The Intelligent Data Centre
There are many differing industry views around what the new generation of intelligent data centres look like, from ensuring high-availability, dense network availability – offering a diverse range of connectivity options – to high server and network speeds and power density.

At VIRTUS, these are considered table stakes – the bare minimum required for any data centre company.

To be considered intelligent and next generation, data centre providers need to take far more into account if they are to provide the innovative capabilities and price points that customers demand if they are to stay competitive.

To achieve next generation status, data centres need to be intelligently designed and purpose built from the ground up to ensure they’re highly optimised, deliver innovative services, are sustainable and efficient.

Every aspect of the data centre needs to have been rigorously planned, questioned and simulated – from the location of the site, construction firms and technology vendors used, to connectivity capabilities, ease of access for operators, power consumption and cooling capabilities.

However, what really sets intelligent data centres apart is the ability to provide customers with access to the vast amounts of information they generate daily. By giving customers visibility into data centre operations and enabling them to access, visualise and analyse the information, customers can benefit from far greater insight than has been previously available, and use it to base more accurate resourcing decisions on.

So What is an Intelligent Data Centre?

VIRTUS: Ahead of the Intelligent Data Centre Curve

The role of the data centre has changed. Over the last few years it has transitioned from a cost centre to a revenue centre with businesses of all sizes seeing the strategic value they deliver.

Until now, traditional data centres offered expensive pricing models, which alienated the majority of small to mid-size businesses, unable to commit to long term and expensive contracts.

However, with the emergence of intelligent data centre providers, with astutely designed facilities, disruptive pricing models and flexible contracts capable of offering better price points, shorter contract terms and more efficient solutions, this is no longer the case.
How VIRTUS is Making The New Generation of Intelligent Data Centres a Reality

AT VIRTUS Data Centres, we’ve taken this approach with the building of our LONDON2 data centre in Hayes. The first of its kind, it has been designed from inception to be an intelligent and highly efficient data centre, which has been recognised and awarded with Tier III certification by the Uptime Institute. In addition, its freehold status – as a data centre built on ground owned by VIRTUS – is a key contributor to the low cost of ownership enjoyed by VIRTUS and customers.

Prior to breaking ground on LONDON2, forecasts were made to assess the data centre’s running costs over a 10 year period, analysing the performance of numerous vendors and comparing them against capital and operational cost profiles.

By simulating a number of VIRTUS data centre models and analysing the results, it was possible to predict the total cost of ownership of each option and ensure the most efficient and cost effective configuration was chosen, benefitting both VIRTUS and customers.

This ability to simulate and forecast costs also played a crucial role in the decision to deploy ground-breaking Indirect Adiabatic and Evaporative Data Centre Cooling technology. The modular nature enables it to be scaled up in line with the number of servers that require cooling.

More importantly, it also means the data centre can achieve its design PUE much sooner once operational – unlike the majority of data centres, which can take years before they achieve the same.

The ability to forecast and understand total cost of service goes far beyond simple capital expenditure calculations. It also has implications from a commercial stand point.

In a fast paced world where business needs can change regularly, the expensive and inflexible long term contracts, which have to-date been the norm, are no longer palatable to many businesses.

Typically, data centres have charged high rates, because their overheads made these prices necessary. However, by taking a smarter approach to building, cooling and running data centres, VIRTUS has reduced these overheads significantly – passing on the cost savings to customers.

This has provided VIRTUS with the freedom to implement a disruptive commercial model, which is very different to its competitors. The results being that VIRTUS can offer absolute flexibility from a rack to a suite for a day to a decade, while providing cost effective data centre solutions to real business problems.
Understand and Pay For What You Use

The new generation of data centres need to be intelligent by design, from the initial inception through to completion of the build. However, there’s another vital ingredient that is required.

Today, many colocation providers claim to deliver ‘flexible’ and ‘agile’ data centre contracts. However, due to a lack of Data Centre Infrastructure Management capabilities, few provide customers with the information about how much space, power and cooling they are using to allow them to take advantage of these scalable contracts and adjust their data centre requirements in line with their usage.

Data centre providers are quick to highlight if customers need to buy more capacity, but not as quick to advise when to scale down requirements.

In order to make its intelligent data centre offer more complete and ensure customers have total transparency and control of their usage, VIRTUS has launched the VIRTUS Intelligent Portal (VIP). This is the industry’s first free technology portal that includes Data Centre Infrastructure Management (DCIM) for colocation customers in the UK, and provides customers with the same level of control over their data centre deployment as if it were their own.

Choosing Your Intelligent Data Centre

There’s more to intelligent data centres than just space, power and cooling.

In today’s constantly evolving and competitive data centre landscape, where companies have far more choice, data centres need to ensure they’re highly efficient if they are to compete.

Only by minimising operational costs and laying a solid foundation for success through intelligent design will they be able to compete with the next generation of data centres who are offering highly flexible, short term and competitively priced data centre offerings.

If you’re interested in learning more about VIRTUS’ Intelligent LONDON2 Data Centre in Hayes contact info@virtus.com 0207 499 1300
About VIRTUS

VIRTUS owns, designs, builds and operates a new generation of agile, connected, efficient data centres around the heart of London’s cloud and digital content economy. Located within London’s metro, VIRTUS offers the best of traditional retail colocation including limitless connectivity, dedicated support and complementary ecosystems, combined with the low cost, scalability and custom solutions of the wholesale model, in uniquely flexible and customer friendly packages.