Digital transformation for SMBs

Simple network solutions to propel small and mid-sized businesses into the digital era
Solutions for digital transformation

Small and mid-sized businesses (SMBs) need simple, affordable and smart network infrastructure and communications solutions. This was echoed in the Techaisle study on Top 10 SMB Business Issues, IT Priorities and IT Challenges of 2020. Most issues, priorities and challenges fall under four main concerns:

• Budget constraints: continuous struggles on where to allocate spending
• Mobility: enabling on- and off-premises (remote working) workforce mobility securely
• Lack of IT staff: with budget constraints, most SMBs cannot afford to have IT staff
• Need for a hyperconverged infrastructure (HCI): a single point of contact (one vendor) for a fully interoperable converged solution for voice and data infrastructure

Alcatel-Lucent Enterprise (ALE) addresses this market with a comprehensive solution for wired (LAN) and wireless (Wi-Fi) networking as well as IP telephony and collaboration. The ALE network solution for SMBs is simple, cost-effective and secure, and provide enterprise-grade reliability.

ALE’s network vision for SMB digital transformation

At Alcatel-Lucent Enterprise, we believe that the most revolutionary technology doesn’t have to be complex or expensive; it just needs to be tailored to the needs of SMBs. The Alcatel-Lucent Enterprise SMB network solution is based on three main pillars: local area network (LAN), wireless LAN also known as your Wi-Fi infrastructure, and network management. It provides a solid foundation to support business communications, applications, users and devices.
Based on a high-performance enterprise-grade network, the SMB network solution ensures high-availability, security and scalability to address future growth. ALE SMB LAN switches provide enhanced VoIP and video performance, and reduce costs by providing Power over Ethernet (PoE) for IP phones, WLAN access points and video cameras, to name a few.

The Alcatel-Lucent OmniAccess® Stellar Wi-Fi 5 and Wi-Fi 6 access points offer versatility and operational simplicity. And the Alcatel-Lucent OmniVista® Network Management System provides unified network management for a consistent wired and wireless experience, enabling ultimate IT simplicity for deploying, operating and maintaining your network.

The ALE digital transformation solution for SMBs is suitable for those who are looking for an affordable high-performance wired and wireless LAN networking solution that is simple to deploy, operate and maintain.

The following figure shows what the solution could look like:
LAN infrastructure

On the LAN side, we offer a suite of switches that will allow you to address any of your needs, whether it be for a pure standalone network, for branch offices or enterprise edge network needs. The suite includes: the Alcatel-Lucent OmniSwitch® 2260 Websmart+ Gigabit Ethernet LAN switch suitable for small offices requiring a plug and play, pure standalone switch; the OmniSwitch 2360 Stackable Gigabit Ethernet LAN switch for those requiring connection to a branch office with capability to deliver more scalability; and the OmniSwitch 6360 Stackable Gigabit Ethernet LAN Edge switch for those who require higher value solutions for multiple buildings and branch office connectivity. For more advanced needs, including the requirement for a mission critical edge network, the OmniSwitch 6560 Stackable MultiGigabit Ethernet LAN Edge switch will deliver the most advanced and rich capabilities with high availability, very high Power over Ethernet (PoE/PoE+) budget and 2.5 Gigabit user ports. Using a single infrastructure for gigabit data services with PoE/PoE+ is cost efficient. Please refer to the chart for a quick comparison of these switches.

LAN access

**OmniSwitch® Series Line-up**

**OS2260**
- 8, 24 and 48 ports
- Fan-less on 10/P10, 24/P24
- Optimized PoE+ budget
- Perpetual/Fast PoE
- Ideal for standalone needs

**OS2360**
- 24 and 48 ports
- Fan-less on 24 model
- Optimized PoE+ budget
- Perpetual/Fast PoE
- Ideal for standalone or branch office

**OS6360**
- 10, 24 and 48 ports
- Fan-Less on 10/P10, 24/P24 modelsHigh PoE/POE+ budget
- Perpetual/Fast PoE
- IoT device profiling/onboarding
- BYOD/Guest Management
- Ideal for multi-site or branch office/enterprise edge networks

