

NETWORK CONNECTIVITY SERVICE LEVEL AGREEMENT

CONTENTS

TERMINOLOGY	2
SERVICE DESCRIPTION	3
SERVICE OFFERINGS	3
DIRECT INTERNET ACCESS	3
CONNECTIVITY AND MANAGED WAN	
Ethernet Connectivity	
T-1 Connectivity	
Other Connectivity	∠
BUSINESS INTERNET	∠
SMALL BUSINESS INTERNET	∠
CRADLEPOINT TEMP INTERNET	∠
Dependencies	∠
POINT-TO-POINT	∠
MPLS NETWORKING	5
Virtual Private LAN services (VPLS)	5
Virtual Private Routed Network (VPRN)	5
DARK FIBER	6
ADD-ON OPTIONS	6
DNS	E
ROUTER MANAGEMENT	E
WIRELESS BACKUP	
Options	
Wireless Backup Features	
Limitations of Wireless Backup	
SERVICE LEVEL METRICS	8
AVAILABILITY DEPENDENCIES	8
LIMITATIONS	9
EXCEPTIONS	9
SERVICE DELIVERY	
DISCONNECT POLICY	10



This Network Connectivity Service Level Agreement ("SLA") is incorporated into the Quote executed by C Spire Business and Customer for Network Connectivity Services and sets forth the specific terms and conditions under which C Spire Business shall supply the Network Connectivity Services described herein to Customer. The general terms applicable to such Services are contained in the Master Terms and Conditions ("MTC") and the Master Service Level Agreement ("MSLA") incorporated into the Quote by reference. Capitalized terms used but not defined herein shall have the meanings set forth in the MTC and MSLA.

TERMINOLOGY

These are service specific definitions. Common definitions are already defined in our Master Service Level Agreement and Master Terms and Conditions.

- C Spire's Network refers to the telecommunications network constructed, owned, or operated by C Spire.
- Core Network Service (CNS) is defined as the switching and routing infrastructure that provides key transport for the IP/MPLS backbone between data centers and to our third-party access providers, which are of a high-availability design. CNS is not, for the purposes of this document, a point of our network where a customer is attached via transport to a single piece of equipment or line card.
- Customer Network refers to Customer-owned network components.
- Customer Premise refers to the physical address (as stated in the Quote) where C Spire Business Service is requested.
- Customer Premise Equipment refers to Equipment that C Spire Business has deployed at Customer Premise to enable a service.
- Off-Net Service refers to service where one or both locations to be connected, or any portion of the Circuit located between the locations to be connected, is (are) not served solely by C Spire's Network.
- On-Net Service refers to service where both locations to be connected and all Circuits between the locations are served solely by C Spire's Network.
- Points of Presence or POP refers to a specific location where Customer or C Spire originates or terminates Service.
- Router refers to the Customer router receiving Service.
- Switch refers to the Customer switch receiving Service.



SERVICE DESCRIPTION

Network Connectivity provides private network services and delivery of reliable high-bandwidth internet access.

SERVICE OFFERINGS

DIRECT INTERNET ACCESS

- Direct Internet Access On-Net (No IP Voice) Dedicated bandwidth speed for those with fiber already bored to the facility.
- Direct Internet Access Near-Net (No IP Voice) Dedicated bandwidth speed for those under 1,000 feet from a handhole
- Direct Internet Access On-Net (With At Least 5 VoIP) Dedicated bandwidth speed for those under 1,000 feet from a handhole
- Direct Internet Access Near-Net (With At Least 5 VoIP) Dedicated bandwidth speed for those under 1,000 feet from a handhole
- Hybrid Direct Internet Access When C Spire uses a third-party carrier for last mile transport and delivers it over the C Spire network.

Please note that speeds above 100 Mbps and greater require an SI to validate capacity.

CONNECTIVITY AND MANAGED WAN

Managed WAN provides one or more private data connections for access to multiple C Spire Business' Data Centers, Wide Area Network (WAN) connectivity, and reliable high-bandwidth internet access.

