Progetto di rete

Per realizzare questa rete in 2 edifici diversi, ho deciso di utilizzare:

Un router che utilizza 2 interfacce ciascuna per edificio con gateway rispettivi 192.168.1.1 e 192.168.2.1 con subnetmask 255.255.255.192;

Uno switch e un access point per ogni piano;

Due stampanti, ovvero una per ogni edificio;

Trenta computer con OS Windows per piano;

Un firewall e un server backup.

Preventivo

240 x Computer ASUS ExpertCenter D5 SFF D500SD = 100.560€

1 x Router Cisco = 3000€

8 x Switch Cisco = 12.000€

8 x Access Point Cisco = 160€

2 x Stampanti Brother MFC-J410 = 1000€

1 x Firewall Cisco = 1000€

1 x Server = 2000€

Servizio = 170€ x h = 9180€

Totale = 128.900€

SUBNET 255.255.255.192 NETWORK 192.168.1.0 GATEWAY 192.168.1.1 BROADCAST 192.168.1.63 HOST RANGE 192.168.1.2 - 192.168.1.62 PIANO 2 SUBNET 255.255.255.192 NETWORK 192.168.1.64 GATEWAY 192.168.1.65 BROADCAST 192.168.1.127 HOST RANGE 192.168.1.66 - 192.168.1.126 PIANO 3 SUBNET 255.255.255.192 NETWORK 192.168.1.128 GATEWAY 192.168.1.129 BROADCAST 192.168.1.130 - 192.168.1.190		EDIFICIO 1
SUBNET 255.255.255.192 NETWORK 192.168.1.0 GATEWAY 192.168.1.1 BROADCAST 192.168.1.63 HOST RANGE 192.168.1.2 - 192.168.1.62 PIANO 2 SUBNET 255.255.255.192 NETWORK 192.168.1.64 GATEWAY 192.168.1.65 BROADCAST 192.168.1.127 HOST RANGE 192.168.1.66 - 192.168.1.126 PIANO 3 SUBNET SUBNET 255.255.255.192 NETWORK 192.168.1.128 GATEWAY 192.168.1.129 BROADCAST 192.168.1.191 HOST RANGE 192.168.1.130 - 192.168.1.190 PIANO 4 SUBNET 255.255.255.192		EDIFICIO 1
NETWORK 192.168.1.0 GATEWAY 192.168.1.1 BROADCAST 192.168.1.63 HOST RANGE 192.168.1.2 - 192.168.1.62 PIANO 2 SUBNET 255.255.255.192 NETWORK 192.168.1.64 GATEWAY 192.168.1.65 BROADCAST 192.168.1.127 HOST RANGE 192.168.1.66 - 192.168.1.126 PIANO 3 255.255.255.192 NETWORK 192.168.1.128 GATEWAY 192.168.1.129 BROADCAST 192.168.1.191 HOST RANGE 192.168.1.130 - 192.168.1.190 PIANO 4 SUBNET SUBNET 255.255.255.192		
GATEWAY BROADCAST HOST RANGE PIANO 2 SUBNET SUBNET POST RANGE PIANO 2 SUBNET PIANO 2 SUBNET PIANO 3 SUBNET PIANO 4 PIANO 4 SUBNET PIANO 4 SUBNET PIANO 4	SUBNET	255.255.255.192
BROADCAST HOST RANGE 192.168.1.2 - 192.168.1.62 PIANO 2 SUBNET 255.255.255.192 NETWORK 192.168.1.64 GATEWAY 192.168.1.65 BROADCAST HOST RANGE 192.168.1.127 HOST RANGE 192.168.1.66 - 192.168.1.126 PIANO 3 SUBNET 255.255.255.192 NETWORK 192.168.1.128 GATEWAY 192.168.1.129 BROADCAST 192.168.1.129 BROADCAST 192.168.1.191 HOST RANGE 192.168.1.130 - 192.168.1.190 PIANO 4 SUBNET 255.255.255.192	NETWORK	192.168.1.0
HOST RANGE	GATEWAY	192.168.1.1
PIANO 2 SUBNET 255.255.255.192 NETWORK 192.168.1.64 GATEWAY 192.168.1.65 BROADCAST HOST RANGE PIANO 3 SUBNET 255.255.255.192 NETWORK 192.168.1.128 GATEWAY 192.168.1.129 BROADCAST 192.168.1.129 BROADCAST 192.168.1.191 HOST RANGE PIANO 4 SUBNET 255.255.255.192	BROADCAST	192.168.1.63
SUBNET 255.255.255.192 NETWORK 192.168.1.64 GATEWAY 192.168.1.65 BROADCAST 192.168.1.127 HOST RANGE 192.168.1.66 - 192.168.1.126 PIANO 3 SUBNET SUBNET WORK 192.168.1.128 GATEWAY 192.168.1.129 BROADCAST 192.168.1.191 HOST RANGE 192.168.1.130 - 192.168.1.190 PIANO 4 SUBNET SUBNET 255.255.255.192	HOST RANGE	192.168.1.2 - 192.168.1.62
