

Free Webinar

# How to leverage the speed of 5G to build secure and powerful business Internet?



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- 02 Business Internet Solutions
- 03 Demo: InCloud Manager
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01

# Scenarios of Business Internet



# Trends of Business Internet

## Multi-Cloud Workload

Business increasingly migrated from locally to public or private clouds



## Hybrid Workplace

Working locations are being flexible



## Business Continuity

Enterprises are seeking resilience of networking



## Complex Security

Increasingly complex environments require more for security



# | New Technologies of Business Internet



## 5G

Excellent user experience with high speed, low latency, and better connection



## SD-WAN

Flexible and low-cost control of the network by transferring the traffic management burden from physical devices to software



## NaaS

Saves time for deploying and maintaining self-owned networking infrastructure



## SASE

Secure Access Service Edge. SD-WAN local security features combined with cloud-centric security offer more comprehensive protection

01

## Access to Internet

- Speedy expansion of chains
- Hybrid offices becoming popular
- Remote work increasingly preferred
- Multiple terminals are interconnected in branch offices

02

## Network Stability

- Business increasingly managed in the cloud
- Critical applications
- Applications for remote working

03

## IT Unified Management

- Quick and mass deployment
- Quick troubleshooting
- Unified IT strategies
- Traffic priorities to critical business and applications
- Greater efficiency

04

## Wireless Network Services

- Customer Wi-Fi in stores
- Office employees connecting multiple terminals to Wi-Fi

05

## Cyber Security

- Network security in hybrid offices
- Complexity in wireless networks
- Sensitive data (e.g. transactions)
- Remote access to intranet resources

06

## IT Costs

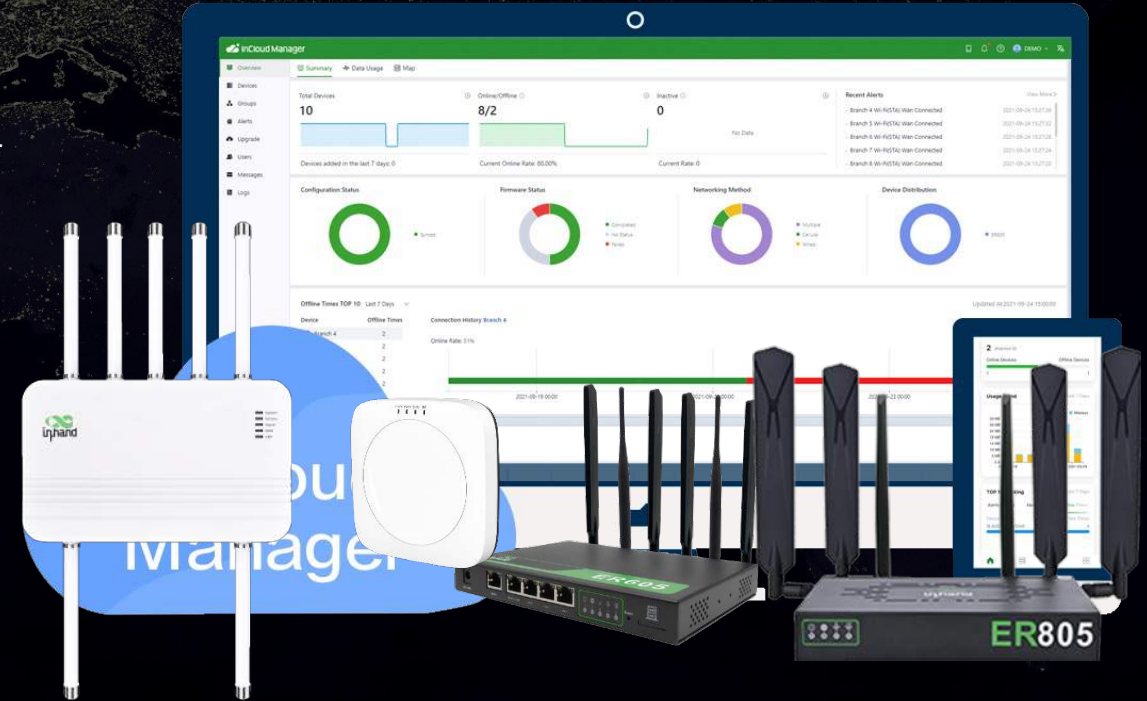
- Demand for more flexible networking solutions
- Cost of broadband and dedicated lines
- Costs of network deployment and maintenance

# Business Internet Solutions



# Cloud-Managed Networking Solution

The **InHand Cloud-Managed Networking Solution**, including edge routers, Wi-Fi AP, 5G outdoor unit, and InCloud Manager SaaS, offers fast, secure, simple, and convenient networking services, creates unlimited possibilities for business growth.



