

SECURE • COMPLIANT • SIMPLE



Cloud Hosting Information Book

www.lifelinedatacenters.com

For an electronic version of this book, go to https://lifelinedatacenters.com/cloudEbook



FedRAMP hosting is the law.

Lifeline Data Centers is the best, most flexible and least

expensive with any hybrid design that fits your agency.

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Lifeline Data Centers (LLDC)



Lifeline Data Centers is a colocation and cloud hosting provider with over 22 years of experience. As an original industry veteran, we have shaped how these services are provided throughout the industry.

Developed by technology engineers; people just like you, they still own and daily operate the company. The entire staff continuously improves services by implementing process improvements like Six Sigma, Reliability Centered Maintenance (RCM) and FedRAMP compliance.

While Lifeline is a national provider, we are still privately owned and completely Indiana-based. With two operating data centers and a third opening in 2018, Lifeline boasts an impressive 180,000 sq. ft. of data center floor space. Additionally, we are on a clear path to constructing up to 500,000 sq. ft. without any additional land acquisition.



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Lifeline Data Centers (LLDC)



What we do

Lifeline began as a colocation provider and telecom hotel in 2001. By aggressively pursuing security and uptime oriented goals, we have **not had a customer impacting outage** on its Eastgate campus since 2008. That's unheard of in the data center industry.

We provide lights-out colocation, IaaS and PaaS cloud hosting services, as well as certain workgroup recovery offerings. All of these services are cost-effective and provide you the ability to concentrate on maintaining the applications and data that actually cause your business to grow.

Now, Lifeline provides the very highest level of compliance, as evidenced by its FedRAMP certification (www.fedramp.gov). By virtue of FedRAMP compliance, Lifeline also becomes compliant with PCI-DSS, HiTrust (HIPAA), IRS-1075 and many others.

Why our customers use us

Lifeline does NOT want to replace your job. You are an IT professional and we only support your success. We are an infrastructure company that keeps IT turned on, so that your IT professionals can focus on the job of maintaining your applications and data.

Our focus is on security, compliance and uptime with every customer and solution. Operating facilities with the highest level of physical security and uptime, we have achieved FedRAMP compliance. FedRAMP compliance allows Lifeline to store top secret data due to our processes, architecture and physical security. We provide those exact design and controls to non-governmental organizations. This extreme compliance focus adds a level of data center security and operations that allows a CISO and CIO/CTO to sleep at night. Audit reports and assistance are provided by our NOC as required by each one of our customers.

Reduced management and administration

By utilizing Lifeline's IaaS or PaaS offerings, an organization removes a large portion of our customer's operational responsibilities. This allows your IT resources to re-focus on growing your business. Internal resources can begin to complete projects in a much faster manner and provide the agility to meet business requirements. Lifeline provides management at multiple levels for customer needs. Our IaaS solution takes on the responsibilities for support contract, configuration, updates and patching for the complete data center infrastructure for our customers. Our PaaS solution is monitored, updated and patched from the operating system down the stack, allowing internal IT teams to get back to revenue generating applications. The industry average for the amount of time spent just keeping the lights on through daily operational tasks is at 70%. We can do a large amount of these tasks in our secure compliant facility.

In short, we provide stable, secure and compliant infrastructure in our solutions that internal organizations are unable to achieve. Why, because it is all we do. And we do it really well.

Lifeline Data Centers (LLDC)



Lifeline Federal Hosting Services offers FedRAMP certified hosting solutions that comply with the stringent NIST 800-53 r4 and NIST 800-171 r1 controls. The implementation and use of these control sets are mandated for US Defense Contractors that maintain Controlled Unclassified Information (CUI), Secret Information and Top Secret Information. Lifeline Federal Hosting Services offers a secondary site that provides protection from EMP and solar radiation burst to increase digital survivability. Lifeline Federal Hosting Services is cost effective; consistently less expensive and more secure than offerings from the "Big 3".

