SPLM – Intergraph SmartPlant License Manager

Issue
Scavenge fails to release locked license seats on remote or VPN based SPLM client machines.

Environment
SPLM over VPN or other Remote Access

Resolution
1. Educate users to exit applications correctly. Crashes and abnormal exits will lock the licenses.

2. The VPN should not be disconnected while holding licenses. The license will not return normally and will become locked.

3. Ensure pdlice.exe is correctly added to the firewalls’ allowed programs list. Otherwise, scavenge will fail with Connection timed out and any locked licenses can be held for 16 hours.

4. Scavenge should be run when users get the "no grade-level seat available” error.

5. Make sure DNS is setup to update the SPLM server immediately when SPLM clients change their IP address. Otherwise, scavenge can fail with Connection timed out.

6. Do not allow SPLM client computers to go to sleep while holding a license. Inactivity can cause the VPN to disconnect and lock the license.

7. If crashes occur and the application remains running in the background as an orphaned process, the process must be ended, or the license will appear to be in use (Seat Not Recoverable) and will not scavenge.
ISL – Intergraph Smart Licensing

Internet Connection

ISL clients require internet connection, but users need not connect to their company’s VPN. As long as there is an internet connection, applications will be able to get licenses from Hexagon PPM servers.

Note: We have seen ISL Client working in home network for some customers having issues with their office network.

Installing ISL

Ensure that the latest version of VC++ 2019 is installed on the end user machine:


Answer 35581

Ensure that .NET 4.8 is also installed on the end user machine:

https://dotnet.microsoft.com/download/dotnet-framework/net48

Answer 38085
**Issue**

Users are "Working from Home" more frequently. What are some considerations and tips when using CADWorx and Analysis Solutions (i.e. CAESAR II, PV Elite, Tank, CADWorx, etc.)

**Environment**

Working at Home

**Resolution**

The primary concern when trying to use your CAS products while working from home is Licensing. There are currently four licensing configurations you may have Local (Green) HASP Key, Network (Red) HASP Key, Smart Plant License Manager (SPLM), or Intergraph Smart Licensing (ISL). See below for tips on getting licensing to work for you.

**Local (Green) HASP** – This key can only be used when plugged locally into the user machine. You may not RDP into your machine at the office that is holding the key. You **MUST** bring the key home with you to use. Any RDP session will disable the key. The limitation is the user will not be able to easily share this key with colleagues.

**Network (Red) HASP** – Connect your machine at home to your company Network and you should be able to retrieve the license just as if you were working at the office. If you are getting a 6000 series Error please follow the steps starting on page 4 of the HASP Support Guide. If you are being issued a new laptop to bring home, install the CAS Application and follow the steps starting on page 4 of the HASP Support Guide to configure your machine to find your network license.

**SPLM** – Theoretically, you should only need a VPN connection to access your license or check out a license. It is recommended to check out a license if your internet connection is unstable or VPN bandwidth is low. When using the SPLM checkout Utility you will not be able to Check the license back in. The seat will be returned only when the time limit expires. Consult, Work from Home FAQs, in the SPLM section for more information on working from home using SPLM.

**ISL** – All you will need to access your license when using ISL, is a stable internet connection. If your connection is unstable it is recommended to use the ISL Client interface to check out a license for the expected usage of the license. Simply, bring your machine home, connect to the internet and start using right away.

If you experience any difficulty trying to access your software when working from home please file a Service Request on Smart Support.
Display Issues Due to Display Scaling

Relevant Product(s)
SM3D; SP3D; SP3D MHE

Issue
When using Smart 3D on a display with a higher resolution, the Smart 3D window may not properly adjust to the entire display when maximized:

Also, other Smart 3D windows may not display correctly (such as the Common Views window and Properties pages).

Environment
Windows 10 or later

Resolution
Properties of the S3DHost.exe application can be changed to keep the software from adjusting based on the screen resolution, keeping the views more user-friendly.
1. Navigate to the S3DHost.exe application in Windows Explorer (this can be found at <Smart3D Installation Path>/Core/Container/Bin).
2. Right-click on the application and select Properties.
3. In the Properties window, select the Compatibility tab.
4. Under the Settings options in the Compatibility tab, check the box next to the option Override high DPI scaling behavior.
5. Click **OK** in the S3DHost Properties window to close it. The views will now display properly when running Smart 3D.

