Colocation Factsheet ODC21

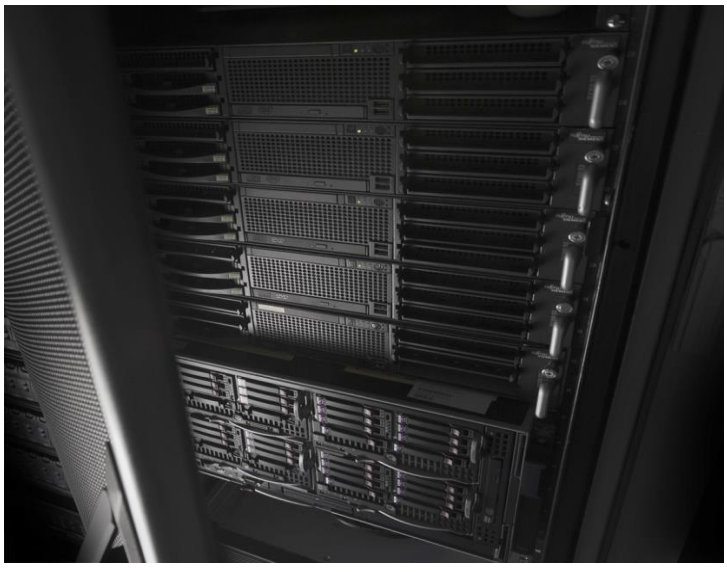
upstreamNet
backbone connectivity – colocation

Factsheet ODC data center

Address: Richard-Neutra-Gasse 10, 1210 Vienna

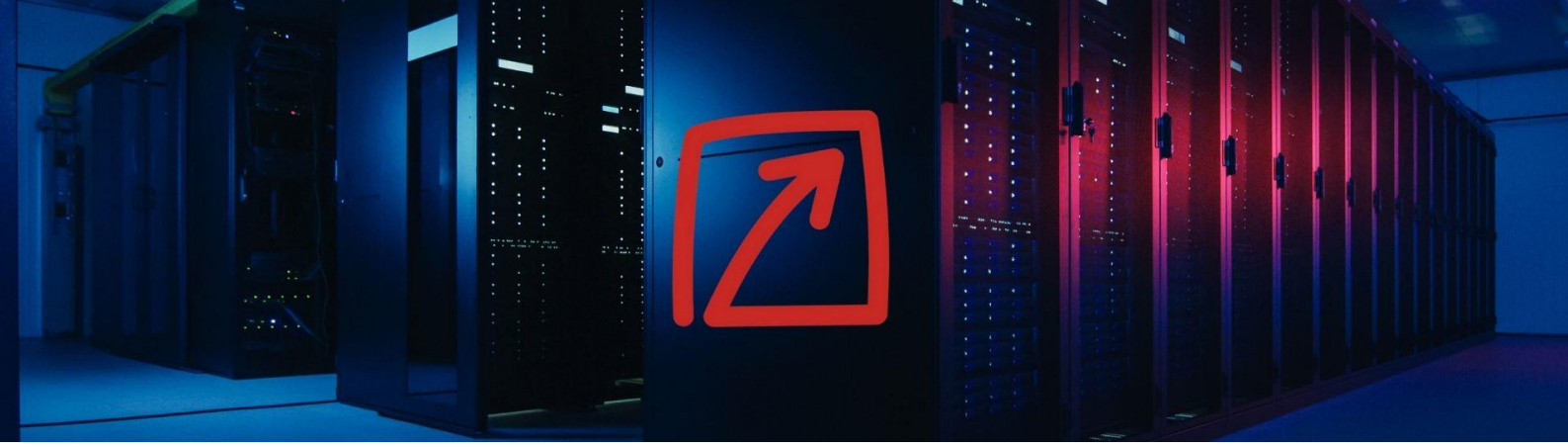
About the data center ODC21 (On Demand Center)

The On Demand Data Center (ODC21) was opened after being acquired by IBM in the fall of 2006 with an area of 770 m^2. Due to the enormous demand, the data center was fully expanded by the end of March 2009. Currently, approx. 3000 m^2 of floor space is available at this site.
As part of the 2009 expansion, 230 m^2 of space was created in the ODC21 building, and 350 m^2 of space was created in the ODC21 neighboring building for emergency workstations. The data center, which is currently **ISO 27001** certified, was reviewed in accordance with **ISAE 3402** (formerly SAS70) and offers a comprehensive resource pool with redundant design of the building services infrastructure.



