



INTERNET DEDICATED SERVICE

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8. DEFINITIONS

1. GENERAL

- 1.1 **Service Definition.** Internet Dedicated Service provides access to the Internet via the Verizon Network.
 - **Platforms.** Except where explicitly stated otherwise, these terms apply to Optimized Service (denoted with a "+" and sometimes referred to as Rapid Delivery) and non-Optimized Service.
- 1.2 **Standard Service Features.** Verizon provides Internet Dedicated with the following standard features:
 - 7x24 hour customer support, monitoring and notification.
 - Static or dynamic IP routing.
 - Assignment of non-portable IP addresses (IPv4 and/or IPv6 protocol, upon request). IP addresses are provided by Verizon to be used by Customer for transporting Internet traffic with Verizon's Internet Dedicated Service. Acquiring or downgrading Verizon's Internet Dedicated Service as a method solely to obtain or retain IP addresses is not permitted.
 - Traffic utilization statistics.
- 1.2.1 **Speed Testing.** Internet Dedicated uses Access Services to connect the Customer Site to the Verizon Network. Verizon uses standard procedures to test the delivery of the Access speed at its Internet gateway service edge. Network latencies to speed test servers and other destinations on the Internet may vary e.g. by distance, routing, 3rd party IP networks and situations or events beyond Verizon's control. The Service Attachment for Access Services can be found at https://enterprise.verizon.com/service_guide/reg/cp_access_plus_access.pdf.



- 1.2.2 **Bandwidth Shaping for Ethernet Access Circuit.** If Verizon provisions 'bandwidth shaping' overhead adjustments on the Ethernet Interfaces at the service edge egress, for speed-configuration purposes, it may be necessary for Customer to apply policies at Customer's edge egress to prevent packet loss due to Ethernet protocol overhead used within the Verizon IP Network (depending on the Verizon IP platform and Customer's traffic profile).
- 1.3 **Optional Service Features.** Customer may select any of the following features:
- 1.3.1 **Diversity.** With Diversity service, Verizon provides a second equivalent circuit for the same Customer Site that may be configured as either active or passive, and as providing either Geographic Diversity or Router Diversity, as Customer elects.
- 1.3.2 **Domain Name Services.** Verizon offers primary and secondary domain name hosting services with Internet Dedicated, plus the following domain name services:
- **Domain Name Registration.** If Customer orders Domain Name Registration, Verizon will apply for and enter into a registry agreement to register domain names on Customer's behalf.
 - **RIPE Registration (available in Europe).** If Customer requests RIPE Registration service, Verizon will register an Autonomous System Number and/or provider-independent IP address ranges with the relevant registry (www.ripe.net) on Customer's behalf, subject to applicable registry guidelines and policies.
- 1.3.3 **Non-Optimized Service-Only Optional Features – Shadow Service.** With Shadow Service, Verizon provides backup access to its Network on a second equivalent circuit (connecting to a Verizon POP) for use in the event of an outage on the primary circuit.
- 1.3.4 **Distributed Denial of Service (DDoS) Security (DDoS).** DDoS mitigation services help protect the availability of Customer's internet connected business operations. Verizon's DDoS Security is a managed, cloud-based, service designed to monitor, intercept and remove significant amounts of malicious DDoS traffic targeting Customer's internet connected network.
- 1.3.5 **Dynamic Network Manager (Optimized Service Only).** With Dynamic Network Manager, Verizon provides a web-based interface through which Customer can dynamically manage its Internet Dedicated port values. Customer accesses the interface through the Verizon Enterprise Center or via an Application Program Interface.

2. DDOS SECURITY FEATURES

- 2.1 **Service Configuration and Reporting.** Verizon will configure DDoS Security in accordance with its policies as reasonably practicable to correspond to Customer's configuration information. Verizon will send Mitigation traffic reports to the authorized or technical point of contacts collected during the ordering process.
- 2.2 **Mitigation and Redirection.** Mitigation is the act of removing traffic deemed to be malicious from redirected (inbound) traffic. Redirection may be activated by request in the VEC Portal and occurs when traffic is routed to the DDoS Security mitigation nodes (facilities) instead of Customers normal routing path (Redirection). When Redirection is initiated, both legitimate traffic and DDoS attack traffic will be redirected to Verizon pre-deployed mitigation facilities. Within 30 minutes after Customer's inbound traffic being redirected to the Verizon DDoS Security mitigation platform, Verizon will initiate mitigation of inbound DDoS attack traffic.



