



If you recently had a java update and are now unable to launch LSGAM [click here](#)

To install LSGAM for your GEM2000 or GEM5000 instrument, you will need to do the following:

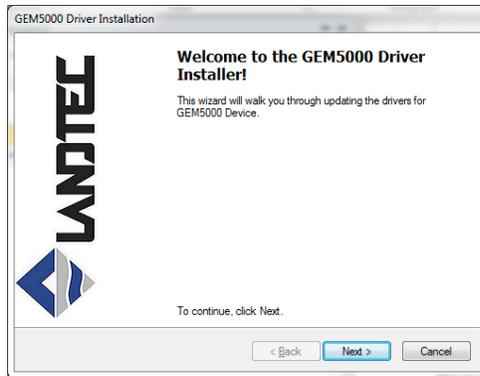
- Install the USB Drivers
- Install the Java Platform
- Launch LSGAM to cache it on your computer

STEP1—Install the USB Drivers_

To install the LANDTEC GEM USB cable Drivers, first unplug your USB cable from the computer. Then click on <http://www.landtecnica.com/lsgam/files/usb.exe> and run the file. During the installation you should see a black “Dos” like screen will appear for a brief moment. This will detect your operating system environment and install the appropriate driver for the GEM-2000 series of instruments.

A screenshot of a DOS command prompt window. The window title is "C:\Users\marcel\AppData\Local\Temp\DF9nt_Mon64.exe". The text in the window reads: "ok! bit 00 detected", "C:\Users\marcel\AppData\Local\Temp\DF9nt64.exe", "Installing driver...", and "D:\GEM Driver Installation process completed." The window has a standard Windows-style title bar with minimize, maximize, and close buttons.

Next you will see an installer appear for the GEM5000 series of instruments



Note: you may see a box appear indicating that the drivers are “unsigned”. Please answer the box to continue anyways.

After the installation plug in your USB cable. The computer should detect the cable and will complete the installation for the cable drivers once the cable is plugged in.

STEP 2—Install Java Runtime Environment

Install Java Runtime engine from <http://www.java.com/en>. Click on the  button.

STEP 2b—Manually copy the java serial driver to your computer

Download the RXTXserial.dll for Java from <http://www.landtecna.com/wp-content/rxtx/32bit/rxtxserial.dll> to your computer. Once on your computer, copy it to either the

`c:\program files (x86)\java\jre7\bin`

folder or to the

`c:\program files\java\jre7\bin`

folder depending upon your version of windows.

STEP 3—Launch LSGAM to cache it on your PC

Run the LSGAM from <http://www.landtecna.com/lsgam/lsgam60.jnlp>

You should see



followed by LSGAM starting.

STEP 3—Launch LSGAM to cache it on your PC

Verify your LSGAM will run and connect to your instrument(s) while OFF-LINE from the internet. First, unplug any network cables and disconnect any wireless connections you may have to the internet. Now start LSGAM and ensure you are able to communicate with the instrument.

Step 4—Download your instrument manual

A copy of the GEM-instrument manual can be found at <http://www.landtecnica.com>

Troubleshooting

If you are having trouble with your instrument please refer to one of the following sections specific to your instrument:

- GEM5000 Series of Instruments
- GEM2xxx Series of Instruments (Includes GEM-2000, GEM-2000 Plus, GEM2Nav, GEM2Nav Plus)
- Problems common to both the GEM5000 and GEM2xxx series of instruments

GEM5000series troubleshooting

Symptom: LSGAM Starts but does not connect

The USB cable may not be plugged in to either the computer or to the instrument.

The USB Cable driver may not be installed.

- a. Cable Verification (open device manager... Start→Run→DEVMGMT.MSC)
- b. Expand the Ports Com & LPT section
 - i. Plug in or remove the USB cable from either the instrument or the computer. You should see a port named “LANDTEC USB Serial Port (COMxx)” appear and disappear as the cable is plugged in and then removed. “xx” represents the actual COM port number assigned to your instrument. Note: Each 5000 instrument will have a different port number for a given computer.
 - ii. If the port does NOT appear then ensure the instrument is in “LEGACY” mode by pressing the Menu Key on the instrument, then pressing device options. Within device options choose information. On the information screen press the Left-Softkey  to toggle the communications mode between ‘GA5K’ and ‘LEGACY’ until it shows ‘LEGACY’.
 - iii. If the USB Cable driver has been installed AND you do not have any data in the instrument you can attempt a “hard power off” of the instrument by pressing and holding the power key for approximately 25 seconds until the RED led illuminates above the power button. After restarting the instrument, you will be prompted to enter the date and time. The instrument will be in GA5K mode

and will not communicate. It must be reset through the “device settings” menu
→ Device Information Screen and set to “LEGACY” mode.

- c. On the instrument
 - i. Try switching between GM5K & Legacy mode. Then close and re-open LSGAM

Now ensure the instrument is in the main reading screen. Restart LSGAM and attempt a connection to the instrument.

As an alternative to using the USB cable, a Bluetooth connection can be made to the instrument. Please refer to the Instrument Manual for more specifics on using Bluetooth.

GEM2xxx series troubleshooting

Symptom: LSGAM Starts but does not connect

The USB Cable driver may not be installed or the cable is not connected to the instrument.

- d. Cable Verification (open device manager... Start→Run→DEVMGMT.MSC)
- e. Expand the Ports Com & LPT section
 - i. Plug in or remove the USB cable. You should see a USB Serial port (COMx) appear and disappear as the cable is plugged in and then removed.
 - ii. If not, Please see Step 1 above

If the USB Cable driver has been installed AND you do not have any data in the instrument you can attempt a cold start of the instrument.

Warning: A cold start of the instrument will do the following to your instrument:

- Erase ALL ID's from the instrument
- Erase All Readings from the instrument
- Erase All comments from the instrument
- Erase All Field Calibration information from the instrument
- Reset the instrument clock to a default time

To perform the cold start of the instrument. Turn on the instrument, press and hold the number 1 screen after you see the logo appear. Wait about 1 second, release the number 1 key. The instrument will prompt you for a passcode. Enter in 12345 followed by the enter key. Once complete, you will have an option 1 for Cold Start. Press 1 and then enter to confirm the cold start of the instrument.

Now ensure the instrument is in the main reading screen. Restart LSGAM and attempt a connection to the instrument.

