Capabilities Statement

Hotwire® COMMUNICATIONS

At a Glance

- *Communications Service/IT Solutions Provider*
- *Privately owned, 20 year industry leader*
- *2100 West Cypress Creek Road, Fort Lauderdale, FL 33308*
- *www.hotwirecommunications.com*
- *800.355.5668*
- *Diverse and Inclusive Work Environment*

Core Competencies

- *Network Planning, Design and Deployment*
- *Project Management*
- *Network Construction Management*
- *Network Wireless Design*
- *Network Integration*
- *Network Evolution Planning*
- *Network Monitoring and Management*
- *Network Security Services*
- *IT Consulting*
- *Video Analytics*
- *Trend Analysis*
- *Data Center Services/Colocation*
- *Network Customization*
- *Network CAD Design*
- *IT Strategic Planning*

Partners

- *Cisco Systems*
- *Ruckus Wireless/ARRIS*
- *Nokia Networks*
- *Ericsson*
- *Technicolor*

Certifications / Memberships

- *Competitive Local Exchange Carrier (CLEC)*
- *FL Cable TV Authority*
- *Certified Underground Utility and Excavation Contractor*

Who We Are

- *Fiber optics based telecommunications company*
- *Operating in 15 states including FL, PA, GA, NY, NJ, NC & more*
- *Exclusively deploying fiber optics since 2002.*
- *First Residential Gigabit Internet provider in FL*
- *Carrier-neutral*
- *99.999% Uptime SLA*
- *Over 1,500 employees*
- *Secure HQ in Florida, 24x7x365 on-site staff, CCTV surveillance, key card access*
- *Intelligent centralized information source for all surveillance, incident detection, containment, reconnaissance, case study histories, knowledge base, network and infrastructure documentation*

Products

- *Ethernet Private Line (EPL)*
- *Ethernet Private Local Area Network (EP-LAN)*
- *Dark Fiber Wide Area Network (DF-WAN)*
- *Ethernet Direct Internet Access (E-DIA)*
- *Network Monitoring*
- *Technical Support*
- *Network Maintenance*
- *IPTV*
- *Multi-Gigabit Speed Data*
- *Security Monitoring*

Existing Deployments

- *Residential*
- *Commercial*
- *Educational - Colleges/ Schools*
- *Municipalities*
- *Senior Living Communities*
- *Shopping Malls*
- *Hotels*
- *Sports Stadiums*
- *Marinas*
- *Outdoor Music Festivals*
- *Convention Centers*
- *Planned Communities*
- *Medical Buildings*
- *Off Base Military Housing*
- *Film Studios*
- *Corporate Meeting Rooms*
- *Business Parks*
- *Airports*
- *Yachts*
- *Financial Institutions*

Dark Fiber Wide Area Network

Hotwire® COMMUNICATIONS

DF-WAN *is a high-capacity network solution for those who need unlimited bandwidth, complete service control, and total reliability. Hotwire Communications offers a variety of connectivity options from individual strands of fiber to complex multi-site, self-healing rings and custom designs. We also offer multiple contracting options including Multi-year Operation and Maintenance (O&M), Indefeasible Right of Use (IRU) and buyout agreements.*

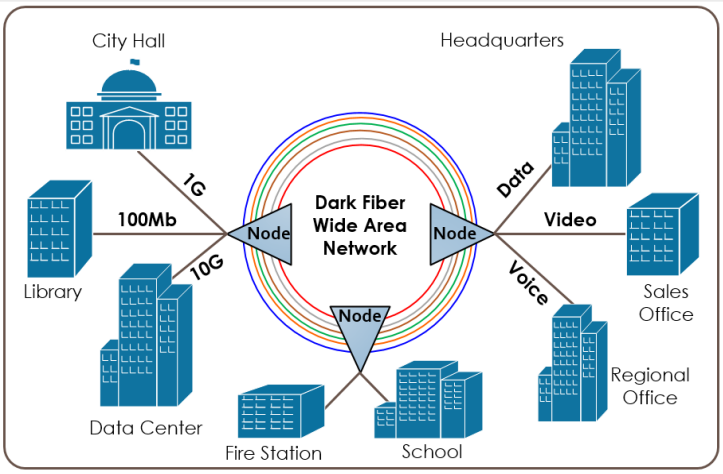
Dark Fiber Wide Area Network (DF-WAN) *offers organizations an unmatched level of speed, performance, and control. No other network solution matches the level of control over equipment, standards, protocol, or the uniqueness dark fiber provides in flexibility for enterprises seeking to scale up.*

