

User Manual

Advantech WebAccess/CNC

CNC Machine Monitoring Solution



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Advantech WebAccess/CNC

1.1 Advantech WebAccess/CNC

Advantech WebAccess/CNC is the core solution for network CNC devices. WIth its 100% web-based WebAccess/SCADA software structure, WebAccess/CNC provides major CNC networking functions in addition to bringing the advantages of SCADA software to the CNC market. By being able to also monitor I/O devices, WebAccess/CNC brings to you the benefits of CNC information management and status visualization. It allows you to browse SCADA web pages via Internet Explorer (IE) so that you can monitor and capture real-time CNC data and production status information. Your operational efficiency can thus be improved by analyzing device availability.

Advantech WebAccess/CNC is a CNC networking software application designed specifically for the machine tool market. Through the integration of many SCADA drivers, WebAccess/CNC supports most CNC, I/O, and PLC devices for data acquisition from factory equipment and gives you the tools you need to develop industrial networking applications.

1.2 Functions and Features

1.2.1 Functions

- CNC Overview: Provides real-time information on connection status, operation mode, CNC status, alarm status, and availability
- CNC Information: Provides machine coordination information, operation information, G code, and spindle information
- Availability: Provides details of CNC availability to assist with handling production efficiency optimization
- CNC Alarm: Provides historical alarms from CNC records; these can be used as an important reference for machine maintenance
- NC Program Management: Provides a function for uploading/downloading NC files as well as an editing interface for programming NC files
- Set Parameters: Provides a configuration interface for modifying coordinate compensation and tool compensation parameters
- Servo Spin: Provides real-time monitoring of spindle loading for the analysis of wear or damage to tools
- Maintenance: Provides a configuration interface with basic preventive maintenance functions and manufacturer contact information
- PLC Parameters: Provides an instant query interface to obtain PLC register values which facilitates defining the I/O status requirements of CNC controllers.

Note!



WebAccess/CNC for Advantech LNC only supports CNC register read/ write. Currently, it does not include a web interface for these nine functions.

1.2.2 Features

- Supports major CNC and I/O monitoring device functions
- Supports various protocols for connecting common industrial devices and PLCs
- 100% web-based SCADA software including an HTML5 dashboard with crossplatform compatibility
- Provides the full functionality of WebAccess Professional
- Upgradable to increase the number of available CNC connections

1.2.3 Specification

Support CNC Controllers List

- FANUC: 0i-A/B/C/D/F, 16i, 18i, 21i, 31i, 32i (FOCAS library requirement)
- MITSUBISHI: M700/M70, M800/M80 series (Please install MITSUBISHI communication middleware EZSocket in advance. Contact your agent or a Mitsubishi Electric representative to purchase a software license.)
- HEIDENHAIN: iTNC530 (DNC optional requirement) (The maximum number of connections for HEIDENHAIN is limited to 16 for each instance of WebAccess/CNC runtime)
- SIEMENS: 840D, 828D (OPC/UA license requirement)
- Advantech LNC: M/T 2800/2900/5800/6800/6900/7900

Multi-languages

EN/TC/SC/JP

SCADA Software

Advantech WebAccess V8.2 Professional or later

Project Node\SCADA Node

- Operating System:
 - Windows 7 Professional SP1
 - Windows 8.1 Professional
 - Windows Server 2008 R2 or later
 - Microsoft .NET Framework 3.5 for WebAccess/CNC runtime
 - Microsoft .NET Framework 4.5 or later
 - IIS 7.5
- Minimum Hardware Requirements:
 - Intel Atom® or Celeron® Dual-Core processor
 - 4GB RAM
 - 200 GB free disk space
- USB Port:
 - USB port for License Hardkey on SCADA node
- Browser Resolution:
 - Designed for 1280*720 resolution to 1920*1080 resolution
- Browser support:
 - IE 11 or later for full support
 - For dashboard support only, use Chrome (Version 37 or later), Firefox (Version 31 or later), or Safari (Version 7 or later)

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Getting Started

2.1 WebAccess/CNC Installation

Before you install WebAccess/CNC, you will need to install (1) WebAccess/SCADA V8.2 Professional (or later) and (2) IE 11 or later. The following screenshots will guide you step-by-step through the process of installing WebAccess/CNC:



1. Run setup to open the WebAccess/CNC Setup Wizard



2. Select which items you wish to install



3. Click [Next] to confirm the installation

B WebAccessCNC				
Installing WebAc	cessCNC			
WebAccessCNC is being ins	talled.			
Please wait				
		Cancel	< Back	Next >

4. Wait for the installation process to complete



5. Press [Close] to complete the installation

After the installation has been completed, a log file will be available at the following address: C:\WebAccess\Node\WebAccessCNC\install.log

2.2 CNC Device Settings and CNC Runtime

The **CNC Device Settings** screen in WebAccess/CNC is for configuring the CNC network settings. From this screen, you can add, delete, and modify CNC device settings and also start WebAccess/CNC runtime.

Open **CNC Device Settings** from the start menu (default: Start \rightarrow All Programs \rightarrow WebAccess CNC \rightarrow CNC Device Setting). The launch screen will appear as it is shown in Figure 2.1.

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Conn	ect Name	CNC Type	CNC IP	CNC Port	CNC Controller
	CNC1	FANUC	59.120.227.238	18193	0i/16i/18i/21i/30i/31i/32
	CNC2	FANUC	124.9.8.233	8193	0i/16i/18i/21i/30i/31i/32
	CNC3	HEIDENHAIN	127.0.0.1	19000	iTNC530
5	C1	FANUC	192.168.1.12	8193	0i/16i/18i/21i/30i/31i/32
5	Z C2	FANUC	192.168.1.13	8193	0i/16i/18i/21i/30i/31i/32
5	Z C3	FANUC	192.168.1.14	8193	0i/16i/18i/21i/30i/31i/32
5	Z C4	FANUC	192.168.1.15	8193	0i/16i/18i/21i/30i/31i/32
5	Z C5	FANUC	192.168.1.16	8193	0i/16i/18i/21i/30i/31i/32
	C6	MITSUBISHI	192.168.12.18	683	CNC 70/700 Series
			1021681215	4840	8280

Figure 2.1 Device Settings

Click on **[Add Device]** to open the **Add Device** screen (Figure 2.2) or **[Modify Device]** to open the **Modify Device** screen (Figure 2.3). Click **[Delete Device]** to delete a device. From the **Add Device** screen, you can set the CNC name, CNC type, controller type, CNC IP, CNC port, and data server settings.

	×
DeviceSetting -	-> Add
Name:	C8
CNC Type:	FANUC -
Controller:	0i/16i/18i/21i/30i/31i/32i 🔻
CNC IP:	192.168.12.20
CNC Port:	8193
Data Server	
No Data S	Server 💿 Data Server
Account:	User
Password:	test
	Save Cancel

Figure 2.2 Add Device

DeviceSetting -	> Modify
Name:	CNC3
CNC Type:	HEIDENHAIN
Controller:	iTNC530
CNC IP:	127.0.0.1
CNC Port:	19000
Data Server	
No Data	Server 💿 Data Server
	Save Cancel

Figure 2.3 Modify Device

There are two methods for starting CNC Runtime:

- 1. Click **[Start Runtime]** on the **CNC Device Settings** screen. This will enable the CNC runtime connection between the selected CNC devices.
- 2. From the start menu: Start \rightarrow All Programs \rightarrow WebAccess CNC \rightarrow Start CNC Runtime



Figure 2.4 WebAccess CNC Runtime

Note!

You can right-click on the WebAccess CNC Runtime icon in the notification area to exit the runtime service.



Advantech LNC controllers provide an auto detect function so that you do not need to configure the CNC device settings. This function requires that your PC be on the same network segment as the LNC controller.

The CNC types "MITSUBISHI" and "MITSUBISHI_EZ" are effective for when you wish to install the Mitsubishi communication middleware "EZSocket" and need to obtain the installation license simultaneously. To get the Mitsubishi FCSB1224 software license, please see a Mitsubishi agent.

-	
DeviceSetting -	-> Add
Name:	M700-1
CNC Type:	MITSUBISHI
Controller:	CNC 70/700 Series -
CNC IP:	10.0.70
CNC Port:	683
Data Server	
No Data S	Server 💿 Data Server
	Save Cancel

Figure 2.5 Mitsubishi_EZ Configuration

2.3 WebAccess/CNC Explorer

WebAccess/CNC Explorer gives you access to five main screens: **Project Selection**, **PMC Search List**, **LNC Search List**, **Start Searching**, and **Device List**. It provides a configuration interface displaying the supported CNC connection parameters. You can also use this tool to automatically generate WebAccess/CNC projects.

You can start WebAccess/CNC Explorer from the start menu (default: Start \rightarrow All Programs \rightarrow WebAccessCNC \rightarrow Explorer). The opening screen will appear as shown in Figure 2.6.

🕞 🕒 🖉 http://localhost/WebAccessCNC/Explorer/Index 🖉 + C 🦉 We	bAccessCNC Explorer	×	1.04	2	- • • ×
WebAccess					î
PROJECT SELECTION	2 PMC SEARCH LIST	3 LNC SEARCH LIST	A START SEARCHING	5 DEVICE LIST	
	Pro Project Na	ject Select me	ion		
	Node Nam	ne			
		Next >			

Figure 2.6 WebAccess/CNC Explorer

- Project Selection: This screen allows you to set the WebAccess project name and node name.
- PMC Search List: This screen allows you to enter the IP address and port number of WebAccess/CNC Runtime. The default port number is 9701. Note that "pmc" is the default for both the connection name and the password.
- LNC Search List: This screen allows you to add an LNC controller by automatically searching for an Advantech LNC controller in the same network segment, or by manually setting the IP address of the LNC controller.
- Start Searching: This screen allows you to search for a CNC device from the PMC and LNC settings.
- Device List: After connected CNC devices have been detected, you can submit the selected CNC devices to automatically generate a WebAccess project.



