

# Site Survey Report

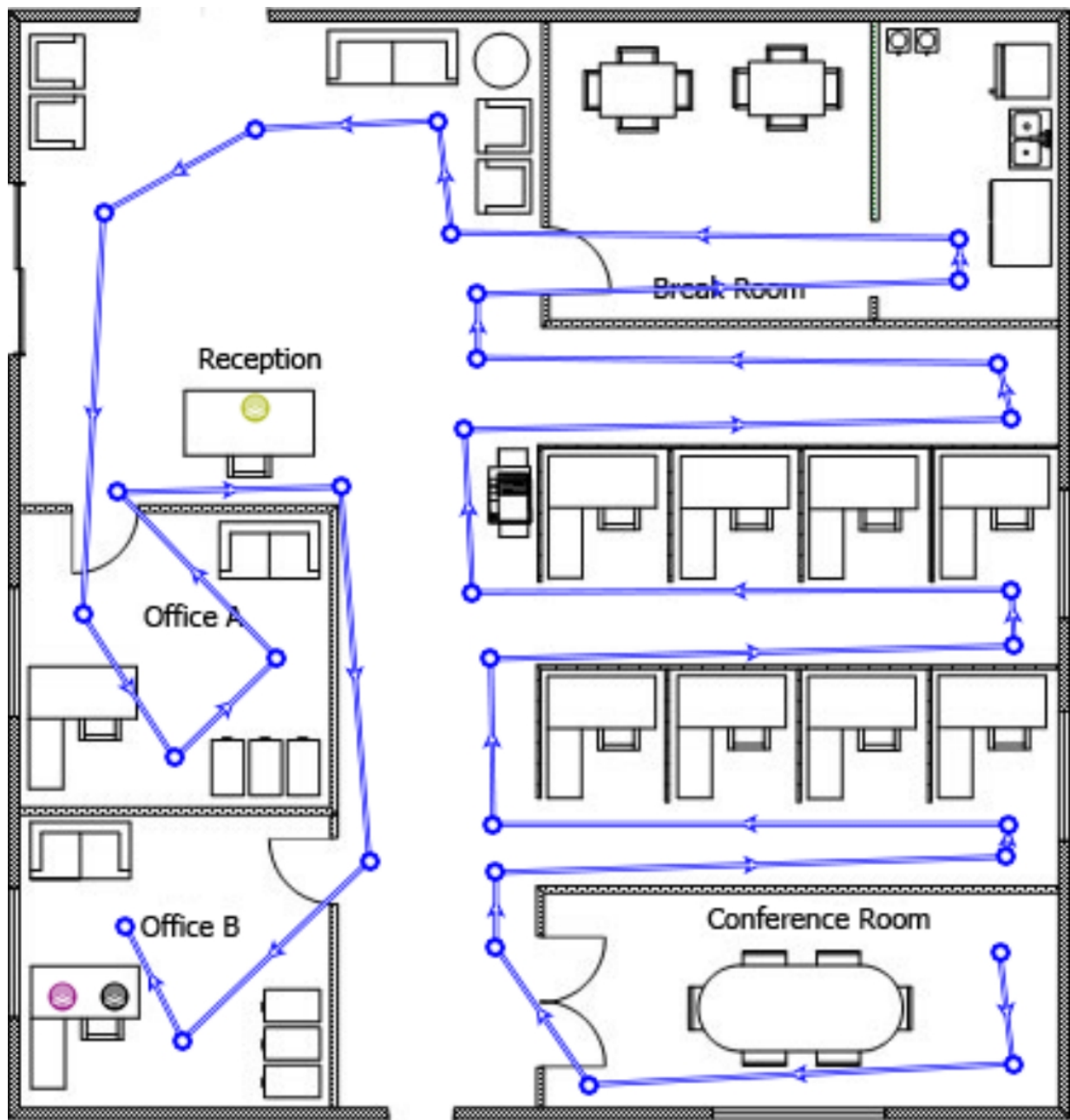
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Survey Name	Zone A
Surveyor	Andrew Riedel
Location	Building 2
Description	Sample Report
Date(s)	Thursday, September 09, 2010

