



ITA_User Instruction Manual

Role-based access control for
data records

—Version 1.6 —

Disclaimer

All the contents of this document are protected by copyright owned by NEC Corporation.
Unauthorized reproduction or copying of all or part of the contents of this document is prohibited.
The contents of this document are subject to change without prior notice in the future.
NEC Corporation is not responsible for any technical or editorial errors or omissions in this document.
NEC Corporation do not guarantee accuracy, usability, certainty of the content in this document.

Trademark

- Linux is registered trademark or trademark of Linus Torvalds, registered in the U.S. and other countries.
- Red Hat is registered trademark or trademark of Red Hat, Inc. registered in the U.S. and other countries.
- Apache, Apache Tomcat, and Tomcat are registered trademarks or trademarks of the Apache Software Foundation.
- Ansible is registered trademark or trademark of Red Hat, Inc.

The names of other systems, company name and products mentioned in this document are registered trademarks or trademarks of their respective companies.

The ® mark and TM mark are not specified in this document.

※「Exastro IT Automation」 is written as 「ITA」 in this document.

Table of contents

Introduction	3
1 Overview of role-based access control for data records (RBAC).....	4
2 Main functions of role-based access control (RBAC)	5
3 Role link for each user.....	6
3.1 Design roles to control access and register for role list.....	8
3.2 Role and menu registration in role/menu link list.	10
3.3 User (accounts) with user list registration	11
3.4 Registration of link between user and role in the Role/User list.....	12
4 Role link for data	13
4.1 New data.....	17
4.2 Updating Data	21
4.2.1 Handling discarded roles.....	21
4.2.2 Handling roles not longer linked to users/roles	23
4.2.3 When specific data is shared by multiple roles	25
4.3 Data restoration	27
4.4 Data restore	27
4.5 Upload from Excel.....	27
4.6 Uploading from RestAPI	31
4.6.1 EDIT (X-Command)	31
5 Display control by linked roles	32
5.1 Display list.....	33
5.1.1 Login results for each user.....	34
5.2 Trace history	43
5.3 Display filter	48
5.4 RestAPI display filter.....	54

Introduction

This document explains the functions and operation methods of the role-based access control for data records (RBAC).

1 Overview of role-based access control for data records (RBAC).

Access for each data record can be controlled by assigning a role that allows access for each user and data record.

If the features above are not going to be used, please leave the default access permission roles blank.

In this document, "Role-based access control for data records (RBAC)" is hereinafter written as "Role-based access control (RBAC)".

2 Main functions of role-based access control (RBAC)

The main functions of role-based access control (RBAC) fall in the following categories.

- Web
Web content. A screen where you can use the menu creation function provided by the browser.
- BackYard
Resident process that runs on the server independently of the web contents.

3 Role link for each user

To perform role-based access control (RBAC), set up roles that allow access permission for each user. For example, we will explain the following procedure (chapter 3.1 ~ 3.4) based on the registration example in "Table 3-1".

Table 3-1 Chapters and registration example

Chapter/ Section	「Management Console」menu group	Register example												
3.1	「Role list」Menu	<table border="1"><thead><tr><th>Role</th></tr></thead><tbody><tr><td>Role_A</td></tr><tr><td>Role_B</td></tr></tbody></table>	Role	Role_A	Role_B									
Role														
Role_A														
Role_B														
3.2	「Role/Menu link list」Menu	<table border="1"><thead><tr><th>Role</th><th>Menu</th><th>Link</th></tr></thead><tbody><tr><td>Role_A</td><td>Menu_A</td><td>Maintenance</td></tr><tr><td>Role_B</td><td>Menu_A</td><td>Maintenance</td></tr><tr><td>Role_B</td><td>Menu_B</td><td>Maintenance</td></tr></tbody></table>	Role	Menu	Link	Role_A	Menu_A	Maintenance	Role_B	Menu_A	Maintenance	Role_B	Menu_B	Maintenance
Role	Menu	Link												
Role_A	Menu_A	Maintenance												
Role_B	Menu_A	Maintenance												
Role_B	Menu_B	Maintenance												
3.3	「User list」Menu	<table border="1"><thead><tr><th>User</th></tr></thead><tbody><tr><td>User_A</td></tr><tr><td>User_B</td></tr></tbody></table>	User	User_A	User_B									
User														
User_A														
User_B														
3.4	「Role/User link list」Menu	<table border="1"><thead><tr><th>Role</th><th>User</th><th>Default access permission</th></tr></thead><tbody><tr><td>Role_A</td><td>User_A</td><td>●</td></tr><tr><td>Role_B</td><td>User_B</td><td>●</td></tr></tbody></table>	Role	User	Default access permission	Role_A	User_A	●	Role_B	User_B	●			
Role	User	Default access permission												
Role_A	User_A	●												
Role_B	User_B	●												
- ※	「Menu list」Menu	<table border="1"><thead><tr><th>Menu</th></tr></thead><tbody><tr><td>Menu_A</td></tr><tr><td>Menu_B</td></tr></tbody></table>	Menu	Menu_A	Menu_B									
Menu														
Menu_A														
Menu_B														

※For details about create menu, please refer to "ITA_User_Instruction_Manual_Menu_creation_function".

The above "Table 3-1" is mapping in the following relationship.

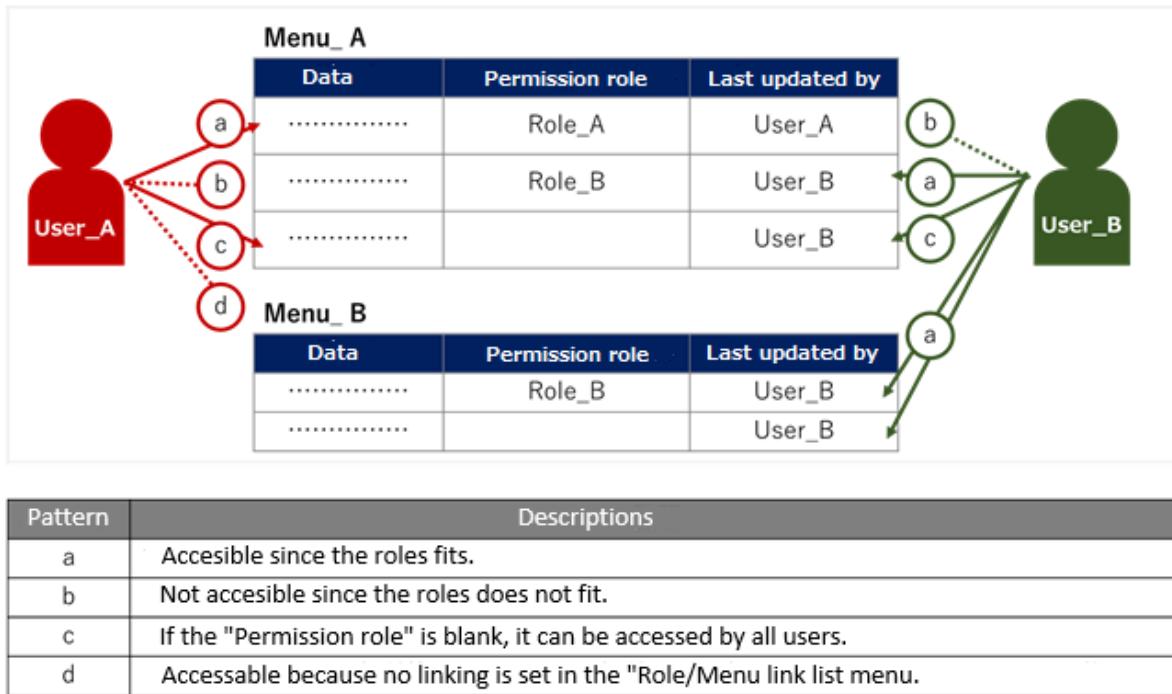


Figure 3- 1 Overall view

In the case of "Pattern: d" above, the following dialog will be displayed.

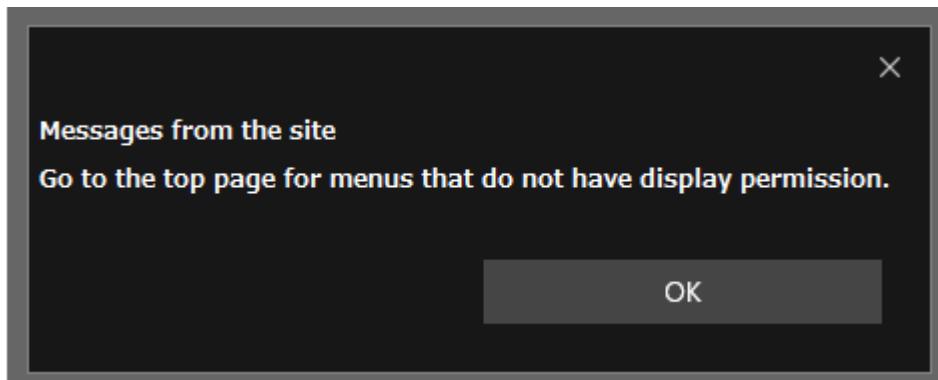


Figure 3-2 Dialog displayed when display permission is not available

For example, if "User_A" tries to access "Menu_B" which is not linked, the user will be redirected to the top page because he does not have permission to access the menu.

3.1 Design roles to control access and register for role list

Design a role that is going to control access and register it from the "Management Console" menu group> "Role list" menu.

Update	Discard	Role ID	Role name	User information	Menu information	Access permission	Remarks	Last update date/time	Last updated by
Update	Discard	1:System Administrator	System Administrator	User information	Menu information	Role to allow access	System Administrator	2015/04/01 10:00:00	System Administrator
Update	Discard	2,100,000,001	Default Role	User information	Menu information	Setting	SSO Default Role	2015/04/01 10:00:00	System Administrator

Figure 3.1-1 "Management Console" Menu Group> "Role list" Menu

- ❖ A role has two functions.

① Menu access permissions

Access permission to each menu is registered from the "Management Console" Menu group > "Role/Menu link list" Menu.

Item No.	Role (ID: Name)*	Menu group: Menu*	Last update date/time	Last updated by
Auto-input	1:System Administrator	2100011612:Reference:6:With operation	Auto-input	Auto-input

Figure 3.1-1 "Management Console" Menu Group> "Role/Menu link list" Menu

② Roles for data records

Roles assigned to each user's data are registered from the "Management Console" Menu Group> "Role/User link list" Menu.

Item No.	Role (ID: Name)*	User ID: Login ID*	Default access permission	Access permission	Last update date/time	Last updated by
Auto-input	1:System Administrator	1:administrator	Setting	Role to allow access	Auto-input	Auto-input

Figure 3.1-2 "Management Console" Menu Group> "Role/User link list" Menu

The following roles are registered when ITA is installed by default. Please do not change/update them.

Update	Discard	Role ID	Role name	User information	Menu information	Access permission		Remarks
						Role to allow access		
Update	Discard	1	System Administrator	User information	Menu information			System Administrator
Update	Discard	2,100,000,001	SSO Default Role	User information	Menu information			SSO Default Role

Figure 3.1-3 "Management Console" Menu Group> "Role list" Menu

In addition, this document describes "(2) roles given for each data record" of the two roles. (In Figure 3-1, "Pattern: a, b, and c" is applicable.)

