



# **IT Automation BASE Practice**

※Exastro IT Automation is written as “ITA” in this document.

# Table of contents

## 1. Management console

1. Scenario

## 2. Practice①

1. Create new user
2. Register role
3. Role/Menu link
4. Role/User link
5. Confirm link

## 3. Basic console

1. Scenario
2. Pre-preparation

## 4. Practice②

1. Register work target host
2. Register operation
3. Register IaC
4. Register Movement
5. Register Movement details
6. Register Movement and Host that connects to Operation
7. Manage Substitute Value
8. Register Symphony
9. Execute Symphony
10. Confirm Symphony

# 1. Management Console

## 1.1 Scenario 1/2

In this scenario, we will create a new user called “testuser”. This user will be able to see the “Device list” menu and its contents.

**2.1 Create a new user**



**2.2 Register role**



**2.3 Link Role and Menu**



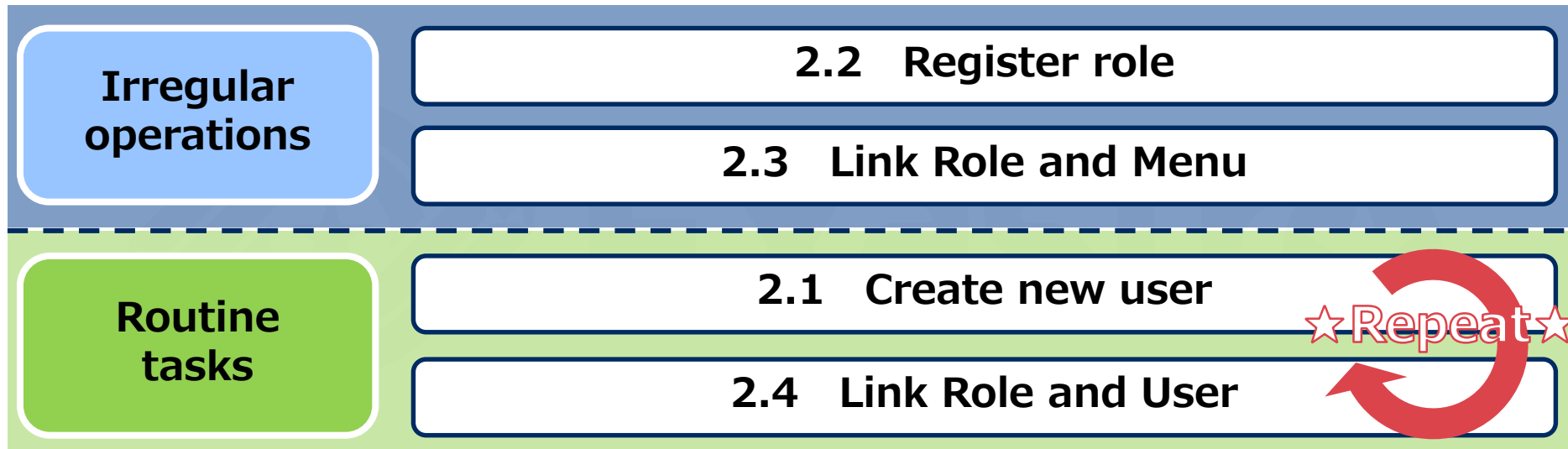
**2.4 Link Role and User**



**2.5 Confirm Link**

## 1.1 Scenario (2/2)

In this scenario, we assume that step 2.1 "Creating a new user" and 2.4, "Link Role and user" are routine tasks.



## 2. Practice①

## 2.1 Create new user

### Create new user

“Management Console” Menu group-> “User list” Menu-> “Register” Sub-menu-> “Start Register” Button.

- ① Input values for “Login ID”, “Login PW”, “Username” and “Mail Address”
- ② Press the “Register” button.

**List/Update**

Update	Discard	User ID	Login ID	Login Password	User name	Mail address	Role information	Last update date/time	Last updated by
Update	Discard	1	administrator	*****	System Administrator	sample@xxx.bb.cc	Role information	2020/08/11 11:13:45	Data portability procedure
Update	Discard	2	testuser	*****	テスト用	test@aa.bb.cc	Role information	2020/10/20 11:04:40	Data portability procedure

Filter result count: 2

Output Excel

**Register**

Auto-Input

※ \* is a required item.