## Map with no visualizations



## List of Surveys

Name	Description
Survey 9/9/2010 1:39:06 PM	
Survey 9/9/2010 2:28:52 PM	

## List of APs

Name	SSID	MAC	Vendor	Channel	Max Rate	Encryption
Cisco 802.11n	WLAN03	00:23:04:89:C6:91	Cisco	2 (6)	300.0	WPA-CCMP
3com 802.11n	WLAN03	00:1A:C1:6E:A0:B6	3com	2 (6)	300.0	WPA-CCMP
AsustekCom 802.11g	ImpexDD	00:1D:60:E8:4E:B5	AsustekCom	1	54.0	WPA-TKIP
D-Link 802.11g	GuestNet	00:0F:3D:E9:05:01	D-Link	11	54.0	WEP
AsustekCom 802.11g	BorisM	00:23:54:F6:6E:10	AsustekCom	4	54.0	WPA-CCMP
D-Link 802.11a	GuestNet	00:0F:3D:E9:05:01	D-Link	36	54.0	WPA-TKIP
Cisco 802.11n	GuestNet	00:23:04:1B:81:01	Cisco	2 (6)	270.0	WEP
Cisco 802.11g	WLAN03	00:22:90:49:F2:7F	Cisco	6	54.0	WPA-TKIP
3com 802.11g	LOBBY	00:1A:C1:36:B5:15	3com	11	54.0	WEP
Cisco 802.11n	Floor_5	00:23:04:03:FE:7E	Cisco	1 (5)	300.0	WPA-CCMP, WPA-TKIP
ZygateComm 802.11g	ImpexDD	00:02:CF:AE:80:4F	ZygateComm	1	54.0	WPA-TKIP
Cisco 802.11an	WLAN03	00:23:04:79:5B:31	Cisco	161 (157)	300.0	None
AsustekCom 802.11g	Zone 2	00:1E:8C:0F:34:19	AsustekCom	11	54.0	WPA-CCMP
AskeyCompu 802.11g	Zone 2	00:21:63:1C:F7:B9	AskeyCompu	11	54.0	WPA-TKIP
ZygateComm 802.11g	Zone 2	00:02:CF:DB:92:C6	ZygateComm	1	54.0	WPA-TKIP
Cisco 802.11g	ImpexDD	00:22:90:78:0D:CD	Cisco	1	54.0	WPA-CCMP
AsustekCom 802.11g	Zone 2	90:E6:BA:A9:9D:4C	AsustekCom	1	54.0	WPA-TKIP

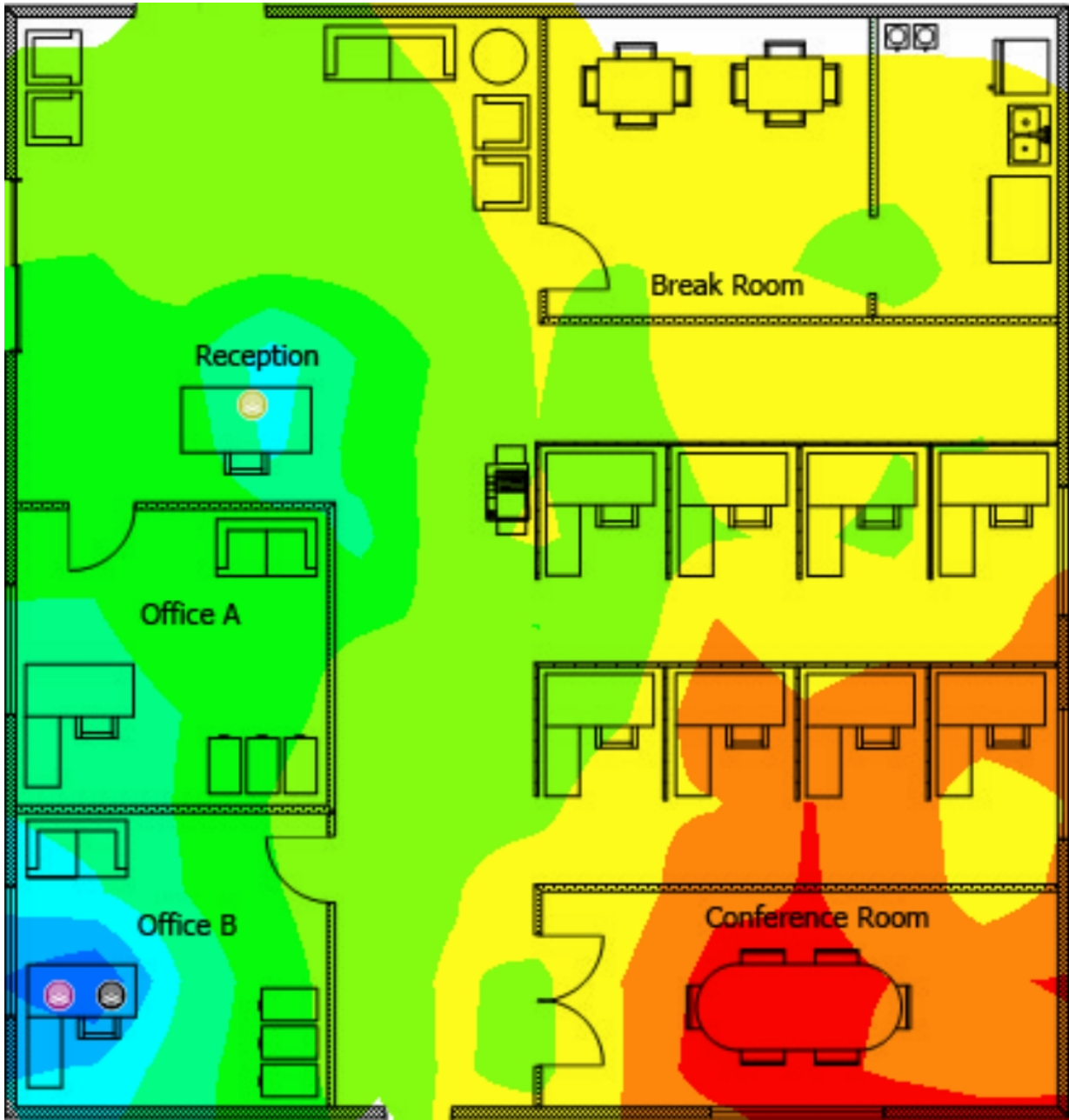
## Signal Level

This visualization shows the signal strength map (also called the coverage map) measured in dBm. Signal strength is one of the most important factors that influence WLAN performance, as in the areas with low signal, establishing a reliable and high-throughput link between the AP and client devices is impossible.



