Google Chrome Installation Guide . 1

KNXCONTROL

Google Chrome Installation Guide

Version 1.0 REV05-20160415

GENERAL INFORMATION

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The manual has been conceived and written for users who are experienced in the use of PCs and automation technology.

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		Hints and additional notes		
NEW		New		
New features	New	New features		

CONVENTIONS

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1 Introduction

1.1 WEB-BASED VISUALIZATION AND PROGRAMMING

KNXCONTROL is a webserver-based visualization system for KNX installations. The whole visualization is hosted on the installed KNXCONTROL device (KNXSERVER, KNXSUPERIO) and can be accessed from other devices through a browser; such devices are called "clients" in the system. On mobile platforms (Android & iOS) there are special Apps for this pur-pose (OPTIMA-App). On normal PCs (touch PC/Desktop/Laptop) a Browser must be installed to realize the access to the visualization. Since the KNXCONTROL visualization "OPTIMA" was developed for the usage with a browser and especially the browser "Google Chrome", on the client PCs Google Chrome should be installed to show the visualization.

But not only the finished visualization runs in a browser, also the whole programming of the visualization is done through browser. The administrative area of OPTIMA for programming purposes was enhanced to work especially with Google Chrome. Therefore it is recommended the usage of Google for programming and display the OPTIMA visualization.

1.2 SYSTEM REQUIREMENTS

Refer to the requirements of the Google Chrome browser itself and take care, that the target PC has enough performance to handle all required tasks (additional software, Intercom communication). Google Chrome can be installed on differ-ent OS; this installation guide refers to Windows OS.

1.3 VERSION

Since Google Chrome is an ongoing project, there are new versions coming up time after time. Since Google has his own development roadmap newer version can introduce problem for representation of the visualization or also for functionali-ties of OPTIMA. Therefore it is recommended to use only these versions of Google Chrome, which are tested and fully compatible with KNXCONTROL.

The actually fully compatible version of Google Chrome is version 25 (25.0.1364.172 m). To enable the VolP-features in OPTIMA Java must be installed. In combination with Google Chrome V25 we recommend the usage of Java 7 Update 17. An offline installer of this version of Google Chrome and of Java 7 Update 17 can be found on the KNXCONTROL stick.

If you don't have any KNXCONTROL stick available, you can download the needed data also from this link:

www.divus.eu/UPLOADS/building/KNXCONTROL/KNXCONTROL_GCI.zip

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2 Installation

2.1 SETUP GOOGLE CHROME

2.1.1 INSTALLATION

On the KNXCONTROL stick under "Offline Installation files" is an offline installer of Google Chrome (version 25) available; this offline Installer runs on Windows only. For all other OS you'll have to search in the web for a Google Chrome version 25 offline installer. Once a valid Google Chrome installer is made available on the target PC, this installer can be launched with a double click: Google Chrome will be installed without asking for any further information.

Once the installer has finished, Google Chrome will be started automatically. Ignore the "Welcome to Chrome" message by clicking "skip for now" and go on.

Hint: For all other OS than Windows please search for a Google Chrome Installer V25 in the web (version 25.0.1364.172 m is available for Windows on the KNXCONTROL stick). The usage of higher or lower versions of Google Chrome than version 25 could cause problems in the representation of the visualization.

STARTUP PAGE 2.1.2

Once Google Chrome is installed you can define the homepage, which will be loaded on startup of Google Chrome:

- Open the Google Chrome settings window
- Under "On Startup" select "Open a specific page or set of pages" and click on "Set pages"
- In the appearing window add a new page by entering the IP-Address of the installed KNXCONTROL device (standard "192.168.0.110").

	Startup pages	2
On startup	192.168.0.110 http://192.168.0.	.110/
Open the New Tab page	Add a new page Enter URL	
Continue where I left off.	Use current pages	OK Cancel
Open a specific page or set of pages. Set pages	our content pages	Carles

2.1.3 LANGUAGE

Sollte Google Chrome in der falschen Sprache installiert worden sein, kann diese folgendermaßen geändert werden:

- Once Google Chrome is installed it is also possible to change the language:
- Open the Google Chrome settings window
- Scroll to the bottom and click on "Show advanced settings"
- Under "Languages" click on "Language and input settings ..."
- Select the whished language in the appearing window. If the whished language should not be listed, add it by clicking the "Add"-button at the bottom of the window
- Close and restart Google Chrome to activate the new selected languages

Languages Add languages and drag to order them based on your p	preference.	×	
Languages	English (United States)		
English (United States)	Google Chrome is displayed in this language		
English	This language is used for spell checking		
German		1	
		~	•
	Done	•	

2.2 CREATE SHORTCUTS

Google Chrome can be started in different ways with different look. Depending on the usage purpose different ways to start Google Chrome can be useful.

