

CYBER SECURITY DIVISION
2013 PRINCIPAL INVESTIGATORS MEETING

Homeland Open Security Technology (HOST)

Daniel Massey
Program Manager
CSD

September 16, 2013

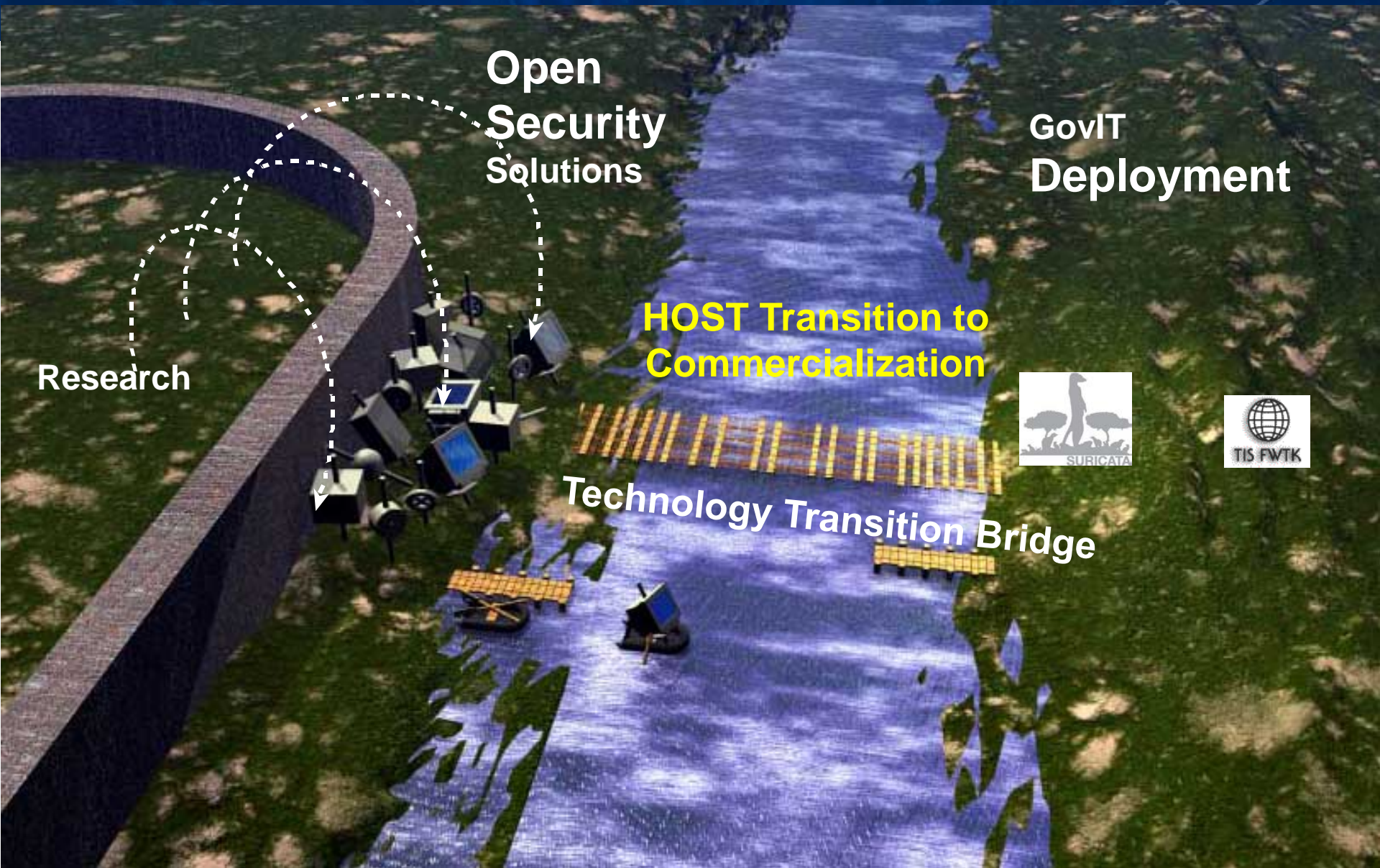


Homeland
Security

Science and Technology

Connecting GovIT with Open Security Solutions

Original Slide Design Stolen From Dr. Doug Maughan, Circa 2000.



