



ITA_Instruction_Manual

Symphony

—Version 1.5 —

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※「Exastro IT Automation」is written as「ITA」in this document

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Introduction

This document describes the functions and operation methods of the ITA Symphony function.

1 Overview of Symphony

This chapter describes the functions and operation methods of the Symphony menu.

Symphony provides the following functions that are commonly required to perform work using ITA.

- Create, manage, execute workflow.

Refer to the “First Step Guide” for the position of the Symphony in the ITA Operation procedure.

2 Symphony Menu screen configuration

This chapter explains Symphony menu and screen configuration.

2.1 Symphony menu list

The ITA Common/Symphony menu is shown below

Table 2.1-1 ITA Screen list

No	Menu Group	Menu group · Screen	Description
1	Symphony console	Symphony interface information	Maintain (View/Register/Update/Discard) settings such as shared directory path of Movement when executing Symphony.
2		Symphony class list	Maintain (View/Discard) Symphony class Click "Details" to move to Class edit menu.
3		Symphony class editor	Edit Symphony class
4		Symphony execution	Execute Symphony class
5		Symphony execution checking	Check the result of Symphony operation execution
6		Symphony execution list	View the Symphony execution list (Execution history) Click "Details" to move to Symphony confirmation.
7		Symphony Regularly execution	Manage regularly executed Symphony operations.

3 Symphony user manual

3.1 Workflow

The standard workflow in Symphony is as follows.
Details of each operation are described in the next section.

