



Progress Report

2012-2015

National Information Assurance Partnership

Executive Summary

The National Information Assurance Partnership (NIAP) has made significant progress in three primary mission areas:

- Evaluation of COTS Information Communication Technology (ICT) products
- Development of Protection Profiles
- Representing the U.S. in the international Common Criteria Recognition Arrangement (CCRA)

This report highlights recent accomplishments and provides a preview of plans for 2016.

Accomplishments

Since October 2013, NIAP has focused internal operations on streamlining evaluation processes to ensure current COTS IT products are available for National Security System users. While NIAP has supported the expanding availability of Protection Profiles, the number of evaluations of commercial products has continued to increase. NIAP's accomplishments are focused on enabling industry and government partners to keep pace with this expanding body of work. Underpinning the 90-day evaluation paradigm are enhanced reporting and tracking of evaluation progress, collaboration with Common Criteria Test Labs, and U.S. government agency partners to ultimately provide a greater number of evaluated commercial IT products to National Security System procurers.

Product Evaluations

Increasing Evaluated Products

NIAP's focus on completion of evaluations within 90 days is paying off. More evaluations were completed than in any other year – with 55 evaluations completed; each comprising multiple product versions. This rapid rise in evaluations has provided over 800 product configurations available to procurers within the National Security System (NSS).

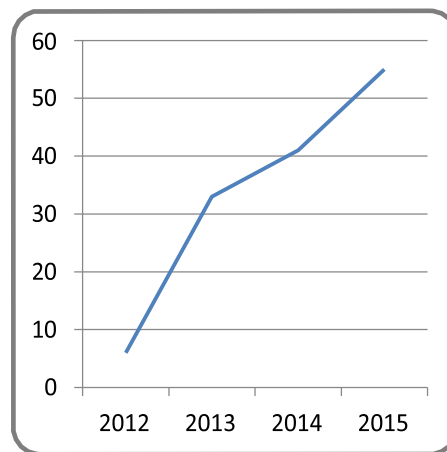


Figure 1. Product Evaluations

Product evaluation schedules are more closely aligning with product development cycles, speeding availability of newly released certified products. Evaluations were completed in an average of 115 days, continuing the trend of faster, streamlined processes.