Back Register

Enter the following for each item

Item	Value
Login ID	testuser
Login PW	(free space)
User name	test
Mail address	test@aa.bb.cc

Create new User

Register Role

Link Role and Menu

Link Role and User

Confirm Link

## 2.2 Register Role

### Register Role

“Management Console” Menu group-> “Role list”-> Menu-> “Register” Sub-menu-> “Start Register” button

- ① Input “Role name”
- ② Press the “Register” button

**List/Update**

Update	Discard	Role ID	Role name	User information	Menu information	Remarks	Last update date/time	Last
<a href="#">Update</a>	<a href="#">Discard</a>	1	System Administrator	<a href="#">User information</a>	<a href="#">Menu information</a>	System Administrator	2015/04/01 10:00:00	Data port
<a href="#">Update</a>	<a href="#">Discard</a>	2	ロールテスト	<a href="#">User information</a>	<a href="#">Menu information</a>		2020/10/20 11:05:43	Data port
<a href="#">Update</a>	<a href="#">Discard</a>	2,100,000,001	SSO Default Role	<a href="#">User information</a>	<a href="#">Menu information</a>	SSO Default Role	2015/04/01 10:00:00	Data port

Filter result count: 3

[Output Excel](#)

**Register**

Role ID	Role name *		e/time	Last updated by
Auto-input	<input type="text"/>			Auto-input

※ \* is a required item.

[Back](#) [Register](#)

1 Enter the following

Item	Value
Role name	Role test

2

Create new user

**Register role**

Link Role and Menu

Link Role and User

Confirm Link



## 2.3 Link Role and Menu (1/2)

### Link Role and Menu①

“Management console” Menu group-> “Role/Menu link list” Menu-> “Register” Sub-menu-> “Start Register” Button.

- ① Input values for “Role(ID:Name)”, “Menu group:Menu”, and “Associate”.
- ② Press the “Register” button

1 Set the following value for each item

Item	Value
Role (ID:Name)	Role test
Menu group: Menu	Device list
Associate	View only

Create new user

Register Role

**Link Role and Menu**

Link Role and User

Confirm Link

Register

Item No. Role (ID: Name) Menu group: Menu Associate

Auto-input

※\*is a required item.

Back Register

2

## 2.3 Link Role and Menu (2/2)

### Link Role and Menu②

- There are two types of "Associate". "Can perform maintenance" and "View only".
  - ※If set to "Can perform maintenance", various edit tools will become available.

The screenshot shows a web form titled "Register". It has a table with three columns: "Item No.", "Menu group: Menu", and "Associate". The "Item No." column contains "Auto-input". The "Menu group: Menu" column has a dropdown menu. The "Associate" column has a dropdown menu with two options: "Can perform maintenance" (highlighted in blue) and "View only". A red box highlights the "Associate" dropdown menu. Below the table, there is a note "※\*is a required item." and two orange buttons: "Back" and "Register".

A vertical menu with five buttons: "Create new user", "Register role", "Link Role and Menu" (highlighted in blue), "Link Role and User", and "Confirm Link".

POINT

For this scenario,  
we will set it to "View only"

## 2.4 Link Role and User

### Link Role and User

“Management console” Menu group-> “Role/User Link list” Menu-> “Register” Sub-Menu-> “Start Registration” button

- ① Input values for “Role (ID:Name)” and “User ID:Login ID”
- ② Press the “Register” Button.

**List/Update**

Update	Discard	Item No.	Role	User	Remarks	Last update date/time	Last updated by		
			ID	Name	User ID	Login ID			
Update	Discard	1	1	System Administrator	1	administrator	System Administrator	2015/04/01 10:00:00	Data portability procedure
Update	Discard	2	2	ロールテスト	2	testuser	テスト用	2020/10/20 11:10:23	Data portability procedure

Filter result count: 2

Output Excel

**Register**

Item No. Auto-Input

Role (ID name)

User ID: Login ID

Remarks

※ is a required item.

