FAQ COMBIVIS studio HMI

Messaging of SMS and Emails FAQ No.0007

Part	Version	Revision	Date	Status
en	4.0.1154.32	005	2019-01-01	Released

Content

KEB Automation KG
Südstraße 38
32683 Barntrup, Germany
E-mail: info@keb.de
Tel. +49 5263 401-0
Fax +49 5263 401-116
www.keb.de

District Court Lemgo HRA 5649
DUNS-No. 314108728
VAT-No. DE309087075
Bank Details: Sparkasse Paderborn-Detmold
IBAN DE 19 4765 0130 0000 0060 07
BIC WELADE3L

General Partner:
Vittorio Tavella
KEB Verwaltungs-GmbH, Barntrup
District Court: Lemgo HRB 8965
Directors: Curt Bauer CMO,
Ralf Lutter COO, Vittorio Tavella CFO,
Wolfgang Wiele CTO

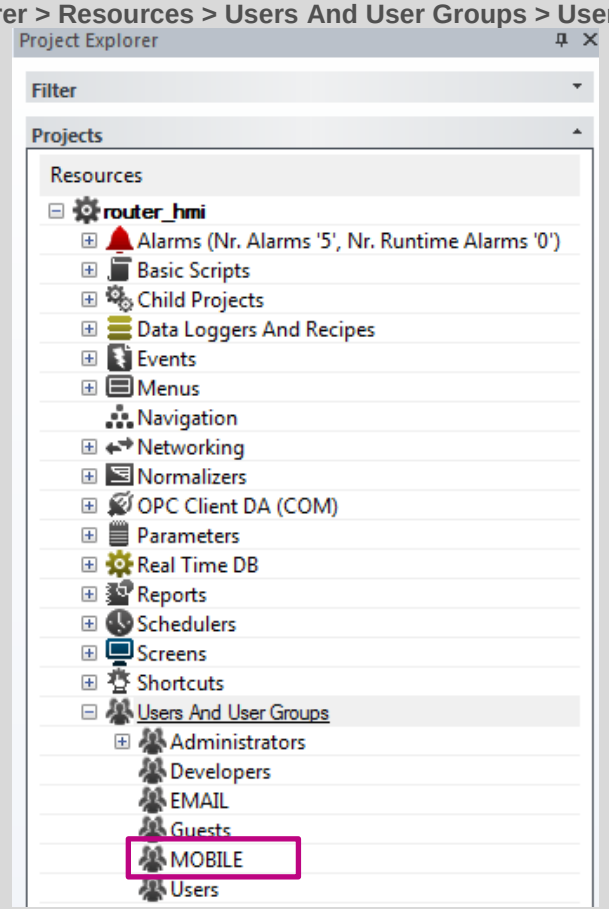
Introduction

This document contains a manual for creating a COMBIVIS Studio HMI project for sending a SMS or Email by a C6 Router, HMI or IPC.
Note: For these functions you need an Advance HMI License on the devices.
Note: It´s mandatory to use a C6 Router with a Mobil connection for sending SMS.
Note: To transmit an Email it´s mandatory to grant an access to a SMTP-Server. In the following manual it´s described how to insert the Loging-Data for the server.

Sending SMS by a C6 Router

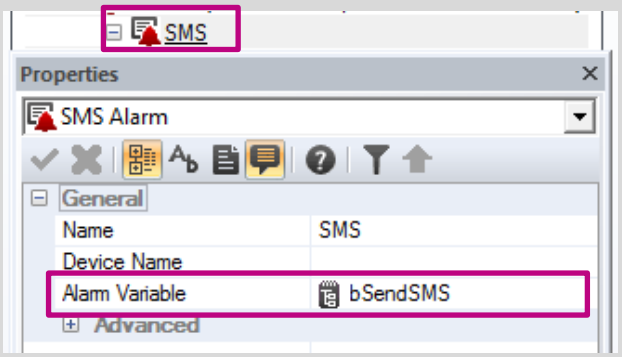
1. Add a new usergroup to your HMI project. (e.g. name = "**MOBILE**")

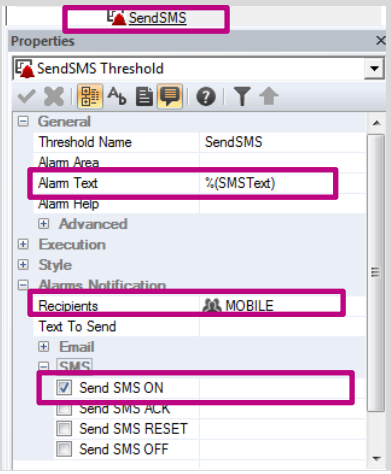
Project-Explorer > Resources > Users And User Groups > Users



2. Add a new Alarm and connect a variable to it (e.g. **bSendSMS**). Attach an alarm threshold to this alarm and insert the message, that you want to send after activating. In this example the alarm is named “**SMS**“ and will be activated by the variable “**bSendSMS**”. The threshold is called “**SendSMS**” and contains the string-variable “**SMSText**”. All Users in the group “**MOBILE**” will receive the SMS. Activate the option “**Send SMS ON**”.

