

AT&T Enterprise Hosting Services

Irvine, CA
Internet Data Center



Last Update: 09.25.2008



The Right Hosting Infrastructure



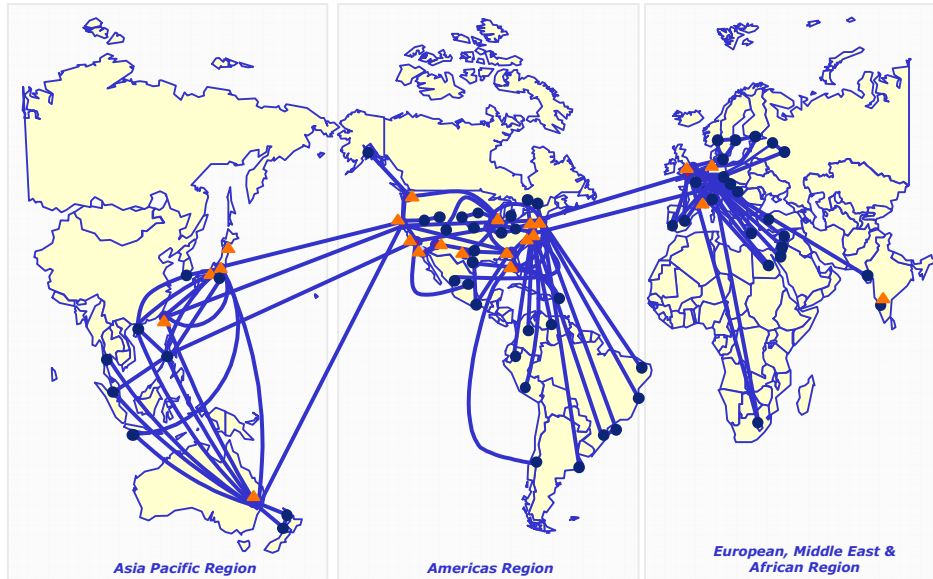
The Reliability, Scalability, Security and Skill for Mission Critical Applications

AT&T IDC Locations:

Annapolis Area, US
 Atlanta Area, US (2)
 Bangalore, IN
 Boston Area, US
 Chicago Area, US (2)
 Dallas Area, US (2)
 Los Angeles Area, US (2)
 Miami Area, US
 Nashville Area, US
 New York Area, US
 New York Metro Area, US (2)

Orlando Area, US
 Phoenix Area, US
 San Diego, US
 San Francisco Area, US
 San Jose Area, US
 Seattle Area, US
 Washington DC Area, US
 Amsterdam, NE
 Birmingham, UK

Frankfurt, DEU
 London, UK
 Nice, FR
 Paris, FR
 Hong Kong, CH
 Osaka, Japan
 Shanghai, CH (3)
 Singapore, SG
 Sydney, AU
 Tokyo, JP (3)
 Toronto, Canada



- 38 Internet Data Centers in 11 Countries (40 IDCs by End of 2008)
 - Directly Integrated with AT&T Global Network
- In Region Network Operations and Customer Support Centers
- 24x7x365 Proactive Monitoring & Management Services
 - Network, Systems & Applications
- Server, Facility & NOC Security
- Flexible Connectivity Options
 - Ethernet, Fast Ethernet, or Gigabit (ICB)
 - Ethernet Committed Information Rates

● Global IP Node
 ▲ GIDC

AT&T Internet Data Center

Network Architecture

- AT&T Internet Data Centers Have Redundant Dual Uplinks Directly Connected to our Global IP Backbone
- Designed For Flexibility To Meet Your Network Requirements
- Minimum N+1 Redundancy Factor on all Critical Infrastructure Systems
- Internet Connectivity Available to Customer Cage or Rack Via Ethernet Handoff
- Multiple Local Carriers Available For Customers Private Connectivity

AT&T Internet Data Center

Security

All Internet Data Centers are Located Within Hardened Facilities Protected by Multiple Security Measures:

- 24x7x365 On-Premise Support
- Continuous Closed Circuit Video Surveillance
- Security Breach Alarms
- Electronic Card Key Access to floor, customer cage and cabinets
- Customer Door alarms
- Biometric Palm Scan and Individual Personal Access Code
- Secured Cage & Cabinet Environment