WebAccess/CNC Functions The WebAccess/CNC project provides nine main CNC tool functions:

- Overview
- Information
- CNC Alarm
- Program
- Servo Spin
- Set Parameters
- Maintain
- Tools
- PLC Parameters

Note!

The nine CNC functions of the web pages are designed for the common functions of Fanuc, Mitsubishi, Heidenhain and Siemens CNC. The functions are not all suitable for the each CNC types.

3.1 CNC Web Functions

3.1.1 The Overview Screen

As shown in Figure 3.1, there are four CNC conditions indicated by the lamp status:

- Green: Busy
- Yellow: Idle
- Red: Alarm
- Grey: Disconnect

The other fields are defined as

- Device Name: The CNC device name
- Main Prog: Main program
- Cur Prog: Currently executed program
- Cur Seq: Sequence of the currently executed program
- Mode: MEM/MDI/JOG/MPG(RPF)/single step/other
- Status: Start/hold
- Alarm: Normal/alarm
- EMG: Normal/EMG
- P count: Part count
- Avail. (Today): Availability rate for the current day

102001	1									
127.0.0.1	Device Name	Main Prog	Cur Prog	Cur Seq	Mode	Status	Alarm	EMG	P Cnt	Avail (Today
	CNC1	022	022	0	MEM	OTHERS	NORMAL	NORMAL	0	0
۲	CNC6	0777	04	0	RMT	START	NORMAL	NORMAL	14821	0.6
۲	CNC4	0777	O628	0	RMT	START	NORMAL	NORMAL	21395	0.76
۲	CNC2	(38000	08000	9	MEM	START	NORMAL	NORMAL	8495	0.99
۲	CNC5	0777	01	0	RMT	START	NORMAL	NORMAL	8236	0.92
	CNC3	0777	0777	0	RMI	OTHERS	NORMAL	NORMAL	15945	0.8

Figure 3.1 Overview screen

3.1.2 The Information Screen

Data monitoring allows you to monitor data from connected CNC devices in real time, including CNC status, coordinates, G-code, non-G-code, part count, CNC operating time, actual feed rate, and actual speed.

Information	CNC2	Main I	Prog 10	Cur Prog O8000	Cur	Seq	Mode MEM	Status START	Alarm NORMAL	EMG NORMAL	P Cn 8495
Absolute Machine I X: -298.0820(mm) I Y: 35.4120(mm) I Z: -136.4610(mm) I	Relative Distance										
Total P Count: 8546 Req. P Count: 0 P Cnt: 8495	Pr C C O	ower On Time: 16001 uttling Time: 10384 ycle Time: 3 peration Time: 8254	H 47 M H 8 M H 7 M H 9 M	0 S 51 S 59 S 32 S			F%: 10 S%: 10 Act. F Act. S	0.00 0.00 eed Rate: peed: 200	1000.00 0.00 (RP	(mm/min) M)	
H Code: 0 D Code: 0 M Code: 3	S Code: 2000 T Code: 1 F Code: 1000	G Code: € 1/3 ►	G01 G21 G50 G69 G13 1	G17 G40 G67 G15	G91 G49 G97 G40.1	G22 G80 G54 G25	G94 G98 G64 G160	2			

Figure 3.2 Information screen

3.1.3 The Availability Screen:

The query tool provides details of CNC availability inquiries to assist you with handling production efficiency optimization.

Availa	bility CNC2	Main P	rog Cur 0 08	Prog	Cur Seq	Mode MEM	Status START	Alarm NORMAL	EMG NORMAL	P Cnt 8495
Query Start End 1	Time: 2017-08-25 10:43:22 ime: 2017-08-29 10:44:22 Submit	Idle Total T Alarm Tota Busy Total Off Total T Availability	lime: al Time: Time: Ime: /:	2 H 0 H 9 H 76 H 78.21 %	32 M 0 M 6 M 14 M	17 S O S 30 S 53 S				Idle Alorm Busy
Status	✓ Start Time	End Time	Total Time (hr)	,	Cnt		Nc Name	,	Marm	
OFF	2017/08/25 17:32:45	2017/08/25 23:59:59	6.4538	()					
OFF	2017/08/26 00:00:00	2017/08/26 23:59:59	23,9997	0)					
OFF	2017/08/27 00:00:00	2017/08/27 23:59:59	23.9997	0)					
OFF	2017/08/28 00:00:00	2017/08/28 07:35:48	7.5968	()					
	2017/08/28 16:09:08	2017/08/28 16:10:18	0.0194	()					
OFF	0017/08/08 17:04:07	2017/08/28 23:59:59	6.5895	0	i .					
OFF	2017/08/28 17:24:36									

Figure 3.3 Availability screen

3.1.4 The CNC Alarm Screen

This screen provides information on historical alarms and CNC operation records.

CNC Alarm	CNC2	Main Prog O8000	Cur Prog O8000	Cur Seq	Mode	Status START	Alarm NORMAL	EMG NORMAL	P Cr 8493
Alarm Operation									
Export CSV file								10 -	III -
No.	Alarm Class	DateTime	Y Alarm						
1027	18	2017/08/21 07:06:41	2qs0qg						
5010	7	2017/08/10 15:40:19	END OF RE	ECORD					
1968	7	2017/08/10 11:20:16	FILE (MEM	ORY CARD)2qs0	99				
1968	7	2017/08/10 11:17:32	FILE (MEM	ORY CARD)2qs0	g				
1029	18	2017/08/07 16:36:49	ILE (MEMC	ORY CARD)2qs0q	g				
1961	7	2017/08/07 15:54:47	\$ (MEMOR	RY CARD)RD)2qs	Dqg				
60	3	2017/08/04 13:31:47	SEQUENCI	E NUMBER NOT F	OUND				
60	3	2017/08/04 13:30:40	SEQUENCI	E NUMBER NOT F	OUND				
501	4	2017/08/02 14:51:45	- OVERTRA	VEL (SOFT 1)					
501	4	2017/08/02 14:51:33	- OVERTRA	VEL (SOFT 1)					

Figure 3.4 Alarm screen

You can export alarm and operation in CSV format. Note that the file will be created in the current project folder (e.g., C:\WebAccess\Node*Project Name_Node Name\log\Device Name*).

3.1.5 The Program Screen

This screen provides a function for uploading/downloading NC files and an editing interface for programming NC files.

Program	CNC2	Main Prog Ci8000	Cur Prog	Cur Seq	Mode MEM	Status START	Alarm NORMAL	EMG NORMAL	P Cn 8495
Local Memory Data Ser	ver								
File Name	File Size (Byte)	Last Write	Time	Remark					
O9001	500						9.8.9		
09028	500			M131A-B			9 8 9		
09029	1500						9 8 9		
00777	1000						Q 8 0		
0008C	500						9.8.0		
03007	21500			30070-0-	HTO		Q 8 0		
03092	1000						9.8.9		
03061	8000			30061-A-	HDR-70		9 8 Ø		
00971	11000			159-7A			9.8.0		
00972	1500			159-7B			9.8.0		
a < 1 2 > n							Showing	1 to 10 of 20 e	intries

Figure 3.5 Program screen

You can download NC files from memory or a data server to a local folder under your project (e.g., C:\WebAccess\Node*Project Name_Node Name\pgm\Device Name*).

The path of the memory folder can be set by the driver tag "MNcPath." The default value of this tag is an empty string. Some examples of "MNcPath" are listed as follows:

FANUC: //CNC_MEM/USER/PATH1/ SIEMENS: /nckfs/_N_MPF_DIR

3.1.6 The Servo Spin Screen

This screen provides real-time monitoring information on spindle loading, which allows you to analyze tool wear/damage.

Serv	vo Spin	1)	CNC2	Main F	Prog 10	Cur Prog	Cur Seq	Mode MEM	Status START	Alarm NORMAL	EMG NORMAL	P Cn1 8495
Cmd Spin	idle Speed:	2000 (RPM)	Cmd Fee	ed Rate:	1000		X100 G4X0	0. Z200.			
Act. Spin	dle Speed:	2000.00 (RPM)	Act. Fee	ed Rate:	1000		M99 %				
Sp	indle Load:	0.00 7		Temp. of S	pindle1:	32						
Max Sp	indle Load:	0 7	ē.	Temp. of S	spindle2:	0						
Server	Act. Speed	Temp.	Load%	Max Load%	~			~				
Spindle	2000.00	32.00 / 0.00	0.00	0		7						
x	0	24.00	4.00	4.00								
Y	0	28.00	5.00	5.00								
	0	45.00	50.00	50.00								

Figure 3.6 Servo Spin screen

3.1.7 The Set Parameters Screen

This screen provides tool offset, work coordinates, and macro variable read/write functions.

Set Par	ameters	CNC2	Main Prog	Cur Prog O6000	Cur Seq	Mode MEM	Status START	Alarm NORMAL	EMG NORMAL	P Cn 8495
Tool Offset	Work Coordinates	Macro								
Export CSV file										
NO.		LENGTH GEOM	LENGTH W	EAR	RADIUS	GEOM		RADIUS WEA	A.R.	
1		-438.037	0		0			0		
2		-402.178	0		0			0		
3		-446.685	0.		0			0		
4		-447.725	0		0			-0.005		
5		+420,437	0		0			0		
6		-433.41	0		0			0		
7		-454.989	0		0			0		
8		-433,768	0		0			0		
9		-450.557	0		0			0		
10		-451.136	0		0			0		

Figure 3.7 Set Parameters screen

3.1.8 The Maintain Screen

WebAccess/CNC provides a basic maintenance function. If a maintenance item does not have a value in "PLC node," WebAccess/CNC Runtime will detect whether CNC is running and calculate the usage time. Warnings will appear once the usage time is more than or equal to the lifetime.

