

Managed IP PBX Service Level Agreement

Effective March 15, 2006

1. Overview

Managed IP PBX offers certain service level agreements and objectives as shown below. Capitalized terms that are not defined in Appendix B: Terms and Definitions are defined in the Customer's service agreement.

The Managed IP PBX SLAs are as follows:

- Platform Availability
- Call Quality
- Time to Repair ("TTR")
- Proactive Outage Notification

The Managed IP PBX Service Level Objectives are as follows:

- Change Management
- Call Completions

2. Managed IP PBX Details

2.1 Coverage Categories. The Managed IP PBX SLAs vary by designed architecture and maintenance provider as specified below.

PBX Designed Architecture. Customer's choices with respect to; a) design, b) end to end management of the PBX and related networks (i.e. the supporting WAN and LAN), c) the level of redundancy of equipment and applications, and d) the codec implemented on the PBX determines the applicable service level as further explained below.

Maintenance. Whether maintenance is provided by Verizon Data Maintenance – Network, Verizon Data Maintenance or an approved third party ("3rd Party Maintenance"), determines the applicable service levels for Time to Repair. The current approved 3rd Party Maintenance providers are Cisco and NEC. Other maintenance providers may be approved on a case by case basis.

3. Managed IP PBX SLA

3.1 Service Level Agreement by Design and Maintenance Provider

TABLE 3.1 MANAGED IP PBX SERVICE LEVEL AGREEMENTS

Parameter		Contiguous U.S.
Platform Availability – Complete Network Management	Redundant IP PBX Cluster	100%
	IP PBX Cluster without Redundancy or IP PBX Router with Call Manager Express	99.50%
Platform Availability – Partial Network Management	Redundant IP PBX Cluster	100%
	IP PBX Cluster without Redundancy	99.50%

Parameter		Contiguous U.S.
Call Quality	G.711 PCM codec	MOS ≥ 4.0
	G.729 CS-ACELP codec	MOS ≥ 3.9
	G.729a CS-ACEKO codec	MOS ≥ 3.7
TTR	Verizon Data Maintenance – Network	3.5 Hours
	Verizon Data Maintenance	6.0 Hours
	3 rd Party Maintenance	6.0 Hours
Proactive Outage Notification		15 minutes

TABLE 3.2 MANAGED IP PBX SERVICE LEVEL OBJECTIVES

Parameter		Contiguous U.S.
Call Completion – Complete Network Management	Redundant IP PBX Cluster	99.95%
	IP PBX Cluster without Redundancy	99.50%
Call Completion – Partial Network Management	IP PBX Managed Only	None
Change Management		72 Hours

4. Service Level Agreements and Objectives Defined

4.1 Platform Availability. The IP PBX Platform is deemed “Available” if i) no alarm events have occurred on the Network Operations Center’s (“NOC”) Network Management System related to Outages, or ii) no Trouble Ticket related to Outages has been opened by Customer with respect to that Platform.

4.1.1 Calculation

Availability is the percentage of time that the Platform is Available within a given Billing Month. Availability only applies to Outages.

Platform Availability (%) =

$$\left(\frac{\text{Available Minutes per month per Site}}{\text{Number of days in Billing Month} \times 24 \text{ hrs} \times 60 \text{ min}} \right) \times 100$$

4.1.2 Credit Structure and Amounts

For each month in which the Platform Availability percentage falls within a tier associated with a credit amount in the table below, Customer will be eligible for that credit amount equal to the percentage of the Managed IP PBX monthly recurring charges for the affected Site.

PLATFORM AVAILABILITY MATRIX COMPLETE NETWORK MANAGEMENT – REDUNDANT IP PBX CLUSTER

Platform Availability %		Credit (% of MRC)
From	To	
<100%	99.95%	10%
99.949%	99.00%	15%
98.99%	98.00%	20%
97.99%	97.00%	30%
96.99%	95.00%	50%
Less than 95.00 %		100%

