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Scalable Cyber Deception

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<http://www.ng.mil/Images1/today/0501b.jpg>

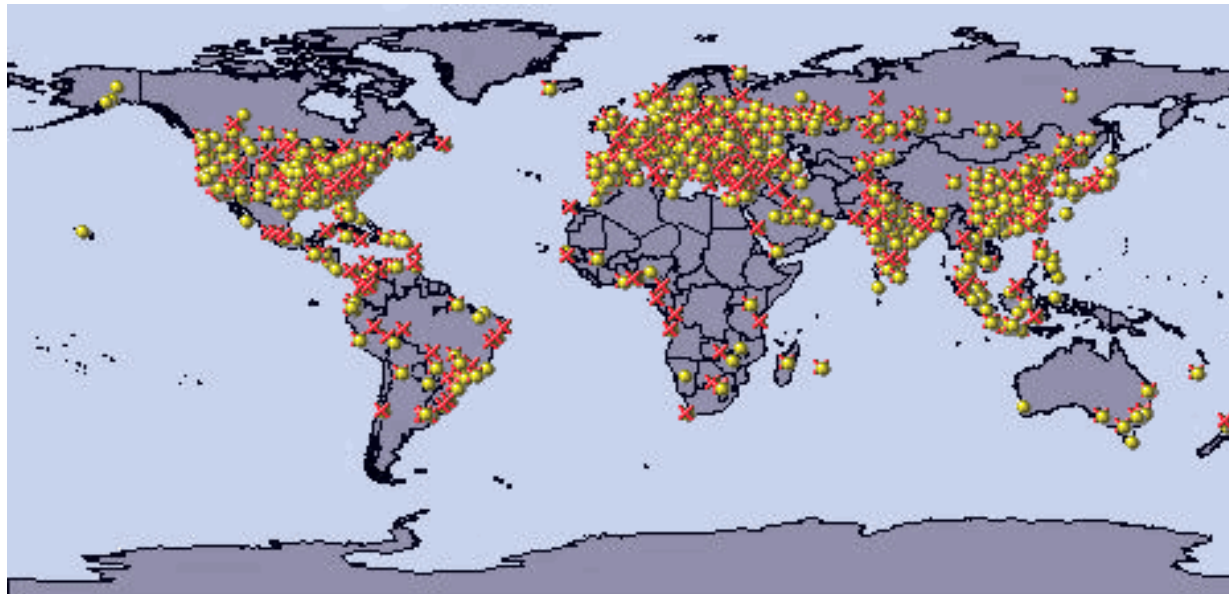
“All warfare is based on deception...” Sun Tzu

Deception: A direct counter to asymmetrical threats



Intrusion attempts on a Government agency

- 40,000 blocked intrusion attempts/week
- World-wide attack sources



 **Monitored Scanner**

 **Blocked Scanner**

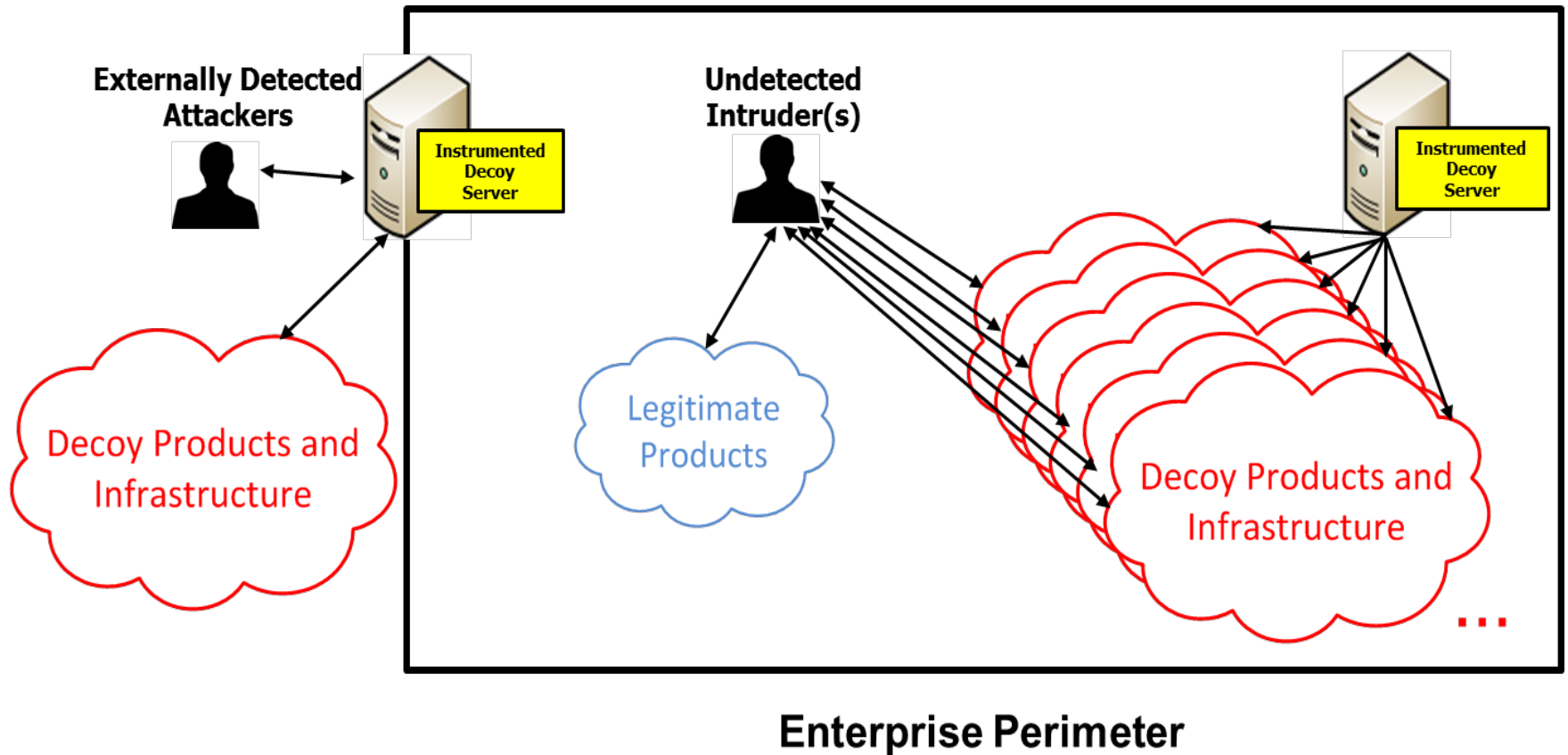
 **Monitored Attacker**

 **Blocked Attacker**

An Opportunity?



An Example Architecture for Cyber Deception





Scalable Cyber Deception Issues

Generation and Deployment of both Decoy Products and Infrastructure

- Automated
- Realistic, Credible, Enticing
- Tailorable
- Differentiable / Non-differentiable
- Noninterference



Key Technical Challenge

To significantly increase adversaries' workloads
with minimal increase to our own

Promising Applicable Research Areas:

- Natural Language Processing
- Large-scale Virtualization
- Realistic Synthetic Activity Generation
- Protocol Manipulation and Exploitation
- Behavioral Science
- Others...



Scalable and Tailorable Cyber Deception

Please send input to:

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