



NETWORK MOBILITY FOR SMB

Increase network performance while
adding mobility for users

Alcatel·Lucent
Enterprise



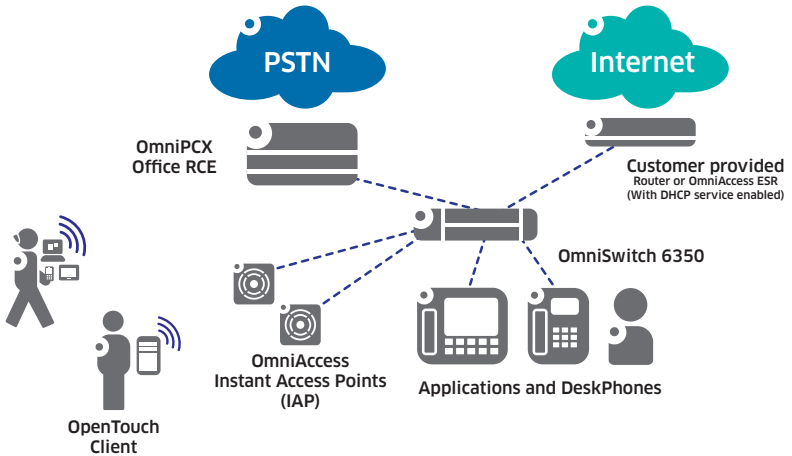
SOLUTION FOR GREATER MOBILITY

SMB network infrastructure solution

The SMB (small-medium business) market can be addressed using two Alcatel-Lucent Enterprise solutions. The first solution includes OmniSwitch® 6350 Gigabit Ethernet Switch for SMBs and OmniAccess® Instant Access Points (IAPs), such as the IAP103 (IEEE 802.11a/b/g/n), IAP205/205H (IEEE 802.11a/b/g/n/ac), or the latest 802.11 ac Wave 2 Access points that support up to 2.5 Gbps aggregate bandwidth, enabling high speed wired and wireless (Wi-Fi®) LAN access, referred to as the Network Mobility solution. The second solution includes OmniPCX® Office RCE, providing IP telephony, for a complete voice/data/Wi-Fi solution.

OmniPCX Office RCE and an OmniSwitch/IAP Network Mobility solution is optimized for SMB customers who need an IP telephony solution with Wi-Fi access, or who would like to upgrade their existing OmniPCX Office RCE solution and add Wi-Fi, as shown in the following figure:

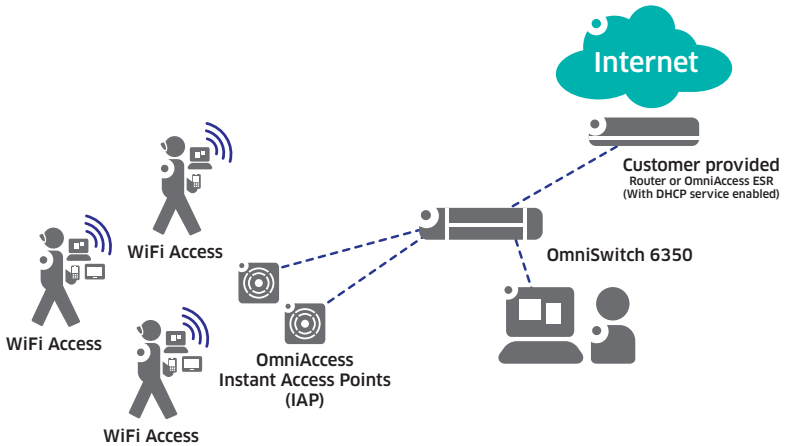
Figure 1: Mobility and IP telephony solution



SOLUTION FOR GREATER MOBILITY

The Network Mobility solution is for customers who would like to add high-speed wired and wireless LAN to their network and either already have OmniPCX Office RCE or have a budget constraint, as shown in the following figure:

Figure 2: Mobility solution



The advantage of ordering an SMB Network Mobility solution from Alcatel-Lucent Enterprise is its ease of installation and configuration. Zero-touch configuration is provided for the OmniSwitch 6350 and IAPs when used with OmniPCX Office RCE, as the switch gets its configuration information from OmniPCX Office RCE. When the Network Mobility solution is used by itself, minimum configuration is required to get the OmniSwitch 6350 and IAPs up and running. To simplify ordering a Network Mobility solution, a set of solution examples for 20, 50, and 100 users (country specific) have been identified, as a reference. In addition, a configuration guide describes the installation and set-up of the OmniSwitch 6350-P10, OmniSwitch 6350-P24 and OmniSwitch 6350-P48 Ethernet PoE/PoE+ switches, with OmniAccess IAP103, OmniAccess IAP205 and IAP324/325.

