At Pearson, we understand that implementing and managing a new Student Information System (SIS) is a challenging effort. We are pleased to work with you to understand your needs and expectations, and strive to ensure your continued success of PowerSchool, the fastest-growing, most widely used web-based student information system.

To assist you through the management of PowerSchool, the Technical Solutions Group (TSG) are pleased to offer a wide range of technical services designed to meet the needs specific to your consulting desires. TSG offers a wide variety of technical services that districts can choose from before, during or after their implementation. Experienced Pearson System Engineers work on-site or off-site with the district technical resources to provide technical expertise relating to the deployment and configuration of the PowerSchool application as well as the infrastructure supporting PowerSchool.

The Technical Solutions Group also offers a wide range of hardware and 3rd party software, designed to meet the needs specific to your PowerSchool deployment. Pearson has partnered with major hardware and 3rd party software manufacturers to resell hardware and 3rd party software directly to Pearson customers at discounted costs. Pearson provides this offering to reduce hardware costs associated with purchasing Pearson software to provide the customer a more cost effective solution.
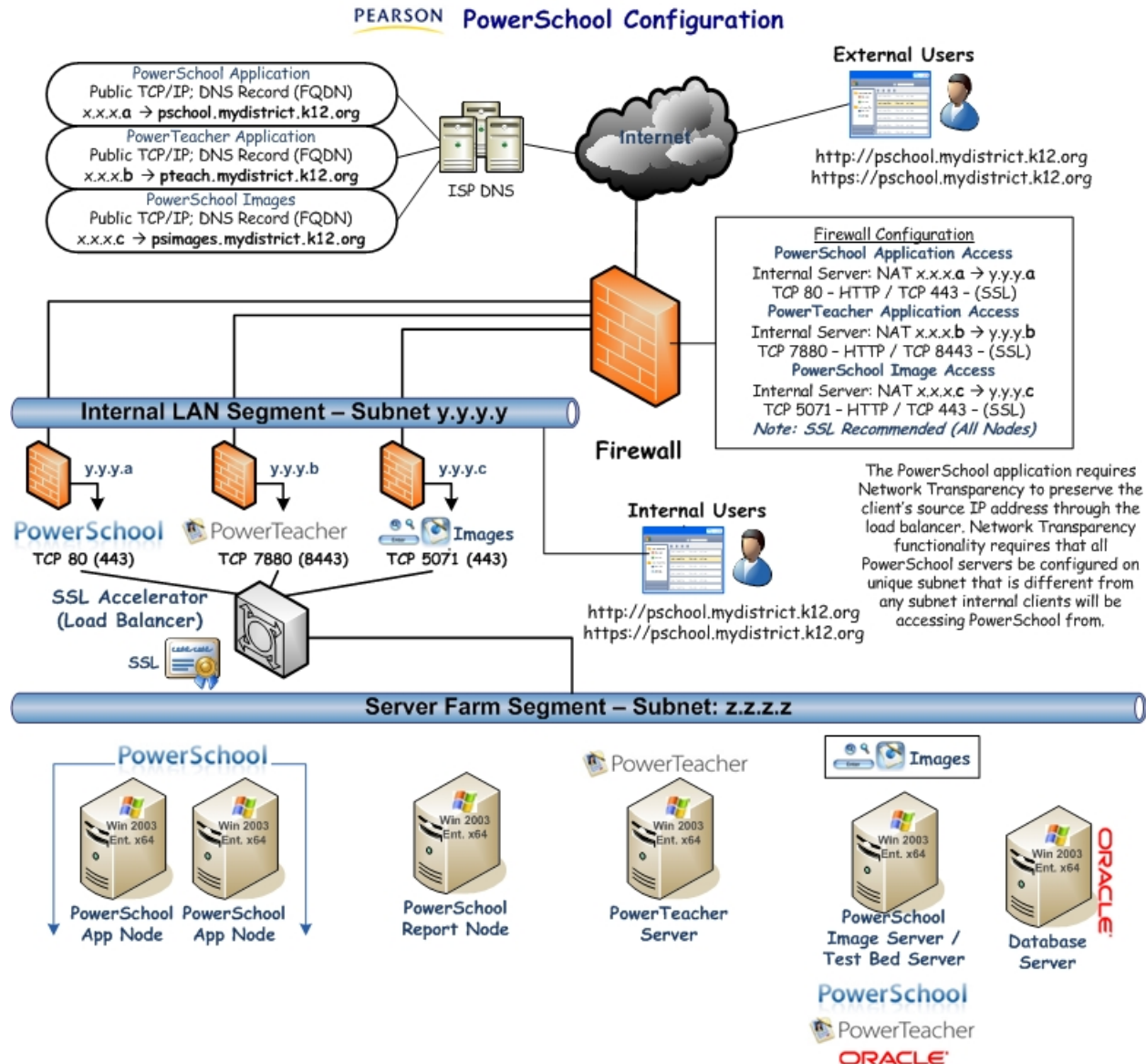
To assist you with ongoing proactive maintenance and support of the PowerSchool application and infrastructure, the Technical Solutions Group also offers an *Infrastructure Support Services* (ISS) agreement. The Infrastructure Support Services agreement provides the following key benefits to assist districts with PowerSchool configurations:

- Technical support for the Infrastructure (including servers, virtualization, load balancer appliances, storage, SSL, 3rd party software, etc.)
- Quarterly pro active PowerSchool environment checks including installations of PowerSchool software version updates, environment check-up, and installation of 3rd party software product patches or version updates.
- Assistance with PowerSchool Data Restoration and / or Server Migrations.
- Data Continuity service with an automated backup of local PowerSchool/Oracle files to a secured remote storage facility.

For questions or further details regarding these services, product requirements, or specific scaling configurations, please contact your Account Executive or tsghelpdesk@Pearson.com

Logical Deployment Diagram

Below is an example of how PowerSchool would be deployed in the district's technical environment:

PEARSON **PowerSchool Configuration**

PowerSchool Application
Public TCP/IP; DNS Record (FQDN)
x.x.x.a → pschool.mydistrict.k12.org

PowerTeacher Application
Public TCP/IP; DNS Record (FQDN)
x.x.x.b → pteach.mydistrict.k12.org

PowerSchool Images
Public TCP/IP; DNS Record (FQDN)
x.x.x.c → psimages.mydistrict.k12.org

ISP DNS

Internet

External Users

http://pschool.mydistrict.k12.org
https://pschool.mydistrict.k12.org

Firewall Configuration
PowerSchool Application Access
Internal Server: NAT x.x.x.a → y.y.y.a
TCP 80 – HTTP / TCP 443 – (SSL)
PowerTeacher Application Access
Internal Server: NAT x.x.x.b → y.y.y.b
TCP 7880 – HTTP / TCP 8443 – (SSL)
PowerSchool Image Access
Internal Server: NAT x.x.x.c → y.y.y.c
TCP 5071 – HTTP / TCP 443 – (SSL)
Note: SSL Recommended (All Nodes)

Firewall

Internal LAN Segment – Subnet y.y.y.y

y.y.y.a   y.y.y.b   y.y.y.c

PowerSchool   PowerTeacher   Images
TCP 80 (443)   TCP 7880 (8443)   TCP 5071 (443)

SSL Accelerator
(Load Balancer)

SSL

Internal Users

http://pschool.mydistrict.k12.org
https://pschool.mydistrict.k12.org

The PowerSchool application requires
Network Transparency to preserve the
client's source IP address through the
load balancer. Network Transparency
functionality requires that all
PowerSchool servers be configured on
unique subnet that is different from
any subnet internal clients will be
accessing PowerSchool from.

Server Farm Segment – Subnet: z.z.z.z

PowerSchool

Win 2003 Ent. x64   Win 2003 Ent. x64
PowerSchool   PowerSchool
App Node   App Node

PowerTeacher

Win 2003 Ent. x64
PowerSchool
Report Node

Win 2003 Ent. x64
PowerTeacher
Server

Images

Win 2003 Ent. x64
PowerSchool
Image Server /
Test Bed Server

Win 2003 Ent. x64 ORACLE
Database
Server

PowerSchool
PowerTeacher
ORACLE

Load Balancer / SSL Accelerator Appliance Configuration

This solution is specially tailored to incorporate an SSL Accelerator into the district's existing PowerSchool environment. The SSL Accelerator, also referred to as a Hardware Load Balancer, provides the ability to distribute incoming web requests to the PowerSchool application nodes. It also provides the ability to terminate SSL connectivity on the load balancer itself. This allows SSL processing to be handled by the load balancer's processor and not the actual PowerSchool server's processors.

