Emergency Gateway Maintenance Plus Service Addendum

Version 2019.09.30
1. **Introduction**

This document is a supplement to the Service Guide for Technical Support, License, and Maintenance and Implementation Services for Intrado’s enterprise (business) 911 products and services customers (“Customers”) that have purchased the Maintenance Plus services (“Services”).

The Services are governed by the maintenance terms specified in the Service Guide for Technical Support, License, and Maintenance and Implementation Services.

2. **Scope**

Following an initial evaluation, Intrado will prepare a detailed report that outlines the items verified, the areas requiring attention and recommendations from its experts. Intrado Deployment Engineers will also upgrade the Emergency Gateway (“EGW”) to the latest release version, if the current version is out of support or if the upgrade is necessary to remedy any of the issues identified in the Maintenance Plus report. Maintenance Plus is performed at a mutually agreed-upon time and date that falls within Intrado’s business hours.

The following categories form the basis of the Maintenance Plus evaluation:

- Call Detail Records and Alarm Logs
- OS Level Health Check
- Customer Environment
- Location Provisioning
- Redundancy and Failover
- Call Monitoring and Notifications
- New Features
- Support and Maintenance
- Access Audit

The Maintenance Plus evaluation process occurs twice per year. The first process is performed at the start of the annual maintenance period and the second approximately six months after.

3. **Report and Recommendations**

The Maintenance Plus report will include details of Customer’s environment plus recommendations moving forward. Note that the Maintenance Plus report may include recommendations that require additional fees for implementation.

The Maintenance Plus report will include the following details.

3.1. **Executive Summary**

- Hardware model, date of expiration, and system uptime
- Number of ERLs and endpoints
- Call metrics (number of calls and callbacks, average call duration, proportion of provisioned vs. unprovisioned calls)
- Version of ESL/RLM/Desk Alert deployed clients
- Areas requiring attention and recommendations

3.2. **Detailed Report Findings**

3.2.1. **Call Detail Records and Alarm Logs**

- Review the number of provisioned vs unprovisioned calls. Help identify root cause if the volumes are high.
- Review the number of cancelled or short calls (less than 15 seconds). Help identify any PBX misconfigurations leading to potential misdials.
• Review recent alarm logs to determine the overall health of the system. Investigate any recent alarms (30 days).
• Clear out older alarms that have been addressed.

### 3.2.2. OS Level Health Check

• Check for running processes and verify current EGW load for current environment.
• Identify any hung processes causing high CPU usage.
• Verify available disk space.
• Verify if the backup process is running.
• Remove old backups and upgrade files.
• Verify that the EGW’s internal monitoring system is running properly.
• Perform a back-up (hardware) and/or request snapshot (virtual). Clean-up old virtual snapshot if applicable.
• Verify System Time on all EGWs.
• Connect to Remote Access Controller (“RAC”) and run statistics check to detect any hardware issues. Upgrade RAC software if possible.

### 3.2.3. Customer Environment Refresh

• Review the latest environment specifications: PBX versions, firewall, etc.
• Verify system network settings; NTP, DNS, SMTP.
• Review scheduled tasks: are the right ones enabled; are they running at appropriate times/intervals?
• Update Intrado internal customer reference documentation.
• Verify and update any connectivity URLs (provisioning, SOAP, etc.).
• Review Customer’s upcoming activities that may impact E911

### 3.2.4. Provisioning

• Run the unprovisioned endpoint report (if available); are there a large number of unprovisioned endpoints?
• Determine the last time new ERLs were added. Verify that all sites are accounted for (ERLs and auto discovery).
• Verify validity of total vs. provisioned endpoints.
• Generate reports for Customer review.
• Provision an ERL to verify ERS connectivity.
• Verify that automated PBX provisioning interfaces are working.
• Verify the expiration dates of any certificates.
• Run a scan to determine if any subnets, switches or APs have been added or deleted and clean up any problems.
• Determine if automated batch or SOAP processes are running successfully.

### 3.2.5. Redundancy and Failover

• If EGW is deployed in a primary/secondary configuration, when was the last time a call was made through the secondary EGW or secondary ERS data center?
• Verify that failovers are working correctly.
• Verify the Emergency Call Response Center (“ECRC”) failover function.
• Verify connectivity to all PBX nodes.
• Verify connectivity to each data center.

### 3.2.6. Call Monitoring and Notification

• Confirm that Crisis Alert email notifications are working.
• Check Desk Alert statistics and verify that alerts are acknowledged.
• Verify that three-way Call Monitoring 9-1-1 calls are answered.
• Verify accuracy of the Desk Alert agents list.
- Validate recipients of email alarms.
- Verify that SNMP traps are being delivered.
- Verify email connectivity.

### 3.2.7. New Features
- Have there been any applicable feature additions in recent releases? If so, an assisted upgrade will be performed.
- Review requested features.
- Review tickets that have been addressed in new releases.
- Review new usage scenarios (remote users, WiFi, softphones).

### 3.2.8. Support and Maintenance
- Verify that all previously opened tickets have been resolved.
- Review accuracy of system notification recipient list (alarms, maintenance notifications, billing, NOC number, system owners, etc.).
- Review latest support policy documentation.
- Verify administrator list on EGW: additions and deletions? Last logins? Configuration logs?
- Verify that customizations are still valid and have been implemented in the EGW.

### 3.2.9. Access Audit
- Verify that user accounts on the EGW appliance are still in use and have appropriate access rights.
- Audit running services, open ports and processes to detect unauthorized intrusions, malware, or viruses.
- Verify for any unauthorized access attempts.

### 4. Potential Recommendations
Recommendations will be provided by the Deployment Engineer to address any issues found during the Maintenance Plus evaluation. Examples of typical recommendations include:

- **Provisioning Automation:** If the environment is often changing, provisioning automation could minimize the impacts of not updating the network map in the EGW.
- **Product Training:** Staff rotation usually leaves the new 9-1-1 Administrator with the burden of managing an unfamiliar product. Product training will bring the new administrator up to speed.
- **Upgrade:** Labor for assisted upgrades is included. The upgrade will be to the latest release, will help mitigate vulnerabilities, and potentially address outstanding bugs. Upgrading will bring the EGW in line with Intrado’s end-of-life policy, ensuring support is available for Customer’s EGW version.

### 5. Exclusions
The following items are excluded from the scope of the Maintenance Plus program:

- Configuration change requests that require validation retesting or redesign.
- System rebuild or redesign (e.g. migration to VMWare, solution rebuild)

### 6. Maintenance Plus Pricing Terms
The Maintenance Plus program may be selected at any renewal period in place of the Standard Maintenance and Support package. The Maintenance Plus program allows for two evaluations in 12 months: at the receipt of Customer’s purchase order and six months later.
### 6.1. Maintenance Plus Item Codes

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROSR-EGWAMP</td>
<td>Annual Maintenance Plus Program and Support-EGW Appliance</td>
</tr>
<tr>
<td>PROSR-EGWAPL</td>
<td>Annual Maintenance Plus Program and Support for each EGW Appliance Enterprise License (2500 additional endpoint license keys)</td>
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