LIFELINE
DATA CENTERS

SECURE • COMPLIANT • SIMPLE

White Paper

DoD
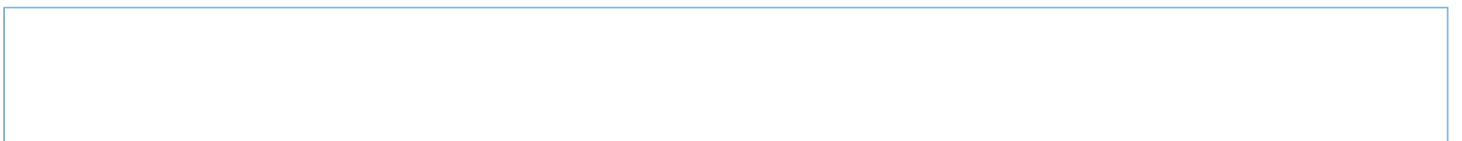### CMMC Fasttrack Implementation

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Overview

CMMC (Cybersecurity Maturity Model Certification) is a unified standard for implementing cybersecurity across the defense industrial base. Adherence to CMMC is now required by all DoD contractors and subcontractors.

Complying with CMMC is not easy and is not free, but when done correctly it does provide a company with best practices for cybersecurity and data reliability, while at the same time, also creates organizational efficiencies that offset the compliance costs.

Lifeline Data Centers is a CMMC compliant Cloud Service Provider (CSP). By using Lifeline as an application hosting solution, companies inherit a large portion of Lifeline's CMMC compliance, making rapid CMMC compliance both possible and affordable.

Working with Lifeline leverages decades of:

- ✓ Compliance, conformity and knowledge
- ✓ Security and affordability
- ✓ Flexibility and agility to changing needs and landscape

Problem Statement

Data Security within the United States is woefully lacking and especially within the SMB (small/medium businesses) community, which makes their data easy targets for electronic hacking and employee data exfiltration activities.

Most leading-edge advancements begin in the SMB community due to less organizational structure and other factors that create an environment for expedited experiments and advancements. Also, since budget concerns are more heightened in SMB, appropriate funding for cybersecurity is often not at a meaningful level.

DoD has lost tens-of-thousands of small business contractors due to the complexity of performing work within technologically secure environments that also demand certain business processes and controls to be in place. Consulting firms charge exuberant fees to bring SMB into CMMC compliance, often in excess of $140,000 on the low side. On top of consulting fees, there are required capital expenditures to be made for new IT equipment and software. Finally, there is the large soft cost of employee time moving from a non-secure to a meaningfully secure environment. The combination of these costs creates significant pause to proceed within the SMB community, especially since beginning to work with the DoD often means there is a large gap between getting started and actually receiving payments.

Optimal Working Environment

Everyone wants a cyber secure environment to work within, but there is a lot of mystery to SMB management and employees on what that environment should look like and what is the best, most economical path of obtaining that environment.

DoD must have a robust SMB contracting community, but this community absolutely must have strong and reliable cybersecurity and data/information security controls in place that are always operable.

LLDC's solution allows SMB users to work from anywhere and across multiple devices, which has now become a critical component of business continuity practices because of COVID-19 physical separation practices.

Solutions That Are Replicable

Lifeline Data Centers has created a proven, cost effective and replicable solution that can be implemented within 60 days, for bringing the SMB community into CMMC compliance. CMMC Level 3 is the initial and normal resting state for most, but CMMC Level 5 is certainly achievable within this solution, as well. All steps required for the SMB to achieve CMMC Level 3 and subsequently Levels 4 & 5, are documented in a manner that takes away the mystery.