For "(1) Access permission to menus", please refer to

"ITA_User_Instruction_Manual_Management Console." (In Figure 3-1, "Pattern: d" is applicable.)

3.2 Role and menu registration in role/menu link list.

Register a link between each role and menu in the "Management Console" menu group > "Role/Menu link list".

Newly registered roles will be required to have it linked to each menu in the "Role/Menu link list" menu.

Update	Discard	Item No. \downarrow	ID \downarrow	Name \downarrow	Role	ID \downarrow	Name \downarrow	Menu group	ID \downarrow	Name \downarrow	Last update date/time \downarrow	Last updated by \downarrow
Update	Discard	1 1	1 1	System Administrator	100011610	Input	1	Timezone list	2021/02/22 08:56:04	Create Menu procedure		
Update	Discard	2 1	2 1	System Administrator	100011611	Substitution value	2	Timezone list	2021/02/22 08:56:04	Create Menu procedure		
Update	Discard	3 1	3 1	System Administrator	100011612	Reference	3	Timezone list	2021/02/22 08:56:04	Create Menu procedure		
Update	Discard	4 1	4 1	System Administrator	100011610	Input	4	With operation	2021/02/22 09:55:36	Create Menu procedure		
Update	Discard	5 1	5 1	System Administrator	100011611	Substitution value	5	With operation	2021/02/22 09:55:36	Create Menu procedure		
Update	Discard	6 1	6 1	System Administrator	100011612	Reference	6	With operation	2021/02/22 09:55:36	Create Menu procedure		
Update	Discard	7 1	7 1	System Administrator	100011610	Input	7	Operation	2021/02/22 10:16:41	Create Menu procedure		
Update	Discard	8 1	8 1	System Administrator	100011611	Substitution value	8	Operation	2021/02/22 10:16:41	Create Menu procedure		

Figure 3.2-1 "Management Console" Menu Group> "Role/Menu link list" Menu

The "System Administrator (role)" is linked to all menus by default when installing ITA. Please do not change/update it.

Update	Discard	Item No. \downarrow	ID \downarrow	Name \downarrow	Role	ID \downarrow	Name \downarrow	Menu group	ID \downarrow	Name \downarrow	Last update date/time \downarrow	Last updated by \downarrow
Update	Discard	1 1	1 1	System Administrator	2100011610	Input	1	Timezone list	2021/02/22 08:56:04	Create Menu procedure		
Update	Discard	2 1	2 1	System Administrator	2100011611	Substitution value	2	Timezone list	2021/02/22 08:56:04	Create Menu procedure		
Update	Discard	3 1	3 1	System Administrator	2100011612	Reference	3	Timezone list	2021/02/22 08:56:04	Create Menu procedure		
Update	Discard	4 1	4 1	System Administrator	2100011610	Input	4	With operation	2021/02/22 09:55:36	Create Menu procedure		
Update	Discard	5 1	5 1	System Administrator	2100011611	Substitution value	5	With operation	2021/02/22 09:55:36	Create Menu procedure		
Update	Discard	6 1	6 1	System Administrator	2100011612	Reference	6	With operation	2021/02/22 09:55:36	Create Menu procedure		

Figure 3.2-2 "Management Console" Menu Group> "Role/Menu link list" Menu

Assume that "Menu_A" and "Menu_B" are created.

For details about create manu, please refer to "ITA_User_Instruction_Manual_Menu_creation_function".

Discard	No	Host name/Host group name	ID	Last update date/time	Last updated by
Exclude discarded records \downarrow	<input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="text"/> ~ <input type="text"/>	<input type="text"/> ~ <input type="text"/>	<input type="text"/> ~ <input type="text"/>

Figure 3.2-3 "Input" Menu Group> "Menu_A" Menu

3.3 User (Accounts) with user list registration

Register an user (Account) from the "Management Console" menu group > "User list" menu.

Update	Discard	User ID	Login ID	Login Password	User name	Mail address	Role information
Update	Discard	1	User_A	*****	User_A		Role information
Update	Discard	2	User_B	*****	User_B		Role information

Figure 3.3-1 "Management Console" Menu Group> "User list" Menu

The following users (accounts) are registered by default when installing ITA. Please do not change/update them.

Update	Discard	User ID	Login ID	Login Password	User name	Mail address	Role information	Last update date/time	Last updated by
Update	Discard	1	administrator	*****	System Administrator	sample@xxx.bbb.ccc	Role information	2020/08/11 11:13:45	Data portability procedure

Figure 3.3-2 "Management Console" Menu Group> "User list" Menu

3.4 Registration of link between user and role in the Role/User list

Register the user-role link "Management Console" menu group > "Role/User link list" menu. When registering new data, if you specify it as the default role to be granted to the data, the setting is performed in the "Default access permission" column.

By setting "●" in the "Default access permission" column, it will be a role (Permission role) set as the default when registering new data.

Role/User link list			List/Update				
			List/Update				
			List/Update				
Update	Discard	Item No. ▾	ID ▾	Role	User	Default access role	
Update	Discard	1 1	1 1	Role_A	User ID ▾	Login ID ▾	●
Update	Discard	2 2	2 2	Role_B			●

Figure 3.4-1 "Management Console" Menu Group> "Role/User link list" Menu

If RBAC is not going to be implemented, please leave the "Default access permission" field blank.

The following user/role link will be registered by default when installing ITA. Please do not change/update them.

Update	Discard	Item No. ▾	ID ▾	Role	User	Default permission	
Update	Discard	1 1	1 1	System Administrator	User ID ▾	Login ID ▾	
Update	Discard						●

Figure 3.4-2 "Management Console" Menu Group> "Role/User link list" Menu

4 Role link for data

In the following explanation, assumes that "Table 4-1" will be set below.

Table 4-1 Menu and registration example

No.	Menu	Registration example																				
1	「Management Console」Menu group> 「Role list」menu	System Administrator, A System manage, A Kanto Department, A Kansai Department, B System manager, B Kanto Department, B Kansai Department																				
2	「Management Console」Menu group> 「User list」menu	<table border="1"> <thead> <tr> <th>Login ID</th> <th>User name</th> </tr> </thead> <tbody> <tr> <td>administrator</td> <td>System administrator</td> </tr> <tr> <td>A_admin</td> <td>A Department_admin</td> </tr> <tr> <td>A_user01</td> <td>A Department_user01</td> </tr> <tr> <td>A_user02</td> <td>A Department_user02</td> </tr> <tr> <td>A_user03</td> <td>A Department_user03</td> </tr> <tr> <td>B_admin</td> <td>B Department_admin</td> </tr> <tr> <td>B_user01</td> <td>B Department_user01</td> </tr> <tr> <td>B_user02</td> <td>B Department_user02</td> </tr> <tr> <td>B_user03</td> <td>B Department_user03</td> </tr> </tbody> </table>	Login ID	User name	administrator	System administrator	A_admin	A Department_admin	A_user01	A Department_user01	A_user02	A Department_user02	A_user03	A Department_user03	B_admin	B Department_admin	B_user01	B Department_user01	B_user02	B Department_user02	B_user03	B Department_user03
Login ID	User name																					
administrator	System administrator																					
A_admin	A Department_admin																					
A_user01	A Department_user01																					
A_user02	A Department_user02																					
A_user03	A Department_user03																					
B_admin	B Department_admin																					
B_user01	B Department_user01																					
B_user02	B Department_user02																					
B_user03	B Department_user03																					
3	「Management Console」Menu group> 「Role/User link list」menu	<table border="1"> <thead> <tr> <th>ロール</th> <th>User name</th> </tr> </thead> <tbody> <tr> <td>System Administrator</td> <td>System Administrator</td> </tr> <tr> <td>A System manager</td> <td>System Administrator, A Department_admin(●)</td> </tr> <tr> <td>A Kanto Department</td> <td>System Administrator, A Department_admin, A Department_user01(●), A Department_user03</td> </tr> <tr> <td>A Kansai Department</td> <td>System Administrator, A Department_admin, A Department_user02(●), A Department_user03</td> </tr> <tr> <td>B System manager</td> <td>System Administrator, B Department_admin(●)</td> </tr> <tr> <td>B Kanto Department</td> <td>System Administrator, B_admin, B Department_user01(●), B Department_user03(●)</td> </tr> <tr> <td>B Kansai Department</td> <td>System Administrator, B_admin, B Department_user02(●), B Department_user03(●)</td> </tr> </tbody> </table> <p>●...Default access permission</p>	ロール	User name	System Administrator	System Administrator	A System manager	System Administrator, A Department_admin(●)	A Kanto Department	System Administrator, A Department_admin, A Department_user01(●), A Department_user03	A Kansai Department	System Administrator, A Department_admin, A Department_user02(●), A Department_user03	B System manager	System Administrator, B Department_admin(●)	B Kanto Department	System Administrator, B_admin, B Department_user01(●), B Department_user03(●)	B Kansai Department	System Administrator, B_admin, B Department_user02(●), B Department_user03(●)				
ロール	User name																					
System Administrator	System Administrator																					
A System manager	System Administrator, A Department_admin(●)																					
A Kanto Department	System Administrator, A Department_admin, A Department_user01(●), A Department_user03																					
A Kansai Department	System Administrator, A Department_admin, A Department_user02(●), A Department_user03																					
B System manager	System Administrator, B Department_admin(●)																					
B Kanto Department	System Administrator, B_admin, B Department_user01(●), B Department_user03(●)																					
B Kansai Department	System Administrator, B_admin, B Department_user02(●), B Department_user03(●)																					
4	「Management Console」Menu group> 「Menu list」menu	「Basic Console」Menu group >「Input operation list」menu																				
	「Management Console」Menu group>																					

	「Role/Menu link list」menu	Role	Menu
		System Administrator, A	「Basic Console」Menu group >
		System manager, A	「Input operation list」menu
		Kanto Department, A	
		Kansai Department, B	
		System manager, B	
		Kanto Department, B	
		Kansai Department	

No.1) "Role list" menu reflecting the registration example in "Table 4-1"

Role ID	Role name	User information	Menu information	Default permission
1	System Administrator	User information	Menu information	
2	Test Role	User information	Menu information	
3	Role test	User information	Menu information	
2,100,000,001	SSO Default Role	User information	Menu information	

Figure 4-1 "Management Console" menu group > "Role list menu"

No.2) "User list" menu reflecting the registration example in "Table 4-1"

User ID	Login ID	Login Password	User name	Mail address	Role information
1	administrator	*****	System Administrator	sample@xxx.bbb.ccc	Role information
2	user_01	*****	user 01		Role information
3	testuser	*****	test		Role information

Figure 4-2 "Management Console" Menu group > "User list" Menu

No.3) "Role/User link list" menu reflecting the registration example in "Table 4-1"

The screenshot shows a left sidebar with a tree structure:

- User list
- Role/Menu link list
- Role/User link list** (highlighted with a red box)
- Single-sign-on Basic Preference
- Single-sign-on Attribute Preference

The main area is titled "List/Update". It contains a table with the following columns:

Update	Discard	Item No. \downarrow	Role		User		Default permission \downarrow
			ID \downarrow	Name \downarrow	User ID \downarrow	Login ID \downarrow	
Update	Discard	1	1 System Administrator	1 administrator	System Administrator	●	
Update	Discard	2	2 A_admin	2 A_admin	●	●	
Update	Discard	3	3 A_user01	3 A_user01	●	●	

Filter result count: 3

Figure 4-3 "Management Console" Menu group > "Role/User link list" Menu

Table 4-2 List of Settings for "Role/User link list"

Role name (Login ID)	System administrator	A System manager	A Kanto Department	A Kansai Department	B System manager	B Kanto Department	B Kansai Department
System Administrator (administrator)	○	○	○	○	○	○	○
A Department_admin (A_admin)		●	○	○			
A Department_user01 (A_user01)			●				
A Department_user02 (A_user02)				●			
A Department_user03 (A_user03)			○	○			
B Department_admin (B_admin)					●	○	○
B Department_user01 (B_user01)						●	
B Department_user02 (B_user02)							●
B Department_user03 (B_user03)						●	●

●: With link in Role/User link list. Set "●" with default access permission

○: With link in Role/User link list. Set the "Default access permission" to be blank.