Back Register

Create new user

Register Role

Link Role and Menu

Link Role and User

Confirm Link

1 Enter the following for each item

Item	Value
Role(ID:Name)	Role test
User ID:Login ID	testuser

2

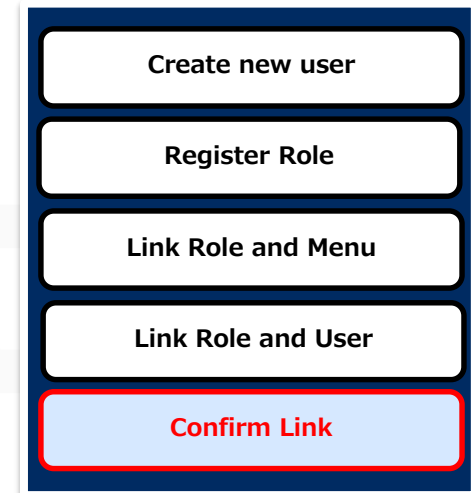
## 2.5 Confirm Link (1/4)

### Re-login

- First, Log out. Then, log in using the “Username” and “Login PW” we created in 2.1.



The image shows the Exastro IT Automation login interface. At the top, there is a dark blue header with the Exastro IT Automation logo. Below the header, there is a white login form with a blue header labeled "Login". The form contains two input fields: "Login ID" and "Password". The "Login ID" field is highlighted with a red border. Below the input fields is an orange "Login" button.

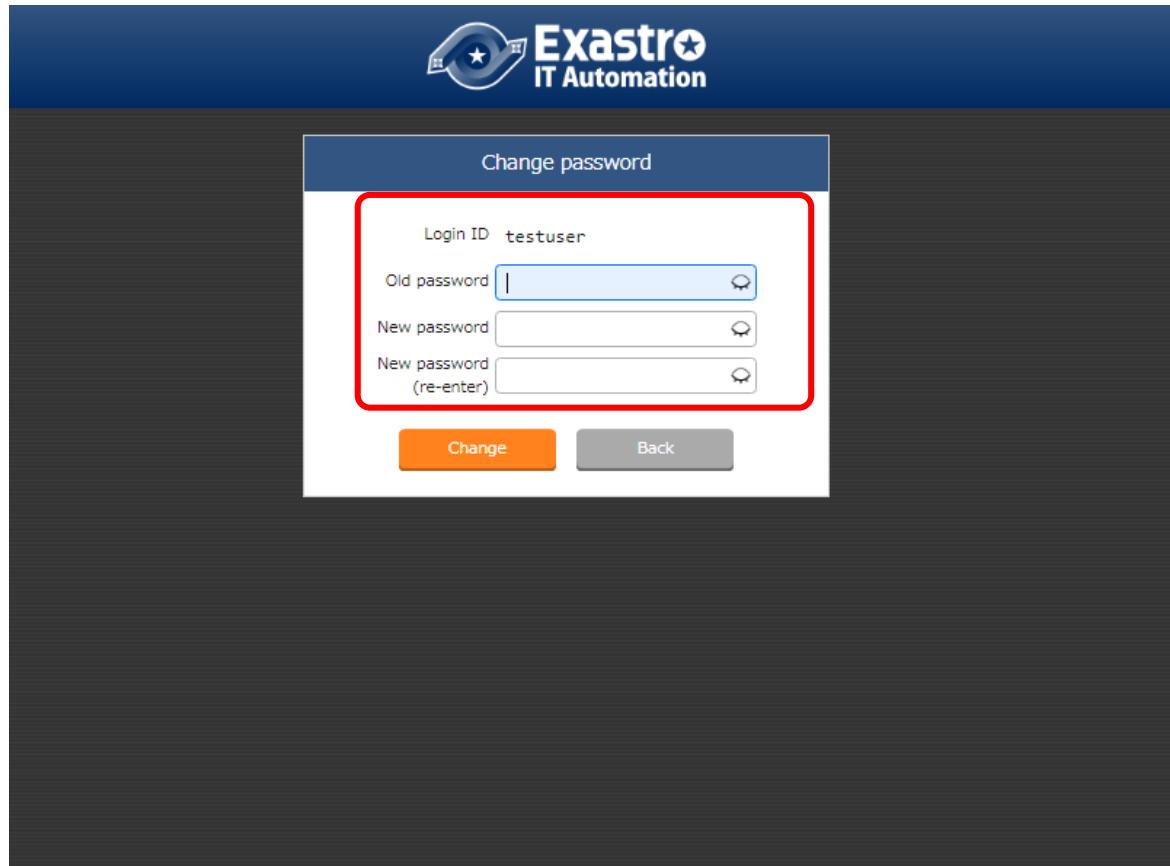


The image shows a vertical navigation menu with five buttons. The buttons are labeled "Create new user", "Register Role", "Link Role and Menu", "Link Role and User", and "Confirm Link". The "Confirm Link" button is highlighted with a red border.

