



# IT Automation Export/Import 【Practice】

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

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## 3. Scenario ② Excel bulk export/import

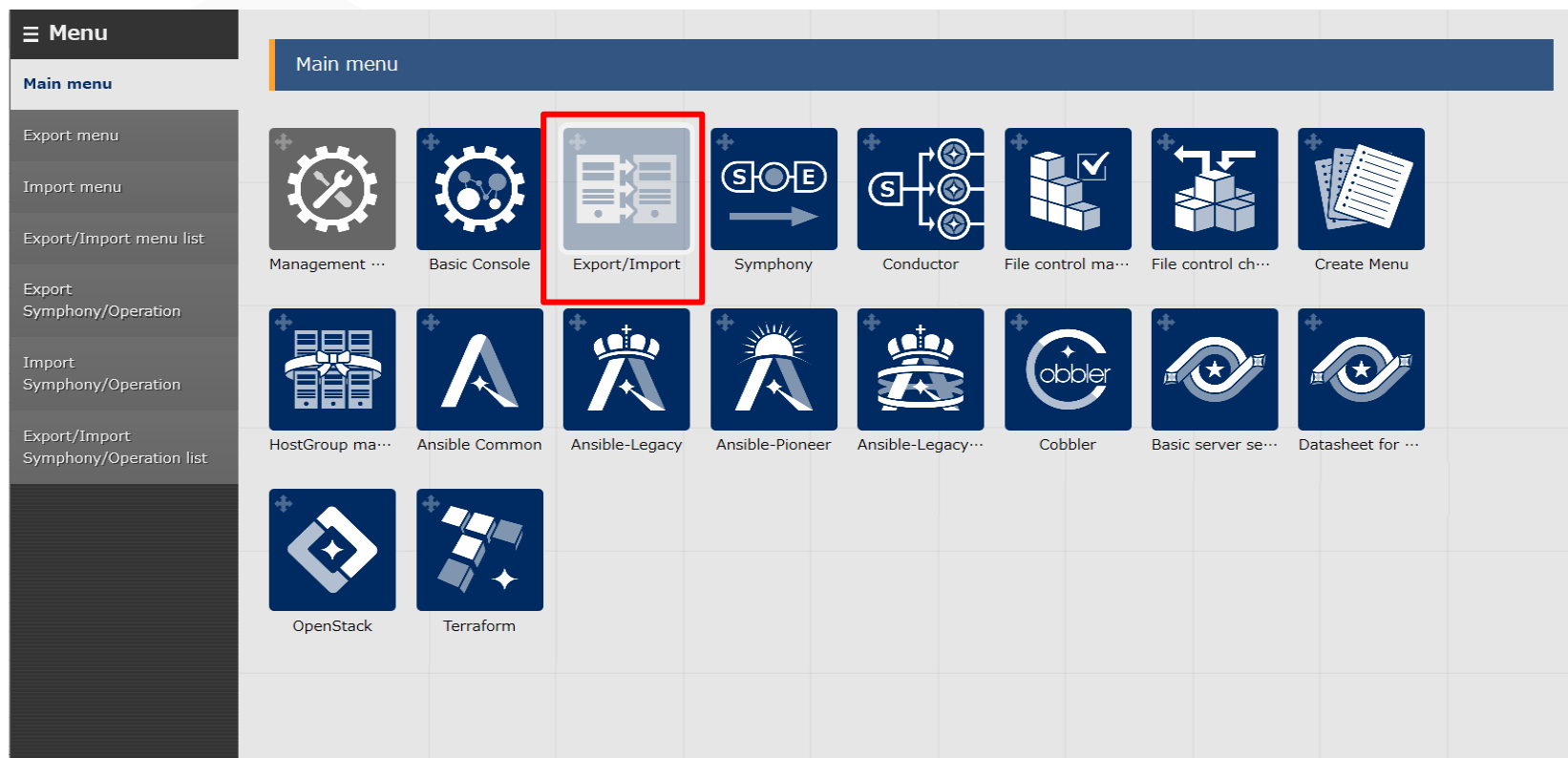
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# 1. Introduction

# 1.1 About this document

## About this document

This document aims to introduce the reader to the **Export/Import function** by teaching them through a hands-on scenario



## 2. Practice ①. Menu export

# 2.1 Environment

## Work environment

The environment used in this document is as following.

