Frequently asked questions about Java™
capaNCDT 6200
colorCONTROL ACS 7000
confocalDT 2451/2471
CSP 2008
eddyNCDT 3100
ILD 2300
optoCONTROL 2520
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1. **General**
   - The latest version of Java 8 is only supported by capaNCDT 6200 and 3100 eddyNCDT.

When using ACS7000, 8u91 works in conjunction with firmware 2.193.

1.1 **Important Instructions**

1.1.1 **Browser Support**

Many current browsers do not support Java applets more.

The following browsers have stopped support for Java applets:

Google Chrome and based on this browser (Opera, Vivaldi, Mozilla Firefox (64-bit version, 32-bit version end of 2016).

Instead, use the Microsoft Internet Explorer.

You will find further information on the following website: https://www.java.com/de/download/faq/chrome.xml

1.1.2 **Microsoft Edge**

The Microsoft Edge is the default browser of Windows 10.

The Microsoft Edge browser does not support plug-ins, and therefore no Java plug-in. Thus no visual indication of a Java applet is displayed.

You will find further information on the following website: https://www.java.com/de/download/faq/win10_faq.xml

1.1.3 **Affected Micro-Epsilon Systems**

- C-Box Analog, ACS7000, CSP2008

These systems include (yet) Java applets.

- Therefore, use the Microsoft Internet Explorer.

- Controller / sensors with web interface and older firmware version
  - capaNCDT 6200, capaNCDT 6530,
  - eddyNCDT 3100,
  - IF1032/ETH,
  - ILD 2300,
  - confocalDT 2451, confocalDT 2471,
  - optoControl 2520

The latest firmware for these controllers / sensors (to be found at the following website: http://www.micro-epsilon.de/download/index.html) uses a different technology for data display and does not need a Java Plug-in more.

- The eddyNCDT 3100 still requires a current Java installation.

- Update the affected controller/sensor carefully before upgrading to a new version of Java!
1.1.4  **Java and Windows 10**

You will find further information on the following website: https://www.java.com/de/download/faq/win10_faq.xml

- Java from version 8 update 51 (Java 8u51) is supported by Windows 10.
- You will find the Java Control Panel, by entering Java in the Windows 10 search field and by selecting Configure Java in the results. Alternatively a right click on the Start menu icon and selection of Control panel opens the control panel known from Windows 7, which contains the Java entry.
- With Microsoft Edge an URL can be opened in Internet Explorer:
  - Select above the option Further Actions (Icon „...“) in Microsoft Edge, and click on Open Internet Explorer.

1.1.5  **Java Help Center - General Questions**

You will find the official Oracle Java-FAQ under https://www.java.com/de/download/faq/index_general.xml.

1.1.6  **High-resolution displays**

For high resolution displays (4k) the Java applets are not scaled properly.

1.2  **Page Measurement**

With the first call of page Measurement, see Fig. 1, the following query, see Fig. 2, must be confirmed at least once. However, you can disable further runs by clicking the checkbox Do not show this again for apps from the publisher and location above.

- Confirm this with Run.

**Fig. 1 Page Measurement**

**Fig. 2 Window Do you want to run this application?**
1.3 Allow Access

**Issue**
After installing Java 7u55 ("Java 7 Update 55") or Java 8u5 ("Java 8 Update 5") the following message box appears.

![Security Warning]

**Explanation**
Java 7u55 respectively Java 8u5 expect that the Java applet knows in advance the IP address from which it is run. As the sensors have different IP addresses, the Java applet can of course not know these IP addresses in advance. That is why a wildcard ("*") is used. Since Java 7u55 respectively Java 8u5, the following message box is displayed when using a wildcard for that IP address:

**Solution**
If Java 7u55 or Java 8u5 are active, allow the access to the applet. The access can be allowed permanently by activating the corresponding checkbox Do not show this again for this app and web site.

1.4 Starting the Measurement Data Display

If the page Measurement is not working, check if the Java version and the controller version fit together.

The latest version of the controller also works with older Java versions. The latest Java version works only with the latest controller version.

<table>
<thead>
<tr>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Java updates can also be uninstalled via Control Panel &gt; Programs and Features. Perhaps ask your administrator.</td>
<td>Has the Java / firmware been updated before?</td>
</tr>
<tr>
<td></td>
<td>If yes, delete diverse caches and try again.</td>
</tr>
<tr>
<td></td>
<td>If no, see Chap. 3.</td>
</tr>
<tr>
<td></td>
<td>Install the latest sensor / controller firmware.</td>
</tr>
<tr>
<td></td>
<td>Install Java again afterwards and delete diverse caches, see Chap. 1.5, see Chap. 1.6, see Chap. 1.7.</td>
</tr>
</tbody>
</table>
1.5 Firmware Version

- Update the firmware of the sensor / controller before installing a new Java version.

Explanation

A new Java version has got enhanced safety requirements which have to be included in to the Java applet.

Therefore, first update the sensor / controller followed by Java. Otherwise it can happen that the Java applet is no longer working.

