Enterprise Management Service ("EMS") Statement of Work

eSchoolPlus
Student Information System

Contents

Introduction

The purpose of this Statement of Work is to outline and specify the services and support provided by the Technical Solutions Group ("TSG")in the fulfillment of the Enterprise Management Service ("EMS") and address the roles and responsibilities of TSG and the school, district, or other entity subscribing to EMS("Client").

Often confused with the Technical Support department, TSG is a services organization within PowerSchool tasked with offering self-hosted eSchoolPlus customers with a wide variety of technical products and services that combine to create solutions to varied information technology and software administration needs. TSG is staffed with experienced, educated, and industry-credentialed Systems Engineers, Security Engineers, and Database Administrators located in nine states and two provinces across four countries covering six different time zones.

EMS is a comprehensive solution that manages and maintains the Client's self-hosted eSchoolPlus environment in the following areas:

1. Environment Monitoring

- Real-time monitoring of server hardware for performance and faulty hardware
- Real-time monitoring of the eSchoolPlus and SQL Server application logs
- Real-time monitoring of Microsoft Windows® operating system logs and resource utilization
- Real-time monitoring of virtualization hosts performance and utilization
- Real-time monitoring of load balancer configurations
- Monthly reporting of status and trending of performance, hard drive consumption, and server uptime.

2. Software Update Service

- Automated or on-demand deployment of **all** eSchoolPlus including state and provincial reporting version updates and upgrades
- Automated or on-demand deployment of **all** eSchoolPlus-related Microsoft SQL Server software updates
- Choice of automated or on-demand deployment of **all** Microsoft Windows® operating system and relevant server-related third-party software updates

3. Offsite Data Backup and Disaster Recovery

- Automated nightly compression, encryption, and transfer of eSchoolPlus and SQL Server files to a remote location for 365 days of retention (or longer by negotiation)
- This includes "live" database and related attach/espTasks, and related databases to support the live environment but does not include Dev/Train/Test, etc. databases for offsite backup
- In the case of a disaster, temporary hosting of the eSchoolPlus application for thirty (30) days on the TSG cloud platform
- Initiate restoration process of eSchoolPlus the TSG temporary hosting environment initiation within 24 hours
- EMS clients may opt to initiate one (1) test per twelve-month EMS term to evaluate disaster recovery protocol, RTO/RPO, and temporary hosting solution

4. Data and Server Migrations and Restorations

- Same-day restoration of corrupted environment using most recent backup
- Completion of planned server migrations to new physical or virtual hardware

5. SSL Certificate Administration

- Procurement and provisioning of 256-bit military grade SSL certificate
- Configuration of SSL certificate for each specific client's site
- Integration into client environment instance of eSchoolPlus and ongoing administration throughout three-year term

6. Security Audit

- Review of architecture, configuration, versioning, credentials, and business logic of all security elements
- Calculation or testing to determine the nature, likelihood, and severity of risks and threats
- Determination, publication, and fulfillment of measures to harden, secure, and correct the condition of environment

7. SQL Server Performance Tuning and Optimization

- Review and evaluation of physical and virtual database server hardware and storage configurations

- Review and evaluation of SQL Server settings and configuration and other elements of data integrity strategies
- Review and evaluation of SQL Server Database Tables and Index definitions
- Modification or optimization of SQL Server Table and Index and other elements of tuning potential
- Capture and completion of recommended and agreed-to configuration settings

8. Infrastructure Support

- Pro-active response and intervention to performance situations identified by our monitoring protocols
- Telephone and email escalations <u>directly</u> to TSG twenty-four hours/day Monday through Thursday, Fridays from Midnight to 9:00 PM Pacific Time, Saturdays from 4:00 AM to 6:00 PM Pacific Time, and Sundays from 4:00 AM to 6:00 PM and 9:00 PM to Midnight Pacific Time(excluding joint US and Canadian holidays and unless otherwise specified or negotiated) regarding any concern involving the eSchoolPlus infrastructure components such as hardware, virtualization, third party software configurations, and general performance
- One (1)-hour Service Level Agreement for responses to all needs

Environment Monitoring

TSG provides 24/7/365 real-time monitoring of the eSchoolPlus environment resulting in ongoing oversight of essential eSchoolPlus components including the hardware, Microsoft Windows® environment, and other assets to ensure all elements are operating in a fully optimized state. The monitoring is passively configured to eliminate any potential influence that the act of monitoring might otherwise have on the performance of the individual components or their collective contribution to the operation of the environment. TSG specifically monitors the following components to minimize service disruptions and maintain a high level of availability and productivity:

Server Hardware
▪ Physical disk drive status and monitoring for faulty hardware
▪ Hardware RAID controller status and monitoring for faulty hardware
▪ Network Interface Card status and monitoring for faulty hardware
▪ Power supply status and monitoring for faulty hardware
▪ Physical RAM status and monitoring for faulty hardware
▪ CPU and memory utilization
▪ Disk I/O utilization
Microsoft Windows®
▪ Microsoft Windows® Server Event Log errors for eSchoolPlus messages
▪ Microsoft Windows® disk storage
▪ Microsoft Windows® Updates
eSchoolPLUSand Related Assets
▪ eSchoolPlus Network service status
▪ Microsoft SQL Server Network Service(s) status
▪ IIS application services
▪ Microsoft SQL maintenance plan logs
▪ eSchoolPlus website availability
▪ Cognos availability (if applicable)
***Virtualization Host**
▪ Network Interface Card status
▪ Hardware status
▪ Virtual Machine file storage status
▪ CPU and memory utilization

Monitoring is provided only if the component exists within the environment and the Client opts to enroll it in the EMS package.