- 2.3 **BGP Routing Change.** Verizon will announce Customer's BGP route changes, for pre-configured IP ranges, to the Internet within 15 minutes after Verizon's receipt of Customer's request for such routing change.
- 2.4 **Clean Traffic Return.** Customer must utilize MPLS L3 VPN (Multi Label Packet Switching Layer 3 Virtual Private Networking") as a methodology to receive returned (Forwarded) post mitigation traffic.
- 2.5 **Redirection Time Period and Service Overutilization.** Customer must submit a request in the VEC Portal by enabling or disabling the DDoS mitigation button in Dynamic Network Manager to start and stop a redirection to DDoS Security. If a customer exceeds 35 hours of redirection per calendar month, hourly overage charges will apply. Verizon will measure and monitor the total number of hours traffic is redirected using the DDoS Security service- Usage in excess of 35 hours per calendar month-will be provided at an additional hourly charge to Customer. Customer acknowledges and agrees that, if Customer's overutilization occurs during any given active mitigation period, Verizon may, at its discretion, deem such overutilization as Customer's authorization to charge the hourly overage rate.

3. DDOS SECURITY CUSTOMER RESPONSIBILITIES

- 3.1 **DDoS Attack.** In the event of a DDoS attack, Customer is responsible for DDoS security activation and Customer must notify the Security Operations Center (SOC), via the VEC Portal by enabling the DDoS mitigation button in Dynamic Network Manager. Customer will notify the SOC upon the conclusion of a DDoS attack to perform the discontinuance of rerouting of traffic, by disabling DDoS mitigation button in the VEC Portal. Failure to cancel any authorized redirection will be seen as Customer's authorization to incur hourly overage charges.
- 3.2 **Compliance.** Absent terms to the contrary in the Agreement, DDoS Security services are implemented without specific controls that may generally be required or customary for customers in any particular industry, and Customer shall be solely responsible for determining that DDoS Security services satisfy Customer's obligations under law or contract and shall not use the Service in any manner that imposes a legal obligation on Verizon that is not specifically agreed to in the Agreement. In the event Customer acts or uses DDoS Security services in a manner not permitted under this Section 3.2, Customer shall (a) take, at Customer's expense, prompt action to correct and/or mitigate the effects of Customer's breach of this Section 3.2; and (b) provide Verizon with reasonable cooperation and support in connection with Verizon's response to Customer's breach of this Section 3.2. Customer shall assume and be solely responsible for any reporting requirements under law or contract arising from Customer's breach of this Section 3.2.

4. DDOS SECURITY WARRANTIES

- 4.1 **Verizon Warranties.** Verizon warrants to Customer that it will perform its obligations in a good and workmanlike manner. Verizon's entire liability and Customer's sole and exclusive remedies regarding DDoS Security (including, without limitation, relating performance) are set forth in the SLA for DDoS Security. When utilizing DDoS Security during a DDoS attack, Verizon does not guarantee that only DDoS attack traffic will be dropped or that only legitimate traffic will be allowed to reach Customer. Verizon does not warrant that DDoS Security will prevent all possible threats and vulnerabilities, or that such services will render Customer's network and systems invulnerable to all security breaches and vulnerabilities. Customer acknowledges and agrees that DDoS Security services (a) constitute only one component of Customer's overall security program and are not a comprehensive security solution; and (b) are not guaranteed to be uninterrupted or error-free, or to meet Customer's requirements.



- 4.2 **Third Party Warranties.** Verizon is not responsible for third party hardware, software, or other products or services unrelated to and not specifically a part of the DDoS Security service.
- 4.3 **Customer Warranties.** Customer hereby warrants to Verizon that Customer (a) consents to Verizon's performance of DDoS Security services (b) has and will continue to have all rights necessary to have Verizon perform DDoS Security services for purposes of DDoS services including, without limitation, consent of all authorized network users, and, (c) will use the DDoS Security services to protect Customer from abusive, fraudulent, or unlawful use or access to its information, systems and applications including Verizon's public internet service.