Control and scalability

One of the most significant benefits of Hotwire Communications' DF-WAN is it gives customers full control and freedom over the network, equipment and connection settings. Customers can decide the type of network topology, transmission technology, protocols and features they would prefer for their business. Customers can scale-up rapidly, continuing to replace and upgrade technology, and change equipment according to the organization's evolving needs. This means that data and speed capacities will be limited only by the equipment used to power the network.

Reliability and performance

Hotwire Communications' DF-WAN networks offer high reliability and performance when it comes to equipment failure because it is passive connected from end-to-end, and the cables are maintained in marked communications conduits underground. Common types of outages due to third-party damage to the power infrastructure or central office equipment failure—whether that be to the physical cabling or the power supply—are mostly avoidable with dark fiber solutions.



Security and Privacy

Hotwire Communications' DF-WAN networks are purposefully designed per customers' specifications. The data is highly secure and never enters the public Internet. Customers can determine the security protocols and standards to be used, including encryption, permissions and settings.

High Volume Data Transfer

Fiber optic cables can be lit up to 100 Gigabits per second (Gbps) on a single wavelength depending on the distance of the fiber cable itself. The DF-WAN network can be optimized for speed by choosing, for example, appropriate equipment upgrades and transmission protocols. No other users can access the network; therefore the bandwidth provisioned is entirely dedicated to a single customer.

Dark Fiber Wide Area Network

Network Monitoring

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- *Hotwire Communications shall remotely monitor the functions of the system and the services on a 24x7x365 basis.*
- *Hotwire Communications shall provide a customer service telephone support line 365 days per year, 7 days per week and 24 hours per day (The Help Desk).*
- *Hotwire Communications shall ensure that the Help Desk is at all times appropriately staffed and managed to meet its support obligations of the agreement.*

Network Mantainence

In order to conduct facility maintenance and repair, Hotwire Communications shall intentionally interrupt service only for good cause and for the shortest time possible. Hotwire Communications shall use its best efforts to ensure that such interruptions shall occur during the least inconvenient times for subscribers, which shall be the period between 2 a.m. and 6 a.m., if practicable. Hotwire Communications shall use its best efforts to notify the customer 24 hours in advance of any system maintenance unless in an emergency or other cases in which maintenance is needed to prevent system outages. System maintenance shall only be performed two (2) times per quarter for each service provided by Hotwire Communications.

Customer Responsibilities

Customers have the following responsibilities related to the installation, support, and maintenance of the service:

- *Provide secure and sufficient space to a standard, freestanding, equipment cabinet at each of the customer facilities.*
- *Provide outside plant entry conduit(s) and internal path via risers or IDF's conduit to allow Hotwire Communications the ability to rod/ pull a fiber optic cable to the point of demarcation*
- *Provide UPS and needed electrical outlets, emergency generator back up services and circuit sizing to be determined, if NOC services are contracted.*
- *Provide access to the buildings and electrical rooms at each customer location to allow Hotwire Communications and its approved contractors to install fiber for service installation. Provide access to each location for regular emergency (24-hour) service and maintenance of Hotwire Communications' equipment and facilities..*
- *Provide an operating environment with temperatures not below fifty-five (55) or above seventy-eight (78) degrees Fahrenheit. Humidity shall not exceed seventy-five (75) percent at seventy-eight (78) degrees Fahrenheit if NOC services are contracted.*
- *Customer shall provide a Point of Contact (POC) for installation, service activation and any maintenance activities.*

