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## Current Setup for one client

- Cisco 4507 Chassis (Big Iron on a budget)
- Dual Power Supplies
- Dual Supervisors
- Multiple Fiber Blades
- Dual Mikrotik Cloud Core Routers
- Connections redundant to different blades


## Think about Layers

Think in terms of the 3 primary layers
Core Layer


## Core

Backbone of the network. This layer of the network does not route traffic at the LAN. In addition, no packet manipulation is done by devices in this layer.
Speed is important at this layer

## Distribution

The "routing layer"
-Packet filtering (firewalling):
-QoS: The router or layer 3 switches can read packets and prioritize delivery, based on policies you set.
-Aggregation Point:
-The distribution layer also performs queuing and provides packet manipulation

## Access

The "customer" layer
-Customer end devices connected to your switches, and other routers.
-Customer authentication done at this layer.

## Typical Problem

- Single connection to one or more backbone providers
- How do I make this as redundant as possible?



## One Solution

- Add in a switch to "split" any single connections between routers.
- Utilizing VLANS
- OSPF or VRRP between the routers
- Each connection is peered with a /29
- Switch should be something beefy



## Multiple Connections



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## THANK YOU!

