

ITA_User instruction Manual

Basic Console

-Version 1.3 -

Copyright © NEC Corporation 2019. All rights reserved.

Disclaimer

All the contents of this document are protected by copyright owned by NEC Corporation.

Unauthorized reproduction or copying of all or part of the contents of this document is prohibited.

The contents of this document are subject to change without prior notice in the future.

NEC Corporation is not responsible for any technical or editorial errors or omissions in this document.

NEC Corporation do not guarantee accuracy, usability, certainty of the content in this document.

Trademark

- Linux is registered trademark or trademark of Linux Torvalds, registered in the U.S. and other countries.
- Red Hat is registered trademark or trademark of Red Hat, Inc. Registered in the U.S. and other countries.
- Apache, Apache Tomcat, and Tomcat are registered trademarks or trademarks of the Apache Software Foundation.
- · Ansible is registered trademark or trademark of Red Hat,Inc.
- · AnsibleTower is registered trademark or trademark of Red Hat,Inc.

The names of other systems, company name and products mentioned in this document are registered trademarks or trademarks of their respective companies.

The® mark and TM mark are not specified in this document.

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

Table of contents

ln	troduction		3
1	Overvie	ew of ITA basic console	4
2	ITA bas	ic console menu screen configuration	5
	2.1 ITA	basic console menu list	5
3	ITA bas	ic console user instruction procedure	6
	3.1 Wo	ork flow	6
4	Functio	n and operation method description	7
	4.1 ITA	basic console	7
	4.1.1	OS type master	7
	4.1.2	Device list	9
	4.1.3	Associated menu	11
	4.1.4	Input operation list	12
	4.1.5	Movement list	13
	4.1.6	Symphony interface information	14
	4.1.7	Symphony class list	15
	4.1.8	Symphony class editor	16
	4.1.9	Symphony execution	18
	4.1.10	Symphony execution checking	21
	4.1.11	Symphony execution list	23
	4.1.12	Export Symphony/ Operation	24
	4.1.13	Import Symphony/Operation	25
	4.1.14	Export / Import Symphony/Operation list	27
5	Operati	on notes	28
	5.1 Ro	utine deletion of operation work history	28
6		(S	
	6.1 Ab	out the data that can be retrieved by Export Symphony /Operation	29
	6.1.1	Symphony Export	
	6.1.2	Export operation	

Introduction

This document explains the functions and operation methods of the ITA basic console.

1 Overview of ITA basic console

This chapter explains the functions and operation methods of the basic console menu.

The basic console provides the following functions that are commonly required to perform work using

The basic console provides the following functions that are commonly required to perform work using ITA.

- Registration and management of device information
- Create, manage and execute workflows

Refer to the 「First Step Guide」 for the position of the basic console in the ITA operation procedure.

2 ITA basic console menu screen configuration

This chapter explains the menu and screen configuration of the ITA basic console.

2.1 ITA basic console menu list

The ITA common / basic console menu is shown below.

Table 2.1-1 ITA screen list

No	Menu Group	Menu / Screen	Description
1		OS type master	OS type can be maintained (view/ register / update / discard).
2		Device list	Users can maintain the list of managed systems (view / register / update / discard).
3		Input operation list	Users can maintain the operation list (view / register / update / discard).
4		Movement list	Users can view the list of registered movements.
5		Symphony interface information	During Symphony work, Users can maintain the shared directory path by Movement (view / register / update / discard).
6		Symphony class list	Symphony class can be maintained (view/discard) by clicking "Details" and redirecting to the Symphony class Edit menu.
7		Symphony class editor	Symphony class can be edited.
8	ITA basic	Symphony execution.	Symphony class can be executed.
9	console	Symphony execution checking	Users can check the execution result of Symphony work
10		Symphony execution list	Users can view the Symphony Work list(execution history) Click on "details" to go to the Symphony execution checking
11		Export Symphony/Operation	Users can export the data associated with symphony or operations.
12		Import	Users can Import the data which is exported from Export
12		Symphony/Operation	Symphony/Operation menu.
13		Export/Import Symphony/Operation list	This menu manages the status of export performed with the [Export Symphony/Operation] menu and import performed with the [Import Symphony / Operation] menu.

3 ITA basic console user instruction procedure

3.1 Work flow

The standard workflow in the ITA basic console is as follows.

Details of each operation are described in next section.

Please refer to the details on how to register a Movement in the user instruction manual of each driver.