ETHERNET CONNECTIVITY

Managed WAN can be delivered in the form of a dedicated Ethernet circuit engineered by C Spire Business that may be transported via an Optical or Electrical interface that will be dependent upon location, bandwidth and/or Services requested. Ethernet Connectivity is available at speeds starting at 10MB up to 10GB and has the following features and benefits:

- Provides high-bandwidth connectivity for Data Center access or as a vehicle to deliver internet and WAN access.
- Private data connectivity with quality of service (QOS), if required.
- Variable bandwidth options.
- Provides high-bandwidth connectivity for C Spire Business' Hosted Voice and SIP Services.

T-1 CONNECTIVITY

T-1 is a symmetric data Service to the Customer premise. T-1 Connectivity has the following features and benefits:

• Provides 1.5M bandwidth connectivity for Data Center access, as a vehicle to deliver internet and/or WAN access.

Copyright© 2019 TekLinks, Inc. dba C Spire Business. All rights reserved. Public. Version 1.0, August 2019



- Private data connectivity with quality of service (QOS), if required.
- Able to provide bonded T-1 solutions based on customer needs up to 9M.
- Managed WAN offered throughout domestic US footprint.

OTHER CONNECTIVITY

C Spire Business may offer other custom connectivity options such as "SONET", dark fiber, or other connectivity solutions depending on geographic location and availability. Bandwidth options vary by solution. Custom connectivity may fall outside the scope of this Service Level Agreement.

BUSINESS INTERNET

C Spire Fixed Wireless Internet provides qualified small businesses with high-speed Internet service using an outdoor antenna and indoor Wireless Gateway router. Actual speeds may vary based on a number of factors including geography, foliage, in-business equipment, external radio interference, network traffic congestion, etc. and are not guaranteed.

SMALL BUSINESS INTERNET

This is a shared, best effort internet access service.

CRADLEPOINT TEMP INTERNET

Internet service for a business utilizing the Cradlepoint 600 4G LTE modem. It is meant for locations not readily serviceable by reliable terrestrial services such as DIA, SBI, T1, or cable modem service.

DEPENDENCIES

- The customer will need, at a minimum, one "Precision Plan Basic Phone" subscription to have a device to receive usage threshold alerts from the modem.
- This works on the C Spire network ONLY.
- This is best effort service and asymmetrical. Network speeds vary by location.
- Precision Plans do not have overage protection.
- Weather, building construction, and usage contention can impact network speeds.
- Forgetting to password protect Wi-Fi can results in very large, unexpected data usage.
- Streaming cannot be effectively blocked.

POINT-TO-POINT

Clear channel layer-2 connectivity between two nodes on a private connection.

Custom-quoted via the Service Inquiry process.



MPLS NETWORKING

Many customers need to connect multiple LANs together to form a wide area network (WAN). C Spire utilizes its MPLS-powered fiber network to meet this demand. MPLS technology lives within our network inside MPLS-enabled routers strategically placed throughout our footprint. In some cases, circuits from third-party carriers will supplement the custom solution (e.g. out of region). MPLS, or Multi-Protocol Label Switching, is an advanced form of data delivery, noted for its low latency transmission. It directs traffic travelling commonly diverse circuit types (e.g. Ethernet, Wave etc.) with a simple labeling scheme. This eliminates the stripping and modification of headers at each network "hop" (switch or router) and accelerates data delivery. We can deliver two types of network solutions, VPLS and VPRN.

VIRTUAL PRIVATE LAN SERVICES (VPLS)

Multiple point-to-point circuits from customer sites into one or more MPLS "Core" sites in the C Spire network. These can be C Spire or resold circuits of any of these types:

- Ethernet Dedicated Ethernet circuit engineered by C Spire Business that may be transported via an Optical or Electrical interface that will be dependent upon location, bandwidth, and/or Services requested.
- SONET
- DWDM
- T1 Symmetric data Service to the Customer premise

Circuits may utilize one or more sophisticated port technologies below. The cost for these is included within the cost of the circuit.