2.2.1 STANDARD

The standard way to start Google Chrome is to double Click the standard shortcut, which is created during the installation on the Dekstop. This shortcut opens Google Chrome in Stadnard mode, where the system buttons of the window (minimize, maximize, close), address bar and tabs are available. This mode is normally used to to program the OPTIMA visualisation. Google Chrome can be used to open additionally pages on new tabs, it can be minimized, maximized or closed totally.



2.2.2 APPLICATION

Google Chrome can also be started as a windows application. To create a shortcut to start Google Chrome as application follow these steps:

- Open Google Chrome in standard way
- Open the target page in the actual tab
- Open the settings menu of Google Chrome and select "Tools -> Create application shortcuts"
- Select which shortcuts you want to create (Desktop, Start menu, Quick launch bar) and click on "Create"

Whenever one of the created shortcuts is triggered, Google Chrome will be opened as application window. There will be no address bar, no tabs, no access to the settings of Google Chrome, only the system buttons of the Google Chrome application window (minimize, maximize, close) will be available.

The "application" mode of Google Chrome is useful when beneath the OPTIMA visualization also other programs should be accessible to the customer.



Once an application shortcut is created its target URL can also be changed. If for example the IP-address of your KNXCONTROL device was changed, you can change the settings of the existing application shortcut instead of creating a new application shortcut:

- Right click on the application shortcut and open it's settings window
- Change the IP-address specified in the field "Target" to the IP-address of your KNXCONTROL device behind the key-word "-app"
- Apply the new settings and close the window

Once changed, the new URL will be loaded in the appearing Google Chrome application window, when the application shortcut is double-clicked.

VUS KNXSERVER Properties ?					
ieneral Shorto	ut Security				
o o	VUS KNXSERVER				
Target type:	Application				
Target location	Application				
Target:	-app=http://192.168.0.110/knxserver/mod	dules/s			
Start in:	"C:\Documents and Settings\Administrator\Local				
Shortcut key:	None				
Run:	Maximized				
Comment:	>				
Find	Target Change Icon Advanc	ed			
	OK Cancel	Apply			

2.2.3 FULL SCREEN

Sometimes the end user shall not be able to reach the settings of the client PCs OS or be able to close Google Chrome (Intercom can't work, if the Google Chrome is not running and connected to the OPTIMA visualisation). For such purposes Google Chrome must fullscreen without any possibility for the user to close Google Chrome or to reach other prgoams or the OS behind; this mode is also called "kiosk" mode. To run Google Chrome in "kiosk" mode the settings of the normal shortcut must be adapted:

- Right click on the Google Chrome shortcut and open it's settings window
- In the field "target" add at the end one space and then "--kiosk"
- Apply the new settings and close the window

Afterwards this shortcut will start Google Chrome in full screen mode, when it is double clicked; the URL will be loaded, which was defined as startup page.

ieneral Short	cut Security		
S 6	cogle Chrome		
Target type:	Application		
Target location	x Application		
Target:	Google\Chrome\Application\chrome.exe" -kiosk		
Start in:	"C:\Documents and Settings\Administrator\Loca		
Shortcut key:	None		
Run:	Normal window		
Comment:	Access the Internet		



2.2.4 OUTDATED PLUG-INS

From time to time are released new versions of plug-ins, Google Chrome notices this and notifies the user by displaying a corresponding banner.

If you don't want Google Chrome to notify the user when a plug-in is out of date, the command line parameter --allow-outdated-plugins has to be used. To use this command line flag the following steps have to be made:

- Open the properties window of the link used to start Google Chrome by right clicking and selecting properties. If Google Chrome is started automatically, also the link in the auto start folder has to be modified.
- Add at the end of the field "Target:" the entry " --allow-outdated-plugins".

• Close the properties of the link by clicking on "OK".

All links that are used to start Google Chrome have to be modified in this way.

