

# **KDDI-Global Networks and IT Solutions**

Networking, Colocation, System Integration around the world



# BUILDING YOUR BUSINESS TOGETHER

# KDDI solutions are at the cutting-edge in all fields of information and communications

KDDI, a Fortune Global 500 company, is one of Asia's largest telecommunications providers, with approximately US\$48 billion in annual revenue and a proven track record extending over many years and around the world. We deliver all-round services, from mobile phones to fixed-line communications, making us your one-stop solution provider for telecommunications and IT environments. The high praise and trust enjoyed by our TELEHOUSE data centers positioned around the world have kept us at the forefront of service and quality.

Since our establishment in 1953, we have expanded our presence into 28 countries and 60 cities, with over 100 offices around the world supporting the success of our international customers through our high quality services.

KDDI's mobile telephone brand "au" has achieved significant market share in Japan, one of the world's most comprehensive communications markets.

KDDI's relationship with over 600 carriers worldwide enables us to provide high-quality international network services in over 190 countries. Our exciting ventures, built on extensive experience, include investment in the "South-East Asia Japan 2 Cable", which connects 11 locations in 9 countries and territories in Asia. Moreover, as the world moves toward the age of IoT and 5G, KDDI is taking steps to promote IoT business, such as connected cars, support for companies engaged in global business, and the creation of new value for our society.

Our contributions to customers' businesses through cutting-edge technologies, seamless networks and a ubiquitous, powerful IT infrastructure will continue to propel us going into the future.

#### **KDDI leading the way in Global Business**







Approx. \$48B in Sales





Over 40 sites
TELEHOUSE Data Center



**Global Network Coverage** 





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#### KDDI provides reliable, trustworthy business support

KDDI's top-class network throughout Asia — along with a global system of affiliates — delivers a seamless network environment tailored to your particular business. As well as global networks, we also provide local network provisioning services and maintenance support within EMEA, the Americas and Asia. To guarantee a reliable and stable network, our Global Network Operations Center in Ho Chi Minh City, Vietnam, provides 24/7 maintenance services for our international network.

#### KDDI Backbone, Connecting the World



#### EMEA\* — ASIA

KDDI holds capacity on multiple cables giving us the ability to create proposals mixing and matching routes, including the low-latency RJCN cable connecting Asia and

**ASIA** 

SJC and SJC2\*2, connecting Japan and Singapore, covers the entire Asian region, including South Korea, China, Taiwan, Hong Kong, the Philippines, Brunei, Singapore, Vietnam, Cambodia and Thailand.

#### AMERICAS — ASIA

KDDI connects Japan and the US using 2 cables - UNITY, with the shortest route, and FASTER, with huge capacity.

- **★**1: Europe, the Middle East and Africa





#### **Diverse Network**

#### KDDI Global IP-VPN

A full mesh global network can easily be built with just local access from each site — by deploying KDDI's Global IP-VPN to over 190 countries. The security and high quality of our IP network services deliver extensive scalability and flexibility, resulting in speedy development of global networks tailored to your business. Using highly secure MPLS technology in building our flexible services, we deliver the best network environment possible for each individual customer. KDDI also provides fully managed Internet access (IP-SEC Type) for companies with low traffic volumes or as a backup circuit. Internet gateways from our global backbone enable a reliable and cost-effective global VPN service.

#### International Private Leased Circuit (IPLC)

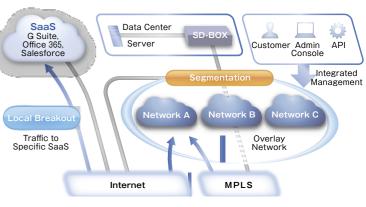
Point-to-point service that connects two fixed locations anywhere on earth, with IPLC allowing dedicated communications 24/7. Unlike public networks, IPLCs will not be affected by any network congestion and so provide a stable connection. We support your business by providing full service — from ordering, through circuit construction to operations and maintenance.

