3118389 - SSO failing for all users suddenly server error is Message stream modified

Version	17	**Type**	SAP Knowledge Base Article
Language	English	**Master Language**	English
Release Status	Released to Customer	**Category**	Problem
Component	BI-BIP-AUT (Authentication, ActiveDirectory, LDAP, SSO, Vintela)	**Released On**	05.01.2022

Please find the original document at **https://launchpad.support.sap.com/#/notes/3118389**

Symptom

- SSO suddenly starts failing for all users, and they are left at a login screen
- In the stderr with -Dcjsi.kerberos.debug=true we see "com.crystaldecisions.sdk.exception.SDKException$InvalidArg: The argument has an invalid value null (FWM 02024)" **To note this error is very generic,** the ones below can verify the issue better
- Web application logs (following KBA 1613472) show the error below
- **NEW!** to have your web application logs deciphered automatically for you please upload them to the new **Support Log Assistant** (SLA)

"LoginContext failed. Failure unspecified at GSS-API level (Mechanism level:
com.dstc.security.kerberos.KerberosError: **Message stream modified**"
Error code: 41
Server name: BICMS/SPN
Server realm: EXAMPLEREALM.COM

- Vintela logs contain no errors following KBA 2684843
- Client packet scans contain no errors following KBA 1969914
- Packet scans on the web application server will show KRB Error: **KRB5 KRB_AP_ERR_MODIFIED** on TGS request for the CMC service principal name
- this error is also mentioned in KBA 2820819 but so far the previous solutions have failed
- Manual logon is working for all users both in client tools and web applications

Environment

- SAP BusinessObjects Business Intelligence Platform 4.2 (all SPs) probably will affect 4.3 as well
- Windows server version 2012, 2016, and 2019 all supported server versions
- Important to note the issue is being caused by domain controllers not BI servers

Reproducing the Issue

Following for setting up BI AD SSO in KBA 1631734 and 2629070

Cause

We 1st saw this issue when Windows security update KB5007192 (windows 2016), for more information see the following URL under 'Known issues'

https://support.microsoft.com/en-us/topic/november-9-2021-kb5007192-os-build-14393-4770-f534a33a-ed00-4bd2-8248-9424c53e9bde

It's important to note that the issue is caused by patching the **domain controllers not the BI servers**. Fixing the issue **must be done on the domain controllers**

Further research the fix above will also be contained in the following Microsoft patches. Each OS has it's own patch #. If any of the following are installed on the domain controller, see the **Resolution** section below on the appropriate fix for your OS.

- KB5007206 - Windows Server 2019
- KB5007192 - Windows Server 2016
- KB5007247 - Windows Server 2012 R2
- KB5007260 - Windows Server 2012
- KB5007236 - Windows Server 2008 R2 SP1
- KB5007263 - Windows Server 2008 SP2

Resolution

The issue is resolved from Microsoft with an "out of band patch" see the below articles for the patch information:

- Windows Server 2019: KB5008602 — DOWNLOAD
- Windows Server 2016: KB5008601 — DOWNLOAD
- Windows Server 2012 R2: KB5008603 — DOWNLOAD
- Windows Server 2012: KB5008604 — DOWNLOAD
- Windows Server 2008 R2 SP1: KB5008605 — DOWNLOAD
- Windows Server 2008 SP2: KB5008606 — DOWNLOAD

You will not be able to install these emergency updates through Windows Update, and they will also not install automatically on affected DCs.

To download the standalone update package, you will have to search for them in the Microsoft Update Catalog (you can also use the download links available above).

You can import this update into Windows Server Update Services (WSUS) manually using the instructions available in the Microsoft Update Catalog.

To note Microsoft has also released the "B" release with the fixes so the out of band fix is no longer required. (2012 R2 listed below others to follow)

- Windows Server 2012 R2: KB5008263— DOWNLOAD

WORK AROUND

Removing Microsoft patch KB5007192 or depending on OS the other patch #'s are listed in the cause section is currently the only known work around to fix SSO

MANUAL LOGON WORK AROUND

1. When SSO breaks users are left at a logon screen logon manually is not affected by this issue but may not be configured correctly
2. Verify manual logon steps in KBA 2629070 and KBA 1245178

See Also

To save time we **have not been able to work around the issue** (SSO) with the following....

- using idm.kdc to avoid an affected DC (the failing TGS request is generated by the BI **service account** using **AD DNS** (defined in sites and services)) the idm.kdc is a client setting in the global.properties
- setting encryption to RC4 or AES does not help (issue does not seem to be encryption related)
- If any further work arounds are available we will post them on this KBA **currently none**
- **Manual logon** is all that will work while the DC's remain unpatched

Keywords

bip bi 4.x 4.* 4.2 4.3 bi4.x bi4.* bi4.2 bi4.3 vintela ventila vintella ventela set up Active Directory single sign on sign-on slient automatic opendocument error fail Account Information Not Recognized: Active Directory Authentication failed to log you on. Please contact your system administrator to make sure that you are a member of a valid mapped group and try again. If you are not a member of the default domain, enter your user name as UserName@DNS_DomainName, and then try again. (FWM 00006) (FWM 00005) jcsi.kerberos: Could not decrypt service ticket with Key type ##, KVNO ##, Principal "HTTP/XXX.YYY.ZZZ" using key:Principal username@REALM.COM - delegation error secwinad winad