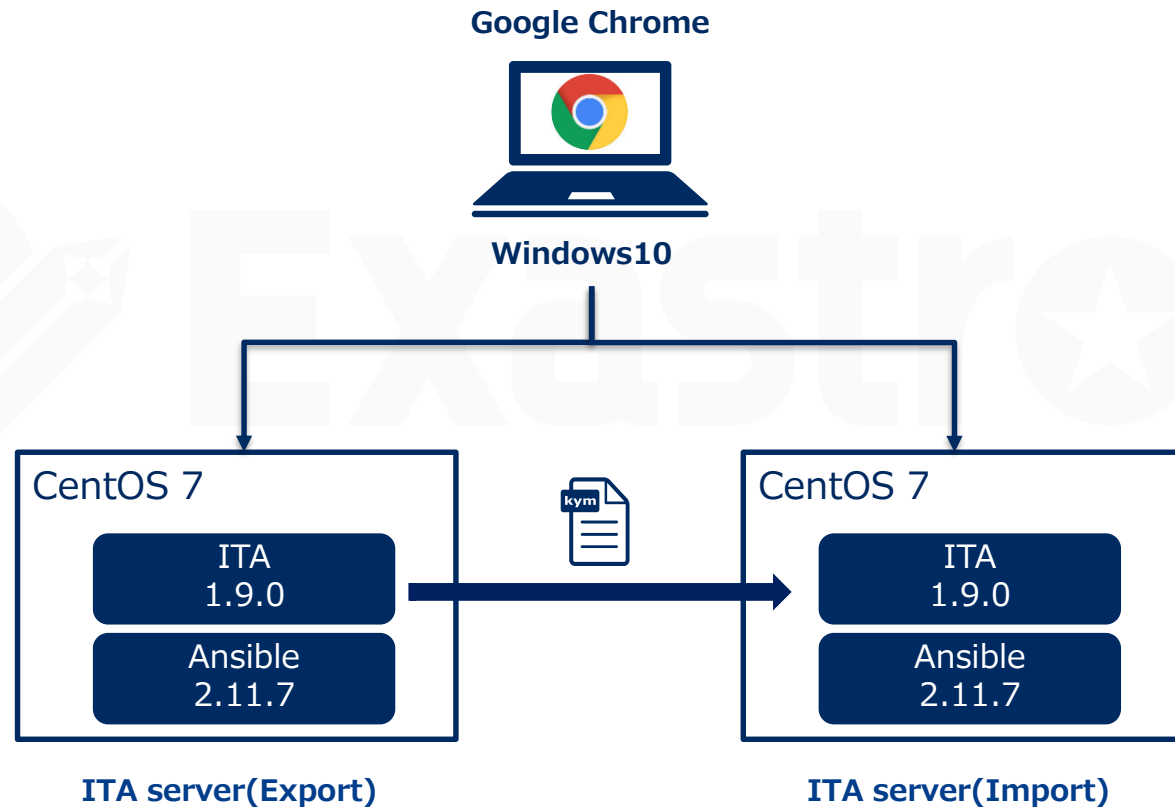
The Export/Import function requires 2 systems in order to function (one for export and one for import).

### Client machine

- Google Chrome
- Windows10

### ITA Server (2)

- CentOS 7 (※1)
- ITA 1.9.0
- Ansible 2.11.7



※1 In this scenario, the host server is running on CentOS7, but ITA can be installed on any RHEL7/RHEL8 type OS.

## 2.1 Export/Import procedure

### Work procedure

This scenario will follow the procedure shown below.

1. Device information

2. Operation

① Data registration

3. Menu creation / Input group creation

4. Menu creation

5. Input created menus

② Menu creation/Input

6. Execute export

7. Download Kym file.

③ Export

8. Execute import

9. Check import results

④ Import

## 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"

**Data registration**

Device info

Operation

**Create/Input menu**

**Export**

**Import**

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"/>
Upload status:									

\* is a required item.

Back

Register

Item	Input content
HW device type	SV
Host name	(Free value)
IP address	Target device IP Address
Login user ID	(Free value)
Management	●
Login password	(Free value)
Authentication method	Password authentication

