
Okuma America Corporation

Okuma Program Scheduler
Software User Manual

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| OKUMA Program Scheduler | |
| User Manual | Date: 07/26/2021 |

Revision History

| Date | Description | Author |
|------------|--------------------------------|------------|
| 07/26/2021 | Public Release Version 1.0.0.0 | Linh Huynh |

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Okuma Program Scheduler Interface User Manual

1. Introduction

1.1 Purpose

The purpose of this document is to provide the instruction of installing and operating Okuma Program Scheduler Interface. It also provides information on how to repair, and uninstall this software.

1.2 Scope

This manual will cover the installation, operation and troubleshooting of Okuma Program Scheduler Interface running on OSP P200L/P300L/P200M/P300M/P300G controls or newer controls and on Windows XP SP3, Windows 7 SP1, and Windows 10.

1.3 Definitions, Acronyms and Abbreviations

None

1.4 Overview

The Okuma Program Scheduler Interface is an application that is designed to simplify the process of creating schedule program for part programs stored in D:\MD1 folder and subfolders. Part programs stored in other folders will be copied to the D:\MD1 folder, automatically.

1.5 References

[1] Installation Manual for THINC-API

1.6 Requirements

THINC-API:

Version 1.21.1 for Lathe and Machining Center

Version 1.21.1 for Grinder

2. Installation

The following steps in section 2.0 need to be performed in the same order:

[Installation of THINC API](#)

[Installation of Okuma Program Scheduler Interface' Software](#)

Note: All installation must be either installed directly from CD/DVD disks or copied to the local hard drive.

2.1 Installation of THINC-API

This application requires THINC-API having the same version or greater to be installed on machine as specified in the Release Note.

Refer to THINC-API 'InstallationManual.pdf' provided on THINC-API Installation disk for instructions.

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Tip: Try to run THINC-API Demo Application and see if it runs normally to make sure THINC-API is properly installed.

It is always best to install the latest version of THINC-API on the machine if possible.

2.2 Installation of Okuma Program Scheduler Interface Software

In Windows mode (press ESC and Cancel button during NC Startup screen to prevent NC from running. On P300A or new controls, it needs to keep tapping on the Shift key while NC is starting to prevent NC from running.), Run the 'Setup.exe' program from the DVD to install this software package. The setup program automatically checks if Microsoft .NET framework 4.0 is installed. If it is not installed, continue to section 2.2.1, otherwise refer to section 2.2.2.

OSP software should not be running during the installation or .NET Framework 4.0. During the .NET installation, it will be necessary to reboot multiple times. OSP software launch should be cancelled and the installation media should remain connected during the reboot.

For Windows XP, it must have Service Pack 3 installed in order to support .NET Framework 4.0

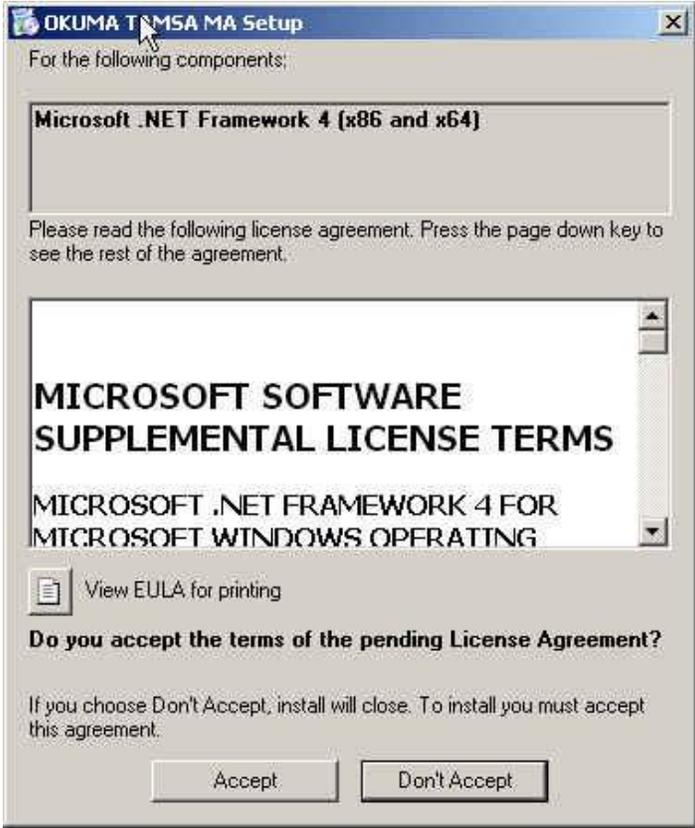
This installation can only be installed on 32-bit Windows XP or Windows 7.

Note: This setup will check to see if the required version of THINC-API, and Startup Service installed on target machine before installing Okuma Program Scheduler Interface.

2.2.1 Installation of Microsoft .NET Framework 4.0

The next dialog will be displayed if Microsoft .NET framework 4.0 is not installed.

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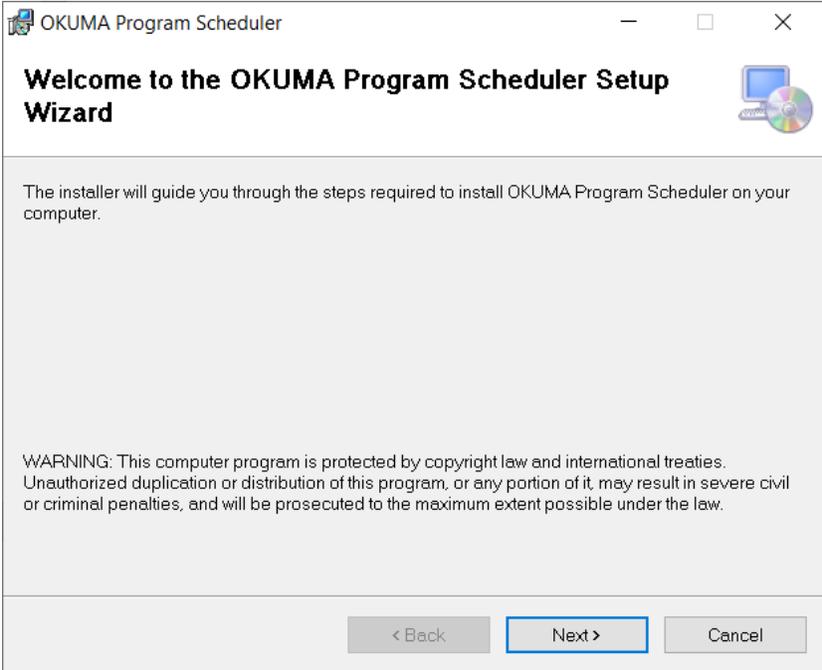
Click **Accept** to install .NET framework 4.0.