Ethernet Direct Internet Access

Hotwire COMMUNICATIONS

Ethernet Direct Internet Access (E-DIA) *is a private, high-bandwidth connection method for enterprises to connect their Local Area Networks (LANs) with public Internet and streamline the performance of their networks. E-DIA is an alternative to legacy technologies—such as T1 lines, frame relay, and ATM—that typically rely on bonding multiple T1 lines or fractional T3 lines. These legacy Wide Area Network (WAN) links cannot handle escalating bandwidth requirements for business continuity, business process automation, Software as a service (SaaS), Software-Defined Wide Area Network (SD-WAN) and other emerging applications.*

Customizable & Scalable

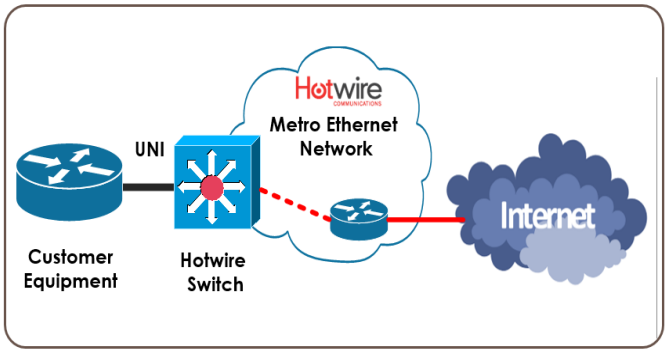
Depending on the individual business requirements, bandwidth speed can be fully customized and scaled so customers only pay for what is needed. Hotwire Communications' E-DIA provides symmetrical upstream and downstream speeds required for strong hosting of a web presence, business continuity, cloud computing, and other applications. Customizable, redundant, and diverse physical connections are available.

Security

Hotwire Communications' E-DIA dedicated fiber optic lines provide ultra-low latency, express connections to the Internet gateway. Having a secure internet connection is a priority for many businesses; Hotwire Communications' E-DIA is much safer than other provider connections because the service is dedicated and committed to a single customer and not shared with others in the network. These measures make it easier to implement authentication protocols and security applications.

Traffic Management

Hotwire Communications will use protocols available to reduce congestion, latency and packet loss by managing contracted bandwidth effectively. Hotwire Communications' Network Operations Center (NOC) continuously monitors the network to ensure Service Level Agreements (SLAs) are maintained at all times.



Service Speeds and User Network Interface

Hotwire Communications' E-DIA is delivered over a single ethernet fiber optic connection and boasts bandwidth ranging from 100 Megabits per Second (Mbps) to 100 Gigabits per Second (Gbps).

Service Speed	Interface Type	CIR Increments
100 Mbps	100 Base T or 1000 Base SX	100 Mbps
1 Gbps	1000 Base T or 1000 Base SX	1000 Mbps
10 Gbps	10 Gbase SX or 10 Gbase SX-SR	10 Gbps
100 Gbps	100 Gbase SX or 100 Gbase SX-SR	

Border Gateway Protocol (BGP)

BGP Routing allows customers to connect to multiple Internet Service Providers (ISPs) and advertise their IP addresses to all of their ISPs. To use BGP, a customer must be assigned an Autonomous System Number (ASN) by the appropriate regional registry. In the United States, these ASN's are assigned by the American Registry for Internet Numbers (ARIN). Customers must maintain the BGP configuration on their router. Hotwire Communications has Peer-to-Peer agreements with over 100 ISPs worldwide.

Ethernet Direct Internet Access

Network Monitoring

Hotwire has multiple geographically diverse Network Operation Centers (NOCs). The Hotwire Help Desk may be contacted by a customer's designated staff on a 24 hours/day, 7 days/week, 365 days/year basis at no charge regarding the Hotwire System and Services. Hotwire shall provide technical support services with respect to the Hotwire System as follows:

- *Hotwire certified engineering staff shall remotely monitor the functions of the system and the Services on a 24x7x365 basis.*
- *Hotwire shall provide a customer service telephone support line 365 days per year, 7 days per week and 24 hours per day (The Help Desk).*
- *Hotwire shall ensure that the Help Desk is at all times appropriately staffed and managed to meet its support obligations of the Agreement.*

Service Level Objectives

Description	Target
Network availability Target	99.999%
Network Latency Target	< 100ms round trip through continuous pings with a packet size of <32 Bytes
Packet Loss Target	< 2% round trip through continuous pings with a packet size of <32 Bytes
Jitter Target	< 45ms round trip through continuous pings with a packet size of <32 Bytes