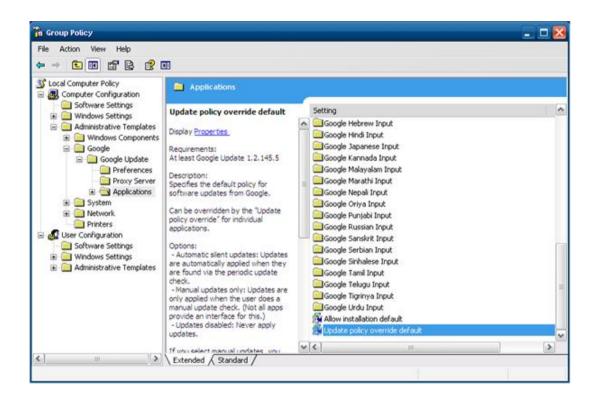
2.3 BLOCK UPDATES

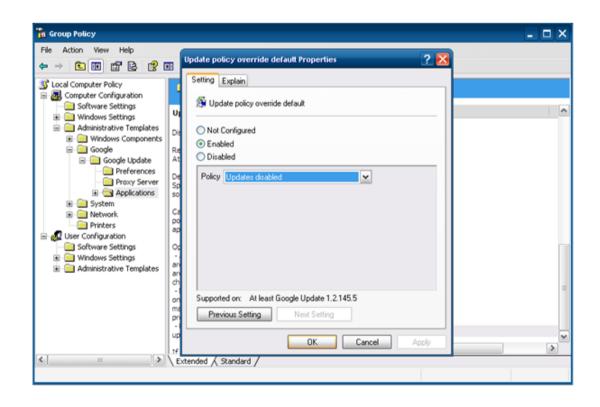
2.3.1 DISABLE GOOGLE CHROME AUTOMATIC UPDATES

Since Google Chrome has no option to disable the Google Chrome automatic updates, a small workaround must be done to disable them. If Google Chrome automatic updates are not disabled, Google Chrome will automatically download each new version of Google Chrome and install it without prompt for it or warning about this. So the memory of your client PC will be filled up with downloads and you risk to run into compatibility problems with new versions of Google Chrome without any warning from Google Chrome.

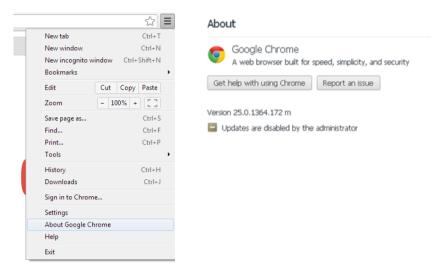
To stop Google Chrome automatic updates totally the following steps must be made on the machine:

- Copy the file "GoogleUpdate.adm" on your PC; you can find this file on your KNXCONTROL stick in the folder "Offline Installation files".
- Click on "Start ->run" and enter "gpedit.msc"; the group policy editor will appear
- Right click on "Administrative templates" and select "Add/Remove Templates"
- Click "Add", browse for the file "GoogleUpdate.adm", and add it. It is recommended to first copy the file and paste it into the browse window, which opens once the "Add"-button is clicked; in this way the template for blocking Google Chrome updates is pasted into the directory where all other templates are stored.
- Once the administrative template is added, navigate to its subfolder "Google" -> "Google Updates" -> "Applications"
- Double click on "Update policy override default"
- Select "Enable" in the appearing window and choose "Updates disabled" for the "Policy" dropdown menu
- Close this window with "OK"
- Close the group policy editor





• Control if in "Google Chrome" under "customize Google Chrome" -> "About Google Chrome" there is the entry "Updates are disabled by the administrator"



• Click on "Start ->run" and enter "msconfig" and press "Enter" on the keyboard

•

Run	? 🛛
-	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
Open:	msconfig 💌
	OK Cancel Browse

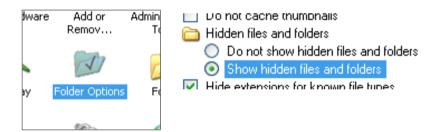
- Click on "System start"
- Deactivate GoogleUpdate.exe (by the way deactivate also jucheck.exe if it's there)