No.4) "Role/Menu link list" menu reflecting the registration example in "Table 4-1"

New roles needs to be linked to a menu. This can be done in "Role/Menu link list" menu.

The following assumes that each role is getting linked to "Basic Console" menu group > "Input Operation List" menu.

Role		Menu group		Menu		Associate
ID	Name	ID	Name	ID	Name	
2,100,000,261	System Administrator	2100000002	Management Console	2100000204	Menu group list	Can perform maint.
2,100,000,261	System Administrator	2100000002	Management Console	2100000205	Role list	Can perform maint.
2,100,000,261	System Administrator	2100000002	Management Console	2100000207	Role list	Can perform maint.
2,100,000,261	System Administrator	2100000002	Management Console	2100000208	User list	Can perform maint.
2,100,000,261	System Administrator	2100000002	Management Console	2100000209	Role/Menu link list	Can perform maint.
2,100,000,261	System Administrator	2100000002	Management Console	2100000210	Role/User link list	Can perform maint.
2,100,000,231	System Administrator	2100000004	Export/Import	2100000211	Export menu	View only
2,100,000,231	System Administrator	2100000004	Export/Import	2100000212	Import menu	View only
2,100,000,231	System Administrator	2100000004	Export/Import	2100000213	Export/Import menu list	View only

Figure 4-4 "Management Console" Menu group > "Role/Menu link list" Menu

Example) If user "B_admin" is logged in

By linking, user "B_admin" can access the "Input operation list" menu > "Basic Console" menu group.

Discard	No.	Operation ID	Operation name	Scheduled date	Last update date/time	Last updated by
Exclude discarded records ▾	<input type="text"/> ~ <input type="text"/>	<input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/> ~ <input type="text"/>	<input type="text"/>

Figure 4-5 "Management Console" Menu group > "Input operation" Menu

4.1 New data

It is possible to set "access permissions" for data when registering it.

The following figure 4.1-1,"Basic Console" menu group > "Input operation list" shows the data registration sub menu (operation).

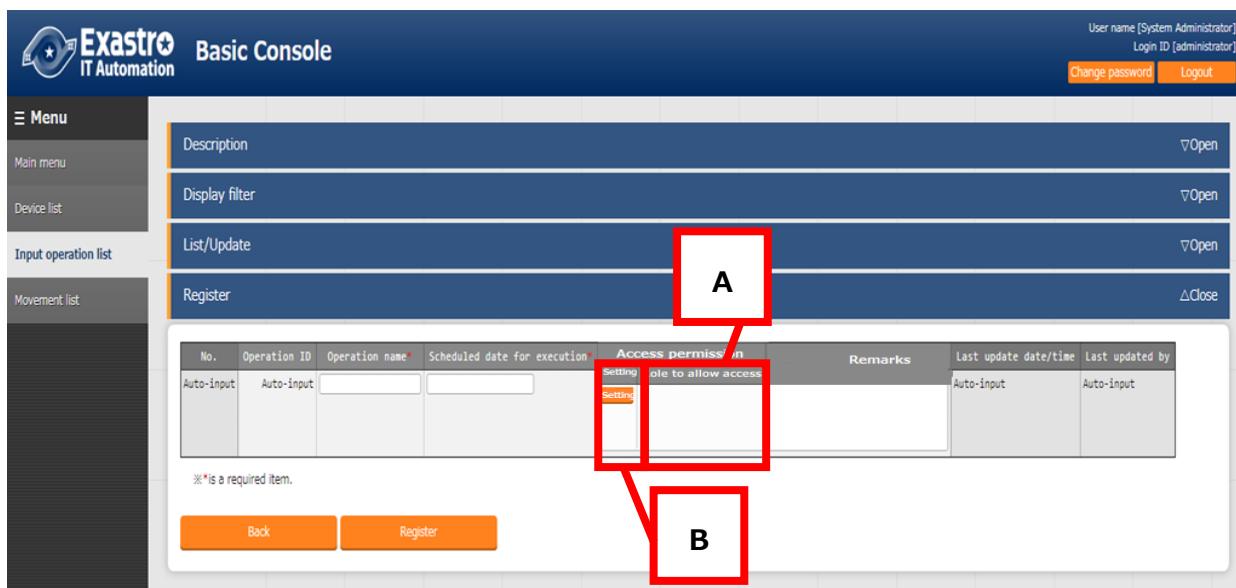


Figure 4-5 "Basic Console" Menu group > "Input operation list" Menu

A. "Role to allow access" column

The role that grants access to data records will be displayed.

The default permission access role will be displayed in the "Permission role" column.

If no default permission access role is set, it will be blank.

Only the user linked with the permission role can view/change the data.

If the permission role is blank, all users can view/change the data.

If Role-based access control (RBAC) is not getting implemented, do not set any permission roles.

※1 Default Permission roles

Roles with "●" selected in the "Default permissions" column of the "Role/User link list" menu will have their role name displayed in the "permission role" column when registering by default.

Update	Discard	Item No. ▾	Role	User	Default permission
ID ▾	Name ▾	User ID ▾	Login ID ▾		
Update	Discard	1 1	System Administrator	1 administrator	●
Update	Discard	2 2	A_user01	2 A_user01	●
Update	Discard	3 3	A_user02	3 A_user02	●

Figure 4.1-2 "Management Console" Menu group > "Role/User link list" Menu

Example) If user "A_user03" is logged in.

User "A_user03" is not set to "Default permissions", so by default, nothing will be displayed in the "Permission role" column when registering.

No.	Operation ID	Operation name*	Scheduled date for execution	Access permission	Remarks	Last update date/time	Last updated by
Auto-Input	Auto-Input			Setting... Role to allow access		Auto-Input	Auto-Input

Figure 4.1-3 "Basic Console" Menu group > "Input operation list" Menu

Example) If "B_user03" is logged in.

Since User "B_user03" is set to "Default permissions", the role set to it will be displayed in the "permission role" column by default when registering.

The screenshot shows the Exastro Basic Console interface. At the top right, the user information 'User name [B_User03]' and 'Login ID [B_User03]' is displayed, both enclosed in a red box. Below this, there are 'Change password' and 'Logout' buttons. On the left, a vertical menu bar lists 'Main menu', 'Device list', 'Input operation list' (which is currently selected and highlighted in orange), and 'Movement list'. The main content area has a header 'Description' with a '▼Open' button. Below it are three more options: 'Display filter', 'List/Update', and 'Register'. The 'List/Update' section contains a table with the following columns: No., Operation ID, Operation name, Scheduled date for execution, Access permission, Remarks, Last update date/time, and Last updated by. A single row is shown for 'Auto-Input' with the value 'B_User03' in the 'Access permission' column, which is also enclosed in a red box. The 'Remarks' column is empty, and the other columns show 'Auto-input'.

No.	Operation ID	Operation name	Scheduled date for execution	Access permission	Remarks	Last update date/time	Last updated by
Auto-Input	Auto-Input			Role to allow access B_User03		Auto-input	Auto-input

Figure 4.1-4 "Basic Console" Menu group > "Input operation list" Menu

B. 「Settings」column

If you want to change the permission role, click the "Setting" button.

A dialog box where users can change permission role will be displayed.

The dialog box displays a list of roles linked to the user from the user in the "Role/User link list" menu.

Select permission role then press the "Decision" button

The selected role will be mirrored "Permission role" column.

If the "Decision" button is clicked without any role selected, the "Permission role" field will be left blank

If the "Permission role" is blank, the data can be viewed/changed by all users.

clicking the "register" button will register all the contents displayed in the "permission role" column.

Example) If user "A_user03" is logged in.

The roles "A_user03_" and "A_user03" linked to the user "A_user03" will be displayed in a dialog box

The screenshot shows the Exastro Management Console interface. On the left, there is a sidebar with a menu. Under the 'Role/Menu link list' section, the 'Role/User link list' item is selected. The main area has three tabs: 'Description', 'Display filter', and 'List/Update'. The 'List/Update' tab is active, showing a table with columns: Update, Discard, Item No. (ID), Role (Name), User (User ID, Login ID), and Default permission. There are three rows in the table:

Update	Discard	Item No. (ID)	Role (Name)	User (User ID, Login ID)	Default permission
Update	Discard	1 1	System Administrator	1 administrator	●
Update	Discard	2 2	A_user03	2 A_user03	
Update	Discard	3 3	A_user03	3 A_user03	

Below the table, a message says 'Filter result count: 3'. At the bottom, there is an 'Output Excel' button. A red arrow points from a 'Role select' dialog at the bottom to the 'List/Update' section. The 'Role select' dialog has a 'Select' button and a table with columns: Select, ID, Name. It contains two rows:

Select	ID	Name
<input type="checkbox"/>	2	A_user03
<input type="checkbox"/>	3	A_user03

Figure 4.1-5 Changing permission role dialog

4.2 Updating Data

Roles that grants permission to data records will be displayed in the "Permission role" column. Change the permission role as needed.

No.	Operation ID	Operation name*	Scheduled date for execution*	Access permission
1	1	Operation1	2020/08/27 16:15	<small>Setting</small> Role to allow access A_user01,A_user02

Figure 4.2-1 "Basic Console" Menu group > "Input operation" Menu

4.2.1 Handling discarded roles

If a role is abolished in "Basic Console" Menu group > "Role list" Menu, it will be display in "Permission role" column as "ID conversion failure".

Example) If Role "A_user01" is abolished,

No.	Operation ID	Operation name	Scheduled date for execution	Access permission
3	3	ope_sample3	2021/01/01 14:00	<small>Setting</small> Role to allow access A_user01,ID conversion failed

Figure 4.2-2 "Basic Console" Menu group > "Input operation" Menu

If the "update" button is clicked when the screen is the same as "Figure 4.2-2", Abolished roles will be deleted from the column. (In this case, (ID Conversion Failure) disappears and only A_user01 will be displayed).

