Microsoft's Cloud Infrastructure

Datacenters and Network Fact Sheet
June 2015

Who we are

Microsoft Corp. delivers more than 200 cloud services, including Bing, MSN, Outlook.com, Office 365, OneDrive, Skype, Xbox Live and the Microsoft Azure platform. These services are hosted in Microsoft's cloud infrastructure composed of more than 100 globally distributed datacenters, edge computing nodes, and service operations centers. This infrastructure is supported by one of the world's largest multi-terabit global networks, with an extensive dark fiber footprint, that connects them all.

What we do

Microsoft provides cloud services to customers 24x7x365, and the Microsoft Cloud Infrastructure and Operations' team designs, builds, operates and helps secure every facet of the infrastructure. Since opening our first datacenter in 1989, we have invested more than $15 billion on our infrastructure and remain focused on delivering reliable, scalable and security-enhanced online services, while efficiently managing operations and costs as we grow.

Microsoft's cloud infrastructure strategies

- **Reliability.** Delivering services at huge scale requires a radically different approach to designing, building, deploying and operating datacenters. When software applications are built as distributed systems, every aspect of the physical environment — from the server design to the building itself — creates an opportunity to drive systems integration for greater reliability, scalability, efficiency and sustainability. For more information on Microsoft's resilient software strategy and how cloud workloads have changed the way we design and operate datacenters, please read the Cloud-Scale Datacenter strategy brief and listen to our cloud engineer's presentation.
- **Security and compliance.** Microsoft is committed to helping keep customer data secure, maintain privacy and meet compliance regulations, while providing high service availability. We have risk-based information security and privacy controls and a compliance framework to ensure that our infrastructure meets our commitments while helping customers meet their complex compliance requirements. For more on Microsoft's security and compliance efforts, please read the Securing the Cloud Infrastructure strategy brief and listen to our cloud security expert's presentation.
- **Environmental sustainability.** Microsoft is investing in the development of software and technology innovations to help people and organizations improve the environment and reduce their impact upon it. We continue to evolve our datacenter operations and build technologies to improve our efficiency, while sharing sustainability best practices with the industry. For more information on Microsoft's sustainability efforts, please read the Datacenter Sustainability strategy brief and listen to our cloud energy strategist's presentation.

Microsoft's cloud infrastructure by the numbers

- **1989:** The year Microsoft opened its first datacenter on its Redmond, Washington campus.
- **90-plus:** The number of marketplaces that our cloud services are available in today.
- **200-plus:** The number of online services delivered by Microsoft's datacenters 24x7x365.
- **$15 billion-plus:** Microsoft's investment in building our huge cloud infrastructure.
- **1 million-plus:** The number of servers hosted in our datacenters.
- **100-plus:** The number of datacenters Microsoft has in its global cloud infrastructure portfolio.
- **30 trillion-plus:** The number of data objects we store in our datacenters.
- **1.5 million-plus:** The average number of requests our networks process per second.
- **3:** The number of times Microsoft's fiber optic network, one of North America's largest, could stretch to the moon and back.
- **1.125:** Microsoft's average PUE for its new datacenters. Power usage effectiveness (PUE) is a metric of datacenter energy efficiency and is the ratio of the power and cooling overhead required to support our server load. The industry average is 1.8.
- **2.3 billion kWh:** The amount of green power purchased by Microsoft as part of our carbon-neutral goal — ranking as the third most purchased by any U.S. company, according to the U.S. Environmental Protection Agency.
- **16:** The number of carbon offset projects Microsoft has invested in, including projects in Brazil, Cambodia, China, Guatemala, India, Kenya, Mongolia, Peru, Turkey and the United States. (including Keechi Wind Power investment announced November 4, 2013)
- **100 percent:** The percentage of our servers and electronic equipment that we send to a third-party vendor for recycling and/or reselling after it has been securely decommissioned.
- **2007:** The year Microsoft began sharing its best practices for cloud infrastructure with the industry. Download our latest Top Ten Best Business Practices for Environmentally Sustainable Datacenters white paper.

Microsoft's datacenters

Microsoft has both owned and leased datacenter capacity to support customers in regions throughout the world. Microsoft's global network of datacenters include more than one million servers in more than 100 datacenters, including Amsterdam; Australia; Boydton, VA; Brazil; Cheyenne, WY; China; Chicago, IL; Des Moines, IA; Dublin, Ireland; Hong Kong; Japan; Quincy, WA; and San Antonio, TX.

For more information:
Visit www.microsoft.com/datacenters and our team blog
Watch our datacenter tour video
For more information, press only: Rapid Response Team, Waggener Edstrom Worldwide, 1-(503)-443-7070, rrt@waggeneredstrom.com