AT&T Internet Data Center

Fire Detection & Suppression

Very Early Smoke Detection Apparatus (VESDA)

- State-of-the-art active laser air sampling system
- 100 times more sensitive than conventional fire detection systems
- Configured to generate multiple alarms to provide the time needed to help minimize or prevent loss from fire

Conventional Smoke and Heat Sensors

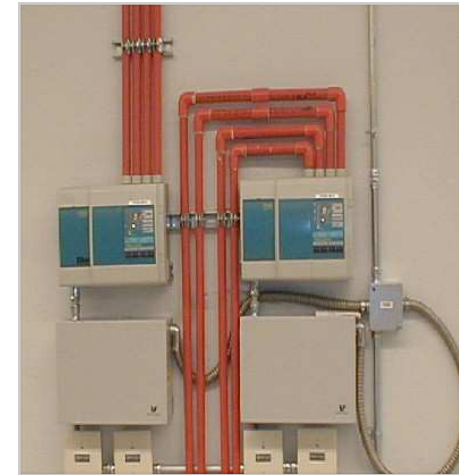
- Cross-zoned throughout the center on the ceiling, below the raised floor area, top of CRAC units, UPS rooms, etc...

Fire Extinguishers

- Located on the center floor for human intervention

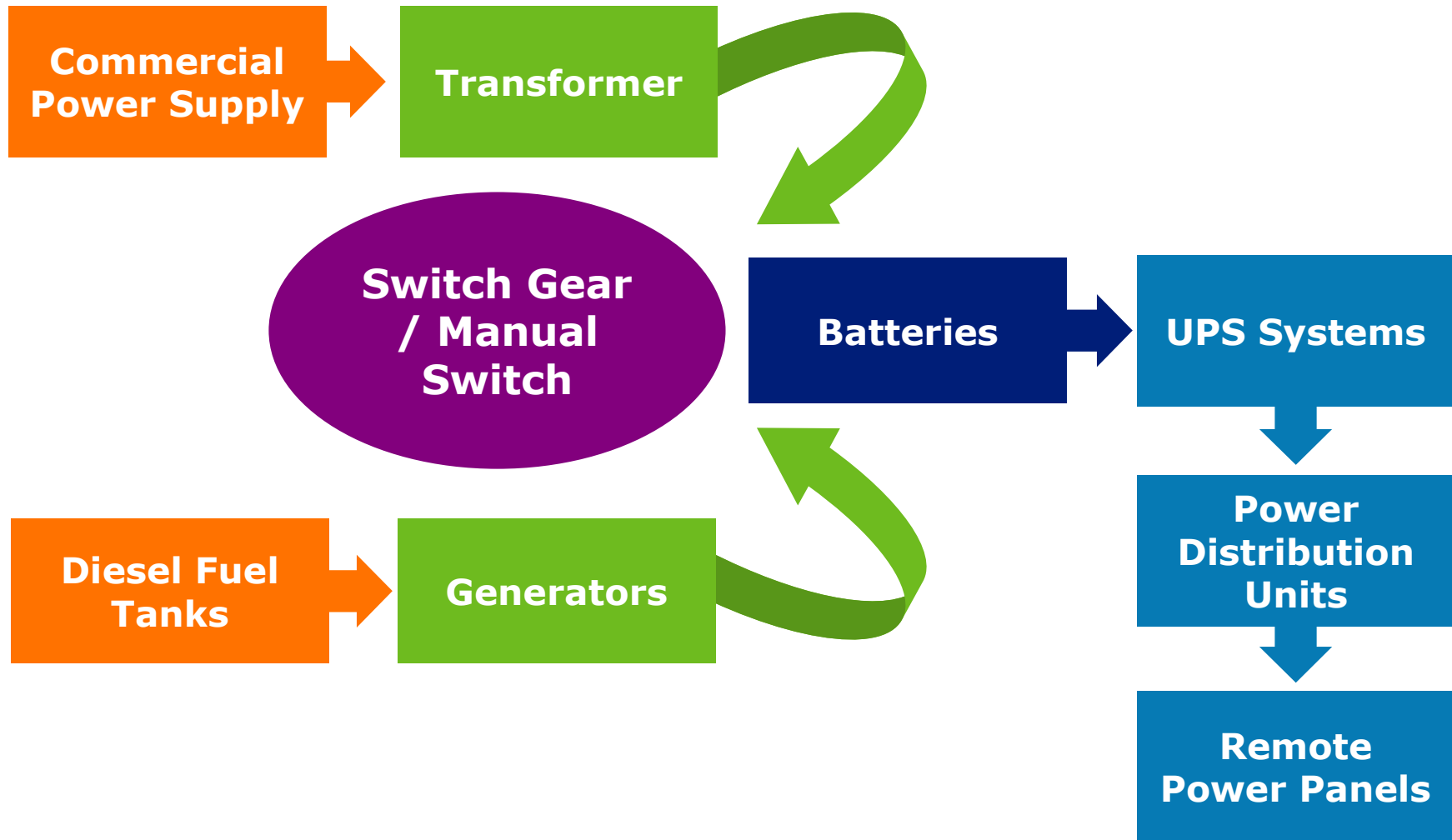
Pre-Action Dry-Pipe Fire Suppression System

