



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



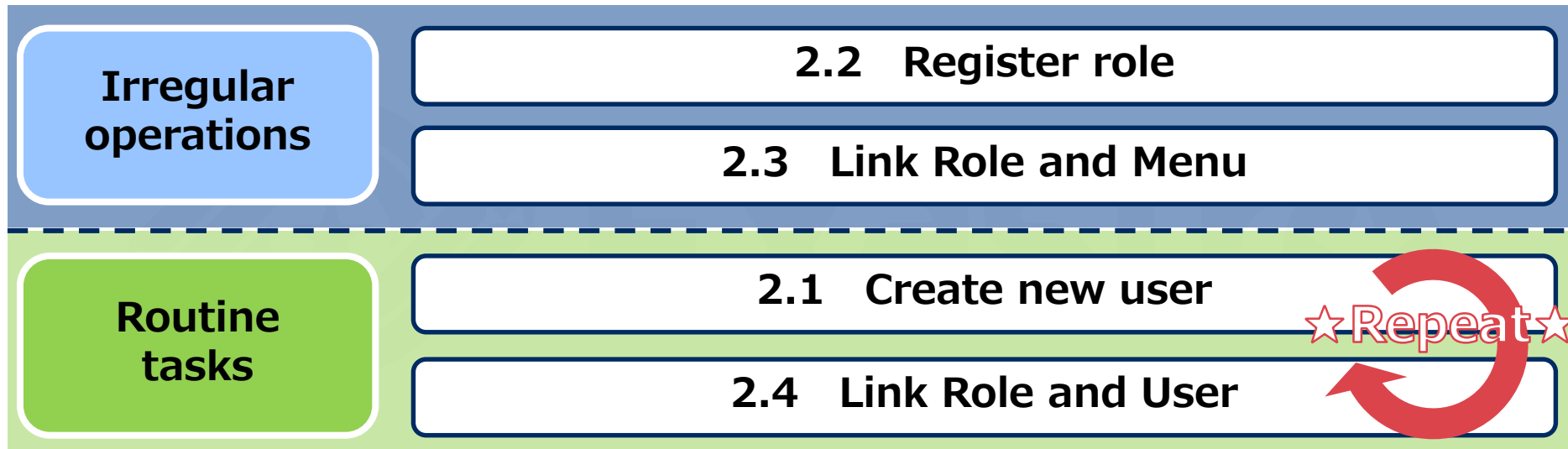
2.4 Link Role and User



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.

The screenshot displays the 'Create new User' interface. On the right, a sidebar menu contains the following options: 'Create new User' (highlighted in red), 'Register Role', 'Link Role and Menu', 'Link Role and User', and 'Confirm Link'. The main area shows the 'List/Update' table with one user entry: 'administrator' with 'System Administrator' role. Below this is the 'Register' form. A red box labeled '1' highlights the input fields for 'Login ID', 'Login Password', 'User name', and 'Mail address'. The 'Login ID' field contains 'testuser'. Below the form is a 'Back' button and a 'Register' button, with a red box labeled '2' highlighting the 'Register' button. A red box labeled '3' highlights a table with the following data:

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

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

| History | Update | Discard | Role ID | Role name | User information | Menu information | Access permission | Remarks | Last update |
|---------|--------|---------|---------|----------------------|------------------|------------------|----------------------|----------------------|-------------|
| History | Update | Discard | 1 | System Administrator | User information | Menu information | Role to allow access | System Administrator | 2015/04/01 |

Filter result count: 1

Output Excel

Register

Role ID: Auto-input

Role name*:

Access permission: Setting

Role to allow: Setting

Setting

Enter the following

| Item | Value |
|-----------|-----------|
| Role name | Role test |

※ is a required item.

Back Register

Side Menu:

- 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 |

Register

Item No. Auto-input

Role (ID: Name) *

Menu group: Menu *

Associate *

※*is a required item.