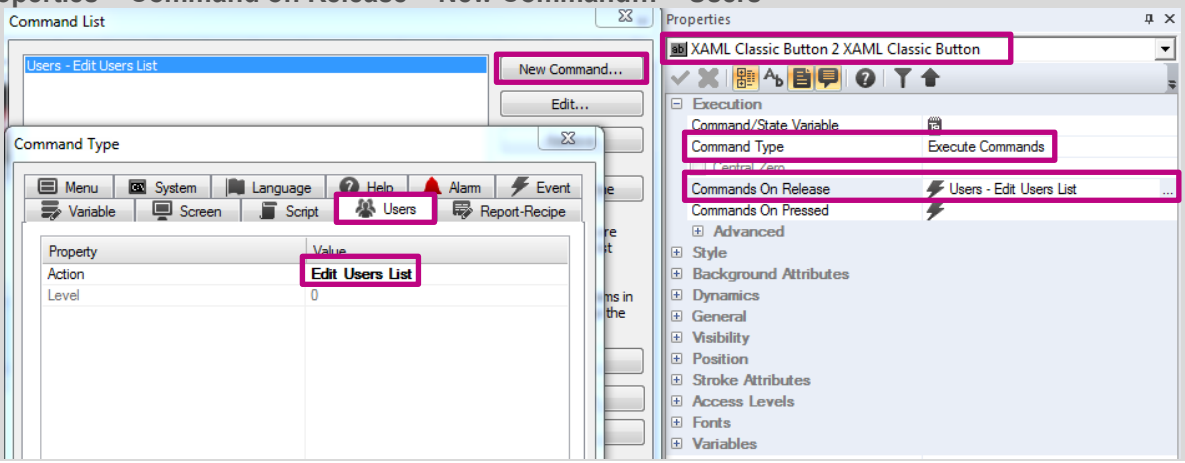
Projekt-Explorer > Alarms





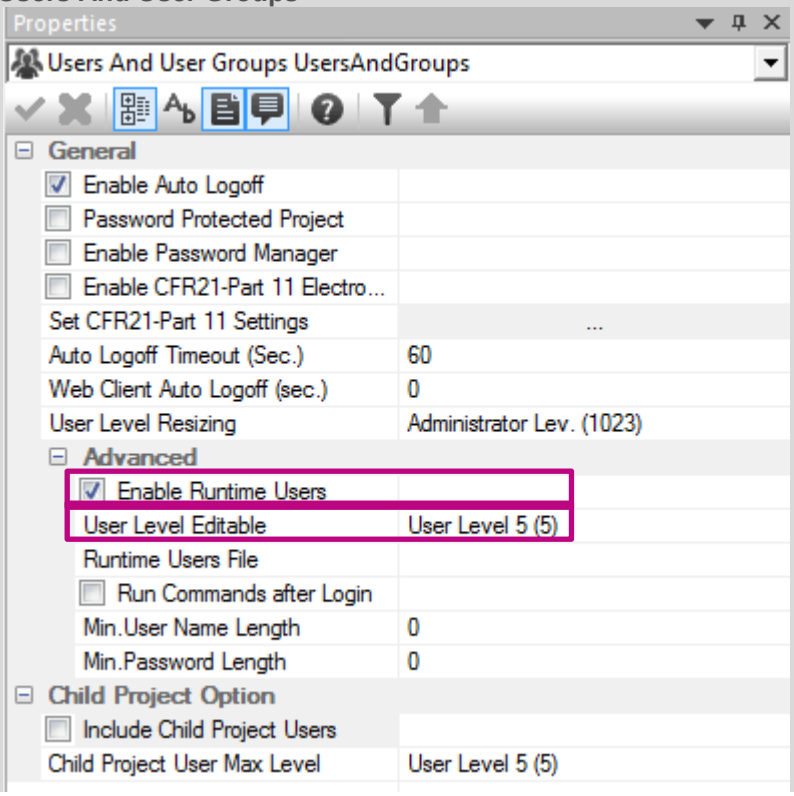
3. Now create a new user administration. You can do this by using an execution command, for example of a button. In this case there is an XAML Button, which performs the command “**Edit user list**”. Also link the variable “**bSendSMS**” to a XAML button or an event.

Properties > Command on Release > New Command… > Users



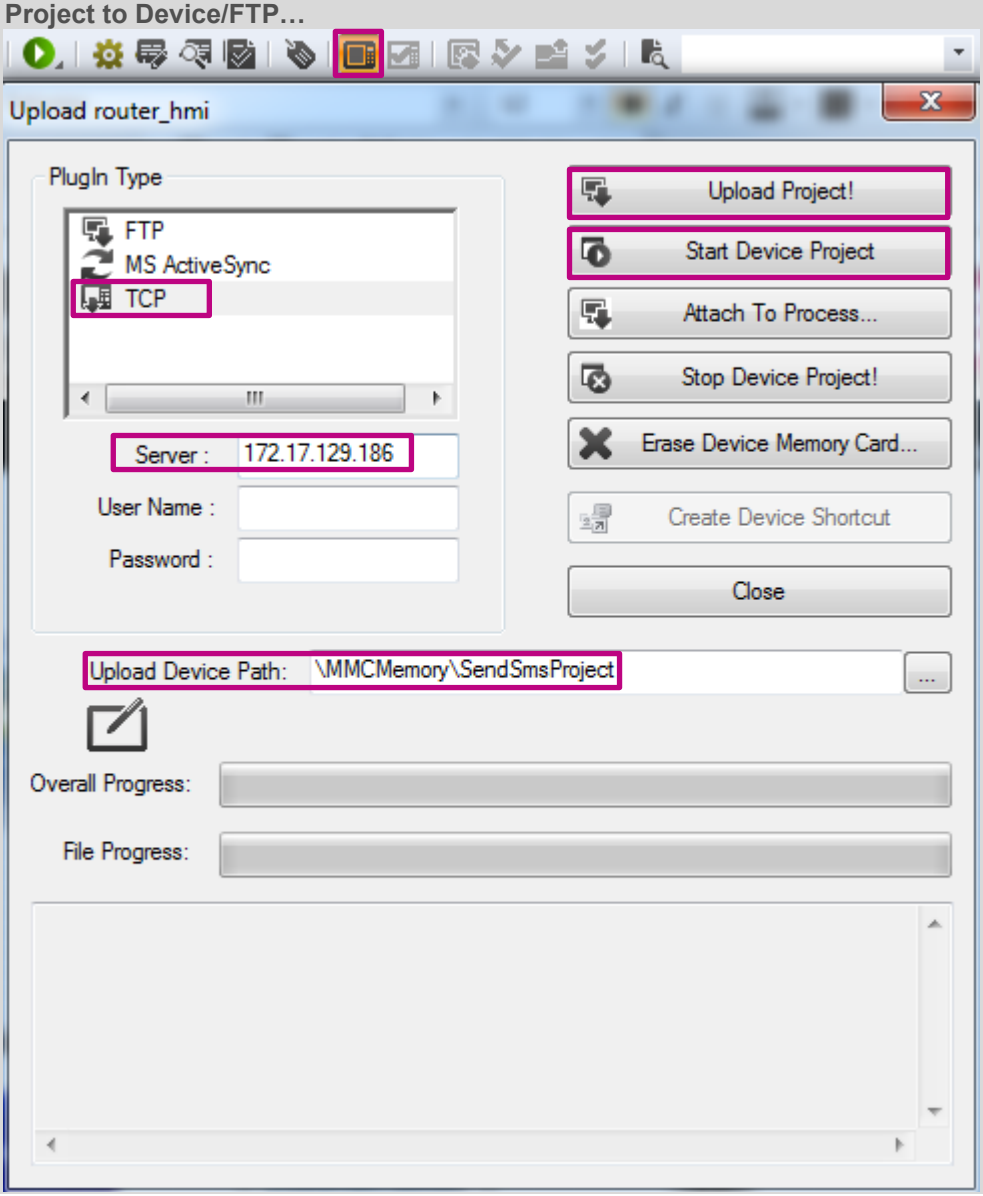
4. To enable the user administration on the HMI runtime, activate “**Enable Runtime Users**”. It´s possible to set an access-level for the user(s) who should be allowed to change the administration.

