

## Instruction Manual

Frequently asked questions about Java<sup>™</sup> 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
- 1 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 does 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/down-load/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/down-load/faq/win10\_faq.xml

### 1.1.3 Affected Micro-Epsilon Systems

- C-Box Analog, ACS7000, CSP2008

These systems include (yet) Java applets.

i

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  $\mbox{carefully before}$  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/down-load/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 (4 k) 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.

Home Proforences	Measurement Video signal	ConfocalDT 245	
Measured values Distance measurement	Distance		
Select measuring program	Distance		
Mastering / Zeroing			
Set master value Mestering is IRACTIVE			
Averaging			
Video averaging He averaging - Measurement averaging He averaging - Submit			
Reset statistics			

Fig. 1 Page Measurement

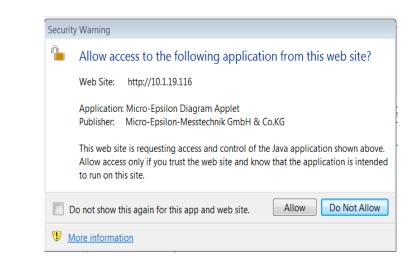


Fig. 2 Window Do you want to run this application?

### 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.



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.

Ask for the used Java version, see Chap. 2.1.				
Ask for the used sensor / controller version.				
This appears on the Help / Info page of the	ne respective sensor / controller website.			
Fit the Java version together with the controller version?				
Νο	Yes			
Java updates can also be uninstalled via Control Panel > Programs and Features.	Has the Java / firmware been updated before?			
Perhaps ask your administrator.	again.			
	If no, see Chap. 3.			
Install the latest sensor / controller firmware.				
Install Java again afterwards and delete diverse caches, see Chap. 1.5, see Chap. 1.6, see Chap. 1.7.				

#### 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,
- **I** 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.

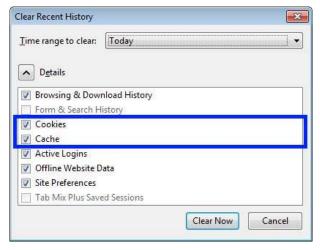


Fig. 1 Firefox window Clear Recent History

**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:

Preserve Favorites website data	1
Keep cookies and temporary Internet websites to retain preferences and di	
Temporary Internet files and we	bsite files
Copies of webpages, images, and me viewing.	dia <mark>t</mark> hat are saved for faster
Cookies and website data	
Files or databases stored on your con preferences or improve website perfo	
<u>H</u> istory	
List of websites you have visited.	
Download History	
List of files you have downloaded.	
Form data	
Saved information that you have type	ed into forms.
Passwords	
Saved passwords that are automatica	ally filled in when you sign in
to a website you've previously visited	
Tracking Protection, ActiveX Filt	ering and Do Not Track
A list of websites excluded from filteri	
Protection to detect where sites migh about your visit, and exceptions to D	
about your visit, and exceptions to b	o Not mack requests.

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.

Clear browsing data				
Obliterate the following items from: the l	beginning of time 💌			
Clear browsing history				
Clear download history				
Delete cookies and other site and plug	g-in data			
Empty the cache				
Clear saved passwords				
🕑 Clear saved Autofill form data				
Clear data from hosted apps				
🕢 Deauthorize content licenses				
Learn more	Clear browsing data Cancel			

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

🛓 Java	Control	Pane	l.						X
General	Update	Java	Security	Advanced					
	ersion inf rk Setting		ion about	Java Contro	l Panel.			About	•
use the						nnections. By advanced us		uld mod	dify
Tempo	rary Inter	rnet Fi	les						
						ecial folder fo odify these se Settings	ttings.	executi /iew	on
Java in	the brow	vser is	enabled.	See the S	Security	tab			
						ок	Cancel	Ap	ply

▶ Press the key Settings...

ocation Select the loca	tion where temporary files a	e kept:	
c:\Program Fi	les (x86)\Java\Cache		Change
	pression level for JAR files:	None	•]
	t of disk space for storing ter	nporary file	32768 🚔

**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	
General Update Java Security Advanced	
About View version information about Java Control Panel.	
	About
Network Settings	
Network settings are used when making Internet connectio use the network settings in your web browser. Only advance these settings.	
ĺ	Network Settings
Temporary Internet Files	
Files you use in Java applications are stored in a special for later. Only advanced users should delete files or modify the Settin	ese settings.
Java in the browser is enabled. See the Security tab	

Press the key Settings...

ocation			
Select the location where temporary files ar	e kept:		
c:\Program Files (x86)\Java\Cache		Change	
Select the compression level for JAR files: Set the amount of disk space for storing ten	-	s: 32768 彙	MB

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.



