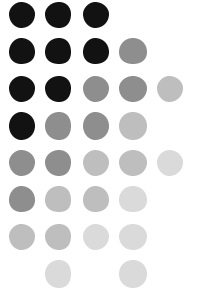
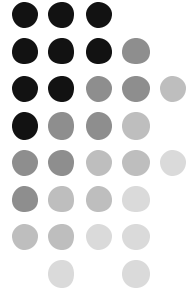


Chris Camut, Vice President, Accelacom



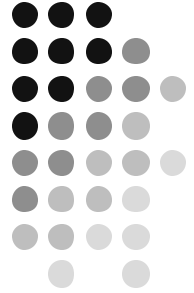
What is Wireless?

- 2 Main Flavors
 - Each does different things
- Wi-Fi (802.11 a/b/g)
 - Local Area Networks
- Fixed Wireless
 - Wide Area Networks
 - Metropolitan Area Networks



What is Wi-Fi (802.11 a/b/g)?

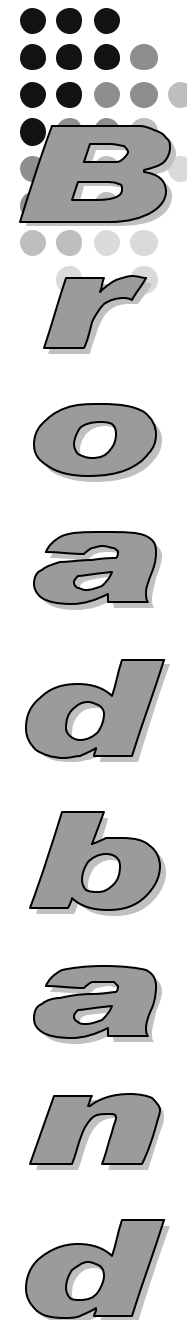
- Local networking between computers
 - Low power
 - Short range - 100m, less in buildings
 - What comes installed in many laptops now
 - 1.5 to 108 Mb/s shared bandwidth
 - Most commonly 11Mb/s (802.11b)
 - Not all transmitters and receivers are compatible
 - This is what you get at Starbucks, the Library or at the Office.



What is Fixed Wireless?

- Wide area networking between networks
 - Higher power
 - Longer range – 4-6 miles+
 - Line of Sight, Near Line of Sight
 - .5 to 155 Mb/s+ (OC3) dedicated bandwidth
 - Not all transmitters and receivers are compatible
 - Last mile connections
 - Users connect their Local Area Network, not an individual PC

Business Services	Bandwidth	Usage	Hardware	Price/month
T – 1	64Kbps - 1.5 Mb/s	Dedicated access, VPN, static IP, 20 or more users	CSU/DSU - \$500+	\$450 - \$1000 per month + mileage
T – 3	3.0 – 45 Mb/s	Web hosting, secure connectivity, medical imaging, Static IP, Dedicated Access	MUX \$700 - \$2200	\$3500 per month
Wireless: Wi – Fi (802.11)	11 Mb/s (1.5 to 108Mb/s)	Dynamic IP, multiple users, shared bandwidth, heavy Internet traffic	Base station - \$175	\$45 – 400 per month
Wireless Fixed	.5 - 20 Mb/s (Up to 155Mb/s+)	Static IP, Dedicated Access, VPNs, Small to Large Offices	Receiver/Ant. \$750	\$350 - \$3800 per month
Cable Modem	1.5 Mb/s down, 286Kbps Up	Dynamic IP, multiple users, shared bandwidth, heavy Internet traffic, music, video	Modem ~ \$100	\$100-200 per month plus cable service
DSL	144 kb/s – 1.1 Mb/s	Dynamic IP, multiple users, Dedicated Access, Internet traffic	Modem- \$100	\$60 - \$150 per month
Satellite	500 kb/s	Dynamic IP, Multiple users, Internet traffic	Dish/receiver - \$600	\$100 per month
DSL	A broadband connection using telephone infrastructure with limited availability due to distance, capacity, and technology. Distance usually 3 miles from Central Office.			
Cable	A broadband connection using cable television infrastructure with limited availability due to distance, capacity and technology. Must pay for cable service and Internet service.			
Wireless	A broadband connection using airwaves, antennas, towers and receivers with limited availability due to distance and technology.			
T – 1	Broadband connectivity up to 1.5 Mb/s with wide availability and support, although its greater complexity and expense limits its use in smaller organizations.			
T – 3	Broadband connectivity up to 45 Mb/s with wide availability and support, although its greater complexity and expense limits its use in smaller organizations.			



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