



# **IT Automation Export/Import 【Practice】**

※"Exastro IT Automation" will be shortened to ITA in this document.

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# 1. Introduction

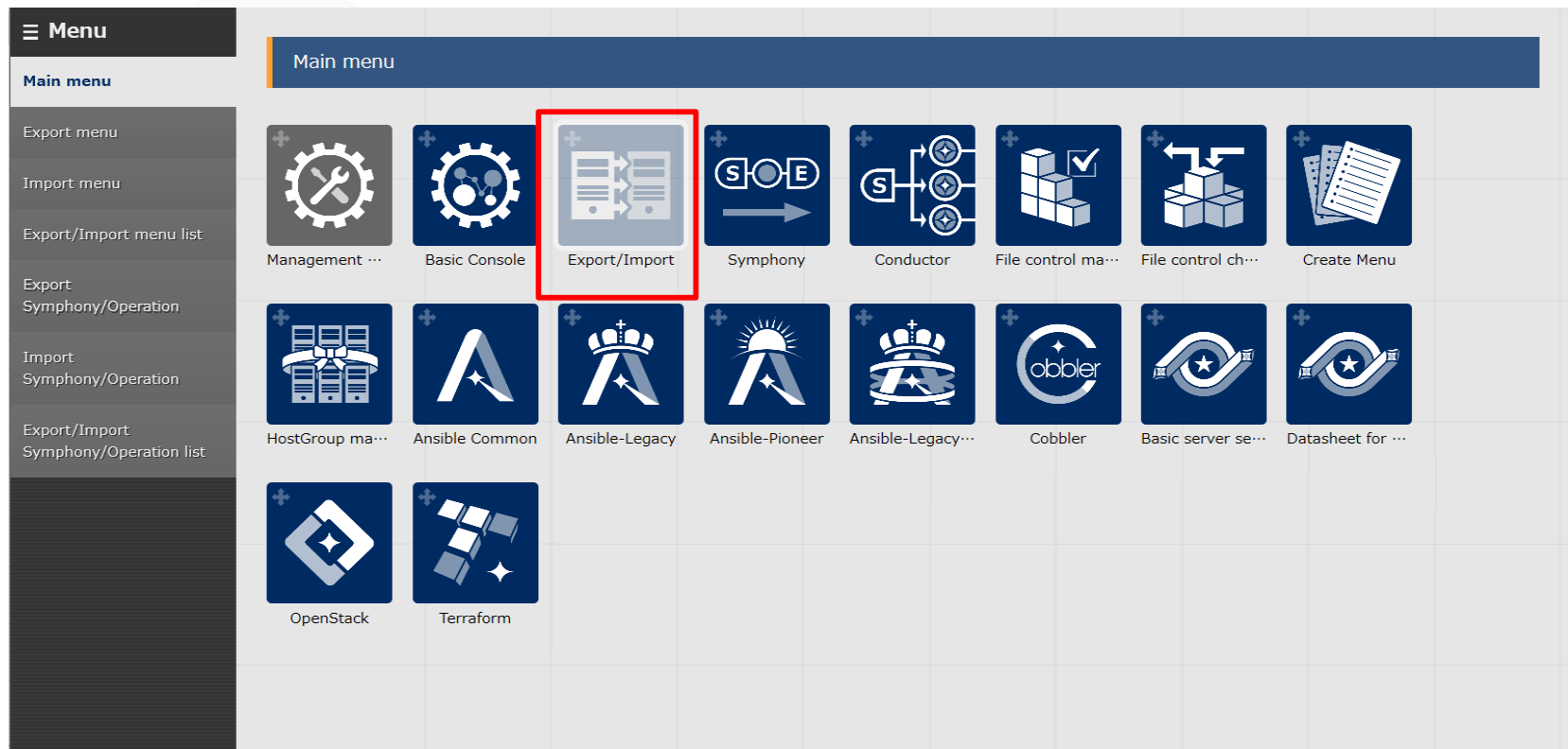
# 1.1 About this document

## About this document

In this document, you will learn about the “Export/Import” menu by trying it hands on.

Practice 1 will operate in the Export menu

Practice 2 will operate in the Symphony/Operation export menu.