SMB Mobility solution references

20-user 802.11a/b/g/n example

- 1 x OS6350-P24
- 2 x OAW-IAP103

50-user 802.11a/b/g/n/ac example

- 1 x OS6350-P48
- 4 x OAW-IAP205

20-user 802.11a/b/g/n/ac example

- 1 x OS6350-P24
- 2 x OAW-IAP205

100-user 802.11a/b/g/n/ac example

- 2 x OS6350-P48
- 10 x OAW-IAP205

LAN INFRASTRUCTURE

LAN infrastructure

Using a single infrastructure for Gigabit data services with Power over Ethernet (PoE/PoE+) is cost efficient.



OS6350-P10



OmniSwitch 6350-P24



OmniSwitch 6350-P48

Gigabit Ethernet switch with 10-, 24- and 48-ports

OmniSwitch 6350 Gigabit Ethernet Switch

The Alcatel-Lucent OmniSwitch 6350 Gigabit Ethernet switch offers versatile 10/24/48-port fixed configurations. Each switch includes:

- A Gigabit Ethernet chassis in a 1U form factor
- 10-, 24- or 48-PoE/PoE+auto-sensing 10/100/1000 Base-T ports
- Four fixed SFP 1G uplink ports (two SFP ports on the OS6350-10/P10)
- Fanless OS6350-10,-P10 and -24 switches ensure quiet operation

These switches deliver low power consumption for reduced operating expenses and faster return on investment (ROI).

Key features

- Offers excellent investment protection and flexibility with easy deployment, operation, and maintenance
- Provides outstanding performance, supports real-time voice, data, and video applications
- Ensures that efficient power management reduces operating expenses (OPEX) and lowers total cost of ownership (TCO) through low power consumption and dynamic PoE allocation (delivers only the power needed to the attached device)
- Supports cost-effective installation and deployment with automated switch setup and configuration, as well as end-to-end virtual LAN (VLAN) provisioning

WLAN INFRASTRUCTURE

WLAN infrastructure

Using a single infrastructure for wireless (Wi-Fi) access is cost efficient.



OmniAccess IAP324/325
IEEE 802.11a/b/g/n/ac
Wave 2 Wi-Fi



OmniAccess IAP103
IEEE 802.11a/b/g/n Wi-Fi



OmniAccess IAP205
IEEE 802.11a/b/g/n/ac Wi-Fi

Dual radio (MIMO) with IEEE 802.3af Power over Ethernet (PoE)

OmniAccess 103, 205 and 324/325 Instant Access Points

Alcatel-Lucent OmniAccess 103, 205 and 324/325 Instant Access Points (IAP) maximize mobile device performance in low and medium density Wi-Fi environments, while minimizing interference from cellular networks. A single IAP automatically distributes the network configuration to other IAPs in the WLAN. Simply turn on and configure one IAP, and plug in the other IAPs to complete the network- the entire process takes about five minutes.

The OmniAccess IAP103 model features a 2.4-GHz and a 5-GHz radio that delivers wireless data rates of up to 300 Mb/s per radio, employing 802.11n technology. The IAP205 delivers up to 867 Mb/s to 5 GHz devices using 802.11ac technology, while simultaneously supporting 2.4 GHz 802.11n clients with data rates of up to 300 Mb/s. Each IAP leverages two spatial (multiple-input and multiple-output) MIMO streams to achieve these data rates. The OmniAccess IAP324 and IAP325 Wave 2 Access Points are dual radio 802.11ac APs supporting multi-user MIMO (MU-MIMO) and 4 spatial streams (4SS) to provide up to 2.5 Gb/s data rates.

To eliminate sticky client behavior while users roam, these IAPs use ClientMatch™ technology, which continuously gathers session performance metrics from mobile devices. If a mobile device moves away from an AP or if RF interference impedes performance, ClientMatch automatically steers the device to a better AP.

WLAN INFRASTRUCTURE

Key features

- ClientMatch dynamically optimizes Wi-Fi client performance as users roam and RF conditions change
- Adaptive Radio Management™ (ARM) technology manages the 2.4-GHz and 5-GHz radio bands to optimize Wi-Fi client performance. ARM ensures that APs stay clear of RF interference while remote spectrum analysis scans radio bands to identify sources of RF interference
- Advanced Cellular Coexistence (ACC) enables WLANs to perform at peak efficiency by minimizing interference from 3G/4G LTE networks, distributed antenna systems and commercial small cell/femtocell equipment

Contact your Alcatel-Lucent Enterprise
reseller to find out more about
Network Infrastructure for SMB.

enterprise.alcatel-lucent.com

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