Load Balancer Installation Service Statement of Work

PowerSchool
Student Information System

Contents

Introduction

The purpose of this Statement of Work is to outline the service and support specifics provided by the Pearson Technical Services as well as address the roles and responsibilities of the client as it relates the Load Balancer Installation offering.

The objective of the Load Balancer Installation offering is to provide remote services to perform the initial installation and configuration of a Load Balancer to be used in PowerSchool environments that contain two or more PowerSchool Application server(s). The Load Balancer Installation service also includes configuring the PowerSchool application to utilize the Load Balancer configuration as a Proxy.

A load balancer, also referred to as a Secure Socket Layer (SSL) accelerator appliance, is required for PowerSchool 7.x Server Array deployments consisting of two or more Tomcat application node servers. The load balancer not only provides the ability to distribute incoming user traffic to the multiple Tomcat application node servers, but also provides the ability to offload the SSL transactions on the load balancer. Although neither supported nor certified by PowerSchool, any hardware or software load balancer, when configured properly, should have the potential to operate successfully within the production environment. PowerSchool does not endorse any particular manufacturer. The specific load balancer manufacturer provides product support. Cisco, F5, and KEMP Technology appliances (among others) should all meet the load balancing requirements for PowerSchool.

The Load Balancer / SSL Accelerator appliances must be capable of the following requirements:

- Layer 4 load balancing capabilities
- Layer 7 load balancing capabilities
- Cookie-based session persistence
- SSL offload / termination on the load balancer (if SSL is desired)

Layer 7 Network Transparency is recommended with PowerSchool load balanced environments. Network Transparency provides the ability to preserve the client's source TCP/IP address and present it to the PowerSchool application server(s). This is recommended if you intend to use PowerSchool security features that disable the PowerSchool user account's source TCP/IP address caused by failed logon attempts. PowerSchool security features cannot not only disable the PowerSchool account, but also the client's source TCP/IP address.

Scope of Work

1. Pearson Responsibilities

It will be the responsibility of the Pearson to ensure each of the following items are addressed by Pearson.

1. Upon receipt of a payment for the Load Balancer Installation offering, Pearson will send the client an email with the Load Balancer Installation Readiness Checklist as well as request that the client provide Pearson with their desired date(s) for the Load Balancer Installation service.
2. Pearson will notify the client via email that their request services date(s) are confirmed and that their Load Balancer Installation Service is scheduled.
3. Pearson will assign the Load Balancer Installation projects to a Pearson Systems Engineer.
4. Pearson will provide the client a list of TCP/IP ports that will need to be configured on the firewall to allow external access to PowerSchool.
5. The installation of the Load Balancer within this scope of the Load Balancer Installation service will be performed within a two (2) business-day service window unless weekend or off-hour services have been negotiated.
6. Pearson will work with the client to ensure remote access can be established to the client's intended PowerSchool environment as well as the Load Balancer configuration.
7. Pearson will download the currently available or desired firmware / software version for the Load Balancer appliance.
8. Pearson will assist the client with performing the initial setup of the load balancer including establishing network connectivity, assigning a management TCP/IP address, and applying licensing (if applicable).
9. Pearson will apply applicable firmware and software updates for the Load Balancer.
10. Pearson will create and configure PowerSchool related Virtual Services.
11. Pearson will create applicable Certificate Signing Request(s) and matching RSA Key(s) for district to provide to Certificate Authority (If SSL will be utilized).
12. Pearson will assist district with obtaining and downloading SSL Certificates and Intermediate Certificates (If SSL will be utilized).
13. Pearson will apply SSL Certificate(s) and RSA Key(s) to PowerSchool related virtual service(s) to provide secured connections to Tomcat application node server(s) (If SSL will be utilized).
14. Pearson will configure High Availability of SSL Accelerator (If Applicable).
15. Pearson will configure PowerSchool network configuration settings to use the load balancer configuration as a Proxy with SSL (if desired).
16. Pearson will configure ReportWorks network configuration settings to use the load balancer configuration as a Proxy with SSL (if desired).
17. Pearson will configure Apache Web (Image Server) network configuration settings to use the load balancer configuration as a Proxy with SSL (if desired).
18. Pearson will configure PowerSchool Global Server Settings to use the load balancer configuration as a Proxy with SSL (if desired).

19. Pearson will backup the new load balancer appliance(s) configuration settings to a desktop folder.
20. Pearson will start the PowerSchool and ReportWorks Windows services.
21. Pearson will ensure within the PowerSchool Monitor that the PowerSchool system is connected.
22. Pearson will ensure the client is presented with the PowerSchool logon screen.

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.