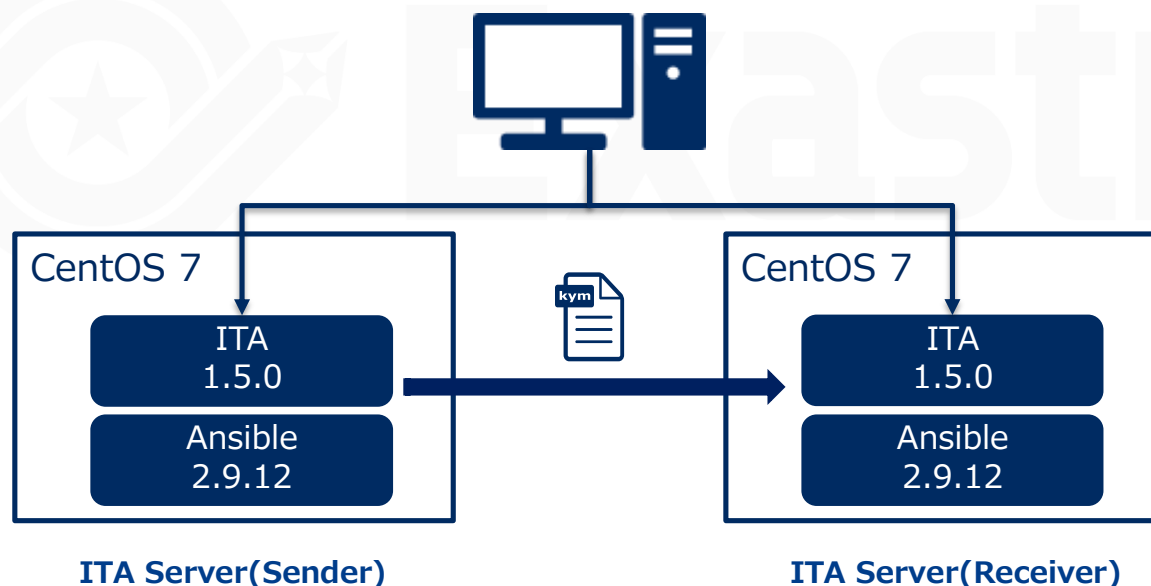
## 1.2 Work environment

### Work environment

The work environments used in this documents are shown below  
Please prepare two ITA servers. One for sending and one for receiving.

#### 2 ITA servers

- CentOS 7 (※1)
- ITA 1.5.0
- Ansible 2.9.12



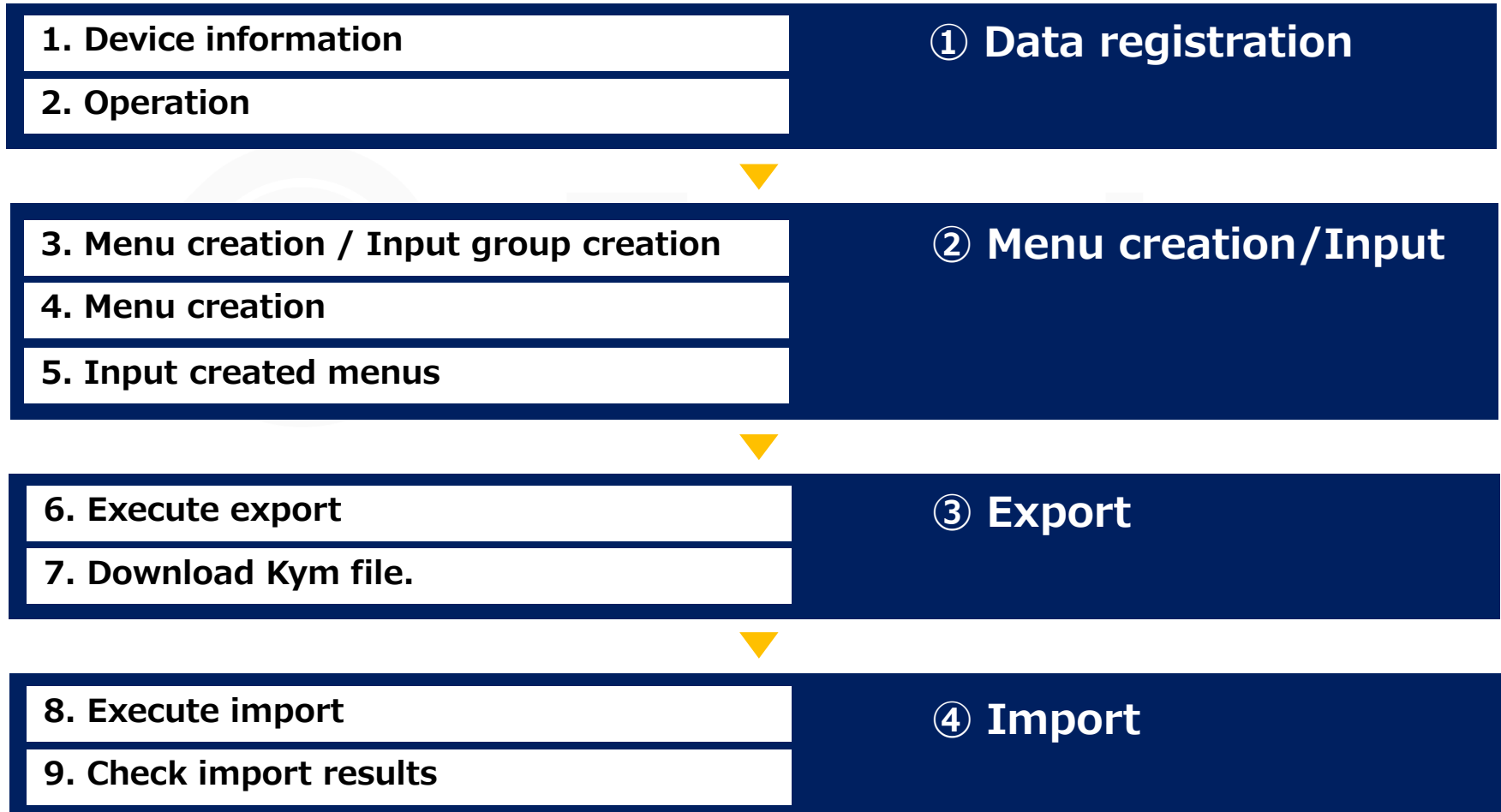
※1 This time, we will use CentOS7 though the host server, but ITA can be installed into any RHEL7 and RHEL8 type OS.