 Cloud-Managed

 IT Improved

 Deployment Simplified

 Experience Optimized

# Cloud-Managed Networking Solution

  
**InCloud Manager**  
Visualized Cloud


  
Full Lifecycle

  
Network Visualization

  
Application Insights

**Store Branches**


- 4G/5G cellular networks
- Link failover
- High performance
- Network fault diagnostics
- Zero-touch deployment
- Centralized management



**Internet**  
4G/5G

**Enterprise**

- SD-WAN
- Network security
- Traffic & data analysis
- Network visualization
- Intelligent operation
- Unified management



**Hardware**

  
5G Outdoor Unit

  
ER605  
5G Edge Router

  
ER805  
5G Edge Router

  
Wi-Fi 6 AP

**Coming soon**

# Six Core Values, One-Stop Management

## Flexible Access Network

Convenient network, and multiple networking methods, enabling the digital store business.

## High Availability

Worry-free network experience,  
Stable network for the digital business escort.

## SD-WAN

Intelligent link, real-time detection of network quality, rapid inter-branch networking.

## IT Unified Management

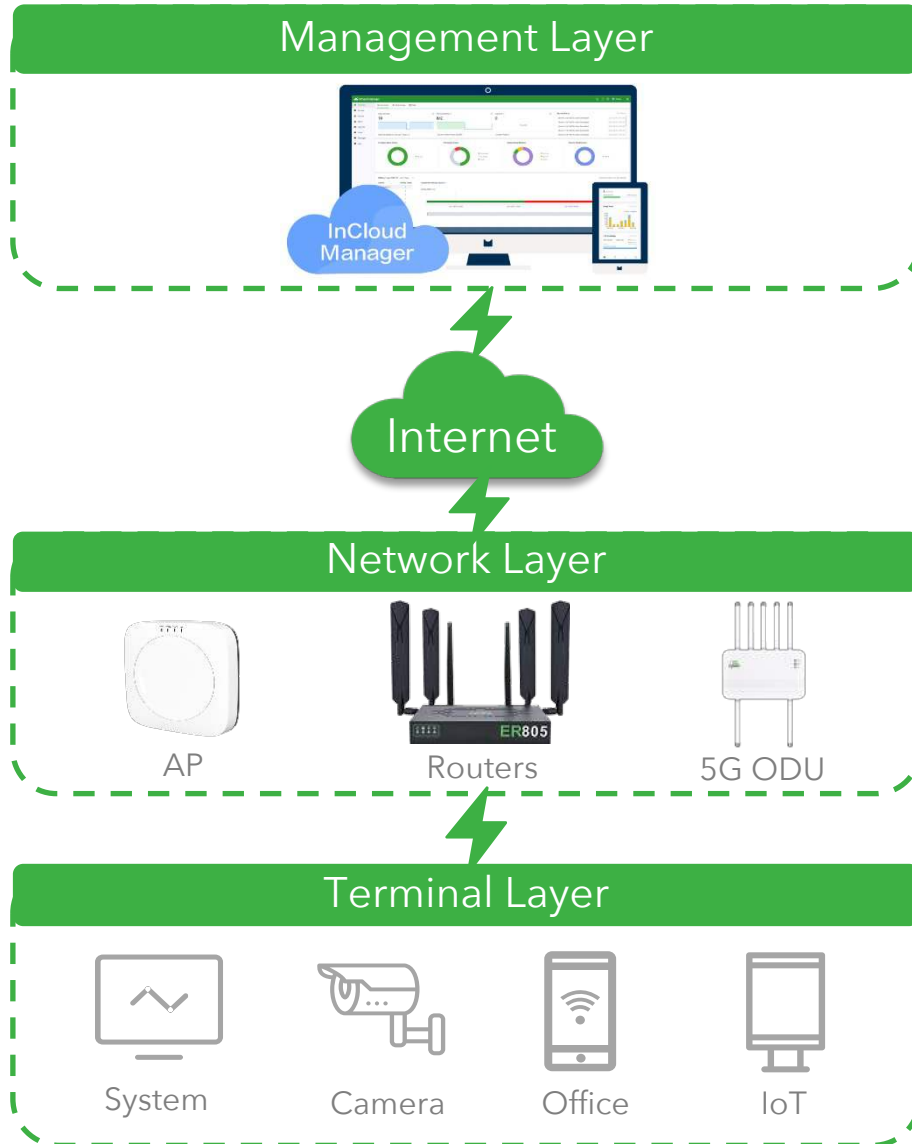
Visual and centralized portal, support business development always and everywhere.