#### **KDDI** Internet Gateway

KDDI provides wide-area, low-latency Internet connections using a high-capacity global backbone connecting major international cities through its TELEHOUSE data centers. Recommended for customers expanding their business internationally and requiring high-capacity and high-quality global IP transit service.

#### KDDI SD-Network Platform

KDDI SD-Network Platform is a network virtualization solution using SD (Software Defined) technology. By installing a dedicated device in the customer's office, customers can get access to specific public cloud services directly over the Internet from their offices, distribute traffic for a pleasant, low-latency cloud experience, and save money that would otherwise be spent on establishing private lines. Available in 37 countries\*1, KDDI SD-Network Platform supports enterprises in optimizing their networks in order to adapt to various business environmental changes, such as growing cloud service usage, an increasing number of overseas offices, and ongoing global business expansion.



\*Features to be added as they Branch Site

\*1: As of October 2019

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# TELEHOUSE DATA CENTER

#### Superior data centers to protect your invaluable IT assets

Our TELEHOUSE data centers provide both shared and dedicated space to fulfill your needs, especially if you are expanding internationally, and looking for a highly trusted partner to create a secure IT environment. Putting our entire energy behind securing your data, TELEHOUSE provides a highly redundant power and cooling system, with 24/7 maintenance



#### **TELEHOUSE Interconnect**

TELEHOUSE brings together more than 3,000 business partners, including 800+ carriers/ISPs; mobile, and content providers, enterprises and financial services companies. With Cloud Interconnect (connections into cloud providers) and Carrier Interconnect (connections to telecom providers), TELEHOUSE provides fast, efficient and secure interconnections within our data centers, empowering you to globally expand your business seamlessly. TELEHOUSE co-locates 5 major Internet Exchanges around the world — in New York, London, Paris, Hong Kong and Tokyo — that are critical to routing global traffic.

#### Internet Exchanges in TELEHOUSE Data Centers

- LINX (London)
- NYIIX (New York, Los Angeles)
- France-IX (Paris)
- JPIX (Tokyo)
- DE-CIX (Frankfurt)
- HKIX (Hong Kong)

#### Standardized data centers worldwide

By defining and introducing our own "Global TELEHOUSE Standards" based on over 30 years of experience in the data center business, we ensure the same high level of quality is maintained at all of our data centers across the world, and that an operational rate of 99.999% \*1 is maintained under our SLAs.

#### **TELEHOUSE Cloud Link**

TELEHOUSE Cloud Link provides a direct, private and secure connection between your networks and public cloud services. This allows you to access multiple cloud providers through a single connection, simplifying and speeding up data transfer.

#### Available cloud providers in Telehouse\*2

- Amazon Web Services
- Microsoft Azure
- Office 365
- Google Cloud Platform
- Alibaba Cloud (Alivun)
- Oracle Cloud
- IBM Cloud

#### The latest environmental technology

TELEHOUSE is playing our part in reducing global warming and helping protect the global environment. TELEHOUSE is promoting energy conservation and greater efficiency ("Green IT") at each site the world over. In our latest TELEHOUSE London North Two data center, we have installed a vertical Indirect Adiabatic and Evaporative cooling system, significantly reducing power consumed for air conditioning, achieving a designed PUE of 1.16. With this, TELEHOUSE London won the 2017 Data Centre Solutions Awards (Data Centre Energy Efficiency Project of the Year category).

- \*1: Some sites excluded
  \*2: As of October 2019, TELEHOUSE Cloud Link is available in our New York, London, Paris, Frankfurt and Hong Kong facilities. Services and available cloud providers differ at each facility.