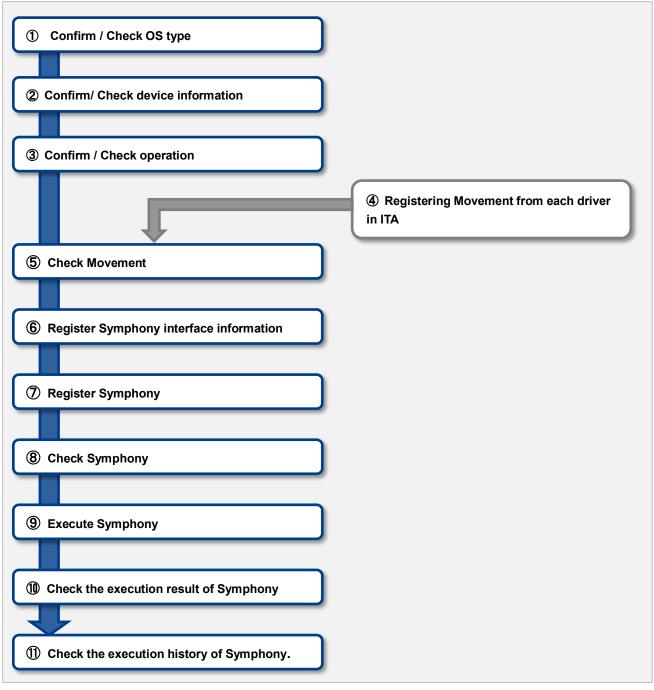


Figure 3.1-1 Work flow

4 Function and operation method description

4.1 ITA basic console

4.1.1 OS type master

The [OS Type Master] screen manages the OS type of the ITA operation target device.

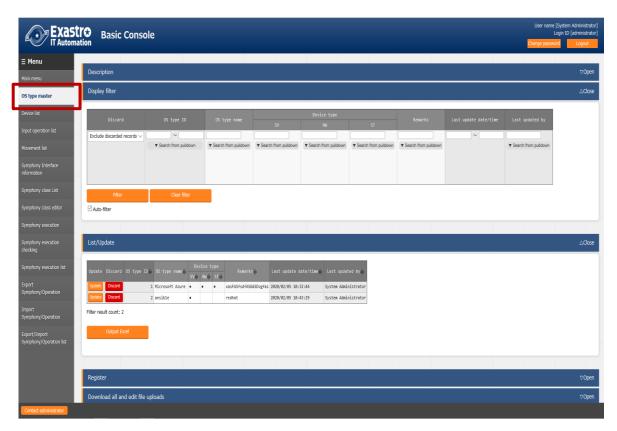


Figure 4.1-1 Submenu screen (OS type master)

Click [Registration]-[Start Registration] button to register OS information.



Figure 4.1-2 Registration screen (OS type master)

The list of items on the registration screen is as follows. Please make sure to register the OS type name.

Table 4.2-1 List of registration screen items (OS type master)

	,				
Item		Description	Input Required	Input type	Restrictions
OS type ID		A unique ID that identifies the registration information is automatically entered.	0	Autofill	-
OS type name		Enter the name of the desired device.	0	Manual input	Maximum length 256 bytes
Device type	SV	Select [●] ,if the device type is a server	_	List selection	-
	NW	Select [●], if the device type is a network device	-	List selection	-
	ST	Select [●] ,if the device type is a storage device	-	List selection	-
Remark	s	Free description field	_	Manual input	-

4.1.2 Device list

(1) On the [Device List] screen, information on the target host is managed. Please register the required information according to the server type before running each orchestrator. Also, if the server information has been changed when re-executing, change the server information in advance.

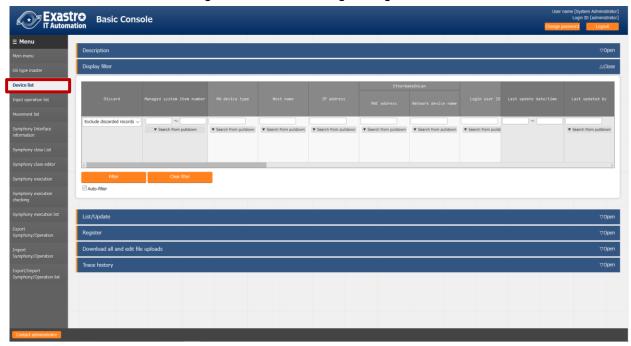


Figure 4.1-3 Submenu screen (device list)

(2) Click [Registration]-[Start Registration] button to register device information.



Figure 4.1-4 Registration screen (device list-common items)

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

Please make sure to enter the target [Host name] and [IP address].

**Registration is required if "Login password" is "●" for "Management".

Table 4.2-2 List of Registration Screen Items (Device List-Common Items)

_lte	em	Description	Input	Input	Restrictions
	····		Required	type	11001110110110
Managed system item number		A unique ID that identifies the registration information is automatically entered.	-	Autofill	-
HW device t	уре	Select the type of HW device	-	Manual input	Maximum length 128 bytes
Host name		Enter the host name	0	Manual input	-
IP address		Enter the IP address (xxx.xxx.xxx format).	0	Manual input	Maximum length 15 bytes
EtherWake OnLan	MAC address	Enter MAC address	-	Manual input	Maximum length 17 bytes
	Network device name	Enter the network device name	-	Manual input	Maximum length 256 bytes
Login user ID		Enter the user ID to log in.	-	Manual input	Maximum length 30 bytes
Login password	Manageme nt	Select [●] to manage the password in ITA	-	List selecti on	-
	Login passwords	Specify a password	*	Manual input	Maximum length 30 bytes
ssh authentication key file		Enter the key file when performing key authentication by specifying the ssh authentication key file. Provide a key file that can be authenticated by the root user.	-	File selecti on	Maximum size 10K bytes
Remarks		Free description field	-	Manual input	-

- (4) In addition to the common items, information is registered when using each Driver/orchestrator. For details on each Driver, Please refer to the usage instruction for each driver.
 - 1) Ansible Dedicated information



Figure 4.1-5 Registration Screen (Device List-Ansible)

- · Ansible Dedicated information is a required parameter for Ansible driver.
- For more details, Please refer to "Usage Instruction_Manual_Ansible-driver".

