

## **IP Bandwidth Service Terms**

### **1. DEFINITIONS**

**“ARIN”** refers to the American Registry for Internet Numbers, which is a nonprofit, member-based organization that administers IP addresses and ASNs in support of the operation and growth of the Internet.

**“CDR”** the Customer design review form.

**“Committed Rate”** means the agreed-upon unit amount and/or fee set forth in the Order.

**“Burst Rate”** means the agreed-upon overage fee set forth in the “Other Fees” section of the Order that is above and/or beyond the Committed Rate.

**“RIPE”** refers to Réseaux IP Européens, which is a forum open to all parties with an interest in the technical development of the Internet.

**“Standard Bandwidth”** refers to the speed (in megabits per second) of a communications link, as specified in the Order.

### **2. IP BANDWIDTH**

#### **2.1 General**

The Standard Bandwidth provided for IP Bandwidth Services may be capped or burstable, as specified in the Order. If capped, Sungard AS shall have no obligation to provide an Internet connection exceeding the Standard Bandwidth unless Customer contracts for additional capacity by way of written amendment to the applicable Order. Where the Standard Bandwidth is burstable, Customer may exceed the specified Standard Bandwidth to a maximum of the burstable amount specified in the Order, provided Customer pays the Burst Rate specified in the Order. Customer will not be able to exceed the burstable amount in the Order. Sungard AS shall have no obligation to provide additional bandwidth exceeding that burstable amount without Customer contracting for additional bandwidth.

#### **2.2 IP Bandwidth – Dedicated**

**Formerly: Managed Internet Access / Service**

##### **2.2.1 Features**

Sungard AS will provide the amount of bandwidth identified in the Order and, for Sungard-AS-provided IP addresses, will provide the following in accordance with the completed CDR form:

- (a) Dual ethernet port connection to the internet from diverse upstream devices.
- (b) Eight IP addresses assigned to the customer; three of the eight are useable by customer equipment in a VRRP configuration, unless otherwise identified in the Order.
- (c) Sungard-AS-provided IP address in accordance with the Sungard AS IPv4 Address Space Request Policy.
- (d) Monthly report of bandwidth usage.
- (e) Basic Distributed Denial of Service (DDoS) blackhole mitigation using reasonable efforts to detect and mitigate the impact of attacks affecting links from Sungard AS to its upstream Internet providers. This mitigation is intended to reduce the chance of an isolated DDoS attack from impacting other IP Bandwidth customers that are not directly part of the attack.

#### **2.3 IP Bandwidth On-Demand**

**Formerly: Web Redirect / Basic Internet Access**

##### **2.3.1 Features**

Sungard AS will provide the amount of bandwidth identified in the Order and, for Sungard-AS-provided IP addresses, will provide the following in accordance with the completed CDR form:

- (a) Single ethernet port connection to the internet.

- (b) Four IP addresses assigned to the customer; one of the four is useable by Customer equipment, unless otherwise identified in the Order.
- (c) Sungard-AS-provided IP address in accordance with the Sungard AS IPv4 Address Space Request Policy.
- (d) Basic Distributed Denial of Service (DDoS) blackhole mitigation using reasonable efforts to detect and mitigate the impact of attacks affecting links from Sungard AS to its upstream Internet providers. This mitigation is intended to reduce the chance of an isolated DDoS attack from impacting other IP Bandwidth customers that are not directly part of the attack.

## **2.4 Service Conditions**

All hardware and software will be provided by Customer unless otherwise identified in the Order. Sungard AS does not guarantee a time to fix hardware or software. Sungard AS will engage and manage vendors in accordance with the terms of the underlying maintenance agreement. Sungard AS is not responsible for vendor failure to deliver parts or repairs within maintenance agreement timelines.

## **2.5 Fair Use**

In the event that Customer is deemed to be at a very high risk of high-volume attacks, the Parties shall review the contracted arrangement and, if they are unable to agree, Sungard AS may suspend the Service.

## **3. Add-on / Optional Services Related to IP Bandwidth**

### **3.1.1 IP Addresses**

#### **3.1.1.1 IPv4**

Sungard AS procures its IPv4 IP address allocation from American Registry for Internet Numbers (ARIN) and Réseaux IP Européens (RIPE). The address allocation is given based on Sungard AS agreeing to conform with the ARIN and RIPE policies and guidelines for assignments. The number of IPv4 address allocations given by ARIN and RIPE to Sungard AS is based on customer usage rates. In the event that Customer does not employ these usage rates, Sungard AS reserves the right to withdraw the unused IP addresses for it to conform with ARIN & RIPE.

Sungard AS assigns IP addresses in accordance with the requirements of American Registry for Internet Numbers (ARIN) and Réseaux IP Européens (RIPE), and, in the case of IPv4 IP addresses, in accordance with Sungard AS' IPv4 IP Address Space Request Policy. IPv4 address blocks larger than eight (8) are not guaranteed and are only available based on Sungard AS receipt of adequate Customer-provided justification. If Customer has significant IP requirements (e.g., in excess of 128 public IP addresses), Sungard AS may require that Customer contact ARIN or RIPE directly to register the IP addresses.

