

DoD 8140 Program Implementation Update DAFITC 2024

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Mission and Vision Statement

MISSION – Provide the tools, resources, policies and programs that enable the Department’s cyber workforce stakeholders to identify, recruit, develop and retain a more agile and effective cyber workforce. This includes developing Department-wide policies, championing interagency workforce development initiatives and supporting components with meeting Department-wide cyber requirements to provide a unified direction for the individual communities that comprise this workforce.

VISION – Develop a cyber workforce that is the most capable and dominant force in the world.



- Identification
- Recruitment
- Development
- Retention

GOAL 1: Execute consistent capability assessment and analysis processes to stay ahead of force needs.

GOAL 2: Establish an enterprise-wide talent management program to better align force capabilities with current and future requirements.

GOAL 3: Facilitate a cultural shift to optimize Department-wide personnel management activities.

GOAL 4: Foster collaboration and partnerships to enhance capability development, operational effectiveness and career broadening experiences.



DoD 8140

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- **Unify the cyber workforce**
 - **Establish a common data model with the DCWF to identify and track workforce requirements and capabilities**
 - **Develop and advance cyber workforce capabilities**
 - **Establish a more targeted approach for holistic workforce management and support data-driven decision making**
 - **Establish a program with standard identification and qualification requirements for interoperability while providing flexibility for Enterprise implementation and individual career path development**
 - **The new DoD 8140 Cyber Workforce Qualification Program (CWQP) is designed to grow skill sets to be successful in evolving cyber environments**
 - **Facilitates strategy execution by leveraging cyber work role identification, development, qualification, and talent management.**
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DoD 8140 Policy Documents

- **DoD Directive (DoDD) 8140.01** establishes a definition for the cyber workforce, introduces the DoD Cyber Workforce Framework (DCWF) as an authoritative reference, and outlines component roles and responsibilities for the management of the DoD cyber workforce.
 - **DoD Instruction (DoDI) 8140.02** outlines the identification, tracking, and reporting of the cyber workforce in accordance with the DCWF, enabling enterprise strategic workforce planning efforts.
 - **DoD Manual (DoDM) 8140.03** establishes the qualification criteria for each DCWF work role to ensure personnel filling cyber positions are capable of meeting mission requirements
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Implementation Plan

Implementation Plan

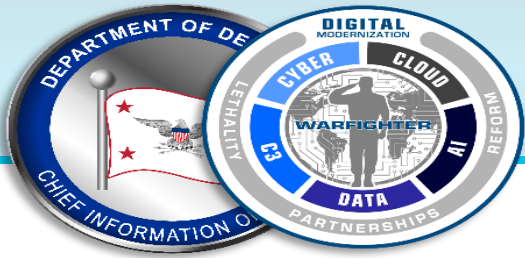
- ⚡ Sets the foundation for how the Department will execute the **22 objectives** and **38 initiatives** aligned with the **4 overarching goals** in the CWF Strategy.
- ⚡ Is strategically designed to be **agile**, **flexible**, and **responsive**, empowering the Department to effectively adapt and fulfill mission requirements within an ever-changing cyber domain.



“To address the numerous workforce challenges DoD faces, we must take a unified and coordinated approach that takes meaningful action to reduce the talent pipeline gap, increase the quality and diversity of our cyber workforce, and prioritize the personal and professional needs of our cyber practitioners.”

— Mr. John Sherman,
DoD CIO

Alignment: DoDI 8140.02 Coding and Identification



DoDI 8140.02, "Identification, Tracking, and Reporting of Cyberspace Workforce Requirements" has been signed and is now effective.



DoDI 8140.02, Sec. 4., Para. a.(2): "Positions appropriately classified with occupational series that would indicate the performance of cyber work is expected to have a cyberspace work role. Exemptions must have documented justification for non-cyberspace coding."