SECURE

- All devices and operating systems have DISA STIGs applied
- FIPS 140-2 validated encryption modules for all data in motion and at rest
- EMP protection
- Fully compartmentalized "simple power path" power delivery systems
- Innovative, efficient, and fully redundant HVAC systems
- Surrounding electrical and HVAC feed patent protected

COMPLIANT

- 800-171 compliance
- FedRAMP (Federal Risk and Authorization Management Program) compliance
- FISMA compliant data center with certified FISMA practitioners on staff
- ISACA certified information systems auditors on staff
- ISACA certified risk managers on staff
- Years of experience assisting customers with FISMA, IRS-1075 compliance and PCI-DSS, CJIS, ITAR, SOC2, HIPPA HITRUST CSF audit preparation
- TIA-942 certified data center designer and auditor on staff

SIMPLE

- Private or common infrastructure cloud
- No more hardware service and support contracts
- No more data center concerns
- Allowed to focus on applications and data that make your company money
- No customer impacting outage since 2008, due to patented systems and rigorous maintenance

Why the Midwest is Best

Why are so many outsource data centers locating in the Midwest? Why are Microsoft, Google, and other large Internet companies putting their private data centers in the heartland? Here are the biggest reasons:

- Risks of natural disaster are lower
- Cost of real estate is lower
- Cost of power and labor is low
- · Great access to multiple telecom providers in many areas

Many companies consider Chicago colocation because of easy travel access and telecom density. Yet Chicago colocation prices are almost always higher than similar data center facilities within a few hours. Chicago colocation is expensive for a few reasons: high real estate costs, union labor, higher demand density of business and a higher cost of living.

Why Lifeline Data Centers in Indianapolis is your best choice for your colocation provider

- Dense concentration of telecommunications fiber
- · Low data center power costs
- Hardened data center facilities F5 tornado, flood and seismic resistant
- Ten years of history delivering affordable colocation with 99.995% uptime
- Simple pricing models make forecasting growth easy.
- · Fifteen carriers with no monthly cross-connect fees
- SAS 70, TIA 942, HIPAA, FISMA, NIST, PCI, FDA compliant





- N+N redundant architecture better design means less downtime
- Private cages or shared space
- · Secure office space on a 41 acre campus
- 10,000 square feet available
- Privately held and owner-operated by veteran IT professionals
- Strong pool of talented information technology professionals from Purdue, IU and Rose-Hulman
- Vibrant, easy to access technology community



Readiness Assessment Report

August 8, 2017 | Page 1 of 3

Controlled Unclassified Information						
Readiness Assessment Report (RAR) Evaluation Package ID: F1605117899						
FedRAMP Review for:	Lifeline Data Centers, LLC - Lifeline Federal Hosting Services (LFHS)					
Recommendation:	FedRAMP Ready			System Categorization:	Moderate	
RAR Date:	8/2/2017	Ver.	3.1	Deployment Model:	Public	
FedRAMP Evaluation Date:	8/3/2017)17		Service Model:	laaS	
Signed?	Yes			Recommended by 3PAO?		
				3PAO Name:	P&A CPAs DBA A-Lign	
Section A: Executive Summary						
The purpose of this report is to summarize the evaluation of A-LIGN's review of Lifeline Data Centers Lifeline Federal Hosting Services for consideration of the "FedRAMP Ready" designation.						
The evaluation of the Readiness Assessment Report (RAR) was conducted by the Federal Risk and Authorization Management Program (FedRAMP) Program Management Office (PMO). The intended audiences for this report are Agencies considering using the service offering, the Cloud Service Provider (CSP), and the Third Party Assessment Organization (3PAO).						
The Third Party Assessment Organization (3PAO) performed a thorough technical evaluation of the Lifeline Federal Hosting Services during their assessment. The RAR provided a detailed description of the testing that was performed and the capabilities in place. Based on this RAR evaluation, the FedRAMP PMO has determined that this service offering is FedRAMP-Ready.						