If the .NET installation requires rebooting, then it needs to reboot the machine to continue the installation again.

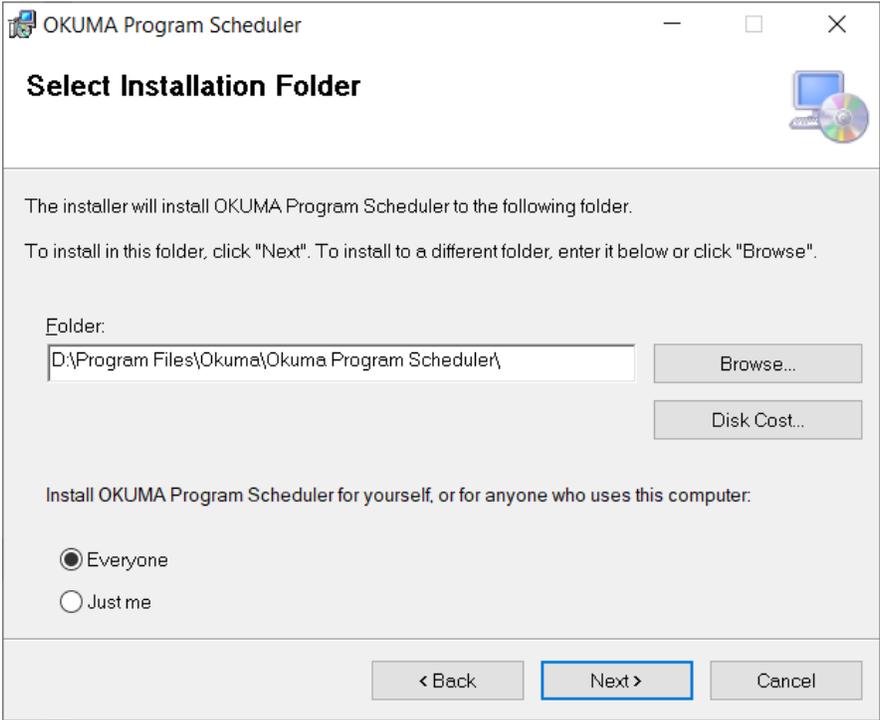
2.2.2 Installation of Okuma Program Scheduler Interface Software

The following dialog will be displayed once all of the required .NET frameworks are installed.

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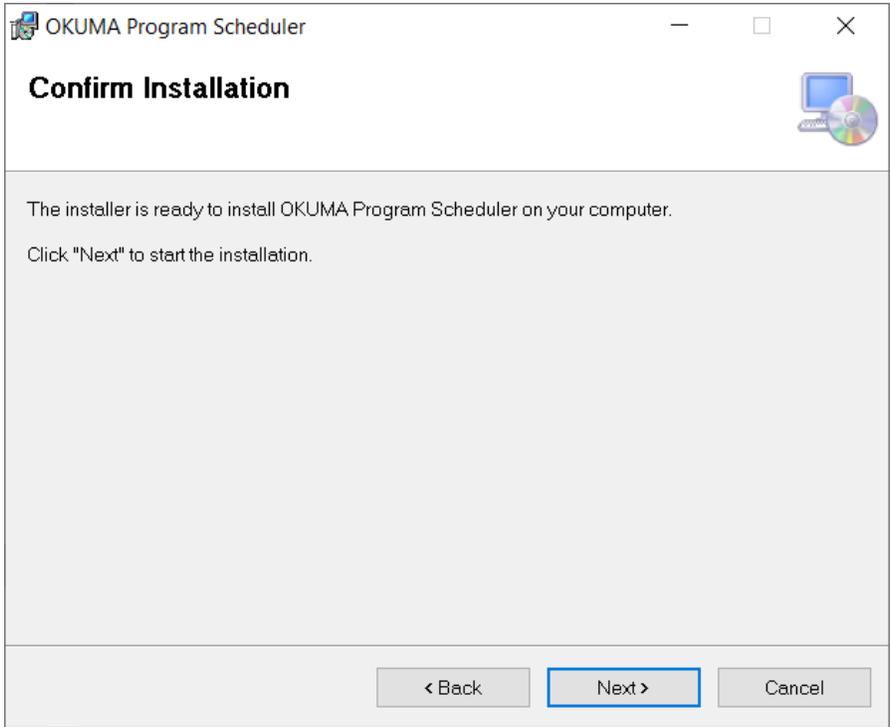


Click **Next** to continue.

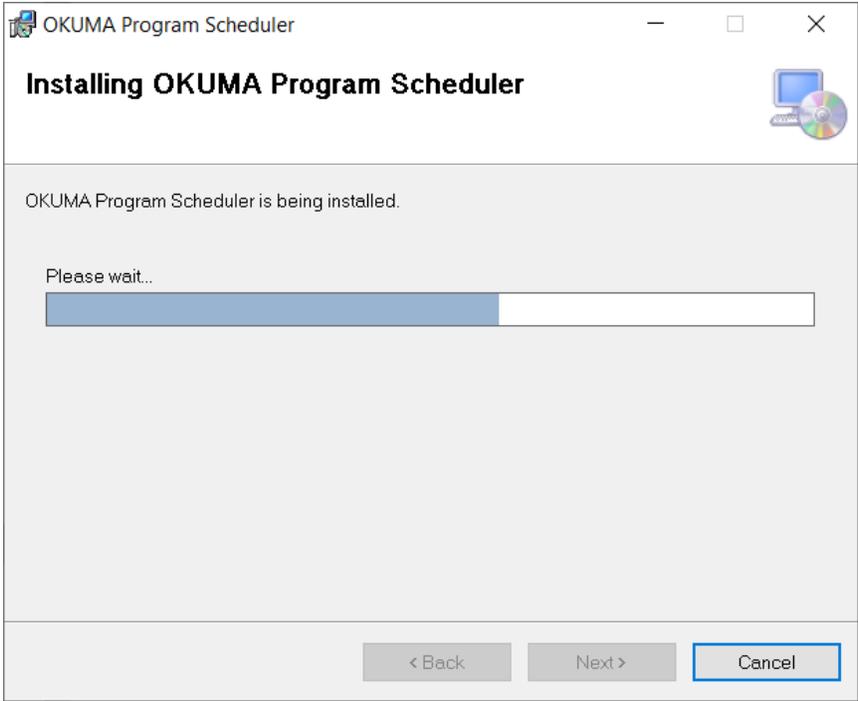


Click **Next** to continue. User can also select a different folder other than the default one to install Okuma Program Scheduler Interface Software.

