

ADDENDUM TO THE MASTER SERVICE AGREEMENT MANAGED NETWORK SERVICES

This Addendum for Managed Network Services is made by and between iGEM Communications LLC, dba Globalgig, a Texas LLC, and its Affiliates and the customer identified on the applicable Service Order (“Customer”) and is part of their Master Service Agreement between the Parties (“Agreement”). Capitalized terms not defined herein shall have the meaning ascribed to them in the Agreement.

- Definitions.** The following words and expressions shall have the following meanings:
 - “Alert” means a monitoring system generated notification of an Incident.
 - “Covered Device(s)” means any physical or logical network device that receives Managed Network Services.
 - “Incident” means any event that is not part of the standard or expected operation of a Covered Device and that causes or may cause an outage or degradation in performance of that device.
 - “Notification” occurs when Globalgig has received notice of an Incident affecting a Covered Device upon receipt of a phone call or email from Customer or upon receipt of an automated Alert from the monitoring system.
 - “Network Operations Center” means Globalgig-provided NOC service, which is a single point of contact for Incidents associated with the Managed Network Service.
 - “Service” or “Managed Network Service” is a set of device monitoring and management services as outlined herein.
 - “Customer Site” means the location of one or more Covered Devices, whether the Customer’s premise, a Globalgig datacenter, or a third-party hosting or colocation facility.
 - “Trouble Ticket” means the ticket issued by the Globalgig Ticketing System which: (a) states the exact time the NOC received Notification of an Incident; (b) states the nature and location of the Incident; (c) states the responsible Customer representative for the Incident; (d) has an identifying number; and (e) is automatically emailed to Customer upon creation and update.
- Service Orders.** Customer may submit a Service Order to Globalgig for Managed Network Services. A Service Order includes, at a minimum, rates and charges, the requested location(s), the managed network service option and Covered Device(s) the associated Technical Order Form, and the Service Term. An additional non-recurring and/or monthly recurring charge, which may not be otherwise reflected on the Service Order, may apply.
- Managed Network Services Service Descriptions.** Managed Network Services are a set of device and network monitoring and management services for all network router, switch, and wireless devices including deployments of SD-WAN and SD-BRANCH. Globalgig’s Managed Network Service options are described below and shall be provided to Customer as defined in this Addendum. Services are available for devices and connectivity scenarios as agreed to by the Parties and reflected on the applicable Service Order. As specified in the Service Order, Globalgig may provide the following Services.

Included with Globalgig Provided Non-Managed Wireline & Wireless Services:

Up/Down status monitoring of Globalgig provided service to the edge CPE. Customer must provide ICMP and SNMP access to Globalgig for CPE. Included status monitoring service consist of:

- ICMP ping for monitoring status of broadband services from Globalgig end-point monitoring systems
- SNMP for monitoring status of DIA services from Globalgig end-point monitoring systems
- Wireless monitoring if terminated to a Globalgig managed Peplink or Cradlepoint device
- Read-only portal access for up/down status

Globalgig Managed Network Services Options:

Essential Option:

- Hardware monitoring and trouble resolution
- Option to monitor 3rd party circuits with LOA from Customer
- Monitoring consists of ping and SNMP from Globalgig end-point monitoring system
- Device and Interface visibility and reporting
- Up to 3 WAN interfaces (wired or wireless) on edge device
- Up to 2 LAN uplinks on edge device
- Up to 6 physical interfaces on L2 switch
- Globalgig can support options for more interfaces that are currently included, pricing will be ICB

Plus Option:

- Essential level services +
- Device firmware management
- Device configuration management

- Globalgig will utilize any vendor device orchestration portals to enhance monitoring and management systems where applicable

Premier Option:

- Plus level services +
- Tier 1 support bypass gets trouble and requests directly to Enhanced Support Team
- Hardened LTE Out-of-Band Management (OOBM) service to covered WAN edge device providing:
 - Enhanced Troubleshooting with remote encrypted two-factor console access to device.
 - Reduced Change Management Risk.
 - Improved RMA process.

4. Implementation.

4.1 Service Activation. Globalgig will provide the following activation services to Customer as a part of the Managed Network Service:

- Ensure connectivity to Customer's network as specified in the Service Order;
- Establish Customer's contact information in Globalgig's orchestration and management system and related support systems; and
- Add all Covered Devices to the monitoring system(s) and ensure access appropriate to the level of service provided.