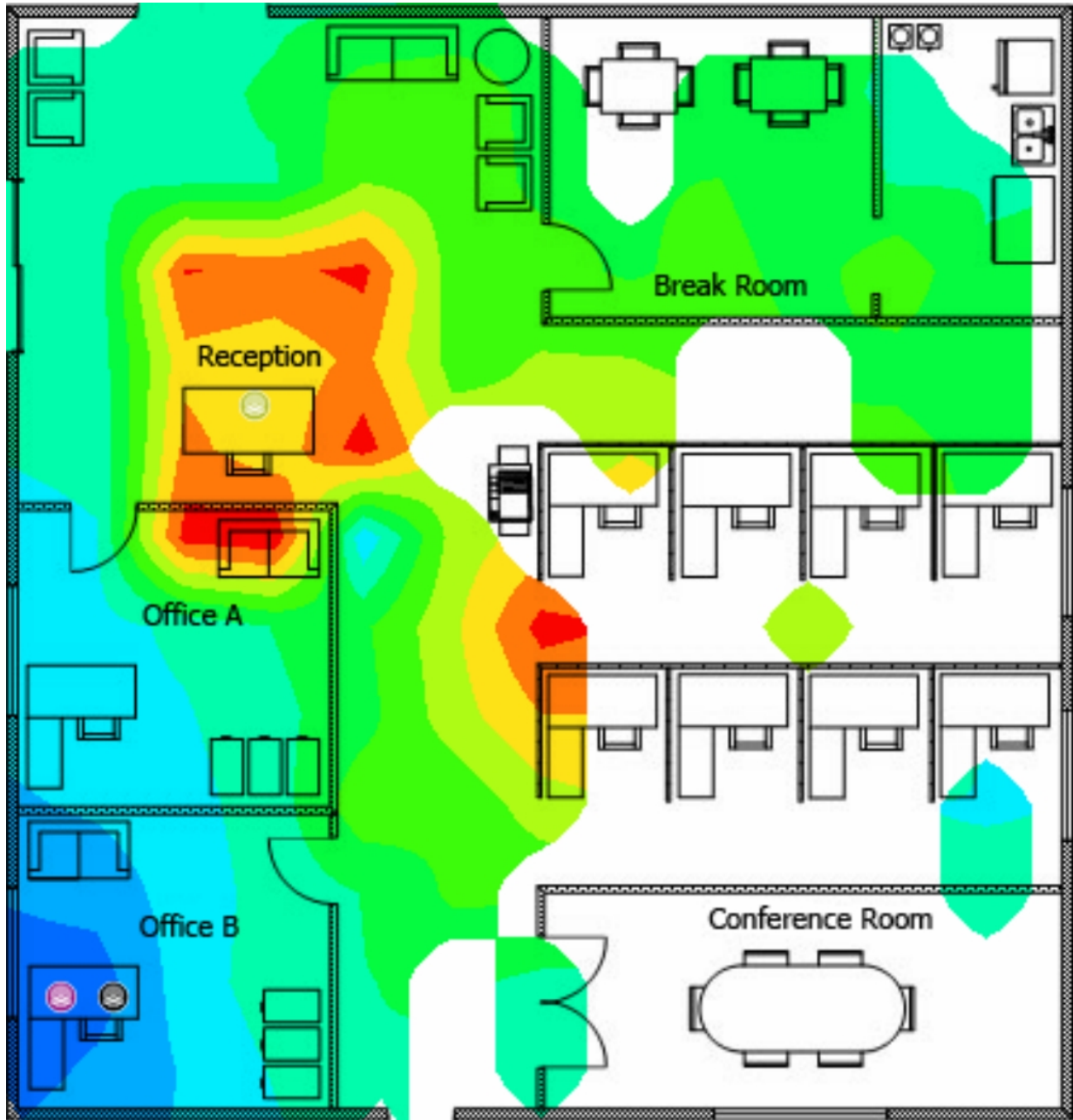
## Signal-to-Noise Ratio

This visualization shows the signal-to-noise ratio (SNR) measured in dB. SNR is a measure to quantify by how much the signal level exceeds the noise level. Noise is generated by non-802.11 sources of radio waves (this includes 802.11 frames damaged during propagation). In low SNR zones, client devices may not be able to communicate with APs.



## Signal-to-Interference Ratio

This visualization shows the signal-to-interference ratio (SIR) measured in dB. SIR is a measure to quantify by how much the signal level of an AP (interfered AP) exceeds the interference level. The interfering signal is the signal being transmitted by other APs (interfering APs) that may or may not belong to your WLAN and that use the same or one of the adjacent 802.11 channels. In low SIR zones, client devices may experience low throughput.



Zone A

## AP Coverage Areas (Cisco 802.11n - 00:23:04:89:C6:91)

This visualization shows the areas covered by the APs. An area is considered covered if the signal is strong enough for the clients to communicate to the AP. Coverage areas are color-coded: For each AP, a small colored square is shown next to the AP icon. The corresponding color is used to display the coverage area contour or fill.