Back Register

2

Create new user

Register Role

Link Role and Menu

Link Role and User

Confirm Link

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 first row has "Auto-input" in the first column, a dropdown menu in the second, and a dropdown menu in the third. The "Associate" dropdown is open, showing two options: "Can perform maintenance" (highlighted in blue) and "View only". 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 with a red border), "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

| History | Update | Discard | Item No. | Role | | User | | Default access permission |
|---------|--------|---------|----------|------|----------------------|---------|---------------|---------------------------|
| | | | | ID | Name | User ID | Login ID | |
| History | Update | Discard | 1 | 1 | System Administrator | 1 | administrator | |

Filter result count: 1

Output Excel

Register

| Item No. | Role (ID name) | User ID: Login ID | Default access permission |
|------------|----------------------|----------------------|---------------------------|
| Auto-input | <input type="text"/> | <input type="text"/> | |

※*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

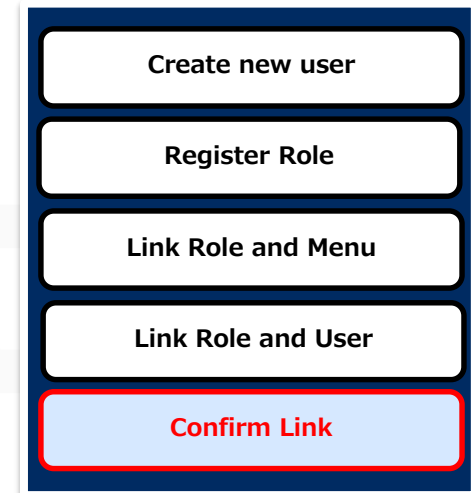
2.5 Confirm Link (1/4)

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 is a dark blue header with the Exastro IT Automation logo. Below the header is a white login form titled '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.