Sec	tion B: RAR Attestation/Executive	Summary	
#	Description	Free of Gaps/ Missing Elements?	Comments
1	Do the Readiness Assessment Activities within the Attestation section provide the date(s) and location(s) of the Readiness Assessment and a description of the 3PAO's activities?	~	
2	Does the Executive Summary provide an adequate description of the system?	~	
3	Does the Executive Summary provide an adequate overview of information/findings provided in Sections 4.1, 4.2, and 4.3, including notable strengths and other areas for consideration?	~	

<u> </u>	tion C: CSP System Information (ad	ldraaaa D	AD Section 2)
#	Description	Free of Gaps/ Missing Elements?	Comments
1	Is the CSP system information within Table 3-1 complete? (§3.0)	~	
2	Are the relationships to other CSPs (Table 3-2) clearly defined, explained, and adequate?	n/a	Does not leverage another service.
3	Are the leveraged services (Table 3-3) clearly defined, explained, and adequate? (§3.1)	n/a	
4	Has the RAR indicated that the 3PAO has performed a full validation of the authorization boundary? (§3.2)	~	
5	In addition to a boundary diagram, has the RAR provided a written description that clearly and accurately describes the authorization boundary? (§3.2.1)	v	

Readiness Assessment Report

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		С	ontrolled Unclassified Information	
	Readiness As	sessmen	t Report (RAR) Evaluation	Package ID: F1605117899
6	Has the RAR indicated and described any boundary exclusions? (§3.2.2)	~		
7	In addition to the data flow diagrams, has the RAR provided a written description that adequately identifies and delineates the data flows (i.e., including how data enters and exits a system)? (§3.2.3)	v		
8	Does the RAR demonstrate solid separation measures used by the CSP? (§3.3)	~		
9	Are the system interconnections and TIC capability clearly documented? (§3.4)	v		
Sect	tion D: Capability Readiness (addr	esses RAR	Section 4.1)	
#	Description	Free of Gaps/ Missing Elements?	Comments	
1	Does the RAR state that all Federal Mandates are met? (§4.1)	~		
2	Are FIPS 140-2 Validated or National Security Agency (NSA)-Approved cryptographic modules consistently used where cryptography is required? (§4.1, #1)	~		
3	Can the system fully support user authentication via Agency Common Access Card (CAC) or Personal Identity Verification (PIV) credentials? (§4.1, #2)	~		
4	Is the system operating at the minimum eAuth level for its FIPS-199 designated level of operation (Level 3 for Moderate, Level 4 for High)? (§4.1, #3)	~		
5	Does the CSP have the ability to consistently remediate High vulnerabilities within 30 days and Moderate vulnerabilities within 90 days? (§4.1, #4)	~		
6	Does the CSP and system meet Federal Records Management Requirements, including the ability to support record holds, National Archives and Records Administration (NARA) requirements, and Freedom of Information Act (FOIA) requirements? (§4.1, #5)	~		
	tion E: Capability Readiness (addr		-	
#	Description	Free of Gaps/ Missing Elements?	Comments	
1	Does RAR Table 4-2 indicate that only Federally approved cryptographic modules are used consistently (SC-13)? (§4.2.1)	~		
2	Does the RAR indicate that all transport layer protocols are identified? (§4.2.2)	~		
3	Does RAR Table 4-4 sufficiently describe identification and authentication, authorization, and access controls? (§4. 2.3)	~		

Readiness Assessment Report

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		C	controlled Unclassified Information	
	Readiness As	sessmer	t Report (RAR) Evaluation	Package ID: F1605117899
4	Does the RAR show the system has consistent audit, alerting, malware, and incident response controls in place? (§4. 2.4)	~	There is no custom code.	
5	Does the RAR indicate consistent contingency planning and disaster recovery controls in place? (§4.2.5)	~	4.2.6 #3 (Alternate storage and processing facilities) - The primary site, although specific mileage is not provided; the alternate site 125 miles away.	
6	Does the CSP demonstrate consistent configuration and risk management controls? Specifically, are authenticated scans performed monthly on OS/ Infrastructure and Web and Database applications, as applicable? Are vulnerabilities remediated within the required timeframes? (§4.2.6)	~		
7	Does the RAR illustrate that the CSP has consistent data center security? (§4.2.7)	~		
8	Does the RAR show that the CSP has a complete set of policies and procedures? (§4.2.8)	~		
9	Does the RAR indicate that the CSP has adequate security awareness and role- based training? (§4.2.8)	~		
_				
#	tion F: Additional Capability Inform Description	Free of Gaps/ Missing Elements?	Comments	
1	Does the RAR indicate that the CSP is adequately staffed? (§4.3.1)	 ✓ 		
2	Does the RAR indicate a mature Change Management Capability? (§4.3.2)	~		
3	Does the RAR show that CSP vendor dependencies and related agreements are adequately maintained? (§4.3.3)	~		
4	Does the RAR indicate that the CSP has adequate Continuous Monitoring? (§4.3.4)	~		
5	Does the RAR document the SSP maturity level? (§4.3.5)	V		
Sect	tion G: Additional Comments			v.1.7
	'A controls are listed. here are three alternative implementation con	trols (includin	g CM-6, Configuration Settings).	

