How to Setup Access Control Lists (SAMPLE)

Step 1 – GLOBAL - Naming and Security		
Prompt	**Command**	**Comment**
router>	Enable	
router#	configure terminal	
router(config)#	hostname ***SN1***	Name of Router
router(config)#	enable secret ***class***	
Step 2 – INTERFACE - Addressing Interfaces and Host Naming		
Prompt	**Command**	**Comment**
router(config)#	interface serial 0/0 interface serial 0	For A Model 260X Router For A Model 250X Router
router(config-if)#	ip address ***185.18.255.66 255.255.255.192***	Where x is S0's IP address. Where y is the subnet mask.
router(config-if)#	clock rate 56000	
	encapsulation ppp	Initiate PPP encapsulation.
router(config-if)#	no shutdown	
router(config-if)#	interface fastethernet 0/0 interface ethernet 0	For A Model 260X Router For A Model 250X Router
router(config-if)#	ip address ***185.18.0.65 255.255.255.192***	Where x is E0's IP address. Where y is the subnet mask.
router(config-if)#	no shutdown	
router(config-if)#	Exit	No IP hosts need to be set.
Step 3 – ROUTING		
Prompt	**Command**	**Comment**
router(config)#	router igrp 139	Initiate IGRP protocol and 139 regards an arbitrary autonomous system number (ASN) that matches the directly connected router
router(config-router)#	network ***185.18.255.64***	Where x is network address to DO
router(config-router)#	ping ***185.18.255.65***	Test connection to District Office
router(config-router)#	Exit	
Step 4 – LINE		
Prompt	**Command**	**Comment**
router(config)#	line con 0	
router(config-line)#	Login	
router(config-line)#	exec-timeout ***480***	
router(config-line)#	password ***cisco***	
router(config-line)#	line vty 0 4	
router(config-line)#	Login	
router(config-line)#	exec-timeout ***480***	
router(config-line)#	password ***cisco***	
router(config-line)#	Exit	
Step 5 – Setup Access Control List		
Prompt	**Command**	**Comment**
router(config)#	Ping ***185.18.255.65***	
	Comment: Setup the Workstations IP, SM, and Default Gateway before testing the connection between the workstation to D0 with ping. First… Set the IP so it falls within Range 1 and test. Then, set the workstation's IP within range 2 and test. One setting will allow telnet to D0 and the other won't.	
router(config)#	Access-list 101 permit tcp 185.18.0.64 0.0.0.31 185.18.255.65 0.0.0.0 eq 23	

	Comment Range 1: This will permit all workstation IP addresses from 185.18.0.64 to 185.18.0.95 telnet access to D0	
router(config)#	Access-list 101 deny tcp 185.18.0.96 0.0.0.31 185.18.255.65 0.0.0.0 eq 23	
	Comment Range 2: This will deny all workstation IP addresses from 185.18.0.96 to 185.18.0.127 telnet access to D0	
router(config)#	Access-list 101 permit IP any any	
	Comment: This permits all other conditions not meeting the filter of the ACL.	
router(config)#	interface fastethernet 0/0 interface ethernet 0	Select the interface closest to the source to apply the ACL.
router(config-if)#	IP access-group 101 in	This applies the ACL to the inbound traffic on E0.
router(config-if)#	Exit	

Step 6 – SAVE – Test		
Prompt	**Command**	**Comment**
router(config)#	banner motd ***#message#***	
router(config)#	service password-encryption	
router(config)#	Exit	
router#	show running-config	
router#	copy running-config startup-config	
	press enter on confirm?	
router#	Reload	
	press enter on confirm?	