PLATFORM AVAILABILITY MATRIX COMPLETE NETWORK MANAGEMENT WITHOUT REDUNDANCY OR IP PBX ROUTER WITH CALL MANAGER EXPRESS

Platform Availability %		
From	To	Credit (% of MRC)
100%	99.50%	0%
99.49%	99.00%	10%
98.99%	97.00%	15%
96.99%	95.00%	25%
94.99%	93.00%	35%
92.99%	90.00%	50%
Less than 90.00%		100%

PLATFORM AVAILABILITY MATRIX PARTIAL NETWORK MANAGEMENT- REDUNDANT IP PBX CLUSTER

Platform Availability %		
From	To	Credit (% of MRC)
<100%	99.50%	10%
99.49%	98.00%	15%
97.99%	96.00%	20%
95.99%	94.00%	30%
93.99%	91.00%	50%
Less than 91.00%		100%

PLATFORM AVAILABILITY MATRIX PARTIAL NETWORK MANAGEMENT – WITHOUT REDUNDANT IP PBX CLUSTER

Platform Availability %		
From	To	Credit (% of MRC)
100%	99.50%	0%
99.49%	98.00%	10%
97.99%	95.00%	15%
94.99%	93.00%	25%
92.99%	91.00%	35%
90.99%	88.00%	50%
Less than 88.00%		100%

4.1.3 Exclusions. In addition to the general exclusions found in Appendix A, the following exclusions apply to the Platform Availability SLA:

- 4.1.3.1 The Platform is considered Available during interruptions not reported by Customer, or for which no Trouble Ticket was opened.
- 4.1.3.2 The Platform Availability SLA does not apply to Platforms installed for less than one full calendar month.
- 4.1.3.3 The Platform Availability SLA for Complete Network Management does not apply to WAN or LAN managed by Verizon at any level less than Full Management (i.e. WAN or LAN managed by Verizon at the Physical or Monitor and Notify level). In such case, Partial Network Management SLAs will apply.

4.1.3.4 SLA commitments may be adjusted to reflect the service levels provided by the maintenance provider. Customer must contract for a minimum 7 days/week by 24 hours per day by 4 hour (7x24x4) maintenance from 3rd party provider for Availability SLAs to be offered.

4.2 Call Quality. Call quality will be reported by determining a MOS within each IP PBX network. Different codecs are used within the IP PBX network, the LAN and the WAN. The call quality will be reported for each codec used in any month.

4.2.1 Calculation

Verizon will deploy equipment within Customer’s IP PBX network to simulate calls and measure call quality. Call quality measurements are taken every five (5) minutes and the samples are aggregated and reported as an average over a month.

4.2.2 Credit Structure and Amounts

For each month in which the Call Quality MOS falls within a tier associated with a credit amount in the table below, Customer will be eligible for that credit amount equal to the percentage of the Managed IP PBX monthly recurring charges for the affected Site. Customer is only eligible for one credit per month per Site.

CALL QUALITY MATRIX G711 CODEC

MOS		Credit (% of MRC)
From	To	
5.00	4.00	0%
3.99	3.50	5%
3.49	3.00	25%
2.99	2.00	50%
Less than 2.00		100%

CALL QUALITY MATRIX G729 CODEC

MOS		Credit (% of MRC)
From	To	
5.00	3.80	0%
3.79	3.50	5%
3.49	3.00	25%
2.99	1.70	50%
Less than 1.69		100%

CALL QUALITY MATRIX G729A CODEC

MOS		Credit (% of MRC)
From	To	
5.00	3.60	0%
3.59	3.30	5%
3.29	2.50	25%
2.49	1.60	50%
Less than 1.59		100%

4.2.3 Exclusions. In addition to the general exclusions found in Appendix A, the following exclusions apply to the Call Quality SLA:

4.2.3.1 The Call Quality SLA does not apply to Platforms installed for less than one full calendar month.

4.2.3.2 Sites using Call Manager Express are not eligible for the call quality SLA.

4.2.3.3 Partial Network Management Sites are not eligible for the call quality SLA.

4.3 Time to Repair (“TTR”). TTR is the time to close an Outage Trouble Ticket for an IP PBX Platform.

4.3.1 Calculation

The TTR time starts when a Trouble Ticket is opened by Verizon or the Customer for an Outage event and concludes when the Trouble Ticket is closed following the resolution of the Outage event.