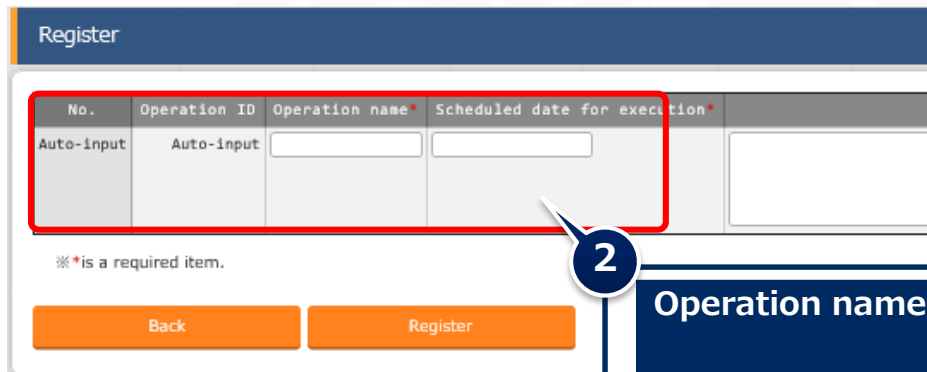
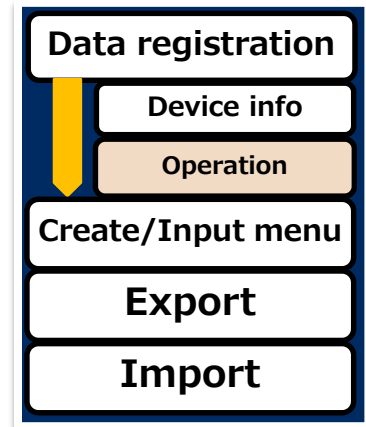


## 2.2 Data registration (2/2)

### Register a new operation

Menu: **Basic console**> **Operation list**

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



The 'Register' form interface. It features a table with columns: 'No.', 'Operation ID', 'Operation name', and 'Scheduled date for execution'. The first row is pre-filled with 'Auto-input' for both 'No.' and 'Operation ID'. The 'Operation name' and 'Scheduled date for execution' columns have input fields. A red box highlights the first row. Below the table, there is a note: '※ \* is a required item.' and two orange buttons: 'Back' and 'Register'.

2

Operation name

Scheduled date for execution

OP1

(Free value)

## 2.3 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

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

Data registration

Input/Create Menu

Menu group

Menu

Created Menu

Export

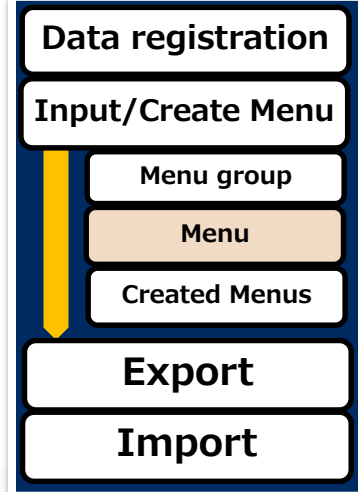
Import

## 2.3 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

Target menu group

Host\* :

Reference\* :

Vertical :

Target menu group

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

Target menu group

Input	Substitution value	Reference	ID	Menu group name
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	-	Unselected
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	1	Basic Server Settings
<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	2	Basic Server Settings (For referencing)
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	2100011610	Input
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	2100011611	Substitution value
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	2100011612	Reference

Decision

Cancel

## 2.3 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 'Create Menu' interface with the 'Item' tab selected. The interface includes a table with columns for 'path', 'owner', 'group', and 'mode'. Each column has a dropdown menu set to 'String' and a 'Maximum number of bytes\*' field set to '32'. There are also checkboxes for 'Required' and 'Unique constraint' for each item. A 'Create' button is visible at the bottom of the screen.

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

The sidebar menu contains the following options:

- Data registration
- Input/Create Menu
- Menu group
- Menu
- Created Menus
- Export
- Import

## 2.3 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
(Free)	OP1	/tmp/work1	root	root	0644

Host name	Operation	path	owner	group	mode
(Free)	OP1	/tmp/work2	root	root	0644

## 2.4 Export(1/2)

### Export Execution

Choose and export the registered information

Menu: **Export/Import**> **Export menu**

The screenshot shows the 'Export' configuration page. At the top, there are tabs for 'Description' and 'Export'. The 'Export' tab is active. Below the tabs, there are several sections with checkboxes for selecting data to export. A red box highlights the 'All menus' checkbox, and a callout bubble with the number '1' points to it with the text 'Tick the "All Menu" checkbox'. Another red box highlights the 'Export' button at the bottom, and a callout bubble with the number '2' points to it with the text 'Click the "Export" button.'.

Export

☒ 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

☒ IP address filter list

☒ Menu group list

☒ Menu list

☒ Conductor interface information

☒ Conductor class list

☒ Conductor

☒ Node pegging terminal list

☒ Conductor Regularly execution

☒ Symphony

☒ movement associated with Symphony list

Export

Contact administrator

A vertical navigation menu with a blue background and white text. It contains the following items: 'Data registration', 'Input/Create Menu', 'Export', 'Start Export', 'Download kym file', and 'Import'. A yellow arrow points down from the 'Export' button to the 'Start Export' button.

