National Cybersecurity Center of Excellence

Increasing the deployment and use of standards-based security technologies

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NCCoE
NATIONAL CYBERSECURITY
CENTER OF EXCELLENCE

ABOUT THE NCCOE

VISION

ADVANCE CYBERSECURITY

A secure cyber infrastructure that inspires technological innovation and fosters economic growth

MISSION

ACCELERATE ADOPTION OF SECURE TECHNOLOGIES

Collaborate with innovators to provide real-world, standards-based cybersecurity capabilities that address business needs

GOAL 1

PROVIDE PRACTICAL CYBERSECURITY

Help people secure their data and digital infrastructure by equipping them with practical ways to implement standards-based cybersecurity solutions that are modular, repeatable and scalable

GOAL 2

INCREASE RATE OF ADOPTION

Enable companies to rapidly deploy commercially available cybersecurity technologies by reducing technological, educational and economic barriers to adoption

GOAL 3

ACCELERATE INNOVATION

Empower innovators to creatively address businesses' most pressing cybersecurity challenges in a state-of-the-art, collaborative environment

The NCCoE seeks problems that are:

▸ Broadly applicable across much of a sector, or across sectors

▸ Addressable through one or more reference designs built in our labs

▸ Complex enough that our reference designs will need to be based on the combination of multiple commercially available technologies

Two Types of NCCoE Project

▸ Use Case - Sector-specific use cases that focus on a business-driven cybersecurity problem facing a particular sector (e.g., health care, energy, financial services)

▸ Building Block - Technology-specific building blocks that cross sector boundaries (e.g., roots of trust in mobile devices, trusted cloud computing, software asset management, attribute based access control)

ENGAGEMENT & BUSINESS MODEL

DEFINE + ARTICULATE Describe the business problem	ORGANIZE + ENGAGE	IMPLEMENT + TEST Build a reference design	TRANSFER + LEARN Guide stronger practices
ACTION	ACTION	ACTION	ACTION

Identify and describe business problem	Publish project use cases, building blocks and solicit responses	Build reference design	Collect documents
Conduct market research	Select partners and collaborators	Test reference design	Tech transfer
Vet project and use case descriptions	Sign CRADA	Identify gaps	Document lessons learned

OUTCOME	OUTCOME	OUTCOME	OUTCOME
Define business problems and project descriptions, refine into specific use case	Collaborate with partners from industry, government, academia and the IT community on reference design	Practical, usable, repeatable reference design that addresses the business problem	Set of all material necessary to implement and easily adopt the reference design

NATIONAL CYBERSECURITY EXCELLENCE PARTNERS

Financial Services

▸ IT Asset Management

▸ Access Rights Management

Energy

▸ Identity and Access Management

▸ Situational Awareness

Health IT

▸ Electronic Health Records

▸ Wireless Infusion Pumps

Consumer/Retail

▸ Multifactor Authentication for e-Commerce

▸ Securing Hospitality Networks

Transportation

▸ Cybersecurity Profile for Bulk Liquid Transport

▸ Authentication for Law Enforcement Vehicle Systems

Public Safety/First Responder

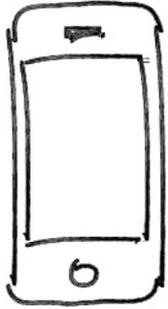▸ Mobile Single Sign-On

Mobile Device Security

Data Integrity

DNS-based Secured Email

Derived Personal Identity Verification (PIV)

Attribute Based Access Control
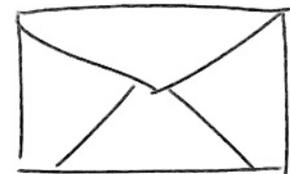
How to Build a Cybersecurity Profile

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Questions?

http://nccoe.nist.gov

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