# 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:

Java Control Panel	
eneral Update Java Security Advanced	
Debugging	
Enable tracing	
Enable logging	
Show applet lifecycle exceptions	
Java console	
- O Show console	
O Hide console	
Do not start console	
Default Java for browsers	
Microsoft Internet Explorer	_
Mozilla family	
Java Plug-in	
Enable the next-generation Java Plug-in (re-	quires browser restart)
Shortcut Creation	
— Always allow if hinted	
•••• Prompt user if hinted	
Never allow	
JNLP File/MIME Association	
Always allow	
- O Prompt user	
Never allow	
Application Installation	-
• III	4

Confirm with OK.

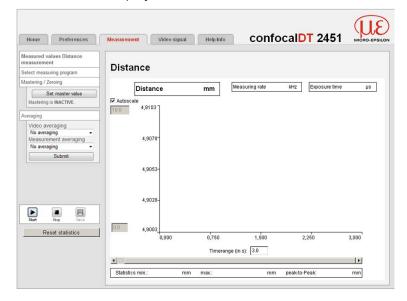
## 3. Potential Issues and Solutions

### 3.1 No Measurement Data

Solution

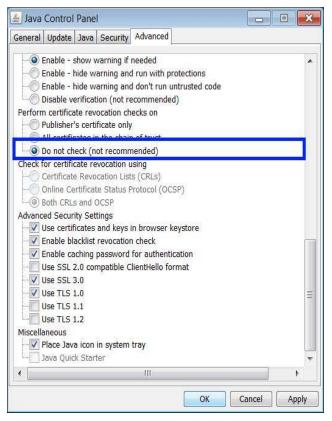
Issue Web pages are displayed and the system tries to launch the measurement data display, but fails.

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.

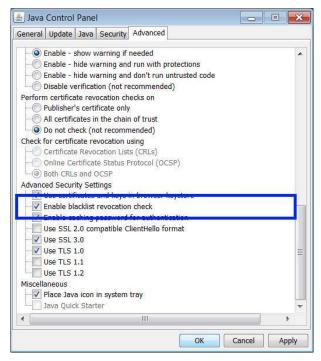


**Start the** Control Panel > Java > Advanced > Perform certificate revocation checks on

Choose the entry Do not check (not recommended).



In addition, the setting Enable blacklist revocation check should be active:

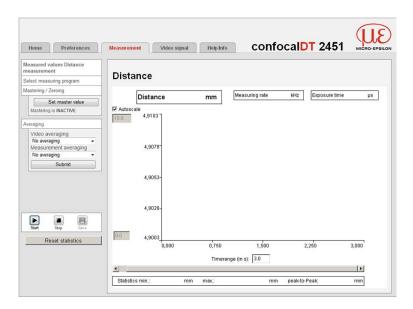


## 3.2 Measurement Data Display is not Launching

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:



Solution

The following message may appear after a few seconds:



Clicking Start or Stop has no effect.

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

Set the security level to Medium.

🛓 Java Control Panel					
General Update Java	Security	Advanced			
Enable Java content in	n the bro	wser			
Security Level					
	- Very High				
	- High (minimum recommended)				
	0	Medium			
Least secure setting - Al security prompt.	l Java ap	pplications will be allowed to run after presenting a			
Exception Site List					
Applications launched appropriate security p		e sites listed below will be allowed to run after the			
http://169.254.168.15	50	•			
		+ Edit Site List			
	Rest	tore Security Prompts Manage Certificates			
		OK Cancel Apply			

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.

Solutions

## 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:

Application error		8
General Exception		
Name: DiagramApplet		
SecurityException: Missing require http://localhost/diagram/Diagram		
	ОК	More information

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 (\*, ?, +).

差」 Exception Site List	×
Applications launched from the sites listed below will be allowed to run after th appropriate security prompts.	ie
Location	
http://169.254.168.150	
FILE and HTTP protocols are considered a security risk. We recommend using HTTPS sites where available.	move
ОК	Cancel



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