## 2. Practice ①. Menu export

## 2.1 Work procedure

### Work procedure

This scenario will follow the procedure shown below.

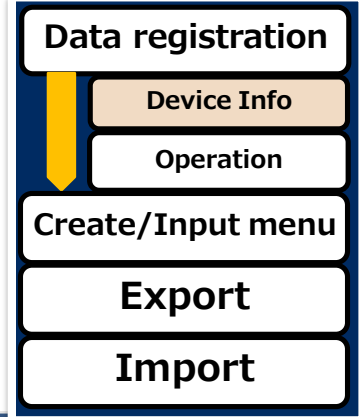


## 2.2 Data registration (1/2)

### Device registration

Menu: Basic console> Device list

- ① Click "Start Registration" under the "Register" sub-menu
- ② Select or input the following information for each item and click "Register"



The screenshot shows a 'Register' form with a table of input fields. A red box highlights the first row of the table, and a blue circle with the number '2' points to the 'Host name' field. Below the table, there are 'Back' and 'Register' buttons. A note at the bottom left states '※ \* is a required item.'.

Managed system item number	HW device type	Host name*	IP address*	EtherWakeOnLan		Login user ID	Login password		ssh authentication
				MAC address	Network device name		Management	Login password	
Auto-input	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Item	Input content
HW device type	SV
Host name	(Enter arbitrary value)
IP address	Target device`s IP Address
Login user ID	(Enter arbitrary value)
Management	●
Login password	(Enter arbitrary value)
Authentication method	ssh

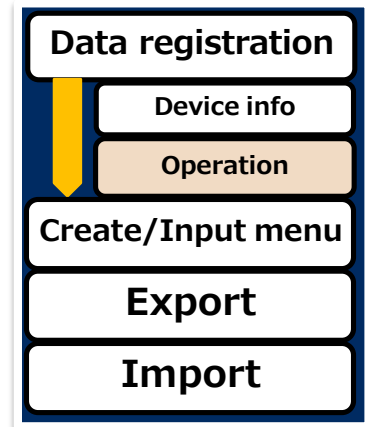


## 2.2 Data registration (2/2)

### Register a new operation

Menu: Basic Console> Input operation list

- ① Click "Start Registration" under the "Register" sub-menu.
- ② Input the following information for each item and click "Register"



The screenshot shows a 'Register' form with a table. The table has four columns: 'No.', 'Operation ID', 'Operation name', and 'Scheduled date for execution'. The first row is labeled 'Auto-input' in the first two columns. The third and fourth columns have input fields. A red box highlights the third and fourth columns. A callout bubble with the number '2' points to the 'Operation name' and 'Scheduled date for execution' columns. Below the table, there is a note: '※ \* is a required item.' and two orange buttons: 'Back' and 'Register'.

No.	Operation ID	Operation name *	Scheduled date for execution *
Auto-input	Auto-input		

※ \* is a required item.

Back Register

Operation name	Scheduled date for execution
OP1	(Enter arbitrary value)

## 2.3 Input/Create Menu(1/4)

### Menu group creation

Menu: Management Console> Menu group list.