4.1.3 Associated menu

(1) Register/Update/Discard the menu of CMDB that is associated by the substitution value auto registration setting in associated menu.

<u>**This is an optional function that can be associate when the CMDB is customized.</u> This function can't be used on default.

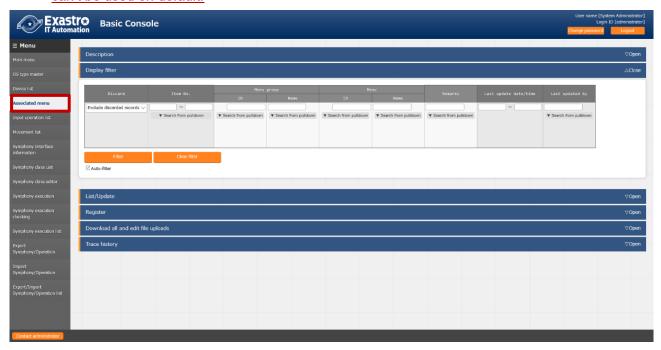


Figure 4.1-6 Submenu screen (Associated menu)

(2) Click [Registration]-[Registration start] button to link/associate the menu.



Figure 4.1-7 Registration screen (linking/Associated menu)

(3) The list of items on the registration screen is as follows.

Table 4.2-3 List of registration screen items (associated menu)

table in a selection of the factor in the fa						
item	Description	Input Required	Input Type	Restrictions		
Menu	The CMDB menu is displayed. Select the menu of	0	List	-		
group:Menu※2	CMDB to be associate with the substitution value		selection			
	automatic registration setting.					
Remarks	Free description field	-	Manual	Maximum length		
			input	4000 bytes		

※2 Registration of CMDB menu group and menu is required

Please refer to [User Instruction Manual Management Console] for the registration of menu group and menu of CMDB.

4.1.4 Input operation list

(1) In the [Input operation list] screen, the operations for the target host to be executed by the orchestrator are managed.

(Example) [Service additional construction work] etc.

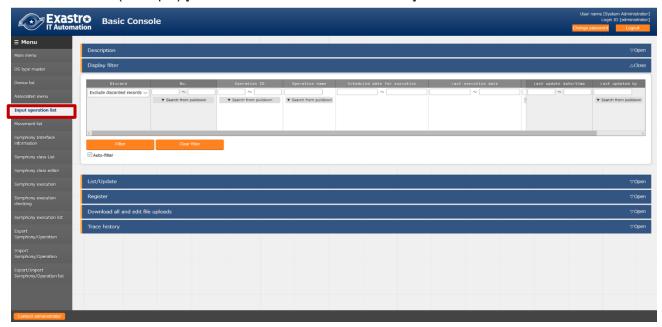


Figure 4.1-8 Submenu screen (list of input operations)

(2) Click [Registration]-[Registration start] button to register the operation information.



Figure 4.1-9 Registration Screen (List of Input Operations)

(3) The list of items on the registration screen is as follows.

Table 4.2-4 List of registration screen items (input operation list)

item	Description	Input required	Input type	Restrictions
Operation name	Register desired operation name	0	Manual input	Maximum length 256 bytes
Scheduled date for executions	Enter the scheduled date and time of the operation. **The process is not actually executed on the date specified here. **The work history associated with the operation for which the scheduled execution date and time is set is automatically deleted after the specified reservation period.	0	Manual input	-
Operation ID	The system automatically inputs a unique ID that identifies the operation.	ı	Autofill	-
Last execution date	Displays the actual date and time when the operation is selected for Symphony execution or each driver's work execution.	-	Display item	Blank is displayed for unexecuted operations.
Remarks	Free description field	1	Manual input	-

4.1.5 Movement list

(1) In the [Movement list] screen, you can see the association of the Movement with the orchestrator when using the orchestrator (for reference only).

For the actual registration of Movement, please refer to the instruction manual of each Driver and go to the console menu of the ITA driver of each orchestrator.