Work Role Codes

- Each DoD civilian cyberspace position needs to be assigned at least one work role code and proficiency level
- Up to three work role codes, with proficiency levels, authorized for each cyberspace position
- Use a specific and unique cyberspace work role code once for each position
- Use a cyberspace code for any position requiring designation as an IT privileged user

000

- Must use the code "000" for non-cyberspace positions if the position does not require cyberspace tasks as the primary duty
- Document a justification for positions in a recognized cyberspace occupational series that will be coded with a primary code of "000"

Outside DoD

- Identify and code positions occupied by individuals outside DoD military and civilian cyberspace descriptors
- (Example: North Atlantic Treaty Organization (NATO) personnel occupying DoD cyberspace positions)



WORK ROLES IMPROVE WORKFORCE MANAGEMENT

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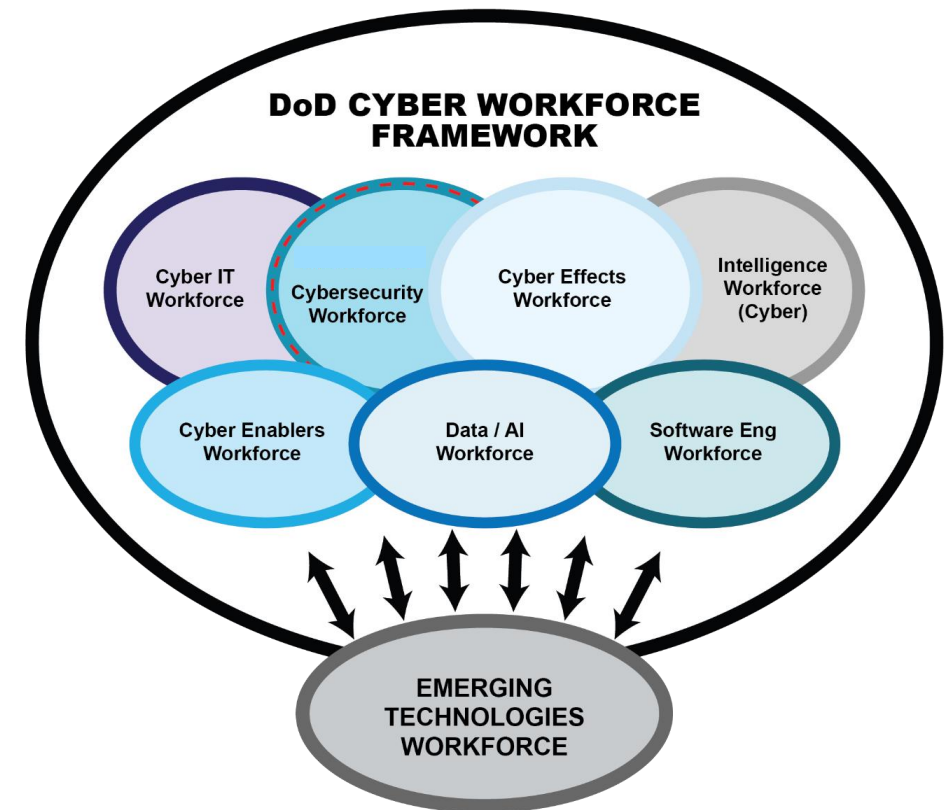
The **DoD Cyber Workforce Framework (DCWF)** provides the Department with an enterprise baseline standards using Work Roles, which offer greater fidelity than historical occupational structures (e.g., civilian occupational series, military occupational specialties).

Agile and responsive process that can incorporate the ever-changing requirements to align to evolving technical threat landscape:

- ⚡ Updated 39 work roles to include Cloud and DevSecOps
- ⚡ Added a Control Systems unique work roles
- ⚡ The Framework now consists of 72 work roles to include Artificial Intelligence (AI), Data, and Software Engineering

Among its many applications, the Department is using the DCWF to:

- ⚡ Conduct strategic workforce planning
- ⚡ Develop tailored training and education materials
- ⚡ Qualification requirements and career progression
- ⚡ Targeted recruitment and retention incentives
- ⚡ Identification of critical recruiting and retention shortfalls (i.e., high vacancy rates and attrition rates)