Knowing the leaders behind Lifeline Data Centers

Alex Carroll, Co-Founder: Alex is responsible for finance, business development, real estate, design/construction and mission critical facilities: hardened buildings, power systems, cooling systems, fire suppression, and environmental. Alex also has an extensive background in IT infrastructure administration/support, database administration & programming, and software design and development. Alex is hands-on every day in the data center. He holds many certifications, including: RCM Professional, Master Electrician License, EPA 608 Universal, EPA 609, PM Tech, Indoor Air Quality.

Alex Carroll, Co-Founder Rich Banta, Co-Founder

Rich Banta, Co-Founder: Rich is responsible for Compliance and Certifications, Data Center Operations, Information Technology and Client Concierge Services. Rich is the Chief Information Security Officer and holds the following industry credentials: CISSP, CCSP, CISA, CRISC, CFCP, CDCDP, CTIA, and CTDC, which makes him far and away the most credentialed data center and Cloud Service Provider owner/operator in the United States. Rich serves on several cybersecurity working groups and task forces, including the Indiana Governor's Executive Council on Cybersecurity. Rich is an Air Force veteran and the former CTO of a major health care system. Rich is hands-on every day in the data centers.



The leader in data center compliance, uptime and innovation: Lifeline Data Centers, LLC

s more efficient use of IT assets becomes a clear and pressing priority for IT organizations, the need to align the data center's facilities and IT processes becomes greater to maintain uptime, coordinate complex integrated systems and deploy shared resources reliably. In addition, rapidly changing data processing requirements demand that data centers remain flexible and support greater rack densities. Therefore, enterprise data centers must evolve to provide the agility and efficiency that accelerate business growth. And Lifeline Datacenters, LLC can help achieve that by providing actionable intelligence for an ideal balance of high availability and peak efficiency throughout the entire data center life cycle.

Lifeline Data Centers, LLC is a privately owned, debt-free company which is involved in business and technology operations. Lifeline's facilities are built for and used by Fortune 500 corporations, but are priced within the reach of SMB users faced with arduous uptime and/or compliance requirements. The company was originally formed in 2001 to provide a world class colocation and cross-connect facility for Central Indiana. At that time, the IT community in Indiana only had Chicago and Atlanta as colocation and hosting resources.

Ensuring the highest levels of efficiency and value for clients

Lifeline has organically grown from a small 3,000 square foot local data center and application hosting provider to the largest provider in Indiana. When Lifeline completes its current data center build, it will have 180,000 square feet of data center space and be the only company in the USA to fully provide and manage an EMP protected, highly secure, extreme uptime, colocation and cloud hosting. The company already has additional plans and resources to allow a clear path to create a total of 500,000 square feet of data center space.

Also, as Lifeline built on the success of its early years, it has now become FedRAMP-Ready which allows Lifeline to begin discussions with any government agency, or private company to host top secret and other sensitive data. The owners of Lifeline Data Centers have long held to the goal of providing the very best colocation and hosting services available. At this time, Lifeline is pursuing public and private cloud Platform as a Service (PaaS) offerings which include OS hosting, Hadoop hosting and hosting certain database platforms.

