

TIA Data Center Program



Building a reliable infrastructure, together

Data Centers are foundational elements to the digital world in which we live. They are key to the production and delivery of many of the key products and services being used every day. In order to support this increasingly complex and demanding infrastructure, data centers need to deliver high performance computing, storage and connectivity reliably and securely.

The TIA Data Center program is responsible for defining and leading the evolution of data center standards and certification to ensure that the reliability, performance and security of the data centers is in place to deliver the new services enabled by the latest technologies. The TIA Data Center standard (TIA-942) and its associated certification program are key attributes that help the industry agree on the various levels of resiliency and define how it is implemented.

The TIA Engineering Committees and Working Groups of over 50 industry leaders produced and maintain the TIA-942 standard and certification framework that meet the needs of the industry. However, the work is never complete and, as data centers continue to evolve, there is always a need for more experts to continue to shape the program to meet the needs of the industry.

Emerging 5G, software-defined networks, low-latency networking, distributed computing, sensor technologies and IoT applications are redefining both market expectations and data center requirements. The TIA Data Center program offers a platform for professionals from across the ecosystem to come together in advancing data center technology. The program offers tremendous value to stakeholders in data centers, ICT, hyperscalers and all industry user domains.

INTERNATIONALLY RECOGNIZED STANDARD AND CERTIFICATION

The TIA-942 Certification Program enables data centers to be reviewed and verified for conformity to the requirements of the globally recognized ANSI/TIA-942 standard. The program includes a global database of TIA-942 certified data centers, TIA-942 auditors, as well as information and training for companies and individuals interested in becoming an auditor or consultant.

The TIA-942 standard covers all aspects of data center physical infrastructure, including architecture and topology, environmental design, power systems and distribution, cooling systems and distribution, cabling systems, redundancy, pathways, safety, and physical security.

A key objective of the TIA-942 standard is to define how a data center should be built and configured to provide the level of reliability and resiliency required by users. There are four ratings that enable data center owners and users to define their expectations depending on the applications and data stored in their specific data center.

The TIA-942 standard's compliance is verified through the TIA-942 Certification Program that enables data center facilities to be independently reviewed and verified for conformity to the standard, providing greater assurance to customers and stakeholders. The certification covers 4 levels of resiliency:

1. Basic infrastructure
2. Redundant capacity components
3. Concurrently maintainable
4. Fault tolerant

Why should you join the TIA Data Center Program?

Data Centers involve a highly complex ecosystem and participation in the TIA Data Center Program provides significant benefits that span multiple company types and industries. By participating in the TIA Data Center program, you can shape the future of the Data Center standard and certification criteria while fostering the evolution of Data Centers, including the rapidly growing Edge Data Center market.

While collaborating with other leaders in the Data Centers ecosystem, participants in the program also have a unique opportunity to establish themselves as thought leaders and subject matter experts. Participating in the TIA Data Centers activities can provide true return on investment by creating business opportunities for your organization.

A complex ecosystem requires a comprehensive standard and needs input from all stakeholders. Whether you are a Data Center owner, equipment supplier, service provider, auditor or any other part of the ecosystem you can help drive the standard and certification requirements to suit your business.

GET INVOLVED

As the trusted association for the connected world, TIA provides a neutral ground for stakeholders across the data center ecosystem to come together and collaborate in the development and ongoing enhancement of the TIA Data Center Standards and Certification program and shape the future of Data Centers.

Full TIA Membership enables participation in the Data Center program, all other TIA technology programs and standards development, as well as TIA government affairs which advocates on U.S. and international public policy on behalf of TIA members.



Members and participants in TIA can produce a true return on investment by establishing themselves as active thought leaders and subject matter experts in the expanding Data Center industry with contributed content such as blogs, webinars or white papers.

Participating in the TIA Data Center Program includes participation in the TR-42 Engineering Committee, providing the opportunity to drive the future of the Data Center standard and certification as well as TIA's other industry cabling standards.

If you are interested in joining and advancing the future of Data Centers, please contact us at DataCenterInfo@tiaonline.org

For more information about TIA's Data Center Program, visit: <https://tiaonline.org/products-and-services/tia942certification/>