Germany Frankfurt



Chin

Shanghai Jinqiao



- · London East
- · London West
- · London North Two

#### **US West Coast** · Los Angeles

#### US East Coast

#### New York Teleport

- New York Chelsea

#### Global Footprint

40+ Data centers 10+ Cities worldwide 400,000 m<sup>2</sup> + Space

**US West Coas** 

Los Angeles

#### Germany Beijing • Frankfurt (4) Beijing BDA Beijing BEZ Russia Moscow Vietnam





- France · Paris Voltaire
- · Paris Jeûneurs
- Paris Magny-les-Hameaux (3)

# • Istanbul



Japan

Sendai

Oyama

• Tokyo (10)

• Nagoya (2)

Hong Kong Singapore Hong Kong CCC

Singapore

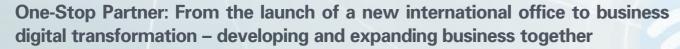


New York Teleport

**US East Coast** 

Hong Kong CCC

# SYSTEM INTEGRATION



When customers decide to take their business internationally, they come to us. We provide one-stop support, from the installation of office IT environment elements such as servers, LAN and PBX, to the provision of security measures, cloud access, SaaS, ERP, IT outsourcing, mobile solutions, Al and RPA.

In addition, as IoT advances and we move toward a world where just about everything is connected to the Internet, KDDI is working to provide an IoT Worldwide Architecture. We aim to offer the ability to gather and analyze a vast array of richly varied data from products, facilities and equipment, aiding the efforts of companies to create value such as new services and business models.

#### Office/Factory Relocation

- Implementation of network and IT environments for new offices and plants
- System installation and migration
- Business Continuity Plan (BCP) and Disaster Recovery (DR) measures

#### Security

- Security management consulting/IT investment evaluation
- Global IT governance/on-site investigation
- Cyber security/Information security
- Security against targeted attacks

### SaaS & Unified Communications (UC)

- Workstyle efficiency improvement with SaaS
- Multiple communication services
   (Cisco CUCM, Webex, Teams, Microsoft Skype For Business, etc.)

## Managed Services and Outsourcing

- ITIL (Information Technology Infrastructure Library) operation and management
- IT support help desk
- IT asset management
- Network equipment
- CISCO Gold Partner:
- KDDI Singapore
- KDDI Myanmar

#### loT

- Factory equipment visualization/Fault prediction
- Factory equipment operational rate visualization
- Digital on-site record-keeping, to replace paper records
- Inventory management/automatic ordering
- · Worker movement management
- People movement analyzer for commercial facilities
- Vehicle management
- · Surveillance camera management
- LoRaWAN
- Smart city solutions

#### Al / Data Analytics

- Advanced data analytics
- Machine learning, deep learning

#### **RPA**

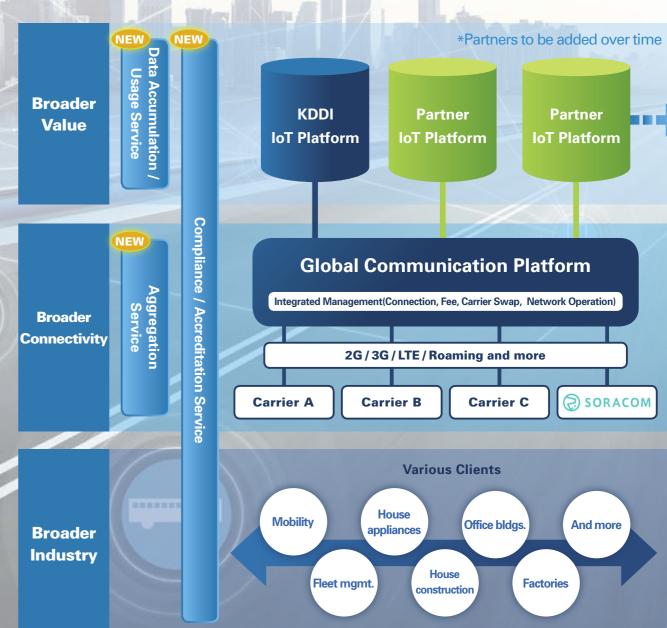
- Better efficiency by using software robots to automate routine work
- RPA + OCR
- RPA + Chatbot

#### Cloud

- Own infrastructure and backbone
- Superior stability and quality
- Hybrid (cloud & on-premise) cloud computing

