1) Routing:

Apynamic routing

2) Routing information Protocol: (RIP)

exchanged between neighbours approximately every 30 seconds.

CERRIPILIS also Called 08

response message 06 Brows

ARESponse Message was Sent

by routers: - wholse

response messages are also know

as a Rip advertisments.

ATT is an openingtandard

Protocol.

of \$24 Uses Bellman and fords

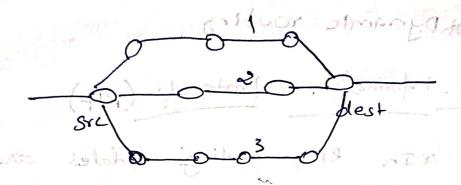
algorithm

Using Metrice Hop Count"

of It Supports upto 15x

count

asupport equal Cost Coad balancing



functions of RIP. shows

Update: updates the neighbourgh for every 30 sec

invalid: The router will start wait for an update from neighbor ode, if it does not receive an update in 180 Seconds then it marks, the particular voute as unreachable.

Hold down:

Every roular can keep hold upto 180 sec

Flush . flush the inreachable in 24 08

Request and Response. of Essay of Essays 5 colosolicated unsoliciated Disal vastage RIPUL & RIP versionamis designed to overcome some of the Shortcome, in version 1. 2 norwood mole is RIP Msq format: 4, 29902 41,2000 20 Command Versian Reserved ALL & STO state anily robust of B thorace arbbard without address all southern ball 21 of bold 21 millionals trees shortest part colly link state + rem board All o of join eboral to won reals Distance, reddition A De centralized alg . W. Centralized alg of Sends Smaller stopped through wholy

& Advantages: Request and Response. a Easy to Configure & Support different to pology Disadvantages: BIDNE. shigh cpc memory otilization so Limited number of router as Slow Covergence & Doesn't Support unequal cost Toad balancing 2) Distances Vector Link State of Bellman's and fords of Dijstra's algorithm algorithm is used to Is used to calculate final shortest path of line State Cost æsends Mag to of Send Msg to every other node in Newsk neighbor so centralized alg or Decentralized alz & Sends Smaller larger #Sends updates. updates

A simplet to impt de Expensive to implant support

and support

eg: OSPF and BGP

\$ 500 to coof 5000 H 3) OSPF: of Ospf stands for open shortest path forst restour bodonnos state trouting a link state trouting protocol. sestuois zuomonotia x * ospf is based on distributed map concept & It is widely used in Interior rooting protocol Features" Craft load & It Supports multiple balancing ar ospf can converge very quickly to retwork topology AIt Supports multiple metrics a supports for variable length of Subnetting.

Arospf Uses types boutors: they are 1920 (8 & Internal router Actrea Bounded Youter A Backbone router betudicized no board 21 1920 A 100000 25 days of Supports for Vanical

Header formal: ा छ दन Version Type Packet Router 1D ex (Inones Area 10 A Burp Authentication type poledie Cheilsum en per Authentication Authentication servi Data frage growd, Advantages: 1001/2000 ruodingion (1 & Low traffic roverhead & fast Convergence * Area based topdogy a supports for complex address & Authorfication motors Birn. ligur Disadvantages: Amemory overhead A processor overhead of config is complexated longity

gateway protocol. border as 2 ray & BGIP is oused to exchange

routing information for the internet

routing information for the internet

An autonomous System is a

collection of IP networks and routers

under the Control of Single Organization

under the

&BCIP Performs three functional

pourch appoint

procedures. they are

1) Neighbour acquisition

2) Neighbour reachability

3) Network reachability

ArBup connection inside an autonomous System 35 Called Internal Bup. (11847)

Bup. (iBup)

or Connection between different autonomous systems are called external Borphalamas di ginas a

or There are three different of autonomous System they ty per HEUDOY I TOSM losatory gration ans 17 STUBAS 2) Multivi Homed AS:0 905 % 3) Transit Asidding thinitial of 2 apolinov bas MI Header format. Tengtho! type dottor. Growin Marker field is used for authentication & length: This field indicates the total length of the Msg * Type: This field indicates the type q Msg. & BUIP defines four types of Messages Huy are 1) OPEN A) UPDATE 3) NOTIFICATION 4) KEEPALIVE

Advantages: MBCIP is robust and Scalable is routing protocol & Bap easily Solves the Count infinity problems. Hisman is Hoadoz format. Di Sadvantages: or Burp is complex & Burp voutes to destination networks, rather than tollows specific hosts love routers. * Mar Kery field