Case Study



Contra Costa Community College District

About Contra Costa Community College District

The Contra Costa Community College District relies on PortalGuard for Enterprise-ready support and deployment, alongside Self-Service Password Reset and Single Sign-On to various Education-related web apps.

Contra Costa Community College District pathways to success

Specific Pain Point

The Contra Costa Community College District required a solution to drastically reduce the amount of incoming password related help desk calls while simultaneously consolidating multiple login prompts.

Additionally, Contra Costa needed a solution that would fit in with a tightly imposed budget and lean IT support team.

Existing Challenge

The Contra Costa Community College District was consistently seeing a large spike in password related Help Desk calls at the beginning of a new semester, or when students, faculty, and staff return from a mid-semester break. With a user count in excess of 60,000, the call volume and wait times put a huge strain on both the end-user population and the substantially lean IT support team at the local Help Desk

Contra Costa also provides students, faculty, and staff with access to Office 365, an internal SharePoint website, and Colleague by Ellucian. The large end-user population was quickly becoming inundated with various login prompts - increasing frustration and decreasing productivity.

Due to various imposed budget restrictions and limitations, Contra Costa was also limited to which solution could be utilized to address these various challenges. This put a lot of difficulty in obtaining an effective, well-equipped solution without overstepping these boundaries or sacrificing any single requirement for another.

Customer Profile

Industry:

Higher Education 60.000+ Users

Location:

California

Top Applications Used:

AD, Office 365, SharePoint and Colleague by Ellucian

The PortalGuard Resolution

Consolidating Login Prompts

By using PortalGuard's on-premises Enterprise solution, Contra Costa was able to affordably deploy an integrated portal solution that addressed both major pain points with Self-service Password Reset (SSPR) and Single Signon (SSO), while simultaneously providing the flexibility to deal with any future identity management requirements such as Two-factor Authentication - should they arise.

In order to consolidate various login prompts for SharePoint, Office 365, and Ellucian apps, A PortalGuard server was installed as an on-premises Identity Provider (IdP) for Contra Costa. With PortalGuard in place, users are only required to remember a single set of credentials and undergo a single authentication in order to receive access to the full range of resources they may require.

Office 365, SharePoint, and Colleague by Ellucian natively support the SAML v2.0 protocol for Single Sign-On. The PortalGuard IdP was then configured to provide a 'jump' page for end-users to use for access to any necessary application. To provide streamlined access for all Contra Costa end-users – even when they attempt to access various applications directly – the PortalGuard IdP creates a SAML response for each authentication and the browser redirects the end-user to the originally requested server and URL with this SAML response. This redirect happens independently of the user without any additional action being required.

Additionally, the PortalGuard IdP supports various additional methods of providing SSO, such as the CAS and Shibboleth protocols, or even Kerberos and Forms-based authentication for additional scenarios. This versatility provides Contra Costa with the ease of use and functionality to scale to various sizes and applications without worry of losing out on the benefits to SSO.

Reducing Password Related Help Desk Calls

In addition to a SSO-capable IdP, PortalGuard also provided Contra Costa with an SSPR solution complete with fully granular configuration control. With PortalGuard SSPR, IT administrators can configure password policies with full control over every aspect of the requirements, such as:

- Minimum/Maximum Password Length
- **Password Expiration**
- Character Set
- Required Character Types (Symbols, Upper-case, Lower-case, Alphanumeric, etc.)
- Password Repetition.

This range of configuration capabilities, combined with PortalGuard's built in auditing features, provided the Contra Costa Community College District with the ease of use and freedom to address various internal compliance needs should they adjust in the future.

In addition, the PortalGuard SSPR solution also provides full configuration over the ability to reset and recover forgotten passwords, as well as managing account unlock functionality.

For ease of use, the SSPR solution also includes PortalGuard Desktop - a method of resetting a forgotten password directly from the login screen on either Windows or Mac in the local environment.

PortalGuard provides more than eleven (11) different methods of verifying identity in order to initiate a password reset, recovery or account unlock, providing end-users with flexibility without sacrificing usability or security.

This solution integrates alongside the PortalGuard IdP to reduce the required passwords for end-users, while providing complete self-service to reduce any reliance on the local help desk.

An Enterprise Ready Solution

The PortalGuard Enterprise solution was created as a RESTful web application, which allows it to scale out horizontally for performance and load balancing by adding additional servers as needed. Each application server has a suggested threshold of 10,000 concurrent users - with properly configured load balancing, Contra Costa was easily able to meet the traffic and uptime necessary for their 60,000+ user base.

The Technical Approach

- PortalGuard Desktop is packaged as an MSI so it can be silently installed using standard desktop management software.
- PortalGuard Desktop allows user to launch a "Forgot Password" wizard right from the Windows logon screen.
- PortalGuard is a browser agnostic webserver that supports standard browser access from any device with a responsive UI.
- 2FA/SSPR require no mandatory training, setup and configuration is done centrally

Additional Resources

SAML Single Sign On Tech Brief

Centralized Self-Service Password Reset Tech Brief

Overcoming 2FA Hurdles Tech Brief

PortalGuard is a cybersecurity authentication package that delivers a full set of features in a single, fully customizable solution. PortalGuard provides single sign-on (SSO), self-service password reset (SSPR), two-factor authentication (2FA), and over 130 other features to ensure that each campus is equipped with the tools needed to face any authentication challenge.