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BTS SIO Services Informatiques aux

SISR

2025

Organisations

Option

Session



1

Activité professionnelle N°

NATURE DE L'ACTIVITE	Création de réseau sur un logiciel de simulation
Contexte	Dans le cadre de l'épreuve E5 il nous a été demandé de créer un réseau, effectuer un routage simple.
Objectifs	Créer un réseau un réseau à l'aide de différents dispositifs réseau.
Lieu de réalisation	Dans les locaux de IMC ALTERNANCE.

SOLUTIONS ENVISAGEABLES

	DESCRIPTION DE LA SOLUTION RETENUE
Conditions initiales	L'enseignant nous a donné une adresse IP 10.0.0.0/16 que l'on découpera en 4 sous-
	réseaux
Conditions finales	Le réseau a été créé et qui comporte 4 sous-réseaux à l'aide des différents
	dispositifs réseau via le logiciel de simulation Cisco Packet Tracer
Outils utilisés	Ordinateur et Cisco Packet Tracer

	CONDITIONS DE REALISATION
Matériels	Poste informatique (Windows)
Logiciels	Cisco Packet Tracer
Durée	30-45 minutes

Contraintes			



Découper en 4 sous réseaux le réseau 10.0.0.0/16 Nous ajoutons + 2 lits dans le masque done 10,0.0,0/18 10.0.0.0 R: resear, SSR: sous-researce, H: hote R SA H 16 2 14 sere partie now allow ajouter des lits dans 10.000000000.0000 00001 la partie dote et la partie 10,0,0,0 Soms répeau . 128 64 32 168 42 1 63 = 0 0 1 1 1 1 1 1 255 = 1 1 1 1 1 1 1 10,010011 111 .1111 1111 10.0.63. 255 2ª partie PO. 0, PIDO CODO, 0000 0000) 10.0.64.0 128 64 32 16 8 4 2 1 642 0 10.0.011 111.111 111 100000 AL7: 0 1 1 1 1 1 10.0.127.255 3° partie 128 64 32 16 8 4 2 1 10. 0. 1000 0000 . 0000 0000 198=1 0 0 0 0 0 0 0 10,0,128:0 10.0.0011 1111. 1111 1111 131-10 10.0. 191.255 3ª portie 128 64 32 16 8 4 2 1 10.0.1100 0000 .0000 00001 0 0 0 0 0 1 6 192=1 10.0.192.0 10.0 101 111 . 111 111] 10.0.255.255

3/ Création du réseau sur Cisco Packet Tracer

10.0.0.0/1

Nous allons d'abord ouvrir Cisco Packet Tracer il faudra entrer ses identifiants afin d'y accéder.



10.0.192.0/1

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configuration erface FastEthernet0 P Configuration • O DHCP • : Pv4 Address 10.0 Subnet Mask 255 Default Gateway 10.0 DNS Server 0.0 Pv6 Configuration • : O Automatic • : Pv6 Address ink Local Address FE8 Default Gateway DNS Server WS Server WS Server WS Server Wate 802.1X Security Authentication MD5 Jsername Password	Static .0.1 255.192.0 .63.254 0.0 Static /
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Link Local Address FE8 Default Gateway DNS Server D02.1X Use 802.1X Security Authentication MD5 Jsername Password Op	0::20A:F3FF:FEC2:AD4D
Default Gateway	
DNS Server 302.1X Use 802.1X Security Authentication MD5 Jsername Password op	
02.1X Use 802.1X Security Authentication MD5 Jsername Password Op	~
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nfiguration	
HCP O St	atic
Address 10.0.6	4.1
et Mask 255.2	55.192.0
ult Gateway 10.0.1	
Server 0.0.0.	27.254
	0

IP Configuration		
O DHCP	 Static 	
IPv4 Address	10.0.128.1	
Subnet Mask	255.255.192.0	
Default Gateway	10.0.192.254	
DNS Server	0.0.0.0	
PC 3 :		
PC 3 :		
PC 3 :		
IP Configuration	 Static 	
IP Configuration O DHCP IPv4 Address	Static 10.0.192.1	
PC 3 : IP Configuration DHCP IPv4 Address Subnet Mask	 Static 10.0.192.1 255.255.192.0 	
PC 3 : IP Configuration DHCP IPv4 Address Subnet Mask Default Gateway	 Static 10.0.192.1 255.255.192.0 10.0.255.254 	

Nous avons donc créé notre réseau avec chaque PC qui sont dans des sous-réseaux différents les uns des autres. Ici les adresses IP des PCs sont fixes car nous faisons du routage simple.

4/Test : Ping des PCs

Nous allons voir si les PCs des différents sous-réseaux ping entre eux. Nous cliquerons alors sur la petite enveloppe en haut à gauche puis nous faisons un ping de PC en PC.



Les PCs des différents sous-réseaux ping bien entre eux.

CONCLUSION

Nous avons donc créé un réseau(routage simple) avec le logiciel de simulation Clsco Packet Tracer. Cela nous a donc permis de savoir configurer les différents dispositifs réseau pour pouvoir créer un réseau fonctionnel.