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NIST
National Institute of
Standards and Technolog

National Vulnerability Database

automating vulnerability management, security measurement, and compliance checking

Security Content Automation Protocol (SCAP) Compliance Program

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July 31 OMB memo to Federal CIOs

"Your agency can now acquire information technology products that are self-asserted by information technology providers as compliant with the Windows XP & VISTA FDCC, and use NIST's Security Content Automation Protocol (S-CAP) to help evaluate providers' self-assertions. Information technology providers must use **S-CAP validated tools**, as they become available, to certify their products do not alter these configurations, and **agencies must use these tools** when monitoring use of these configurations. Related resources (e.g., group policy objects) are also provided to help facilitate agency adoption of the FDCC."

Security Content Automation Protocol (SCAP)

Has Goals...

- Enable standardized and automated vulnerability management, measurement, and policy compliance evaluation (e.g., FISMA and DoD 8500.2/8510 compliance)
- Enumeration of vulnerabilities, misconfigurations, platforms, and impact
- Enable the creation of machine readable security configuration checklists

...Needs Tools

What is an SCAP Compliant Tool?

Tool	CVE	CCE	XCCDF	OVAL	CPE	CVSS
Security Configuration/Vulnerability Scanners	X	X	X	X	X	X
Intrusion Detection Systems	X			X	X	X
Vulnerability Databases	X			X	X	X
Asset Management Tools		X			X	
Policy Framework Tools		X	X		X	
Configuration/Patch Management		X	X	X	X	

The SCAP Compliance Program Should…

- Ensure that security tools
  - comply to the NIST Security Content Automation Protocol (SCAP)
  - be able to certify against one or more the SCAP standards based on the tool function.
- Be unbiased, exact, and process driven
  - How can users trust that they are getting what they need?

National Voluntary Laboratory Accreditation Program (NVLAP)

- Laboratory accreditation programs (LAPs) which are established on the basis of requests and demonstrated need.
- Accredits public and private laboratories based on evaluation of their technical qualifications and competence to carry out specific calibrations or tests.
- Unbiased third-party evaluation and recognition of performance.

SCAP Test Methods and Requirements

- Developed by NIST and shared with the SCAP standards communities
- Provided to NVLAP as input into the overall accreditation program
- Validated on a regular basis
- Updated as needed
  - Significant revisions of SCAP and/or its component standards

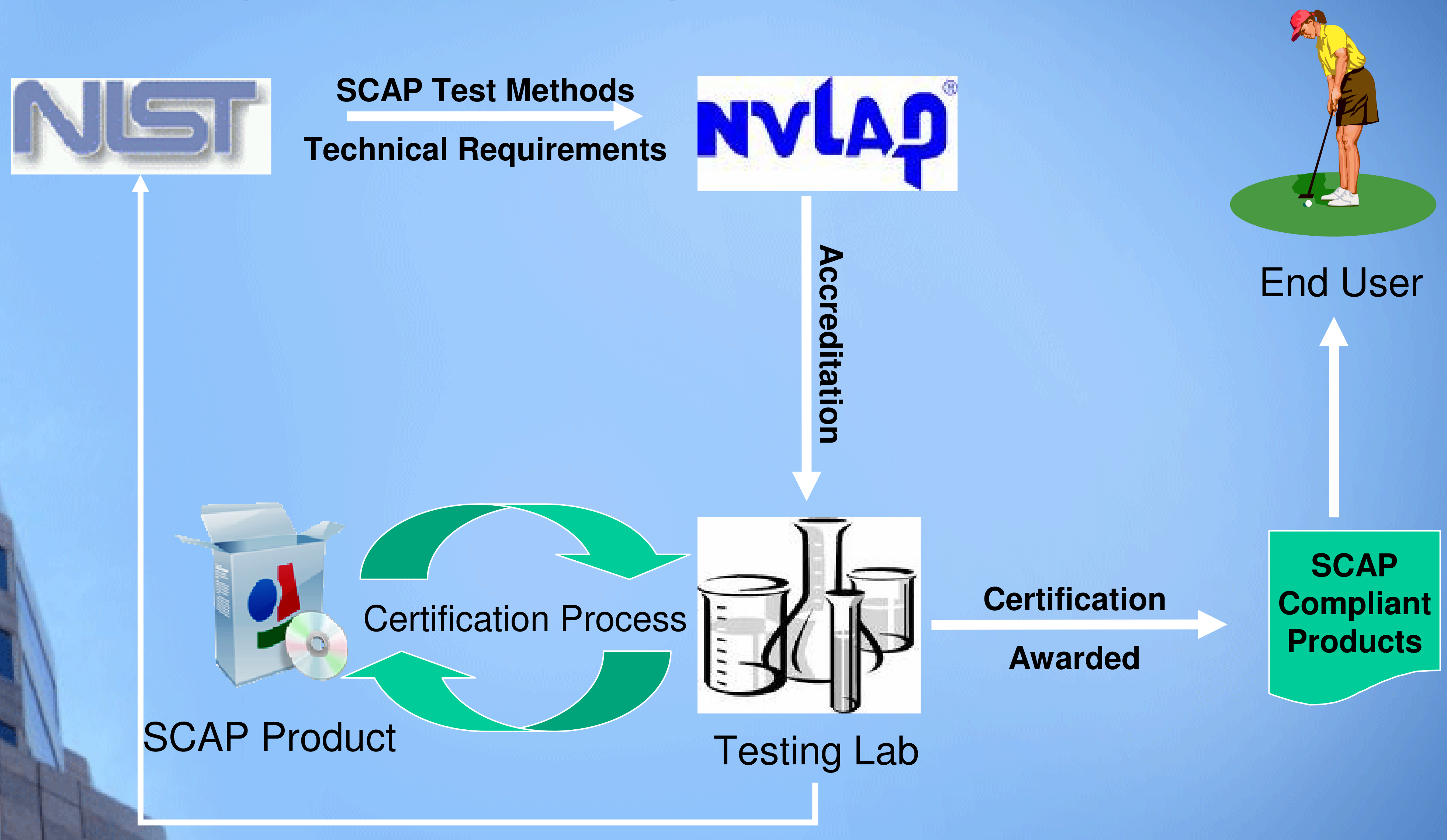
SCAP Configuration Scanning Tool

- Provided by NIST for use in Lab SCAP Compliance testing (e.g. FDCC)
- Purposefully non-competitive with industry tools

The Pieces

- SCAP
- SCAP Test Methods
- NVLAP
- Accredited Testing Labs
- SCAP Products
- End Users

Putting the Pieces Together



SCAP Test Methods

Technical Requirements

Accreditation

End User

Certification Process

SCAP Product

Testing Lab

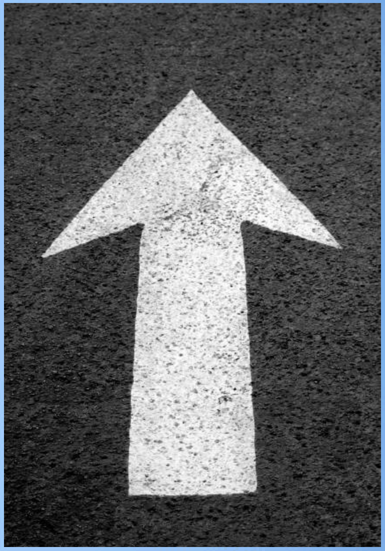
Certification

Awarded

SCAP Compliant Products

Reporting for Validation

Moving Forward



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