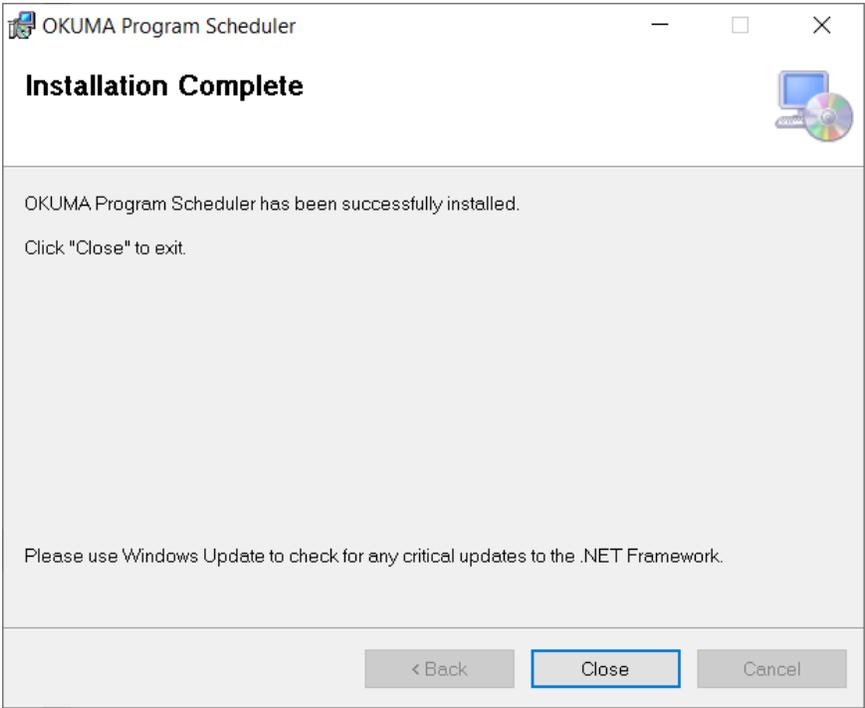
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Click **Next** to continue.



Application is installing.

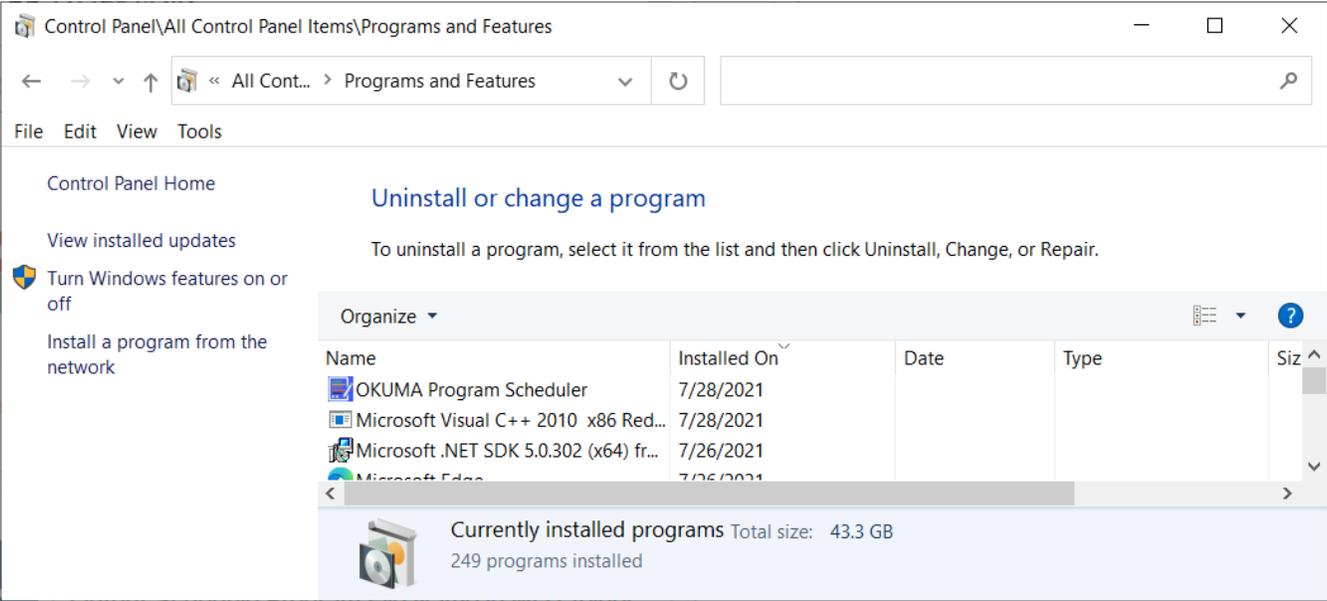


Click **Close** to complete the installation.

3. Repair/Uninstall Okuma Program Scheduler Interface Software

3.1 Un-install Okuma Program Scheduler Interface Software

Start the machine in Windows only mode. Click **Start** → **Settings** → **Control Panel** to launch control panel. Double click **Add or Remove Programs** for **Windows XP** or **Programs and Features** for **Windows 7** in control panel, find the item **Okuma Program Scheduler Interface** and click **Remove or Uninstall** to uninstall Okuma Program Scheduler Interface Software.



4. Installation Files

4.1 Okuma Program Scheduler Interface Software

All the files are installed in the installation folder unless otherwise noted, by default, which is 'D:\Program files\Okuma\Okuma Program Scheduler' Interface.

5. Usage

This application is designed to help creating schedule program running on OSP-P controls only.

