



IT Automation BASE Practice

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

Exastro IT Automation Version 1.10
Exastro developer

Table of contents

1. Introduction
 - 1.1 Document Overview
2. Practice Scenario 1
 - 2.1 Operation Environment
 - 2.2 RBAC for Menu scenario
 - 2.3 Create and register new users
 - 2.4 Create and register Roles
 - 2.5 Link Roles and Menus
 - 2.6 Link Roles and Users
 - 2.7 Register Device/Operation list
 - 2.8 Check access permission
3. Practice Scenario 2
 - 3.1 Operation Environment
 - 3.2 RBAC for Data records scenario
 - 3.3 Create and register new users
 - 3.4 Create and register Roles
 - 3.5 Link Roles and Menus
 - 3.6 Link Roles and Users
 - 3.7 Register Movement list
 - 3.8 Check access permission

1. Introduction



1.1 Document overview

About this document

This document will have the reader go through a couple of sample scenarios in order to learn more about the Role based access restriction function.

Scenario 1 will have to user experience RBAC for Menus.

Scenario 2 will have the user experience RBAC for data records.



2. Scenario 1



2.1 Operation environment

Environment

The following is required in order to finish this document's scenarios.

You will need 1 server.

Client device

- Windows10
- Google Chrome



ITA server

- CentOS7 (※1)
- ITA 1.10.0
- Ansible 2.11.10



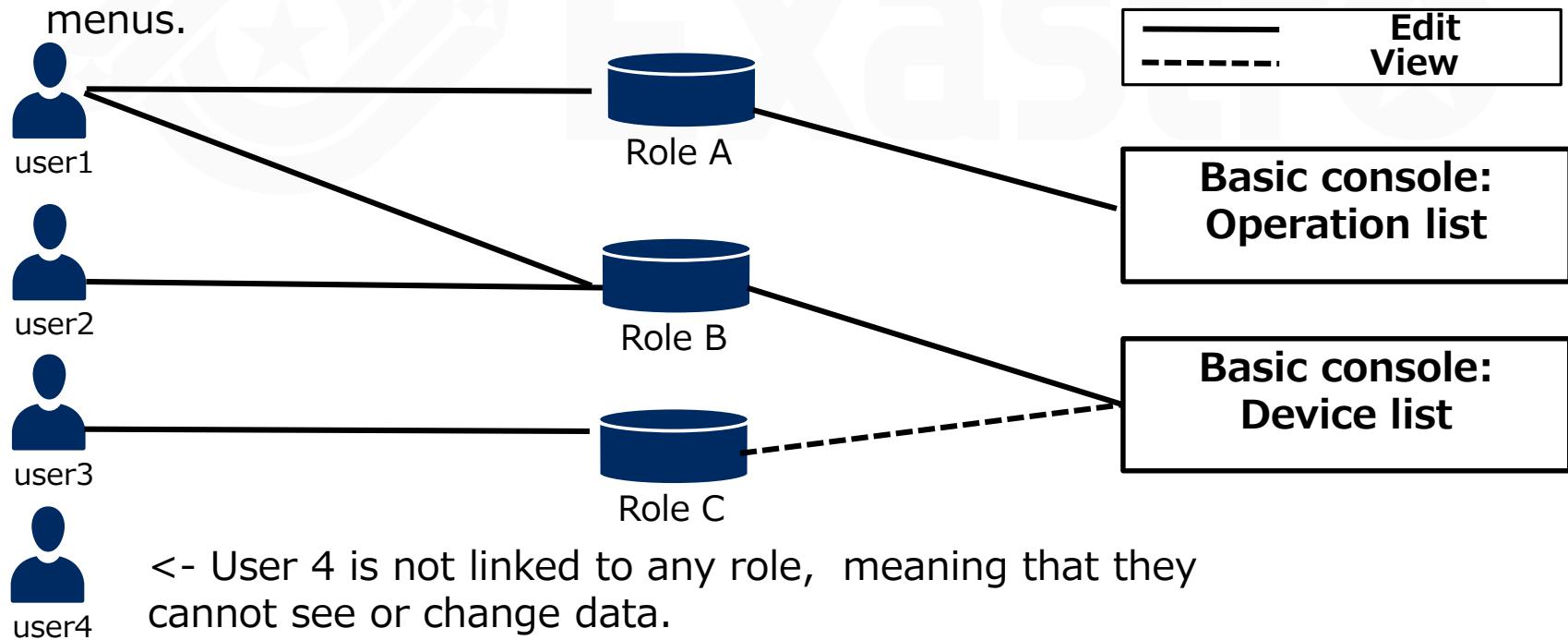
※1 In this scenario, the host server will be running CentOS7. However, ITA can be implemented to any RHEL7 or RHEL8 type OS.

2.2 RBAC for Menus scenario (1/2)

Scenario

This scenario will have the reader use the Management console -> Menu link list function to control RBAC for different menus.

- ① User 1 is linked to Role A and Role B, meaning that they can edit contents in both the “Operation list” and the “Device list”.
- ② User 2 is linked to Role B, meaning that they can edit in “Device list”.
- ③ User 3 is linked to Role C, meaning that they can view in the “Device list”.
- ④ User 4 is not linked to any role, meaning that they cannot view any of the menus.



2.2 RBAC for Menus Scenario (2/2)

Scenario procedure

2.3 Create and register new users



2.4 Create and register roles



2.5 Link roles and menus



2.6 Link roles and users



2.7 Register data in the “Device list”
and “Operation list” menus.



2.8 Check RBAC

2.3 Create and Register new users

Create and register new users

In order to check the different access permissions, we will create 4 different users.