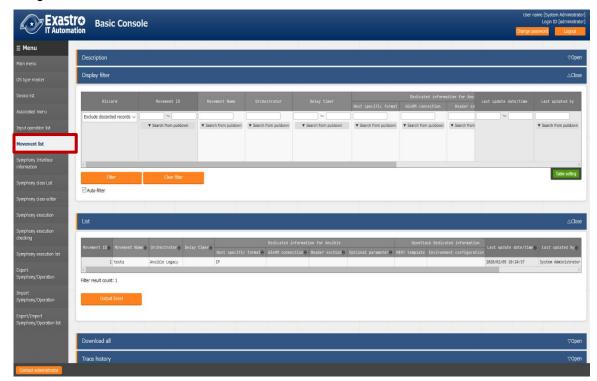


Figure 4.1-10 Submenu screen (Movement list)

4.1.6 Symphony interface information.

(1) In the [Symphony Interface Information] screen, set the directory path shared by each Movement executed from Symphony and the refresh interval of the [Symphony execution check] screen

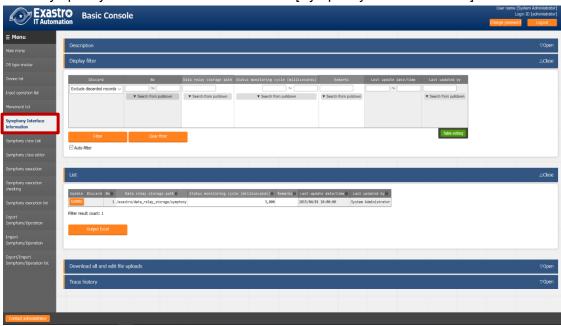


Figure 4.1-11 Submenu screen (Symphony interface information)

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

Table 4.2-5 List of registration screen items (input operation list)

item	Description	Input Require d	Input Type	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, Refer to the interface information in the instruction manual for each driver. Drivers that can share the directory are as follows. • Ansible • Ansible-Tower • DSC	0	Manual input	Maximum length 128 bytes
Status monitoring cycle (unit: millisecond)	Enter the interval for refreshing the display of [4.3.9 Symphony execution]. Generally, about 3000 milliseconds is the recommended value. Free description field	-	Manual input Manual input	Minimum value 1000ms -

4.1.7 Symphony class list

(1) In the [Symphony Class List] screen, registered Symphony classes can be referred (Browse) or discarded.

Clicking the "Details" button in the list will redirect you to the edit screen [4.1.8 Edit Symphony class] of that Symphony class.

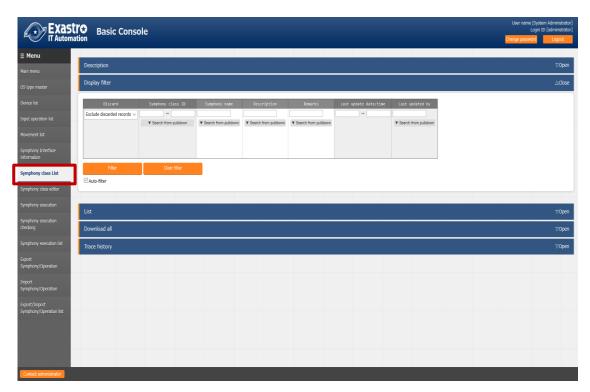


Figure 4.1-12 Submenu screen (Symphony class list)

4.1.8 Symphony class editor

- (1) In the [Symphony class editor] screen, register the Symphony class name and the Movement of the workflow.
 - Registered Movement are displayed in the display filter area on the right side of the screen.
 - Movement can be set by drag and drop from the display filter area on the right side of the screen
 - In the Movement flow editing area, you can swap the Movement by dragging and dropping.
 - Paus can be set by the check box under the set Movement.
 - In the "Description" column and the entry column under the name of the dropped Movement, users can note the processing description and comments. This information is a memo field that has no effect on the execution of the process and can be referenced only on the WEB.
 - After setting the Movement flow, click the "Register" button to register the Symphony class.

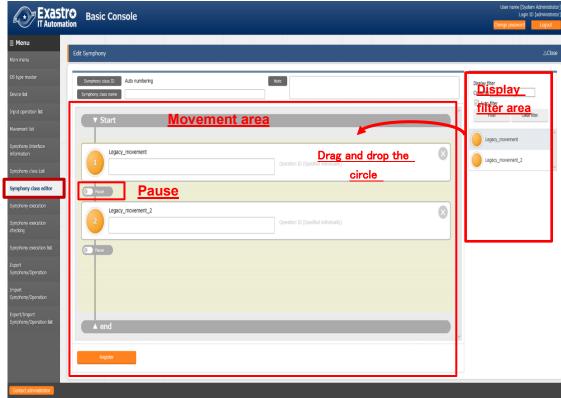


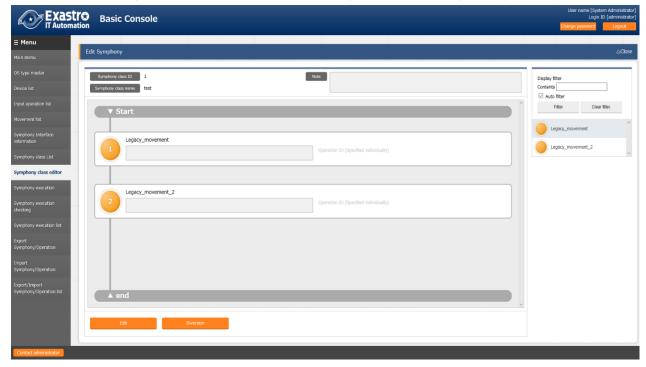
Figure 4.1-13 Submenu screen (Symphony class editor)

The list of items on the Symphony class edit screen is as follows.

