CAS – The Single Sign-on Solution for myPurdue & Related Systems

What it means to you

Introduction

As part of the upgrade scheduled to be in effect on September 26, 2015, myPurdue and related systems such as myPurduePlan, Student Profile, and UniTime will use a standard single sign-on technology known as “CAS” which stands for “central authentication service”. CAS is an established standard that is used by numerous other applications on campus.

Prior to adopting CAS, a number of myPurdue-related applications relied on custom single sign-on solutions. Most of these solutions only worked in one direction. Users had to start at myPurdue and access other applications from there. With CAS, users can enjoy true bi-directional single sign-on across other CAS-based applications. CAS is an industry standard that has been used within Purdue for a number of years, but it may be new to some of the myPurdue users.

Understanding a few CAS fundamentals will help users of myPurdue and related systems better adapt to this new method of providing seamless integration across systems.

CAS Fundamentals

1. **CAS Sessions are associated with a specific browser session.** When you log into any system that uses CAS, you are creating a CAS session for that specific browser session. If you open a second instance of a given browser or you open a different browser, these new browser sessions are unaware of any CAS session you may have created in the other browser session.

2. **CAS sessions typically end when you close your browser.** Within a browser session, as long as that CAS session is valid, you can access other systems that use CAS without having to re-enter your login credentials. Depending on how your browser is configured, when you close the browser, you are ending your CAS session. IT Security recommends logging out of applications when you are finished using them and to close your browser when you are leaving your workstation to attend meetings, on lunch break or wrapping up for the day.

3. **CAS sessions have a two hour duration.** Unless they are explicitly ended, CAS sessions last for two hours. If you login to myPurdue at 8:00 am, you should be able to single sign-on into myPurduePlan up until 10:00 am. At 10:01 am, you will have to re-enter your career account credentials, but now you have another two-hour window.

4. **Application timeouts are independent of CAS session timeouts.** Just because the CAS session expires does not mean the application session will be impacted. If you login to myPurdue at 8:00 am and access
Banner INB at 8:10, the CAS session created at 8:00 am will expire at 10:00 am. But as long as you continue to use myPurdue it will continue to work. The same is true for other applications.

5. **When you logout of one CAS system, your CAS session ends.** If you login to myPurdue at 8:00 am, and at 8:10 am you navigate to myPurduePlan and then logout of myPurduePlan at 9:00 am, your CAS session will end. Your myPurdue application session remains active, but if you then navigate to Banner INB or any other CAS-based system, you will be prompted to provide your login credentials. This is because your browser no longer has an active CAS session. Once you do this, you will have established a new 2 hour CAS session that will provide you with single sign-on access to other systems for the next two hours.

6. **Logging out of one CAS-based system ends your CAS session, but it does not log you out of other applications.** If at 8:00 am you login to myPurdue, visit myPurduePlan at 8:10, UniTime at 8:20, and Banner INB at 8:30 all within a single browser session, all of these applications utilized the same CAS session to grant you access. When you logout of anyone of the applications, you will have ended that application session and your CAS session, but this does not log you out of the other applications.

**What this Means to the User Experience?**

When you log into a CAS-based system, your browser establishes a CAS session that will last for two hours. As long as that CAS session is not ended by you explicitly logging out of one of the systems that use that session, you will be able to navigate across multiple systems without re-authenticating. If for any reason, your CAS session is ended, you may be prompted to re-enter your career account id and password. For some users, this may result in fewer logins based on their usage patterns, and for other uses it may result in a few more logins.

**Why Did We Switch to CAS?**

Every year, new applications come along that have to be integrated with myPurdue. In some cases, we have built custom single sign-on solutions for these systems. In cases where building a customized single sign-on solution was not practical, users were required to sign on a second, third or fourth time. For the typical user who is at their work station for a one- to two-hour time period, CAS provides a true single sign-on experience that enables seamless navigation and allows us to introduce new applications without developing additional custom single sign-on solutions that are costly to build and maintain. Custom single sign-on solutions are notoriously vulnerable from a security stand point. CAS is a widely supported authentication system that has sophisticated security measures baked into the system, providing a more secure single sign-on infrastructure than those provided by custom solutions.

As a standard authentication service, CAS is supported by applications frequently used by colleges and universities to support administrative and academic systems.

Utilizing CAS across the myPurdue family of applications will be an adjustment for some users, but in the end, CAS enables integrating additional applications seamlessly into our environment and at a lower cost than building custom single sign-on solutions.