

The 5 Vital Pillars for a High Availability in Data Centers

Guide



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Who is Vertiv?

World's Leading Critical Digital Infrastructure

Nearly all aspects of our lives involve the use of technology. It is how we work and play and do anything in between. This connectivity or use of data is built into the very fabric of our society. It is vital to human progress. Vertiv believes there is a better way to meet this accelerating demand for data — one driven by passion and innovation.

As industry experts, we collaborate with our customers to envision and build future-ready infrastructures. We leverage our portfolio of hardware, software, analytics, and services, to ensure our customers' vital applications run continuously, perform optimally, and scale with business needs.

Data Centers: Hyperscale/Cloud, Colocation, Enterprise and Edge

Communication Networks: Macro Site, Central Office, Small Cell and Data Center

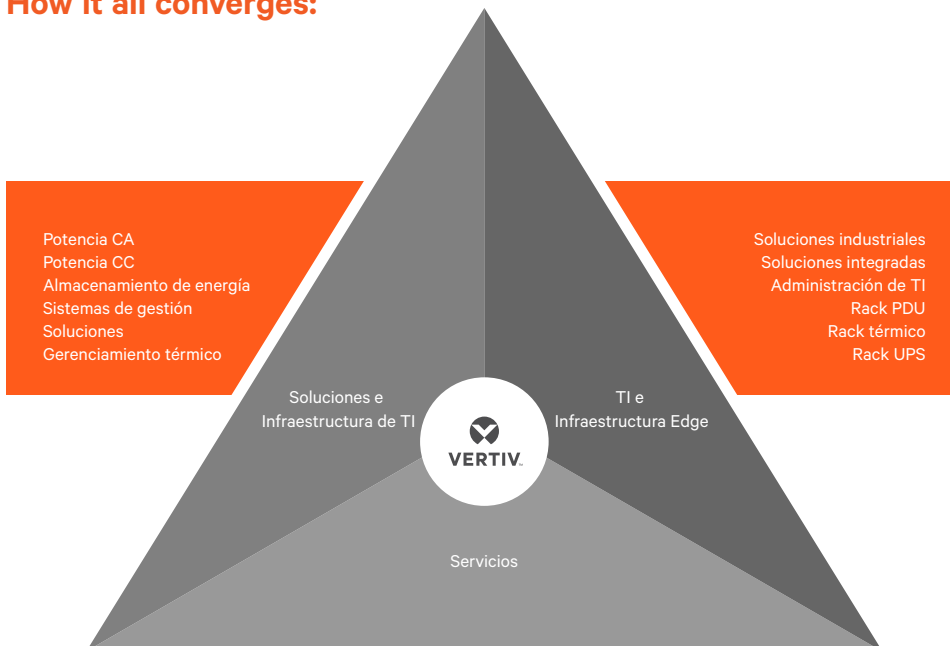
Commercial and Industrial: Healthcare, Manufacturing, Rail/Mass Transit, Power Generation and Oil and Gas.

Vertiv brings together hardware, software, and ongoing services to ensure our customers' vital applications run continuously and perform optimally.



In this document, you will find important information to keep your equipment and systems in optimal working order, gathering more than twenty years of experience in data center services.

How it all converges:



Our Brands

Albér™

Battery Monitoring

Avocent®

IT Management

Chloride®

Industrial Power

Cybex™

IT Management

Energy Labs

Commercial and Industrial Thermal

Geist™

Rack PDU

Liebert®

AC Power and Thermal

Netsure™

DC Power

5 pillars of a high availability data center:



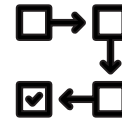
Team



Facilities



Projects



Process



Equipments

High Availability: Luck or Competition?

As mature as the data center business may seem, we still face many of major mistakes that can compromise the entire performance of an organization. Therefore, we decided to share 5 vital pillars that must be considered when planning the business of any data center.



1. Projects

Ensuring that your site will have the appropriate availability for your type of business implies the good practice of carrying out an adequate comprehensive assessment of the business needs, and subsequently hiring a competent company to develop the project. The comprehensive evaluation will allow to mitigate operational risks, unnecessary investments and the alignment of customer expectations.



2. Equipments

Always specify reliable equipment that is certified. There are many suppliers of similar equipment, but quality, reliability, and efficiency should be key considerations in your decision making. You must also make sure that there is an adequate after-sales structure that guarantees the execution of the necessary maintenance, the supply of spare parts locally, considering the desired SLAs during the useful life of the asset.



3. Facilities

This step is crucial for high availability throughout the life of your site as there is no point in having a great project and high quality equipment if they are not properly installed and commissioned per manufacturer's guidelines. There is room for adaptations and flexibility in the later stages, but if your work is of poor quality, performance will be compromised.



4. Teamwork

In the last two decades, we have seen large investments in CAPEX considering resilient topologies that are very important to mitigate the risks of downtime in highly critical businesses, but we cannot help but give proper weight to the OPEX of the business. Having a correctly dimensioned team, either qualitatively or quantitatively, is essential to guarantee the projected performance. Research indicates that up to 70% of data center outages are related to human factors failures, so we cannot neglect this pillar.

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5. Process

Media has announced some cases of TIER IV sites showing results from TIER II sites and vice versa, for what reason? We can say that the lack of maturity in the risk analysis and management processes are among the main factors.

We recommend that best practices be applied for the management of mission critical sites, using and certifying their operation through one of the consolidated standards in the market.

Mature processes dramatically mitigate the potential for human factors failures, as well as support business decision making.



After this short reading, you feel that you are fully aligned with these good practices, congratulations! The availability of your site is safe. If you detected a gap in your management, you should be careful, as availability may be at risk.

Vertiv Services Capabilities

Services ensure that your vital applications stay up and running. We do this through our vast array of project, maintenance and performance capabilities, supporting you in making better decisions to operate more efficient and reduce complexity.

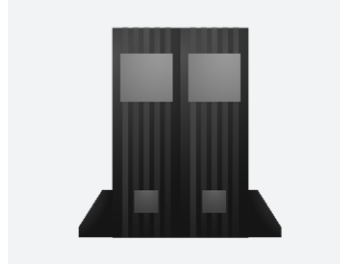


Vertiv ensures continuous uptime of your critical operations so you can perform at your peak and maximize your resources. Whether you are in a data center, communications facility, government agency, or industrial plant, we collaborate with you every step of the way.



Project Service

Deep infrastructure expertise and a full complement of professional services to guide your project from initial planning and design through engineering and construction, to final execution and approvals.



UPS & Battery Services

Services to keep your operation running, even when your AC power fails.



Thermal Management Services

Integrated lifecycle services help maximize the performance of your thermal management systems.



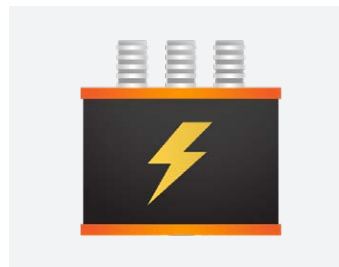
Rack PDU Services

Lifecycle service and support for your rack power distribution units, giving on-site staff a reprieve while ensuring system availability.



DC Power Services

Product assessment, integration, and maintenance services to ensure the dependable operation of your DC power system.



Electrical Reliability Service

Critical expertise for your electrical infrastructure.



Electrical Safety & Compliance

Services to help you protect your people and infrastructure through regulatory compliance.

Contact Vertiv

How can we help?

Send us your concern by completing the form below and we'll get back to you as soon as possible.

<https://www.vertiv.com/en-latam/contacts/>