Table 4.2-6 list of registration screen items(Symphony class editor)

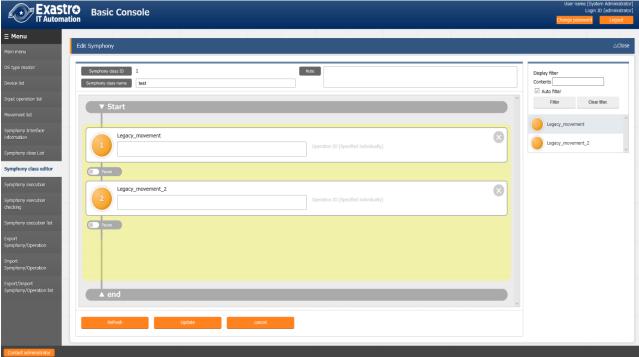
item	Description	Input Required	Input type	Restrictions
Symphony class ID	A unique ID for Symphony is automatically assigned.	-	Autofill	-
Symphony class name	Enter desired Symphony class name	0	Manual input	-
Description	Enter a description or comment for the Symphony class	-	Manual input	-
Movement Description field	Enter a description or comment for the Movement	-	Manual input	-
Operation ID (specified individually)	Enter the ID of the operation you want to specify individually. For details, refer to [4.1.9 Symphony execution] for specifying the operation ID individually.	-	Manual input	-
Pause	Check if users want to pause after executing the Movement	-	Checkbox	-
Delete	Delete Movement	•	button	-

(2) When registration is completed, the following screen will change to [Symphony class list] screen.



- Registered Symphony can be edited with the "Edit" button.
- With the "Diversion" button, you can copy the registered Symphony and create a new one.]

(3) If you click the "Edit" button, the following screen is displayed.



- Click the "Refresh" button to discard the edited contents and return to registered contents.
- Click the "Update" button to save the edited content.
- Click the "Cancel" button to return to the state before pressing the "Edit" button.

4.1.9 Symphony execution

- (1) Instruct Symphony execution in the "Symphony execution" screen.
- In "Symphony [list]", the Symphony registered in 「4.1.7 Symphony List」 is displayed.
- In "Operation [list]" ,The Operations registered in 「4.14 List of input operations」 is displayed.
- Select from the radio buttons of "Symphony[list]" and "Operation[list]", and press the "Execute button" to transit to 「4.1.10 Symphony execution check 」 and start tracing the execution.
- When you enter the scheduled date and time and press the "Execute" button, the work schedule is made. Users can check this in the 「4.1.11 Symphony list」。※The date and time earlier than the current time cannot be entered.
- If you check "□Skip" next to the Movement symbol the Movement will be skipped during execution.

18 / 34

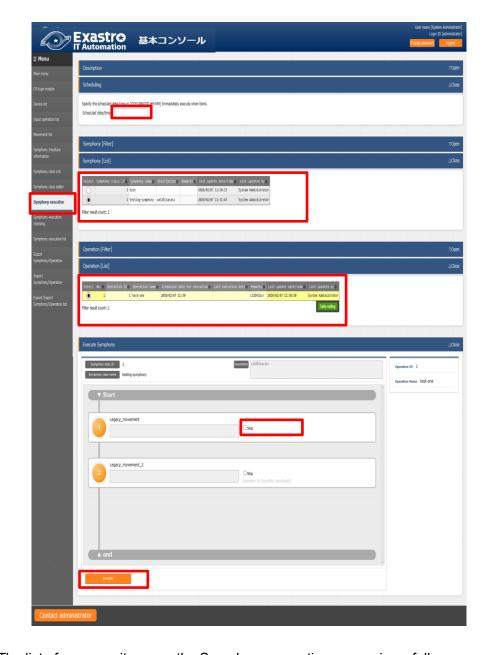


Figure 4.1-14 Submenu screen (Symphony execution checking)

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

Table 4.2-7 List of registration screen items (Symphony execution)

item	Description	Input Required	Input type	Restriction s
Scheduled date and	Specify the scheduled date and time of Symphony	-	Manual	Date and
time	execution		input	time before
				the current
				time cannot
				be entered
Symphony[list]	The Symphony registered in 「4.1.7 Symphony	0	Radio	
	class list」will be displayed.		buttons	
Operation [List]	The operations registered in [4.1.4 List of input	0	Radio	
	operations] will be displayed		buttons	
Skip	Check to skip the target operation	-	Checkbox	
Operation ID	※ Refer to "Specifying the operation ID	-	Manual	
(specified	individually" below.		input	
individually)				
Execute	Execute the registered Symphony	0	Button	

XAbout individual specification of operation ID

When you click on the operation ID (individual specification) in light character to display a text box. In this text box, you can enter an operation ID different from the operation ID of the operation specified by the radio button on the screen.