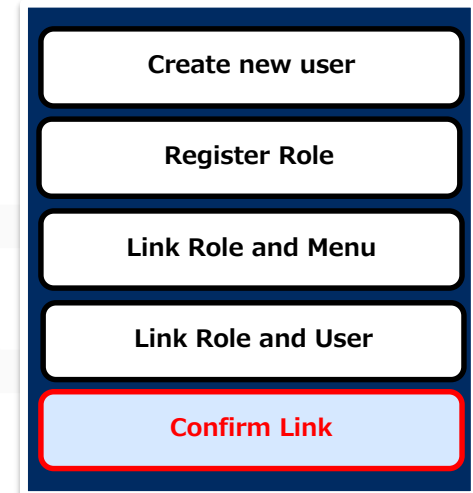
## 2.5 Confirm Link (2/4)

### Set new password.

- Every user who log in for the first time will be asked to change their password, so please do so.



The screenshot shows the 'Change password' form in the Exastro IT Automation interface. The form is titled 'Change password' and is set for the user 'testuser'. It contains three password input fields: 'Old password', 'New password', and 'New password (re-enter)'. Each field has a small eye icon for toggling visibility. The 'Old password' field is highlighted with a red border. Below the input fields are two buttons: 'Change' (orange) and 'Back' (grey).



A vertical navigation menu with five buttons: 'Create new user', 'Register Role', 'Link Role and Menu', 'Link Role and User', and 'Confirm Link'. The 'Confirm Link' button is highlighted with a red border.

## 2.5 Confirm Link (3/4)

### Check the Menu screen (If the permission is “View only”)

- Since the link settings are set to “View only”, the user is unable to use any editing tools.

The screenshot displays a web application interface with the following components:

- Display filter:** A section at the top with a 'Discard' button, a 'Managed system item number' dropdown, and several search filters for 'HW device type', 'Host name', 'IP address', 'MAC address', 'Last update date/time', and 'Last updated by'. It includes 'Filter' and 'Clear filter' buttons, and an 'Auto-filter' checkbox.
- List:** A table showing data with columns: 'Managed system item number', 'HW device type', 'Host name', 'IP address', 'MAC address', 'Network device name', 'Login user ID', 'Man', 'Last update date/time', and 'Last updated by'. The table contains two rows of data.
- Download all:** A section at the bottom with a 'Download all (Excel)' button.
- Menu:** A vertical menu on the right side with buttons: 'Create new user', 'Register Role', 'Link Role and Menu', 'Link Role and User', and 'Confirm Link' (highlighted with a red border).

A red callout box labeled **POINT** points to the 'Confirm Link' button in the menu, with the text: "In this scenario, we will set the “Item list” menu to “View only”".

## 2.5 Confirm Link(4/4)

### Check the menu screen (When the permission is "Can perform maintenance").

- If the link settings are set to "Can perform maintenance", all the edit tools will appear and be useable by the user.

The screenshot displays the Exastro system interface. The top menu bar includes 'List/Update' and 'Register'. The 'List/Update' menu shows a table of system items with columns: Update, Discard, Managed system item number, HW device type, Host name, IP address, EtherWakeOnLan (Power ON, MAC address, Network device), and Last update. The table contains two rows of data. The 'Update' and 'Discard' buttons are visible for each row. The 'Register' menu shows 'Download all (Excel)' and 'Download for new registration (Excel)' buttons. The 'Upload file' button is visible in the 'Register' menu. A red box highlights the 'Register' menu. A red box highlights the 'Confirm Link' button in the right sidebar. A red box highlights the 'Upload file' button in the 'Register' menu.

