WebAccess/CNC
CNC Machine Networking Solution

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

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

All product specifications are subject to change without notice. Last updated: 2-Jul-2021
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, SYNETEC (OPC UA), HAAS, FANUC tocas library, FANUC robot interface, OKUMA OSP-API, SIEMENS S7/TCP, MITSUBISHI E2Socket & KUKA OPC UA.

Supported CNC Controllers

Standard License (CNC runtime)
- FANUC 0i-A/B/C/DiF, 16i, 18i, 21i, 31i, 32i (FOCAS library is required)
- MITSUBISHI M700/M70, M800/M80 series
- SIEMENS ITNC530, TNC640 (ONC option is required)
- HEIDENHAIN 840D/P & 828D (OPC UA license is required)

Economical License (CNC driver)
- FANUC 0i-A/B/C/DiF, 16i, 18i, 21i, 31i, 32i (FOCAS library is required)
- LNC MT 2800/2900/5800/6800/6900/7900
- BROTHER CNC-B00: TC-22B/31B/32BN/R2B/20B/SZDN
  CNC-C00: S300X1/S500X1/S700X1
  S100X1/S300Z1/S700Z1
  M140X1/M140X2
  R405X1/R650X1/R850X1
- SYNETEC Support controllers with software (V10.116.36 and later) and CloudAgent (SYNETEC OPC UA server)
- HAAS RS232 & TCP/PPP connection (NGC)
- FAGOR 80IX & 80TX series
- RODERS RMSE-ERP
- OKUMA OSP-P200/P300 for Mill & Lathe type (OSP-API license is required)
- SIEMENS 840D/P, 408D, 810D & 828D (S7/TCP)
- MITSUBISHI M700/M70, M800/M80 series

Supported Robot Controllers

- FANUC ROBOT LR Mate 200iD, M-10iA, M-20iA, M-710iC, R-2000iC, M-900iB, M-200iA, M-410iC with controller R-J3iB
  TDB0/45 or later, R-J3iB TDB1/60 or later, R-J3iB TDB2/01 or later, R-J3iB TDB4/01
  M-30A/20A
  M-30B/R-30iB Plus All Versions (*)

If R650 FRA Params is selected, R653 “HMI Device (SNP)” is needed. If R651 HRI. Params is selected, no option is needed.

- KUKA ROBOT KUKA.DeviceConnector 2.1 (OPU UA protocol is required)

Open Connectivity

- OPC UA/DA/Server/Clients
  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/SQLite
- 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 (ONC 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-X005E No I/O tags, 1 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

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 2008 R2 or later
  Windows 10 (not support Home or Home Premium)

- .NET Framework 3.5 for WebAccess/CNC runtime
  .NET Framework 4.0 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
  16 GB x 720 to 1020 x 1080

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

WebAccess APP
- Platform Environment iOS 9 and Android 4.4

Online Download www.advantech.com/products