



IT Automation Quickstart

※“IT Automation” will be written as “ITA” in this document

Exastro IT Automation Version 1.10
Exastro developer

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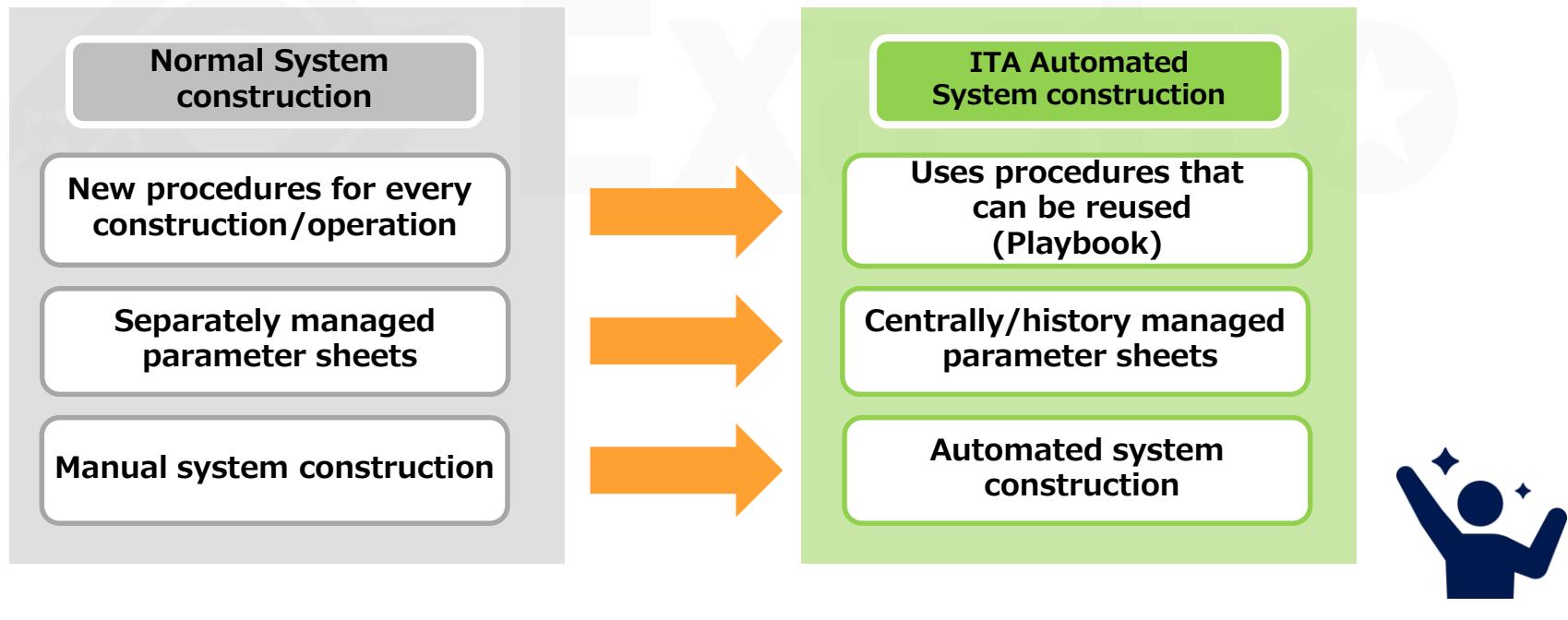
1. Introduction



1.1 Introduction (1/2)

This document serves as a quick start guide for users who are using IT Automation (written as ITA) for the first time.

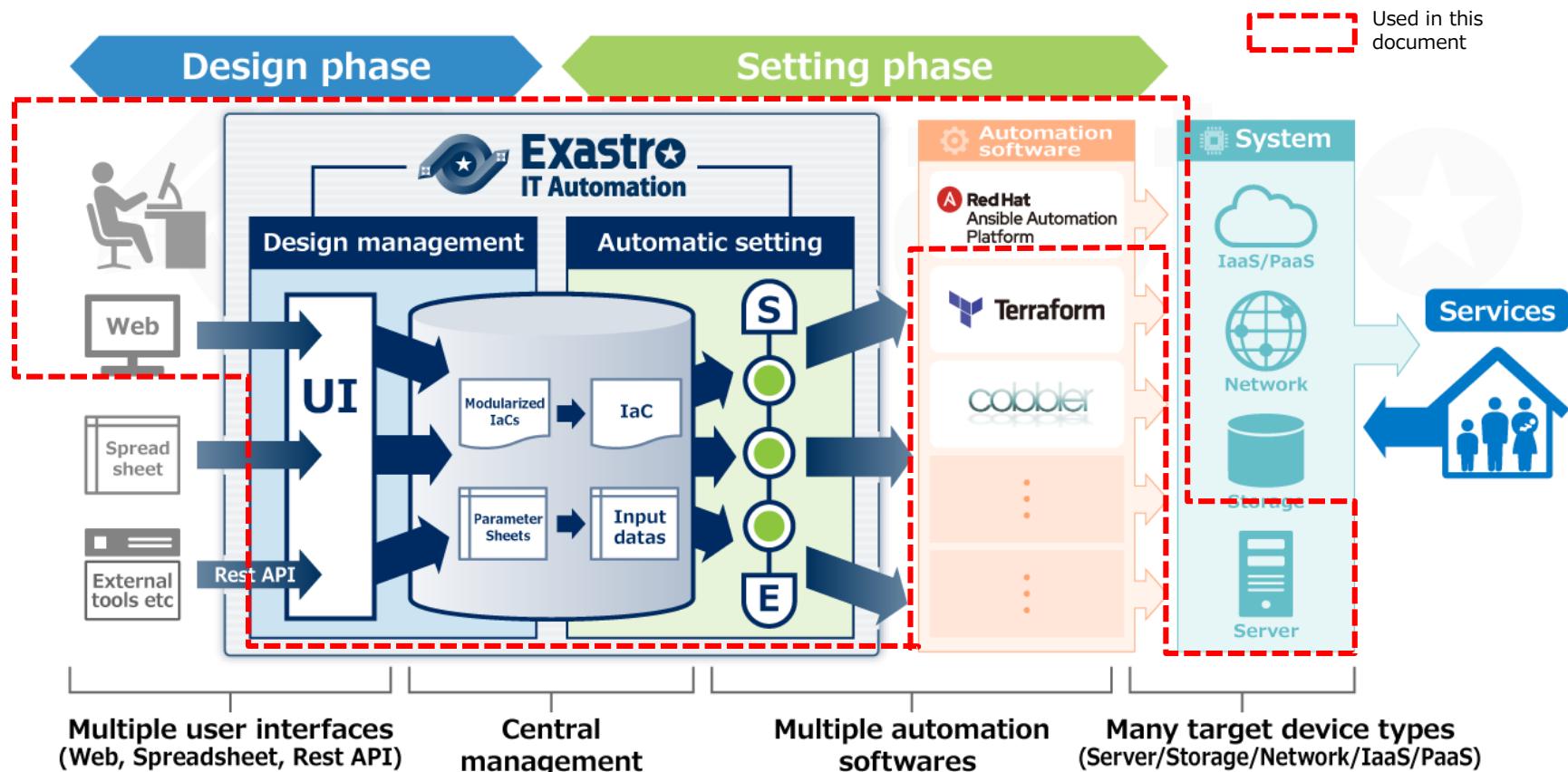
By installing Linux server packages, we can automate and centralize and automate package management for each server. That way, we can use ITA and have a more efficient system than we could achieve from a conventional system construction.



1.1 Introduction (2/2)

Main ITA functions used in this document.

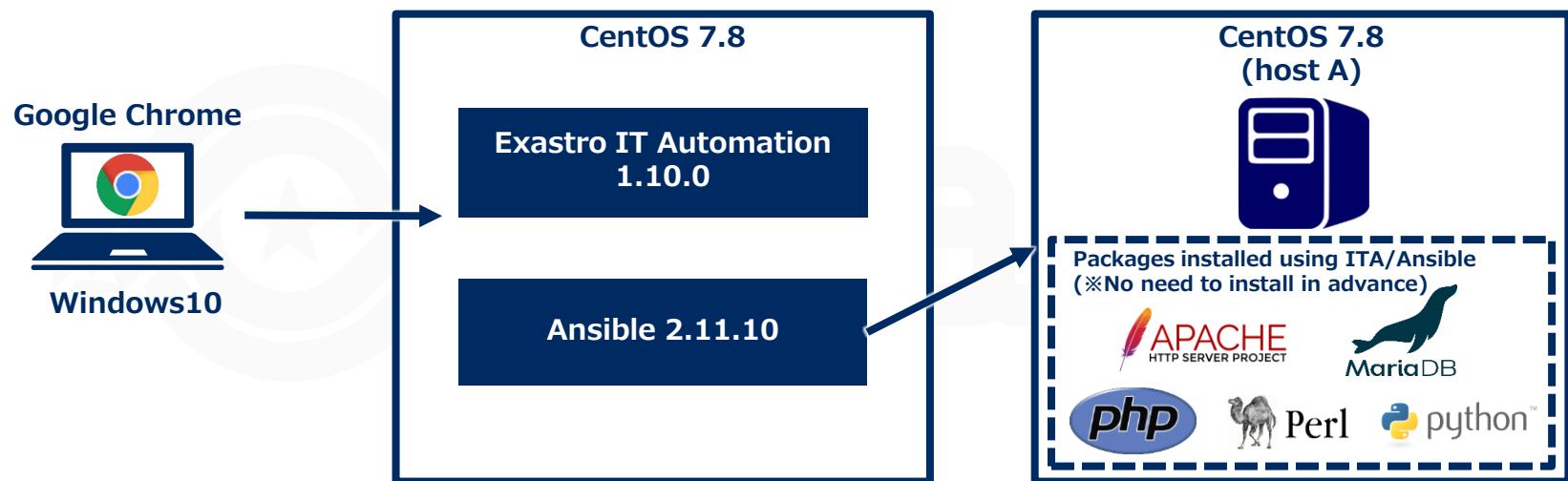
- Linking with Automation software (Ansible).
- Parameter management (Creation, Registration and history management of Menus)
- Linking Variables (Automatic registration of substitute values)



1.2 Scenario overview(1/3)

In this scenario, we will use Ansible Driver to manage the parameters for each server and automate the Yum Package installations, which is often used when constructing Linux servers.

