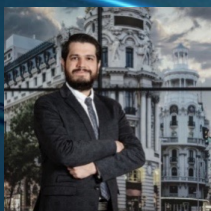


Ruijie



El futuro del campus inteligente

Lightning Fast and Future-Ready, Innovative



Rolando Gonzalez Rodriguez
Solutions & Services Manager

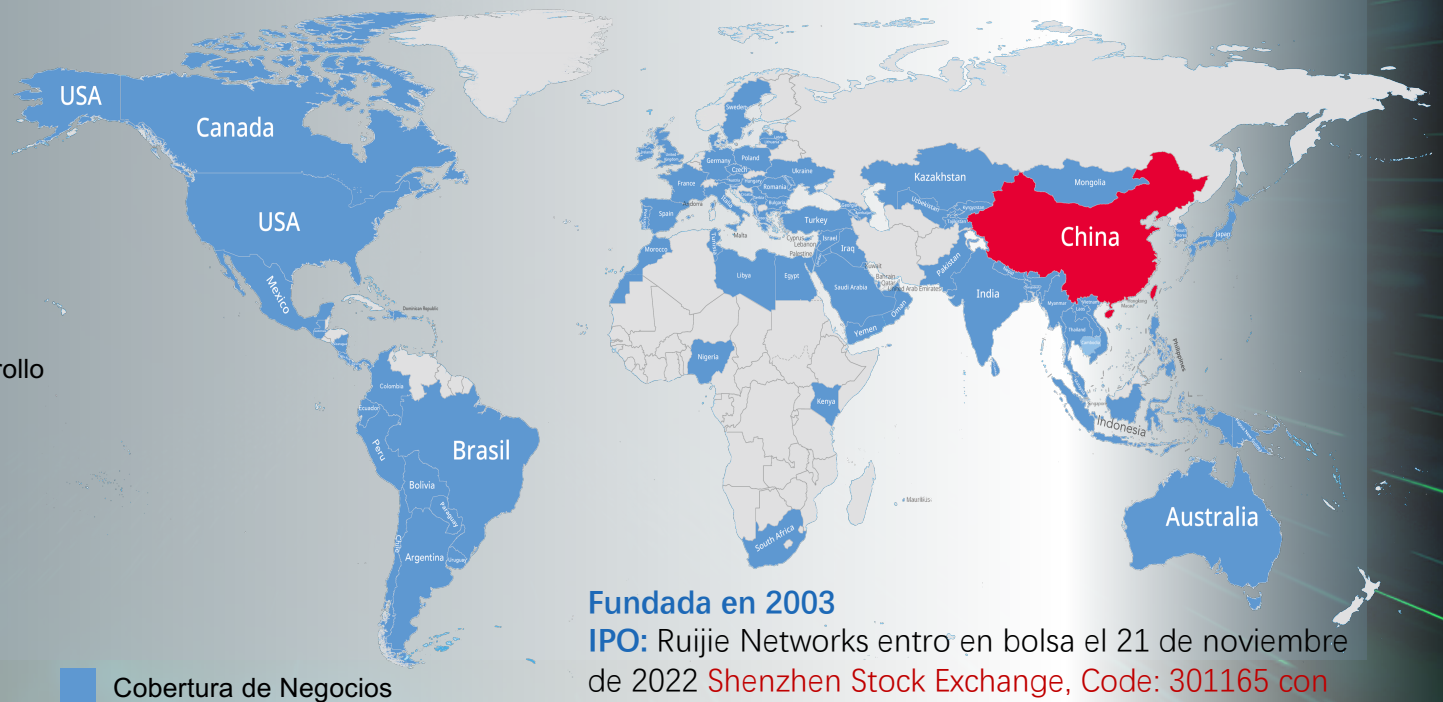
oficinas a nivel mundial

90+ Países y regiones
de Cobertura de Negocios

8 Centros de investigación y desarrollo

empleados

partners



Fundada en 2003

IPO: Ruijie Networks entro en bolsa el 21 de noviembre de 2022 **Shenzhen Stock Exchange, Code: 301165** con capitalización de \$44.6 billion



