

Your assessment checklist: How to select the right colocation data centre

You may have decided that colocation is the best option for your business needs. But not all colocation data centre providers can offer the same specifications that align with your requirements.

How should you go about searching for the right fit for your business operations? Here are some key factors to consider when shortlisting and evaluating colocation providers.



Location

Location is everything. It is critical to your decision-making when identifying a colocation provider. Potential repercussions such as additional costs and operational disruptions can be easily avoided by choosing a facility in a better location.

Geographic stability

- ✓ Is the location of the facility prone to natural disasters, such as floods or earthquakes, that may result in downtime? How frequently do they happen?
- ✓ What is the power capacity in the area? Does it have a stressed power infrastructure due to unpredictable weather conditions? *E.g. extreme heat requiring more cooling*

Access to power, renewable energy

- ✓ How easily accessible is the colocation facility to the power grid? Is it reliable and capable enough to support the facility's intensive power needs?
- ✓ What are the redundancy protections in place to ensure minimal downtime/disruptions?
- ✓ Does the colocation provider have access to renewable energy sources (*e.g. wind, solar*) that lessen the environmental impact of the facility?

Skilled talent pool

- ✓ Does the facility or local area have the depth of talent required (*e.g. technicians, engineers*) to staff and run the facility round the clock?
- ✓ Are there enough staff members based nearby who can respond at short notice in times of emergency?

2 Power provisioning

The mechanical and electrical design of the colocation provider needs to be able to support your power and cooling density requirements. Understanding what the facility can deliver now, and in the future (for potential expansion), can contribute to your decision.



Power

- ✓ Does the facility meet your power requirement needs? How much more capacity can they deliver?
- ✓ How efficient is the energy consumption in the colocation facility? What is the level of power usage effectiveness (PUE)? *i.e. the ratio of power available vs. the power consumed*
- ✓ What is the data centre facility's tiered rating? What is the facility's ability to handle concurrent maintainability?
- ✓ How long can data centre operations continue to run uninterrupted following a power outage?
- ✓ What are the energy sources used for backup? Are they efficient/scalable and are there clean energy alternatives? *E.g. lithium-ion batteries*

Cooling

- ✓ What type of cooling technologies does the facility use for its racks?
 - *E.g. AI-assisted automatic cooling control, Hot aisle/cold aisle layout, direct-to-chip or cold-plate liquid cooling, close-coupled cooling*
- ✓ What is the energy consumption for the facility's cooling infrastructure?
- ✓ How does the facility measure its energy/resource efficiency?
 - PUE (Power Usage Effectiveness)
 - WUE (Water Usage Effectiveness)



3 Security

Safeguarding the security of the facility's building infrastructure from physical threats is as important as protecting the network infrastructure from cyber threats.

Physical security

- ✓ How many layers of security measures does the facility have for protection? *i.e. the number of security checkpoints/processes encountered once a person is on the campus*
 - Perimeter security — Fences, guards/patrol staff
 - ID checks
 - Biometric/smart card access (at data hall/rack level)
 - Video surveillance systems
 - Motion-activated security lighting

Network security

- ✓ What tools are being used for risk management and threat detection in the facility?
 - Firewalls
 - Two-factor authentication
 - Intrusion detection and prevention services

4 Network access

The level of telecommunications access that a facility has will determine the data speeds and latency levels it can deliver to meet the surging demand for bandwidth.

- ✓ What level of access does the facility have with cloud/internet exchange points?
- ✓ What is the availability of the fiber infrastructure for the colocation facility to tap into?
- ✓ What are the redundant capacity components, such as servers and network links, in place to ensure no downtime/disruption during outages?

5 Environmental monitoring

Having an updated, real-time view of the facility's operating environment will help ensure smoother running of operations, boost the ability to take preventive measures, and allow quicker response in the event of outages.

- ✓ How does the colocation facility record and track environmental factors such as temperature, humidity, and smoke, which are critical to its operations? *E.g. manual checks, sensors*
- ✓ How detailed/timely is the data available?
- ✓ Does the facility offer you real-time access to the environmental conditions of the facility's operations, through a dashboard/portal for instance?



6 Compliance

Selecting a colocation provider with a strong understanding and knowledge of local laws and regulations, along with global compliance and audit requirements, will be particularly essential if you're a foreign operator entering a new market.



- ✓ Is the facility fully compliant with local laws and regulations?
- ✓ Are they aware of tax incentives available in-market? *E.g. waiver of import duties in special economic zones*
- ✓ What local/regional/global standards or certifications does the facility have, in general or specific to industry/sector?
 - *E.g. SOC 2, Payment Card Industry Data Security Standards (PCI DSS)*
- ✓ Is the facility able to meet third-party audit requirements? What kind of support can it provide you in the audit process?

Searching for the right colocation provider?
Connect with a JLL data centre expert to get started today.