Each month, the Client will receive a report detailing the history, status, and trending of performance, hard drive consumption, and server uptime.

1. TSG Responsibilities

- TSG will install monitoring software agents on each eSchoolPlus-related component that is covered under the EMS offering.
- TSG will be responsible for configuring the monitoring agents to alert TSG personnel in the event a monitoring alert is triggered.
- TSG will respond to all alerts within one (1) hour of its transmission during extended hours of EMS coverage 24 hours/day Monday through Thursday, Fridays Midnight – 9PM, Saturdays 4AM – 6PM, and Sundays 4AM - 6PM and 9PM to Midnight Pacific Time excluding joint US and Canadian holidays unless otherwise specified or negotiated.
- In the event a monitoring alert is triggered, TSG will open an EMS Support Case, investigate the alert, and notify the Client of the problem and its intended time and nature of resolution.
- If the monitoring event is directly related to the eSchoolPlus or Microsoft SQL application, TSG will open a support case with eSchoolPlus Technical Support on the Client's behalf. The Client will then be responsible to work directly with the eSchoolPlus Technical Support department to rectify the issue.

2. Client Responsibilities

It will be the responsibility of the Client to ensure each of the following items are understood and addressed by the Client's staff:

- The Client will provide TSG with an infrastructure-level administrative account to perform the services listed within this agreement. This account can be disabled when services are not being delivered.
- The Client will provide TSG with naming conventions, TCP/IP parameters, and user accounts passwords associated with all support-related infrastructure components
- The Client will perform any firewall configurations to provide TSG with access necessary to perform the services listed within this agreement.
- The Client will provide TSG with updated documentation on any infrastructure-related configuration changes that occur during the EMS term, including additional applications, additional servers, network protocol schemes, naming conventions, LAN/WAN diagrams, directory services, etc.
- The Client will contact the hardware manufacturer directly to rectify the need to replace any faulty hardware or related components.
- The Client will escalate any concerns regarding the components being monitored during extended hours of EMS coverage twenty-four

hours/day Monday through Thursday, Fridays from Midnight to 9:00 PM Pacific Time, Saturdays from 4:00 AM to 6:00 PM PT, and Sundays from 4:00 AM to 6:00 PM and 9:00 PM to Midnight Pacific Time (excluding joint US and Canadian holidays and unless otherwise specified or negotiated).

- The Client will work directly with eSchoolPlus Technical Support if TSG determines that a potential issue (arising from the monitoring of eSchoolPlus and Microsoft SQL) is outside the scope of EMS.
- Client will install advanced tools made available by the manufacturer (Dell OpenManage Systems Management, Dell Server Administrator, HP System Management, etc). In their absence, hardware monitoring will utilize the system OS event logs.
- Client will be responsible for paying additional fees if the growth of the Client's enrollment or their needs extend beyond the scope of EMS.
- Client will ensure that the eSchoolPlus server(s) is/are running eSchoolPLUS 3.1and Microsoft SQL Server 2012 SP3 or later in order to participate in the Environment Monitoring service of EMS.

Software Update Service

As part of EMS, clients can take advantage of TSG's administration of the distribution of all elements of software fundamental to the operation of eSchoolPlus. This element of EMS provides remote services to install all subsequent eSchoolPlus version updates/upgrades, all eSchoolPlus related Microsoft SQL updates, all eSchoolPlus state and provincial reporting installers, Microsoft Windows® operating system updates, and applicable third-party software updates, and provides the Client with the assurance that their eSchoolPlus environment is up to date on the latest versions. This service includes the following features:

- On-demand distribution and installation of eSchoolPlus version updates.
- On-demand distribution and installation of eSchoolPlus state and provincial reporting installer updates.
- On-demand distribution and installation of eSchoolPlus related Microsoft SQL updates.
- Choice of automated or on-demand distribution and installation of Microsoft Windows® operating system updates.
- Choice of automated or on-demand distribution and installation of VMware® ESX/ESXi updates (If Applicable)
- Choice of automated or on-demand distribution and installation of server hardware firmware updates (If Applicable, when one or more physical servers is/are enrolled in EMS)

1.TSG Responsibilities

For automated distribution and installation of updates, TSG will apply all relevant updates during the Software Update Service maintenance window. The Software Update Service maintenance window will be used to apply updates and upgrades to the eSchoolPlus version release, eSchoolPlus state and provincial reporting code, Microsoft SQL and any related third-party software.