System Configuration Utility					
eneral SYSTEM.INI W	IN.INI BOOT.INI Services	Startup Tools			
Startup Item	Command	Location			
🗹 rundil32	rundll32.exe bthprops	HKLM\SOFTWARE\Microsoft\Windows\CurrentVer			
🗹 igfxtray	C:\Windows\system32	HKLM\SOFTWARE\Microsoft\Windows\CurrentVer			
🗹 hkomd	C:\Windows\system32	HKLM\SOFTWARE\Microsoft\Windows\CurrentVer			
🗹 igfxpers	C:\Windows\system32	HKLM\SOFTWARE\Microsoft\Windows\CurrentVer			
🔽 RTHDCPL	RTHDCPL.EXE	HKLM\SOFTWARE\Microsoft\Windows\CurrentVer			
🗹 tbdaemon	C:\Program Files\UPD	HKLM\SOFTWARE\Microsoft\Windows\CurrentVer			
🗹 aidaemon	C:\Program Files\UPD	HKLM\SOFTWARE\Microsoft\Windows\CurrentVer			
🗹 ctfmon	C:\Windows\system32	HKCU\SOFTWARE\Microsoft\Windows\CurrentVer			
V DIVUS Fullscreen	C:\GOOGLE~1\App\C	Startup			
📃 GoogleUpdate	"C:\Documents and Se	SOFTWARE\Microsoft\Windows\CurrentVersion\Run			
📃 jusched	"C:\Program Files\Com	SOFTWARE\Microsoft\Windows\CurrentVersion\Run			
Enable All Disable All OK Cancel Apply Help					

Close the window by clicking on "OK"



- Open the Windows "Control panel"
- Click on "Folder Options -> View" and set all files and folders visible, then click on "Apply"



• Click on "Scheduled Tasks", delete all entries of "Google" or "GoogleUpdate" and close the Window by clicking on "OK"



• Click on "Start ->run", enter "regedit" and press "Enter" on the keyboard

Run	? 🔀
-	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
Open:	regedit 💌
	OK Cancel <u>B</u> rowse

- Navigate to "Computer -> HKEY_LOKAL_MACHINE -> SOFTWARE -> Microsoft -> Windows -> CurrentVersion -> Run"
- Delete every entry according to "Google" or "GoogleUpdate"
- Delete also the entry of "MSConfig", so that the automatic updates don't start automatically on the next system restart of the device

ile Edit Vie	w Favorites Help						
	Reinstall Reliability	^	Name		Type REG_SZ	Data (value not set)	
	RunOnce RunOnce Setup Setup Shell Extensions Shell Extensions Shell Extensions ShellScrapatibility ShellScrapatibility		ᇓaidaemon ᇓBluetoothAuthenticationAgent 과HotKeysCmds		REG_SZ REG_SZ REG_SZ	C:\Program Files\UPDD\aidaemon.exe rundll32.exe bthprops.cpl,,BluetoothAuthenticationAgent C:\Windows\system32\hkcmd.exe	
		ab	ab]IgfxTray ab]MSConfig	REG_SZ	C:\Windows\system32\igfxtray.exe C:\WINDOWS\PCHealth\HelpCtr\Binaries\MSConfig.exe /auto		
				Modify Modify Binary Data	EG_SZ EG_SZ	C:\Windows\system32\igfxpers.exe RTHDCPL.EXE	
	🗉 🧰 SideBySide	\mathbf{v}	ab)tbdaemon	Delete	EG_SZ	C:\Program Files\UPDD\tbdaemon.exe	
(<	Rename		111	

• Click on "Start ->run", enter "services.msc" and press "Enter" on the keyboard

Run	? 🔀
-	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
Open:	services.msc
	OK Cancel Browse

• Search for the entry "GoogleUpdate.exe" from Google and "automatic Updates" from Windows

• Deactivate it if there is such an entry by making a right click, then click on "Properties" than change in the Properties Window the

"Startup type:" to "Disabled", save and close the Window by clicking on "Apply" or "OK"

Start			
Stop			
Pause			
Resume			
Restart	Startup type:	Disabled	×
All Tasks 🔹 🕨	oranap type.	Produce	
Refresh	-		
Properties			
Help	-		

- Navigate using the Windows Explorer into the folder "C:\Documents and Settings\Administrator\Local Settings\Application Data\Google" and delete the folder "Update"
- Go back to "Folder options -> View" and change back to "don't show hidden folders, ...", then close the window by clicking on "OK"

Do noccache unumbriaiis

Hidden files and folders

O not show hidden files and folders.