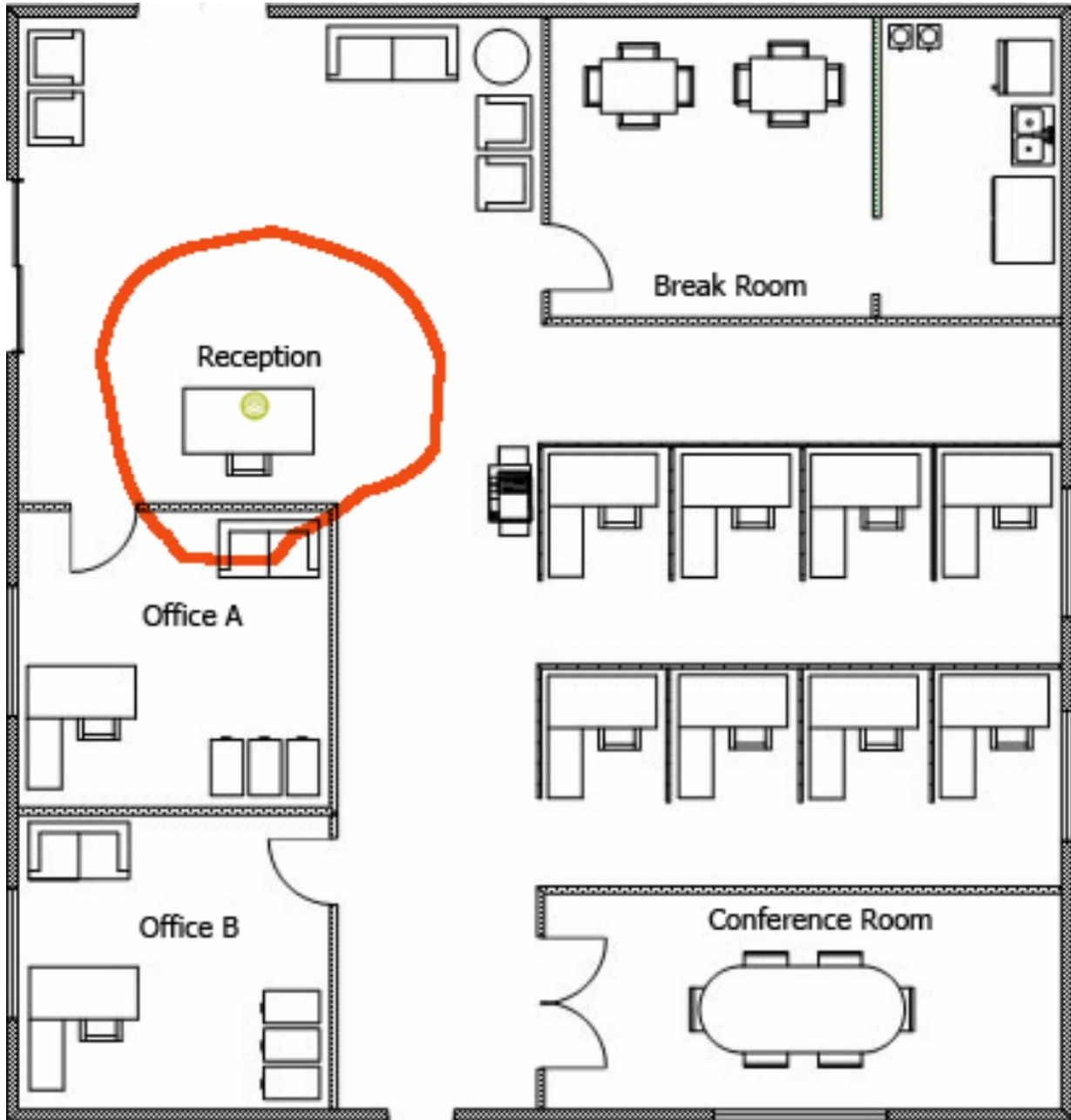
### AP Information

Name	SSID	MAC	Vendor	Channel	Max Rate	Encryption
Cisco 802.11n	WLAN03	00:23:04:89:C6:91	Cisco	2 (6)	300.0	WPA-CCMP

Zone A

## AP Coverage Areas (Cisco 802.11g - 00:22:90:49:F2:7F)

This visualization shows the areas covered by the APs. An area is considered covered if the signal is strong enough for the clients to communicate to the AP. Coverage areas are color-coded: For each AP, a small colored square is shown next to the AP icon. The corresponding color is used to display the coverage area contour or fill.



