

#### 10 QUESTIONS TO ASK YOUR DATA CENTRE





# CHOOSING THE RIGHT DATA CENTRE\*

Whether you're a business looking to house your servers in a robust external facility, or a managed service provider seeking a base from which to run your services, your choice of data centre is a crucial one that mustn't be entered into lightly.

Here we set out 10 questions to ask of any colocation service provider you may be considering.





## FOR THE RIGHT REASONS.

There are many reasons to use an external data centre – to ensure business continuity and data security, to centralise the storage of applications and data resources so they can be accessed from anywhere, or to deliver scalable, robust and consistent performance for demanding yet fluctuating activities such as web interactions and e-commerce transactions.

Data centres are also where cloud-based computing happens – whether you're running hosted applications in a private cloud, accessing software as a service, or tapping into externally managed infrastructure services. But not all data centres are equal so it's vital to do some research before choosing where your IT systems, software and services will be housed.

Performance may vary at peak times and support services may be inadequate when your business will be depending on the data centre to keep core processes flowing. If you're buying a cloud solution or managed infrastructure service, ask the provider about the facilities they use.

#### THE FOLLOWING PAGES CONTAIN THE QUESTIONS YOU SHOULD BE ASKING OF ANY DATA CENTRE PROVIDER:



## Ol.↓ WHERE IS THE DATA CENTRE LOCATED?

The whole point of using an external data centre is that it is outside the business, but your IT people will still want access to the facility, and the reassurance of knowing they can easily get to their systems 24/7. So the importance of convenience should not be underestimated. Volta's London data centre is nice and central – on Great Sutton Street, close to the prime business areas of the West End, the City and the Tech City/Silicon Roundabout in Shoreditch.

Volta Data Centres site is also safely away from flood areas (most other London facilities are uncomfortably close to the Thames), as well as from City Airport, and the Docklands. The facility is highly resilient too. Our vast building used to house a data centre owned by Reuters, then BT. When we bought the building in 2012 we refurbished it to the highest data centre specifications, and installed two dedicated 33kV transformers in the basement.

Location will also have a bearing on the cost of the connection from your office to the data centre. For example, to get a 10Gbps connection from a central London office to a facility outside the M25 will cost significantly more than connecting to a central London data centre located just around the corner.

#### NEAREST LONDON UNDERGROUND

Barbican (645m) Circle Hammersmith & City Metropolitan lines

Farringdon (800m) Circle Hammersmith & City Metropolitan lines

Old Street (1,130m) Northern Line (Bank branch)

Angel (1,130m) Northern Line (Bank branch)

NATIONAL RAIL Farringdon (800m) City Thameslink (1,300m) Moorgate (1,610m)







## 02. WHO ELSE USES THE DATA CENTRE?

Although some companies using your target data centre may want to keep their identity private, you should be able to find out about the types and size of companies already using the service, to get a good idea of whether it's suitable for a business like yours. Ask for references or check out the provider's website for case studies, and find out what these companies value the most about the service. Volta is a popular choice for colocation services for the financial, media and content industries and, because of our central London location, we are ideally placed for West End retailers.

But rest assured that if you don't want your competitors to know where you are, we don't tell them. Consider us like a GP surgery – Volta won't ever discuss your details with anyone else.



## 03. HOW SCALABLE IS THE DATA CENTRE'S CAPACITY?

As your business or your appetite for data centre services grows, you may find that you need to add capacity. If you're using the data centre to house your own IT equipment, you'll need to know you'll be able to easily add additional power and rack space. If you're buying a managed service from a hosting provider, you'll need the assurance that they will be able to bend and flex capacity too as your needs change and grow.

Look for a data centre environment that offers flexibility. For example, can it run high-density and low-density racks side by side? This will be at least partly determined by the type of cooling system in use. Without row-based, rack-level cooling, it could be harder to adapt or add racks without the upheaval of moving to a different location within the building.

Volta Data Centres offers a substantial 91,000 square feet of space, has a sophisticated cooling system, and provides impressive flexibility to meet any business or managed service provider's needs. That includes the ability to house high and lowdensity racks side by side.









## 04. HOW WELL CONNECTED IS THE DATA CENTRE?

A data centre's connectivity is its lifeline. Without it, no one would be able to access the infrastructure, content, applications and services housed at the facility. So connections must be solid, perform consistently, and have multiple layers of backup. As businesses become more ambitious in their use of external facilities, 'latency' begins to matter more too – delays of even nanoseconds can pose problems for sensitive applications involving voice and video, or for everyday database and e-commerce transactions.

