

The Atlantic Metro Communications (AMC) backbone provides customers with an extremely high quality Internet connection, maximizing throughput and availability while minimizing latency and jitter.

Several elements go in to a high quality, high availability and high performance IP network. Ensuring connectivity for mission critical network components and servers is the goal of any IP network. This document will list and present the core elements that go in to a quality IP network.

Redundancy

A great network should have as much redundancy wherever possible. The main principle for this is eliminating any single points of failure. Redundancy can exist at the upstream provider, router, switch and blade level. Having multiple connections to separate network equipment chassis, and using different hardware sub-components in that chassis will allow for any given portion of the device, or the device as a whole, to fail with minimal service degradation.

Atlantic Metro Communications facilitates an N+1 redundancy model. We feel strongly that our customers should not suffer when we are forced to manage a failure – hardware or software. This model gives us the piece of mind to be able to isolate any issues that arise for further, in-depth, troubleshooting and resolution.

Reach

A network is only as good as its reach. Having a very expansive reach delivers data, video, and voice traffic to the end destination in the least amount of time. The term *BGP peering* is used to describe an interconnection between organizations that allows information to be transmitted directly to the other party as opposed to traversing an intermediary network. Organizations peer to offer a better experience and to add a direct, closer, and in most cases, a faster path for mutual customers,

AMC is an active peering participant at several Internet Exchange (IX) points. Peering provides customers with direct connectivity to many other networks throughout the world. In other words, we get your data there as fast as possible.

Security

The Internet is a very large system where users from across the world can communicate with ease. Since access to many computer and network systems is so readily available, much attention must be paid to preserving system integrity. Ensuring networks and systems are up to date, secure and monitored are some necessary steps to do just that. To do that, organizations utilize Intrusion Detection Systems (IDS) to identify any attempted (or even successful) security breaches.

AMC has intrusion detection and stateful packet inspection systems in place to ensure that customer data is transmitted securely with minimal risk.

Monitoring

Murphy's Law states that 'Whatever can go wrong, will go wrong.' The same applies to networking equipment and servers. Lets face it; nothing is perfect. In addition to the previous

characteristics of a great network, having effective monitoring of the live environment is among the most critical factors. Things will go wrong and having proper monitoring and alerting in place is the first step to correcting the problem. Without monitoring, problems could exist that were previously unnoticed.

AMC operates a 24x7 network operations center to monitor and actively repair any issues that may arise. Our customers rely on us to have foresight of any potential issues. Proper monitoring often allows us to notice issues before they become service impacting. Rest assured that the AMC backbone equipment as well as customer circuits and equipment are being watched around the clock.

Maintenance

With technology advancing as rapidly as it is, staying current is imperative to a great network. In order to increase performance and available service offerings, performing maintenance on critical components is necessary. Typical examples include routine maintenance for power distribution systems or network equipment, or even emergency maintenance to remedy any components that are likely to fail if not given immediate attention.

AMC performs maintenance as necessary to ensure customers are constantly on a state-of-the-art network platform and to make sure the network is available as much as possible.

Accountability

A necessary element of a great network is a strong Service Level Agreement (SLA). An SLA states the allowable performance metrics that a customer can expect when purchasing services from a vendor. A network SLA typically sets forth the expectations for network connectivity (uptime), network speed (latency) and overall network throughput consistency (jitter). Should one of these metrics exceed standard figures, some form of compensation will be provided to the customer.

AMC puts our money where our mouths are by offering a 100% network uptime guarantee, and additionally, low latency and jitter.

Conclusion

Many fundamentals go in to proving the difference between a good and a *great* network. We employ every method so we are able to provide the best possible service to our customers. We truly care about your business and have made strides to exemplify and prove that by designing and implementing a great network.

For more information and details about the Atlantic Metro Communications network and our products and services, contact a sales representative at +1 212-792-9950 or via email at sales@atlanticmetro.net

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