



OASIS by Onlight

- Simultaneously use full bandwidth of multiple ISP's
- Services (mail, ftp and web, etc) used over all connections
- All servers are reachable as long as one connection to the internet is up
- Makes traditionally less reliable services work in concert to deliver 100% up time
- All services are ISP independent
 - Switching ISP's is a breeze
 - Single ISP outage does not cause downtime
 - Can combine different types of access (T1's, DSL, Cable, and Wireless)
 - No need for ISP to run BGP

Example 1:

How Oasis works in a normal scenario when no outage is present.

1. The outside internet user's web browser makes a DNS request for `www.xyz.com`
2. The internet routes the DNS request over one of the connections chosen at random. *
3. OASIS will return a different answer (different IP) for `www.xyz.com` depending on the path the DNS has taken.
4. If, for instance, the DNS request arrived on the first ISP's connection, OASIS would return ISP1's IP address as the IP for `www.xyz.com`. **
5. The web browser performs an HTTP (web) request over ISP1's connection.
6. Oasis receives the HTTP request on the first ISP's connection and translates it to the web servers internal IP address using NAT, sending it to the Web Server
7. Oasis receives the data back from the web server and knowing the request came from the first ISP's connection sends it back over the first ISP's connection to the outside user's web browser.

* The random choice of DNS naturally causes load balancing across multiple lines. DNS1 is ISP1's IP address, DNS2 is ISP2's IP address, DNS3 is the thirds, and so on.

** If DNS 2, 3 or 4 were randomly chosen this process would have occurred over the ISP 2, ISP 3, or ISP 4's connections respectively by returning the IP address for its connection.