When Globalgig has determined that the Covered Devices can be remotely monitored, it will advise Customer that the Managed Network Service has been satisfactorily activated.

4.2 Customer Obligations for Activation. Customer must provide, at its cost, any and all information and/or assistance reasonably required to establish appropriate access to the Covered Device.

4.3 Globalgig WAN/SDWAN Implementation Standards. Globalgig has implemented the following standards to minimize variance in orders and provide a timely onboarding experience. Any delays in the delivery of the Globalgig service(s) resulting from lack of access or delayed Customer survey response may result in billing prior to solution completion.

- WAN Circuits:
 - Head-End circuits:
 - Will be ordered with /29 WAN blocks between Provider Edge (PE) and Customer Edge (CE)
 - Branch office circuits:
 - Will be ordered with standard /30 WAN block unless "High Availability Hardware" if option is checked
 - Will be ordered with /29 WAN block for High Availability Hardware installs
 - Circuits over any transport (MPLS, EVPN, VPLS, etc):
 - Globalgig will commence billing on the A or Z side of the circuit on completion regardless of readiness of the other end if the cause of delay for the other end was due to Customer related issues.
 - Handoff standards:
 - Will be ordered with RJ45 for up to 100Mbps circuits
 - Broadband will be RJ45 in most all cases
 - Speeds of 100Mbps+ Will be ordered as Single Mode Fiber with LC connectors
 - Globalgig requires a Customer site survey response within ten (10) business days of order. Customer may opt to have Globalgig perform a site survey for additional cost.
 - DEMARC will be MPOE unless otherwise requested. It is assumed that Customer will extend to DEMARC. Customer may request Globalgig to perform extension at additional cost
- LAN Service Side Delivery:
 - Service Side (LAN side) delivery to Customer Firewall or LAN switches standard:
 - Globalgig will deliver up to (2) RJ45 handoffs per SDWAN appliance into Customer device for port speeds up to 1Gbps. These can be configured as LACP EtherChannel's or as simple trunks into Active/Standby Customer device
 - Globalgig will deliver up to (2) Multimode fiber (MMF) using OM3/OM4 Aqua fiber terminated to LC connectors for port speeds > 1Gbps. These can be configured as LACP EtherChannel's or simple trunks into Active/Standby Customer device. Customer will need to provide 10G Short Range LC SFP+ modules for their devices to accommodate
 - Any delays resulting in Customer not having proper equipment to accommodate the standard may jeopardize the install and will not delay billing commencement on the Globalgig services.
 - Globalgig Sales Engineering will include all optics required to interconnect Globalgig provided gear (i.e. WAN switch to Edge appliance, HA and stack cables, power cables etc.) in the bill-of-materials (BOM) when BOM is provided from Globalgig. Initial BOM is subject to change based on workshop discovery process.
 - Globalgig Lead Engineer and Project Manager will review the BOM after workshop and prior to hardware order to facilitate changes where necessary and execute appropriate change orders with Sales Engineering/Account Executive team. As discovery is critical to execution, Customer is expected to:
 - Provide access to all relevant facilities for circuit termination and equipment deployment.
 - Provide network access to equipment that SDWAN edge gear will interface, e.g., LAN switching or Firewalls.

5. **Monitoring and Support.**

5.1 **Network Operations.** Globalgig provides a ticketing system service as a single point of contact for Incidents associated with the Managed Network Service. Customer’s authorized staff may be updated by Customer at any time by written notice to Globalgig. When Globalgig’s ticketing system receives Notification of an Incident, the Network Operations Center will record, monitor, and manage all Incidents; and provide Customer with regular and periodic updates on the status of resolution.