5. SUPPLEMENTAL TERMS

- 5.1 **Resale.** Internet Dedicated is designed for use by Customer and its direct end users. If Customer wishes to resell Internet Dedicated in its entirety to another person or entity, it will first work with Verizon to agree upon the terms and conditions appropriate for resale.
- 5.2 **Installation.** Installation of Internet Dedicated will be performed Monday through Friday during Normal Working Hours, excluding holidays, as determined by Verizon. At Customer's request, Verizon will use commercially reasonable efforts to perform installation outside of Normal Working Hours for an additional charge.
- 5.3 **U.S. Services for Mass Market Customers.** Mass-market customers, as defined by the Federal Communications Commission, should view important information regarding Network Management Practices and Service Performance information for the internet access service by visiting www.verizon.com/about/our-company/open-internet.
- 5.4 **Voice Over IP (VoIP) Restrictions.** Customer acknowledges that a number of jurisdictions impose restrictions and/or licensing or registration conditions on VoIP transmission over the network. Customer shall comply with such regulations, as applicable.
- 5.5 **Customer Data.** As part of providing DDoS Security, Verizon may transfer, store and process Customer Data in the United States or any other country in which Verizon or its agents and/or suppliers maintain facilities. By using DDoS mitigation services, specifically including DDoS Security, Customer consents to this transfer, processing and storage of Customer Data either in the United States or any other country in which Verizon or its agents and/or suppliers maintain facilities.
- 5.6 **Export Control.** Customer represents and warrants that in connection with DDoS Security services, Customer (a) will not provide Verizon access to export-controlled information without providing advance written notification to Verizon; and (b) is not subject to any government order suspending, revoking or denying privileges necessary for the performance of Customer's or Verizon's obligations under the Agreement.
- 5.7 **Service in India**
- 5.7.1 **No Internet Telephony in India.** Verizon's license from the Indian Ministry of Communications, Department of Telecommunications (DOT) requires Verizon to restrict use of its Internet Dedicated Service for Internet telephony. Customer expressly agrees that it shall not use, or permit others to use, the Service for Internet telephony except in one of the following three ways: (i) personal computer (within or outside India) to personal computer (within or outside India); (ii) personal computer (within India) to the public switched telephone network (PSTN) outside of India (PSTN connection gateway located outside



India); or (iii) IP-based H.323 or SIP terminal connected directly to a licensed ISP within India to a H.323, SIP, or similar terminal connected directly to a licensed ISP anywhere in the world (including India).

5.7.2 **Restriction on Encryption Functionality in India.** Customer may use encryption up to 40 bit key length in RSA algorithm. If Customer requires encryption higher than this limit, then Customer must obtain approval from the relevant telecom authority. Customer will not employ bulk encryption equipment in connection with Verizon Facilities in India.

5.7.3 **End User Identification in India.** Customer acknowledges that DOT in India and other Indian governmental authorities may from time to time require Customer to identify the end users of Internet Dedicated in order to monitor and prevent unlawful activity over the Verizon Network. Where Customer uses Wi-Fi connectivity in relation to Internet Dedicated, Customer shall employ appropriate authentication processes to secure the Verizon Network and retain records of all authorized end users of Internet Dedicated. Such records shall include sufficient details to permit DOT or other Indian governmental authorities of India to identify and locate end users.

5.7.4 **Additional Documentation in India.** Customer will complete and sign the document in the form set out in Schedule 1 at www.verizonenterprise.com/external/service_guide/reg/cp_ids_plus_schedule_1_proforma.pdf, Proforma for checking bona fide of Verizon Internet Dedicated Customers.

6. **SERVICE LEVEL AGREEMENT (SLA).** The SLA for Internet Dedicated is set forth at: www.verizonenterprise.com/external/service_guide/reg/cp_ids_plus_sla.pdf (or other URL designated by Verizon). Verizon’s records and data are the basis for all SLA calculations and determinations. The SLA for DDoS Security is set forth at: https://enterprise.verizon.com/service/cp_ddos_security_sla.pdf.

7. **FINANCIAL TERMS**

7.1 **Optimized Service.** Customer will pay the charges for Optimized Internet Dedicated Service specified in the Agreement, including those below and at the following URL: www.verizonenterprise.com/external/service_guide/reg/applicable_charges_toc.htm
Charges below are in U.S. dollars and will be billed in the invoice currency for the associated service.