Menu: **Management console > User list**

- ① Register > Start registration
- ② Follow the table below and press “Register”

The screenshot shows the Exastro Management Console interface. On the left, a vertical navigation menu lists various options like Main menu, System settings, and User list, with 'User list' currently selected and highlighted by a red box. The main content area has a header 'Management Console'. Below the header, there's a registration form with fields for User ID, Login ID*, Login Password*, User name*, and Email address*. A note at the bottom of the form states: '※* is a required item.' Below the form are 'Back' and 'Register' buttons, with 'Register' highlighted by a red box and a callout bubble containing the number '2'. To the right of the registration form is a table showing four registered users:

Login ID	Login PW	User name
user1	(Free field)	Test1
user2	(Free field)	Test2
user3	(Free field)	Test3
user4	(Free field)	Test4

*Remember the Login ID and password

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Device/Operation list

Check access permission

2.4 Create and register roles

Create and register roles

Create and register the roles that controls user access

Menu: **Management console> Role list**

- ① Register > Start registration
- ② Follow the table below and press “Register”

The screenshot shows the Exastro Management Console interface. On the left, there is a vertical navigation menu with various options like Main menu, System settings, etc. The 'Role list' option is highlighted and has a red box around it. A red circle labeled '1' points to the 'Role list' item in the menu. Another red circle labeled '2' points to the 'Register' button in the registration form.

The main content area displays a registration form for a new role. The form includes fields for 'Role name' (with 'Role A' entered), 'Access setting' (with 'Auto-input' selected), and 'Setting' (with 'Auto-input' selected). Below the form, a note says '※ * is a required item.' At the bottom of the form are 'Back' and 'Register' buttons, with the 'Register' button also having a red box around it.

On the right side of the registration form, there is a sidebar with several links:

- User name [System Administrator]
- Login ID [administrator]
- Change password
- Logout
- ▽ Open
- ▽ Open
- ▽ Open
- △ Close

Below the sidebar, there are four more links:

- Download all and edit file uploads
- User information
- Menu information
- Trace history

At the very bottom of the page, there are 'Contact administrator' and 'Help' links.

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Device/Operation list

Check access permission

2.5 Role · Menu link

Link Role and menus

Link menus to the different roles and select permission type

Menu: **Management console> Role · Menu link list**

- ① Register > Start registration
- ② Follow the table below and press “Register”

The screenshot shows the Exastro Management Console interface. On the left, a sidebar menu includes items like Main menu, System settings, and Role list. The 'Role · User link list' item is highlighted with a red box and a circled '1'. The main content area shows a registration form for a new role. A circled '2' points to the 'Menu group:' dropdown. To the right, a table lists three roles with their associated menu groups and permissions:

Role name	Menu group: Menu	Associate
Role A	Basic console: Operation list	Edit
Role B	Basic console: Device list	Edit
Role C	Basic console: Device list	View

At the top right, there are links for creating users and roles, and for linking roles and menus. The 'Link Roles and Menus' link is highlighted with a red box.

2.6 Role • User link

Link Role and user information

Link a roles to the different users

Menu: **Management console> Role • User link list**

- ① Register > Start registration
- ② Follow the table below and press “Register”

The screenshot shows the Exastro Management Console interface. The left sidebar contains a navigation menu with items like Main menu, System settings, Menu group list, Menu list, Role list, User list, Role • Menu link list, Role • User link list (which is highlighted with a red box), File delete list, Sequence list, Single-sign-on Basic Preference, and Single-sign-on Attribute Reference. The main content area is titled 'Management Console' and shows a registration form for 'Role • User link list'. The form includes fields for 'Item No.', 'Role (ID name)*', 'User ID: Login ID*', and 'Default access permission*'. A note at the bottom states '※ * is a required item.' Below the form are 'Back' and 'Register' buttons. At the top right, there are links for 'Change password' and 'Logout'.

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Device/Operation list

Check access permission

Role name	User ID	Default access permission
Role A	user1	●
Role B	user1	●
Role B	user2	●
Role C	user3	●

Point

Selecting "●" for "Default access permission" will make the registered access permission default to the role when registering new data.

2.7 Device list/Operation list registration(1/2)

Register new data in the Device list menu.

The following must be done while logged in as Administrator.

Register a new item in the Device list.

This allows us to check the access permissions for the different users.

Do not set access permission roles in this step.

Menu: **Basic console > Device list**

- ① Register > Start registration
- ② Follow the table below and press “Register”

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

HW device type	Host name	IP address
SV	(Free host name)	(Free IP address)

2

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Device/Operation list

Check access permission

2.7 Device list/Operation list registration(2/2)

Register new operation

The following must be done while logged in as Administrator.

Create a new operation.

This allows us to check the access permissions for the different users.

Do not set access permission roles in this step.

Menu: **Basic console > Operation list**

- ① Register > Start registration
- ② Follow the table below and press “Register”

The screenshot shows the Exastro Basic Console interface. The left sidebar has a 'Menu' section with various options like Main menu, Device list, and Operation list (which is highlighted with a red box). The main content area has a 'Basic Console' header. Below it, there's a 'Description' section with 'Display filter', 'List/Update', and a 'Register' section. The 'Register' section contains a table with columns: No., Operation ID, Operation name*, Scheduled date for execution, Access p., Setting, Role, and a 'Setting' button. A note says '* is a required item.' Below the table are 'Back' and 'Register' buttons. At the bottom, there are links for 'Download all and edit file uploads' and 'Trace history'. In the top right, there's a user info box with 'User name: [System Administrator]' and 'Login ID: [administrator]'. A red callout box highlights the 'Operation name' and 'Scheduled execution date' columns in a table below the registration form. A red circle with the number '2' points to this table. The table has two rows: one for OP1 with '(Free field)' in the scheduled date column, and one for OP2 with '(Free field)' in the scheduled date column.

