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Aspen House Fleet Data Centre (AHF) Technical Specification

Power

- 1.5MVA dedicated sub-station with dual HV feed from National Grid
- 2500Amp x 3 phase dedicated LV panel, all Merlin Gerin & Schneider switch gear
- Data centre ranked amongst highest Amps/Kw per sq. ft. in UK
- Multiple modular (near unity) UPS, Powerwave 9000 DPA, with 99.9999% reliability and uptime
- Generators with 4 days of oil supply capable of supporting full building load

Racks

- Maximum capacity of 112 racks at dual 8kW per rack, phase1 racks are dual 8kW and dual 4kW
- Dual 32Amp power strips per rack (PDU's with ammeters) each from separate distribution boards and circuit breakers, phase1 racks are dual 32Amp and dual 16Amp, theoretical 96Amps per rack
- Diverse data delivery cabling in traywork above racks
- Power distribution in traywork below floor
- Racks are extra large 47U, 1000mm deep, 700mm wide

Data Floor

- 8500 sq.ft. Hi-Tech building with 4250 sq.ft. technical space
- Phase1 completed June '08, Phase2 completed November '09, Phase3 completed September '10
- 112 racks with dual 32Amp (dual 8kW) diverse supplies per rack
- Electrostatic discharge heavy duty data floor with earth bonding every 9M²

Cooling

- Multiple N+1 Denco CRAC (computer room air conditioning) cooling system
- Contained cold aisle solution, cold air plenum above racks, organised high efficiency cooling
- High performance and high efficiency Denco with seasonal free cooling
- HiCoP (high co-efficient of performance) Mitsubishi background cooling
- Fresh air system with Lossnay heat exchangers on both floors

Fire & Smoke Detection

- Honeywell 20 zone digital addressable fire alarm panel
- Intelligent XP95 optical smoke detectors
- Xtralis VESDA (Very Early Smoke Detection Apparatus) system along each row of racks
- Xtralis VESDA (Very Early Smoke Detection Apparatus) system around Denco cooling units
- On-site DC staff and security trained on basic fire fighting
- Automatic fire brigade callout at first knock

Security

- Sixteen internal and external IP cameras, images recorded and available over IP
- All doors have electronic locks and are centrally controlled and monitored
- Secure building with window grilles and shuttering
- 2.1M high security palisade fencing around perimeter

Connectivity

- Separate Telco room with diverse Cisco 6509 switches
- Diverse and separately routed multiple Gigabit fibre connections from BT, NEOS, Virgin Media & Global Crossing
- Racks connected via Cisco 3560G-24TS top-of-rack switch providing twin 100Mbps Ethernet links to dual Cisco Catalyst 6509 core switches with resilient multiple Gigabit fibre connections back to our London data centres

Support

- On-site engineering and facilities support team including VMware certified VCP's and VSP's
- Technical build area, adjacent to data floor
- Services available on site: Cisco support, VMware support, LINUX support, ADSL connectivity, private circuits, DSL, server rentals/installs, firewall/router/switch rentals/installs
- Remote hands support
- Accept and store client deliveries