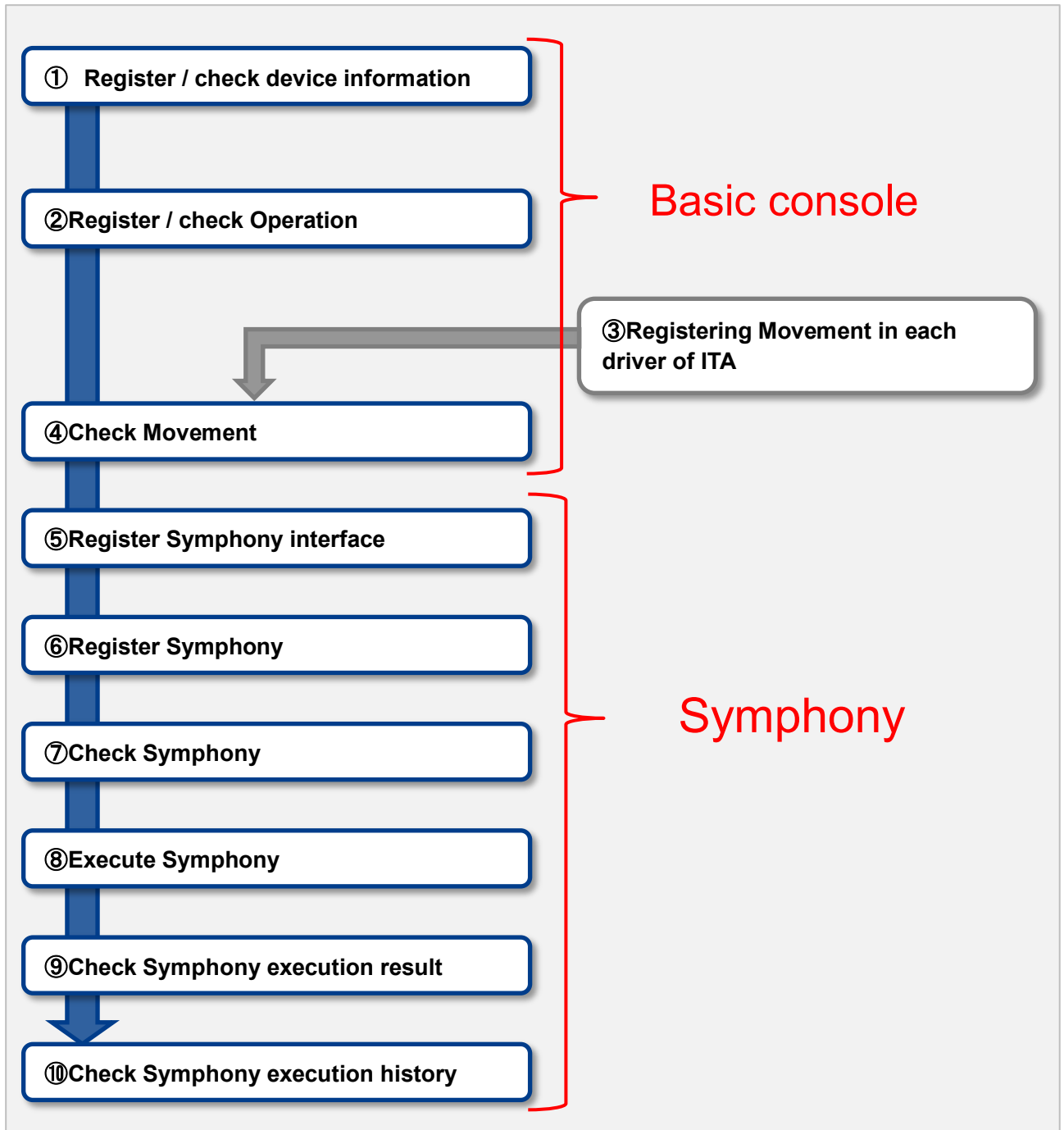


Figure 3.1-1 Workflow

4 Function and operation method description

4.1 Symphony

4.1.1 Symphony interface information.

- (1) In the “Symphony interface information” screen, users can set the path of shared directory for each Movement executed by Symphony and the refresh interval for “Symphony confirmation” screen.

The screenshot displays the 'Symphony Interface Information' screen in the Exastro IT Automation system. The interface includes a sidebar menu on the left with options like 'Main menu', 'Symphony Interface Information' (highlighted), 'Symphony class List', 'Symphony class editor', 'Symphony execution', 'Symphony execution checking', 'Symphony execution list', and 'Symphony Regularly execution'. The main content area features a 'Description' section, a 'Display filter' section with various search criteria (Discard, No, Data relay storage path, Status monitoring cycle, Remarks, Last update date/time, Last updated by), and a 'List' section showing a table of data. The table has columns for Update, Discard, No, Data relay storage path, Status monitoring cycle, Remarks, Last update date/time, and Last updated by. The first row shows 'Update' as 'Update', 'Discard' as '1', 'No' as '1', 'Data relay storage path' as '/exastro/data_relay_storage/symphony', 'Status monitoring cycle' as '3,000', 'Remarks' as empty, 'Last update date/time' as '2015/04/01 10:00:00', and 'Last updated by' as 'System Administrator'. There is also an 'Output Excel' button and a 'Filter result count: 1' indicator.

Figure 4.1-1 Sub menu screen (Symphony interface information)

- (2) The list of common items on the registration screen is as follows.

Table 4.1-1 List of Registration Screen Items (Input operation list).

Items	Description	Input Required	Input method	Restrictions
Data relay storage path	When executing Symphony, enter the directory shared by each Movement with the directory path viewed from the ITA server. For the path viewed from each driver, please refer to the interface information in the instruction manual for each driver. Drivers that can share the directory are as follows. • Ansible • Ansible-Tower	○	Manual input	Maximum length 128 bytes
Status monitoring cycle (Milliseconds)	Enter the interval for refreshing the display of “4.1.4 Symphonic execute”. Generally, it is recommended to set the number to 3000 milliseconds.	○	Manual input	Shortest value: 1000 milliseconds
Remarks	Free description field.	-	Manual input	-

4.1.2 Symphony class list

- (1) In the “Symphony class list” screen, users can refer to /cancel already registered symphony classes.

Click the “Details” button to move the selected symphony class edit screen “4.1.3 Symphony class edit”.

The screenshot shows the 'Symphony class list' screen. The left sidebar menu has 'Symphony class List' highlighted with a red box. The main content area includes a 'Description' header with an 'Open' button, a 'Display filter' section with a 'Close' button, and a table with columns: Discard, Symphony class ID, Symphony name, Description, Remarks, Last update date/time, and Last updated by. Each column has a search dropdown. Below the table are 'Filter' and 'Clear filter' buttons, and a checked 'Auto-filter' checkbox. A 'List' section with a 'Close' button shows a message: 'Record does not exist. New registration can be done as per the following.' At the bottom are 'Download all' and 'Trace history' buttons, each with an 'Open' button. The top right shows user information and 'Change password' and 'Logout' buttons. The bottom left has a 'Contact administrator' button.

Discard	Symphony class ID	Symphony name	Description	Remarks	Last update date/time	Last updated by
Exclude discarded records	~				~	
	▼ Search from pulldown	▼ Search from pulldown	▼ Search from pulldown	▼ Search from pulldown		▼ Search from pulldown

Filter Clear filter

☒ Auto-filter

List Close

Record does not exist.
New registration can be done as per the following.