- The Client will be notified via a release notice as to the date when TSG will begin to apply the specific update to EMS Clients that have chosen automated distribution and installation of updates. Note that this date does not obligate TSG to perform all updates at that time, but rather, indicates when TSG will begin the deployment process for the EMS client community.
- TSG will notify the EMS Technical Contact(s) via email within one (1) business day of the date that updates will be applied to the Client's environment during the Software Update Service maintenance window.

- TSG reserves the right to delay or otherwise cancel the deployment of specific versions if circumstances render such an action necessary. The Client will be notified of such a decision should it be made.
- Unless otherwise specified, TSG will apply the most current release of eSchoolPlus unless a desired release is indicated (subject to availability) within the eSchoolPlus Software request submitted by the Client.
- TSG will apply each eSchoolPlus and Microsoft SQL Server version release within nine (9) business days of the release date during the eSchoolPlus Software Update Service maintenance window occurring Monday through Friday from 4:00 PM to 6:00 PM Local Client Time (excluding US holidays) unless otherwise specified and communicated.
- Unless otherwise specified, TSG will apply the most current release of eSchoolPlus state and provincial reporting updates unless a desired release is indicated (subject to availability) in writing by the Client.
- TSG will apply each eSchoolPlus state and provincial reporting update within five (5) business days of the state and provincial reporting update release date during a Software Update Service maintenance window occurring Monday through Friday from 4:00 PM to 6:00 PM Local Client Time (excluding US holidays) unless otherwise specified and communicated.
- Unless otherwise specified, TSG will apply the most current or compliant server-related release as part of the Software Update Service unless a desired release is indicated (subject to availability) in writing by the Client.
- For the automated deployment of server updates, all applicable Microsoft Windows® operating system and third-party software updates will be applied outside the eSchoolPlus Software Update maintenance window and will be scheduled to occur monthly between 12:00 AM (midnight)and 2:00 AM Local Client Time in order to minimize downtime to the Client's eSchoolPlus user community.
- TSG will ensure that the eSchoolPlus application is in an available state (as indicated by the presence of a logon screen) once all relevant software updates have been applied.
- TSG will notify the EMS Technical Contact(s) via email once all applicable software updates have been applied and the eSchoolPlus Software Update Service maintenance window has been completed.
- TSG will notify the EMS Technical Contact(s) via email if issues arise during the upgrade that will prolong the eSchoolPlus Software Update Service maintenance window.
- TSG may create an administrative level account within eSchoolPlus named, "TSG" for testing purposes.

2. Client Responsibilities

It will be the responsibility of the Client to ensure each of the following items are understood and addressed by the Client.

- The Client is responsible for notifying TSG of their desire for Automated or On Demand distribution of software updates via the EMS Activation Checklist. Any changes in decision are to be communicated promptly to TSG.
- The Client will understand that TSG will change an Automated subscription to updates to On Demand in the event that two consecutive releases are refused by the Client for any reason.
- If choosing to not have updates applied automatically, the Client must submit an eSchoolPlus Software Update Service request for each and every update request covered by the Software Update Service by sending an email to **myEMS@powerschool.com**.
- The most current release of the eSchoolPlus application will be installed as part of the Software Update Service unless a desired release is specified within the eSchoolPlus Software Update Service request submitted by the Client.
- The Client is to review all Release Notifications related to the version of eSchoolPlus being installed and fully understand the implications (benefits and impact on current operations) introduced as a result of the update. Questions or issues concerning the update's influence on the visibility to your data or the continued access to, or use of, customizations should be directed to the eSchoolPlus Technical Support department.
- The services included within the scope of this offering do not include any services related to the installation or configuration of any third-party applications that have direct access to the eSchoolPlus and Microsoft SQL resources. Questions or issues concerning the configuration of other application configurations should be directed to the appropriate technical support department that is affiliated with the particular application in use.
- TSG is not affiliated with the eSchoolPlus Technical Support department and is unable to address any questions relating to the use or troubleshooting of functionality within the application as a result of an eSchoolPlus configuration or update performed by TSG. Clients with questions of this nature will be instructed to contact the eSchoolPlus Technical Support department.
- The Software Update Service will likely require bringing the eSchoolPlus application and/or its environment components off line during the Software Update Service maintenance window to apply updates and restart services. It will be the responsibility of the Client to notify their users of the outage.

Note: The EMS Technical Contact(s) will be notified via email within one (1) business day of the date that updates will be applied to the Client's environment during the Software Update Service maintenance window.