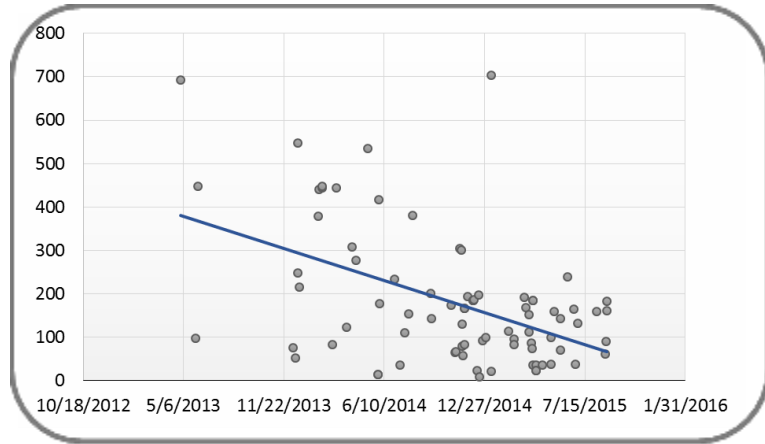


Figure 2. Reduced Timeline (days) for Evaluation

Protection Profile Development

Collaborative Technical Communities

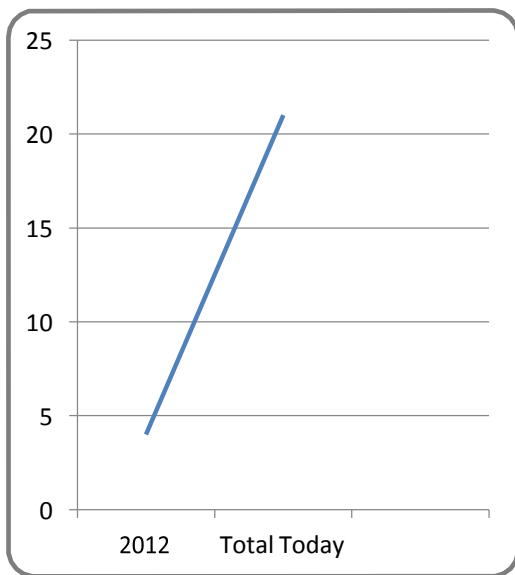


Figure 3. Number of Technical Communities

NIAP brings together technology expertise from industry, Common Criteria test labs, end users, academia, and international governments to form Technical Communities (TCs). The TC members collaborate to develop and update Protection Profiles, which define the security requirements and test activities for a given technology. These collaborations provide unique product development, security, and user perspectives that result in high quality, objective PPs. The number of Technical Communities (TCs) has grown significantly since the 2012 when TCs began developing Protection Profiles.

NIAP's success in increasing TCs, and their membership, has resulted in profound growth in the number of industry partners – from less than 50 in 2012 to over 200 today.

Protection Profile Growth Yields Increased Security in COTS Products

Protection Profiles (PPs), developed collaboratively in TCs with industry and end users, raise the security bar for COTS products by defining current security requirements and outlining optional security functionality that are expected to become mandatory over time.

The breadth and number of Protection Profiles (PPs) has continued to grow, accounting for the steady rise in the number of evaluated products and projections for ever-increasing NIAP product evaluations.

The PP development process has been continuously streamlined and the number of subject matter experts involved in the process has increased.

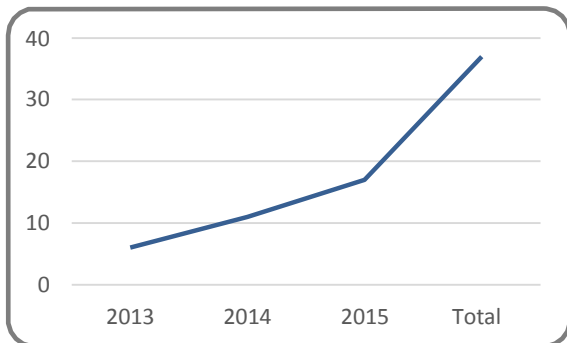


Figure 4. Available Protection Profiles

NUMBER of AVAILABLE EVALUATED PRODUCTS PER TECHNOLOGY

Protection Profile Technology Type	2015	All Evaluations
APPLICATION SOFTWARE	2	
ENCRYPTED STORAGE	2	3
ENTERPRISE SECURITY MANAGEMENT	2	3
FIREWALL*	4	5
MOBILITY	11	18
MULTIFUNCTION DEVICES		
NETWORK DEVICES	34	69
OPERATING SYSTEMS*	2	
REDACTION TOOLS*		
SIP SERVER*	1	
VOICE OVER INTERNET PROTOCOL (VOIP)	1	2
WIRELESS LOCAL AREA NETWORK*	15	6

* New in 2015

International Accomplishments Benefit Vendors and U.S. Government Procurers

Collaborative Protection Profile Development

Internationally, NIAP and the Common Criteria Recognition Arrangement continue to build on progress since the ratification of the updated Common Criteria Recognition Arrangement (CCRA) in 2014.

The first international collaborative Protection Profiles (cPPs) were released in 2015. The cPP development process required collaborative development of essential security requirements and security problem definitions. Written in English, these documents enable non-CC experts to easily comprehend the scope and goals of the PP, and provide the foundation for the cPP, written in Common Criteria language.

In 2016, the existing cPPs will be revised to accommodate additional product security functionality.

Voluntary Periodic Assessment Results

In 2014 NIAP underwent a CCRA-mandated, five-year audit of all NIAP processes and procedures. This Voluntary Periodic Assessment is conducted by an international team consisting of representatives from CC member nations. NIAP received an unprecedented, excellent assessment, with no recommended areas for improvement.