Download all Open

Trace history Open

Contact administrator

Figure 4.1-2 Submenu screen (Symphony class list)

4.1.3 Symphony class edit

- (1) In the “Symphony class edit” screen, Users can register symphony class titles and work flow movements.
- Registered Movements is displayed in the area on the top-right side of the screen.
 - Users can set Movement by dragging and dropping them on the right side of the screen.
 - Users can switch Movement by dragging and dropping them in the Movement flow edit area.
 - Users can temporarily stop the set Movement by checking the box under it.
 - Users can memo the description of the operation of the comments in the “Description” column and the column below the dropped Movement name.
- The column is only for reference on the web and will not affect operation execution.
- Press the “Register” button after setting up Movement flow to register the Symphony class.

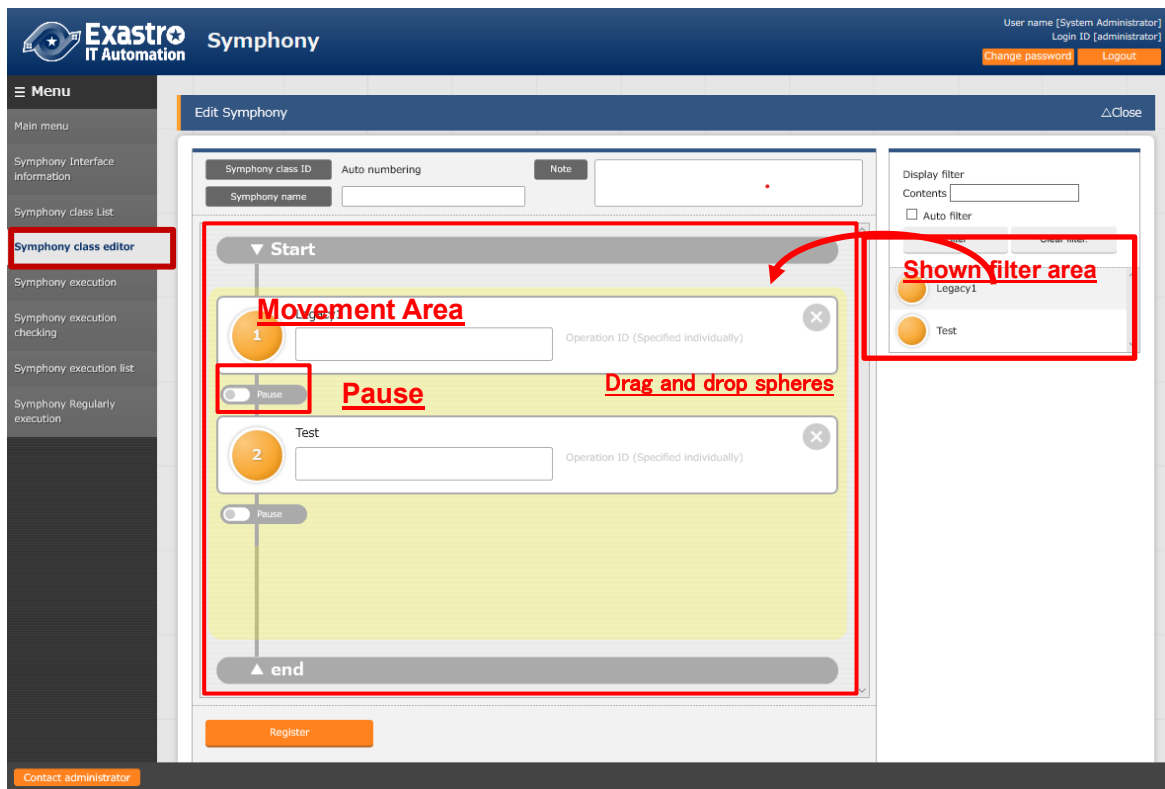


Figure 4.1-3Submenu screen (Symphony class edit)

The Symphony class edit screen item list is as shown below.

