Avaya Wireless

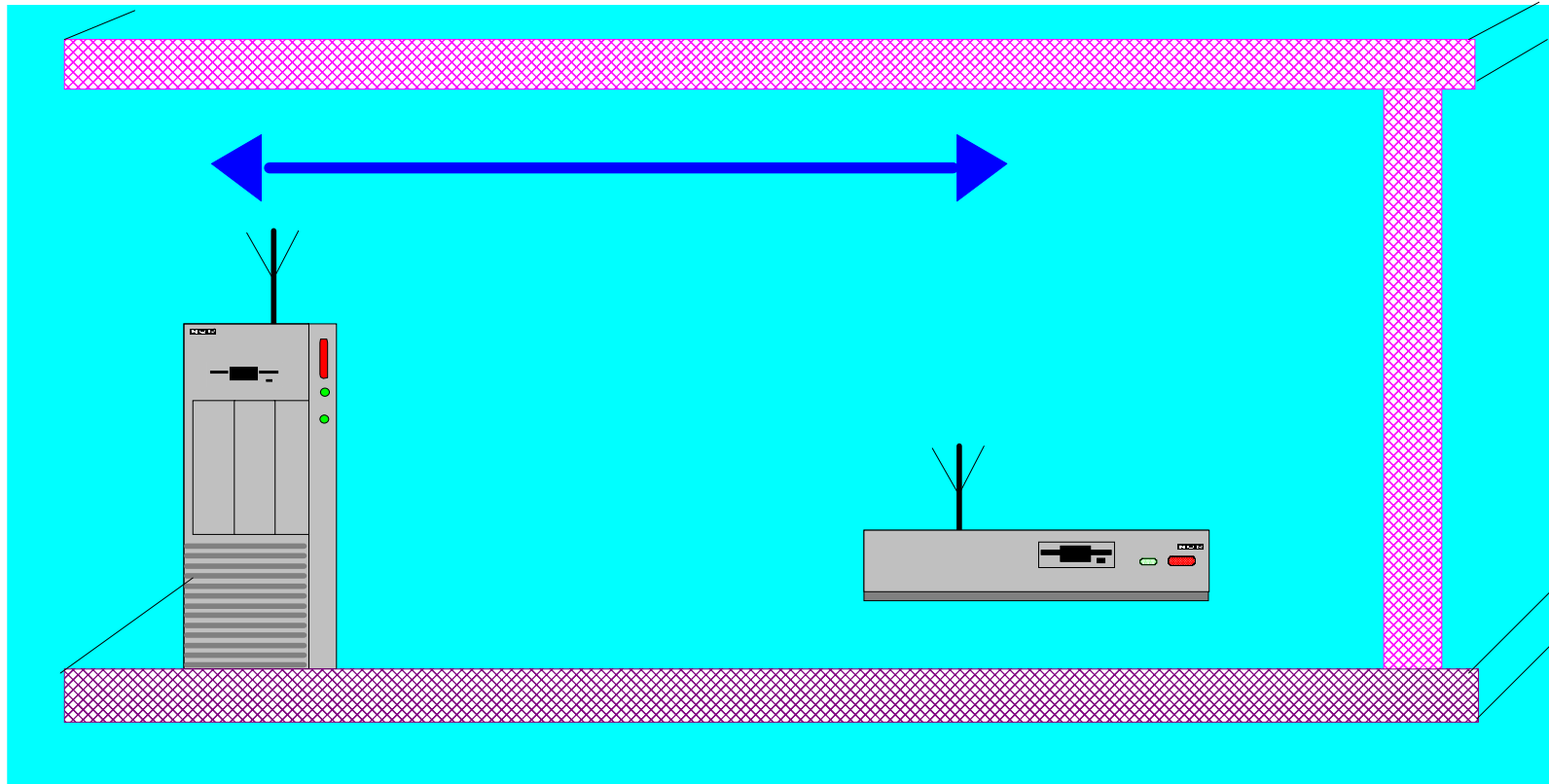# Site survey

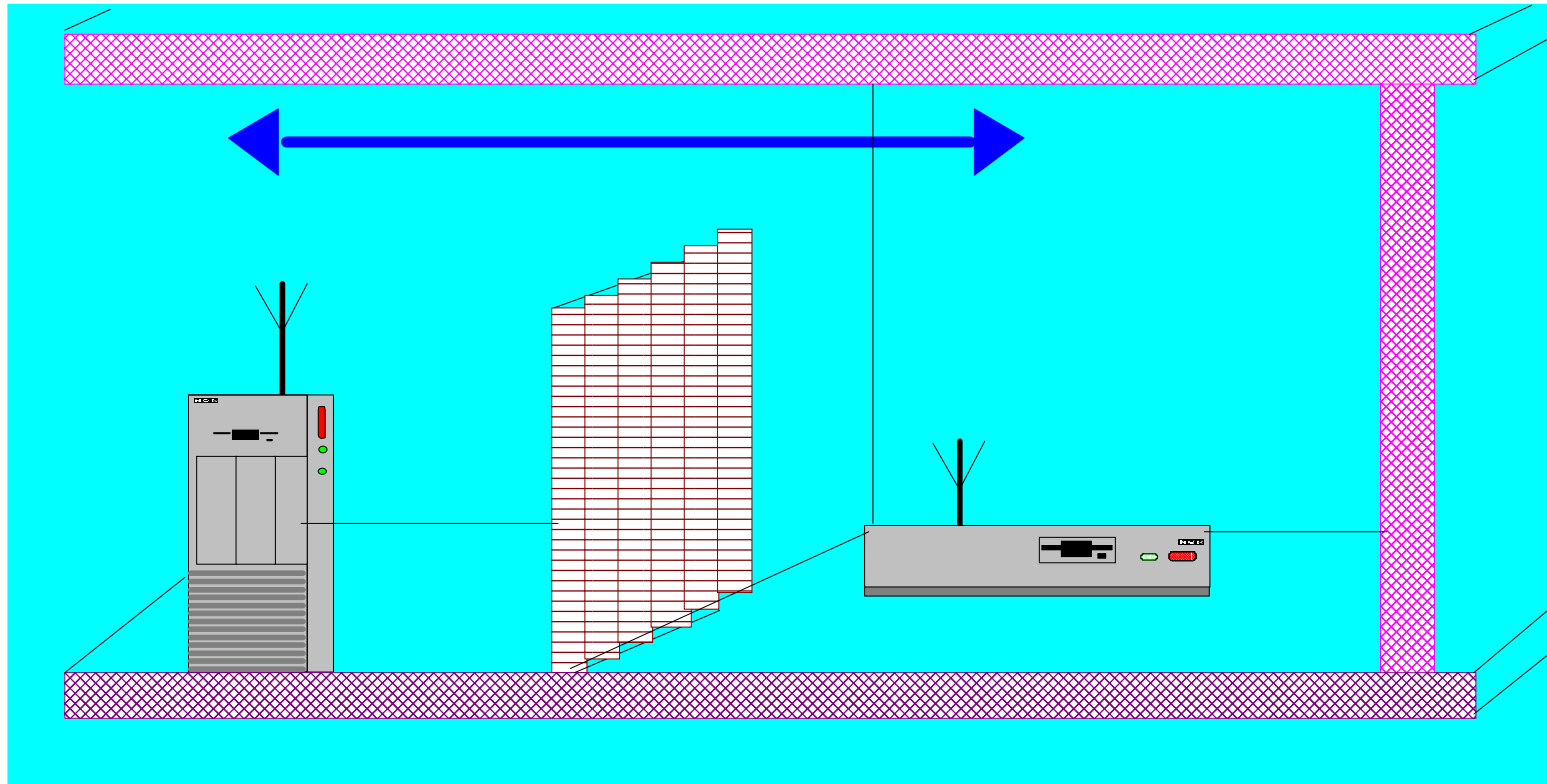# *Why a site survey*

★ determine actual coverage area

★ determine number of wireless cells needed

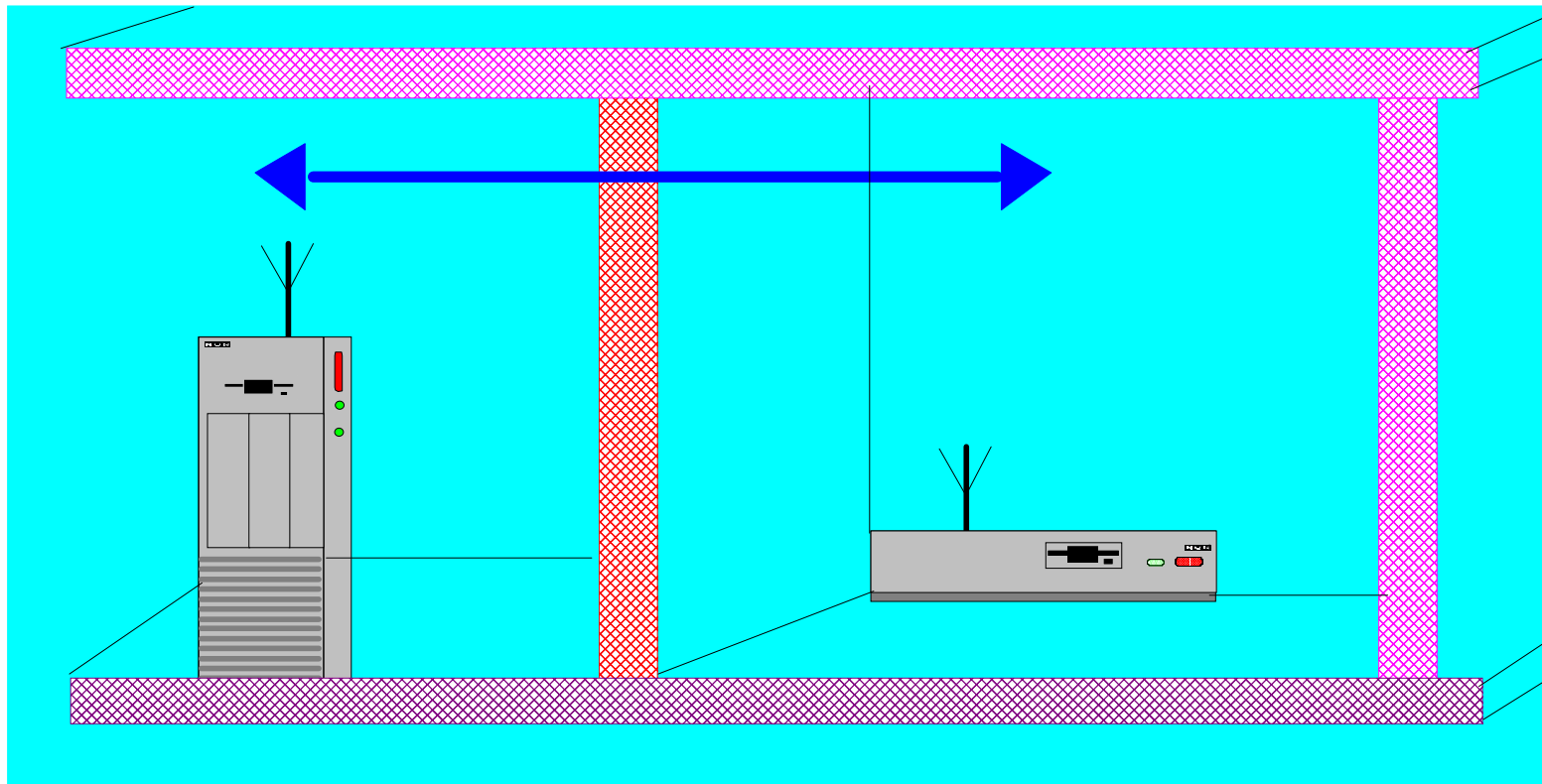★ determine location of access point and/or wireless servers

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Open Environment

Semi-open Environment

Closed Environment

Coverage

Speed option	Range		
Avaya Wireless 11 Mbps	Open Plan Building	Semi Open Office	Closed Office
High	160 m (525 ft)	50 m (165 ft)	25 m (80 ft)
Medium	270 m (855 ft)	70 m (230 ft)	35 m (115 ft)
Standard	400 m (1300 ft)	90 m (300 ft)	40 m (130 ft)
Standard low	550 m (1750 ft)	115 m (375 ft)	50 m (165 ft)

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Barriers

RF Barrier description:	RF Barrier severity:	Examples:
Air	Minimal	
Wood	Low	partitions
Plaster	Low	inner walls
Synthetic material	Low	partitions
Asbestos	Low	ceilings
Glass	Low	windows
Water	Medium	damp wood , aquarium
Bricks	Medium	inner and outer walls
Marble	Medium	inner walls
Paper rolls	High	paper on a roll
Concrete	High	floors, outer walls
Bulletproof glass	High	security booths
Metal	Very high	desks, metal partitions, re-enforced concrete

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The method

★ Prepare
  - ★ get copy of floor plan
  - ★ determine suitable locations to measure

