



VizAdapter
BY TECHSOLVE

TechSolve's customizable MTConnect® Adapters enable manufacturers to monitor the status of all the machines and devices in their shop, no matter what age.

Frequently Asked Questions (FAQs) for TechSolve's SINUMERIK 840D MTConnect® Adapters

How can I order TechSolve's VizAdapters®?

Order directly from TechSolve, 6705 Steger Dr., Cincinnati, Ohio, 45237, USA:

- Phone: (800) 345-4482, +01 (513) 948-2030
- Email: vizsales@techsolve.org

What part number should I order?

See Data Sheets for each 840D Adapter versions we offer to determine which is applicable to your machine.

How are the VizAdapters® delivered?

The Adapter delivery package is provided via download link emailed to you. Contents include:

- Adapter executable and configuration files
- Configuration file to include the adapter in the 840D HMI boot sequence
- MTConnect® Agent executable and configuration files
- Installation and troubleshooting instructions for above
- Data Sheets
- Licenses

How is the Adapter installed? What level of expertise is needed?

The Adapter comes with step-by-step instructions. Installation typically involves booting the CNC into Service mode, copying files into certain directories and possibly editing a text file. The installer must be familiar with the Windows® (or possibly Linux) desktop environment and be able to follow instructions in English. Preferably, the installer has some familiarity with using a command prompt. Specific Adapter installation steps may vary slightly from the above.

How is the MTConnect® Agent installed?

The Agent comes with step-by-step instructions. Installation is done on a Windows® computer and involves copying files into certain directories and possibly editing a text file. The installer must be familiar with the Windows® desktop environment and be able to follow instructions in English. Preferably, the installer has some familiarity with using a command prompt. Installing the Agent on the CNC is possible but not recommended.

What is required for purchase and installation?

Please see Data Sheets for installation requirements. For purchase, certain information about HMI and NCK/NCU is needed, as well as the CNC's Ethernet MAC address. For HMI Advanced CNCs, files from the CNC are needed to build an adapter that will work for your particular model.

What data is collected? Where is this data stored?

See Data Sheets for standard and optional data items. There is no data stored on the CNC; it is passed directly to the MTConnect® Agent and converted to MTConnect® format. From there, it goes to a separate client application which handles storage, presentation, and analysis of the data.

How will the data be sent? What is needed to receive the data?

Data will be sent through the Ethernet connection. The MTConnect® Agent must be able to connect to the CNC via Ethernet network. A fixed IP address must be assigned to each CNC.

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Is the data transmission triggered by events or is it cyclical?

The Adapter queries the CNC cyclically (typically at 1000 ms intervals) for the data it is configured to deliver. The Adapter then sends only those data items that have changed to the MTConnect® Agent. The Agent buffers the data and converts it to an MTConnect® format, and makes it available to an MTConnect® client application.

What sampling rates are possible?

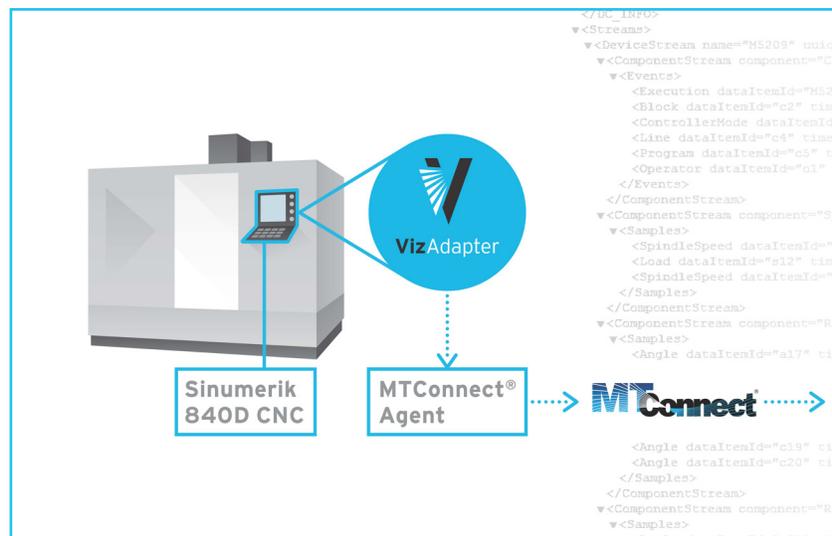
Typically, management level monitoring applications are happy at 1000 ms sampling intervals. TechSolve has successfully acquired data ~250 ms intervals for ~150 data items on HMI Advanced systems. Success at faster sampling rates is highly dependent on CNC software and hardware versions and other 3rd party applications. Please contact us for more information regarding special data acquisition at vizsupport@techsolve.org or +01 (513) 948-2030.

Do you provide software for the analysis of the data?

Client applications are a separate offering (and not under the Siemens Solution Partner scope). TechSolve provides two applications for visualization and analysis. Those applications are called ShopViz® and MiniViz®.

What kind of analysis is possible?

Types of analysis are dependent on the client application. Common forms include various graphs and charts on dashboards for real-time information as well as a variety of reports for historical knowledge and comparison. In some cases, data can be retrieved in .csv form for off-line user analysis.



About TechSolve

For over 30 years, TechSolve has been a consulting firm that has helped organizations of all sizes leverage process improvement, machining expertise, and innovation to enhance their competitive edge across ever-changing markets. We understand engineering and manufacturing, so we developed an array of machine monitoring software under the umbrella of VizProducts®. The custom-tailored machine-monitoring and data-gathering solutions TechSolve provides can help manufacturers eliminate extraneous costs, increase productivity, and maximize profits.

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