- Water not stored in pipe
- Easier to control, more effective, and less harmful to equipment than chemical alternatives



AT&T Internet Data Center

Power



AT&T Internet Data Center

Power



Commercial Power Feeds

- (8) 2,500 kVA transformers at the site fed from commercial power utility service. 1 for each line-up
- Located Near Substation
- All Cable Routed Underground for Protection

AT&T Internet Data Center

Power



Emergency Power Switch

- Automatically Powers Up All Generators When Commercial Power is Interrupted for More Than 15 Seconds; Generators are Shed to Cover Load As Needed; Typical Transition Takes 60 Seconds
- Manual Override Available to Ensure Continuity if Automatic Start-Up Should Fail

AT&T Internet Data Center

Power



Batteries

- Two (2) Battery Rooms Support The UPS Systems
- Each Battery Bank Contains liquid Cell Batteries Per UPS Module
- Fifteen (15) Minutes of Battery Backup Available At Full Load (I.E. 100 Watts/Square Foot)
- Battery Bank Testing Machines Continuously Monitor Each Battery Bank To Ensure Optimum Operating Availability

AT&T Internet Data Center

Power



Uninterruptible Power Supply (UPS)

Eliminate Spikes, Sags, Surges, Transients, and All Other Over/Under Voltage and Frequency Conditions, Providing Clean Power to Connected Critical Loads

- Two (2) Separate UPS Systems (N+1 Redundancy)
- Supporting each lineup are (3) 300kw - UPS modules. N+1 at a module level.
- Each UPS system is rated for 1,200 kW critical load.

AT&T Internet Data Center

Power



Back-up Power – Generators and Diesel Fuel

- Eight (8) 2,000kw Diesel Generators (N+1 Redundancy) Providing Standby Power
- Generator "A & F" is our "Catcher"
- Three (3) 30,000 Gallon Underground Diesel Fuel Storage Tanks

Irvine IDC

Site Specifications

- 186,042 Total Gross Square Feet
- 77,128 raised data center floor space
- Customer Lounge Facility and Customer Conference Room
- Equipment Staging Area
- Internet Data Center Raised Floor Expands the Entire Computer Room Area
 - Allowable Floor Loading Is 300 Pounds Per Square Foot
 - Tiered Housing of Network Cabling, Water Pipes, Electrical Wiring, VESDA, and Leak Detectors
- Designed To Meet Industry Standards
- Minimum Of N+1 Redundancy Factor

Why AT&T Internet Data Centers?

- Rich portfolio of flexible solutions
- 38 IDC's in 11 Countries that meet the demands of multinational clients looking for international coverage
- Flexibility to accommodate new technologies as they are introduced
- Ability to Extend Several Services to Client Premises or Other Data Centers
- Scalable and Flexible Pay-As-You-Go Options to Meet Customers' Changing Business Needs
- AT&T BusinessDirect® Portal providing customers with personalized, secure access to detailed reports about your Hosted Infrastructure and applications to better align with your business planning

Performance

Event correlation across network, systems and applications to isolate and cure root cause issues

Agility

Virtualized and real-time adaptive IT environments with ability to set performance requirements at transaction level