Factors that have optimized data center operations

- Innovation Lifeline Data Centers has developed new methods for power and cooling delivery that allows extreme system redundancy and tolerance to mechanical failures in the data center.
- **Compliance/Auditing** In 2004, Lifeline Data Centers started investing in business/ security standards that were acknowledged as best practices in the public sector. Since that time, Lifeline has become FedRAMP Moderate compliant. Over the course of this time, Lifeline has monetized its compliance with these standards by providing the benefit to corporate America. This action has been very well received in the corporate governance and risk

management sectors, which is driving a lot of IT decisions.

- **Customer Service** One of the hallmarks of Lifeline is its dedication to helping the customer. The owners of Lifeline have been on the IT side of the table and they fully understand the daily problems that IT professionals encounter. Lifeline, as an entire organization, works continuously to remove barriers for its customers, so they can successfully run their businesses.
- In-sourcing all operational tasks – A big problem that exists in today's business environment is the outsourcing of critical operational tasks. Lifeline directly employs people to execute on all tasks required to successfully run a data center and cloud hosting environment. This ensures a consistent response to customer needs and allows Lifeline to provide the highest level of response.
- Internal staff education and team building – Lifeline focuses on the need to have all employees on the same page and empowers them to perform their duties.

Comprehensive data center facilities management solutions

Lifeline is introducing EMP/CME (Electromagnetic Pulse/Coronal Mass Ejection) protection as standard to all of its new data center build outs, which also provides a relatively quick and easy path to TEMPEST and SCIF rated facilities. Lifeline's CISO works closely with the FBI, NIST, and MITRE. It is because of Lifeline that EMP protection is being written into nationally mandated NIST standards.

Lifeline has also built a 4 MW solar farm, which effectively means that Lifeline Data Centers is powered with renewable energy. Lifeline captures and recycles condensate water, which it innovated into a new method of reducing the power required to cool the data center.

The roadmap ahead

Lifeline is now providing PaaS with Windows and Linux OS's, Hadoop and certain database platforms. Lifeline will open its next data center in 2018, which will be the FIRST data center in the country to offer Electromagnetic Pulse (EMP) protection as a standard offering. This is a large and upcoming protection requirement for certain types of data under nationally mandated NIST 800-53 R5 controls.

Lifeline is becoming the standard of how a data center and cloud provider must operate if data is secure and always available. Over the next few years, Lifeline sees significant progress in on boarding a large number of new customers with the high-end needs that only Lifeline Data Centers can provide.

"Lifeline's path has been set by providing system uptime and compliance for customers that require third party audits to stay in business. This will continue to take shape and change as the corporate world continues to drive their data into a more secure environment."

CIO Applications Article

APPLICATIONS

GOVERNANCE, RISK, AND COMPLIANCE SPECIAL

SEPTEMBER - 01 - 2017 CIOAPPLICATIONS.COM

recognized by CIO magazine as TOP 25 GOVERNANCE, RISK & COMPLIANCE (GRC) Π TECHNOLOGY PROVIDERS - 2017 The annual listing of companies providing Governance, Risk and Compliance Solutions helping clients build competitive advantage and transform their businesses Jon Philling Joe Phillip

Lifeline Data Centers

Company:

Lifeline Data Centers

Key Person:

Rich Banta &

Alex Carroll

Co-founders

Description:
Provides compliant data
centre facilities, FedRAMP
cloud infrastructure, and
managed services
Website:
Ifelinedatacenters.com

Top 25 Governance, Risk and Compliance (GRC) **Technology Providers - 2017**

he facets of Governance, Risk, and Compliance, in particular, definitely shouldn't be overlooked to ensure seamless functioning of an organization. Mitigation of risks associated with enterprise assets and data, as well as adherence to compliance standards such as the Sarbanes Oxley Act, often become a challenge of gargantuan proportions for organizations to confront. The recent times have seen a rise in the need of partner organizations, among enterprises, that can address complex GRC concerns through cutting-edge solutions. Cost-effectiveness, ease of implementation and use, reliability, and robustness are key factors considered by organizations for the selection of an ideal GRC Technology solution provider. In addition, choosing a sustainable operational model is guite important for an organization looking forward to GRC assistance from foreign vendors.