- LAG (link aggregation group)
- MC-LAG (multi-chassis link aggregation group)
- LLF (link loss forwarding)

VIRTUAL PRIVATE ROUTED NETWORK (VPRN)

This is a "Layer 3" MPLS service in which the customer utilizes C Spire routers – it is a true managed network. This service requires a minimum 36-month contract. Any quote for this service should actively engage a sales engineer. Multiple point to point circuits from customer sites into one or more MPLS "Core" sites in the C Spire network. These can be C Spire or resold circuits of any of these types:

- Ethernet Dedicated Ethernet circuit engineered by C Spire Business that may be transported via an Optical or Electrical interface that will be dependent upon location, bandwidth, and/or Services requested.
- SONET
- DWDM
- T1 Symmetric data Service to the Customer premise

Circuits may utilize one or more sophisticated port technologies below. The cost for these is included within the cost of the circuit.

- LAG (link aggregation group)
- MC-LAG (multi-chassis link aggregation group)
- LLF (link loss forwarding)

Copyright© 2019 TekLinks, Inc. dba C Spire Business. All rights reserved. Public. Version 1.0, August 2019



DARK FIBER

Fiberoptic cable typically used to physically connect locations. Using 100% Dark Fiber access, our footprint lets you expand your existing network, boost diversity, and connect rural, suburban, and metro regions.

- Uncommon level of transparency.
- Flexible fiber lease terms and IRU options.
- Custom quoted via the Service Inquiry Process.
- On-net solution only.

ADD-ON OPTIONS

The following options may be added to the Network Connectivity Services. Description of Service options in no way entitles Customer to the feature, unless specified by C Spire Business. A separate Order or Statement of Work may apply to such options and may have additional costs associated with them. Options below may not be compatible with all variants of Network Connectivity Service.

DNS

C Spire Business operates resolving or caching Domain Name System (DNS) servers that Customer may use for domain name look-ups by Customer's in-house systems, such as Customer PCs and mail servers, provided that in-house systems are connected to Network Connectivity Services. This domain name look-up service is only available if C Spire Business is providing primary DNS or secondary DNS to Customer and if Customer does not have its own DNS server(s). C Spire Business' domain name look-up service may not be used by Customer's SPAM detection software for querying SPAM block lists.

If Customer is running its own DNS server or relying on third parties to host its domain names, Customer must use its own servers or the third party's DNS servers for this purpose. Customer or third-party servers may not be configured to forward DNS queries to C Spire Business' DNS servers. Customer may not make more than 150 DNS queries per minute averaged over 30 minutes or more than 600 DNS queries per minute during any 5-minute interval.

C Spire Business will provide reverse DNS at the request of Customer via established support protocols for all IP addresses statically routed to Customer as part of Service.

ROUTER MANAGEMENT

C Spire Business offers Network Connectivity Routers in conjunction with Network Connectivity services. C Spire Business is responsible for installing, configuring, and maintaining the router.

C Spire Business will evaluate firmware in troubleshooting scenarios related to device performance or availability and update devices as needed. Firmware management outside of these are areas is not included and requires a block of hours to address items classified as upgrades, such as feature enhancements, third party reports, or customer preference.



WIRELESS BACKUP

If Customer has a Managed router in conjunction with Managed WAN connectivity, they may opt to add cellular wireless backup service.

OPTIONS

WIRELESS BACKUP

This service level is intended for failover of primary circuits with bandwidth between 1.5M and 10M and allows for monthly data transfers up to 5GB. Data rates may apply if monthly limits are exceeded.

WIRELESS BACKUP PLUS

This service level is intended for failover of primary circuits with bandwidth between 20M and 50M and allows for monthly data transfers up to 8GB. Data rates may apply if monthly limits are exceeded.

WIRELESS BACKUP FEATURES

AUTOMATED FAIL OVER

Wireless Backup Service remains in an offline or "down" state until primary Service fails, at which time it becomes active. In the event of an interruption in primary circuit service, the cellular modem dials up and connects to the C Spire Business network.

ROUTINE SERVICE VALIDATION

Wireless Backup Service includes a biannual validation check of wireless interfaces and wireless radios in which a wireless connection is established to ensure the wireless radio achieves successful connections, and the wireless interfaces are started to ensure they respond properly. C Spire Business engineering staff will be notified of any devices that do not respond or connect properly. C Spire Business is responsible for troubleshooting and resolving any issues related to devices that do not respond or connect during monthly maintenance validation checks.