Environment

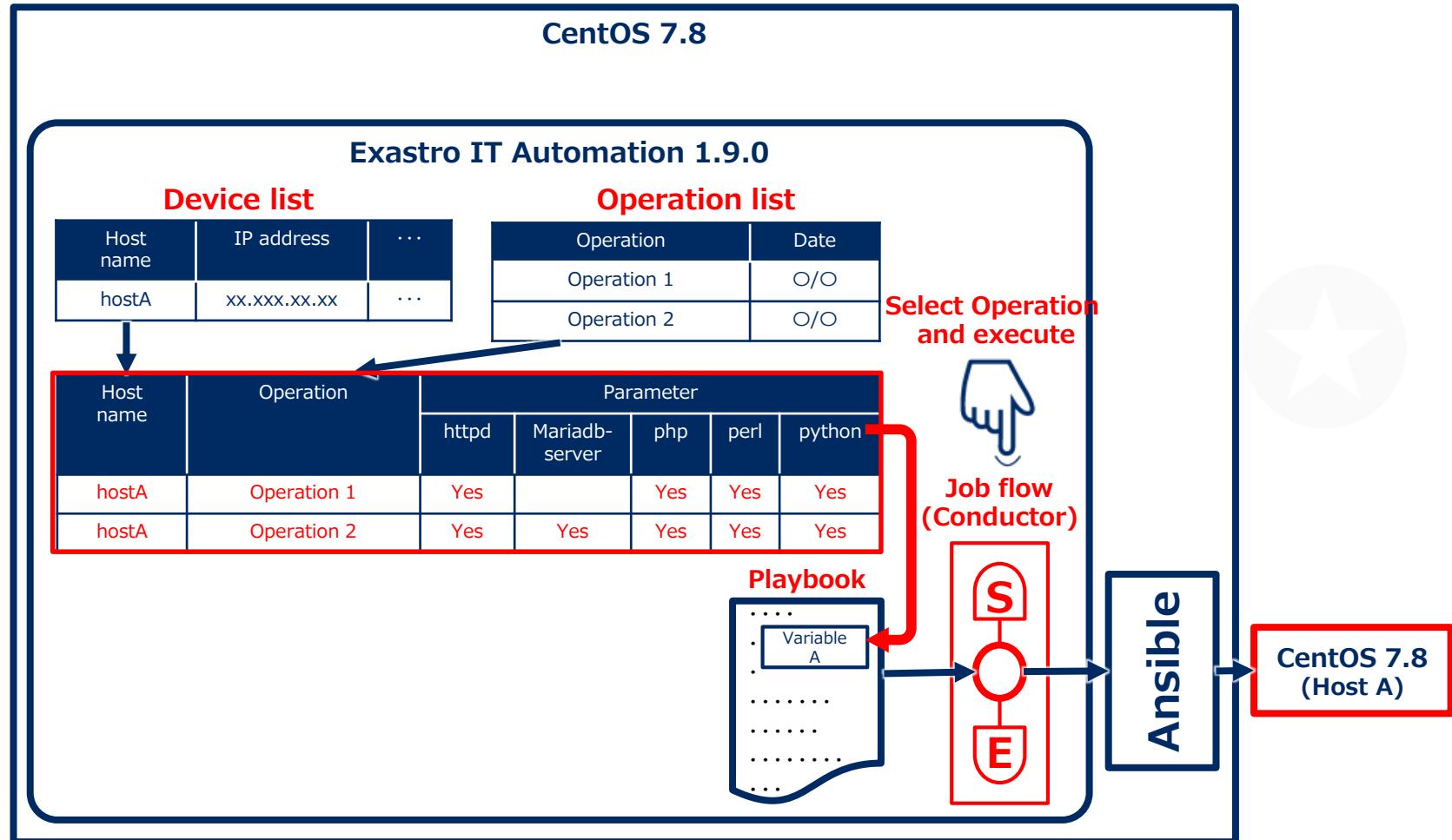


Systems used

- Exastro IT Automation 1.10.0
- CentOS Linux 7.8(for ITA Server)
- CentOS Linux 7.8(for Target machine)
- Windows 10(Client)
- Google Chrome (Win10 side)

1.2 Scenario overview (2/3)

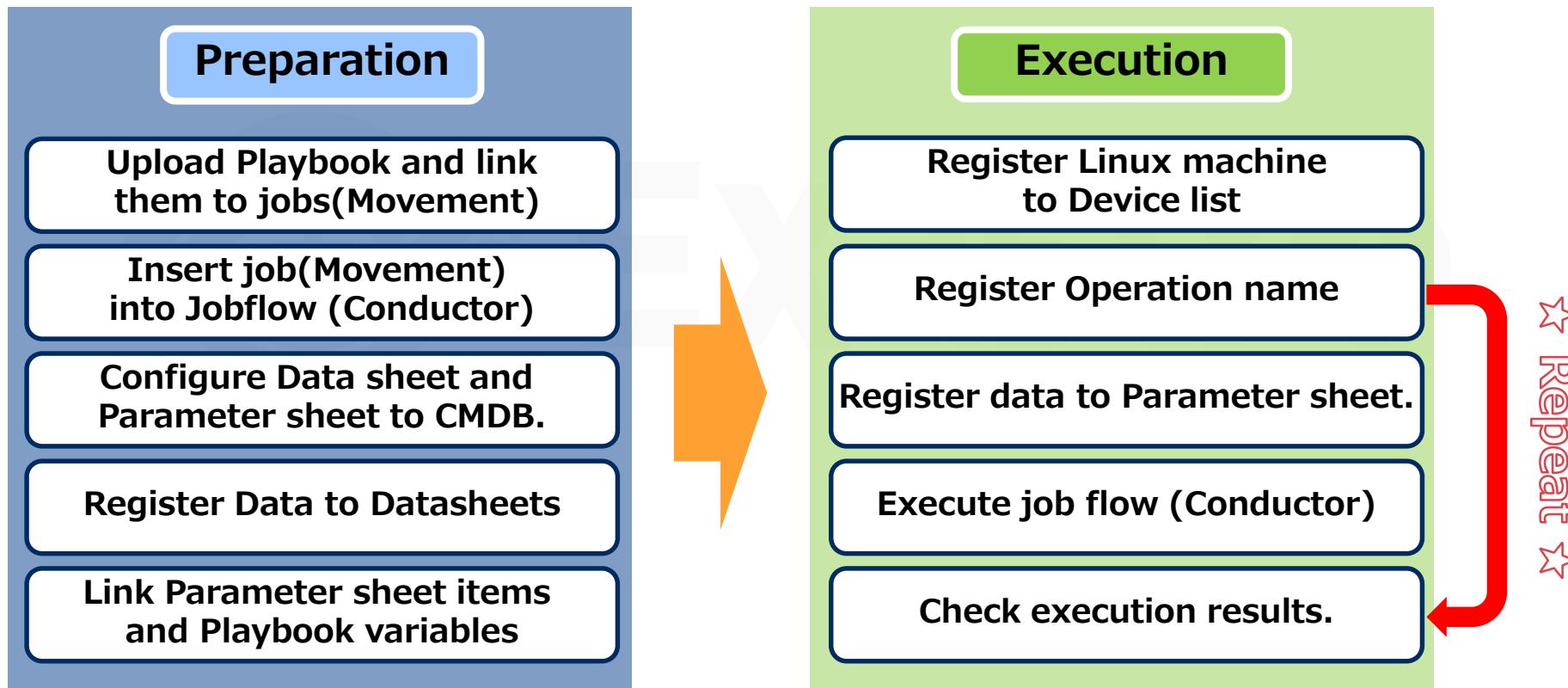
Scenario execution image



1.2 Scenario overview(3/3)

Post-installation Ansible Legacy execution scenario.

- The figure below illustrates the scenario as well as the Developer(Preparation)/Operator(Execution) operations.



1.3 Terminology

The following table explains the different terminology used in this document

Word	Description
Playbook	A file that describes routine tasks that can be executed with Ansible. All Playbook are written in YAML format.
Ansible-Legacy	A function that allows users to use Ansible from ITA. In the Legacy console, this is used when YAML files are used for the building code.
Operation name(Operation)	Operation unit in ITA. Users can set their execution dates in advance, manage the execution history and more.
Conductor	A sequence of work units. It can be executed after an operation name has been linked to it. Combine several parts called Nodes to create a job flow. It can then be used to execute configuration/construction operations on multiple machines.
Movement	Configuration/Construction units used with each of the devices construction tools.

For more information regarding Exastro ITA, please refer to the Document page on the community website.

2. Screen Description

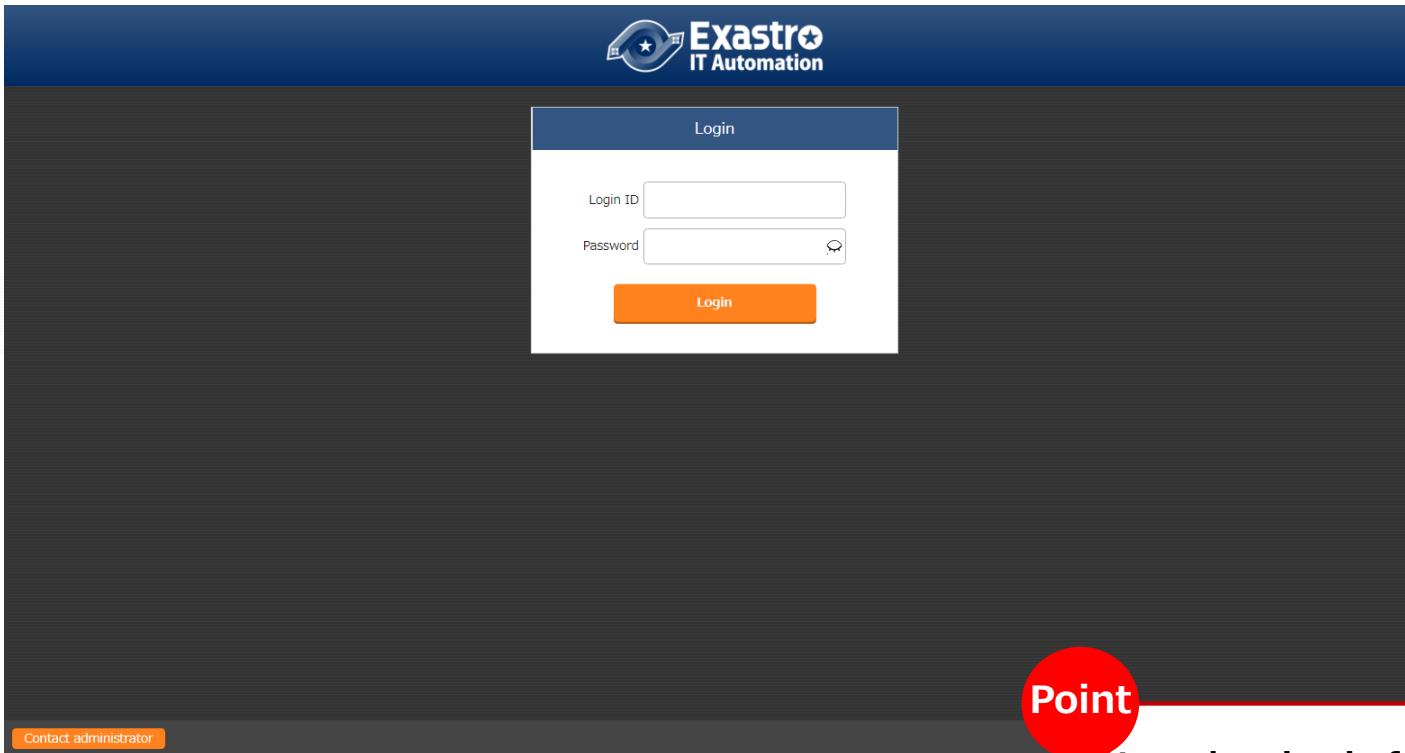


2.1 Web console screen description (Login)

Web Console login screen

- Accessing ITA via URL after it has been installed will direct the user to the login screen

※For information regarding how to install ITA, please refer to the Online Install manual



Point

Users logging in for the first time
will be asked to change
their password

2.2 Screen Description (Main Menu)

Screen description (Main Menu)

- The main functions of the Main Menu screen is as following

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

Edit

Main menu

- System settings
- Menu group list
- Menu list
- Role list
- User list
- Role - Menu link list
- Role - User link list
- Sequence list
- Single-sign-on Basic Preference
- Single-sign-on Attribute Preference
- version

Contact administrator

Menu bar

Point

For more detailed information regarding the different functions, please refer to the manual.