Problems common to both the GEM5000 and GEM2xxx series of instruments

Symptom: LSGAM does not retain saved information.

If you create or edit an ID, project, route, or comment and save the project, LSGAM will indicate that the information is saved. You then close LSGAM and open LSGAM and discover that the newly created information or edit does not show or shows the old information prior to being edited.

This behavior is caused due to security settings on the data files used by LSGAM. Network administrators, Local administrators, and the original person who installed LSGAM will not encounter this behavior but other users of the computer will encounter the behavior because they only have “read” and “execute” permission rather than “change” permission to the folders holding the data.

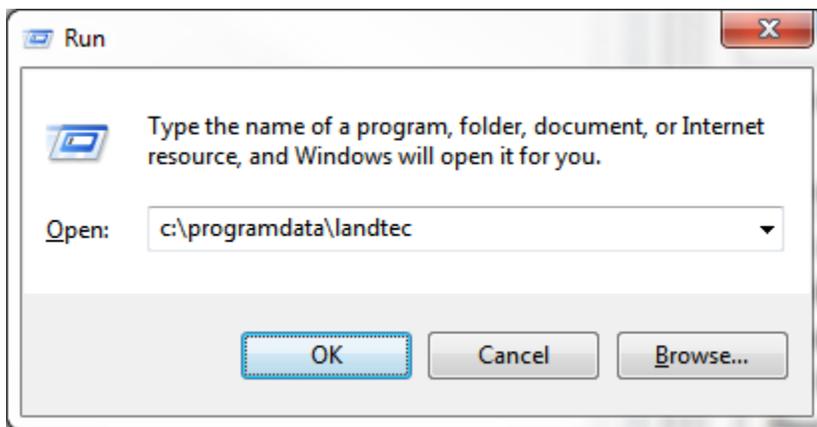
Solution: Login to the computer as a user with Administrative Permissions. Reset permissions on the LSGAM data folders to allow all users of the computer the ability to have “full control” permission on the directory containing LSGAM data.

For Windows XP, the data is stored in the directory `c:\documents and settings\all users\application data\LANDTEC`

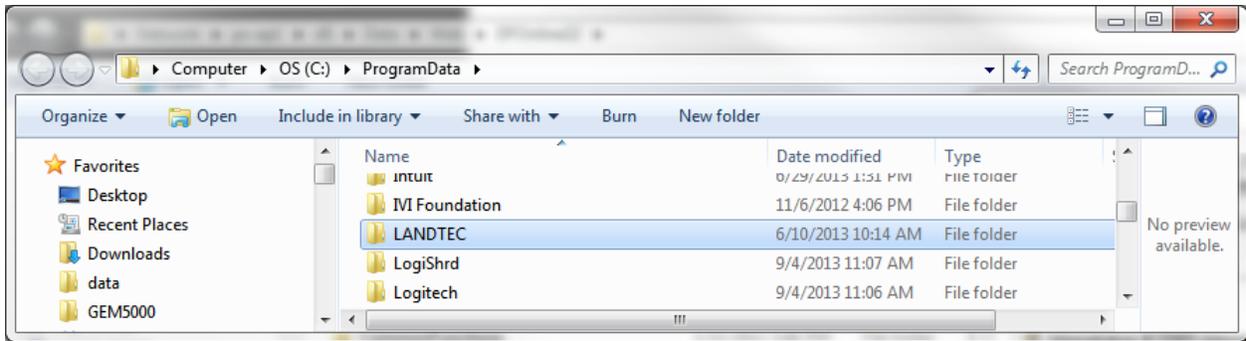
For Windows 7 & 8 the data is stored in the directory `c:\programdata\LANDTEC`

This example shows the changes for Windows 7 & 8 & 10.

Windows Key () + R will open the RUN box. Type in the appropriate location depending upon your operating system into the Open line and click OK.



Click OK. The explorer window should open and show you the LANDTEC folder.



Right click on the LANDTEC folder and choose Properties. On the Properties window, select the Security tab and then highlight Users. Now look to see if the Users have a check mark beneath the Allow column for the permissions of “Full control” or “Modify”. If there is NO check mark for Allow click the Edit button.