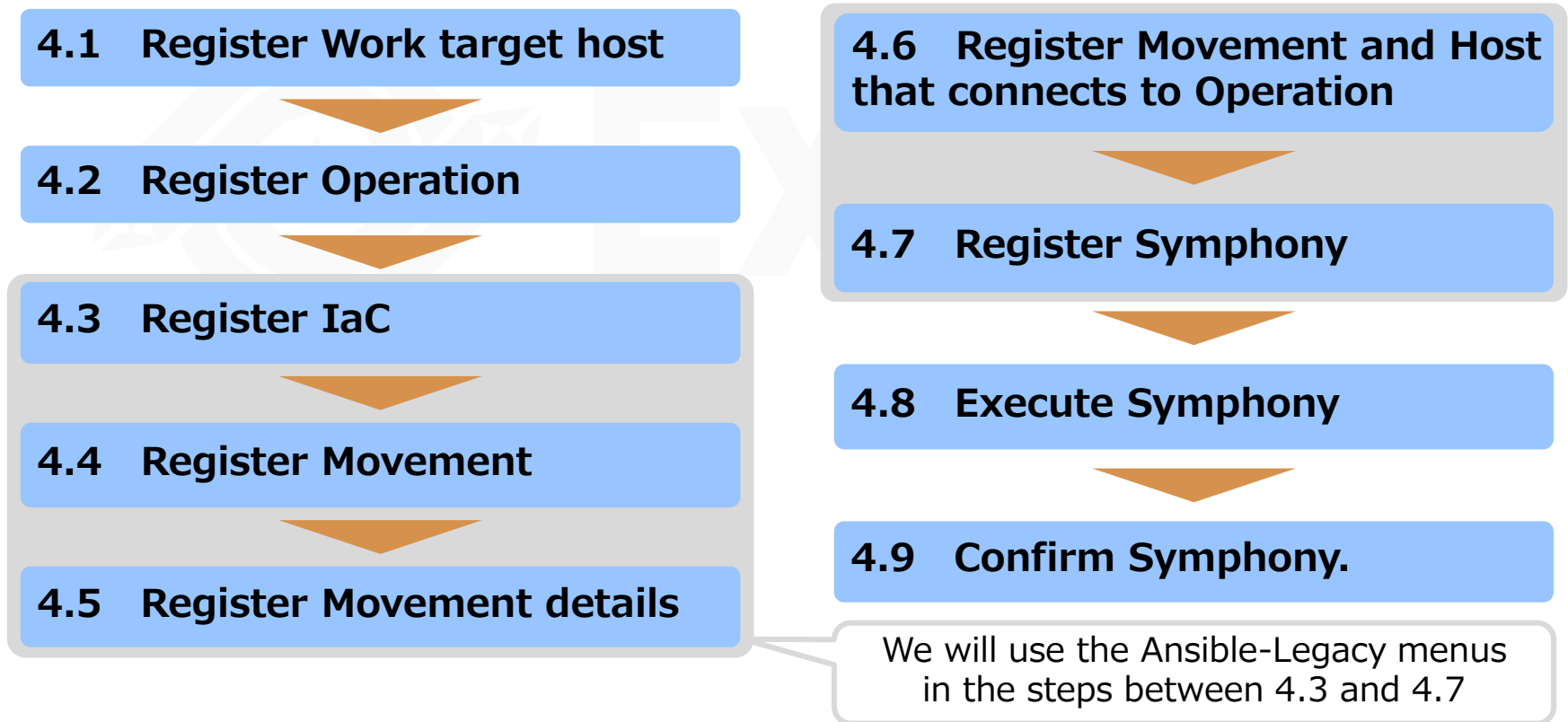
**POINT**

When the permission is set to "Can perform maintenance", several editing tools such as "Update", "Register", and "Upload File" will be displayed.

## 3.1 Scenario

In this scenario, a directory called “testdirectory” will be created under the tmp directory of the target host.

Please also keep in mind that since Ansible-Driver is required in order to proceed , we will use Ansible-Legacy.





## 3.2 Pre-preparation

### Create IaC

This scenario will use Ansible Legacy as an example.

This scenario will need an Ansible playbook as an IaC Sample in order to finish this scenario.

The sample playbook is written below.

※ Character code is "UTF-8", Newline code is "LF", File name extension is "yaml" format.