Projekt-Explorer > Users And User Groups



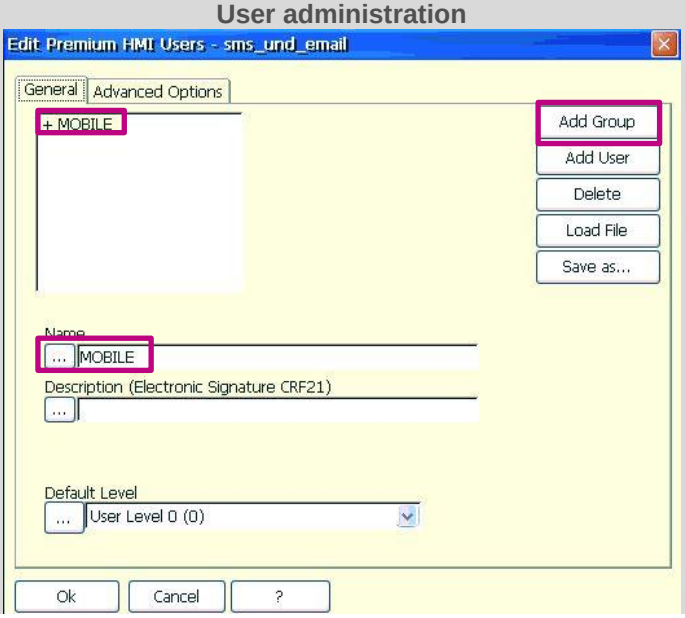
5. Now you can upload the project with "**Upload Project to Device/FTP…**" to the C6 Router and start it. Therefor you have to insert the IP of the router and the path of the projectfolder.

Upload Project to Device/FTP…



6. After uploading the project successfully, open the user administration by clicking on the button from step 3. Add a new group with the same name like in step 1. It´s important to observe the case sensitivity.

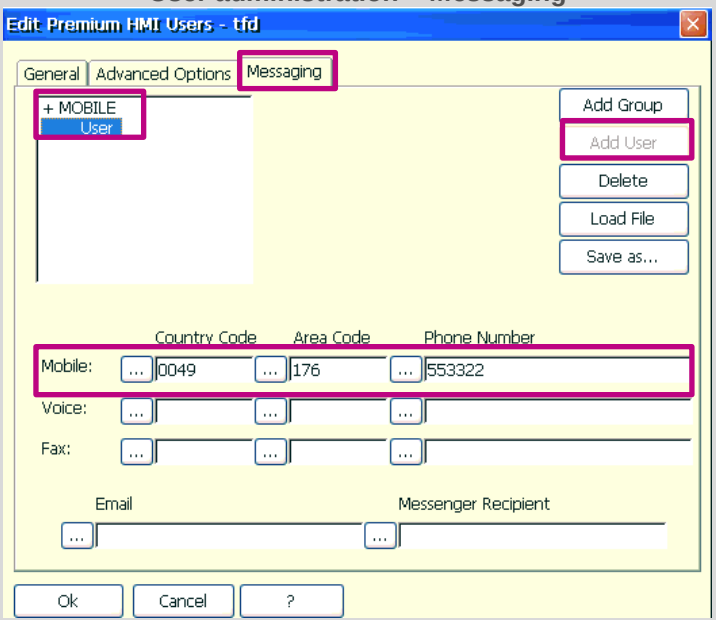
User administration



7. Add a new user and attach the mobile number to it (e.g. Username = "**User**"). You can add as much users as you need, with different mobilenumbers.

HINT: If you enter a "**Country Code**" it's necessary that you delete the first 0 of the "**Area Code**"

User administration > Messaging



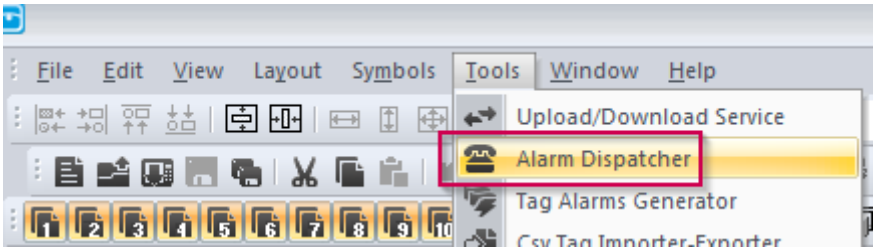
8. When all users are created correctly, you can activate the alarm-variable (step 2). Every user in the group "**MOBILE**" will receive the text which is deposited in the alarm threshold.

Sending Emails via C6 HMI / IPC / Router

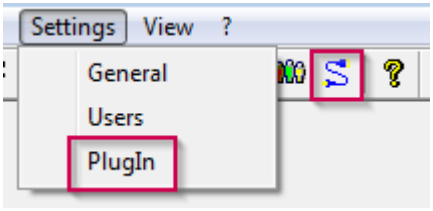
In order for emails to be sent successfully, the access data of the SMTP server must first be entered into the alarm dispatcher. Then the service can be linked to an alarm, for example.