5.2 **Incident Monitoring, Event Notification and Service Level Agreement.** Upon receipt of Notification of an Incident by Globalgig, Globalgig will:

- Create a Trouble Ticket to track the Incident, and assign a priority/severity level to the Incident based on those set out in the Priority/Severity Levels table below;
- Notify Customer of Trouble Ticket creation (“Mean Time to Accept” or “MTTA”);
- Diagnose the Incident and attempt to resolve the problem;
- Escalate the Incident;
- Provide regular and periodic updates (Globalgig requires that all email notifications, alerts or updates be sent to **distribution groups** and not to individual email addresses) on the status of resolution (“Update Time”);
- Resolve the Incident (“Mean Time to Resolution” or “MTTR”):

Response Time and Update Time for the Priority/Severity Levels below indicate the target time it will take Globalgig to notify Customer that an Incident has been identified and action has been initiated to resolve it. The Response Time is the time from reporting of an Incident by either Customer or the monitoring system until a Trouble Ticket has been created; Update Time is the time from the previous Trouble Ticket update or Customer contact until the subsequent Trouble Ticket update or Customer contact. Globalgig shall assign Priority/Severity Levels to Incidents as stated below and provide the associated Service Level Agreement (“SLA”) for Managed Network Services.

Priority/Severity Level	Definition	MTTA	Ticket Updates	MTTR
Priority 1 (Urgent)	50% or more of the Customer’s services are completely down at a site	15 Minutes	Hourly	4 Hours
Priority 2 (High)	Less than 50% of the Customer’s services are down at site	30 Minutes	Hourly	8 Hours
Priority 3 (Normal)	Individual user’s service or functionality is affected	45 Minutes	Every 4 hours or by next business day	24 Hours
Priority 4 (Informational)	Routine technical issue, such as improper time on phone or caller-ID issues, Network/Voice services are up and there are no operational impacts	60 Minutes	Every 8 hours or by next business day	36 Hours

6. **SLA Credits.** If average monthly Mean Time to Resolution or MTTR is not met, Globalgig will credit Customer with ten percent (10%) of the monthly recurring charge for the relevant Managed Network Service for the affected Covered Device for the given month.

Exclusions:

- (a) If issue resolution is delayed or blocked by Customer’s action or inaction, the Trouble Ticket status will be changed to “Pending Customer” and Trouble Ticket updates will occur daily.
- (b) If the next step in the troubleshooting or remediation process has been scheduled for a time farther in the future than the Update Time associated with that Priority, the Trouble Ticket status will be set to “Pending Customer” and the next Trouble Ticket update will occur within one (1) hour of the scheduled start time of said next step or within 24 hours, whichever is sooner.
- (c) Maintenance and Notification
 - (i) Customer pre-approves a 15-minute maintenance window, to take place Saturdays at 2300 US Central Time, which may include downtime of the monitoring system. Globalgig will send notification in advance when this window is needed.
 - (ii) Customer pre-approves a monthly 1-hour maintenance window, to take place on the second Saturday of each month at 2300 US Central Time, which may include downtime of the monitoring system.
 - (iii) Customer will approve emergency maintenance upon receipt of 24 hours’ notice by Globalgig for security-related patches and fixes.
 - (iv) Periodic major maintenance may be required as new versions of the Software are released. Globalgig will provide at least one (1) week of notice of such maintenance, and these notifications will include expected downtime. Major maintenance will not occur more frequently than quarterly.
- (d) Device Supportability
 - (i) Customer will maintain active hardware and software service contracts with equipment vendor in order to facilitate an escalation path for related issues.
 - (ii) Customer will maintain a current, secure, and supported software version on all system components which is published by the

equipment vendor. For Plus+ service options, Customer will approve periodic software upgrade windows so that Globalgig can push upgrades to maintain compliance.

- (iii) Service Level credits shall not apply if Device Supportability in non-compliance. Globalgig reserves the right to suspend monitoring and management of non-compliant devices until device is made compliant.
- (e) Service Level credits shall not apply if Customer fails to provide reasonable assistance. Reasonable assistance includes, but is not limited to, opening of a trouble ticket with Globalgig’s Network Operations Center, providing access to Customer’s premises or systems, if necessary, and assisting Globalgig with problem identification and resolution.
- (f) Customer will be eligible for one (1) credit for a request which stems from the same event. Credits will not be cumulative. Credits are calculated based on the affected Service’s then-current monthly recurring charge and, during any calendar month, may never exceed one (1) month’s billing. In order to obtain a Credit, Customer must notify Globalgig’s Customer Service Department in writing within thirty (30) calendar days after the end of the month in which the event(s) giving rise to the credit occurred. Credits will be issued only upon Customer’s timely request. Failure by Customer to make payment as due under the terms of the Agreement shall forfeit Credits under this SLA. Credits shall be Globalgig’s sole liability and Customer’s sole remedy in the event of an SLA failure.