Menu groups

DASHBOARD

Movement

Movement	SUM
Ansible Legacy	10
Ansible Pioneer	1
Ansible Legacy Role	1
Terraform	1

Work status

Status	CON	SYM	SUM
Executing	0	0	0
Unexecuted (schedule)	0	0	0
Unexpected error	0	1	1
Emergency stop	0	0	0
Schedule cancellation	0	0	0

Work result

Result	CON	SYM	SUM
Normal end	0	0	0
Abnormal end	0	0	0
Unexpected error	0	1	1
Emergency stop	0	0	0
Schedule cancellation	0	0	0

Work history

Terraform

2.3 Screen Description (Menu) (1/2)

Screen Description (Menus)

- The name of the basic functions are as following.

The screenshot shows the Ansible-Legacy application interface. On the left is a vertical navigation menu with items like 'Main menu', 'Movement list', 'Playbook files', etc. The main area has a title 'Ansible-Legacy' and a top bar with user info ('User name [System Administrator]', 'Login ID [administrator]', 'Change password', 'Logout'). A red box highlights a submenu under 'Movement list'. This submenu has sections for 'Description', 'Display filter', and 'List/Update'. The 'List/Update' section contains a table with columns: History, Duplicate, Update, Discard, Movement ID, Movement Name, Orchestrator, Access per role, Role to allow access, Last update date/time, and Last updated by. The table lists 11 rows of movement data. A callout box points to the 'Submenu outline' section with the text 'Contains a brief description regarding the menu.' A red arrow points from the 'Open' button in the submenu to the 'Submenu' label.

Submenu outline
Contains a brief description regarding the menu.

Explanation
Lets the user search for registered information

Display Filter
Displays registered information

List/Update

History	Duplicate	Update	Discard	Movement ID	Movement Name	Orchestrator	Access per role	Role to allow access	Last update date/time	Last updated by
History	Duplicate	Update	Discard	1	Gatherfacts	Ansible Legacy			2021/08/31 18:19:41	System Administrator
History	Duplicate	Update	Discard	2	getSSL	Ansible Legacy			2021/09/01 15:46:15	System Administrator
History	Duplicate	Update	Discard	5	move1	Ansible Legacy	Role A,Role B		2021/12/08 15:22:20	System Administrator
History	Duplicate	Update	Discard	6	move2	Ansible Legacy	Role A		2021/12/08 15:22:45	System Administrator
History	Duplicate	Update	Discard	7	move3	Ansible Legacy	Role B		2021/12/08 15:23:03	System Administrator
History	Duplicate	Update	Discard	8	move4	Ansible Legacy	Role C		2021/12/08 15:24:36	System Administrator
History	Duplicate	Update	Discard	9	movement1	Ansible Legacy	Role A		2021/12/08 15:29:35	Test1
History	Duplicate	Update	Discard	10	movement2	Ansible Legacy	Role B		2021/12/08 15:37:25	Test2
History	Duplicate	Update	Discard	11	Package install	Ansible Legacy			2021/12/09 10:22:00	System Administrator

2.3 Screen Description (Menu) (2/2)

Screen description (Menu)

- The name of the basic functions are as following

The screenshot shows the Ansible-Legacy application interface. On the left is a vertical navigation bar with various menu items. The main content area displays a list of functions under the 'Movement' category. A red box highlights a submenu for 'Register'. This submenu contains three items: 'Start Registration', 'Download all and edit file uploads', and 'Change history'. A red callout points to the 'Change history' item with the label 'Submenu'.

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

☰ Menu

Main menu

Movement list

Playbook files

Movement playbook link

Substitution value auto-registration setting

Target host

Substitution value list

Execution

Check operation status

Execution list

Ansible-Legacy

Description ▽Open

Display filter ▽Open

List/Update ▽Open

Register △Close

Start Registration

Download all and edit file uploads

Download all (Excel)

Download for new registration (Excel)

Choose File No file chosen
Upload status:
Upload file

Trace history △Close

Movement ID
Display Reset

Contact administrator

Submenu

■ Submenu outline

Register : Allows the user to register records from the browser

Download all and edit file uploads : IN/OUT processing with Excel

Change history : Change history of registered records

3. Preparation



3.1 Uploading Playbook and linking it to a job(Movement) (1/5)

Playbook preparation

- First, we need to create the Playbook files that we are going to use.

Use your desired editor program to create the following YML file and save it to your local hard drive.

yum_package_install.yml

```
- name: install the latest version of packages
  yum:
    name: "{{ item }}"
    state: latest
  with_items:
    - "{{ VAR_packages }}"
```

Uploading Playbook
and linking it to a job(Movement)

Implementing job (Movement)
into Jobflow (Conductor)

Configure CMDB Data sheet
and Parameter sheet

Register Data to Datasheet

Link Parameter sheet item
to Playbook variable.

Register target (Linux machine)
to Device list.

Point

Make sure that the character code is "UTF-8 without BOM" and the newline code is "LF". The file should be saved as an yml file.
Please be check that the indents are correct.

```
~$ yum_package_install.yml X
```

```
1   name: install the latest version of packages
2   yum:
3     name: "{{ item }}"
4     state: latest
5   with_items:
6     - "{{ VAR_packages }}"
7
```

3.1 Uploading Playbook and linking it to a job(Movement) (2/5)

Register Movement to the Movement list.

- In the next step, we will register a Movement.

From the main menu , go to the Ansible-Legacy menu and then to the Movement list menu.

The screenshot shows the Exastro IT Automation interface. On the left, the 'Ansible-LegacyRole' section of the dashboard is visible. In the 'Main menu' sidebar, the 'Movement list' item is highlighted with a red box and a red circle containing the number 2. In the central grid, the 'Ansible-Playbook' icon (a blue square with a white play button and a sunburst icon) is highlighted with a red box and a red circle containing the number 1. To the right, there is a vertical stack of six boxes, each with a title and a brief description:

- Uploading Playbook and linking it to a job(Movement)**
- Implementing job (Movement) into Jobflow (Conductor)**
- Configure CMDB Data sheet and Parameter sheet**
- Register Data to Datasheet**
- Link Parameter sheet item to Playbook variable.**
- Register target (Linux machine) to Device list.**

3.1 Uploading Playbook and linking it to a job(Movement) (3/5)

Register Movement to the Movement list.

- Click the “Start Registration” button.

Follow the table listed below and fill out the different items before pressing the “Register” button.

The screenshot shows the Exastro IT Automation interface for the Ansible-LegacyRole module. On the left, there's a sidebar with various menu items like 'Main menu', 'Movement list', 'Role package list', etc. The main area is titled 'Ansible-LegacyRole' and shows a table for 'Movement list'. At the bottom of the 'Register' panel, there's a red box around the 'Start Registration' button, which is step 3 in the process.

Uploading Playbook and linking it to a job(Movement)

Implementing job (Movement) into Jobflow (Conductor)

Configure CMDB Data sheet and Parameter sheet

Register Data to Datasheet

Link Parameter sheet item to Playbook variable.

Register target (Linux machine) to Device list.

The screenshot shows the 'Register' dialog box. It has fields for 'Movement ID' (Auto-input), 'Movement Name' (containing 'PackageInstall'), 'Delay timer' (empty), 'Host specific' (dropdown set to 'IP'), 'Format' (dropdown), 'WinRM connection' (dropdown), 'Header sec' (dropdown), 'Last update date/time' (Auto-input), and 'Last updated by' (Auto-input). A red box highlights the 'Movement Name' field. A red circle labeled '4' points to the 'Movement Name' field. A red circle labeled '5' points to the 'Register' button at the bottom.

Movement name	Host format
PackageInstall	IP

3.1 Uploading Playbook and linking it to a job(Movement) (4/5)

Register Playbook to the Playbook file menu.

- Next, we will register the Playbook we created earlier to the Playbook files menu.

From the main menu , go to the Ansible-Legacy menu and then to the Playbook files menu. Fill out the items marked with red using the information from table listed below and press the "Register" button.

The screenshot shows the Ansible-Legacy interface with the following steps highlighted:

- Step 1: The "Playbook files" menu item is highlighted with a red box and a red number 1.
- Step 2: A red box highlights the "Playbook file name" and "Playbook file" fields in the registration dialog. The "Playbook file name" field contains "yum_package_install" and the "Playbook file" field contains "yum_package_install.yml".
- Step 3: A red box highlights the "Register" button at the bottom of the dialog.

A callout bubble with the text "Point" and a red border contains the following note:

If you are uploading a Playbook, make sure to hit the "Upload in advance" button before pressing the "Register" button.

On the right side of the interface, there is a sidebar with several options:

- Uploading Playbook and linking it to a job(Movement)
- Implementing job (Movement) into Jobflow (Conductor)
- Configure CMDB Data sheet and Parameter sheet
- Register Data to Datasheet
- Link Parameter sheet item to Playbook variable.
- Register target (Linux machine) to Device list.

3.1 Uploading Playbook and linking it to a job(Movement) (5/5)

Register “Movement-Playbook link”

- Next, we will link the playbook to the earlier registered Movement

From the main menu, go to the Ansible-Legacy menu and then to the “Movement-Playbook link” menu. Fill out the items marked with red using the information from table listed below and press the “Register” button.

The screenshot shows the Ansible-Legacy interface with the following steps highlighted:

- Movement playbook link**: A red box highlights the "Movement playbook link" item in the left sidebar menu. A red circle with the number 1 points to this item.
- Execution list**: A red box highlights the "Execution list" section on the left side of the main content area. A red circle with the number 2 points to this section.
- Register**: A red box highlights the "Register" button at the bottom of the "Movement playbook link" form. A red circle with the number 3 points to this button.

Table Data:

Movement	Playbook file	Include order
Package Install	yum_package_install	1

Form Fields (Movement playbook link screen):

Associated item No.	Movement	Playbook files	Include order*	Access setting	Last update date/time	Last updated by
Auto-input	17:PackageInstall	yum_package_install	1	Setting	2023-09-11 14:53:27	Auto-input

Callout Text:

- Point**: A red callout points to the "Include order" field with the text: "If you want to register a single movement to multiple Playbooks. For 1:1, please input 1."
- Uploading Playbook and linking it to a job(Movement)**: A red box highlights this text in a callout box.
- Implementing job (Movement) into Jobflow (Conductor)**: A red box highlights this text in a callout box.
- Configure CMDB Data sheet and Parameter sheet**: A red box highlights this text in a callout box.
- Register Data to Datasheet**: A red box highlights this text in a callout box.
- Link Parameter sheet item to Playbook variable.**: A red box highlights this text in a callout box.
- Register target (Linux machine) to Device list.**: A red box highlights this text in a callout box.