**OS6560**
- 24 and 48 ports
- 8, 16, 24 Multi-Gig ports (802.3bz)
- Very High PoE/POE+ budget
- IoT device profiling/onboarding
- BYOD/Guest Management
- Ideal for multi-site or branch office/enterprise edge networks with high availability

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**IT simplicity for easy, reliable and secure deployment**

**Optimized PoE/PoE+ budget to reduce investments**

**LAN & WLAN unified management to set the best quality of service**
WLAN infrastructure

Outstanding performance with simplified deployment

Alcatel-Lucent Enterprise offers a wide range of Wi-Fi 5 and Wi-Fi 6 access points. OmniAccess Stellar access points provide outstanding performance but are simple and cost effective to deploy and maintain. They operate in a secure (https) web-managed cluster architecture, allowing for a simplified plug-and-play deployment.

Based on a distributed intelligence architecture, Stellar access points do not need a centralized controller. This design is what makes Stellar access points more reliable and able to provide continuous Wi-Fi access throughout the office premises, whether your employees and/or guests are indoor or outdoor. Each access point is aware of the status of adjacent access points, so it knows which access point to hand-off access to as people move around, providing your employees and customers a seamless experience. Simply put, OmniAccess Stellar access points makes it easier to provide you and your employees with absolute freedom to be mobile.

The OmniAccess Stellar portfolio features enhanced WLAN technology with RF Radio Dynamic Adjustment, secure network admission control with unified access, and built-in application intelligence and analytics. This makes it ideal for enterprises of all sizes that demand simple, secure and scalable wireless solutions.

A Wi-Fi access point for every need

Wi-Fi 5 (802.11ac) Access Points

If you have budget constraints but still want to make sure your Wi-Fi network is secure, you should consider deploying or upgrading at minimum to Wi-Fi 5 access points. Wi-Fi 5 access points uses WPA3, a new security standard that improves Wi-Fi security using advanced security algorithms and stronger ciphers, including the 192-bit security suite.

The OmniAccess Stellar AP1201 access point is a multifunctional entry level, affordable, small, low-powered access point, for deployments that demand a simple, secure and scalable wireless solution. With the AP1201 you can fine-tune the Quality of Service (QoS) of Unified Communications applications such as voice, video and desktop sharing.

If you have employees working from home, you can equip them with a remote access point like the OmniAccess Stellar AP1201H which is designed to securely provide them access to your corporate network while working at a remote location. Don't worry, access points from remote locations remain visible to you as the Alcatel-Lucent OmniVista Network Management System gives you network-wide visibility.

For outdoor installations, the multifunctional OmniAccess Stellar AP1251 is ideal for medium-density outdoor environments. This high-performance, rugged access point supports the IP67 standard for harsh outdoor environments, such as exposure to high and low temperatures, persistent moisture and precipitation, and industrial strength surge protection. It provides high throughput and seamless user experience.

Wi-Fi 6 (802.11ax) Access Points

Wi-Fi 6 technology offers better Wi-Fi service in higher density areas, delivers more capacity for bandwidth-hungry and latency-sensitive voice and video clients, and provides a dependable secure network for Internet of Things (IoT) devices while improving their battery life. The OmniAccess Stellar WLAN portfolio brings unparalleled experience in connectivity, coverage and performance for modern IoT connected enterprises.

The OmniAccess Stellar AP1301 brings unparalleled connectivity, coverage and performance at a competitive entry-level price point. It is optimized for standard Wi-Fi 6 functionality and lower power consumption and provides great value for small and medium-sized businesses as they evolve their digital infrastructure.

The OmniAccess Stellar AP1311 provides premium features and is retro-compatible with previous WLAN standards. It offers robust IoT support with Bluetooth Low Energy and Zigbee radios, and a 1Gbe port for wired IoT connectivity. It also provides extra high security with a dedicated scanning radio.

The OmniAccess Stellar AP1320 series supports higher capacity requirements with a multigig Ethernet uplink.