- ① Click the “Start Registration” button under the “Register” sub-menu
- ② Input the following information for each item and click “Register”

Register

Menu group ID	Menu group name*	Display order	Image for panel
Auto-input	<input type="text"/>	<input type="text"/>	<input type="button" value="参照..."/>

Upload in advance

Upload status:

※\*is a required item.

Back Register

Data registration

Input/Create Menu

Menu group

Menu

Created Menu

Export

Import

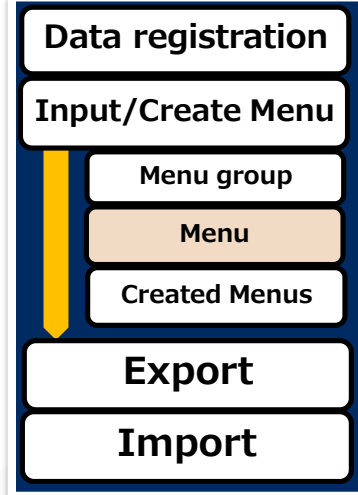
Menu group name	Display Order
Basic Server Settings	125
Basic Server Settings (For referencing)	130

## 2.3 Input/Create Menu(2/4)

### Create Parameter sheets

Menu: Create menu> Create/Define menu

- ① Input the following for “Menu creation information”
- ② Click “Target menu group” and select the target menu group.



Menu creation information

Basic information

Id : Auto-input

Menu name\* :

Creation target\* : Parameter Sheet(Host/Operation)

Display order\* :

Use\* : For Host

Last modified : Auto-input

Last updated by : Auto-input

Item	Input content
Menu name	Directory settings
Creation target	Parameter Sheet(Host/Operation)
Display order	1
Use	For Host

Target menu group

Host\* :

Reference\* :

Vertical :

Target menu group

Target menu group

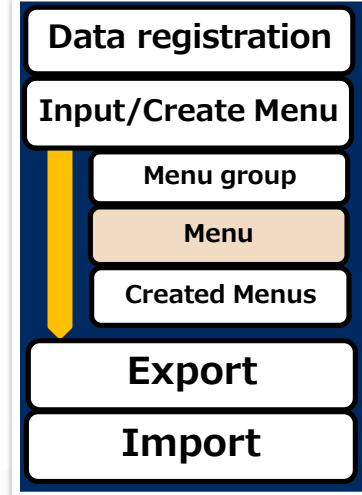
Host	Reference	Vertical	ID	Menu group name
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	-	Unselected
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	4	Basic server settings (for host groups)
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	5	Basic server settings
<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	6	Basic server settings (for referencing)

## 2.3 Input/Create Menu (3/4)

### Define Parameter Item names.

Menu: Create Menu> Create/Define menu.

- ① Press "Item" and add new items.
- ② Select or input the following for each item and click "Register"
- ③ Click "Create" on the bottom of the screen.



The screenshot shows the 'Input/Create Menu' interface. A red box highlights the 'Item' button, with a callout '1'. The interface has four columns: 'path', 'owner', 'group', and 'mode'. Each column has a dropdown menu set to 'String', a 'Maximum number of bytes\*' field set to '32', and a 'Regular expression' field. There are also checkboxes for 'Required' and 'Unique constraint', and an 'Explanation' field. A callout '2' points to the 'Maximum number of bytes\*' field. At the bottom, a 'Create' button is highlighted with a red box and a callout '3'. A 'List(Preview)' window is open, showing a table of operations.

Item name	Input method	Maximum number of bytes
path	String	32
owner	String	32
group	String	32
mode	String	32

No	Host name	Operation name	Reference date and time
1	192.168.0.1	Operation	2020/01/01 00:00
2	192.168.0.1	Operation	2020/01/01 00:00
3	192.168.0.1	Operation	2020/01/01 00:00

## 2.3 Input/Create Menu (4/4)

### Register data to Parameter sheet.

Menu: Basic Server Settings> Directory Settings

- ① Click "Start Registration" under the "Register" sub-menu.
- ② Select or input the following for each item and click "Register"
- ③ Update the data created in ② to match the data below.

Data registration

Input/Create Menu

Menu group

Menu

Created Menu groups

Export

Import

Register

No	Host name	Operation	Parameter			
		Operation	path	owner	group	mode
Auto-input	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

※ \* is a required item.