The following Load Balancer / SSL Accelerator appliances have been tested and are supported with PowerSchool:

1. F5 Networks BIG IP Application Delivery Networking appliances
2. KEMP Technologies LoadMaster appliances
3. Cisco Content Services Switch (CSS) 11000 series
   - **Note:** When utilizing a Cisco CSS 11000 series please ensure your model has the optional SSL Accelerator module if you intend on integrating SSL on the appliance.

PowerSchool Technical Consultation

1. Professional Services

The following services will be delivered **remotely** by a Pearson Systems Engineer:

Integration Design
▪ Design and review of the desired deployment including infrastructure readiness, network topology, and project related deliverables and schedules.
PowerSchool Configuration
▪ Install latest release of PowerSchool Oracle database application.   ▪ Configure Oracle variables including Flash Recovery Area and automated SMTP messaging alerts.   ▪ Install and configure latest release of the PowerSchool application.   ▪ Test and validate PowerSchool functionality for end user access.
SSL Accelerator Configuration (Load Balancer)
▪ Install and configure SSL Accelerator configuration parameters with applicable firmware and updates.   ▪ Create and configure PowerSchool related Virtual Services.   ▪ Assist district with obtaining SSL Certificates.   ▪ Apply district provided SSL Certificates. (If applicable)   ▪ Test and validate PowerSchool functionality for secured end user access.   ▪ Configure High Availability of SSL Accelerator. (if applicable)
Firewall Configuration
▪ Provide district personnel with firewall configuration parameters to ensure proper PowerSchool ports are configured.
Documentation and Administrative Overview
▪ Provide overview of general administration of the SSL Accelerator.

2. District Responsibilities

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

Facilities
1. Provide a technical district resource to work with the Pearson Systems Engineer for the duration of the project.
2. All work will be performed during normal business hours unless otherwise specified. (Monday – Friday; 8:00 AM – 5:00 PM Local US Time) (Excludes Pearson Holidays)
3. Provide Pearson with remote access to perform the services listed within this agreement. This can include Bomgar access or any customer provided or other customer provided remote access software.

Infrastructure Configuration
1. Provide Pearson with naming conventions, TCP/IP parameters, and user accounts passwords associated with all project related infrastructure components.
2. 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)
3. Coordinate with ISP to obtain required public TCP/IIP addresses and register fully qualified domain name (FQDN) and corresponding public DNS entries for PowerSchool access. (Refer to Logical Deployment Diagram)
4. Provide SSL Certificates to be used with fully qualified domain names (FQDN) for PowerSchool access. (Optional if SSL deployment is desired)
5. Configure firewall configurations for all project related infrastructure components as it relates to PowerSchool access.

PowerSchool
1. Installations of PowerSchool / Oracle within the scope of this project do not include any services relating to the data migration of/to PowerSchool, Oracle or their associated resources. These services are offered at additional fees.
2. TSG are 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 installation performed by TSG. Customers with questions of this nature will be instructed to contact the PowerSchool Application Technical Support department.

General
1. Support for all project related third party hardware and software is provided by the manufacturer unless otherwise stated.

Pricing Summary

PowerSchool Load Balancer Configuration (Fixed Fee) (REMOTE)	**$2,800.00**
PowerSchool Installation (Fixed Fee) (REMOTE)	**$500 (First Server)** **$250n (Additional Servers)**

Where n is the number of additional servers that will exist in the customer's instance/environment at the time of the service that will be included as part of the service.

Note: Rates are also available for on site services.

The pricing set forth above shall be valid for a period of sixty (60) days from the date of this proposal and is only applicable to those products and services described herein. If customer has not returned a signed copy of this Proposal to Pearson prior to the expiration of the foregoing sixty (60) day period, Pearson reserves the right to modify the products, services and associated pricing quoted herein or in the alternative, cancel this Proposal, in whole or in part.

Should customer require any products or services, in addition to those set forth in this Proposal, Pearson will, upon request, provide customer with a quote for such products and services; provided, that such products and services are available to Pearson for distribution to customer.

All products and services set forth in this Proposal will be provided to customer in accordance with the terms and conditions of Pearson's standard PowerSchool Licensed Product Agreement.

To purchase this package or other Pearson Technical Solutions Group (TSG) offerings, please send your inquiries to your Account Executive or contact TSG at tsghelpdesk@Pearson.com.

**For details on other Pearson Technical Solutions Group (TSG) offerings please visit us on PowerSource.
https://powersource.pearsonschoolsystems.com/f/pearson_technical_solutions_group**