Data registration

Input/Create Menu

Export

Start Export

Download kym file

Import

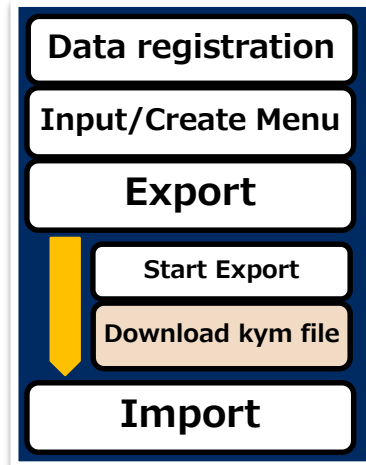
## 2.4 Export(2/2)

### 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							
History	Execution No.	Status	Execution type	File name	Execution user	Last update date/time	Last updated by
History	1	Completed	Export	<a href="#">ita_exportdata_20220203155550.kym</a>	administrator	2022/02/03 15:55:50	Data portability procedure

Filter result count: 1

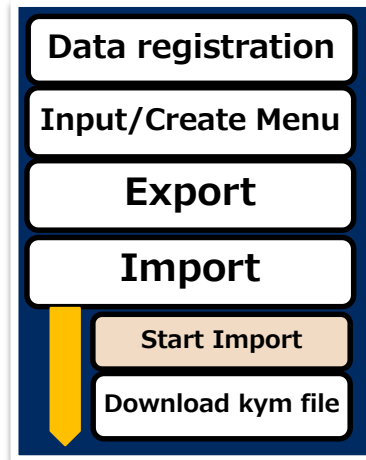
3

## 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 the 'Import' section of the Exastro interface. It includes an 'Upload' section with a 'Choose File' button and an 'Upload' button. Below this is the 'Import' section with various checkboxes and buttons. Numbered callouts are present: 1 points to the 'Upload' button, 2 points to the 'All menus' checkbox, and 3 points to the 'Import' button.

Upload

Choose File ita\_exportdat...155550.kym

Upload

1 Upload Kym File

Import

Mode

Environment migration Time specification

Abolition data All records Exclude discarded records

2 Tick the "All Menus" Checkbox.

3 Click the "Import" button.

3

Import Import (without discarded data)

#### Tips

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



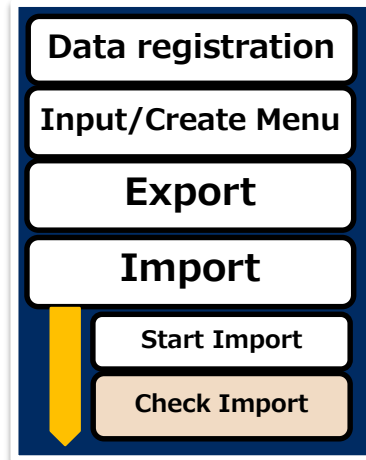
## 2.5 Import(2/3)

### 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

History	Execution No.	Status	Execution type	File name	Execution user	Last update date/time	Last updated by
History	2	Completed	Import	<a href="#">2_ita_exportdata_20220203155550.kym</a>	administrator	2022/02/03 15:59:14	Data portability procedure

Filter result count: 1

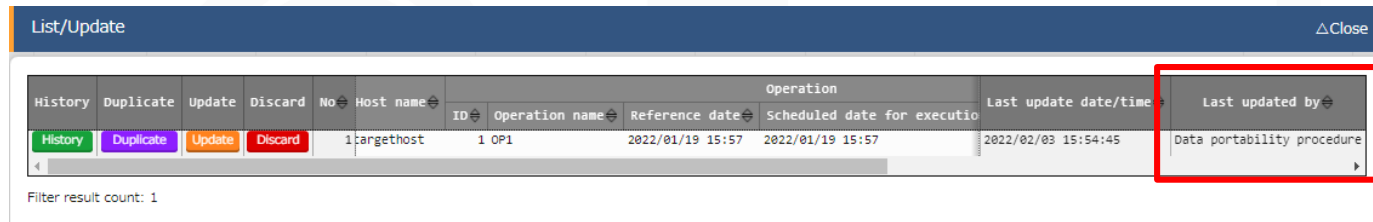
## 2.5 Import(3/3)

### 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.**

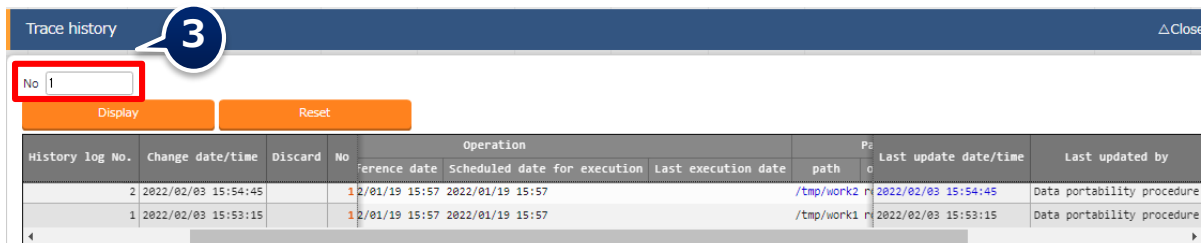
- ① Click "Filter"
- ② Check if the Menu information has been migrated by "Data Portability Procedure"