Facts:

- Built-out data center area: approx. 3000 m²
- Infrastructure technical area: 1560 m²
- Side rooms, reception and offices: 600 m²



Safety:

The following safety functions, among others, are available in the RDC:

- Early fire detection with active suction and sensitive detection
- Water outlet monitoring in the data center
- Access control system ("bank data center")
- Video surveillance with monitoring of the outer building envelope & all access areas
- Intrusion protection: monitoring of all external doors and windows
- Monitoring of all security systems via the alarm control panel
- Monitoring of all fire detectors & control of the extinguishing system from the fire alarm control panel

Extinguishing and fire alarm system:

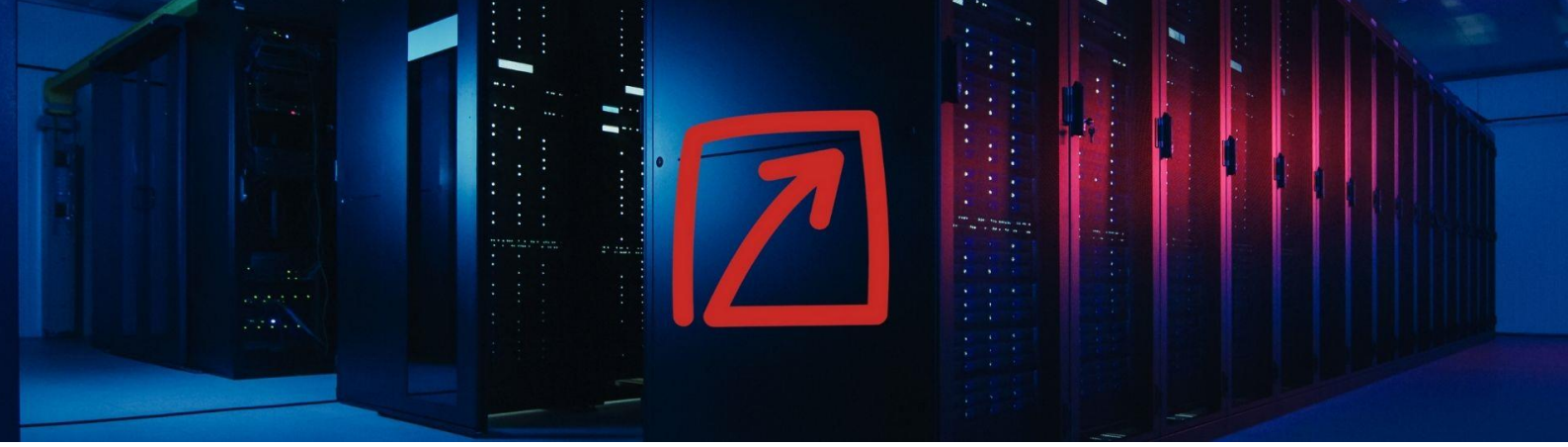
- 2-detector dependent INERGEN extinguishing gas system
- Flooding areas: Data center areas incl. raised floor area and technical areas
- Fire detection: automatic fire alarm system / optical and thermal (entire building)

Power supply and redundancy:

- two independent supply rails A+B, powered by two transformers, each UPS-supported
- E-distributors are fused via STS (static transfer switch)
- geo-redundant supply line Wienstrom: 2 x 20kV
- Installed power: 2 x 4 MVA
- NEA emergency diesel generators (+1 2013): 3 x 2 MVA
- Bridging period: min. 72 hrs.
- UPS Uninterruptible Power Supply System,
  both power feeds UPS-secured: 8 x 500 kVA
  new UPS rails C and D (2013) additional 6x 200 kVA
- no supply with DC voltage (i.e. no DC supply)

Several diesel generators are connected in the data center to secure the uninterruptible power supply (UPS). If the external power supply collapses, the generators take over the power supply to the data center until the regular feed is stable again.