DCWF Proficiency Levels

- Proficiency Level must also be applied for each DCWF work role coded to a position. The only exception is Primary work role code “000,” which does not require a proficiency level code to be applied.
- **Per DoDI 8140.02**, valid DCWF proficiency levels are *Basic*, *Intermediate*, and *Advanced* with these definitions:
 - **Basic.** The role requires an individual to have familiarity with basic concepts and processes and the ability to apply these with frequent, specific guidance. An individual must be able to perform successfully in routine, structured situations.
 - **Intermediate.** The role requires an individual to have extensive knowledge of basic concepts and processes and experience applying these with only periodic high-level guidance. An individual must be able to perform successfully in non-routine and sometimes complicated situations.
 - **Advanced.** The role requires an individual to have an in-depth understanding of advanced concepts and processes and experience applying these with little to no guidance. An individual must be able to provide guidance to others; and the work must be performed as a Primary or Additional work role.
- DoD plans to release additional guidance on proficiency levels
- New DCWF tool will be available for manager/supervisor use



DoD Cyber Workforce Framework (DCWF)

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❖ DCWF expanded to 72 work roles across 7 Workforce Elements:

- DoD CIO is Office of Primary Responsibility (OPR) for **IT, Cybersecurity (CS), and Cyber Enablers** workforce elements
 - *462 Control Systems Security Specialist new work role under CS workforce element*
- DoD Principal Cyber Advisor (PCA) is OPR in coordination with USCYBERCOM for **Cyber Effects** workforce element
 - *Updates & additions to Cyber Effects work roles driven by alignment with USCYBERCOM Cyber Mission Force (CMF) roles*
- Under Secretary of Defense for Intelligence & Security USD(I&S) OPR for **Intelligence (Cyber)** workforce element
- OSD Chief Digital & Artificial Intelligence Office (CDAO) OPR for **Data/Artificial Intelligence (AI)** workforce element
- USD for Research & Engineering USD(R&E) OPR for **Software Engineering** workforce element

❖ OPRs are responsible for:

- Developing/analyzing potential new work roles
- Updating knowledge, skills, abilities, and tasks (KSATs) for work roles under their purview
- Developing work role qualification matrices in coordination with DoD CIO
- Reviewing education, training, and certifications for applicability to work roles
- Providing guidance for position coding when needed
- Coordinating with DoD CIO regarding work role applications for human capital decision-making



DCWF Work Role Alignment to Workforce Elements

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CYBER IT

OPR: DoD CIO

- (411) Technical Support Specialist
- (421) Database Administrator
- (431) Knowledge Manager (KM)
- (441) Network Operations (NETOPS) Specialist
- (451) Systems Administrator (SYSADMIN)
- (632) Systems Developer
- (641) Systems Requirements Planner
- (651) Enterprise Architect (ENTARCH)
- (661) Research and Development (R&D) Specialist
- (671) System Testing & Evaluation (T&E) Specialist

CYBERSECURITY

OPR: DoD CIO

- (212) Cyber Defense Forensics Analyst
- **(462) Control Systems Security Specialist**
- (511) Cyber Defense Analyst
- (521) Cyber Defense Infrastructure Support Specialist
- (531) Cyber Defense Incident Responder
- (541) Vulnerability Assessment Analyst
- (611) Authorizing Official (AO)/Designating Rep.
- (612) Security Control Assessor
- (622) Secure Software Assessor
- (631) Information Systems Sec. Developer
- (652) Security Analyst
- (722) ISSM
- (723) Communications Security (COMSEC)

CYBER EFFECTS

OPR: USD PCA

- (121) Exploitation Analyst
- (122) Digital Network Exploitation Analyst (DNEA)
- (131) Joint Targeting Analyst (JTA)
- (132) Target Digital Network Analyst (TDNA)
- (133) Target Analyst Reporter (TAR)
- (321) Access Network Operator
- (322) Cyberspace Operator
- (332) Cyber Operations Planner
- (442) Network Technician
- (443) Network Analyst
- (463) Host Analyst

INTEL (CYBER)

OPR: USD (I&S)

- (111) All-Source Analyst
- (151) Multi-Disciplined Language Analyst
- (311) All-Source Collection Manager
- (312) All-Source Collection Requirements Manager
- (331) Cyber Intelligence Planner