2

Register

Host name	Operation	path	owner	group	mode
Arbitrary	OP1	/tmp/work1	root	root	0644

3

Host name	Operation	path	owner	group	mode
Arbitrary	OP1	/tmp/work2	root	root	0644

## 2.4 Export(1/2)

### Export Execution

Choose and export the registered information

Menu: Export/Import> Export menu

Description ▾Open

Export △Close

☒ All menus

☒ Basic server settings (for host groups)

☒ Menu\_A

☒ Basic server settings

☒ Directory settings

☒ Basic server settings (for referencing)

☒ Directory settings

☒ Datasheet for pulldown selection

☒ Time zone list

☒ Sample Menu

☒ Menu\_A

☒ Management Console

☒ System settings

☒ Role list

☒ Operation delete list

☒ Single-sign-on Basic Preference

☒ Menu group list

☒ Menu list

☒ Conductor interface information

☒ Node pegging terminal list

☒ Conductor class list

☒ Conductor Regularly execution

☒ Conductor

☒ Symphony

☒ movement associated with Symphony list

Export

Contact administrator

Data registration

Input/Create Menu

Export

Start Export

Download kym file

Import

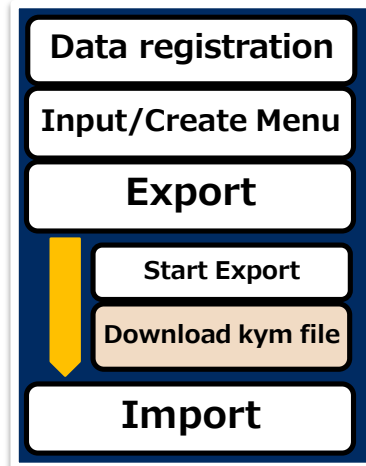
## 2.4 Export(2/2)

### Download Kym File

Let download the exported data.

Menu: Export/Import> Export/Import menu list

- ① Click "List"
- ② Click the "Filter" button.
- ③ Download Kym file from the export status list.



List

Execution No.	Status	Execution type	Import type	File name	Last update date/time	Last updated by
6	Completed	Export		<a href="#">ita_exportdata_20201119091542.kym</a>	2020/11/19 09:15:42	Data portability procedure

Filter result count: 1

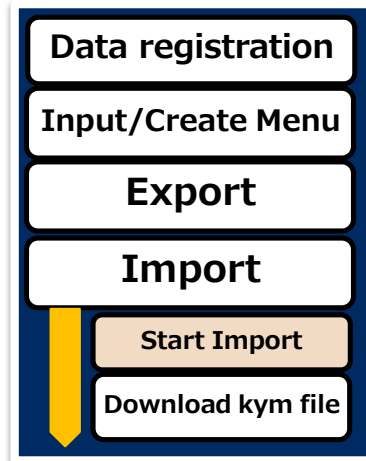
3

## 2.5 Import(1/3)

### Execute Import

From here, we will use the receiving server to operate.  
Upload the Kym file and import it.

Menu: Export/Import> Import Menu



The screenshot shows two web interfaces. The top interface is titled 'Upload' and has a text input field containing a file path and a red box around it with a callout '1' pointing to it. Below the input field is an 'Upload' button. The bottom interface is titled 'Import' and has several checkboxes. A red box around the 'All menus' checkbox has a callout '2' pointing to it. Below the checkboxes are two buttons: 'Import' and 'Import (without discarded data)'. A callout '3' points to the 'Import' button.

1 Upload Kym File

2 Tick the "All Menus" Checkbox.

3 Click the "Import" button.

#### Tips

Users can exclude discarded data and import the rest of the data.



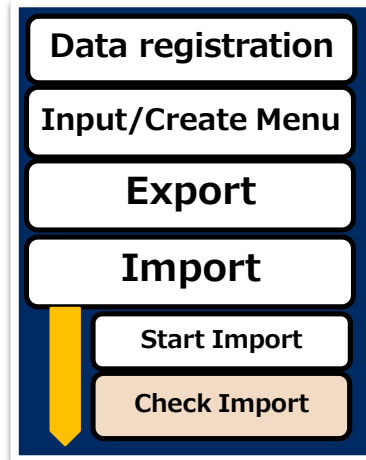
## 2.5 Import(2/3)

### Check Import status

Let`s check the imported information and see if the status is "Completed"

Menu: Export/Import> Export/Import menu list

- ① Click "List"
- ② Click the "Filter" button.
- ③ Check if the status of the executed import is "Completed"



List

Execution No. ⌵	Status ⌵	Execution type ⌵	Import type ⌵	File name	Last update date/time ⌵	Last updated by ⌵
7	Completed	Import	Normal	<a href="#">7_ita_exportdata_20201119091542.kym</a>	2020/11/19 09:29:13	Data portability procedure

Filter result count: 1

## 2.5 Import(3/3)

### Check Import results

Lets check the imported menus. All change history for each record should also be moved. Let`s put them together and check them.