Table 4.1-2 Registered screen item list.(Symphony class edit)

Item	Description	Input required	Input method.	Restrictions
Symphony class ID	Unique ID for Symphony is auto-numbered.	-	Automatic input	-
Symphony name	Enter any desired name for Symphony class	o	Manual input	-
Description	Enter description and comment for Symphony class	-	Manual input	-
Movement Description	Enter description and comment for Movement	-	Manual input	-

Operation ID (Specified individually)	Enter the desired operation ID for to individually specify it.	-	Manual input	-
Pause	Check the box to pause the movement after it has been activated	-	Check box	-
Delete	Delete Movement	-	Button	-

- (2) The screen below will appear if the user has moved from the Symphony class list screen or has finished registering a symphony.

The screenshot displays the 'Edit Symphony' interface in the Exastro IT Automation system. The main workspace is a flowchart editor titled 'Start' at the top and 'end' at the bottom. It contains two steps: 'Legacy1' (Step 1) and 'Legacy_movement' (Step 2). Each step has a text input field for 'Operation ID (Specified individually)'. A 'Note' box at the top right of the editor area contains the text 'This is a demo'. To the right of the editor is a 'Display filter' section with a 'Contents' dropdown, an 'Auto filter' checkbox, and 'Filter' and 'Clear filter' buttons. Below this is a list of items: 'Legacy1', 'Test', and 'Legacy_movement', each with a radio button. At the bottom of the editor area are 'Edit' and 'Diversion' buttons. The left sidebar shows a 'Menu' with options: 'Main menu', 'Symphony Interface information', 'Symphony class List', 'Symphony class editor' (selected), 'Symphony execution', 'Symphony execution checking', 'Symphony execution list', and 'Symphony Regularly execution'. The top of the page has the 'Exastro IT Automation Symphony' header and user login information.

- Users can edit registered Symphonies by clicking the 「Edit」 button
- Click the “Diversion” button to copy registered Symphony then create as a new one.

(3) If the 「Edit」button is pressed, the screen shown below will appear.

The screenshot shows the 'Edit Symphony' interface in the Exastro IT Automation system. The top header includes the Exastro logo, 'Symphony' title, and user information (System Administrator). A left sidebar contains a 'Menu' with options like 'Main menu', 'Symphony Interface information', and 'Symphony class List'. The main area is titled 'Edit Symphony' and contains a form for editing a Symphony class. The form includes fields for 'Symphony class ID' (1), 'Symphony name' (Demo), and a 'Note' (This is a demo). Below these is a 'Start' button and a list of operations. The first operation is 'Legacy1' with a 'Pause' button and a 'Note' field. The second operation is 'Test' with a 'Pause' button and a 'Note' field. The list ends with an 'end' button. At the bottom are 'Refresh', 'Update', and 'cancel' buttons. A right sidebar shows a 'Display filter' section with 'Contents' and 'Auto filter' options, and a list of items: 'Legacy1' and 'Test'.

- Click the “Reload” button to discard the edited content then return to the state before any edits.
- Click the "Update" button to save edited content
- Click the "Cancel" button to return to the status before any edits

4.1.4 Symphony execution

- (1) The Symphony execution instructions are displayed in the "Symphony execution" screen
 - "Symphony [List]" displays the Symphonies registered in "4.1.2 Symphony class list".
 - "Operation [List]" displays the Operations registered in "Basic console-Input operation list"
 - Select radio button in "Symphony [List]" and "Operation [List]", then click the "Execution" button to move to "4.1.5 Symphony confirmation" then start tracing of execution.
 - Pressing the "Execution" button after scheduled date/time has been entered will schedule the execution. The scheduled execution can be checked in "4.1.6 Symphony execution list". ※ Date/Time before current time can't be entered.
 - Check the "Skip" box next to the Movement symbol to execute without executing the selected Movement.

Figure 4.1-4Sub Menu screen (Symphony execution check)