Maintai	n	F1	Main Prog 09003	Cur Prog O9003	Cur Seq 9001	Mode MEM	Status START	Alarm NORMAL	EMG NORMAL	P Cr 16
Ilem Name *	Use Time (min)	Life Time (min)	PLC	Spec.	5	upplier	Conta	ct	Telephone	
Gear Oil	10.31	3600		Agip 80W9	0 1	atic	Sales		02-27965130)

Figure 3.8 Maintain screen

3.1.9 The Tools Screen

WebAccess/CNC provides a basic tools management function. The processing time is measured when CNC is running under MEM mode. A warning will appear once the processing time is more than or equal to the lifetime.

To	pols	F1		CO9003	Cur Prog 09003	Cur Se 9001	q Mode	Status START	NORMAL	EMG NORMAL	P Cnt 16
Tool No *	Tool Type	Cycle Time (m)	Life Time(m)	P Count (Used)	P Count (Life)	Feed Rate	Spindle Speed	Work Material	Tool Material	Diameter	Tool
1	Side Milling Cutter	13	12000	110	2000	0	0			0	0
2	End Mill	16.18	10000	12	1000	0	0			0	0
3	Face Milling Cutter	53	12000	78	2000	0	0			0	0
4	Drill	3	6000	14	1000	0	0			0	0

Figure 3.9 Tools screen

3.1.10 The PLC Parameters Screen

WebAccess/CNC provides a PLC register query interface for obtaining information on I/O or memory status. This function can help you to create tags for monitoring the I/O status of CNC machines.

PLC Paramet	ters	CNC2	Main Prog	Cur Prog	Cur Seq	Mode MEM	Status START	Alarm NORMAL	EMG NORMAL	P Cn 8495
Query Paramet	er									
	PI	C Address: F -								
	PI	C Number: 0 .	20 Query							
PLC Number	PLC Typ	pe			PLC Data					
0	Byte				224					
1	Byte				144					
2	8yte				64					
3	Byte				.32					
4	Byte				4					
5	Byte				0					
6	Byte				0					
								Show	vina 1 to 7 of 3	21 entries
0 - 1 2 3	1 1									

Figure 3.10 PLC Parameters screen

3.2 Parameters of WebAccess/CNC Webpages

The resolution for WebAccess/CNC functions to be viewable is from 1280 x 720 to 1920×1080 .

The blue WebAccess title bar of the WebAccess/CNC functions web page can be removed by setting the video display parameter "mode" of wacnc.drw, as follows: uti:../WebAccessCNC/index.asp?goto=graph=main&*mode=1*&hwnd=%HWND&

(in the second s	Information	H	2 Main DEM	Prog он	Cur Prog DEMO.H	Cur Seq	Mode MEM	Status START	Alarm	EMG	P Cnt
	Absolute (mm) X: 29.366 A:	0.000	Machir X: 0.000	ne (m	m) A: 0.000		Distar X: 0.00	ice (mr	n) A: 0.000		
sickeller	Y: 22.025 B:	0.734	Y: 0.000		B: 0.000		Y: 0.00	0	B: 0.103		
C Alami	Z: 14.683 C:	12.481	Z: 0.000		C: 0.000		Z: 0.00	0	C: 14703	78.374	
	Total P Count:		Mach Run Time:	4 H	24 M S		F%: 100	0.00			
yo Spin	Required P Count	:	Mach Up Time:	4 H	50 M S		\$%: 100	0.00			
	0.0-1		Nc Up Time:	4 H	51 M S		Actual	Feed Ro	ate: 1200.	00 (mn	n/min)
	r Gni.		Spindle Run Time:	4 H	33 M S		Actual	Speed:	500.00 (R	PM)	
aintain (])	H Code: 0	S Code: 0	G Code	4 0							
look	D Code: 0	T Code: 0									

Figure 3.11 Removing the WebAccess title bar

You can set which of the nine main CNC tool screens can be viewed in addition to the Overview screen. Which screens are viewable can be modified by setting the video display parameter "menu" of the wacnc.drw as follows:

uti:../WebAccessCNC/index.asp?goto=graph=main&menu=224&hwnd=%HWND&

Table 3.1: WebAccess/	CNC me	nu parar	neter de	finition		
"menu" value	0	2	6	128	224	480
Information	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Availability	\checkmark	×	x	\checkmark	\checkmark	\checkmark
CNC Alarm	\checkmark	\checkmark	x	\checkmark	\checkmark	\checkmark
Program	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Servo Spin	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Set Parameters	\checkmark	\checkmark	\checkmark	\checkmark	x	x
Maintain	\checkmark	\checkmark	\checkmark	\checkmark	x	x
Tools	\checkmark	\checkmark	\checkmark	x	x	x
PLC Parameters	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	x

) An the second	Information	n H:	2	Main P	rog "H	Cur Prog DEMO.H	Cur Seq	Mode MEM	Status START	Alarm	EMG	PCn
ation	Absolute (mm	1) A: 0.000		Machin	e (m	m)		Distar X: 0.0	nce (mr	n)		
)	Y: 37.071	B: 5.000		Y: 0.000		B: 0.000		Y: 0.00	~ 10	B: 0.007		
	Z: 87.529	C: 275.000		Z: 0,000		C: 0.000		Z: 0.00	00	C: 14703	78.463	
	Total P Count:		Mach Run	Time:	4 H	26 M S		F%: 10	0.00			
	Required P Cou	nt:	Mach Up	lime:	4 H	52 M S		S%: 10	D.00			
	wedness -		Nc Up Tim	e;	4 H	52 M S		Actua	Feed Ro	ate: 500.0	10 (mm/m	nin)
	P Cnt:		Spindle Ru	n Time:	4 H	35 M S		Actua	Speed:	500.00 (F	RPM)	
	H Code: 0	S Code: 0	ί	G Code:	8							
	D Code: 0	T Code: 0										
	M Code: 31	F Code: 5	00									

Figure 3.12 Available functions when the setting "menu=224" is applied

You can set each CNC device's information page so that it can be accessed directly. To do this, adjust the video display parameters "device" and "comport" in your DRW file as follows:

uti:../WebAccessCNC/index.asp?device=CNC6&comport=1&hwnd=%HWND&

Cmd Spindle Speed: 600 (RPM) Cmd Feed Rate: 0 N1 Md11 Md11 Md11 Md11 Md11 Md11 Md11 Md	Ser	vo Spin	3)	CNC6	Main	Prog 77	Cur Prog 0777	Cur Seq	Mode MEM	Status OTHERS	Alarm NORMAL	EMG NORMAL	P Cn1 14822
Act. Spindle Speed: 0.00 (RPM) Act. Feed Rate: 0 Motified Notes Spindle Load: 0.00 % Temp. of Spindle1: 28 Motified Notes Notes Max Spindle Load: 0 % Temp. of Spindle1: 28 Motified Notes Notes Server Act. Speed Temp. Load% Max Load% Max Load% Max Load% Na Spindle 0.00 28.00 / 0.00 0 0 Na Na Server Act. Speed Temp. Load% Max Load% Max Load% Max Load% Spindle 0.00 28.00 / 0.00 0 0 Na Y 0 24.00 6.00 6.00 6.00 Cond% Cond%	Cmd Spir	idle Speed:	600	RPM)	Cmd Fe	ed Rate:	0		N1 M6T1				
Spindle Load: 0.00 % Temp. of Spindle1: 28 Nation Provide ProvideProvide Provide Provide ProvideProvide Provide Pro	Act. Spir	dle Speed:	0.00	RPM)	Act. Fe	ed Rate:	0		M101 M00	HIDI			
Max Spindle Load: 0 % Temp. of Spindle2: 0 NO	Sp	Indle Load:	0.00	6	Temp, of S	Spindle1:	28		N2 M6T2	Line and the second			
Server Act. Speed Temp. Load% Max Load% Spindler 0.00 28.00 r 0.00 0 X 0 24.00 1.00 1.00 Y 0 24.00 6.00 6.00	Max Sp	indle Load:	0 :	¢.	Temp. of S	Spindle2:	0		M00 N3	11203			
Server Act. speed temp. Loady Max Loady Spindle 0.00 28.00 / 0.00 0 X 0 24.00 1.00	line and								1	1			
Spindle 0.00 24.00 0.00 0 X 0 24.00 1.00 1.00 Y 0 24.00 6.00 6.00	Server	Aci. speed	remp.	Lodd%	Max Loda%								
X 0 24.00 1.00 Y 0 24.00 6.00	spindle	0.00	28.007	0.00	.0								
Y 0 24.00 6.00 6.00	x	0	24.00	1.00	1.00								
	Y	0	24.00	6.00	6.00								
Z 0 42.00 62.00 62.00	z	0	42.00	62.00	62.00								

Figure 3.13 Directly access the WebAccess/CNC device information page

Each screen for the different CNC device functions can be accessed directly by setting the video display parameters "page" in your DRW file as follows: uti:../WebAccessCNC/index.asp?device=H1&comport=1&*page=program*&hwnd=%HWND&

Table 3.2: WebAccess/CNC page parameter definition

Functions	Page Name
Overview	page=overview
Information	page=info
Availability	page=avail
CNC Alarm	page=alarm
Program	page=program
Servo Spin	page=servo
Set Parameters	page=parameter
Maintain	page=maintain
Tools	page=toolmanage
PLC Parameters	page=plcparameter



WebAccess/CNC Driver

4.1 **CNC Runtime API List**

Table 4.1 lists the definitions of the WebAccess/CNC driver.