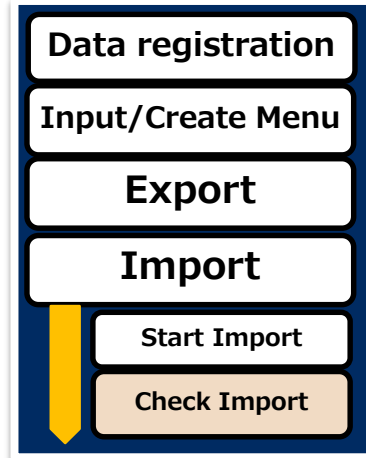
History	Duplicate	Update	Discard	No	Host name	ID	Operation name	Reference date	Scheduled date for execution	Last update date/time	Last updated by
History	Duplicate	Update	Discard	1	targethost	1	OP1	2022/01/19 15:57	2022/01/19 15:57	2022/02/03 15:54:45	Data portability procedure

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.



History log No.	Change date/time	Discard	No	Reference date	Scheduled date for execution	Last execution date	path	P2	Last update date/time	Last updated by
2	2022/02/03 15:54:45		1	2/01/19 15:57	2022/01/19 15:57		/tmp/work2	n	2022/02/03 15:54:45	Data portability procedure
1	2022/02/03 15:53:15		1	2/01/19 15:57	2022/01/19 15:57		/tmp/work1	n	2022/02/03 15:53:15	Data portability procedure



### 3. Practice ② Excel Bulk export/import

## 3.1 Environment

### Work environment

The following scenario uses the following environment.

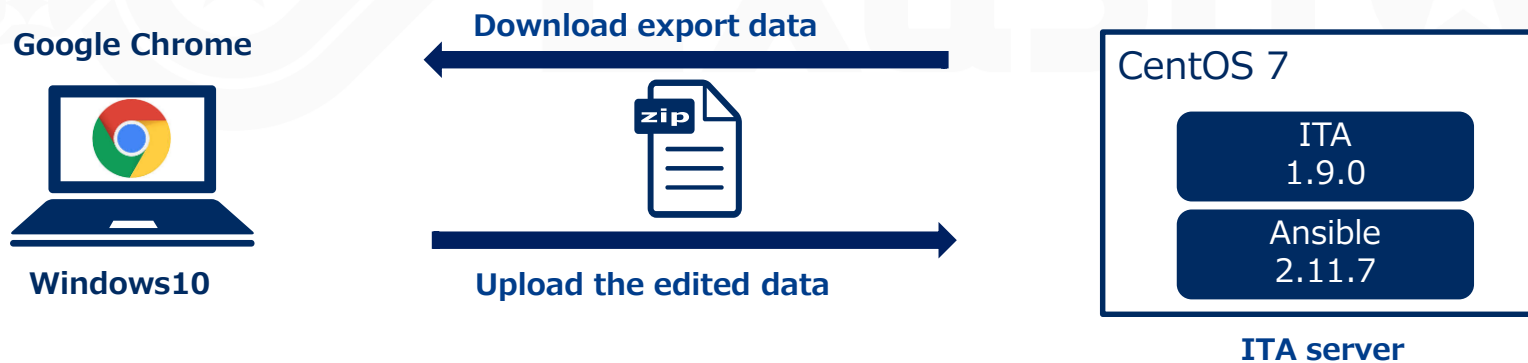
The scenario requires one ITA server.

#### Client device

- Windows10
- Google Chrome

#### ITA server (x1)

- CentOS 7 (※1)
- ITA 1.9.0
- Ansible 2.11.7



※1 In this scenario, the host server is running on CentOS7, but ITA can be installed on any RHEL7/RHEL8 type OS.

## 3.2 Excel bulk export/import procedure

### Workflow

This scenario will have the user use the Excel export function to register data to the Role list or the Operation list. The following figure illustrates the workflow.

1. Start export

2. Download zip file

① Excel bulk export

3. Extract files, edit and save them

4. Re-zip edited files

② Excel file edit

5. Start import

6. Check import results

③ Excel bulk import

## 3.3 Excel bulk export (1/2)

### Start the export

Start exporting menus.

