SAP SNC Errors - Using Microsoft Kerberos instead of MIT Kerberos for Windows to access SAP

Q: SAP SNC Errors - Using Microsoft Kerberos instead of MIT Kerberos for Windows to access SAP

- Due to a compatibility issue with MIT Kerberos for Windows and the User Account Control (UAC), the UAC is disabled by default in win.mit.edu to avoid having users receive errors while trying to access SAP instances.
- The following fix allows users to access SAP via Microsoft Kerberos functionality built into the OS instead of MIT's Kerberos for Windows. Once this fix is in place the UAC can be enabled if desired in the case where MIT's Kerberos for Windows was only used for access to SAP.

Context

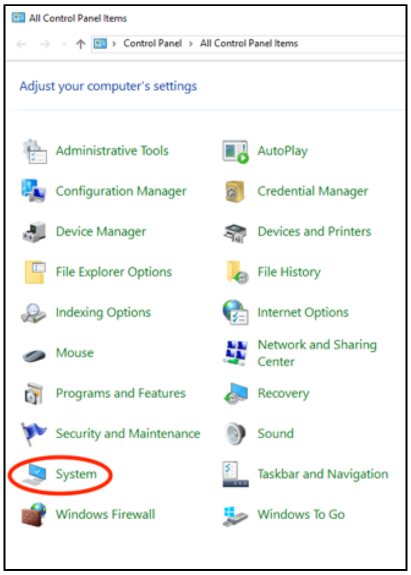
- This is due to an issue with MIT Kerberos and Windows. By using Microsoft Kerberos this issue is bypassed. **Please note this issue should only be used to resolve issues with SAP as other applications may need MIT Kerberos**. Other applications can continue to use the Kerberos for Windows software.
- This fix is generally applied via a group policy object and must be performed by an IT technician with the appropriate permissions to the GPO.
- Applying this fix allows UAC to be enabled on computers if desired.

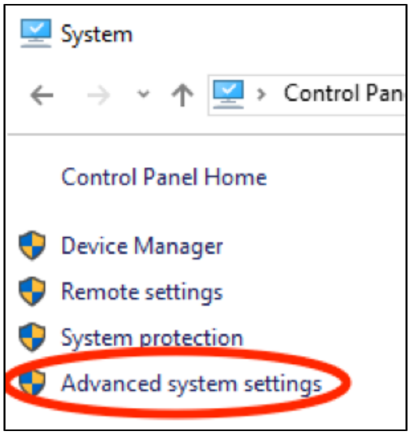
Answer

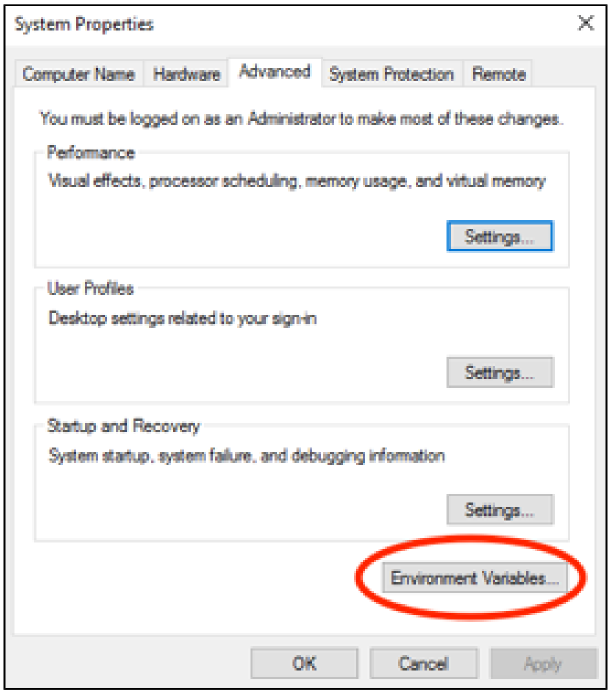
Note: Only one procedure below is needed. You do not apply both procedures. The individual computer change procedures apply to only the computer(s) you are working on whereas the group policy procedures will apply to all computers located in the related Organizational Unit (OU).