For outdoor installations that need to support higher density environments and high-bandwidth multimedia applications, AP1360 series access points are designed for harsh outdoor environments and provide industrial strength surge protection. AP1360 series models can be connected to the network via SFP for long distance backhaul and provide an additional downlink Ethernet interface for wired IoT device endpoint connection, catering to varied deployment options in today's demanding outdoor environments.
OmniAccess® Stellar WLAN
Family lineup from AP1200 to AP1400

**Wi-Fi 6 APs**

- **Entry-level basic AP1301**
- **Entry-level premium AP1311**
- **Mid-range AP1321/22**
- **Outdoor AP1361/61D/62**
- **Hospitality AP1301H**
- **Outdoor AP1251**
- **Hospitality AP1201H**

**Wi-Fi 5 APs**

- **Entry-level AP1201**
- **High-end AP1231/32**
- **Outdoor AP1251**
- **Outdoor AP1261**
- **Hospitality AP1411 et AP1431**

For a complete view of all OmniAccess Stellar access points, please refer to the [OmniAccess Stellar Product Line Matrix](#).

**Investment protection with standard-based solutions**
Network management

Alcatel-Lucent Enterprise offers unified network management for LAN and WLAN. The Alcatel-Lucent OmniVista Network Management platform gives you single-pane visibility of your entire network, including those in remote locations. This is available either on premises with the OmniVista 2500 NMS or in the cloud with the OmniVista Cirrus NMS, providing deployment flexibility and simplicity. With OmniVista, you get cohesive management and network-wide visibility with a full set of tools for converged campus networks. With this comprehensive and powerful network management tool, you’ll benefit from a full set of components for infrastructure and device configuration, monitoring, backup, scheduling, security, alerts, quarantine, troubleshooting, downtime resolution and overall management.

Along with making day-to-day network operations more efficient, Alcatel-Lucent OmniVista Network Management Systems provide all the network management tools and reports you need to track and achieve your business goals.

IT simplicity

Pre-configured profiles of users and devices connecting to the enterprise network allow for zero-touch provisioning (ZTP) and deployment. Network configuration policies can be automatically applied to new users and devices being deployed based on these pre-configured profiles.

Zero-touch enrollment and provisioning

The diagram on the right shows how you can set up a pre-configured device in three easy automated steps. Simply plug your device as illustrated in Step 1. The OmniVista Network Manager will discover and identify the device (Step 2), apply its activation license and configuration policies (Step 3), and then the device is ready to go!

The OmniAccess Stellar APs and OmniSwitch products also support secure ZTP with Alcatel-Lucent OXO Connect (or any third-party server), which provides mechanisms to set up the full network automatically, quickly and securely.

From the OXO Connect Evolution, the ZTP is performed to discover devices and to download their default configuration files and settings to set up the network automatically. This is possible for the ALE OmniSwitch, OmniAccess Stellar and IP Phones.

Once ZTP is done, within a few minutes, the network is built, the IP Phones are operational and Wireless LAN connectivity is ready, without any manual intervention.

Zero-touch configuration and the Wi-Fi self-discovery save installation time and money for enterprises. Under normal circumstances, the time and cost to install and configure an Ethernet switch, WLAN infrastructure and an IP phone system on an SMB premises could be substantial. With the ALE solution, the configuration of OmniSwitch Ethernet Switches with OXO Connect for IP telephony will take a fraction of the time it takes to get a switch up and running compared to other solutions.

Last but not least, manual configuration errors are dramatically reduced thanks to automatic plug and play provisioning.
Why choose Alcatel-Lucent Enterprise?

With Alcatel-Lucent Enterprise, you will get enterprise-grade solutions, consumer-grade simplicity, lower total cost of ownership (TCO) and no compromises. ALE is one of a few vendors to offer SMBs a complete enterprise-grade LAN and WLAN solution without compromising on performance, reliability and security, all while lowering the TCO of your network and communications infrastructure.

AL solutions are simple to deploy, operate and maintain. As a result, Alcatel-Lucent Enterprise simplifies SMB digital transformation so you can focus on the most important areas of your business.

ALE provides unified advanced LAN and WLAN remote management capabilities at any time, and from any location and device, making it ideal for SMBs with limited IT resources.

Alcatel-Lucent-Enterprise offers an end-to-end solution to address the data network, telephony and collaboration needs of SMBs, enabling one-stop shopping and support. The Alcatel-Lucent Enterprise communications solution includes Alcatel-Lucent OmniPCX Office Connect (OXO Connect), Rainbow Office as well as a range of IP telephony products. The network and communications components provide a complete voice/data/Wi-Fi solution for small and mid-sized enterprises.