### AP Information

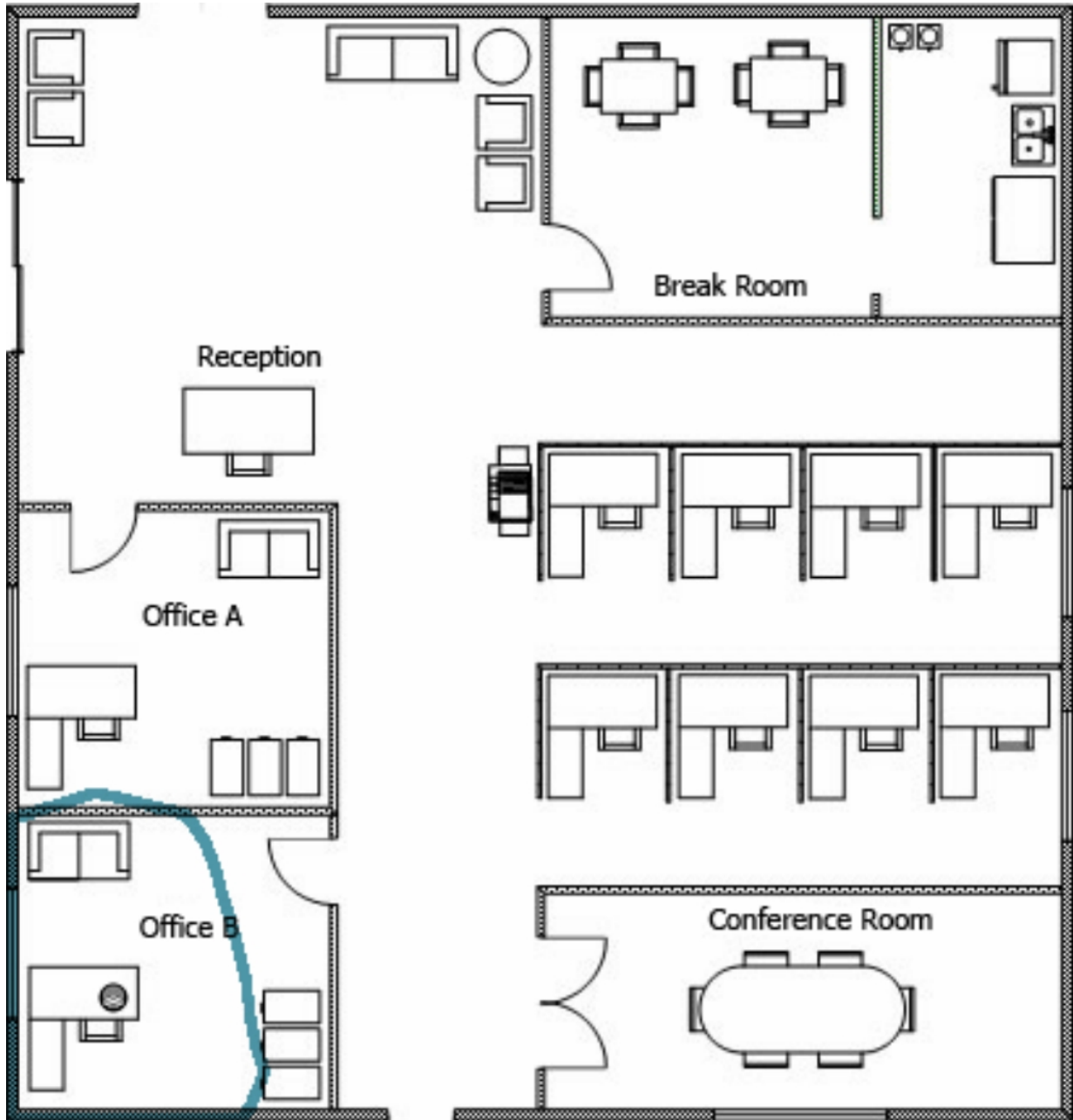
Name	SSID	MAC	Vendor	Channel	Max Rate	Encryption
Cisco 802.11g	WLAN03	00:22:90:49:F2:7F	Cisco	6	54.0	WPA-TKIP



Zone A

## AP Coverage Areas (Cisco 802.11an - 00:23:04:79:5B:31)

This visualization shows the areas covered by the APs. An area is considered covered if the signal is strong enough for the clients to communicate to the AP. Coverage areas are color-coded: For each AP, a small colored square is shown next to the AP icon. The corresponding color is used to display the coverage area contour or fill.

