How You Can Influence an Update to the NICE Framework

December 3, 2019
Improves communication about how to identify, recruit, develop, and retain cybersecurity talent.

Categorizes, organizes, and describes cybersecurity work.

Can be used by educators, students, employers, employees, training providers, policy makers, and more.

nist.gov/nice/framework
Throughout the NIST SP 800-181, the NICE Framework, the combined terms “cybersecurity workforce” is shorthand for a workforce with work roles that have an impact on an organization’s ability to protect its data, systems, and operations.

Action from the Report to the President on Growing and Sustaining the Nation’s Cybersecurity Workforce:

   Action 1.3.3 To reduce confusion and ensure alignment, federal departments and agencies should strive to standardize around the use of a single definition of “cybersecurity workforce” based on the National Initiative for Cybersecurity Education (NICE) Cybersecurity Workforce Framework.
The DoD Cyber Strategy 2018 serves as overarching guidance for transforming the Department's cyber capabilities. Line of Effort (LOE) 8 of the Strategy Implementation Plan is focused on sustaining a ready cyber workforce and includes nine objectives to recruit, develop, and retain cyber personnel in a competitive national environment.

A critical workforce element of the DoD Cyber Strategy is LOE 8, objective 1, which requires the development of cyber workforce policies that provide guidance for the management of the DoD cyber workforce according to the DoD Cyber Framework (DCWF). The DCWF and 8140 policy series provide for the standardized, identification, tracking, development, qualification and reporting of the DoD cyber workforce.
DOE CYBER WORKFORCE FRAMEWORK (DCWF)
DoD 8140 Issuances: Policy to Enable Workforce

DoD Directive 8140.01
Cyberspace Workforce Management

- DoD Directive 8140, signed August 2015, establishes a definition for the cyber workforce and outlines Component roles and responsibilities for the management of the DoD cyber workforce.
- NOTE: 8570.01-M is still in effect until such a time as it is replaced.

[DRAFT]: DoD Instruction 8140
Cyberspace Workforce Identification, Tracking & Reporting

- DoD Instructions 8140 (currently in draft) will cover the identification, tracking, and reporting of the cyber workforce in accordance with the DCWF.

[DRAFT]: DoD Manual – Cyber Workforce Qualification and Management Program

Qualifications Model: Establishes qualification criteria for each DCWF work role.

- Education
- Training
- Certifications
- On-the-Job Qualification
- Continuous Professional Development
NICE CYBERSECURITY WORKFORCE FRAMEWORK

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niccs.us-cert.gov
Career information from the U.S. Department of Labor

https://www.onetonline.org/

https://www.mynextmove.org/
Competency Model Clearinghouse
26 Sector-specific industry competency models

www.CareerOneStop.org/CompetencyModel
The Occupational Information Network (O*NET) is an *entry-point* into the *World of Work*

- Descriptive career and occupational information resource
- Provides comprehensive coverage of over 900 occupations across all sectors of the economy
- Includes Knowledge, Skills, Abilities, Tasks, and Detailed Work Activities (along with other descriptors)
- O*NET websites are used by tens of millions of users annually
The value of links from DOL information to more detailed frameworks

We seek increased linkages and interoperability between systems like O*NET and industry competency models to even more detailed sector-specific systems, such as the NICE Cybersecurity Framework

- For when learners and job-seekers move *beyond* the entry point of a career to being serious about a specific field and job, such as one in cybersecurity
3 new Cyber occupations will be included in O*NET in the November 2020 release

Corresponding to 3 Work Roles from the NICE Cybersecurity Framework

- 15-1299.04 Penetration Testers
- 15-1299.06 Information Security Engineers
- 15-1299.06 Digital Forensics Analysts
Q & A
Introducing a new website!

...to help provide information and resources on consulting and implementing a national-focused resource that categorizes and describes cybersecurity work.

nist.gov/nice/framework
Review and Updates to the NICE Cybersecurity Workforce Framework

We’re seeking input on updates to the NICE Cybersecurity Workforce Framework

Improvements to the NICE Framework

Awareness, Applications, and Uses of the NICE Framework

The public is invited to provide input by January 13, 2020.

NICEFramework@nist.gov

See Full Announcement
Improvements to the NICE Framework (12)

• Components that have been most useful and why

• Components that should be static v. dynamic

• Changes to scope and major components

• Benefits or challenges in using the NICE Framework with other standards or resources

Awareness, Applications, and Uses of the NICE Framework (10)

• How you learned about the NICE Framework

• How you are using or referencing the NICE Framework

• Tools and Resources that have been created

• Tools and Resources that are needed
Timeline for Review and Updates to NICE Framework

- **Engagement with Key Stakeholders** Pre-November 2019
- **Webinar to Describe Process and Request for Comments** December 2019
- **Adjudicate Comments Received** January-February 2020
- **First Draft of Changes for Comments** June 2020

Updates to Tasks, Knowledge, Skills, and Abilities, *November 2019-2021*

- **Announcement of Request for Comments** November 2019
- **Request for Comments Deadline** January 2020
- **Consultative Process** March-May 2020
- **Final Draft of Changes** November 2020
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Q & A
Thank You for Joining Us!

**Upcoming Webinar:** Shopping Safely Online and the Work of Cybersecurity Awareness and Behavior Change

**When:** December 18, 2019 at 2pm EST

**Register:** [https://nist-nice.adobeconnect.com/webinardec19/event/registration.html](https://nist-nice.adobeconnect.com/webinardec19/event/registration.html)

nist.gov/nice/webinars