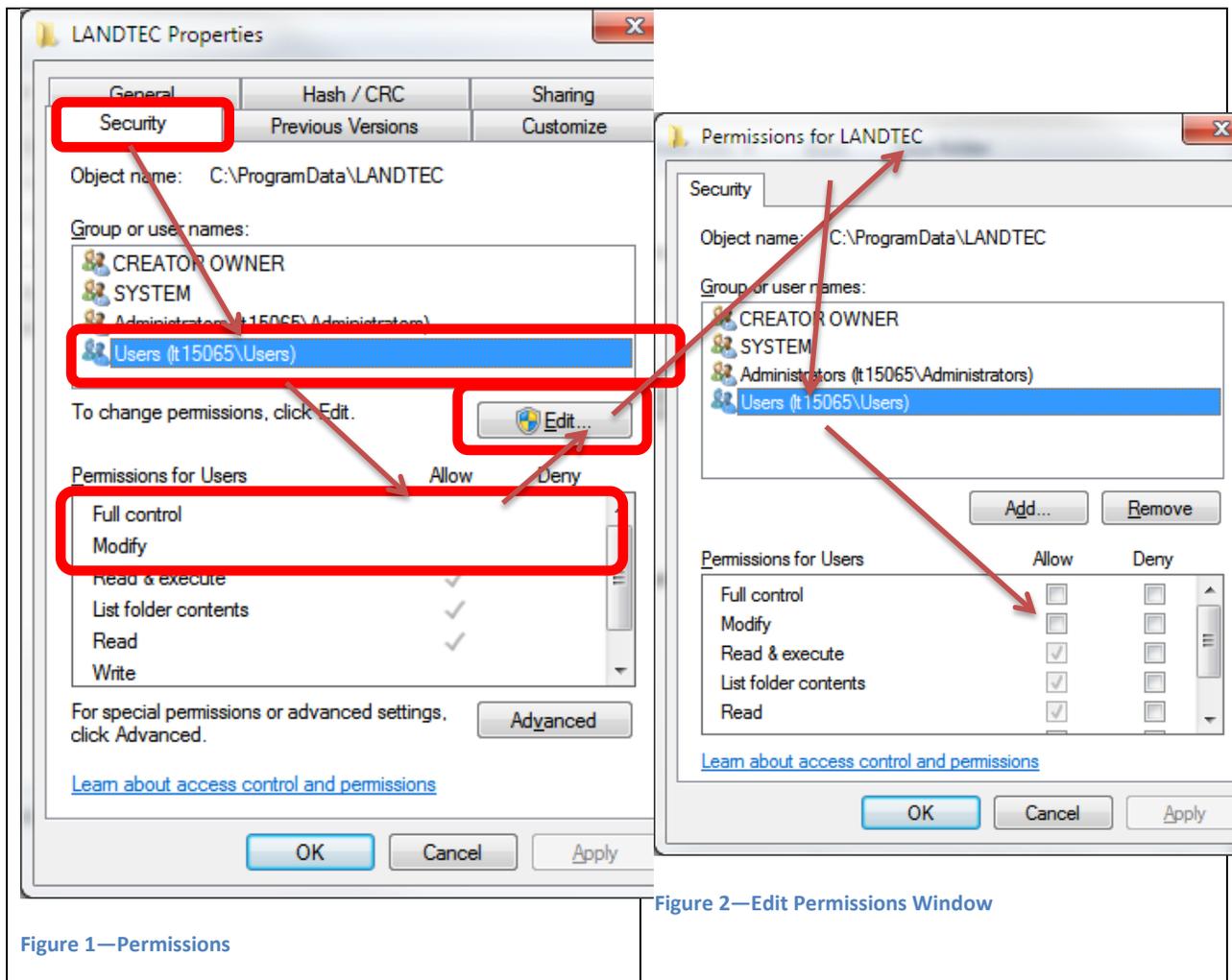


Figure 1—Permissions

Figure 2—Edit Permissions Window

Now highlight Users in the “Edit Permissions Window”. Click on the two check boxes under the allow column

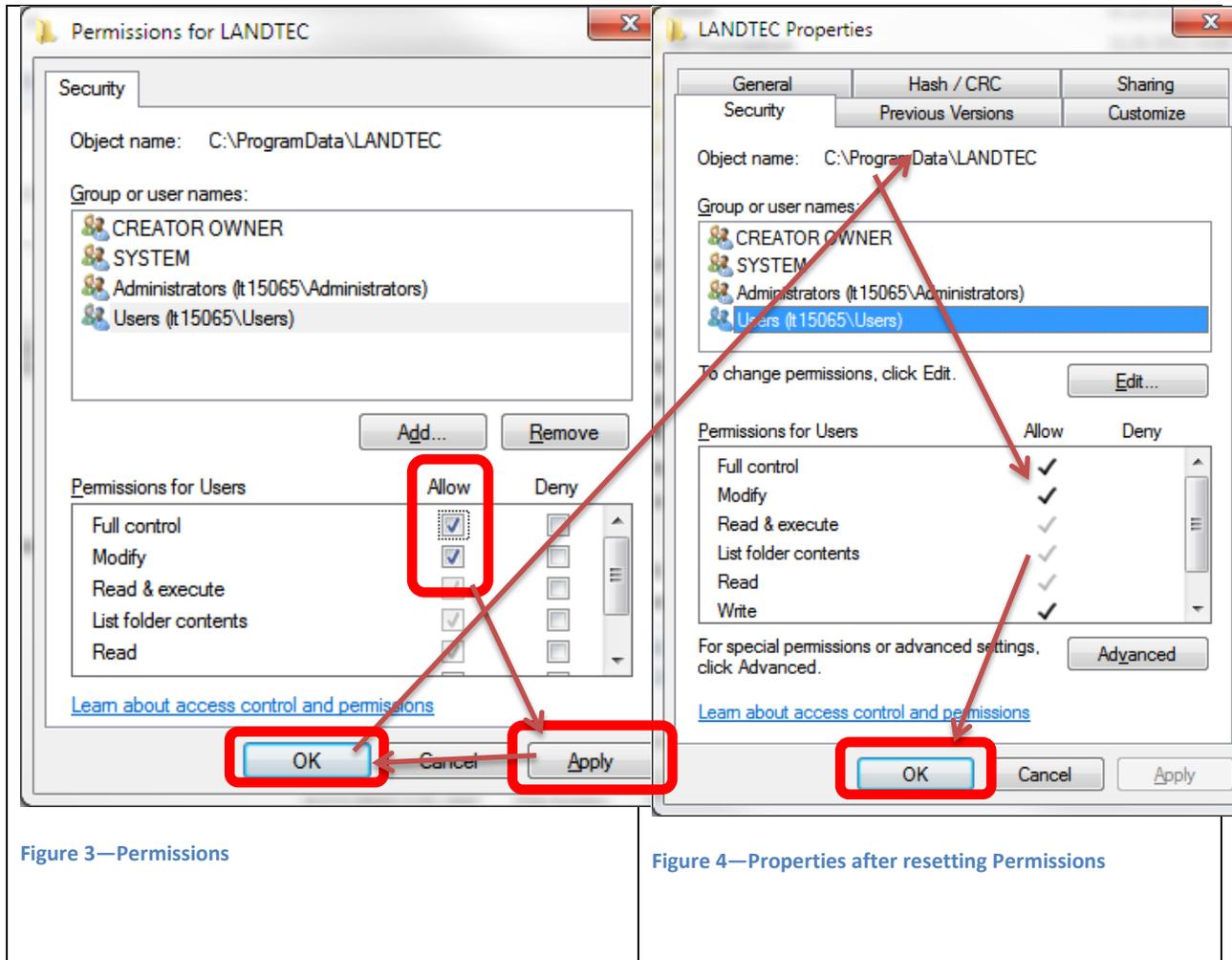


Figure 3—Permissions

Figure 4—Properties after resetting Permissions

Then click the Apply followed by the OK button. The LANDTEC Properties window will then refresh showing **dark** check marks for “Full Control”, “Modify”, and “Write” permissions. Click OK to complete resetting the permissions.

Restart LSGAM and test that changes are now being saved.

Symptom: LSGAM is connects to instrument in the office but not in the field.