4.3.2 Credit Structure and Amounts

For each month in which the Time to Repair falls within a tier associated with a credit amount in the table below, Customer will be eligible for that credit amount equal to the percentage of the Managed IP PBX monthly recurring charges for the affected Site.

TIME TO REPAIR WITH VERIZON DATA MAINTENANCE – NETWORK (APPLIES TO EACH SITE)

Time to Repair Verizon Data Maintenance – Network		
Outage Repair Time (Per incident)		Credit (% of MRC)
3:30:00	3:59:59	5%
4:00:00	5:59:59	10%
6 Hours Plus		15%

TIME TO REPAIR WITH VERIZON DATA MAINTENANCE AND APPROVED NON-VERIZON MAINTENANCE (APPLIES TO EACH SITE)

Time to Repair Verizon Data Maintenance and 3 rd Party Maintenance		
Outage Repair Time (Per incident)		Credit (% of MRC)
6 Hours Plus		5%

4.3.3 Exclusions. In addition to the general exclusions found in Appendix A, the following exclusions apply to the TTR SLA:

4.3.3.1 The TTR SLA is not available to Sites with Verizon Data Maintenance -- Network located outside of a sixty (60) mile radius of a designated Verizon service center in the United States. Sites with Verizon Data Maintenance – Network located between sixty (60) and one hundred twenty (120) miles of a designated Verizon service center in the United States have a TTR objective of 6 hours. Sites with Verizon Data Maintenance – Network beyond a one hundred twenty (120) mile of

a designated Verizon service center in the United States have a TTR objective of 24 hours.

4.3.3.2 SLA commitments may be adjusted to reflect the service levels provided by the maintenance provider. Customer must contract for a minimum 7 days/week by 24 hours per day by 4 hour (7x24x4) maintenance for TTR to be offered.

4.4 Proactive Outage Notification SLA. The proactive outage notification SLA provides credits if Verizon fails to notify Customer of an IP PBX Platform Outage as provided below. Proactive Outage Notification will be provided to the Customers' designated point of contact by e-mail or pager. Verizon has fifteen (15) minutes to notify Customer's primary point of contact from the start point of the Notification Period, as defined below.

4.4.1 Calculation

The "Notification Period" begins with opening of a Trouble Ticket for an Outage and ends when the Trouble Ticket is closed. Verizon is in compliance with the proactive outage notification SLA if the Customer opened the Trouble Ticket or contacts Verizon within the Notification Period. Verizon will provide the ticket number and an initial status.

4.4.2 Credit Structure and Amounts

Customer is eligible to receive a credit equal to ten percent (10%) of the monthly recurring charge for each IP PBX Platform which was impacted during an Outage that was not properly notified.

4.4.3 Exclusions. In addition to the general exclusions found in Appendix A, the following exclusions apply to the Proactive Outage Notification SLA:

4.4.3.1 Interruptions not reported by Customer, or for which no Trouble Ticket was opened are not included within the Proactive Outage Notification SLA.

4.4.3.2 The time resulting from the Customer point of contact unavailability due to incorrect contact information or other cause is not included in the Proactive Outage Notification SLA.

4.5 Change Management Service Level Objective. The Change Management service level objective is to complete certain change management requests, listed below, within 72 hours of when the Customer has scheduled the change to occur. Verizon may add, delete, or change the change request types from time to time.

4.5.1 Definition

Change Request Types:

Change Activity
Server OS/Application Patch
Server Administrator Account Add/Delete/Modify
Call Control System Modify*
Call Control Route Plan Modify*
Call Control Service Modify*
Call Control Feature Modify*
Call Control Device Modify*
Call Control Survivability Modify*
Messaging Feature Modify*
Emergency Responder Feature Modify*
Call Center Feature Modify*

Change Activity
Router Call Control Modify*
Router Messaging Modify*
Request to back up media

*Does not include end user or end device move, add, change or delete.

Standard change requests do not provide for scheduling, coordination, follow-up, impact assessment or evaluation before or after such request by Customer.