Table 4.1: Supported A	APIs (See the SKYMARS API Manual)
API	Description
SKY_conn_status_single	Get the CNC connection status
GET_information	Get basic correlation information
GET_information_heid	Get basic correlation information (HEIDENHAIN controller)
GET_status	Get status information
GET_position	Get the coordinate status
GET_gcode	Get the G-code
GET_othercode	Get other codes (H, D, T, M, B, F, and S)
GET_feed_spindle	Get the feed rate/spindle speed
GET_time	Get the CNC system time
GET_time_heid	Get the CNC system time (HEIDENHAIN controller)
GET_part_count	Get the part count
GET_part_total	Get the total part count
GET_part_required	Get the required part count
GET_alm_current2	Get current occurring alarm
GET_msg_current	Get the operation message
GET_alm_history2	Get the alarm history
GET_msg_history	Get the operation history
GET_plc_alarm	Get the PLC alarm history
GET_servo_current	Get current loads of all spindles
GET_servo_load	Get the servo load percentage (%)
GET_servo_speed	Gethe servo speed
GET_spindle_load	Get the percentage of spindle load (%)
GET_spindle_speed	Get the spindle speed
GET_servo_temperature	Get the servo motor temperature
GET_spindle_temperature	Get the spindle temperature
GET_utilization_all_today	Get he utilization rate data for the current day
GET_utilization_single_all	Get all utilization rate data for a single machine
GET_nc_mem_list	Get the NC list from the machine (memory)
GET_nc_ftp_list	Get the NC list from FTP (Fanuc Data Server/MITSUBISHI CF card)
GET_nc_local_list (*)	Get the NC list from local storage
GET_nc_mem_code	Get the NC program content from memory
GET_nc_ftp_code	Get the NC program content from FTP (Fanuc Data Server/ MITSUBISHI CF card)
GET_nc_pointer	Get the pointer (line) of the current NC
GET_nc_current_block	Get the NC of the current and next block
UPLOAD_nc_mem	Upload NC data to memory
UPLOAD_nc_ftp	Upload NC data to FTP (Fanuc Data Server/MITSUBISHI CF card)
DEL_nc_mem	Clear NC data from memory
DEL_nc_ftp	Delete NC data from FTP (Fanuc Data Server/MITSUBISHI CF card)

DEL_nc_local (*)	Delete NC data from local storage
SET_nc_main	Set or assign NC data to the main program
GET_plc_ver	Get the PLC version information
GET_plc_addr2	Get the PLC address of start and end number
GET_plc_status2	Get the PLC status
GET_offset_title	Get the title of the tool offset
GET_offset_all	Get the offset of all tools
SET_offset_single	Write the offset of a single tool
GET_macro_all	Get data for all macro (common) variables
SET_macro_single	Set data for a single macro (common) variable
GET_TOOL_TABLE_SIEM ENS	Get SIEMENS tool tables
GET_TOOL_EDGE_PARA METER_SIEMENS	Get SIEMENS tool edge parameters
GET_maint_all	Get all maintenance management data
GET_toolmanage_all2	Get all tool management data
(*): not SkyMars API	

4.2 WebAccess/CNC Driver List

Table 4.2: Driver Block Type List				
Block Type Name	Description			
FANUC	For FANUC controllers			
MIT	For MITSUBISHI controllers			
HEID	For HEIDENHAIN controllers			
SIEMENS	For SIEMENS controllers			
LNCRecon	For Advantech LNC controllers			

Tag Name	Address	Туре	Description
MachName	Common;20001	Text	Machine name
MNcPath	Common;20017	Text	NC file path in memory
Supported CNC	: FANUC, MITSUBISHI, HEIDEN	IHAIN, SIE	MENS
DEL_nc_ftp			
Supported CNC	: FANUC, MITSUBISHI		
DelFPgm	DEL_nc_ftp;10009	Discrete	Flag from deleting an NC pro- gram from the data server (FTP) (0 -> 1)
DelFName	DEL_nc_ftp;20009	Text	Deleted (FTP server) NC pro- gram name (input)
DEL_nc_mem			
Supported CNC	: FANUC, MITSUBISHI, HEIDEN	IHAIN	
DelMPgm	DEL_nc_mem;10008	Discrete	Flag from deleting an NC pro- gram from memory (0 -> 1)
DelMName	DEL_nc_mem;20008	Text	Deleted (memory) NC program name (input)

DEL_nc_local						
Supported CNC:	: FANUC, MITSUBISHI, HEIDEN	NHAIN,				
DelLPgm	DEL_nc_mem;10010	Discrete	Flag from deleting an NC pro- gram from the local disk (0 -> 1)			
DelLName	DEL_nc_mem;20010	Text	Deleted (local disk) NC program name (input)			
GET_alm_current2						
Supported CNC:	FANUC, MITSUBISHI, HEIDEN	NHAIN, SIE	MENS			
AlmClass	GET_alm_current2;0,Alm- Data,1,AlmClass	Text (Array)	Alarm class			
AlmCode	GET_alm_current2;0,Alm- Data,1,AlmCode	Text (Array)	Alarm code			
AlmMsg	GET_alm_current2;0,Alm- Data,1,AlmMsg	Text (Array)	Alarm message			
IsAlarm	GET_alm_current2;1,IsAlarm	Discrete	Alarm status			
GET_alm_histo	ory2					
Supported CNC:	: FANUC, MITSUBISHI, HEIDEN	NHAIN, SIE	MENS			
AlmClasH	GET_alm_history2;0,Alm- His,1,AlmClass	Text (Array)	History alarm class			
AlmCodeH	GET_alm_history2;0,Alm- His,1,AlmCode	Text (Array)	History alarm code			
AlmDateH	GET_alm_history2;0,Alm- His,1,AlmDate	Text (Array)	History alarm date			
AlmMsgH	GET_alm_history2;0,Alm- His,1,AlmMsg	Text (Array)	History alarm message			
GetHAIm	GET_alm_history2;10001	Discrete	Flag from getting a history alarm (0 ->1)			
GET_feed_spin	dle					
Supported CNC:	FANUC, MITSUBISHI, HEIDEN	NHAIN, SIE	MENS			
ActFeed	GET_feed_spindle;1,ActFeed	Analog	Actual feed rate			
ActSpin	GET_feed_spindle;1,ActSpin- dle	Analog	Actual spindle speed			
OvFeed	GET_feed_spindle;1,OvFeed	Analog	Feed override			
OvSpin	GET_feed_spindle;1,OvSpin- dle	Analog	Spindle override			
GET_gcode						
Supported CNC:	: FANUC, MITSUBISHI, SIEMEN	١S				
GCode	GET_gcode;0,gcode,1,Gdata	Text (Array)	G-code			
GET_informatio	on					
Supported CNC:	: FANUC, MITSUBISHI, SIEMEN	١S				
Axes	GET_information;1,Axes	Analog	Current number of axes			
CncType	GET_information;1,CncType	Text	e.g., '18' = Series 180/180i			
MaxAxes	GET_information;1,MaxAxes	Analog	Maximum number of axes for this CNC type			
NcVer	GET_information;1,Nc_Ver	Text	NC version			
Series	GET_information;1,Series	Text	M/T type			
GET_information	on_heid					
Supported CNC:	: HEIDENHAIN					

Axes_H	GET_information_heid;1,Axes	Analog	Axes (HEIDENHAIN)
FCL_H	GET_information_heid;1,FCL	Text	FCL (HEIDENHAIN)
Model_H	GET_information_heid;1,Model	Text	Model (HEIDENHAIN)
NcVer_H	GET_information_heid;1,Nc_V er	Text	NC version (HEIDENHAIN)
PlcVer_H	GET_information_heid;1,Plc_V er	Text	PLC version (HEIDENHAIN)
GET_msg_curr	ent		
Supported CNC	: FANUC		
IsMsg	GET_msg_current;1,IsMsg	Discrete	Message status
MsgCode	GET_msg_current;1,MsgCode	Text	Operation message code
MsgText	GET_msg_current;1,MsgText	Text	Operation message text
GET_msg_hist	ory		
Supported CNC	: FANUC		
MsgCodeH	GET_msg_history;0,MsgHis,1, MsgCode	Text (Array)	History operation message code
MsgDateH	GET_msg_history;0,MsgHis,1, MsgDate	Text (Array)	History operation message date
MsgTextH	GET_msg_history;0,MsgHis,1, MsgText	Text (Array)	History operation message text
GetHMsg	GET_msg_history;10002	Discrete	Flag from getting a history opera- tion message (0 -> 1)
GET_nc_currer	nt_block		
Supported CNC	: FANUC, MITSUBISHI, HEIDEN	IHAIN	
CurNcBlk	GET_nc_current_block;0,NcBl ock,1,Block	Text (Array)	Get the content of the currently running program blocks
GET_nc_ftp_cc	ode		
Supported CNC	: FANUC, MITSUBISHI, SIEMEN	1S	
GetFPgm	GET_nc_ftp_code;10005	Discrete	Flag from getting NC program from a data server (FTP) (0 -> 1)
FQNc GET_nc_ftp_code;20005		Text	FTP data server: NC program name (input)
GET_nc_ftp_lis	t		
Supported CNC	: FANUC, MITSUBISHI, SIEMEN	IS	
FNcTime	GET_nc_ftp_list;0,NcList,1,Dat eTime	Text (Array)	FTP data server: NC program modification date
FNcFD	GET_nc_ftp_list;0,NcList,1,FD	Text (Array)	FTP data server: NC program file type (file/directory)
FNcName	GET_nc_ftp_list;0,NcList,1,Nc Name	Text (Array)	FTP data server: NC program name
FNcSize	GET_nc_ftp_list;0,NcList,1,Siz e	Analog (Array)	FTP data server: NC size (Bytes)
GetFList	GET_nc_ftp_list;10019	Discrete	Flag from getting an NC program list from a data server (FTP) (0 -> 1)
GET_nc_local_	list		
Supported CNC	: FANUC, MITSUBISHI, HEIDEN	IHAIN, SIE	MENS

