promises can be fulfilled?**
- **Can new COTS hardware help us?**
- **How can we build such systems?**

# Background



**One compromise can have a “ripple effect” on mission assurance in unpredictable ways!**

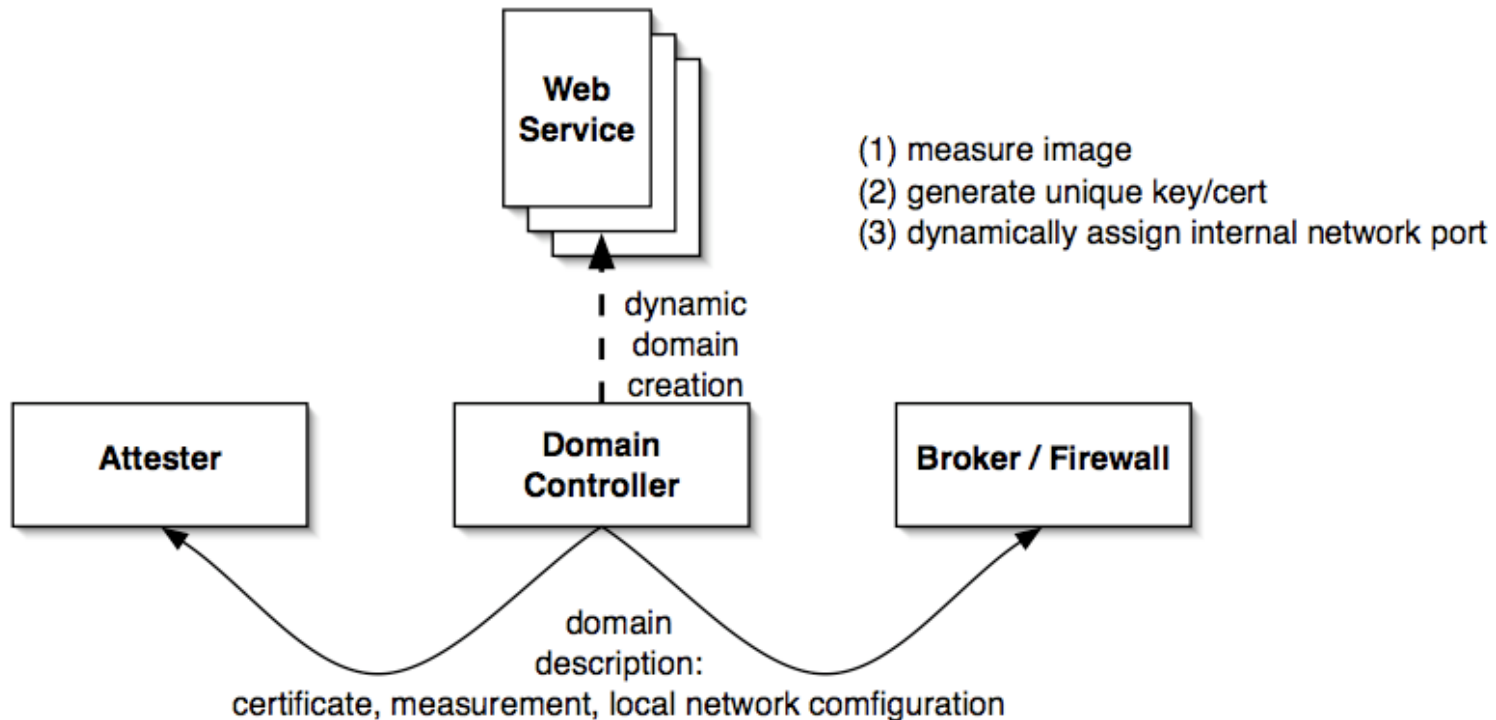
# Objectives

- Increase assurance in Web services, *without* modifying their code.
- Build base attestation platform from COTS
- Build integrated Web services on platform
- Validate resilience of platform