Administrative Charges	Charge Instance	NRC
Administrative Change	Per Change	\$60.00
Cancellation of Service Order	Per Port	\$800.00
Expedite	Per Port	\$1,000.00
After Hours Installation	Per Port	\$1,000.00
Pending Order Change	Per Order	\$60.00
Physical Change	Per Order	\$60.00
Reconfiguration	Per Port	\$300.00

For Optimized Service, Customer selects from one of the following Internet Dedicated pricing plans. Customer may change to a different pricing plan, or upgrade or downgrade within a pricing plan, once per calendar month per circuit, at any time after the Service Activation Date.

7.1.1. **Tiered Service Plan.** With Tiered Service, Verizon provides Internet access at the Customer-selected speed (Tier).



7.1.2. **Broadband Pro Plan.** With Broadband Pro Plan, Verizon provides Internet access at the Customer-selected speed (Tier). A Service Level Agreement is not available with the Broadband Pro Plan.

7.1.3. **Burstable Service Options Plan.** With Burstable Service, Customer may subscribe to a Bandwidth Commitment which is less than the full speed of the selected Internet Dedicated Service and may subsequently burst to the full speed of the selected Internet Dedicated Service as required.

Customer may request changes to Burstable Aggregation Group once per calendar month. When Customer requests a new Bandwidth Commitment or change to a Burstable Aggregation Group, Verizon will implement the new Bandwidth Commitment or changed Burstable Aggregation Group on the first day following the end of the billing cycle if feasible but in any event no later than the first day of the billing cycle thereafter. Verizon's records and data are the basis for all calculations.

For Burstable Service, Customer selects one of the following Burstable Internet Dedicated pricing plans.

7.1.4 **Burstable Select.** If Customer's Measured Use Level is greater than Customer's Bandwidth Commitment per circuit for any month, Customer will pay the price for each Mbps over the circuit's respective Bandwidth Commitment.

7.1.5 **Burstable Aggregation.** Customer may associate multiple Internet circuits together as a Burstable Aggregation Group and will designate a Master Site within each defined group. Customer will pay the overage price based on the Master Site rates for each Mbps over the Measured Use Level in a month for the sum of the Bandwidth Commitments within a Burstable Aggregate Group.

7.1.6 **DDoS.** Customer will pay monthly recurring charges (MRCs) for DDoS as set forth in the applicable Agreement.

7.2 **Non-Optimized Service.** Customer will pay MRCs and NRCs for non-Optimized Internet Dedicated as specified in the Agreement. In addition, online pricing for Services provided by a U.S. Verizon entity is at: www.verizonenterprise.com/external/service_guide/reg/cp_internet_dedicated_services.htm.

8. **DEFINITIONS.** The following definitions apply to Internet Dedicated, in addition to those identified in the Master Terms and the administrative charge definitions at the following URL: www.verizonenterprise.com/external/service_guide/reg/definitions_toc_2017DEC01.htm.

Term	Definition
Bandwidth Commitment	Means the portion of a port speed which Customer may use in a monthly period without incurring an overage charge.
Burstable Aggregate Group	Is a group of circuits aggregated together for the purpose combining the Measured Use Level for the aggregated circuits for the Burstable Aggregation service.
Geographic Diversity	Automatically directs the second Customer circuit to a different Verizon gateway at a different Verizon POP.
Master Site	The circuit within a Burstable Aggregate Group that determines the overage Mbps price. There can only be one Master Site designated per Burstable Aggregate Group.
Measured Use Level	To calculate Customer's "Measured Use Level," Verizon samples Customer's Service usage periodically throughout a given month. Customer's usage at the 95th percentile of samples (i.e., samples representing the highest five percentiles of usage are discarded) is Customer's Measured Use Level. For



	example, if Verizon took 100 samples of Customer's 100 Mbps Service in a given month and Customer's highest six samples were 15.67 Mbps, 14.73 Mbps, 14.72 Mbps, 13.22 Mbps, 12.35 Mbps, and 11.39 Mbps, Customer's Measured Use Level would be 11.39 Mbps for that month.
Router Diversity	Automatically directs the second Customer circuit to a different switch or router.