Latency *or Frame Delay, is defined as the maximum delay measured for a portion of successfully delivered service frames over a time interval.*

Packet Loss *or Frame Loss, is the difference between the number of service frames transmitted at the ingress UNI and the total number of service frames received at the egress UNI.*

Jitter *or Frame Delay Variation, is defined as the short-term variations measured for a portion of successfully delivered service frames over a time interval.*

Network Mantainence

When required, Hotwire Communications shall intentionally interrupt service only for good cause and for the shortest time possible. Hotwire Communications shall use its best efforts to ensure that such interruptions shall occur during the least inconvenient times for subscribers, which shall be the period between 2 a.m. and 6 a.m., if practicable. Hotwire Communications shall use best efforts to notify the Customer 24 hours in advance of any system maintenance unless in an emergency or other cases in which maintenance is needed to prevent system outages. System maintenance shall only be performed two (2) times per quarter for each service provided by Hotwire Communications.

Customer Responsibilities

Customers have the following responsibilities related to the installation, support, and maintenance of the Service:

- *Provide secure and sufficient space to a standard, freestanding, equipment cabinet at each of the customer facilities, no further than fifty (50) feet from the customer router or switch interface (UNI).*
- *Provide outside plant entry conduit(s) and the internal path via risers or IDFs conduit to allow Hotwire Communications the ability to rod/pull a fiber optic cable to the point of demarcation.*
- *Provide UPS and needed electrical outlets, emergency generator back up services, and circuit sizing to be determined, if applicable.*
- *Provide access to the buildings and electrical rooms at each customer location to allow Hotwire Communications and its approved contractors to install fiber for service installation. Provide access to each location for regular emergency (24-hour) service and maintenance of Hotwire Communications'. equipment and facilities.*
- *Provide an operating environment with temperatures not below fifty-five (55) or above seventy-eight (78) degrees Fahrenheit. Humidity shall not exceed seventy-five (75) percent at seventy-eight (78) degrees Fahrenheit.*
- *Customer shall provide a Point of Contact (POC) for installation, service activation, and any maintenance activities.*

Ethernet Private Line

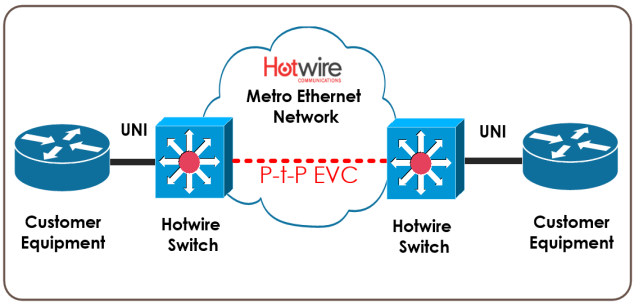
Hotwire® COMMUNICATIONS

Ethernet Private Line (EPL) *is a private data connection securely connecting two customers locations for private data services. EPL circuit is a closed network data transport service which does not traverse the public Internet and is inherently secure with no data encryption needed.*

*An **Ethernet Private Line (EPL)** connection provides unparalleled Quality of Service (QoS) as it is not a shared service and follows the same direct network path every time. Ethernet Private Line circuits are used by businesses to provide reliable, secure Ethernet Point-to-Point data services for applications including credit card processing, file sharing, data backup, Ethernet VOIP, and video conferencing. EPL service can also be configured to carry voice, video, Internet, and data services together over the same private line Ethernet connection. Ethernet Private Line services are also known as Point-to-Point Ethernet, Metro Ethernet, or Carrier Ethernet Service.*

Hotwire Communications' EPL service uses a Point-to-Point Ethernet Virtual Connection (EVC) between two User-Network Interfaces (UNIs) and provides a high degree of transparency for Service Frames between the UNIs it interconnects such that the Service Frame's header and payload are identical at both the source and destination UNI when a Service Frame is delivered. The figure above shows the basic structure of EPL service.

