

# WebAccess / CNC

## CNC Machine Networking Solution



### Features

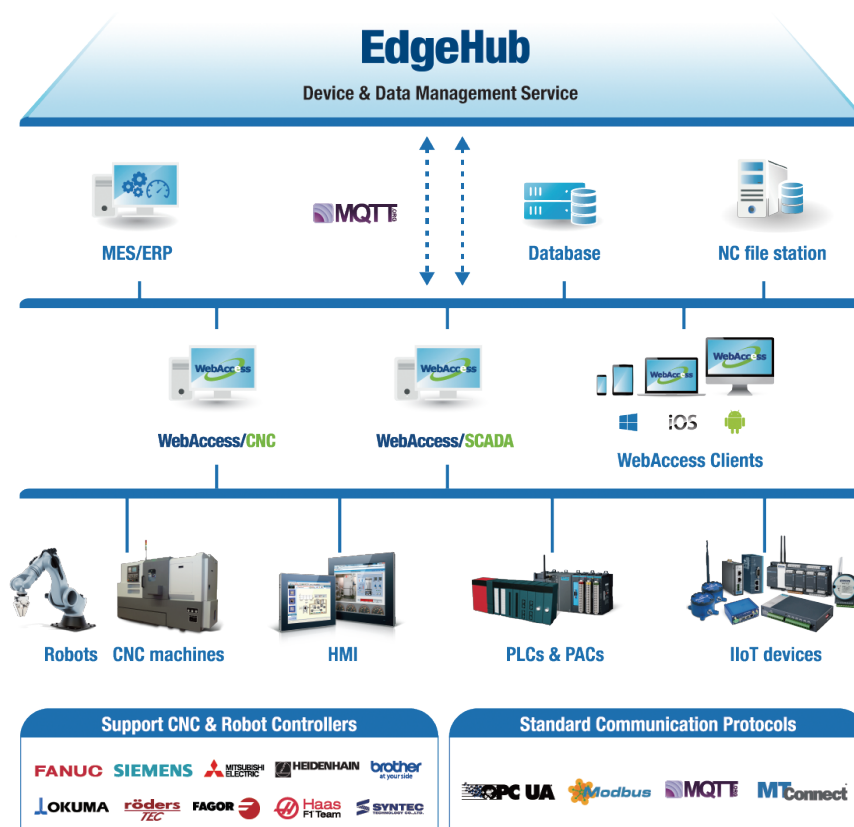
- Automatically generates CNC projects for WebAccess/SCADA software
- Supports CNC, robot and I/O device monitoring
- Supports most CNC communication protocol
- Provides CNC information and parameter monitoring
- Provides CNC status for utilization calculation and NC file transfer function
- Supports all features and full functions of WebAccess/SCADA software
- Supports UTE (utilization rate) and OEE (overall equipment effectiveness) by using WA-UTE/OEE option.

### Introduction

Advantech WebAccess/CNC is a core software solution for networking CNC and robot. Leveraging the 100% web-based architecture of the WebAccess/SCADA platform, WebAccess/CNC provides not only crucial CNC networking functions, but also the benefits of SCADA software for CNC machining. With the inclusion of I/O device monitoring capabilities, WebAccess/CNC enables CNC information management and status visualization.

Internet Explorer can be used to browse SCADA web pages and monitor/capture real-time CNC and production status data to improve efficiency and analyze device availability. Designed specifically for the machine tool market, WebAccess/CNC is integrated with numerous SCADA drivers and can support a wide range of CNC, I/O, and PLC devices to facilitate equipment data collection and industrial networking application development.

### Software Architecture



## Software Specification

WebAccess/CNC has two types of license key:

- Standard license (through CNC runtime)
- Economical license (using a CNC driver)

The standard license key supports four CNC types including FANUC, MITSUBISHI, SIEMENS and HEIDENHAIN. Standard licensed products are phased out by the end of 2024/Q2.

The economical license supports MTCconnect protocol, various CNC drivers as FANUC, MITSUBISHI, SIEMENS, HEIDENHAIN, brother, OKUMA, Haas, FAGOR, Roders, SYNTEC, LNC, HNC, KND and robot drivers as FANUC, KUKA.

### Supported CNC Controllers

#### Standard License (CNC runtime)

- FANUC** Oi-A/B/C/D/F, 16i, 18i, 21i, 31i, 32i (FOCAS library is required)
- MITSUBISHI** M700/M70, M800/M80 series
- HEIDENHAIN** iTNC530, TNC640 (DNC option is required)
- SIEMENS** 840Dsl & 828D (OPC UA license is required)

