In today's world, data center compliance is no joke, and firewalls aren't enough to keep your data safe. Whether you're outsourcing or housing your data center internally, understanding all facets of the data center can be helpful in crafting effective strategies for your data's safety. A variety of government regulations have been put into place to protect consumer data, and it's necessary for your data center professionals to be knowledgeable on all that apply. But data center compliance is as complex as it is important. There are a variety of standards, groups, certifications and qualifications involved, and the list will continue to get longer in the future.

As data center professionals, we know how overwhelming compliance can be. That's why we wanted to share our compliance acronym lexicon, a resource that we've found extremely useful, for you to use in your own organization. Use it as a quick reference for data center compliance acronyms and why they're important, or just to learn more about compliance in general.

When you see this symbol, that indicates Lifeline has that many certified professionals of that type on staff.
This association “sets ethical standards for accountants, as well as U.S. auditor standards for private companies, nonprofit organizations and the government.” These standards affect data center laws and standards.

A certified information systems auditor is “a certification issued by the Information Systems Audit and Control Association (ISACA).” These professionals perform audits of information systems.

A certified data center design professional is an individual who is certified in data center design, utilizing their skills to make their data centers more efficient and effective.

This is one of the most prestigious data center certifications available, as there are only nine individuals certified in the United States. This data center professional is truly an expert in their field.
CERTIFIED DATA CENTER PROFESSIONAL (TIA, BICSI, SINGAPORE PROFESSIONAL ENGINEERS BOARD)

This certification is designed to demonstrate a “comprehensive view of components of a data center and address critical operations and maintenance aspects.”

CERTIFIED FISMA COMPLIANCE PRACTITIONER

This certification is dedicated to understanding anything and everything having to do with FISMA, or the Federal Information Security Management Act.

CERTIFIED IN RISK & INFORMATION SYSTEMS CONTROL (ISACA)

Obtaining this certification will allow you to “build a greater understanding of the impact of IT risk and how it relates to your organization and its data center.”

FEDERAL INFORMATION PROCESSING STANDARD PUBLICATION 199

Standards for Security Categorization of Federal Information and Information Systems

FIPS 199 provides the official standards and guidelines that are adopted under Section 5131 of the Information Technology Management Act of 2002. It directly affects the “utilization and management of computer and related telecommunications systems in the federal government.”
FEDERAL INFORMATION SECURITY ACT OF 2002

FISMA is “United States legislation that defines a comprehensive framework to protect government information, operations and assets against natural or man-made threats.”

INFORMATION SYSTEMS AUDIT AND CONTROL ASSOCIATION

ISACA is “an international professional association focused on IT Governance.” This association pushed the “need for a centralized source of information and guidance” in organizations.

NATIONAL FIRE PROTECTION ASSOCIATION FOR EMERGENCY AND STANDBY POWER SYSTEMS

NFPA 110 “covers performance requirements for emergency and standby power systems providing an alternate source of electrical power in building and facilities in the event that the normal electrical power source fails.”

- Level 1 – Failure of the equipment to perform could result in loss of human life or serious injuries
- Type O – No interruptions; UPS carrying load
- Class 0.25 – 15 minutes minimum stored energy reserve time
- Class 48 – Hours of runtime without intervention

NATIONAL FIRE PROTECTION ASSOCIATION ON STORED ELECTRICAL ENERGY EMERGENCY AND STANDBY POWER SYSTEMS

- Level 1 – Failure of the equipment to perform could result in loss of human life or serious injuries
- Type U – Uninterruptable
NIST 800-37

NIST 800-37 “aims to transform the traditional Certification and Accreditation process into the six-step Risk management framework (RMF).”

NIST 800-53
Security and Privacy Controls for Federal Information Systems and Organizations

NIST 800-53 “provides a catalog of security controls for all U.S. federal information systems except those related to national security.”

RCM
RELIABILITY-CENTERED MAINTENANCE
RCM is a “corporate level maintenance strategy that is implemented to optimize the maintenance program of a company or facility.”

SAR
SECURITY ASSESSMENT REPORT (FISMA/NIST 800-53)
A SAR is basically a review of your data center’s security, which includes both negative and positive findings, prioritizations, recommendations and any other relevant information.
FIPS 199 provides the official standards and guidelines that are adopted under Section 5131 of the Information Technology Management Act of 2002. It directly affects the "utilization and management of computer and related telecommunications systems in the federal government."

AICPA STATEMENT ON STANDARDS FOR ATTESTATION ENGAGEMENTS NO. 16
SSAE 16 is "a regulation created by the Auditing Standards Board (ASB) of the American Institute of Certified Public Accountants (AICPA) for redefining and updating how service companies report on compliance controls."

SECURITY PLAN (FISMA/NIST 800-53)
A plan for the data protection in the data center.

SERVICE ORGANIZATION CONTROL 2.
"REPORT ON CONTROLS AT A SERVICE ORGANIZATION", AS MEASURED AGAINST TSP (TRUSTED SERVICE PRINCIPLES)
A SOC 2 "reports on various organizational controls related to security, availability, processing integrity, confidentiality or privacy."
The TIA-942 is a standard for data centers that “specifies the minimum requirements for telecommunications infrastructure of data centers and computer rooms including single tenant enterprise data centers and multi-tenant Internet hosting data centers.” This is also published as an ANSI (American National Standards Institute) standard.

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<th>Tier 1 Rated-1</th>
<th>Tier 2 Rated-2</th>
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<td>22.7</td>
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AICPA TRUSTED SERVICE PRINCIPLES

Trusted Service Principles are “a set of professional attestation and advisory services based on a core set of principles and criteria that address the risks and opportunities of IT-enabled systems and privacy programs.”

- Security
- Availability
- Processing Integrity
- Confidentiality
- Privacy

UPTIME INSTITUTE¹²

The Uptime Institute is the leading provider of education and certification for data center professionals.

Lifeline Data Centers is the leader in data center compliance, excellence and innovation. Lifeline Data Centers serves over hundreds of companies in health care, software, utilities, pharma, cloud computing, and government. If you value uptime and compliance, consider Lifeline Data Centers’ flexible wholesale colocation and office space solutions.
Rich Banta, co-owner of Lifeline Data Centers, is widely recognized as one of the most qualified and certified professionals in the industry. His certifications include:

- CISA - Certified Information Systems Auditor
- CRISC - Certified in Risk & Information Systems Management
- CDCE - Certified Data Center Expert
- CDCDP - Certified Data Center Design Professional
- CTDC - Certified TIA-942 Design Consultant
- CTIA - Certified TIA-942 Auditor
- CFCP - Certified FISMA Compliance Practitioner

Schedule a tour of our facilities by visiting bit.ly/tourldc or calling 317.275.0021.

To learn more about data center compliance, visit our blog: lifelinedatacenters.com/blog.

Infographic by DK New Media
http://www.dknewmedia.com

Sources
1 http://searchcompliance.techtarget.com/
2 http://www.training-classes.com/programs/05/16/51677_certified_data_center_professional_certified_data_center_spe.php
5 http://en.wikipedia.org/wiki/ISACA
7 http://en.wikipedia.org/wiki/NIST_Special_Publication_800-37
8 http://en.wikipedia.org/wiki/NIST_Special_Publication_800-53
9 http://www.maintenanceassistant.com/reliability-centered-maintenance/
11 http://www.aicpa.org/InterestAreas/InformationTechnology/Resources/TrustServices/Pages/Trust%20Services%20Principles%E2%80%94An%20Overview.aspx
12 http://www.lifelinedatacenters.com/means-tier-4-data-center/