EPL service does not allow for Service Multiplexing, i.e., a dedicated UNI (physical interface) is used for the service. Because of the high degree of transparency of this service, there is no need for coordination between the customer and Hotwire Communications on a detailed CE-VLAN ID/EVC Map for each UNI because all Service Frames are mapped to a single EVC at the UNI.



Hotwire Communications provides the Layer 2 handoff, configuration, management and maintenance of the equipment, and Network Operations Center (NOC) Monitoring for the duration of the contract. All provided equipment will solely be used for the delivery of services by Hotwire Communications. The company retains ownership of all network components up to the demarcation point (UNI Interface).

Service Speeds and User-Network Interface

Hotwire Communications' EPL services are available in a range of bandwidth speeds from 100 Megabits per Second (Mbps) to 100 Gigabits per Second (Gbps). Figure 1 lists the available Speeds, UNI physical interfaces and associated Committed Information Rate (CIR) bandwidth increments:

Figure 1

Service Speed	Interface Type	CIR Increments
100 Mbps	100 Base T or 1000 Base SX	100 Mbps
1 Gbps	1000 Base T or 1000 Base SX	1000 Mbps
10 Gbps	10 Gbase SX or 10 Gbase SX-SR	10 Gbps
100 Gbps	100 Gbase SX or 100 Gbase SX-SR	

Traffic Management

Hotwire Communications will use protocols available to reduce congestion, latency and packet loss by managing contracted bandwidth effectively. Hotwire Communications NOC continuously monitors the networks to ensure Service Level Agreements (SLAs) are maintained at all times.

Ethernet Private Line

VLAN Tag Preservation

The service supports IEEE 802.1Q VLAN-tagged customer packets. All customer VLAN IDs and priority code points (IEEE 802.1p). Untagged packets are mapped to the native VLAN specified by customer. Customers may configure their own VLANs on their customer owned CPE without coordination with Hotwire Communications. Hotwire Communications may reserve one VLAN for network management purposes.

Network Monitoring

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Ethernet Private Local Area Network

Hotwire COMMUNICATIONS

Ethernet Private Local Area Network (EP-LAN) *services enable customers to connect multiple locations across a large metropolitan area as if they were on the same Local Area Network (LAN). These services also offer Virtual LAN (VLAN) tag preservation and tunneling of Layer 2 Control Protocols (CE-VLAN ID = YES).*

EP-LAN *is dedicated, scalable, flexible and more cost effective than traditional Hub-and-Spoke, Frame Relay or Multi-Protocol Label Switching (MPLS) network topologies, and more secured than SD-WAN which employs IP VPNs to connect to the distributed sites. A key advantage of this approach is that it allows the customer to configure VLANs across its sites without the need to coordinate with Hotwire Communications. This feature enables customers to determine the network behavior either as Multipoint-to-Multipoint, Point-to-Multipoint or Multiple Point-to-Point.*

Service Speeds and User Network Interface (UNI)

EP-LAN provides bidirectional, full duplex transmission of Ethernet frames using a standard IEEE 802.3 Ethernet interface (UNI). Figure 1 lists the available speeds, UNI physical interfaces and associated Committed Information Rate (CIR) bandwidth increments:

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Service Speed	Interface Type	CIR Increments
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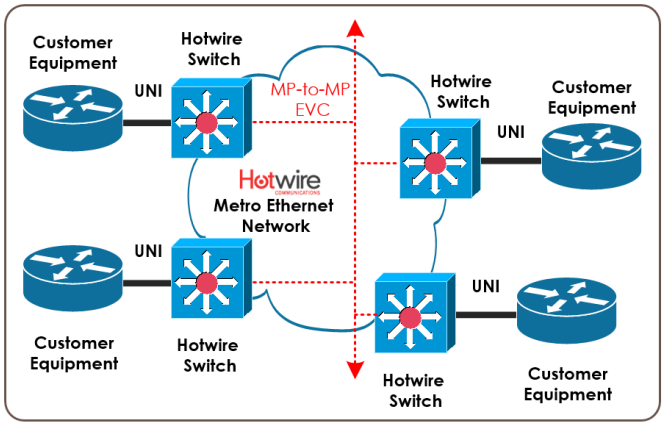

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Traffic Management

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