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

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

NCCoE
NATIONAL CYBERSECURITY
CENTER OF EXCELLENCE

PARTNERS/SPONSORS

Advise, assist, and facilitate the Center's strategic initiatives

The White House

National Institute of Standards and Technology

U.S. Department of Commerce

U.S. Congress

Montgomery County

Maryland State

TEAM

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

NCCoE

National Cybersecurity FFRDC*

Tech Firms

Industry

Academia

Government

Project Specialists

Project-Specific Collaborators

National Cybersecurity Excellence Partnership (NCEP) Partners

*Sponsored by NIST, the National Cybersecurity Federally Funded Research & Development Center (FFRDC) is operated by the MITRE Corporation

CUSTOMERS

Collaborate with center on project-specific use cases that help our customer's manage their cybersecurity priorities

Business Sectors

Individuals

Academia

Government

Cybersecurity IT Community

Systems Integrators

DEFINE + ARTICULATE
Describe the business problem

Define business problems and project descriptions, refine into a specific use case

ORGANIZE + ENGAGE
Partner with innovators

Collaborate with partners from industry, government, academia and the IT community on reference design

IMPLEMENT + TEST
Build a usable reference design

Practical, usable, repeatable reference design that addresses the business problem

TRANSFER + LEARN
Guide users to stronger cybersecurity

Set of all material necessary to implement and easily adopt the reference design

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

Reference designs address:

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

‣ 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)
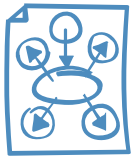
Cybersecurity solutions that are:

based on standards and best practices

usable, repeatable and can be adopted rapidly
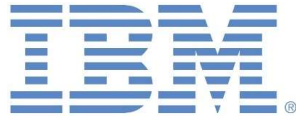
modular, end-to-end and commercially available

developed using open and transparent processes

matched to specific business needs and bridge technology gaps

‣ Attribute Based Access Control **(SP)**

‣ **Consumer/Retail:** Multifactor Authentication for e-Commerce

‣ Data Integrity

‣ Derived PIV Credentials

‣ DNS-Based Secured Email **(SP)**

‣ **Energy:** Identity and Access Management **(SP)**

‣ **Energy:** Situational Awareness

‣ **Financial Services:** Access Rights Management

‣ **Financial Services:** IT Asset Management **(SP)**

‣ **Health Care:** Electronic Health Records on

Mobile Devices **(SP)**

‣ **Health Care:** Wireless Medical Infusion Pumps

‣ **Manufacturing:** Capabilities Assessment for Securing Manufacturing Industrial Control Systems

‣ Mobile Device Security **(SP)**

‣ Privacy-Enhanced Identity Federation

‣ **Public Safety/First Responder:** Authentication for Law Enforcement Vehicle Systems

‣ **Public Safety/First Responder:** Mobile Application Single Sign-On

‣ **Transportation:** Maritime: Oil & Natural Gas

‣ Trusted Geolocation in the Cloud

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