Monthly validation tests do not include active transfer of communications to Wireless Backup.

LIMITATIONS OF WIRFLESS BACKUP

- This add-on option is only available in conjunction with primary Managed WAN (T-1 or MetroE) Circuits together with a Managed Router. Customer-owned/Customer-provided equipment is not permitted with this service.
- This add-on option is not available for primary circuits above 50M.
- This add-on option is only available where 4G-LTE networks are available.
- This add-on option is subject to availability pre-qualification and site survey.
- This add-on option may not be used as a primary connection.
- C Spire Business makes no warranty of quality (i.e., voice) over this service.



SERVICE LEVEL METRICS

- The Network Performance Parameters (NPP) for C Spire Business' On-Net Service shall be a Latency of < 25ms, Jitter of < 0.5ms, and Packet Loss < 0.1% for each port.
- Latency, Jitter, and Packet Loss are measured by averaging sample measurements taken during a calendar month between the Network Termination Equipment (NTE) between which the Customer ports are attached (i.e., end to end) when the Service is available for use by the Customer. The NPPs are based on the C Spire Business network-wide average of the Customer's traffic traversing between the NTE and the C Spire Business network.
- These NPPs apply only to the C Spire Business core network and C Spire Business local access network.
- The Customer is responsible for (1) notifying C Spire Business within fifteen (15) days following the end of the calendar month during which the actual service metrics within any calendar month fail to meet the NPPs, and (2) requesting a service credit.
- Upon verification by C Spire Business that the actual service metrics within any calendar month fail to meet the NPPs, C Spire Business shall have one (1) month to correct the problem.
- If after one month, one or more service metrics still fails to meet the applicable NPP, then C Spire Business shall provide the Customer with a credit equal to ten percent (10%) of the MRC for all affected Circuits ("NPP Credit"). Only one NPP credit per Circuit shall be applied per calendar month.
- Customer shall not be entitled to receive an NPP Credit for the same Circuit(s) or Services in the same month as Customer receives a Network Availability Credit or Major Interruption Credit.
- Latency may vary on ports with Real Time CIR of 10 Mbps or below and Real Time EVCs on such ports are excluded from calculations that determine whether the Latency NPP is met.
- C Spire Business will not provide credits for any Interruption of Off-Net Services. C Spire Business will pass through to Customer any Interruption credits it receives from third-party suppliers of Off-Net Services.

AVAILABILITY DEPENDENCIES

The availability of Service is dependent on the following:

- It is Customer's responsibility to ensure that all Users are able to connect to the Service and are configured properly. This includes, but is not limited to, Ethernet switches, Ethernet cabling, workstations, servers, operating systems, and software.
- Existence of a suitable network transport from C Spire Business to User(s). C Spire Business reserves the right to limit Service availability in the event that necessary Service Components are either unavailable or unattainable.
- The availability of Ethernet or T-1 services may be dependent on distance from the nearest local Exchange center central office or from the nearest C Spire Business facility. C Spire Business reserves the right to limit availability of Service even if pre-qualification cycle determines Customer Premise to be serviceable by Ethernet or T-1 as applicable.
- If Hybrid Ethernet services are ordered and require fiber-optic cabling, the carrier may require access to install fiber at the Customer premise. Most providers of fiber require access from the closest right of way point (determined by the local provider) to the

Copyright© 2019 TekLinks, Inc. dba C Spire Business. All rights reserved. Public. Version 1.0, August 2019