NIAP Infrastructure to Support All Stakeholders

NIAP continues to focus on ensuring the efficient completion of product evaluations and supporting the Commercial Solutions for Classified Program to support the National Security community's procurement of COTs IT products. Toward this end, NIAP continues to build an infrastructure to facilitate effective communications between NIAP validators and CCTL evaluators; to improve access to vital resources, and improve tracking of all validation scheme activities.

An Evaluation Consistency Review tool has been implemented with the goal of ensuring consistent and unambiguous inputs from validators. Clear and consistent guidance from validators during a product evaluation ensures efficient, timely evaluations.

NIAP has focused significant attention on project tracking and this will continue to be a focus area into 2016.

2015 cPP Releases

- ▲ Firewall
- ▲ Full Disk Encryption, Authorization Acquisition (AA)
- ▲ Full Disk Encryption, Encryption Engine (EE)
- ▲ Network Device

2016 Development

- ▲ USB Biometric Devices
- ▲ Dedicated Security Component
- ▲ Software Applications
- ▲ USB
- ▲ Firewall *revision*
- ▲ Full Disk Encryption AA *revision*
- ▲ Full Disk Encryption EE *revision*
- ▲ Network Device *revision*

Alignment

NIAP's alignment with the National Institute of Standards and Technology (NIST) and the Defense Information Systems Agency (DISA) contributes to ensuring current evaluated products are available for DoD use.



NIST and NIAP continued collaborations in 2015 to align the NIAP evaluation processes with the NIST Cryptographic Algorithm Validation Program (CAVP) and Cryptographic Module Validation Program (CMVP) – commonly referred to as FIPS. NIAP evaluations require that each product's cryptography have at least a CAVP certificate and preferably a CMVP certificate. NIAP PPs are written so that they can be used internationally by nations that do not participate in FIPS, but a CAVP or CMVP certificate eliminates the need for the Common Criteria Test Lab to conduct some of the PP assurance tests. This saves time for both government and industry by eliminating redundant cryptographic testing.

In the coming year, NIAP will be participating in a NIST working group, consisting of government and industry members, to explore opportunities for streamlining the CMVP evaluation timeline.

NIAP-DISA Aligned PPs

- ▲ Mobile Device Fundamentals
- ▲ Mobile Device Management
- ▲ Web Browser
- ▲ Application Software
- ▲ Firewall
- ▲ Mobile Device Agents
- ▲ Server Virtualization

NIAP and DISA are collaborating to eliminate duplicate requirements documents and test activities required for product certifications necessary for DoD procurement. Together, NIAP and DISA develop DoD Annexes that define DoD configuration settings for NIAP-evaluated products. NIAP Protection Profiles, in conjunction with the DoD annexes eliminate DISA Security Requirements Guides (SRGs). Industry benefits from this more efficient and less expensive approval process, while the DoD gains a wider range of current COTS products available for procurement because of the cost and schedule reductions.

In 2015 DISA and NIAP added to the inventory of aligned technologies with the addition of Firewall, Software Applications, and Server Virtualization.

NIAP Into the Future

Moving into 2016, new technical communities are being formed to develop Protection Profiles in technology areas including wireless intrusion detection, enterprise session controller, and dedicated security components. Several new cPPS are also in development. A new Software Applications cPP will broaden the availability of evaluated software applications products. A biometric cPP is being led by Spain and Japan. Vendors are leading the Dedicated Security Component cPP effort with initial support from the US and other CCRA member nations. A USB Device cPP is also in progress.

Infrastructure improvements are planned for continued support to all stakeholders. NIAP has initiated development of a database and online tracking of Technical Rapid Responses to issues that arise during product evaluation in order to improve specific and timely responses to those issues. The NIAP website update was initiated to provide all customers with improved usability and access to resources. NIAP will also continue managing the international Common Criteria portal website.

The forecast, based on recent accomplishments and 2016 plans, promises increased product evaluations and greater breadth and depth of evaluated COTS IT products to meet National Security System customers' growing IT needs into the future.