The screenshot displays the Exastro IT Automation Symphony execution interface. The sidebar menu on the left includes options like 'Main menu', 'Symphony Interface information', 'Symphony class List', 'Symphony class editor', 'Symphony execution', 'Symphony execution checking', 'Symphony execution list', and 'Symphony Regularly execution'. The 'Symphony execution' option is currently selected. The main content area is divided into several sections. At the top, there's a 'Description' section with an 'Open' button. Below it is a 'Scheduling' section with a 'Close' button. A text input field for 'Specify the scheduled date/time (YYYY-MM-DD HH:MM) Immediately execute when blank.' is present, with a 'Scheduled date/time' label. The 'Symphony [List]' section features a table with columns: 'Select', 'Symphony class ID', 'Symphony name', 'Description', 'Remarks', 'Last update date/time', and 'Last updated by'. It contains one row for Symphony class ID 1, named 'demo', with description 'This is a demo' and last update date/time '2020/10/06 08:35:43'. The 'Operation [List]' section has a similar table with columns: 'Select', 'No.', 'Operation ID', 'Operation name', 'Scheduled date for execution', 'Last execution date', 'Remarks', 'Last update date/time', and 'Last updated by'. It contains one row for Operation ID 1, named 'Operation1', with scheduled date for execution '2020/08/27 16:15' and last update date/time '2020/09/02 18:30:37'. The 'Execute Symphony' section at the bottom shows details for the selected Symphony (ID 1, name 'demo') and Operation (ID 1, name 'Operation1'). It includes a flowchart with two steps: 'Legacy1' and 'Test'. The 'Legacy1' step has a 'Skip' checkbox checked, and the 'Test' step has a 'Skip' checkbox unchecked. An 'Execute' button is located at the bottom of the flowchart.

The list of common items in Symphony execution screen is as follows.

Table 4.1-3 Register screen item list (Symphony execution)

Items	Description	Input required	Input method	Restrictions
Scheduled date/time	Specify the scheduled date and time of Symphony execution	-	Manual input	Date and time before the current time cannot be entered.
Symphony 「List」	The symphony registered in “4.1.7 Symphony Class list” will be displayed.	○	Radio button	
Operation「List」	The operation registered in 4.1.4 Input operation list will be displayed.	○	Radio button	
Skip	Target operation will be skipped if checked	-	Check box	
Operation ID (Specified Individually)	※ Refer to the following " About Individually specified Operation ID"	-	Manual input	
Execute	Registered Symphony will be executed.	○	Button	

※ About Individually specified Operation ID

Press the grey “Operation ID (Specified Individually)” text to display the text box.

Users can enter a different operation ID than the operation ID specified by radio button in this text box.

Accordingly, that Movement can be executed with the “Specific value” (e.g. “Substitution value list” in ITA Anisble-Legacy console) substituted with the value registered for other Operation ID in the “Substitution value list” menu of the orchestrator which that Movement belongs to

The Operation ID specified in Symphony class edit screen is saved according to the register/update.

Moreover, users can change Operation ID already registered in the Symphony edit menu for each step of the Symphony before execution.

However, the settings in Symphony execution screen only reflects the Symphony execution. The settings will not be saved.

Users can use this function to diverse the Movement to operate another server.

4.1.5 Symphony execution checking.

- (1) In the “Symphony execution checking” screen, the status of the Symphony execution is displayed. By clicking the “Details” button in “4.1.6 Symphony execution list”, the status of the selected Symphony will be displayed.

Users can execute “Cancel reservation”, “Resume” or “Emergency stop” according to the situation. It is also possible to move to the different operation confirmation screens by clicking the Movement Flow sphere.