Please make sure that the indents are correct.

```
- name: Make Work Directory demonstration
  file:
    path: "/tmp/{{ VAR_DIRECTORY }}"
    state: directory
    mode: 0755
```

#### POINT

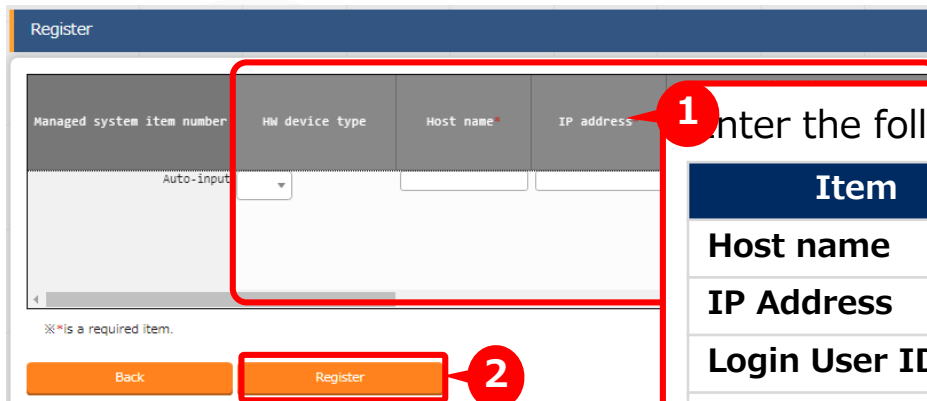
This IaC creates a new directory underneath /tmp.  
In this scenario, the file name will be "sample1".

## 4.1 Register Target work host

### Register Target work host

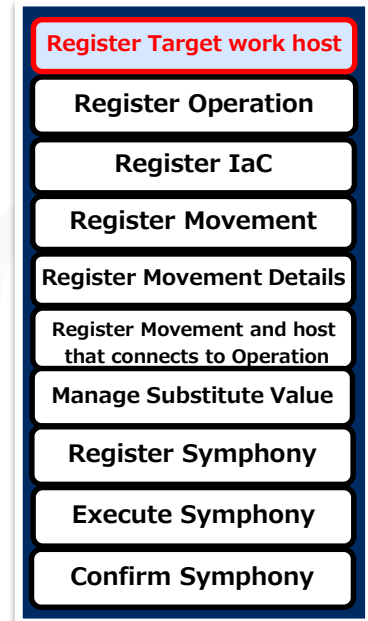
"Basic console" Menu group->"Device list"Menu->"Register"Sub-menu->"Start registration" button.

- ① Enter values for "Host name", "IP Address", "Login User ID", "Management", "Login Password" and "Authentication method".
- ② Press the "Register" button.



1 Enter the following for each item

Item	Value
Host name	testserver
IP Address	(Free space)
Login User ID	(Free space)
Management	●
Login Password	(Free space)
Authentication method	Password Authentication



Register Target work host

Register Operation

Register IaC

Register Movement

Register Movement Details

Register Movement and host that connects to Operation

Manage Substitute Value

Register Symphony

Execute Symphony

Confirm Symphony

#### POINT

This scenario assumes that there is an ssh password connection to the target host. For the values "IP Address", "Login User ID" and "Login password", please enter the same values set in the environment settings.

## 4.2 Register Operation

### Register Operation

"Basic Console" Menu group->"Input Operation list" Menu->"Register"Sub-menu->"Start Register" button.

- ① Input "Operation name" and "Scheduled execution date/time"
- ② Press the "Register" button.

Register

No.	Operation ID	Operation name	Scheduled date for execution
Auto-input	Auto-input	<input type="text"/>	<input type="text"/>

※ \* is a required item.

Download all and edit file uploads

**1**  
Enter the following for each item

Item	Value
Playbook file name	operation
Scheduled date for execution	(Free space)

**2**

- Register Work target host
- Register Operation**
- Register IaC
- Register Movement
- Register Movement Details
- Register Movement and host that connects to Operation
- Manage Substitute Value
- Register Symphony
- Execute Symphony
- Confirm Symphony

#### POINT

The operation will not be automatically executed at the date/time specified here.

## 4.3 Register IaC

### Register IaC

"Ansible-Legacy" Menu group-> "Playbook files" Menu-> "Register" sub menu-> "Start Registration" button.

- ① Input value for "Play book file name" and click the "Browse" button in the "Playbook file" field to upload "Sample1.yml" that we created earlier.  
( Click the "Upload in advance" button)
- ② Press the "Register" button

Exastro IT Automation Ansible-Legacy

Menu

- Main menu
- Movement list
- Playbook files
- Movement details
- Substitution value auto-registration setting
- Target host
- Substitution value list
- Execution
- Check operation status
- Execution list

Description

Display filter

List/Update

Register

Playbook name\*

Playbook files\*

Choose File | No file chosen

Upload in advance

Upload status:

Back Register

Enter the following for each item

Item	Value
Playbook file name	sample1
Playbook file	sample1.yml

POINT

For more information on creating IaC, please refer to section 3.2, "Pre-preparation".