3.2 Implementing job (Movement)into Jobflow (Conductor)

Create “Conductor”

- In the next step, we will implement the Movement into a conductor.
From the Conductor menu group, access the Conductor Class edit screen.
Follow the numbered steps below and press the “Register” button.

Uploading Playbook and linking it to a job(Movement)

Implementing job (Movement) into Jobflow (Conductor)

Configure CMDB Data sheet and Parameter sheet

Register Data to Datasheet

Link Parameter sheet item to Playbook variable.

Register target (Linux machine) to Device list.

Input field for Remarks and such.

Drag and Drop

Drag a line between "OUT" and "IN"

Registration

3.3 Configure CMDB Data sheet and Parameter sheet (1/3)

Create Parameter sheet

- In the next step, we will create a parameter sheet.

In the "Create menu" menu group, go to the "Define/Create Menu" menu.

Follow the steps below and fill out the items with the values written in the tables.

Click "Group"

2

3

1

Group name

Install Package

Menu creation information

Basic information :
Id : Auto-input
Menu name* : Install Package list
Creation target : Parameter Sheet(Host/Operati
Display order* : 1
Create as hostgroup menu : Yes
Create as vertical menu Yes
Last modified : Auto-input
Last updated by : Auto-input

Target menu group

Input : Input
Substitution value* : Substitution value
Reference* : Reference
Target menu group
Permission role
Role :

List(Preview)

No Host name Operation name Reference date

1 Operation 2020/01/01 00:00

2 Operation 2020/01/01 00:00

3 Operation 2020/01/01 00:00

Create

Contact administrator

Menu name	Creation target	Display Order
Install Package list	Parameter sheet (Host/ Operation)	1

Uploading Playbook and linking it to a job(Movement)

Implementing job (Movement) into Jobflow (Conductor)

Configure CMDB Data sheet and Parameter sheet

Register Data to Datasheet

Link Parameter sheet item to Playbook variable.

Register target (Linux machine) to Device list.

Configure CMDB Data sheet and Parameter sheet

3.3 Configure CMDB Data sheet and Parameter sheet (2/3)

Create Parameter sheet

- Add items and fill the items with the values written in the table below.

4 Add items so there are 5 in total

5

Item name	Input method	Selection item
httpd	Pulldown Selection	Create Menu: Selection 1:*- (blank)
mariadb-server	Pulldown Selection	Create Menu: Selection 1:*- (blank)
php	Pulldown Selection	Create Menu: Selection 1:*- (blank)
perl	Pulldown Selection	Create Menu: Selection 1:*- (blank)
python	Pulldown Selection	Create Menu: Selection 1:*- (blank)

User name [System Administrator]
Logout

Uploading Playbook
and linking it to a job(Movement)

Implementing job (Movement)
into Jobflow (Conductor)

Configure CMDB Data sheet
and Parameter sheet

Register Data to Datasheet

Link Parameter sheet item
to Playbook variable.

Register target (Linux machine)
to Device list.

Explanation

Remark

3.3 Configure CMDB Data sheet and Parameter sheet (3/3)

Create Parameter sheet

- After following the steps below, click the “Create” button.

The screenshot shows the 'Create Menu' interface in Exastro IT Automation. On the left, there's a sidebar with options like 'Main menu', 'Create - Define menu', 'Menu definition information', 'Menu creation history', 'Menu conversion information', and 'Reference Item Info'. The main area is titled 'Create Menu' and shows a grid of items for different menu groups: 'Install Package', 'httpd', 'mariadb-server', 'php', 'perl', and 'python'. Each item has a 'Selection item' dropdown, an 'Input' field, a 'Reference item' dropdown, and checkboxes for 'Required reference item' and 'Unique constraint'. Below each item are sections for 'Explanation' and 'Remark'. A red callout with the number 6 points to the top row of the grid, with the text 'Drag and drop the items into the column group'. A red arrow points from the bottom of the grid up towards the header. A red callout with the number 7 points to the right side of the screen, with the text 'When finished, the items should look like this'. This callout contains a smaller screenshot of the same interface where all items have been moved into their respective columns. A red callout with the number 8 points to the bottom-left corner of the main interface, with the text 'Click the "Create" button'.

Uploading Playbook and linking it to a job(Movement)

Implementing job (Movement) into Jobflow (Conductor)

Configure CMDB Data sheet and Parameter sheet

Register Data to Datasheet

Link Parameter sheet item to Playbook variable.

Register target (Linux machine) to Device list.

3.4 Link Parameter sheet item to Playbook variable (1/3)

Create "Substitution value auto-registration settings".

- Lastly, we will automatically register substitute values.

In the "Ansible-Legacy" Menu group, go to the "Substitution value auto-registration setting" menu.

Follow the steps below and fill the items with the values written in the table below.

The screenshot shows the Exastro IT Automation interface with the following details:

- Header:** Ansible-Legacy, User name [System Administrator], Login ID [administrator], Change password, Logout.
- Left Sidebar:** Main menu, Movement list, Movement playbook link, Substitution value auto-registration setting (highlighted with a red box), Target host, Substitution value list.
- Current View:** Substitution value auto-registration setting, Register sub-menu.
- Table:** Parameter sheet (From) showing one row:

Item No.	Menu group:Menu*	Item*	Last update date/time	Last updated by
Auto-input	2100011611:Substitution value:58:Install Package list	Parameter/Install Package/httpd	Auto-input	Auto-input

1

2

Menu group:Menu	Item	Registration method	Movement	Key Variable Variable name	Substitution order
2100011611:Substitution value:3:Install Package list	Parameter/Install Package/httpd	Key type	1:PackageInstall	1:VAR_packages	1
2100011611:Substitution value:3:Install Package list	Parameter/Install Package/mariadb-server	Key type	1:PackageInstall	1:VAR_packages	2
2100011611:Substitution value:3:Install Package list	Parameter/Install Package/php	Key type	1:PackageInstall	1:VAR_packages	3
2100011611:Substitution value:3:Install Package list	Parameter/Install Package/perl	Key type	1:PackageInstall	1:VAR_packages	4
2100011611:Substitution value:3:Install Package list	Parameter/Install Package/python	Key type	1:PackageInstall	1:VAR_packages	5

The callout boxes contain the following text:

- Uploading Playbook and linking it to a job(Movement)
- Implementing job (Movement) into Jobflow (Conductor)
- Configure CMDB Data sheet and Parameter sheet
- Register Data to Datasheet
- Link Parameter sheet item to Playbook variable. (This box has a red border and a red arrow points from the 'Substitution value auto-registration setting' table to it.)
- Register target (Linux machine) to Device list.

3.4 Link Parameter sheet item to Playbook variable (2/3)

Create "Substitution value auto-registration settings".

- Follow the table below and press the "Register" button.

The screenshot shows the Exastro IT Automation web interface. In the top left, there's a logo for 'Exastro IT Automation'. The top right shows the user information: 'User name [System Administrator]', 'Login ID [administrator]', 'Change password', and 'Logout'. On the left, there's a sidebar with various menu items like 'Main menu', 'Movement list', 'Playbook files', etc. The main area is titled 'Ansible-Legacy'. It contains a table with columns: 'Item No.', 'Registration method*', 'Movement*', 'IaC variable(To)', 'Key varia', 'Last update date/time', and 'Last updated by'. The table has one row with values: 'Auto-input', 'Key type', '17:PackageInstall', '6:VAR_packages', 'Auto-input', and 'Auto-input'. Below the table, a note says '※* is a required item.' At the bottom of the table area, there are 'Back' and 'Register' buttons. The 'Register' button is highlighted with a red box and a red circle containing the number '2' pointing to it. At the very bottom of the page, there's a link 'Download all and edit file uploads'.

This block contains a vertical stack of six callout boxes. Each box has a blue header and white text. From top to bottom:

- Uploading Playbook and linking it to a job(Movement)
- Implementing job (Movement) into Jobflow (Conductor)
- Configure CMDB Data sheet and Parameter sheet
- Register Data to Datasheet
- Link Parameter sheet item to Playbook variable.** (This box is highlighted with a red background)
- Register target (Linux machine) to Device list.

Point

The following table describes the 3 different variable link registration methods.

Registration method	Use	Description
Value type		Basic registration type. Links the value written in the table to the variable.
Key type	●	Links the table item (column name) to the variable. If the item's setting value is blank, it will not be linked.
Key-Value type		Links both the item name (Key) and the setting value (Value) to the variable.

In this scenario, we want to assign the table items (column name) to the Playbook as a specific value, so we will choose the "Key" registration method.

For more information, please see the [Exastro System Operation and Construction Efficiency Guide](#)

3.4 Link Parameter sheet item to Playbook variable (3/3)

Create "Substitution value auto-registration settings".

Use the Display filter to check that you have registered 5 items.

This will end the preparation operations.

Exastro IT Automation Ansible-Legacy

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

☰ Menu

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

Description

Display filter

Parameter sheet(From)

Discard Item No. Menu group ID Name ID Last update date/time Last updated by

Exclude discarded records ▾ Search from pulldown Filter ▾ Search from pulldown

Filter Clear filter Auto-filter

Check that 5 items are registered

Parameter sheet(From)

History	Duplicate	Update	Discard	Item No. ▾	Menu group	ID ▾	Name ▾	Menu	ID ▾	Name ▾	Last update date/time ▾	Last updated by ▾
History	Duplicate	Update	Discard	2	2100011611 Substitution value	19	Install Package_list	Parameter/Install Package/http	2021/12/09 13:27:33	System Administrato		
History	Duplicate	Update	Discard	3	2100011611 Substitution value	19	Install Package_list	Parameter/Install Package/mari	2021/12/09 13:27:54	System Administrato		
History	Duplicate	Update	Discard	4	2100011611 Substitution value	19	Install Package_list	Parameter/Install Package/php	2021/12/09 13:28:11	System Administrato		
History	Duplicate	Update	Discard	5	2100011611 Substitution value	19	Install Package_list	Parameter/Install Package/perl	2021/12/09 13:28:25	System Administrato		
History	Duplicate	Update	Discard	6	2100011611 Substitution value	19	Install Package_list	Parameter/Install Package/pyth	2021/12/09 13:28:40	System Administrato		

Filter result count: 5

Output Excel

Uploading Playbook and linking it to a job(Movement)

Implementing job (Movement) into Jobflow (Conductor)

Configure CMDB Data sheet and Parameter sheet

Register Data to Datasheet

Link Parameter sheet item to Playbook variable.

Register target (Linux machine) to Device list.

4. Execution (First time)

4.1 Register target (Linux machine) to Device list (1/3)

Register target host to "Device list".

- First, we will have to register the target host to which we will install packages to. From the "Basic Console" Menu group, go to the "Device list" menu. Fill in the information written in the table below.