No.	Operation ID	Operation name	Scheduled date for execution	Access permission	Role to allow access
3	3	ope_sample3	2021/01/01 14:00	Setting	A_user01

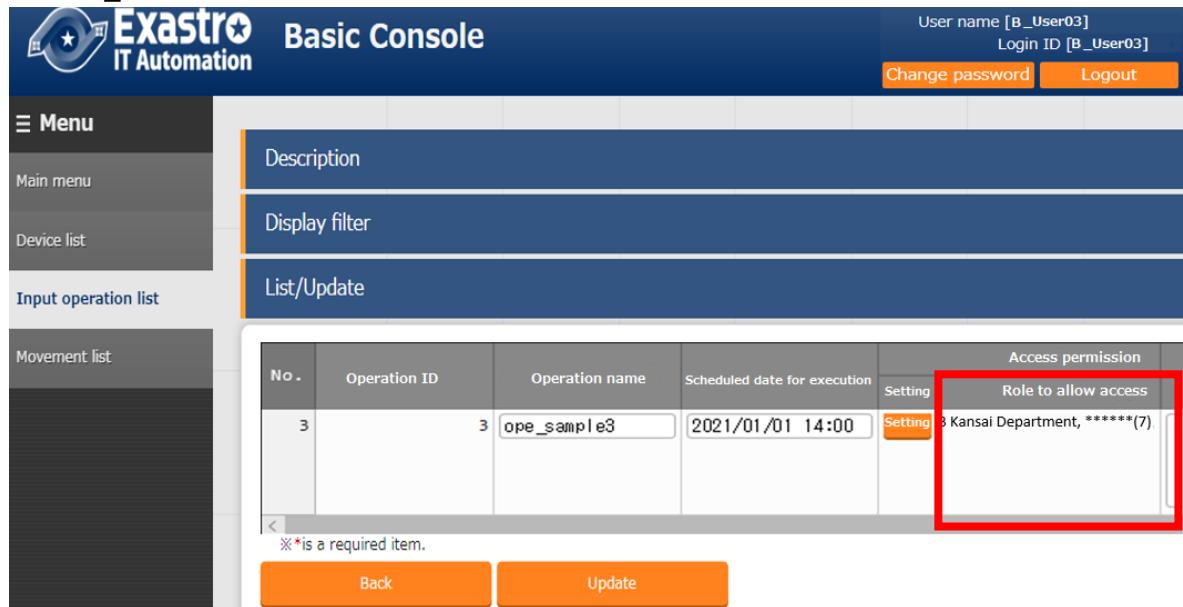
Figure 4.2-3 "Basic Console" Menu group > "Input operation" Menu

Unless the "Update" button in the "List/Update" sub menu is pressed, any abolished roles will remain in the "Permission role" and will be displayed as "ID conversion failure".

4.2.2 Handling roles not longer linked to users/roles

If the role link is abolished in the "Management Console" menu group > "Role/User list" menu, the role that got abolished will be displayed as ***** in the "Permission Role" column.

example) Abolishing the link between "B_user03" and "B Kansai Department" and logging in as User "B_user03".



The screenshot shows the "Basic Console" interface with the title "Basic Console" and the user information "User name [B_User03] Login ID [B_User03]". The left sidebar has sections like "Main menu", "Device list", "Input operation list", and "Movement list". The main area has tabs for "Description", "Display filter", and "List/Update". In the "List/Update" tab, there is a table with columns: No., Operation ID, Operation name, Scheduled date for execution, Setting, and Access permission. The "Access permission" column for the third row contains the text "Role to allow access" followed by "B Kansai Department, *****(7)". A red box highlights this row. At the bottom, there are "Back" and "Update" buttons.

Figure 4.2-3 "Basic Console" Menu group > "Input operation" Menu

The "Permission role" column will not change even if the update button is clicked when the screen is the same as Figure "Figure 4.2-3".

If you want to remove the "*****" display from the "Permission role" column, press the "Setting" button on the "List/Update" sub menu to display the dialog and press the "Decision" button.



The screenshot shows a "Role select" dialog box. It has a header "Role select" and a close button "X". Inside, there is a table with columns "Select", "ID", and "Name". The row for "B_user03" has a checked checkbox in the "Select" column. At the bottom, there are "Decision" and "Cancel" buttons, with the "Decision" button highlighted by a red box.

Figure 4.2-4 "Role select" Screen

The screenshot shows the Exastro Basic Console interface. The top navigation bar includes the Exastro logo, 'Basic Console', user information ('User name [B_user03]', 'Login ID [B_user03]'), and links for 'Change password' and 'Logout'. On the left, a vertical menu bar lists 'Main menu', 'Device list', 'Input operation list', and 'Movement list'. The main content area displays a table titled 'List/Update' under the 'Input operation list' heading. The table has columns: No., Operation ID, Operation name, Scheduled date for execution, Setting (button), and Access permission (Role to allow access). The third row shows '3', 'ope_sample3', '2021/01/01 14:00', 'Setting' (button), and 'B Kansai Department'. A red box highlights the 'Role to allow access' field for the third row. A note at the bottom left of the table area states '※* is a required item.'

No.	Operation ID	Operation name	Scheduled date for execution	Setting	Access permission Role to allow access
3	ope_sample3	2021/01/01 14:00	Setting	B Kansai Department	

Figure 4.2-5 "Basic Console" Menu group > "Input operation" Menu

Unless you press the "Decision" button on the dialog, abolished role will remain in the "Permission role" column with the display "*****".

4.2.3 When specific data is shared by multiple roles

If data has multiple permission roles registered for it, roles without a link from the "Role/User link list" menu will be displayed as "*****" in the "Permission role" column.

Example) Logging in as User_B and registering data in the "Permission role" column in the default state.

No.	Operation ID	Operation name	Scheduled date for execution	Setting	Access permission
3	3	ope_sample3	2021/01/01 14:00	<input type="button" value="Setting"/>	B_Kansai Department, B_kanto Department

Figure 4.2-6 "Basic Console" Menu group > "Input operation" Menu

Log in as user "B_user01". User "B_user01" is not linked to the role "B_user02". Roles that are not linked will be displayed as "*****" in the Permission role display.

No.	Operation ID	Operation name	Scheduled date for execution	Setting	Access permission
3	3	ope_sample3	2021/01/01 14:00	<input type="button" value="Setting"/>	B_user01, ***** (7)

Figure 4.2-7 "Basic Console" Menu group > "Input operation" Menu

The permission role column will not change even if the update button is clicked when the screen is the same as Figure "Figure 4.2-7".

If you want to remove the "*****" from the "Permission role" column, press the "Setting" button to display the dialog and press the "Decision" button.



Figure 4.2-8 "Role select" Screen

A screenshot of the Exastro IT Automation Basic Console. The top navigation bar shows 'Basic Console' and user information ('User name [B_user01]', 'Login ID [B_user01]', 'Change password', 'Logout'). On the left is a vertical 'Menu' sidebar with options: Main menu, Device list, Input operation list, and Movement list. The main content area has tabs: 'Description', 'Display filter', and 'List/Update' (which is selected). Below these tabs is a table with the following data:

No.	Operation ID	Operation name	Scheduled date for execution	Setting	Access permission
3	3	ope_sample3	2021/01/01 14:00	Setting	B_user01

A note at the bottom left says '※ * is a required item.' At the bottom are 'Back' and 'Update' buttons. A red box highlights the 'Access permission' column for the third row.

Figure 4.2-9 "Basic Console" Menu group > "Input operation" Menu

Unless you press the "Decision" button on the dialog, the abolished role will remain in the "Permission role" column with the display "*****".

4.3 Data restoration

Abolishing the data will not change the permission role.

4.4 Data restore

Restoring the data will not change the permission role.

4.5 Upload from Excel

The following information registered based on "Table 4-1" is used to explain the information.

Update	Discard	Item No.	Role		User		Default permission
			ID	Name	User ID	Login ID	
Update	Discard	1	1	System Administrator	1	administrator	●
Update	Discard	2	2	A_user01	2	A_user01	●
Update	Discard	3	3	A_user02	3	A_user02	●

Filter result count: 3

Figure 4.5-1 "Basic Console" Menu group > "Role/User link list" Menu

If an excel file is downloaded from the button below, the user's default permission role will be displayed in the "Permission role" column in the blank row of the downloaded Excel.

List/Update					Download all and edit file uploads	
Update	Discard	No.	Operation ID	Operation name		
Update	Discard	1		1 Operation1		
Update	Discard	2		2 Test Operation		
Update	Discard	5		5 Operationtest		
Update	Discard	6		6 Basic settings all		
Update	Discard	7		7 opel		
Update	Discard	8		8 operation		

Filter result count: 6

Output Excel

Download all (Excel)

Download for new registration (Excel)

Figure 4.5-2 "Basic Console" Menu group > "Input operation" Menu

Example) If user is logged in as user "A_admin" and downloads an excel file.

Figure 4.5-3 Download from "Excel Output" button > "List/Update" sub menu

If you're uploading from Excel, make sure that the "Permitted Roles" column has a role set that is within the range of roles linked to the "Management Console" menu group > "Role/User link list" menu.

If you want to set multiple roles, separate them with commas.

Example) Example: Setting within the scope of the role linked with the user

Table 4.5-1 List of "Figure 4.5-1"

Login user	Configuration value of permission role
A_admin	A System manager, A Kanto Department, A Kansai Department
A_user01	A Kanto Department
A_user02	A Kansai Department
A_user03	A Kanto Department, A Kansai Department

(1) Register

Example) If logged in as user "A_admin" and downloaded to excel.

Enter the required information as shown in the red frame in the figure below.

A	B	C	D	E	F	G	H	I	J
	Notes	Execution process type	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Access permission
									Role to allow access
3	• : Required	Register	x	x	x	•	•	x	c
4	c : Optional	Update	x	x	x	•	•	x	c
5	x : Cannot edit	Discard	x	x	x	x	x	x	x
6		Restore	x	x	x	x	x	x	x
7	OK : Line break OK/NG : No line break		NG	NG	NG	NG	NG	NG	NG
		Other notes Select processing type.	Discard flag Cannot do operation other than restore. because of auto-	Can not edit	Operation ID (auto numbering)	[Maximum length] 256 bytes	Not used in the system	Date/time when the operation was actually performed.	Role to allow access to record. When multiple role is access, separate the roles with commas(,).
8									
9		Execution process type	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Role to allow access
10		-		1	1	ope_sample1	2021/01/01 16:53		A_admin
11		-		2	2	ope_sample2	2021/01/01 16:54		A_admin
12		-		5	5	ope_sample3	2021/01/01 16:55		A_admin
13		-		6	6	ope_sample4	2021/01/01 16:56		A_admin
14		-		7	7	ope_sample5	2021/01/01 16:57		A_admin
15		-		8	8	ope_sample6	2021/01/01 16:58		
16		Register				ope_sample10	2021/02/01 13:00		A_admin,A_user01,A_user02
17									
18									A_admin
19									A_admin
20									

Figure 4.5-4 Output updated excel

When you upload the updated Excel (Fig. 4.5-4) from the "File upload" button of the "Basic Console" menu group> "Input operation list" menu> "Download all and edit file upload" submenu, the data will be registered and added to the "List/Update" sub menu.