Operation name	Scheduled execution date
OP1	(Free field)
OP2	(Free field)

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

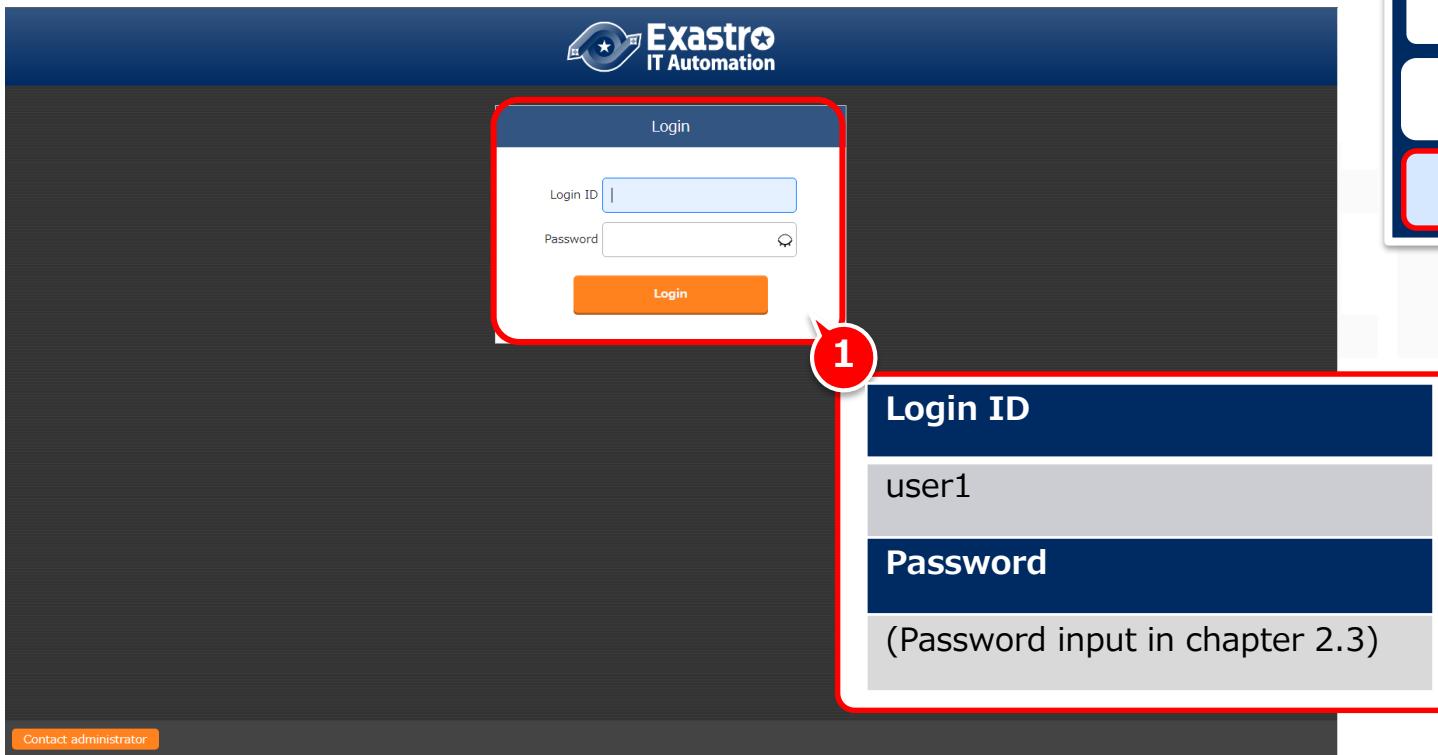
Register Device/Operation list

Check access permission

2.8 Check access permission(1/12)

Change account

Log out from the Admin account and log in as the different users we created earlier in chapter 2.3



- Create and register new users
- Create and register Roles
- Link Roles and Menus
- Link Roles and Users
- Register Device/Operation list
- Check access permission

2.8 Check access permission(2/12)

Configure new password

Users will be asked to create a new password when logging in for the first time.

Log in and create a new password for all the users.

The screenshot shows the Exastro IT Automation interface. A 'Change password' dialog is open, containing fields for 'Old password', 'New password', and 'New password (re-enter)'. A red box highlights this dialog, and a red circle with the number '2' points to the 'Old password' field. To the right, a detailed view of the input fields is shown in a red-bordered box:

Input Type	Value	Description
Login ID	user1	
Old password	(Password input in chapter 2.3)	(Free value)
New password	(Free value)	(Free value)
New password (re-enter)		

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Device/Operation list

Check access permission

2.8 Check access permission(3/12)

Check User 1's access permissions

Log in as User 1 and check the access permissions

- ① Check that the Login ID is “user1” and the Login user is “Test1” in the upper right corner.
- ② Press roll button to see “Role A” and “Role B” is displayed

The screenshot shows the Exastro Basic Console interface. At the top, there is a header bar with the Exastro logo, the text "Basic Console", and a user login status: "User name [test1] Login ID [user1]". Below the header are several buttons: "Role", "Change password", and "Logout". To the right of these buttons, a red circle with the number "1" indicates the "Role" button. In the center of the screen, there is a dashboard with three main sections: "Movement", "Status", and "Result". Below the dashboard, a modal window titled "Role" is open, listing "Role A" and "Role B" under the "Name" column. A red circle with the number "2" points to this modal window. At the bottom left of the screen, there is a red circular callout with the word "Point" and the text "Press role button to check role tied up with login user".

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Device/Operation list

Check access permission

Point

Press role button to check role tied up with login user

2.8 Check access permission(4/12)

Check User 1's access permissions

Log in as User 1 and check the access permissions

Menu: Basic console > Operation list

- ② Display filter > Press "Filter"
- ③ Check that device list are displayed and that you can edit them

The screenshot shows the Exastro Basic Console interface. The top navigation bar includes the Exastro logo, '基本コンソール' (Basic Console), and user information: ようこそ[テスト用1]さん ログインID [user1]. Below the navigation are buttons for 'ロール' (Role), 'パスワード変更' (Change Password), and 'ログアウト' (Logout). The main area is titled '説明' (Explanation) and contains a '表示フィルタ' (Display Filter) section with various search fields and a 'Table setting' button. A large red box highlights the 'Filter' button at the bottom of this section. A red circle with the number '1' is placed over this button. Below this is a table listing devices. A second red box highlights the 'Edit' icon (pencil symbol) in the bottom toolbar of one of the table rows. A red circle with the number '2' is placed over this icon. A callout box points from the 'Edit' icon to a note: 'Users with "Can maintain" displayed in the link settings are able to edit. (See more information on slide 22.)' The bottom toolbar also includes 'Excel出力' (Excel Output) and other standard table management buttons.

