



Smart Business Communications System (SBCS)



How Many Wireless Access Points Are Needed?

How Many Wireless Access Points Are Needed?

A “quick and rough” guide to SBCS radio planning

- Caveat: Optimal radio planning takes radio expertise, site surveys and experience. Cisco offers training courses.
- SBCS/Mobility Express makes radio planning a little bit easier
 - Only one type of antenna (omni-directional)
 - Only 802.11 b/g radio
 - The controller’s RRM feature will adjust channels and power settings in real time to constantly optimize

Rough rules of thumb...

AP Count (rough estimates)		
Data-quality	One every ~3,000 Sq Ft/ 280 Sq Meters	~15-20 laptops/AP
Voice-quality	One every ~1,700 Sq Ft/ 160 Sq Meters	~7 for 802.11b ~14 802.11g phones/AP

Refining the estimate...

- For RRM to work effectively at least 3 APs are required
- For Fast Secure Roaming and seamless Mobility of the Wireless VoIP phones WLC has to be deployed.