Assignment - B3

31332

TITLE:-

RIP/OSPF/BGP protocol

PROBLEM STATEMENT:-

Configure RIP/OSPF/BGP using packet tracer.

OBJECTIVE:

1. To understand the concept of dynamic routing.
2. To understand dynamic routing protocols.

OUTCOME

Students will be able to:-

To configure and understand RIP protocol using packet tracer

H/W & S/W required:-

Fedora OS

i3 processor

THEORY:-

Dynamic Routing

Dynamic routing is a networking technique that provides optimal data routing. Unlike static routing, dynamic routing

enables routers to select paths according to real-time logical network layout changes

Dynamic routing occurs when routing protocol. It is a dynamic routing protocol used is large to very large IP networks.

Dynamic routing protocols.

1. OSPF (Open Shortest Path First)

OSPF is a link static routing protocol. It is a dynamic routing protocol used in large to very large IP network. The protocol uses a link state database & link state database

The algorithm used for OSPF to determine best routes relies on the link state database & allows OSPF to update its router are faster than RSP who a network change is countered

2. BGP (Border Gateway Protocol)

BGP is used to exchange routing information for the internet & is protocol used between ISPs. The protocol can connect together any internetwork of autonomous system using arbitary topology.

5. RIP (Routing Info Protocol)

RIP is a dynamic routing protocol which uses hop count as a routing metric to find the best path between source & destination network

Features of RIP

1. Updates of the network are exchanged periodically
2. Full routing tables are sent in updates.
3. Updates are always broadcasted

→ Configure RIP for Router.

```
# router rip
# network 192.168.1.0
# network 10.0.0.0
```

→ Configure RIP Router 2.

```
# router rip
# network 192.168.2.0
# network 10.0.0.0
```

CONCLUSION

Through this assignment routing information protocol (RIP) is configured using Cisco Packet Tracer