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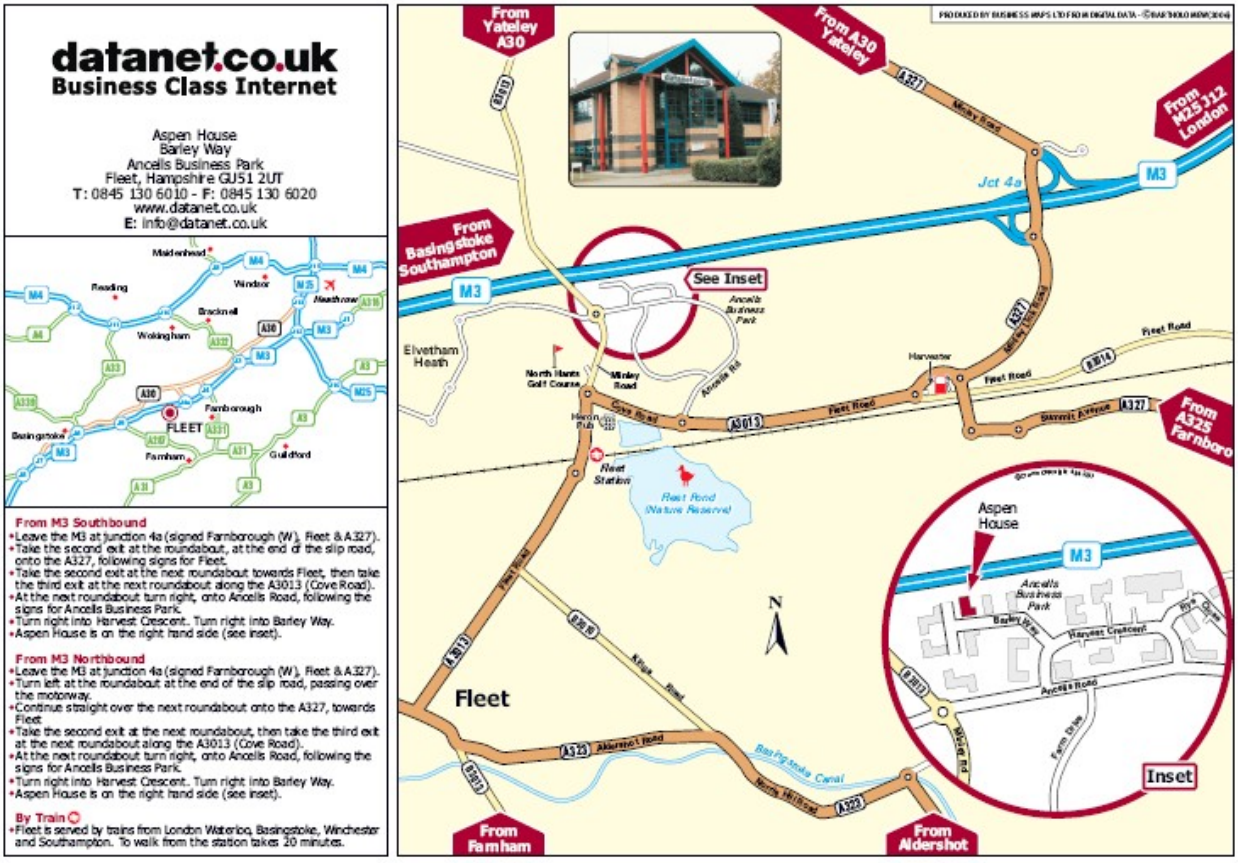
Location

- 1 mile from J4A of the M3
- Ample visitor parking
- Secure business park location
- Fleet railway station – half hourly services to London Waterloo, 50 minute journey time
- 15 minutes by car to M25 J12 and 25 minutes to Heathrow, less than an hour's drive from central London



Datanet cares about our environment

We designed our Aspen House (AHF) data centre to be as environmentally friendly and efficient as today's technology allows. The air conditioning for the entire facility is HiCoP (high co-efficient of performance) and employs a heat exchange system whereby in winter, the already warmed air leaving the building helps heat the cold air coming in, with the reverse true in the summer months.

In addition, Datanet has deployed cold aisle containment for super efficient cooling of the servers in the racks within the data centre and the CRAC (computer room air conditioning) system utilises seasonal "free cooling technology". The technically superior near unity UPS infrastructure reduces power consumption and lowers the carbon footprint of Aspen House. Datanet has received tax credits in the form of "Enhanced Capital Allowance" from HM Revenue & Customs to reflect the high efficiency and environmentally friendly investment made by Datanet.

Datanet offers more efficient and environmentally friendly servers to our customers and operates a strict recycling policy in house.