DATA / AI

OPR: DoD CDAO

- (422) Data Analyst
- (423) Data Scientist
- (424) Data Steward
- (623) Artificial Intelligence / Machine Learning (AI/ML) Specialist
- (624) Data Operations Specialist
- (653) Data Architect
- (672) AI Test & Evaluation Specialist
- (733) AI Risk & Ethics Specialist
- (753) AI Adoption Specialist
- (902) AI Innovation Lead.
- (903) Data Officer

SOFTWARE ENG

OPR: USD (R&E)

- (461) Systems Security Analyst
- (621) Software Developer
- (625) Product Designer User Interface (UI)
- (626) Service Designer User Experience (UX)
- (627) Development, Security, Operations (DevSecOps) Specialist
- (628) Software/Cloud Architect
- (673) Software Test & Evaluation Specialist
- (806) Product Manager

CYBER ENABLERS (OPR: DoD CIO)

- Leadership:** (732) Privacy Compliance Mgr.; (751) Cyber Workforce Dev. & Mgr.; (752) Cyber Policy & Strategy Planner; (901) Executive Cyber Leader
- Legal:** (211) Forensics Analyst; (221) Cyber Crime Investigator; (731) Cyber Legal Advisor
- Trng & Educ:** (711) Cyber Instructional & Curriculum Developer; (712) Cyber Instructor
- Acquisition:** (801) Program Mgr.; (802) IT Project Mgr.; (803) Product Support Mgr.; (804) IT Investment/Portfolio Mgr.; (805) IT Program Auditor



LOE 4

Cultivate a Premier Digital Workforce



October 2024



DoD CIO releases
DoD 8140 Cybersecurity Annual Report Data Call
(Qualifications)



October - 31 December 2024



DoD Components respond to
DoD 8140 Cybersecurity Annual Report Data Call
(Qualifications)



Spring 2025



DoD Component 8140 Foundational Qualification Data
(Cybersecurity Workforce)
Briefed at Cyber Workforce Management Board (CWMB)

April 2025



DoD Component 8140 Foundational Qualification Data
(Cybersecurity Workforce)
Submitted to House Armed Services Committee



DoD 8140 Qualification Program

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The **DoD 8140 Qualification Program** sets cyber workforce standards for the Department while allowing for flexibility in Component implementation and workforce management.

DoD 8140 Qualification Program Tenets

Role-Based Progression

Verification of Capability

Verification of Knowledge

**Continuous Professional
Development**



Sample DoD 8140 Qualification Matrix

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		Basic	Intermediate	Advanced
Foundational Qualification Options – Demonstration of Knowledge	Education	Option	Option	Option
	Training (DoD & Commercial)	OR	OR	OR
	Personnel Certification	Option	Option	Option
	Experience	OR	OR	OR
Residential Qualification – Demonstration of Capability		Option	Option	Option
		Conditional Alternative	Conditional Alternative	Conditional Alternative
Maintain Currency	On-the-Job Qualification	Always Required	Always Required	Always Required
	Environment Specific Requirements	Component Discretion	Component Discretion	Component Discretion
	Continuous Professional Development	> Of 20 Hours/Year Or Cert. Rqmt.	> Of 20 Hours/Year Or Cert. Rqmt.	> Of 20 Hours/Year Or Cert. Rqmt.



Qualification Options

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❖ Continuous ingestion of education, training, certifications for Foundational Qualifications

- Scanning for education, training, certifications (offerings) relevant to DCWF work roles
- Researching new avenues for academic inclusion via accreditations, education program changes, and proficiency alignment
- Exploring DoD training and commercial training equivalency for college credits (ACE)
- Third party validation of commercial certifications for work role/proficiency level suitability
- Offerings must be accredited through a DoD recognized governing body like ANSI (American National Standards Institute)
- Offerings must address 70% work role core KSATs

❖ Update of Qualification Matrices for CS and IT Workforce Elements

- Matrices update coming in Aug/Sep; Navy and other Services/orgs are providing inputs that are analyzed for changes
- Will be updated regularly or as needed

