



Subscriber Guide

Dear Subscriber:

Welcome to Everstream™! By becoming a Everstream™ Network subscriber, you have chosen the fastest, most reliable network in Northeast Ohio.

Everstream™ is more than a fast connection to the Internet; it is an intranet that connects every subscriber to every other subscriber—a private information superhighway available specifically for your needs.

Your intranet connection opens up entirely new possibilities for communication, creation and manipulation of media (such as video and sound), collaboration on projects, sharing and transfer of massive data files, distance learning, and much more. In addition to providing your organization with increased efficiencies each and every day, Everstream™ enables technology to support – and accelerate – your organizational mission, and to interact with your community in ways that previous generations could never have dreamed of. Your imagination is truly free to explore the community impact your organization can make.

Many opportunities lie ahead. To get you started, this Subscriber Guide includes the information you will need to begin using and optimizing your connection. It outlines the terms and conditions of service, and provides current details on connections, services, and contact information for network staff to assist you. As our relationship evolves, we will support you with access to tools, potential technology partners and discussion venues that will help you explore new ways to interact with and engage the communities you serve.

We at Everstream™ pride ourselves in serving our subscribers. This is why we provide 24/7 network monitoring and help desk assistance from certified professionals. This is also why we strive to continually add new services, improve existing services, and engage with you to support imaginative opportunities for your organization and constituents.

Let us know what is important to you. We promise to listen. Together we will ensure that Everstream™ is the best possible network for your needs.

Sincerely,

Brett Lindsey, President
Everstream™

Optimizing Your Everstream Services

environment

A suitable environment is essential to accommodate the network equipment needed for your connection:

- Network equipment must be located in a clean, secure area.
- Security, climate control and proximity to your technical staff.
- AC power sufficient to operate networking equipment must be provided and maintained.
- Everstream™ staff must be allowed access to networking equipment for installation, testing & maint.
- A telephone with long-distance service must be located near the networking equipment.

support

The following support and personnel should be identified in order to ensure our team is communicating with the appropriate contacts in your organization. We recommend the following groups be identified:

- Business Owner responsible for managing our services – this person will serve as the main point of contact for account management, customer reporting, and general service needs;
- Contacts for IT staff responsible for the administration and maintenance of services.

maintenance

Consistent interface is critical to our ability to respond to your needs. As such, the IT contacts you choose(or their alternates) should be named for our Everstream™ staff, and authorized as the only individuals to report technical problems to the Everstream™ Network Operations Center (NOC). It is the site coordinator's responsibility to:

- Ensure that the problem is not local;
- Assist NOC staff in testing and troubleshooting the network by being the “hands and eyes” at your site;
- Provide accurate contact information for personnel at your site;
- Inform NOC staff of any locally scheduled outages or downtime prior to the activity.
- Service as main point of contact for Everstream™ NOC on proactive monitoring issues.

Network Technical Standards

access speeds

The network Backbone is comprised of multiple rings of DWDM transport that connects points of presence (or “nodes”) across Northeast Ohio to your site and other networks.

Each site has dedicated access to the network backbone using fiber or copper connections with backbone connection speeds ranging from 10 Mbps to 100Gbps. The local access facilities at your location will determine the initial connection speed options available to you. Fiber-based connection speeds can be upgraded as needed.

supported protocols

Everstream™ is a MPLS based routed network that can support transport of any Layer 2 or Layer 3 traffic. We support all Layer 2 protocols as well as common Layer 3 routing protocols such as OSPF, BGP, EIGRP, and ISIS.

security

Each Everstream™ point-of-presence (“POP”) is housed in a controlled-access facility and is protected by an uninterruptible power supply and emergency power generator. The facilities are environmentally controlled for heat, cooling and humidity. Only authorized personnel have access to these secure facilities.

The NOC is housed in a remote, controlled-access, highly-available facility. It manages the network remotely through secure connections to routers and switches that are also secured by additional security measures such as address filtering and password.

For your connection security you may request custom, enhanced end-user security, including a Layer 3 Virtual Private Network (L3-VPN), Layer 2 Virtual Private Network (L2-VPN), or Virtual Private LAN Services (VPLS).

Network Operations Support

operations responsibilities

Everstream[™] is responsible for the overall availability and accessibility of the Everstream[™] network. Resolution of issues related to operations, management and outside vendors begins with One Community's staff. Everstream's responsibilities include the performance of all core network or network-related hardware and software. One Community's responsibilities extend from the core network to termination of "customer premise equipment" (CPE) devices or Metro-Ethernet end-points.