## Wireless Network Services

Manageable visitor network,  
Improve the customers experience.

## Reduced Cost

Refined NetOps, and new SD-WAN technology enhance the IT efficiency and reduce cost.



**Challenge: With varying scenarios of business branches and increasing demand for connectivity, how to ensure Internet access?**

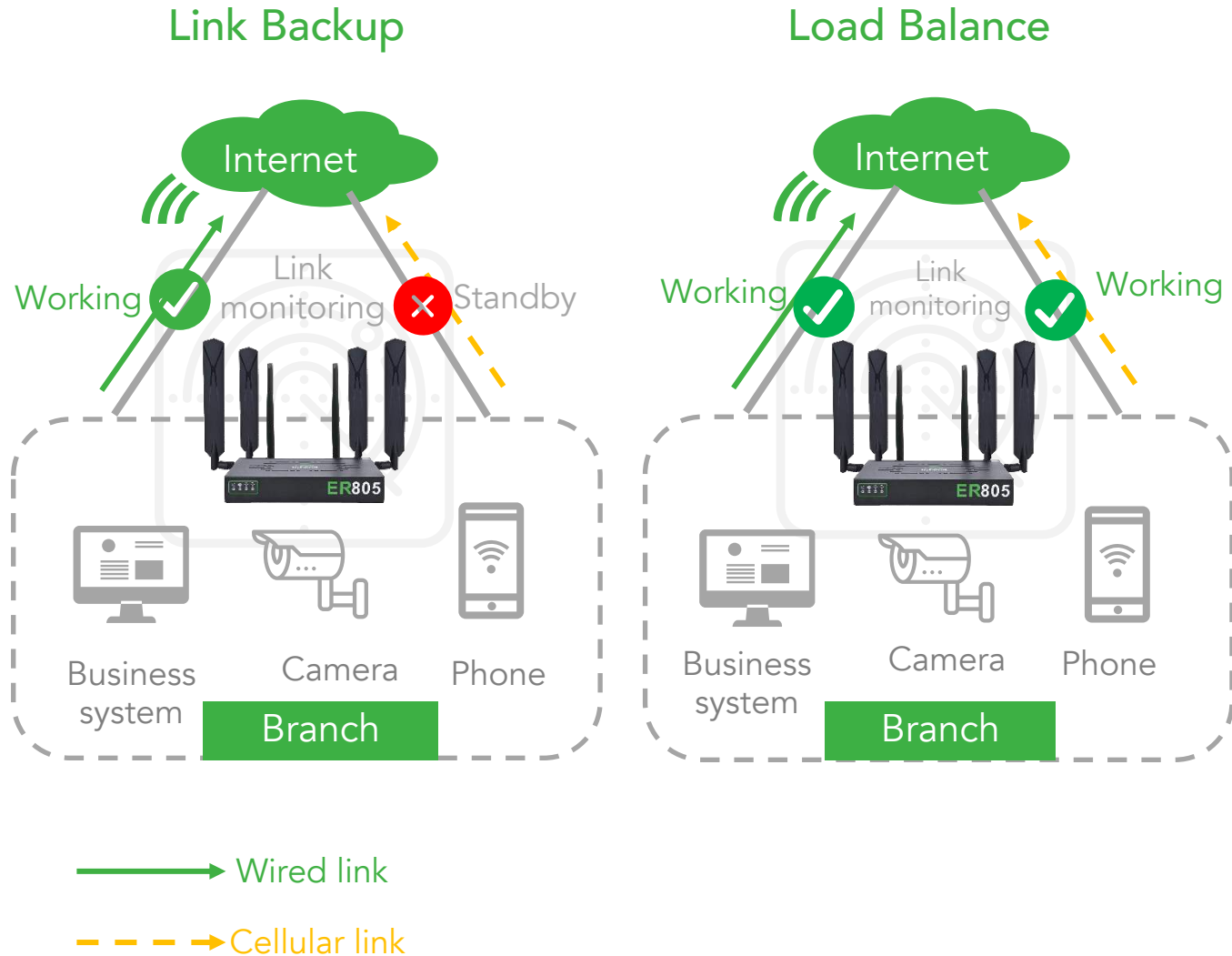
## Highly cost-effective networking equipment

- Multiple devices for varying branch sizes
- Available concurrently with wired, cellular and Wi-Fi
- Flexibly adaptable to various scenarios

