## Demystifying Networking Department of Computer Science and Engineering Indian Institute of Technology, Bombay

## Lecture – 13 Devices on Cisco Packet Tracker

So we see here, there are lot of options in the Cisco Packet Tracer. So, let us look at them one by one.

(Refer Slide Time: 00:07)

Cisco Packet tracer	
Using Cisco Packet tracer	Connections
<ul> <li>Devices</li> <li>Network Devices</li> <li>End Devices</li> <li>IOT Devices</li> </ul>	<ul> <li>Modes         <ul> <li>Realtime</li> <li>Simulation</li> </ul> </li> </ul>
<ul> <li>Interfaces</li> <li>Physical Interfaces</li> <li>User Interface</li> <li>Configuration Interface</li> </ul>	Topologies     Logical     Physical
Den	nystifyling Networking   CS75

So, basically there are lot of devices, among devices you have network devices, you have end devices, end devices are usually computers, servers that basically communicate over the network and the network devices are the ones which make communication possible. Then you have new kind of devices like IoT devices, smart sensors, smart doors, smart furnaces and all of those kind of devices.

Then each device has a different kind of interfaces, like the physical interface, the user and the configuration interface which we will be looking at soon. Then there are different kind of connections. By connections, we mean wires. So, we have optical fibres, we have lan cables which are basically twisted copper wires and then on the simulation engine itself, which is our Cisco packet tracer, we have modes of simulations.

Now, we will be talking more about these as we go further. So, let us go back to packet tracer and let us look at what are the different devices and how what are the different interfaces there.

(Refer Slide Time: 01:09)

	€todet - α ×	
ej	Paper 2012 20 - Robert Street Street Version	

So, if you look on the bottom left corner of the screen. So, you can see network devices, all these icons here, end devices, network devices. So, when you click on network devices there are certain routers which are shown here. So, all you have to do is just pick one, drop it here and that is how you place a router. If you click on the router, you will be able to see the router here.

So, let us zoom in and see how it looks like so, here is a switch, here are different ports of the router. So, this is what we call the physical appearance of a router and you could choose between different kind of interfaces you want to put on the router. For example, we have this empty slot here and we have say, we want four more Ethernet ports. So, we can just drag and drop so, you need there to switch off the router before adding any of the ports. So you switch off the router, you add these ports. They get added. So, now, you have four more ports on the router. So, this is how actually, this is original Cisco router looks like, there are number of them, different models over here. Then you have the different windows that we were talking about, so one of them is the configuration window, yeah. To do any configuration, the router must be switched on.

So, as you go into the configuration window, what you see is these shrilling hashtags, so that means, the router is booting up. So, this is how a router's command line interface actually looks like. So, if you login to a router using a console cable and use a terminal on your PC so, that is how basically how a router looks like. So, here you have all the different settings of a router,

the router's name, host number, the different type of routing properties, the different network addresses, all the things you could configure inside those and then you have the command line, which actually simulates, how a router's command line look looks like.



(Refer Slide Time: 03:01)

So, let us go ahead and close this and let us look at say an end device. So, we can pick a PC over here. Drag it here and when we click over it, you see the physical appearance of the PC.

(Refer Slide Time: 03:11)

	# K0	- 0 ×
	Provid Code Desire Property Athles	
0	SUBME         Internet           Automation         Pacific Marco           Pacific Marco         Back Bit           Pack Bit         Pack Bit	Z State Unite Can Anna Anna Anna Anna Anna Anna Anna
	Die	

Then, if you go to the configuration here, you can change the settings of the network adaptor of the PC.

(Refer Slide Time: 03:25)



Then, if you go to the desktop, it gives you all the kind of softwares that are available usually on desktops. For example, you have this place where you can configure the IP address of the desktop. This is just like a standard web browser. So, you type a URL and based on the URL, it will go and contact the server in your virtual network.

(Refer Slide Time: 03:39)



So, why not let us go and see actual network that has been configured on Cisco packet tracer.