In the wake of the growing need of GRC technology solutions across enterprises globally, we've compiled a list of "Top 25 Governance, Risk, and Compliance Technology Providers 2017." The compilation is a result of extensive research of GRC technology providers worldwide, conducted by our editorial team. Automation of GRC procedures to enhance the business value and overall holistic development of an organisation is a common motive of these leading solution providers today. Alignment of compliance and risk management initiatives to facilitate better decision making across organizational hierarchies is an additional advantage of opting their assistance. This list will offer you a better insight about the contributions these leading GRC technology solution providers can make to businesses.

Lifeline Data Centers Delivering Secure and Compliant Cloud Solutions



ith the consequences of non-compliance increasing, the need for highly secure and compliant solution providers is escalating to new levels. Moreover, security breaches are increasingly posing threats to enterprises of all sizes and the data is left vulnerable. Hackers are changing their threat capabilities as the clock ticks.

With a clear strategy to combat these issues is one of the most established and experienced data centers and cloud service providers in the industry—Lifeline Data Centers. Headquartered in Indianapolis, IN, Lifeline has, for nearly two decades, strongly focused on uptime and compliance, and recently achieved FedRAMP-Ready status. Lifeline has constructed a highly secure FedRAMP/DoD/PCI/HITRUST IaaS/PaaS cloud environment that resides within an FISMA/ FedRAMP-compliant data center. "On a day-by-day, momentby-moment increment, Lifeline monitors for security issues. With the FedRAMP association, Lifeline receives weekly updates from the military on current known threats and computer chips whose code must be patched," says Rich Banta, Co-founder of Lifeline.

A few years back, with the IRS and the FDA approaching Lifeline, the company sought out the highest bar of compliance in order to meet the audit requirements of any industries. This resulted in Lifeline becoming certified NIST800-53 compliant through FedRAMP. Flashing forward to the present, implementation of controls in their business, operational and security processes have led to the company obtaining FedRAMP status. Having developed security methods that scale the high bars of certification, Lifeline effortlessly complies with the controls required by their clients. Lifeline also ensures that all of their clients procure comprehensive benefits from the builtin security that the company extends. Lifeline comprehends their clientele's need for security and compliance to meet federal regulations. The firm employs a FedRAMP, DoD, and HITRUST-compliant posture that assists their clients across various industries in implementing secure cloud solutions that are compliant with federal regulations. The opportunity to host the government's top-secret data is a feather in Lifeline's cap. Alex Carroll, Co-founder of Lifeline recalls, "In the process of serving our clients we found that if we are compliant to host the government's top secret data, we're compliant to host the government's top secret data, we're compliant with everybody else." Lifeline catered to homeland security and border security, by meeting the security requirements, successfully improving the client's security posture and also substantially increasing their uptime.

TOP 25 GOVERNANCE, RISK & COMPLIANCE (GRC)

The value-oriented strategies of Lifeline provide the delivery of industry leading solutions at a nominal cost. "Comprehending the necessity to work in harmony with our clients and meet their requirements has been the driving force of our company," adds Banta. Additionally, recognizing the efforts contributed by its employees, Lifeline accredits them for delivering ceaseless performance through the years. Lifeline has been exceeding their customer expectations by ensuring that their clients and the employees are on the same team and marching towards the same goal.

If we are compliant to host the government's top secret data, we're compliant with everybody else

Focusing on security and compliance throughout all designs and implementations, Lifeline promotes this stability and peace of mind for clients to allow them to focus on their business and not the management of a complex infrastructure. Lifeline provides their services at an economical cost. It has long been serving the needs of customers with database needs, but the company is further taking a step forward by building a Hadoop PaaS. That is in the pipeline to allow their clients to store extensive data sets. "Staying put in Indiana, we plan to build another 200,000 square feet data center to expand our footprint in the sector," concludes Carroll. **CA**

Only Lifeline Data Centers Grades Its Cloud

Lifeline Data Centers is the first FedRAMP provider to subscribe to the Infinity Paradigm[®], which is a Cloud grading scale prescribed by the International Data Center Authority (ICDA). By using the Infinity Paradigm grading scale, Lifeline is the only FedRAMP provider that can assure its customer that the Cloud is resilient and strong. It can be objectively graded and audited.

