Title

Adobe Acrobat Reader updates recommended to improve ChemStation stability

Summary

Errors like "ChemMain stopped working" and other instabilities could be attributed to the version of Adobe Acrobat Reader and updates pushed by Adobe.

Situation

Only the Adobe Acrobat Reader Classic track is supported by ChemStation and runs in a 'sandbox' protected mode with the option of no automatic updates. Adobe Acrobat Reader Continuous track is not supported as it pushes updates on a regular basis which will interfere with ChemStation operation and result in ChemMain failures.

The following error: "There is a problem with Adobe Acrobat/Reader. If it is running, please exit and try again. (523:523)" or "...(507:507)" occurs if Adobe Acrobat Reader settings are not configured for ChemStation or by a virus checker.

There are installations of Acrobat Reader versions that push automatic updates and need to be uninstalled.

To prevent Adobe from reaching out to the Web, there are other notification channels and messages that need to be disabled. These settings are ON by default at installation and must be changed manually.

Also, some AntiVirus applications have an issue with adobe reader in our setup and exclusions are needed.

In Windows Application event log, the faulting module names for Adobe Acrobat Reader are: AcroPDFImpl.dll_unloaded and AcroPDFImpl.dll.

Solution

This applies to ChemStation versions C.01.07 to C.01.10 Update 2.

<u>Verify version of Acrobat Reader installed</u>

It will be necessary to check the version of Adobe Reader present on ChemStation systems. Internal stability tests show that Acrobat Reader 2017 (Classic Track) was the most robust and an upgrade to this version is strongly recommended.

1. Check Acrobat Reader version number.
2. Open Acrobat Reader and Select Help > About Adobe Acrobat Reader

3. The version number has several ranges. The Continuous or Classic track is indicated by the first two digits of the third range.
20 = Continuous track
30 = Classic track

Example: 2017 Release | Version 2017.011.30127

4. If one of the following Acrobat Reader versions are installed, they must be uninstalled using Add/Remove programs in Control Panel first and not be upgraded to Acrobat Reader 2017:
- Acrobat Reader 2016, 2015 or lower
- Acrobat Reader XI or lower (11.0.0, 10.x.x)
- Any Acrobat Reader versions from the Continuous track (even with Acrobat Reader 2017)

Install Adobe Acrobat Reader 2017 (Classic Track)
1. Check if an existing Acrobat Reader version must be uninstalled first.
2. Install Adobe Acrobat Reader 2017 (Classic Track)
3. Here is the link to the Release Note of the Adobe Reader Update to version 17.011.30166. If you need to get the full version of Adobe, use the Reader Download Center link mentioned in the release note.

   https://www.adobe.com/devnet-docs/acrobatetk/tools/ReleaseNotesDC/classic/dcclassic17.011mar2020.html

4. Be careful to pick the "Reader" Product Type and not "Acrobat".
5. Run the Installer and follow the instructions of the Adobe Reader Setup wizard.

NOTE: When you open either Acrobat Reader or the ChemStation Report Viewer for the first time, you will be asked to confirm the Adobe Reader license agreement.   On a Networked WorkStation, this dialog appears only once. On an AIC, this dialog will appear for each newly configured instrument.


Disable the Adobe Update Service to prevent automatic updates and checks for updates
1. In the Windows Start menu, search for Services and run as administrator
2. Stop the Adobe Acrobat Update Service.
3. Go to the Action menu and select Properties. In the service properties, set the startup type to Manual.

Ensure correct Adobe Acrobat Reader settings
There are other notification channels and messages that need to be disabled to prevent Adobe reaching out to the Web. These are ON per default installation and must be changed.