List/Update							
Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Access permission
							Role to allow access
Update	Discard	1	1	Operation1	2020/08/27 16:15	2021/02/01 13:12	A Company_Kanto Department, A Company_Kansai Department
Update	Discard	2	2	Test Operation	2020/10/08 10:00	2020/10/23 16:21	A Company_Kanto Department
Update	Discard	5	5	Operationtest	2020/10/23 09:28	2020/10/21 09:44	A Company_Kansai Department
Update	Discard	6	6	Basic settings all	2020/10/24 09:54		
Update	Discard	7	7	ope1	2020/11/10 14:00		B Company_Kanto Department
Update	Discard	8	8	operation	2021/01/29 16:53	2021/01/26 16:59	B Company_Kanto Department, B Company_Kansai Department

Filter result count: 6

Figure 4.5-5 Results of uploading the updated Excel

(2) Update

Set the role within the permission role set in the update record, but If you want to share data with multiple users and want to keep the role not associated with the login user, please set the role name as ***** (Role ID).

Example) If you want to leave a role that is not linked to a login user

Table 4.5-2 Configuring permission roles for update records

Login user	Configuring value of permission role
A_admin	A System manager, A Kanto Department, A Kansai Department
A_user01	******(2), A Kanto Department, ******(4)
A_user02	******(2), ******(3), A Kansai Department
A_user03	******(2), A Kanto Department, A Kansai Department

No.	Operation ID	Operation name	Scheduled date for execution	Access permission
3	ope_sample3	3	2021/01/01 14:00	Setting ******(2), A Kanto Department, ******(4)

Figure 4.5-6 List/Update sub menu when login "A_user01"

(3) Abolition/Revival

Aboliting/reviving will not change the permission role.

If the permission role is blank, all users can view/change the data (When uploading from Excel, the permission role is automatically specified ※Figure 4.5-3).

If role based access control (RBAC) is not input, do not set the permission role.

4.6 Uploading from RestAPI

Uploads from RestAPI (Registration, update, abolition, revival) are similar to "4.5 Upload from Excel".

However, Unlike uploading from Excel, "Permission role" is not specified by default.

Table 4.6-1 Differences in default values by upload source

Upload source	Default value	Result when registered with default values
Excel	The default permission role for the logged in user is specified. (Figure 4.5-3).	Only users with the specified role can see the data.
RestAPI	Unspecified	Data can be reference to all users

When uploading from RestAPI, "Unspecified permission role" is the default.

If the "Permission Role" column is blank, all users can view/change the data, so please be careful if there is data that you do not want to view/change from other than a specific role.

If you want to narrow down the number of users who view/change data, please upload the permission role after specifying it.

If Role-based access control (RBAC) is not getting implemented, do not set any permission roles.

4.6.1 EDIT (X-Command)

For details on how to operate from RestAPI, please refer to "ITA_User_Instruction_Manual_RestAPI".

※"FILTER (X-Command)" will be described in ["5.4 RestAPI display filter"](#).

If you want to register or update data from RestAPI, set the access permission role to be within the range of roles linked with the user in the "Management Console" menu group > "Role/User link list" menu.

If you want to set multiple roles, separate them with commas.

If permission role field is blank, all users can view/change the data.

If Role-based access control (RBAC) is not getting implemented, do not set any permission roles.

5 Display control by linked roles

In this and subsequent chapters, it is assumed that the following data has been registered in the "Basic Console" Menu group > "Input operation list" Menu".

The screenshot shows the Exastro IT Automation Basic Console interface. The top navigation bar includes the Exastro logo, 'Basic Console', and user information ('User name [System Administrator]', 'Login ID [administrator]', 'Change password', 'Logout'). On the left, a sidebar menu lists 'Main menu', 'Device list', 'Input operation list' (which is selected and highlighted in grey), and 'Movement list'. The main content area features a data grid titled 'List/Update' with the following columns: No., Operation ID, Operation name, Scheduled date for execution, Last execution date, Remarks, Last update date/time, and last updated by. The grid contains 8 rows of data, each with 'Update' and 'Discard' buttons in the first two columns. The data includes various operation names like 'Operation1', 'Test Operation', 'Operationtest', etc., with dates ranging from 2020/08/27 to 2021/01/29.

Figure 5-1 "Basic Console" Menu group > "Input operation" Menu"

Table 5- Data list displayed per user

User name (Login ID)	ope_sample1	ope_sample2	ope_sample3	ope_sample4	ope_sample5	ope_sample6	ope_sample7	ope_sample8	ope_sample9
System Administrator (administrator)	◆	◆	◆	◆	◆	◆	◆	◆	◆
A Department_admin (A_admin)	◆	◆	◆	◆		◆			
A Department_user01 (A_user01)	◆	◆				◆			
A Department_user02 (A_user02)	◆		◆			◆			
A Department_user03 (A_user03)	◆	◆	◆			◆			
B Department_admin (B_admin)						◆	◆	◆	◆
B Department_user01 (B_user01)						◆		◆	
B Department_user02 (B_user02)						◆			◆
B Department_user03 (B_user03)						◆		◆	◆

◆ : Data to be displayed by each user

5.1 Display list

The data displayed in the "List/Update" submenu will be the data that has been assigned to the access permission role by the role linked with the user in the "Management Console" menu group > "Role/User Association Management" menu.

The screenshot shows a user interface for managing role-user links. On the left, there's a sidebar with 'User list', 'Role/Menu link list', and 'Role/User link list'. The 'Role/User link list' item is highlighted with a red box. The main area is titled 'List/Update' and contains a table with three rows of data. Each row represents a link between a role and a user. The columns are: Update, Discard, Item No. (with a dropdown arrow), Role (with sub-columns ID and Name), User (with sub-columns User ID and Login ID), and Default permission. The first row (highlighted with a red box) shows 'System Administrator' linked to 'administrator' with 'System Administrator' as the default permission. The second row shows 'A_admin' linked to 'A_admin' with a checked permission. The third row shows 'A_user01' linked to 'A_user01' with a checked permission. At the bottom of the table, it says 'Filter result count: 3'.

Update	Discard	Item No.	Role		User		Default permission
			ID	Name	User ID	Login ID	
Update	Discard	1	1	System Administrator	1	administrator	System Administrator
Update	Discard	2	2	A_admin	2	A_admin	•
Update	Discard	3	3	A_user01	3	A_user01	•

Figure 5.1-1 "Role/User link list" menu reflecting "Table 4-1"

5.1.1 Login results for each user

- **User name: System Administrator** (Login ID:administrator)

If the user is logged in as "Administrator", the following data will be display in the "Basic Console" menu group > "Input operation list" menu.

Operation name/ User name(Login ID)	ope_sample1	ope_sample2	ope_sample3	ope_sample4	ope_sample5	ope_sample6	ope_sample7	ope_sample8	ope_sample9
System Administrator	◆	◆	◆	◆	◆	◆	◆	◆	◆

Table 5.1-1 “Table 5-1”Extract

The screenshot shows the Exastro IT Automation Basic Console. At the top right, there is a login status bar with 'User name [System Administrator]', 'Login ID [administrator]', 'Change password', and 'Logout'. On the left, there is a vertical navigation menu with options like 'Main menu', 'Device list', 'Input operation list', and 'Movement list'. The main content area has tabs for 'Description', 'Display filter', and 'List/Update'. The 'List/Update' tab is active and displays a table of operations. The columns are: Update, Discard, No., Operation ID, Operation name, Scheduled date for execution, and Last execution date. The 'Operation name' column is highlighted with a red box. The table contains 8 rows of sample operations. At the bottom of the table, it says 'Filter result count: 6'.

Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date
Update	Discard	1		1 ope_sample1	2020/08/27 16:15	2021/02/01 13:12
Update	Discard	2		2 ope_sample2	2020/10/08 10:00	2020/10/23 16:21
Update	Discard	5		5 ope_sample3	2020/10/23 09:28	2020/10/21 09:44
Update	Discard	6		6 ope_sample4	2020/10/24 09:54	
Update	Discard	7		7 ope_sample5	2020/11/10 14:00	
Update	Discard	8		8 ope_sample6	2021/01/29 16:53	2021/01/26 16:59
<						

Figure 5.1-2 List/Update sub menu when logged in as "administrator"

The link between user "administrator" and each role is as follows. (Excerpted from Table 4-1).

Role name/ User name(Login ID)	System Administrator	A System manager	A Kanto Department	A Kansai Department	B System manager	B Kanto Department	B Kansai Department
System Administrator	○	○	○	○	○	○	○

Table 5.1-2 "Table 4-1" Excerpt

- **User name:A Department Administrator** (User ID:A_admin)

If the user is logged in as "A_admin", the following data will be displayed in the "Basic Console" menu group > "Input operation list" menu.

Operation name/ User name(Login ID)	ope_sample1	ope_sample2	ope_sample3	ope_sample4	ope_sample5	ope_sample6	ope_sample7	ope_sample8	ope_sample9
A_admin	◆	◆	◆	◆		◆			

Table 5.1-3 "Table 5-1" Excerpt

The screenshot shows the Exastro IT Automation Basic Console interface. At the top right, there is a user login header: "User name [A_admin] Login ID [A_admin]" with "Change password" and "Logout" buttons. On the left, a vertical menu bar has "Input operation list" selected. The main content area has tabs for "Description", "Display filter", and "List/Update". The "List/Update" tab is active, displaying a table of operations. The columns are: Update, Discard, No., Operation ID, Operation name (which is highlighted with a red box), Scheduled date for execution, and Last execution date. The table contains 8 rows of sample data. At the bottom of the table, it says "Filter result count: 6".

Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date
Update	Discard	1		ope_sample1	2020/08/27 16:15	2021/02/01 13:12
Update	Discard	2		ope_sample2	2020/10/08 10:00	2020/10/23 16:21
Update	Discard	5		ope_sample3	2020/10/23 09:28	2020/10/21 09:44
Update	Discard	6		ope_sample4	2020/10/24 09:54	
Update	Discard	7		ope_sample5	2020/11/10 14:00	
Update	Discard	8		ope_sample6	2021/01/29 16:53	2021/01/26 16:59

Figure 5.1-3 List/Update sub menu when logged in as "administrator"

The link between user "A_admin" and each role is as follows. (Excerpted from Table 4-1).

Role name/ User name(Login ID)	System Administrator	A System Manager	A Kanto Department	A Kansai Department	B System Manager	B Kanto Department	B Kansai Department
A_admin		●	○	○			

Table 5.1-4 "Table 5-1" Excerpt

- User name: A Department_user01 (User ID:A_user01)

If the user is logged in as "A_user01", the following data will be displayed in the "Basic Console" menu group > "Input operation list" menu.

Operation name/ User name(Login ID)	ope_sample1	ope_sample2	ope_sample3	ope_sample4	ope_sample5	ope_sample6	ope_sample7	ope_sample8	ope_sample9
A_user01	◆	◆				◆			

Table 5.1-5 "Table 5-1" Excerpt

Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date
Update	Discard	1		ope_sample1	2020/08/27 16:15	2021/02/01 13:12
Update	Discard	2		ope_sample2	2020/10/08 10:00	2020/10/23 16:21
Update	Discard	5		ope_sample3	2020/10/23 09:28	2020/10/21 09:44
Update	Discard	6		ope_sample4	2020/10/24 09:54	

Figure 5.1-4 List/Update sub menu when logged in as "A_user01"

The link between user "A_user01" and each role is as follows. (Excerpted from Table 4-1).