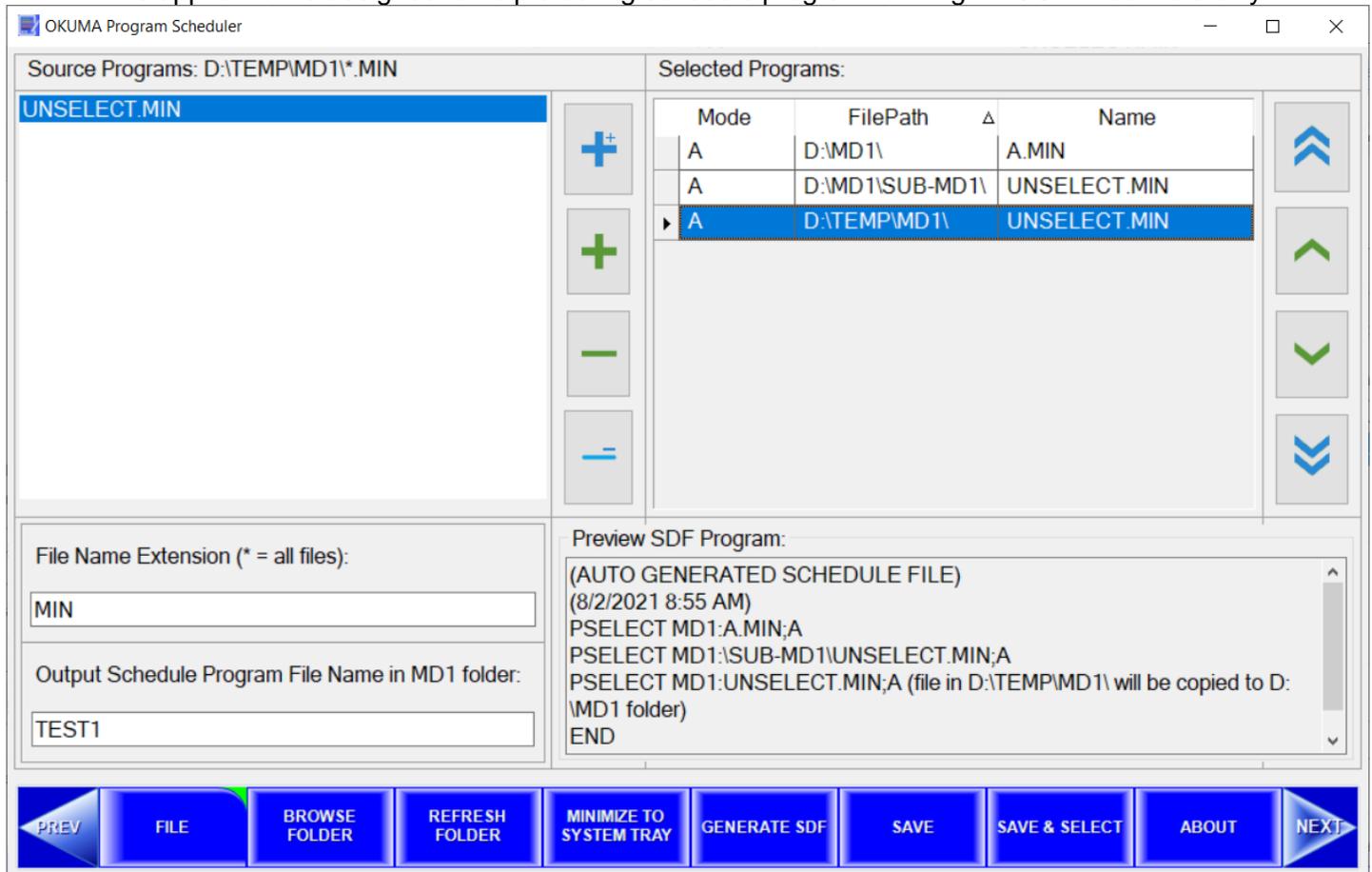


Figure: Okuma Program Scheduler Interface Software main user interface for Machining Center

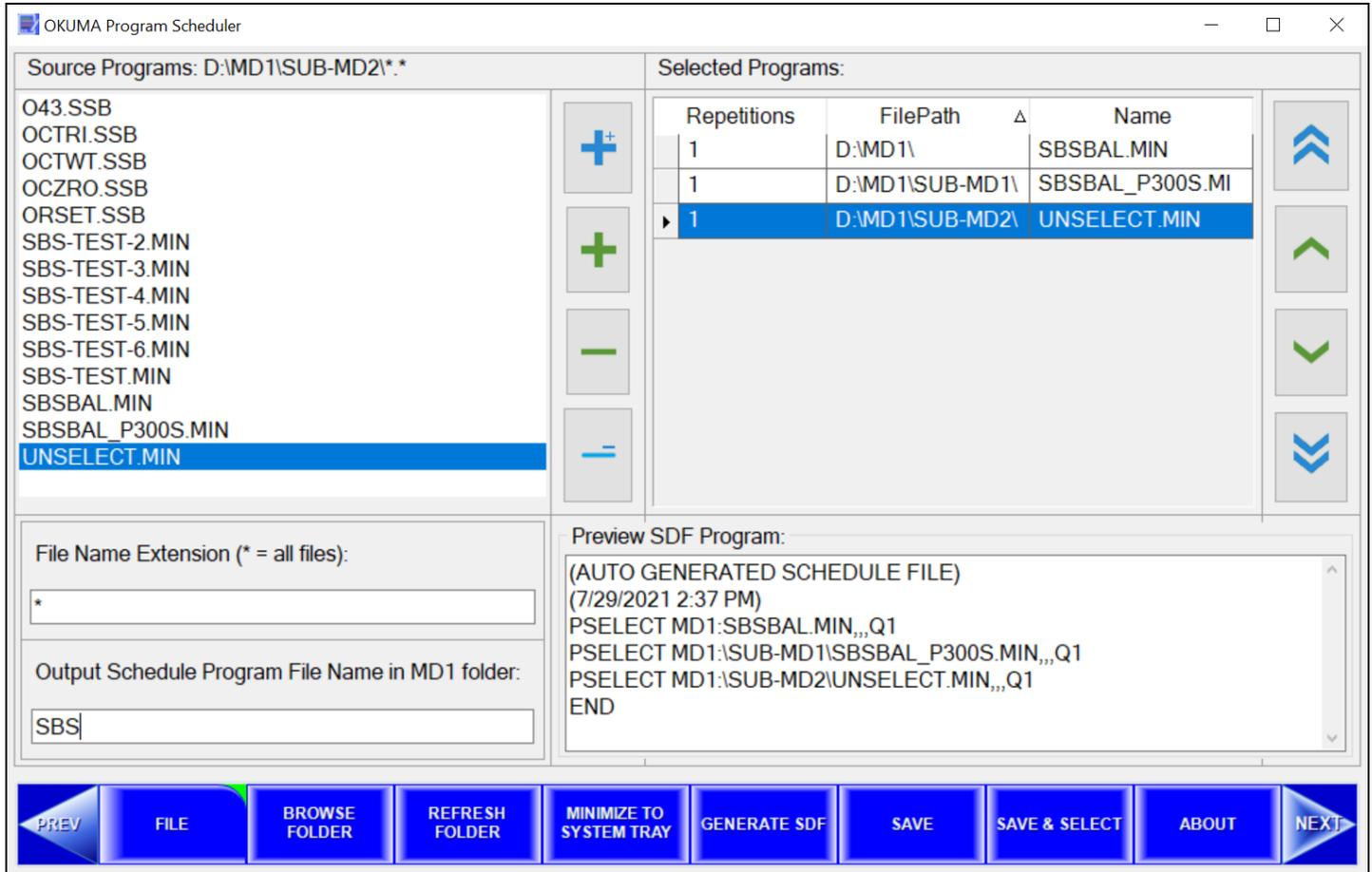
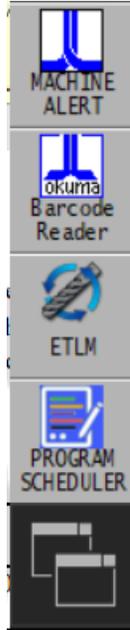


Figure: Okuma Program Scheduler Interface Software main user interface for Lathe/Grinder

5.1 Start Okuma Program Scheduler Interface Application

The Okuma Program Scheduler Interface Software can be launched from the OSP VKEY once NC is fully startup.