- demarcation point in the building. If no existing access is available, Customer may be required to provide access at their own expense.
- Customer is responsible for UPS power and cabling, proper grounding, and adequate space to install C Spire Business-managed and local access provider equipment.
- C Spire Business also reserves the right to limit service availability in the event that necessary service components including, but not limited to, electrical power, cooling capacity, cabling, rack space, switching/routing/network infrastructure, application software, etc. are either unavailable or unattainable.
- If Customer requests custom network designs, Customer will be responsible for the cost of any engineering time required by C Spire Business to design, implement, or support. Customer will be billed at standard C Spire Business hourly rates for such time. C Spire Business shall be the sole party responsible for determining if the Customer network does not fit into a pre-defined C Spire Business template. Customer will be responsible for providing network gear recommended by C Spire Business. This network gear may include but is not limited to routers, memory, flash memory, software code, switches, and router modules.
- C Spire Business' responsibility is limited to the routing between the C Spire Business IP Network and Customer Equipment directly attached to the C Spire Business IP Network. Customer is responsible for any equipment directly attached to the C Spire Business network not provided by C Spire Business.

LIMITATIONS

- Customer agrees that C Spire Business is not responsible for any unauthorized access or modification of Customer's data while in electronic transmission to or from the C Spire Business Data Centers. Customer also agrees that C Spire Business is not responsible or liable for any content sent using, or received from, the Network Connectivity Service including that which may be illegal, obscene, defamatory, threatening, or that may infringe any trademark, copyright, or other third-party intellectual property right.
- Standard Network Connectivity Service offerings do not include backup or recovery of user or application data. Customer may select to add other C Spire Business Services for added recoverability in the quote.

EXCEPTIONS

The following exceptions apply to this Service:

• Chronic Trouble – If three (3) or more trouble tickets have been opened for a particular Service in a 30-day period for Service Interruptions totaling an aggregate of six (6) hours of Service Interruption in that 30-day period, and the cause of outage is determined to be in C Spire's Network or System Equipment and is not due to a Force Majeure Event, the affected circuit(s) will be deemed a Chronic Trouble Service. Customer may disconnect the affected circuit(s) without incurring liability for early termination under the Master Terms & Conditions.



SERVICE DELIVERY

Upon receipt of the signed agreement, C Spire Business will install the Network Connectivity Service as follows:

- Schedule a site survey on all Ethernet orders to identify any Customer Premise modifications required to support the Service.
- If Customer has purchased a custom C Spire Business solution, C Spire Business will deliver Network Connectivity into the nearest telephone demarcation point of the Customer Premise. C Spire Business will not extend wiring though existing walls or permanent ceiling. C Spire Business will not extend wiring where the cable needs to be installed 12 feet or higher (warehouse) above walking surfaces.
- C Spire Business offers configuration, staging, and shipping of Equipment used to terminate Service. Configuration only includes configuration of Equipment to support C Spire Business Service. C Spire Business reserves the right to bill Customer at current hourly rates for configuration requests that are not required to provide Service outlined herein.

C Spire Business is not responsible for existing station cables within Customer premise. Customer is responsible for providing all patch cables from the CPE (router/switch) equipment to the in-house cabling infrastructure. C Spire Business will provide a patch cable from wall jacks to C Spire Business managed equipment. C Spire Business offers cabling options for Service at additional charge. C Spire Business reserves the right to bill Customer at current hourly rates for any cabling required to support service. C Spire Business reserves the right to use outside cabling contractors to perform cabling work.

Shipping of equipment includes standard ground shipping. C Spire Business reserves the right to bill Customer if any alternative shipping method is requested by Customer.

If additional configuration work is required due to limitations of the Customer network, C Spire Business reserves the right to bill Customer at current hourly rates for additional configuration time.

DISCONNECT POLICY

If Customer is out of term and cancels service, C Spire Business adheres to a 30-day disconnect policy. To disconnect service, Customer must submit a ticket to C Spire Business support requesting disconnect of said service. The ticket must include service address, circuit ID, and any other applicable information. C Spire Business will terminate service and stop all billing 30 days after receipt of Customer request.

The customer will receive a shipping label from C Spire Business to return all equipment. Equipment must be returned in the same condition as when C Spire Business services were last active in the Customer environment. If equipment is returned in a damaged state, Customer will be invoiced for the value of the equipment. Any applicable Early Termination Fees will be billed to Customer on the final billing invoice.

If Customer disconnects service after signature of the SLA but before installation of Service, Customer will be responsible and billed for any costs incurred by C Spire Business from service partners or third parties.