1. Click Edit> Preferences in Acrobat Reader.
2. Select the General category.
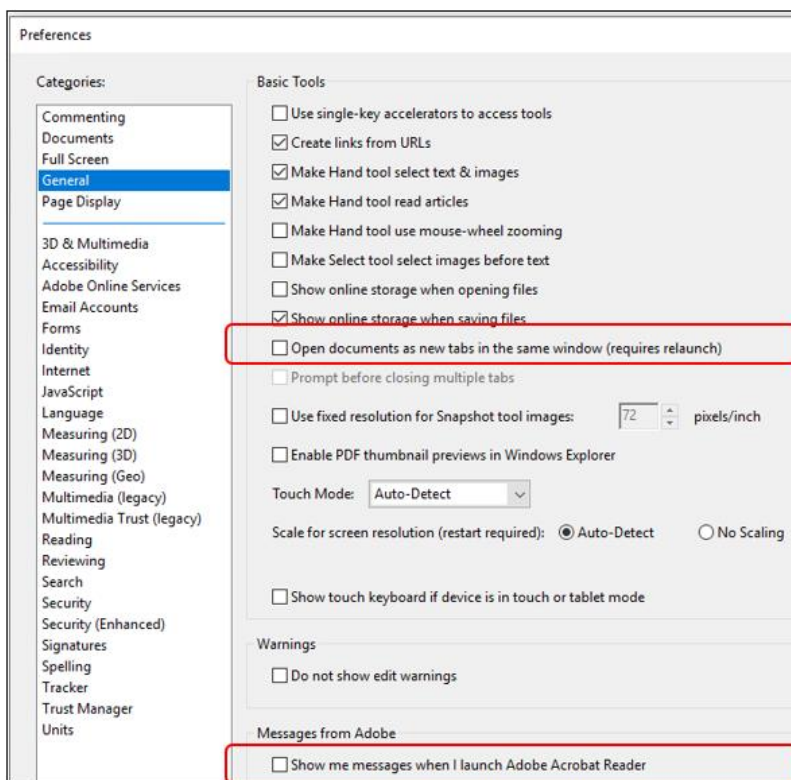
a. Ensure that the "Open documents as new tabs in the same window" check box is cleared. If it is selected, Acrobat Reader may interfere with the ChemStation Report Viewer feature.

b. Clear the "Show me messages when I launch Adobe Acrobat Reader" check box. If it is selected, Adobe messages may interfere with the ChemStation software.

3. Select the Security (Enhanced) category.

a. Ensure that the "Enable Protected Mode at startup" check box is selected.

b. Ensure that the "Enable Enhanced Security" check box is selected.
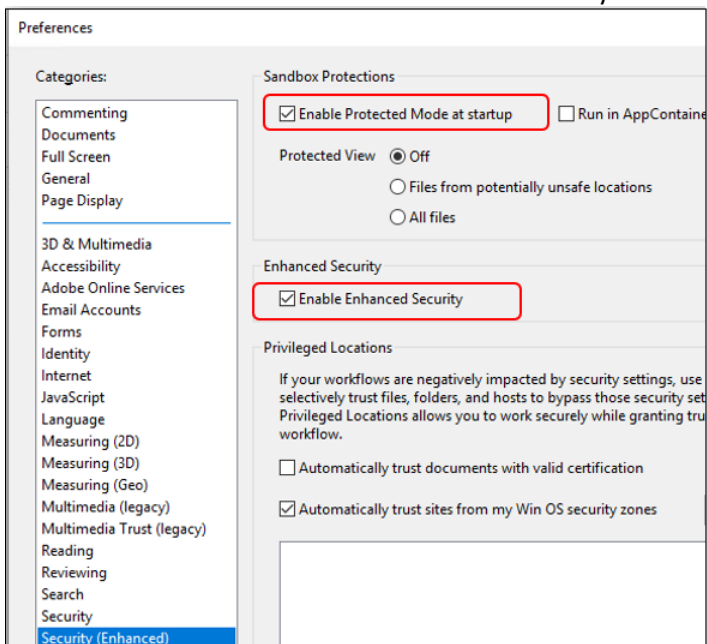
4. Select the Tracker category.
   a. Ensure that the "Show notification icon in system tray" check box is cleared.
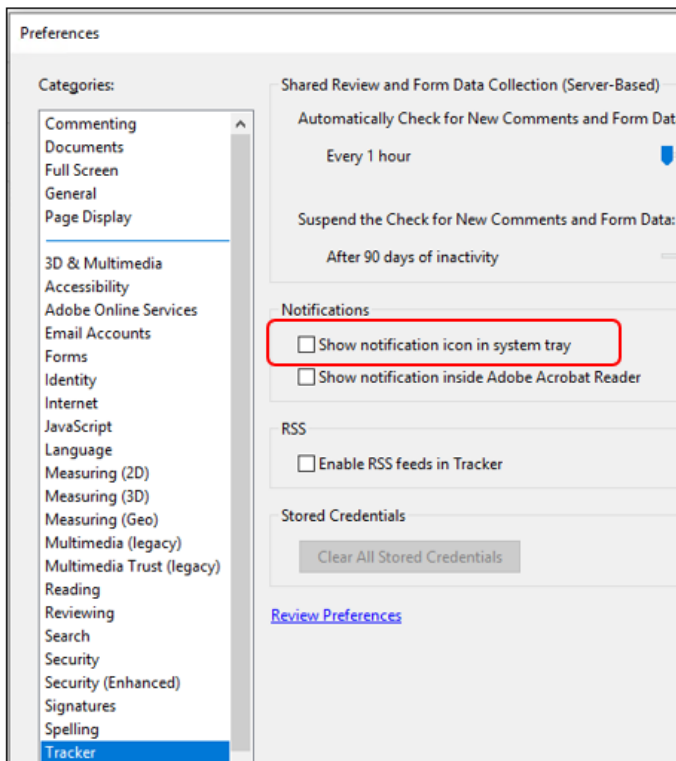
5. Select OK.