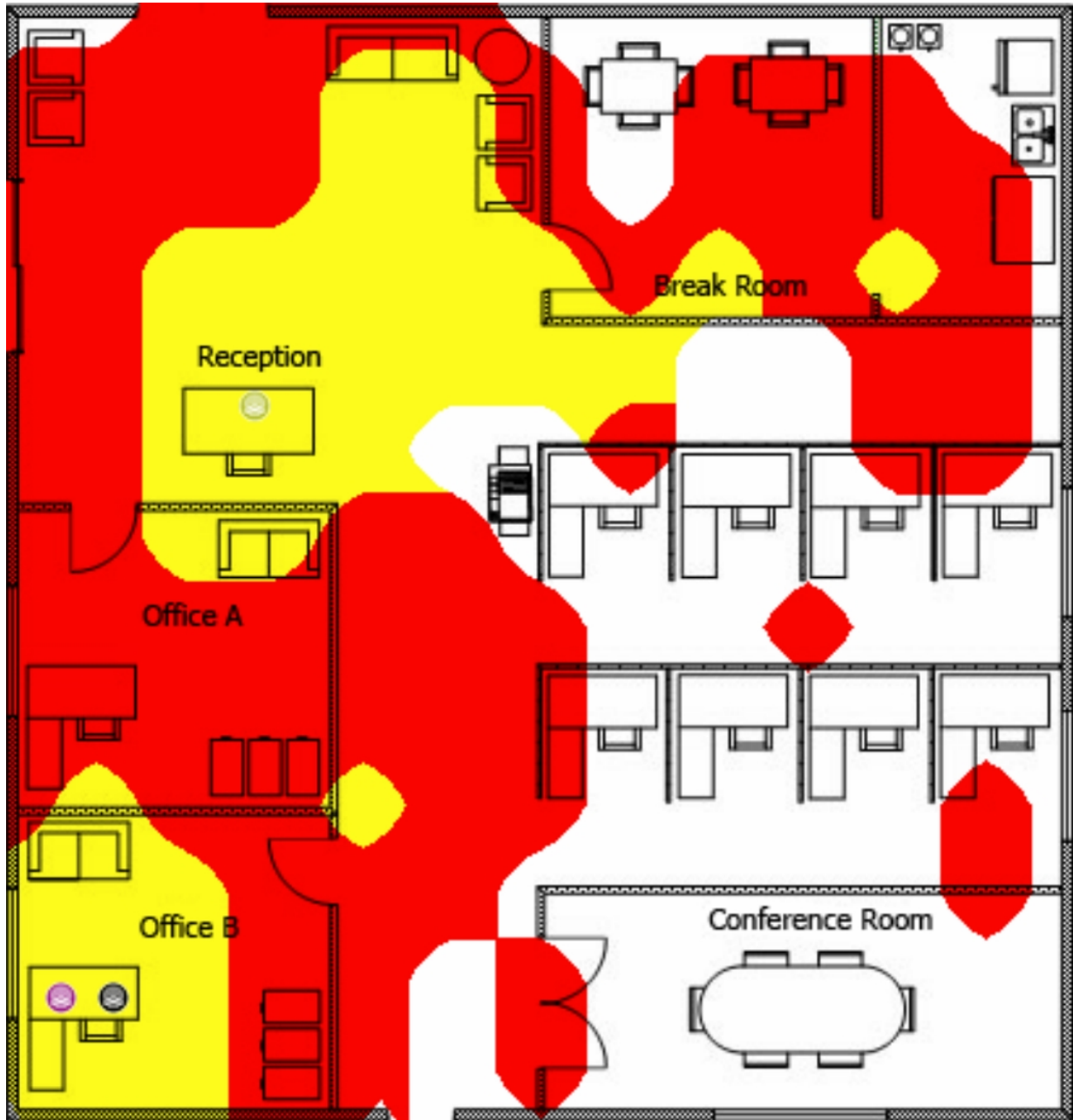


### AP Information

Name	SSID	MAC	Vendor	Channel	Max Rate	Encryption
Cisco 802.11an	WLAN03	00:23:04:79:5B:31	Cisco	161 (157)	300.0	None