#### Economical License (CNC driver)

- FANUC (TCPIP)** Oi-A/B/C/D/F, 16i, 18i, 21i, 31i, 32i (FOCAS library is required)
- FANUC (RS232)** 15, 16/18/20/21, mate D/F/H, 16i/18i/21i, mate i, 15i, 0i, 30i/31i/32i (using DPRNT command)
- LNC** M/T 2800/2900/5800/6800/6900/7900
- brother** CNC-B00: TC-22B/31B/32BN/S2D/R2B/20B/S2DN  
CNC-C00: S300X1/S500X1/S700X1  
S100X1/S500Z1/S700Z1  
M140X1/M140X2  
R450X1/R650X1/R450Z1  
CNC-D00: W1000Xd1/S300Xd1/S500Xd1/S700Xd1/  
R450Xd1/R650Xd1/U500Xd1
- SYNTEC** Support controllers with software (V10.116.36 or later) and CloudAgent (SYNTEC OPC UA server) (V2.10.0 or later)
- Haas** RS232 & TCPIP connection (NGC)
- FAGOR** 806X & 807X series
- Roders** RMS6-ERP
- OKUMA** OSP-P200/P200A/P300 for Mill & Lathe type (OSP-API license is required)
- SIEMENS** 840Dsl, 840D, 810D & 828D (S7/TCP)  
840Dsl & 828D (OPC UA license is required)
- MITSUBISHI** M700/M70, M800/M80 series (FCSB1224W100 runtime library is required)
- HNC** HNC 8 series (HNC ServerWindow adapter is required)
- KND** KND CNC (using REST API)
- HEIDENHAIN** iTNC530, TNC640 (using LSV2)
- MTCconnect** Support MTCconnect protocol

### Supported Robot Controllers (CNC driver)

- FANUC ROBOT** LR Mate 200iD, M-10iA, M-20iA, M-710iC, R-2000iC, M-900iB, M-2000iA, M-410iC with controller R-J3iB 7D80/45 or later, R-J3iB 7D81/09 or later, R-J3iB 7D82/01 or later, R-J3iB Mate 7D91/01 or later, R-30iA/30iA Mate/30iB/R-30iB Plus All Versions (\*)

If R650 FRA Params is selected, R553 "HMI Device (SNPX)" is needed. If R651 FRL Params is selected, no option is needed.

- KUKA ROBOT** KUKA.DeviceConnector 2.1 (OPU UA protocol is required)

### Open Connectivity

- OPC DA/UA Server/Client** Yes
- Modbus Server** Yes
- BACnet Server** Yes
- DDE Server** Yes

### Open Interface

- Windows API** Yes
- RESTful API** Yes
- SignalR** Yes

### Web-enabled Integration

- Video** Yes
- Google Maps and GPS Location Tracking** Yes

### Report

- Web-Based Report** Yes
- Excel Report** Yes
- Send Email by PDF or Excel** Yes

### Others

- Database** SQL Server/Oracle/MySQL/PostgreSQL/Microsoft Access
- Script Language** TclScript/VBScript/JScript (can be encrypted)
- Supports IPv6** Yes
- WebAccess APP** Yes
- Electronic Signature** Yes, conforms to 21 CFR Part 11
- Scheduler** Yes
- Receipt** Yes

## Ordering Information

### Economical License Key (MTCconnect protocol and CNC drivers as FANUC, MITSUBISHI, SIEMENS, HEIDENHAIN, brother, OKUMA, Haas, FAGOR, Roders, SYNTEC, LNC, HNC, KND, and robot drivers as FANUC, KUKA )

- WA-BRO-U001E** WebAccess/CNC driver 1 CNC connection and WebAccess Professional 75 tags
- WA-BRO-U005E** WebAccess/CNC driver 5 CNC connections and WebAccess Professional 75 tags
- WA-BRO-U025E** WebAccess/CNC driver 25 CNC connections and WebAccess Professional 75 tags
- WA-BRO-U050E** WebAccess/CNC driver 50 CNC connections and WebAccess Professional 75 tags
- WA-BRO-X001E** WebAccess/CNC driver 1 CNC connection upgrade

\* Each computer is allowed to connect up to 100 CNC or robot controllers.

\* The connection tags of CNC runtime and driver are not counted in the license tags calculation

### Option Upgrade

- WA-UTE0EE** WebAccess UTE/OEE option upgrade
- 32WAMP000001A0** WISE-Marketplace rebindable license 150-tag base
- 32WAMP020001A0** WISE-Marketplace rebindable license unlimited tags

## Minimum Requirement

### SCADA Software

- Advantech WebAccess V8.4.4 Professional or later

### Project Node\SCADA Node

- Operating System** Windows 7 SP1 Professional  
Windows 8.1 Professional  
Windows Server 2008R2 or later  
Windows 10 (not support Home or Home Premium)  
.NET Framework 3.5 for WebAccess/CNC runtime  
.NET Framework 4.5 or later version  
IIS 7.5
- Hardware** Recommended: Intel® Core™ i3 with 4 GB RAM and 200 GB disk space
- USB** USB port for license hardkey on SCADA node
- Browser Resolution** 1280 x 720 to 1920 x 1080
- Browser Support** IE Explorer 11 or later

### Dashboard Viewer

- Hardware** **PC:** Intel® Core™ i3 with 4 GB RAM  
**iPhone:** iPhone 5  
**Android:** 1.5 GHz quad-core with 2 GB RAM  
**Windows Phone:** 1.5 GHz quad-core with 2 GB RAM
- Browser** **Internet Explorer:** IE 11  
**Chrome:** Version 37  
**Firefox:** Version 31  
**Safari:** Version 7

### WebAccess APP

- Platform Environment** iOS 9 and Android 4.4