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In addition, application can also be launched from Windows Programs menu by pressing **Ctrl + ⧞** on the operation panel to pop up Start Menu, then click **Programs → OKUMA Program Scheduler → Okuma Program Scheduler** to run.



The main user interface can be displayed by double clicking on the icon in the system tray or Show menu item if the application has been minimized to system tray.



5.2 Exit Okuma Program Scheduler Interface Application

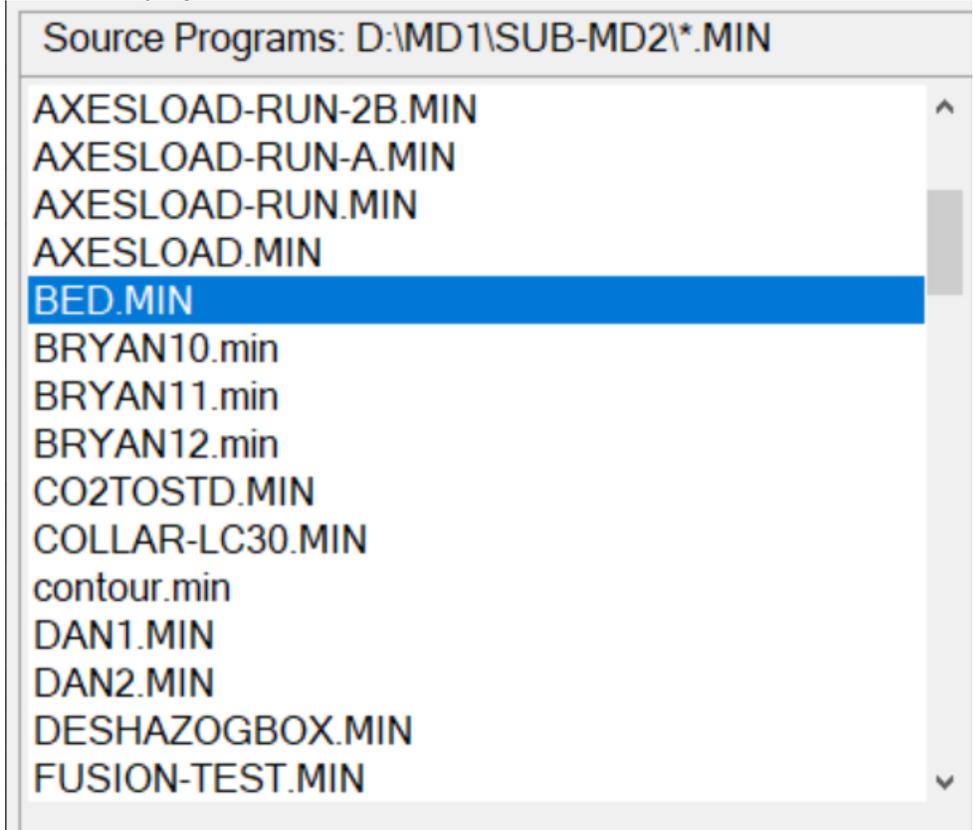
When user shuts down the machine, the software will be terminated automatically without user interaction. Click the button **File/Exit** will also terminate the software.

5.3 Source Programs and Selected Programs

By default, the system will list all files in the default D:\MD1 folder based on the current Part Program File Name Extension. User can use the operation buttons to add files to the Selected Programs list or remove files from the Selected Programs list.

5.3.1 Source Programs

The list displays all files in the current select folder.



The source programs displays part programs based on the current selected folder and file name extension.



- Add all part programs from source programs to the Selected Programs list



- Add one or more selected part programs from source programs to the Selected Programs list



- Remove the selected part program from the Selected Programs list



- Remove all part programs from the Selected Programs list

5.3.2 Selected Programs

Selected Programs:

| | Mode | FilePath Δ | Name | |
|--|-------------|-------------------|------------|--|
| | A | D:\MD1\ | A.MIN | |
| | A | D:\MD1\SUB-MD | APREBA.MIN | |
| | B | D:\MD1\SUB-MD | BED.MIN | |
| | A B S | | | |
| | | | | |

- Figure: Selected Programs for Machining Center machines

Selected Programs:

| Repetitions | FilePath Δ | Name |
|-------------|-------------------|-----------------|
| 1 | D:\MD1\ | SBSBAL.MIN |
| 1 | D:\MD1\SUB-MD1\ | SBSBAL_P300S.MI |
| ▶ 2 | D:\MD1\SUB-MD2\ | UNSELECT.MIN |









- Figure: Selected Programs for Lathe and Grinder machines

-



-

Move the current selected row in the Selected Programs list to the first row of the list



-

Move the current selected row in the Selected Programs list up 1 row



-

Move the current selected row in the Selected Programs list down 1 row



-

Move the current selected row in the Selected Programs list to the last row of the list

5.3.2.1 Machining Center Programs

By default, the part program will be assigned A mode. Mode can be changed to other modes for each part program as shown below:

| | Mode | FilePath Δ | Name |
|--|------|-------------------|------------|
| | A | D:\MD1\ | A.MIN |
| | A | D:\MD1\SUB-MD | APREBA.MIN |
| | A | D:\MD1\SUB-MD | BED.MIN |
| | A | | |
| | B | | |
| | S | | |

5.3.2.2 Lathe/Grinder Programs

By default, the part program will have a repetition of 1. The number of repetition can be changed by changing the value of Repetition column as shown below:

| | Repetitions | FilePath Δ | Name |
|--|-------------|-------------------|-----------------|
| | 1 | D:\MD1\ | SBSBAL.MIN |
| | 1 | D:\MD1\SUB-MD1\ | SBSBAL_P300S.MI |
| | 2 | D:\MD1\SUB-MD2\ | UNSELECT.MIN |

5.4 File Name Extension

File Name Extension (* = all files):

MIN

By default, the file name extension is MIN. It can be changed to any other file name extension if the machine is configured to work with that. It can also be set to "*" to allow the system to load all files available in the current selected folder. When the folder is refresh or new folder is selected, only files having the same file name extension will be loaded into the Source Programs.

5.5 Output Schedule Program File Name in MD1 Folder

Output Schedule Program File Name in MD1 folder:

SBS

By default, the schedule program will be stored in MD1 folder only. A file name must be specified when the schedule program is generated by pressing the GENERATE SDF button.

