

CMMC Update

Current As Of: December 2022

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TODAY'S SPEAKERS





Ryan Heidorn

Chief Technology Officer, C3 Integrated Solutions Board Director, NDIA New England



Amira Armond

President, Kieri Solutions Vice Chair, C3PAO Stakeholder Forum



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Secure Your Networks and Systems In Physical Space and Cyberspace



- Secure your Networks. Now
- NIST 800-171 Released Jun '15 / Updated Aug '16: 110 controls
 - Revision 3 draft planned for release in Spring of '23
 - Expect 110 number to go up
- CMMC announced Jul '19 to independently assess cyber implementation
 - CMMC 2.0 announced Nov '21
 - Interim rule expected March 2023
 - 60 days after Interim Rule published, CMMC requirements could appear in DoD solicitations/contracts



Secure Your Networks and Systems In Physical Space and Cyberspace



Be working on these controls now!

- 18-24 months a reasonable, serious timeline; lower costs
- 7 months a crash program with heavy investment
- 7 days / 7 weeks un-executable at any cost

Prioritize!

- Some controls provide larger impact
- 100% implementation extremely difficult



Three Big Questions



What are we trying to protect? And why?

- We cannot protect information/data if we don't understand why something should be "Controlled"
- We cannot protect CUI if it is not properly marked

From whom are we trying to protect it?

- Assume all US persons have access?
- Is "Need to Know" a component of access?
- What about friends, partners and Allies?

Can NDIA encourage the government to begin by:

- Focusing on most critical data/information
- Providing some guidelines on releasability



What is a Cloud Services Provider (CSP)?



- CSP examples: Microsoft, Amazon Web Services, Google, and clouddelivered applications (software-asa-service)
- Definition: "Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction."
 DFARS 252.239-7010, NIST SP

800-145

On-Premises	laaS	PaaS	SaaS
Applications	Applications	Applications	Applications
Customer data	Customer data	Customer data	Customer data
Runtime	Runtime	Runtime	Runtime
Middleware	Middleware	Middleware	Middleware
Operating system	Operating system	Operating system	Operating system
Virtualization	Virtualization	Virtualization	Virtualization
Networking	Networking	Networking	Networking
Storage	Storage	Storage	Storage
Servers	Servers	Servers	Servers

User/consumer responsibility



Provider responsibility

Compliance Considerations for CSPs



- When used to store, process, or transmit CUI, CSP must implement security requirements equivalent to FedRAMP Moderate baseline per <u>DFARS 252.204-7012(b)(2)(ii)(D)</u>
- FedRAMP authorized vs FedRAMP equivalent
- Per DFARS 252.204-7012 CSP must also comply with:
 - Incident reporting
 - Media preservation
 - Damage assessment requirements



Compliance Considerations for CSPs



CSP Responsibilities:

- Define security controls in Customer Responsibility Matrix (CRM)
- Prove CSP protecting CUI
 - Verify CSP on FedRAMP marketplace AND DIB Company using FedRAMP offerings
 - https://marketplace.fedramp.gov/
 - If not on marketplace, Assessor will likely need to verify CSP's SSP for FedRAMP controls implementation

DIB Company Responsibilities:

- Implement security controls defined in CRM
- Obtain CSP's SSP if CSP not on FedRAMP marketplace



IT/Security Skillsets for CMMC Implementation



- What are the required skills for implementing and maintaining a compliant IT infrastructure?
- NIST's NICE Framework (<u>SP 800-181</u>), defines roles based on knowledge, skills, and abilities (KSAs)
- Small businesses often outsource these KSAs to external service providers such as an MSP

Role	Training	Salary	Notes
Systems Requirements Planner (Securely Provision)	Minimum 2 years of apprenticeship/hands- on training; systems requirements documentation, computer and system engineering	\$88,000–130,000	KSAs may only be required annually, per RMF minimums
System Administrator (Operate and Maintain)	Systems administration, security fundamentals	\$60,000-87,000	KSAs may only be required a few days per week
IT Project Manager (Oversee and Govern)	Workplace-provided training, online training, workshops, boot camps for IT project management, leadership, public speaking, network security vulnerability	\$85,000-95,000	KSAs will be time-intensive during projects, less so during continuous upkeep and lifecycle management
Cyber Defense Incident Responder (Protect and Defend)	Network security vulnerability, advanced network analysis, basic cyber analysis/operations, network traffic analysis, cyber operator, computer forensics invest and response, information security, information systems, network security, information assurance, troubleshooting, security operations, cryptography	\$90,000-137,000	Availability of this role's KSAs must be maintained, however cannot be planned for without historical data regarding incident likelihood



What is a Managed Services Provider (MSP)?



- Outsourced IT and security labor delivered as services
- May manage cloud infrastructure on behalf of an organization
- Most MSPs are unlikely to process, store, or transmit CUI
- Common MSP responsibilities:
 - Configure and manage networks, servers, and cloud infrastructure
 - Manage day-to-day IT needs (system administration, help desk support)
 - Monitor security tools and respond to alerts and incidents



Applicable CMMC Practices for MSP



- People: training, privileged management, account requirements, background screening
- Technology: MSP will be expected to perform internal security for their systems if persistent connections exist to your network (remote management tools, VPNs)
- Facility: only if storing CUI at MSP
- Compliance activities: Change Mgmt., Incident Mgmt., maintenance, vulnerability scanning, etc.
- Assessor will need to evaluate MSP to verify any compliance activities they perform on DIB Company's behalf



How to Select an MSP for CMMC



Demand a Shared Responsibility Matrix (SRM) designed for use with CMMC

Ask:

- Does the MSP maintain remote access connections to your environment?
- How does the MSP manage changes to your environment?
- Does the MSP have staff qualified to act as CISO for you?
- Are all MSP employees U.S. Persons?
- What clouds and subcontractors does the MSP use to support you?
- Has the MSP implemented NIST SP 800-171 for its internal systems?



Additional Resources for Vetting MSPs



- MSP Shopping Guide
 - https://ndisac.org/wp-content/uploads/2022/12/NDISAC-SMB-WG-MSP-Shopping-Questionnaire-Rev-4.5.pdf
 - ND-ISAC, SMB Working Group
- MSPs and CMMC Compliance
 - https://www.cmmcaudit.org/msps-and-cmmc-compliance/
- MSP Maturity Check: 21 Questions to Ask Your MSP
 - https://steelroot.us/resource/msp-cybersecurity-check/



NDIA Concerns Associated with cloud/MSP



- Conflation of CSPs/MSPs in the draft CMMC Assessment Process (CAP)
- Necessity of practice inheritance in the assessment process
- Interpretation of some CMMC practices in cloud-native architectures
- No process to assess CMMC compliance for CSPs/MSPs prior to client DIB Company assessments
- NDIA submitted <u>comments</u> on the Cyber AB's draft CAP in August



NDIA Recommendations



- Current plan as NDIA understands it will result in significant failure rates across the DIB (and government)
- 3 Recommendations
- 1. DoD CIO include industry in their assessment plan
 - Without correction, 1st year assessments could carry 75%+ failure rate
 - Likely to drive industry opt outs, anger & additional congressional oversight
- 2. Assess MSPs as part of a cohesive strategy
 - Verify providers meet standards on behalf of their clients
- 3. Adjust implementation plan Move away from cliff implementation
 - Max 10% / 11 controls auto-fails
 - 80% of 110 controls = PASS
 - Consider further adjustments for small business



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Questions?