Sector de la enseñanza superior (Universidades)



N.º1 en cuota de mercado WLAN del sector de la educación en China

(Fuente: IDC)



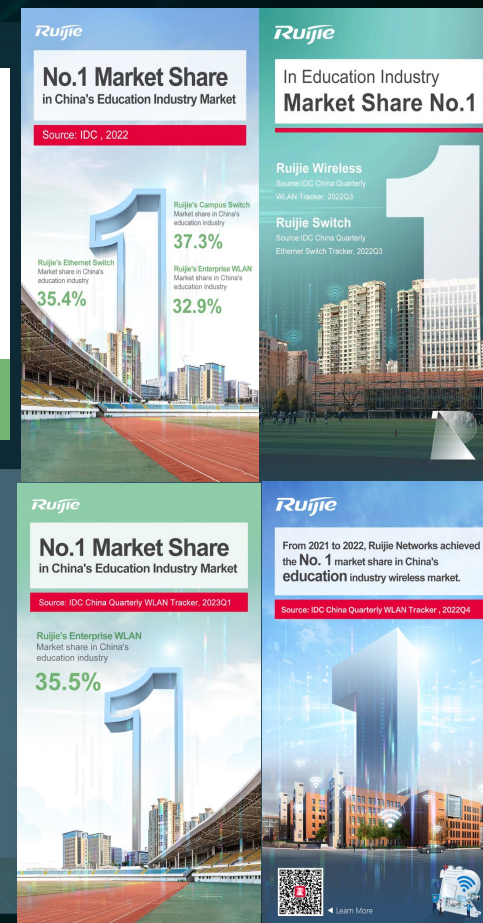
N.º1 en cuota de mercado de switches del sector de la educación en China

(Fuente: IDC)



N.º 1 en cuota de mercado de soluciones de aula en la nube en China durante **7 años**.

(Fuente: CCW)



Otros sectores



Alibaba

Proveedor principal de switches para DC desde 2019 en **25G/100G, 200G y 400G**



China Mobile

Mayor cuota de Mercado desde 2019 en **switching de DC y High-end Layer 3**



Fuxing bullet trains

Entorno **Wi-Fi** para más de 1200 trenes bala Fuxing y más de **6000 trenes** de velocidad general en total



Tencent

- **Principal proveedor** de switches para centros de datos
- Esfuerzo conjunto en el desarrollo del **primer switch CPO de 25,6 Tbps**
- Cooperación con Tencent para establecer el laboratorio conjunto de redes **Thinkwin Innovative**



ByteDance

- **Principa proveedor** de switches para centros de datos
- Colaboración con ByteDance para realizar pruebas basadas en un switch de 51,2 Tbps con módulo óptico LPO de 800G totalmente equipado



CITIC Tower

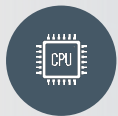
Diseño de una solución a medida para construir tres redes privadas para CITIC Tower:

- Red de plataforma de nivel 1 (el núcleo de red de todo el edificio)
- Red de administración de dispositivos de protección
- Red de administración de dispositivos del edificio (30 subsistemas).



Recursos de la cadena de suministro

Cooperación estrecha y extensa con los principales proveedores



BROADCOM

intel

ASPEED
TECHNOLOGY Inc.

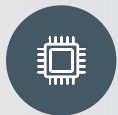
MAXIM



XILINX

intel

Lattice



TEXAS
INSTRUMENTS

NXP

DIODES

IDT



RENESAS

Infineon

TEXAS
INSTRUMENTS

ON



hynix

intel

SAMSUNG



TE

molex

Amphenol

santec



DELTA

AVC

NMB

Nidec



TIM Technologies

SCC

WUS
Group

Altamente reconocido por los proveedores de Core estratégicos

 **BROADCOM**

CSG/OSD Tier1 Client

Strategic Partnership, profound accumulation on Campus, DCN, Carries applications.