- During the Software Update Service maintenance window, the eSchoolPlus server(s) may require a restart. It will be the Client's responsibility to ensure no USB drives or other bootable devices are attached to the eSchoolPlus server(s) that can cause issues during the reboot process.
- TSG is not responsible for any eSchoolPlus version updates that fail due to third party applications or interfaces being run against the eSchoolPlus database that prohibit the update of the eSchoolPlus application.
- In the event an eSchoolPlus version update fails, TSG will reinstall the previous version of eSchoolPlus and Microsoft SQL and restore the last known good SQL backup to repopulate the database.
- If the eSchoolPlus server(s) covered by the EMS agreement is/are configured as members of an Active Directory environment, the Domain User account used to logon to the EMS covered eSchoolPlus server(s) must belong to Local EMS covered eSchoolPlus server(s) Administrators Group.
- If the eSchoolPlus server(s) covered by the EMS agreement is/are configured as members of an Active Directory environment, the eSchoolPlus server(s) and the Domain Users must have the ability to run scripts within the Windows PowerShell.
- Clients that have selected automated distribution and installation of updates can choose to have Software Update Service components updated at any time by sending an email to MyEMS@powerschool.com.
- The eSchoolPlus server(s) must be running eSchoolPLUS3.1 and Microsoft SQL Server 2012 SP3or later to participate in the Enterprise Management Service (EMS) Software Update Service.
- The Client will need to purchase any additional 3rd party licensing required to support additional servers or environments.
- The Client will need to purchase any Professional services such as Project Management, Customizations or Training services when upgrading versions as these are not delivered by TSG.

Offsite Data Backup and Disaster Recovery

EMS provides clients with an automated backup of their eSchoolPlus and Microsoft SQL data files and securely transfers them to a remote storage location provided by TSG. The data backup consists of and is provided via the Microsoft SQL Server maintenance plans and is used to take a point-in-time snapshot of the database.

This capability provides the ability to recover the files needed to quickly restore an eSchoolPlus instance following an irretrievable loss of data. Clients may contact TSG to perform the restoration process. This service includes the following features:

- Automated backup of eSchoolPlus and Microsoft SQL data files
- AES 256-bit double encryption of eSchoolPlus and Microsoft SQL data files before they are transferred
- Automated secure transfer of data to a secured remote SAS70-certified data center employing state-of-the-art security
- Retention of each day's backup file for 1 year (365 days calendar days). Longer retention terms are available by negotiation.
- Storage Monitoring: **TSG** Administrators will be notified of any alerts regarding the status of nightly backups and the health of the Client's backup files

EMS also provides clients with temporary hosting of the eSchoolPlus application and client's data for up to thirty (30) days. In the case of a disaster rendering the client's eSchoolPlus environment inaccessible, TSG will setup and configure an eSchoolPlus environment in TSG's cloud platform. TSG will import the client's last nightly off-site backup, or more recent SQL database backup if available, along with the other necessary files and data, to implement a temporary eSchoolPlus environment for client's use. Initiation of the environment build will begin within 24 hours of notification that the client needs to invoke the disaster recovery service provided by the Enterprise Management Service. EMS clients may opt to initiate one (1) test per twelve-month EMS term to evaluate disaster recovery protocol, RTO/RPO, and temporary hosting solution

1. TSG Responsibilities

- TSG will monitor the success of the native Microsoft SQL Server jobs that are used to create local backup sets.
- TSG will utilize Microsoft SQL Server Maintenance plans to capture Microsoft SQL data that will be retained in the remote TSG facility for the Offsite Data Backup process.

- Microsoft SQL Server data backup files will be compressed, encrypted, and uploaded to a remote TSG facility daily for the Offsite Data Backup process.
- TSG will monitor the success of the compression, encryption, and uploading of files to the remote TSG facility for the Offsite Data Backup process.
- TSG will retain file(s) within the remote TSG facility for the Offsite Data Backup process for up to 365 days or other pre-negotiated period of time.
- In the event the Offsite Data Backup is unsuccessful, TSG will respond within one (1) hour to rectify the issue twenty-four hours/day Monday through Thursday, Fridays from Midnight to 9:00 PM Pacific Time, Saturdays from 4:00 AM to 6:00 PM PT, and Sundays from 4:00 AM to 6:00 PM and 9:00 PM to Midnight Pacific Time (excluding joint US and Canadian holidays and unless otherwise specified or negotiated).
- In the event the offsite data needs to be restored, TSG will respond within one (1) hour to begin downloading the current or desired Microsoft SQL Server database backup files twenty-four hours/day Monday through Thursday, Fridays from Midnight to 9:00 PM Pacific Time, Saturdays from 4:00 AM to 6:00 PM PT, and Sundays from 4:00 AM to 6:00 PM and 9:00 PM to Midnight Pacific Time (excluding joint US and Canadian holidays and unless otherwise specified or negotiated).
- In the event the disaster recovery service needs to be applied, TSG will respond to the Client's request and begin the implementation of the temporary eSchoolPlus environment in TSG's cloud platform. TSG will download the current or desired SQL backup file, import the SQL backup pump file to the temporary SQL instance of eSchoolPlus, and test access to local eSchoolPlus instance. TSG will also copy the Student and Staff folders from the offsite backup to the temporary eSchoolPlus environment.
- TSG will initiate the disaster recovery environment implementation within 24 hours of the client's request to invoke the disaster recovery service.