Role name/ User name(Login ID)	System Administrator	A System Manager	A Kanto Department	A Kansai Department	B System Manager	B Kanto Department	B Kansai Department
A_user02			●				

Table 5.1-6 "Table 4-1" Excerpt

- User name:A Department_user02 (User ID:A_user02)

If the user is logged in as "A_user02", the following data will be displayed in the "Basic Console" menu group > "Input operation list" menu.

Operation name/ User name(Login ID)	ope_sample1	ope_sample2	ope_sample3	ope_sample4	ope_sample5	ope_sample6	ope_sample7	ope_sample8	ope_sample9
A_user02	◆		◆			◆			

Table 5.1-7 "Table 5-1" Excerpt

Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Remarks
Update	Discard	1	1	ope_sample1	2020/08/27 16:15	2021/02/01 13:12	
Update	Discard	2	2	ope_sample2	2020/10/08 10:00	2020/10/23 16:21	
Update	Discard	5	5	ope_sample5	2020/10/23 09:28	2020/10/21 09:44	

Figure 5.1-5 List/Update sub menu when logged in as “A_user02”

The link between user "A_user02" and each role is as follows. (Excerpted from Table 4-1)

Role name/ User name(Login ID)	System Administrator	A System Manager	A Kanto Department	A Kansai Department	B System Manager	B Kanto Department	B Kansai Department
A_user02				●			

Table 5.1-8 "Table 4-1" Excerpt

- User name:A Department_user03 (User ID:A_user03)

If the user is logged in as "A_user03", the following data will be displayed in the "Basic Console" menu group > "Input operation list" menu.

Operation name/ User name(Login ID)	ope_sample1	ope_sample2	ope_sample3	ope_sample4	ope_sample5	ope_sample6	ope_sample7	ope_sample8	ope_sample9
A_user03	◆	◆	◆			◆			

Table 5.1-9 "Table 5-1" Excerpt

Operation name	Scheduled date for execution	Last execution date
ope_sample1	2020/08/27 16:15	2021/02/01 13:12
ope_sample2	2020/10/08 10:00	2020/10/23 16:21
ope_sample5	2020/10/23 09:28	2020/10/21 09:44
ope_sample6	2020/10/24 09:54	

Figure 5.1-6 List/Update sub menu when logged in as "A_user03"

The link between user "A_user03" and each role is as follows. (Excerpted from Table 4-1)

Role name/ User name(Login ID)	System Administrator	A System Manager	A Kanto Department	A Kansai Department	B System Manager	B Kanto Department	B Kansai Department
A_user03			○	○			

Table 5.1-10 "Table 4-1" Excerpt

- User name: B Department_Administrator (User ID:B_admin)

If the user is logged in as "B_admin", the following data will be displayed in the "Basic Console" menu group > "Input operation list" menu.

Operation name/ User name(Login ID)	ope_sample1	ope_sample2	ope_sample3	ope_sample4	ope_sample5	ope_sample6	ope_sample7	ope_sample8	ope_sample9
B_admin						◆	◆	◆	◆

Table 5.1-11 "Table 5-1" Excerpt

Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Remarks
Update	Discard	6		ope_sample6	2020/08/27 16:15	2021/02/01 13:12	
Update	Discard	7		ope_sample7	2020/10/08 10:00	2020/10/23 16:21	
Update	Discard	8		ope_sample8	2020/10/23 09:28	2020/10/21 09:44	
Update	Discard	9		ope_sample9	2020/10/24 09:54		

Figure 5.1-7 List/Update sub menu when logged in as "B_admin"

The link between user "B_admin" and each role is as follows. (Excerpted from Table 4-1)

Role name/ User name(Login ID)	System Administrator	A System Manager	A Kanto Department	A Kansai Department	B System Manager	B Kanto Department	B Kansai Department
B_admin					●	○	○

Table 5.1-12 "Table 4-1" Excerpt

- **User name:B Department_user01** (User ID:B_user01)

If the user is logged in as "B_user01", the following data will be displayed in the "Basic Console" menu group > "Input operation list" menu.

Operation name/ User name(Login ID)	ope_sample1	ope_sample2	ope_sample3	ope_sample4	ope_sample5	ope_sample6	ope_sample7	ope_sample8	ope_sample9
B_user01						◆		◆	

Table 5.1-13 "Table 5-1" Excerpt

Update	Discard	No. ◆	Operation ID	Operation name ◆	Scheduled date for execution	Last execution date
Update	Discard	6		ope_sample6	2020/08/27 16:15	2021/02/01 13:12
Update	Discard	8		ope_sample8	2020/10/08 10:00	2020/10/23 16:21

Figure 5.1-8 List/Update sub menu when logged in as “B_user01”

The link between user "B_user01" and each role is as follows. (Excerpted from Table 4-1).

Role name/ User name(Login ID)	System Administrator	A System Manager	A Kanto Department	A Kansai Department	B System Manager	B Kanto Department	B Kansai Department
B_user01						●	

Table 5.1-14 "Table 4-1" Excerpt

- User name:B Department_user02 (User ID:B_user02)

If the user is logged in as "B_user02", the following data will be displayed in the "Basic Console" menu group > "Input operation list" menu.

Operation name/ User name(Login ID)	ope_sample1	ope_sample2	ope_sample3	ope_sample4	ope_sample5	ope_sample6	ope_sample7	ope_sample8	ope_sample9
B_user02						◆			◆

Table 5.1-15 "Table 5-1" Excerpt

Update	Discard	No. ▲	Operation ID ▲	Operation name ▲	Scheduled date for execution ▲	Last execution date ▲
Update	Discard	6	6	ope_sample6	2020/08/27 16:15	2021/02/01 13:12
Update	Discard	9	9	ope_sample9	2020/10/08 10:00	2020/10/23 16:21

Figure 5.1-9 List/Update sub menu when logged in as "B_user02"

The link between user "B_user02" and each role is as follows. (Excerpted from Table 4-1)

Role name/ User name(Login ID)	System Administrator	A System Manager	A Kanto Department	A Kansai Department	B System Manager	B Kanto Department	B Kansai Department
B_user02							●

Table 5.1-16 "Table 4-1" Excerpt

- User name:B Department_user03 (User ID:B_user03)

If the user is logged in as "B_user03", the following data will be displayed in the "Basic Console" menu group > "Input operation list" menu.

Operation name/ User name(Login ID)	ope_sample1	ope_sample2	ope_sample3	ope_sample4	ope_sample5	ope_sample6	ope_sample7	ope_sample8	ope_sample9
B_user03						◆		◆	◆

Table 5.1-17 "Table 5-1" Excerpt

Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date
Update	Discard	6	6	ope_sample6	2020/08/27 16:15	2021/02/01 13:12
Update	Discard	8	8	ope_sample8	2020/10/08 10:00	2020/10/23 16:21
Update	Discard	9	9	ope_sample9	2020/10/23 09:28	2020/10/21 09:44

Figure 5.1-10 List/Update sub menu when logged in as “B_user03”

The link between user "B_user03" and each role is as follows. (Excerpted from Table 4-1)

Role name/ User name(Login ID)	System Administrator	A System Manager	A Kanto Department	A Kansai Department	B System Manager	B Kanto Department	B Kansai Department
B_user03						●	●

Table 5.1-18 "Table 4-1" Excerpt

5.2 Trace history

Only the data will be displayed in the "List/Update" sub menu can also be displayed in the "Trace History" sub menu. Also, the history will be assigned the access permission role.

Example) If user is logged in as "B_user2".

The data will be displayed in the "List/Update" sub menu (Operation ID: 6, 9) can be displayed in the "Trace History" sub menu.

The screenshot shows the Exastro Basic Console interface. On the left, there is a vertical menu bar with options: Main menu, Device list, Input operation list (which is currently selected), and Movement list. The main content area has three tabs: Description, Display filter, and List/Update. The List/Update tab is active, showing a table with two rows of data:

Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date
Update	Discard	1	1	ope_sample1	2020/08/27 16:15	2021/02/01 13:12
Update	Discard	2	2	ope_sample2	2020/10/08 10:00	2020/10/23 16:21

An orange arrow points down from the List/Update table to a second window titled 'Trace history'. This window also has a 'No.' input field, 'Display' and 'Reset' buttons, and a table with two rows of data:

History log No.	Change date/time	Discard	No.	ID	Operation name	Scheduled date for execution	Last execution date	Last update date/time	Last updated by
70	2021/03/11 10:58:39		1	1	ope_sample1	2020/08/27 16:15		2021/03/11 10:58:39	System Administrator
60	2020/10/23 16:21:05		2	2	ope_sample2	2020/10/08 10:00		2020/10/23 16:21:05	Legacy execution procedure

Figure 5.2-1 "Basic Console" Menu group > "Input operation list" Menu".

Keep in mind that data which users do not have permission to access cannot be displayed.

The screenshot shows the same basic console interface as Figure 5.2-1. The 'Input operation list' menu is selected. In the main content area, the 'Trace history' section is highlighted with a red box. The 'No.' input field and 'Display' button are visible. Below the table, a message says 'Corresponding record does not exist.'

Figure 5.2-2 "Basic Console" Menu group > "Input operation list" Menu".

The data to which the role linked with the user's "Role/User link list" menu is target will be displayed in the "Trace history" sub menu.

Example) If user is logged in as "B_user02".

Roles linked in the "Role/User link list" menu of user "B_user02".

Role		User	Default permission	
ID	Name	User ID	Login ID	
1	B_user02	1	B_user02	●

Figure 5.2-3 "Basic Console" Menu group > "Role/User link list" Menu".

Data assigned to the role linked in the user's "Role/User link list" Menu".

History log No.	Change date/time	Discard No.	Operation ID	Operation name	Scheduled date for execution	Last update date/time	Last updated by
70	2021/03/11 10:58:39	1	1	Operation1	2020/08/27 16:15	2021/03/11 10:58:39	System Administrator

Figure 5.2-4 "Basic Console" Menu group > "Role/User link list" Menu".

If a new permission role is granted for the data displayed in the "Trace history" sub menu, data linked with previous roles with different permission roles will not be displayed.

Example) if Data from Company A is passed to Company B.

This section uses the data of user "A_admin" and "B_admin" to explain the permission roles when data is passed from "Company A" to "Company B".

The following figure shows the "Input Operation list" menu when logged in as "Administrator".

No.	Operation ID	Operation name	Scheduled date for execution	Remarks	Last update date/time	Last updated by
1			2021/02/01 13:12	Top secret	2021/03/11 10:58:39	System Administrator
2			2020/10/23 16:21	Top secret	2020/10/23 16:21:05	Legacy execution procedure
5			2020/10/21 09:44	Top secret	2020/10/21 09:44:44	Legacy execution procedure
6				External secret	2020/10/22 09:54:53	Data portability procedure
7				External secret	2020/11/10 14:00:49	Data portability procedure
8			2021/01/26 16:59	External secret	2021/01/26 16:59:36	Legacy execution procedure

Figure 5.2-5 "Basic Console" Menu group > "Input operation list" Menu"

We've divided the data into two colors. Data marked with red can be seen by Company A's side (User: A_admin) and data marked with blue can be seen by Company B's side (User: B_admin). (Please refer to figure "A_admin" and "B_admin" for the respective displays when logging in as User "Figure 5.1-4" and "Figure 5.1-8".) respectively.