Exastro
IT Automation 基本コンソール

ようこそ[システム管理者]さん
ログインID [administrator]
パスワード変更 ログアウト

説明 ▽開く

フィルタ ▽開く

登録 △閉じる

管理システム項目番号 HW機器種別 ホスト名* IPアドレス* EtherWakeOnLan MACアドレス ネットワークデバイス名 ログ 最終更新日時 最終更新者

管理システム項目番号	HW機器種別	ホスト名*	IPアドレス*	EtherWakeOnLan	MACアドレス	ネットワークデバイス名	ログ	最終更新日時	最終更新者
自動入力	SV	hostA	192.168.10.1				自動入力	自動入力	

※*は必須項目です。

HW Device type Host name IP Address

HW Device type	Host name	IP Address
SV	(Free host name)	(Free IP Address)

管理者に連絡

Uploading Playbook and linking it to a job(Movement)

Implementing job (Movement) into Jobflow (Conductor)

Configure CMDB Data sheet and Parameter sheet

Register Data to Datasheet

Link Parameter sheet item to Playbook variable.

Register target (Linux machine) to Device list.

4.1 Register target (Linux machine) to Device list (2/3)

Register target host to "Device list".

- Use the scrollbar to scroll to the left and fill in the items listed below.

The screenshot shows the Exastro Basic Console interface. On the left, there's a sidebar with a 'Menu' section containing 'Main menu', 'Device list' (which is selected), 'Operation list', 'Movement list', 'ER Diagram', 'ER Diagram Menu List', and 'ER Diagram Item List'. Below the sidebar is a red circle with the number '2' pointing to the 'Device list' item in the menu. The main content area is titled 'Basic Console' and shows a 'User name [System Administrator]' and 'Login ID [administrator]' at the top right. There are 'Change password' and 'Logout' buttons. The central part of the screen displays a table for registering a device. The table has columns: Managed system item number, HW device type, Host name*, IP address*, EtherWakeOn, MAC address, Netw, Last update date/time, and Last updated by. The 'Host name*' field is highlighted with a red border. The 'HW device type' dropdown is set to 'SV'. The 'IP address*' field contains 'Auto-input'. The 'EtherWakeOn' field contains 'Auto-input'. The 'MAC address' field contains 'Auto-input'. The 'Netw' field contains 'Auto-input'. The 'Last update date/time' and 'Last updated by' fields also contain 'Auto-input'. At the bottom of the registration table, there are 'Save' and 'Cancel' buttons. The entire registration table is enclosed in a red box.

Uploading Playbook
and linking it to a job(Movement)

Implementing job (Movement)
into Jobflow (Conductor)

Configure CMDB Data sheet
and Parameter sheet

Register Data to Datasheet

Link Parameter sheet item
to Playbook variable.

Register target (Linux machine)
to Device list.

4.1 Register target (Linux machine) to Device list (3/3)

Register target host to "Device list".

- Use the table below to fill in the last item and press the "Register" button.

Exastro IT Automation 基本コンソール

ようこそ[システム管理者]さん
ログインID [administrator]
パスワード変更 ログアウト

△ Menu
メインメニュー
機器一覧
オペレーション一覧
Movement一覧
ER図表示

説明
表示フィルタ
一覧/更新
登録

Dedicated information for Legacy/Role Authentication method
Password authentication

△閉じる

Ansible利用情報
Legacy/Role利用情報
WinRM接続情報
最終更新日時 最終更新者

管理システム項目	認証方式	ポート番号	サーバー証明書	フ	最終更新日時	最終更新者
自動入力	パスワード認証		ファイルを選択 選択されていません 事前アップロード		自動入力	自動入力

※*は必須項目です。

戻る **登録**

全件ダウンロードとファイルアップロード編集
変更履歴

管理者に連絡

Uploading Playbook and linking it to a job(Movement)

Implementing job (Movement) into Jobflow (Conductor)

Configure CMDB Data sheet and Parameter sheet

Register Data to Datasheet

Link Parameter sheet item to Playbook variable.

Register target (Linux machine) to Device list.

Point

In order to run Ansible-Legacy, the following 6 items must be filled.
"Host name", "IP Address", "Login User ID", "Login Password Management", "Login password", "Authentication method※"

※In this document, "Authentication method" is written as "Password authentication".

4.2 Register Operation name (Operation)

Register "Operation name" to "Operation list"

In this step, we will register an Operation name. From the "Basic Console" menu group, go to the "Operation list" menu.

Input the following information and press the "Register" button.

The screenshot shows the Exastro Basic Console interface. On the left, there is a vertical navigation menu with options like Main menu, Device list, Operation list (which is highlighted with a red box and circled with a red number 1), Movement list, ER Diagram, ER Diagram Menu List, and ER Diagram Item List. The main content area has two tabs: 'Description' (with 'Display filter' sub-options) and 'List/Update'. The 'List/Update' tab is active and shows a table for registering operations. A red box highlights the 'Register' button at the bottom of this tab, and a red circle with the number 3 points to it. A callout box with a red border contains the 'Operation name' (Operation 1) and 'Scheduled date and time' ((Free date/time)) fields from the registration form. Another callout box with a red border contains the 'Operation name' (Operation 1) and 'Scheduled date and time' (2021/07/02 14:08) fields from the table. A red box also highlights the 'Operation name' field in the table. The top right corner of the screen shows user information: User name [System Administrator], Login ID [administrator], Change password, and Logout. To the right of the main content area, there is a sidebar with several buttons:

- Register Operation name (Operation) (highlighted with a red box)
- Register data to Parameter sheet
- Execute Jobflow (Conductor)
- Check Execution results

4.3 Register data to Parameter sheet (1/2)

Register data to Install Package list.

In the next step, we are going to input data to the Install package list (Parameter sheet) that we prepared earlier.

Go to the "Input" menu and then the "Install package list" menu.

Input the following information and press the "Register" button.

The screenshot shows the Exastro IT Automation Input interface. On the left, there's a sidebar with a menu. The 'Install Package list' option is highlighted with a red box and a red number 1. In the main area, there's a table for registering data. A red box highlights this table. A red number 2 points to the 'Host name' field, which contains '(Previously registered host)'. A red number 3 points to the 'Register' button at the bottom of the table. To the right of the table, there's a vertical stack of four boxes:

- Register Operation name (Operation)
- Register data to Parameter sheet (highlighted in red)
- Execute Jobflow (Conductor)
- Check Execution results

Table Data:

No	Host name*	Operation	Parameter	Last update date/time	Last updated by
1	Auto-Input aaa-test-target02	2021/07/02 14:06:21:Operation 1	httpd mariadb-server php perl python	Yes Yes Yes Yes Yes	Auto-Input Auto-Input

* Is a required item.

Host name
(Previously registered host)

Operation
(previously specified date)_1:Operation 1

httpd
True

mariadb-server

php
*

perl
*

python
*

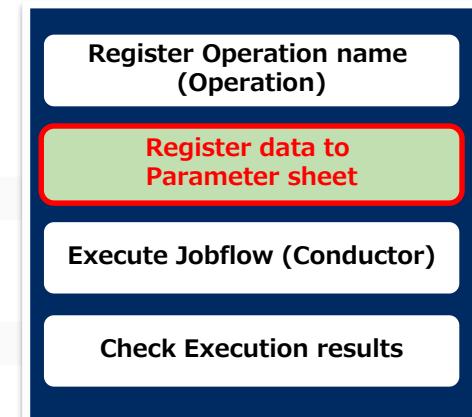
4.3 Register data to Parameter sheet (2/2)

Register data to Install Package list.

- Similarly to when we configured substitution value settings, open the display filter and press the "filter" button to check if the registration was done correctly.

The screenshot shows the Exastro Input interface with the 'Install Package list' selected in the left sidebar. A red box highlights the 'Display filter' button in the top right corner of the main content area. Three numbered callouts point to specific elements: 1 points to the 'Display filter' button; 2 points to the 'Filter' button within the filter dialog; and 3 points to the result table below, which shows one registered operation.

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	7	Operation 1	2021/12/30 13:32	2021/12/30 13:32	2021/12/09 13:33:44	System Administrator



4.4 Execute Jobflow (Conductor) (1/3)

Run Conductor

- We will now start the Conductor.

From the "Conductor" Menu group, go to the "Conductor Execution" Menu.

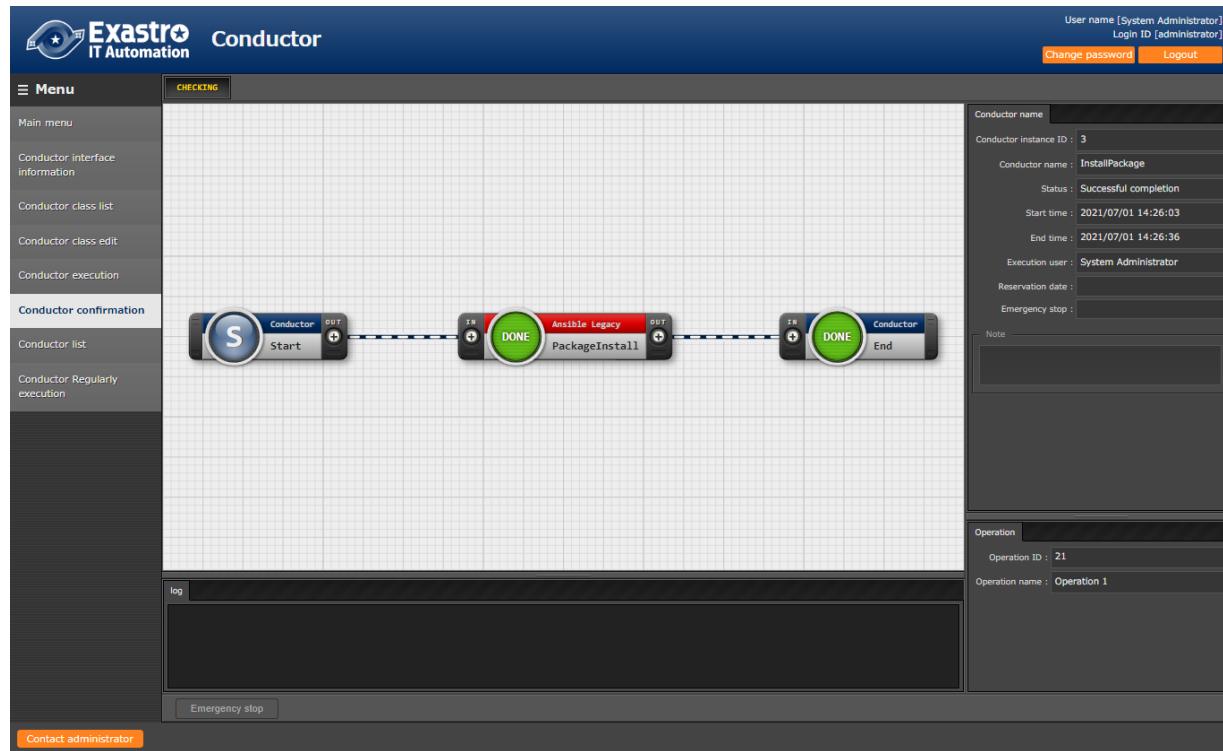
Next, select "Conductor" and "Operation" and press "Execute".