Our diesel gensets with storage tanks (200,000 liter capacity), together with the redundantly designed rotating UPS system, ensure maximum availability.



Climate system:

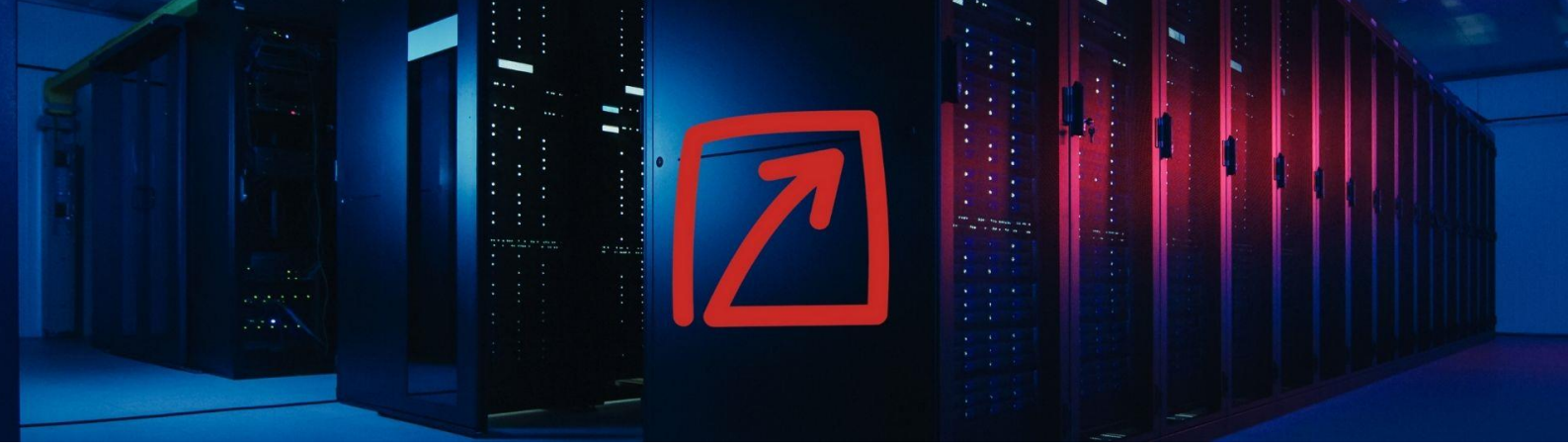
- Installed capacity: 3020 KW
- Chillers: 3 x 637kW and 2 x 550kW
- new chillers 6+7 (2013): additional 2x 550 kVA
- Recirculating air cooling units: 65 EDP air conditioning cabinets

ODC21 & upstreamNet Connectivity

In addition to the integration of the ODC21 into the dark fiber ring of the upstreamNet VIX (University) - VIX2 (InterXion) - RDH (Datacenter I) and thus into the international network of AS8218 (4x10G from Vienna to Frankfurt or Vienna to Paris, path redundant) we can provide single wavelengths as well as dark fiber direct connections ODC21-RDH. In addition to the state-of-the-art building equipment, optional security measures such as redundancy in the machine itself, redundancy through mirroring and clustering to other data centers as well as protection against hackers (connection to the Internet) and internal security measures (manipulation) are also available.

Excerpt from the provider list of third-party providers connected to the ODC21:

A1 Telekom Austria, AT&T, British Telekom, Cable Runner, Colt, Nextlayer, Onstage, Türk Telekom International, T-Systems, Hutchinson, Magenta, Verizone, Wienstrom, Xpirio



Current expansion plan

The modular expansion planning makes it possible to meet the customer's wishes up to an own cage area incl. access control. In addition to the standard connections 16A/230V and 32A/230V or 400V, the media fiber and copper to both provider rooms of the data center, the upstream in the ODC21 also offers placement options for racks up to a depth of 120cm. Details about setup and costs on request.