## Zero-touch Deployment

- Cloud-based integrated design: easy deployment, lower costs, faster expansion
- Efficient deployment: simplified operations, reduced costs
- Easier collaboration: offline configuration, smooth IT/OT collaboration

# Network Availability

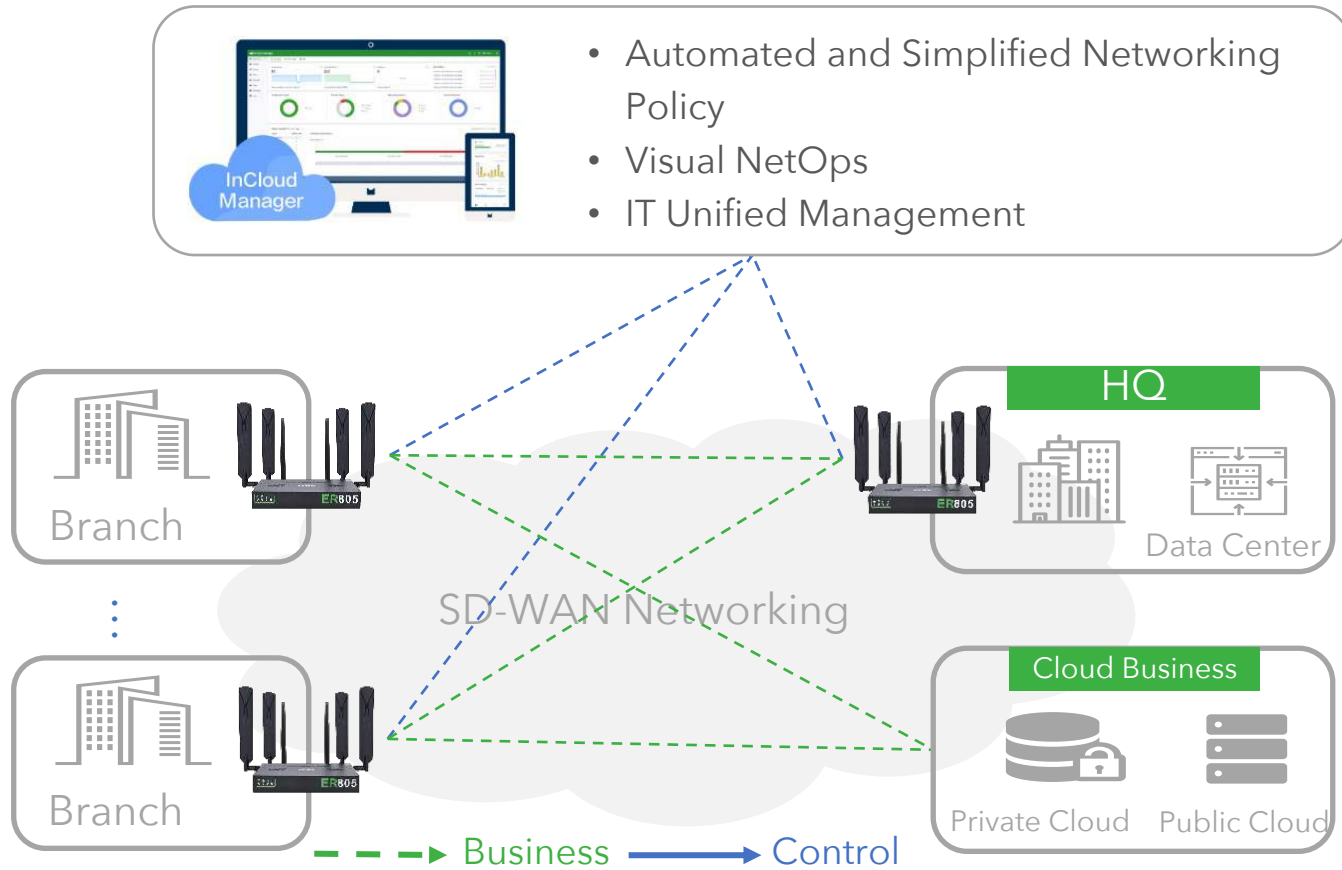


**Challenge: How to maintain network stability and ensure critical business?**

**Highly available "always on" redundant links**

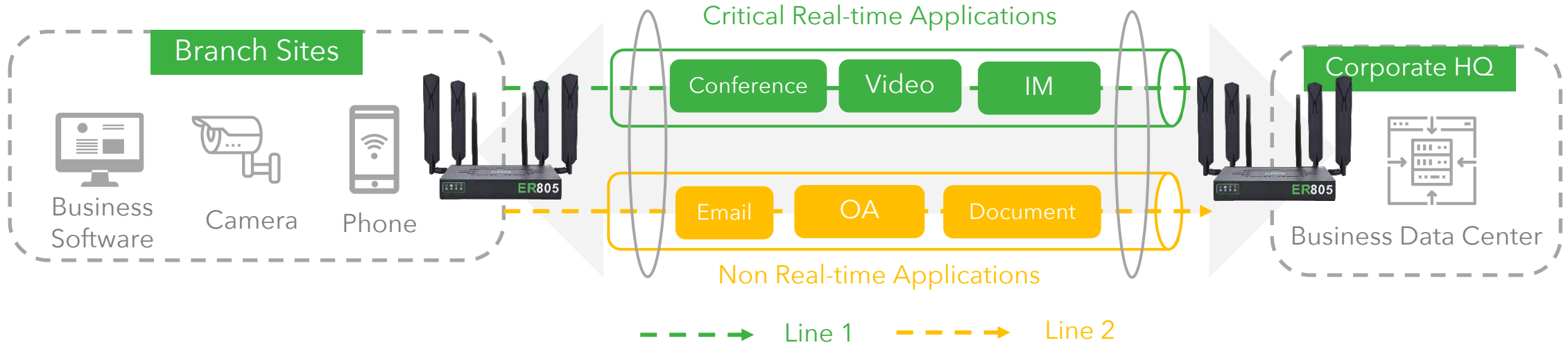
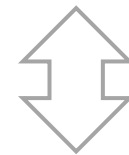
- Load balance on multiple WANs
- Failover between wired WAN and 5G
- Flexible QoS and Access Control List
- Source IP routing policy
- MAC address filtering

# SD-WAN, smarter network management



- Available with **wired, cellular, and wireless links**, seamless link switching, automatic failover
- **Multi-dimensional data visualization** for network insight and efficiency
- Simplified and efficient branch connectivity **without network expertise**, quick and easy network setup

# SD-WAN, smarter network management



# IT Unified Management

**Challenge: How to improve efficiency with centralized management?**



- Centralized management
- Remote diagnosis and troubleshooting, and network fault warning
- Fast response, fast diagnosis for remote terminals
- Multi-dimensional visualization data give deeper business insights