Additionaly, "Top Secret 1-3" and "External secret 1-3" are registered in the "Remarks" Column as information that you do not want to be seen by other roles.

Assuming that the data will be passed from "A Company" to "B Company", Delete "Top Secret 1-3" on the A Company side and change the "Access Permission role" column of "Operation ID: 1, 2, 3, 4" to "B_administrator".

No.	Operation ID	Operation name	Scheduled date for execution	Access permission
3	ope_sample3		2021/01/01 14:00	Setting B_administrator

* * is a required item.

Back Update

Figure 5.2-6 "Basic Console" Menu group > "Input operation list" Menu"

If the user logs out as "Administrator" and log back in as "B_admin", the "list/update" submenu will show a total of eight operation IDs: ID: 1, 2, 3, 4, 6, 7, 8, 9".

No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Remarks
1	1 Operation1	2020/08/27 16:15	2021/02/01 13:12		
2	2 Test Operation	2020/10/08 10:00	2020/10/23 16:21		
5	5 Operationtest	2020/10/23 09:28	2020/10/21 09:44		
6	6 Basic settings all	2020/10/24 09:54			
7	7 opel	2020/11/10 14:00			
8	8 operation	2021/01/29 16:53	2021/01/26 16:59		

Figure 5.2-7 "Basic Console" Menu group > "Input operation list" Menu"

If you check the display in the "Trace History" submenu for "Operation ID: 1,2,3,4" where the access permission role was changed, the data linked to different past roles (Company A Side) will not be displayed.

No.	Change date/time	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Last update date/time	Last updated by
70	2021/03/11 10:58:39		1	1 Operation1	2020/08/27 16:15	2021/02/01 13:12	2021/03/11 10:58:39	System Administrator	

No.	Change date/time	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Last update date/time	Last updated by
60	2020/10/23 16:21:05		2	2 Test Operation	2020/10/08 10:00	2020/10/23 16:21	2020/10/23 16:21:05	Legacy execution procedure	

No.	Change date/time	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Last update date/time	Last updated by
53	2020/10/21 09:27:02	Discard	3	3 OperationTestJoachim	2020/10/19 09:50	2020/10/21 09:23	Th	2020/10/21 09:27:02	Data portability procedure

No.	Change date/time	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Last update date/time	Last updated by
58	2020/10/23 16:16:31	Discard	4	4 Testoperationmilan	2020/10/20 14:09	2020/10/20 15:11	Th	2020/10/23 16:16:31	Data portability procedure

Figure 5.2-8 "Basic Console" Menu group > "Input operation list" Menu"

For "Operation ID: 1, 2, 3, 4, 7, 8, 9" rewrite the remarks column to "Confidential 1~7".

Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Remarks
Update	Discard	1		1 Operation1	2020/08/27 16:15	2021/02/01 13:12	External secret1
Update	Discard	2		2 Test Operation	2020/10/08 10:00	2020/10/23 16:21	External secret2
Update	Discard	5		5 Operationtest	2020/10/23 09:28	2020/10/21 09:44	External secret3
Update	Discard	6		6 Basic settings all	2020/10/24 09:54		
Update	Discard	7		7 opel	2020/11/10 14:00		External secret4
Update	Discard	8		8 operation	2021/01/29 16:53	2021/01/26 16:59	External secret5

Figure 5.2-9 "Basic Console" Menu group > "Input operation list" Menu"

As a result of specifying the data of "Operation ID: 2" in the "Trace History" submenu, the "Top Secret 1" registered when the role was "Company A Side" will not be displayed, and only the "External Secret 2" registered this time will be displayed.

History log No.	Change date/time	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Rem.	Last update date/time	Last updated by
58	2020/10/23 16:16:31	Discard	2	2	ope_sample1	2020/10/20 14:09	2020/10/20 15:11		2020/10/23 16:16:31	B Company admin

Figure 5.2-10 "Basic Console" Menu group > "Input operation list" Menu"

5.3 Display filter

Only the data displayed in the "List/Update" sub menu can be narrowed down by the "Display filter" sub menu.

The screenshot shows the Exastro Basic Console interface. On the left is a vertical navigation menu with options like Main menu, Device list, Input operation list, and Movement list. The main area has two tabs: 'Description' and 'Display filter'. The 'Display filter' tab is active, showing a form with fields for 'Discard' (set to 'Exclude discarded records'), 'No.' (with date range pickers), 'Scheduled date for execution' (with date range pickers), and 'Last execution date' (with date range pickers). Below the form are 'Filter' and 'Clear filter' buttons, with 'Auto-filter' checked. A red box highlights the 'Filter' button. Below this is the 'List/Update' sub-menu, which is also highlighted with a red box. It displays a table of operation records:

Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Access permission Role to allow access
Update	Discard	1		1 Operation1	2020/08/27 16:15	2021/02/01 13:12	A Kansai Department
Update	Discard	2		2 Test Operation	2020/10/08 10:00	2020/10/23 16:21	B Kansai Department
Update	Discard	5		5 Operationtest	2020/10/23 09:28	2020/10/21 09:44	System administrator
Update	Discard	6		6 Basic settings all	2020/10/24 09:54		A Kansai Department

Figure 5.3-1 List/Update sub menu when the "Filter" button is pressed in user "administrator"

This screenshot is similar to Figure 5.3-1, but it is shown from the perspective of a user named 'A_user01'. The top right corner shows the user information: 'User name [A_user01]', 'Login ID [A_user01]', 'Change password', and 'Logout'. A red box highlights this user information. The rest of the interface is identical to Figure 5.3-1, including the 'Display filter' tab, its form, the 'Filter' button (highlighted with a red box), and the 'List/Update' sub-menu with its table of operation records.

Figure 5.3-2 List/Update sub menu when the "Filter" button is pressed in user "A_user01"

In the "Access permission" column of the "Display filter" sub menu, users can search in the following pattern.

The screenshot shows the Exastro Basic Console interface. On the left, there's a sidebar with options like 'Main menu', 'Device list', 'Input operation list', and 'Movement list'. The main area is titled 'Basic Console' and contains a table under 'Display filter'. The table has columns for 'Discard', 'No.', 'e', 'Access permission', 'Last update date/time', and 'Last updated by'. The 'Access permission' column is highlighted with a red box. At the bottom of the table, there are 'Filter' and 'Clear filter' buttons, also highlighted with a red box.

Figure 5.3-3 "Basic Console" Menu group > "Input operation list" Menu"

Table 5.3-1 Search pattern

No.	Pattern
1	Search by single selection in the pull-down menu
2	Search by multiple selection in the pull-down menu
3	Search by "{blank}" single selection in the pull-down menu
4	Search by selecting "{blank}" and others in the pull-down menu
5	Fuzzy search with keywords in string input
6	Search by entering a real role name in the string input
7	Search for multiple role names separated by commas in string input.

Keep in mind that if a comma is used in the string input field as a pattern that cannot be searched for, fuzzy search cannot be performed.

The search patterns no.1 - 7 are explained in detail in the next section.

No.1) Search by single selection in the pull-down menu

Example) Search results obtained by logging in as "Administrator" and selecting the access permission role " System administrator" in the pull-down menu of the "Access permission" column.

Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Access permission Role to allow access
Update	Discard	1		1 Operation1	2020/08/27 16:15	2021/02/01 13:12	System administrator

Figure 5.3-4 “Basic console” Menu group > “Input operation list” Menu

No.2) Search by multiple selection in the pull-down menu

Example) Search results obtained by logging in as "Administrator" and selecting the access permission role " A Kansai Department" and "B Kansai Department" in the pull-down menu of the "Access permission" column.

Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Access permission Role to allow access
Update	Discard	1		1 Operation1	2020/08/27 16:15	2021/02/01 13:12	A Kansai_Department
Update	Discard	2		2 Test Operation	2020/10/08 10:00	2020/10/23 16:21	B Kansai_Department

Figure 5.3-5 “Basic console” Menu group > “Input operation list” Menu

No.3) Search by "Blank" single selection in the pull-down menu

Example) Search results obtained by logging in as "Administrator" and selecting the access permission role "{blank}" in the pull-down menu of the "Access permission" column.

Display filter

Discard	No.	on	Last execution date
Exclude discarded records			
▼ Search from pulldown			

List/Update

Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Access permission Role to allow access
Update	Discard	1	1	Operation1	2020/08/27 16:15	2021/02/01 13:12	A system manager
Update	Discard	2	2	Test Operation	2020/10/08 10:00	2020/10/23 16:21	System administrato

Figure 5.3-6 “Basic console” Menu group > “Input operation list” Menu

No.4) Search by "Blank" and other multiple selection in the pull-down menu

Search results obtained by logging in as "Administrator" and selecting the access permission role "{blank}" and "A Department_Administrator" in the pull-down menu of the "Access permission" column.

Display filter

Discard	No.	on	Last execution date
Exclude discarded records			
▼ Search from pulldown			

List/Update

Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Access permission Role to allow access
Update	Discard	1	1	Operation1	2020/08/27 16:15	2021/02/01 13:12	A system manager
Update	Discard	2	2	Test Operation	2020/10/08 10:00	2020/10/23 16:21	System administrato

Figure 5.3-7 “Basic console” Menu group > “Input operation list” Menu

No.5) Fuzzy search with keywords in string input

Example) Search results when user is logged in as Administrator and entered the keyword "Administrator" as a string line in the "Access permission" field.

The screenshot shows the 'Input operation list' menu interface. On the left is a vertical navigation bar with options: Main menu, Device list, Input operation list (which is selected and highlighted in blue), and Movement list. The main area has two sections: 'Display filter' at the top and 'List/Update' below it. In the 'Display filter' section, there is a table with columns: Discard, No., on, Last execution date, and Access permission. A red box highlights the 'Access permission' column, which contains a dropdown menu with 'Administrator' selected. Below the filter table are 'Filter' and 'Clear filter' buttons, and a checked checkbox for 'Auto-filter'. The 'List/Update' section shows a table of operation records. One record is highlighted with a red box: Operation ID 1, Operation name 'Operation1', Scheduled date for execution 2020/08/27 16:15, Last execution date 2021/02/01 13:12, and Access permission 'A system manager'. Other records in the list include Operation ID 2, Operation name 'Test Operation', and Operation ID 5, Operation name 'Operationtest'.

Figure 5.3-8 “Basic console” Menu group > “Input operation list” Menu

※Fuzzy search is not possible if comma is used.

No.6) Search by entering a real role name in the string input

Example) Search results when user is logged in as Administrator and entered the keyword "A Kanto Department" as a string line in the "Access permission" field.

The screenshot shows the 'Input operation list' menu interface, similar to Figure 5.3-8. The 'Input operation list' option is selected in the navigation bar. The 'Display filter' section shows a table with columns: Discard, No., on, Last execution date, and Access permission. A red box highlights the 'Access permission' column, which contains a dropdown menu with 'A Company_Kanto Department' selected. The 'List/Update' section shows a table of operation records. One record is highlighted with a red box: Operation ID 1, Operation name 'Operation1', Scheduled date for execution 2020/08/27 16:15, Last execution date 2021/02/01 13:12, and Access permission 'A Company_Kanto Department'. Another record in the list has Access permission 'A Company_Kansai Department'.