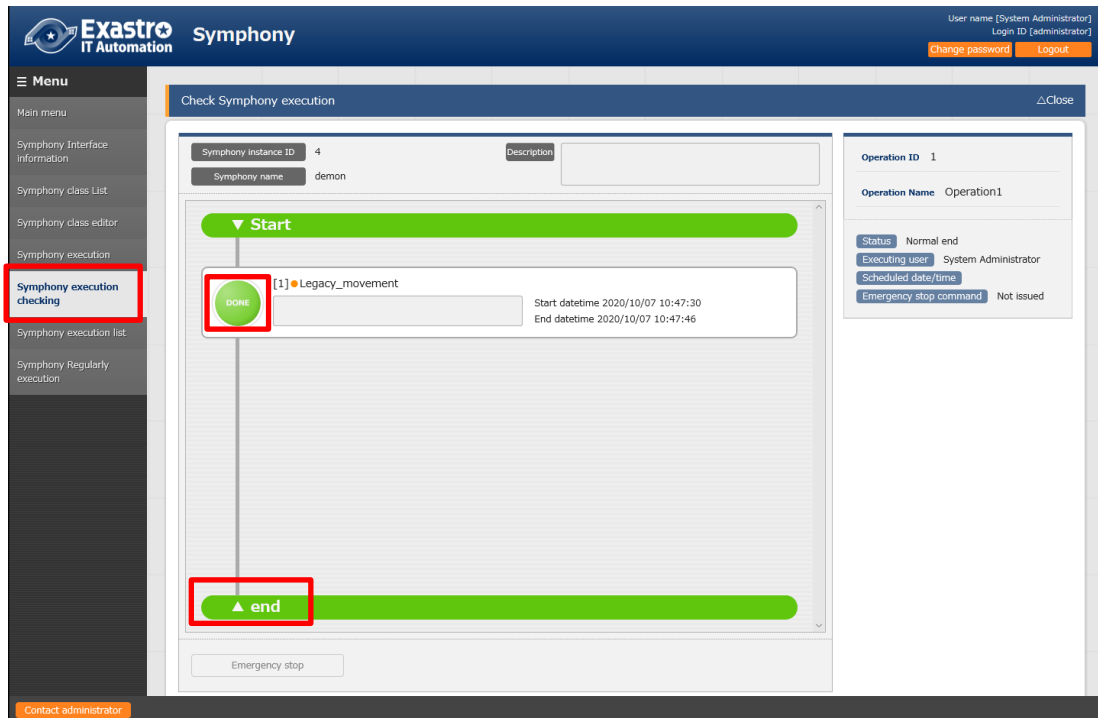


Figure 4.3-5 Submenu screen (Symphony execution checking)

If the selected Symphony has a set reservation and has yet to be executed, a “Cancel Reservation” button will be displayed.

If the button is clicked, the status in “4.1.6 Conductor list” will change to “Unexecuted (Schedule)” and will not be executed.

Check Symphony execution

Symphony instance ID6

Description

Symphony namedemon

▼ Start

[1] Legacy_movement

Start datetime

End datetime

▲ end

Schedule cancellation

Figure 4.1-6 Submenu screen (Symphony execution checking - Cancel reservation)
The list of items in the Symphony confirmation screen is as follows.

Table 4.1-4 Registration screen list (Symphony confirmation)

Items	Descriptions	Input required	Input method	Restrictions
Resume	Cancel pause and continue Movement	-	Button	-
Emergency Stop	Stop Symphony execution	-	Button	-
Cancel reservation	Cancel scheduled Symphony execution	-	Button	Displayed only when execution is scheduled and is yet to be executed

4.1.6 Symphony execution list

- (1) Users can manage executed Symphony operations in “Symphony execution list” screen. By specifying the criteria and clicking the “Filter” button, The Symphony table, list and graphs will be displayed.

A download button will show the selected graph if the mouse cursor is hovering over the graph 表
Users can download the graph by pressing the download button for the respective graph.

Users can click the "Details" button to move to “4.1.5 Symphony execution list” screen

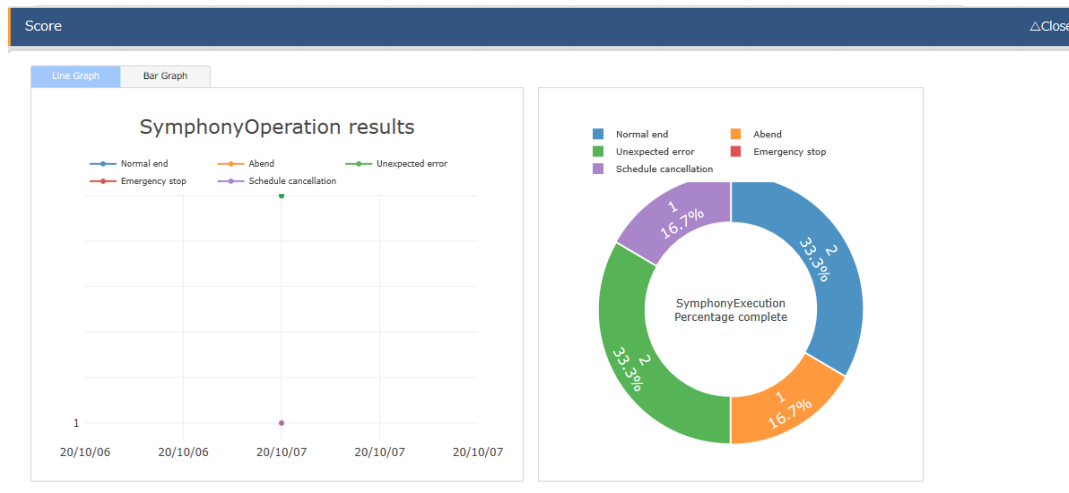


Figure 4.1-7 Submenu screen (Symphony execution list)

4.1.7 Symphony regularly execution

- (1) Users can manage regular execution of Symphony operation in “Symphony regularly execution” screen.

