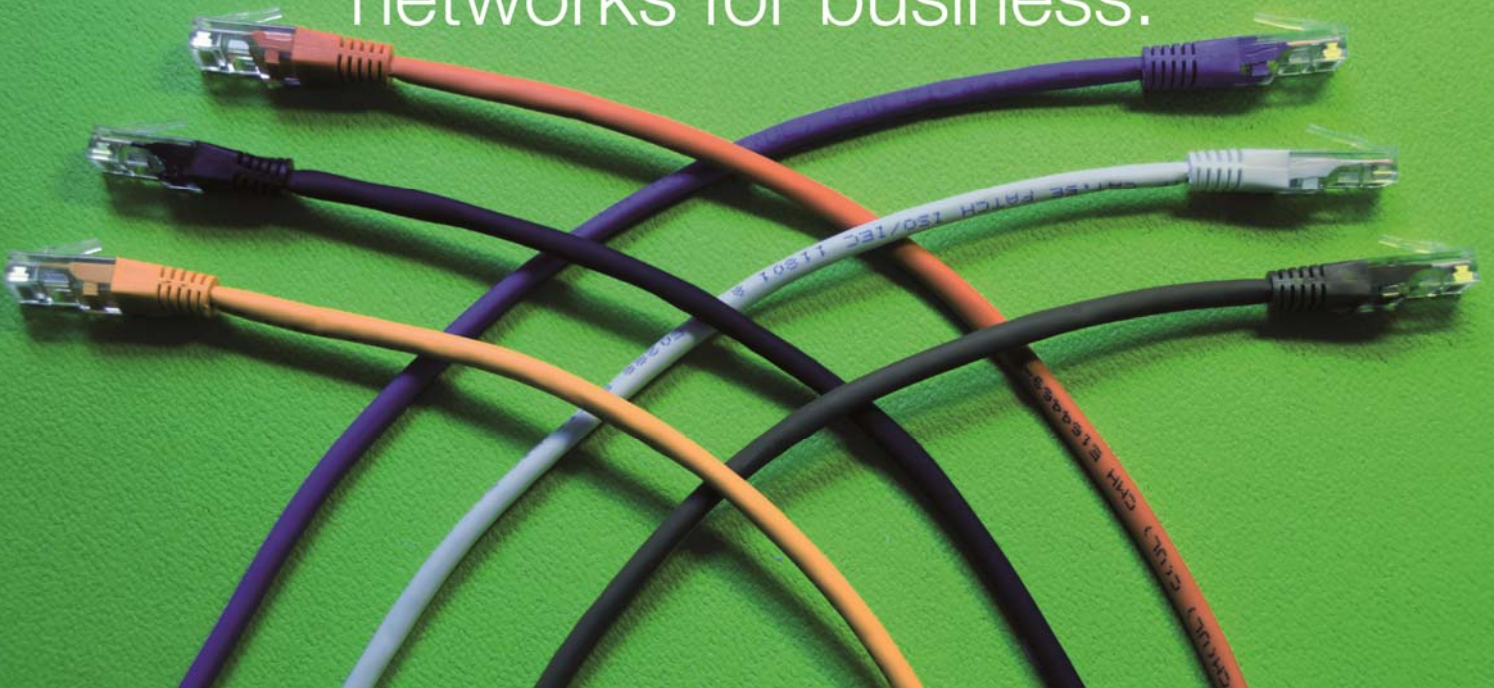


Consistent and high performance  
networks for business.



Voice and data solutions

#### Wireless Network Services

Are you looking to invest in wireless technology, but don't have the technical expertise or have a wireless network which is becoming unmanageable and not performing to its potential, we are here to help your business. We at Ardent Networks are able to offer our services in preparing, planning, surveying, procuring and deploying wireless networks to business throughout the region.

With our wireless network services you don't have to invest in all of the services if you don't want. We can perform just the site survey if you require or help you with the design or equipment procurement.

