

VPNaaS SAML Authentication Fails with "Decryption of relay state failed" Error Using Duo IdP

Contents

Issue

When attempting to establish a VPNaaS connection using Secure Client Remote Access with SAML authentication:

- Failed when processing the SSO authentication request. Please contact your System Administrator
- Decryption of relaystate failed

Authentication with the same IdP and Duo configuration works successfully for ZTNA (Zero Trust Network Access)

Environment

- Technology: Solution Support (SSPT - contract required)
- Subtechnology: Secure Access - Secure Client Remote Access (VPN, Posture, Private Resource)
- Authentication Method: SAML with Duo IdP
- Two Duo applications configured: one for ZTNA, one for VPN
- Authentication works for ZTNA, fails for VPN
- Software Version: ALL
- No recent hardware/software version changes specified

Resolution

The issue was resolved by correcting the configuration of the Entity ID and Assertion Consumer Service (ACS) URL.

1. Login to CSA Dashboard. Go to **Connect > Enduser Connectivity - > Virtual Private Networks**. Find out the **Profile** you are connected to.
2. Click that **Profile** and **Edit**. Go to the **Authentication** tab.
3. Download the SAML Metadata for Secure Access.
4. Check **entityID**="<https://X.vpn.sse.cisco.com/saml/sp/metadata/saml>" and **<AssertionConsumerService index="0" isDefault="true" Binding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-POST" Location="**<https://X.vpn.sse.cisco.com/+CSCOE+/saml/sp/acs?tname=Profilename>**></AssertionConsumerService**
5. Ensure sure that **entityID** and **AssertionConsumerService** matches the Duo Application configured for VPN

Cause

Misconfiguration of the Entity ID and ACS URL on the Duo VPN application resulted in the SAML relaystate decryption failure. The correct configuration was not present in Duo for VPN, even though ZTNA authentication was working with the same IdP. Updating the Duo VPN application with accurate metadata from Secure Access resolved the issue.

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