Configure the Alarm Dispatcher

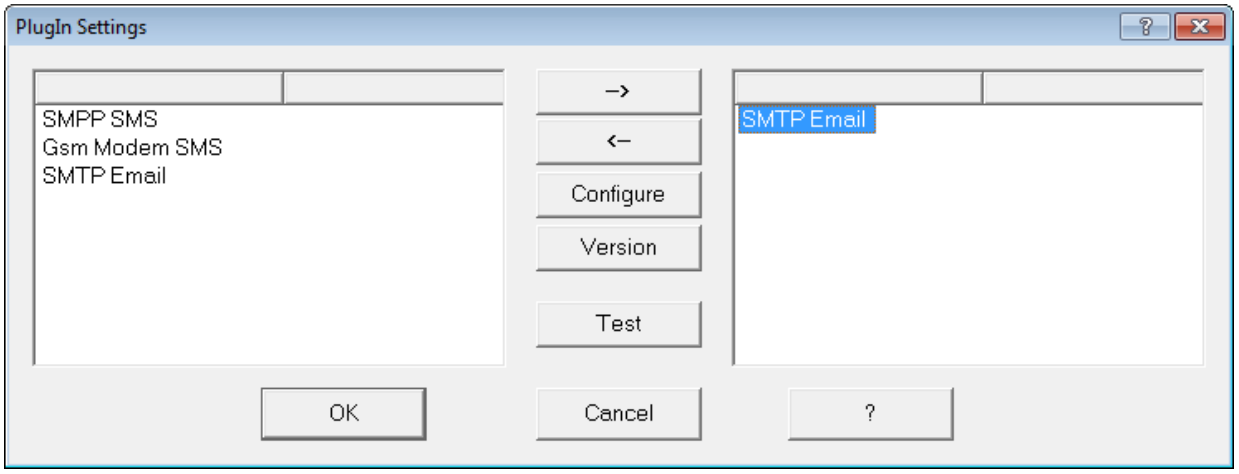
1. Open your COMBIVIS studio HMI project and then select the **Alarm Dispatcher** in the **Tools** tab:



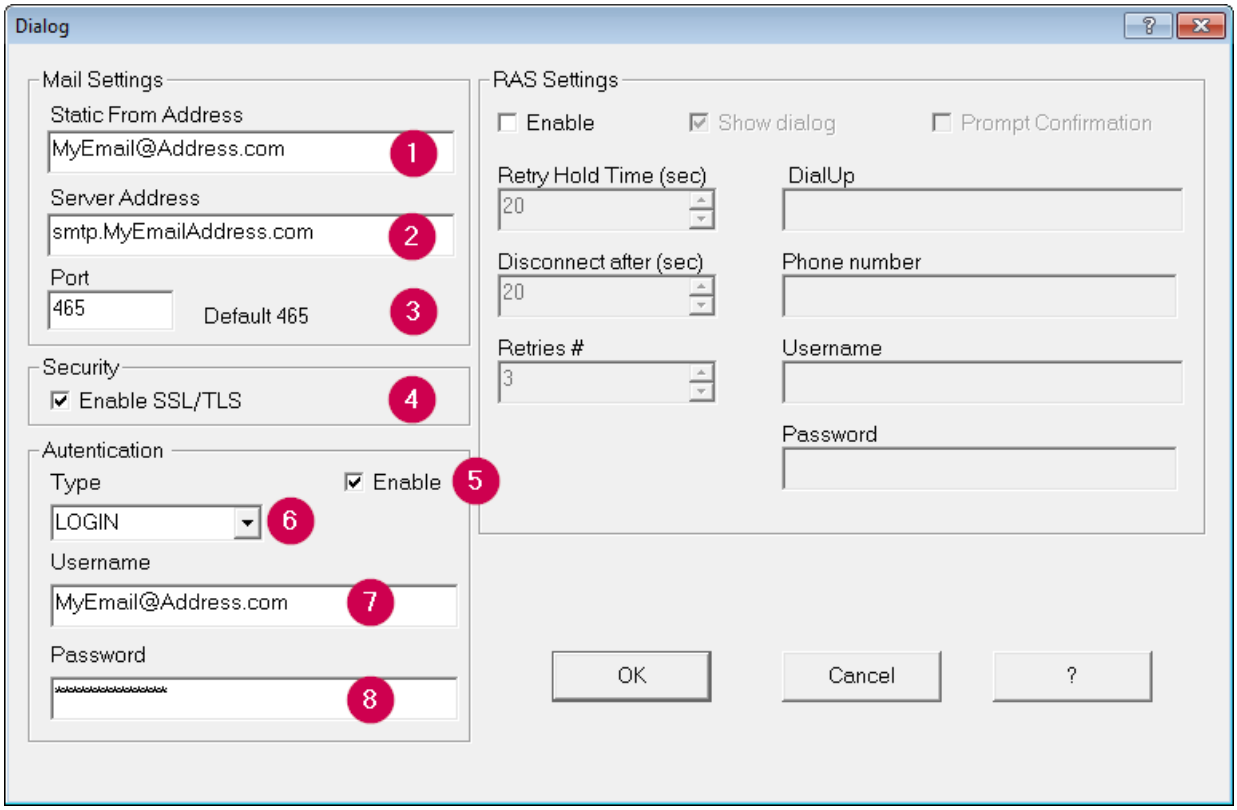
2. In the newly appeared mask click on the blue symbol, which resembles an "S", or via the **Settings**/**PlugIn** tab.



3. If not already done, select "SMTP Email" in the left area of the following window and click on the arrow pointing to the right to select the service for your project. Then double click on the service you just moved to configure it.

