NTT DaTa

intra-mart The Power for Enterprise Web Solution

IM-Workflow
Ver.7.2

Administrator Operation Guide

Fourth Edition: 2011/04/01

Revision History

Revised Date	Revision details
2010/04/28	**First Edition**
2010/07/30	**Second Edition** Sample image of each screen has been replaced with high-resolution version. Fitted and unified overall sentences and layout. Amended description in [1.2.2 Content definition]. ▪ Added explanation on configuration of screen definition path type “JSP or Servlet”, which was newly added to <Screen definition - Create new> screen. Amended description in [1.2.5 Flow definition]. ▪ Added explanation on configuration of newly added “Program executed upon archiving finished matter”, “Program executed upon deleting unfinished matter”, “Program executed upon deleting finished matter”, and “Program executed upon deleting past matter”. ▪ In flow definition search screen, added explanation due to addition of search conditions by flow group. ▪ In the column “Detailed configuration of content definition/route definition for each version”, added explanation due to change in display content of version list screen (showing non-existent version period) . Amended description in [1.2.6.1 Start/end node]. ▪ Added explanation on configuration screen of end node. Amended description in [1.2.10 Listing pattern definition]. ▪ Clarified that at least one listing item must be selected. ▪ Since it became possible to select more than one listing item, description that it can be selected one by one was deleted. Amended description in [1.2.11 Flow group definition]. ▪ Regarding items which canbe selected in parenet hierarchy, clarified the entire hierarchies will not displayed. Added new section [1.2.12 Import/Export]. Amended description in [2.1.4.2 Matter handling]. ▪ Added explanation on node position editing function added to matter handling screen. ▪ Added explanation on the function to display node status in flow diagram. Added new section [2.3 Workflow synchronization listener].
2010/10/29	**Third Edition** Amended description in [1.2.1 Procedure to configure Workflow]. ▪ In the column “Input character limit”, changed notation of the number of inputtable charecters for “Name” and “Remarks”. Amended description in [1.2.2 Content definition]. ▪ Changed “Execution sequence” item of “User program definition” to a required item. Amended description in [1.2.6.6 Configuration of dynamic approval/horizontal placement/vertical placement nodes]. ▪ Added explanation on configuration of “Delete dynamic approval node”. ▪ Added explanation on “Plug-in configuration” tab. Amended description in [1.2.6.9 Confirmation node configuration]. ▪ Added explanation on “Plug-in configuration” tab. Amended description in [1.2.11 Flow group definition]. ▪ Changed “Sort key” item to a required item. Amended description in [1.2.10 Listing pattern definition]. ▪ In the listing item of listing pattern defintion, added explanation on configuration of “width” and “loop back”. Amended description in [0 Reference]. ▪ Changed screen image and column description, due to addition of “Delete” link to the list displayed in “Unfinished matter” tab. Amended description in [2.1.4.2 Matter handling]. ▪ Changed explanation on “Reexpand” link due to amendment of display condition.
2011/04/01	**Fourth Edition** Amended description in [1.2 Workflow configuration/operation]. ▪ Added a column “IM-WorkflowDesigner”. Amended description in [1.2.2 Content definition]. ▪ Added explanation on procedure for specifying page path in case of path type: “JSP or Servlet”. Amended description in [1.2.11 Flow group definition]. ▪ Corrected explanaion on sort key. Amended description in [1.2.12 Import/Export].

- Changed screen image and explanation due to amendment of specifications of inport/export.

Amended description in [2.1.7 Monitoring].

- Changed screen image due to addition of matter ended by matter handling.

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intra-mart WebPlatform/AppFramework

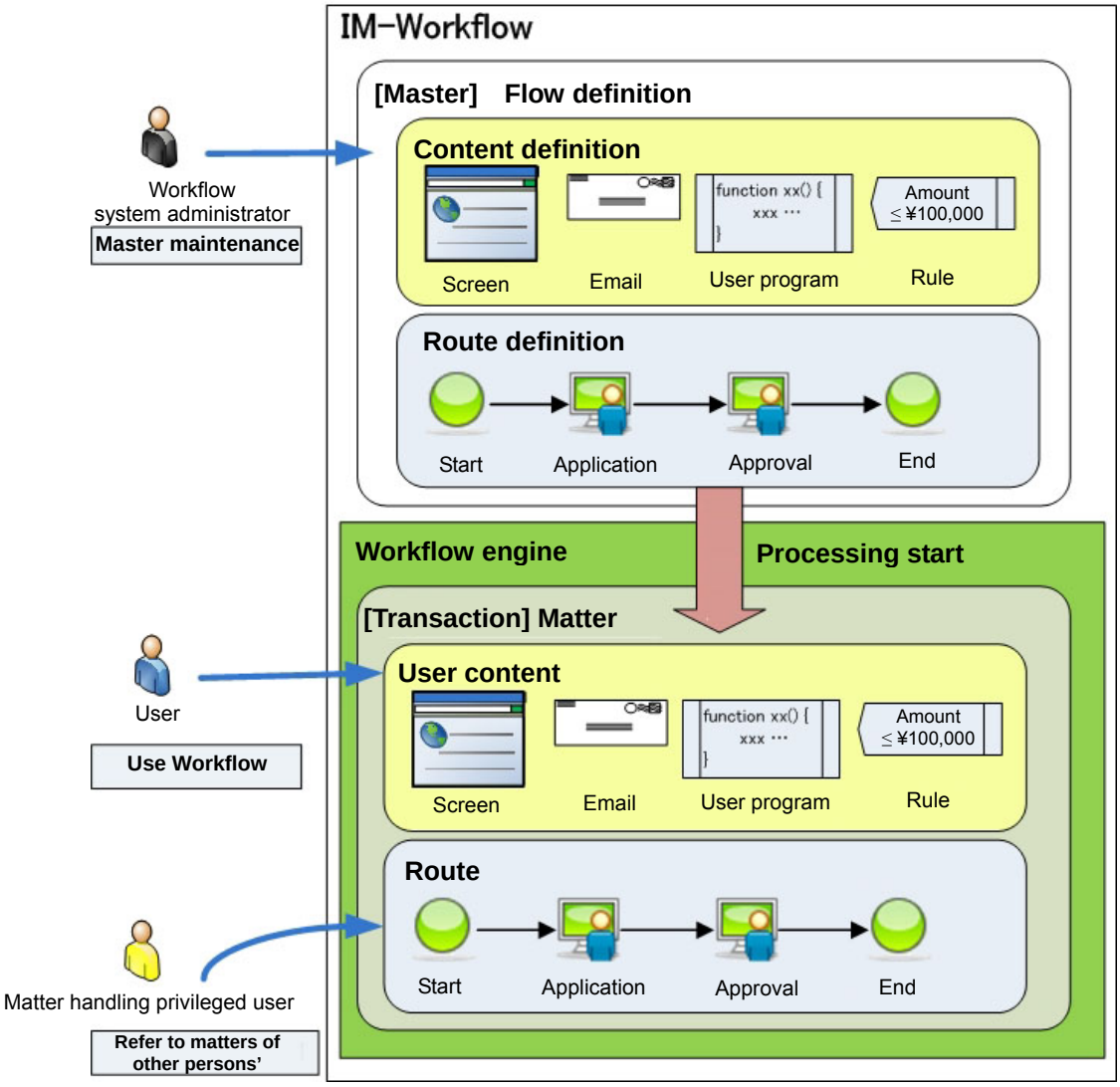
Chapter 1 Workflow configuration

1.1 Outline of Workflow

This document describes the function of IM-Workflow.

IM-Workflow is a function which, according to the “flow definition” which shows the contents and sequence of Workflow processing, carries on a “matter” to perform the processing in line with the flow. In case of Workflow of materials purchasing, for example, flow definition shows application screen and approval sequence of materials purchasing, and matter shows the course of processing from application for materials purchasing through to final approval.

With IM-Workflow various Workflows can be constructed according to the business contents. For a single matter, applicant and approver are allowed to edit the sequence, number of certain processing, and processing approver. In addition, flexible Workflow processing can be achieved for each matter even after application for the matter is submitted. Moreover, each matter can be handled by administrators and users having appropriate privilege, so that matters in stuck condition can be brought forward to the next processing, and progress management of matters such as bringing back to the previous processing and switching to other approver, can be performed.
Matter supervising system for administrators with “alert function” and “monitoring function” is also fulfilling.



< Overall concept >

1.2 Workflow configuration/operation

This section describes how to configure Workflow for Workflow administrators.

Privileges for carrying out configuration and operation of Workflow will be granted to Workflow system administrators and Workflow operation administrators. Workflow system administrators are allowed to configure the entire Workflow, and Workflow operation administrators are allowed to configure Workflow to the extent they are granted privileges from the Workflow system administrator.

Workflow system administrator	Administrator who performs administration over the entire Workflow.
Workflow operation administrator	Administrator who is granted administrative privilege from the Workflow system administrator. The privilege can be granted through [Privileged user configuration] - [Administration group configuration] menu for Workflow system administrators.

This function uses several unique terms. Below are the descriptions of these terms.

Node	A processing unit defined on the flow; e.g. application, approval and confirmation.
Matter	A processing applied from a user based on Workflow. When a user submits an applications using a registered flow definition, a matter will be created.
Content	Collection of information to be used for a range of processing of Workflow; e.g. screen, user program, and email template. This is administered for each version in which period information has been configured.
Route	A flow of processing starting from application through to approver. This consists of interlinked nodes, and retains processing sequence and information about target persons of the matter. This is administered for each version in which period information has been configured.
Flow	This consists of a combination of content and route, and associates each processing defined by the route with the processing details defined by the content, and retains the actual business stream. This is administered for each version in which period information has been configured.
Version	Period information contained in content definition, route definition and flow definition respectively.

Column

Configuration/operation by Workflow operation administrators

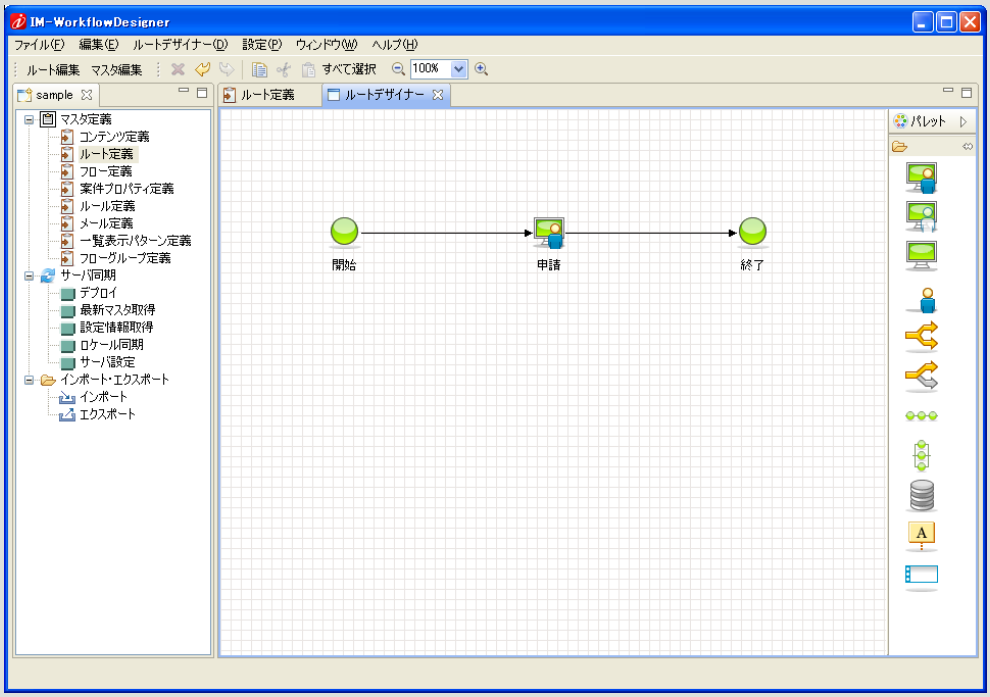
There are four types of configuration/operation of Workflow which Workflow operation administrators are allowed to carry out: “content definition”, “route definition”, “flow definition” and “email definition”.

By selecting the menus from [Workflow] - [Workflow operation administrator] - [Master definition], they are allowed to carry out these operation to the extent they are granted appropriate privilege.

Column

IM-WorkflowDesigner

Regarding various master definitions and import/export to be will be described later in this document, configuration/operation from Web browser will be illustrated therein; however, equivalent configuration/operation can be performed from the client tool “IM-WorkflowDesigner” as well.
As IM-WorkflowDesigner is a client tool, offline work is also possible.



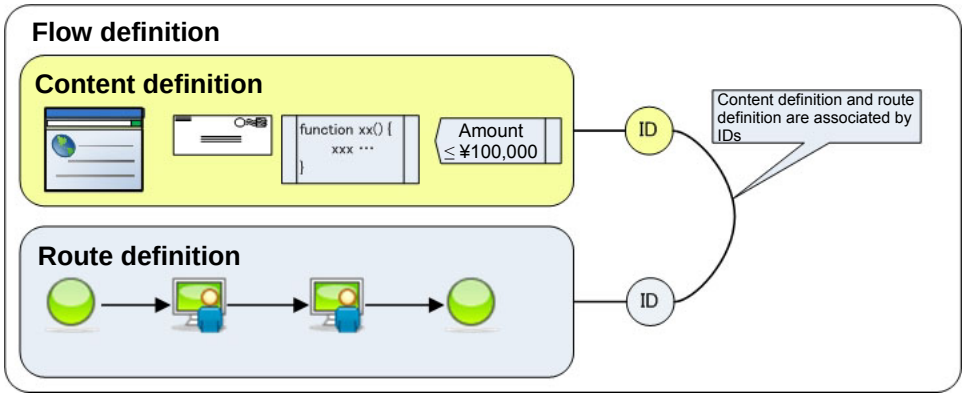
< IM-WorkflowDesigner >

For details on IM-WorkflowDesigner, refer to the separate document “IM-WorkflowDesigner Help”.

1.2.1 Procedure to configure Workflow

Workflow configuration is carried out basically by defining the flow.

Flow definition consists of combination of content definition and route definition.

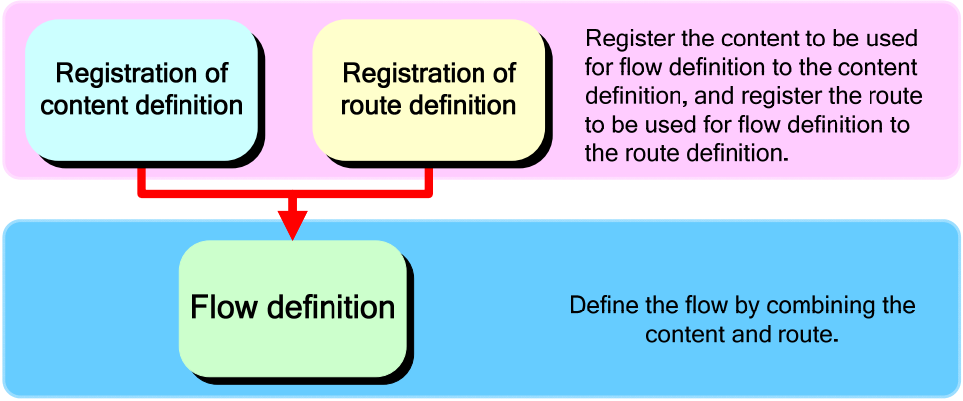


< Flow definition >

To define a flow, content and route need to be defined in advance. Each of them can be defined in the administrator menu: [Master definition] - [Content definition] and [Route definition] respectively.

By combining a pair of content and route, a flow is defined.

A flow can be defined in the administrator menu: [Master definition] - [Flow definition].



< Procedure to configure Workflow >

Column

Input character limit

Input character limit of each input item in configuring Workflow is as follows.

There are input character limits provided for the following input items.

- ID (content ID, node ID, etc.), key (matter property)
  Single-byte numbers (0-9)
  Single-byte alphabet (a-z, A-Z)
  Underscore (“_”)
  Single-byte hyphen (-)
  No more than 20 characters.
- Name (content name, route name, flow name, node name, email name, rule name, etc.)
  No more than 200 single-byte characters (no more than 50 double-byte characters)
- Remarks, comments (within a route diagram)
  No more than 2000 single-byte characters (no more than 500 double-byte characters)
- Execution sequence (content definition - user program definition), width (list display pattern)
  Single-byte numbers
  Three (3) digits or less
- Sort key (flow-group definition)
  Single-byte numbers
  Five (5) digits or less

* Regardless of the character encoding configured at the time of installation, one double-byte character is uniformly deemed as equal to four (4) single-byte characters

Column

Date input

Date input in configuring Workflow is as follows.

There are two ways to input dates as follows.

- Direct input:

▪ Input date directly in “yyyy/mm/dd” format.

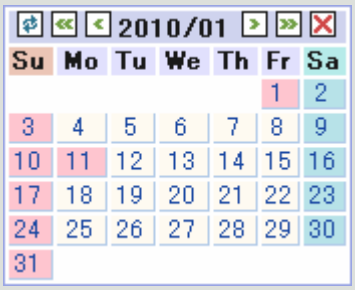
Allowed characters are single-byte numbers (0-9) and single-byte slash (/).

Dates can be input from the screen under [Master definition] menu for administrators. Otherwise, dates can be input only by specifying from calendar.

- Specifying from calendar

▪ Click the icon displayed beside the date input item.

Calendar screen will be displayed. Then click the data to be specified.