The screenshot shows the Exastro IT Automation Conductor interface. On the left, a sidebar lists menu items: Main menu, Conductor interface information, Conductor class list, Conductor class edit, **Conductor execution** (highlighted with a red box and number 1), Conductor confirmation, Conductor list, and Conductor Regularly execution. The main content area has tabs: Description, Scheduling, Conductor [filter], and **Conductor [List]**. A red box highlights the 'Conductor [List]' tab with number 2. Below it is a table with columns: Select, Conductor class ID, Conductor name, Explanation, Access permission, Remarks, Last update date/time, and Last updated by. One row is selected, showing 'InstallPackage' as the operation name. A red box highlights this row with number 2. To the right of the table is a 'EXECUTE' button. Below the table is another section with tabs: Operation [Filter] and **Operation [List]**. A red box highlights the 'Operation [List]' tab with number 3. It contains a table with columns: Select, No., Operation ID, Operation name, Scheduled date for execution, Last execution date, and Role. One row is selected, showing 'Operation 1' as the operation name. To the right of the table is a diagram showing a flow from 'S' (Conductor start) to '17' (PackageInstall) to 'E' (Conductor End). At the bottom is a log window with a red box highlighting the 'Execution' button with number 4. To the right of the interface are four callout boxes: 'Register Operation name (Operation)', 'Register data to Parameter sheet', 'Execute Jobflow (Conductor)' (highlighted with a green background), and 'Check Execution results'.

4.4 Execute Jobflow (Conductor) (2/3)

Execution results

- Executing the Conductor will move the user to the "Conductor confirmation" screen where execution status and execution logs are displayed.



Register Operation name
(Operation)

Register data to
Parameter sheet

Execute Jobflow (Conductor)

Check Execution results

Point

The execution status
and execution log
can be checked
in real-time.

4.4 Execute Jobflow (Conductor) (3/3)

Execution results

- Select a job (Movement) and press either the "Done" icon or the Operation status on the right to see more details.

The screenshot shows the Exastro IT Automation Conductor interface. On the left, there's a navigation menu with items like Main menu, Conductor interface information, Conductor class list, Conductor class edit, Conductor execution, Conductor confirmation, Conductor list, Conductor Regularly execution, and Contact administrator. A red callout bubble with the number '1' and the text 'Select' points to a green 'DONE' button on a movement node in a job flow diagram. To the right of the flow diagram is a detailed view of a movement node. The node details include:

Node	node
Node type	movement
Node instance ID	11
Node name	node-3
Status	Normal end
Start time	2021/07/01 14:26:03
End time	2021/07/01 14:26:33
Operation status	Check execution status

A red arrow points from the 'Check execution status' link to the 'Execute Jobflow (Conductor)' section on the right. This section contains a table with execution details:

Description	Item
Target Operation	
Execution No.	3
Execution type	Normal
Status	Completed
execution engine	Ansible Engine
Caller symphony	
Caller conductor	InstallPackage
Execution user	System Administrator
Movement	
ID	17
Name	PackageInstall
Delay timer (minutes)	
Dedicated information for ansible	Host specific format
No.	IP
Operation	
ID	21
Name	Operation 1
Host management	
Substitution value	
Input data	Populated data
Output data	Result data Scheduled date/time
Operation status	Start date/time: 2021/07/01 14:26:08 End date/time: 2021/07/01 14:26:30

Other sections on the right include 'Register Operation name (Operation)', 'Register data to Parameter sheet', and 'Check Execution results'.

4.5 Check Execution results (1/3)

Execution results

- In the detailed results screen, we can use the progress status (Execution log) to check the Ansible execution log.

The screenshot shows the Exastro UI interface. On the left is a vertical sidebar with a 'Menu' section containing links: Main menu, Movement list, Playback files, Movement playbook link, Substitution value auto-registration setting, Target host, Substitution value list, Execution, Check operation status, and Execution list. Below the sidebar is a 'Contact administrator' button and a three-dot menu icon.

The main area displays several windows:

- A top-level window titled 'Input data' with tabs for 'Input data' (selected), 'Output data', 'Scheduled date/time', 'Operation status', 'Input data URL' (ResultData_000000003.zip), 'Result data' (ResultData_000000003.zip), 'Start date/time' (2021/07/01 14:26:08), and 'End date/time' (2021/07/01 14:26:30).
- A large central window titled 'Progress status(Execution log)' with a red border. It contains a table of log entries and a scrollable text area below it. The log entries include:

Verifying	1/3
Verifying : httpd-2.4.6-97.el7.centos.x86_64	1/3
Verifying : mailcap-2.1.41-2.el7.noarch	2/3
Verifying : httpd-tools-2.4.6-97.el7.centos.x86_64	3/3

Installed:
httpd.x86_64 0:2.4.6-97.el7.centos
Dependency Installed:
httpd-tools.x86_64 0:2.4.6-97.el7.centos mailcap.noarch 0:2.1.41-2.el7
Complete!
META: ran handlers
META: ran handlers

PLAY RECAP ****
ita-test-target02 : ok=1 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0
- A bottom-level window titled 'Progress status(Error log)' with a scrollable text area.
- A context menu on the right side of the central window, enclosed in a red box:
 - Register Operation name (Operation)
 - Register data to Parameter sheet
 - Execute Jobflow (Conductor)
 - Check Execution results** (highlighted in green)

4.5 Check Execution results (2/3)

Execution results

- Use the Execution log to see if httpd, php, perl and python are installed.

Progress log(Execution log)

```
~~~~~  
Installed:  
    httpd.x86_64 0:2.4.6-97.el7.centos  
Dependency Installed:  
    httpd-tools.x86_64 0:2.4.6-97.el7.centos mailcap.noarch 0:2.1.41-2.el7  
Complete!  
    "}  
~~~~~  
Installed:  
    php.x86_64 0:5.4.16-48.el7  
Dependency Installed:  
    libzip.x86_64 0:0.10.1-8.el7 php-cli.x86_64 0:5.4.16-48.el7 php-common.x86_64 0:5.4.16-48.el7  
Complete!  
    "}  
~~~~~  
Updated:  
    perl.x86_64 4:5.16.3-299.el7_9  
Dependency Updated:  
    perl-libs.x86_64 4:5.16.3-299.el7_9  
Complete!  
    "}  
~~~~~  
Updated:  
    python.x86_64 0:2.7.5-90.el7  
Dependency Updated:  
    python-libs.x86_64 0:2.7.5-90.el7  
Complete!  
    "}
```

Register Operation name
(Operation)

Register data to
Parameter sheet

Execute Jobflow (Conductor)

Check Execution results

4.5 Check Execution results (3/3)

Check the Target machine.

- Check that the packages are installed on the Target machine.

hostA

```
$ yum list installed httpd
Loaded plugins: fastestmirror, langpacks
Loading mirror speeds from cached hostfile
 * base: ftp-srv2.kddilabs.jp
 * extras: ftp-srv2.kddilabs.jp
 * updates: ftp-srv2.kddilabs.jp
Installed Packages
httpd.x86_64           2.4.6-97.el7.centos      @updates
```

Register Operation name
(Operation)

Register data to
Parameter sheet

Execute Jobflow (Conductor)

Check Execution results

5. Execution (Second time)

5.1 Register Operation name (Operation)

Register Operation name to the "Operation list".

- This step will be the same as the first time we registered an operation name.
From the "Basic Console" menu group, go to the "Operation list" menu.
Input the information below and press the "Register" button.

The screenshot shows the Exastro Basic Console interface. On the left, a sidebar menu includes 'Operation list' (highlighted with a red box and circled with a red number 1). The main area has three tabs: 'Description' (selected), 'Display filter', and 'List/Update'. The 'List/Update' tab displays a message: '*List is displayed here.' Below it is a 'Register' tab. The 'Register' tab contains a form with fields: 'No.' (Auto-input), 'Operation ID' (Auto-input), 'Operation name*' (Operation 2), 'Scheduled date for execution' (2021/07/03 14:37), and a 'Setting' button. A red box highlights the 'Operation name*' field, and a red circle with number 2 points to it. A red box also highlights the 'Register' button at the bottom of the form, and a red circle with number 3 points to it. To the right of the interface, a vertical sidebar lists five options: 'Register Operation name (Operation)' (highlighted with a red box), 'Register data to Parameter sheet', 'Execute Jobflow (Conductor)', and 'Check Execution results'.

No.	Operation ID	Operation name*	Scheduled date for execution	Action	Setting	Last update date/time	Last updated by
Auto-input	Auto-input	Operation 2	2021/07/03 14:37				

Operation name
Operation 2

Reservation date/time
(Free date/time)

5.2 Register data to Parameter sheet

Register data to "Install Package list"

- From the "Input" menu group, go to the "Install package list" menu

Input the information below and press the "Register" button. Please note that the packages we are installing are different from the first time.

The screenshot shows the Exastro IT Automation interface with the following steps highlighted:

- Step 1:** The "Install Package list" menu item is selected and highlighted with a red box and a circled number 1.
- Step 2:** A red arrow points from the bottom left towards the "Register" button on the main panel.
- Step 3:** A red box highlights the "Register" button on the main panel, and a circled number 3 points to it.

Parameter sheet details:

No	Host name*	Operation	httpd	mariadb-server	php	perl	python	Last update date/time	Last updated by
Auto-input	ita-test-target02	2021/07/03 14:37:22:Operation 2	Yes	Yes	Yes	Yes	Yes	Auto-input	Auto-input

Right-hand sidebar:

- Register Operation name (Operation)
- Register data to Parameter sheet** (highlighted with a red box)
- Execute Jobflow (Conductor)
- Check Execution results

Bottom table:

Host name	Operation	httpd	mariadb-server	php	perl	python
(Previously registered host)	(Previously specified date)_1:Operation 1	Yes	Yes	Yes	Yes	Yes

5.3 Execute Jobflow (Conductor) (1/3)

Run Conductor

- We will now run the Conductor a second time.

From the “Conductor” Menu group, go to the “Conductor execution” menu.

Select the Conductor and Operation you want to run and press “Execute”.

