***Advanced Server and Network Monitoring***

**ALERT VALIDATION & TRIAGE**

**P1 (Priority 1) Alerts: ProVal Tech will remediate or escalate to Client as required. The following alert categories are in scope:**

* **Client Site Offline**
  + Ping the firewall from an external network
  + Open a ticket with the Customers ISP and provide information into the PSA/ticketing system
* **Server Offline** 
  + Access the server/workstation (if approved by MSP for access) of the same network and diagnose (Ping)
  + Access the server via IDRAC/ILO/KVM if physical server VCenter/ESXi/Hyper-V if virtual
  + Attempt to Restart the server if machine is in hung state.
* **Disk Space Alarm Handling** 
  + Handling of alerts with less than 5 GB space left on the System Volume or C: drive
  + Attempt to clear Temporary files/directories to create additional space (if approved by MSP)
  + Document all details and escalate the issue to client for further intervention.
  + Non-OS Drive tickets would be escalated to MSP.
* **Device Down / Status Flap / Packet Loss Alert**
  + Access the server of the same network and diagnose (Ping/Power Issue)
  + For ISP issue, client will contact respective ISP and provide client ticket update hourly
  + For power issues, client will escalate the ticket to the MSP
  + Suspend the alerts in Network Device Monitoring Tool if asked by the MSP
* **VPN Tunnel Down**
  + Access a server which is part of the tunnel network connection and attempt to ping the remote network
  + Access the firewall to check the tunnel status. Reset the tunnel if there is no ping response
  + If the issue persists, escalate to MSP
* **Packet Loss**
  + Ping the server from the same network
  + If packet loss reported, client will escalate the issue

**P2 (Priority 2) and P3 (Priority 3) Alerts: ProVal Tech and Client will need to develop SOP for alert triage and remediation. ProVal Tech will triage all P2 & P3 alerts, capture all information needed to remediate the alerts and contact MSP team as needed to fix the indicative incidents. The following alert categories are in scope:**

* **Virtualization** 
  + Storage Expansion
  + Orphaned Snapshot
  + Consolidation (of snapshots)
  + Memory Utilization
* **Virtual Storage Utilization** 
  + We will work with the MSP to devise SOP on increasing space from available Datastore [Lun] based on provisioning of the disks [Thick or Thin]
* **Server CPU & Memory Utilization**
  + Capture Processes consuming high processor and leading to high CPU utilization
  + We will mention details in the ticket and escalate to MSP for next steps
* **Critical Windows Services** 
  + ProVal Team can attempt to restart the service and track down the event that causes the failure
  + If the Service couldn’t be started, capture the error code and escalate to MSP
* **EventID Monitoring**
  + We would need MSP team to identify the key Event IDs that they would like us to monitor and perform initial Prelim troubleshooting on:
  + Review and build SOP for these, suggestions of increased Automation – i.e., bad block -> Crystal Disk workflow.
  + SMART Errors
  + Abrupt Reboots

**For all Alerts, ProVal Tech team will:**

Confirm that client is a supported 24 x 7 client using the documentation provided by client

* + Confirm that alert is actionable and not false positive or self-remediated
  + Assess alert and assign appropriate priority
  + Create a ticket on the client’s PSA/ticketing system.
  + If remote remediation is not possible with the tools and documentation provided to ProVal Tech, we will escalate via phone to client based on the agreed-upon escalation matrix.

**REPORTING TASKS**

* Monthly Service Overview Report

**ISP / TELCO ENGAGEMENT**

* Contact ISP and create a ticket on the MSP's behalf
* Preform initial troubleshooting steps with ISP support
* Document ISP ticket number and call notes in MSP's ticketing system
* Contact end -user and relay ISP issue information
* Contact MSP’s engineer and provide ISP issue hand-off

**Server and Network Device Monitoring - SERVICE LEVEL AGREEMENT**

Our support team is available via support tickets 24x7.

|  |  |  |
| --- | --- | --- |
| **Priority** | **Criteria** | **Initial Response Goal** |
| **1** | Entire Organization Impacted | 30 minutes |
| **2** | Single/Multiple User(s) Impacted | 2 hours |
| **3** | Support Request | 1 business day |

For all emergency requests, client should use one of the following methods to contact the ProVal Team:

* Email ProVal at support@provaltech.com with “**emergency**” or **“urgent”** in the subject line
* Call our 24 x 7 support line at 407-588-0101, Option 2 for Support

All support and SLA adherence provided by ProVal Technologies, Inc is considered "**best-effort support**". We will exhaust all available resources to provide you with exceptional service. We may be limited due to availability of documentation, dependency on software vendor or, staffing

## MSP Responsibilities

* Client will provision access to end client domain environments with Admin privileges, and single generic named license for all client tools.
* Client will provision an email address for the ProVal team on the client’s domain, which will be used for all tool access and vendor support purposes. This mailbox is not monitored by the ProVal team and should never be used to open support requests.
* Client will keep ProVal informed on transitions/exceptions for any clients and keep the documentation updated on client documentation space.
* Client will inform ProVal when new end-clients are being on-boarded, along with information on how they need to be on-boarded for maintenance and monitoring
* Client will be responsible for the procurement and maintenance of all device licenses from the vendor, as well as the maintenance of the hardware and the operating system on which these applications run
* Client will provide a list of servers and services to be monitored, along with other critical information for the server.
* Client will provide ProVal with the requisite privileges on their RMM tool for remote access and configuration of alarms as per business needs
* Client will work with ProVal to setup a dedicated service board for alerting within MSP PSA, and necessary workflow for when tickets are escalated back to MSP
* Client is responsible for providing the following information at the beginning of the engagement:
  + Default maintenance procedure guidelines and MSP policies
  + Default client maintenance windows and exceptions
  + Client team contact information and issue escalation procedure
  + Client will inform the ProVal team on changes of end-client systems, procedures, access protocols and any other important updates related to services which ProVal is providing.

# OTHER TERMS & CONDITIONS

* ProVal will not support product-related issues which are product defects/bugs. Customer is required to work with their Account Manager or RMM/PSA Support on these matters
* Patch testing and manual patch remediation of end-client machines is not something that is performed as part of this service
* ProVal Tech will not provide support for the software / operating system that is not supported by the software vendor
* All projects are performed at the ProVal team's discretion, and may require a separate scope of work and fee based on complexity