Individual computer change procedures:

1. **Environment Variables** are located under **Advanced system settings**. This can be accessed through **System** within **Control Panel**







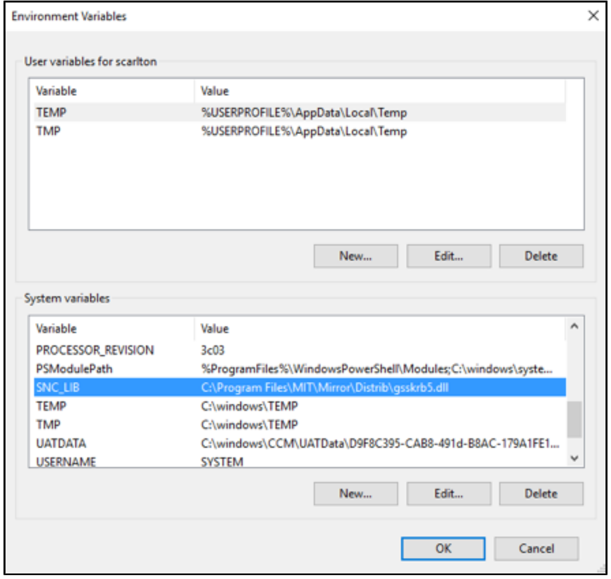
You must be logged on as an Administrator to make most of these changes.

Visual effects, processor scheduling, memory usage, and virtual memory

Desktop settings related to your sign-in

System startup, system failure, and debugging information

2. **Edit** the System Variable **SNC_LIB** to **C:\Program Files\MIT\Mirror\Distrib\gsskrb5.dll**
   Some **Win 10** installs will use the location **C:\Program Files\MIT\Kerberos\bin\gssapi32.dll**



User variables for scarlton

Variable	Value
TEMP	%USERPROFILE%\AppData\Local\Temp
TMP	%USERPROFILE%\AppData\Local\Temp

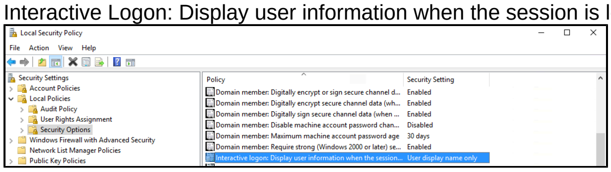
System variables

Variable	Value
PROCESSOR_REVISION	3c03
PSModulePath	%ProgramFiles%\WindowsPowerShell\Modules;C:\windows\syste...
SNC_LIB	C:\Program Files\MIT\Mirror\Distrib\gsskrb5.dll
TEMP	C:\windows\TEMP
TMP	C:\windows\TEMP
UATDATA	C:\windows\CCM\UATData\D9F8C395-CAB8-491d-B8AC-179A1FE1...
USERNAME	SYSTEM

Additionally you'll want to change some settings that resolve the issue of Kerberos tickets breaking when a computer goes to sleep. Changing these settings will require a user to logon with a password every time wake from sleep. Go to the local group policy editor by running **gpedit.msc** on the local computer.

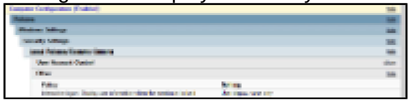
In the local group policy editor, browse to:

1. Computer Configuration, Policies, Windows Settings, Security Settings, Local Policies / Security Options / Other
2. Interactive Logon: Display user information when the session is locked



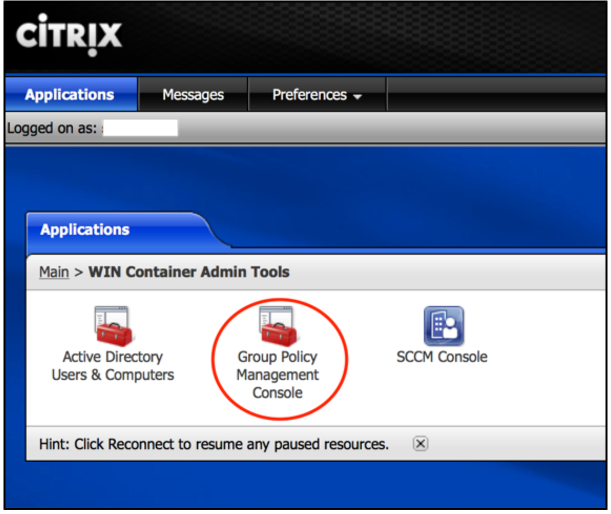
Policy	Security Setting
Domain member: Digitally encrypt or sign secure channel d...	Enabled
Domain member: Digitally encrypt secure channel data (wh...	Enabled
Domain member: Digitally sign secure channel data (when ...	Enabled
Domain member: Disable machine account password chan...	Disabled
Domain member: Maximum machine account password age	30 days
Domain member: Require strong (Windows 2000 or later) se...	Enabled
Interactive logon: Display user information when the session...	User display name only