Menu: Server Basic Settings> Directory settings.

- ① Click "Filter"
- ② Check if the Menu information has been migrated by "Data Portability Procedure"

Data registration

Input/Create Menu

Export

Import

Start Import

Check Import

List/Update

△Close

Update		Discard		No	Operation					Parameter				Last update date/time	Last updated by
ID	Operation name	Reference date	Scheduled date for execution	Last execution date	path	owner	group	mode							
Update	Discard	1	8 OP1	2020/11/21 09:20	2020/11/21 09:20		/tmp/work2	root	root	0644	2020/11/19 09:04:49	Data portability procedure			

Filter result count: 1

- ③ Click "Trace History" and input the numbers for the records you registered.
- ④ Click "Display" and check if the change history information has been migrated or not.

Trace history

3

No

1

Display

Reset

History log No.	Change date/time	Discard	No	Host name	Operation					path	Last update date/time	Last updated by
					ID	Operation name	Reference date	Scheduled date for execution	Last execution date			
2	2020/11/19 09:04:49		1	Tsai_test	8	OP1	2020/11/21 09:20	2020/11/21 09:20		/tmp/wor	2020/11/19 09:04:49	Data portability procedure
1	2020/11/19 09:04:29		1	Tsai_test	8	OP1	2020/11/21 09:20	2020/11/21 09:20		/tmp/wor	2020/11/19 09:04:29	Data portability procedure

<

>

### 3. Practice ② Symphony/Operation Export

# Before doing anything.

## Playbook creation

We prepared some playbook samples that can be migrated  
Save the playbook below as an YML File.

(Attention) Create the YML file with character code "UTF-8" and newline code "LF".

```
- name: Copy Test File to Locale
  copy:
    src: "{{ CPF_test_text }}"
    dest: "{{ VAR_directory }}"
    owner: root
    group: root
    mode: 0644
```

**Filename:** copy\_file.yml

## 3.1 Work Procedure

### Work procedure

This scenario will follow the flow shown below.

1. Device information

2. Operation

3. Movement

4. Playbook

5. Content files

6. Movement details

7. Target host

8. Substitute value list

9. Symphony

#### ① Register the data going to be moved

Most of the operation will be done in Ansible-Legacy.

The following operation will be done from the Sender server

※You can skip this step if you`ve already registered all the files.

10. Execute export

11. Download kym file

#### ② Export

12. Execute Import

13. Check import results

#### ③ Import

## 3.2 Data registration (1/9)

### Device registration

Menu: Basic console> Device list

- ① Click “Start Registering” under the “Register” sub-menu.
- ② Select or input the following information for each item and click enter

※This part can be skipped if you already registered a device in Practice ①

Register

Managed system item number	HW device type	Host name*	IP address*	EtherWakeOnLan		Login user ID	Login password		ssh authentication
				MAC address	Network device name		Management	Login password	
Auto-input	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<div>Upload in advance</div> <div>Upload status:</div>									

※\* is a required item.

Back Register

2

Item	Input content
HW Device type	SV
Host name	(Enter arbitrary value)
IP Address	Target Device IP Address
Login User ID	(Enter arbitrary value)
Management	●
Login password	(Enter arbitrary value)
Authentication method	ssh

#### Data Registration

Device info

Operation

Movement

Playbook

Content File

Movement details

Target host

Substitute Value list

Symphony

Export

Import

## 3.2 Data Registration (2/9)

### Register a new Operation

Menu: Basic console> Input operation list

- ① Click "Start Registering " under the "Register" sub-menu
- ② Input the following information for each item and click "Register"  
※You can skip this step if you registered an operation in Practice ①

Register

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

※ \* is a required item.

Back

Register

Operation Name	Scheduled execution data
OP1	(Enter arbitrary value)

Data registration
Device info
Operation
Movement
Playbook
Content File
Movement details
Target host
Substitute Value list
Symphony
Export
Import

## 3.2 Data Registration (3/9)

### Create a Movement

Menu: Ansible Legacy> Movement list

- ① Click “Start Registration” under the “Register” sub-menu.
- ② Select or input the following information for each item and click “Register”

Register

Movement ID	Movement Name*	Delay timer	Dedicated information for ansible		
			Host specific format*	WinRM connection	Header section
Auto-input	<input type="text" value="MV1"/>	<input type="text"/>	<input type="text" value="IP"/>	<input type="text"/>	<input type="text"/>

※\*is a required item.