Research

Open
Security
Solutions

GovIT
Deployment

HOST Transition to
Commercialization



Technology Transition Bridge



CYBER SECURITY DIVISION

2013 PRINCIPAL INVESTIGATORS MEETING



Homeland Open Security Technology (HOST)

Georgia Tech Research Institute

Joshua L. Davis

September 16, 2013



Homeland
Security

Science and Technology

Performers

Georgia Tech  **Research Institute**

IDA

Bryant Group llc



Open Source
Software Institute



Need for Innovation across the Homeland Security Enterprise

Cybersecurity threats to the Homeland Security Enterprise are ever increasing while Government IT is expensive and slow to adapt.

NEED: Affordable, adaptable, and timely innovation is needed.

Cybersecurity innovation from government research is not transitioning to the market quickly enough.

NEED: Alternative approaches to commercialization are needed to increase discoverability of and accessibility to these innovations.

Approach

Open Source Software (OSS)

Software for which the human-readable source code is available for use, study, re-use, modification, enhancement, and re-distribution by the users of that software.



Reference: 16 October 2009 memorandum from the DoD CIO, "Clarifying Guidance Regarding Open Source Software (OSS)"



Free Software, Libre Software, Free Software, Open Source Software (FOSS or F/OSS), Free/Libre/Open Source Software (FLOSS)



Non-Commercial Software, Freeware, Open Architecture, Open System, Open Interface/Standard/Format, Shareware

Open Security

Application of open source software (OSS) approaches to help solve cyber security problems...In short, open security improves security through collaboration.

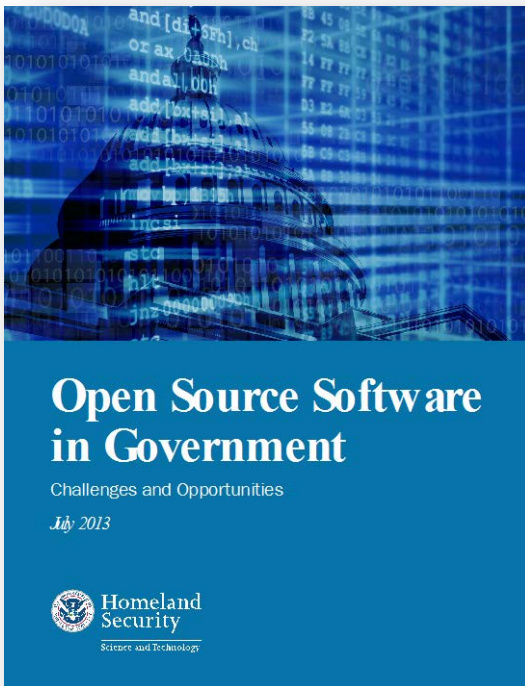
Reference: http://en.wikipedia.org/wiki/Open_security

Homeland Open Security Technology

The mission of the Homeland Open Security Technology (HOST) program is to investigate open security methods, models and technologies and identify viable and sustainable approaches that support national cyber security objectives. The foundational technology for the purposes of HOST is based on open source software.

Discovery • Collaboration • Investments

Discovery



- Discover questions & problems relating to Open Security
- Discover answers & solutions
- Let others know what we've discovered
- OSS in Government
- "Open security" definition
- Frequently Asked Questions (FAQ)
- Various case studies, e.g. OpenSSL, OSS Forensics
- Outreach and training



Collaboration

OPEN SECURITY



- Communications, Community, and Outreach
- Open Security Community
Open-Sec.org
- BSides OSS
- Government Open Source Conference
- DHS OSS Policy
- OpenCyberSecurity.org
 - Open security
 - OSS ecosystem



http://OpenCyberSecurity.org



- LEARN
- FIND
- UTILIZE
- COLLABORATE
- CONTACT



Featured case study #1 title to go in this area.