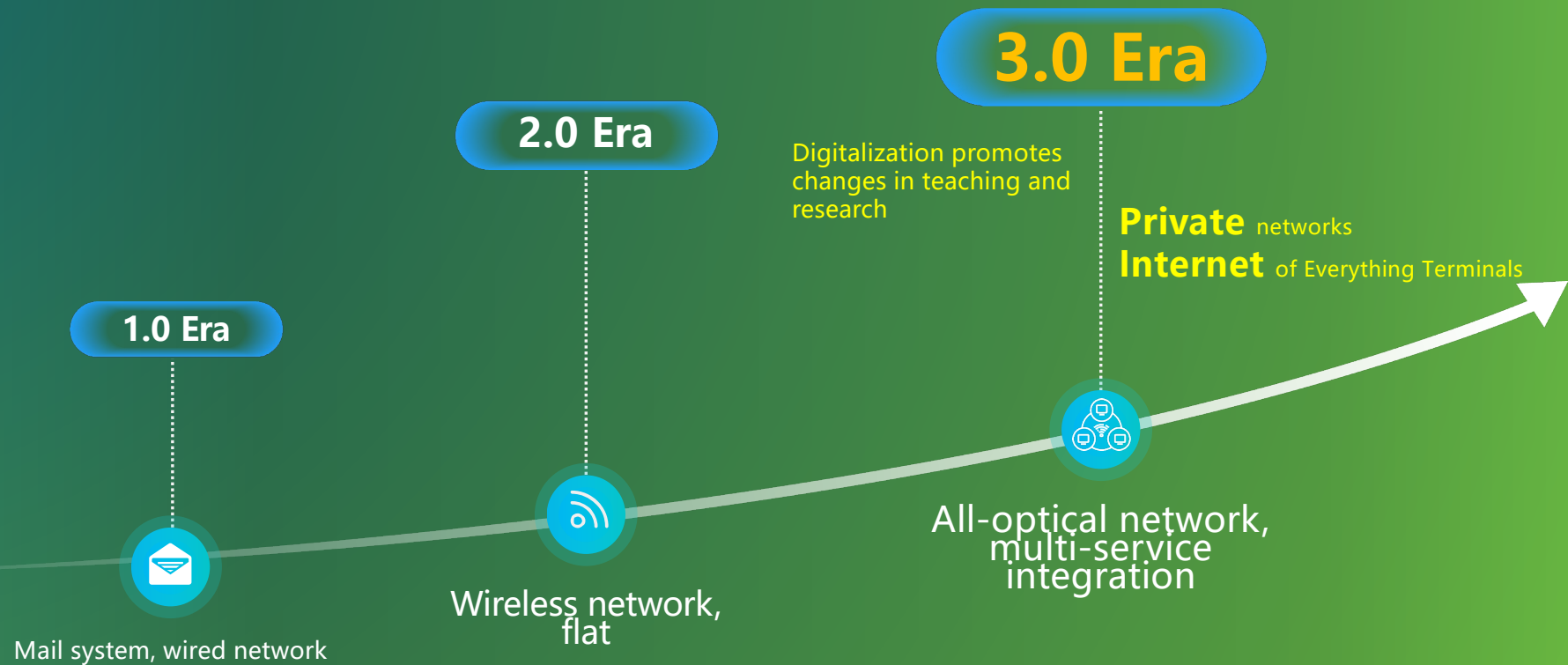
intel

IOTG Tier1 Client



Intel Titanium Partner

La red del campus experimenta cambios constantes





Tendencias de la infraestructura del Campus Inteligente

Totalmente Conectada

Cobertura inalámbrica de todo el escenario del campus. Itinerancia fluida y acceso ubicuo. La mejor experiencia de usuario

Red optimizada y Escalable

Arquitectura simple, sólida y verde.
Red cimentada preparada para el futuro

Educación Inteligente

Aprendizaje híbrido/multimedia, AR/VR, IA, IoT, aplicaciones del campus y servicios en la nube

O&M Simple

Gestión automatizada fácil y simplificada





Retos y creación de una red de campus inteligente y sostenible

Complex Scenarios & Poor Performance

- Too many devices from different vendors
- Complicated scenarios with poor network performance
- Limited bandwidth

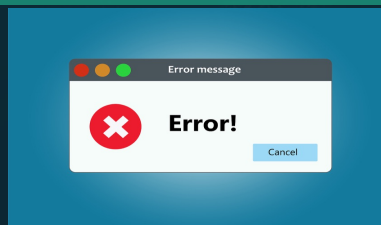


Full Coverage & High Bandwidth



Frequent Network Security Issues

- How to secure internal network access?
- How to prevent unauthorized users from accessing the network?
- How to identify authorized users?