If Customer brings an IP range to Sungard AS, Customer is solely responsible for any dealings related to regulator needs with the appropriate regulator service (e.g., ARIN/RIPE).

Network addresses assigned by Sungard AS are non-portable and not allowed to be advertised out to any non Sungard AS ASN or ISP. Network space allocated to Customer by Sungard AS must be returned to Sungard AS in the event the Services are terminated or cancelled.

Customer agrees to utilize the provided IP address in accordance with proper use ordinances within the country in which the Service is used. In addition, Customer must not use the provided IP addresses for the purposes of mass email/spam distribution or any activities which could blacklist any Sungard AS IPv4 addresses.

#### **3.1.1.2 IPv6**

Sungard AS procures its IPv6 IP address allocation from American Registry for Internet Numbers (ARIN) and Réseaux IP Européens (RIPE). The address allocation is given based on Sungard AS agreeing to conform with the ARIN & RIPE policies and guidelines for assignments. The number of IPv6 address allocations given by ARIN & RIPE to Sungard AS is based on the perceived customer usage rates. In the

event that Customer does not employ these usage rates, Sungard AS reserves the right to withdraw the unused IP addresses for it to conform with ARIN & RIPE.

Network addresses assigned by Sungard AS are non-portable and not allowed to be advertised out to any non Sungard AS ASN or ISP. Network space allocated to Customer by Sungard AS must be returned to Sungard AS in the event the Services are terminated or cancelled.

Customer agrees to utilize the provided IP address in accordance with proper use ordinances within the country in which the Service is used. In addition, Customer must not use the provided IP addresses for the purposes of mass email/spam distribution or any activities which could blacklist any Sungard AS IPv6 addresses.

### 3.1.2 DNS Administration

If DNS Administration Services are specified in the Order, Sungard AS will provide configuration of DNS zones and records in accordance with the configuration instructions supplied by Customer for the domains specified in the Order that are associated with the Services, with the following limitations:

- (a) Up to five Domain Name System (DNS) changes, with up to 10 records per change per month, for Customer-registered domain names.
- (b) Domain name administration services for as many as 10 primary and/or secondary Customer domain(s).

## 4. SERVICE LEVEL AGREEMENT (SLA)

### 4.1 IP Bandwidth - Dedicated Service SLAs

**Target:** The Sungard AS connection to the internet will have  $\geq 99.99\%$  availability. That availability value will be calculated on a monthly basis by subtracting the total number of minutes that the service was down from the total number of minutes in the month, and then dividing that number by the total number of minutes in that month.

**Remedy:** If Sungard AS fails to meet the IP Bandwidth – Dedicated Service SLA, Customer is entitled to a credit as set forth below for each month in which the failure occurred:

**Condition for Applicability of the Target and Remedy:** In order for the IP Bandwidth SLA target to apply, and for Customer to be entitled to the remedies specified below, Customer configuration must take advantage of both feeds made available for that Service.

IP Bandwidth - Dedicated	
Availability Percentage	Remedy (% of the Order's Monthly Fee attributable to the impacted IP Bandwidth – Dedicated Service)
$\geq 99.9\%$ and $< 99.99\%$	5%
$\geq 99.5\%$ and $< 99.9\%$	10%
$\geq 99.0\%$ and $< 99.5\%$	15%
$< 99.0\%$	30%

### 4.2 IP Bandwidth - On-Demand Service SLAs

Due to the on-demand nature of this Service, Sungard AS does not provide an SLA for the IP Bandwidth – On-Demand Services.

## **5. BILLING**

### **5.1 Peak/Burst Capability**

If indicated in the Order, Customer may burst above the Standard Bandwidth up to the burstable amount and at the Burst Rate that is identified in the Order, subject to available bandwidth on Sungard AS' network. The Burst Rate will be invoiced in arrears for each Mbps exceeding the Standard Bandwidth. Customer's Burst Rate usage is determined on a monthly basis by traffic samples that are taken every 5 minutes, and then ranking the traffic samples from highest to lowest and calculating the fee based on the usage that falls at the 95<sup>th</sup>-highest percentile.

#### **5.1.1 95th Percentile**

To calculate the level at which Burst Rate is payable, Sungard AS records throughput over the Internet connection provided to Customer periodically every day over the course of a month. The records for the last 30 days of a month (or, in the case of February, the 28 (or 29) days of that month and the last 2 (or 1) days from the end of January) are sorted by Sungard AS into ascending order, and the top 5% is ignored to account for temporary traffic bursts. The highest of the remaining readings is taken as the 95<sup>th</sup>-percentile value. The Burst Rate are calculated by reference to the bandwidth used at the 95<sup>th</sup>-percentile value. As long as the 95<sup>th</sup>-percentile value bandwidth is less than or equal to the specified Standard Bandwidth, no additional fees are incurred. If that value exceeds the specified Standard Bandwidth, then the burstable fees specified in the Order are payable by Customer.

## **6. GERNERAL SERVICE TERMS**

These Services are also subject to the General Service Terms at

<https://www.sungardas.com/hubfs/multimedia/document-file/sungardas-general-service-terms.pdf>.