Agile **POL**
Campus Solution

Challenges

* Cloud education and E-learning demand for reliable networks that can support large bandwidths and smooth evolution.
* Campuses require full Wi-Fi coverage, uniform wired/wireless authentication, and seamless roaming.
* Campuses need cloud desktop, uniform bearing for multi-service, and simplified network planning, cabling, and O&M.

Solution

Huawei's AgilePOL solution achieves uniform bearing for all services in multiple scenarios over a fiber network. The passive ODN network not only improves reliability but also supports flexible expansion through the P2MP architecture as well as smooth evolution into GPON, 10G PON.

Simple
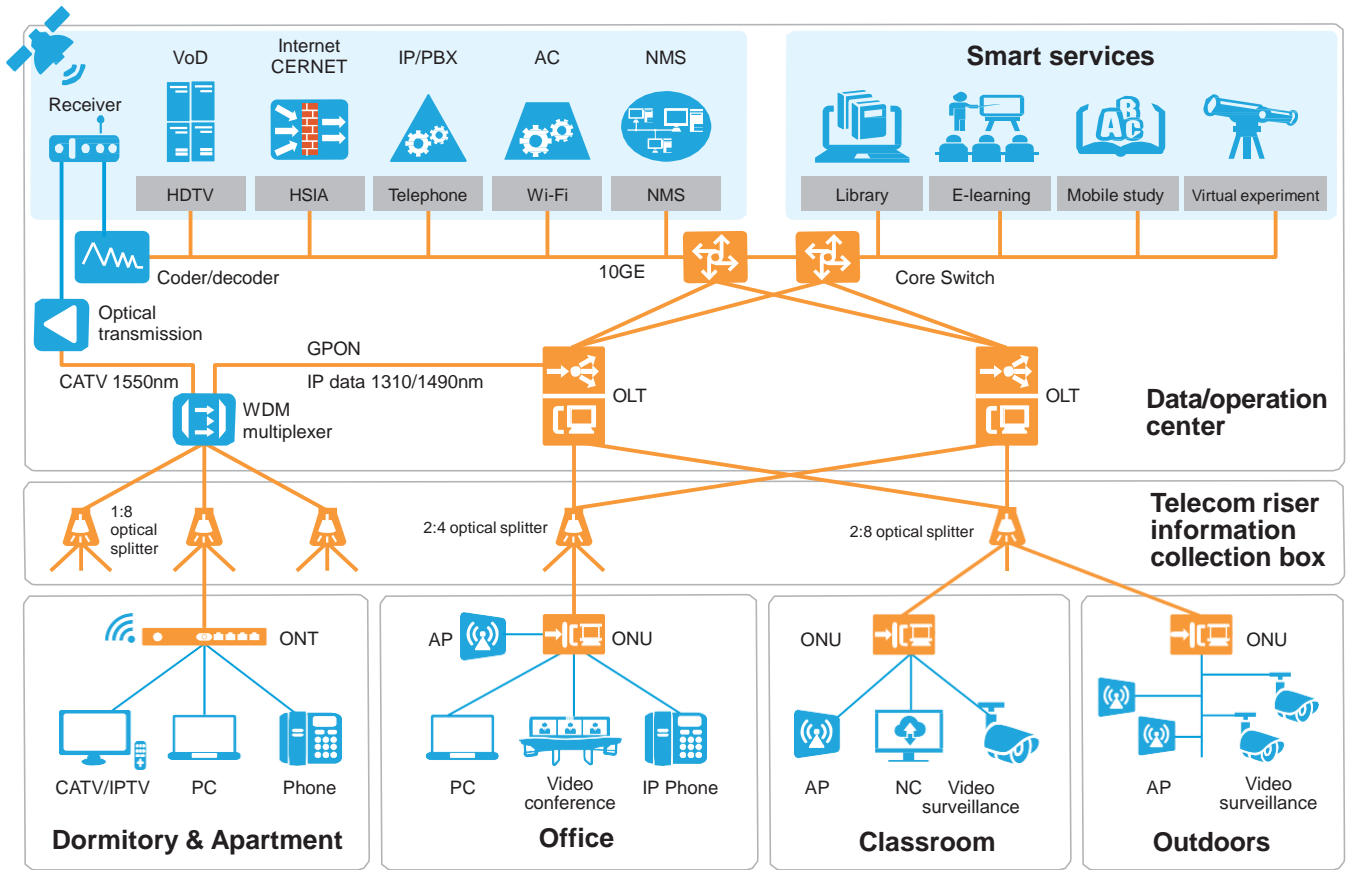
* Flattened 2-layer structure; saves CO space
* One fiber for multiple services; centralized management over devices

Reliable

* Active -> Passive, with zero faults
* Copper lines -> Fibers, without interference or distance limitations of 100 m