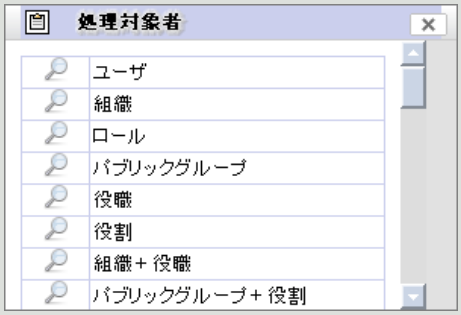
< Calendar >

Column

Obtaining user information from IM-Common Master

In the default configuration of IM-Workflow, IM-Common Master is used as user information source. When specifying processing handler or user in configuring Workflow, select them from the search screen of IM-Common Master.

- By clicking the < Search > icon, displayed for processing handler and user specification item, a popup window for selecting the handler will be displayed.



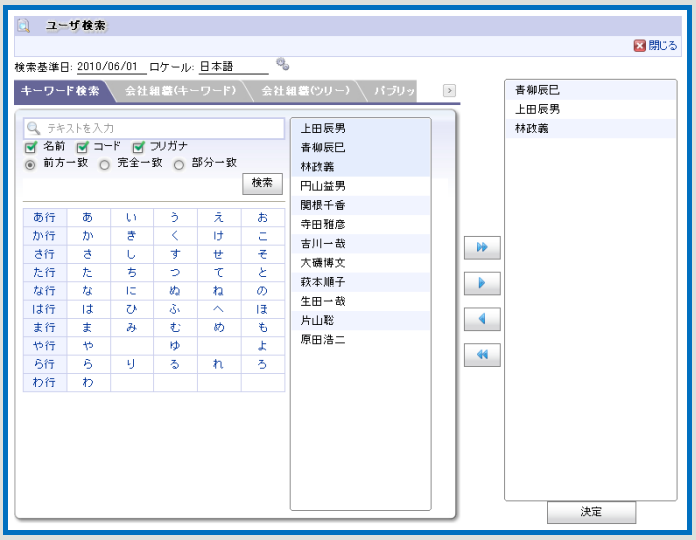
< Processing handler >

Processing handler allowed to be specified may be limited, depending on the item. (Example: Specifying user only, Specifying role only)

Types of processing handler are as follows.
- user
- organization
- role
- public group
- job title
- task
- organization + job title
- public group + task
- organization + role
- public group + role

- Click the icon for the processing target to be searched.

A popup window for searching IM-Common Master to search the selected processing handler.



< Search screen of IM-Common Master (user search) >

For the searching procedure for each processing handler, refer to the separate document “IM-Common Master Search Screen Specifications”.

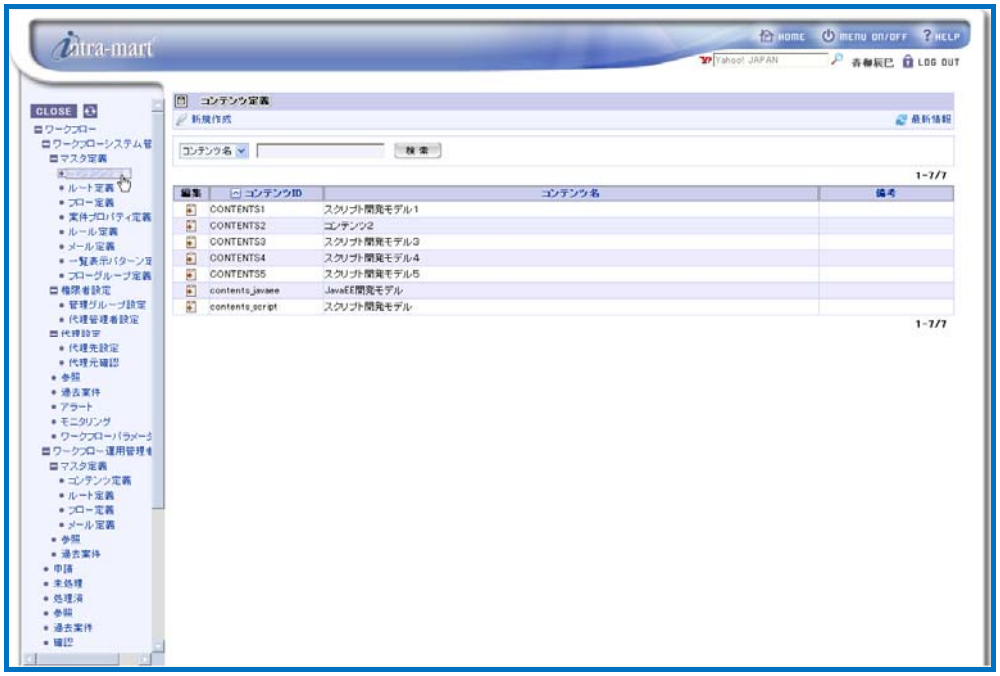
1.2.2 Content definition

Content retains information of “screen”, “user program”, “email” and “rule” used for each Workflow processing. In flow definition which uses content definition, information listed above which has been defined in the content definition can be used. In addition, content definition is administered for each “version” distinguished according to the period information, so that part of the configuration can be changed according to the period information.

Workflow system administrator registers content information through [Workflow] - [Workflow system administrator] - [Master definition] - [Content definition] menu. Workflow operation administrator edits/creates new ones through the [Workflow] - [Workflow operation administrator] - [Master definition] - [Content definition] menu, to the extent he/she is granted appropriate privilege.

1 Click the [Content definition] button.

< Content definition > screen will be displayed in which a list of registered contents will be displayed.



< Content definition >

Column

Searching/displaying content definition

By specifying conditions to search content definition, it becomes possible to display only relevant ones. Enter search conditions to the field for specifying search conditions located at the top of the screen.

- From the pull-down list, select the content definition item to be search target.
- In the textbox located on the right, enter the string to be searched.
- Click the [Search] button.

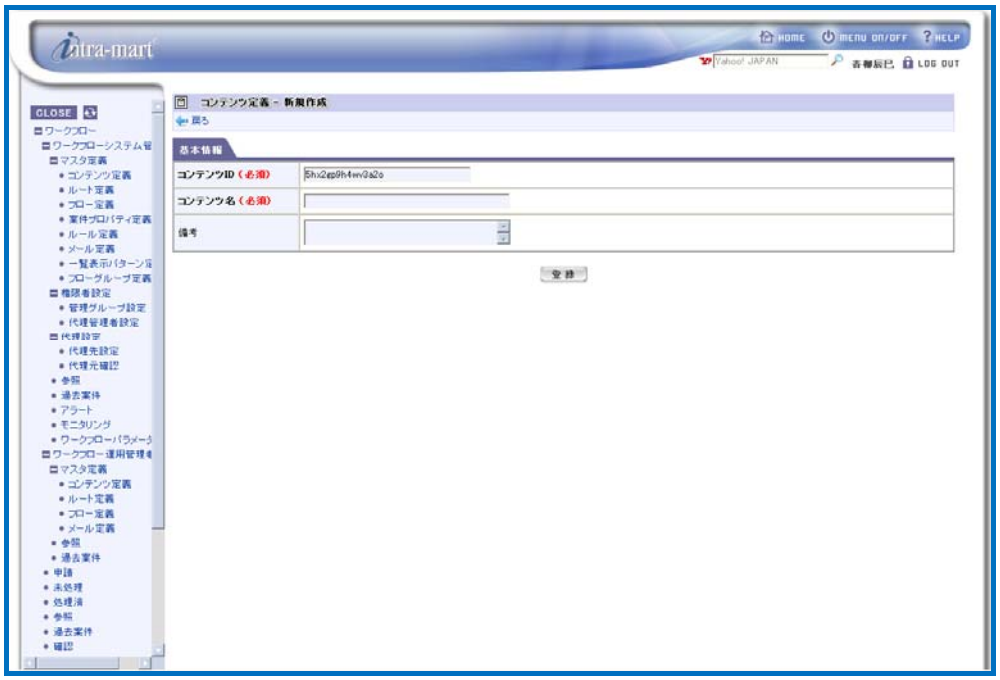
As compared to the search target selected, only the content definition containing partially-matching string will be displayed.

Column

Editing/deleting content definition

To edit already-registered content, click the icon displayed in the [Edit] column for the content to be edited.
Then < Content definition - Edit > screen will be displayed. And by clicking the [Update] button after completing editing the content, it will be updated. Follow the similar steps when deleting content: in the < Content definition - Edit > screen which will be displayed, click the [Delete] button.

2 To create new content, click the < Create new > icon.
< Content definition - Create new > screen will be displayed.



< Content definition - Create new >

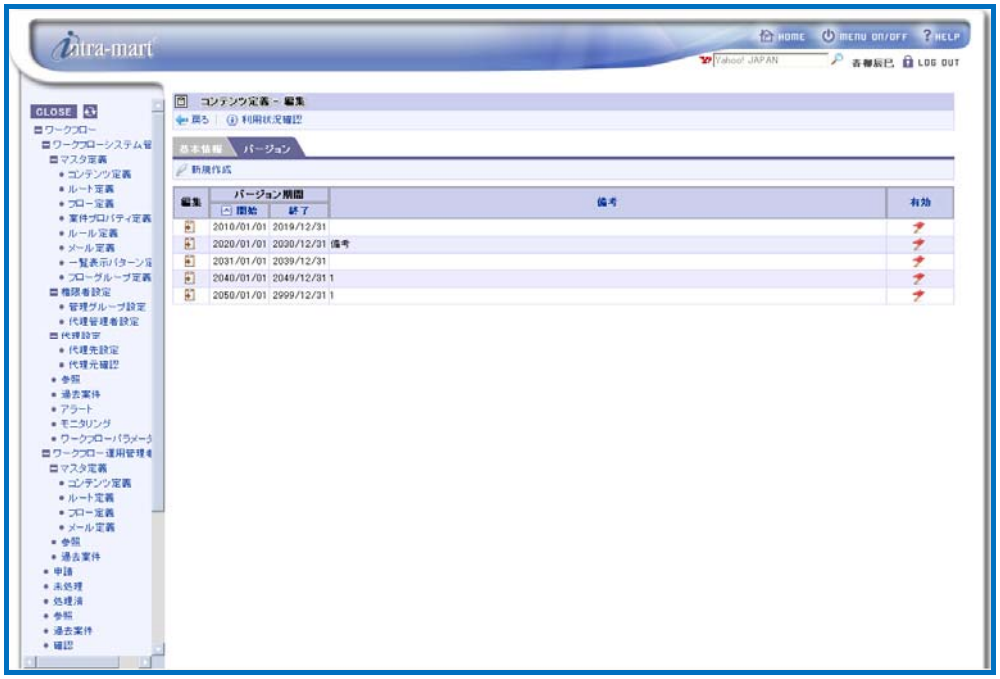
Enter basic information of the content.

Content ID (required)	ID for identifying the content. Automatically numbered. Unless being already used, it can be changed arbitrarily.
Content name (required)	Enter the name of the content to be registered. It should be entered for all the locales configured in the system.
Remarks	Explanation about the content, etc. can be entered. It can be entered for all the locales configured in the system.

3 Click the [Register] button.

Basic information of the content will be registered, and then < Content definition - Edit > screen will be displayed.

Versions of content definition will be listed up. However, nothing will be displayed for newly created content.



< Content definition - Edit (Tab: Version) >

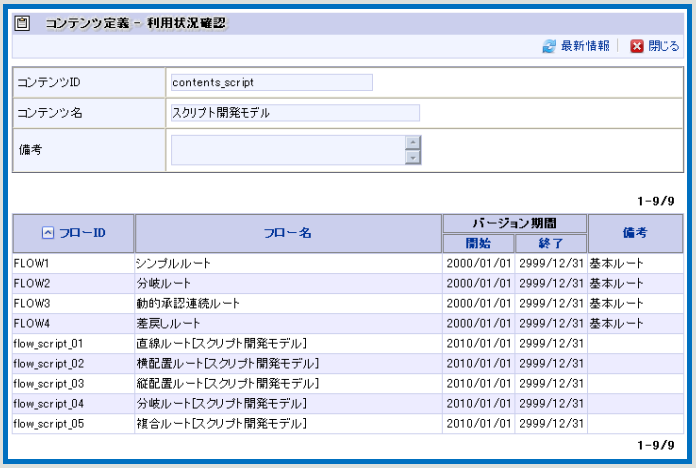
Column

Confirming usage status of content definition

■ It is possible to confirm which flow definition is currently using the content definition being edited.

- In the < Content definition - Edit > screen, click the < Confirm usage status> icon.
- A popup window of < Content definition - Confirm usage status > will be displayed.

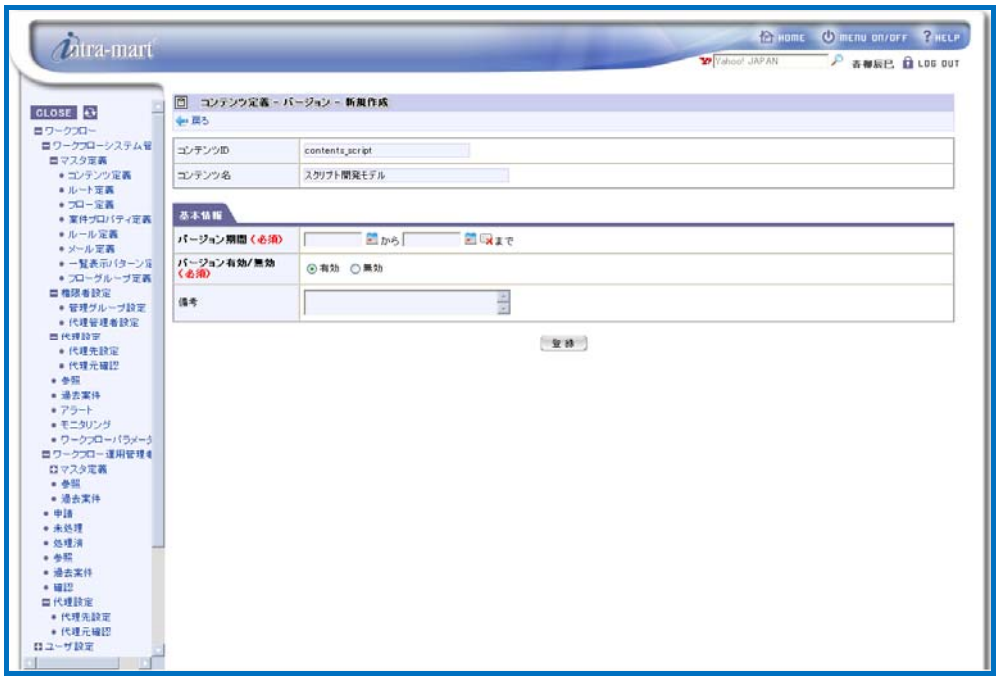
Basic information of the content and the flow definition currently using this content will be listed up.



< Content definition - Confirm usage status >

4 To register new version of the content, click the < Create new > icon.

< Content definition - Version - Create new > screen will be displayed.



< Content definition - Version - Create new >

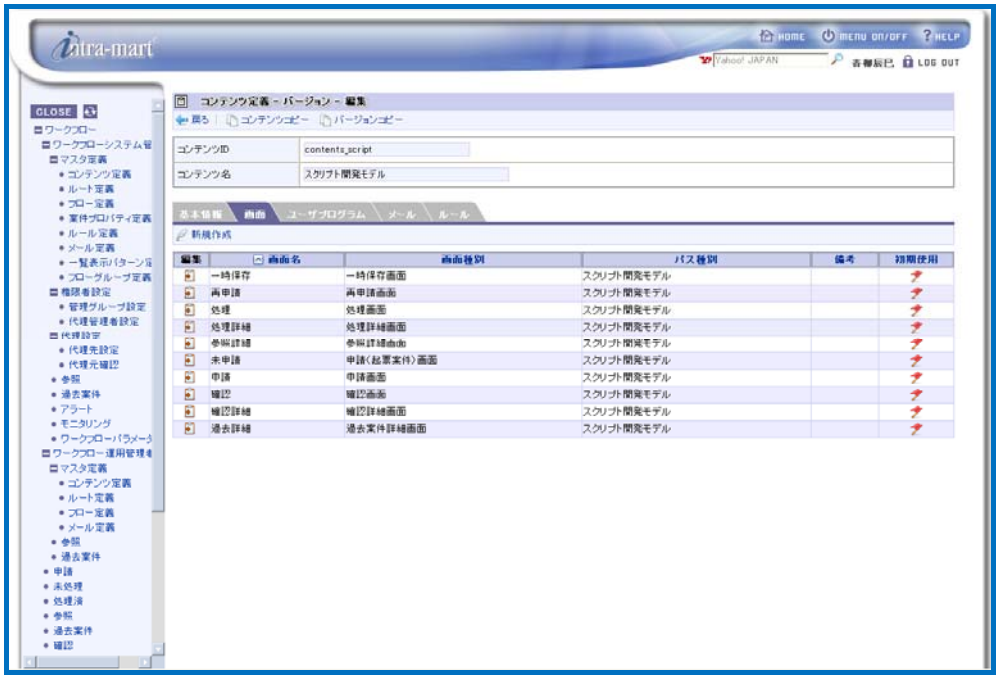
Enter version information of the content.

Version period (required)	Configure the period of validity of the version of content definition.
Version valid/invalid (required)	Configure the status of validity of the version of content definition.
Remarks	Explanation about the version of content definition, etc. can be entered. It can be entered for all the locales configured in the system.

End date of version period is not always required. If left blank, it will be configured as indefinite (end date of the system).

5 Click the [Register] button.

Basic version information of the content will be registered, and then < Content definition - Version - Edit > screen will be displayed.