This allows users to assign "specific value" That is registered in another operation ID in the "substitution value management" menu of the orchestrator to which the Movement belongs (for example, in the "substitution value management" menu of the ITA Ansible-Legacy console).

The operation ID specified individually in the Symphony class edit screen can be saved by the Symphony register/update button

In addition, users can perform individual assignment in Symphony execution screen before execution, and also make further changes to the operation ID that has already been registered with the individual specification registration in the Symphony class editor menu then execute Symphony.

However, the operation ID specified individually on the Symphony execution screen is reflected only at the time of execution, and the setting is not saved.

Please use it when you want to divert the same Movement and operate another server.

4.1.10 Symphony execution checking

(1) On the [Symphony execution check] screen, the execution status of Symphony is displayed. Click the "Details" button in [4.1.11 Symphony execution list] to monitor the processing status of the selected Symphony execution. Depending on the situation, "unhold" and "emergency stop" can be executed.

In addition, users can move to each execution status checking screen by clicking the circle of the Movement flow.



Figure 4.1-15 Submenu screen (Symphony execution check)

In addition, if the selected Symphony operation has a scheduled date and time, but has not yet been executed, the schedule cancellation button is displayed. If you click the schedule cancellation button, the status that can be confirmed in $\lceil 4.1.11 \rceil$ Symphony Work List \rfloor will becomes "Schedule cancellation" and it will not be executed.

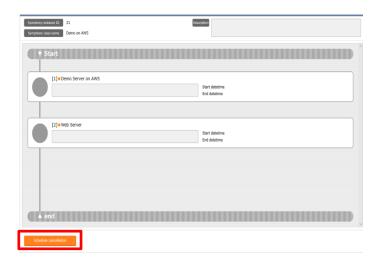


Figure 4.1-16 Submenu screen (Symphony execution check-Schedule cancellation)

The list of common items for Symphony work confirmation is as follows.

Table 4.2-8 List of registration screen items (Symphony execution check)

item	Description	Input Required	Input Type	Restrictions
Unhold	Unhold target Movement	-	button	-
Emergency stop	Stop Symphony execution	-	button	-
Schedule cancellation	Cancel Symphony execution schedule		button	Displayed when the reservation date and time has been set and not been executed

4.1.11 Symphony execution list

(1) In the [Symphony execution list] screen, the executed Symphony is managed. When user specify criteria and click the "Filter" button, the operation list table and graph are displayed.

When you move the mouse cursor over each graph, the download button of the graph is displayed in the upper right corner. It is possible to download the graph by clicking the download button of displayed graph.

When the "Details" button in the execution display column is clicked, the screen will move to [4.1.10 Symphony] screen.

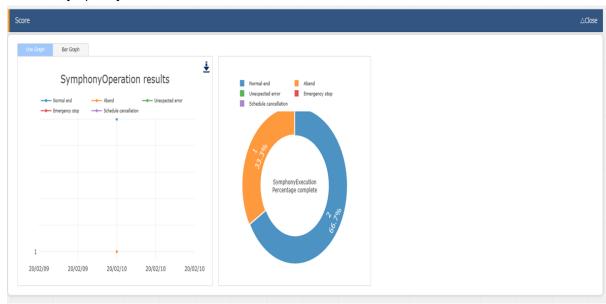


Figure 4.1-17 Submenu screen (Symphony execution list)

4.1.12 Export Symphony/ Operation

Specify Symphony or operation and export the data associated with it.

For information about the associated data, please refer "6.1" about the data that can be retrieved by "「Export Symphony/Operation」".

This function is assumed to be used for exporting data from one ITA environment and then importing the data into another ITA environment.

While [Management Console] - [Export menu] exports the data of the whole menu, this function exports the associated data unit.

(1) Select the Symphony and operation user's wants to export and click the "Export" button.

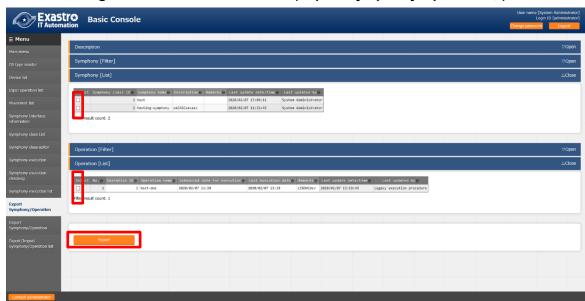
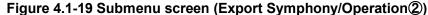
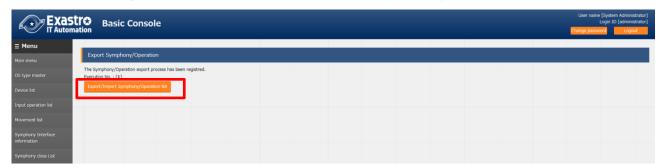


Figure 4.1-18 Submenu-screen (Export Symphony/Operation 1)

(2) Transit to the reception completion screen. Click the 「Export/Import Symphony/Operation list」 button, then the screen moves to the 「Export/Import Symphony/Operation list」 menu. For export status, Users can check and get export data.

