WebAccess/CNC

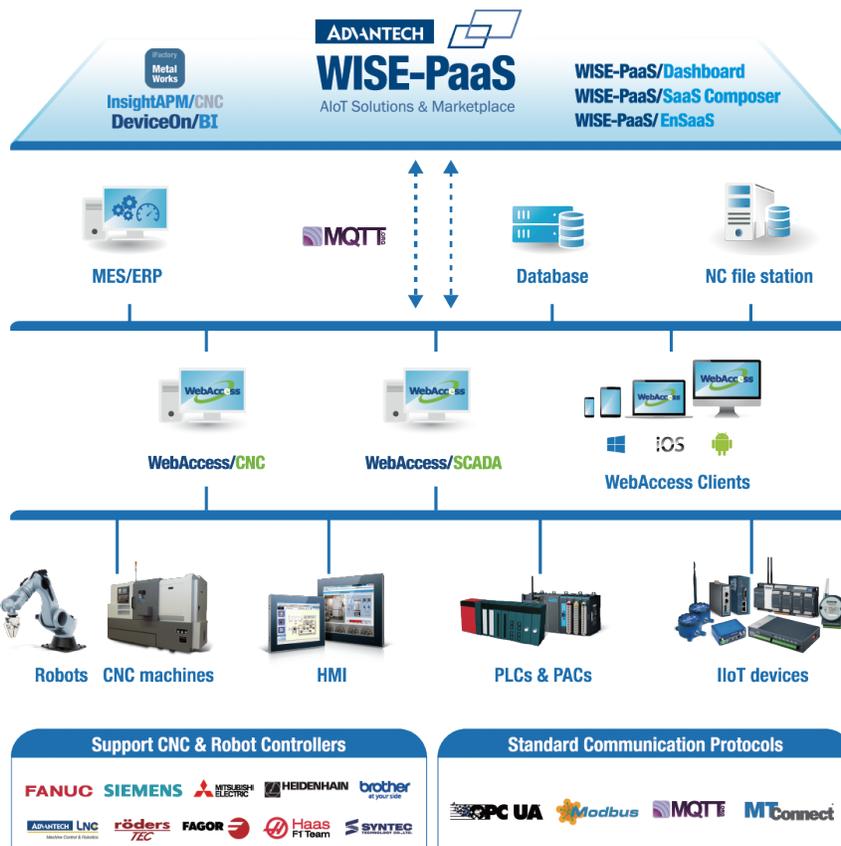## CNC Machine Networking Solution

WebAccess/CNC

Features

- Automatically generates CNC projects for WebAccess/SCADA software
- Supports CNC, robot and I/O device monitoring
- Supports leading CNC network controllers
- Provides CNC machining status and PLC register monitoring
- Provides CNC availability queries and NC file transfer function
- Provides historical CNC alarm and operation queries
- Supports all features and full functions of WebAccess/SCADA software

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 various CNC types (FANUC, MITSUBISHI,SIEMENS and HEIDENHAIN). The economical license supports drivers as LNC Recon library, BROTHER, SYNTEC (OPC UA), HAAS, FANUC focas library, FANUC robot interface, OKUMA OSP-API, SIEMENS S7/TCP, MITSUBISHI EZSocket & KUKA OPC UA.

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
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)
MITSUBISHI	M700/M70, M800/M80 series (FCSB1224W100 runtime library is required)
HNC	HNC 8 series (HNC ServerWindow adapter is required)

Supported Robot Controllers

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

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

WA-CNC-U001E	75 I/O tags, 1 CNC connection for CNC runtime
WA-CNC-U005E	75 I/O tags, 5 CNC connection for CNC runtime
WA-CNC-U010E	75 I/O tags, 10 CNC connection for CNC runtime
WA-CNC-X005E	No I/O tags, 5 CNC connection (upgrade) for CNC runtime

*	Each computer is allowed to connect up to 10 CNC controllers.*
*	Users need to obtain connection authorization from HEIDENHAIN (DNC option) & SIEMENS (OPC UA license).*

Economical License Key (CNC driver for FANUC, BROTHER, LNC, SYNETEC, HAAS, FAGOR, RODERS, OKUMA, SIEMENS, MITSUBISHI and robot driver for FANUC & KUKA)

WA-BRO-U001E	75 I/O tags, 1 CNC or robot connection for CNC driver
WA-BRO-U005E	75 I/O tags, 5 CNC or robot connection for CNC driver
WA-BRO-U025E	75 I/O tags, 25 CNC or robot connection for CNC driver
WA-BRO-U050E	75 I/O tags, 50 CNC or robot connection for CNC driver
WA-BRO-X001E	No I/O tags, 1 CNC or robot connection (upgrade) for CNC driver
WA-BRO-X005E	No I/O tags, 5 CNC or robot connection (upgrade) for CNC driver
WA-BRO-X025E	No I/O tags, 25 CNC or robot connection (upgrade) for CNC driver

*	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-UTEOEE	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
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