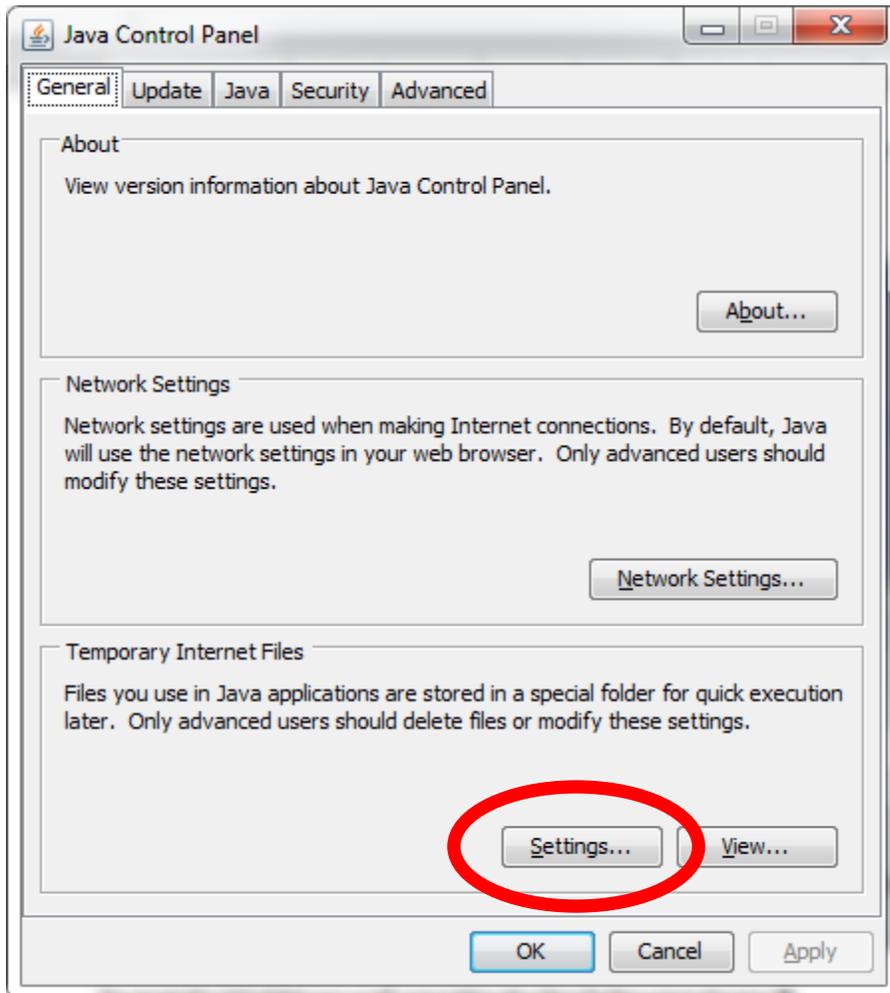
The serial communications driver used by Java is probably missing from the Java installation. This often occurs if installing Java directly from the java website. A copy of the driver is automatically used from LANDTEC’s website when you are connected to the internet so the problem is masked when an internet connection is present. Refer to step 2b above for obtaining the driver and copying it to your computer.

Symptom: LSGAM Starts but an unknown error has occurred.

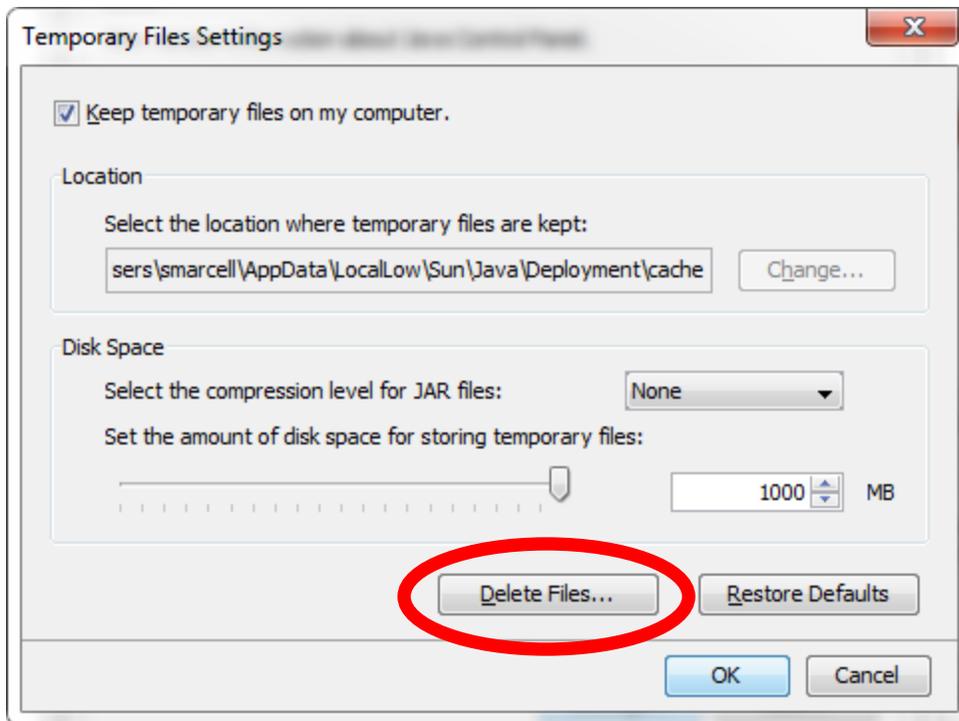
Most likely the temporary internet files which Java uses for the program are corrupted on your computer. Clear the files using the steps below and then use the link from Step 3 above.

Clear Java cache by going to control panel→Java→General (tab) →Temporary Internet files

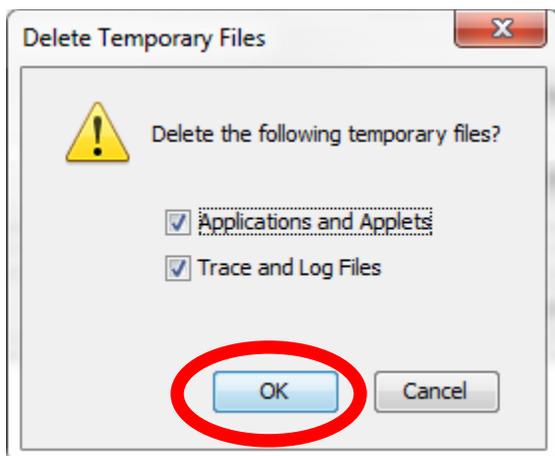
Note: from control panel you may need to switch your view to “Detail View” or “Small Icons” view to see the actual icon for Java.