1.6 Browser Cache

Before installing a new Java version delete the browser cache and close the browser.

- You will reach the appropriate window in all browsers (Firefox, Internet Explorer, Google Chrome) with the key combination Ctrl + Shift + Del.

Explanation

A new Java version also installs a new browser plugin. Deleting the browser cache ensures that the browser will not use any prior settings but downloads the latest websites of the sensor / controller.

1.6.1 Firefox

Press Ctrl + Shift + Del in Firefox or choose the menu Time Range/History and after that:

Choose Clear Recent History and the following settings, see Fig. 1.

![Fig. 1 Firefox window Clear Recent History](image)

Confirm with Clear Now.
1.6.2  Internet Explorer

Press Ctrl + Shift + Del in Internet Explorer or choose the menu Extras (Alt-x) > Safety > Delete Browsing History in the Internet Explorer.

The following window appears:

![Internet Explorer window](image)

Fig. 2 Internet Explorer window Delete Browsing History

Choose Temporary Internet files and website files and Cookies and website data and confirm with Delete.

1.6.3  Google Chrome

Press Ctrl + Shift + Del.

The window Clear browsing data appears.

Choose the following settings, see Fig. 3.

![Google Chrome window](image)

Fig. 3 Google Chrome window Clear browsing data

Confirm with Clear browsing data
1.7 Java Cache

After installing a new Java version delete the Java cache.

Explanation Deleting the Java cache ensures that the browser will not use any prior settings but downloads the latest applet of the sensor / controller.

Close the browser.

Go to Start > All programs > Java > Configure Java or Start > Control Panel > Java > General

Press the key Settings...

Press the key Delete Files... and confirm with OK.

After the Java cache has been deleted the browser can be opened again.
1.8 Disable Java Cache

The eddyNCDT 3100 configuration software requires to disable the Java cache for running with Java 8u91.

**Explanation**  Since Java 8u77 there is an error in the certificate check routine (see also JDK-8154131, http://bugs.java.com/bugdatabase/view_bug.do?bug_id=8154131) of Java Web Start. Because of this error the configuration software for the eddyNCDT 3100, which has a correct certificate will not start. The workaround mentioned by Oracle is to disable the Java cache.

➡️ Go to **Start > All programs > Java > Configure Java or Start > Control Panel > Java > General.**

![Java Control Panel](image)

➡️ Press the key **Settings...**

![Temporary Files Settings](image)

➡️ Deactivate the checkbox **Keep temporary files on my computer.**

➡️ Close the dialog.

Now the eddyNCDT 3100 configuration software will start again after double clicking the jnlp-file.
2. **Java Version**

2.1 **Used Java Version**

This is how you find your Java version:

> Start the **Control Panel > Java > General > About**.

![Image of Java version](image)

2.2 **Checking Java Version**

> Check Java version on https://www.java.com/de/download/installed.jsp.

2.3 **Switching on Java Console**

> Start **Control Panel > Java > Advanced**.

The following window appears:

![Image of Java control panel](image)

> Confirm with **OK**.
3. Potential Issues and Solutions

3.1 No Measurement Data

Issue
Web pages are displayed and the system tries to launch the measurement data display, but fails.

Explanation
Since Java 7u25, the system checks for revoked certificates, which requires Internet access. If Internet access is not available, this check fails and the applet won’t start, even if a valid certificate exists for all files. Display cannot be established.

Solution
Start the Control Panel > Java > Advanced > Perform certificate revocation checks on choose the entry Do not check (not recommended).
In addition, the setting **Enable blacklist revocation check** should be active:

3.2 **Measurement Data Display is not Launching**

**Issue**
Web pages are displayed and the system tries to launch the measurement data display, but fails, see Chap. 1.

**Explanation**
Advanced security checks in Java 7u45 prevent the JavaScript used on the web page from starting the diagram applet. General display, headers and coordinate system are visible, but no data are displayed. Only Press start is displayed:
The following message may appear after a few seconds:

Clicking Start or Stop has no effect.

**Solution**

If Java 7u45 is installed: Go to Control Panel > Java > Security.

Set the security level to **Medium**.

Check if

- the controller sends data
- possibly a trigger mode is set,
- data channels are enabled for transmission.

If Java 8 is installed and the attached controller is not a capaNCDT 6200 or eddyNCDT 3100, please use the latest Java version 7.
3.3 Error Message During Measurement Data Display

Issue
Web pages are displayed, but an error message appears when loading the measurement data display.

Explanation
Java 7u51 expects that the diagram applet defined certain security attributes. These attributes were not defined for older firmware versions. An error message similar to the following appears when the applet is trying to load:

Solutions
If Java 7u51 is enabled: Add the IP address for your sensor / controller to the list of site exceptions.

Go to Control Panel > Java > Security > Edit Site List... > Add

Enter the IP address for your sensor/controller.

The address has to begin with http://... and must not contain any wildcard characters (*, ?, +).