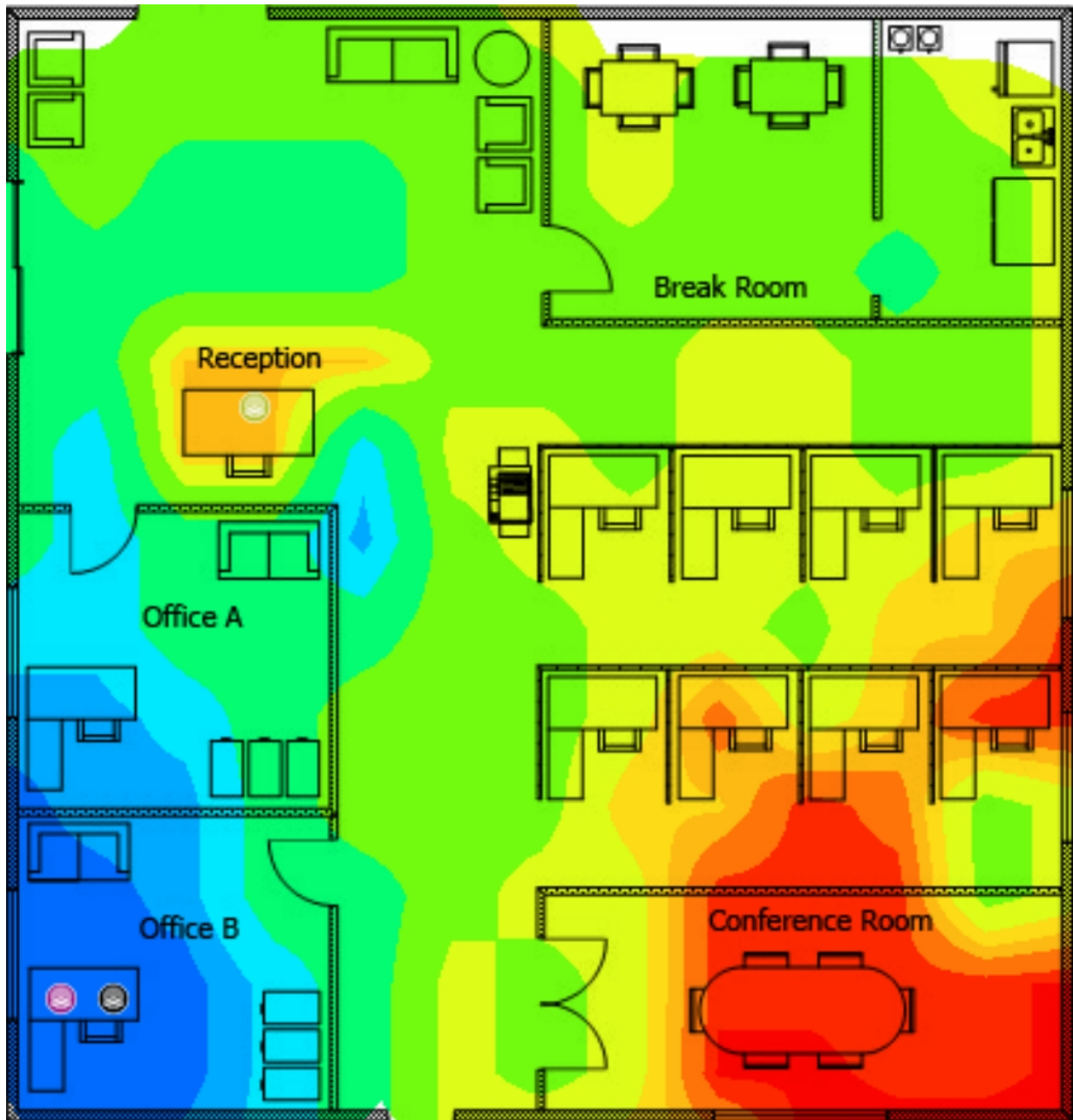
## Number of APs

This visualization shows how many APs cover the given area. An area is considered covered if the signal is strong enough for the clients to communicate with the AP. In many WLANs, multiple AP coverage is an important requirement that ensures uninterrupted connectivity, load balancing, and seamless roaming.



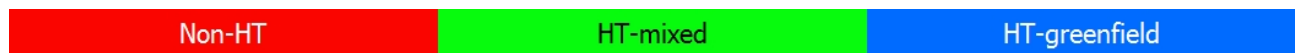
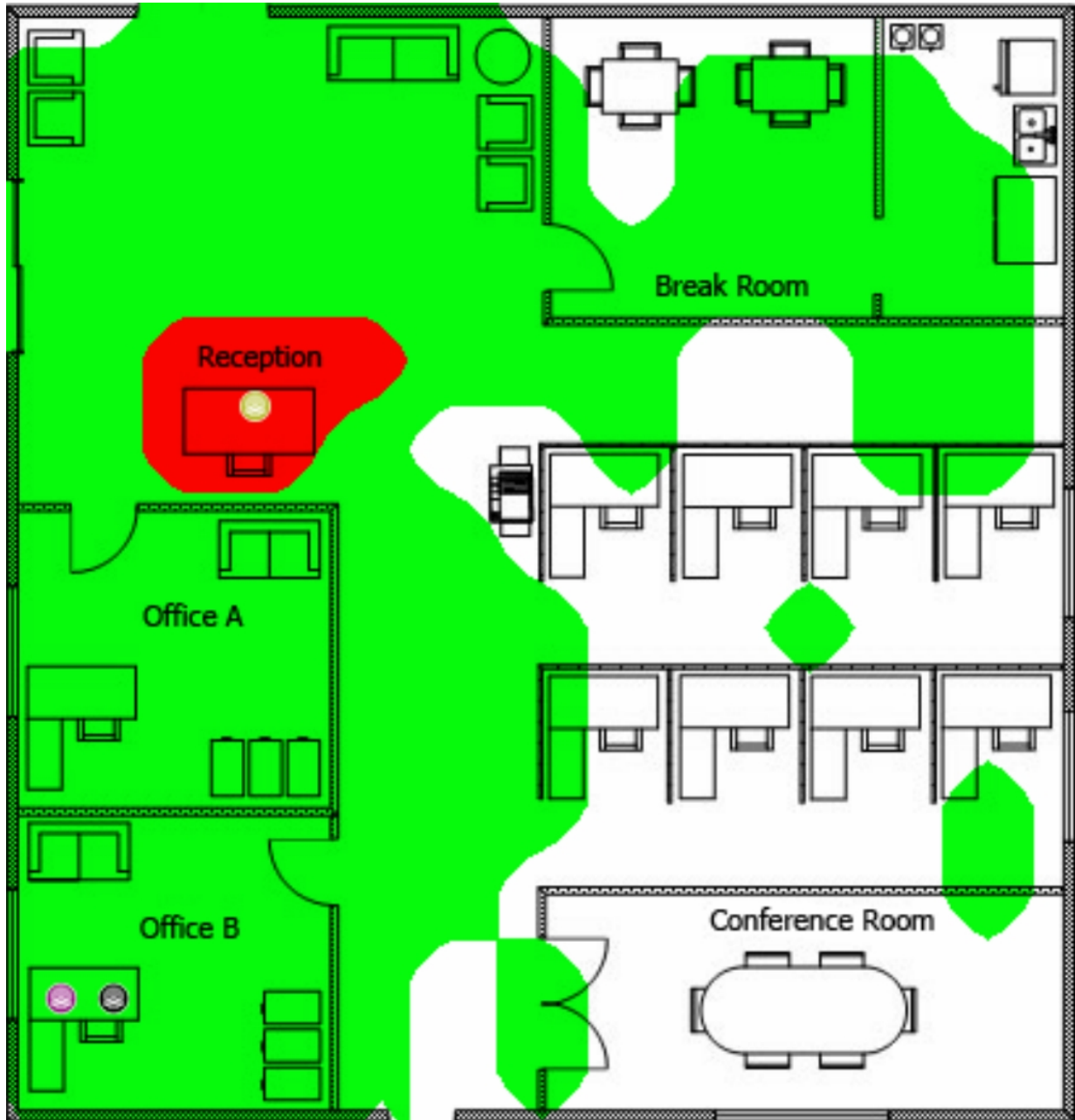
## Expected PHY Rate

The physical layer (PHY) rate is the speed at which client devices communicate with the AP. When you move a computer connected to the AP within the WLAN coverage area, the adapter properties dialog in Windows displays the varying connection speed, which may be as high as 450 or 300 Mbps when you are close to the AP or as low as 1 Mbps when you are 50 meters away from it. The displayed speed is the PHY rate.