3. Setting – User display name only



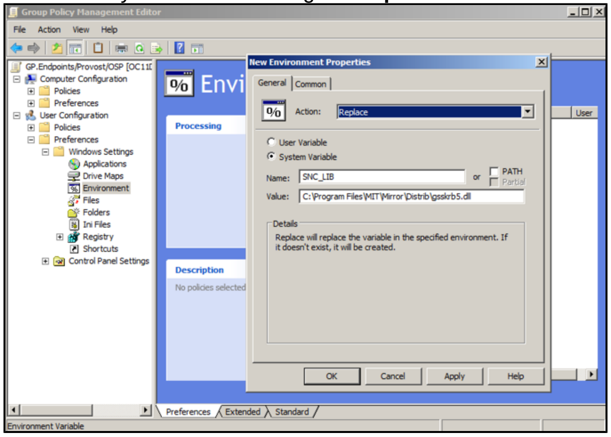
Group Policy change procedures (applies to all computers within the OU):

1. Access the related Organization Unit GPO through **Group Policy Management Console**. This is done through **Citrix** under the **WIN Container Admin Tools**. https://citrixapps.mit.edu/Citrix/XenApp/auth/login.aspx


CiTRIX
Applications
Messages
Preferences
Logged on as:
Applications
Main > WIN Container Admin Tools
Active Directory Users & Computers
Group Policy Management Console
SCCM Console
Hint: Click Reconnect to resume any paused resources.

Once you locate your related GPO **right click** and **select edit**

1. Navigate to **User Configuration/Preferences/Windows Settings/Environment**
2. Add a new system variable using the **Replace** action named **SNC_LIB** with the value **C:\Program Files\MIT\Mirror\Distrib\gsskrb5.dll**



Action: Replace

○ User Variable
● System Variable

Name: SNC_LIB or ☐ PATH ☐ Partial

Value: C:\Program Files\MIT\Mirror\Distrib\gsskrb5.dll

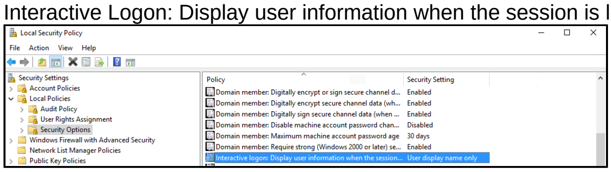
Details

Replace will replace the variable in the specified environment. If it doesn't exist, it will be created.

Additionally you'll want to change some settings that resolve the issue of Kerberos tickets breaking when a computer goes to sleep. Changing these settings will require a user to logon with a password every time wake from sleep. Go to the GPO **right click** and **select edit**

In GPMC, browse to:

1. Computer Configuration, Policies, Windows Settings, Security Settings, Local Policies / Security Options / Other
2. Interactive Logon: Display user information when the session is locked



Security Settings
- Account Policies
- Local Policies
  - Audit Policy
  - User Rights Assignment
  - Security Options
- Windows Firewall with Advanced Security
- Network List Manager Policies
- Public Key Policies

Policy	Security Setting
Domain member: Digitally encrypt or sign secure channel d...	Enabled
Domain member: Digitally encrypt secure channel data (wh...	Enabled
Domain member: Digitally sign secure channel data (when ...	Enabled
Domain member: Disable machine account password chan...	Disabled
Domain member: Maximum machine account password age	30 days
Domain member: Require strong (Windows 2000 or later) se...	Enabled
Interactive logon: Display user information when the session...	User display name only

3. Setting – User display name only