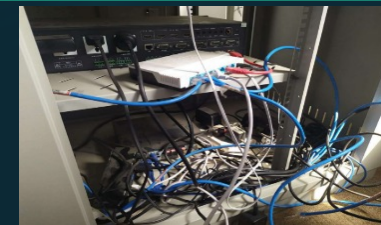


Secure & Reliable Authentication



Difficult O&M

- Difficult troubleshooting
- Difficult in fault handling
- Lack of O&M personnel



Simplified O&M





Tres características principales de la red del campus en la nueva era

A graphic for 'Simple Connection' featuring a teal circular overlay on a background of a city skyline at night with glowing white lines representing network connections.

**Simple
Connection**

A graphic for 'Excellent Experience' featuring a green circular overlay on a background of a person in a blue striped shirt holding a smartphone, with floating geometric shapes.

**Excellent
Experience**

A graphic for 'Ultimate Safety' featuring an orange circular overlay on a background of a server room with multiple computer monitors displaying data.

**Ultimate
Safety**



**All-Optical
Campus Network
Construction**



**Simplified
Network Security
Authentication**



Smart O&M

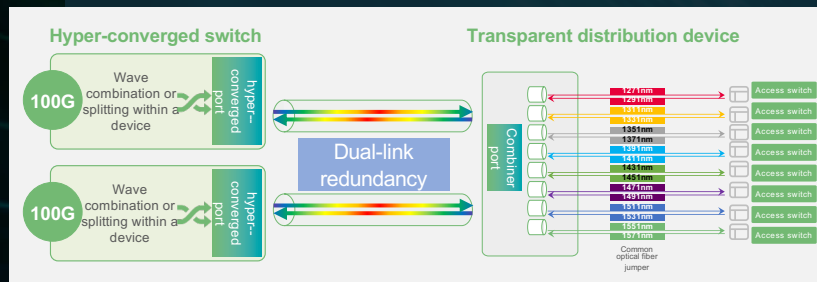


All-Optical Campus Network Construction



SOE Solution: Red Core & Agregación

CWDM transmission



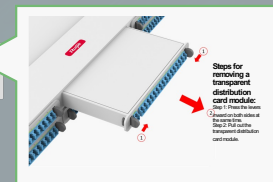
First large-scale application of CWDM transmission on campus networks

Building switch

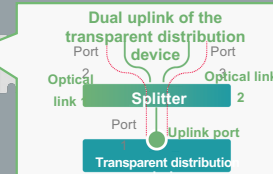
Passive transparent distribution device



Card slots are configured flexibly based on the number of rooms, maximizing ROI



The optical splitter achieves dual link redundancy, ensuring secure and reliable transmission.



Numbering for access-side CWDM transceivers facilitates maintenance.

Flexible installation of passive distribution devices, label identification, simplifying O&M

Simplified Network

2 Layer Active Device



1 Layer Active Device

CAPEX Reduction

OPEX Reduction

Core side

Hyper-converged switch



hyper-converged modular hot-swappable switch, supporting access to up to 704 rooms



1 U/2 U hyper-converged fixed switch, supporting access to up to 80/160 rooms



Core-side CWDM transceiver, single-core optical fiber access, simple deployment

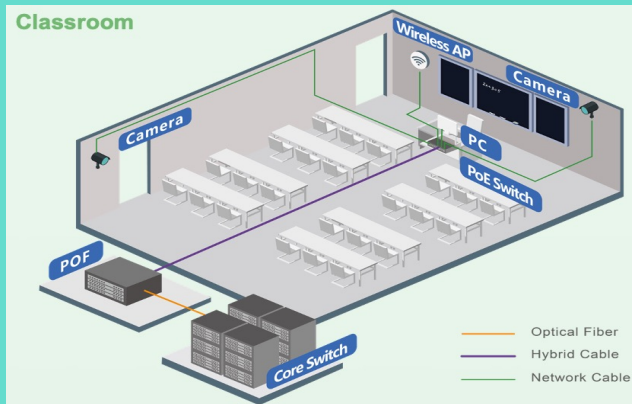
CWDM device, internal decoupling switching, 100G uplink, reducing fiber use, centralized O&M



