- Advantages of Junos OS
- 1) Robus , Modular OS Divide the resources into segments and every process is done in its segment
- 2) Single Software
  All products has single software train Same configuration software for easy management
- 3) Separation of control and forwarding

router Fla

Flapping interface - Up and Down - This problem can Shut down the router

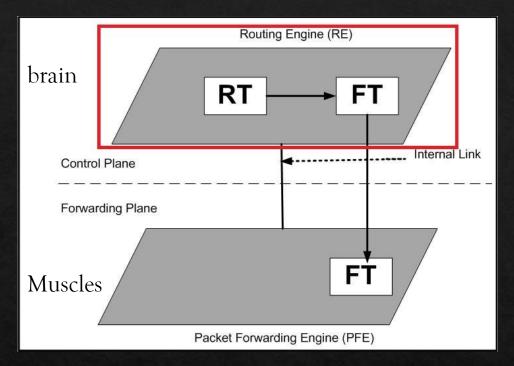
Routing protocols injects the data in RT

Internal link : protect RE from DDOS attack by limiting the transfer speed Speed = 100 Mbps

## Routing Engine Role (RE):

- 1- Maintain Routing And Forwarding Tables (Process and save it)
- 2- Control and Monitor the Chassis
- 3- Manage the PFE

Packet Forwarding Engine Role (PFE): Layer 2 and 3 Forwarding



RT: Routing Table (has all possible paths)

FT : Forwarding Table ( has the best path only )

## Policing Vs Shaping

Policing: When data exceed the speed limit save the exceeded data in a Buffer and then

Transfer it in FIFO

Shaping: When data exceed the speed limit drop the exceeded data

## DSL Types:

ADSL Uploading = 1/8 Downloading SHDSL Symmetric High Speed Digital Subscribe Line Upload = Download

Class of service: classify the data depend on type of it (Video - Voice - Mail)

## Firewall Types:

Stateless Firewall: Check data in only one direction checks packets individually without keeping track of the state of connections

Statefull Firewall: Check data in both directions keeps track of the state of active connections. It monitors the entire session of a connection

Types of Traffics:
Transit Traffic Processing >> PFE Handle it



Ex: 1.1.1.1 wants to connect to 3.3.3.3, So 2.2.2.2 will have Transit Traffic

Exception Traffic Local IP -> RE Handle it



Ex : 1.1.1.1 want to connect with 2.2.2.2

Exception Traffic Control Traffic -> RE Handle it



When router wants to send it routing table Multicase 224.0.05 & 224.0.0.6