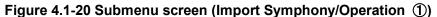


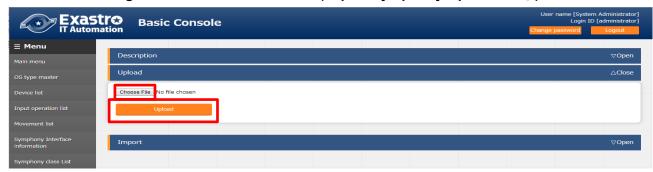


4.1.13 Import Symphony/Operation

Import the data which is exported from [Export Symphony / Operation] menu.

- *The data to be imported is imported using the unique item of the data as a key (the numerical value at the left end of the table). If data of the same unique item already exists, data will be overwritten.
- *The last modified person of the data after the import will be the user who executed the import.
- *For example, in this function it is assumed that data registered in the A environment is exported, and imported into the B environment to execute work. If users edit the data after importing into the B environment, each function may not work properly.
 - (1) Select the file you want to import and press the "Upload" button.





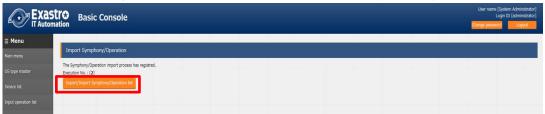
(2) Displays a list of Symphony and operations in the imported file. Select the Symphony and operations you want to import and press the "Import" button.



Figure 4.1-21 Submenu Screen (Import Symphony/Operation 2)

(3) Transit to the reception completion screen. Click the 「Export/Import Symphony/Operation list」 button will take you to the 「Export / Import Symphony/Operation list」 menu, where status of import can be checked.

Figure 4.1-22 Submenu Screen (Import Symphony /Operation③)



4.1.14 Export / Import Symphony/Operation list

Manages the status of exports performed with the [Export Symphony /Operation] menu and the status of imports performed with the [Import Symphony /Operation] menu.

The status changes in the order of "Unexecuted", "Executing" and "Completed".

The processing type displays 「Export」or 「Import」.

In the case of Export , the Export data will be displayed when the file name is 「Completed」, please download and use it. In the case of import, the imported data is displayed.

Remarks displays the ID of selected Symphony and operation.

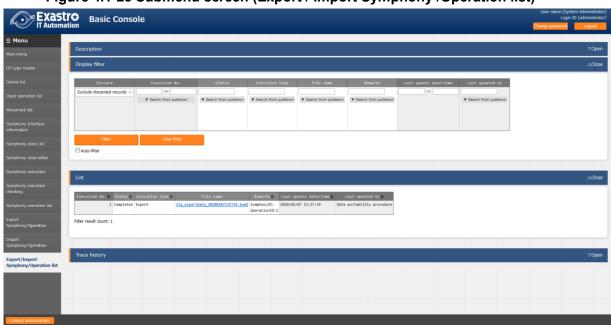


Figure 4.1-23 Submenu screen (Export / Import Symphony /Operation list)

The list of items on the screen is as follows.

Table 4.2-9 List screen item list (Export / Import Symphony /Operation list)

item	Description			
Execution No.	A unique ID is automatically assigned.			
Status	Changes in the order of "Unexecuted", "Executing" and "Completed". If an error occurs, the			
	column will be "Completed" (abnormal).			
Execution type	Export ···Export Symphony / Operation			
	Import · · · Import Symphony / Operation			
File name In the case of Export, the export data will be displayed when "Completed",				
download and use it. In the case of import, the imported data is displayed, the remaindered				
Remarks	Displays the selected Symphony and operation ID			

5 Operation notes

5.1 Routine deletion of operation work history.

The function to delete the data associated with the scheduled date and time of the operation that is registered in the 「input operation list」 menu is available.

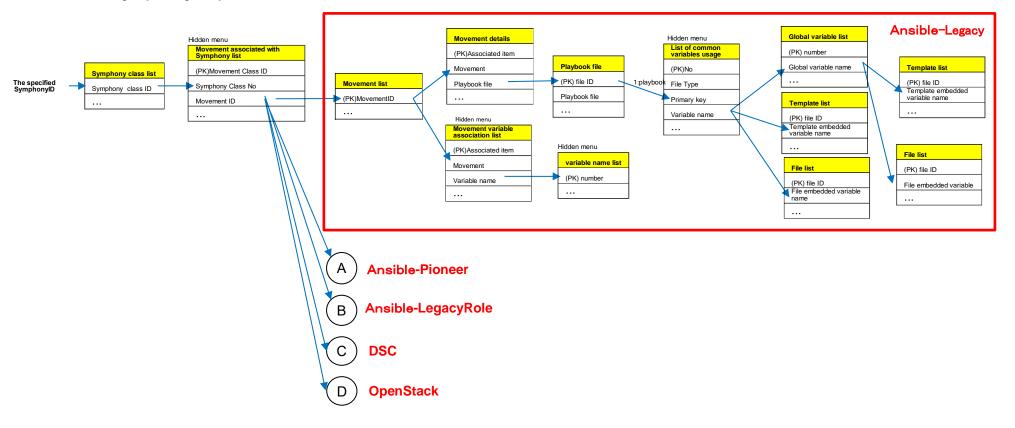
Please refer to 「User Instruction Manual_Management Console」 for details.