Control

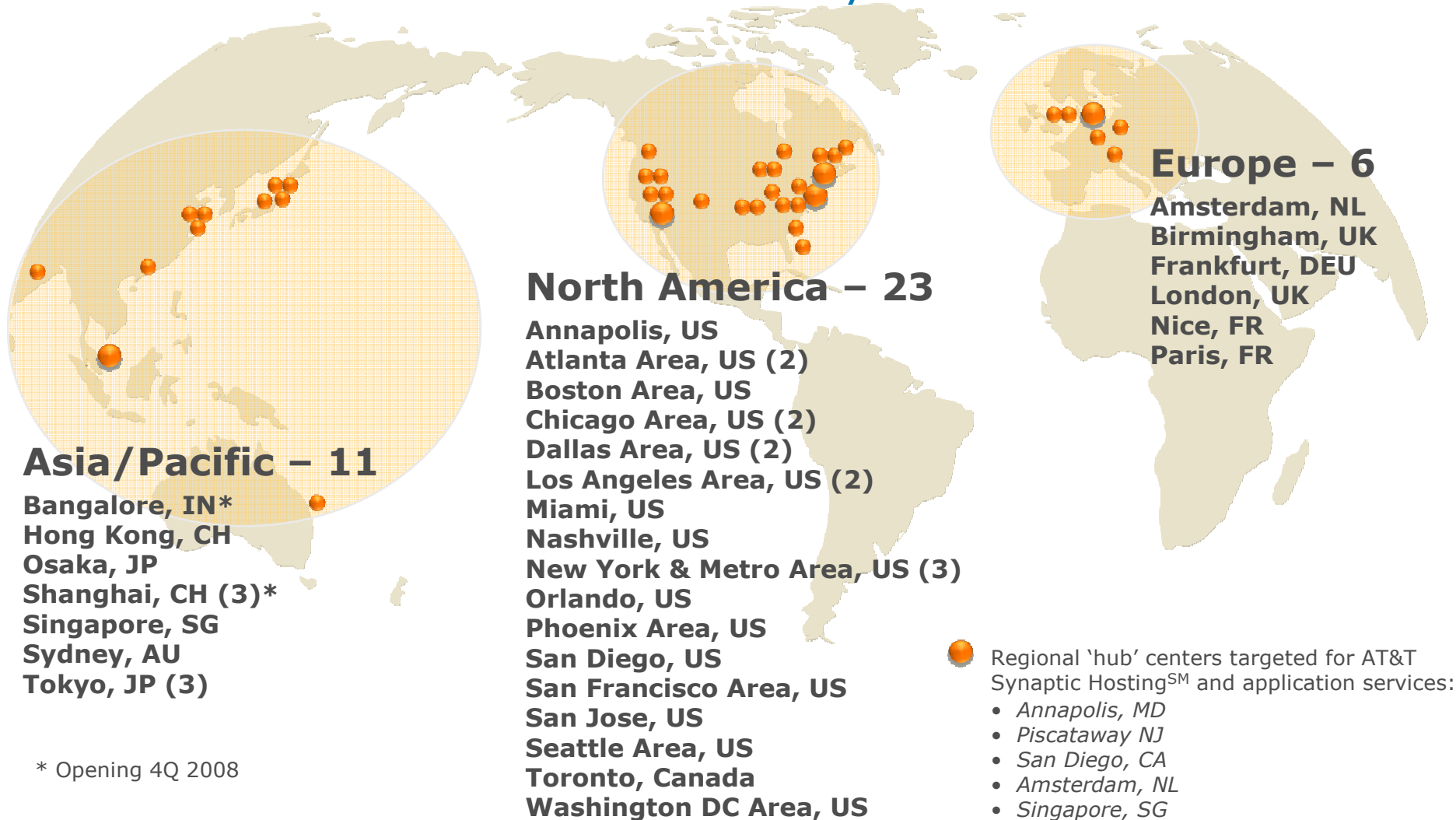
Policy engine control at the user and application level

Security

Network-based denial of service prevention, hosted firewall, intrusion detection and anti-virus options

Global Data Center Footprint- 38 IDCs

40 AT&T Internet Data Centers by End of 2008



**Additional Back of House Slides
If Needed**