Established by the International Data Center Authority, Infinity Paradigm is the fundamental framework for organizations and agencies to reduce business risk, and optimize and align performance with defined business requirements. It is the framework for visualizing and analyzing an entire information technology system as a holistic and dynamic model, in a manner that qualitatively and quantitatively illustrates the myriad of interdependencies of its various supporting components. This model is called the Application Ecosystem[™], and it is comprised of various physical layers of technical infrastructure as well as some conceptual or logical layers that are derived from those physical layers.

Business owners, government agencies and technology stakeholders have never had a systematic and dynamic mechanism that provided a holistic end-result driven evaluation of the effectiveness of the vast and disparate array of information, applications, resources, technologies, processes, personnel, infrastructure, documentation, standards and governance that together, despite their inherit complexity, form the ecosystem that powers their business. Nor have they had a common language that allowed them to effectively interact with their executive leadership and peers as well as industry stakeholders, vendors, and service providers in a way that universally assures projected business results, until now. The Infinity Paradigm empowers organizations to truly synchronize technology strategies, designs, plans, implementations and operations with business strategy; and to optimize business strategy with accurate data indicating true capabilities, vulnerabilities, and competencies obtained from every layer of the Application Ecosystem.

IDCA's Infinity Paradigm grades the entire stack. From the data center walls, to the power and cooling, to the physical security, and finally up through the cloud layer. This provides a truly holistic look through the entire application ecosystem. Following is a high overview of the ecosystem layers that are graded and can be further audited.

Application Ecosystem (AE)™



Application Layer

A set of software services that fulfill organizational requirements. As an example, an ERP Application is composed of accounting, payroll, inventory, and asset management software services.

Platform Layer

Represents the methodology by which the application is delivered. Common Delivery Platforms are Business as a Service (BaaS), Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS) and Nothing as a Service (NaaS).

Compute Layer

Logical layer where processing requirements of the application are defined in an abstract form. The compute cloud would subsequently map to actual virtual or physical cores in the IT Infrastructure layer.

IT Infrastructure (ITI) Layer

A set of physical information technology instances such as network infrastructure, servers, storage, and other IT infrastructure utilized to support application delivery.

Site Facilities Infrastructure (SFI) Layer

Collection of facilities infrastructure components that support a Data Center Node (DCN). The SFI layer includes the power, cooling, and other infrastructure and related services that a data center node requires to meet the business requirements.

Site Layer

An independently operated space to house instances of site facilities and IT infrastructure. The Site layer involves land, building, utilities, civil infrastructure, etc.

Topology Layer

Specifies the physical locations, interconnectivity and interrelation of data center nodes. The Topology is the ultimate global map of data center nodes that depicts the characteristics of physical distribution and layout of the infrastructure that supports the business application.

EMP Shielding & SCIF Construction

Certain data is critical to society and must survive any calamity, including an EMP or Coronal Mass Ejection Event. The draft version of NIST 800-53 R5 includes controls that dictate such data be housed within an EMP shielded facility.

EMP Shielding

Lifeline Data Centers has adopted the practice of installing an EMP shield in conformity with MIL-STD-128-125-1 during new data center construction. Retrofitting EMP shield capabilities into an existing data center is an order of magnitude more difficult than incorporating the shield before the first concrete is poured.

MIL-STD-128-125-1 states that an EMP shield must divert a minimum of 80 Db of energy to be effective. Lifeline's design creates a shield effectiveness of approximately 120 Db.



Lifeline's design creates a shield effectiveness one and half times normal conformity.

SCIFF Construction

Within Lifeline's EMP shielded data center, a true SCIF (Sensitive Compartmented Information Facility) can readily be configured with the addition of some minor TEMPEST capabilities. A SCIF is an accredited area, room, building, or installation where sensitive information may be stored, used, discussed, and electronically processed.



SCIF installations contain multiple layers of metal and insulating materials which are intended to prevent visual, acoustical, technical, and physical access by unauthorized persons. Multi-layered construction helps block electromagnetic radiation (EMI/RFI).

