E-Tree

An E-Tree is a rooted multipoint service that connects a number of UNIs providing sites with hub and spoke multipoint connectivity. Each UNI is designated as either *root* or *leaf*. A root UNI can communicate with any leaf UNI, while a leaf UNI can communicate only with a root UNI.

E-Trees provide the separation between UNIs required to deliver a single service instance in which different customers (each having a leaf UNI) connect to an ISP which has one or more root UNIs. Having more than one root UNI is useful for load sharing and resiliency schemes.



E-Trees are used to create:

- Multicast delivery services
- Internet access
- Mobile backhaul services
- Telemetry services

Root and Leaves

In E-Lines and E-LANs, all UNIs are designated as a root UNI.

In E-Tree, UNIs are designated either as root UNIs or as leaf UNIs. Root UNIs are used to source traffic that can be directed to any other UNI in the E-Tree. Those UNIs should be only able to see traffic that is originates in one of the root UNIs in the E-Tree are designated as leaf UNIs.

For example in an E-Tree used to provide access to multiple organizations to a single ISP, the ISP POP will sit at the root UNI, whereas each organization accessing the ISP sits at a leaf UNI so that it is unable to see traffic to and from other ISP clients.

Multiple root UNIs are permitted in E-Trees in order to support mirror sites (resiliency) and load sharing configurations.

Example(s)

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Unknown Attachment

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