Configure VLAN

`vlan <number>`	Creates a VLAN
`name <name>`	Sets name of a VLAN
`switchport mode access vlan <number>`	Assigns interface to a VLAN
`show vlan brief`	Shows VLANs
`switchport mode [access	trunk]`	Sets Port to Access or Trunk

Configure VTP

`vtp domain <domain>`	Set VTP domain
`vtp password <password>`	Set VTP password
`vtp mode [server	client	transparent]`	Set VTP mode to Server, Client or Transparent
`show vtp status`	Shows status of VTP

VLAN Trunking Protocol distributes the VLANs added to the VTP Server to all Switches in the domain. Therefore you do not have to configure every VLAN on every Switch yourself.

Configure DTP

`switchport mode access`	Puts the interface into permanent nontrunking mode
`switchport mode trunk`	Puts the interface into permanent trunking modePuts the interface
`switchport mode dynamic auto`	Makes the interface able to convert the link to a trunk link (becomes trunk if neighbor is set to trunk or desirable)
`switchport mode dynamic desirable`	Makes the interface actively attempt to convert the link to a trunk link (becomes trunk if neighbour is trunk, desirable or dynamic auto)
`switchport nonegotiate`	Prevents the interface generating DTP frames
`show dtp interface <interface>`	Shows DTP information for an interface
`debug dtp states`	Shows DTP actions

Dynamic Trunking Protocol helps to negotiate if an interface is a trunk or access interface.

DTP - Negotiated Interfaces Modes

	Dynamic Auto	Dynamic Desirable	Trunk	Access
Dynamic Auto	Access	Trunk	Trunk	Access
Dynamic Desirable	Trunk	Trunk	Trunk	Access
Trunk	Trunk	Trunk	Trunk	Limited Connectivity
Access	Access	Access	Limited Connectivity	Access

EtherChannel

`interface range F0/3 - F0/4`	Configure multiple interfaces at once
`channel-group <number> mode [auto	desirable]`	Adds port to EtherChannel with mode auto or desirable
`interface port-channel <number>`	Configure the EtherChannel
`switchport mode trunk`	Sets the interface to Trunk
`switchport trunk native vlan <number>`	Sets the native VLAN
`show etherchannel summary`	Shows information about EtherChannel

An EtherChannel summarizes a few physical cables to one logical cable and can therefore speed up the transfer of data. It is only available for Cisco Devices.

Link Aggregation

`interface range F0/0 - F0/1`	Configure multiple interfaces at once
`switchport mode trunk`	Set interface to Trunk
`switchport trunk native vlan <number>`	Set the native VLAN
`channel-group <number> mode [active	passive]`	

Link Aggregation is the same as EtherChannel but is device independent.