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Device/Operation list

Check access permission

2.8 Check access permission(5/12)

Check User 1's access permissions

Log in as User 1 and check the access permissions

Menu: Basic console > Operation list

- ② Display filter > Press "Filter"
- ③ Check that both OP1 and OP2 are displayed and that you can edit them

The screenshot shows the Exastro Basic Console interface. On the left, there is a navigation menu with options like Main menu, Device list, and Operation list. The main area has tabs for Description and Display filter. The Display filter tab is active, showing a search form with various fields and a 'Filter' button highlighted with a red circle labeled '1'. Below it, the Operation list tab is active, showing a table with columns: History, Duplicate, Update, Discard, No., Operation ID, Operation name, and Scheduled date for execution. Two rows are visible: one for 'OP1' and one for 'OP2'. Both rows have an 'Edit' icon (pencil) in the History column, which is highlighted with a red circle labeled '2'. A red box encloses the entire list table. At the bottom of the list table, there is a note: 'Users with "Can maintain" displayed in the link settings are able to edit. (See more information on slide 22.)'

History	Duplicate	Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution
History	Duplicate	Update	Discard	5	5	OP1	2021/12/08 19:00
History	Duplicate	Update	Discard	6	6	OP2	2021/12/09 15:10

Users with "Can maintain" displayed in the link settings are able to edit.
(See more information on slide 22.)

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Device/Operation list

Check access permission

2.8 Check access permission(6/12)

Check User 2's access permissions

Log in as User 2 and check the access permissions

- ① Check that the Login ID is “user2” and the Login user is “Test2” in the upper right corner.
- ② Press roll button to see “Role B” is displayed

The screenshot shows the Exastro IT Automation dashboard. At the top right, there is a login status bar with "User name [test2]", "Login ID [user2]", and buttons for "Role", "Change password", and "Logout". A red box highlights this area, and a red circle with the number "1" points to the "Role" button. Below the status bar, there are three circular performance indicators: "Movement" (0), "Work status" (0), and "Work result" (0). A red box highlights the "Movement" indicator, and a red circle with the number "2" points to its value "0". In the center, a modal window titled "Role" is open, showing a single entry: "Role B". A red box highlights this modal window. On the left side, there is a sidebar with a "Basic Console" icon and a "Work history" section. At the bottom left, there is a "Contact administrator" link. To the right of the dashboard, there is a vertical stack of six buttons, each with a title: "Create and register new users", "Create and register Roles", "Link Roles and Menus", "Link Roles and Users", "Register Device/Operation list", and "Check access permission". The "Check access permission" button is highlighted with a red box and a red circle with the number "1".

2.8 Check access permission(7/12)

Check User 2's access permissions

Log in as User 2 and check the access permissions

- ① Check that the Login ID is “user2” and the Login user is “Test2” in the upper right corner.
- ② Press roll button to see “Role B” is displayed

The screenshot shows the Exastro Basic Console interface. At the top, there is a navigation bar with 'Exastro IT Automation' logo, 'Basic Console' title, and user info ('User name [test2]', 'Login ID [user2]', 'Change password', 'Logout'). On the left, there is a sidebar with 'Main menu' and 'Device list' options. The main area has two tabs: 'Description' (selected) and 'Display filter'. The 'Display filter' tab contains a search interface with fields for 'Discard', 'Managed system item number', 'HW device type', 'Host name', 'IP address', 'MAC', 'Last update date/time', and 'Last updated by'. Below this is a 'Filter' button (circled with red number 1) and a 'Clear filter' button. A checkbox for 'Auto-filter' is also present. The second tab, 'List/Update', shows a table of device data with columns: History, Duplicate, Update, Discard, Managed system item number, HW device type, Host name, IP address, EtherWake, Power ON, MAC address, Last update date/time, and Last updated by. Below the table are buttons for History, Duplicate, Update, and Discard. A red box labeled '2' highlights the 'Update' button. A red callout box points from the 'Update' button to a note: 'Users with "Can maintain" displayed in the link settings are able to edit. (See more information on slide 20.)' At the bottom of the list tab, it says 'Filter result count: 1' and 'Output Excel'.

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Device/Operation list

Check access permission

2.8 Check access permission(8/12)

“Can maintain” access permission settings

If the link settings says "Can maintain",
the user will have access to the different edit functions.

The screenshot shows a web-based application interface for managing devices. On the left, there's a sidebar with 'Main menu' and 'Device list'. The main area has two tabs: 'List/Update' and 'Register'. The 'List/Update' tab is active, showing a table with columns like History, Duplicate, Update, Discard, Managed system item number, HW device type, Host name, IP address, EtherWake, Power ON, MAC address, Last update date/time, and Last updated by. A red box highlights the top part of this table. Below the table, there's a button labeled 'Output Excel'. The 'Register' tab shows options to 'Download all and edit file uploads', 'Download all', 'Download all (Excel)', 'Download for new registration (Excel)', and a file input field 'Choose File' with 'No file chosen'. A red box highlights the 'Upload file' button. At the bottom, there are links for 'Trace history' and 'Download all'. The footer includes 'Contact administrator' and some icons.

Point

If the user has “Can maintain” permissions,
functions such as “Update”, “Register”, “Upload file”
and others will be available.