7. **Change Management with Plus and Premier Service Options.**

- Globalgig provides ongoing change management support as part of the Plus and Premier options.
- Globalgig will make configuration changes at Customer’s request or to resolve network or performance issues via the orchestration platform to the device(s).
- All Customer-driven change requests should be submitted to the Globalgig Support/NOC center (same process as opening a trouble ticket).
- There is no limit to the number of changes request that can be submitted on a monthly basis but Globalgig reserves the right to revisit this policy if Customer requests become excessive.
- The following changes will be performed by a Globalgig Tier 2 engineer and based on a 1 business day SLA:
 - Change device IP address
 - Customer notification parameter adjustments
 - Add or delete static routes
 - Minor QoS changes (i.e. adding or removing a service to an existing QoS policy)
 - Minor Application Aware Routing (AAR) modifications (i.e. adding or removing a service or cloning an existing AAR policy)
 - SSID, VLAN, Interface additions
- The following changes are considered ICB and will be charged at additional fee of \$150 per hour (1-hour minimum), requiring 48-hour scheduling:
 - Major QoS changes (i.e. adding classes, changing QoS parameters, implementing QoS, implementing QoS on a specific device)
 - Traffic Shaping requests (including bandwidth throttling)
 - Application Aware Routing (AAR) modifications
 - Security policy modifications
 - Load Balancing changes
 - Network and Security topology changes
 - Protocol specific alterations (BGP, ISIS, EIGRP, OSPF)
 - Customized reporting
- Typically, these ICB requests would take no more than 4 hours. Any request above 4 hours is considered a Professional Services engagement.

8. **Professional Services.** To order Professional Services, Customer may place a Service Order with Globalgig that specifies the level of support being requested. All Professional Services are billed hourly based on the levels identified below and as specified in the applicable Service Order.

Level of Support	Rate
Level 1: Remote Hands and Basic Troubleshooting (Including Hardware Racking, Cabling Assistance, Remote Hands, Basic Networking Assistance, Port Management, VLAN Management)	\$ 125.00/hour
Level 2: Support and Configuration (Including Networking Assistance, VPN Support, Network Creation, Network and Connectivity Troubleshooting)	\$ 175.00/hour
Level 3: Design, Architecture and Implementation (Including Backup and Disaster Recovery, Storage Area Networking, Scripting, VMware Implementation,	\$ 300.00/hour

9. **Web Based Reporting Services.** Globalgig provides access to Globalgig’s orchestration and/or end-point monitoring system for the relevant Service for Customer to view performance data for network services and covered devices. Portal access will vary by Service selected.
10. **Globalgig’s Rights to Limit or End Service or End This Agreement.** Globalgig can, with notice, limit, suspend or end Service or any agreement with Customer for cause, including, but not limited to: (1) if Customer: (a) breaches this agreement; (b) resells Service; (c) uses Service for any illegal purpose, including use that violates trade and economic sanctions and prohibitions promulgated by any governmental agency; (d) installs, deploys or uses any regeneration equipment or similar mechanism (for example, a repeater) to originate, amplify, enhance, retransmit or regenerate an RF signal without Globalgig permission; or (2) if Customer and/or any end-user of Customer device or Service: (a) engage in abusive messaging or calling; (b) modify Customer device from its manufacturer's specifications; (c) use Service in a way that negatively affects Globalgig and/or underlying mobile network and/or other customers. Globalgig can also temporarily limit or suspend Service without notice for any operational issue such as a Denial-of-Service attack, virus generation or required governmental action.
11. **Security. Globalgig Does Not Guarantee Security.** Data encryption is available with some, but not all services sold by Globalgig. If Customer uses Customer provided device to access company email or information, it is Customer’s responsibility to ensure Customer use complies with Customer company's internal IT and security procedures.
12. **Acceptance of This Addendum.** By accepting this Addendum, Customer agrees to receive and pay for the Service provided by Globalgig, including any subsequent service orders under the terms and conditions of this Addendum. Prices to be charged and additional terms and conditions may be contained in the Globalgig proposal attached hereto.

This Addendum is made part of and incorporated in the Agreement and constitutes the entire agreement by Globalgig and Customer pertaining to the subject matter hereof. Any and all Services pertaining to the subject matter hereof and active as of the Effective Date shall be governed by the terms and conditions herein.

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