Lifeline Data Centers operates this solution behind a secure boundary and within a CMMC Level 5 compute environment. So, all SMB users are performing their compute work, along with storing all data in a CMMC Level 5 solution. After full integration of the SMB company into Lifeline's solution, the SMB company will be operating at CMMC Level 3, due to the SMB's internal business controls outside of Lifeline's solution.
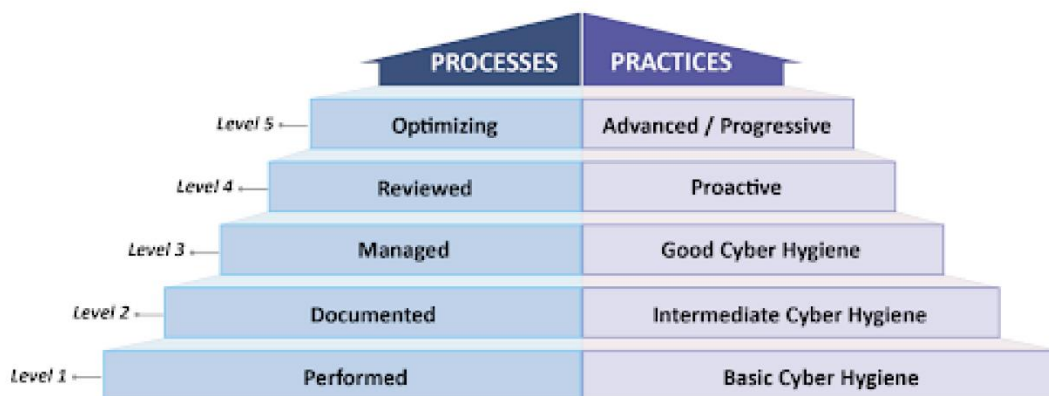

CMMC Levels and Descriptions

Therefore, as a practical matter of business operations, the SMB company starts with Lifeline at CMMC Level 3 and as time goes forward, will be able to cost effectively evolve into a CMMC Level 5 posture, as they raise the bar on their internal business controls outside of Lifeline's solution.

This technology solution is highly replicable to any SMB customer within the USA and can quickly onboard many SMB companies that then operate with the following assurances:

1) Highly scalable and redundant compute platform that can be securely accessed from any Internet enabled location.
2) Data backup and redundancy.
3) Automatic software license enforcement that can be easily audited by Business Software Alliance.
4) Continuously updated security posture with DISA STIG's and monthly updates.

VDI Hosting Infrastructure
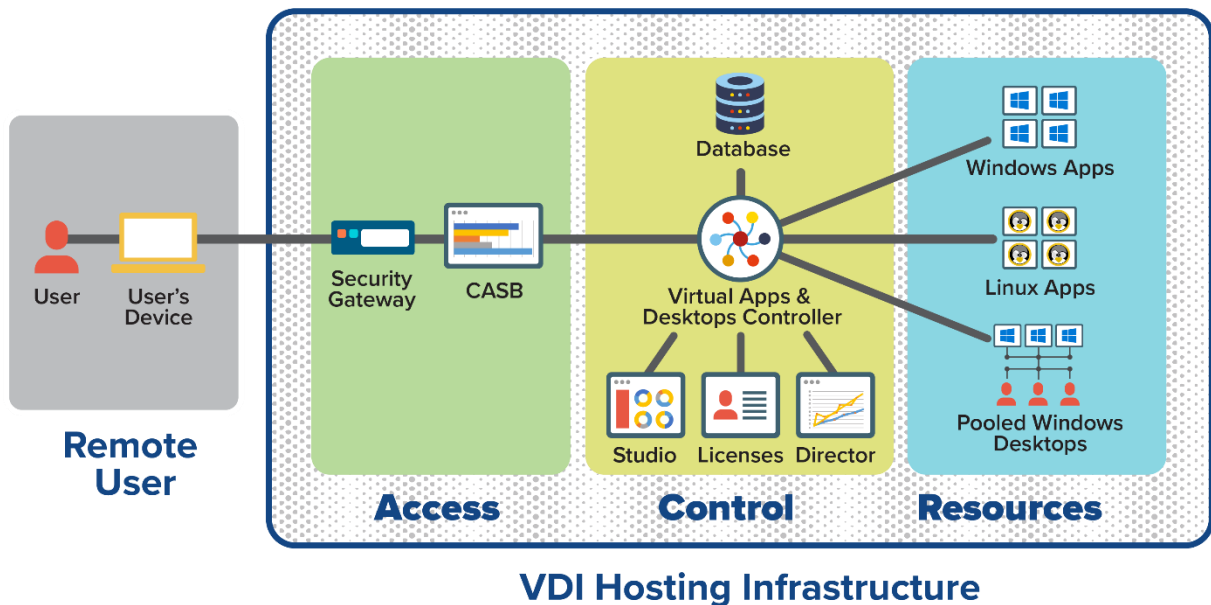
Integration Process

Onboarding a new SMB into the Lifeline solution is straightforward and prescriptive. There are two Lifeline teams assigned to the SMB. First is the technical team that performs all IT functions, and this is the most significant portion of work. Secondly, is the business improvement team, which performs the following tasks:

1) Review internal business processes that are not in the cybersecurity portion of CMMC controls, which then reside within Lifeline's solution.
2) Jointly document all CMMC business controls that will need to be implemented and then verify their full implementation.
3) After Lifeline's solution has been implemented and before the C3PAO is engaged, calculate the SPRS score within the DoD portal.