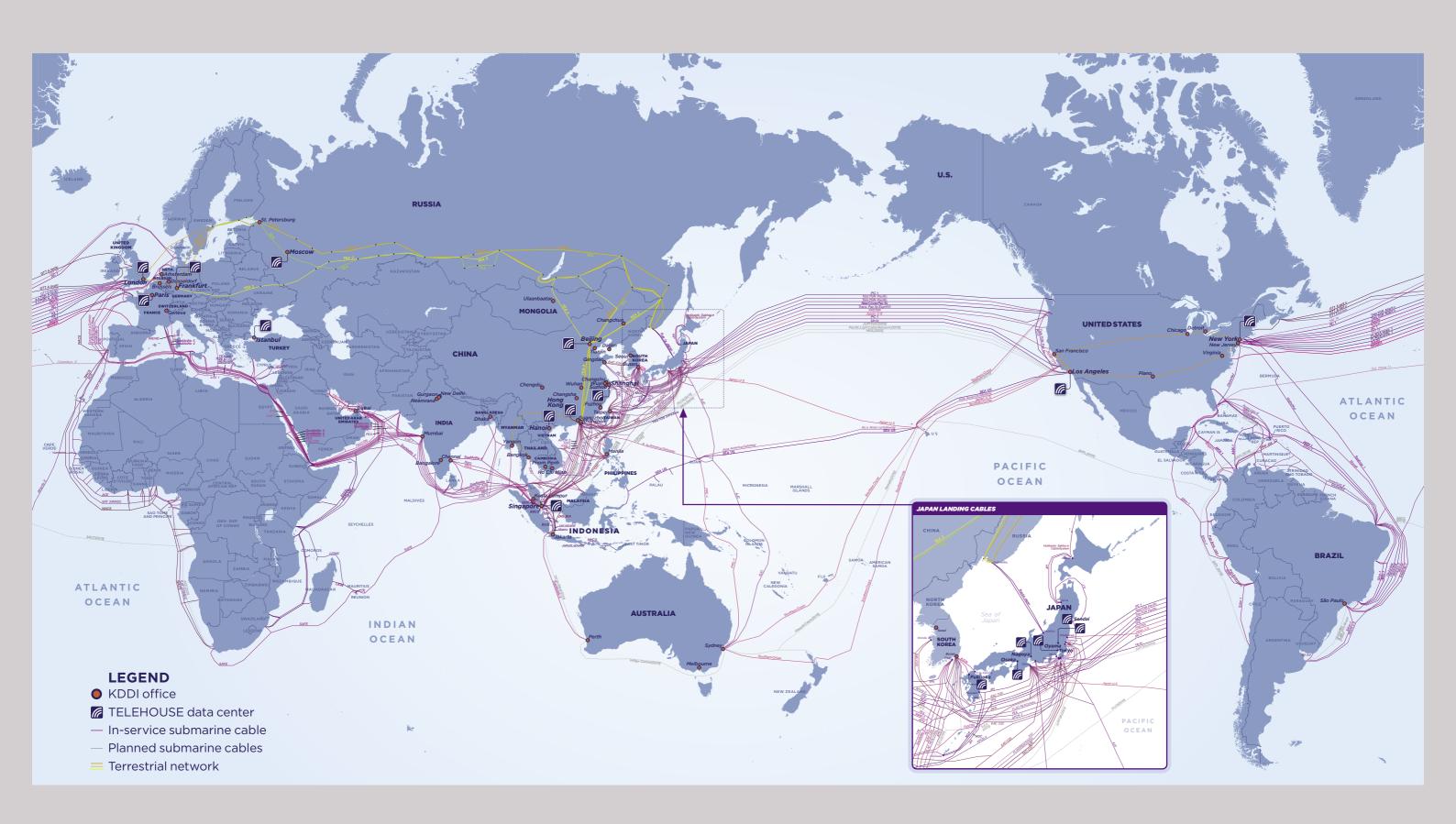
# KDDI IoT Worldwide Architecture

Global support for IoT device connectivity, data utilization, legal procedures, and more



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Over 100 offices in 28 countries and 60 cities worldwide
Approximately 5,900 employees working internationally to support
our customers' businesses





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