❖ Components establishing Resident Qualifications

- Includes Job Qualification Requirements (JQR), Personnel Qualification Standards (PQS), On-the-Job (OJT) training, skill-based/task evaluations, exercises that assess work role proficiency level, skill demonstrations
- We are looking to build a repository of examples for resident qualifications



DoD 8140 Qualification Matrix

- **Each cyberspace work role has in its qualification matrix as many as four areas to identify the options available to achieve qualifications associated with each role.**
 - **Foundational Qualifications** composing of education, training, or certification. In some circumstances, actual experience performing in the role may serve as a conditional alternative
 - An **optional foundational qualification** based on experience
 - A **Residential Qualification** that is based on demonstration of capability, which always includes a specific On-the-Job qualification and may include any environmental or organizational specific requirements
 - **Continuous professional development** of a minimum of 20 hours per year (or vendor certification maintenance minimums, whichever is greater).
 - **Additional information regarding the location and management of these matrices can be found on the DoD Cyber Exchange site at: <https://cyber.mil/wid/dod8140/qualifications-matrices>.**
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DoD 8140 Implementation Timelines

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DoD 8140 Implementation Timelines

Foundational Qualifications

**15 FEB
2025**

DoD civilians and military personnel in DCWF work roles under **cybersecurity** workforce element meet foundational qualification requirements.

**15 FEB
2026**

DoD civilians and military personnel in DCWF work roles under **cyber IT, cyber effects, cyber (intelligence), and cyber enablers** workforce elements meet foundational qualification requirements.

CLEARED
For Open Publication
Nov. 03, 2023

Department of Defense
OFFICE OF PUBLICATION AND SECURITY REVIEW

Residential Qualifications

**15 FEB
2026**

DoD civilians and military personnel in DCWF work roles under **cybersecurity** workforce element meet resident qualification requirements.

**15 FEB
2027**

DoD civilians and military personnel in DCWF work roles under **cyber IT, cyber effects, cyber (intelligence), and cyber enablers** workforce elements meet resident qualification requirements.

Reporting and Metrics

**15 FEB
2025**

DoD Components report on **cybersecurity** workforce element via DoD 8140 key performance indicators in accordance with DoDM 8140.03.

**15 FEB
2026**

DoD Components report on **cyber IT, cyber effects, cyber (intelligence), and cyber enablers** workforce elements via DoD 8140 key performance indicators in accordance with DoDM 8140.03.





DoD CIO Workforce Innovation Directorate References & Resources

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DoD CYBER EXCHANGE PUBLIC

Topics ▾ Training ▾ **WID ▾** PKI/PKE ▾ SRGs/STIGs Resources ▾ Help ▾

DoD 8140 Supplemental Resources Coming Soon

DCWF Cyber Enabler Workforce Element: Interim Qualification Matrix

DCWF Documents Library Webpage

- DoD 8140 Module 4:** Cyber Position Identification
- DoD 8140 Module 5:** Civilian Cyber Positions
- DoD 8140 Module 6:** Cyber Workforce Development & Qualification
- DoD 8140 Module 7:** Cyber Analytics & Reporting

DoD WORKFORCE INNOVATION DIRECTORATE

DoD Workforce Innovation Directorate (WID) Home	Cyber Information Technology Exchange Program (CITEP)
DoD 8140	DoD Cyber Service Academy (DoD CSA)
DoD Cyber Workforce Framework (DCWF)	Cyber Workforce Rotational Program (CWRP)
DoD Cyber Excepted Service (CES)	Federal Cyber Career Pathways

- ❖ **DoD 8140 Landing Page, Documents Library & Qualification Matrices**
 - Landing Page:** <https://public.cyber.mil/wid/dod8140/>
 - Documents Library/Qualification Matrices:** <https://public.cyber.mil/wid/dod8140/documents-library>
- ❖ **DCWF Landing Page & Work Role Tool**
 - Landing Page:** <https://public.cyber.mil/wid/dod-cyber-workforce-framework/>
 - Work Role Tool:** <https://public.cyber.mil/wid/dcwf/>
- ❖ **Cyber Excepted Service (CES) Landing Page, Operational eGuide & Compensation Calculator**
 - Landing Page:** <https://public.cyber.mil/wid/dod-cyber-excepted-service-ces/>
 - Operational eGuide:** <https://public.cyber.mil/training/ces-hr-operational-eguide/>
 - Compensation Calculator:** <https://dl.dod.cyber.mil/wp-content/uploads/dces/CES-Incentives/story.html>

