

IST-IX Overview

HASIM INAL, OPERATIONS AND SERVICES MANAGER

Terremark Worldwide



- Leading global provider of managed IT infrastructure services
 - Colocation services
 - Network & connectivity
 - Managed hosting
 - Cloud Computing
- Sophisticated technology platform
 - Top-tier, purpose-built, carrier-neutral datacenters
 - Access to more than 160 global network carriers
 - Infinistructure® utility computing platform
 - digitalOps[®] service delivery platform
- VMware Service Provider of the Year 2009
- Listed in Gartner Magic Quadrant, Web Hosting and Hosted Cloud System Infrastructure Services (Leaders Quadrant)
- 50 facilities on all over the world











Global footprint of top-tier datacenters

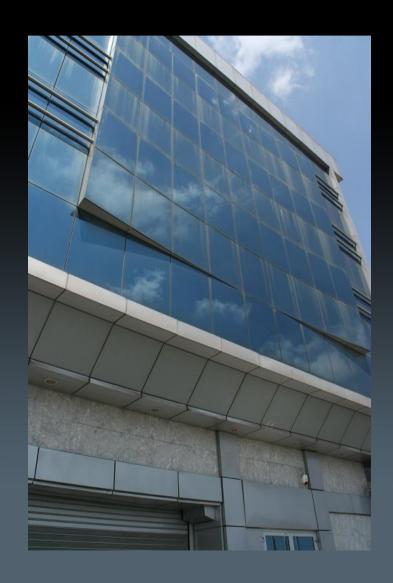




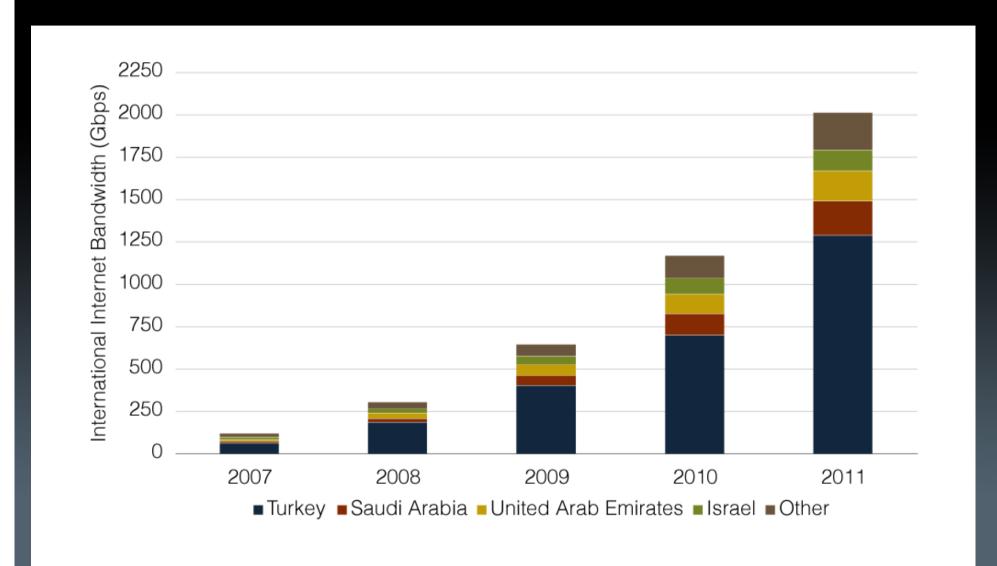


Terremark NAP of Turkey

- 150 m² of collocation space immediately available, expandable to 1600 m²
- Global connectivity from multipe international carriers
- Redundant fiber connectivity from multiple national operators.
- Hosts IST-IX, the region's only carrier neutral peering point.
- 24X7 on-site security personnel



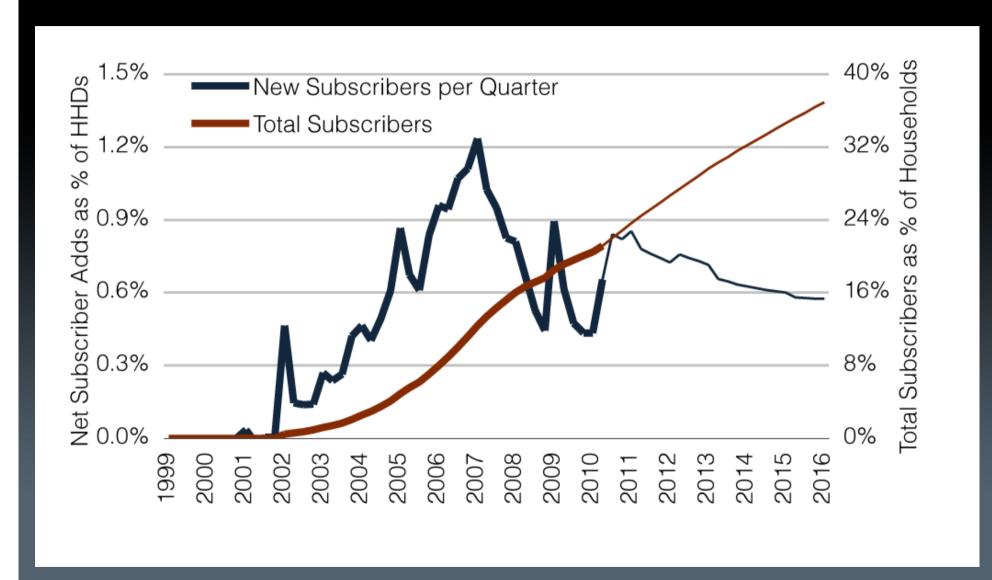
Middle East International Internet Capacity



Source: Telegeography

- %88 of Middle East traffic goes to Europe.
- Intra-regional connectivity in the Middle East, folded 18 times increase between 2007 and 2011.
- International Internet capacity deployments in the Middle East should continue to grow at a rapid pace in the coming years due to two factors
 - increasing broadband penetration
 - and declining capacity prices.

