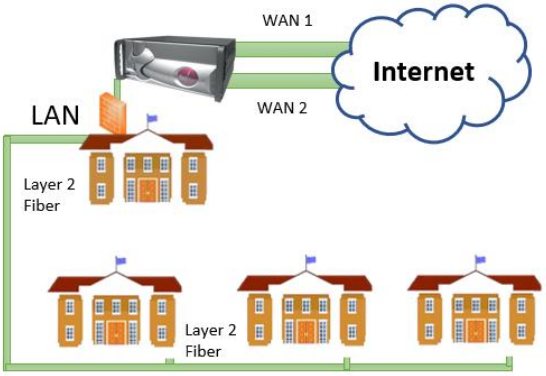
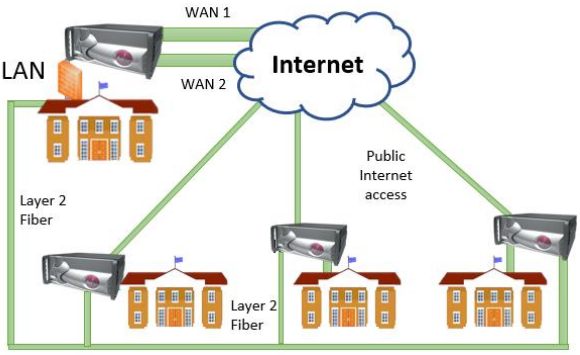
CASE STUDY: US COUNTY

An US County Government Uses FatPipe WARP to Manage its Layer 2 and Direct Internet Access Connections to Improve Redundancy and Connectivity



Scenario 1: Network Redundancy Only at HQ



Scenario 2: Full Network Redundancy

A US County has recently started using FatPipe to manage its network. There are thousands of government employees generating large amounts of data. The county offices are connected to the data center through two 1Gig lines. The challenges that the IT department faces are to create more reliable and efficient usage of the available bandwidth and create a solution that is better able to cope with surges in demand, and to prevent downtime due to line failure.

SOLUTION OVERVIEW

SITUATION

The county currently connects its system to the data center through fiber. They are worried that if the fiber line gets cut, data will be lost, and operations will temporarily stop. The lines are currently not load balanced.

All the county employees have access to the network and the internet 24/7, which is especially important due to remote work. There is external access to the county's secure Intranet for workers to ensure that tasks are completed. All data traffic through the county government currently flows through two 1Gig lines and ends at the county data center before gaining access to the internet. The current connections are not load balanced nor have failover leading to poor redundancy and connectivity within the network. If a line were to be cut, the government would lose critical data.

SOLUTION

Each county office purchased a second internet line for Full Network Redundancy. They combined it with the Layer 2 Network provided by the district. They added a FatPipe WARP at each office as well to manage the network.

The county placed a FatPipe WARP and a second internet line at each office location to load balance all internet traffic and ensure sub-second failover if one connection failed. This would ensure the county is no longer dependent on one connection from the Headquarters. FatPipe was selected for this use case as it is a managed service router which manages both the Layer 2 Line and the direct Internet access line. Adding the second line also reduced strain on the county network since employees could access work files through individual office internet lines.

BENEFITS

Using a FatPipe WARP solution, the county has sub-second failover. FatPipe WARP prevents packets from dropping and increases traffic speeds by Load Balancing.

FatPipe load balancing created a more available network that is able to cope with surges in demand throughout the day. The solution also makes it easy for the count to add more connections such as more fiber without the need for major changes to the infrastructure. The "set it and forget it" nature of the FatPipe solution means that the focus of attention for the IT department can shift away from connections to more important issues.