Telling the Story

Cyber Workforce Data and Analytics





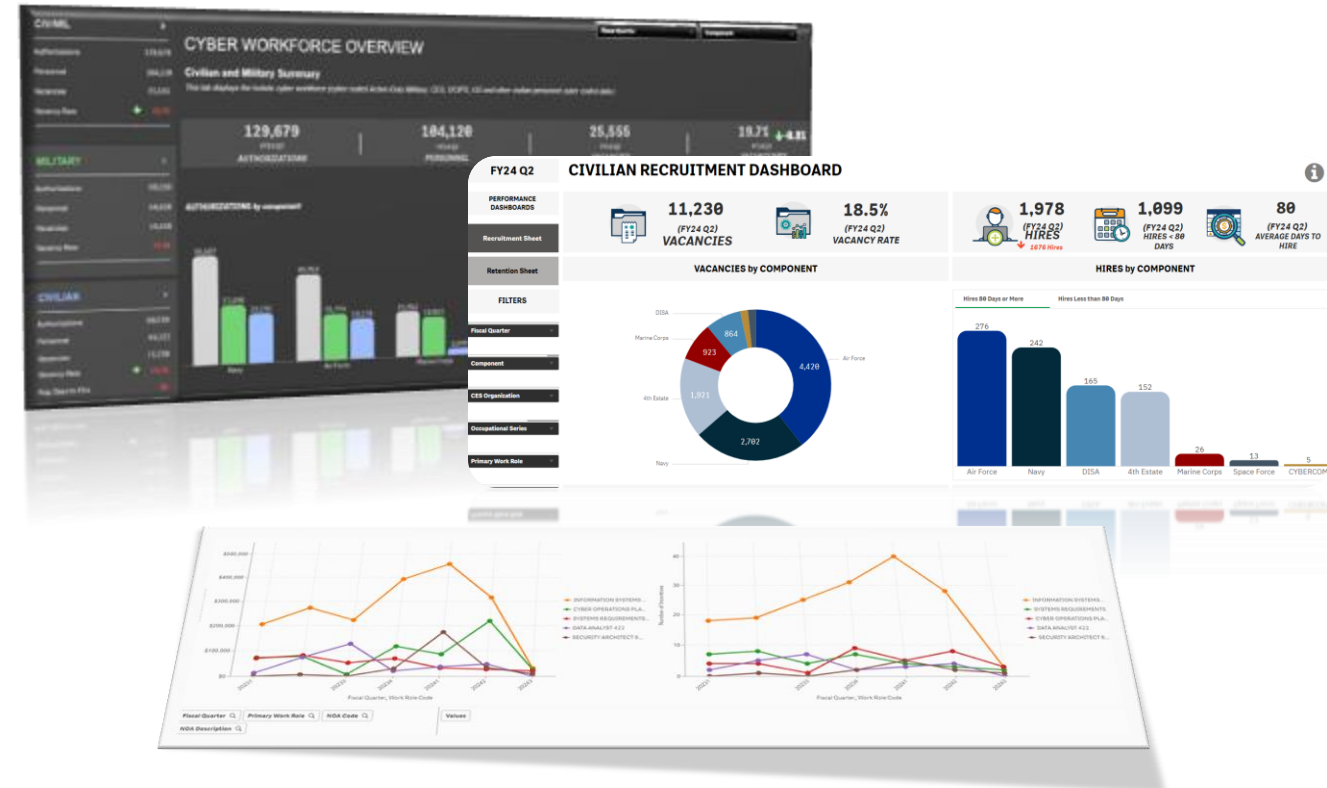
Leveraging Analytics to tell the Story

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Approach



Provide **enterprise-wide cyber workforce analytics** that integrate with and inform risk assessments. In support of workforce readiness analytics, using data from manpower, personnel and qualification systems to provide close to real time workforce visualizations.