5.6 Preview SDF Program

Selected Programs:

| Mode | FilePath | Name |
|------|-----------------|--------------|
| A | D:\MD1\ | A.MIN |
| A | D:\MD1\SUB-MD1\ | UNSELECT.MIN |
| A | D:\TEMP\MD1\ | UNSELECT.MIN |

Preview SDF Program:

```
(AUTO GENERATED SCHEDULE FILE)
(8/2/2021 8:55 AM)
PSELECT MD1:A.MIN;A
PSELECT MD1:\SUB-MD1\UNSELECT.MIN;A |
PSELECT MD1:UNSELECT.MIN;A (file in D:\TEMP\MD1\ will be copied to D:
\MD1 folder)
END
```

- Figure: Preview SDF Program for Machining Center machines

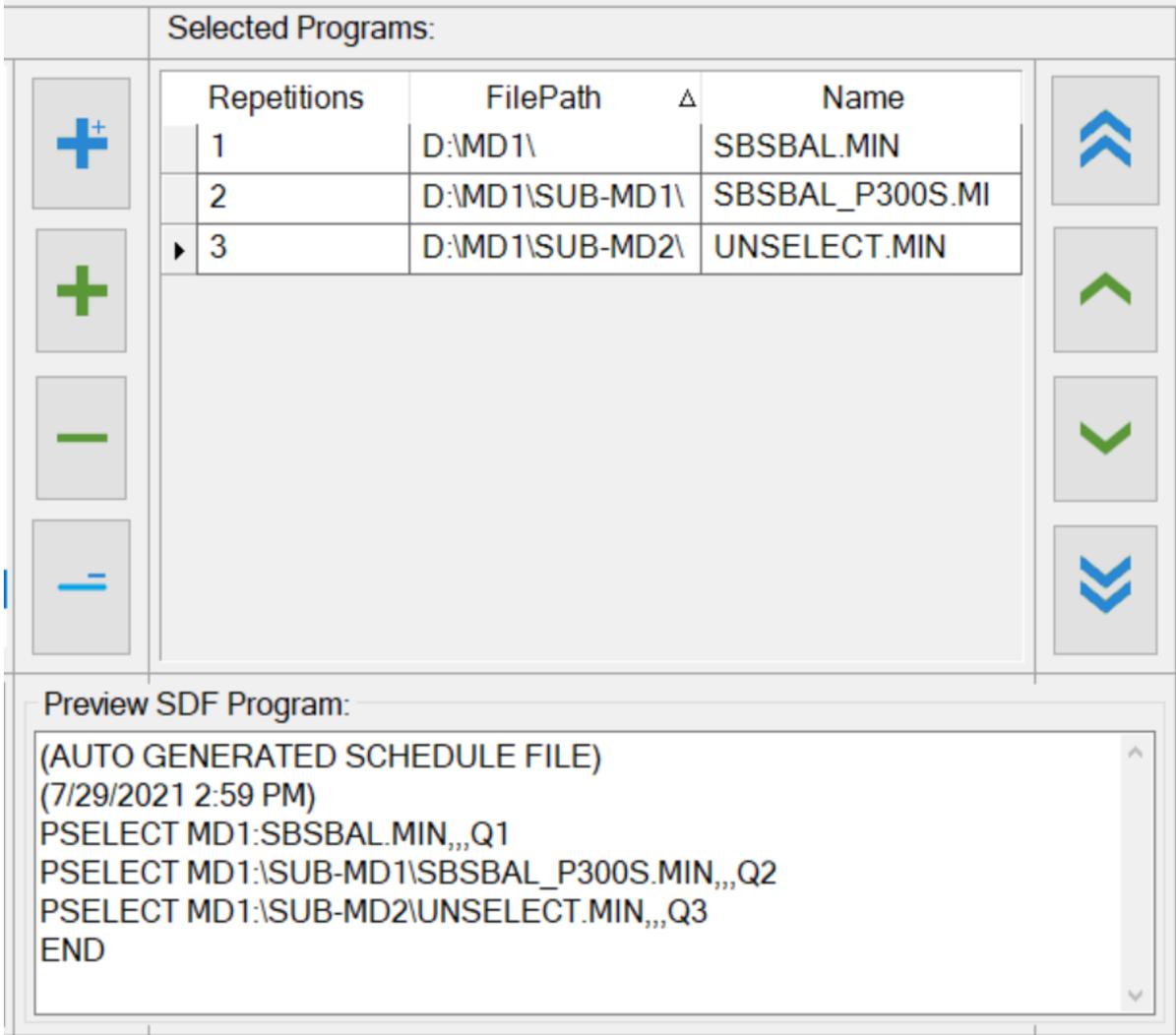


Figure: Preview SDF Program for Lathe/Grinder machines

The system will generate a preview of schedule part program based on the programs from the Selected Programs list.

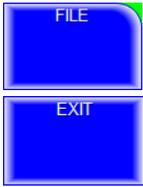
Note: If part program files are not stored in the folder or subfolders of D:\MD1, part program files will be automatically copied to the D:\MD1 folder when schedule program is saved.

5.7 Menu Bar

The application contains a menu bar as shown below. The menu item can be activated by pressing on it or pressing the correspond Function Key from [F1] to [F9] if applicable.



5.7.1 File



- Click on this soft key or function key [F1], the File menu has one submenu item, which is

Click on **Exit** button close the application.

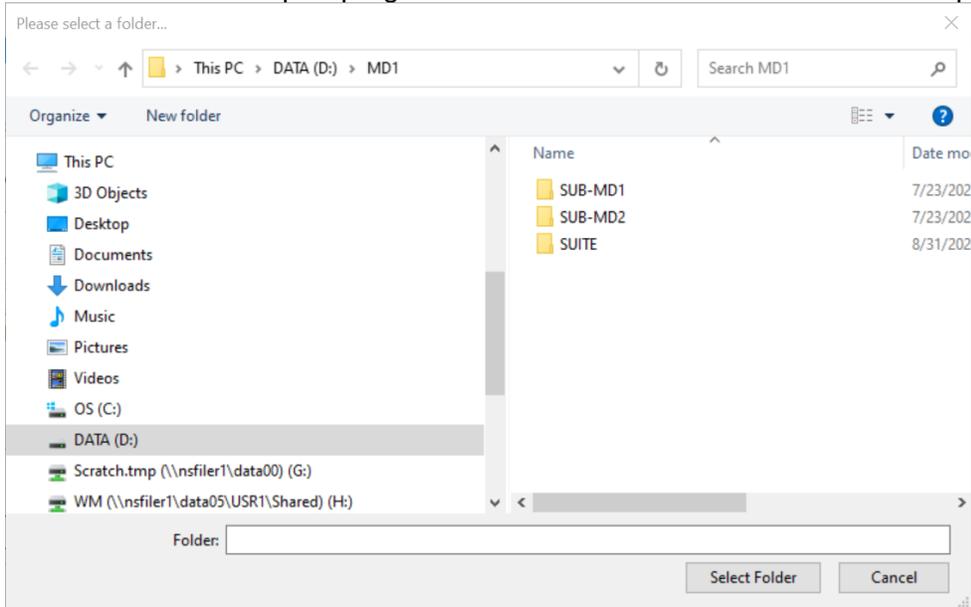


The application can also be closed by clicking the button on the application's title bar

