# FiberLight INTERNET INTERNET<

### **NETWORK/CARRIER**

### POINT OF FAILURE

Subscribing for service with one carrier is an **outage** waiting to happen!

Utilizing 2 carriers who share some of the same network facilities, elements, or use the same last mile provider **can be equally disastrous.** 

### SOLUTION

Employ 2 carriers using **diverse networks**, different local loops, separate facilities, and multiple upstream IP providers.

### LAST MILE



Ensure that there are 2 last mile providers with **separate circuits taking separate paths**.

### **POINT OF FAILURE**

It is common for Internet Service Providers to use the Local Exchange Carrier (LEC) for the last portion or "last mile" to the customer premise. When each provider uses the same Local Loop there is **one point of failure in that last mile lateral**.

## ENTRANCE TO BUILDING

### **POINT OF FAILURE**

If each Internet Service Provider enters the building in the exact same location, there is a single point of failure.

### **SOLUTION**

Incorporate **Dual Entry** into building as a part of network design.

### **POP** (POINT OF PRESENCE)

### **SOLUTION**

Have **alternate ISP** take a diverse path from customer location to a different PoP from primary provider.

### **POINT OF FAILURE**

Even highly skilled IT professionals who deploy carrier diversity, separate conduit, as well as diverse last mile laterals, can find the **two connections landing at the same PoP** if they are not careful. In this case, the PoP and possibly the network path from the PoP to the Internet can be a **single point of failure**.

### **POINT OF FAILURE**

Two Internet Service Providers **does not** necessarily **mean two networks.** 

ISP

### Be wary of resellers

Sometimes, an alternative provider is simply a reseller or aggregator who may not be providing diversity.

### SOLUTION

Diversify ISP so if one provider has an outage, **it does not affect the second.** 

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### SINGLE THREAD TO INTERNET



### **POINT OF FAILURE**

Being **single threaded to an internet provider** is another frequent oversight. In this scenario, there is one backbone being used.

### EQUIPMENT

### **POINT OF FAILURE**

A single router, switch, or piece of equipment **without a backup alternative.** 

### SOLUTION

Adding secondary routers/ switches is an **inexpensive way to provide failover.** 

### CUSTOM DESIGN

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### SOLUTION

Schedule a Network Assessment with one of our Engineering Experts to **create a diversity plan which meets your needs.** 

### **POINT OF FAILURE**

Standard ISP services do not typically include a diversity plan.

# What are you waiting for?

Talk with us today!