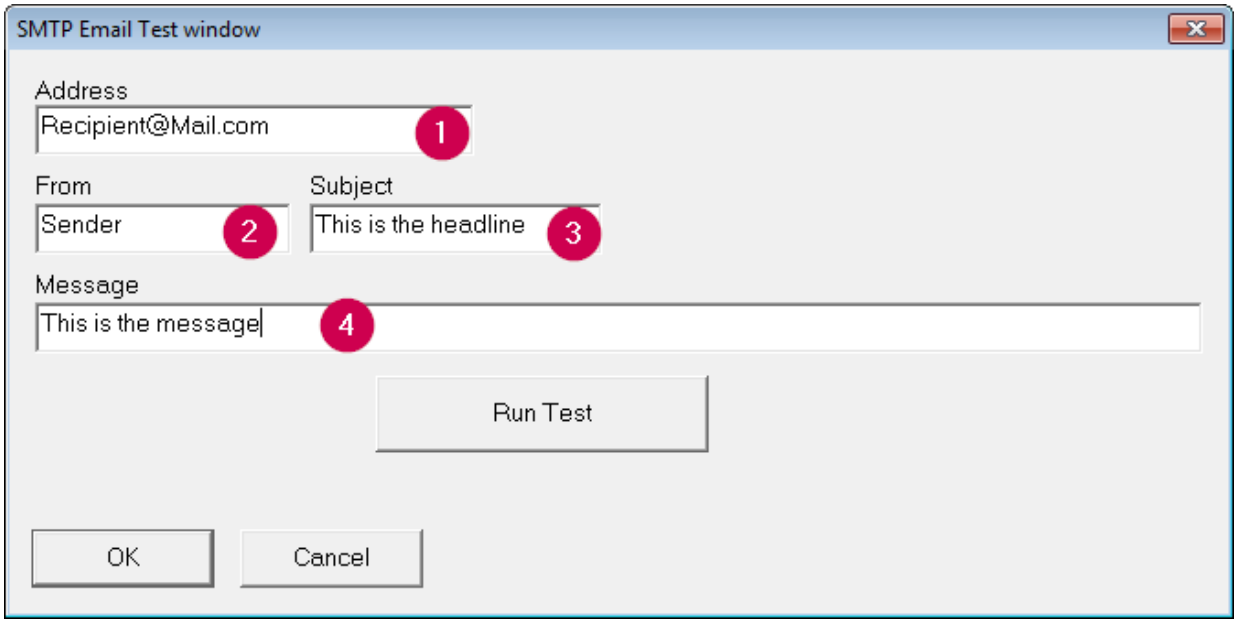


The following window opens:



(1) Email address of the sender.
(2) SMTP server address. You can obtain this from your provider
(3) Service Port.
Enter the port used for the email service here (e.g. 25, 465, 587, etc.)
(4) Activate/deactivate secure email connection SSL/TLS.
Please take care that the port (3) changes depending on the setting.
(5) Enable/disable authentication.
Usually an authentication (login) with your email provider is necessary.
(6)): If you have activated the authentication (5) select the type "Login".
(7) Enter the login data of the email provider you use, here "Username".
(8) Enter the login data of the email provider you are using, here "Password".

4. You can test your settings. Please note that the connection test is performed by your PC and not by the target device (PLC/HMI). Also note that the necessary ports for the service must be released, otherwise the test will fail.



(1) Enter the destination address
(2) For example, enter the sender address
(3) Enter a subject
(4) Enter a message

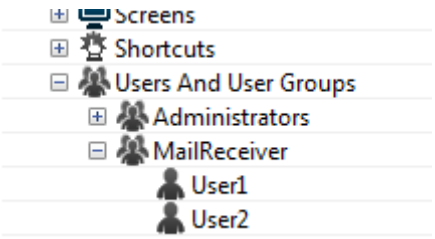
With **Run Test** a message is sent with the given settings. The test is confirmed with a status message.

5. Finally save your changes. Use the diskette symbol or click on **File** and then on **Save**. The configuration of the email service is now complete.

Configure COMBIVIS studio Project

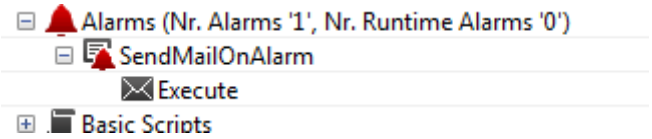
An email can be sent automatically, e.g. by activating an alarm. The circle of recipients can be defined during project planning and/or during runtime.

1. First create a new user group (here "MailReceiver") and create as many users as there are email recipients. If you only want to create users during runtime, you only need to create the user group:

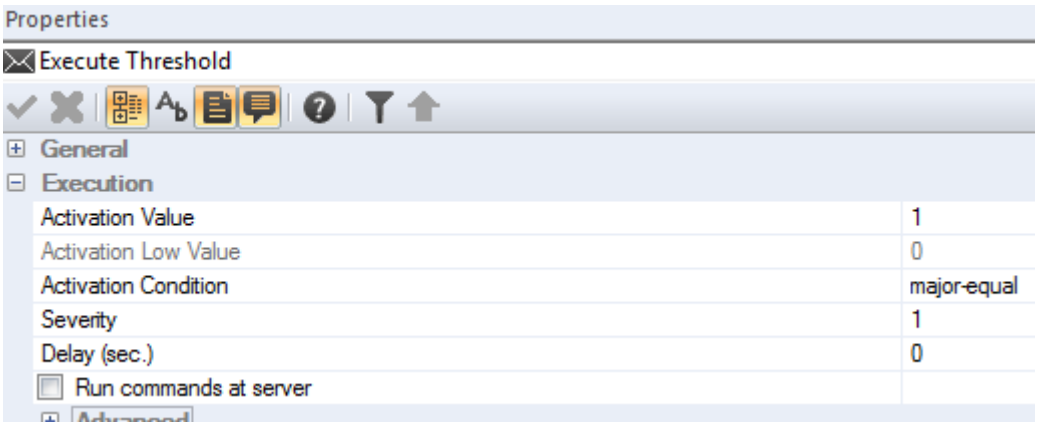


2. You can assign a different email address to each user. You can find the settings in the user's properties under User Data and then Email.

3. Add an alarm (here "SendMailOnAlarm") and an alarm threshold "Execute" to the project

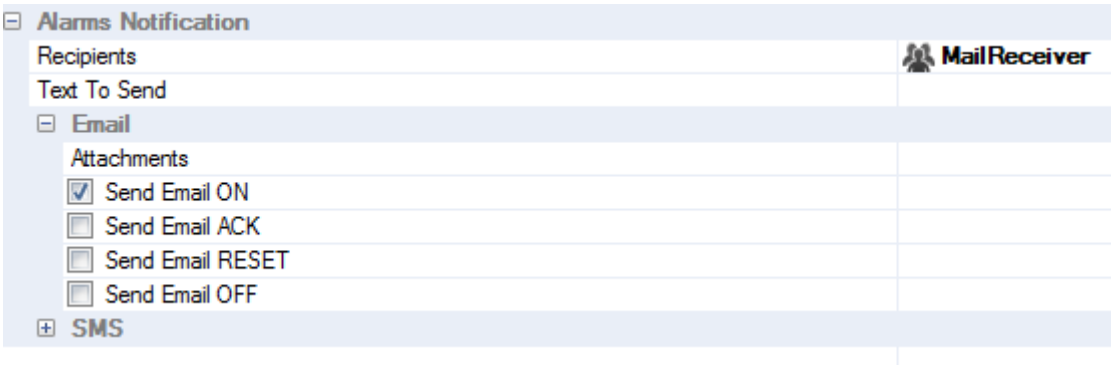


Also link the alarm to an alarm variable (Properties/General/Alarm Variable). This is used as reference variable for the alarm.
Then set the threshold value when the alarm should be active (Properties/Execution/...).