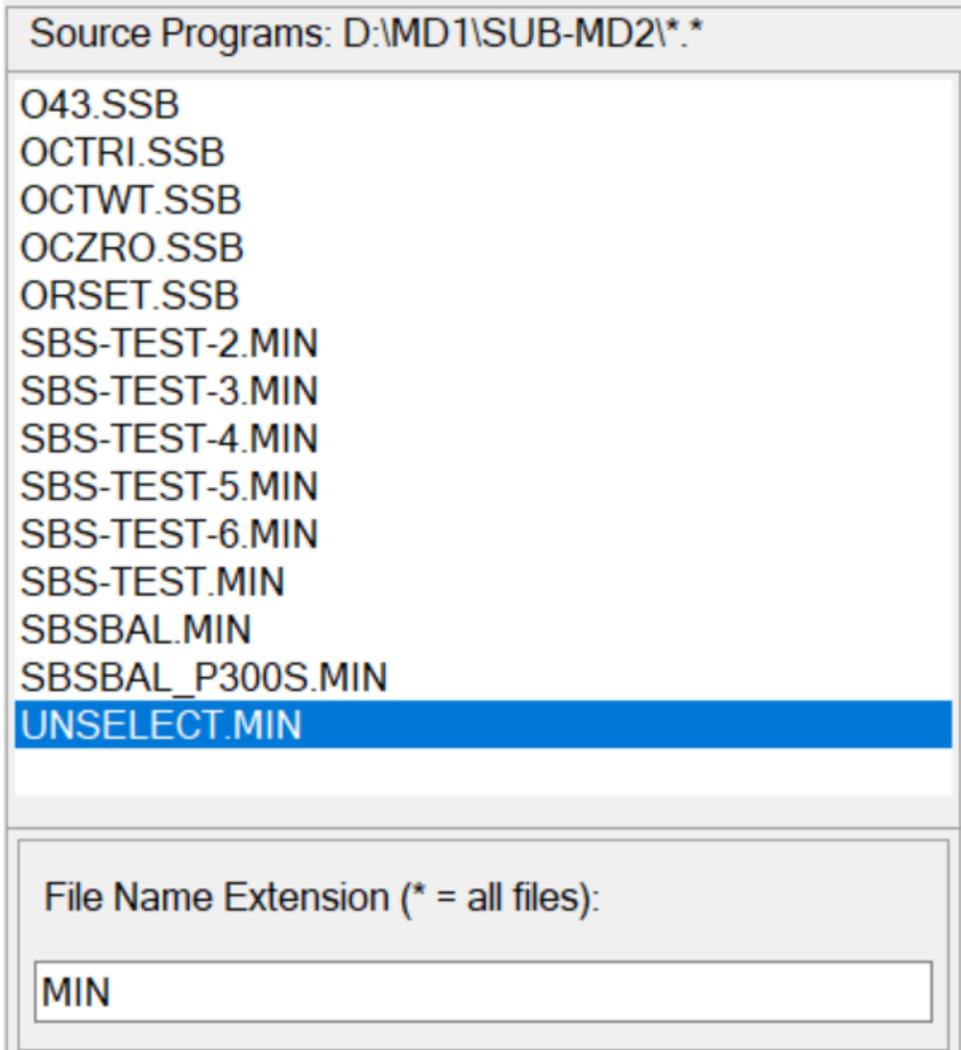
5.7.2 Browse Folder



By clicking on this soft key or function key [F2], a dialog is displayed to allow user to select a folder where part programs can be selected to create a schedule program.



When a folder is selected, the system will display all files having file the name extension defined in the Part Program File Name Extension as shown below:



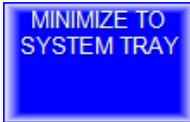
If the File Name Extension is *, then all files includes in the current select folder will be displayed in the list.

5.7.3 Refresh Folder



By clicking on this soft key or function key **[F3]**, the system will reload all files based on the file name extension and current selected folder.

5.7.4 Minimize to system tray



- Click on this soft key or function key **[F4]** the main user interface is hidden and the

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Okuma Program Scheduler icon for this application is shown in the system tray of Windows System task bar.



5.7.5 Generate SDF



- Click on this soft key or function key **[F5]** the system generates a preview of schedule program based on the programs listed in the Selected Programs list.

5.7.6 Save



- Click on this soft key or function key **[F6]** the system will generate and save the schedule program to the MD1 folder based on the Preview SDF Program. A schedule program name without extension must be assigned before performing this operation.

Note: The system will also copy part program files to D:\MD1 folder if files are not stored D:\MD1 folder or its subfolders.

5.7.7 Save and Select



- Click on this soft key or function key **[F6]** the system will generate and save the schedule program to the MD1 folder based on the Preview SDF Program. A schedule program name without extension must be assigned before performing this operation. In addition, the schedule program is also loaded into NC.

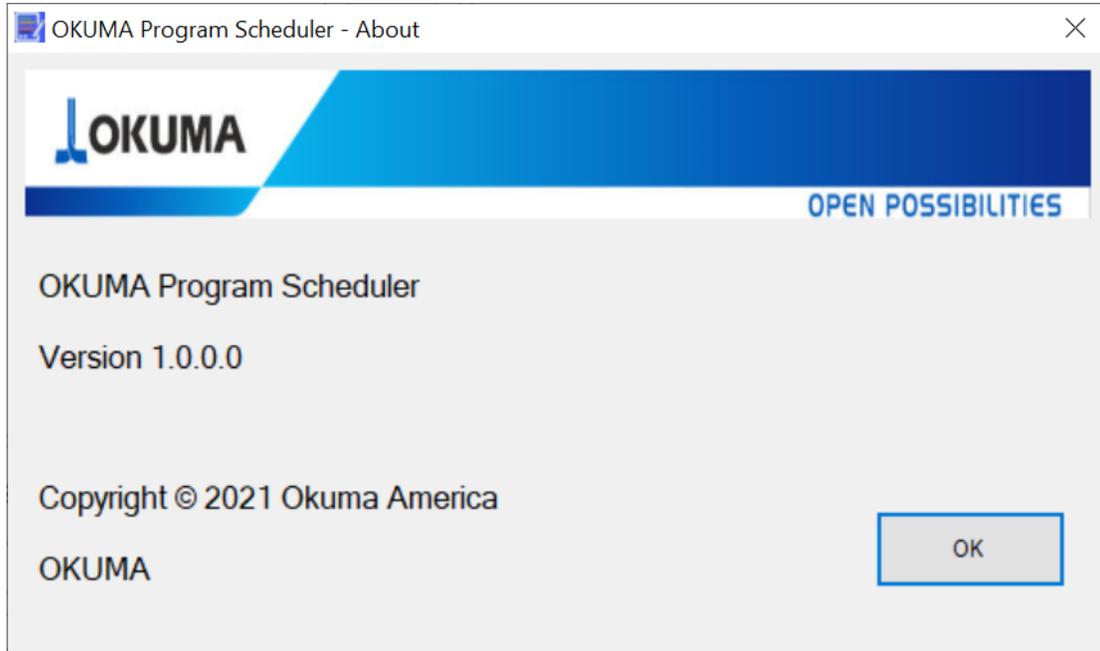
Note: The system will also copy part program files to D:\MD1 folder if files are not stored in D:\MD1 folder or its subfolders.