## WLAN Services Overview

### Prepare

We are able to help with the prepare phase that addresses specifics that should be addressed prior to any in-depth planning or design. During the "prepare" phase, our organisation will help you answer a number of pertinent questions that will impact the deployment of the WLAN. Preparatory work includes: Identifying what the organization can justify financially, what the wireless network design should support, what services are to be supported on the wireless network, data, voice, location based services? Additionally, what clients are to be supported, laptops, handhelds PDA's, active RFID tags?

### Plan

During the planning phase we are able to help develop a project plan to manage tasks, responsible parties, resources and milestones. If there is a current network in place, planning should address any impact on the existing network by adding controllers and access points. Are there available ports for access points and controllers to be connected to existing network switches or will additional switches be added to the network to support the controllers and determine the amount of access points and placement for the services you plan to support, such as data, voice, or location based services.

### Site Surveying

A WLAN site survey is ideal for defining the quantity and location of access points for your desired coverage or for evaluating the performance of a new/existing WLAN infrastructure. The service includes data collection and evaluation of WLAN infrastructure, recommendations for design alteration to improve performance, but does not include WLAN optimization.

### Layer one sweep

At Ardent Networks we have invested in Cisco's Spectrum Analysis technology to identify and locate any non-802.11 devices that may cause interference with the proposed WLAN - in either the 2.4 or 5 GHz ISM bands or both. We will sweep all areas where access points will be deployed with Cisco Spectrum Expert to identify any devices that may interfere with the proposed WLAN. These devices could be cordless phones, microwave ovens or any other device that use the license free Industrial, Scientific, Medical, Band (ISM band) or Unlicensed National Information Infrastructure bands (UNII 1-3), but are not IEEE 802.11 devices. Once any of these devices are identified that can cause interference, they can be removed or replaced by devices that do not operate in the 2.4 or 5 GHz frequency bands. We use Cisco Spectrum Expert to also identify other 802.11 devices that may be heard from surrounding WLAN installations in the area.

### The Survey

The next stage is to perform WLAN Site Survey. The site survey is a process of identifying access point placement for the required coverage. This is done so additional access points can be placed to achieve the appropriate signal to noise ratio (SNR) for the WLAN services to be supported. The site survey process ensures needed signal levels and overlap with minimal interference to other access points. Prior to performing our site survey we identify what devices are being supported on the WLAN to determine appropriate signal levels and these vary depending on the following:

**Data:** WLAN data-only networks are dependent only on SNR for data rate supported.

**Voice:** WLAN Voice networks are critical to SNR, data rate supported and proper overlap.

**Location-based services:** WLAN Location Based Services requires that access points are placed in such a fashion that the Active RFID tags and 802.11 clients are surrounded by access points for ultimate optimization.

We have extensive pre-site survey forms to extract all information regarding the survey and any information that will be required to complete the site survey.

### Site Survey Reports

Following the survey then will be produced into a report of our findings and presented in a readable format so that any person should be able to perform the installation, not just our engineers.

### Procurement

Following the plan, prepare, layer one sweep, site survey and site report phases of a WLAN project we can help your company in getting the right equipment in preparation for deploying the Wireless Network. We can help you in purchasing Cisco or Aruba wireless network equipment from national distributors at rates that you cannot get from any other local supplier.

### Installation

With any project of any size we can offer our services in installing the equipment into the location or assist with in house teams in getting the wireless network up and running. We can assist in troubleshoot a wireless network installation that may have gone wrong.

### Post Installation Fault Finding

Got a wireless network and don't know why it's going wrong or why you're not getting the correct coverage to your location or the best performance out of your equipment. Ardent Networks can help in troubleshooting your underperforming wireless network as we have invested in Cisco hardware and software to help diagnose faults within wireless network infrastructure. This software helps us in our initial site survey, but can also help in finding out what is going wrong with an existing WLAN network.

Should you be interested in any of our wireless services then please do not hesitate to contact us.

## Voice and data solutions

Ardent Networks Bradstowe House, 35 Middle Wall, Whitstable, Kent CT5 1BJ  
Tel: 01227 774850, Fax: 01227 282491

Email: [enquiries@ardentnetworks.co.uk](mailto:enquiries@ardentnetworks.co.uk) [www.ardentnetworks.co.uk](http://www.ardentnetworks.co.uk)

A business division of