4.5.2 Credit Structure and Amounts. The Change Management service level objective and has no associated credit.

4.5.3 Exclusions. In addition to the general exclusions found in Appendix A, the following exclusions apply to the Change Management service level objective:

4.5.3.1 Requests submitted outside of the hours of 7:00-17:00 ET, Monday through Friday will not be eligible for Standard change request treatment.

4.5.3.2 The time for Standard change request will be tolled due to incomplete information, including the specific commands/configurations.

4.5.3.3 Only requests submitted via the enterprise services portal ("ESP") are eligible to be tracked for compliance with this service level objective.

4.6 Call Completion Service Level Objective. The call completion service level objective is to determine how many calls are successfully completed in a Billing Month. A successful call is a call where there is a call placed and the call is answered, busy, ring with no answer, abandoned (i.e. user hangs up), or connected to the PSTN.

4.6.1 Calculation

Call completion is the percentage of calls successfully completed within a given Billing Month.

Monthly Call Completion (%) =

$$1 \text{ Minus } \left(\frac{\text{Total calls not completed successfully}}{\text{Total number of calls}} \right) \times 100$$

4.6.2 Credit Structure and Amounts. The call completion service level objective and has no associated credit.

4.6.3. Exclusions. The general exclusions found in Appendix A apply to the call completion service level objective.

5.0 Credit Application Process. This provision applies to all SLAs.

5.1 Managed IP PBX SLA Application Structure

Credits are not cumulative month to month. If the SLA issue exceeds 30 days, the same schedule applies for each consecutive month. The total credit percentage that will be applied against the total MRC for the Managed IP PBX Service for all failures to meet the SLAs within a month at a Site will not exceed 100% of total MRC for the Managed IP PBX Service for the affected month at such Site. Verizon's data and calculations will be used to determine if an SLA has been missed and a credit is due. Verizon will issue a credit within 90 days if it determines that a credit is due. When attributes are shared with another Verizon managed service (e.g. router with managed WAN and Call Manager Express) only one payout qualifies for credit payout.

5.2 Process for Customers to Apply for SLA Credits. Except for Call Quality SLAs, Customer completes two steps in order to have an Outage qualify for a Service Level Agreement credit. First, a Trouble Ticket must be opened for the Managed IP PBX Service issue when the Managed Service issue occurs. Second, a written request for credit must be made to the account team contact.

5.2.1 Opening a Trouble Ticket

For the Availability, TTR, and Proactive Outage Notification SLAs, an Outage Trouble Ticket must be opened, either by Verizon or Customer. A Trouble Ticket records the Outage.

5.2.2 Submitting a Service Level Agreement Credit Request

5.2.2.1 Call Quality. Customer must make a request in writing (e-mail or fax) to the Verizon Account Team for a credit within fifteen (15) days of the end of the month for which an SLA credit is due with the following information:

- MOS Call Quality reports are available at the end of a month via a web portal provided by Verizon.
- MOS reports are available by codec level.
- Customer may only request one MOS score credit for per month per Site.

5.2.2.2 Availability, Time To Repair, and Proactive Outage Notification SLA. Customer must make a request in writing (e-mail or fax) to the Verizon Account Team for a credit within fifteen (15) days of the end of the month for which an SLA credit is due with the following information:

- The date the IP PBX Platform Outage occurred
- The time the IP PBX Platform Outage began and ended
- The Outage location or IP PBX Platform.
- Trouble Ticket number for each Site and event.

5.2.3 Service Level Agreement Credit Time Limitation

If Verizon has failed to meet the same SLA for three (3) consecutive months, Customer may elect to:

- continue the Managed IP PBX Service with a limit of six (6) months of credits for any individual SLA within a 12-month period.
- discontinue Managed IP PBX Service without liability except for charges incurred prior to discontinuation of the Managed IP PBX Service. Customer must submit a written disconnect notice to their Verizon Account Team within 30 days following the end of either the third or subsequent consecutive month of Verizon's failure to meet the SLA.

If 3rd Party Maintenance provider causes the payout of SLA credits for three (3) consecutive months, Verizon has the following options:

- require a change of 3rd Party Maintenance provider, as applicable; or
- terminate its performance obligations under this Managed IP PBX SLA for the related SLA.