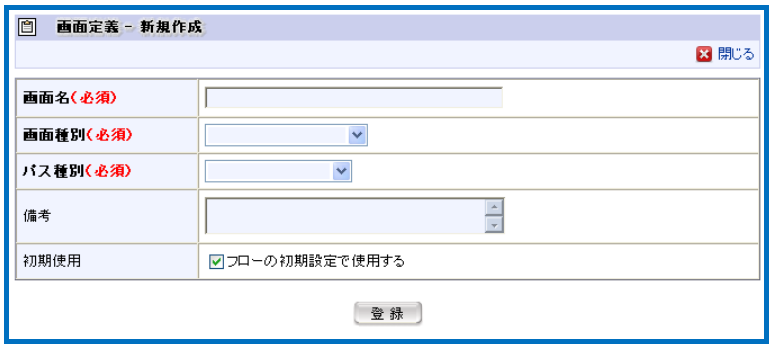
< Content definition - Version - Edit (Tab: Screen) >

6 To register screen definition of the content, switch the tab to [Screen].

Already registered screen definition will be listed up. However, nothing will be displayed for newly created version.

■ To create new screen definition, click the < Create new > icon.

< Screen definition - Create new > screen will be displayed.



< Screen definition - Create new >

Enter information of the screen definition.

Screen name (required)	Register the name of the screen definition. It should be entered for all the locales configured in the system.
Screen classification (required)	Select the classification of the screen definition.

Application	Used when the user submits an application.
Temporary saving	Used when the user saves the matter temporarily.
Application (drafting matter)	Used when the matter is in a status pending application.
Reapplication	Used when the user reapplies the matter.
Processing	Used when the user handles the matter processing (Approval, Denial, etc.).
Confirmation	Used when the user confirms the matter.
Processing details	Used when the processing handler of the matter refers to the details on the matter.
Reference details	Used when the referrer of the matter refers to the details on the matter.
Confirmation details	Used when the confirmer of the matter confirms the details on the matter.
Past matter details	Used when the user refers to past matters (archived matters).

Path classification (required)

Select the path classification of the screen definition.

▪ Script development model

Script path (required)	Enter the path to the screen of the script development model.

▪ Java EE development model

Application ID (required)	Enter the application ID of the screen of the Java EE development model.
Service ID (required)	Enter the service ID of the screen of the Java EE development model.

▪ JSP or Servlet

Page path (required)	Enter the page path of the screen of the JSP/Servlet.

Remarks	Enter explanation, etc. of the screen definition. It can be entered for all the locales configured in the system.
Initial use	Specify initial use status of the screen definition. When configuring this screen configuration as initial use in the flow, check this box.

Click the [Register] button to register these information.
It will return to < Content definition - Version - Edit > screen.

Column

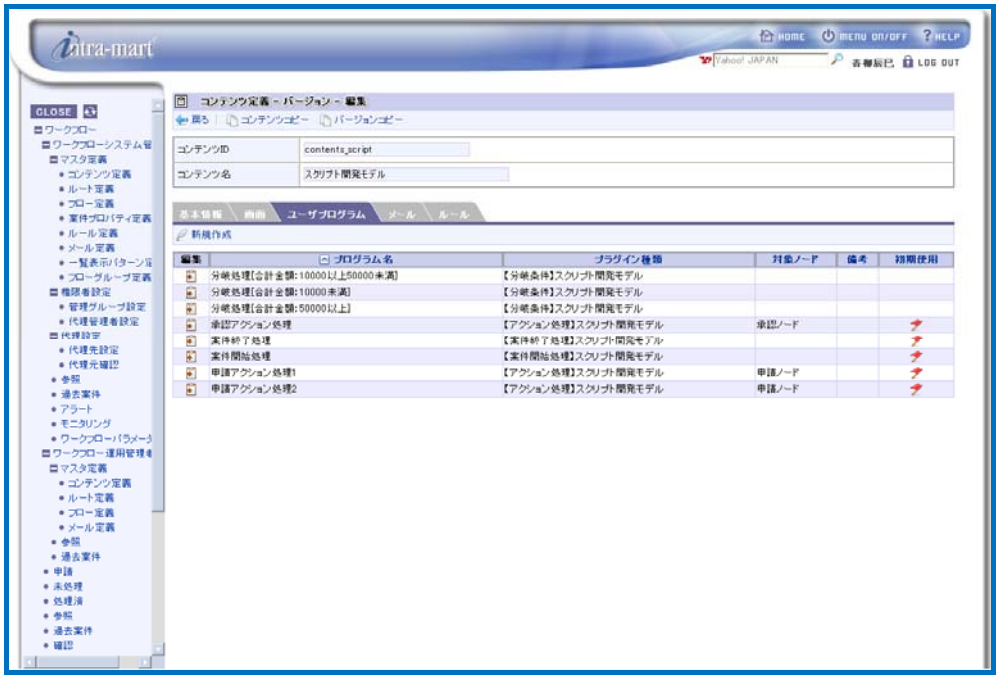
How to specify the page path in case of path classification: “JSP or Servlet”

■ For the page path in case of path classification: “JSP or Servlet”, specify the relative path from the context root as “Without forefront slash”.
[Example] If URL of intra-mart id http://hostname:port/imart/default.portal
When specifying the page path as “test/hello.jsp”, it will be called as http://hostname:port/imart/test/hello.jsp.

7 To register user program definition of the content, switch the tab to [User program].

Already registered user program definition will be listed up. However, nothing will be displayed for newly created version.

■ To create new user program definition, click the < Create new > icon. < User program definition - Create new > screen will be displayed.



< Content definition - Version - Edit (Tab: User program) >

< User program definition - Create new >

Enter information of the user program definition.

Program name (required)	Register the name of the user program definition. It should be entered for all the locales configured in the system.
Plug-in classification (required)	Select the classification of plug-in.

Matter start processing	Program which is invoked when a matter starts.
Matter end processing	Program which is invoked when a matter ends.
Action processing	Program which is invoked when some processing e.g. application is launched.
Arrival processing	Program which is invoked when a node processing has been done by some processing.
Junction processing	Program which determines junction destination according to the junction conditions. If configured for junction start node, this is invoked when the junction starts.
Combine processing	Program which determines whether junction end node can be transitioned to the next processing or not according to the combining conditions. If configured for junction end node, this is invoked when the junction ends.

Target node (required)	Select the classification of the target node for executing the user program. This is displayed only when the plug-in classification is “Action processing” or “Arrival processing”.
Plug-in type (required)	Select the type of plug-in, specify the program path and so forth. Content of pull-down list may vary depending on the plug-in classification and target node specified.

Script development model	Specify this when script development model program is to be used. Enter the program path in the text box displayed.
Java EE development model	Specify this when Java EE development model program is to be used. Enter the class path in the text box displayed.

▪ Only if the target node of arrival processing is approval node:

Existing processing	Program which handles node

	handler automatic approval	processing automatically when a processing handler who carried out approval between application node and the target node of automatic processing is the processing handler of the relevant node.
	Repeated processing handler automatic approval	Program which handles node processing automatically when the processing handlers include previous approver.
	Continuous automatic approval	Program which handles node processing automatically when the processing handler of the relevant node is the same person as the applicant or approver of the last node.
	▪ For only combine processing	
	Number of arrival determination	Program which specifies the conditions for bringing forward a matter to the next node in combine processing of the junction, according to the arrival rate of junction route to junction node. Enter percentage in the entry field displayed.
Remarks	Enter explanation, etc. of the user program definition. It can be entered for all the locales configured in the system.	
Initial use	Specify initial use status of the user program definition. When configuring this user program configuration as initial use in the flow, check this box.	
Execution sequence (required)	Specify the execution sequence of the program. Enter in single-byte number.	

Click the [Register] button to register these information.
It will return to < Content definition - Version - Edit > screen.

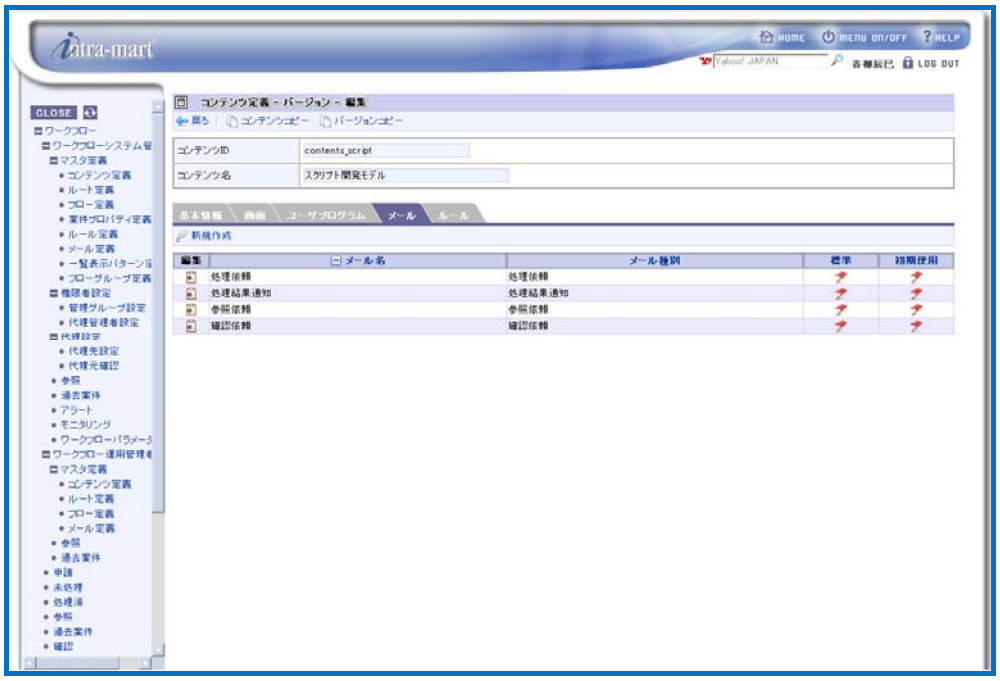
8 To register email definition of the content, switch the tab to [Email].

Already registered email definition will be listed up. By default, email definitions defined by the system (“Processing request”, “Processing result notification”, “Reference request” and “Confirmation request”) have been registered. To create new email definition, it is necessary to create the email definition in [Mater definition] - [Email definition] menu in advance.

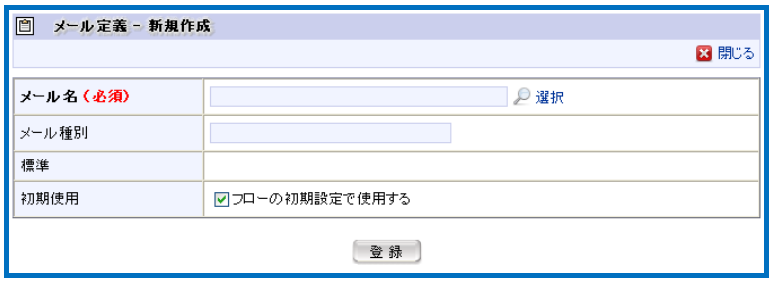
For registering the email definition, refer to [1.2.9 Email definition] described below.

■ To create new email definition, click the < Create new > icon.

< Email definition - Create new > screen will be displayed.



< Content definition - Version - Edit (Tab: Email) >



< Email definition - Create new >

Enter information of the email definition.

Email name (required)

Specify the email definition to be registered. Click the < Select > icon.
A popup window < Email definition - Search > will be displayed.
Email definition which can be selected will be listed up therein.

< Email definition - Search >

Click the icon of the email definition to be registered.

Email classification

Email classification of the email definition information selected in “Email name” will be displayed.

Standard

Whether the email definition information is the one made available by the system as default or the one defined by a user will be displayed.

Initial use

Specify initial use status of the email definition. When configuring this email configuration as initial use in the flow, check this box.

Click the [Register] button to register these information.
It will return to < Content definition - Version - Edit > screen.

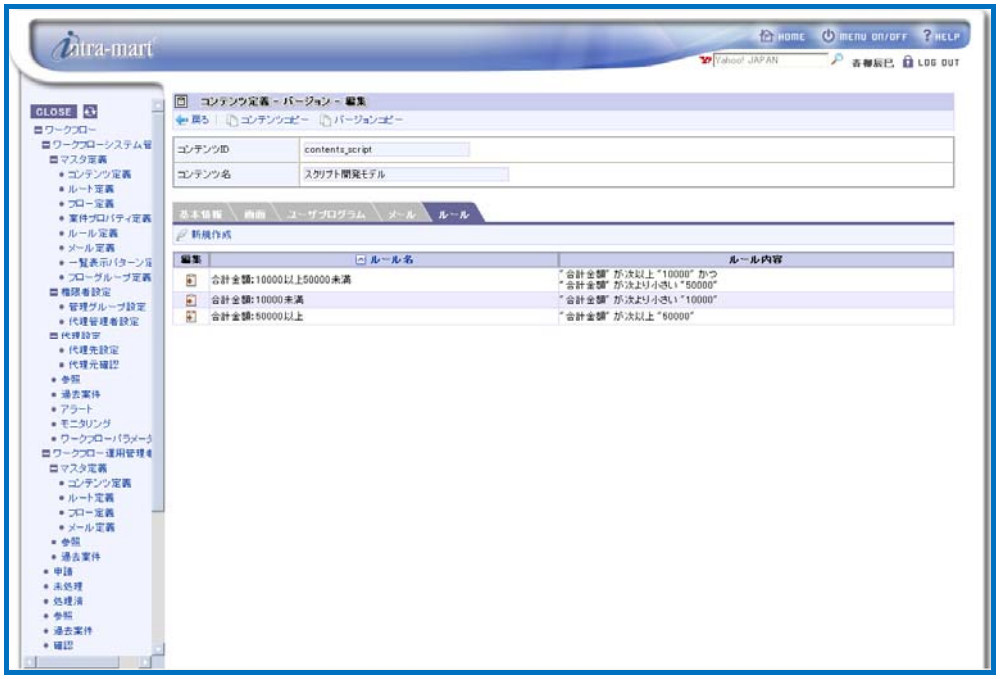
9 To register rule definition of the content, switch the tab to [Rule].

Already registered rule definition will be listed up. However, nothing will be displayed for newly created version. To create new rule definition, it is necessary to create the rule definition in [Mater definition] - [Rule definition] menu in advance.

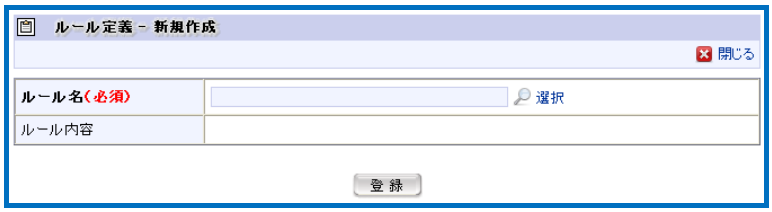
For registering the rule definition, refer to [1.2.8 Rule definition] described below.

■ To create new rule definition, click the < Create new > icon.

< Rule definition - Create new > screen will be displayed.



< Content definition - Version - Edit (Tab: Rule) >



< Rule definition - Create new >

Enter information of the rule definition.

Rule name (required)	Specify the rule definition to be registered. Click the < Select > icon. A popup window < Rule definition - Search > will be displayed. Rule definition which can be selected will be listed up therein. < Rule definition - Search > Click the icon of the rule definition to be registered.
Rule details	Rule details of the rule definition information selected in “Rule name” will be displayed.

Click the [Register] button to register these information.
It will return to < Content definition - Version - Edit > screen.

10 Now creating new content definition is complete.

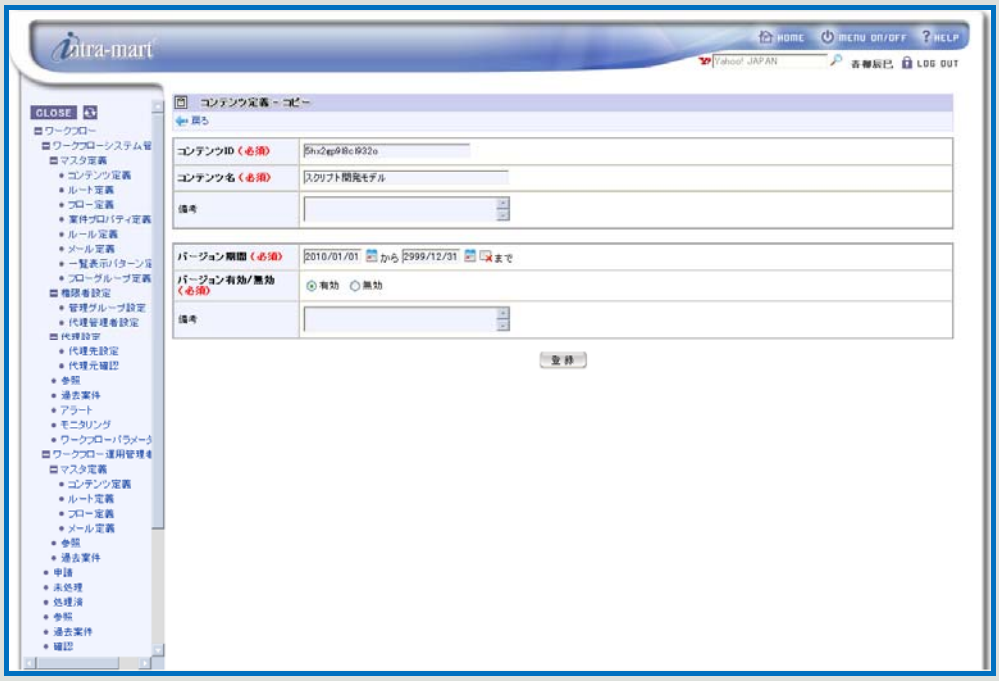
- As long as there is no overlapping period, any number of versions can be registered for a single content definition.
- Range of version period (system start date - system end date) allowed to be configured can be changed through [Workflow parameter] menu. (For details, refer to the separate document “IM-Workflow Specifications”.