SUBNET 255.255.255.192 NETWORK 192.168.1.64 GATEWAY 192.168.1.65 BROADCAST 192.168.1.127 HOST RANGE 192.168.1.66 - 192.168.1.126 PIANO 3 SUBNET SUBNET WORK 192.168.1.128 GATEWAY 192.168.1.129 BROADCAST 192.168.1.191 HOST RANGE 192.168.1.130 - 192.168.1.190 PIANO 4 SUBNET SUBNET 255.255.255.192		
NETWORK 192.168.1.64 GATEWAY 192.168.1.65 BROADCAST 192.168.1.127 HOST RANGE 192.168.1.66 - 192.168.1.126 PIANO 3 SUBNET 255.255.255.192 NETWORK 192.168.1.128 GATEWAY 192.168.1.129 BROADCAST 192.168.1.191 HOST RANGE 192.168.1.130 - 192.168.1.190 PIANO 4 SUBNET 255.255.255.192		PIANO 2
GATEWAY 192.168.1.65 BROADCAST 192.168.1.127 HOST RANGE 192.168.1.66 - 192.168.1.126 PIANO 3 SUBNET 255.255.255.192 NETWORK 192.168.1.128 GATEWAY 192.168.1.129 BROADCAST 192.168.1.191 HOST RANGE 192.168.1.130 - 192.168.1.190 PIANO 4 SUBNET 255.255.255.192	SUBNET	255.255.255.192
BROADCAST HOST RANGE 192.168.1.127 PIANO 3 SUBNET 255.255.255.192 NETWORK 192.168.1.128 GATEWAY BROADCAST 192.168.1.129 BROADCAST 192.168.1.191 HOST RANGE 192.168.1.130 - 192.168.1.190 PIANO 4 SUBNET 255.255.255.192	NETWORK	192.168.1.64
HOST RANGE 192.168.1.66 - 192.168.1.126 PIANO 3 SUBNET 255.255.255.192 NETWORK 192.168.1.128 GATEWAY 192.168.1.129 BROADCAST 192.168.1.191 HOST RANGE 192.168.1.130 - 192.168.1.190 PIANO 4 SUBNET 255.255.255.192	GATEWAY	192.168.1.65
PIANO 3 SUBNET 255.255.255.192 NETWORK 192.168.1.128 GATEWAY 192.168.1.129 BROADCAST 192.168.1.191 HOST RANGE 192.168.1.130 - 192.168.1.190 PIANO 4 SUBNET 255.255.255.192	BROADCAST	192.168.1.127
SUBNET 255.255.255.192 NETWORK 192.168.1.128 GATEWAY 192.168.1.129 BROADCAST 192.168.1.191 HOST RANGE 192.168.1.130 - 192.168.1.190 PIANO 4 SUBNET 255.255.255.192	HOST RANGE	192.168.1.66 - 192.168.1.126
SUBNET 255.255.255.192 NETWORK 192.168.1.128 GATEWAY 192.168.1.129 BROADCAST 192.168.1.191 HOST RANGE 192.168.1.130 - 192.168.1.190 PIANO 4 SUBNET 255.255.255.192		
NETWORK 192.168.1.128 GATEWAY 192.168.1.129 BROADCAST 192.168.1.191 HOST RANGE 192.168.1.130 - 192.168.1.190 PIANO 4 SUBNET 255.255.255.192		PIANO 3
GATEWAY 192.168.1.129 BROADCAST 192.168.1.191 HOST RANGE 192.168.1.130 - 192.168.1.190 PIANO 4 SUBNET 255.255.255.192	SUBNET	255.255.255.192
BROADCAST 192.168.1.191 HOST RANGE 192.168.1.130 - 192.168.1.190 PIANO 4 SUBNET 255.255.255.192	NETWORK	192.168.1.128
HOST RANGE 192.168.1.130 - 192.168.1.190 PIANO 4 SUBNET 255.255.255.192	GATEWAY	192.168.1.129
PIANO 4 SUBNET 255.255.255.192	BROADCAST	192.168.1.191
SUBNET 255.255.192	HOST RANGE	192.168.1.130 - 192.168.1.190
SUBNET 255.255.192		
		PIANO 4
NETWORK 192.168.1.192	SUBNET	255.255.255.192
	NETWORK	192.168.1.192
GATEWAY 192.168.1.193	GATEWAY	192.168.1.193
BROADCAST 192.168.1.255	BROADCAST	192.168.1.255
HOST RANGE 192.168.1.194 - 192.168.1.254	HOST RANGE	192.168.1.194 - 192.168.1.254

	EDIFICIO 2
	PIANO 1
SUBNET	255.255.255.192
NETWORK	192.168.2.0
GATEWAY	192.168.2.1
BROADCAST	192.168.2.63
HOST RANGE	192.168.2.2 - 192.168.2.62
	PIANO 2
SUBNET	255.255.255.192
NETWORK	192.168.2.64
GATEWAY	192.168.2.65
BROADCAST	192.168.2.127
HOST RANGE	192.168.2.66 - 192.168.2.126
	PIANO 3
SUBNET	255.255.255.192
NETWORK	192.168.2.128
GATEWAY	192.168.2.129
BROADCAST	192.168.2.191
HOST RANGE	192.168.2.130 - 192.168.2.190
	PIANO 4
SUBNET	255.255.255.192
NETWORK	192.168.2.192
GATEWAY	192.168.2.193
BROADCAST	192.168.2.255
HOST RANGE	192.168.2.194 - 192.168.2.254
<u> </u>	