Menu: **Export/Import >Excel bulk export**

The screenshot shows the 'Export/Import' interface of Exastro IT Automation. The sidebar on the left lists the navigation menu, with 'Excel Bulk Export' selected. The main content area displays the 'Export' section with various export options. A red box highlights the 'All menus' checkbox, with a callout '1 Check "All menus"'. Another red box highlights the 'Export' button at the bottom, with a callout '2 Press the "Export" button'.

Exastro IT Automation Export/Import

User name [System Administrator]  
Login ID [administrator]  
Change password Logout

Menu

Main menu

Export menu

Import menu

Export - Import menu list

Excel Bulk Export

Excel Bulk Import

Excel Bulk Export - Import list

Abolition data ☒ All records ☐ Exclude discarded records ☐ Only discarded records

☒ All menus

☒ Management Console

☒ System settings

☒ User list

☒ Single-sign-on Basic Preference

☒ Menu group list

☒ Role - Menu link list

☒ Menu list

☒ Role - User link list

☒ Role list

☒ File delete list

☒ Basic Console

☒ Device list

☒ Operation list

☒ Movement list

☒ ER Diagram Menu List

☒ ER Diagram Item List

☒ Create Menu

☒ Menu definition information

☒ Menu creation history

☒ Reference Item Info

☒ Selection 1

☒ Selection 2

Contact administrator

File link

Export

Export

Start Export

Download Zip file

Edit and save file

Import

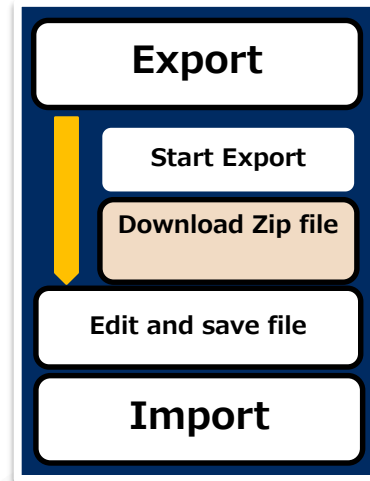
## 3.3 Excel bulk export (2/2)

### Download zip file

Download the exported data.

Menu: **Export** > **Excel bulk export/import list**

- ① Press "List"
- ② Download the Zip file from the export status list.



History	Execution No. ⇅	Status ⇅	Execution type ⇅	Abolition data ⇅	Execution user ⇅	File name
History	1	Completed	Export	Exclude discarded records	administrator	<a href="#">ITA FILES 20210906163722.zip</a>

2

## 3.4 Excel file edit (1/3)

### Extract zip file and edit contents

- ① Extract the downloaded zip file
- ② Open the file and open Management console> role (Excel file)
- ③ Edit the file so it matches the picture below and save it.

Execution process type	Role ID	Role name
	x	•
	x	•
	x	x
	x	x
	NG	NG
Select processing type.	Cannot edit because of auto-numbering. Must be blank when execution process type	Multiple lines of character string are not allowed. character count is 100 bytes, tab and line break cannot be entered, repetition, duplication with other records is not allowed
Execution process type	Role ID	Role name
Register		Role_A
Register		Role_B
-		

**Export**

**Start Export**

**Download Zip file**

**Edit and save file**

**Import**

Execution process type	Role name
Register	Role_A
Register	Role_B



## 3.4 Excel file edit (2/3)

### Extract zip file and edit contents

Edit the contents of the downloaded file

- ① Extract the downloaded zip file
- ② Open the file and open > Basic console > Operation list (Excel file)
- ③ Edit the file so it matches the picture below and save it.



Execution process type	Discard	No.	Operation ID	Operation name
	x	x	x	•
	x	x	x	•
	x	x	x	x
	x	x	x	x
	NG	NG	NG	NG
Select processing type.	Discard flag. Cannot do operation other than restore.	Cannot edit because of	Operation ID (auto numbering)	[Maximum length 256 bytes]