Certifications



CJIS

(Criminal Justice Information Security) Standard designed to protect data used by law enforcement

EMP

(Electromagnetic Pulse Protection) To 10 Ghz

FedRAMP

(Federal Risk and Authorization Management Program) Continuously monitored, highly secured, cloud infrastructure designed for Top Secret information

FISMA

(Federal Information Security Management Act) FISMA credentialed members on staff

HIPPA HITRUST CSF

(Health Information Trust Alliance) Providing a common framework to correctly enforce and audit HIPPA

IRS 1075

(Internal Revenue Service) IRS policies, practices, and controls to protect federal tax information confidentiality

ISACA

(Information Systems Audit and Control Association) ISACA credentialed members on staff

ITAR

(International Traffic in Arms Regulations) Ensures defense related technology is safe

NIST 800-37

(National Institute For Standard and Technology Special Publication 800-37, Rev 1) Risk assessment standard

NIST 800-53

(Institute For Standard and Technology Special Publication 800-53, Rev 4) Recommended security controls for FedRAMP

PCI DSS

(Payment Card Industry Data Security Standard) To protect credit card transaction data

Rated-4

Concurrently maintainable electric and HVAC environments

SOC2

(Service Organization Control) Audited non-financial reporting controls as they relate to security, availability, processing integrity, confidentiality and privacy of a system

STIGs

(Security Technical Implementation Guides) DISA/DoD configuration guides for OS and firmware



Certified/Licensed Staff

Master electrician

- Welders aluminum, stainless steel, mild steel and sheet metal
- Licensed class A HVAC
- Retired firefighter

CDCDP

(Certified Data Center Design Professional) BICSI

CDCE

(Certified Data Center Expert) TIA, BBICSI, Singapore Professional Engineers Board

CDCP

(Certified Data Center Professional) TIA, BBICSI, Singapore Professional Engineers Board

FIPS 199

(Federal Information Processing Standard Publication 199) Risk assessment standards

IDCA

(International Data Center Authority) Standards framework used to grade the effectiveness of the entire data center and cloud Ecosystem

NFPA 70B

(National Fire Protection Association) Standards for routine maintenance of electrical gear

NFPA 110/111

(National Fire Protection Association) For emergency and standby power systems

RCM

(Reliability-Centered Maintenance) Military grade processes used to ensure proper equipment maintenance



AICPA

(American Institute of Certified Public Accountants) Internationally accredited auditing certifications

BICSI 002

(Building Industry Consulting Service International) Data center physical design and implementation

CFCP

(Certified FISMA Compliance Practitioner) Certified members on staff

CISA

(Certified Information Systems Auditor) ISACA

COMPTIA

(Computing Technology Industry Association) Internationally recognized computer/network certifications

CRISC

(Certified In Risk & Information Systems Control) ISACA

SAR

(Security Assessment Report) FISMA/NIST 800-53

Six Sigma Black Belt

Engineering process excellence

SOX (Sarbanes-Oxley Act)

SSAE18 SOC2

(AICPA Statement on Standards for Attestation Engagements No. 18) Type II annually audited reports



SECURE • COMPLIANT • SIMPLE

Customer Testimonials



We began working with Lifeline Data Centers more than five years ago. Since then we have hosted very secure and highly critical government data within Lifeline's data center. We have not had an infrastructure outage, or security breach and we have successfully passed many audits from the IRS, Social Security Administration, as well as, third party FISMA audits. Lifeline has been outstanding in customer service and their pricing is extremely reasonable.

Chad Hughes TCC

We have worked with the Lifeline team since the late 1990's. We have always found them to be very responsive to our requests and always willing to go above and beyond with their assistance.

We currently have moved our cloud hosting operations into Lifeline's FedRAMP compliant environment and have experienced no downtime, reasonable, pricing and spectacular support.

Jeff Grosenbacher JAG Consulting Services





We recently required a Saas offering for our federal contract. Although the authorization process was a difficult exercise, Lifeline was beyond helpful in guiding us through the process. Their expertise and guidance was invaluable. We are so grateful for their support.

Abby Shackelford Value Recovery



www.lifelinedatacenters.com