Optionally, the Desktop resolution may need to be adjusted:

1. Right-click desktop and select Screen resolution
2. Select Make text and other items larger or smaller
3. Set the DPI setting to Smaller - 100%
4. Select Apply
5. Select Log off now

Also, if experiencing issues with the display of menu items in certain tasks/commands, ensure that check that the size of text, apps, and other items (DPI setting) is set to 100% with (Default) next to it.
**Issue**
When executing an action that opens up a separate dialog (e.g., opening an object's Properties page), it does not appear on screen.

**Environment**
S3D; Not version specific

**Resolution**
Please check your screen's resolution. What is likely happening is that the separate dialog is opening but is appearing "outside" the screen.

Use the following Windows shortcut to move an active screen:

1. Press Alt + space
2. Press M
3. Press any of the directional arrow buttons to lock the cursor to the screen
4. Move with the mouse

**Cause**
Screen settings (e.g., laptop running on a separate screen in the office may have a different resolution than individual laptop screen)

---

**Enhancing User Experience Connecting to VM**

Answer ID: 38448 | Published 4/7/2020 | Updated 4/9/2020

**Relevant Product(s)**
SM3D; SP3D; SP3D MHE

---

**Issue**
When connecting to a remote VM using Remote Desktop Connection, the VM shows a lot of lag. Also, the application sometimes takes a long time to display the graphics.

**Environment**
Remote Desktop Connection to VM

**Resolution**
Whenever user tries connecting to a Virtual machine using Remote Desktop connection from Windows, there are options in the Remote Desktop Connection tab which might enhance the User experience and optimize performance.

April 15, 2020
Setting 1:

1) Browse for remote desktop connection from the start menu, Click on Show options.
2) Traverse to the Experience Tab where there is a drop down under “Choose your connection speed to Optimize performance”.
3) Select the relevant option from the drop down based on your Internet speed and connection type. (LAN/Broadband etc.)
Setting 2:

1) The Color Depth of the Remote Desktop can be optimized.
2) Traverse to the display tab under Remote desktop connection.
3) Under “Choose the Color depth of remove session”, reduce the color quality.
Remote Desktop Connection

Display configuration
Choose the size of your remote desktop. Drag the slider all the way to the right to use the full screen.

Small  Large

Full Screen

Use all my monitors for the remote session

Colors
Choose the color depth of the remote session.

- Highest Quality (32 bit)
- High Color (15 bit)
- High Color (16 bit)
- True Color (24 bit)
- Highest Quality (32 bit)

Display the...
These two settings might enhance the User experience.

**Cause**

Informational
Issue
Operating the Navigate View using RDP Connection is slower than using a physical machine.

Environment
Not version specific

Resolution
This is the default behavior and a limitation to Microsoft Remote Desktop. This is due to how RDP works. It creates a virtualized desktop version of the host machine that only uses software OpenGL which doesn't use the hardware acceleration and the same extensions required when running in hardware mode. The following are the remote graphics enhancements that Microsoft made to RDP version 10 which shipped with the Windows 10 1511 update and the Windows Server 2016.

It uses the h.264/AVC 444 hardware encoding for a better performance in RDP connection and it is recommended to enable them.

1. In Windows 10, start the Group Policy Editor by clicking the Windows button and typing gpedit.msc.


4. Enable “Configure H.264/AVC hardware encoding for Remote Desktop Connections” and Apply.

5. Log off from the machine and reconnect to it using RDP.
For the Performance Tuning Remote Desktop Session Hosts, please refer to the following articles, "Client experience settings" under "Remote Desktop Session Host tuning parameters".

https://docs.microsoft.com/en-us/windows-server/administration/performance-tuning/role/remote-desktop/session-hosts#remote-desktop-session-host-tuning-parameters

**Cause**

Informational