Although most data centres offer multiple Tier 2 carrier options, they are sometimes limited by the number of Tier 1 carriers (i.e. the original network owners). Without multiple backup fibre connections, services are vulnerable: any damage to the underlying cable network – for example, as a result of road works - will take out every Tier 2 connection whose services pass over that provider's network. Although they're harder to find, look for a data centre provider with multiple Tier 1 carrier options and diverse entry points into the building to ensure a fully resilient, 'always on' connection to your IT assets. Volta provides ultra-fast connectivity linking customers to a variety of world-class carriers, as well as cloud providers, business partners, networks, major internet exchanges, and any other data centre globally.



## 05. WHAT POWER SUPPLY CONTINGENCIES ARE THERE?

Just as a data centre is only as good as its connectivity, a continuous service demands a robust power supply. All data centres have a dual power supply from the grid, as well as some form of resiliency or back up to the grid power supply from arrays of batteries or generators. But most urban data centres are limited to 11KV of power derived from a single grid substation – if that goes out, they will lose both grid feeds.

Volta is different, offering a level of resilience that is unparalleled in central London. We have two wholly owned and dedicated 33kV transformers onsite, which are fed by two separate redundant grid rings at 33kV each, providing a level of resilience that no other central London facility can match. In the unlikely event both of these grid rings were to fail, whilst a considerable amount of London would be in complete darkness, at Volta our resilient back up generators will ensure that the lights will never go out at our Great Sutton Street site.







### 06↓ HOW IS THE ENVIRONMENT CONTROLLED - WHAT COOLING SYSTEMS ARE IN PLACE?

Data centres traditionally use computer room air conditioning (CRAC) to keep the racks of servers from overheating, but this is only typically effective for IT loads of a few kilowatts per rack. Volta's London colocation facility is at the forefront of modern cooling technology. Our speciallydeveloped row-based cooling system increases efficiency and scalability, and is purpose built to handle IT equipment with a peak power density of 20kW per rack and beyond. The system enables future-proofing for the latest server technology, and allows companies to house high-density racks next to traditional racks.



### **07** HOW ROBUST ARE THE DATA CENTRE'S SECURITY MEASURES?

Security is an essential consideration within any data centre environment. This applies to the physical environment – which must be disaster proof – and to the safeguards and processes in place to prevent unauthorised access to equipment and the assets stored on them.

Volta goes above and beyond the normal measures, providing the additional option of adding cages around the racks, or dedicated private suites, to ensure a depth of security facilities that is more than adequate to protect against continually evolving threats.

In addition to having security guards patrolling the premises 24 hours a day, we have expert mechanical engineers on site right around the clock, so whatever time of day or night the site is well staffed and vigilantly looked after.









## 08. WHAT LEVEL OF CUSTOMER SERVICE CAN I EXPECT?

When you're housing critical IT systems and assets in an external data centre, having a trusted relationship with the provider is paramount. The larger the operator, the harder it can be to maintain a personal relationship. In some cases, account managers may each be responsible for thousands of businesses, so that yours is seen as just another transaction – rather than a valued account.

At Volta, we pride ourselves on retaining the personal touch. We won't leave your engineers struggling at the door with equipment, and we won't wait for you to tell us you need more capacity - because we'll always be one step ahead of your requirements.

Volta's operations control engineers are there for you right around the clock too, to let you in or check on your equipment for you – even if it's at 3am. And we'll review your needs regularly so that extra capacity is ready when you need it.



#### O9↓ HOW IS PRICING CALCULATED AND HOW PREDICTABLE ARE THE COSTS?

One of the benefits of using an external data centre ought to be control and predictability over costs, but this isn't always the case.

At Volta, we have a very transparent and predictable pricing structure. We'll review your usage regularly and, if we notice you're regularly going over your estimated usage, your account manager will start a conversation with you about your likely future needs so we can provision and bill accurately in line with your continued requirements.





## 10. HOW FUTUREPROOF IS THE DATA CENTRE?

Just as your business will change and grow, your data centre provider is also a commercial entity with its own plans and evolving needs. So what assurances are there that your IT assets will be in the same safe hands in 5-10 years?

Many data centre providers lease their premises for a renewable term, so find out what assurances they can offer you about the future so that you don't find that your company has to relocate everything in the short term. We own our London data centre outright, and continue to invest heavily in its resources and state-of-theart facilities, so that we can continue to meet our clients' developing needs. Our upgraded power systems and advanced cooling systems are good examples of how seriously we take our service, and how agile and adaptable we are.



# FINALLY

When you do find the right data centre for your business, make sure you keep reviewing the service you are receiving and keep a dialogue going with your provider. A good account manager will value you as a client and will always be looking for new ways for you to benefit from their service.

Ask about the provider's technology and service partners too, to see for example whether you could benefit from hosted and managed infrastructure services down the line. As well as providing colocation services to companies, we work with a range of service providers that need to host their IT equipment in a secure, external facility. These specialist business-to-business service providers will often partner with us to offer additional value to our data centre customers.

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