LAB 10:

Configuring VTP in switch domain network

Introduction:

You can configure a switch to operate in any one of these VTP modes:

- **Server -In VTP:** server mode, you can create, modify, and delete VLANs and specify other configuration parameters, such as VTP version and VTP pruning, for the entire VTP domain. VTP servers advertise their VLANS configuration to other switches in the same VTP domain and synchronize their VLAN configuration with other switches based on advertisements received over trunk links .VTP server is the default mode.

- **Client-VTP** :client behave the same way ass VTP servers, but you cannot create, change, or delete VLANS on a VTP client.

- **Transparent-**VTP: transport switches do not participate in VTP. A VTP transport switch does not advertise its VLAN configuration and does not synchronize its VLAN configuration based on received advertisement, but transparent switches do forward VTP advertisements that they receive out their trunk ports in VTP Version 2.

- Off (configurable only in CatOS switches) — In the three described modes, VTP advertisements are received and transmitted as soon as the switch enters the management domain state. In the VTP off mode, switches behave the same as in VTP transport mode with the exception that VTP advertisements are not forwarded.

VTP V2
- VTP Vr 2 is not much different than VTP VI .The major difference is that VTP V2 introduces support for Token Ring VLANS. If you use Token Ring VLANS, you must enable VTP V2.0therwise, there is no reason to use VTP V2.

VTP Password
- If you configure a password for VTP, you must configure the password on all switches in the VTP domain. The password must be the same password on all those switches. The VTP password that you configure is translated by algorithm into a 16-byte word (MD5 value) that is carried in all summary-advertisement VTP packets.

VTP Pruning
- VTP ensures that the all switches in the VTP domain are aware of all VLANs. However, there are occasions when VTP can create unnecessary traffic. VTP pruning takes effects several seconds after you enable it. VTP pruning does not prune traffic from VLANs that are pruning-ineligible. VLAN 1 and VLANs 1002 to 1005 are always pruning- ineligible: traffic from these VLANs cannot be pruned. Extended-range VLANs (VLAN IDs greater than 1005) are also pruning-ineligible.

Objectives:

The purpose for performing this experiment is to establish a central management mechanism for spreading the configured VLANS throughout the switched domain while it is configured only once in a server switch.

PROBLEM:

VTP Security Configuring

Equipment:

1. Atleast two switches,
2. and a number of PC'