WebAccess/CNC

CNC Machine Networking Solution



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 gueries
- 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



WebAccess/CNC

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.

Supported CNC Controllers

Standard License (CNC runtime)

0i-A/B/C/D/F, 16i, 18i, 21i, 31i, 32i (FOCAS library is required)

M700/M70, M800/M80 series MITSUBISHI

iTNC530, iTNC640 (DNC option is required) 840Dsl & 828D (OPC UA license is required) HEIDENHAIN SIEMENS

Economical License (CNC driver)

FANUC 0i-A/B/C/D/F, 16i, 18i, 21i, 31i, 32i (FOCAS library is

required)

M/T 2800/2900/5800/6800/6900/7900 LNC

CNC-B00: TC-22B/31B/32BN/S2D/R2B/20B/S2DN CNC-C00: S300X1/S500X1/S700X1 BROTHER

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)

RS232 &TCPIP connection (NGC) HAAS

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)

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.

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	Yes
	Location Tracking	

Report

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

Others

SQL Server/Oracle/MySQL/PostgreSQL/ Database

Microsoft Access **Script Language** TclScript/VBScript/JScript (can be encrypted)

Yes Supports IPv6 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-X001E No I/O tags, 1 CNC connection (upgrade) for CNC

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

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

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 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

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

CNC driver

I/O Tag Upgrades

WA-CNC-X005E

(OPC LIA license)

e)
e)

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

Recommended: Intel® Core™ i3 with 4 GB RAM and Hardware

200 GB disk space

USB port for license hardkey on SCADA node

1280 x 720 to 1920 x 1080 **Brower Resolution** Browser Support IE Explorer 11 or later

Dashboard Viewer

PC: Intel® Core™ i3 with 4 GB RAM Hardware

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

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