Update Acrobat Reader regularly
1. Update Adobe Acrobat Reader on a regular basis to avoid push notifications from Adobe. Acrobat Reader updates usually come on a quarterly basis.
2. Close all ChemStation instances to ensure there are no running instruments (on AIC, go to Control Panel and select force shutdown)
3. To update, open Acrobat Reader, and click Help> Check for Updates....
4. After an update, ensure that the Adobe Acrobat Update Service is still stopped.
5. Ensure that the Adobe Acrobat Reader settings have not been reset.

Configure the Antivirus Program
If the antivirus software includes program or executable deny execution settings, ensure that the following program files are not denied execution. You can use the windows search feature to find the specific folder each program file is located in.

• Acrobat.exe
• AcroRd32.exe

Example: add C:\Program Files (x86)\Adobe\Acrobat Reader DC\Reader\AcrRD32.exe and C:\Program Files (x86)\Adobe\Acrobat DC\Acrobat\Acrobat.exe to the Trusted Programs List.

Apply Acrobat Reader Settings to all Instruments on AIC
The Acrobat Reader settings are stored in each user profile in Windows. When the ChemStation is running on an AIC, each instrument runs under a dedicated "instrument user" (e.g. CSIUser01, CSIUser02, ...). To update the Adobe Acrobat Reader settings for all the "Instrument Users" follow the procedure below. If you use multiple AICs, repeat this procedure on each AIC.

1. Log into OpenLab Control Panel as a CDS Admin with the everything role to have access to the ChemStation command line
2. Launch the instrument. An offline session can be used.
3. If the ChemStation Command Line is not visible, click View> Command Line in the Method and Run Control view.
4. In the ChemStation Command Line, enter the command shellexecute "C:\Program Files (x86)\Adobe\Acrobat Reader 2017\Reader\AcroRd32.exe"
5. Press Enter to run the command. This opens Adobe Acrobat Reader instance (may need to be selected on taskbar) and the correct Acrobat settings are applied to the instrument sessions.
6. Close Adobe Acrobat Reader and ChemStation.
7. Repeat the procedure for all instruments that are configured on the AIC

    Note this procedure needs to be completed for instruments added in the future.

Additional info:

No additional training is required to implement the changes described in this service note.

This service note replaces the following:
OpenLAB CDS ChemStation Edition-059A
OpenLAB CDS ChemStation Edition-066
OpenLAB CDS ChemStation Edition-104A