Register Work target host

Register Operation

**Register IaC**

Register Movement

Register Movement Details

Register Movement and host that connects to Operation

Manage Substitute Value

Register Symphony

Execute Symphony

Confirm Symphony

# 4.4 Register Movement

## Register Movement

"Ansible-Legacy"Menu group-> "Movement list"Menu-> "Register" sub-menu->"Start Registration" button.

- ① Input values for "Movement name" and "Host specific format".
- ② Press the "Register" button

Exastro IT Automation Ansible-Legacy

Menu

- Main menu
- Movement list
- Playbook files
- Movement details
- Substitution value auto-registration setting
- Target host
- Substitution value list
- Execution
- Check operation status
- Execution list

Description

Display filter

List/Update

Register

Movement ID

Movement Name \*

Delay timer

Host specific

Auto-input

※ \* is a required item.

Back Register

Download all and edit file uploads

Trace history

Set the following for each item

Item	Value
Movement name	Move1
Host specific format	IP

Register Work target host

Register Operation

Register IaC

**Register Movement**

Register Movement Details

Register Movement and host that connects to Operation

Manage Substitute Value

Register Symphony

Execute Symphony

Confirm Symphony

## 4.5 Register Movement details

### Register Movement details

"Ansible-Legacy" Menu group->"Movement details"Menu->"Register"Sub-menu->"Start Registration" button .

- ① Input values for "Movement", "Playbook file" and "Include order"
- ② Press the "Register" button

Exastro IT Automation Ansible-Legacy

Menu

- Main menu
- Movement list
- Playbook files
- Movement details
- Substitution value auto-registration setting
- Target host
- Substitution value list
- Execution
- Check operation status
- Execution list

Description

Display filter

List/Update

Register

Associated item No. Movement Playbook files Include order Remarks Last update date/time Last

Auto-Input

※\* is a required item.

Back Register

Enter the following for each item

Item	Value
Movement	move1
Playbook file	sample1
Include order	1

Download all and edit file uploads

Trace history

Register Work target host

Register Operation

Register IaC

Register Movement

Register Movement Details

Register Movement and host that connects to Operation

Manage Substitute Value

Register Symphony

Execute Symphony

Confirm Symphony

## 4.6 Register Movement and host that connects to Operation

### Register Movement and host that connects to Operation

"Ansible-Legacy" Menu group->"Target host" Menu-> "Register" Sub-menu-> "Starter Registration" button .

- ① Input values for "Operation", "Movement" and "Host"
- ② Press the "Register" button.

Exastro IT Automation Ansible-Legacy

Menu

- Main menu
- Movement list
- Playbook files
- Movement details
- Substitution value auto-registration setting
- Target host
- Substitution value list
- Execution
- Check operation status
- Execution list

Description

Display filter

List/Update

Register

Item No. Auto-input

Operation Movement Host

Back Register

※ is a required item.

Download all and edit file uploads

Trace history

Register Work target host

Register Operation

Register IaC

Register Movement

Register Movement Details

Register Movement and host that connects to Operation

Manage Substitute Value

Register Symphony

Execute Symphony

Confirm Symphony

Enter the following for each item

Item	Value
Operation	operation
Movement	move1
Host	testserver

## 4.7 Manage Substitute Values

### Manage Substitute Values

"Ansible-Legacy" Menu group->"Substitute value list"->"Register" Sub menu->"Start Register" button .

- ① Input values for "Operation", "Movement", "Host", "Variable name" and "Specific value".
- ② Press the "Register" button.

**1** Enter the following for each item

Item	Value
Operation	operation
Movement	move1
Host	testserver
Variable Name	VAR_DIRECTORY
Specific Value	testdirectory

**2**

Register Work target host

Register Operation

Register IaC

Register Movement

Register Movement Details

Register Movement and host that connects to Operation

**Manage Substitute Value**

Register Symphony

Execute Symphony

Confirm Symphony



## 4.8 Register Symphony

### Register Symphony

"Symphony" Menu group->"Symphony Class editor" Menu->"Symphony edit"Sub-menu.