Also note the properties of the alarm threshold “Style” (Properties/Style/...). If you deselect all checkboxes here, no alarm is triggered, but only a notification. A change here is also displayed visually:

4. Select the email recipient group in the properties of the alarm threshold (Properties/Alarm Notification/Recipients)
   In the Email tab below, select when an email should be sent.
   With the option "Send Email ON" an email will be sent, for example, when the alarm changes from inactive to active, i.e. when the alarm threshold is reached.



5. Set a message to be sent with the email You can do this in the properties of the alarm threshold (Properties/General/Alarm Text).
   You can simply enter a standard message or a string variable that you have declared in the project before.
   Link the variable as follows:

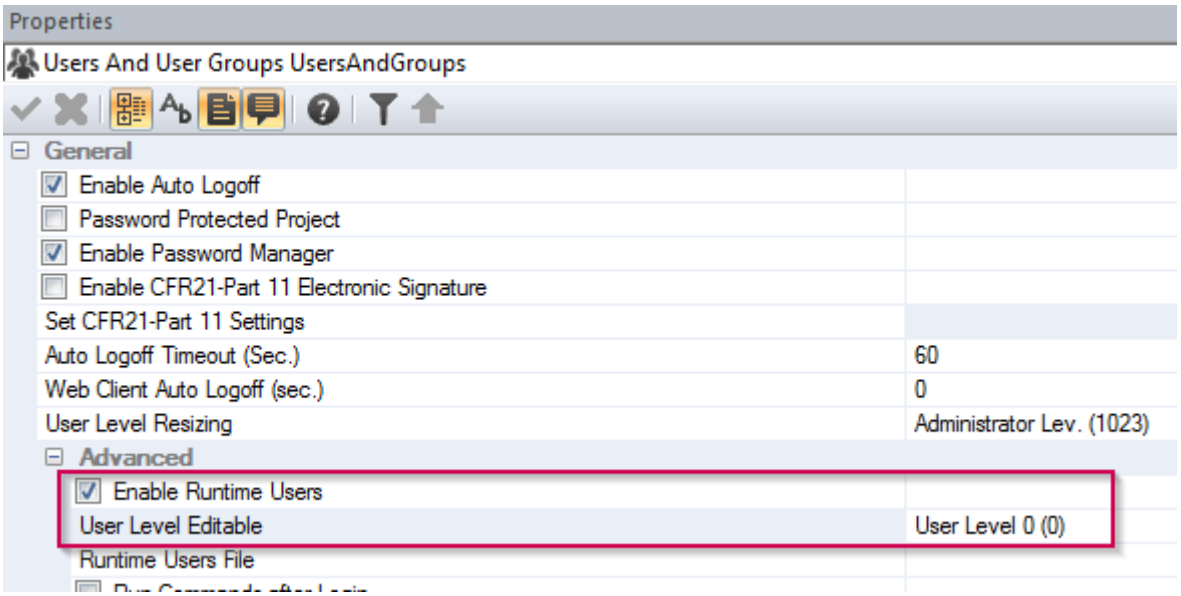
%(VarName)

The alarm is now configured so that statically created users receive an email message when the alarm threshold is reached.

Configure runtime user for email sending

Follow the instructions in "Configure COMBIVIS studio HMI project" to activate e-mail transmission in the project. However, you do not need to create the static users User1 and User2.

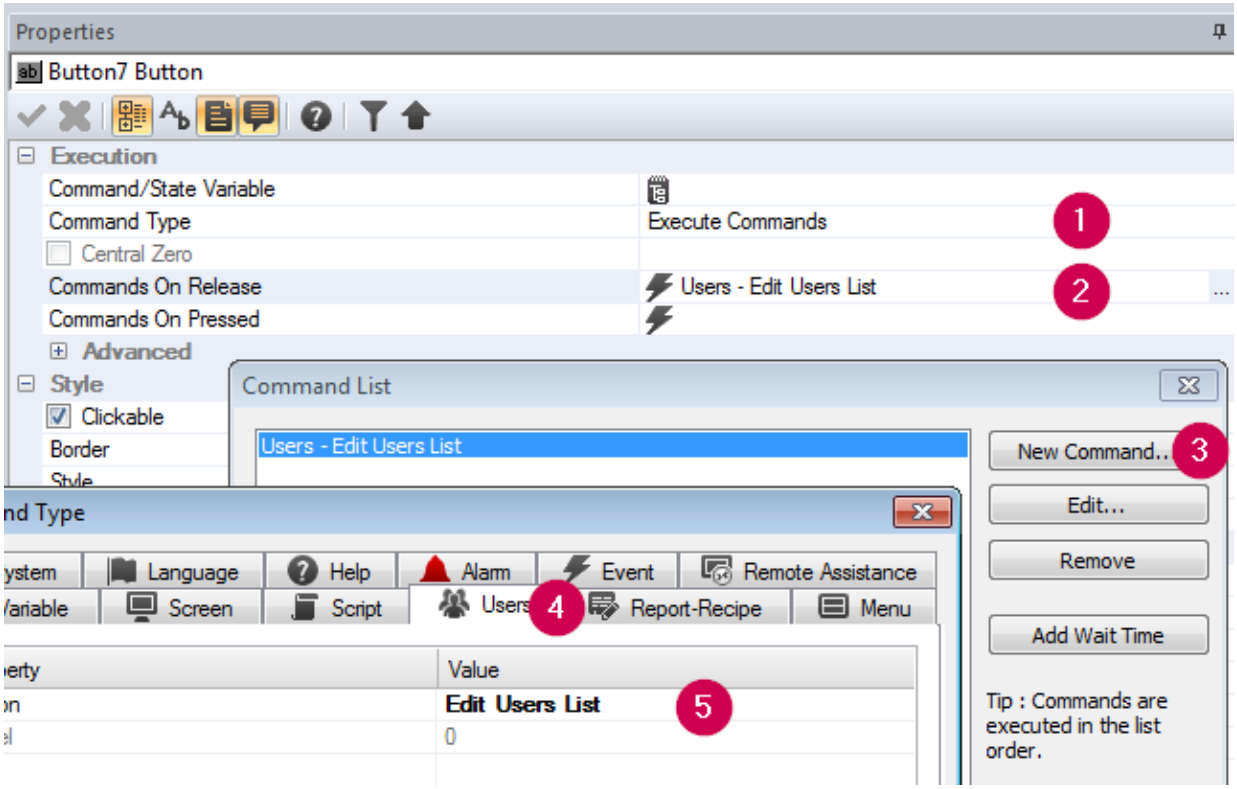
1. To be able to create users at runtime, the property "Enable Runtime Users" must be activated in the properties of users and groups (Properties/General/Advanced/Enable Runtime Users).