SOE Solution: Líder en rendimiento óptico y eléctrico Hybrid Cable

Solution

PoE Switch
with Hybrid Cable



Scenario

Challenge for
electrical retrofitting



Remotely power
on/off



Stable power
Remote power
management



Give the devices a unified power supply by the hybrid cable

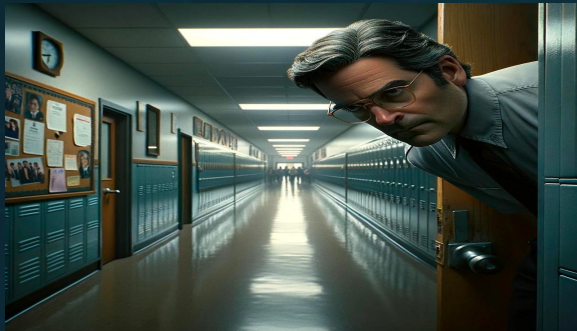


Simplified Network Security Authentication

*We have a professional team for implementation and delivery. For SAM+ purchase requests, please contact Michael (EBC).



SMP+: Red de campus centrada en identidad



The inability to identify terminal identities and types



The difficulty in managing terminals



Identity + traffic limitation based on different application and role



Identity + Terminal Management

Identity-based



Identity + IoT terminal



Permission remains unchanged

Identity + policy consistency

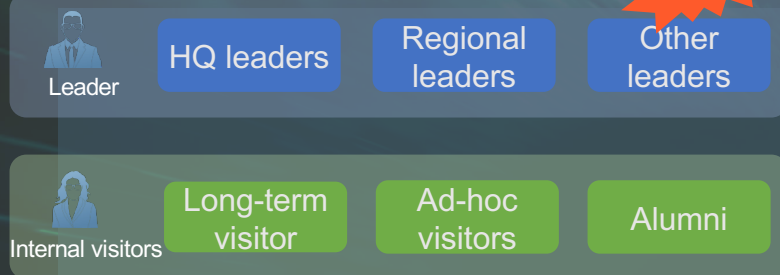
Simplified Authentication



SMP+: Funcionalidades y valor

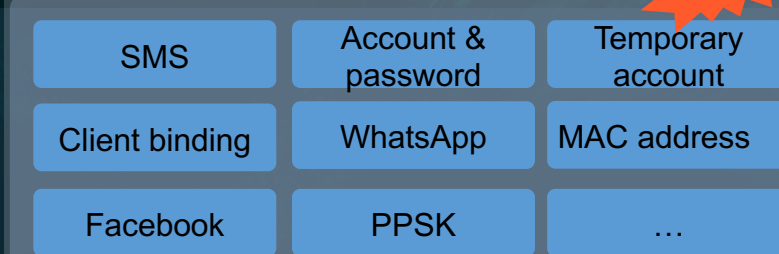
Refined user identity management

COA



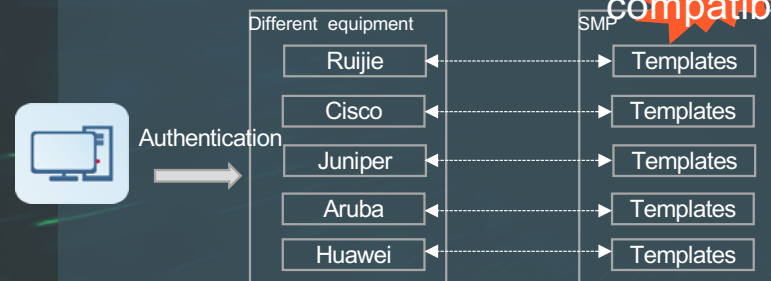
Multiple authentication modes

Visitor



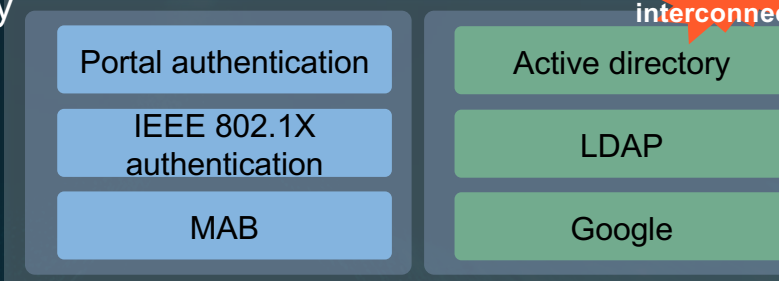
COA : changes ACL to users dynamically

NAS compatibility



Multiple authentication protocols & identity source interconnection

Identity source interconnection