- Show hidden files and folders
- Hide extensions for known file types

2.3.2 DISABLE JAVA AUTOMATIC UPDATES

Java has its own update-engine; after installation the automatic updates are enabled. To avoid automatic updates of JAVA following steps must be done:

- Open the "Control panel".
- Double click on the Java .lcon



 Select the tab "Update", deactivate "Search automatic for Updates", change the Box "Show Messages" to "before download" and close the Window by clicking on "OK"

General Update Java Security Adv	anced
	n ensures you have the most updated n. The options below let you control how pplied.
Notify Me:	Before downloading
Check for Updates Aut	Advanced
	on below to check for updates. An icon will an update is available. Move the cursor tus of the update.

- Click on "Start ->run", enter "regedit" and press "Enter" on the keyboard
- Navigate to "Computer -> HKEY_LOKAL_MACHINE -> SOFTWARE -> Microsoft -> Windows -> CurrentVersion -> Run"
- Delete every entry according to " jucheck.exe"

le Edit View Favorites Help				
🛛 💼 Reinstall 🦳 Name		Туре	Data	
	Default)	REG_SZ	(value not set)	
E DunOnen	idaemon	REG_SZ	C:\Program Files\UPDD\aidaemon.exe	
B Setup	luetoothAuthenticationAgent	REG_SZ	rundll32.exe bthprops.cpl,,BluetoothAuthenticationAgent	
BharedDLLs	lotKeysCmds	REG_SZ	C:\Windows\system32\hkcmd.exe	
Shell Extensions	gfxTray	REG_SZ	C:\Windows\system32\igfxtray.exe	
ShellCompatibility	1SConfig	PEG_SZ	C:\WINDOWS\PCHealth\HelpCtr\Binaries\MSConfig.exe /auto	
	ersistend Modify	EG_SZ	C:\Windows\system32\iafxpers.exe	
	THDCPL Modify Binary Data	EG SZ	RTHDCPL.EXE	
	bdaemon Delete	EG_SZ	C:\Program Files\UPDD\tbdaemon.exe	
	Rename		111	

- Click on "Start ->run", enter "services.msc" and press "Enter" on the keyboard
- Search for the entry "jucheck.exe" from Oracle

• Deactivate it if there is such an entry by making a right click, then click on "Properties" than change in the Properties Window the "Startup type:" to "Disabled", save and close Window by clicking on "Apply" or "OK"

Startup type:	Disabled	¥
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3 Appendix

3.1 FAQ

3.1.1 GOOGLE CHROME INSTALLATION FAILS

If the installation of Google Chrome fails with the messages "Google Chrome installer can't be started!" Or "There is a newer version already installed ...", a newer version of Google Chrome was installed on the device but not completely removed from the system. If this occurs, the Windows registry must be checked:

Open the registry editor by typing "regedit" in the window appearing by clicking on "Start -> Run" and confirm

Then check the following entry in the registry of the device "HKEY_CURRENT_USER\SOFTWARE\Google\Update\Clients".

Any subfolder present here, whiches name begins with "{....}" must and contains information about newer versions of Google Chrome must be deleted. Execute a right click on such a subfolder and click on "delete" in the appearing context menu to delete it.

Then restart the device.

Once the registry entries of newer versions of Google Chrome has been removed, the installation process explained in chapter 2 of this manual can be followed, to install Google Chrome in version 25

3.1.2 GOOGLE CHROME REPORTS PLUG-INS ARE OUT OF DATE

Google Chrome usually shows on the top of browser window a corresponding banner, which notices that someone tries to use plug-ins that are no more up to date. In the appearing banner the user is asked if he want to run this outdated plug-in or not.

If you do not want Google Chrome to notify the user when a plug-in is out of date, the command line parameter --allow-outdated-plugins can be used. To use this command line flag the following steps have to be made:

- Open the properties window of the link used to start Google Chrome by right clicking and selecting properties. If Google Chrome is started automatically, also the link in the auto start folder has to be modified.
- Add at the end of the field "Target:" the entry " --allow-outdated-plugins".
- Close the properties of the link by clicking on "OK".

All links that are used to start Google Chrome have to be modified in this way.

3.2	NOTES