Appendix A: General Exclusions

The following exclusions apply to all Service Level Agreements contained in this document:

- No SLA will be deemed missed due to any act or omission on the part of the Customer, its contractors or vendors, or any other entity over which the Customer exercises control or has the right to exercise control, including without limitation, disconnection of power to the CPE.
- No SLA will be deemed missed due to Force Majeure, as defined in the Agreement.
- SLA time will be suspended for scheduled maintenance by Customer or entities under Customer's direction or control;
- SLA time will be suspended for scheduled maintenance by Verizon within Verizon's maintenance windows;
- No SLA will be deemed missed due to lapses of IP PBX Service before the IP BPX Service is up and billable will not be eligible for SLA credits.
- CPE with less than 24 x 7 x 4 coverage with Verizon or a Verizon approved 3rd party maintenance provider will not be eligible for SLA credits.
- SLA time will be suspended for the amount of time delays due to Customer Time.
- No SLA will be deemed missed due Trouble Tickets associated with any act or omission of any third party.
- SLA commitments may be adjusted to reflect the service levels provided by the maintenance provider.
- No SLA will be deemed missed due to the Customer not fully complying with Verizon recommendations for network and server configuration.
- No SLA will be deemed missed due to changes to the recommended network or server configuration, trunking or dial plans without Verizon's prior agreement.
- No SLA will be deemed missed due to performance impacting issues related to or resulting from (but not limited to) rogue network devices, viruses, worms, miss-configured unmanaged network devices attached to the LAN being managed or other impacting events/devices beyond the scope and control of Verizon.
- No SLAs will be available for IP PBX Platforms with less than 200 users.

Appendix B: Terms and Definitions

Terms and Definitions	Definition
3 rd Party Maintenance	Maintenance services from third parties approved by Verizon from time to time. The current approved 3 rd Party Maintenance providers are Cisco and NEC.
Billing Month	The period of time used for the monthly invoice. This is usually a minimum of 30 days but starts after the first of any month.
codec	Program used to convert voice signals from analog data to digital data for transmission by the IP PBX Service and then convert the data back to analog data to be received.
Complete Network Management	Customer's WAN, LAN and IP PBX Networks are all under Verizon Full Management (as defined by Customer's WAN or LAN agreement, if any).
CS-ACELP	Conjugate Structure - Algebraic Code Excited Linear Prediction
Customer Premise Equipment ("CPE")	Managed IP PBX equipment located at the Site.
Customer Service Center	Service centers where Customers call in to report Managed IP PBX issues.

Terms and Definitions	Definition
Customer Time	Time attributable to or caused by one or more of the following: <ul style="list-style-type: none"> • Incorrect or incomplete information provided by Customer; • Verizon or the Verizon approved maintenance provider being denied access to CPE or network components at the Customer location when access is required; • Failure or refusal to release the Device for testing; or • Customer unavailability where needed to close a Trouble Ticket.
Device	Any LAN networking Customer premises equipment managed by Verizon.
IP PBX Cluster	An IP PBX Cluster consists one IP PBX publisher server and one IP PBX subscriber server with the associated publisher and subscriber applications and an uninterruptible power supply for each server.
MOS	Mean Opinion Score. A measurement of the voice quality of a call ranging from a score of 1 to 5.
MRC	Monthly Recurring Charge.
Outage(s)	Total loss of service such that the Customer does not have the ability to make or receive calls.
Partial Management	One or both of either Customer's WAN or LAN is not under Verizon Full Management (as defined by Customer's WAN or LAN agreement, if any).
PCM	Pulse Code Modulation
Platform	The IP PBX system under Verizon management including the IP PBX Clusters and other equipment and applications located at a Site.
Redundant IP PBX Cluster	A Redundant IP PBX Cluster is an IP PBX Cluster is duplicated in an IP PBX Cluster located in a different physical location.
Service Level Agreement ("SLA")	A series of performance commitments made by Verizon to the Customer.
Site	A Site is Customer's Managed IP PBX Service location which includes an IP PBX Platform
Trouble Ticket	A ticket opened within Verizon's NOC from an internal Verizon report or a report by a Customer to Verizon of either perceived Outage or Managed IP PBX Service degradation.