- Support for **Portal authentication, IEEE 802.1X authentication, and MAC authentication** for heterogeneous NAS devices (20 NAS devices)
- Support **CWA, international mainstream Portal**, and **CMCC Portal 2.0** authentication
- Support quick adaption to **new brands and models within one week**.

- Support for **customize Portal**.
- SAM+ supports visitor **self-service registration and approval, without IT intervention**. **Third-party social media self-registration (Facebook, WhatsApp, SMS)** is also supported.
- Support pre-shared key-based admission of **IoT terminals**

Network

Security Events



30%

Reduction

IT O&M

OPEX



40%+

Improve Network mgmt.

Loading



30%+

Ruijie

Smart O&M



UNC: O&M intelligente

At 15:00, the video conference was interrupted.



At 17:00, the network operation was normal





UNC: O&M inteligente



Faster deployment and go-online

Network-wide automated deployment



More secure access

Efficient management of access terminals



Multi-service security isolation

- Multi-service bearing
- Access permission isolation



Fast network recovery

Network-wide traffic visualization

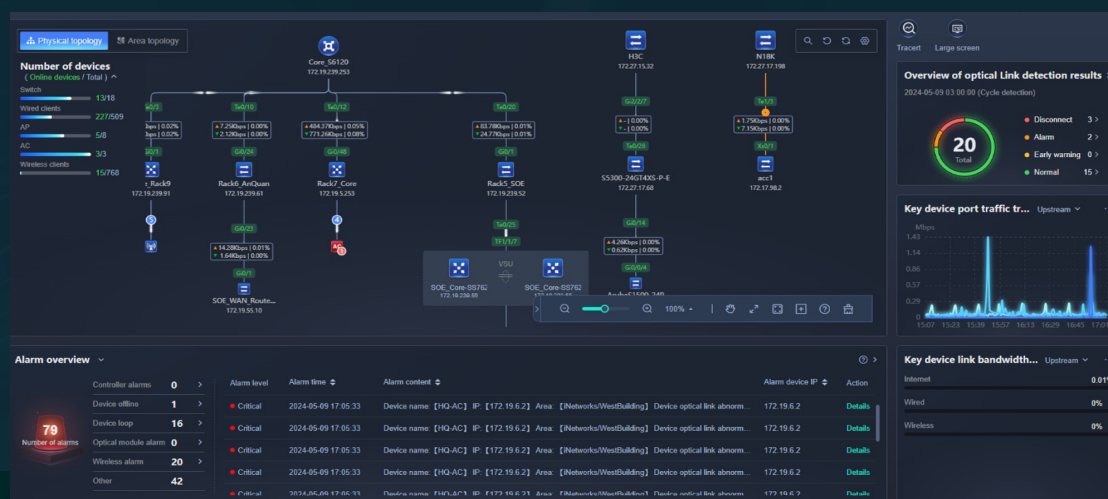
Fast fault locating



Auto policy migration

Mobile office and network-wide policy migration

Wired



Wireless

Ruijie



¡Gracias!



Rolando Gonzalez Rodriguez
Solutions & Services Manager