Internet



Branch



Branch



Branch



5G Outdoor Unit



SD-WAN Routers



AP



Business System



Camera

Monitoring Area



Digital Signage



Price Tag

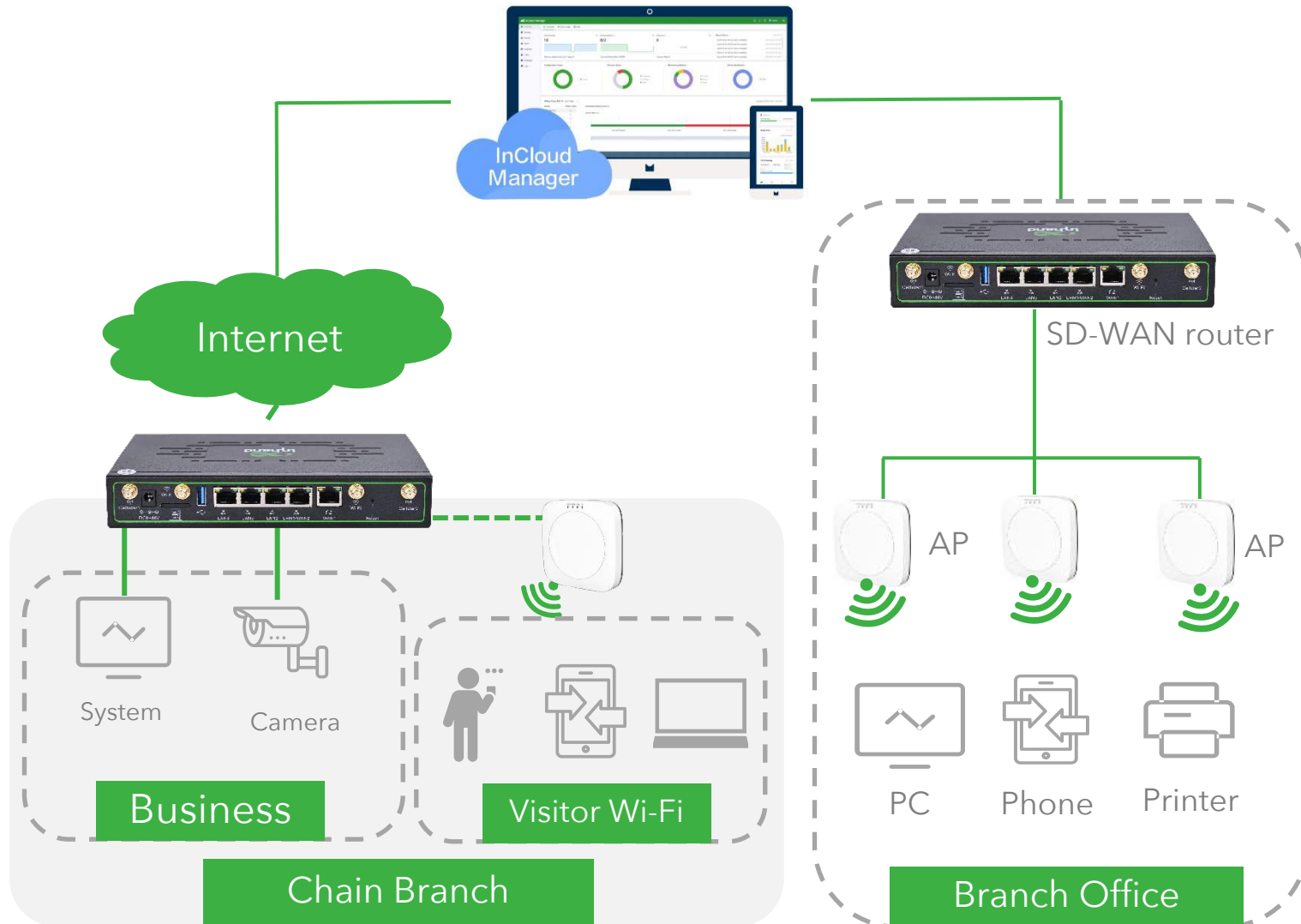
Commodity Area



Staff/customer networking



# Wireless Network Services



**Challenge: How to build more powerful Wi-Fi and connect more devices?**

**Excellent Wi-Fi network service: AP & Routers**

- Powerful dual-band gigabit Wi-Fi 5/6 coverage
- Seamless Wi-Fi roaming
- Wi-Fi encryption and authentication

**Unified Wi-Fi network managed by InCloud Manager**

- Unified portal Service authentication
- Visitor information collection
- Wi-Fi hotspot visualization (on roadmap)

# Reduced IT Costs



## Deployment Costs

- Plug-and-play devices, a cloud-hosted platform
- Automated network architecture, no need to change existing networks



## NetOps Costs

- Distributed sites centralized managed in the cloud, reducing travel costs
- Visualized interface improves network management efficiency
- Easier troubleshooting reduces maintenance costs



## Internet Fees

- Cost-effective traffic charges
- Cost-effective network devices

# Cloud-Managed 5G SD-WAN Edge Routers



ER805

For medium-sized branches:

Access capacity:

- Firewall throughput: 600M bps
- VPN throughput: 200Mbps
- User access volume: 100-150

Networking capabilities:

- 5G/4G
- 5 \* Gigabit Ethernet
- Wi-Fi 5, dual-band Gigabit



ER605

For smaller sized branches:

Access capacity:

- Firewall throughput: 450M bps
- VPN throughput: 100Mbps
- User access volume: 50 to 100

Networking capabilities:

- 5G/4G Cellular
- 5 \* Gigabit Ethernet
- Wi-Fi 5, dual-band Gigabit

# 5G Outdoor Unit



## High performance 5G/4G

DL : 4.76Gbps , UL: 1.25Gbps



Throughput: 2 Gbps

Number of access users: 200



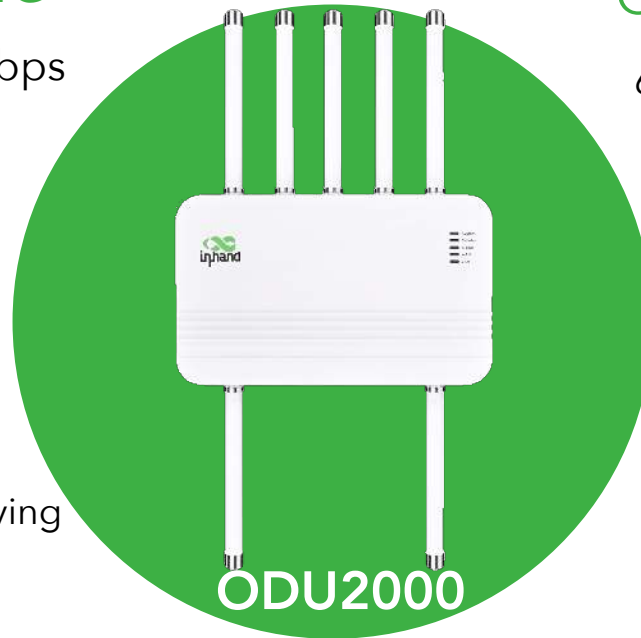
## 2.5G Gigabit Ethernet

WAN/LAN , support PoE power receiving



## Security Features

Firewall, DOS attack prevention, remote access control



## Omnidirectional Antenna

6 external 5G cellular antenna design



## Adapt to Harsh Outdoor Environments

IP67 , -30 ~ 70 degrees, die-casting aluminum shell, GPS



## Wall-mounted, Pole-mounted

Adjustable installation angle



## Cloud Management

Simplified and completely cloud-based management



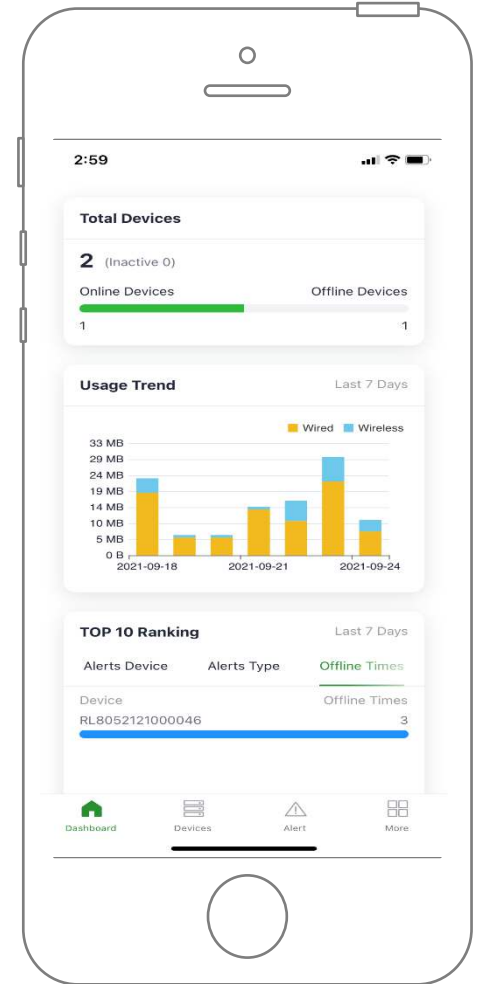
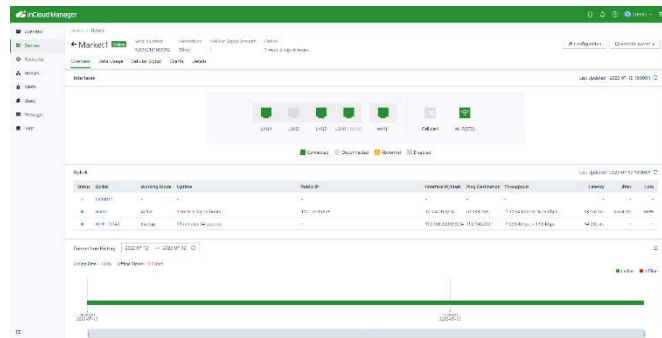
# InCloud Manager SaaS

One-Stop devices, networks, and applications management portal



Simplify your deployment and network management  
Improve your network access experience

Data visualization for better business analysis



# Demo: InCloud Manager



# | InCloud Manager Demo

**01** Remote Monitoring

**02** Remote Management

**03** Networking Features

# | InCloud Manager Demo – Remote Monitoring

## Overview

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- Visual global summary information
- Rich graphs

## Network Monitoring

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- Link information & quality
- Network quality
- Traffic status

## Device Details

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- Basic information
- License information
- Firmware and cellular module information
- Geolocation

## Alerts

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- Device reboot
- Cellular traffic threshold
- InCloud connection
- Link abnormal status
- SIM switch

## Upgrade Firmware Remotely

- Batch upgrade
- Group upgrade
- Schedule an upgrade

## Configure Remotely

- User-friendly GUI interface
- Web GUI configuration without complex command lines
- Batch configure
- Group configure

## Account Management

- Multi-level organizations
- 4 user roles
- Internal and external accounts
- MFA: SMS, authenticator APP

## Cloud Connector

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- Access to remote terminals to make maintenance, download programs and collect data
- Secure and stable channel based on OpenVPN