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Device/Operation list

Check access permission

2.8 Check access permission(9/12)

Check User 3's access permissions

Log in as User 3 and check the access permissions

- ① Check that the Login ID is “user3” and the Login user is “Test3” in the upper right corner.
- ② Press roll button to see “Role C” is displayed

The screenshot shows the Exastro basic console interface. At the top right, there is a user login header with the text "ようこそ[テスト用3]さん ログインID [user3]" and three buttons: "ロール" (Role), "パスワード変更" (Change Password), and "ログアウト" (Logout). A red circle labeled "1" points to the "ロール" button. Below the header, a red box labeled "Check access permission" highlights the "Role" section of the main dashboard. A red circle labeled "2" points to a modal dialog titled "Role" which displays the "Name" field containing "RoleC".

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Device/Operation list

Check access permission

2.8 Check access permission(10/12)

Check User 3's access permissions

Log in as User 3 and check the access permissions

- ① Check that the Login ID is user3 and the Login user is "Test3" in the upper right corner
- ② Menu: Basic console > Device list
- ③ Display filter > Press "Filter"
- ④ Check that the user can view ,but not edit contents.

The user will not be able to edit contents if the permission settings is set to "View only".
(See Slide 22)

- Create and register new users
- Create and register Roles
- Link Roles and Menus
- Link Roles and Users
- Register Device/Operation list
- Check access permission

2.8 Check access permission(11/12)

“View Only” access permission settings

If the permission settings set to the link is set to “View only”, the user will not be able to edit the contents.

The screenshot shows the Exastro Basic Console interface. On the left, there's a sidebar with 'Exastro IT Automation' logo, 'Basic Console' title, 'Main menu', and 'Device list'. The main area has a header with 'User name [Test]', 'Login ID [user]', 'Change password', and 'Logout'. Below the header is a table with a single row of data. The table has columns: History, Managed system item number, HW device type, Host name, IP address, EtherWakeOnLan, MAC address, Network device name, Login user ID, Management, Login p, Last update date/time, and Last updated by. The data row shows: History, 4, SV, LearnTest, 123.123.123.123, EtherWakeOnLan, MAC address, Network device name, Login user ID, Management, Login p, Last update date/time (2021/12/07 18:55:12), and Last updated by (System Administrator). A red box highlights the entire table. At the bottom of the table area, there's an 'Output Excel' button. Below the table is a 'Download all' section with 'Download all' and 'Download all (Excel)' buttons. At the very bottom, there's a 'Trace history' and 'Download all (Excel)' section. A red circle with the word 'Point' is overlaid on the bottom left of the table area. To the right of the table, a callout box contains text about edit functions being unavailable for 'View only' users.

- Create and register new users
- Create and register Roles
- Link Roles and Menus
- Link Roles and Users
- Register Device/Operation list
- Check access permission

Point

Edit functions such as “Edit,” “Abolish” and “Restore” will not be available for users with “View only” permission.

2.8 Check access permission(12/12)

Check user 4's access permissions

Log in as User 4 and check the access permissions

- ① Login ID: Log in as user4
- ② Check that the Login ID is user4 and the Login user says "Test4" in the upper right corner
- ③ As this user does not have permission to anything, they should not be able to see anything.

The screenshot shows the Exastro IT Automation dashboard. At the top, there is a header with the Exastro logo, a menu icon, and a 'DASHBOARD' button. Below the header, the main menu section displays a message: 'There are no "Menu group" that can be displayed.' To the right of this, there are three circular status dashboards: 'Movement' (0 Total), 'Work status' (0 Total), and 'Work result' (0 Total). Each dashboard has a corresponding table below it showing various metrics. At the bottom of the dashboard area, there is a 'Work history' section with a table and a 'Contact administrator' button at the very bottom.

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Device/Operation list

Check access permission

3. Scenario 2



3.1 Operation Environment

Operation Environment

The following is required in order to finish this document's scenarios.
You will need 1 server.

Client Device

- Windows10
- Google Chrome



ITA Server

- CentOS7 (※1)
- ITA 1.10.0
- Ansible 2.11.10

※1 In this scenario, the host server will be running CentOS7. However, ITA can be implemented to any RHEL7 or RHEL8 type OS.

3.2 RBAC for Data records(1/3)

Scenario 1

In this scenario, we will give the different roles access permission for all the different data records. That way, the reader can experience the RBAC for Data records function.

- ① user1, who is linked to Role A, B and C, will be able to see Move1~4
- ② user2, who is linked to Role B, will be able to see Move1~3
- ③ user3, who is linked to Role B and Role C, will be able to see Move 1,3 and 4

■ User name : System administrator
Login ID: administrator
Role : System administrator

履歴	複製	更新	廃止	MovementID	Movement名	オーケストレータ	遅延タイマー	Ansible利用情報				Movement-Playbook紐付	アクセス権	備考	最終更新日時	最終更新者
								ホスト指定形式	WinRM接続	ヘッダーセクション	オプションパラメータ		アクセス許可ロール			
履歴	複製	更新	廃止	6	move1	Ansible Legacy	IP					Movement-Playbook紐付	ロールA, ロールB		2021/08/23 10:23:04	システム管理者
履歴	複製	更新	廃止	7	move2	Ansible Legacy	IP					Movement-Playbook紐付	ロールA		2021/08/23 10:29:47	システム管理者
履歴	複製	更新	廃止	10	move3	Ansible Legacy	IP					Movement-Playbook紐付	ロールB		2021/08/23 10:23:46	システム管理者
履歴	複製	更新	廃止	11	move4	Ansible Legacy	IP					Movement-Playbook紐付	ロールC		2021/08/23 10:23:52	システム管理者

User name [System Administrator]
Login ID [administrator]

