# Increasing the Value of Certifications to the End User

**Jeffrey Blank** 

Vulnerability Solutions Office NSA Cybersecurity











### Who is this End User?

#### In this context:

- Network owners
- Acquisition and risk decision makers
- Actual end users of IT products

...the people deploying and using the products



## What does the End User want?

### Things we hear most:

- (1) To use products that best meet their needs
- (2) Efficiencies in network accreditation
- (3) Confidence in new technology paradigms

Let's see how we're doing



### Products that best meet needs

- Speed, speed, and speed of evaluation is key Did I mention SPEED? There are points of light here
  - NIST's strategy for automated module testing
  - NIAP's 90-day evaluation mantra
- Innovation in creating new requirements documents
  - •e.g. GitHub
- Explicit non-involvement of certification bodies in product spaces not suited for certification Is more clarity needed?





# Accreditation

- •In the US, NIST maintains a Risk Management Framework for accrediting *information systems* 
  - NIST SP 800-53 provides a catalog of security controls
- NIAP provides mappings of NIST controls for each PP
  - •This provides confidence that the security functionality has been evaluated, in validated products



- Knowing what's on the network is essential to accreditation or assessment of a network
- •This is one of NSA's Top 10 Mitigations and one of CIS's Basic Controls
- •Certain NIST 800-53 controls are also required by CNSSI 1253, including the validation of IT components against a NIAP-approved Protection Profile
  - Insight into the level of operational compliance should be very informative to us!





# Accreditation

- Other controls are achieved by implementing certain configuration settings for individual IT products
  - Address this need by producing operationally-useful guidance as part of CC and FIPS evaluations
  - •NIAP will be posting *Configuration Annexes* to assist vendors and labs in this process
  - •This will also address the problem of configuration guides masquerading as product approval



## **Confidence in New Technology**

- •"The Cloud" not a new concept in 2018
  - Component vs system: FIPS, CC, FedRAMP
  - •Which components?
- Quantum cryptography
- Authentication mechanisms

•Internet of Things?



### One Last Thing

#### Clarity.

There are a variety of other certification approaches that come and go.

This creates ongoing confusion for the end user, as well as industry.

We can manage this confusion together.