Lorem ipsum dolor sit amet, vim porro epicurei te, eam cu apparatus intellegam ei eum, his ut eripuit copiosae, et sus partiendo qualisque incidere.

[See case study >>](#)

Explore Cyber Security Open Source Software

- Cryptography
- Client Systems Protection
- Network Security
- Physical Protection
- Configuration Management
- Identification & Authentication

Cryptographic software serves this purpose. (This is where the description of the product category highlighted during rollover would appear.) Will update file when I have icons.

FROSCON

August 25, 2013
Washington D.C.

[See all events >>](#)

Get the facts!

See why open source software benefits your agency.

[See FAQ >>](#)

Question Answer

Latest News

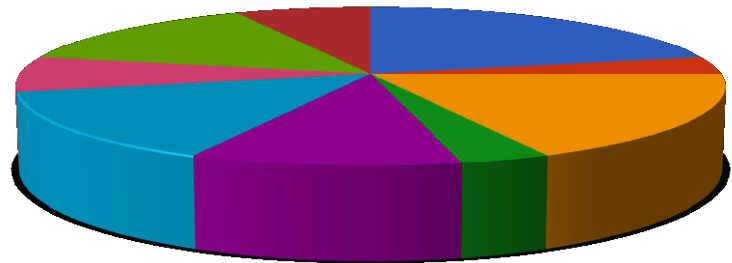
July 2, 2013
[Study shows OSS users in government IT departments have higher satisfaction >>](#)

Upcoming Events

July 2, 2013
[Study shows OSS users in government IT departments have higher satisfaction >>](#)

Recent Videos

Investments



- Security Analytics
- Authentication
- Intrusion Detection and Prevention
- Forensics
- Industrial Control Systems
- Hardware Assurance
- Mobile Security
- Software Assurance
- Wireless Security

- Domains or technologies needing push/refresh
- Certifications, accreditations, and validations
- Proof of concepts and prototyping
- Current Investments:
 - Open Information Security Foundation
 - Suricata IDS
 - OpenSSL FIPS 140-2 Validation
 - Open Web Application Security Guidebook Project
 - City of Portland IDS/IPS Pilot Project
 - Trusted Code Initiative
- Seed and collaborative investments
- Peer reviewed applications
- Shared as case studies



Benefits

Governments

- Increase discovery and accessibility to innovative cybersecurity technologies
- Potential commoditization of effective cybersecurity through economics of scale

Innovators

- Active support in transitioning technologies to open source software
- An evolving and growing open security market
- Opportunities for collaborative innovation

OSS and Security Communities

- Alternative resources for government market requirements
- Increased awareness of government cybersecurity technologies
- Opportunities for collaborative innovation

Current Status

Open Security defined

Discovery - Initial research approved for publication, multiple case studies complete, multiple outreach opportunities

Collaboration - OpenCyberSecurity.org almost ATOed, 250 open security technologies cataloged, Open-Sec Community established, multiple outreach opportunities

Investments - Suricata transitioned, multiple investments in progress and almost complete, call for 2013 investments closed

Next Steps

Discovery - Continue FAQ update and maintain, start development of “How to use OSS in the government”, continued outreach, video documentation

Collaboration - Engage DHS S&T Innovators, Engage DHS about OSS policy, launch OpenCyberSecurity.org, refresh open security catalog, GOSCON in Portland, OR (state & local), BSides OSS in DC (federal and industrial base), continued outreach, integrate with SWAMP

Investments - Council of peers review applications, manage current investments, complete case studies, continue application processing

Homeland Open Security Technology (HOST)



**Should I open source?
I want to open source.
I already open sourced!**

DISCOVERY

David A. Wheeler
IDA
dwheeler@ida.org



COLLABORATION

Joshua L. Davis
Georgia Tech
josh.davis@gtri.gatech.edu



INVESTMENTS

Deb Bryant
Bryant Group, LLC
deborah@debbryant.com