Column

Copying content definition

■ By copying content definition, new content definition retaining the version information of the copy source can be created.

- By clicking the < Copy content > icon displayed at the top of < Content definition - Version - Edit > screen, < Content definition - Copy > screen will be displayed.



< Content definition - Copy >

- Enter basic information of content definition to be the copy destination newly created, and the version period information.
- Click the [Register] button.
  New content definition retaining the same one version in which information of “screen”, “user program”, "email” and “rule” is identical to the version of the copy source content definition, will be created with the version period as specified.

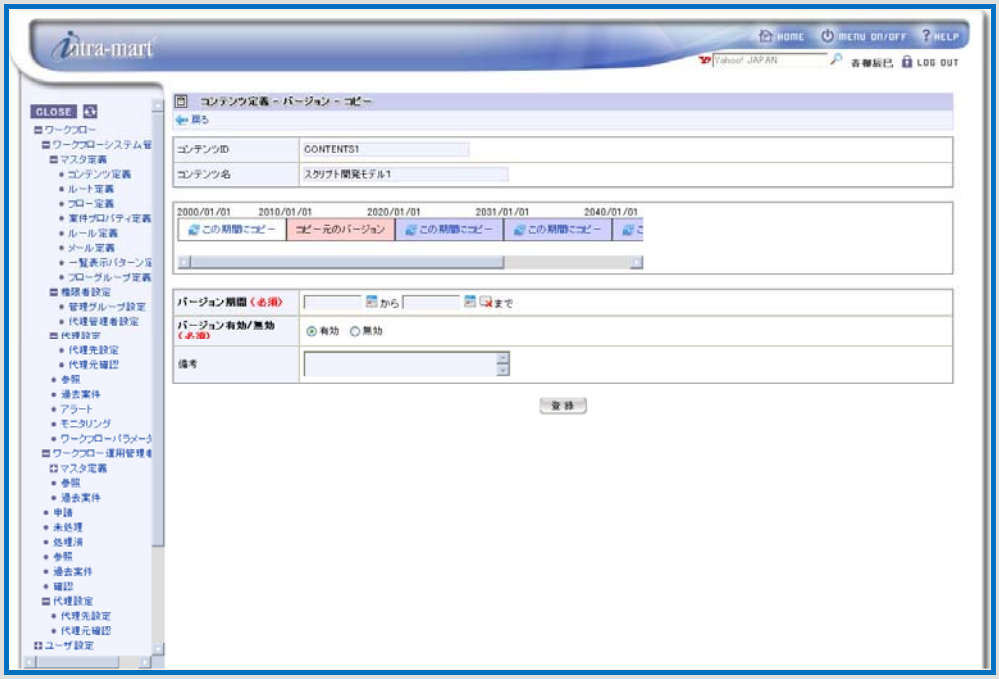
* The version to be registered for the newly created content definition is limited to one. Other versions registered for the copy source content definition cannot be copied.

Column

Copying the version of content definition

■ By copying the version, new version retaining the version information of the copy source can be created within the same content definition.

- By clicking the < Copy version > icon displayed at the top of < Content definition - Version - Edit > screen, < Content definition - Version - Copy > screen will be displayed.



< Content definition - Version - Copy >

- Enter version period information of the copy destination to be newly created.
- Version period table will be displayed about the center of the screen. This is a table which shows all the version periods registered for the same content definition. Range of system periods will be indicated with the color coding as described below.

Red	Version period of the copy source.
Blue	Of the version periods registered for the same content definition, which has its version configured as “Valid”.
Gray	Of the version periods registered for the same content definition, which has its version configured as "Invalid".
White	Of the version periods registered for the same content definition, which has no version defined yet.

By clicking one of the < Copy to this period > icons displayed for periods other than copy source, that period will be input as the version period of the copy destination.

- Click the [Register] button.

New version in which information of “screen”, “user program”, "email” and “rule” is identical to the version of the copy source, will be created with the version period as specified.

* If the specified period includes existing version period entirely or partially, then the period of the copy destination version has priority and overwrites the existing period, making it erased or altered.

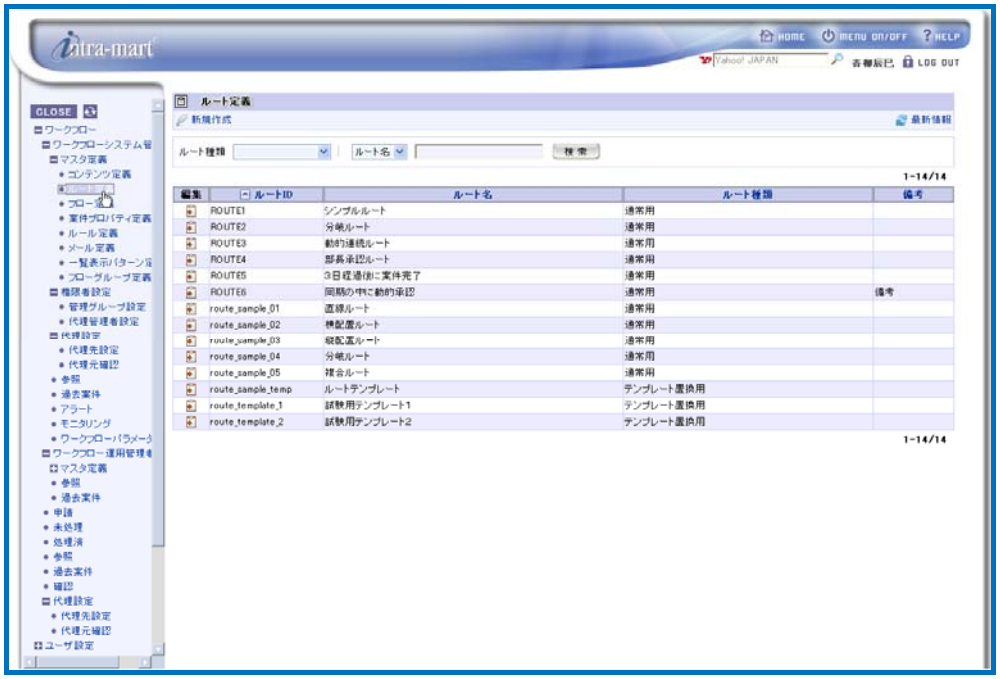
1.2.3 Route definition

A route retains the processing flow from application through to final approval.
In flow definition which uses route definition, configuration of each node defined for the route can be used. In addition, route definition is administered for each “version” distinguished according to the period information, so that part of the configuration can be changed according to the period information.

Workflow system administrator registers content information through [Workflow] - [Workflow system administrator] - [Master definition] - [Route definition] menu. Workflow operation administrator edits/creates new ones through the [Workflow] - [Workflow operation administrator] - [Master definition] - [Route definition] menu, to the extent he/she is granted appropriate privilege.

1 Click the [Route definition] button.

< Route definition > screen will be displayed in which a list of registered route definition will be displayed.



< Route definition >

Column

Searching/displaying route definition

■ By specifying conditions to search route definition, it becomes possible to display only relevant ones.
Enter search conditions to the field for specifying search conditions located at the top of the screen.

- From the pull-down list of “Route type”, select the route definition item to be search target.
- From the pull-down list on the right, select the route definition item to be search target.
- In the textbox located on the right, enter the string to be searched.
- Click the [Search] button.

As compared to the search target selected, only the route definition containing partially-matching string will be displayed.

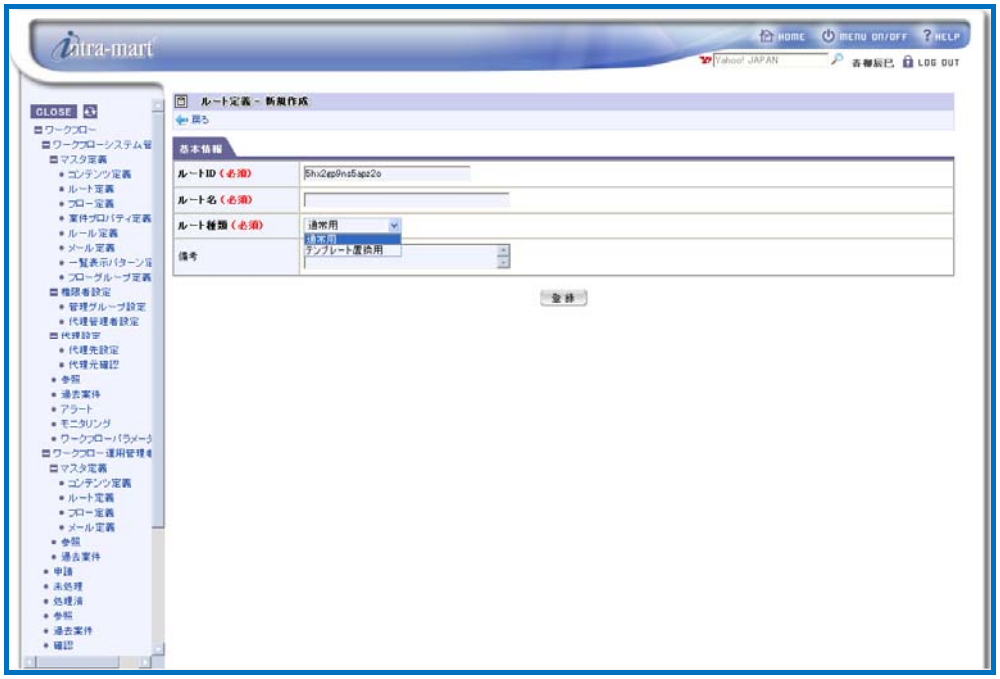
Column

Editing/deleting route definition

To edit already-registered route, click the icon displayed in the [Edit] column for the route to be edited.
Then < Route definition - Edit > screen will be displayed. And by clicking the [Update] button after completing editing the content, it will be updated. Follow the similar steps when deleting route: in the < Route definition - Edit > screen which will be displayed, click the [Delete] button.

2 To create new route, click the (Create new) button.

< Route definition - Create new > screen will be displayed.



< Route definition - Create new >

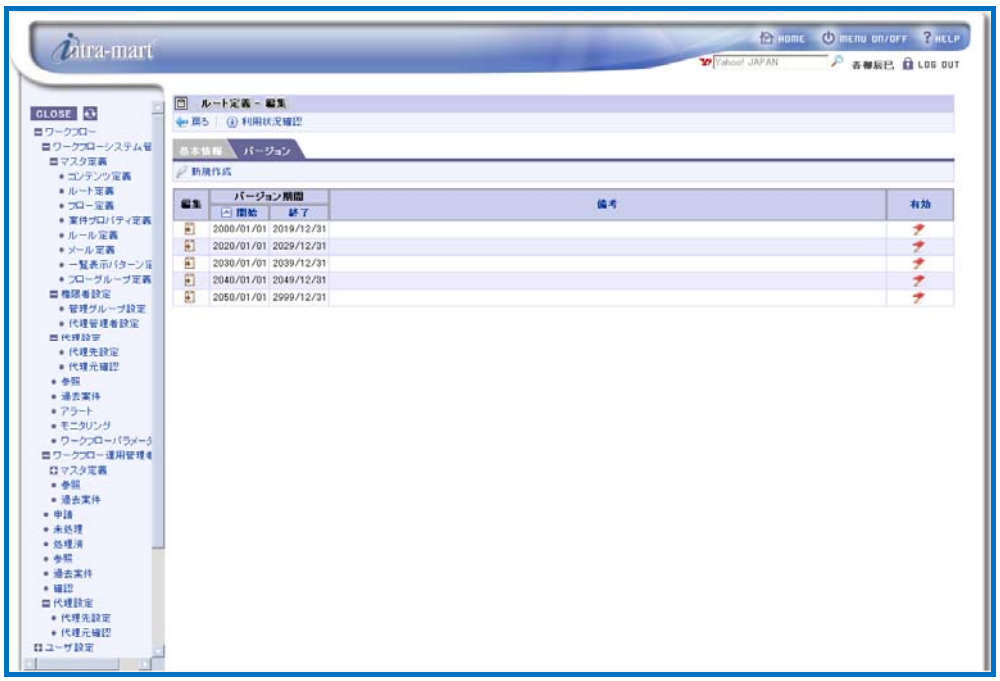
Enter basic information of the route.

Route ID (required)	ID for identifying the route. Automatically numbered. Unless being already used, it can be entered arbitrarily.
Route name (required)	Enter the name of the route to be registered. It should be entered for all the locales configured in the system.
Route classification (required)	Select the classification of the route to be registered. **Normal**: Create normal route. **For template replacement**: Create route to be configured as template replacement node.
Remarks	Explanation about the route, etc. can be entered. It can be entered for all the locales configured in the system.

3 Click the [Register] button.

Basic information of the route will be registered, and then < Route definition - Edit > screen will be displayed.

Versions of route definition will be listed up. However, nothing will be displayed for newly created route.



< Route definition - Edit (Tab: Version) >

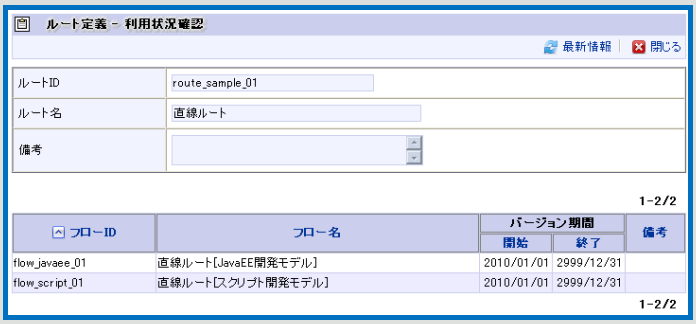
Column

Confirming usage status of route definition

■ It is possible to confirm which flow definition is currently using the route definition being edited.

- In the < Route definition - Edit > screen, click the < Confirm usage status> icon.
- A popup window of < Route definition - Confirm usage status > will be displayed.

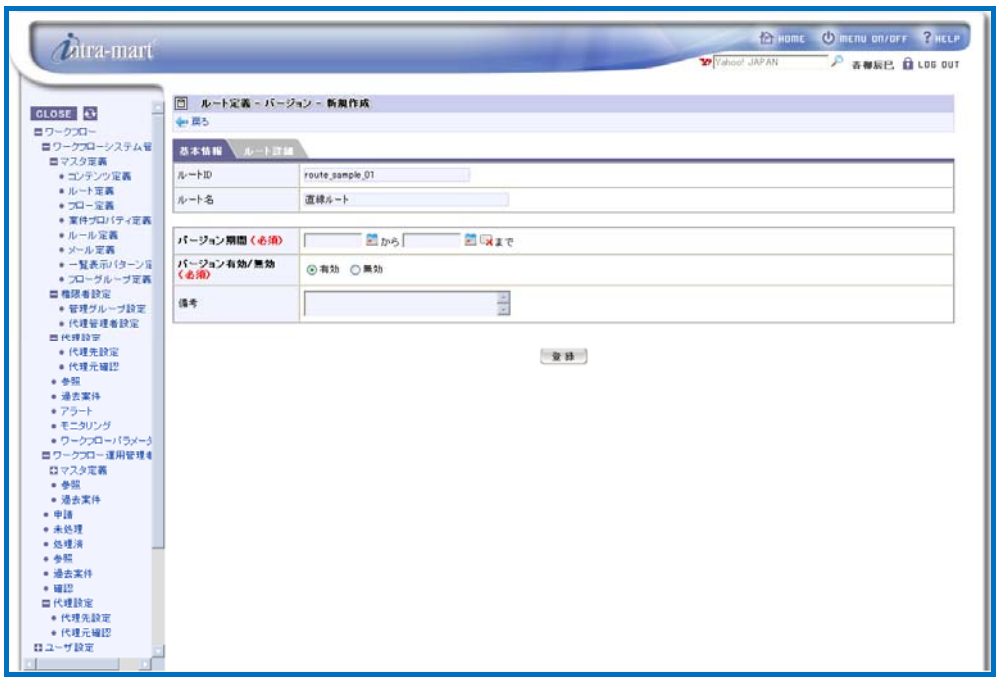
Basic information of the route and the flow definition currently using this route will be listed up.



< Route definition - Confirm usage status >

4 To register new version of the route, click the < Create new > icon.

< Route definition - Version - Create new > screen will be displayed.



< Route definition - Version - Edit (Tab: Basic information) >

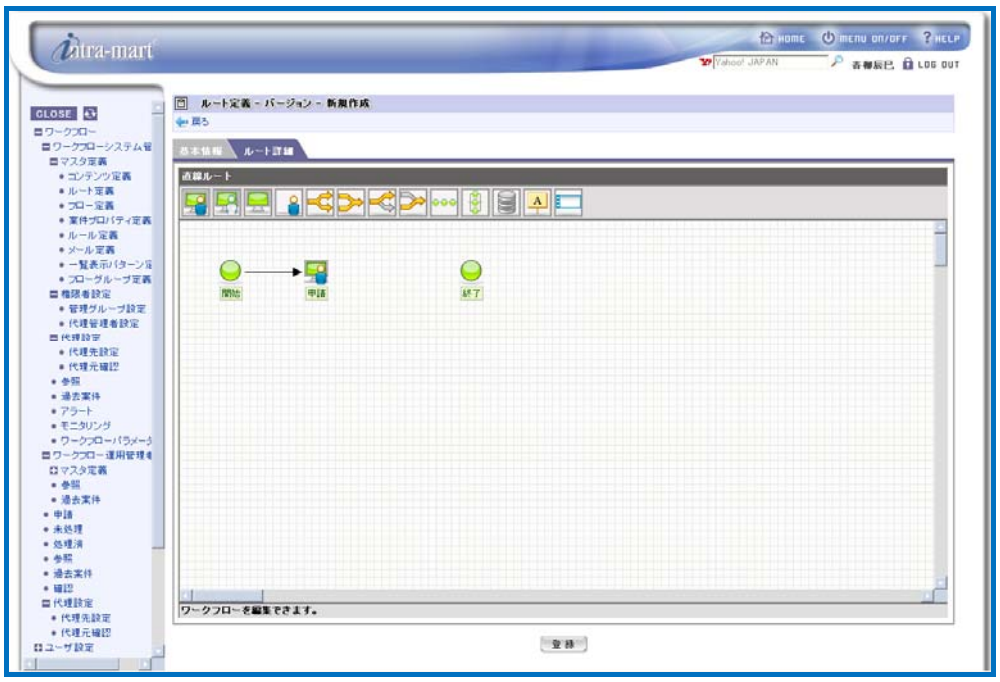
Enter version information of the route.