Clicking the “Check the work list” in “List” will move to “4.1.6 Symphony execution list” screen with the target executed by regular execution.

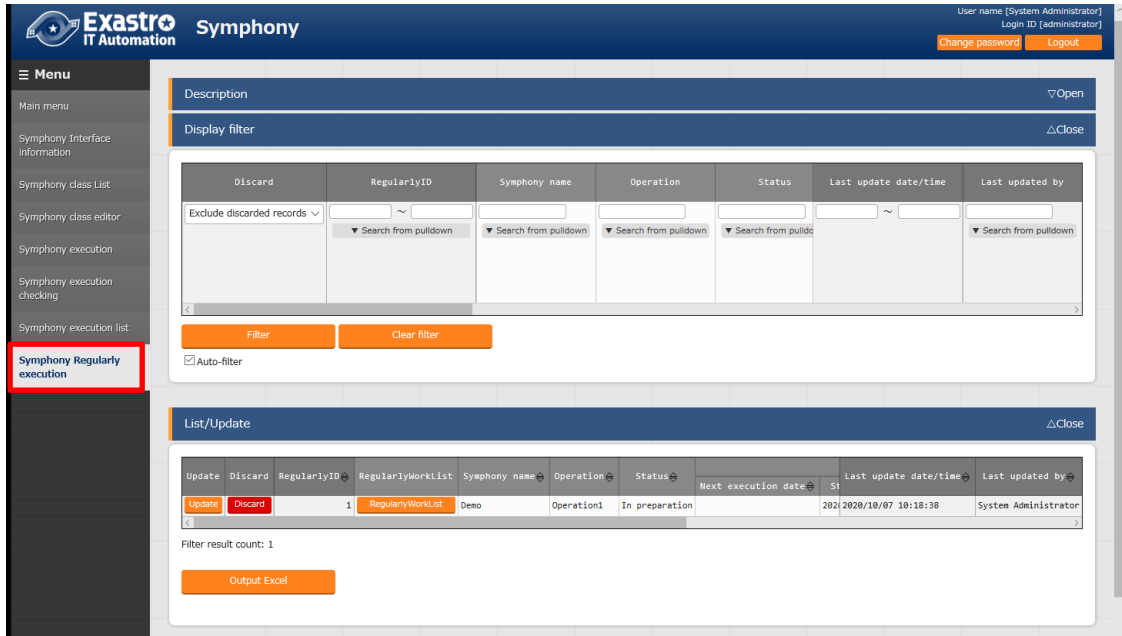


Figure4.1-8 Sub menu screen (Symphony regularly execution)

- (2) Click “Register” - “Start Registration” button to register Symphony regular execution. Schedule can only be set in the setting window by clicking “Schedule settings” button.

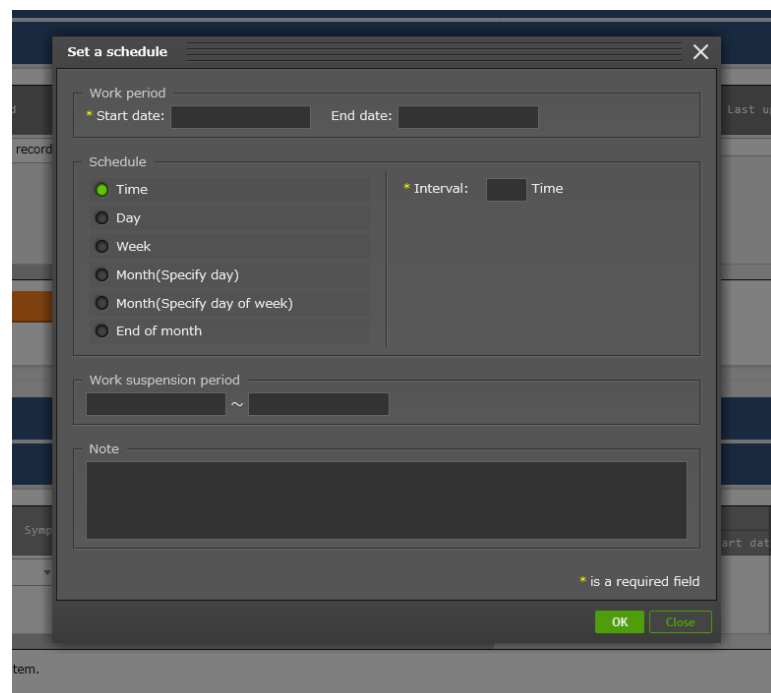


Figure 4.1-9 Schedule settings screen (Symphony regular execution)

(3) The register screen item list is as shown below.