Back

Register

2

Movement name	Host specific format
MV1	IP

Data registration
Device info
Operation
<b>Movement</b>
Playbook
Content File
Movement details
Target host
Substitute Value list
Symphony
Export
Import



## 3.2 Data registration (4/9)

### Register Playbook

Menu: Ansible-legacy> Playbook files

- ① Click "Start Registration" under the "Register" sub-menu.
- ② Click the Browse button and select desired Playbook
- ③ Select or Input the following data below for the different items and click "Register"

Register

Playbook ID	Playbook name	Playbook files
Auto-input	<input type="text"/>	<input type="button" value="参照..."/>
		<input type="button" value="Upload in advance"/>
		Upload status:

※\* is a required item.

Playbook name	Playbook files
copy_file	copy_file.yml

Data registration
Device info
Operation
Movement
Playbook
Content File
Movement details
Target host
Substitute Value list
Symphony
Export
Import

## 3.2 Data registration (5/9)

### Register content files.

Let`s register content files. The contents be whatever.

Menu: Ansible-Common> File list

- ① Click "Start Registration" under the "Register" sub-menu.
- ② Browse and find the test file and then click " Upload in advance".
- ③ Enter the following for each item and click "Register"

**File embedded  
variable name**

CPF\_test\_text

**Files**

test\_text.txt

#### Data registration

Device info

Operation

Movement

Playbook

Content File

Movement details

Target host

Substitute Value list

Symphony

Export

Import

## 3.2 Data registration (6/9)

### Register Playbook to Movement

Menu:Ansible Legacy>Movement details

- ① Click “Start Registration” under the “Register” sub-menu.
- ② Select or enter the following for each item and click “Register”.

Register

Associated item No.	Movement*	Playbook files*	Include order*
Auto-input	<input type="text"/>	<input type="text"/>	<input type="text"/>

※\*is a required item.

Back

Register

2

Movement	Playbook files	Include order
MV1	copy_file	1

Data registration

Device info

Operation

Movement

Playbook

Content File

Movement details

Target host

Substitute Value list

Symphony

Export

Import

## 3.2 Data registration (7/9)

### Register target host

Menu: Ansible Legacy> Target host.

- ① Click “Start Registration” under the “Register” sub-menu.
- ② Select or enter the following for each item and click “Register”

**Data registration**

Device info

Operation

Movement

Playbook

Content File

Movement details

Target host

Substitute Value list

Symphony

**Export**

**Import**

Register

Item No.	Operation*	Movement*	Host*
Auto-input	<input type="text"/>	<input type="text"/>	<input type="text"/>

2

Operation	Movement	Host
OP1	MV1	(Arbitrary Host)

## 3.2 Data registration (8/9)

### Manage substitute values.

Menu: Ansible Legacy> Substitution value list.

- ① Press "Start Registration" under the "Register" sub-menu.
- ② Select or enter the following for each item and click "Register"

Register

Item No.	Operation*	Movement	Host	Variable name	Specific
Auto-input	<input type="text"/>	Select operation	Select operation	Select Movement	

2

Operation	Movement	Host	Variable name	Specific value
OP1	MV1	任意	VAR_directory	/tmp/work1

Data registration

Device info

Operation

Movement

Playbook

Content File

Movement details

Target host

Substitute Value list

Symphony

Export

Import

Tips

We now directly changed the "Target Host" and "Substitution value list", but records created from the substitution value auto-registration setting menu can also be moved.

## 3.2 Data registration (9/9)

### Register Symphony

Menu: Symphony>Symphony class edit.

**1** Enter symphony name.

Item	Value
Symphony class name	SP1

**2** Add "MV1" By dragging and dropping it into the yellow area

**3** Click "Register".

Register

**Data registration**

- Device info
- Operation
- Movement
- Playbook
- Content File
- Movement details
- Target host
- Substitute Value list
- Symphony**

**Export**

**Import**

# 3.3 Export(1/2)

## Execute Export

Select and export the registered information.

Menu: Export/Import> Export Symphony/Operation

Data registration

Export

Start Export

Download kym2 file

Import

Symphony [List] △Close

Select	Symphony class ID	Symphony name	Description	Remarks	Last update date/time	Last updated by
<input type="checkbox"/>	14	Symphony class name	Test Joachim Export/Import		2020/11/19 13:14:45	System Administrator

Filter result count: 1

Operation [Filter] ▽Open

Operation [List] △Close

Select	No.	Operation ID	Operation name	Scheduled date for execution	Last ex	Last update date/time	Last updated by
<input type="checkbox"/>	8	8	OP1	2020/11/21 09:20		2020/11/19 09:03:14	Data portability procedure

Filter result count: 1

Export

1  
Select the Symphony and Operation we created earlier.

2  
Click "Export"



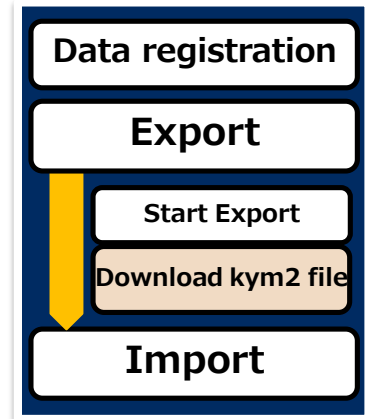
## 3.3 Export(2/2)

### Download kym2 file

Let`s download the exported data.