   With the property "User Level Editable" you set the user level which must be present for the active user to be able to create a new user at runtime. Level 0 allows each runtime user to create a new runtime user.

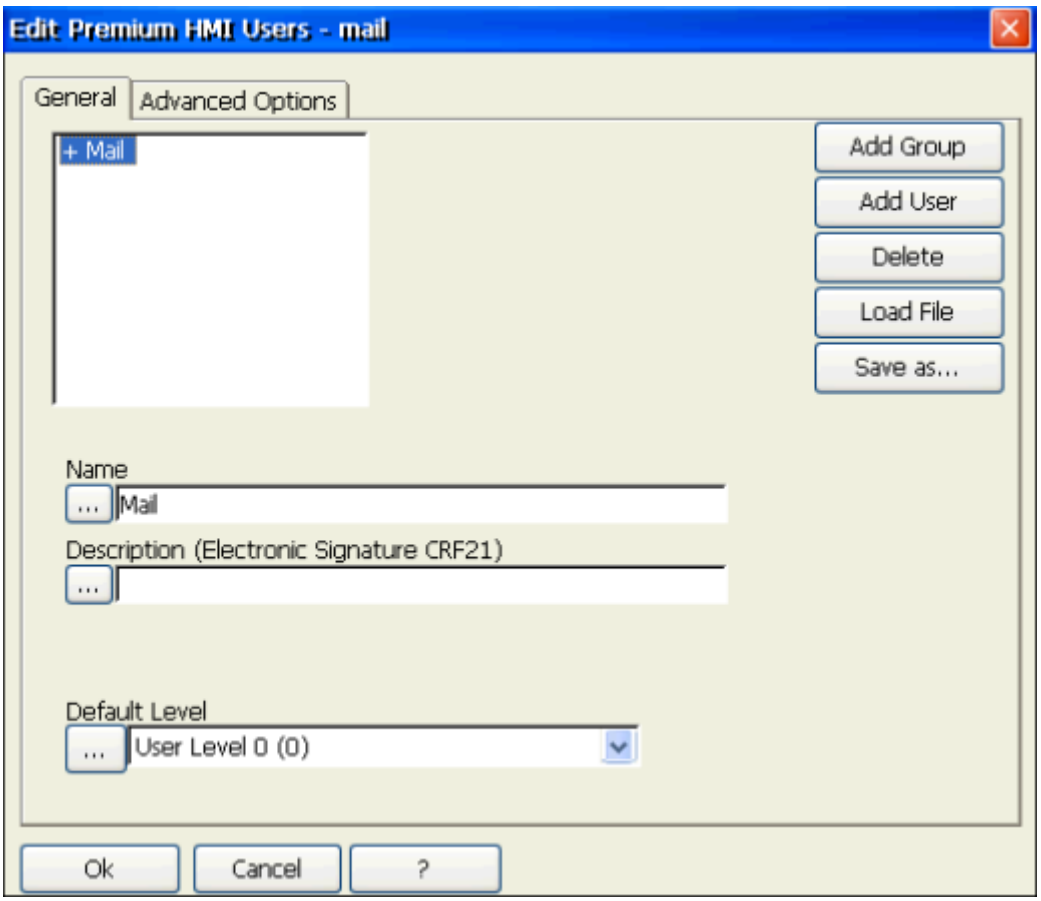
2. Add a button to your project to open the runtime user mask.