1. Submit a request for the Load Balancer Installation Service via email indicating the desired date(s) that the Load Balancer Installation Service is to be performed as well as key details regarding the intended PowerSchool configuration.
2. Perform the initial setup of the load balancer including rack mounting, establishing network connectivity, assigning a management IP address, and applying licensing (if applicable).
3. Provide a technical district resource to work with Pearson for the duration of the service window.
4. All work will be performed during normal business hours unless otherwise specified. (Monday – Friday; 5:00 AM – 5:00 PM US Pacific Time) (Excludes US Pearson Holidays)
5. Provide Pearson with remote access to perform the services listed within the Pearson Responsibilities.
6. Provide pre-configured PowerSchool server(s) that are in compliance with all aspects of the minimum system requirements for the supported PowerSchool Version Release being utilized.
7. Provide Pearson with infrastructure-level administrative accounts to perform the services listed within the Pearson Responsibilities.
8. Ensure all required network related changes such as firewall, DNS updates, or IP address modifications have been completed prior to commencing services.
9. Provide internal and external name resolution for all project related infrastructure components. (This would include any DNS, WINS, or host file entries to the district's current infrastructure)
10. Coordinate with ISP to obtain required public TCP/IP addresses and registered fully qualified domain name (FQDN) with corresponding public DNS entries for PowerSchool access.
11. Provide SSL Certificates to be used with fully qualified domain names (FQDN) for PowerSchool access. (Optional if SSL deployment is desired)
12. Ensure the issuing Certificate Authority and Certificate type you intend to use with PowerSchool are supported with your client browsers that will be used to access PowerSchool and comply with your district security policies. (Optional if SSL deployment is desired)
13. If utilizing SSL with PowerSchool, the PowerSchool SSL integration must occur during the one-time Load Balancer Installation service event window. Implementing PowerSchool with SSL at a deferred time will require additional service fees.

14. Ensure all PowerSchool server(s) TCP/IP addresses and host names have been configured prior to the start of the PowerSchool Load Balancer Installation Service window. Modifications to the PowerSchool server(s) TCP/IP addresses and host names once PowerSchool and Oracle have been installed will incur additional fees for Pearson Technical Services reinstall / update the PowerSchool and Oracle configuration(s).
15. The Load Balancer Installation service does not include any services relating to the deployment, installation, or data migration of/to PowerSchool, Oracle or their associated resources. These services are offered by Pearson Technical Services at additional fees.
16. Backup the existing PowerSchool / Oracle configurations prior to commencing of the service window.
17. Notify all PowerSchool users of scheduled down time during the Load Balancer Installation service window.
18. The installation of the load balancer within the scope of the Load Balancer Installation Service does not include any services related to configuring load balancer virtual services for SIF agents or components. Questions or issues concerning the SIF installation / configuration should be directed to the Pearson Application Technical Support department. (**datasolutionssupport@pearson.com**)
19. The installation of the load balancer within the scope of the Load Balancer Installation Service does not include any services related to configuring load balancer virtual services for other Pearson or third party applications that have direct access to the PowerSchool / Oracle 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.
20. Pearson Technical Services is not affiliated with the PowerSchool Application 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 a PowerSchool configuration / update performed by Pearson Technical Services. Clients with questions of this nature will be instructed to contact the PowerSchool Application Technical Support department. (**PowerSchoolSupport@pearson.com**)
21. During the PowerSchool Load Balancer Installation Service window your PowerSchool 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 PowerSchool server(s) that can cause issues during the reboot process.
22. Pearson is not responsible to reconfigure the client's Load Balancer / Proxy configuration at a later time to support new PowerSchool Version Release features or updates to TCP / UDP Port requirements. Modifications to the load balancer once the initial services have been completed will require additional funding.
23. Pearson is not responsible to reconfigure the client's Load Balancer / Proxy configuration at a later time to renew SSL Certificates. Modifications to the load balancer once the initial services have been completed will require additional funding.
24. Ensure all requested configurations have been completed at the end of the PowerSchool Load Balancer Installation Service window.

Completion Criteria

The services within Load Balancer Installation Service will be considered complete and delivered when the following conditions have been met:

- The client has been requested to submit the Load Balancer Installation Service dates.
- Pearson has contacted the client and established remote access to the client's PowerSchool environment and load balancer.
- Pearson has downloaded and applied applicable firmware / software updates for the load balancer appliance.
- Pearson has configured the load balancer appliance for use with PowerSchool.
- Pearson has configured the PowerSchool application to utilize the load balancer configuration as a Proxy with SSL (if desired).
- Pearson has ensured the PowerSchool Monitor states that the PowerSchool system is connected.
- The client is presented with the PowerSchool logon screen.
- The client has been notified that the Load Balancer Installation has been completed.

Within five (5) business days of completion of the PowerSchool Load Balancer Installation Service, the District Primary Contact will either accept the Deliverables or provide Pearson Technical Services a written list of objections, if any. If no response from the Client is received within five (5) business days, then the Deliverables will be deemed accepted, unless the Client requests an extension.

If the Client experiences issues directly related to a configuration performed by Pearson Technical Services personnel, it will be the Client's responsibility to contact Pearson Technical Services within five (5) business days. Configuration related requests received after five (5) business days of project completion may incur additional service costs.