Click on settings button



Click on Delete Files Button



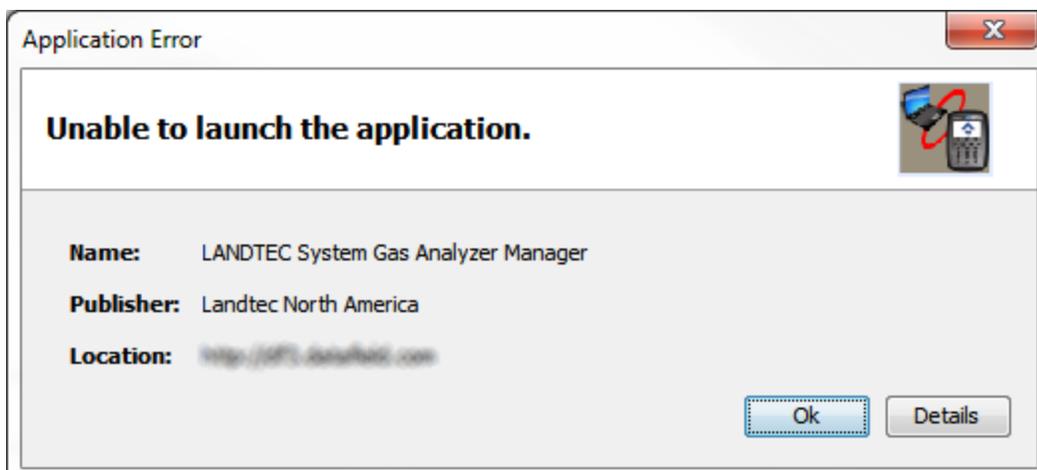
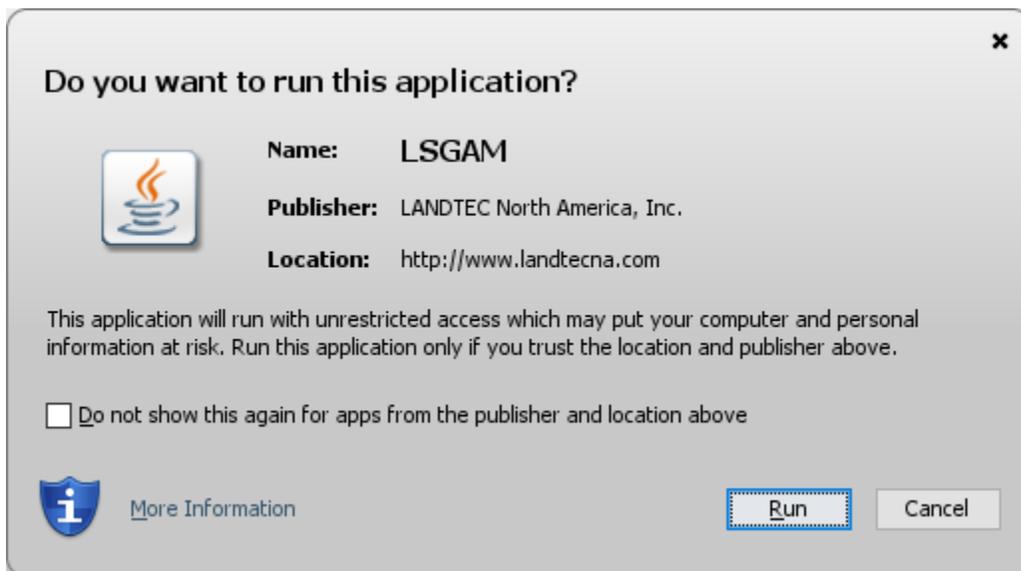
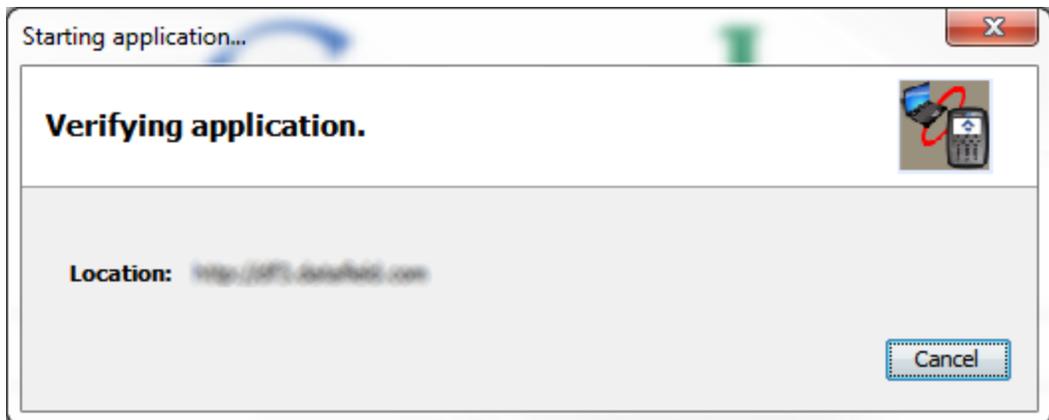
Click OK

Click OK again

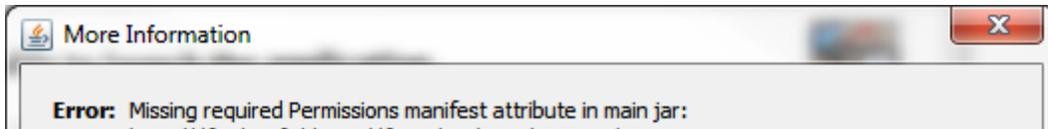
Click OK again to close the Java windows. Now return to step 3 above.

Symptom: Java update gives Unable to Launch Application.

