WebAccess/CNC

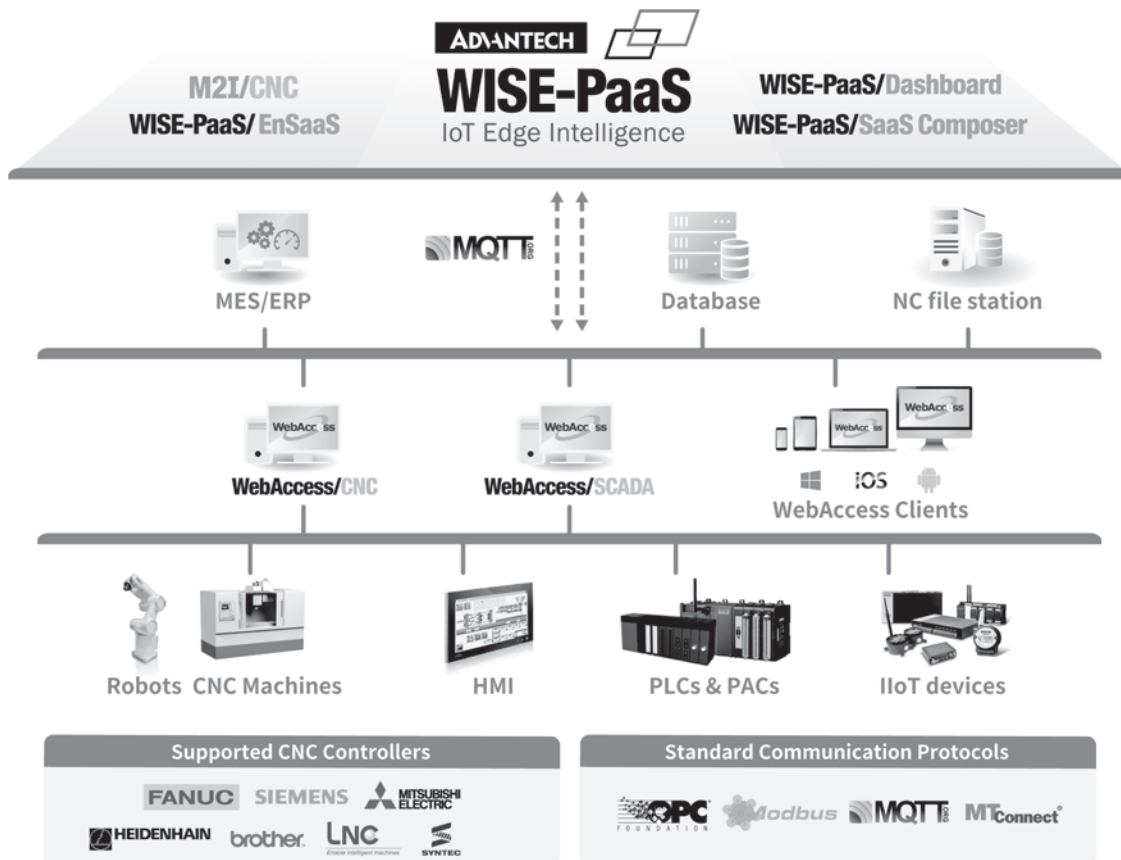## CNC Machine Networking Solution

Features

- Automatically generates CNC projects for WebAccess/SCADA software
- Supports CNC machine 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 machines. 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

Supported CNC Controllers
- **FANUC** — 0i-A/B/C/D/F, 16i, 18i, 21i, 31i, 32i (FOCAS library requirement)
- **MITSUBISHI** — M700/M70, M800/M80 series
- **HEIDENHAIN** — iTNC530, iTNC640 (DNC option requirement) (The number of connections to Heidenhaim is limited to 16 for each WebAccess/CNC runtime instance)
- **SIEMENS** — 840D, 828D (OPC/UA license requirement)
- **LNC (free)** — 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

WebAccess/CNC has two main connection methods:
- through CNC runtime
- using a CNC driver

WebAccess/CNC runtime supports various CNC types (e.g., FANUC, MITSUBISHI, SIEMENS, and HEIDENHAIN) and web functions. WebAccess/CNC supports drivers as LNC Recon library, BROTHER, and FANUC FOCAS library.

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/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

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-U020E** — 75 I/O tags, 20 CNC connection for CNC runtime
- **WA-CNC-X005E** — No I/O tags, 5 CNC connection (upgrade) for CNC runtime
- **WA-CNC-X010E** — No I/O tags, 10 CNC connection (upgrade) for CNC runtime

CNC driver for LNC (free), BROTHER and FANUC
- **WA-BRO-U001E** — 75 I/O tags, 1 CNC connection for CNC driver
- **WA-BRO-U005E** — 75 I/O tags, 5 CNC connection for CNC driver
- **WA-BRO-U025E** — 75 I/O tags, 25 CNC connection for CNC driver
- **WA-BRO-U050E** — 75 I/O tags, 50 CNC connection for CNC driver
- **WA-BRO-X001E** — No I/O tags, 1 CNC connection (upgrade) for CNC driver
- **WA-BRO-X005E** — No I/O tags, 5 CNC connection (upgrade) for CNC driver
- **WA-BRO-X025E** — No I/O tags, 25 CNC connection (upgrade) for CNC driver

(The connection tags of CNC runtime and driver are not included in the tags calculation)

I/O Tag Upgrades
- **WA-X83-U075E** — 75 tags (upgrade)
- **WA-X83-U300E** — 300 tags (upgrade)
- **WA-X83-U600E** — 600 tags (upgrade)
- **WA-X83-U15HE** — 1,500 tags (upgrade)
- **WA-X83-U50HE** — 5,000 tags (upgrade)

Minimum Requirement

SCADA Software
- Advantech WebAccess V8.3.3 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 Atom® or Celeron® Dual-Core processor
  4 GB RAM
  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 Explore 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