Large bandwidth

* Smooth evolution into GPON, 10G PON
* 1 Gbit/s access

Southwest University
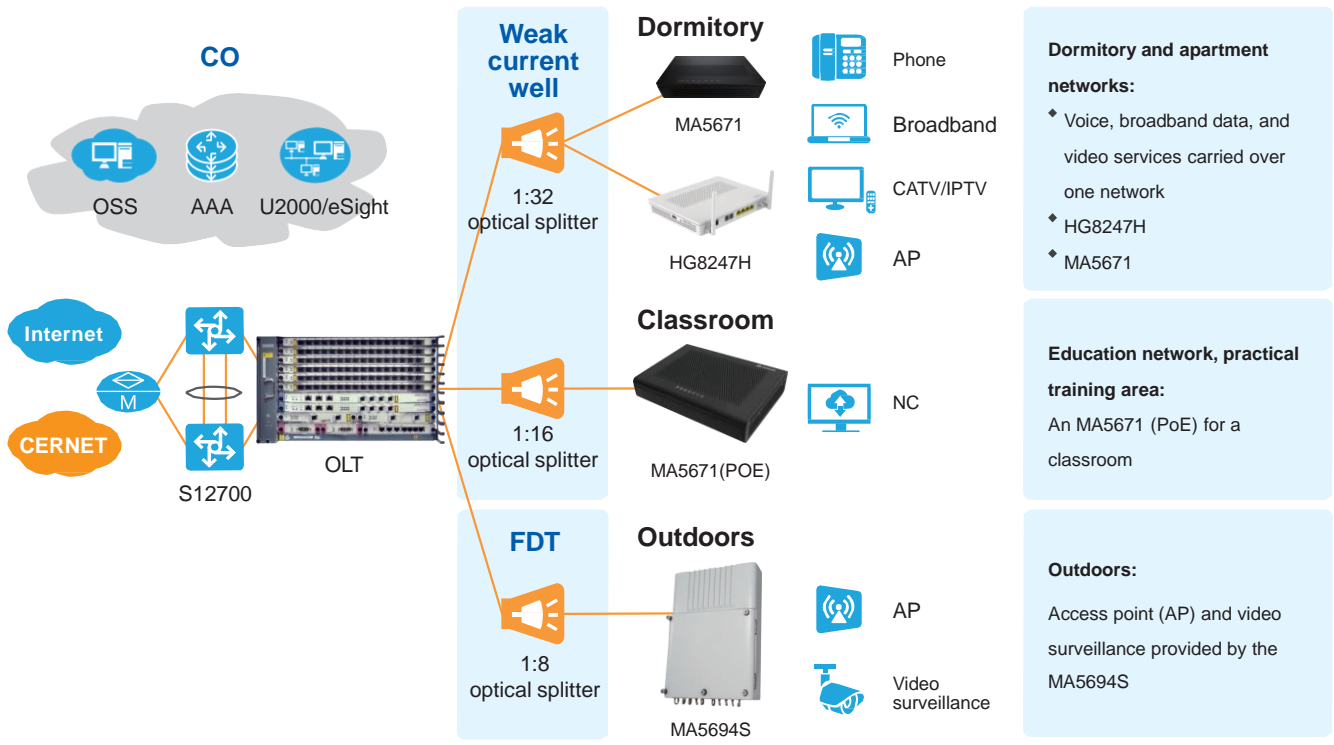## Builds a Next-generation Cloud Campus Network

Customer Demands

- The original network has a complex architecture and is unreliable. The customer urgently needs a network that can provide large bandwidths and is easy to deploy.
- This new network must be highly reliable, free from high fault reporting rates, and easy to maintain.

Solution

Huawei raised the Agile POL solution, which is capable of carrying multiple services, such as data, voice, video, and Wi-Fi access, over a single fiber network.

- One classroom, one fiber, and one terminal; uniform bearing of services such as cloud desktop and video surveillance
- Flattened 2-layer architecture + vertical traffic, meeting the future trend of campus networks
- Uniform management over network-wide devices, enabling easy O&M

CO — OSS, AAA, U2000/eSight

Internet, **CERNET**, S12700, OLT

Weak current well
1:32 optical splitter

Dormitory
- MA5671 — Phone
- HG8247H — Broadband, CATV/IPTV, AP

Dormitory and apartment networks:
- Voice, broadband data, and video services carried over one network
- HG8247H
- MA5671

Classroom
1:16 optical splitter
- MA5671(POE) — NC

Education network, practical training area:
An MA5671 (PoE) for a classroom

FDT
1:8 optical splitter

Outdoors
- MA5694S — AP, Video surveillance

Outdoors:
Access point (AP) and video surveillance provided by the MA5694S

Customer Benefits

- The POL network supports uniform bearing of dormitory and classroom services and centralized management over devices, effectively reducing the O&M workload by 50% compared with the traditional LAN.
- Active devices are replaced with passive ones. This greatly reduces fault reporting rates and realizes smooth evolution in the future.

Access Network Information Service Portal

Network Information Dept

http://support.huawei.com/enterprise   eaccessinfo@huawei.com