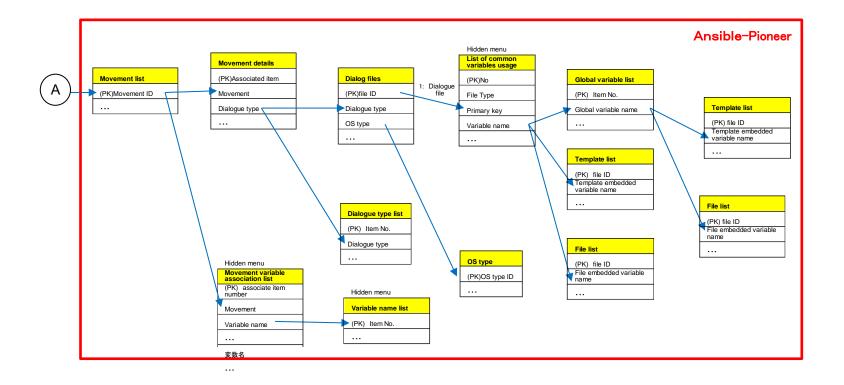
6 Remarks

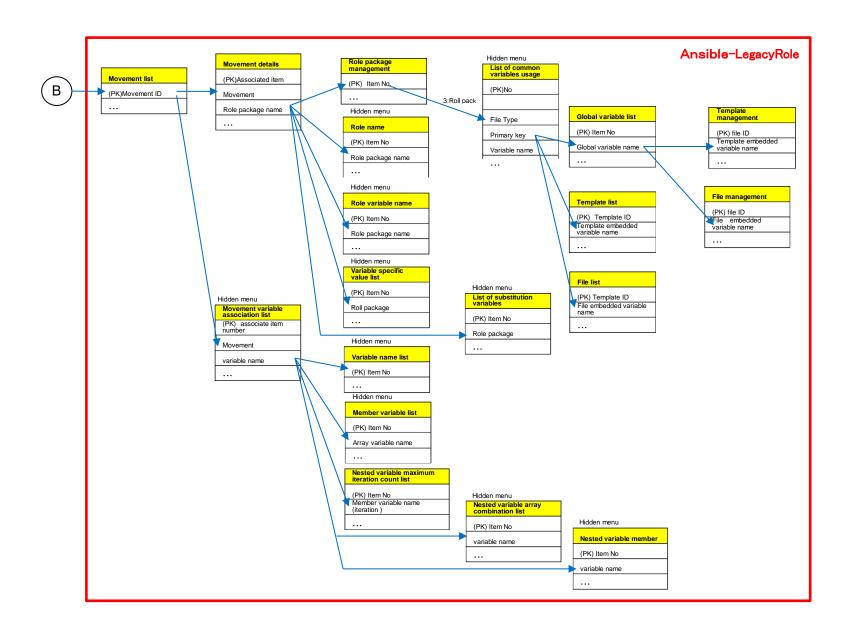
6.1 About the data that can be retrieved by Export Symphony /Operation

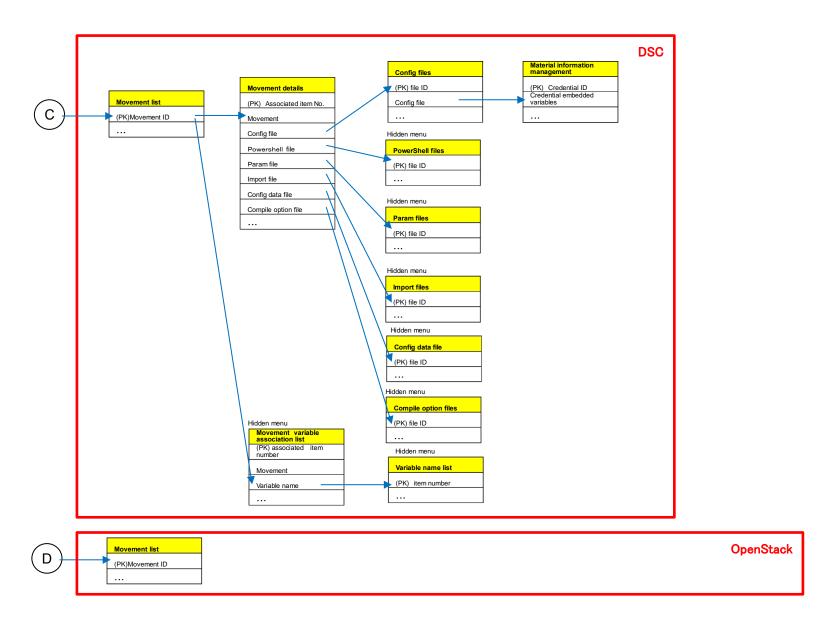
The data acquired by Export Symphony /operation is retrieved by following the linked menu .The link of each menu is as follows.

6.1.1 Symphony Export









6.1.2 Export operation