Table 4.3: Dr SIEMENS)	iver Tag List (FANUC, MI	SUBISH	II, HEIDENHAIN, and
LNcTime	GET_nc_local_list;0,NcList,1,D ateTime	Text (Array)	Local PC: NC program modifica-
LNcName	GET_nc_local_list;0,NcList,1,N cName	Text (Array)	Local PC: NC program name
LNcSize	GET_nc_local_list;0,NcList,1,S ize	Analog (Array)	Local PC: NC size (Bytes)
GetLList	GET_nc_local_list;10017	Discrete	Flag from getting an NC program list from a local disk (0 -> 1)
GET_nc_mem_	code		
Supported CNC	: FANUC, MITSUBISHI, HEIDEN	IHAIN, SIE	EMENS
GetMPgm	GET_nc_mem_code;10004	Discrete	Flag from getting an NC program from memory (0 -> 1)
MQNc	GET_nc_mem_code;20004	Text	Internal memory: NC program name (input)
GET_nc_mem_	list		
Supported CNC	: FANUC, MITSUBISHI, HEIDEN	IHAIN, SIE	EMENS
MNcTime	GET_nc_mem_list;0,NcList,1, DateTime	Text (Array)	Machine memory: NC program modification date
MNcFD	GET_nc_mem_list;0,NcList,1,F D	Text (Array)	Machine memory: NC program file type (file/directory)
MNcName	GET_nc_mem_list;0,NcList,1, NcName	Text (Array)	Machine memory: NC program name
MNcRmk	GET_nc_mem_list;0,NcList,1, Remark	Text (Array)	Machine memory: NC program remark
MNcSize	GET_nc_mem_list;0,NcList,1, Size	Analog (Array)	Machine memory: NC program size (Bytes)
GetMList	GET_nc_mem_list;10018	Discrete	Flag from getting an NC program list from CNC memory (0 -> 1)
GET_nc_pointe	er 🛛		
Supported CNC	: FANUC, MITSUBISHI, HEIDEN	IHAIN, SIE	EMENS
CurNcPtr	GET_nc_pointer;1,BlkPointer	Analog	Pointer of the current program
GET_othercode	e		
Supported CNC SIEMENS	: FANUC, MITSUBISHI(only B co	ode), HEID	DENHAIN(only M, F, T, S code)
BCode	GET_othercode;1,BCode	Analog	B-code
DCode	GET_othercode;1,DCode	Analog	D-code
FCode	GET_othercode;1,FCode	Analog	F-code
HCode	GET_othercode;1,HCode	Analog	H-code
MCode	GET_othercode;1,MCode	Analog	M-code
SCode	GET_othercode;1,SCode	Analog	S-code
TCode	GET_othercode;1,TCode	Analog	T-code
GET_part_cour	nt		
Supported CNC	: FANUC, MITSUBISHI, SIEMEN	IS	
PartCnt	GET_part_count;1,PartCount	Analog	Part count
GET_part_requ	lired		
Supported CNC	: FANUC, SIEMENS		
PartReq	GET_part_required;1,PartRe- quired	Analog	Part required
GET part total			

Supported CNC:	FANUC					
ParTotal	GET_part_total;1,PartTotal	Analog	Total part count			
GET_plc_alarm						
Supported CNC: FANUC						
PlcAlm	GET_plc_alarm;0,PlcAlm,1,Al mMsg	Text (Array)	PLC alarm message			
GET_plc_ver						
Supported CNC:	FANUC, MITSUBISHI					
PlcDate	GET_plc_ver;1,Date	Text	PLC version date			
PlcDesig	GET_plc_ver;1,Designed	Text	PLC version designer			
PlcVer	GET_plc_ver;1,Version	Text	PLC version			
GET_position						
Supported CNC:	FANUC, MITSUBISHI, HEIDEN	IHAIN, SIE	MENS			
AbsPos	GET_position;0,PosData,1,Abs	Analog				
(Array)	The Absolute Coordinate of Axes					
AxisName	GET_position;0,Pos- Data,1,AxisName	Text (Array)	Axis name			
RemDist	GET_position;0,PosData,1,Dist	Analog (Array)	Remaining axis distance			
MachPos	GET_position;0,Pos- Data,1,Mach	Analog (Array)	Axis machine coordinates			
RelPos	GET_position;0,PosData,1,Rel	Analog (Array)	Relative axis coordinates			
AxisUnit	GET_position;0,PosData,1,Unit	Text (Array)	Axis unit			
GET_servo_cur	rrent					
Supported CNC:	FANUC					
ServCurr	GET_servo_current;0,AxisCur- rent,1,Current		Load current value of each axis			
GET_servo_loa	d					
Supported CNC:	FANUC, MITSUBISHI, HEIDEN	IHAIN, SIE	MENS			
SerLd01	GET_servo_load;1,ServoLoad- Percent,1,Load	Analog	Load values for each axis (%)			
SerLd02	GET_servo_load;2,ServoLoad- Percent,1,Load	Analog	Load values for each axis (%)			
SerLd03	GET_servo_load;3,ServoLoad- Percent,1,Load	Analog	Load values for each axis (%)			
SerLd04	GET_servo_load;4,ServoLoad- Percent,1,Load	Analog	Load values for each axis (%)			
SerLd05	GET_servo_load;5,ServoLoad- Percent,1,Load	Analog	Load values for each axis (%)			
SerLd06	GET_servo_load;6,ServoLoad- Percent,1,Load	Analog	Load values for each axis (%)			
SerLd07	GET_servo_load;7,ServoLoad- Percent,1,Load	Analog	Load values for each axis (%)			
SerLd08	GET_servo_load;8,ServoLoad- Percent,1,Load	Analog	Load values for each axis (%)			

Table 4 <u>.3: D</u>	priver Tag List (FANUC, MI	TSUBIS	HI, HEIDENHAIN, and
SIEMENS)			
SerLd09	GET_servo_load;9,ServoLoad- Percent,1,Load	Analog	Load values for each axis (%)
SerLd10	GET_servo_load;10,Servo- LoadPercent,1,Load	Analog	Load values for each axis (%)
SerLd11	GET_servo_load;11,Servo- LoadPercent,1,Load	Analog	Load values for each axis (%)
SerLd12	GET_servo_load;12,Servo- LoadPercent,1,Load	Analog	Load values for each axis (%)
GET_servo_s	peed		
Supported CN	C: FANUC, MITSUBISHI, HEIDEN	NHAIN, SI	EMENS
ServSped	GET_servo_speed;0,Servo- LoadPercent,1,Speed	Analog (Array)	Servo shaft speed
GET_servo_te	emperature		
Supported CN	C: FANUC, HEIDENHAIN, SIEME	INS	
ServTemp	GET_servo_temperature;0,Te mperature,1,AxisTemp	Analog (Array)	Servo motor temperature
GET_spindle_	load		
Supported CN	C: FANUC, MITSUBISHI, HEIDEN	NHAIN, SI	EMENS
SpinLoad	GET_spindle_load;1,Load	Analog	Spindle load (%)
GET_spindle_	speed		
Supported CN	C: FANUC, MITSUBISHI, HEIDEN	NHAIN, SI	EMENS
SpinSped	GET_spindle_speed;1,Speed	Analog	Spindle speed
GET_spindle_	temperature		
Supported CN	C: FANUC, HEIDENHAIN,		
SpinTmp1	GET_spindle_temperature;1,S pindle_1_Temp	Analog	Temperature of Spindle 1
SpinTmp2	GET_spindle_temperature;1,S pindle_2_Temp	Analog	Temperature of Spindle 2
GET_status			
Supported CN	C: FANUC, MITSUBISHI, HEIDEN	NHAIN, SI	EMENS
Alarm	GET_status;1,Alarm	Text	Alarm
NcStatus	GET_status;1,CncStatus	Text	CNC Status (e.g., "STOP", "START")
CurPgm	GET_status;1,CurProg	Text	Current program
CurSeq	GET_status;1,CurSeq	Analog	Sequence of the current program
Emg	GET_status;1,Emg	Text	EMG
MainPgm	GET_status;1,MainProg	Text	Main program
Mode	GET_status;1,Mode	Text	e.g., "MDI", "MEM"
GET_time			
Supported CN	C: FANUC, MITSUBISHI, SIEMEN	٧S	
CutHour	GET_time;1,Cutting,1,Hour	Analog	Cutting time (hours)
CutMin	GET_time;1,Cutting,1,Minuite	Analog	Cutting time (minutes)
CutSec	GET_time;1,Cutting,1,Second	Analog	Cutting time (seconds)
CycHour	GET_time;1,Cycle,1,Hour	Analog	Cycle time (hours)
CycMin	GET_time;1,Cycle,1,Minuite	Analog	Cycle time (minutes)
CycSec	GET_time;1,Cycle,1,Second	Analog	Cycle time (seconds)
OperHour	GET_time;1,Operation,1,Hour	Analog	Operation time (hours)