Actionable
Insights

Enterprise
Visualization

Clarity on
Demand

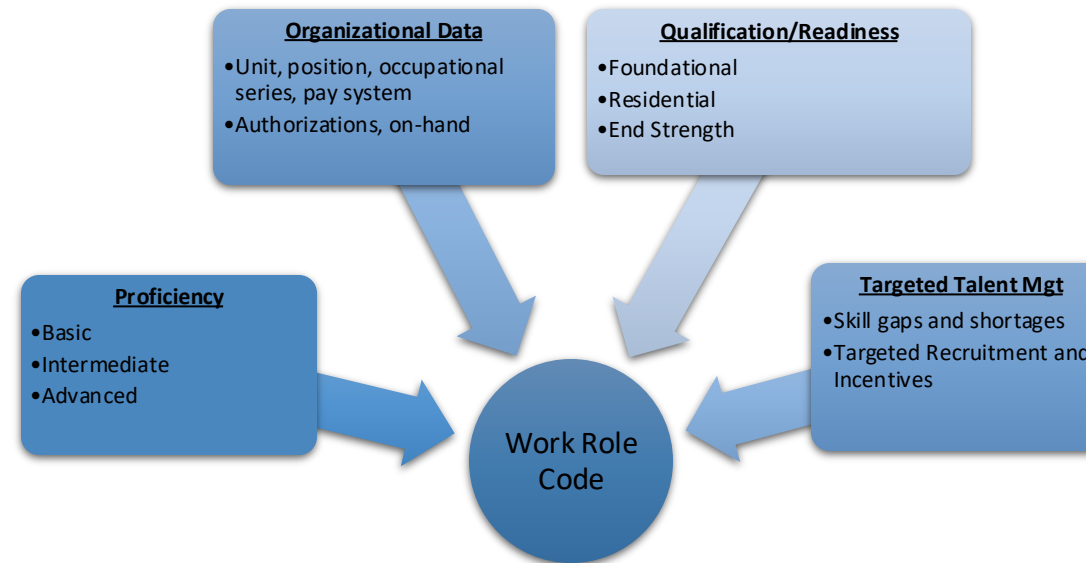


Measuring and Visualizing Cyber Workforce

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- ✓ Over 50 Key Performance Indicators
- ✓ Trends, Performance Analysis and data driven support

Work Role Code = Master Data Entity



- ✓ Fidelity beyond traditional occupational series
- ✓ Provides the capability to identify critical skill gaps and shortages by specific work role

Visualized using Advana Dashboards



Executive Overview

Holistic view of the workforce at scale in support of informing executive leadership