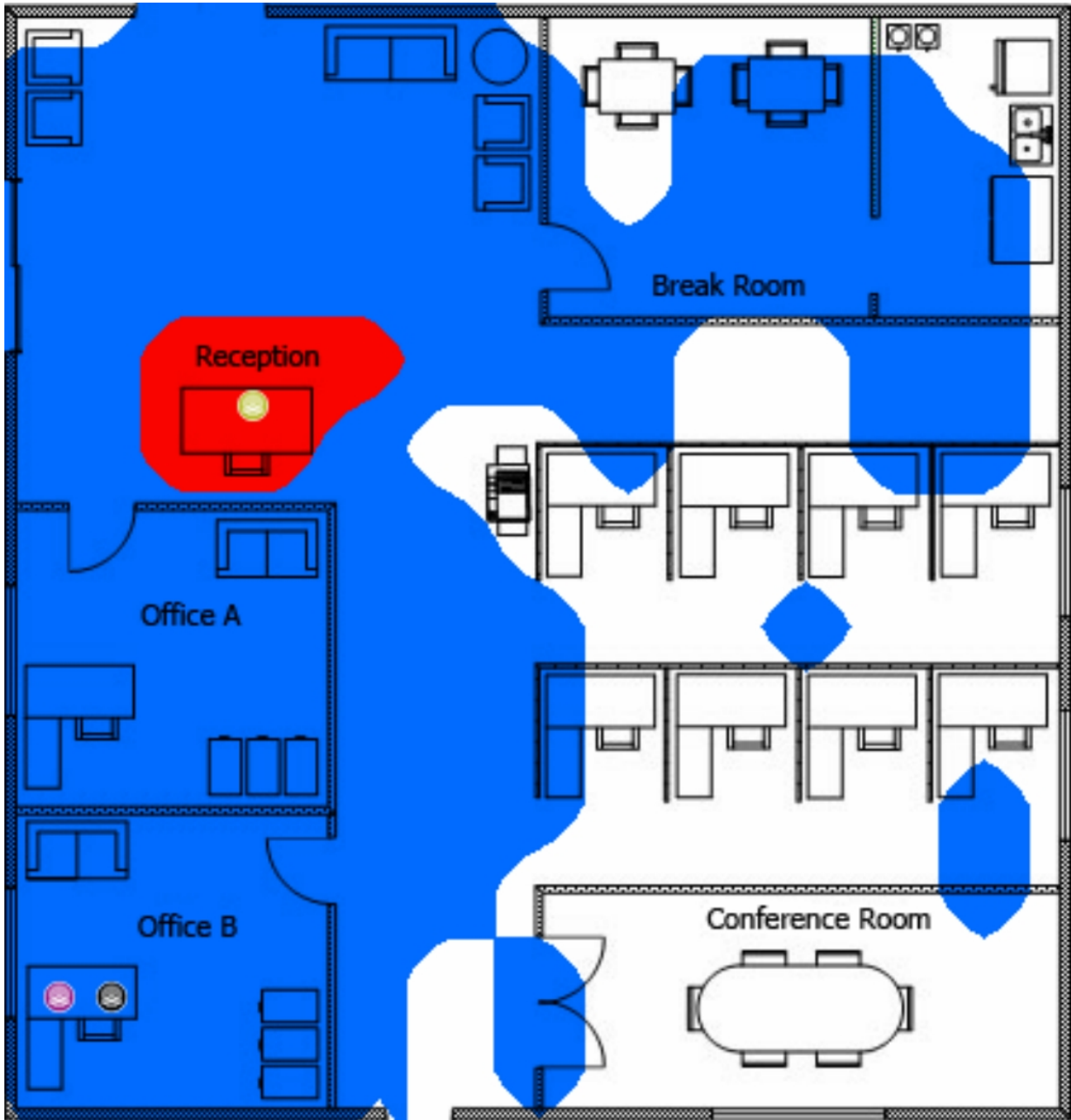
## Frame Format

This visualization shows what format of 802.11 frames is being used: Non-HT (a legacy format used by 802.11 a/b/g equipment that is not based on the latest 802.11n standard), HT-mixed (a new format introduced in the 802.11n standard that uses a protection mechanism that allows 802.11n devices to coexist with legacy 802.11 a/b/g devices), or HT-Greenfield (a new format introduced in the 802.11n standard that assumes that there are no legacy 802.11 a/b/g stations around).



## Channel Bandwidth

This visualization shows what type of channel bandwidth is being used: 20 MHz Legacy (used by 802.11 a/b/g equipment that is not based on the latest 802.11n standard), 20 MHz HT (a new format introduced in the 802.11n standard that occupies the same 20 MHz spectrum space as the legacy equipment, but uses HT-mixed and HT-Greenfield frame formats), or 40 MHz HT (a new format that uses two 20 MHz channels simultaneously, thus occupying 40 MHz spectrum space).



## Requirements

This visualization shows what requirements set by the user are met. The zones where the requirement is not met are marked with the corresponding legend color. If more than one requirement is not met, only one color will be used.