Figure 5.3-9 “Basic console” Menu group > “Input operation list” Menu

No.7) Search for multiple role names separated by commas in string input

Example) Search results when user is logged in as Administrator and entered the keyword "A Kanto Department, A Kansai Department" as a string line in the "Access permission" field.

The screenshot shows the 'Input operation list' menu interface. On the left is a vertical sidebar with 'Main menu', 'Device list', 'Input operation list' (which is selected and highlighted in blue), and 'Movement list'. The main area has a 'Display filter' header. Below it is a 'Discard' section with a dropdown 'Exclude discarded records' and a search bar. To its right are columns for 'No.', 'on', and 'Last execution date', each with a search bar. The 'Access permission' field is highlighted with a red box and contains the text 'Role to allow access' and 'A Company_Kanto Department, A Company_Kansai Department'. Below the filter is a row of buttons: 'Filter' (highlighted with a red box), 'Clear filter', and 'Auto-filter'. The main table area is titled 'List/Update' and shows a single row of data: 'Update' (button), 'Discard' (button), 'No.' (1), 'Operation ID' (1), 'Operation name' (Operation1), 'Scheduled date for execution' (2020/08/27 16:15), 'Last execution date' (2021/02/01 13:12), and 'Access permission' (Role to allow access A Company_Kanto Department, A Company_Kansai Department).

Figure 5.3-10 “Basic console” Menu group > “Input operation list” Menu

※If multiple entries are entered and separated by commas, the search might not be able to finish depending on the order it was entered.

5.4 RestAPI display filter

This next section explains how to handle permission roles in RestAPI's Filter (X-Command).

There are three types of filters for each column of FILTER (X-Command).

Table 5.4-1 Filter type

Type of files	Details
NORMAL	Normal fuzzy search
RANGE	OR search for roles specified in START and END
LIST	Search by multiple exact match conditions

The filter pattern is further separated into the following conditions.

Table 5.4-2 Number of role names

Number of role names	
A	1piece
B	Multiple

Table 5.4-3 Search pattern

Search pattern	
a	fuzzy search for fuzzy role names
b	fuzzy search for exactly matched role names
c	Search for role names by exact match

Using the combination above, this section explains how to handle the permission roles in each filter.

The configuration of the RESTAPI is shown "Figure 5.4-1" below.

The diagram illustrates the mapping between RESTAPI configuration and access permission roles. A red line connects the 'Discard' button in the RESTAPI table to the 'Access permission' column in the table below. A blue line connects the 'Discard' button to the 'Meaning of non discard' box. A blue box highlights the 'Access permission role' column, with a sub-box containing the search string '["Folder type" : "Search string"]'. An orange box highlights the 'Role to allow access' column, with a sub-box containing the value '["A Company_Kanto Department", "A Company_Kansai Department"]'.

Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Access permission Role to allow access
Update	Discard	1	1	Operation1	2020/08/27 16:15	2021/02/01 13:12	A Company_Kanto Department, A Company_Kansai Department
Update	Discard	2	2	Test Operation	2020/10/08 10:00	2020/10/23 16:21	A Company_Kanto Department
Update	Discard	5	5	Operationtest	2020/10/23 09:28	2020/10/21 09:44	A Company_Kansai Department
Update	Discard	6	6	Basic settings all	2020/10/24 09:54		A System manager

Meaning of non discard

```
{"7" : {"NORMAL" : "A Company"}, "1" : {"NORMAL" : 0}}
```

"Access permission role" Column:{"Folder type" : "Search string"}

Figure 5.4-1 RestAPI configuration

This section assumes that the information in the red frame bellow is added to the registration information "Table 5-1".

The screenshot shows the 'Basic console' menu group with the 'Input operation list' menu selected. The table displays operation records with columns: Update, Discard, No., Operation ID, Operation name, Scheduled date for execution, Last execution date, and Access permission Role to allow access. A red box highlights the last two columns of the eighth row, which corresponds to the highlighted row in Figure 5.4-1.

Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Access permission Role to allow access
Update	Discard	1	1	Operation1	2020/08/27 16:15	2021/02/01 13:12	A Company_Kanto Department, A Company_Kansai Department
Update	Discard	2	2	Test Operation	2020/10/08 10:00	2020/10/23 16:21	A Company_Kanto Department
Update	Discard	5	5	Operationtest	2020/10/23 09:28	2020/10/21 09:44	A Company_Kansai Department
Update	Discard	6	6	Basic settings all	2020/10/24 09:54		
Update	Discard	7	7	ope1	2020/11/10 14:00		B Company_Kanto Department
Update	Discard	8	8	operation	2021/01/29 16:53	2021/01/26 16:59	B Company_Kanto Department, B Company_Kansai Department

Filter result count: 6

Figure 5.4-2 "Basic console" Menu group > "Input operation list" Menu

● NORMAL

A) When there is 1 role name

a) Fuzzy search for Fuzzy role name

```
{"7":{"NORMAL":"A Company"},"1":{"NORMAL":0}}
```

List/Update							
Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Access permission Role to allow access
Update	Discard	1		1 Operation1	2020/08/27 16:15	2021/02/01 13:12	A Company_Kanto Department, A Company_Kansai Department
Update	Discard	2		2 Test Operation	2020/10/08 10:00	2020/10/23 16:21	A Company_Kanto Department
Update	Discard	5		5 Operationtest	2020/10/23 09:28	2020/10/21 09:44	A Company_Kansai Department
Update	Discard	6		6 Basic settings all	2020/10/24 09:54		A System manager

Figure 5.4-3 “Basic console” Menu group > “Input operation list” Menu

b) Fuzzy search for exactly matched role names

```
{"7":{"NORMAL":"A Company_Kanto Department "}, "1":{"NORMAL":0}}
```

List/Update							
Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Access permission Role to allow access
Update	Discard	1		1 Operation1	2020/08/27 16:15	2021/02/01 13:12	A Company_Kanto Department, A Company_Kansai Department
Update	Discard	2		2 Test Operation	2020/10/08 10:00	2020/10/23 16:21	A Company_Kanto Department

Figure 5.4-4 “Basic console” Menu group > “Input operation list” Menu

- B) When there is multiple role names
 - b) Fuzzy search for exactly matched role names
(Applicable)

```
{"7":{"NORMAL":"A Company_Kanto Department,A Company_Kansai Department "}, "1":{"NORMAL":0}}
```

Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Access permission
							Role to allow access
Update	Discard	1	1	Operation1	2020/08/27 16:15	2021/02/01 13:12	A Company_Kanto Department, A Company_Kansai Department

Figure 5.4-5 “Basic console” Menu group > “Input operation list” Menu

- b) Fuzzy search for exactly matched role names
(Not applicable)

```
{"7":{"NORMAL":"A Company, Company_Kansai Department "}, "1":{"NORMAL":0}}
```

Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Access permission
							Role to allow access
Update	Discard	1	1	Operation1	2020/08/27 16:15	2021/02/01 13:12	A Company_Kanto Department, A Company_Kansai Department

Figure 5.4-6 “Basic console” Menu group > “Input operation list” Menu

● RANGE

A) When there is role name

a) Fuzzy search for fuzzy role name

```
{7":{"RANGE":{"START":"A Company","END":"B Company"}}, "1":{"NORMAL":0}}"
```

List/Update							
Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Access permission Role to allow access
Update	Discard	1		1 Operation1	2020/08/27 16:15	2021/02/01 13:12	A Company_Kanto Department, A Company_Kansai Department
Update	Discard	2		2 Test Operation	2020/10/08 10:00	2020/10/23 16:21	System manager
Update	Discard	5		5 Operationtest	2020/10/23 09:28	2020/10/21 09:44	A Company_Kanto Department
Update	Discard	6		6 Basic settings all	2020/10/24 09:54		A Company_Kansai Department
Update	Discard	7		7 ope1	2020/11/10 14:00		B Company_Kanto Department
Update	Discard	8		8 operation	2021/01/29 16:53	2021/01/26 16:59	B Company_Kansai Department

Filter result count: 6

Figure 5.4-7 “Basic console” Menu group > “Input operation list” Menu

b) Fuzzy search for exactly matched role names

```
{7":{"RANGE":{"START":" Company_Kanto Department ","END":"B Company_Kanto Department "}}, "1":{"NORMAL":0}}"
```

List/Update							
Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Access permission Role to allow access
Update	Discard	1		1 Operation1	2020/08/27 16:15	2021/02/01 13:12	A Company_Kanto Department, A Company_Kansai Department
Update	Discard	2		2 Test Operation	2020/10/08 10:00	2020/10/23 16:21	A Company_Kanto Department,
Update	Discard	5		5 Operationtest	2020/10/23 09:28	2020/10/21 09:44	B Company_Kanto Department,

Figure 5.4-8 “Basic console” Menu group > “Input operation list” Menu

B) When there is multiples role names

- b) Fuzzy search for exactly matched role names
(Applicable)

```
{7":{"RANGE":{"START":"A Company_Kanto Department,A Company_Kansai Department,"END":"B Company_Kanto Department,B Company_Kansai Department "}},"1":{"NORMAL":0}}
```

List/Update							
Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Access permission
							Role to allow access
Update	Discard	1	1	Operation1	2020/08/27 16:15	2021/02/01 13:12	A Company_Kanto Department, A Company_Kansai Department
Update	Discard	2	2	Test Operation	2020/10/08 10:00	2020/10/23 16:21	A Company_Kanto Department,
Update	Discard	5	5	Operationtest	2020/10/23 09:28	2020/10/21 09:44	B Company_Kanto Department,

Figure 5.4-9 “Basic console” Menu group > “Input operation list” Menu

- b) Fuzzy search for exactly matched role names
(Not applicable)

```
{7":{"RANGE":{"START":"A Company,A Company_Kansai Department","END":"B Company,B Company_Kansai"}}, "1":{"NORMAL":0}}
```

List/Update							
Record does not exist.							
New registration can be done as per the following.							

Figure 5.4-10 “Basic console” Menu group > “Input operation list” Menu

● LIST

- A) When there is 1 role name
- c) Search exact role names by exact match
(Applicable)

```
{7": {"LIST": ["A Company_Kanto Department"], "1": {"NORMAL": 0}}}"
```

Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Access permission	Role to allow access
Update	Discard	1	1	Operation1	2020/08/27 16:15	2021/02/01 13:12		A Company_Kanto Department

Figure 5.4-11 “Basic console” Menu group > “Input operation list” Menu

- c) Search exact role names by exact match
(Not applicable)

```
{7": {"LIST": ["A Company"], "1": {"NORMAL": 0}}}"
```

Record does not exist.
New registration can be done as per the following.

Figure 5.4-12 “Basic console” Menu group > “Input operation list” Menu

B) When there is multiple role names

c) Search exact role names by exact match

```
{7": {"LIST": ["A_Company_Kanto Department, A_Company_Kansai Department "], "1": {"NORMAL": 0}}}"
```

List/Update							
Update	Discard	No.	Operation ID	Operation name	Scheduled date for execution	Last execution date	Access permission Role to allow access
Update	Discard	1		1 Operation1	2020/08/27 16:15	2021/02/01 13:12	A Company_Kanto Department, A Company_Kansai Department

Figure 5.4-13 “Basic console” Menu group > “Input operation list” Menu