Middle East Broadband Subscribers and Penetration Rate, 1999–2016



Source: Telegeography

Introducing IST-IX

- IST-IX is Turkey's only carrier-neutral peering point.
 - Currently has fiber connectivity from Turk Telecom, Superonline(Turkcell), Borusan Telekom(Vodafone) and Telecom Italia.
- Tier 3 data center infrastructure
 - Fully redundant critical infrastructure
 - Centralized Meet Point Room to enable connections between all tenants
 - Open policy for fiber network connectivity.
- Unique security infrastructure that provides the most secure location for exchange of IP traffic.
- Multi-Layer Options for public and private peering connections
 - Private Peering Options Optical, Ethernet
 - Public Peering Options Ethernet (100, 1,000 and 10,000 Mbps)
 - We are cooperating with Vodafone to install an peering system in the next 30 days.
- IST-IX is already serving now!!

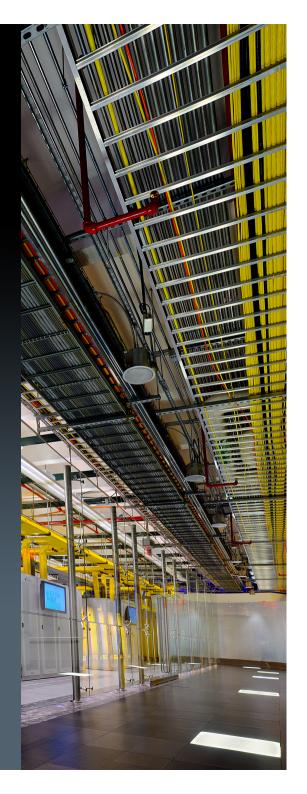
Redundant Power

- Electricity Supplied at 31.5KV to the facility from BEDAS, Istanbul power distribution utility
- Facility is in a redundant electrical supply ring.
- 2:1 Redundant Schneider Electric 1250 KVA 34KV to 400 V Transformers
- 1+1 Redundant 600 KVA UPS for 220V AC Uninterruptable AC Power
- Redundant (1+1) 800 KVA Generators.
- Automatic Generator Start and Switchover Setup in case of BEDAS Power failure
- 3M BTU installed cooling capacity



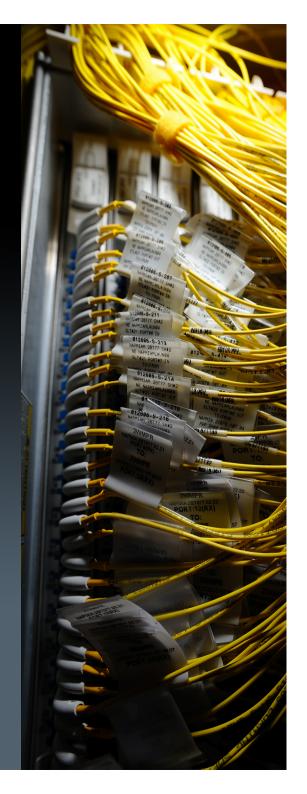
Collocation Services

- Installation Services
 - Equipment handling
 - Cable management
 - Inventory management
- Relocation & Redeployment Services
 - Assist with migrating and deploying systems
- Collocation Services
 - Caged space or cabinet options
 - Power, environmental SLAs
 - Scalable, flexible configuration options
- Remote/Smart Hands
 - Outsourced solution for onsite maintenance, management, testing



Connectivity Services

- Exchange Point Platform
 - Offers easy access to leading global telecommunications carriers
 - "Zero-mile connectivity"
- Public & Private Peering Services
 - Optical ring termination/ADM services
 - Network monitoring services
- Network Engineering Services
 - Project-based engineering, design & planning services
- Managed Network Access/MRS
 - Single point-of-contact for transport procurement & management
- Network Monitoring Services



Current Status

AS Numbers connected to the peering exchange.

Company	AS Number
Renesys	64597
Packet Clearing House	3856
ICANN - L-Root	20144
Terremark	23148
Invitel	8696
SuperOnline(Turkcell)	34984
Global(Turkcell)	34104
Borusan-Vodafone Alternatif	15924

Summary

- Terremark's NAP in Istanbul
 - Hosts IST-IX, the region's only carrier-neutral IXP
 - 150 m² of colocation floorspace available now
 - Global connectivity from multipe regional carriers
 - Carrier-neutral and a competitive marketplace of connectivity that attracts content providers & delivery networks
 - SLAs guaranteed availability
 - Connected to a network of NAPs
- Full suite of Managed Infrastructure Services
 - Colocation
 - Peering
 - Network & Connectivity
 - Security