

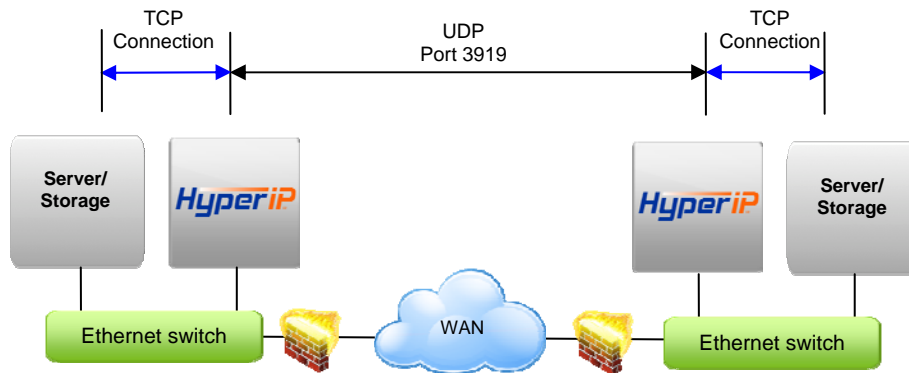
# Adding HyperIP into Your Network

HyperIP improves the performance of backup and replication applications over your IP WAN. **HyperIP does not alter application protocols nor modify any file systems.** It efficiently moves block or file data over the IP WAN under any network conditions.

HyperIP also provides:

- support of WAN speeds scaling from 1-800 Mb/s
- virtual or physical appliance footprint
- adaptive lossless block level compression
- time of day rate controls for changing throughput requirements

**HyperIP requires at least two appliances (virtual or physical)**, one residing on each side of the WAN, as shown in the figure below. Multiple applications, servers and storage at each site can utilize the HyperIP data path. HyperIP can also be deployed in a hub or mesh configuration.



HyperIP terminates TCP connections locally and tunnels the data between HyperIPs using UDP port 3919. **Network devices filtering IP traffic in the data path between the HyperIPs must be configured to allow UDP port 3919.**

**HyperIP must be *in* the data path to optimize the movement of data.** HyperIP connects to a (virtual) LAN switch with a single Gigabit Ethernet NIC and has two modes of operation to facilitate being inserted into the data path:

- **Gateway Mode:** User must add route statements in the *data movers (application servers, storage devices, etc.)* defining HyperIP as the IP gateway for the destination IP addresses or networks. Alternatively, these IP route statements or redirect filters, may be configured in a router. Gateway mode **requires users to define HyperIP intercepts** based on IP addresses, TCP ports and/or protocols to determine what traffic to act on.
- **Proxy Mode:** HyperIP requires additional local IP addresses (proxy) which represent remote IP addresses of the application servers or storage devices. This local proxy IP address is then used to communicate with the remote application. HyperIP is configured with a 1:1 mapping in which each destination IP address requires an associated local proxy address. *Applications that do not support Network Address Translation (NAT) must use the HyperIP gateway mode.*

**Each HyperIP requires its own key** associated with the HyperIP fingerprint. You must connect to the user interface on each HyperIP to retrieve its fingerprint and forward this to [support@netex.com](mailto:support@netex.com) to request the key.

For further explanation on the feature/functionality of HyperIP see the HyperIP User guide at: <http://www.netex.com/support/product-support/hyperip>