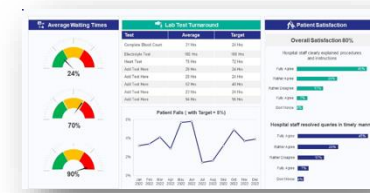
Workforce Oversight

Comprehensive views of Cyber Workforce & Civilian Performance



Advanced Analytics

Detailed data points, queries for decision support



Cyber WF Readiness

Coming soon – overview of DOD 8140 Qualification



Size of the DoD Cyber Workforce

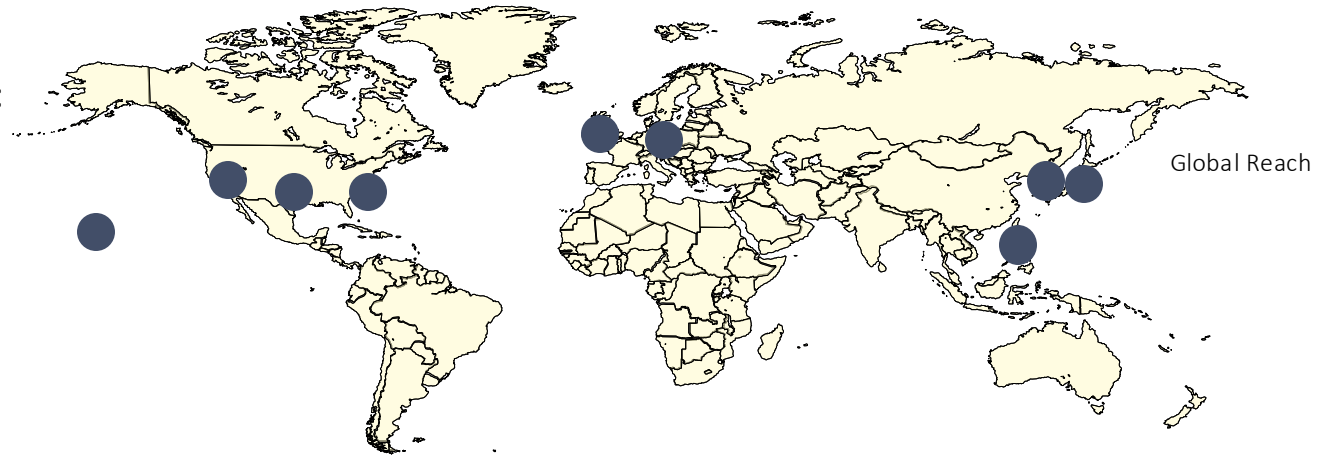
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165k

Authorized Positions

Total DoD Cyber workforce:
All needing to be qualified
under DoD 8140

85K Military/80K Civilian



Information
Technology

77K

Cyber
Security

17K

Enablers

20K





DoD Cyber Workforce Breakout

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Top Cyber Work Roles



Information Technology

System Admin 451

25K

Tech Support Specialist 411

20K

Network Ops Specialist 441

16.6K

Systems Requirements Planner 641

3.8K

Database Admin 421

2.6



Cyber Security

ISSM 722

5K

Cyber Defense Analyst 511

2.8K

Security Control Assessor 612

1.4K

COMSEC Manager 723

1.3K

Cyber Incident Responder 531

1K



Cyber Enablers

Program Manager 801

9.5K

IT Project Manager 802

4K

Cyber Policy /Strategy 752

2.2K

Cyber WF Developer 751

1.9K

Cyber Instructor 712

1.6K

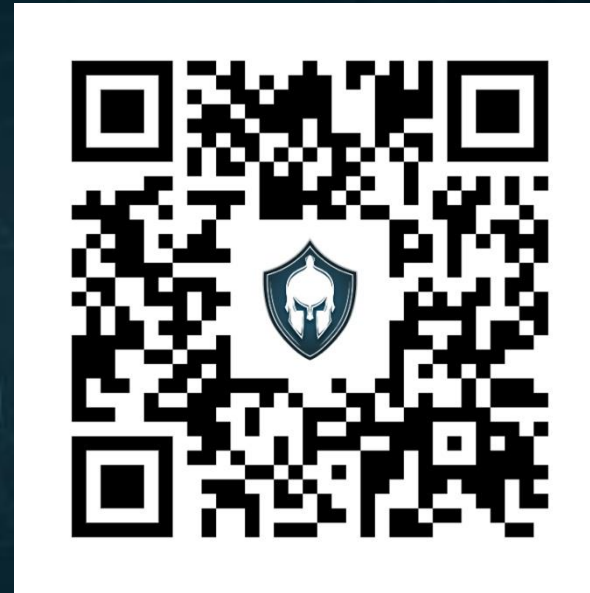


DoD 8140 Resources

- **DAF's implementation of DoD 8140: DAFMAN 17-1305, DAF Cyberspace Workforce Management Program, published 7 June 2024**
 - **https://static.e-publishing.af.mil/production/1/saf_cn/publication/dafman17-1305/dafman17-1305.pdf**
 - **DoD 8140 Resources: DoD 8140 – DoD Cyber Exchange**
 - **DCWF Resources: DoD Cyber Workforce Framework – DoD Cyber Exchange**
 - **DoD 8140 Qualification Matrices: DoD 8140 Qualification Matrices – DoD Cyber Exchange**
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QUESTIONS



SCAN TO VIEW THE CYBER
WORKFORCE STRATEGY