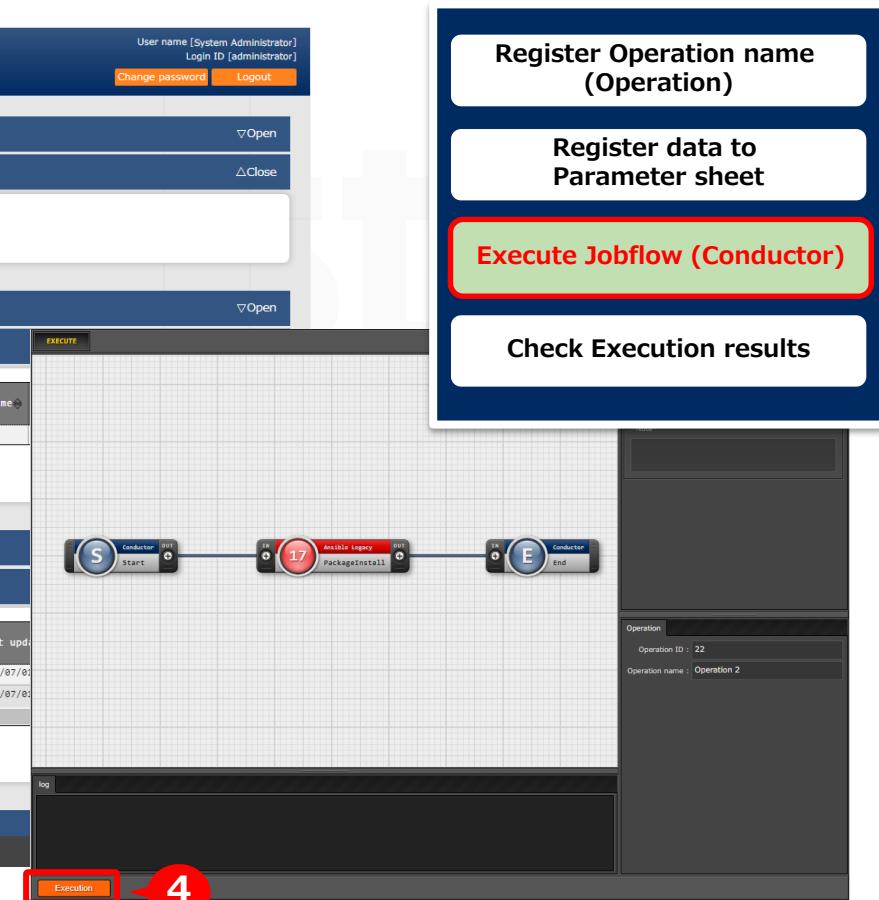
1. Click on the 'Conductor execution' menu item.

2. Select the 'InstallPackage' conductor from the 'Conductor [List]' table.

3. Select 'Operation 2' from the 'Operation [List]' table.

Conductor class ID	Conductor name	Explanation	Access permission	Remarks	Last update date/time
1	InstallPackage				2021/07/01 11:34:52

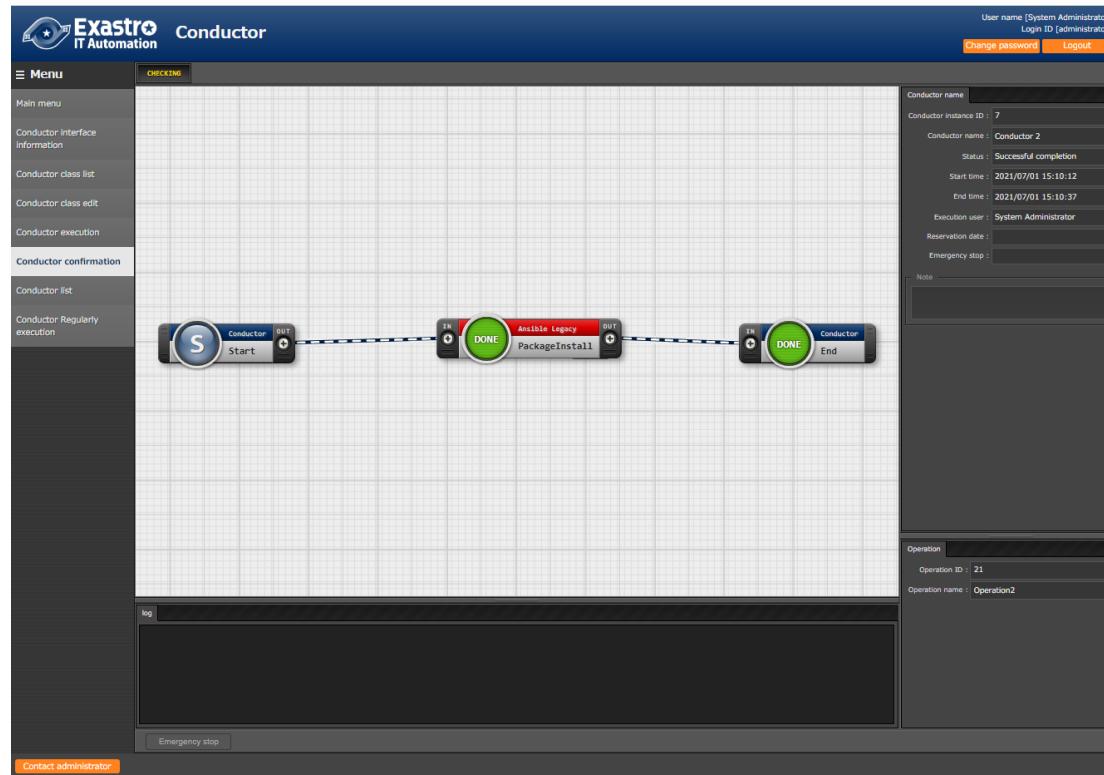
No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Access	Role to allow access	Last update date/time
1	21	Operation 1	2021/07/02 14:06	2021/07/01 14:26			2021/07/01 14:26
2	22	Operation 2	2021/07/03 14:37				2021/07/03 14:37



5.3 Execute Jobflow (Conductor) (2/3)

Execution results

- Executing the Conductor will move the user to the "Conductor confirmation" screen where execution status and execution logs are displayed.



Register Operation name
(Operation)

Register data to
Parameter sheet

Execute Jobflow (Conductor)

Check Execution results

Point

The Execution status and
the Execution log can
be checked in real-time.

5.3 Execute Jobflow (Conductor) (3/3)

Execution results

- Select a job (Movement) and press either the "Done" icon or the Operation status on the right to see more details.

The screenshot shows the Exastro Conductor interface. On the left, there's a navigation menu with items like Main menu, Conductor Interface information, Conductor class list, Conductor class edit, Conductor execution, Conductor confirmation, Conductor list, Conductor Regularly execution, and Contact administrator. The main area displays a job flow diagram with nodes: 'S' (Start), 'Ansible Legacy', and 'PackageInstall'. A red box highlights the 'Ansible Legacy' node, which has a green 'DONE' button. A red callout bubble with the number '1' and the text 'Select' points to this button. To the right of the flow diagram, a detailed view of a node is shown in a modal window. The node details include: Node type: movement, Node instance ID: 26, Node name: node-3, Status: Normal end, Start time: 2021/07/01 15:11:54, and Operation status: Check execution status. Below this, a table shows the 'Get Operation' details:

Item	Value
Execution No.	9
Execution type	Normal
Status	Completed
Execution engine	Ansible Engine
Caller symphony	
Caller conductor	InstallPackage
Execution user	System Administrator
Movement	
ID	17
Name	PackageInstall
Delay timer (minutes)	
Dedicated information for ansible	
Host specific format	IP
Operation	
No.	21
Name	Operation2
ID	21
Host management	
Substitution value	
Input data	Populated data
Output data	Result data
Scheduled date/time	2021/07/01 15:11:57
Operation status	Start date/time End date/time
	2021/07/01 15:12:03

On the right side of the interface, there are four boxes with rounded corners:

- Register Operation name (Operation)
- Register data to Parameter sheet
- Execute Jobflow (Conductor) (highlighted in green)
- Check Execution results

5.4 Check Execution results (1/2)

Execution results

- In the detailed results screen, we can use the progress status (Execution log) to check the Ansible execution log.

The screenshot shows the Exastro interface with a sidebar menu and several windows displaying execution details and logs.

Left Sidebar (Menu):

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

Central Window (Execution Log):

Movement	Delay timer (minutes)	Host specific format	IP
	Dedicated information for ansible	WinRM connection	
Operation	No.		21
	Name		Operation2
	ID		21
Host management		confirmation	
Substitution value		confirmation	
Input data	Populated data		InputData_0000000009.zip
Output data	Result data		ResultData_0000000009.zip
Operation status	Scheduled date/time		
	Start date/time		2021/07/01 15:11:57
	End date/time		2021/07/01 15:12:03

Bottom Window (Error Log):

```
Progress status(Execution log)
Filter : □ Display only corresponding lines
php", "perl", "python"
],
"msg": "", "rc": 0,
"results": [
"All packages providing httpd are up to date",
"All packages providing php are up to date",
"All packages providing perl are up to date",
"All packages providing python are up to date",
""
]
}
META: ran handlers
META: ran handlers

PLAY RECAP ****
ita-test-target02 : ok=1    changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
```

Right Panel (Buttons):

- Register Operation name (Operation)
- Register data to Parameter sheet
- Execute Jobflow (Conductor)
- Check Execution results

Bottom Left Buttons:

- Contact administrator
- ☰

5.4 Check Execution results (2/2)

Execution results

- Check that the new installed Maria DB's dependency with other packages are correct and that the other 4 packages (httpd,php,perl,python) has been updated.

Progress log (Execution log)

```
~~~~~  
"results": ["All packages providing httpd are up to date",  
  ""]}  
~~~~~
```

Installed:

mariadb-server.x86_64 1:5.5.68-1.el7

Dependency Installed:

mariadb.x86_64 1:5.5.68-1.el7

perl-Compress-Raw-Bzip2.x86_64 0:2.061-3.el7

perl-Compress-Raw-Zlib.x86_64 1:2.061-4.el7

perl-DBD-MySQL.x86_64 0:4.023-6.el7

perl-DBI.x86_64 0:1.627-4.el7

perl-IO-Compress.noarch 0:2.061-2.el7

perl-Net-Daemon.noarch 0:0.48-5.el7

perl-PIRPC.noarch 0:0.2020-14.el7

Dependency Updated:

mariadb-libs.x86_64 1:5.5.68-1.el7

Complete!