Table 4.3: [Driver 1	lag List (FANUC,	MITSUBISHI,	HEIDENHAIN,	and
SIEMENS)						

OperMin	GET_time;1,Operation,1,Minu- ite	Analog	Operation time (minutes)
OperSec	GET_time;1,Operation,1,Sec- ond	Analog	Operation time (seconds)
PowHour	GET_time;1,Power,1,Hour	Analog	Power time (hours)
PowMin	GET_time;1,Power,1,Minuite	Analog	Power time (minutes)
PowSec	GET_time;1,Power,1,Second	Analog	Power time (seconds)
GET_time_heid	l		
Supported CNC	: HEIDENHAIN		
RunHour_H	GET_time_heid;1,Machine- Running,1,Hour	Analog	Machine run time (hours) (HEIDENHAIN)
RunMin_H	GET_time_heid;1,Machine- Running,1,Minuite	Machine run time (minutes) (HEIDENHAIN)	
UpHour_H	GET_time_heid;1,MachineUp, 1,Hour	Analog	Machine up time (hours) (HEIDENHAIN)
UpMin_H	GET_time_heid;1,MachineUp, 1,Minuite	Analog	Machine up time (minutes) (HEIDENHAIN)
NUpHour_H	GET_time_heid;1,NcUp,1,Hour	Analog	NC up time (hours) (HEIDENHAIN)
NUpMin_H	GET_time_heid;1,NcUp,1,Minu ite	Analog	NC up time (minutes) (HEIDENHAIN)
SRunHour_H	GET_time_heid;1,SpindleRun- ning,1,Hour	Analog	Spindle running time (hours) (HEIDENHAIN)
SRunMin_H	GET_time_heid;1,SpindleRun- ning,1,Minuite	Analog	Spindle running time (minutes) (HEIDENHAIN)
GET_utilization	_all_today		
Supported CNC	: FANUC, MITSUBISHI, HEIDEN	IHAIN, SIE	MENS
UtiAAIm	GET_utilization_all_today;0,Uti I,1,AlarmTotal	Analog	Today machine availability: total abnormal time (hours)
UtiABusy	GET_utilization_all_today;0,Uti I,1,BusyTotal	Analog	Machine availability for the cur- rent day: total busy time (hours)
UtiACyc	GET_utilization_all_today;0,Uti I,1,CycleTotal	Analog	Machine availability for the cur- rent day: total number of pro- cessing cycles
UtiAldle	GET_utilization_all_today;0,Uti I,1,IdleTotal	Analog	Machine availability for the cur- rent day: total idle time (hours)
UtiAOff	GET_utilization_all_today;0,Uti I,1,OffTotal	Analog	Machine availability for the cur- rent day: total off time (hours)
UtiAPTCnt	GET_utilization_all_today;0,Uti I,1,PartTotal	Analog	Machine availability for the cur- rent day: total number of work- pieces
GET_utilization	_single_all		
Supported CNC	: FANUC, MITSUBISHI, HEIDEN	IHAIN, SIE	MENS
UtiAlmM	GET_utilization_single_all;0,Uti IList,1,Alarm	Text (Array)	Single machine availability: alarm number and information
UtiETime	GET_utilization_single_all;0,Uti IList,1,EndDateTime	Text (Array)	Single machine availability: end time
UtiNcPgm	GET_utilization_single_all;0,Uti IList_1.NcName	Text (Array)	Single machine availability: NC

Table 4.3: D SIEMENS)	river	Tag List	(FANI	JC, MIT	SUBISH	II, HEIDENHAIN	l, and
LitiPCnt	CET	utilization	single	all·0 Litti	Analog	Single machine av	ailability: nu

UtiPCnt	GET_utilization_single_all;0,Uti IList,1,PartCount	Analog (Array)	Single machine availability: number of workpieces		
UtiStatu	GET_utilization_single_all;0,Uti IList,1,Status	Text (Array)	Single machine availability: sta- tus (OFF, IDLE, ALARM, BUSY)		
UtiSTime	GET_utilization_single_all;0,Uti IList,1,StDateTime	Text (Array)	Single machine availability: start time		
UtiTTime	GET_utilization_single_all;0,Uti IList,1,TotalTime	Analog (Array)	Single machine availability: total time		
UtiAlarm	GET_utilization_single_all;1,Uti I,1,AlarmTotal	Analog	Today machine availability: total alarm time (hours)		
UtiBusy	GET_utilization_single_all;1,Uti I,1,BusyTotal	Analog	Single machine availability: total busy time (hours)		
UtiCycle	GET_utilization_single_all;1,Uti I,1,CycleTotal	Analog	Single machine availability: total number of processing cycles		
Utildle	GET_utilization_single_all;1,Uti I,1,IdleTotal	Analog	Single machine availability: total idle time (hours)		
UtiOff	GET_utilization_single_all;1,Uti I,1,OffTotal	Analog	Single machine availability: total off time (hours)		
UtiPTCnt	GET_utilization_single_all;1,Uti I,1,PartTotal	Analog	Single machine availability: total number of workpieces		
GetUtiS	GET_utilization_single_all;100 03	Discrete	Flag from get utilization single all (0 -> 1)		
UtiQST	GET_utilization_single_all;200 02	Text	Single machine availability: query start time. Format is YYYY-MM-dd HH:mm:ss (input)		
UtiQET	GET_utilization_single_all;200 03	Text	Single machine availability: query end time. Format is YYYY-MM-dd HH:mm:ss (input)		
SET_nc_main					
Supported CNC:	FANUC				
SetMain	SET_nc_main;10011	Discrete	Flag from setting the main pro- gram (0 -> 1)		
SetMainN	SET_nc_main;20011	Text	Set an NC program name as the main program (input)		
SKY_conn_stat	us_single				
Supported CNC:	FANUC, MITSUBISHI, HEIDEN	IHAIN, SIE	MENS		
Status	SKY_conn_status_single;1,SK Y_conn_status_single,1,Status	Discrete	Connection status		
UPLOAD_nc_ft	p				
Supported CNC:	FANUC, MITSUBISHI, SIEMEN	IS			
UpFPgm	UPLOAD_nc_ftp;10007	Discrete	Flag from uploading NcCode to a data server (FTP) (0 -> 1)		
UpFNc	UPLOAD_nc_ftp;20007	Text	The FTP Server Upload NC Pro- gram Name (input)		
UPLOAD_nc_mem					
Supported CNC:	FANUC, MITSUBISHI, HEIDEN	IHAIN, SIE	MENS		
UpMPgm	UPLOAD_nc_mem;10006	Discrete	Flag from upload NcCode to memory (0 -> 1)		
UpMNc	UPLOAD_nc_mem;20006	Text	Memory upload: NC program name (input)		

GET_offset_titl	e				
Supported CNC: FANUC. MITSUBISHI					
OffTitle	GET_offset_title;0,Offset,1,Title	Text	Tool offset title		
GetOTitle	GET_offset_title;10012	Discrete	Flag from getting a tool offset's title (0 -> 1)		
GET_offset_all					
Supported CNC	: FANUC, MITSUBISHI				
Offset01	GET_offset_all;0,Offset,1,C0	Analog (Array)	Tool offset value (Column 1)		
Offset02	GET_offset_all;0,Offset,1,C1	Analog (Array)	Tool offset value (Column 2)		
Offset03	GET_offset_all;0,Offset,1,C2	Analog (Array)	Tool offset value (Column 3)		
Offset04	GET_offset_all;0,Offset,1,C3	Analog (Array)	Tool offset value (Column 4)		
GetOData	GET_offset_all;10013	Discrete	Flag from getting all tool offset data (0 -> 1)		
SET_offset_sin	gle				
Supported CNC	: FANUC, MITSUBISHI				
SetONum	SET_offset_single;20012	Analog	The number of offset data (input)		
SetOVal	SET_offset_single;20013	Analog	The values offset data (input)		
SetOData SET_offset_single;10014		Discrete	Flag from setting the offset data (0 -> 1)		
GET_macro_al	l				
Supported CNC	: FANUC, MITSUBISHI, SIEMEN	S			
MacNum	GET_macro_all;0,Macro,1,Mac roNumber	Analog (Array)	The number of macro data		
MacData	GET_macro_all;0,Macro,1,Mac roData	Analog (Array)	Macro data		
GetMacro	GET_macro_all;10015	Discrete	Flag from getting all macro data (0 -> 1)		
SET_macro_si	ngle				
Supported CNC	: FANUC, MITSUBISHI				
SetMacNo	SET_macro_single;20014	Analog	The number of data (input)		
SetMacro	SET_macro_single;20015	Analog	The values of macro data (input)		
SetMData	SET_macro_single;10016	Discrete	Flag from setting the macro data (0 -> 1)		
GET_tool_table	e_siemens				
Supported CNC	: SIEMENS				
ToolMemNo	GET_tool_table_siemens;0,To olData;1;ToolMemeryNO	Analog (Array)	The number of tools in memory (SIEMENS)		
ToolPlace	GET_tool_table_siemens;0,To olData;1;ToolPlace	Analog (Array)	The number of tools in memory (SIEMENS)		
ToolName	GET_tool_table_siemens;0,To olData;1,ToolName	Text (Array)	The name of a tool in memory (SIEMENS)		
EdgeCnt	GET_tool_table_siemens;0,To olData;1,EdgeCount	Analog (Array)	The edge count of a tool (SIE- MENS)		
GetTool	GET_tool_table_siemens;1002 0	Discrete	Flag from getting tool data (SIE- MENS) (0->1)		