Role Change password Logout

■ User name : Test2
Login ID: user2
Role : Role B

履歴	複製	更新	廃止	MovementID	Movement名	オーケストレータ	遅延タイマー	Ansible利用情報				Movement-Playbook紐付	アクセス権	備考	最終更新日時	最終更新者
								ホスト指定形式	WinRM接続	ヘッダーセクション	オプションパラメータ		アクセス許可ロール			
履歴	複製	更新	廃止	6	move1	Ansible Legacy	IP					Movement-Playbook紐付	******(5), ロールB		2021/08/23 10:23:04	システム管理者
履歴	複製	更新	廃止	10	move3	Ansible Legacy	IP					Movement-Playbook紐付	ロールB		2021/08/23 10:23:46	システム管理者

User name [test2]
Login ID [user2]

Role Change password Logout

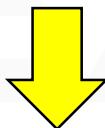
3.2 RBAC for Data records(2/3)

Scenario 2(Figure)

Role and User link

	Role A	Role B	Role C
user1	●	○	○
user2		●	
user3		●	●

- …With Default access permission
- …Without Default access permission



Access permission per Movement

	move1	move2	move3	move4
Role A	●	●		
Role B	●		●	
Role C				●

- …Has access

What Movement can be seen by which user

	move1	move2	move3	move4
user1	●	●	●	●
user2	●		●	
user3	●		●	●

- …Movement displayed

3.2 RBAC for Data records(3/3)

Scenario Procedure

※Users who have completed Scenario 1 can start from chapter 3.5

3.3 Create and register new users



3.4 Create and register roles



3.5 Role · Menu link



3.6 Role · User link



3.7 Movement list registration



3.8 Check access permission

3.3 Create and register new users

Create and register new users

In order to check the different access permissions, we will create 3 different users.

Menu: **Management console > User list**

- ① Register > Start registration
- ② Follow the table below and press “Register”

Login ID	Login PW	User name
user1	(Free field)	Test1
user2	(Free field)	Test2
user3	(Free field)	Test3

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Movement list

Check access permission

3.4 Create and register roles

Create and register roles

Create and register the roles that controls user access

Menu: **Management console> Role list**

- ① Register > Start registration
- ② Follow the table below and press “Register”

The screenshot shows the Exastro Management Console interface. On the left, there is a sidebar with various menu items. The 'Role list' item is highlighted with a red box and has a red number '2' above it, indicating the current step. The main content area shows a table for registering new roles. The table has columns for 'Role ID' (Auto-input), 'Role name*' (empty input field), 'Access setting' (button labeled 'Setting'), and two 'Auto-input' fields for 'Role description' and 'Role notes'. A note at the bottom states '※ * is a required item.' Below the table are 'Back' and 'Register' buttons, with the 'Register' button also highlighted with a red box. To the right of the table, there is a list of other management tasks like 'Download all and edit file uploads', 'User information', 'Menu information', and 'Trace history', each with an 'Open' button. At the top right, there is a user info bar for 'System Administrator'.

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Movement list

Check access permission

3.5 Role • Menu link

Link role and Menu information

Link Menu to role and grant access permissions.

Menu: **Management console> Role • Menu link list**

- ① Register > Start registration
- ② Follow the table below and press “Register”

The screenshot shows the Exastro Management Console interface. On the left, a sidebar lists various management options. The 'Role • Menu link list' option is highlighted with a red box and a red number '2' indicating it's the next step. In the center, a modal dialog is open for 'Register'. It contains fields for 'Item No.' (Auto-input), 'Role (ID: Name)*' (Auto-input), 'Menu group: Menu*' (AnsibleLegacy: Movement list), 'Ass Last update date/time' (Auto-input), and 'Last updated by' (Auto-input). Below the dialog, a message says '※ * is a required item.' and has 'Back' and 'Register' buttons. At the bottom of the screen, there are links for 'Download all and edit file uploads' and 'Trace history'. To the right, a table lists three roles and their menu links:

Role	Menu group: Menu	Link
Role A	AnsibleLegacy: Movement list	Can Maintain
Role B	AnsibleLegacy: Movement list	Can Maintain
Role C	AnsibleLegacy: Movement list	Can Maintain

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Movement list

Check access permission

3.6 Role · User link(1/4)

Link Role and User information

Link roles to the users.

Menu: **Management console> Role · User link list**

- ① Register > Start registration
- ② Follow the table below and press “Register”(See next page)

Role name	User ID: Login ID	Default access permission
Role A	administrator	(blank)
Role B	administrator	(blank)
Role C	administrator	(blank)

- Create and register new users
- Create and register Roles
- Link Roles and Menus
- Link Roles and Users**
- Register Movement list
- Check access permission

3.6 Role · User link(2/4)

Link Role and User information

Link roles to the users.

Menu: **Management console> Role · User link list**

- ① Register > Start registration
- ② Follow the table below and press “Register”(See next page)

The screenshot shows the Management Console interface. On the left, there's a sidebar with various menu items. The main area displays a registration form for linking roles to users. A table is present with three rows, each containing a role name, user ID, and default access permission. A red circle with the number 2 is drawn around the 'Role name' column of this table.

Role name	User ID: Login ID	Default access permission
Role A	user1	●
Role B	user1	(blank)
Role C	user1	(blank)

- Create and register new users
- Create and register Roles
- Link Roles and Menus
- Link Roles and Users**
- Register Movement list
- Check access permission

3.6 Role · User link(3/4)

Link Role and User information

Link roles to the users.

Menu: **Management console> Role · User link list**

- ① Register > Start registration
- ② Follow the table below and press “Register”(See next page)

Item No.	Role (ID name)*	User ID: Login ID*	Default access permission	Access permission Setting	Role to allow access	Last update date/time	Last updated by
Auto-input				Setting		Auto-input	Auto-input
	Role B	user2			●		

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Movement list

Check access permission

3.6 Role · User link(4/4)

Link Role and User information

Link roles to the users.