- ① Input "Symphony Class name".
- ② Drag the item "move1" from the right to the middle of the screen and drop it.
- ③ Press the "Register" button

Enter the following for each item

Item	Value
Symphony class name	workflow

1

2

Drag and Drop

3

- Register Work target host
- Register Operation
- Register IaC
- Register Movement
- Register Movement Details
- Register Movement and host that connects to Operation
- Manage Substitute Value
- Register Symphony**
- Execute Symphony
- Confirm Symphony

## 4.9 Execute Symphony

### Execute Symphony

“Symphony” Menu group-> “Symphony execution” Menu.

- ① Select “Workflow” in the “Symphony name” item in the “Symphony(list)” Sub-menu.
- ② Select “Operation” in the “Operation Name” item inside the “Operation(list)” Sub-menu.
- ③ Press the “Execute” button

Symphony [List]

Select	Symphony class ID	Symphony name	Description	Remarks	Last update date
<input type="radio"/>	5	Symphony			2020/10/15 09:56:
<input type="radio"/>	7	Symphony_A			2020/10/16 13:40:
<input type="radio"/>	8	Symphony_B			2020/10/16 13:44:
<input type="radio"/>	13	Test Symp 10/21			2020/10/21 09:44:
<input type="radio"/>	14	Symphony class test			2020/11/10 13:16:
<input type="radio"/>	15	Symphony test			
<input type="radio"/>	16	Symphony test			
<input type="radio"/>	17	Symphony test			
<input type="radio"/>	18	Test symphony			
<input checked="" type="radio"/>	19	workflow			

Filter result count: 10

1 Select the following

Item	Value
Symphony name	workflow

Operation [Filter]

Operation [List]

Select	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date
<input checked="" type="radio"/>	1	1	Operation1	2020/08/27 16:15	2020/11/11 08:44
<input type="radio"/>	2	2	Test Operatio	2020/10/08 10:00	2020/10/23 16:21
<input type="radio"/>	5	5	Operationte		
<input type="radio"/>	6	6	Basic setti		
<input type="radio"/>	7	7	opel		

Filter result count: 5

2 Select the following

Item	Value
Operation name	operation

Execute Symphony

Symphony class ID: 19  
Symphony name: workflow

Start

1 Move1 ☐ Skip  
Operation ID (Specified individual)

end

Execute

- Register Work target host
- Register Operation
- Register IaC
- Register Movement
- Register Movement Details
- Register Movement and host that connects to Operation
- Manage Substitute Value
- Register Symphony
- Execute Symphony**
- Confirm Symphony

## 4.10 Confirm Symphony

### Confirm Symphony

- Selecting a movement that is running or has finished will take the user to a screen where they can check the status and the log of the operation.

The screenshot displays the 'Confirm Symphony' interface. On the left is a 'Menu' sidebar with 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 main area is titled 'Check Symphony execution' and shows 'Symphony Instance ID: 43' and 'Symphony name: workflow1'. A green bar at the top says 'Start' and a green bar at the bottom says 'end'. A red arrow points from a green circle labeled 'confirm' to the 'Target Operation' screen.

**Target Operation**

Item	Value
Execution No.	73
Execution type	Normal
Status	Completed
execution engine	Ansible Engine
Caller symphony	workflow1
Caller conductor	
Execution user	System Administrator
ID	11
Name	Move2
Delay timer (minutes)	
Dedicated information for ansible	Host specific format: WINRM connection
No.	8
Name	operation
ID	8
Host management	confirmation
Substitution value	confirmation
Input data	Populated data: <a href="#">InputData 0000000073.zip</a>
Output data	Result data: <a href="#">ResultData 0000000073.zip</a>
Scheduled date/time	
Operation status	Start date/time: 2021/01/26 16:59:38
	End date/time: 2021/01/26 16:59:51

**Progress status(Execution log)**

Filter:  ☐ Display only corresponding lines

```
2021-01-26 16:59:38
{"seuser": null,
 "src": null,
 "state": "directory",
 "unsafe_writes": null
},
{"mode": "0755",
 "owner": "root",
 "path": "/tmp/testdirectory",
 "size": 6,
 "state": "directory",
 "uid": 0
}
META: ran handlers
META: ran handlers
```

- Register Work target host
- Register Operation
- Register IaC
- Register Movement
- Register Movement Details
- Register Movement and host that connects to Operation
- Manage Substitute Value
- Register Symphony
- Execute Symphony
- Confirm Symphony**



**Exastro**