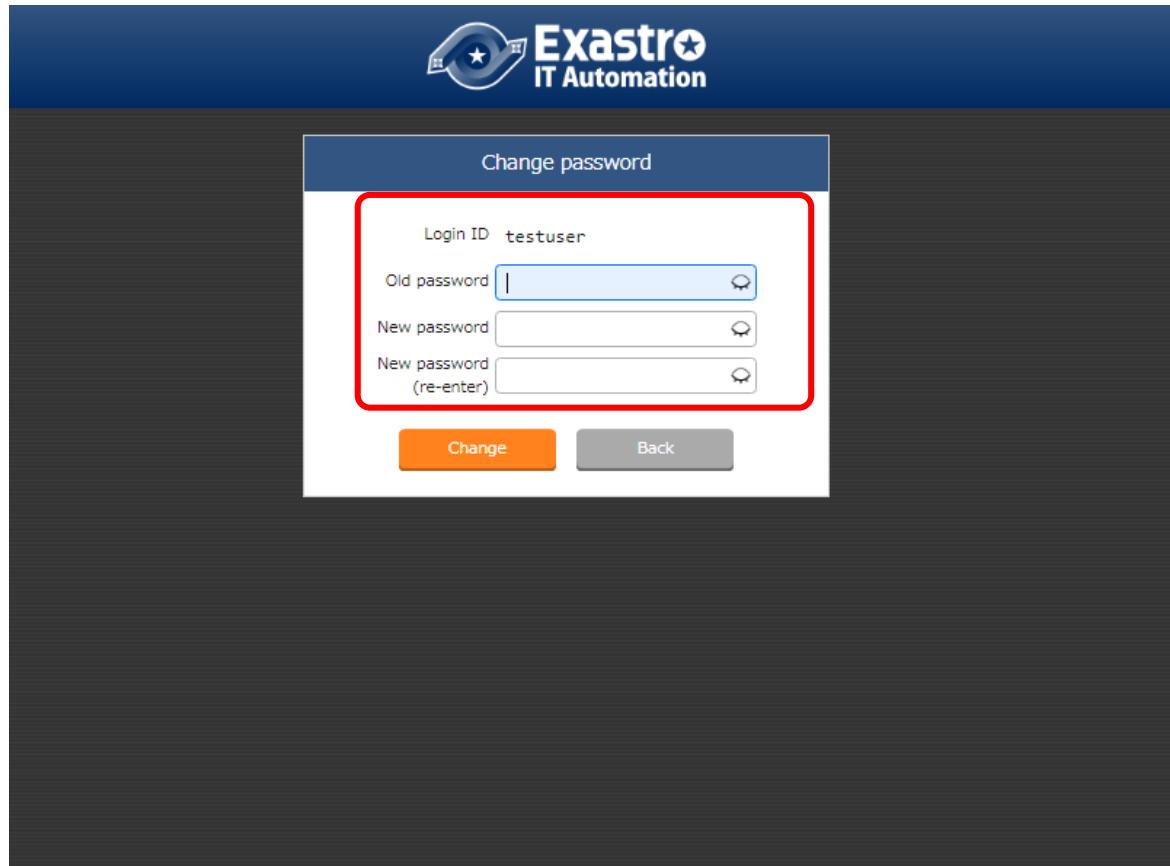


The image shows a vertical navigation menu with five buttons. The buttons are: 'Create new user', 'Register Role', 'Link Role and Menu', 'Link Role and User', and 'Confirm Link'. The 'Confirm Link' button is highlighted with a red border.

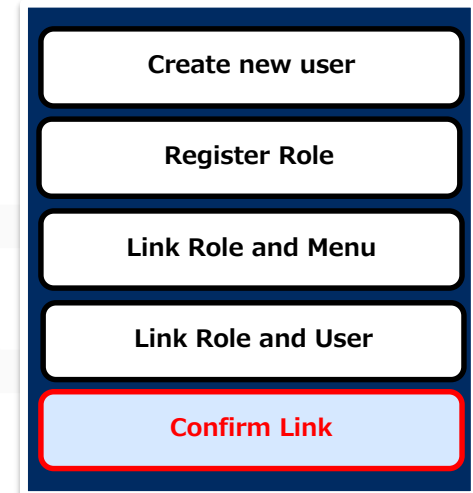
2.5 Confirm Link (2/4)

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.

Display filter △Close

| Discard | Managed system item number | HW device type | Host name | IP addr | Last update date/time | Last updated by |
|-----------------------------|---|-------------------------|------------------------|----------------------|---|------------------------|
| Exclude discarded records ▼ | <input type="text"/> ~ <input type="text"/> | NW <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> ~ <input type="text"/> | <input type="text"/> |
| | ▼ Search from pulldown | ▼ Search from pulldown | ▼ Search from pulldown | ▼ Search from | | ▼ Search from pulldown |

☒ Auto-filter

List △Close

| History | Managed system item number | HW device type | Host name | IP address | EtherWakeOnLan | | Log | Last update date/time | Last updated by |
|---------|----------------------------|----------------|--------------|------------|----------------|---------------------|-----|-----------------------|----------------------|
| | | | | | MAC address | Network device name | | | |
| History | 1 | NW | Host | | | | | 2021/05/11 15:24:45 | System Administrator |
| History | 2 | NW | ita-sample01 | | | | | 2021/06/04 10:33:54 | System Administrator |
| History | 3 | NW | ita-sample-2 | | | | | 2021/06/04 10:34:14 | System Administrator |

Create new user

Register Role

Link Role and Menu

Link Role and User

Confirm Link

POINT

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 a web application interface with several functional areas highlighted by red boxes to indicate available tools under the 'Can perform maintenance' permission.