Menu: **Management console> Role · User link list**

- ① Register > Start registration
- ② Follow the table below and press “Register”

The screenshot shows the Exastro Management Console interface. On the left, there is a sidebar with various menu items. The 'Role · User link list' item is highlighted with a red box and has a red number '2' above it, indicating the current step. The main area displays a table titled 'Role · User link list'. The table has columns for Item No., Role (ID name)*, User ID: Login ID*, Default access permission, Access permission setting, Role to allow access, Last update date/time, and Last updated by. There are two rows in the table: one for 'Role B' linked to 'user3' with a dot in the 'Default access permission' column, and another for 'Role C' linked to 'user3' with a dot in the same column. The table is surrounded by a red border.

Item No.	Role (ID name)*	User ID: Login ID*	Default access permission	Access permission setting	Role to allow access	Last update date/time	Last updated by
Auto-input	Role B	user3			●		
	Role C	user3			●		

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Movement list

Check access permission

3.7 Movement list registration

Register new movement as Admin

In this section, we will register a new Movement so we can see how the Default access permissions work.

We can then configure access permissions to the data we register

Menu: **Ansible-Legacy > Movement list**

- ① Register > Start registration
- ② Follow the table below and press “Register”

Movement name	Host specification format	Access permission Role
move1	IP	Role A Role B
move2	IP	Role A
move3	IP	Role B
move4	IP	Role C

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Movement list

Check access permission

Change Access permission role

Select	ID	Name
<input checked="" type="checkbox"/>	1	System Administrator
<input type="checkbox"/>	2	role A
<input type="checkbox"/>	3	role B
<input type="checkbox"/>	4	role C

Only users that are linked to access permission roles can see and edit the data.

3.7 Check access permissions(1/9)

Check User 1's access permissions

Log in as User 1 and check the access permissions

- ① Check that the Login ID is “user1” and the Login user is “Test1” in the upper right corner.
- ② Press roll button to see “Role A”, “Role B”, and “Role C” is displayed

The screenshot shows the Exastro IT Automation interface. At the top, there is a header bar with the Exastro logo, the text "Ansible-Legacy", and a user login status: "User name [test1] Login ID [user1]". Below the header is a navigation bar with "Menu" and "DASHBOARD" tabs. Under "Main menu", there is a "Movement list" item. In the center, there is a "Movement" card. On the left side, there is a "Basic Console" icon and an "Ansible-Legacy" icon. A red circle labeled "1" points to the user login information at the top right. A red circle labeled "2" points to a modal window titled "Role" which lists "Role A", "Role B", and "Role C".

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Movement list

Check access permission

3.7 Check access permission(2/9)

Check User 1's access permissions

Log in as User 1 and check the access permissions

Menu: **Ansible-Legacy > Movement list**

- ① Display filter > Press “Filter”

The screenshot shows the Ansible-Legacy application interface. On the left, there is a sidebar with 'Exastro IT Automation' logo, 'Ansible-Legacy' title, and 'Movement list' selected. The main area has two tabs: 'Description' (selected) and 'Display filter'. The 'Display filter' tab contains a form with various search fields and a red circle labeled '1' over the 'Filter' button. Below it is a 'List/Update' tab showing a table of movements. The table has columns: History, Duplicate, Update, Discard, Movement ID, Movement Name, Orchestrator, Access permission, Remarks, Last update date/time, and Last updated by. There are four rows of data, each with a red circle highlighting the 'Access permission' column. A red arrow points from the 'Access permission' column in the table to a callout box.

History	Duplicate	Update	Discard	Movement ID	Movement Name	Orchestrator	Access permission	Remarks	Last update date/time	Last updated by
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

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Movement list

Check access permission

User 1 is linked to Role A, B and C, meaning that it has permission to see all the 4 registered Movements.

3.7 Check access permission(3/9)

Register new Movement as User 1

In this section, we will register a new Movement so we can check how Default access permissions work.

Menu: **Ansible-Legacy > Movement list**

- ① Register > Start registration
- ② Follow the table below and press “Register”
- ③ Check that Role A is set as access permission role

The screenshot shows the Ansible-Legacy interface for registering a new movement. The 'Movement name' field is filled with 'movement1' and the 'Host specification format' field is set to 'IP'. The 'Host specific format' dropdown is highlighted with a red box and circled with a red number '2'. The 'Register' button at the bottom is also circled with a red number '3'. A red callout bubble labeled 'Point' contains the following text:

user1 has "Role A" set with "With Default access permission", meaning that Role A will automatically be set as Access permission role.

- Create and register new users
- Create and register Roles
- Link Roles and Menus
- Link Roles and Users
- Register Movement list
- Check access permission

3.7 Check access permission(4/9)

Check User 2's access permissions

Log in as User 2 and check the access permissions

- ① Check that the Login ID is “user2” and the Login user is “Test2” in the upper right corner.
- ② Press roll button to see “Role B” is displayed

The screenshot shows the Exastro IT Automation dashboard. At the top right, there is a user info bar with "User name [test2]", "Login ID [user2]", and buttons for "Role", "Change password", and "Logout". A red box highlights this area, and a red circle with the number "1" points to the "Role" button. Below the user info, there is a "Movement" section with three circular progress indicators labeled "Movement", "Status", and "Result". To the right of these is a "Work result" section. In the center, a modal window titled "Role" is open, showing a single entry: "Role B". This modal is also highlighted with a red box, and a red circle with the number "2" points to the "Role B" entry. At the bottom of the dashboard, there is a "Work history" section showing a table of recent activities. The left sidebar includes a "Main menu" with "Movement list", a "Menu group" with "Basic Console" and "Ansible-Legacy", and a "Contact administrator" link at the bottom.