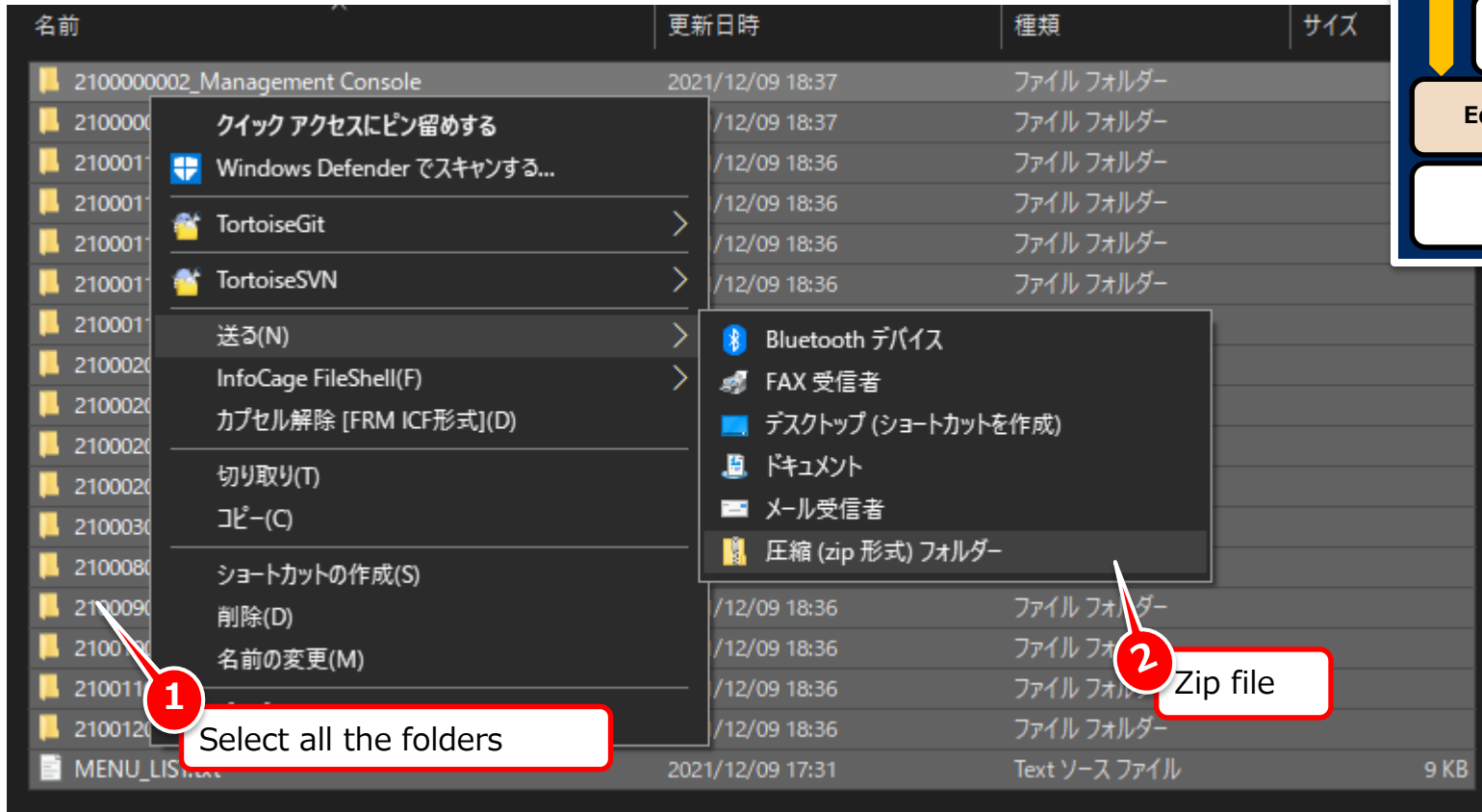
Execution registration type	Operation name	Scheduled execution date
Register	OP2	(Free value)
Register	OP3	(Free value)
Register	OP4	(Free value)

Execution process type	Discard	No.	Operation ID	Operation name	Scheduled date for execution
Register				OP_1	
Register				OP_2	
Register				OP_3	

## 3.4 Excel file edit (3/3)

### Zip the edited file

※Name the file to your liking



Export

Start Export

Download Zip file

Edit and save file

Import

## 3.5 Excel bulk import (1/3)

### Start excel bulk import

Upload the zip file and start importing

Menu : **Export/Import > Excel bulk import**

Export

Edit and save file

Import

Start Import

Check results

The screenshot displays the Exastro IT Automation 'Export/Import' interface. The left sidebar shows a 'Menu' section with options like 'Main menu', 'Export menu', 'Import menu', and 'Excel Bulk Import'. The main area is divided into 'Description' and 'Upload' sections. The 'Upload' section has a 'Choose File' button and an 'Upload' button, with a red callout '1' pointing to the 'Upload' button and the text 'Upload the edited zip file'. Below this is the 'Import' section, which includes a table of import targets. A red callout '2' points to the 'All menus' checkbox, with the text 'Check "All menus"'. The table lists various import targets with checkboxes, descriptions, IDs, and file names. A red callout '3' points to the 'Import' button at the bottom, with the text 'Press the "Import" button'.

