

FAQ for SINAMICS DCM

Question:

With SINAMICS DCM, a STANDARD CUD was replaced by an ADVANCED CUD and the parameter assignment transferred using a memory card (MMC or SD). On power-up, the topology error (33 on the BOP) is exited by setting p9906 =3 in accordance with the operating instructions. Following startup, the warnings A1315, A1416, A1482 and A1507 remain, which interferes with event-triggered alarm monitoring during operation. How can the warnings be prevented after CUD replacement?

Response:

1) Question:

With SINAMICS DCM, a STANDARD CUD was replaced by an ADVANCED CUD and the parameter assignment transferred. How can the warnings be prevented permanently after CUD replacement?

2) Fault description:

Following startup, the warnings A1315, A1416, A1482 and A1507 are output and also displayed cyclically on the BOP20.

3) Cause of error:

The topology of the STANDARD CUD stored in the parameter assignment no longer matches the topology of the ADVANCED CUD after restoring from the memory card to the FLASH memory. This configuration difference cannot be resolved by simply copying back the parameters, and will be permanently displayed in the form of topology difference warnings.

4) How can you find out if a device is affected by this error?

If the starter is connected to the target device (online) after replacing the CUD, warnings A1315, A1416, A1482 and A1507 are output permanently in the alarms overview, and these warning are displayed cyclically on the BOP20.

5) How can the problem be solved?

Transfer of the parameter settings must be executed by converting the project from standard CUD to Advanced CUD using Starter V4.3.

NOTICE! The Standard CUD and the Advanced CUD must have firmware of the same level of development (V1.1, V1.2 or V1.3).

The CUD replacement cannot be executed with any given combinations. The procedure described above is intended only for exchanging a STANDARD CUD with an ADVANCED CUD.

To do this, the following equipment is required:

- I. A Starter V4.3 installed on a computer with SSP V1.3 or SSP V1.2 (in future also SSP V1.4) depending on the FW version used on the standard CUD
- II. A connecting cable suitable for the connection protocol
- III. Sufficient space on the data medium of the computer to buffer the exported project (approx. 25MB)

Procedure:

Project conversion works by means of XML export and import (not via "Upgrade"):

- a) Create a new project with the name "CUD_Standard" and connect to the selected target device.
- b) Confirm the query "Search for accessible nodes?" and then click on "Select drive units" and "Accept". If the system does not automatically switch to "Online/offline comparison", this can be done manually with "Close" and "Connect to the selected target devices". Output the CUD parameters with "Load to PG" and click "Close" to complete.
- c) Save the project.
- d) Use Windows Explorer to create a folder with the name "CUD_Replace" on the data medium of your computer.
- e) Go offline with "Disconnect from target system", right-click on Drive_unit_1 and select "Expert" and "Save project and export object" in the shortcut menu.
- f) In the window that pops up for selection of the storage location, select the previously created folder "CUD_Replace".
- g) Remove the check mark from "optimized export format" and confirm with OK.
- h) Wait for the Starter to export the project to the folder.
- i) In the "CUD_Replace" folder, a file appears with the name "Drive_unit_1.xml" as well as a subfolder.
- j) Close the project.
- k) Switch off the SINAMICS DCM.
- l) Replace the Standard CUD with the Advanced CUD in the SINAMICS DCM.
- m) Create a new project with the name "CUD_Advanced" and connect to the selected target device.
- n) Confirm the query "Search for accessible nodes?" and then click on "Select drive units" and "Accept". If the system does not automatically switch to "Online/offline comparison", this can be done manually with "Close" and "Connect to the selected target devices". Output the CUD parameters with "Load to PG" and click "Close" to complete.
- o) Save the project.
- p) Go offline with "Disconnect from target system", right-click on Drive_unit_1 and select "Expert" and "Import object" in the shortcut menu. A window opens for selecting an XML file.

- q) Select the previously saved Drive_unit_1.xml file from the "CUD_Replace" folder and press OK to confirm. If necessary, acknowledge the incompatibility warning (Yes) and also the delete warning "The data of drive unit 1 will be deleted" (OK).
- r) Wait until the Starter completes the import of the exported project with all configuration data to the Advanced CUD project.
- s) Save the project.
- t) Connect to the selected target devices.
- u) For online/offline comparison with "Download to the target system", load the parameterization to the Advanced CUD; activate the option "After loading, copy RAM to ROM" at the "Start download?" query by ticking the checkbox and press "Close" to finish when download has been completed.