Mesh makes the difference for widespread WiFi
“Sorry Bob, I only just saw your urgent note - I was at the other end of the site all morning”...
…it’s a common story across warehouses, car dealerships, golf courses, country clubs, construction sites and other businesses that are typically spread across a big area. They may be very different, but they share the same challenge: how to keep everyone connected across the site.

Those dreaded WiFi ‘dead zones’ are hard to accept in today’s ‘always on’ world. Smooth and consistent online access is fundamental to most businesses, with users expecting it as much as they do power sockets and light switches. When screens freeze, connections drop or network access simply disappears, it is frustrating and has real impact on personal productivity and efficient communications.

Until recently, frustration-free online access for many businesses covering large areas was a challenge that was hard, even impossible, to meet. That has all changed with the introduction of the latest WiFi technology, providing the performance of fixed network lines but without the cost and installation effort. Nor is there any need to become a tech expert or spend fortunes: consistently great WiFi - up to an unprecedented 17,500 square feet - is now within reach.

Let’s take a closer look at the networking needs of these companies. Usually small-to-medium sized businesses, they may occupy an area as big as a stadium, but unlike a stadium, there are not hundreds of users to connect. That makes it hard to consider the cost and disruption of installing Ethernet cables to reach out to the furthest corners of the site, something that may not even be possible anyway (no-one wants to dig up that perfect fairway, or get the landlord’s permission for construction work).

However, even if there are not hundreds of them, staff and possibly also guests do want and need to be connected. And while users in these environments are typically mobile - such as foremen, site supervisors, the golf pro - cellular phones are not a good cost or technology fit, so WiFi is clearly the answer.
WiFi gets widespread

However, traditional WiFi systems are not suitable for large areas. Plus, most Internet or broadband service providers will offer a standard product or at best a limited range of options, yet a router designed for a compact office building is not right for a sprawling ranch, sports club or factory site.

This is when businesses might look at adding WiFi extenders here and there and these do a great job, but for the purpose for which they were not designed, not to cover large areas.

This matters, especially as people are increasingly using bandwidth-hungry apps on a daily basis: the load a video call places on both the WiFi and external broadband line is a lot more than just simple emails. Ensuring a consistent high-quality WiFi experience, regardless of wherever users are and whatever they are using the network for, is the challenge.
Mesh - consistent WiFi everywhere

So what’s the answer? Enter WiFi mesh systems. These multiple WiFi access points - known as satellites - together with a router and advanced software, create a single cohesive network that can span over a large area. The advantage of mesh networks is that the system is self-organizing and self-optimizing, meaning the satellites are always on the look for the best backhaul option (think of this as the WiFi system’s own internal communication system) to offer the best possible WiFi service. This means that the WiFi speed and quality throughout the coverage area is the same on the farthest golf link as it is in the clubhouse, the warehouse next door as it is in the foreman’s office.

When the mesh network needs to be extended, more satellites can be added, up to a total of six when using ORBI PRO. In practice, this equates to a total of 17,500 square feet and around 80 users at any one time.

Many mesh networks do not make the most of speed and capacity, because they share bandwidth with the back-haul and this means there is a trade-off between the speed and performance available to users.

The answer lies in choosing a WiFi mesh network that uses tri-band technology. Unlike single or dual-band mesh systems, tri-band means that there is a wireless link dedicated to back-haul, rather than taking bandwidth away from users. Businesses get the maximum bandwidth for which they are paying and users get a reliable, consistent experience.
100% faster WiFi

The only mesh network on the market today using tri-band technology is the ORBI PRO range. It provides the best of both worlds: fast, high-performance WiFi, yet takes just minutes to set up ‘out of the box’, without needing to make any changes to existing router equipment, nor specialist training or technical know-how. It provides an outstanding 233Mbps and has been rated as 100% faster than any of its competitors in independent tests.

For large areas, another advantage of ORBI PRO is that three separate networks can be created from one mesh system. Each separate and secure, one network could be allocated to administration, one for general employee communications and one for guests. Designed to be aesthetically attractive in locations where appearance matters (such as the reception area of a health club), units can be wall or ceiling mounted and include indoor or outdoor models. The outdoor ones also are waterproof, so they can be used externally rain or shine, or even interior environments that have high humidity.

While ORBI PRO is designed to be ‘fit and forget’, it is easy to manage from anywhere using a single online app (or a portal on a larger screen), so the network administrator can check on the status of the WiFi network in different buildings or areas, make configuration changes, access helpful information or make a support request, from another location or even his or her home. Again, no technical expertise is needed, something that is important to businesses that are juggling lots of priorities and probably do not have a dedicated IT person.

This ease-of-use, combined with leading-edge tri-band mesh technology, means that at last, businesses can roll out consistently high-performance WiFi access to staff and guests across a large area, cost-effectively, quickly and simply, without any compromise on quality. Bob’s important messages never need to be missed again.