



State of the art Data Centres

Node4 Data Centres

Data Centres have become much more important to business of all sizes in recent years. More and more choose to host their hardware and applications with a Data Centre provider in a purpose-built facility rather than investing in the high costs themselves.

Node4 have made a considerable investment in building three state of the art facilities in two convenient locations across the country ensuring the right environment, even for the most mission critical applications, is provided.

The Node4 Data Centres offer the latest technology in security and resiliencies, meaning that the services you want are available when you need them with a flexible range of colocation and hosting services.

DC2 - Derby

The first stage of DC2's development was completed in November 2007 with the 2nd hall opening for business in April 2008.

The Data Centre is located on-site at Node4's Derby headquarters and has a total capacity of 220 racks.

Features include:

- 4,500 sq ft Data Centre space
- 2 separate Halls
- 3 x N+1 Generators
- 5 x 200kVA Riello UPS (N+1)
- N+1 Stultz DX Cybercool Air Conditioning Systems
- FM200 Fire Suppression
- 14.5kN/m² raised floor system
- 24 Hour Manned Security
- CCTV & Intruder Alarms
- Perimeter fencing and electric gates
- Up to 32A dual power feed per rack
- Diverse Fibre Entry with BT, Kingston Comms Fibre available
- On-site Network Operation Centre
- Multiple T1 Carriers for Internet Transit
- Convenient Midlands location just 5 minutes from junction 25 of the M1.

DC3 - Wakefield

DC3 continues with, and also improves on, the high standards Node4 already have in their existing Data Centres with many features being N+1 and in some cases N+N.

The Data Centre has a total capacity of 450 racks and is conveniently located near Wakefield's major routes.

Features include:

- 13,000 sq ft Data Centre space
- 4 separate data halls
- 450 racks capacity
- Optional private suites with 32, 64, 96 or 128 rack capacity
- 4 x 1MW MTU Generators (N+1)
- 6 x 200kVA Chloride UPS System for A feeds (N+N)
- 6 x 200kVA Chloride UPS System for B feeds (N+N)
- 6 x 350KW Airdale Water Cooled Chillers (N+1) on N+N pumps
- FM200 Fire Suppression
- 14.5kN/m² raised floor system
- 24 Hour Manned Security
- CCTV & Intruder Alarms
- Perimeter fencing and electric gates
- Energy Efficiency (Target Power Usage Efficiency of 1.3)
- 3.5MVA of power
- Diverse connection to National Grid
- 10Gb Ethernet ring to Manchester, London and Derby DC2
- On-site Network Operation Centre
- A 'Goods In' Area
- Build area and optional hot desks
- Convenient location easily accessible from the M1 and M62.

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DC2 - Derby HQ



Environment

DC2 is fully climate controlled with N+1 Stulz DX Cybercool Air Conditioning Systems. Fire protection is provided by the FM200 Fire Suppression system which fills the sealed data centre with gas to extinguish the fire quickly without the use of water.

Security

There are CCTV coverage points on all entry and exits points in DC2 and between rack aisles, from which images are recorded and stored. There is also a strict swipe card entry system for access to the building. DC2 is fully compliant with the Payment Card Industry Physical Security Standards (Section 9) making it the ideal place to host your e-commerce solutions.

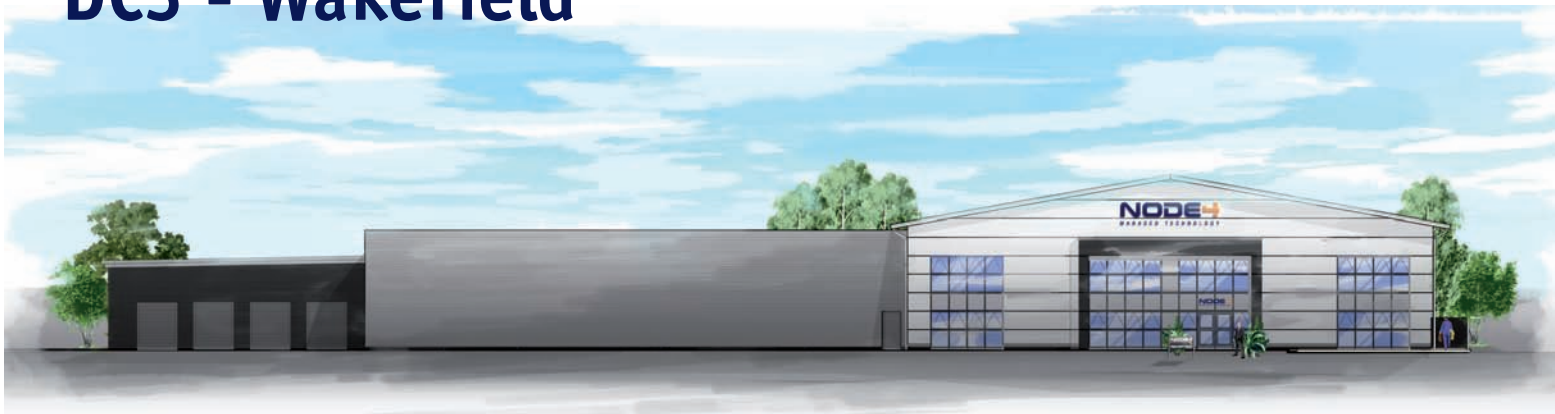
Connectivity

Dedicated Internet connections are available along with site to site connectivity to link up multiple company sites into DC2. From the Data Centre a PSTN break-out enables Node4 to provide a SIP Trunking service.

Power

Flexible power with up to 32amps dual feed per rack can be provided. In the event of a mains power failure the N+1 UPS system seamlessly takes over to ensure that there is a consistent source of power to the Data Centre. The 3 800kVA N+1 Generators are diesel driven and there is a contract in place with suppliers to ensure the constant supply of fuel.