- The disaster recovery environment will not replicate the client's environment and will be limited to a single database and single application server in TSG's cloud platform.

- The virtual machines for use in the disaster recovery environment will be sized to best meet the client's needs.

- A defined number of accounts will be made available with the provision of new credentials as the DR solution will be unable to utilize the clients previous Active Directory authentication mechanism.

- During DR testing, TSG will load the data from the most recent backups to the DR environment.
- During DR testing, TSG will provide access to the applications on the DR solution for the requested time period to extend to no more than thirty (30) days in any twelve-month DCS term.
- During DR testing, TSG will determine and provide a defined number of user accounts to allow access to the application.
- During DR testing, TSG will configure the DR system to utilize customer-provided printer connection information.

2. Client Responsibilities

- It will be the responsibility of the Client to ensure each of the following items are understood and addressed by the Client.
- The Offsite Data Backup process will incorporate the Microsoft SQL Server maintenance plans to create the backup files and compress, encrypt, and transfer a copy of the file on a nightly basis typically between 3:00 AM and 7:00 AM Local Client Time depending upon the potential for bandwidth constraints and other conflicts. The Client shall avoid scheduling infrastructure cloning, batch loading of data, or other processes impacting the availability of application and database assets or the state of data during this time.
- The Offsite Data Backup process will retain file(s) within the remote facility for up to 365 days. All Offsite Data Backup file(s) older than 365 days will be purged from TSG's systems unless otherwise negotiated.
- TSG is not responsible for the integrity of Microsoft SQL data within the Microsoft SQL backups that are used for the Offsite Data Backup process.
- The schedule of the Offsite Data Backup process is determined by TSG and may not be modified in any way by the Client.
- In the event the offsite data backup needs to be restored, the Client will submit a request to **TSG** with the date the restoration is to be completed and the date of the desired Microsoft SQL Data file to be used for the restore.
- In the event the Offsite Data Backup needs to be restored, the Client will identify a Primary Technical Contact that will work with TSG throughout the restoration process.
- The Client will open firewall ports necessary (port 443) for the use of the Offsite Data Back-up process.
- The Client will ensure the database server is allowed access to the Internet on port 443.
- In the event the offsite data needs to be restored, TSG will restore the current or desired Microsoft SQL Server data to the customer

environment instance of eSchoolPlus and test access to the eSchoolPlus software.

- All data restoration events will use the Microsoft SQL Server database backup files, which represents a point-in-time backup of the data.
- Services included with the Offsite Data Backup process do not include restoring data from Microsoft SQL Transaction logs.
- Services included with the Offsite Data Backup process do not include services for point-in-time recovery methods using any Microsoft SQL tools.
- All changes made to your environment including database names or configuration must be communicated to TSG.
- The eSchoolPlus server(s) must be running eSchoolPlus 3.1 and Microsoft SQL Server 2012 SP3 or later to participate in the Enterprise Management Service (EMS) Offsite Data Backup.
- In the event that the Disaster Recovery Service is invoked the client will make the necessary DNS changes to point the client's eSchoolPlus FQDN to the temporary eSchoolPlus application server's IP address which will be provided by TSG.
- The client will be responsible to connect any third-party software to the temporary eSchoolPlus database and verify connectivity.

- The use of the temporary eSchoolPlus hosting for disaster recovery will be limited to thirty (30) days unless otherwise negotiated.

- Client will be responsible for providing SMTP services for sending email from eSchoolPlus if needed.

- Provide an internet routable printer IP address with external connectivity and support for PCL Version 5 or above for printing testing.

Data and Server Migrations and Restorations

EMS includes the facilitation of data transfers in order to meet a variety of needs and circumstances. These include planned expansions of, or migrations to, new physical or virtual hardware, the population of data to a secondary environment instance, or the periodic transfer of data from a production environment instance to a test, training, or other non-production environment instance. In the event of an emergency, EMS also provides for the restoration of an instance corrupted by hardware failure or user error via the use of a backup datafile to be deployed in full rather than to recover specific elements of data.

1. TSG Responsibilities

- TSG will provide an unlimited number of server migrations, data restorations, and data refreshes during the twelve (12)-month EMS term.
- Should a restoration event be invoked, TSG will respond to the Client's request within one (1) hour during TSG's extended business hours of EMS coverage twenty-four hours/day Monday through Thursday, Fridays from Midnight to 9:00 PM Pacific Time, Saturdays from 4:00 AM to 6:00 PM PT, and Sundays from 4:00 AM to 6:00 PM and 9:00 PM to Midnight Pacific Time (excluding joint US and Canadian holidays and unless otherwise specified or negotiated).
- Should a restoration event be invoked, the event will be scheduled and performed as quickly as technically feasible during hours of EMS coverage, as established by TSG, unless off-hour services have been negotiated.
- Should an event unrelated to a data restoration be invoked, TSG will respond to the Client's request within one (1) hour during TSG's extended EMS coverage twenty-four hours/day Monday through Thursday, Fridays from Midnight to 9:00 PM Pacific Time, Saturdays from 4:00 AM to6:00 PM PT, and Sundays from 4:00 AM to 6:00 PM and 9:00 PM to Midnight Pacific Time (excluding joint US and Canadian holidays and unless otherwise specified or negotiated).
- Should a migration event be invoked, the event will be scheduled and performed during hours of EMS coverage, as established by TSG, using the standard five (5) business-day service window unless off-hour services have been negotiated.
- Should a data refresh event be invoked on-demand, the event will be scheduled and performed at a date and time of the Client's choosing according to TSG availability.