Table 4.1-5 Register screen item list (Symphony regularly execution)

Items		Descriptions	Input required	Input method	Restrictions
Symphony class name		The symphonies registered in 「4.1.2 Symphony class list」 will be displayed in the list	○	Choose from list	-
Operation name		Operation registered in "Basic Console-Input operation" Input operation list will be displayed.	○	Choose from list	-
Status		Refer to the following " Table 4.2.11 Status list (Symphony regular execution)	-	Automatic input	-
Schedule settings		The button opens the window for setting detailed schedules.	-	-	-
Schedule	Next execution date	The next execution date will be automatically updated after registering schedule settings.	-	Automatic input	-
	Start date	Enter the date when the Symphony regular execution will start. " The next execution date will always be updated to be a date after the set "Start date"	○	Manual input	Can only enter data from Schedule settings
	End date	Enter the date when the Symphony regular execution will end. If the " Next execution date" exceeds the " Final date" the status will be changed to " Completed"	-	Automatic input	Can only enter data from Schedule settings
	Period	Choose the period of the regular execution "Time", "Day", "Week", "Month (Specify day)", "Month (Specify day of week)", "End of month" can be selected.	○	Radio button	Can only enter data from Schedule settings
	Interval	Select the regular execution interval based on the selected period	○	Manual input	Can only enter data from Schedule settings
	Week number	Used when period is "Month (Specify day of week)", select the week number to execute work.	※1	Choose from list	Can only enter data from Schedule settings
	Day of week	Used when period is "Week" or "Month (Specify day of week)", select the day of week to execute work.	※2	Choose from list	Can only enter data from Schedule settings
	Date	Used when period is "Month (Specify day)", select the date to execute work.	※3	Manual input	Can only enter data from Schedule settings
	Time	Enter the time of regular execution.	※4	Manual input	Can only enter data from Schedule settings
Work suspension period	Start	Enter the start date/time of work suspension period. Registered Symphony will not be executed during the time between the start and end time.	※5	Manual input	Can only enter data from Schedule settings
	End	Enter the date/time of work suspension period. The registered Symphony will not be executed during the time between the start and end time.	※5	Manual input	Can only enter data from Schedule settings
Remarks		Free description field	-	Manual input	-

※1 Week number is required when period is "Month (Specify day of week)".

※2 Day of week is required when period is "Month (Specify day of week)".

※3 Day is required when period is "Month (Specify day)".

- ※4 Time is required when period is "Day", "Week", "Month (Specify day)", "Month (Specify day of week)", "End of month".
- ※5 When setting work suspension period, both "Start" and "End" are required.

Table 4.1-6 Status list (Symphony regular execution)

Status	Description
In preparation	The status immediately after registration. The status will become "In operation" when backyard updates "Next execution date" automatically.
In operation	The status of normal execution. The system registers operation to "4.1.6 Symphony execution list" 3 minutes before "Next execution date", then updates "Next execution date" based on the schedule setting
Completed	The status when "Next execution date" passed "End date". Further Symphony registration will not be performed.
Mismatch error	The status when setting value of schedule is not correct.
Linking error	The status when registering execution failed in "4.1.6 Symphony execution list". Same as the status "In operation", system registered execution in "4.1.6 Symphony execution list", then updates "Next execution date" based on the schedule setting. If registration of execution failed again, the status will remain "Linking error".
Unexpected error	The status when errors other than "Mismatch error" and "Linking error" happens.
Symphony discard	The status when the registered Symphony is discarded. The status will be updated to "In preparation" if the discarded Symphony is restored.
Operation discard	The status when the registered Operation is discarded. The status will be updated to "In preparation" if the discarded Operation is restored.

- (4) The status will become "In preparation" immediately after registered in "Symphony regular execution" menu.

Backyard will update "Next execution date" based on the registered schedule setting, then the status will become "In operation"

If the status is "In operation" or "Linking error", the system registers operation to "4.1.6 Symphony execution list" 3 minutes before "Next execution date", then updates "Next execution date" based on the schedule setting.

※ When pause is set in the Symphony which is registered in regularly execution, if users don't "resume" in "4.1.5 Symphony execution check" after operation is registered, the status in "4.1.6 Symphony execution list" will remain "Executing".