★ Execute
  - ★ use Avaya Wireless Client Manager (link test, history, signal <u>and</u> noise)
  - ★ save results on local disk, or record on tally sheet
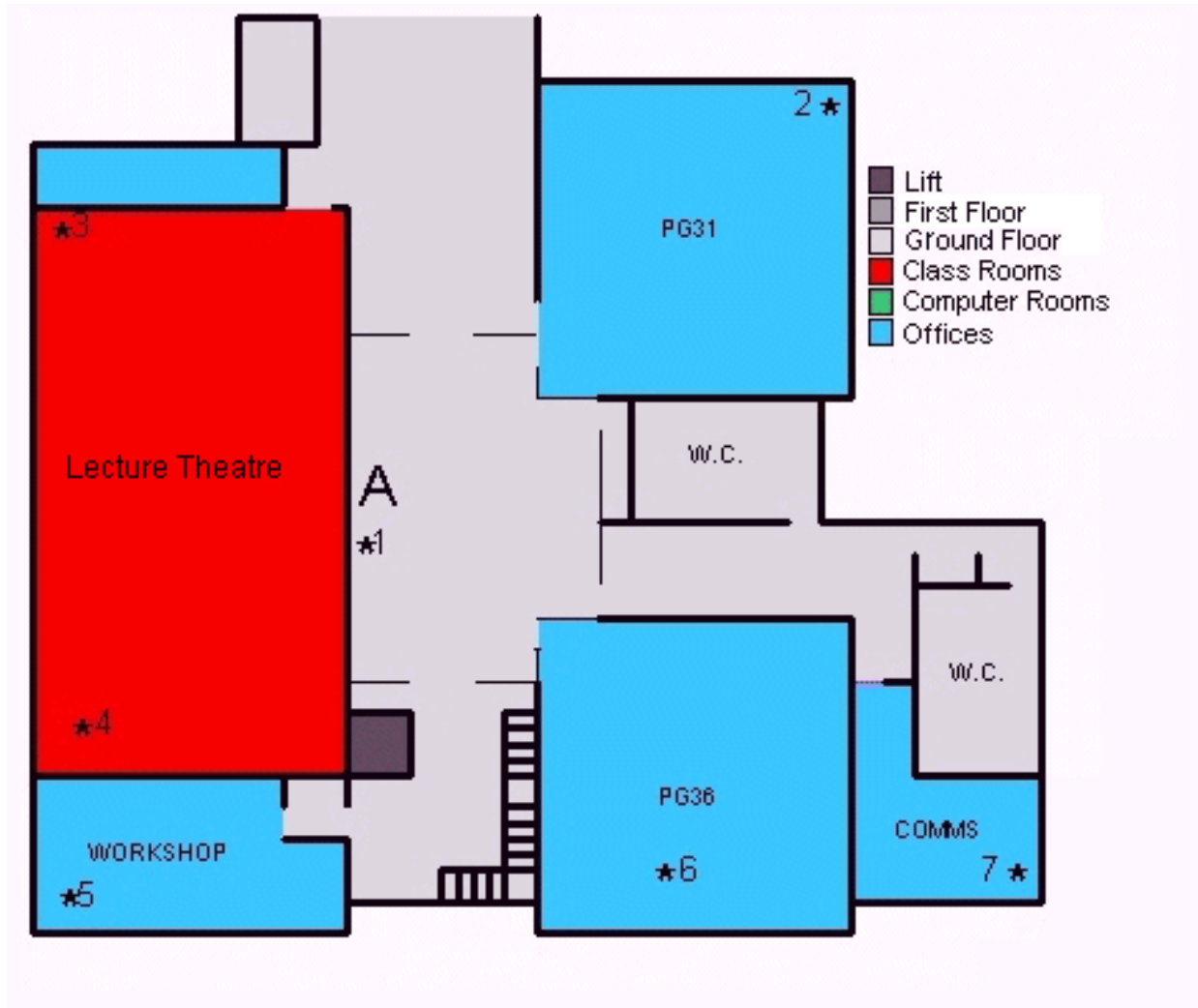 - ★ Look for noise spikes

★ Analyze
  - ★ examine returned Link Quality Assessment
  - ★ determine best location Servers and/or APs, determine floor coverage

★ Document results

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Floor plan
Example

Tally sheet
Example

Position - 1	Position - 2	Link Quality	Comments
1	2		
1	3		
1	5		
1	6		
1	7		
5	7		
3	2		
3	5		
7	2		

Tally sheet
Example

Position - 1	Position - 2	Link Quality	Comments
1	2	good	
1	3	good	
1	5	acceptable	
1	6	acceptable	
1	7	poor	Noise spikes noticed
5	7	poor	
3	2	acceptable	
3	5	acceptable	
7	2	poor	Signal outage noticed

What you need

★ Avaya Wireless Client Manager
  - ★ Link test
    - 1x AP + 1x Notebook/PC Card or desktop
    - purpose: Achievable distances
    - For Point to Point links
  - ★ Site Monitor
    - two or more APs + 1x Notebook/PC Card
    - purpose: verify overlap APs

★ Avaya Wireless AP Manager
  - ★ Analyze function (remote link test)

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Things to remember
Tips

★ Take enough loaded batteries for the Notebook

★ Take building owner on site analysis tour

★ Inform building personal of site analysis

★ If possible (allowed) take digital photo's

★ Ask for future plans

★ Perform site analysis, taking filled building into account.

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