GET_tool_edge	e_parameter_siemens		
Supported CNC	: SIEMENS		
Edge1PNo	GET_tool_edge_parameter_si emens;1,EdgeData,0,Parma- Data,1,ParamNO	Analog (Array)	The parameter number of first tool edge (SIEMENS)
Edge2PNo	GET_tool_edge_parameter_si emens;2,EdgeData,0,Parma- Data,1,ParamNO	Analog (Array)	The parameter number of sec- ond tool edge (SIEMENS)
Edge3PNo	GET_tool_edge_parameter_si emens;3,EdgeData,0,Parma- Data,1,ParamNO	Analog (Array)	The parameter number of third tool edge (SIEMENS)
ToolQMNo	GET_tool_edge_parameter_si emens;20016	Analog	The number of tool in memory (SIEMENS) (Input)
GetTEP	GET_tool_edge_parameter_si emens;10021	Discrete	The flag of getting tool edge parameters (SIEMENS)
GET_plc_statu	s2/SET_plc_status2_adv		
Supported CNC	: FANUC, MITSUBISHI, HEIDEN	IHAIN	
РІсТуре	GET_plc_status2;1,PlcSta- tus,1,PlcType;M,N (M: address, N: PLC number)	Discrete (0:byte 1:short 2:int 3:bool 4:double 5:string 6:sbyte)	Type of PLC status data address: FANUC: G, F, Y, X, A, R, T, K, C, D, E MITSUBISHI: X, Y, M, F, L, SM, D, R, W, B, SB,V, SW, SD HEIDENHAIN: M, B, W, D, I, O, T, C, S, IB, IW, ID, OB, OW, OD
PlcData	GET_plc_status2;1,PlcSta- tus,1,PlcDataStr;M,N (M: address, N: PLC number)	Analog (default)	The data of PLC status data PlcDataStr: PLC data(text) for all type including Byte, Short, Int, Bool, Double, String, Sbyte
GET_plc_statu	s2_Siemens/SET_plc_status2_	Siemens	
Supported CNC	: SIEMENS		
РІсТуре	GET_plc_status2_Siemens;1,P lcStatus,1,PlcType;M,N (M: address, N: PLC number)	Discrete (0:byte 1:short 2:int 3:bool 4:double 5:string 6:sbyte)	The type of PLC status data (SIEMENS) Address: SIEMENS: I/IB/ID/IW/M/MB/MD/MM/Q/QB/ QD/QW/T/DB
PlcDataS	GET_plc_status2_Siemens;1,P lcStatus,1,PlcDataStr;M,N (M: address, N: PLC number)	Analog (default)	The data of PLC status data (SIEMENS) PlcDataStr: PLC data(text) for all type including Byte, Short, Int, Bool, Double, String, Sbyte
GET_param_da	nta		
Supported CNC	: FANUC, MITSUBISHI		
ParaData	GET_param_data;1,Param- Data,1,ParamDataStr,1,Data;1	Text	System parameter data
GET maint all			

Supported CNC: FANUC, MITSUBISHI, HEIDENHAIN, SIEMENS				
Reserved	served GET_maint_all;0,Maint-		Get maintenance management	
(ItemName)	Data,1,ItemTime	(Array)	data for ItemName	
Reserved	GET_maint_all;0,Maint-	Analog	Get maintenance management	
(UseTime)	Data,1,UseTime	(Array)	data for Use lime	
Reserved	GEI_maint_all;0,MaintData,1,	lext	Get maintenance management	
		(Allay)		
(PlcNode)	GET_Maint_all,0,MaintData, T, PlcNode	(Arrav)	data for PlcNode	
Reserved	GET maint all [:] 0 MaintData 1	Text	Get maintenance management	
(Spec)	Spec	(Array)	data for Spec	
Reserved	GET_maint_all;0,MaintData,1,	Text	Get maintenance management	
(Supplier)	Supplier	(Array)	data for Supplier	
Reserved	GET_maint_all;0,MaintData,1,	Text	Get maintenance management	
(Contact)	Contact	(Array)	data for Contact	
Reserved	GET_maint_all;0,MaintData,1,	Text	Get maintenance management	
(Telephone)	Telephone	(Array)	data for Telephone	
GET_toolmana	ge_all2			
Supported CNC	: FANUC, MITSUBISHI, HEIDEN	IHAIN, SIE	MENS	
Reserved	GET_toolmanage_all2;0,Tool-	Analog	Get tool management data for	
(100IN0)		(Array)		
Reserved	GE I_toolmanage_all2;0, lool-	lext	Get tool management data for	
(Toorrype)			Cot tool management data for	
(CvcleTime)	Data.1. CvcleTime	(Arrav)	CycleTime	
Reserved	GET toolmanage all2:0.Tool-	Analog	Get tool management data for	
(LifeTime)	Data,1,LifeTime	(Array)	LifeTime	
Reserved	GET_toolmanage_all2;0,Tool-	Analog	Get tool management data for	
(PartCount)	Data,1, PartCount	(Array)	PartCount	
Reserved	GET_toolmanage_all2;0,Tool-	Analog	Get tool management data for	
(LifePartCount)	Data,1,LifePartCount	(Array)	LifePartCount	
Reserved	GET_toolmanage_all2;0,Tool-	Analog	Get tool management data for	
		(Analog	Cet teel menegement dete for	
(SpindleSpeed)	Data 1 SpindleSpeed	Analog (Arrav)	SpindleSpeed	
Reserved	GET toolmanage all2:0 Tool-	Text	Get tool management data for	
(WorkMaterial)	Data,1,WorkMaterial	(Array)	WorkMaterial	
Reserved	GET toolmanage all2;0,Tool-	Text	Get tool management data for	
(ToolMaterial)	Data,1,ToolMaterial	(Array)	ToolMaterial	
Reserved	GET_toolmanage_all2;0,Tool-	Analog	Get tool management data for	
(Diameter)	Data,1,Diameter	(Array)	Diameter	
Reserved	GET_toolmanage_all2;0,Tool-	Analog	Get tool management data for	
(loolLength)	Data,1, IoolLength	(Array)	IoolLength	
Reserved	GE1_toolmanage_all2;0, lool-	lext	Get tool management data for	
		(Allay)	Suppliel	
(Contact)	Data 1 Contact	(Arrav)	Contact	
Reserved	GET toolmanage all2:0 Tool-	Text	Get tool management data for	
(Telephone)	Data,1,Telephone	(Array)	Telephone	

Table 4.4: Error Code of Driver Tag (FANUC, MITSUBISHI, HEIDENHAINand SIEMENS)

Error Code	Error Types	Description
*[fffc]	Plug-In Time out (-20)	The function has timed out; modify the register value (FANUC only) if you want to extend the time out.
*[ffed]	SkyMars Busy (-19)	SkyMars is running
*[ffee]	Not supported (-18)	The function is not supported for this controller
*[ffef]	Protocol error (-17)	Data from the Ethernet board is incorrect. Please check the Ethernet settings.
*[fff0]	Socket error (-16)	Examine the CNC power supply, Ethernet cable, and I/F board
*[fff1]	DLL file error (-15)	There is no DLL file for each CNC series corre- sponding to the specified node
*[fff8]	Handle number error (- 8)	Get the library handle number
*[fff9]	Version mismatch between the CNC/PMC and library (-7)	The CNC/PMC version does not match the library version. Replace the library or CNC/PMC control software.
*[fffa]	Abnormal library state (- 6)	An exception error has occurred with the executed library.
*[fffd]	Reset or stop request (- 2)	The RESET or STOP button was pressed. Call the termination function.
*[fffe]	CNC Busy (-1)	Wait until after CNC processing or retry
*[8000]	WebAccess/CNC run- time is offline.	Check whether WebAccess/CNC runtime is running
*[8001]	Error(function is not exe- cuted, or not available) (1)	A specific function that should have been called has not been executed; otherwise, the function is not available
*[8002]	Error(data block length error, error of number of data) (2)	Check and correct the data block length or number of data
*[8003]	Error(data number error) (3)	Check and correct the data number
*[8004]	Error(data attribute error) (4)	Check and correct the data attribute
*[8005]	Error(data error) (5)	Check and correct the write data
*[8006]	Error(no option) (6)	There is no corresponding CNC option
*[8007]	Error(write protection) (7)	Write operation prohibited
*[8008]	Error(memory overflow) (8)	CNC tape memory overflow has occurred
*[8009]	Error(CNC parameter error) (9)	CNC parameter is incorrect
*[800a]	Error(buffer empty/full) (10)	The buffer is empty or full
*[800b]	Error(path number error) (11)	A path number is incorrect
*[800c]	Error(CNC mode error) (12)	The CNC mode is incorrect; correct the CNC mode

Table 4.4: Error Code of Driver Tag (FANUC, MITSUBISHI, HEIDENHAIN and SIEMENS)

	· · · · · · · · · · · · · · · · · · ·	
*[800d]	Error(CNC execution rejection) (13)	CNC execution rejected. Check the condition of execution.
*[800e]	Error(Data server error) (14)	An error has occurred no the data server
*[800f]	Error(alarm) (15)	The function cannot be executed because of a CNC alarm. Remove the cause of alarm.
*[8010]	Error(stop) (16)	CNC status is "stop" or "emergency."
*[8011]	Error(State of data pro- tection) (17)	Data protected by the CNC data protection function
*[8012]	Error(Not found Machine ID) (18)	Please check the connected CNC status or disable this CNC connection.
*[8013]	Error(No out) (19)	Please check the error number
*[8014]	Error(Password) (20)	Incorrect password
*[8015]	Error(Compatible) (21)	Version compatibility problem