Version period (required)	Configure the period of validity of the version of route definition.
Version valid/invalid (required)	Configure the status of validity of the version of route definition.
Remarks	Explanation about the version of route definition, etc. can be entered. It can be entered for all the locales configured in the system.

- End date of version period is not always required. If left blank, it will be configured as indefinite (end date of the system).
- If the type of email definition is “For template replacement”, "Basic information” of the version does not need to be entered. Enter only “Route details”.

5 Next, create the route to be registered. Switch the tab to [Route details].

Create the route to be registered.



< Route definition - Version - Create new (Tab: Route details) >

For details on how to create new route, refer to [1.2.4 Route definition - Creating new route] described below.

- Start node, application node and end node have already been in place. These nodes are essential for the route, and therefore cannot be deleted.

6 Upon finishing creating the route, click the < Register > button.

Basic version information of the route will be registered, and then < Route definition - Version - Edit > screen will be displayed.

7 Now creating new route definition is complete.

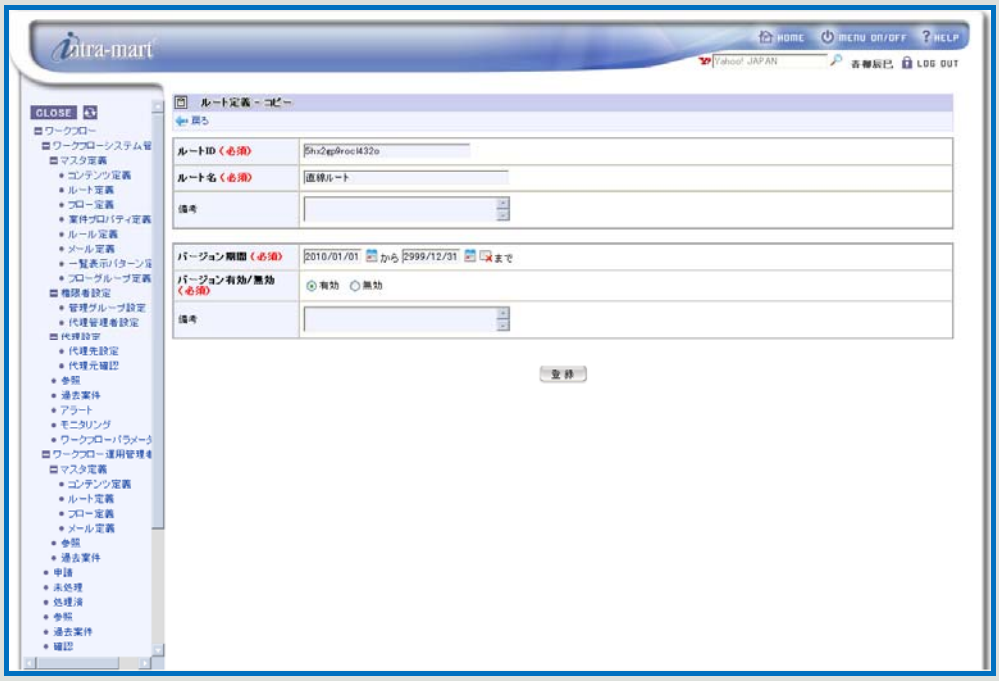
- As long as there is no overlapping period, any number of versions can be registered for a single route definition.
- Range of version period (system start date - system end date) allowed to be configured can be changed through [Workflow parameter] menu. (For details, refer to the separate document “IM-Workflow Specifications”.)

Column

Copying route definition

■ By copying route definition, new route definition retaining the version information of the copy source can be created.

▪ By clicking the < Copy route > icon displayed at the top of < Route definition - Version - Edit > screen, < Route definition - Copy > screen will be displayed.



< Route definition - Copy >

▪ Enter basic information of route definition to be the copy destination newly created, and the version period information.
▪ Click the [Register] button.
New route definition retaining the same one version in which information of “Route details” is identical to the version of the copy source route definition, will be created with the version period as specified.

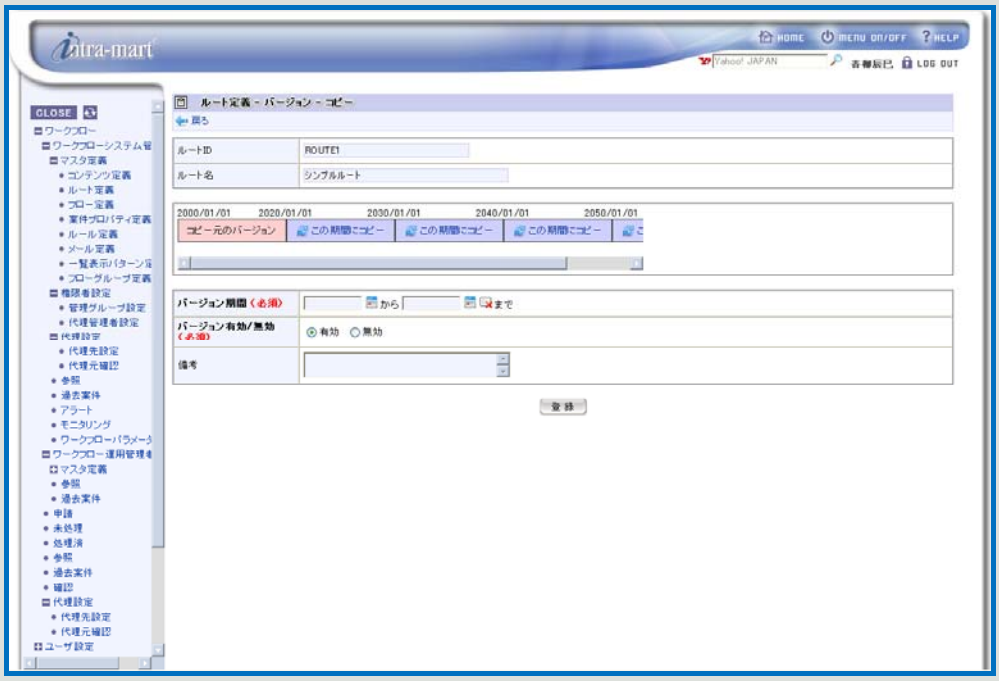
* The version to be registered for the newly created route definition is limited to one. Other versions registered for the copy source route definition cannot be copied.

Column

Copying the version of route definition

■ By copying the version, new version retaining the version information of the copy source can be created within the same route definition.

▪ By clicking the < Copy version > icon displayed at the top of < Route definition - Version - Edit > screen, < Route definition - Version - Copy > screen will be displayed.



< Route definition - Version - Copy >

▪ Enter version period information of the copy destination to be newly created.

▪ Version period table will be displayed about the center of the screen. This is a table which shows all the version periods registered for the same route definition. Range of system periods will be indicated with the color coding as described below.

Red	Version period of the copy source.
Blue	Of the version periods registered for the same route definition, which has its version configured as “Valid”.
Gray	Of the version periods registered for the same route definition, which has its version configured as "Invalid".
White	Of the version periods registered for the same route definition, which has no version defined yet.

By clicking one of the < Copy to this period > icons displayed for periods other than copy source, that period will be input as the version period of the copy destination.

▪ Click the [Register] button.

New version in which information of “Route details” is identical to the version of the copy source, will be created with the version period as specified.

* If the specified period includes existing version period entirely or partially, then the period of the copy destination version has priority and overwrites the existing period, making it erased or altered.

1.2.4 Route definition - Creating new route

This section describes about route creation which will be carried out in the “Route details” tab of < Route definition - Version - Edit > screen displayed via [Workflow] - [Workflow system administrator] - [Master definition] - [Route definition].

* For operation up to this point, refer to the previous section [1.2.3 Route definition].

Route can be easily created/edited on the route designer. Route is constituted by combining “nodes”, i.e. units of Workflow processing.

There are several types of node as follows.

Start node	Meaning start of the route.
End node	Meaning end of the route.
Application node	Indicating that a processing handler who has been specified in advance will submit application for a matter.
Approval node	Indicating that a processing handler who has been specified in advance will approve the matter.
Dynamic approval node	Indicating that a processing handler who has been specified by the applicant and/or approver will approve the matter. Processor person of the node before this node (prior node) is allowed to edit this node (to change processing handler, or to delete/restore this node).
System node	Indicating that the matter will be processed by some separate program outside IM-Workflow. Used for linkage with external programs, e.g. Web Service.
Confirmation node	Indicating that a processing handler who has been specified in advance will confirm the matter. Upon finishing the processing of connected node, specified confirmation handler is allowed to confirm the matter.
Synchronization start node	Indicating start of the synchronization processing. When the processing arrives at this node, it will proceed in parallel with all the nodes connected thereafter.
Synchronization end node	Indicating end of the synchronization processing. At the time of finishing all the processing of the nodes connected before this node, the processing will proceed to the next node.
Junction start node	Indicating start of the junction processing. According to the determination methods as described below, the node to be brought forward will be decided out of the nodes connected thereafter (processing can be proceeded for more than one node in parallel). ▪ To specify junction destination node from the screen. ▪ To determine according to the junction rule.

	▪ To determine by means of user program. ▪ Not configured (operates in the same manner as Synchronization start node).
Junction end node	Indicating end of the junction processing. According to the determination methods as described below, whether to proceed the processing to the node connected thereafter or not will be decided. ▪ To determine according to the combining rule. ▪ To determine by means of user program. ▪ Not configured (operates in the same manner as Synchronization end node).
Horizontal placement node	Indicating that applicant and approver are allowed to create continuous dynamic approval node to the extent specified. Upper limit and lower limit of the number of nodes to be placed can be configured in flow definition. By configuring lower limit of the number of nodes as zero, it is possible to delete (not to place) any node.
Vertical placement node	Indicating that applicant and approver are allowed to create dynamic approval nodes in parallel to the extent specified. Upper limit and lower limit of the number of nodes to be placed can be configured in flow definition. By configuring lower limit of the number of nodes as zero, it is possible to delete (not to place) any node.
Template replacement node	Indicating that at the time to start to apply, content of the template replacement route specified on this node will be expanded within the normal route.
Template start node	Indicating start of the template replacement route.
Template end node	Indicating end of the template replacement route.
Comment	Used to display some comment on the route. The comment itself does not have any effect on processing of the matter.
Swimlane	Used as frame border display for sorting and/or organizing nodes on the route. Swimlane itself does not have any effect on processing of the matter.

* For details on nodes, refer to the separate document “IM-Workflow Specifications”.

There are two types of route which can be created by route definition as follows.

Normal	Create normal route. It is necessary to place start node, application node and end node, just one for each; these have been in place in advance at the time of route creation.
For template replacement	Create route template to be specified on the template replacement node.

It is necessary to place template start node and template end node, just one for each; these have been in place in advance at the time of route creation.

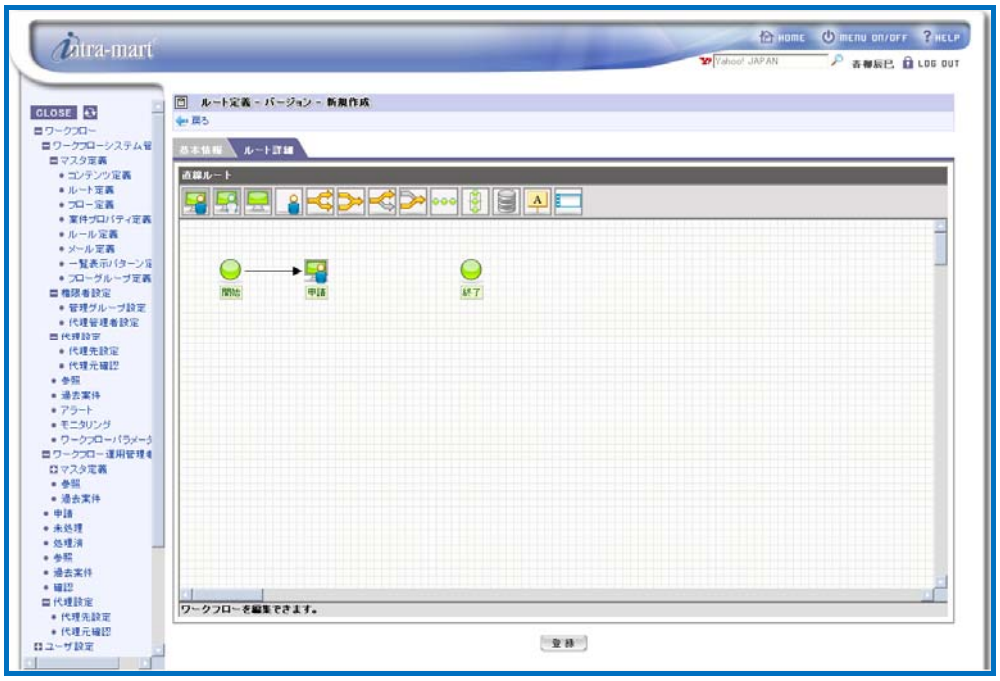
1.2.4.1 Operation procedure for route creation

1 Create [normal] route.

Here, it takes as an example a case of creating simple route consisting of [Start] - [Application] - [Approval] - [End].

When selecting “Route details” in the < Route definition - Version - Edit > screen, start node, application node and end node have already been in place on the grid.

Positions of each node can be changed by drag-and-drop.

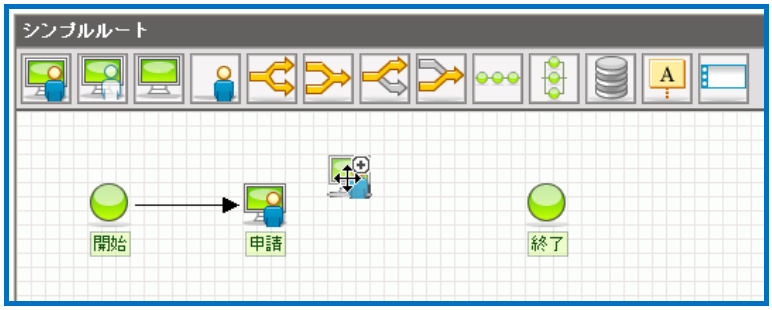


< Route definition - Version - Create new (Tab: Route details) >

- In case of route [for template replacement], template start node and template end node have already been in place.

2 Add approval node.

From the node icon list displayed at the top of the screen, drag the leftmost approval node on the grid (move the mouse with its button still pressed). Then approval node can be moved on the grid, so drop it at some proper point (release the mouse button).



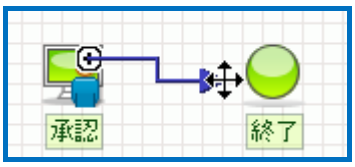
< Route editing screen (adding approval node) >

3 Make new interconnections [application node] - [approval node], and [approval node] - [end node] using arrowed lines on the screen.

By pointing with mouse over each node placed on the grid of the designer screen, [+] sign will be displayed in the upper right position.

By dragging the [+] sign displayed, a purple colored arrowed line will be displayed; then move this arrowed line to the destination node to be connected and drop it.

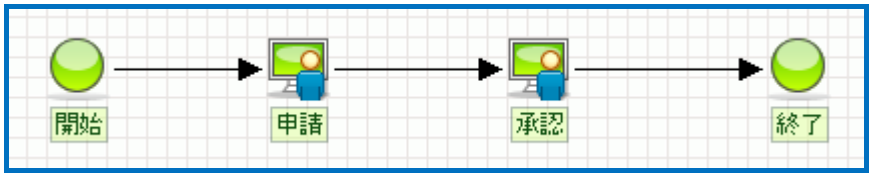
< Node with [+] sign displayed >



< Arrowed line being dragged >

Connect application node and approval node using arrowed line, and in the same way connect approval node and end node.

Then the stream of processing from starting via application, approval, and then leading to end will be complete.

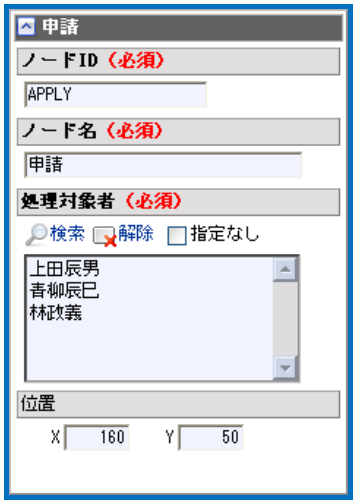


< Completed route >

- If connecting nodes between which interconnection is not allowed is attempted, the arrowed line will be displayed in red thick line, and this makes it unable to register the route. By clicking the arrowed line, green colored square (■) will be displayed, and drag-and-dropping either of them will make it possible to change connection source/destination. By pressing “Delete” key with the green square (■) still displayed, the arrowed line can be deleted.
- There are certain rules concerning the combination of placement and connection of nodes. For details, refer to the separate document “IM-Workflow Specifications”.

