TwinCAT OPC UA Nodeset Editor with CoAgent integration

Using AI chat to create OPC UA information models more efficiently

The TwinCAT OPC UA Nodeset Editor can be used to display, customize, and create the XML-based formal description files of OPC UA information models known as nodesets. These can now be created, tested, and connected to the TwinCAT PLC with ease using natural language via the TwinCAT CoAgent's chat window, which is integrated as a technology preview.

Until now, creating OPC UA information models has required a great deal of specialized knowledge. With the integration of the TwinCAT CoAgent (TE1700) into the TwinCAT OPC UA Nodeset Editor (TE6100), generative AI now makes this much easier. The integrated chat window features an agent that is specifically designed to work with nodesets: Users can easily describe their goal in natural language and the agent implements it in the open project. In doing so, it creates types, objects, variables, and methods; instantiates companion specifications; and implements even extensive changes efficiently. Using the Target Browser, the agent reads the symbols from the TwinCAT PLC – either online or offline – and creates ADS mappings from them. The agent checks node IDs and modeling rules against the OPC UA specification and identifies the corresponding source. It loads the necessary companion specification nodesets on its own as needed. Any changes appear immediately in the editor.

The new version of the TwinCAT OPC UA Nodeset Editor, which features a modernized backend, provides the foundation for this integration of generative AI. It offers significantly better performance for

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all tasks so that nodes open with just a single click. In addition, it offers configurable validation with rule sets and optional XSD verification, a graphical “Compare & Merge” feature for projects, nodesets, and mapping sets, as well as a central nodeset library and portable projects. In addition, OPC UA instances – including ADS mapping – can be dragged and dropped from the Target Browser, and an optimized user interface is available.

➔ www.beckhoff.com/te6100
➔ www.beckhoff.com/twincat-coagent

Press picture:



Picture caption:
By integrating the TwinCAT CoAgent, the TwinCAT OPC UA Nodeset Editor allows users to leverage the capabilities of generative AI for the efficient creation of OPC UA information models.

Press kit:
www.beckhoff.com/media/downloads/press/2026/pr402026_beckhoff.zip

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