Menu: Export/Import> Export/Import Symphony/Operation list

- ① Press the “List” sub-menu.
- ② Click the “Filter” button.
- ③ Download Kym2 file from the Export status list.



List <span>△Close</span>						
Execution No. ⇅	Status ⇅	Execution type ⇅	File name	Remarks ⇅	Last update date/time ⇅	Last updated by ⇅
3	Completed	Export	<a href="#">ita_exportdata_20201119131810.kym2</a>	SymphonyID:1 OperationID:	2020/11/19 13:18:10	Data portability procedure

Filter result count: 1



## 3.4 Import(1/3)

### Execute Import

We will use the receiving server from this point on  
Let`s upload the kym2 file and import it.

Menu: Export/Import> Import Symphony/Operation



The screenshot shows two forms: 'Upload' and 'Import'. The 'Upload' form has a file input field with a '参照...' button and an 'Upload' button. A red box highlights the file input field, and a callout bubble with the number '1' points to it, containing the text 'Upload Kym2 File'. The 'Import' form has a list of checkboxes for 'All Operations', '8:OP1', 'All Symphonies', and '14:Symphony class name'. A red box highlights the first two checkboxes, and a callout bubble with the number '2' points to it, containing the text 'Select the Symphony and Operation we created earlier.' Below the checkboxes is an 'Import' button. A red box highlights the 'Import' button, and a callout bubble with the number '3' points to it, containing the text 'Click "Import.'.

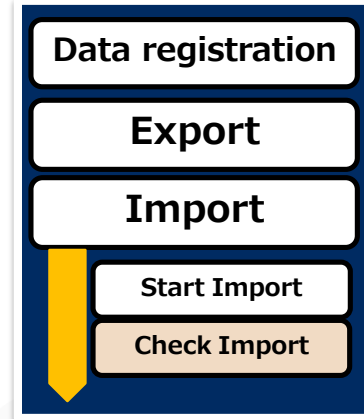
## 3.4 Import(2/3)

### Check Import Status

Let`s check the imported information and see if the status is "Completed"

Menu: Export/Import> Export/Import Symphony/Operation list

- ① Press the "List" sub-menu
- ② Click the "Filter" button.
- ③ Check if the status of the executed import is "Completed"



List <span>△Close</span>						
Execution No.	Status	Execution type	File name	Remarks	Last update date/time	Last updated by
4	Completed	Import	<a href="#">ita_exportdata_20201119131810.kym2</a>	SymphonyID:1 OperationID:	2020/11/19 13:22:46	Data portability procedure

Filter result count: 1

## 3.4 Import(3/3)

### Check Import results

Let`s move the menus we registered and check the imported data.

#### Symphony class list

Discard	Symphony class ID	Detailed display	Symphony name	Description	Last update date/time	Last updated by
Discard	14	Details	Symphony class name	Test Joachim Export/Import	2020/11/19 13:14:45	System Administrator

#### Movement list

Movement ID	Movement Name	Orchestrator	Delay timer	Host specific format	Dedicated WinRM C	Last update date/time	Last updated by
11	MV1	Ansible Legacy		IP		2020/11/19 10:10:58	System Administrator

#### File list

Update	Discard	File ID	File embedded variable name	Files	Remarks	Last update date/time	Last updated by
Update	Discard	1	CPF_test_text	<a href="#">test_text.txt</a>		2020/11/19 10:19:17	System Administrator

#### Input operation list

Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last update date/time	Last updated by
Update	Discard	8	8	OP1	2020/11/21 09:20	2020/11/19 09:03:14	System Administrator

#### Target host

Update	Discard	Item No.	Operation	Movement	Host	Remarks	Last update date/time	Last updated by
Update	Discard	16	8:OP1	11:MV1	1:Tsai_test		2020/11/19 10:53:52	System Administrator

#### Other menus where items were imported:

- Device list
- Playbook files
- Movement details
- Substitute value list

#### Tips

The change history of each record will also be imported.





**Exastro**