Lecture-33
Slide

classmate
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Hierarchical routing
Essentially a 'divide and conquer' strategy
The n/w is divided into different regions and a router for a particular region knows only about its own domain & other routers.
The n/w is viewed at two levels-
i) Sub-network level
ii) Network level

Advantages-
- Smaller sizes of routing tables
- Substantially lesser calculations & updates of routing tables

Disadvantage -
- Since the hierarchy is imposed on the n/w, it is followed and considering of direct path is ignored. This may lead to sub-optimal routing.

Non-hierarchical routing
Interconnected n

Adaptive routing
Uses algos and routing protocols that read and respond to changes in n/w topology.

Non-adaptive routing
When a router uses a non-adaptive routing algo it consults a static table in order to determine to which computer it should send a packet of data.

BGP
- Path was presented as a list of ~~AS, Attributes~~ autonomous systems, actually path is a list of attributes.

Well known path attributes

Types

Mandatory

A well known mandatory attributes is one that must appear in the description of a route.

Discretionary

A well known discretionary attribute is in which resources are controlled by system admin. (upto the discretion of BGP implementation)

BGP: optional path attributes

Types:

i) Optional Transitive Attribute

One that must be passed on to other peers even if the attrib. are not supported.

~~RARP~~

~~A diskless mc~~

ii) Non-transitive - Ignores update if doesn't recognize attribs.