List/Update Section:

| History | | | Managed system item number | HW device type | Host name | IP address | EtherWakeOnLan | | | Last update date |
|---------|--------|---------|----------------------------|----------------|--------------|------------|----------------|-------------|--------------|------------------|
| History | Update | Discard | | | | | Power ON | MAC address | Network devi | |
| History | Update | Discard | 1 | N | Host | | Power ON | | | 2021/05/11 15:24 |
| History | Update | Discard | 2 | N | ita-sample01 | | Power ON | | | 2021/06/04 10:33 |
| History | Update | Discard | 3 | N | ita-sample-2 | | Power ON | | | 2021/06/04 10:34 |

Filter result count: 3

Output Excel

Register Section:

Download all and edit file uploads

Download all (Excel)

Download for new registration (Excel)

Choose File No file chosen

Upload status:

Upload file

POINT

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

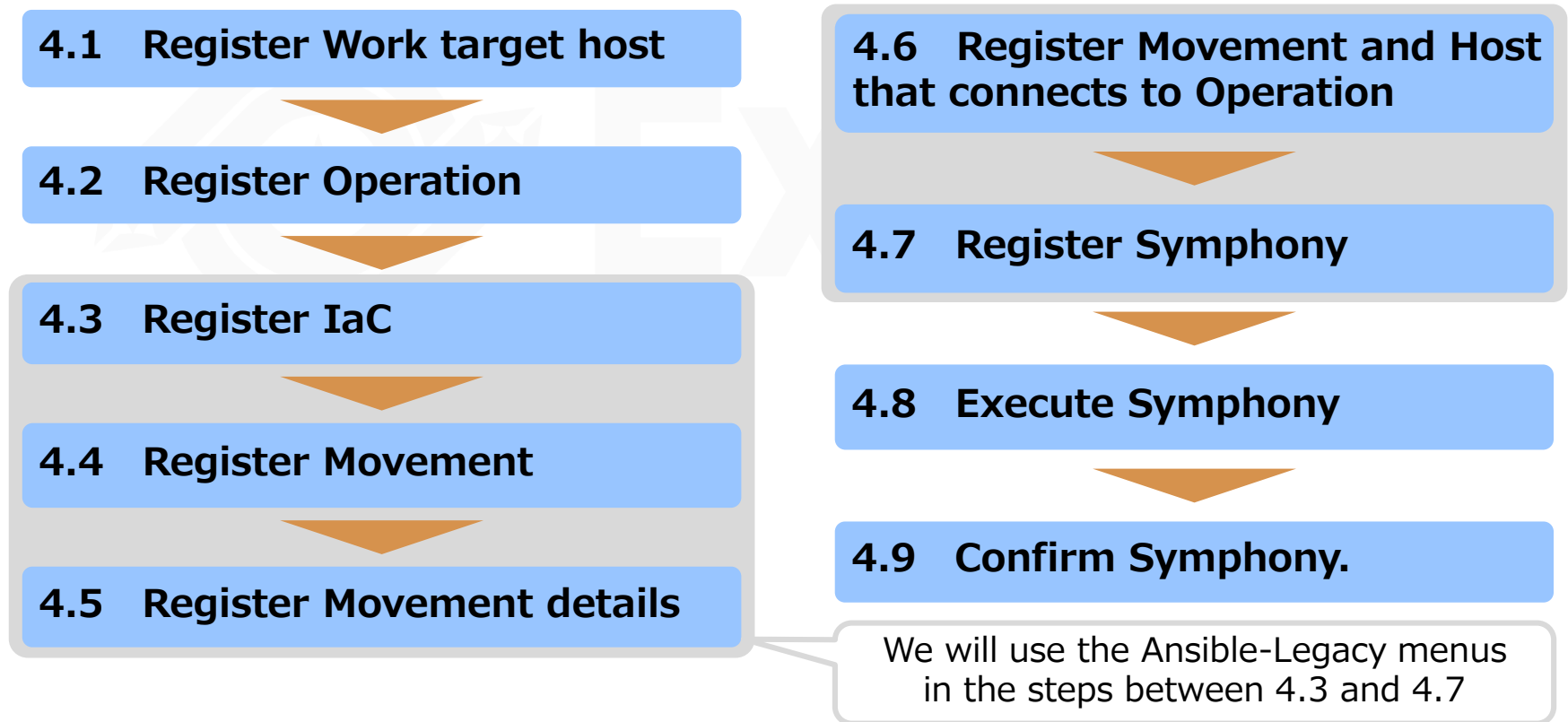
Right Sidebar:

- Create new user
- Register Role
- Link Role and Menu
- Link Role and User
- Confirm Link

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

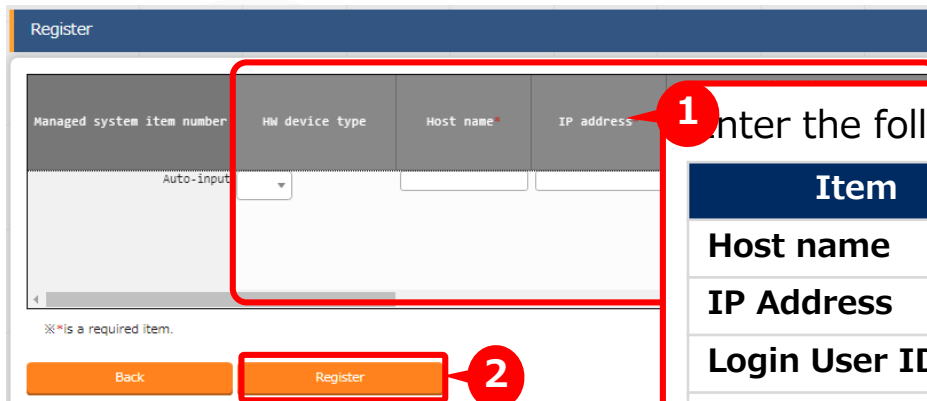
This IaC creates a new directory underneath /tmp.
In this scenario, the file name will be "sample1".

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.



Register

Managed system item number HW device type Host name IP address

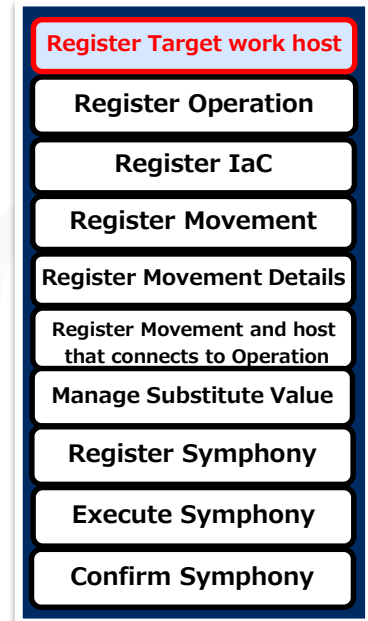
Auto-input

※*is a required item.

Back Register

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

Set the following for each item

| Item | Value |
|----------------------|-------|
| Movement name | Move1 |
| Host specific format | IP |

Movement ID

Movement Name *

Delay timer

Host specific

Auto-input

Back

Register

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

4.5 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

Back Register

※* is a required item.

Download all and edit file uploads

Trace history

User name [Sys Log] Change password

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

1 Enter the following for each item

| Item | Value |
|---------------|---------|
| Movement | move1 |
| Playbook file | sample1 |
| Include order | 1 |

▽Open

▽Open

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 | Operations | 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, a sidebar menu lists various options. The main area shows the 'Check Symphony execution' screen with a 'Start' button and a 'confirm' button. A red arrow points from the 'confirm' button to the 'Target Operation' screen. The 'Target Operation' screen displays a table of execution details, including Execution No., Execution type, Status, Execution engine, Caller symphony, Caller conductor, Execution user, ID, Name, Delay timer (minutes), Host specific format, Dedicated information for ansible, WinRM connection, No., Name, ID, Host management, Substitution value, Input data, Output data, Scheduled date/time, Operation status, Start date/time, and End date/time. Below this, the 'Progress status(Execution log)' screen shows a filter input and a checkbox for 'Display only corresponding lines'. The execution log content is as follows:

```
2021/01/26 16:59:13
{"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