5.7.8 About



- Click on this soft key or function key **[F8]** a dialog is displayed to show the information about this application.

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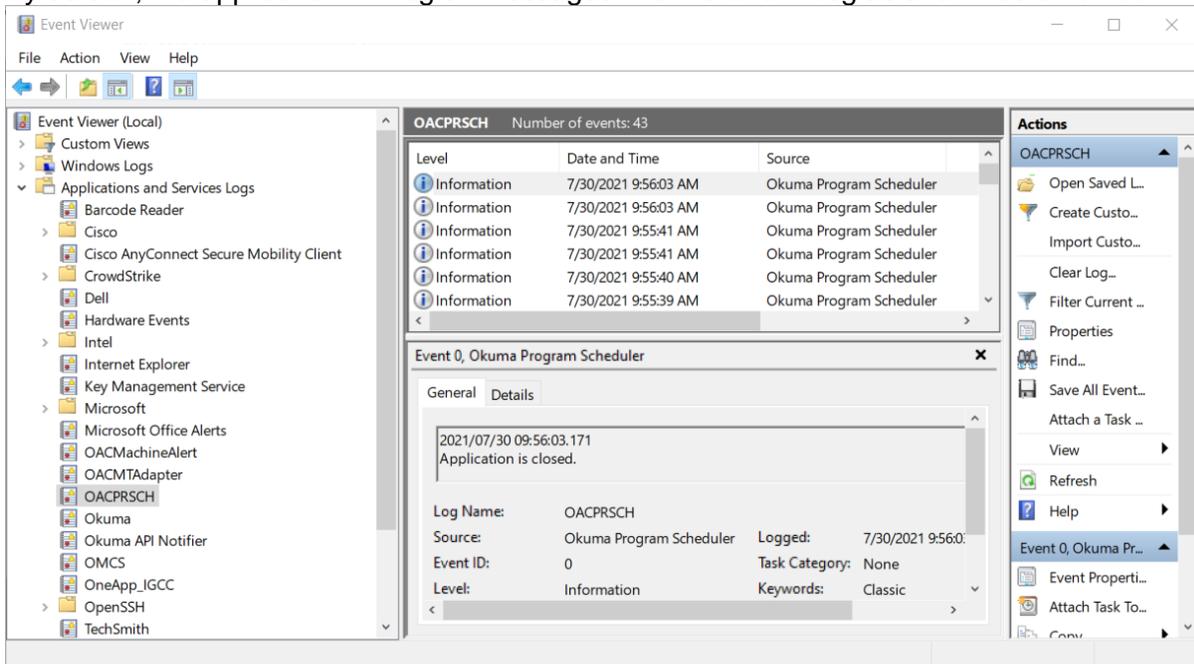
5.8 Configuration

By default, the file name extension is MIN. If it is changed it will be saved into the application configuration file named OkumaProgramScheduler.exe.config.

6. Troubleshooting

6.1 Logs

By default, the application will log all messages into the Event Log as shown below.



In addition, a log file is also created in the Logs folder where the application is installed. The events in

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the log file will be deleted when the application is first started. The name of the log file is Log.txt.

6.2 Running Statuses of THINC-API

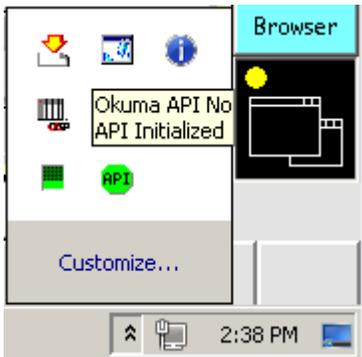
After NC is fully started, THINC-API Notifier Status should have a green icon displayed at the lower left corner of the screen as shown below:

Windows XP:

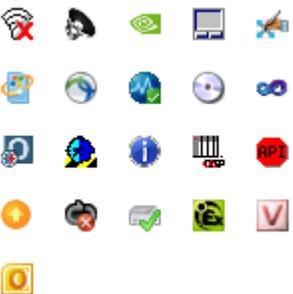


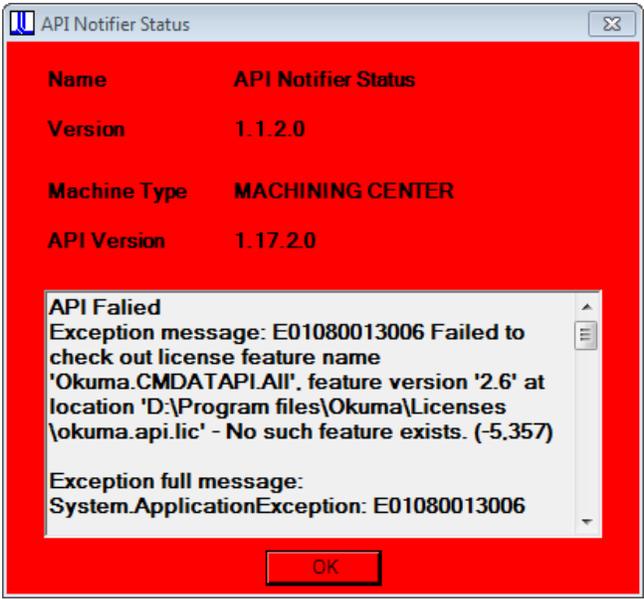
Windows 7:

Note: The API icon status can only be supported on Windows 7 if THINC-API installed on target has a version 1.17.1.0 or greater.



If the color of icon is red, THINC-API has encountered an error state. By clicking on the API icon, a dialog will display and show detail error message as shown in the captured image below:





Please contact OKUMA distributor for further assistant on THINC-API error.

6.3 Version

The version of THINC-API can be checked by clicking on the API icon. A dialog will be displayed and showing API version number.