4 Configure the processing handler of application node.

By clicking the application node displayed on the grid, configuration input field for application node will be displayed on the right of the grid.



< Configuration input field for application node >

Enter configuration information of the application node.

Node ID(required)	This is the ID for identifying the node. This is automatically numbered when placing the node. Unless being already used, it can be changed arbitrarily.
Node name (required)	Node classification will be automatically entered when placing the node, and it can be changed arbitrarily.
Processing handler (required)	Meaning the processing handler who carries out the processing of this node. By clicking the < Search > icon, a popup window < Processing handler > will be displayed. Then by clicking the icon for the item to be the processing handler, search screen of IM-Common Master will be displayed, in which the handler can be selected arbitrarily. By clicking the < Cancel > icon, selected processing handler will be cancelled.
Position	Position of the node placed on the grid can be directly entered by specifying X-Y coordinate. It can be specified in pixel unit.

5 Configure the processing handler of approval node.

Likewise application node configuration, configure approval node.

< Configuration input field for approval node >

Configure [Node ID (required)], [Node name (required)], [Processing handler (required)], and [Position].

6 Upon completing the flow, click the [Register] button.

Now creating the version of route definition is complete.

Column

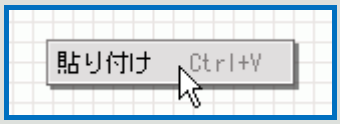
Convenient operation on the grid

■ Copy, Paste, Cut, and Delete

By right clicking each node on the grid, menu will be displayed.

By selecting [Copy] from the menu, the relevant node will be memorized temporarily. Keeping that condition, then right clicking some point on the grid where nothing is displayed will cause [Paste] menu to be displayed, and by clicking this [Paste] the same node as the one which was previously memorized can be placed.

< Node editing menu >



< Node editing menu (Paste) >

Items configured for the copy source node, except node ID and position, will be transcribed to the copied node, so it is not necessary to reconfigure.

In case of creating a route in which multiple similar processings would be placed, copy and paste function will facilitate such route creation.

*As for approval node only, processing handler may not be copied depending on the conditions such as node connection status.

When selecting [Cut] from the menu, the behavior is same as selecting [Copy], except that the selected node will be temporarily deleted from the grid. Although the node will be in deleted status once, by selecting [Paste] it will return to the grid.

When selecting [Delete] from the menu, the node will be deleted from the grid. In this case since the node will not be memorized, [Paste] function cannot be performed, or it is possible to [Paste] the node which had been [Cut] or [Copied] last time around.

Same functions can be performed from keyboard by pressing “Ctrl + X” keys for [Cut], “Ctrl + C” for [Copy], “Ctrl + V” for [Paste], and “Delete” key for [Delete].

In certain browsers keyboard input may not be enabled. In such a case, use mouse.

For Mac OS, “Command” key can be used instead of “Ctrl”.

* With respect to start node, application node and end node (and to route [for template replacement], template start node and template end node), since each one of them must be placed for one route, [Cut], [Copy] and [Delete] function cannot be used for these nodes.

■ Selecting multiple nodes

By starting dragging operation from a point on the grid where nothing is displayed, blue colored selective region will be displayed, then by moving mouse to a different point making certain rectangular region, followed by releasing the button, the nodes within the range can be selected collectively.

This is convenient when, for example, multiple nodes should be moved/deleted at one time. It is also

possible to cut and/or copy with multiple nodes selected.

By clicking the node with “Ctrl” key still pressed, status of selected or non-selected can be switched.

1.2.4.2 How to create various routes

Below are the descriptions of how to create nodes not addressed in [1.2.4.1 Operation procedure for route creation].

Dynamic approval

Place dynamic approval node on the grid by drag-and-drop.
Configure [Node ID (required)], [Node name (required)], [Processing handler (required)], and [Position].

System

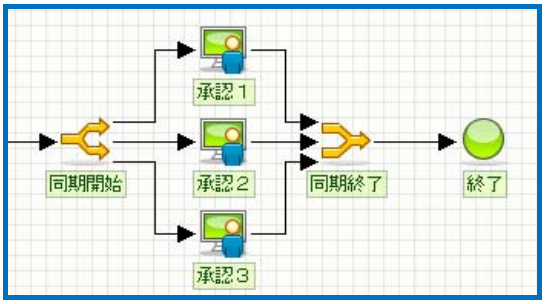
Place system node on the grid by drag-and-drop.
Configure [Node ID (required)], [Node name (required)], and [Position].
Program to be run is not configured here, but it should be configured in flow definition.

Confirmation

Place confirmation node on the grid by drag-and-drop, and then connect it using arrowed line from the node to be the target of starting confirmation.
This can be connected to application node, approval node, and system node.
Upon finishing the processing of connected node, specified confirmation handler is allowed to confirm the deal.
Configure [Node ID (required)], [Node name (required)], [Confirmation handler (required)], and [Position].

Synchronization processing (synchronization start/synchronization end)

Place synchronization start node on the grid by drag-and-drop. Connect arrowed lines in a ratio of 1:n from the synchronization start node toward the nodes to be synchronized.
Place synchronization end node on the grid by drag-and-drop. Connect arrowed lines in a ratio of n:1 from the nodes for which synchronization processing should be ended, toward the synchronization end node.



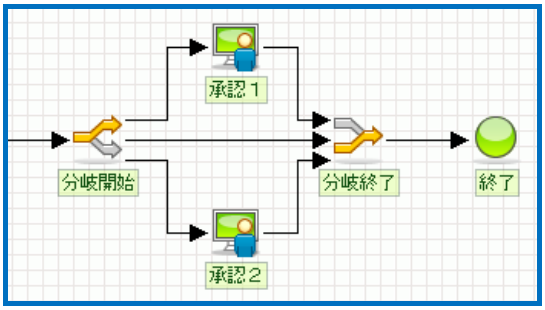
< Placement example of synchronization processing nodes >

Configure [Node ID (required)], [Node name (required)], and [Position], respectively.

Junction processing (junction start/junction end)

Place junction start node on the grid by drag-and-drop. Connect arrowed line from the junction start node toward the node for which junction processing should be performed. It is also possible to connect directly to the junction end node.
Place junction end node on the grid by drag-and-drop. Connect arrowed line from the nodes for which junction processing should be

ended, toward the junction end node.



< Placement example of conditional junction nodes >

Configure [Node ID (required)], [Node name (required)], and [Position], respectively.
If a flow in which previous processing handler can select the route to proceed should be created, use this junction processing. Conditions for junction, etc. are not configured here, but should be configured in flow definition.

Horizontal placement

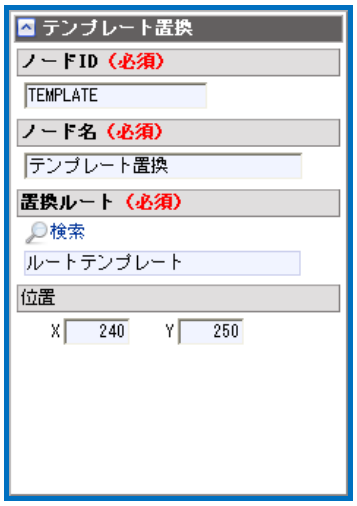
Place horizontal placement node on the grid by drag-and-drop.
Configure [Node ID (required)], [Node name (required)], [Processing handler (required)], and [Position].
Conditions such as number of nodes which can be assigned, and preprocessing node for which detailed node configuration are not configured here, but should be configured in flow definition.

Vertical placement

Place vertical placement node on the grid by drag-and-drop.
Configure [Node ID (required)], [Node name (required)], [Processing handler (required)], and [Position].
Conditions such as number of nodes which can be assigned, and preprocessing node for which detailed node configuration are not configured here, but should be configured in flow definition.

Template replacement

Place template replacement node on the grid by drag-and-drop. However, it cannot be placed on the route for template replacement.
Configure [Node ID (required)], [Node name (required)], [Replacement route (required)], and [Position].
For the item [Replacement route], specify the route for template replacement created in the route definition.



	< Configuration input field for template replacement node >
	By clicking the < Search > icon, a popup window < Route definition - Search > will be displayed. Then select the route definition for template replacement having already been created in advance.
Comment	Used to display some comment on the route. Place it on the grid by drag-and-drop. Configure [Comment name (content)], [Position] and [Size]. It is also possible to configure [Size] by dragging any of the four corners of the comment box. Arrowed line can be connected from the [+] sign displayed over the comment, toward the node to be associated with the comment. Besides, it is also possible to place it alone without associating it with any particular node.
Swimlane	Used for sorting and/or organizing multiple nodes on the route. Place it on the grid by drag-and-drop. Configure [Swimlane name], [Position] and [Size]. It is also possible to configure [Size] by dragging any of the four corners of the swimlane.

- Although there is no upper limit on the number of nodes allowed to be placed on one route, extremely large number of nodes may cause lengthy processing of application/approval. So it would be better configure the placement with as fewer nodes as possible.

Column

Changing grid size

By editing the setting file with “Workflow parameter”, size of route definition designing region for editing the route can be changed.

By default, the size is configured as width [10000] x height [5000].

* Although larger size can be specified, large amount of memory may be consumed. Memory shortage may cause being unable to download image file of the route.
* For details on “Workflow parameter”, refer to the separate document “IM-Workflow Specifications”.

1.2.5 Flow definition

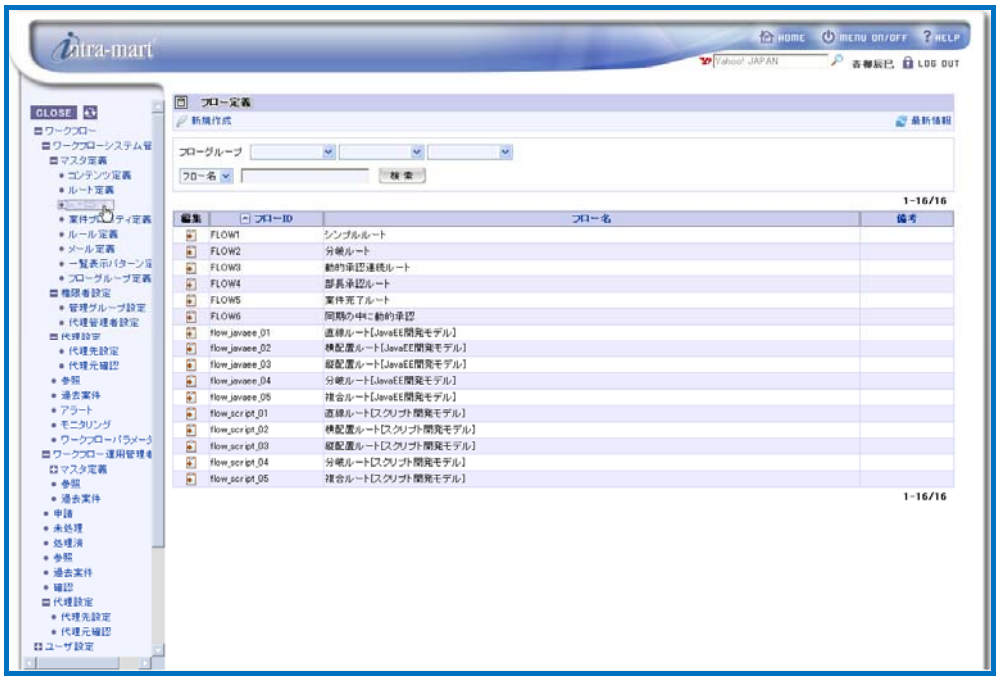
Flow constitutes Workflow for which application can be actually submitted in combination with content and route.

Flow definition is administered for each “version” distinguished according to the period information, so that part of the configuration can be changed according to the period information.

Workflow system administrator registers content information through [Workflow] - [Workflow system administrator] - [Master definition] - [Flow definition] menu. Workflow operation administrator edits/creates new ones through the [Workflow] - [Workflow operation administrator] - [Master definition] - [Flow definition] menu, to the extent he/she is granted appropriate privilege.

1 Click the [Flow definition] button.

< Flow definition > screen will be displayed in which a list of registered flows will be displayed.



< Flow definition >

Column

Searching/displaying flow definition

By specifying conditions to search flow definition, it becomes possible to display only relevant ones. Enter search conditions to the field for specifying search conditions located at the top of the screen.

- From the pull-down list, select the flow definition item to be search target.
- In the textbox located on the right, enter the string to be searched.
- Click the [Search] button.

As compared to the search target selected, only the flow definition containing partially-matching string will be displayed.

In the “Flow group” pane, flow groups which have been defined will be shown in pull-down list format

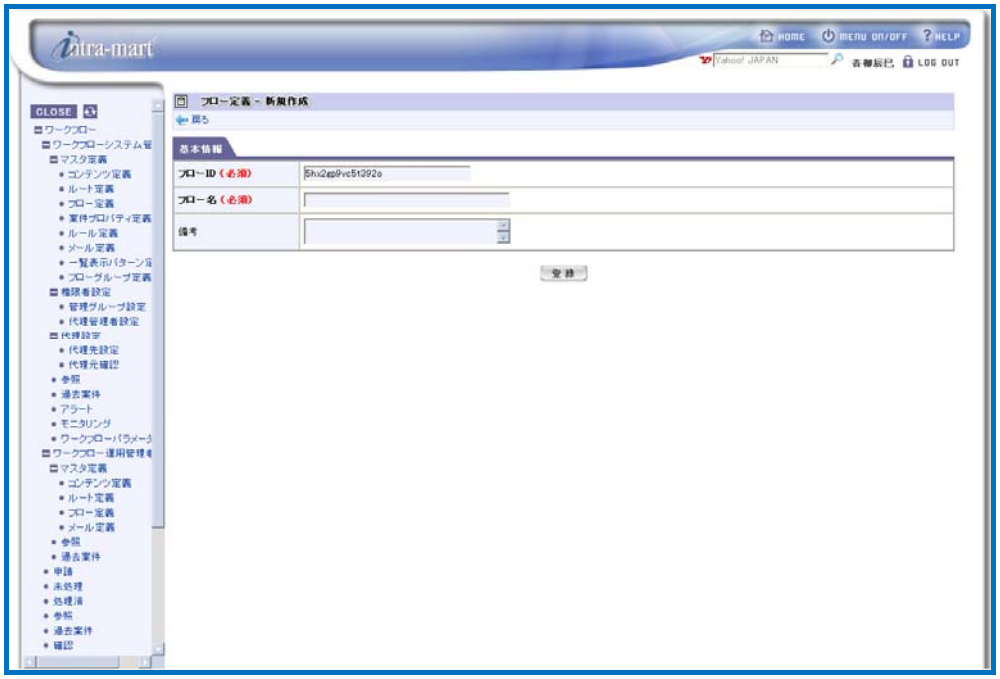
for each hierarchy.
This item will not be displayed if:
- It is configured as “Do not use flow group” in the individual login group configuration; or
- Flow group has not been registered at all.

Column

Editing/deleting flow definition

To edit already-registered flow, click the icon displayed in the [Edit] column for the flow to be edited.
Then < Flow definition - Edit > screen will be displayed. And by clicking the [Update] button after completing editing the content, it will be updated. Follow the similar steps when deleting flow: in the < Flow definition - Edit > screen which will be displayed, click the [Delete] button.

2 To create new flow, click the < Create new > icon.
< Flow definition - Create new > screen will be displayed.



< Flow definition - Create new>

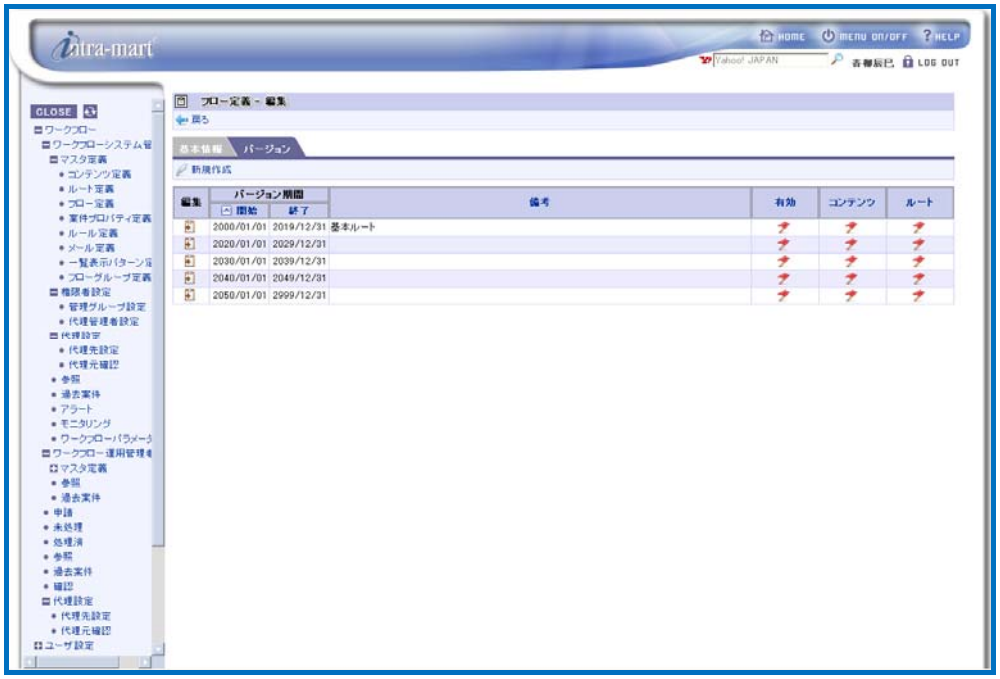
Enter basic information of the flow.