Table 4.5: Driver Tag List (Advantech LNC)

Advantech LNC provides the ReCon library to connect with CNC/robot controllers. There are six types of controller registers: R, C, S, A, I, O. The common registers are as follows:

Tag Name	Address	Туре	Description
AbsPos	R83000	Analog	
(Array)	Absolute position (Axis 1~32)		
DCode	R3006220	Analog	D-code
FastFwdP	R17000	Analog	The percentage of fast forward
FCode	R3006196	Analog	F-code
FedRateP	R17001	Analog	The percentage of feed rate
FeedRate	R82066	Analog	Feed rate
G54P1	R3094352	Analog (array)	G54P1 Code (Axis 1~32)
GCode00	R3094000	Analog (array)	G00 Code (Axis 1~32)
GCode54	R3094032	Analog (array)	G54 Code (Axis 1~32)
GCode55	R3094064	Analog (array)	G55 Code (Axis 1~32)
GCode56	R3094096	Analog (array)	G56 Code (Axis 1~32)
GCode57	R3094128	Analog (array)	G57 Code (Axis 1~32)
GCode58	R3094160	Analog (array)	G58 Code (Axis 1~32)
GCode59	R00001	Analog (array)	G59 Code (Axis 1~32)
HCode	R3006219	Analog	H-code
MachPos	R83064	Analog (array)	The machine position (Axis 1~32)
MCode	R3006197	Analog	M-code
NCode	R3006218	Analog	N-code

Table 4.5: Driver Tag List (Advantech LNC)				
PartCnt	R17019	Analog	Part count	
ParTotal	R140018	Analog	Part total count	
PartSet	C0027	Analog	Part count setting	
RelPos	R83032	Analog (array)	Relative position (Axis 1~32)	
SCode	R3006207	Analog	S-code	
SCodeNum	R3006202	Analog	The number of S-code	
SpinSpdR	R11370	Analog	Spindle speed rate (%)	
SpinSped	R83138	Analog	Spindle speed	
TCode	R3006212	Analog	T-code	
Status	R17003	Discrete	Status	
OperMode	R22000	Discrete	Operation mode	
MachType	R60000	Discrete	Machine type	
SysUnit	R69001	Discrete	The minimal unit of system command	
UnitType	R69042	Discrete	The type of system unit	
IsFinish	S0027	Discrete	Part count is finished or not	
IsArrive	S0098	Discrete	Part count is arrived at the total count or not	
IsMsg	S3000	Discrete	Exists warning message or not	
IsAlarm	S3000	Discrete	Exists alarm or not	

Table 4.6: Error Code of Driver Tag (Advantech LNC)			
Error Code Error Types Description			
*[ffff]	System error (driver not loaded)	ReCon lib driver is not loaded	
*[8000]	Device is offline	Check LNC device is alive or not	



Other Instructions

A.1 FANUC Alarm Message of WebAccess/CNC

By default, WebAccess/CNC alarm messages for FANUC series machines are in English. You can copy the built-in EN/TC/SC alarm message files (the default path is C:\WebAccess\Node\WebAccessCNC\message) and change the file name "alarm-Message.ini" to replace the original one in your project. You can also modify the message to suit specific CNC applications or user needs.

	And a state of the second s	
C:\WebAccess\Node\WebAccessCNC\mess	sage 🚽 😽 搜尋 message	٩
檔案(₽ 編輯(E) 檢視(⊻) 工具(Ⅱ) 說明(出)		
組合管理 ▼ 加入至媒體櫃 ▼ 共用對象 ▼ 燒錢	新増資料夾	i= - 🗔 🔞
 ■ 桌面 1 最近的位置 2 無近的位置 2 媒體櫃 2 文件 1 音樂 1 預用 1 面片 	▲ 名稿 ■ alarmMessage_cn.ini ■ alarmMessage_en.ini ■ alarmMessage_tw.ini	修改日期 類型 2016/11/17 下午 組懇設定 2016/11/17 下午 組懇設定 2016/11/17 下午 組懇設定
▲ 本機磁碟 (C:)		
本機磁碟 (D:) NEAL GREEN (G:)	• • •	4
3 個項目		

Figure A.1 EN/TC/SC alarm message files for FANUC



Figure A.2 Default alarm message file location

Table A.1: FANUC Alarm Class List				
Alarm List	Class Number	Description		
(SW)	0	Parameter switch on		
(PW)	1	Power off parameter set		
(IO)	2	I/O error		
(PS)	3	Foreground P/S		
(OT)	4	Over travel, external data		
(OH)	5	Overheat alarm		
(SV)	6	Servo alarm		
(SR)	7	Data I/O error		
(MC)	8	Macro alarm		
(SP)	9	Spindle alarm		
(DS)	10	Other alarm (DS)		
(IE)	11	Alarm concerning malfunction prevention		
(BG)	12	Background P/S		
(SN)	13	Synchronized error		
?	14	(reserved)		
(EX)	15	External alarm message		
(PC)	19	PMC error		
	20~31	(Not used)		

A.2 User Password and User Access Level for SIEMENS OPC/UA

You can use OPC/UA client software as UaExpert to modify the user password and user access level for SIEMENS OPC/UA machines. First, you should enter the system administrator password (default password = "OpcUaClient") and activate OPC/UA in the SIEMENS OPC/UA configuration dialog box, as follows:

Spindle chiller error	
Settings of the OPC UA Server	Overview
IP address: 192.168.100.2	Systems network
	ompany network
Admin User: OpcUaClient Password: ***** Confirm password: *****	Save NCU settings
Activate OPC UA:	Change ((Back
Setup Li- archive censes B Net- work C OPs Safety Swivel data	

Figure A.3 SIEMENS OPC/UA configuration

When using UaExpert to connect to SIEMENS OPC/UA machines, you can change the administrator password, as follows:

Path: Root\Objects\Sinumerik\Methods\ChangeMyPassword



Figure A.4 Calling the ChangeMyPassword object

input Ar	guments			
lame	Value		DataType	Description
ldPwd	77974590	Load file	String	old password
lewPwd1	77974590	Load file	String	new password
lewPwd2	77974590	Load file	String	confirmation of ne password
Result				
ucceeded				

Figure A.5 Changing the administrator password

To change the user access level, you should add a new user named "WebAccess" when using UaExpert to connect SIEMENS OPC/UA machines, as follows: Path: Root\Objects\Sinumerik\Methods\AddUser

Address Space	8	×
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A Dijects		*
> 👶 Server		
🖌 👶 Sinumerik		
Axis		
Bag		
Channel		
DriveVsa		
GUD		
Hmi		
Methods		
AddUser		
A Chang G Rebrowse		
⊳ => Delete => Call		
Deleteoseraccess		-
GiveUserAccess		
⊳ ≝o ReadVar		
▷ ⇒♥ WriteVar		
Pic		
E CEA		
D LI SEA		
p 🛄 TEA		
Viewe		
		÷



Method to create a miniweb-user		
Input Arguments		
Name Value	DataTy	pe Description
UserName WebAccess	Losd file String	old new user's name
Result		
Succeeded		
	Cal	Close

Figure A.7 Adding a new administrator account

After adding a new user as "WebAccess", you can modify the user access level to be read and write, as follows:

Path: Root\Objects\Sinumerik\Methods\GiveUserAccess



Figure A.8 Calling the ChangeMyPassword object

						USED NO DE DO D
🔛 Call	GiveUserAccess	on Methods				? ×
Method	t to allow a user to a	access data. UserManager require	d.			
Input	Arguments					
Name	Value				DataType	Description
User	WebAccess			Load file	String	user
Realm	SinuResdAll		-	Load file]	String	realm allowed values: "StateRead", "State Write", "FrameRead", "FrameWrite", "SeaRead", "SeaWrite", "TeaRead", "TeaWrite", "ToolRead", "GoulWrite", "DriveRead", "DriveWrite", "GudRead", "GoulWrite", "FlcRead", "PlcWrite", "SinuReadAll", "SinuWriteAll", "RandomRead", "RandomWrite"
Resul	it					
Succee	ded					
						Call Close

Figure A.9 Giving read access to an administrator account

Call GiveUserAccess on Methods			Constants		? X
Method to allow a user to access data. UserManager requin	ed				
Input Arguments					
Name Value		DataType	Description		
User WebAccess	Load file	String	user		
Reshn SinuWriteAll	Load file	String	realm allowed values: "St "FrameRead", "Frame Wri "ScaRead", "Sea Write", " "GouRead", "Tool Write", "GuuRead", "Goul Write", "SmuRead All", "Sinu Wri "Random Write"	ateRead", "Stat te" TeaRead", "Tea "DriveRead", "Pi Reead", "Pi iteAll", "Rando	eWrite", (Write", "DriveWrite", cWrite", omRead",
Result					
Succeeded					
				Call	Close

Figure A.10 Giving write access to an administrator account

DeviceSetting> Modify				
Name:	RD1			
CNC Type:	SIEMENS-OPC			
Controller:	828D 🔻			
CNC IP:	192.168.1.1			
CNC Port:	4840			
OPC User Name:	WebAccess			
OPC Password:	77974590			
SSH User Name:	manufact			
SSH Password:	SUNRISE			
NC Files Path:	/nckfs/_N_MPF_DIR			
USB Files Path:	/media			
Alarm Log Path:	/user/sinumerik/hmi/log/alarm_log/ala			
	Save Cancel			

Figure A.11 SIEMENS OPC/UA username/password (CNC device settings)



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Please verify specifications before quoting. This guide is intended for reference purposes only.

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