## Basic VLANs and Trunks

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**In preparation for the weekly lab experience, a series of questions have been prepared for you to answer. These are required to be completed. Should you not complete them and submit them in the appropriate dropbox there will be a 10 point deduction on your lab report grade. Please answer each question and submit to the Lab Prep 5 Dropbox on myCourses prior to lab.**

Read the Lab 5 instructions and answer the following questions:

1. What is the complete set of commands used to mirror a port on a switch so you can capture the traffic? Start from the <enable> command and include the IOS mode or level needed to configure port mirroring.

Switch>enable

Switch# conf t

Switch# monitor session 1 source int f 0/1 both

Switch# monitor session 1 destination int f 0/2

1. Describe the two different ways VLAN ports can be defined.

VLAN ports can be defined one at a time or range of ports

-One at a time :Each switch port is assigned individually to the VLAN.

-Range: when we require to configure multiple switch ports having same characteristics, in order to save time we use “range” method.

1. Provide the two complete commands used to define a VLAN and its associated ports for each method described in question 2.

* One at a time :

Switch(config)# interface f0/3

Switch(config-if-range)# switchport access vlan 101

* Range:

Switch(config)# interface range f0/1 – 6

Switch(config-if-range)# switchport access vlan 101

1. What two commands are needed to define a VLAN trunk?

* switchport trunk encapsulation dot1q
* switchport mode trunk

1. What is a sub-interface? On which device is it configured? What commands are need to configure the sub- interface?

Sub-interface is logical division of physical interface. We use subinterface for inter VLAN traffic routing.It is configured on router.

* encapsulation dot1q 101
* ip address 192.168.1.254 255.255.255.0

1. How do you configure your switch to act as a layer 3 router?

Provide the command:-

Switch>enable

Switch# ip routing

1. Using <http://www.ieee802.org/1/> which “Archived Project” is responsible for Virtual LANs? Provide the title, 802.X number, and date.

802.1Q- Virtual LANs

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