WebAccess/CNC

CNC Machine Networking Solution



Features

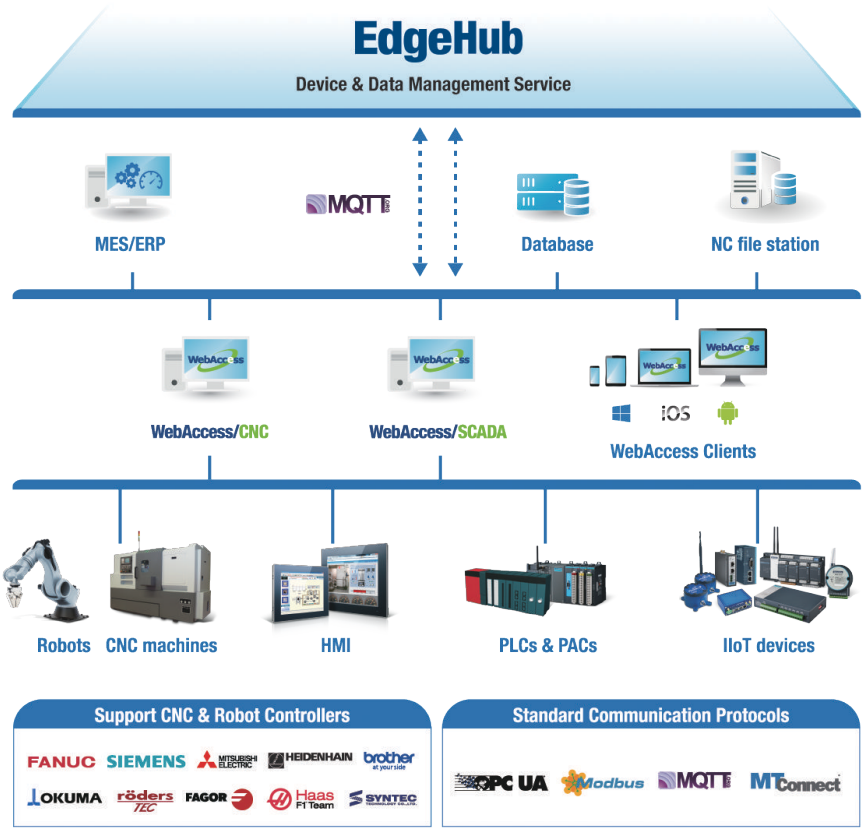
- Automatically generates CNC projects for WebAccess/SCADA software
- Supports CNC, robot and I/O device monitoring
- Supports most CNC communication protocol
- Provides CNC information and parameter monitoring
- Provides CNC status for utilization calucation and NC file transfer function
- Supports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



All product specifications are subject to change without notice.

Last updated: 18-Mar-2025

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 MTConncet 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	0i-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)	0i-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 S1000X1/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)
MTConnect	Support MTConnect 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 (MTConnect protocol and CNC drivers as FANUC, MITSUBISHI, SIEMENS, HEIDENHAIN, brother, OKUMA, Haas, FAGOR, Roders, SYNETEC, 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-UTEOEE	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
Brower 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