Flow ID (required)	This is the ID for identifying the flow. Automatically numbered. Unless being already used, it can be entered arbitrarily.
Flow name (required)	Enter the name of the flow to be registered. It should be entered for all the locales configured in the system.
Remarks	Explanation about the flow, etc. can be entered. It can be entered for all the locales configured in the system.

3 Click the [Register] button.

Basic information of the flow will be registered, and then < Flow definition - Edit > screen will be displayed.

Versions of flow definition will be listed up. However, nothing will be displayed for newly created flow.



< Flow definition - Edit (Tab: Version) >

4 To register new version of the flow, click the < Create new > icon.

< Flow definition - Version - Create new > screen will be displayed.

< Flow definition - Version - Create new>

Enter version information of the flow.

Version period (required)

Configure the period of validity of the version of flow definition.

Version valid/invalid (required)

Configure the status of validity of the version of flow definition.

Remarks

Explanation about the version of flow definition, etc. can be entered. It can be entered for all the locales configured in the system.

Content (required)

Select the content definition to be used for this flow.
By clicking the < Search > icon, a popup window of < Content definition - Search > will be displayed, in which already registered content definition will be listed up.

< Content definition - Search >

It can be selected by clicking the icon of the content definition to be registered.

Route (required)

Select the route definition to be used for this flow.
By clicking the < Search > icon, a popup window of < Route definition - Search > will be displayed, in which already registered route definition will be listed up.

< Route definition - Search >

It can be selected by clicking the icon of the route definition to be registered.

Calendar

Select the calendar definition on which number of days count of the matter to be used for “Automatic processing” and “Automatic reminder” functions.
By clicking the < Search > icon, a popup window < Calendar - Search > will be displayed. In the window, calendar definitions for which the group administrators have been registered will be listed up. If not configured yet, every single day will be counted as one day.

< Calendar - Search >

It can be selected by clicking the icon of the calendar definition to be registered.

Function configuration

Restrictions on the use of the following items are configured.

File attaching	Restriction on the use of file attaching. Configured as “Enabled” by default. If configured as “Disabled”, file attaching will be entirely disabled for matters applied in this flow.
Batch processing	Restriction on the use of batch processing. Configured as “Enabled” by default. If configured as “Disabled”, batch processing will be disabled for matters applied in this flow.
Batch confirmation	Restriction on the use of batch confirmation. Configured as “Enabled” by default. If configured as “Disabled”, batch confirmation will be disabled for matters applied in this flow.
Finished matter confirmation	Restriction on the use of finished matter confirmation. Configured as “Disabled” by default. If configured as “Disabled”, it will not be possible to register confirmation comments after finishing matters applied in this flow.
Automatic processing	Restriction on the use of automatic processing by the system. Configured as “Disabled” by default. If this should be configured as “Enabled”, the following additional configuration items will be displayed. ■ Processing deadline (required): Specify number of days after arriving at the node until executing automatic processing. Days count should follow the calendar definition configured in the [Calendar] menu. ■ Processing after overdue (required):

	Specify whether to "approve" or to “deny” after overdue.
Automatic reminder	Restriction on the use of automatic reminder from the system. Configured as “Disabled” by default. If this should be configured as “Enabled”, the following additional configuration item will be displayed. ■ Reminder deadline (required): Specify number of days after arriving at the node until executing automatic reminder. Days count should follow the calendar definition configured in the [Calendar] menu.

● End date of version period is not always required. If left blank, it will be configured as indefinite (end date of the system).

Column

Automatic processing

“Automatic processing” means processing by “automatic processing” function which handles matters automatically when the node status matched certain conditions.
Conditions for automatic processing are as follows.

Automatic processing for processing deadline	If a matter has passed specified period after arriving at some node, automatic processing for the node will be executed. Among processings for “approval node” and “dynamic approval node”, only matters in status of “pending approval” are the targets. It is configured by the automatic processing configuration of flow definition.
Existing processing handler automatic approval	If a processing handler who carried out approval between application node and the target node of automatic processing is the processing handler of the relevant node, automatic processing for the node will be executed. It can be configured as node arrival processing, by editing the node in the [Route details] menu of flow definition.
Continuous automatic approval	If the processing handler of the relevant node is the same person as the applicant or approver of the last node, automatic processing for the node will be executed. It can be configured as node arrival processing, by editing the node in the [Route details] menu of flow definition.
Repeated processing handler automatic approval	If the processing handlers include previous approver, automatic processing for the node will be executed. It can be configured as node arrival processing, by editing the node in the [Route details] menu of flow definition.

* For details on conditions for automatic processing, refer to the separate document “IM-Workflow Specifications”.

5 Click the [Register] button.

Basic version information of the flow will be registered, and then < Flow definition - Version - Edit > screen will be displayed.

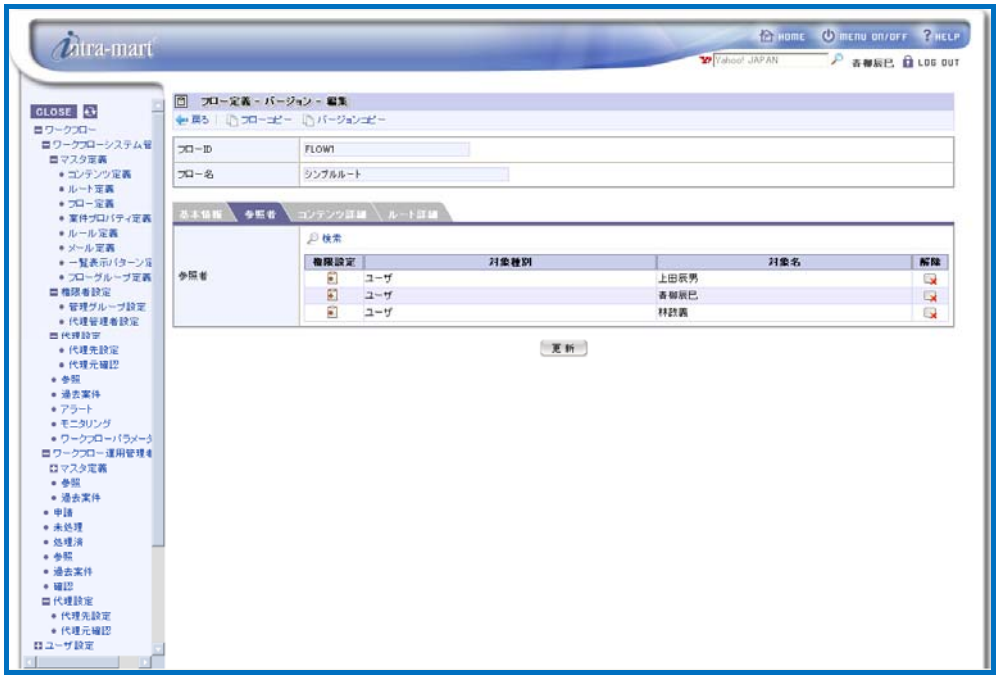
< Flow definition - Version - Edit (Tab: Basic information) >

■ Enabled/Disabled (“Batch processing”, “Automatic processing” and “Automatic reminder”) settings can be reflected on all the nodes on the registered route. If it should be reflected, check the box displayed for the relevant item to be the target and click the [Update] button.

■ Immediately after having created new version, same settings have already been reflected on all the nodes.

6 To configure “referrer” of the flow, switch the tab to [Referrer].

A list of registered referrers will be displayed. However, nothing will be displayed for newly created version.



< Flow definition - Version - Edit (Tab: Referrer) >

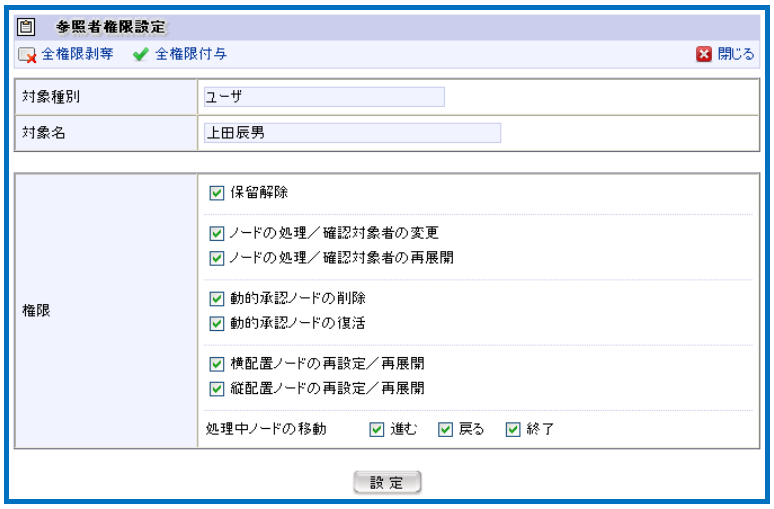
7 Configure referrer.

Users specified as referrers are allowed to refer the matter applied in this flow.
In addition, handler privilege for the matter can also be granted.

● Specify the target to be referrer.
By clicking the < Search > icon in the “Referrer” pane, a popup window < Processing handler > will be displayed.
Then by clicking the icon for the item to be the processing handler, search screen of IM-Common Master will be displayed.

● Select the target to be referrer. Selected targets will be displayed in the list.
By clicking the icon in the [Cancel] column, registration of the referrer will be cancelled.

Configure the settings for referrer privileges.
Click the icon displayed in the [Privilege settings] column of the relevant row for which privilege settings should be configured.
< Referrer privilege settings > screen will be displayed.



< Referrer privilege settings >

Check the box for the privilege to be granted to the referrer.

Release hold	Privilege to release hold status of a matter will be granted.
Change processing handler/confirmation handler of node	Privilege to configure processing handler/confirmation handler of each node will be granted.
Reexpand processing handler/confirmation handler of node	Privilege to reexpand processing handler/confirmation handler of each node will be granted.
Delete dynamic approval node	Privilege to delete dynamic approval node in midstream will be granted.
Restore dynamic approval node	Privilege to place again dynamic approval node in midstream will be granted.

Reconfigure/reexpand horizontal placement node	Privilege to change number of nodes expanded and processing handler, and to reexpand processing handler within horizontal placement node will be granted.
Reconfigure/reexpand vertical placement node	Privilege to change number of nodes expanded and processing handler, and to reexpand processing handler within vertical placement node will be granted.
Reconfigure/reexpand node in process	Privilege to move node in process will be granted. ・ Forward Privilege to move a node currently in process to a node in forward direction (toward end). ・ Backward Privilege to move a node currently in process to a node in backward direction (toward start). ・ End Privilege to move a node currently in process to end node (to approve and end the matter forcibly).

- By clicking the < Deprive all privilege > icon at the top of the screen, all the checkboxes will be checked off.
- By clicking the < Grant all privilege > icon at the top of the screen, all the checkboxes will be checked.

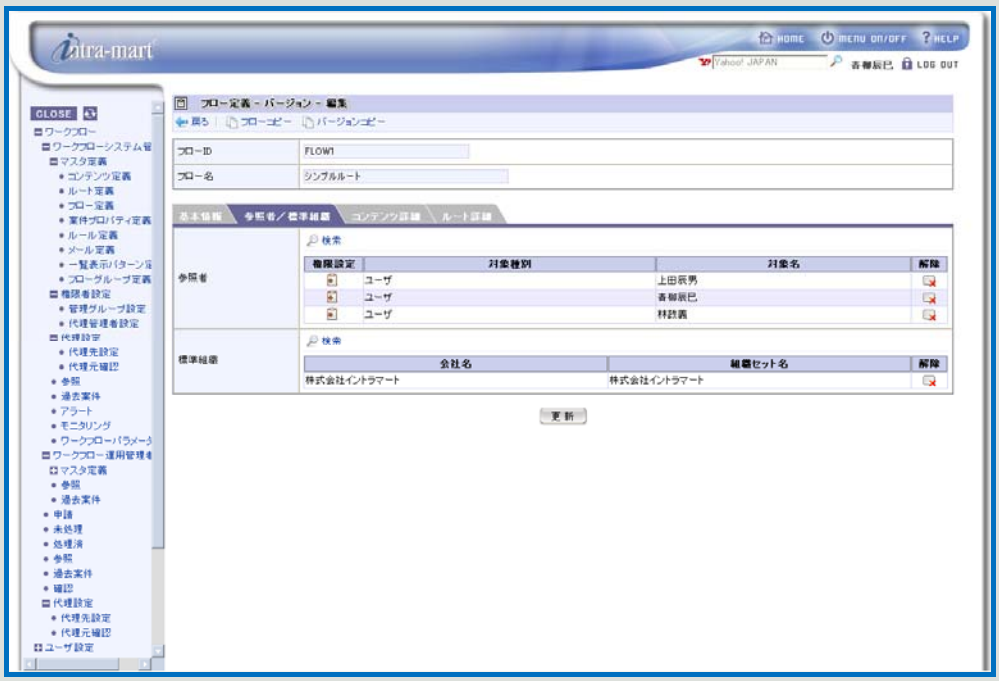
Column

Settings for standard organization

By configuring “Allowed/Not allowed to use standard organization” setting as “Allowed” in the “Workflow parameter”, it becomes possible to configure standard organization for each flow definition.
By configuring standard organization, organization allowed to use this flow can be restricted to those as specified.
If use of organization set is not allowed, or no settings is configured for standard organization, all the organizations are allowed to use this flow.
* For details on standard organization, refer to the separate document “IM-Workflow Specifications”.

By configuring “Use of organization set” as “Allowed” in the "Workflow parameter", [Referrer] tab in the < Flow definition - Version - Edit > screen will change to [Referrer/Standard organization], and configuration items for standard organization will be displayed in addition.

Specify standard organization.
In the < Flow definition - Version - Edit > screen, switch the tab to [Referrer/Standard organization].



< Flow definition - Version - Edit (Tab: Referrer/Standard organization) >

By clicking the < Search > icon in the “Standard organization” pane, a popup window for organization search of IM-Common Master will be displayed.
Select the organization to be caused to use this flow. Selected organization will be displayed in the list.

For the organization displayed in the list, by clicking the icon in the [Cancel] column, registration of the organization will be cancelled.

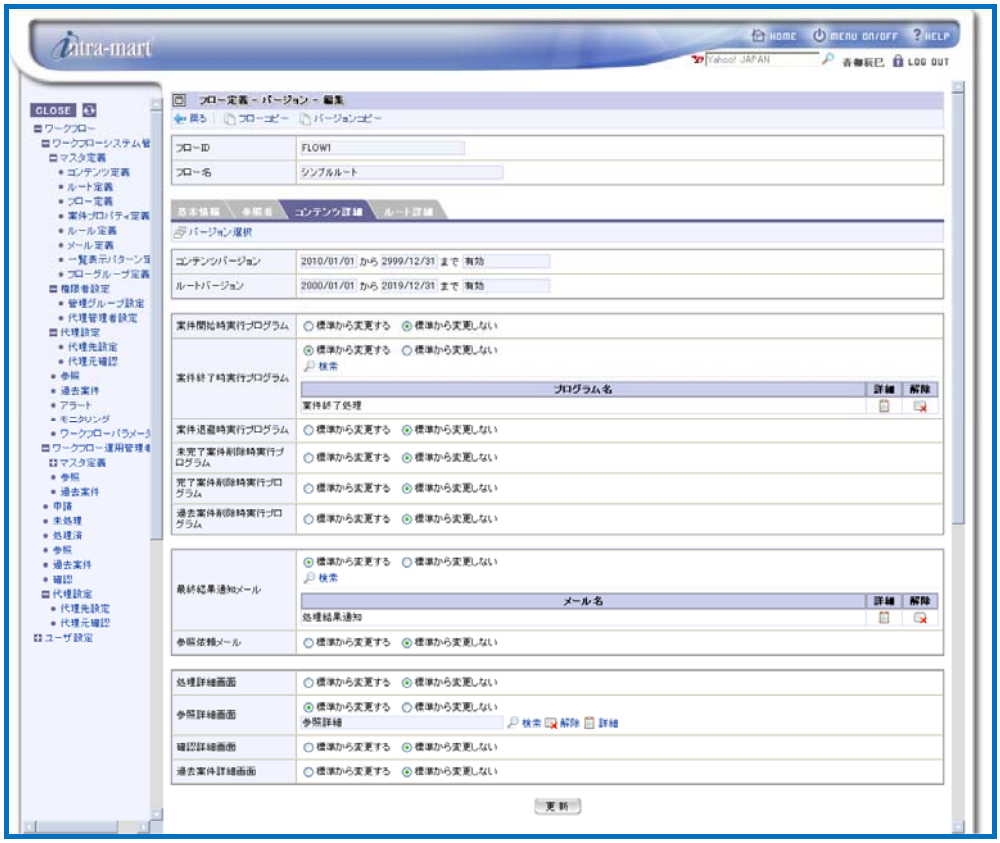
* For details on “Workflow parameter”, refer to the separate document “IM-Workflow Specifications”.

8 Click the [Update] button.

"Referrer" information will be registered to the version.

9 To configure "content details" of the flow, switch the tab to [Content details].

Version information of the content and route configured for the flow, and detailed configuration items of the content will be displayed.



< Flow definition - Version - Edit (Tab: Content details) >

Configure the content details.