Import target	Menu group	Menu list	ID	File name	Error
<input checked="" type="checkbox"/>	Management	Menu list	2100000205	Menu_20211209172933.xlsx	
<input checked="" type="checkbox"/>	Management		2100000207	Role_20211209172935.xlsx	
<input checked="" type="checkbox"/>	Management Conso		2100000208	User_20211209172936.xlsx	
<input checked="" type="checkbox"/>	CI/CD for IaC	Re	2100000209	Role_menu link list_20211209172937.xlsx	
<input checked="" type="checkbox"/>	CI/CD for IaC	Fi	2100000210	Role_user link list_20211209172939.xlsx	
			2100000215	File deletion management_20211209172940.xlsx	

## 3.5 Excel bulk import (2/3)

### Check the Import status and the Registration result

Check that the import has ended successfully and that all of the items has been registered.

Menu : **Export/Import >**

#### Excel export/import list

The screenshot shows the 'Excel export/import list' interface. On the left is a 'Menu' sidebar with options like 'Main menu', 'Export menu', 'Import menu', and 'Excel Bulk Export'. The main area has a 'Description' section with a 'Display filter' dropdown. Below this is a table with columns: 'Discard', 'Execution No.', 'Status', 'Execution type', 'Abolition data', and 'Execut'. The 'Status' column shows '5 Completed'. A red box highlights the 'Filter' button, with a callout '1 Press "Filter"'. Another red box highlights the 'Status' column, with a callout '2 Check that the status says: Completed'. A third red box highlights the 'Result file' column, with a callout '3 Download Log file'.

A vertical navigation menu with a blue background and white buttons. The buttons are: 'Export', 'Edit and save file', 'Import', 'Start Import', and 'Check results'. A yellow arrow points downwards on the left side of the menu.

#### Inside the Log file

```
210000002_Management Console:2100000207_Role list
Input file:Role_20211209172935.xlsx
```

```
Register: 2Record
Update: 0Record
Discard: 0Record
Restore: 0Record
Error: 0Record
```

```
210000003_Basic Console:2100000304_Operation list
Input file:Operation list information_20211209172945.xlsx
```

```
Register: 3Record
Update: 0Record
Discard: 0Record
Restore: 0Record
Error: 0Record
```

4 Check the number of registrations

## 3.5 Excel bulk import (3/3)

### Check registered contents

Check that the registered contents are being displayed.

Menu : **Management console > Role list**

**Exastro IT Automation Management Console**

**Menu**

- Main menu
- System settings
- Menu group list
- Menu list
- Role list**
- User list
- Role - Menu link list
- Role - User link list
- File delete list
- Sequence list
- Single-sign-on Basic Preference
- Single-sign-on Attribute Preference
- version

**Role list**

Discard: Exclude discarded records (dropdown)

Role ID: Search from pulldown

Role name: Search from pulldown

Access permission: Role to allow access (dropdown)

Remarks: Search from pulldown

Last update date/time: Search from pulldown

**Filter** (highlighted with red box and arrow 1) **Clear filter**

☒ Auto-filter

**List/Update**

History	Duplicate	Update	Discard	Role ID	Role name	User information	Menu information	Access permission	Remarks	Last update date/time	Last update user
History	Duplicate	Update	Discard	5	Role_A	User information	Menu information	Role to allow access		2021/12/09 18:42:51	System Administrator
History	Duplicate	Update	Discard	6	Role_B	User information	Menu information	Role to allow access		2021/12/09 18:42:51	System Administrator

Filter result count: 2

**Output Excel**

**1** Press "Filter"

**2** Check that all the registered items show up

Export

Edit and save file

Import

Start Import

Check results

## 3.5 Excel bulk import (3/3)

### Check registered contents

Check that the registered contents are being displayed.

Menu : **Management console > Role list**

**Exastro IT Automation Basic Console**

**Menu**

- Main menu
- Device list
- Operation list
- Movement list
- ER Diagram
- ER Diagram Menu List
- ER Diagram Item List

**Description**

**Display filter**

Discard: Exclude discarded records (dropdown)  
No.: ~ (input)  
Operation ID: ~ (input)  
Operation name: ~ (input)  
Scheduled date: ~ (input)  
Last up: ~ (input)

**Filter** (highlighted with red box and arrow 1) **Clear filter**

☒ Auto-filter

**Press "filter"** (red box with arrow 1)

**List/Update**

History	Duplicate	Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Access p	La
History	Duplicate	Update	Discard	9	9	OP_1	2021/12/09 17:29			202
History	Duplicate	Update	Discard	10	10	OP_2	2021/12/09 17:29			202
History	Duplicate	Update	Discard	11	11	OP_3	2021/12/09 17:29			202

Filter result count: 3

**Output Excel**

**2** (red box with arrow 2) **Check that all the registered items show up**

**Export**

**Edit and save file**

**Import**

**Start Import**

**Check results**



**Exastro**