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Movement list

Check access permission

3.7 Check access permission(5/9)

Check User 2's access permissions

Log in as User 2 and check the access permissions

Menu: **Ansible-Legacy > Movement list**

- ① Display filter > Press "Filter"

The screenshot shows the Ansible-Legacy application interface. At the top, there is a navigation bar with the Exastro IT Automation logo, the title 'Ansible-Legacy', and user information ('User name [Test2] Login ID [user2] Change password Logout'). On the left, a sidebar has 'Main menu' and 'Movement list' options. The main area has tabs 'Description' and 'Display filter'. A red circle labeled '1' points to the 'Filter' button in the 'Display filter' tab. Below this is a table titled 'List/Update' with columns: History, Duplicate, Update, Discard, Movement ID, Movement Name, Orchestrator, Access permission, Remarks, Last update date/time, and Last updated by. Two rows of data are shown: one for 'move1' (Role A) and one for 'move3' (Role B). A red arrow points from the 'move3' row to a callout box at the bottom right. The callout box contains the text: 'User 2 has Role B set to it, meaning that only 2 Movements will be displayed.'

History	Duplicate	Update	Discard	Movement ID	Movement Name	Orchestrator	Access permission	Remarks	Last update date/time	Last updated by
History	Duplicate	Update	Discard	5	move1	Ansible Legacy	*****(2),Role A		2021/12/08 15:22:20	System Administrator
History	Duplicate	Update	Discard	7	move3	Ansible Legacy	Role B		2021/12/08 15:23:03	System Administrator

Filter result count: 2

Output Excel

Register

Download all and edit file uploads

Contact administrator

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Movement list

Check access permission

3.7 Check access permission(6/9)

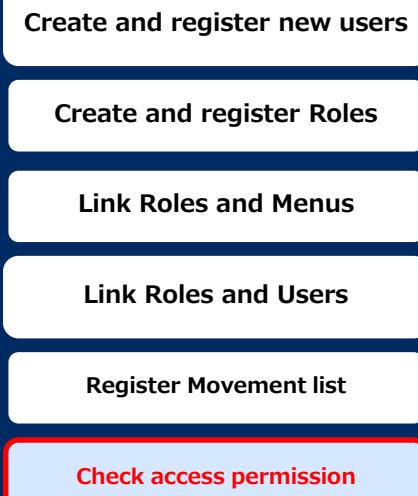
Register new Movement as User2

In this section, we will register a new Movement so we can check how Default access permissions work.

Menu: **Ansible-Legacy > Movement list**

- ① Register > Start registration
- ② Follow the table below and press “Register”
- ③ Check that Role B is set as access permission role

The screenshot shows the Ansible-Legacy Movement list interface. On the left, there's a sidebar with 'Main menu' and 'Movement list'. The main area has a table with columns: Movement ID, Movement Name*, Delay timer, Host specific format*, and Dedication. A red box highlights the 'Movement Name*' column, which contains 'movement2'. A red callout bubble with the number '2' points to the 'Movement Name*' column header. Another red box highlights the 'Host specific format*' column, which contains 'IP'. At the bottom of the table, there are 'Back' and 'Register' buttons. To the right of the table, there's a sidebar with user information: 'User name: [Test2] Login ID: [user2]', 'password', and 'Logout'. Below the sidebar are several 'Open' and 'Close' buttons. A red circle labeled 'Point' is overlaid on the bottom right of the table area. A callout bubble from this point contains the text: "user2 has 'RoleB' set with 'With Default access permission', meaning that Role B will automatically be set as Access permission role."



3.7 Check access permission(7/9)

Check User 3's access permissions

Log in as User 3 and check the access permissions

- ① Check that the Login ID is “user3” and the Login user is “Test3” in the upper right corner.
- ② Press roll button to see “Role B” and “Role C” is displayed

The screenshot shows the Exastro IT Automation dashboard. At the top, the header reads "Exastro IT Automation Ansible-Legacy". The top right corner displays "User name [test3]", "Login ID [user3]", and three buttons: "Role", "Change password", and "Logout". A red box highlights this area, and a red circle with the number "1" points to the "Logout" button. Below the header, the main menu includes "Main menu" and "Movement list". The dashboard features a "Movement" section with three circular gauges labeled "Current", "Status", and "Result". To the right of the gauges is a "Work history" table with several rows. A modal window titled "Role" is open in the foreground, listing "Role B" and "Role C". A red box highlights this modal, and a red circle with the number "2" points to the "Role B" entry. The bottom left corner has a "Contact administrator" link.

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Movement list

Check access permission

3.7 Check access permission(8/9)

Check User 3's access permissions

Log in as User 3 and check the access permissions

Menu: **Ansible-Legacy > Movement list**

- ① Display filter > Press "Filter"

The screenshot shows the Ansible-Legacy Movement list interface. At the top, there is a display filter dialog with various search fields and a 'Filter' button (which has a red circle with the number 2 over it). Below the filter dialog is a list table with columns: History, Duplicate, Update, Discard, Movement ID, Movement Name, Orchestrator, Access permission, Remarks, Last update date/time, and Last updated by. The 'Access permission' column is highlighted with a red box. The table contains four rows of movement data, each with a history section and a set of buttons (History, Duplicate, Update, Discard) and a row ID. A red arrow points from the highlighted table row to a callout box at the bottom right.

History	Duplicate	Update	Discard	Movement ID	Movement Name	Orchestrator	Access permission	Remarks	Last update date/time	Last updated by
History	Duplicate	Update	Discard	5 move1	Ansible Legacy	Role B	*****(2),Role B		2021/12/08 15:22:20	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	10 movement2	Ansible Legacy	Role B			2021/12/08 15:37:25	Test2

User 3 has Role B and Role C set to it, meaning that 3 Movements will be displayed. The Movement registered using User 2 will also be displayed.

Create and register new users

Create and register Roles

Link Roles and Menus

Link Roles and Users

Register Movement list

Check access permission

3.7 Check access permission(9/9)

Register new Movement as role 3

In this section, we will register a new Movement so we can check how Default access permissions work.

Menu: **Ansible-Legacy > Movement list**

- ① Register > Start registration
- ② Follow the table below and press “Register”
- ③ Check that Role B and Role C is set as access permission role

Movement name

movement3

Host specification format

IP

Point

- Create and register new users
- Create and register Roles
- Link Roles and Menus
- Link Roles and Users
- Register Movement list
- Check access permission



Exastro