

Blackboard

SAML Authentication Request Has Expired Error

Date Published: Feb 20,2018 **Category:** Planned_First_Fix_Release:Functioning_as_Designed;
Product:Authentication_and_Security_Learn,Installs_and_Configurations_Learn,Extensions_Learn;
Version:Learn_9_1_Q2_2017_3200_0_0,Learn_9_1_Q4_2017,Learn_9_1_Q2_2018,Learn_9_1_Q4_2016_3100_0_0_rel_107_401e,SaaS,Learn_9_1_Q2_2016_3000_1_0_rel_52
Article No.: 000073506

Product: Blackboard Learn

Release: 9.1;SaaS

Introduction: Issue:

When logging in to Learn through SAML, some Users will continuously see the following error message:

Sign On Error!

Blackboard Learn is currently unable to log into your account using Single sign-on because the authentication request has expired. Please log out of single sign-on and try again.

For reference, the Error ID is xxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx.

Cause:

One of the values passed from the SAML server to Blackboard in the authentication response data is the AuthnInstant. The AuthnInstant timestamp is the time when the User last authenticated through SAML. This is not the same as the IssueInstant timestamp which indicates when the Response ticket was issued by the SAML server. If the AuthnInstant timestamp is older than the "SAML session age limit" setting in Bb, then the ticket will be rejected with the above error. The default "SAML session age limit" setting in Bb is 2 hours, so anybody trying to authenticate that hasn't logged in within the past 2 hours will get rejected.

If the SAML server has persistent sessions enabled (like when the User selects "keep me signed in"), sessions can live a long time without getting re-authenticated, so this problem will be very common among those Users.

Symptoms:

The stack trace in the bb-services logs will have the following "caused by" section:

```
unsuccessfulAuthentication - org.springframework.security.authentication.AuthenticationServiceException: Error validating SAML message  
Caused by: org.opensaml.common.SAMLException: Response doesn't have any valid assertion which would pass subject validation  
at org.springframework.security.saml.websso.WebSSOProfileConsumerImpl.processAuthenticationResponse(WebSSOProfileConsumerImpl.java:229)  
at  
blackboard.auth.provider.saml.customization.consumer.BbSAMLWebSSOProfileConsumerImpl.processAuthenticationResponse(BbSAMLWebSSOProfileConsumerImpl.java:229)  
  
at org.springframework.security.saml.SAMLAAuthenticationProvider.authenticate(SAMLAAuthenticationProvider.java:87)  
... 248 more  
Caused by: org.springframework.security.authentication.CredentialsExpiredException: Authentication statement is too old to be used with value  
2018-02-16T21:26:47.938Z  
at
```

blackboard.auth.provider.saml.customization.consumer.BbSAMLWebSSOProfileConsumerImpl.verifyAuthenticationStatement(BbSAMLWebSSOProfileConsumer

at org.springframework.security.saml.websso.WebSSOProfileConsumerImpl.verifyAssertion(WebSSOProfileConsumerImpl.java:306)

at org.springframework.security.saml.websso.WebSSOProfileConsumerImpl.processAuthenticationResponse(WebSSOProfileConsumerImpl.java:214)

... 250 more

Workaround:

Once a User has run into this error, the only way for them to get into Blackboard is to kill their old SAML session and re-authenticate. Some SAML sites have an easy way to log out, others may need to just clear their browser cookies to remove the old session and get a new one.

Resolution:

This is not a bug with Blackboard, but a configuration problem. To resolve this, you'll either need to raise the "SAML session age limit" in Bb to match the maximum age a session will live on the SAML side, or edit the max session age configuration on the SAML side so that it doesn't keep sessions alive longer than the Bb default of 2 hours (or adjust both to a value in the middle).

To edit the Max Session Age setting in Bb, navigate to **System Admin > Building Blocks > Installed Tools > [Authentication Provider - SAML] chevron > Settings > SAML session age limit**