"]}
~~~~~

```
"results": ["All packages providing php are up to date",  
  ""]}  
~~~~~
```

```
"results": ["All packages providing perl are up to date",
 ""]}
~~~~~
```

```
"results": ["All packages providing python are up to date",  
  ""]}
```

Register Operation name  
(Operation)

Register data to  
Parameter sheet

Execute Jobflow (Conductor)

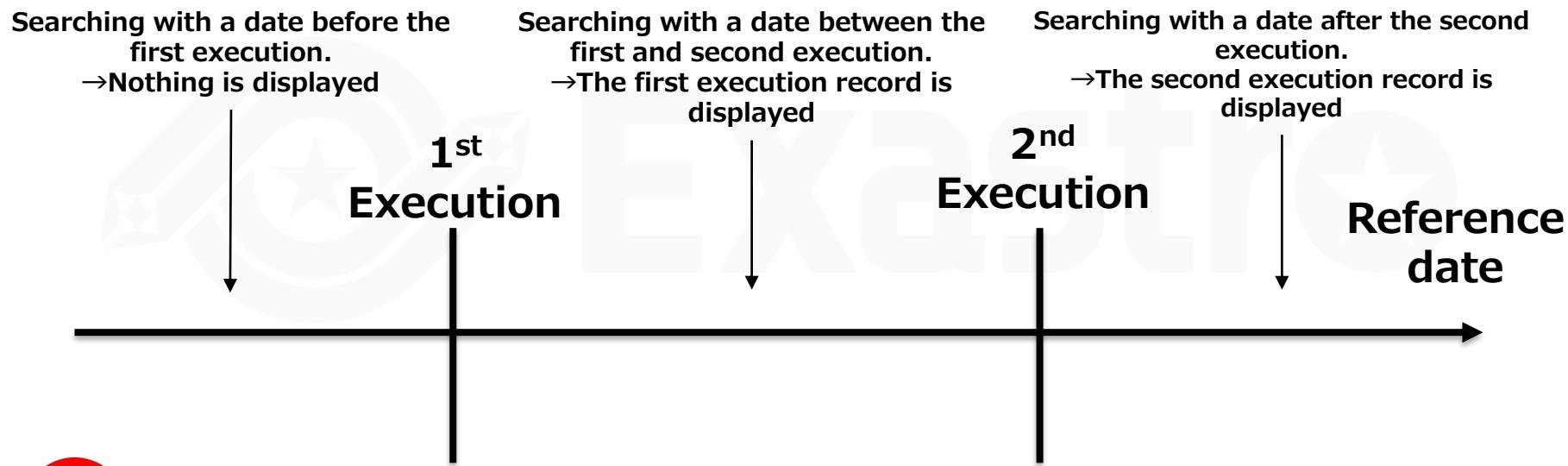
Check Execution results

## 6. Checking the CMDB Parameter history

# 6.1 Executing operations and History Management

## Scenario and History Management

- ITA Manages parameter history and keeps track on who last used it, when it happened and why in the CMDB.
- ITA also comes with functions that are able to extract the parameters of the system at said time. By historically managing parameters, designers and operators both can perform system maintenance without any worries or problems



Point

In order for the user to experience history management of Parameters, this scenario contained 2 executions.

# 6.2 Checking the CMDB Parameter history (1/3)

## History Check

- Check if the parameters are actually managed.

From the "Reference" menu group, go to the "Install package list" menu.

First, press the "Filter" button without inputting any filters.

The screenshot shows the Exastro IT Automation interface. In the top left, there's a navigation bar with 'Main menu' and 'Install Package list'. A red box labeled '1' highlights the 'Install Package list' option. Below it, a red box labeled '2' highlights the 'Filter' button in the 'Filter' dialog. A callout box points to the 'Filter' button with the instruction: 'Press the “Filter” button without inputting anything'. The 'Filter' dialog also has a 'Clear filter' button and a checked 'Auto-filter' checkbox. In the main area, a red box labeled '3' highlights the 'Filter' button in the 'List' panel. A red box labeled '4' highlights the list of operations in the 'List' panel, which includes columns: History No, Host name, ID, Operation name, Reference date, Scheduled date for execution, Last update date/time, and Last updated by. The list shows one entry: History 1, host name ita-test-target02, ID 21, Operation name Operation2, Reference date 2021/07/01 15:11, Scheduled date for execution 2021/07/02 14:06, Last update date/time 2021/07/01 14:16:46, and Last updated by System Administrator. A callout box points to the list with the instruction: 'Check that the newest data is displayed correctly.' At the bottom of the list panel, there are 'Output Excel' and 'Download all' buttons, and a 'Trace history' link.

| History No | Host name         | ID | Operation name | Reference date   | Scheduled date for execution | Last update date/time | Last updated by      |
|------------|-------------------|----|----------------|------------------|------------------------------|-----------------------|----------------------|
| History 1  | ita-test-target02 | 21 | Operation2     | 2021/07/01 15:11 | 2021/07/02 14:06             | 2021/07/01 14:16:46   | System Administrator |

## 6.2 Checking the CMDB Parameter history (2/3)

### History Check

- Now, we will input a reference date that took place earlier than the second execution and filter.

The screenshot shows the Exastro IT Automation interface with the 'Reference' module selected. The top navigation bar includes 'User name [System Administrator]', 'Login ID [administrator]', 'Change password', and 'Logout'. On the left, there's a 'Main menu' and 'Install Package list' option. The main content area has a 'Display filter' section and a 'List' section.

**1** In the 'Display filter' section, the 'Operation Reference date' field is highlighted with a red box and contains the value '2021/07/01 15:37'. A callout box with the text 'Input a date earlier than the second execution date.' points to this field.

**2** The 'Filter' button in the 'Display filter' section is highlighted with a red box.

**3** In the 'List' section, a single row of data is shown in a red box, indicating the result of the filter. The data includes:

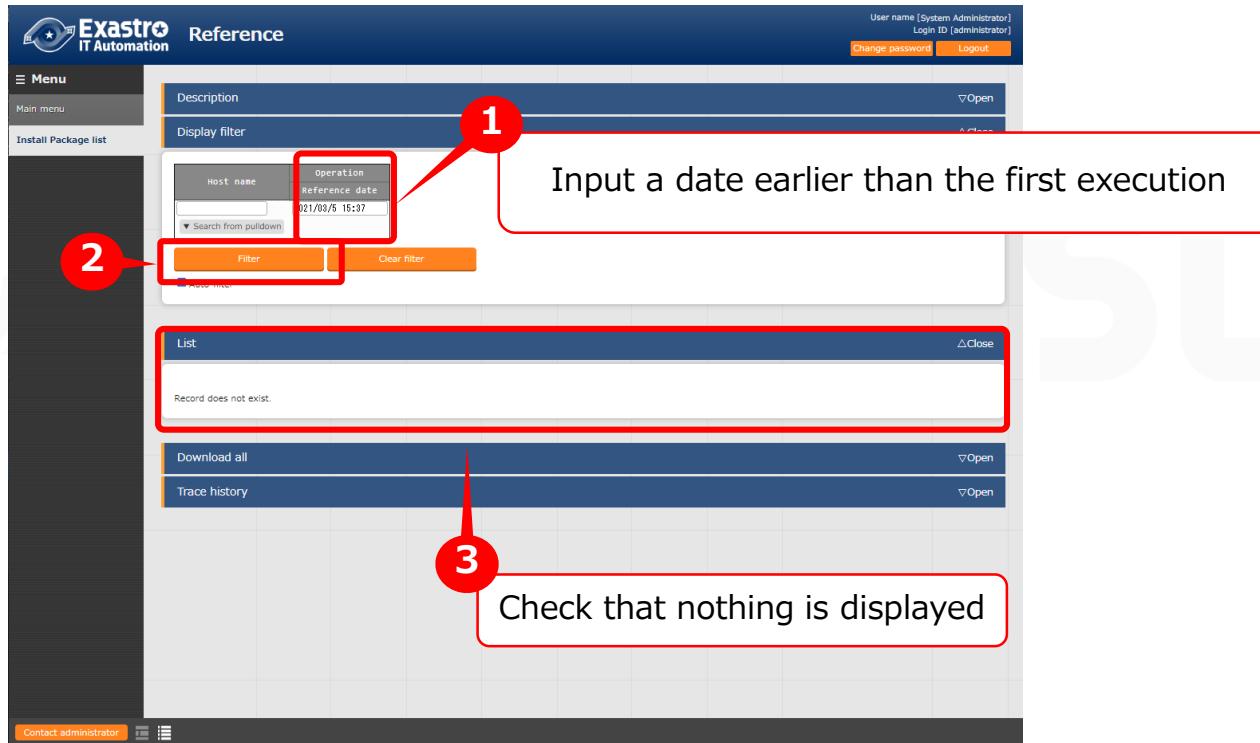
| History | No. | Host name         | ID | Operation name | Reference date   | Scheduled date for execution | Last                | Last update date/time | Last updated by      |
|---------|-----|-------------------|----|----------------|------------------|------------------------------|---------------------|-----------------------|----------------------|
| History | 1   | ita-test-target02 | 21 | Operation 1    | 2021/04/32 14:04 | 2021/07/02 14:06             | 2021/07/01 14:16:46 | 2021/07/01 14:16:46   | System Administrator |

A callout box with the text 'Check that only the first execution is displayed.' points to the list table.

# 6.2 Checking the CMDB Parameter history (3/3)

## History Check

- Lastly, input a date earlier than the first execution.



# A Appendix



# Reference ① [Ansible-Legacy] Single Execution

## Execution menu

- Ansible-Legacy has a "Execution" menu where users can execute individual movements and dry run them.

The screenshot shows the Ansible-Legacy interface with a sidebar menu on the left and three main content sections. The top section displays a table of movements, the middle section displays a table of operations, and the bottom section provides details for a selected movement and contains execution buttons.

**1 Select a created Movement**

**2 Select an operation linked to the Movement**

**3 Dry run**  
: Checks the playbook's connectivity and syntax

**Execute**  
: Executes playbook.

| Select                           | Movement ID | Movement Name  | Orchestrator   | Delay timer | Dedicated information for ansible |                  |                |     | Last update date/time | Last updated by      |
|----------------------------------|-------------|----------------|----------------|-------------|-----------------------------------|------------------|----------------|-----|-----------------------|----------------------|
|                                  |             |                |                |             | Host specific format              | WinRM connection | Header section | Opt |                       |                      |
| <input checked="" type="radio"/> | 17          | PackageInstall | Ansible Legacy | IP          |                                   |                  |                |     | 2021/07/01 14:53:13   | System Administrator |
|                                  | 18          |                |                |             |                                   |                  |                |     |                       |                      |

Filter result count: 1

| Select                           | No. | Operation ID | Operation name | Scheduled date for execution | Last execution date | Access permission | Role to allow access | Last update date/time | Last updated by |
|----------------------------------|-----|--------------|----------------|------------------------------|---------------------|-------------------|----------------------|-----------------------|-----------------|
| <input checked="" type="radio"/> | 21  |              | 21 Operation 1 | 2021/07/02 14:06             | 2021/07/01 15:11    |                   |                      | 2021/07/01 15:48:58   | System Admin    |
| <input type="radio"/>            | 22  |              | 22 Operation 2 | 2021/07/03 14:37             | 2021/07/01 15:08    |                   |                      | 2021/07/01 15:08:32   | Legacy ex       |

Filter result count: 2

Movement ID: 17  
Movement Name: PackageInstall

Dry run      Execute

# Reference ② [Ansible-Legacy] Execution check

## Execution result

- Pressing either the Execute or the Dry run button will move the user to a screen where execution status and logs are displayed.

The screenshot shows the Exastro IT Automation interface with the following components:

- Main Menu:** On the left, listing options like Main menu, Movement list, Playbook files, etc.
- Current Screen:** "Ansible-Legacy" - "Check operation status". It displays a table of execution parameters and a log table.
- Execution Log:** A table showing the progress of the execution log, with rows for perl, python, and results.
- Error Log:** An empty table for displaying error logs.
- Download Buttons:** Buttons for "Input data" (populated data) and "Result data" (ResultData\_000000010.zip).
- Red Annotations:** Three red callout bubbles with the word "Point" pointing to specific areas:
  - Top Right:** Points to the execution log table with the text: "Here you can see the input data and the execution status."
  - Middle Right:** Points to the error log table with the text: "Here you can see both the execution log and the error log in real time."
  - Bottom Right:** Points to the download buttons with the text: "Here you can download both the input data and the result data."



**Exastro**