# Activities

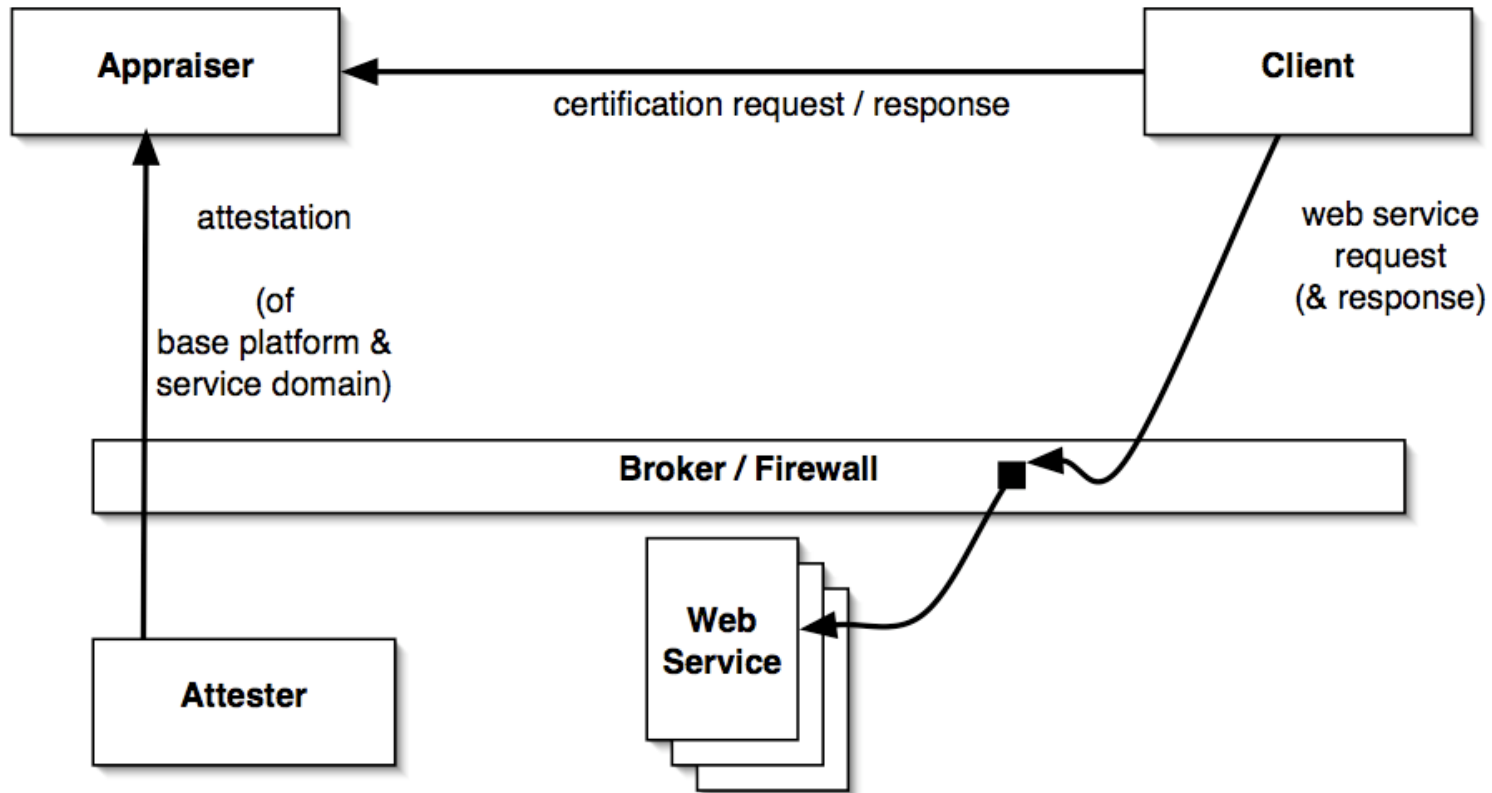
- Evaluate relevant COTS technologies
- Design and develop new methods for extending trust relationships in Web services
- Work with wider community in trust research

# Highlight



## Dynamic Domain Creation, Isolation, and Measurement

# Demonstration



Attestation and Peer Interaction, linked by certificate use

# Impacts

- **Determine trusted computing value in defending against sophisticated attacks**
- **Produce early insight into investment priorities on components needing early DoD attention**
- **Provide credible evidence that defense against sophisticated threats is possible and worth the investment in relevant technology**

# Future Plans



**State-carrying services are harder!**

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