Cloud Wireless
Key Buying Tips for a Cloud-Managed Wireless Network
**Smartphones. Tablets. Intelligent “Things.”**

Today, everybody relies on wireless devices in their business and personal lives. Each day, more devices are connecting to Wi-Fi® networks, and more users are demanding always-on services that deliver excellent performance for streaming media and other high bandwidth applications.

Traditional Wi-Fi architecture just can’t keep up with the wireless demands of today. The typical Wireless LAN (WLAN) controller has become a bottleneck, requiring IT to incessantly add more controllers as more users and devices come onto the network.

There’s a better way. A cloud-managed wireless network offers a far more flexible, cost-effective solution to delivering nimble, reliable, secure and scalable wireless access. With this design, management and control of the network takes place through intelligent Access Points (APs) and virtual controllers that run in the cloud, eliminating the need for a hardware controller. A cloud-managed wireless network greatly increases scalability to meet increasing Bring Your Own Device (BYOD) demands and quickly expand coverage across the enterprise.
A cloud wireless solution also opens up a much broader and more flexible range of implementation options to offload the network management burden from your in-house IT by using managed and hosted services.

So how do you find the right cloud wireless solution for your organization? Keep in mind the following key buying guidelines to ensure your Wi-Fi network can stand up to the demands of your users and your business.

**Buying Checklist**

- Maximize Flexibility
- Provide Wi-Fi Everywhere
- Optimize Wi-Fi Performance
- Make Setup and Access Fast and Easy
- Maintain Tight Network Security
- Ensure Control is Policy-Based
- Monetize your Wi-Fi
- Leverage a Robust Professional Services Package
- Reap the Advantages of a Turnkey Solution
1. Maximize Flexibility

**GOAL**
Achieve business and network agility by working with a service provider who offers maximum deployment flexibility.

**WHY**
As your organizational and wireless needs change and grow, you need flexibility when it comes to managing your network. While there are many benefits to using a fully managed and hosted service, it is important not to be locked into a single subscription service and to maintain options to move to an on-premises or partner-managed solution.

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2. Provide Wi-Fi Everywhere

**GOAL**
Nothing short of 100% uninterrupted coverage for all your users—employees, students, faculty, contractors, visitors and guests.

**WHY**
Users need high-performance Wi-Fi everywhere, whether it’s an office, classroom or high-density areas such as sports stadiums and convention centers. As users move around your facility, they should remain connected without having to re-login multiple times—a common problem with many Wi-Fi networks.
3. Optimize Wi-Fi Performance

**GOAL**
Implement a network design and monitoring system that achieves 99.99% availability, even when taking equipment failures into account.

**WHY**
Internet and Wi-Fi services are now a necessity. A failure in the system that impacts services can quickly impact organizational performance, annoy customers and drive up support costs.

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<td>Carrier grade network. The network design must be carrier grade with built-in redundancy for critical elements such as the Internet connection and router, Ethernet switch, APs in high-density areas and the controllers.</td>
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<td>Performance guarantees. Require guaranteed Service Level Agreements (SLAs) for the network and services.</td>
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<td>Multiple service and recovery locations. The provider should have redundant network operations centers in different regions to guarantee uninterrupted service.</td>
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<td>All-day, everyday monitoring. Your service provider should offer 24x7x365 monitoring and advance hardware replacements.</td>
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<td>Controller redundancy. Virtual controllers should be optionally redundant with the loss of one controller automatically failing over to a backup.</td>
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<td>Continuous service. Ensure that loss of connectivity to the controller does not prevent data traffic and Wi-Fi service from being delivered successfully.</td>
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4. Make Setup and Access Fast and Easy

**GOAL**
Installation and access of APs is “zero-touch”. Once physically installed, APs are immediately usable. At the same time, on boarding users is quick and easy requiring minimal to no IT assistance.

**WHY**
To minimize service calls, costs and demands on scarce IT resources, adding and replacing APs as well as providing users with access needs to be fast and simple.

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<td>Instant install and run. Adding and replacing APs should be easy and automated. Adding a new unit requires no more than physically adding it to the network with network discovery and configuration done automatically using a pre-defined profile.</td>
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<td>Rapid replacement. Replacement requires simply switching out the older unit for the new one with configuration settings automatically downloaded.</td>
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<td>Simple, rapid access for users. It should be easy to set up Guest Access networks as well as those for employees, with the appropriate roles and access privileges built into the system.</td>
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5. Maintain Tight Network Security

GOAL
Security is enforced at every entry point with malicious traffic blocked before it gets onto the wireless network.

WHY
With more wireless data traffic, maintaining data security is very challenging, especially for public networks. The challenge is even more substantial if the Wi-Fi network is carrying operational data, as a hacker could not only steal data but take down the network. This is especially crucial when it comes to meeting the requirements for strict industry standards such as PCI, HIPAA, Sarbanes-Oxley, etc.

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6. Ensure Control is Policy-Based

GOAL
Gain the flexibility to segment use of your Wi-Fi network into multiple levels of service.

WHY
Many facilities need to deploy multiple levels of service for different users as well as keep user and operations traffic separate. For example, you may want to provide slower free guest service, higher bandwidth for premium (paying) customers, another level for employees and a fourth level for business operations.

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7. Monetize Your Wi-Fi

GOAL
Gain insight into your end user customer through the use of cloud-based analytics.

WHY
Many organizations, whether it is a retail shop, public park or sports stadium, are realizing they have a treasure trove of data from customers who log onto their free Wi-Fi network. For example, a fan at a ballpark can be sent an instant coupon for the concessions stand. Likewise, a customer at a car service repair shop could be sent an offer for a discounted wheel alignment while they wait for an oil change.
8. Leverage a Robust Professional Services Package

**GOAL**
Ensure optimal performance, reduce the burden on your IT staff and gain predictable costs with professional monitoring and management services.

**WHY**
IT departments are overwhelmed with work. A constantly growing and changing Wi-Fi network adds to the work and cost pressures. A business-class management service can maximize network performance, security and scalability with predictable costs.

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9. Reap the Benefits of a Turnkey Solution

**GOAL**
Optimize the performance of your wireless network at an affordable, predictable cost.

**WHY**
While it may be possible to meet all of the requirements listed in these guidelines using a variety of resources, a far better approach is to use a solution in which network elements and services are designed to work together. A turnkey solution can successfully deliver the levels of performance, reliability, scalability and security your network—and your users—demand.

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**Next Steps**
If you would like to find out how ADTRAN vWLAN and the ADTRAN ProCloud service can help you optimize your Wi-Fi network, please visit: [www.adtran.com/web/page/portal/Adtran/wp_procloud](http://www.adtran.com/web/page/portal/Adtran/wp_procloud)