2. Client Responsibilities

- It will be the responsibility of the Client to ensure each of the following items are understood and addressed by the Client.
- The Client will submit requests for a data or server migration, or data restoration to **TSG** with the date and nature of the event being requested.
- The Client will identify a Primary Technical Contact that will work with TSG throughout the event.
- The Client will provide TSG with a Primary Technical Contact to assist with onsite tasks that require physical intervention into the event process.
- The Client will ensure the target environment meets allof the minimum system requirements for the relevant eSchoolPlus version release being applied.
- The Client will understand that data and server migration and restoration event processes will utilize the Microsoft SQL Server maintenance plan backups for data backups and associated files to move and/or restore Microsoft SQL data.
- The Client will be responsible to test eSchoolPlus access and functionality once the data and server migration and restoration event has been completed. Should the Client encounter an inability to access the eSchoolPlus environment instance or believe that data may be missing, the Client will be responsible for contacting **TSG** within one (1) business day of the completion of the data and server migration and restoration event.
- The client will understand that TSG shall not be held responsible for the introduction of any conflict into the Client's traditional use of the functionality provided by eSchoolPlus or the Client's own efforts.
- The client will understand that TSG makes no warranties against an updated version's influence on the visibility of data or the continued access to, or use of customizations. Questions should be directed to the eSchoolPlus Technical Support department.
- The Client will understand that data and server migration and restoration events do not include any services relating to the installation or configuration of SIF agents or components.

SSL Certificate Administration

At the onset of the first EMS term, TSG staff will review SSL / TLS use and capability, procure and provision a Certificate Authority (CA) issued TLS 1.x certificate that utilizes a 2048-bit RSA key with SHA-256 signature for the eSchoolPlus production environment if needed, and configure a SSL / TLS certificate for the client's eSchoolPlus production instance. TSG staff will also facilitate the integration into client instance of eSchoolPlus and ongoing administration throughout three-year term.

1. TSG Responsibilities

- TSG will review of the intended deployment including eSchoolPlus server(s) readiness, network topology, and project related deliverables and schedules.
- TSG will Provide district personnel with firewall configuration parameters to ensure proper eSchoolPlus SSL ports are configured.
- TSG will create the Certificate Signing Request(s) and matching RSA Key and generate SSL Certificate and provide the district with CSR, RSA Key and password, Intermediate Certificates, and SSL Certificate for the eSchoolPlus instance.
- TSG will Import and apply the SSL Certificate, RSA Key, and Intermediate Certificates to eSchoolPlus or Load Balancer.
- TSG will reconfigure eSchoolPlus Network settings and eSchoolPlus Global Server settings to utilize SSL configurations.
- TSG will create HTTP to HTTPS redirect for eSchoolPlus access
- TSG will Reconfigure eSchoolPlus related Virtual Services to utilize TCP SSL ports on a load balancer (if needed).
- TSG will perform the aforementioned tasks during TSG's extended business hours of EMS coverage twenty-four hours/day Monday through Thursday, Fridays from Midnight to 9:00 PM Pacific Time, Saturdays from 4:00 AM to 6:00 PM PT, and Sundays from 4:00 AM to 6:00 PM and 9:00 PM to Midnight Pacific Time (excluding joint US and Canadian holidays and unless otherwise specified or negotiated).

2. Client Responsibilities

It will be the responsibility of the Client to ensure each of the following items are understood and addressed by the Client.

- Client will provide TSG with a designated representative to assist with activities that would require physical interaction with supported components.

- Provide TSG with remote access to any and all servers necessary to perform the SSL Certificate Administration.
- Provide TSG with administrative accounts used to assess infrastructure components.
- The Client will be responsible to make any changes recommended by TSG and agreed to by the Client's staff or management.
- The Client will understand that TSG makes no warranties against suggested changes to the environment.

Security Audits

To better assist eSchoolPlus customers in the safeguarding and stewardship of vital assets and sensitive data. Upon request, EMS will provide a review and evaluation of several components critical to ensuring a secure ecosystem. Subsequent to the review is a capture of the existence and status of these components (SSL, password length/complexity and age, operating system and eSchoolPlus versioning, etc.) and an assessment of their capabilities to mitigate threats to the environment.

