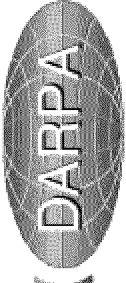


Information Systems Office



Defense Advanced Research Project Agency (DARPA) Information Assurance Program Secure Open Source OS Workshop

Sami Saydjari

DARPA Information Assurance Project Manager

November 30, 1999

REPORT DOCUMENTATION PAGE*Form Approved*
OMB No. 074-0188

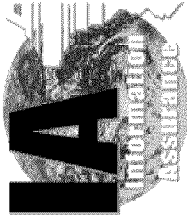
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503

1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE 11/30/1999	3. REPORT TYPE AND DATES COVERED Briefing 11/30/1999	
4. TITLE AND SUBTITLE Defense Advanced Research Project Agency (DARPA) Information Assurance Program: Secure Open Source OS Workshop			5. FUNDING NUMBERS	
6. AUTHOR(S) Saydjari, Sami				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Booz Allen & Hamilton 8283 Greensboro Drive McLean, VA 22102			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) DARPA			10. SPONSORING / MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; Distribution unlimited			12b. DISTRIBUTION CODE A	
13. ABSTRACT (Maximum 200 Words) The National Security Agency (NSA) Joint Technology Office (JTO) and Defense Advanced Research Projects Agency (DARPA) Information Assurance (IA) Program are hosting a series of workshops to investigate leveraging open source OS to improve the robustness of systems it uses for critical functions.				
14. SUBJECT TERMS IATAC Collection, information assurance, DARPA, NSA, open source operating systems			15. NUMBER OF PAGES 5	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT UNLIMITED	

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89)

Prescribed by ANSI Std. Z39-18
298-102



Secure Open Source OS Workshop

Information Systems Office



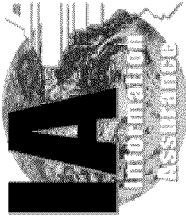
Background:

The National Security Agency (NSA) Joint Technology Office (JTO) and Defense Advanced Research Projects Agency (DARPA) Information Assurance (IA) Program are hosting a series of workshops to investigate leveraging open source OS to improve the robustness of systems it uses for critical functions.

This is the first such workshop.

Workshop Objective:

Foster creation of more trustworthy commercial systems for use within DoD systems.



Secure Open Source OS Workshop

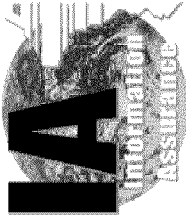
Information Systems Office



Specific Goal:

On the theory that open source operating systems may be more robust and potentially more secure because of the larger research community refereeing the code and contributing to it, what can the government do to foster the development and use of such systems.

Secondary specific goal: expose the community to major GNU/Linux related work.



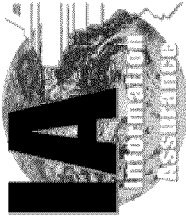
Secure Open Source OS Workshop

Information Systems Office

DARPA

Workshop Detailed Goals:

- Vision -
 - ◆ What is the desirable end goal?
 - ◆ What properties do we seek of the operating system?
 - Robustness? Fewer implementation flaws? Sound design? Security features? Fail-safe?
- Hard problems -
 - ◆ What is in the way of achieving this vision?
 - ◆ Technical and business?
- Who will do a reference implementation?
 - ◆ Do we need to work with standards bodies?
 - ◆ Is there a sufficient market?
 - ◆ Can the Government drive market through specified consumption?
 - ◆ What is the right market model for popular distribution?
 - ◆ How can Government goals and commercial goals be unified so there is one distribution that meets both ?



Secure Open Source OS Workshop

Information Systems Office



Technical Approaches:

- How might we overcome the major technical and business problems?
 - ◆ **Government produced reference implementation?**

Recommendations:

- What sort of investments and policy might the Government make to advance the most promising technical approaches?