The following services are provided as part of your Baseline Service:

- Planning, scheduling, installation & testing of equipment at network access points and dedicated access connections at your site;
- Troubleshooting direct access connections;
- Daily operations, including preventive and corrective maintenance of the Everstream[™] network & servers;
- Identification and resolution of information service problems;
- Technical support for Internet services;
- Liaison support between you and telecom vendors to ensure the quality and reliability of telecommunication services;
- Assignment of Everstream[™] IP addresses and routes;
- Maintenance of primary and secondary Domain Name Servers;
- Custom solutions based upon your needs and services available.

network operations center (NOC)

When you contact the NOC, you can expect to be served promptly and courteously. The NOC handles all troubles that can be pinpointed as issues affecting the Everstream[™] network and are responsible for coordinating with you - the end-user - and vendors to resolve network problems. The NOC assigns each network problem a trouble ticket number and enters it into our OneConnect trouble ticket system. The NOC regularly logs progress and status into the trouble ticket system*. Everstream's network routers and backbone equipment are configured to automatically alert the NOC's engineers and managers when problems occur. This system ensures that most problems or potential problems are reported to the NOC, and are being addressed even before you become aware that problems have occurred. NOC staff coordinates repairs through subscribers and vendors. Problems that cannot be resolved while you are on the telephone are immediately assigned to a network engineer. The ticket system automatically escalates outstanding problems to NOC management and assures you timely status updates.

* As a customer, you are able to view, add comments and manage the support issue with our NOC via the OneConnect tool. See appendix 3 for instructions to utilize the OneConnect tool.

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Appendix 1: Intranet Features

As an organization linked to a community intranet, your opportunities to leverage the network for accelerating your organization's mission are enormous*. The Intranet features listed below are included with each managed Everstream™ connection. Some features require additional bandwidth. Network staff can assist you with configuration options and specific bandwidth requirements.

bandwidth

Bandwidth on the Everstream™ network is less expensive than bandwidth to points off of the Everstream™ network. If a significant portion of your Internet communications is with other Everstream™ subscribers, you may realize significant savings by subscribing to a higher total bandwidth for your connection (the "Intranet" bandwidth) than for off-network (i.e. "Internet" bandwidth) traffic.

high quality on-net communications

Everstream™ cannot guarantee the performance and quality of your communications across the global Internet. However, when you are communicating with other sites on the Everstream™ network, you are using a network engineered for demanding requirements, e.g. real-time multimedia applications. Our data goes directly across our high speed network to your collaborator without taking the long route typical with other Internet service providers.

multiprotocol label switch services (MPLS)

Everstream™ can connect your branches together using various MPLS technologies. Everstream™ can provide Layer 3 virtual private network (L3-VPN), Layer 2 virtual private network (L2-VPN), or Virtual Private LAN Services (VPLS).

* For opportunities on how relationships and communications with other subscribers or the community at large can increase your organization's impact, please contact one of our Everstream staff.

Appendix 2: Internet Features

All Internet features of Everstream's Basic Service, listed below, are included with every subscriber's managed primary connection. Some features require additional bandwidth. Network staff can assist subscribers with specific bandwidth requirements.

high-speed internet access

Internet access has become indispensable in the modern workplace. With Everstream[™], your organization can have a quick on-ramp to the commercial Internet's vast array of information and services. Everstream[™] provides direct Internet access through Tier 1 providers.

state and national inter-networking

Everstream[™] was created exclusively to serve Northeast Ohio's nonprofit entities and public sector. As a subscriber of Everstream[™], you have direct access to a wide range of services as well as connections to other people and data on Everstream[™]. Everstream[™] is preparing for interconnections between the Everstream[™] network and other high-bandwidth regional and national networks – stay tuned.

domain name service (DNS)

DNS is an Internet service that translates domain names such as www.myorganization.org into the IP addresses such as 207.46.198.30 that the Internet uses. Every time you use a name to find a Web site or send an e-mail, a DNS server must translate the name into the correct corresponding IP address. Everstream[™] provides two DNS services from redundant servers: Authoritative DNS and DNS Cache.

- Authoritative DNS

Everstream[™] will help you define the name-to-address mappings and store these on Everstream's servers for anyone on the Internet to lookup the address of your externally accessible servers.

- DNS Caching

Everstream's servers provide fast answers for DNS lookups. All common web and Internet accesses will complete faster because Everstream's DNS caching servers will return lookups rather than waiting for requests to traverse the Internet to other organization's Authoritative servers.