# State Employees Retirement System Enterprise Architecture - Overview

June 2018

## Technology

As an agency under the Governor’s jurisdiction, the State Employees Retirement System (SERS) is fully integrated with the Commonwealth of PA enterprise network, Microsoft Exchange Online email solution, and SAP system. Further, SERS is subject to, and routinely follows, all Information Technology Policies published by the Office of Administration.

### Desktop Environment

Virtualized Windows 7 desktops using VMWare Horizon

Lenovo X1 Yoga laptops

Dell OptiPlex 7010 desktops, Dell Inspiron and Lenovo W-series laptops (legacy)

Microsoft Office365 Suite

### Server Environment

1. Hardware: SERS utilizes Lenovo x-Series servers in its datacenters.
2. Operating System
   1. Windows Server 2016 (standard), 2012 (contain) and 2008R2 (legacy)
   2. Oracle Linux, RHEL compatible, version 7 (standard) and 6 (contain)
3. Database
   1. Oracle Database 12cR1 (standard), 11gR2 (contain), 18c (emerging)
   2. Microsoft SQL Server 2016 (standard), 2014 (contain), 2012 (legacy)
4. Virtualization
   1. VMWare vSphere 6.5
   2. Virtualized Servers: Windows and Linux guest OS
   3. Virtualized Desktops: Windows 7
5. SAN Storage
   1. IBM Storwize V7000 provides storage for virtualized servers, database, desktops and backups.
   2. Brocade Switches provide dual, redundant fabrics and enable multipath access between hosts and storage arrays.

### Network Environment

1. Firewall: Clustered Checkpoint appliances running GAIA operating system
2. Network: Cisco access and core switches.

### Data Center Environment

1. Harrisburg Data Center, SERS Headquarters, Harrisburg, PA
   1. Dual HVAC climate controlled
   2. UPS Power with extended battery backup
   3. Dual COPANET connections
   4. Secure keycard access
2. Reading Data Center, Private Co-location facility, Bernville, PA
   1. Dual HVAC climate controlled
   2. UPS Power with generator backup
   3. COPANET fiber connection
   4. Secure escorted access

## Systems

### State Employees Retirement Information System (SERIS)

Proprietary database application used for housing member data and processing benefits. SERS is currently nearing the end of a multi-year project to modernize SERIS with a planned go-live date of 1/1/2019. The major goals of the project include reengineering for efficiency, optimizing process flow, and re-platforming to a modern, mainstream technology stack.

### Document and Work Process Management (DAWPM)

Workflow and document imaging solution used alongside SERIS for processing benefits and maintaining member information. The modernized SERIS application will contain a workflow component thereby repurposing DAWPM to the agency’s dedicated electronic document management system after go-live.

### Content Management System (CMS)

CMS serves as SERS’s repository for final business documents that are not associated with a member record. Contract, policies, and procedures are examples of documents stored in CMS.

### Eagle PACE

Investment data warehouse platform used in reporting and reconciling plan holdings against data provided by the Custodian.

### Oracle E-Business Suite Financials

Oracle EBS provides SERS with a common, standard platform for managing Accounts Payable, Accounts Receivables, General Ledger, and Cash Management for both defined benefit and deferred compensation programs with the ability to also manage the 401(a) plan later in the year.