1. TSG Responsibilities

- TSG will capture the existence, status, and condition of several pre-defined components of a secure environment.
- TSG will determine the extent to which these components meet TSG-recommended and industry-accepted best practices.
- TSG will provide a written evaluation on a quarterly basis to the Client's designated primary points of contact. The evaluation shall assess each component individually and its contribution to a secure environment.
- TSG will make recommendations as to how to improve the overall and individual values/scores ("grades") in written narrative.
- TSG will evaluate the degree to which the components have improved or worsened in the subsequent audit and evaluation.
- Upon request and subject to staffing availability, TSG will offer additional consulting or elaboration to supplement the written evaluation.
- TSG will perform the aforementioned tasks during TSG's extended business hours of EMS coverage twenty-four hours/day Monday through Thursday, Fridays from Midnight to 9:00 PM Pacific Time, Saturdays from 4:00 AM to 6:00 PM PT, and Sundays from 4:00 AM to 6:00 PM and 9:00 PM to Midnight Pacific Time (excluding joint US and Canadian holidays and unless otherwise specified or negotiated).

2. Client Responsibilities

It will be the responsibility of the Client to ensure each of the following items are understood and addressed by the Client.

- The Client will identify a Primary Technical Contact that will be available to work with TSG during the audit as appropriate.
- The Client will provide TSG with a Primary Technical Contact to assist with onsite tasks that require physical interventioni nto the audit.

- The Client will ensure the target environment is accessible to TSG during the audit period.
- The Client will be responsible to make any changes recommended by TSG and agreed to by the Client's staff or management.
- The Client will understand that TSG shall not be held responsible in any way for the implications of the audit's ability or inability to adequately determine and assess the capabilities of a component to help secure the environment.
- The Client will understand that TSG makes no warranties against suggested changes to the environment.

SQL Server Performance Tuning and Optimization

To better assist EMS clients with the management of eSchoolPlus, upon request the Enterprise Management Service will provide a SQL Server Performance Tuning and Optimization to review and optimize the eSchoolPlus database and database performance.

1. TSG Responsibilities

- TSG will perform a review of all the SQL Server components.
- TSG will review any third-party backup software strategy and configuration.
- TSG will review the SQL Server Table and Index Optimization
- TSG will review eSchoolPlus and SQL Server for usage for Tuning opportunities
- TSG will perform the aforementioned tasks during TSG's extended hours of EMS coverage twenty-four hours/day Monday through Thursday, Fridays from Midnight to 9:00 PM Pacific Time, Saturdays from 4:00 AM to 6:00 PM PT, and Sundays from 4:00 AM to 6:00 PM and 9:00 PM to Midnight Pacific Time (excluding joint US and Canadian holidays and unless otherwise specified or negotiated).

2. Client Responsibilities

It will be the responsibility of the Client to ensure each of the following items are understood and addressed by the Client.

- The Client will identify a Primary Technical Contact that will be available to work with TSG during the review as appropriate.
- Client will provide TSG with remote access to any and all servers necessary to perform the SQL Server Performance Tuning and Optimization.
- Client will provide TSG with administrative accounts used to assess infrastructure components.
- The Client will be responsible to make any changes recommended by TSG and agreed to by the Client's staff or management.
- The Client will understand that TSG makes no warranties against suggested changes to the environment.

Infrastructure Support

TSG will provide remote support for the following infrastructure configurations as it **pertains to the operation of eSchoolPlus and its related components**. The items listed below shall exist and be configured in direct support of the Client's eSchoolPlus environment. The scope of EMS shall not extend to the provision of support for hardware, programs, and other Client assets not deployed for the specific benefit of eSchoolPlus.

Server Hardware Configurations
▪ Hardware disk subsystem configurations ▪ Server attached hardware peripheral configurations ▪ Direct attached SCSI/SAS storage devices
Microsoft Windows® Configurations
▪ Windows Server system settings ▪ Windows Server Event Log errors ▪ Windows Server network settings ▪ Windows Server services
***Virtualization Configurations**
▪ Virtual Machine configurations ▪ Host resource configurations ▪ Host management configurations
SSL Configurations
▪ SSL / Application configurations ▪ Certificate renewals

Support will be provided only if the component is identified and included with the EMS package.

Note: All hardware replacement will be handled directly by the manufacturer. It is the Client's responsibility to contact the hardware manufacturer directly to rectify the need for replacement of any faulty hardware.

1. TSG Responsibilities

- In the event a support request is received, TSG will respond to the Client's request within one(1) hour during TSG's extended hours of EMS coverage twenty-four hours/day Monday through Thursday, Fridays from Midnight to 9:00 PM Pacific Time, Saturdays from 4:00 AM to 6:00 PM PT, and Sundays from 4:00 AM to 6:00 PM and 9:00 PM to Midnight Pacific Time (excluding joint US and Canadian holidays and unless otherwise specified or negotiated).
- In the event a request for infrastructure support is received, TSG will open an Enterprise Management Service support case, make it visible to the designated primary point of contact for the Client, investigate the situation, and notify the Client of the status, assignment, and nature of disposition.
- TSG will notify the Client once the Enterprise Management Service support request issue has been rectified to the fullest extent of TSG's capability, expertise, and authority.