<http://www.landtecnica.com/lsgam/lsgam60.inlp>



Click details

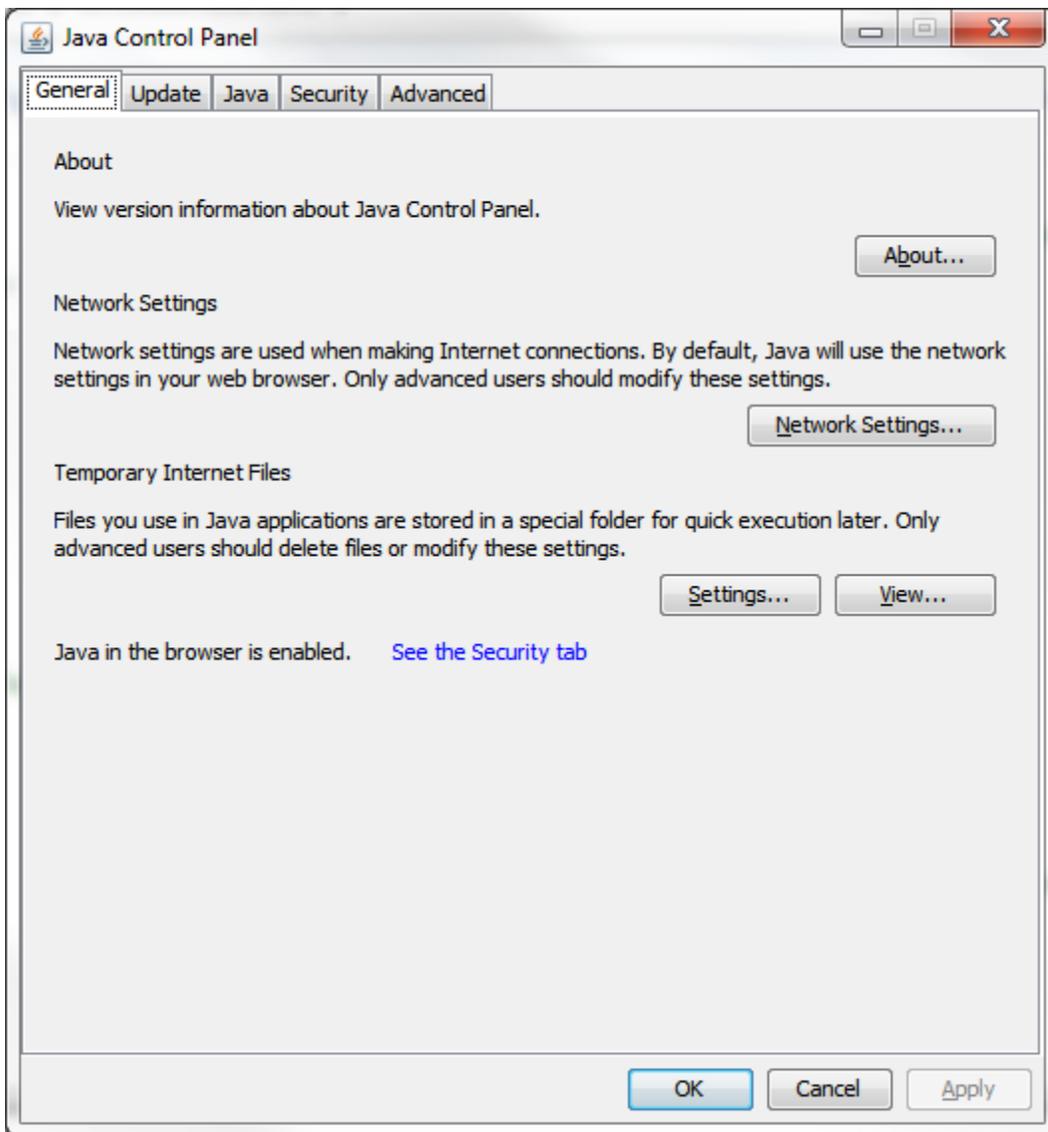


This is because Java security principals beginning with Version 7 Update 51 require permissions to be different.

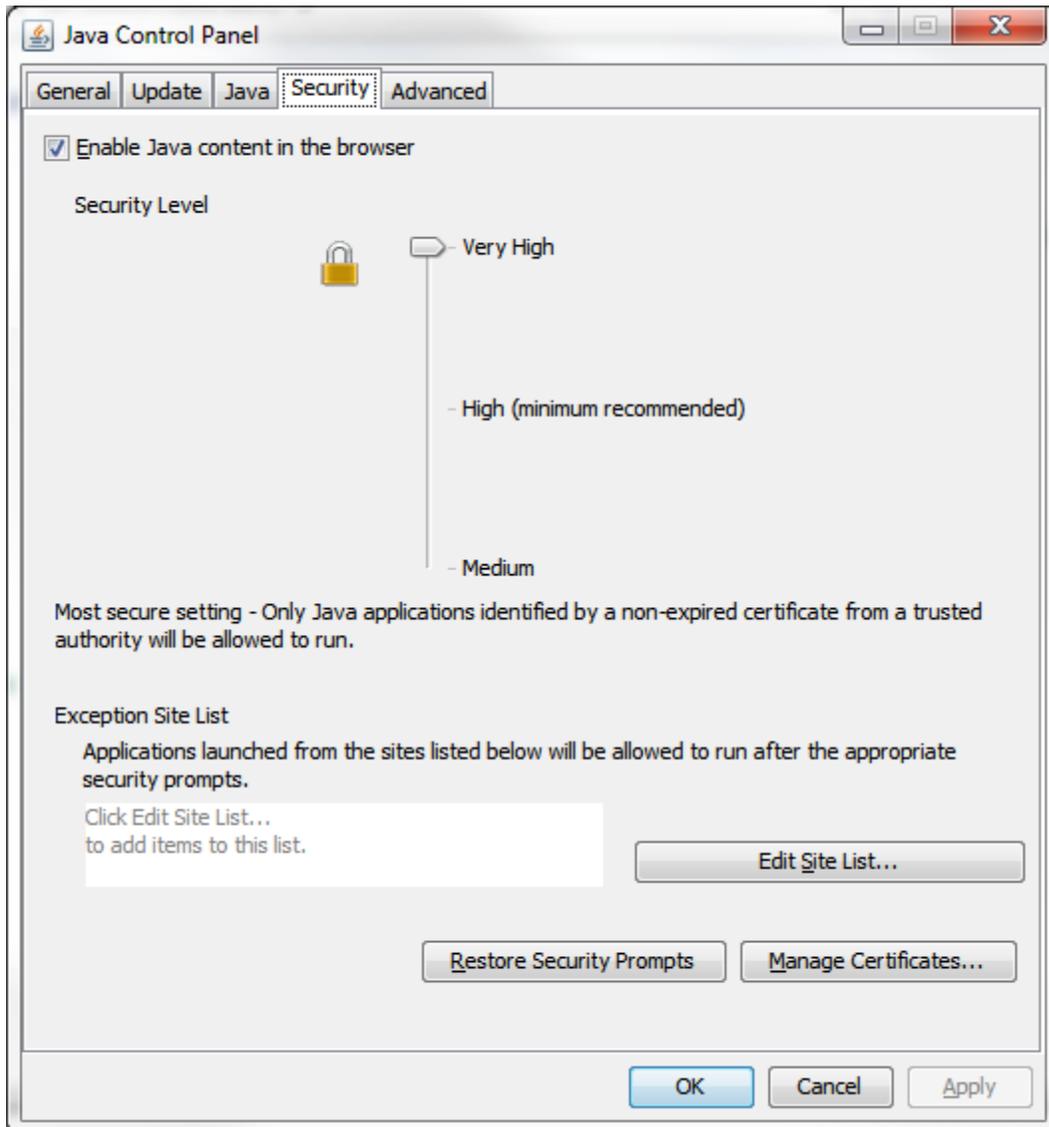
A work around to this is as follows:

Open control panel

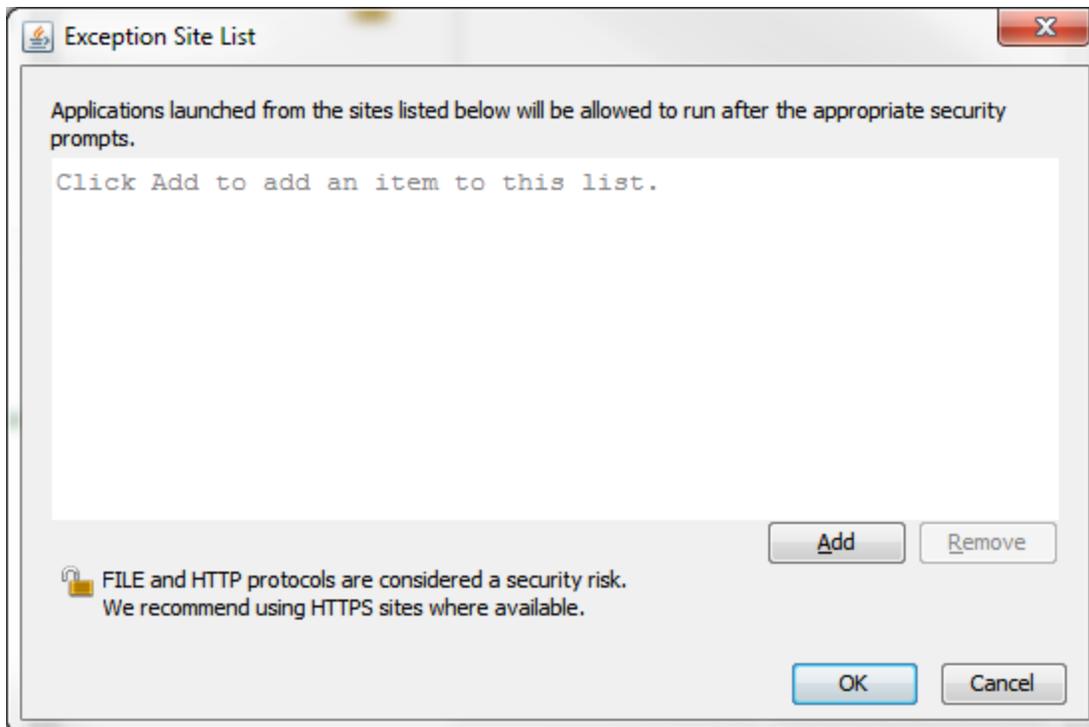
Open Java



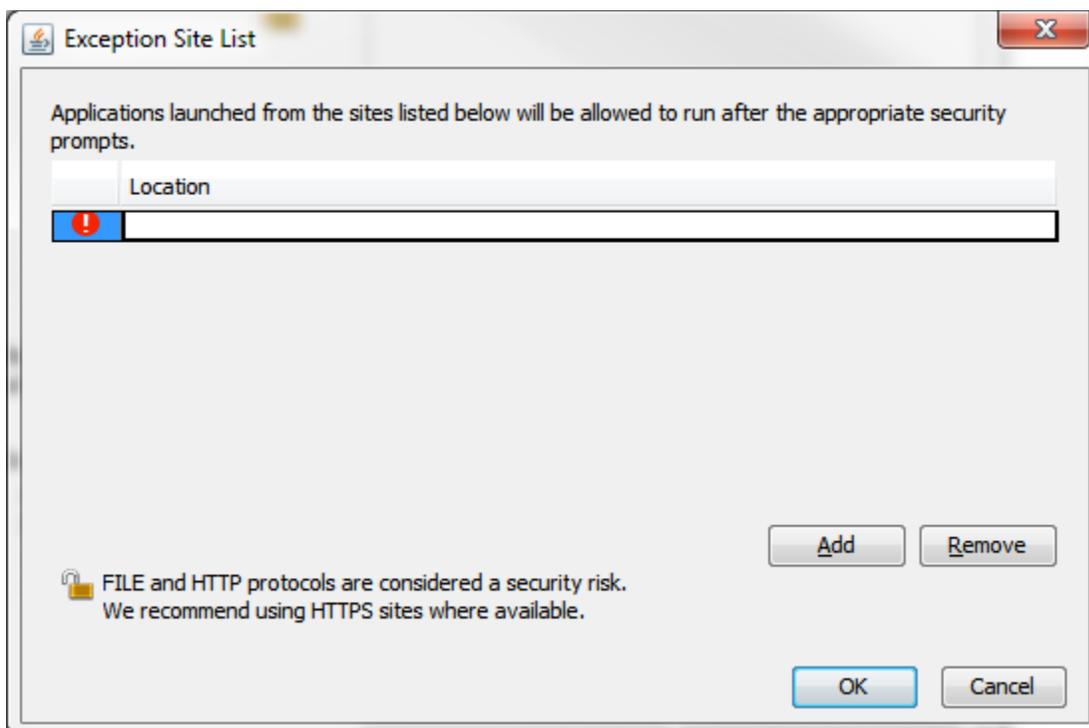
Click on the security Tab



Click on the Edit Site List



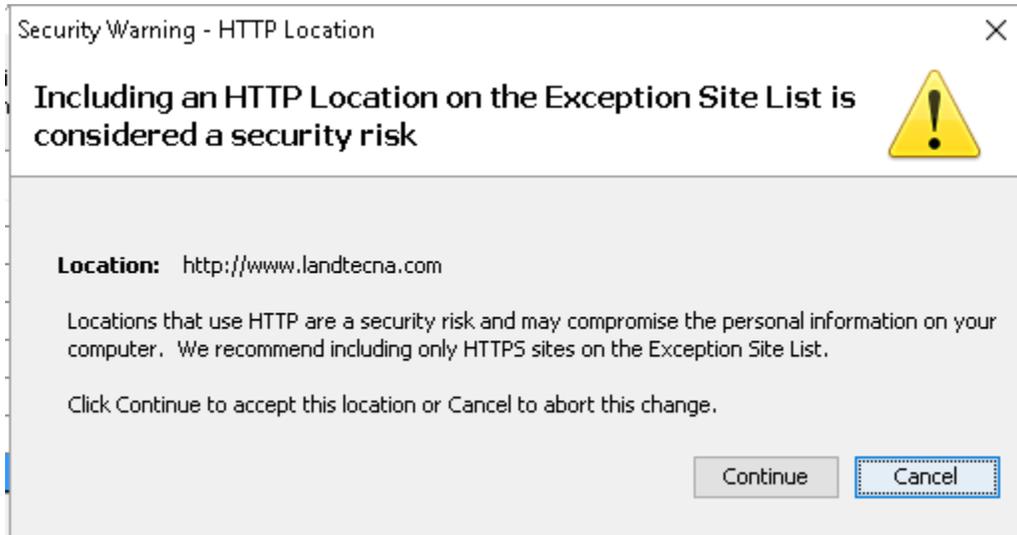
Click on the ADD button



Under location, type in

<http://www.landtecna.com>

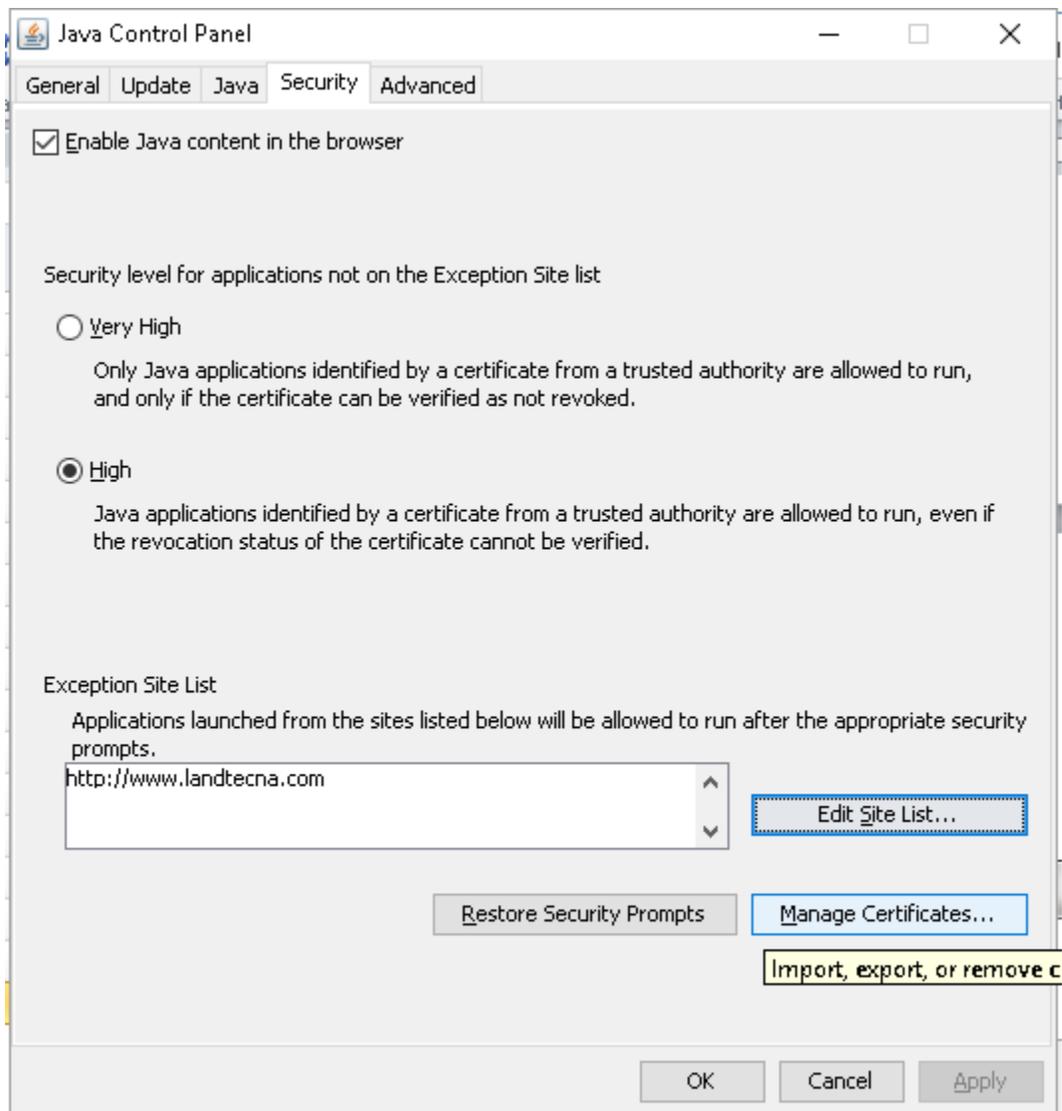
Click on the Add button



Click on Continue

The list of locations will reappear

Click OK. You'll be returned to the Java Control Panel Security Tab.



Verify that you see <http://www.landtecna.com> in the Exception Site List. If you do click OK

Relaunch LSGAM by going to

<http://www.landtecna.com/lsgam/lsgam60.jnlp>

the application should start without throwing an exception as it previously did

Auto-Detecting Instrument
GEM™2NAV (38400 Baud on COM1)

Instrument



Cancel Search

Serial Number:
Version:
Operating Mode:
Units:
Instrument Date:
Service Due Date:
Number of Ids:
Number of Readings:
Available Memory:
Battery Level:

Project

Comments Site Questions

Instrument

Send to Instrument

Clear Instrument Memory Clear Id List