

WebAccess / CNC

CNC Machine Networking Solution



Features

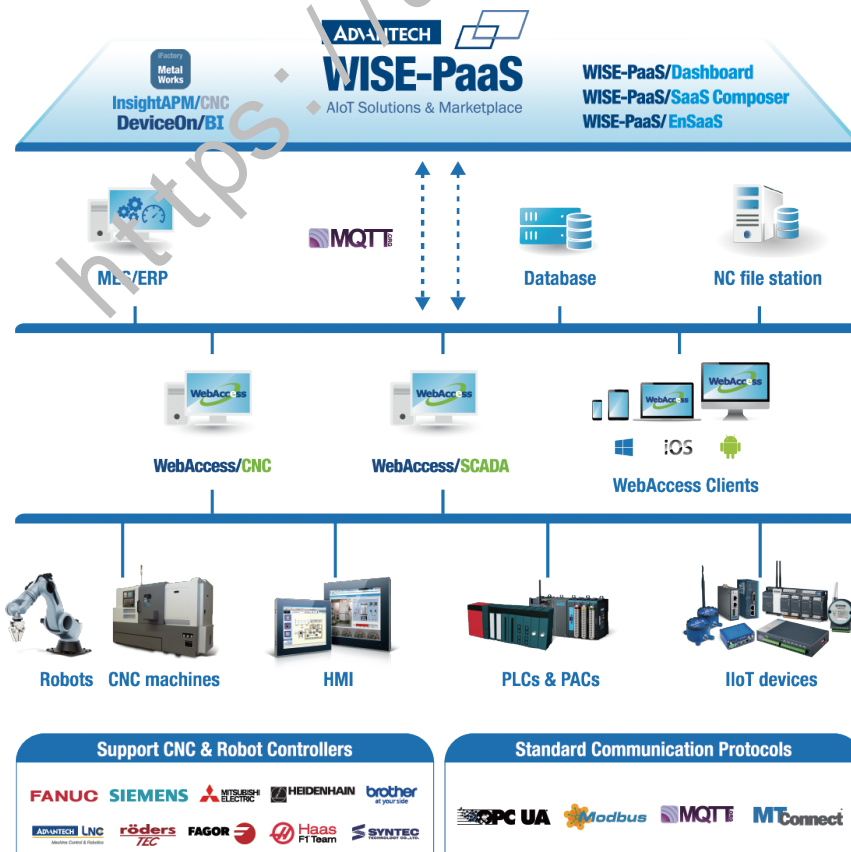
- Automatically generates CNC projects for WebAccess/SCADA software
- Supports CNC, robot and I/O device monitoring
- Supports most CNC communication protocol
- Provides CNC information and parameter monitoring
- Provides CNC status for utilization calculation and NC file transfer function
- Supports 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.

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, Oi, 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
- 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, R-30iB controller R-J3iB 7D80/45 or later, R-J3iB 7D81/05 or later, R-J3iB 7D82/01 or later, R-J3iB 7D91/01 or later, R-30iA/30iA Mate/30iB/R-30iB Plus All Versions (*)

If R650 FRA Params is selected, R553 "HM" (vice "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

Standard License Key (CNC runtime for FANUC, MITSUBISHI, HEIDENHAIN and SIEMENS)

- WA-CNC-U001E** WebAccess/CNC runtime 1 CNC connection and WebAccess Professional 75 tags
- WA-CNC-U005E** WebAccess/CNC runtime 5 CNC connections and WebAccess Professional 75 tags
- WA-CNC-U010E** WebAccess/CNC runtime 10 CNC connections and WebAccess Professional 75 tags
- WA-CNC-X005E** WebAccess/CNC runtime 5 CNC connections upgrade

* Each computer is allowed to connect up to 10 CNC controllers.

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-U.50E** WebAccess/CNC driver 50 CNC connections and WebAccess Professional 75 tags
- WA-BRO-X001E** WebAccess/CNC driver 1 CNC connection upgrade
- WA-BRO-X005E** WebAccess/CNC driver 5 CNC connections upgrade
- WA-BRO-X025E** WebAccess/CNC driver 25 CNC connections 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

I/O Tag Upgrades

- WA-X84-P075E** 75 tags upgrade
- WA-X84-P300E** 300 tags upgrade
- WA-X84-P600E** 600 tags upgrade
- WA-X84-P15HE** 1,500 tags upgrade
- WA-X84-P50HE** 5,000 tags upgrade

Option Upgrade

- WA-UTE0EE** WebAccess UTE/OEE option upgrade

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
Internet Explorer: IE 11
Chrome: Version 37
Firefox: Version 31
Safari: Version 7
- Browser**

WebAccess APP

- Platform Environment** iOS 9 and Android 4.4