## SD-WAN Network

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- Interconnect branch business systems
- Simple configurations without professional network knowledge

## Policy Routing & Traffic Shaping

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- Multi-policy traffic shaping and policy routing ensures critical service networks are prioritized

# Case Studies



# Large Supermarket Chains

## Background



North America



Thousands of stores



Cellular backup link to existing wired network



Remote maintenance from HQ

## Challenges



Scattered stores without centralized IT management



Difficulty in changing existing network architecture

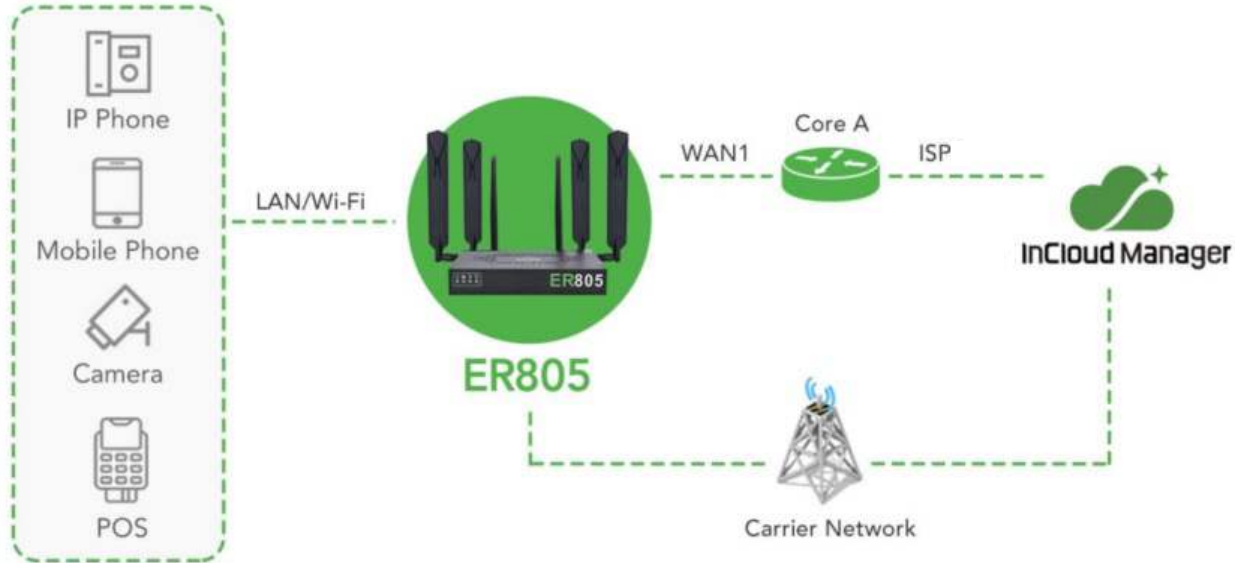


High IT maintenance costs



# Large Supermarket Chains

## Solution



- Devices in the store are connected to the ER805 through LAN or Wi-Fi
- When the primary wired link fails, the network will immediately switch to the cellular network.
- InCloud Manager provides a remote connection channel for remote access from HQ



## Highlights



### Easy deployment

Gigabit Ethernet, 5G, and Gigabit Wi-Fi available concurrently, easily integrate into current network and without changing existing architecture



### High availability with 5G backup

High-speed 5G network as economical and convenient backup, making in-store connectivity more reliable



### Easy Ops, reduced management costs

Centralized management and cloud connection services help manage on-site networks and devices without travel

# Petrol Pumps

## Background



Middle East



100+ stations



Cellular backup link to existing fiber network for huge prospect traffic



Remote monitoring and maintenance

## Challenges



Ultra-high demand for fast & reliable connectivity on 100+ stations during FIFA World Cup 2022



Insufficient IT staff for on-site operation and maintenance



Lack of high bandwidth for remote monitoring



# Petrol Pumps

## Solution



- Devices in the store are connected to the ER805 through LAN or Wi-Fi
- InCloud Manager provides a remote connection channel for remote access from HQ



## Highlights



### High speed

Gigabit Ethernet, 5G, and Gigabit Wi-Fi ensure uninterrupted high-speed connectivity



### High availability

High-speed 5G network and multiple backup mechanisms make connectivity more reliable



### Easy Ops, reduced management costs

Out-of-band management for devices behind the R805 through VPN and



### Efficient management

Multi-dimensional visualization interfaces ease management

# Q & A



# Thanks

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5G