3. Give the button a command:

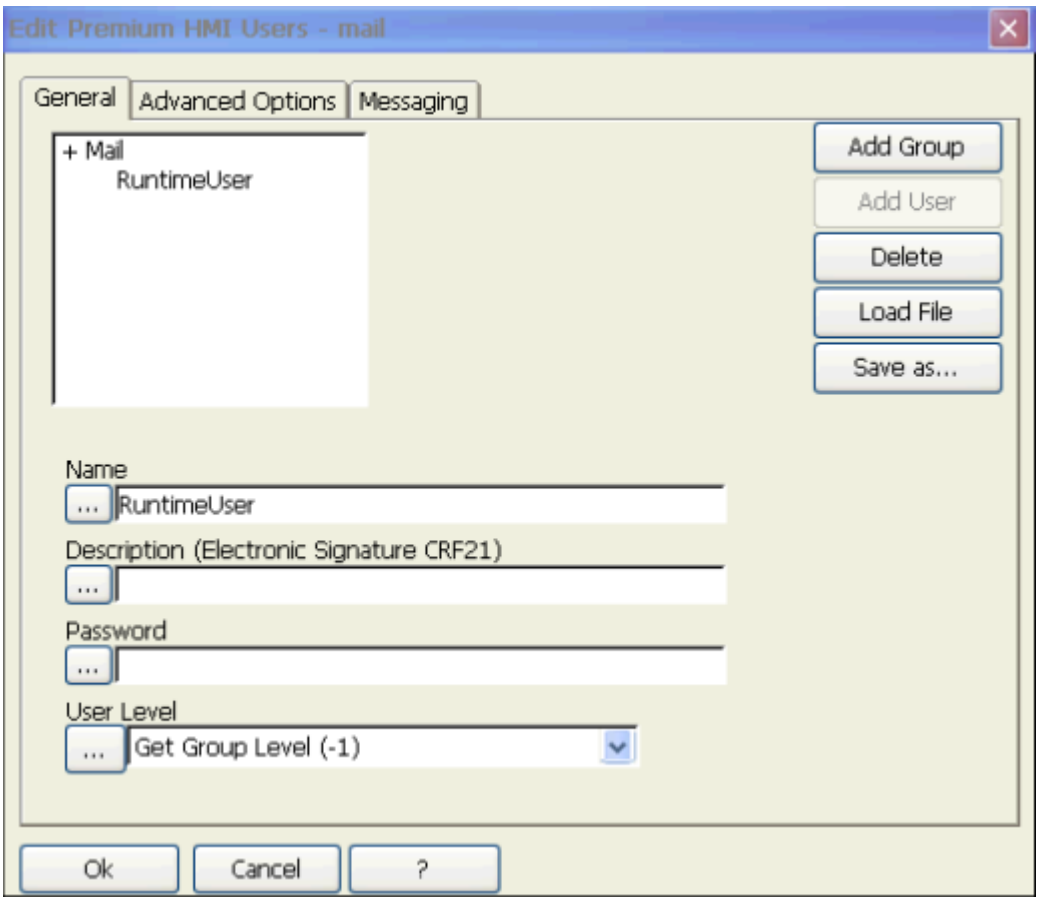


(1) Select the command type, here **Execute Commands**
(2) Click on the small dots in **Commands On Release**
(3) Select **New Command** to add a new command
(4) Select the Users tab and then **Edit Users List** and confirm everything with **OK**

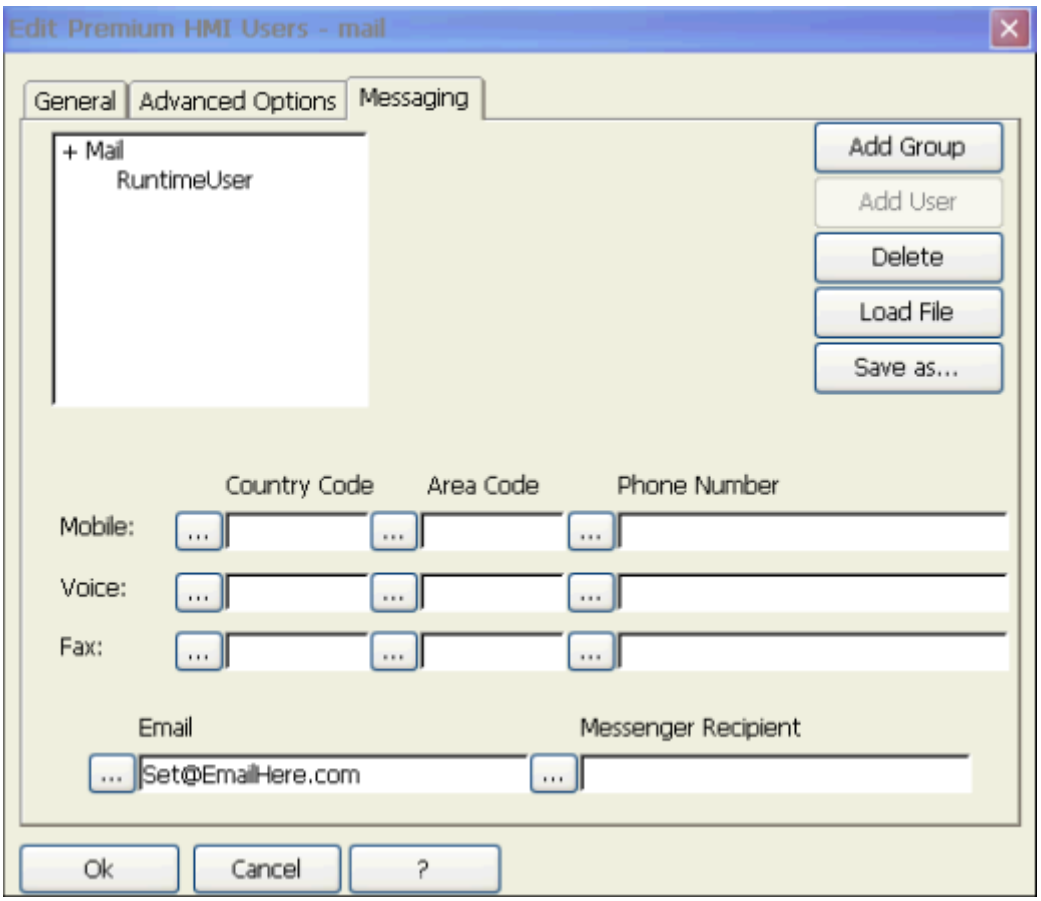
4. The following window opens in the runtime environment when the button is pressed



Add a new user to the Mail group via **Add User** (here "RuntimeUser").



Switch to the **Messaging** tab and add an email address there (here "Set@EmailHere.com"):



Repeat step 4 for additional users.

The alarm is now configured in such a way that users created during runtime will receive an email message when the alarm threshold is reached.

Disclaimer

KEB Automation KG reserves the right to change/adapt specifications and technical data without prior notification. The safety and warning reference specified in this manual is not exhaustive. Although the manual and the information contained in it is made with care, KEB does not accept responsibility for misprint or other errors or resulting damages. The marks and product names are trademarks or registered trademarks of the respective title owners.

The information contained in the technical documentation, as well as any user-specific advice in verbal or in written form are made to the best of our knowledge and information about the application. However, they are considered for information only without responsibility. This also applies to any violation of industrial property rights of a third-party.

Inspection of our units in view of their suitability for the intended use must be done generally by the user. Inspections are particular necessary, if changes are executed, which serve for the further development or adaption of our products to the applications (hardware, software or download lists). Inspections must be repeated completely, even if only parts of hardware, software or download lists are modified.

Application and use of our units in the target products is outside of our control and therefore lies exclusively in the area of responsibility of the user.

KEB Automation KG
Südstraße 38 • D-32683 Barntrup
fon: +49 5263 401-0 • fax: +49 5263 401-116
net: www.keb.de • mail: info@keb.de