High level steps performed by the technical team are as follows:

1) Stakeholders from the SMB meet with Lifeline to be taught an instructional course on CMMC. What it's about, what it means, what it takes, and overall company benefits.
2) A complete inventory of the SMB's IT assets (hardware & software) is made along with the functional reason of each IT asset.
3) A general user list is attached to each IT asset.
4) Lifeline and the SMB complete a Responsibility Matrix for each control of CMMC. See excerpt in Appendix "A".
5) Create an IT asset migration plan and timeline document for moving into Lifeline's solution.
6) Engage the C3PAO for an audit and certificate of compliance.

Post completion, the business improvement team performs semi-annual inspections, so the SMB can be confident of continual adherence to CMMC and also coaches the SMB through updating their SPRS score through the DoD portal.

Cost Model

Working with Lifeline for the SMB community is always a relatively inexpensive experience. While the deeper technical workings of cybersecurity are complex, the end result of performing work within a secure environment does not have to be overly burdensome or costly to the user.

There are three cost components to Lifeline's solution and two savings components for the SMB community. The following table summarizes a current SMB customer that has federal business and fully subscribed to Lifeline's solution.

Description	Monthly Fee	Annual Fee	Onetime Fee
CMMC Hosted environment for 20 users	$ 4,703.25		$ 4,000.00
CMMC Control prep and maintence by business improvement team	$ 1,200.00		$ 5,000.00
Certified 3PAO - CMMC Audited Certificate		$ 10,000.00	
Totals	$ 5,903.25	$ 10,000.00	$ 9,000.00

A SMB directly saves money with labor reduction and/or labor reallocation, along with a capital cost savings. In this real-life example, one $120,000/year employee was moved from IT Support to the business development team, where he assists the team in acquiring new government

business. Also, this SMB did not have to invest nearly $90,000 in capital costs to refresh aging IT equipment and unsupported software.

Therefore, in summary, this SMB reallocated a $120,000/year employee, saved a $90,000 capital expenditure and became CMMC Level 3 compliant by spending about $82,000/year and one-time consulting costs of $9,000.

SMB's also save additional soft dollars through employee and process efficiencies, but in this example, enough time has not passed to fully calculated the value. Although, it does appear this SMB should be able to double their business without significant IT expenditures, or doubling staff count.

Meeting DoD's Data Lake Requirements

DoD is building a data lake to create visibility into the supply chain. With this data lake, DoD should eventually be able slice through different layers and in near real-time, be able to see the activity and status of all DoD vendors and associated part numbers.

Lifeline's solution for CMMC compliance can easily be used as a significant data acquisition source for DoD's data lake project. All DoD contractors and associated users would be operating on a similar platform, making data acquisition a more homogeneous task. At a high level, the following data would be available:

1) Contractor company names and specific data
2) User names and all work product associated and stored for each user
3) Potentially user activity, up to keyboard strokes, if required
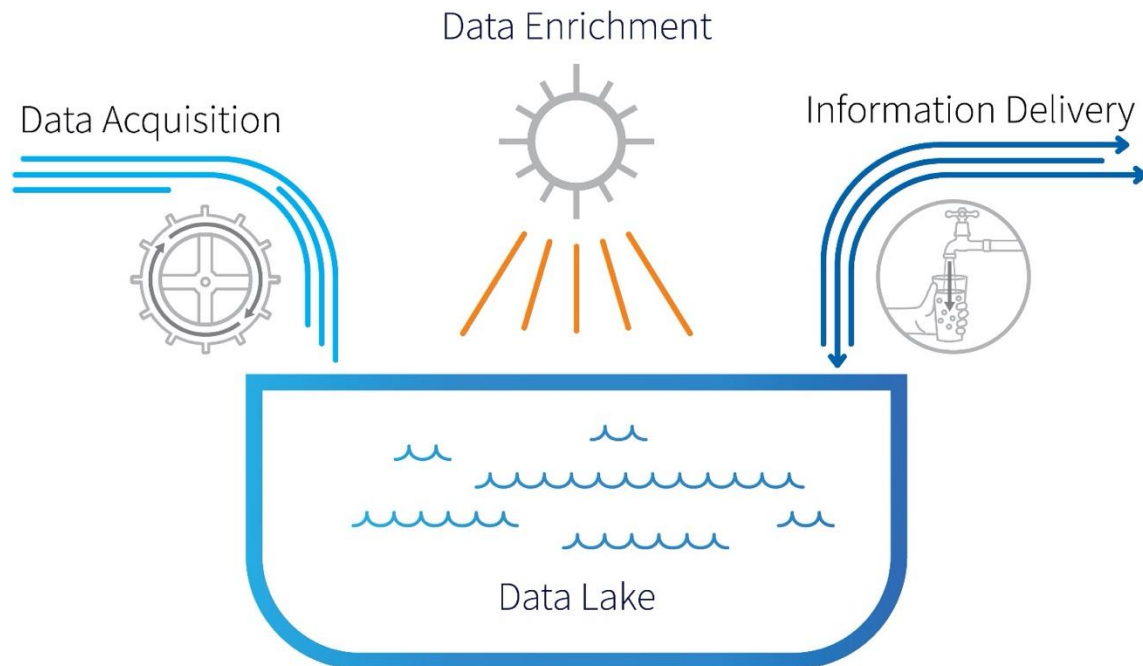
Summary

Lifeline Data Centers has created and implemented a solution that allows for expedited onboarding of SMBs. It takes about 60 days to fully implement the solution and once completed, a SMB will be compliant with CMMC Level 3. Afterwards, if the SMB wishes to increase its security posture, there is a prescriptive path for them to reach CMMC Level 5.

Onboarding SMBs into Lifeline's solution is highly repeatable and scalable.

This solution solves a major problem for DoD. SMBs are moving away from DoD engagements, directly because of complexities like CMMC. Also, this solution provides significant competitive advantages for SMBs since users are enabled to work from anywhere and across multiple devices, which has now become a critical component of business continuity practices

In real-life examples, Lifeline's solution has been a cost savings for SMBs and not an expense. Thereby combining CMMC compliance and cost savings, or at least not expecting significate cost investments by a SMB.

Lifeline's solution is fully complementary to the vision of DoD's vendor data lake. Without much work, Lifeline can be a significate data acquisition source for SMB contractor information.

Appendix "A"

CMMC Responsibility Matrix Excerpt

Control Family	Controls	Responsibilties		
		Lifeline	Customer	Split
MC01 Improve [DOMAIN NAME] activities	ML.2.999 Establish a policy that includes [DOMAIN NAME]. • CERT RMM v1.2 GG2.GP1 subpractice 2			
	ML.2.998 Document the CMMC practices to implement the [DOMAIN NAME] policy. • CERT RMM v1.2 GG2.GP2 subpractice 2			
	ML.3.997 Establish, maintain, and resource a plan that includes [DOMAIN NAME]. • CERT RMM v1.2 GG2.GP2 • CERT RMM v1.2 GG2.GP3			
C001 Establish system access requirements	AC.1.001 Limit information system access to authorized users, processes acting on behalf of authorized users, or devices (including other information systems). • FAR Clause 52.204-21 b.1.i • NIST SP 800-171 Rev 1 3.1.1 • CIS Controls v7.1 1.4, 1.6, 5.1, 14.6, 15.10, 16.8, 16.9, 16.11 • NIST CSF v1.1 PR.AC-1, PR.AC-3, PR.AC-4, PR.AC-6, PR.PT-3, PR.PT-4 • CERT RMM v1.2 TM:SG4.SP1 • NIST SP 800-53 Rev 4 AC-2, AC-3, AC-17 • AU ACSC Essential Eight			
	AC.2.005 Provide privacy and security notices consistent with applicable CUI rules. • NIST SP 800-171 Rev 1 3.1.9 • NIST SP 800-53 Rev 4 AC-8			
	AC.2.006 Limit use of portable storage devices on external systems. • NIST SP 800-171 Rev 1 3.1.21 • CIS Controls v7.1 13.7, 13.8, 13.9 • NIST CSF v1.1 ID.AM-4, PR.PT-2 • NIST SP 800-53 Rev 4 AC-20(2)			