TCSS 558: Applied Distributed Computing [Winter 2020] School of Engineering and Technology, UW-Tacoma





MATERIAL / PACE				
 Please classify your perspective on material covered in today's class (16 respondents): 1-mostly review, 5-equal new/review, 10-mostly new <u>Average - 6.81</u> 				
 Please rate th 1-slow, 5-just <u>Average - 4.9</u> 	ie pace of today's class: right, 10-fast <u>4</u>			
January 28, 2020	TCSS558: Applied Distributed Computing [Winter 2020] School of Engineering and Technology University of Washington Teams			



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TYPES OF VIRTUALIZATION						
Levels of instructions:	Library functions	Application				
■ <u>Hardware</u> : CPU	System calls	Library				
 Privileged instructions KERNEL MODE 	Privileged instructions ~	Operating system General instructio	ons			
General instructions USER MODE						
Operating system: system calls						
Library: programming APIs: e.g. C/C++,C#, Java libraries						
Application:						
Goal of virtualization: mimic these interface to provide a virtual computer						
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On the VI	<u>1:</u> reloa	d config b	by restarting	server	
vncserve	er -kil	11 :1			
vncserve	er :1				
_					
Open por	t 22 & 5	5901 in E	C2 security g	roup:	
Open por	t 22 & 5	5901 in E	C2 security g	roup:	
Open por	t 22 & 5	5901 in E	C2 security g	roup:	
Open por	t 22 & 5 nd rules	5901 in E	C2 security g	roup:	×
Open por Edit inbou	t 22 & 5	5901 in E	C2 security g	Source ①	×
Open por Edit inbou	t 22 & 5	5901 in E	C2 security g	Source ()	×
Open por Edit inbou	t 22 & E nd rules	Protocol () TCP	C2 security g PortRange () 22 5901	Source () Anywhere • 0.0.0.00 Anywhere • 0.0.0.00	×
Open por	t 22 & t nd rules	Protocol ① TCP TCP	C2 security g	Source () Anywhere • 0 0 0 0/0 Anywhere • 0 0 0 0/0 Cancel	X © Save

 <u>On the client (e.g. laptop):</u>
 Create SSH connection to securely forward port 5901 on the EC2 instance to your localhost port 5901
 This way your VNC client doesn't need an SSH key
 ssh -i <ssh-keyfile> -L 5901:127.0.0.1:5901 -N -f -l <username> <EC2-instance ip_address>
 For example: ssh -i mykey.pem -L 5901:127.0.0.1:5901 -N -f -l ubuntu 52.111.202.44

EXAMPLE: VNC CLIENT - 2					
 On the client (e.g. laptop): Use a VNC Client to connect Remmina is provided by defa Can "google" for many others Remmina login: Chose "VNC" protocol Log into "localhost:5901" 	ult on Ubuntu 16.04				
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