DC3 - Wakefield



Environment

The 4 x 450 KW Airdale Water Cooled Chillers are N+1 supplied with N+N pumps. Typically saving 35% of the energy used by a conventional air-cooled liquid chiller, these water cooled chillers use a free-cooling cycle to reduce the need for mechanical cooling, thus significantly reducing the energy consumption and carbon emissions of the air con units. DC3 also includes a VESDA system which provides the earliest possible warning of a fire by continually drawing air into a pipe network attached to a detector unit on the wall.

Connectivity

DC3 benefits from all of the same connectivity features as DC2, along with the multiple 10Gb links that run between the Wakefield and Derby sites, giving customers additional disaster recovery capability with the option to spread their servers across the 2 sites.

Security

The main entrance door and multiple interior doors are accessed using a photo ID swipe card procedure. A support ticket will need to be raised to request access at least 24 hours before a visit to the facility and photo ID presented on arrival.

CCTV coverage of all entry and exit points along with several points inside the data centre is monitored, recorded and archived for 3 months.

Power

Flexible power of up to 32amps dual feed per rack can be provided in DC3 using the 3 MW of power supplied to the building. The 4 x 1MW MTU Generators are present as a back up solution in the unlikely event of a loss of mains power.

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Data Centre Solutions

Having the right environment is the first step in delivering a range of solutions that deliver real business benefits. Node4 can build on their Data Centre facilities with the ability to work with customers to advise and deliver a range of services that can really impact any organisation. The following solutions are available from Node4, however a more bespoke option can be provided should your company require it.



Colocation

Whether you are looking for rack space or a private suite, Node4 have a flexible range of colocation services to meet your specific requirements. Colocation is ideal if you plan to build and manage your hosted set-up yourself, or Node4 can source the hardware for you using accreditations from leading manufacturers such as; Cisco, DELL including EqualLogic SANs, HP and NetApp, benefitting from high levels of discount.



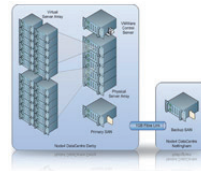
Storage Solutions

Back up can be burdensome but with storage consolidated you can dramatically simplify back up and recovery without downtime, improving reliability as well as reducing costs. Benefit from the features in either of Node4's Data Centres and implement an off-site DR solution in DC2 or DC3 or host an appliance on one of your own company sites.



Managed Hosting

Node4 can provide you with a fully managed infrastructure including servers, SAN devices and firewalls. Your business will benefit from the experience and specialised expertise of the on-site Node4 Support Team who will manage and monitor your servers 24/7.



Virtualisation

Virtualization simply allows one computer to do the job of multiple computers, by sharing it's resources across multiple environments. Today's computer hardware was originally designed to run only a single operating system and a single application, but virtualization breaks that bond, making it possible to run multiple operating systems and multiple applications on the same computer at the same time, increasing the utilization and flexibility.



Node4 Disaster Recovery Solution (N4DRS)

To protect both physical and virtual server workloads, a PlateSpin Forge appliance will be utilised using embedded virtualisation technology. Your servers will be backed up onto the appliance regularly so that in the event of a server outage your business will continue to run as normal on the appliance until the typical environment is restored. High speed connectivity and hosting will also be provided as part of the solution.



Hosted Cisco Unified Communications Platforms

Cisco are now world leaders in telephony with the most extensions deployed worldwide. Using our Cisco Unified Communications Specialisation, Node4 are able to deliver hosted Cisco IP Telephony Platforms. As a recent winner of the Cisco Innovation Award for the work they do in hosted telephony it is worth talking to them about your telephony requirements.



Hosted Microsoft Applications

Many Microsoft applications, such as SharePoint and Exchange are used in everyday business and as time goes on they become more and more critical. It is therefore imperative that they work the way they should to maximise the productivity of any organisation. With businesses now demanding higher availability and reliability, hosting crucial applications elsewhere with constant monitoring, not only saves costs, but also gives peace of mind.



SIP Trunking

Session Initiation Protocol (SIP) is a multi-media signalling standard. It allows businesses to communicate over IP connections. As well as being connected to the Internet, the Node4 Data Centres are also connected to the PSTN world so that you can host your telephony platforms and have reliable, resilient PSTN connections with competitive call charges. Further benefits include geographic and non-geographic number allocation and number porting.

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Why choose Node4?

Control - Node4 own and manage their own Data Centres (Derby [Tier 3] and Wakefield [Tier 4]) ensuring that they are in complete control of the services they deliver.

Solutions - Node4 is distinguished by their award-winning innovation in providing the latest technologies, often bringing multiple products from an extensive portfolio together to provide a complete end-to-end solution.

Flexible - Node4 don't make customers fit in a box. All Node4 services can be developed to meet your business requirements.

Reliable - Node4 manage and monitor their services 24 hours a day, 365 days a year, ensuring that your services are available when you need them.

People - Node4 have a great team who understand customers, offer good advice, and are committed to delivering good customer service and high levels of support.

About Node4

Since Node4 launched in April 2004, there has been a huge amount of rapid growth in the business. Their vast experience in a whole range of Data Centre and Communications solutions and commitment to meet and exceed customer's expectations gives Node4 the edge against any of their competitors.

Service portfolio includes:

Colocation

From single servers to private suites.

Managed Hosting

Dedicated servers & Virtualised Environments.

Connectivity

Broadband, leased lines & Ethernet.

IP-BVN

QoS enabled private network for multiple sites.

SIP trunking

Numbers, number porting & reduced call rates.

Cisco IP Telephony

Hosted & dedicated options.



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