2. Client Responsibilities

- It will be the responsibility of the Client to ensure each of the following items are understood and addressed by the Client.
- Only Client personnel listed as an eSchoolPlus Technical Contact may request support and services related to EMS.
- The Client will notify TSG of their infrastructure-related need or question via the three primary methods for requesting service or support as outlined in the **Contacting TSG** section.
- All support request tasks will be performed during TSG's extended hours of EMS coverage twenty-four hours/day Monday through Thursday, Fridays from Midnight to 9:00 PM Pacific Time, Saturdays from 4:00 AM to 6:00 PM PT, and Sundays from 4:00 AM to 6:00 PM and 9:00 PM to Midnight Pacific Time (excluding joint US and Canadian holidays and unless otherwise specified or negotiated).
- All services within the support offering are to be delivered remotely unless otherwise specified. Onsite support services are available at an additional cost.
- Support requests may require bringing the eSchoolPlus application and its environment components off line while troubleshooting a support incident.
- The Client will provide TSG with one or more infrastructure level administrative accounts to perform the support request.
- While TSG will make every effort to rectify the support request, TSG cannot guarantee a resolution for environments that were not originally integrated by TSG.

- The Client will notify TSG prior to making any changes to the configuration or characteristics to the environment that may have a direct impact on the monitored infrastructure components. This would include the integration of additional servers, server repurposing, changes or updates involving network protocol schemes, naming conventions, LAN/WAN schemes, directory services, load balancing solutions, virtualization, or any software product updates. The Client shall provide TSG with documentation capturing the nature and extent of any modifications once the planned environmental modification has been coordinated with TSG.
- All hardware replacement will be handled directly by the manufacturer. It is the Client's responsibility to contact the hardware manufacturer to rectify any faulty hardware replacement.
- The support services listed within this document are for the support of the infrastructure specifically configured for, or utilized by, the eSchoolPlus application. It does not include support for aspects of the infrastructure utilized by Client assets other than eSchoolPlus.
- The Infrastructure Support services are not intended to replace the assistance provided by the eSchoolPlus Technical Support department. It is the Client's responsibility to contact the eSchoolPlus Technical Support department for support assistance directly related to the configuration or functionality of the eSchoolPlus and Microsoft SQL applications.
- Client is responsible for the support and/or configuration of Microsoft SQL for Always On/Clustering or other SQL High-Availability solutions.
- The Client will be responsible for ensuring adequate Information Technology administrative staff is in place to provide support for normal day-to-day operations of the infrastructure that are not included with the EMS coverage. This includes the monitoring and maintenance of network performance, server infrastructure, infrastructure integrity, and system data protection and recovery.
- The Client will ensure compliance with all aspects of the minimum system requirements for the installed or planned version of the eSchoolPlus application.

Contacting TSG

TSG has established a process for EMS clients to use in order to ensure a timely response to EMS support and service requests. When the Client contacts TSG, a TSG Systems Engineer, Security Engineer, or Database Administrator will be assigned to assist the Client with the request. The TSG representative will have access to documentation capturing the technical information related to the Client's eSchoolPlus environment and an archive of previous EMS support issues and requests.

The three primary methods for requesting service or support are indicated below. TSG provides a one (1) hour Service Level Agreement for responding to correspondence directed to either of the following:

- **Email**

  To receive support or request services by email, the Client should direct their requests to TSG at **myEMS@powerschool.com**.

- **Telephone**

  To receive support or request services by telephone, the Client should call *1.866.434.6276* or *1.916.288.1881*, and select the option #4 for "EMS, DCS and ITSS."

- **PowerSource Self-Service Portal**

  To receive support or request services by posting Cases to the Self-Service portal, please visit https://support.powerschool.com

1. Hours of Operation

TSG operations for supporting EMS clients are twenty-four hours/day Monday through Thursday, Fridays from Midnight to 9:00 PM Pacific Time, Saturdays from 4:00 AM to 6:00 PM PT, and Sundays from 4:00 AM to 6:00 PM and 9:00 PM to Midnight Pacific Time (excluding joint US and Canadian holidays and unless otherwise specified or negotiated). Every effort will be made to accommodate all EMS-related needs during the hours, but priority will be given to those situations involving critical tasks.

Note: *Typically, the Client will be contacted within the targeted response time noted above. However, call volume may impact our targeted response time. Pre-scheduled off-hours support is available at an additional cost.*

2. Client Escalation Procedure

The following procedure will be observed if resolution is required to a conflict arising during the performance and fulfillment of this offering:

If TSG cannot provide resolution or indicate the appropriate path to resolution within two (2) business days from receipt of the support request, the Client's Primary Contact can contact TSG management directly at **tsgmanagement@powerschool.com**via email with the details of the situation and desired escalation.