Program executed upon start of matter	Configuration for program executed upon start of matter. Default setting is "Do not change from standard". When changing from standard, select "Change from standard" and click the < Search > icon which will be displayed. A popup window < User program definition - Search > will be displayed in which list of user program executed upon start of matter as defined in content definition will be displayed, then configure the user program to be registered.
Program executed upon end of matter	Configuration for program executed upon end of matter. Default setting is "Do not change from standard". A popup window < User program definition - Search > will be displayed in which list of user program executed upon end of matter as defined in content definition will be displayed, then configure the user program to be registered.
Program executed upon archiving finished matter	Configuration for program executed upon archiving of finished matter. Default setting is "Do not change from standard". A popup

	window < User program definition - Search > will be displayed in which list of user program executed upon end of matter as defined in content definition will be displayed, then configure the user program to be registered.
Program executed upon deleting unfinished matter	Configuration for program executed upon deleting unfinished matter. Default setting is “Do not change from standard”. A popup window < User program definition - Search > will be displayed in which list of user program executed upon end of matter as defined in content definition will be displayed, then configure the user program to be registered.
Program executed upon deleting finished matter	Configuration for program executed upon deleting finished matter. Default setting is “Do not change from standard”. A popup window < User program definition - Search > will be displayed in which list of user program executed upon end of matter as defined in content definition will be displayed, then configure the user program to be registered.
Program executed upon deleting past matter	Configuration for program executed upon deleting past matter. Default setting is “Do not change from standard”. A popup window < User program definition - Search > will be displayed in which list of user program executed upon end of matter as defined in content definition will be displayed, then configure the user program to be registered.
Final result notification email	Configuration for email to notify final result of the matter. Default setting is “Do not change from standard”. When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed. A popup window < Email definition - Search > will be displayed in which list of final result notification email definition as defined in content definition will be displayed, then configure the email definition to be registered.
Reference request email	Configuration for email to notify reference request of the matter. Default setting is “Do not change from standard”. When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed. A popup window < Email definition - Search > will be displayed in which list of reference request email definition as defined in content definition will be displayed, then configure the email definition to be registered.
Processing details screen	Configuration for processing details screen of the matter. Default setting is “Do not change from standard”. When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed. A popup window < Screen definition - Search > will be displayed in which list of screen definition, the screen classification defined in content definition of which is “Processing details screen”, will be displayed, then configure the screen definition to be registered.
Reference details screen	Configuration for reference details screen of the matter. Default

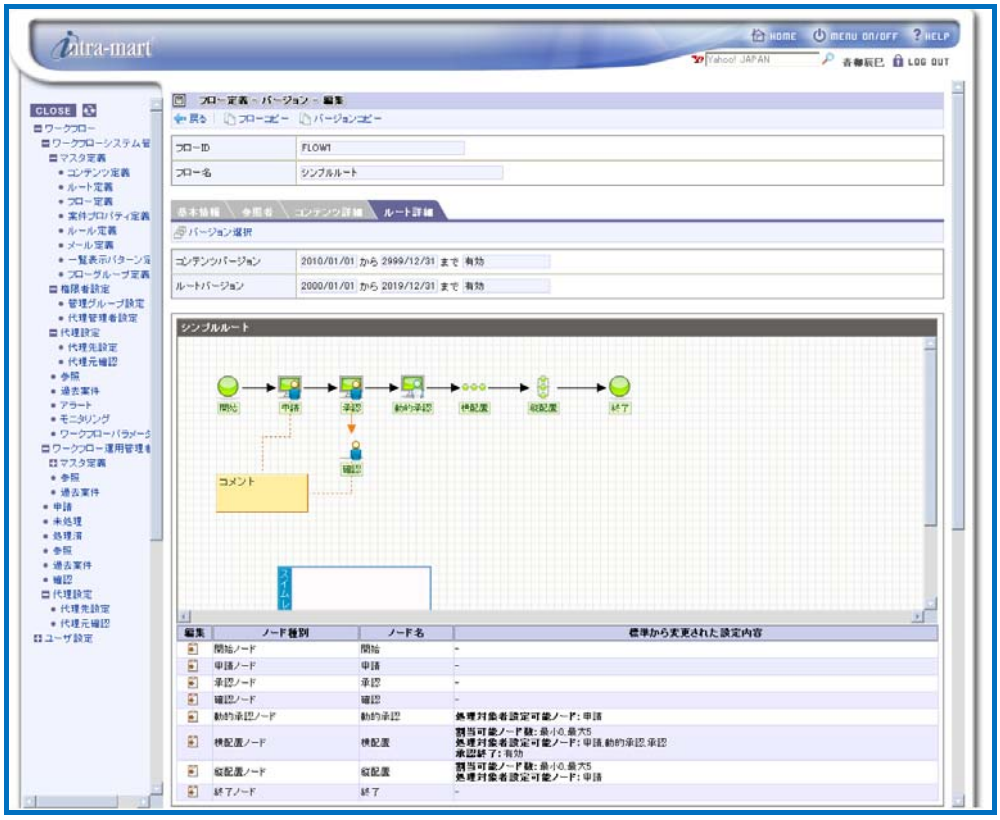
	setting is “Do not change from standard”. When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed. A popup window < Screen definition - Search > will be displayed in which list of screen definition, the screen classification defined in content definition of which is “Reference details screen”, will be displayed, then configure the screen definition to be registered.
Confirmation details screen	Configuration for confirmation details screen of the matter. Default setting is “Do not change from standard”. When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed. A popup window < Screen definition - Search > will be displayed in which list of screen definition, the screen classification defined in content definition of which is “Confirmation details screen”, will be displayed, then configure the screen definition to be registered.
Past reference screen	Configuration for past reference screen of the matter. Default setting is “Do not change from standard”. When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed. A popup window < Screen definition - Search > will be displayed in which list of screen definition, the screen classification defined in content definition of which is “Past reference screen”, will be displayed, then configure the screen definition to be registered.

10 Click the [Update] button.

“Content details” information will be registered to the version.

11 To configure “route details” of the flow, switch the tab to [Route details].

Version information of the content and route configured for the flow, and list of route and node will be displayed, then configure the detailed settings of nodes on the route.



< Flow definition - Version - Edit (Tab: Route details) >

For details on how to configure each node, refer to [1.2.6 Flow definition - Edit node] described below.

Column

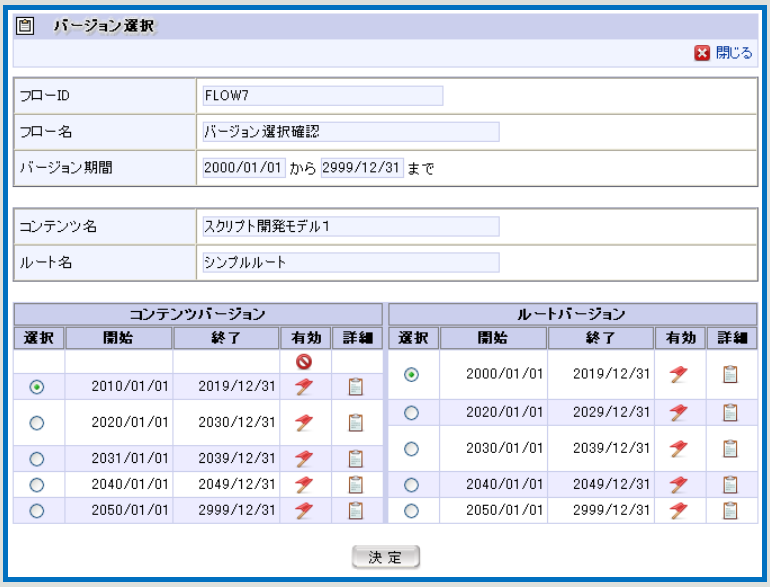
Detailed configuration of content definition/route definition for each version

■ For every version of content definition and every version of route definition being in valid status within the version period of the flow, content details and route details can be configured.

Select the version to be configured.

▪ In <Flow definition - Version - Edit (Tab: Content details) > screen, or in <Flow definition - Version - Edit (Tab: Route details) > screen, click the < Version selection > icon.

< Version selection > screen will be displayed, in which version lists of content and of route being in valid status within the version period of the flow will be displayed.



< Version selection (Route details) >

▪ Select the version to be configured.

By clicking the icon displayed in the [Details] column, details on the version of content and flow can be confirmed.

Select the combination such that version periods for both content and route would overlap partially or entirely.

▪ Click the [OK] button.

Because in the content details only the details of content definition will be included for detailed configuration, version of route definition has no bearing.

And because in the route details, details of content definition and of route definition are interrelated, it is possible to select/configure in detail with respect to every combination of versions of content definition and of route definition.

12 Now creating new flow definition is complete.

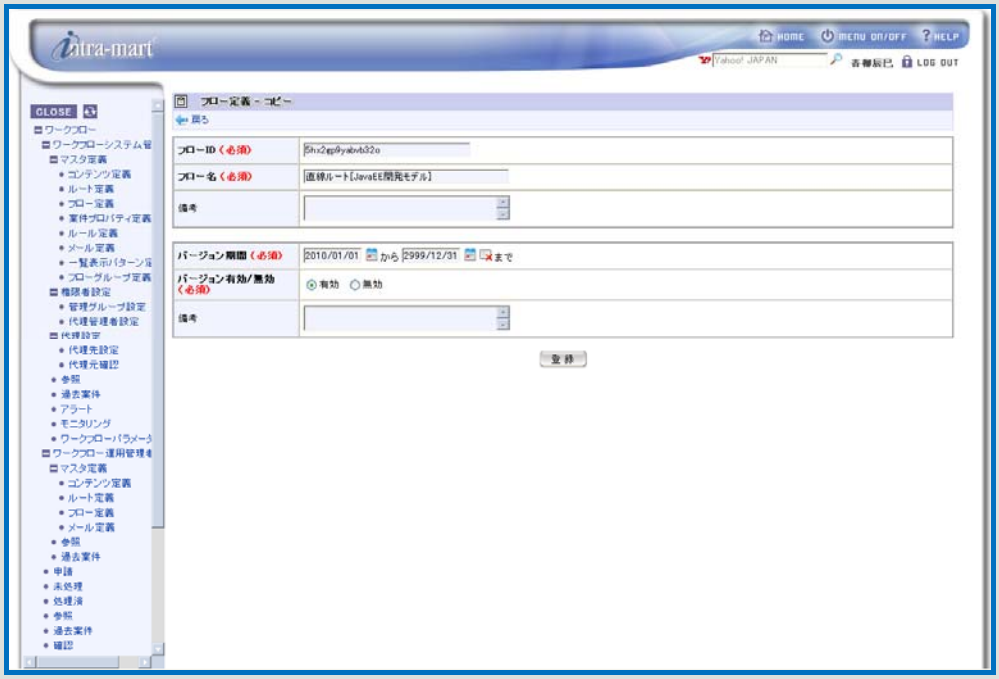
- As long as there is no overlapping period, any number of versions can be registered for a single flow definition.
- Range of version period (system start date - system end date) allowed to be configured can be changed through [Workflow parameter] menu. (For details, refer to the separate document “IM-Workflow Specifications”.)

Column

Copying flow definition

■ By copying flow definition, new flow definition retaining the version information of the copy source can be created.

▪ By clicking the < Copy flow > icon displayed at the top of < Flow definition - Version - Edit > screen, < Flow definition - Copy > screen will be displayed.



< Flow definition - Copy >

▪ Enter basic information of flow definition to be the copy destination newly created, and the version period information.
▪ Click the [Register] button.
New flow definition retaining the same one version in which information of “referrer”, “content details”, and "route details” is identical to the version of the copy source flow definition, will be created with the version period as specified.

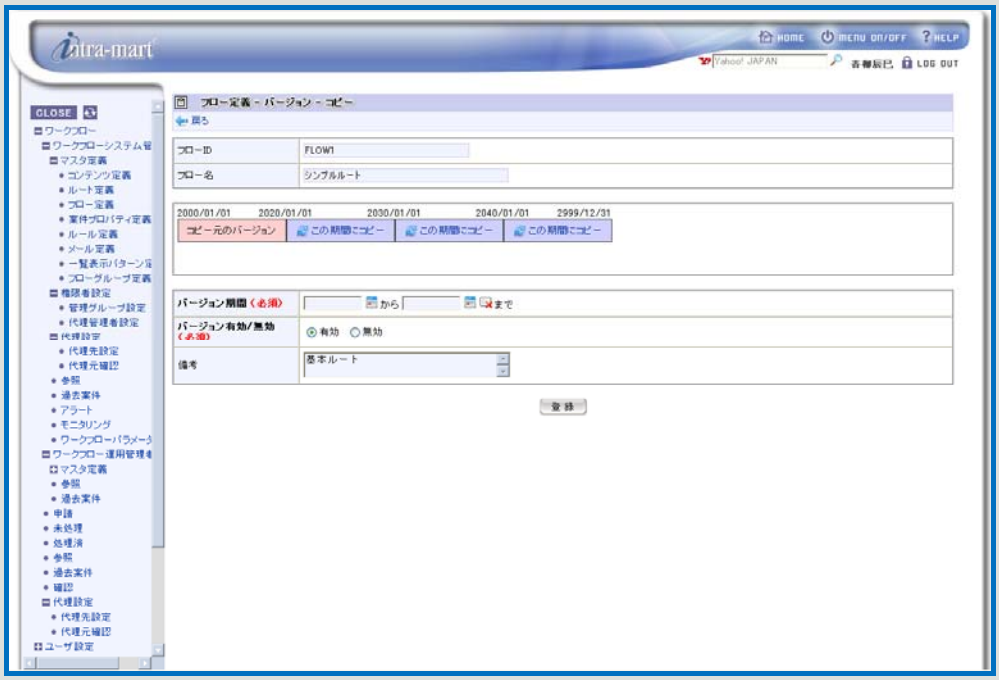
* The version to be registered for the newly created flow definition is limited to one. Other versions registered for the copy source flow definition cannot be copied.

Column

Copying the version of flow definition

■ By copying the version, new version retaining the version information of the copy source can be created within the same flow definition.

▪ By clicking the < Copy version > icon displayed at the top of < Flow definition - Version - Edit > screen, < Flow definition - Version - Copy > screen will be displayed.



< Flow definition - Version - Copy >

▪ Enter version period information of the copy destination to be newly created.

▪ Version period table will be displayed about the center of the screen. This is a table which shows all the version periods registered for the same flow definition. Range of system periods will be indicated with the color coding as described below.

Red	Version period of the copy source.
Blue	Of the version periods registered for the same flow definition, which has its version configured as “Valid”.
Gray	Of the version periods registered for the same flow definition, which has its version configured as "Invalid".
White	Of the version periods registered for the same flow definition, which has no version defined yet.

By clicking one of the < Copy to this period > icons displayed for periods other than copy source, that period will be input as the version period of the copy destination.

▪ Click the [Register] button.

New version in which information of “referrer”, “content details”, and "route details” is identical to the version of the copy source, will be created with the version period as specified.

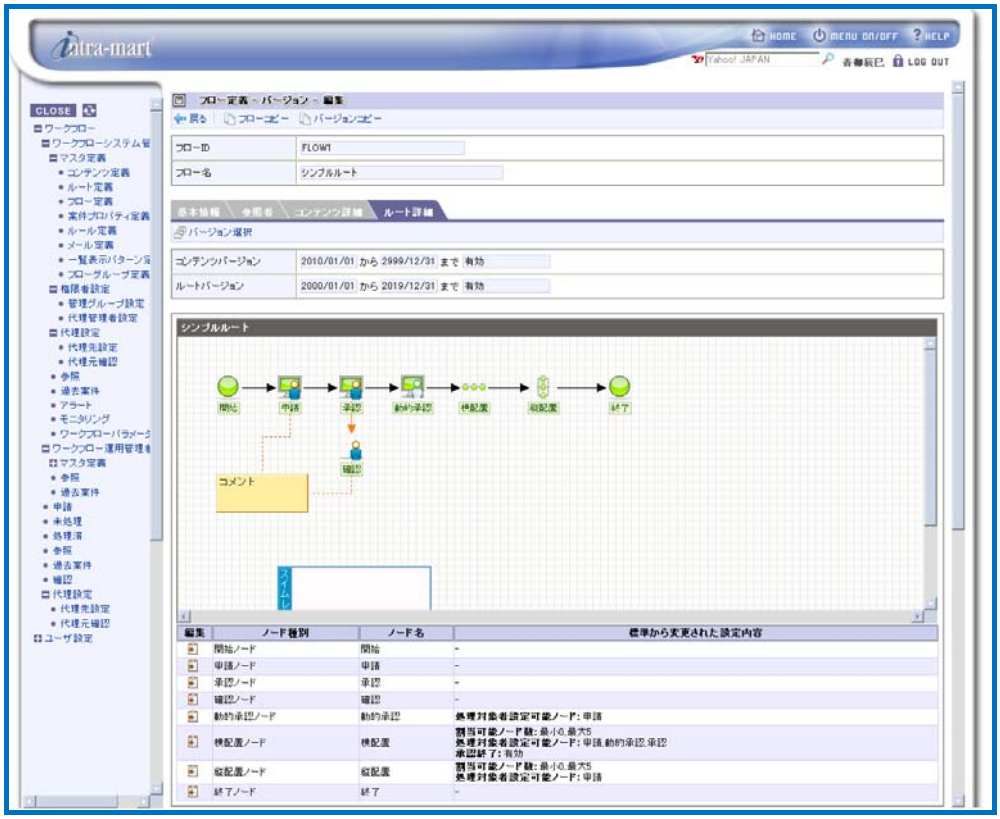
* If the specified period includes existing version period entirely or partially, then the period of the copy destination version has priority and overwrites the existing period, making it erased or altered.

1.2.6 Flow definition - Edit node

This section describes about detailed configuration of each node on the route, which will be carried out in the “Route details” tab of < Route definition - Version - Edit > screen displayed via [Workflow] - [Workflow system administrator] - [Master definition] - [Route definition].

* For operation up to this point, refer to the previous section [1.2.5 Flow definition].

By clicking the icon in the list of nodes on the flow displayed in the “Route details” tab of < Route definition - Version - Edit > screen, detailed configuration screen for each node will be displayed.

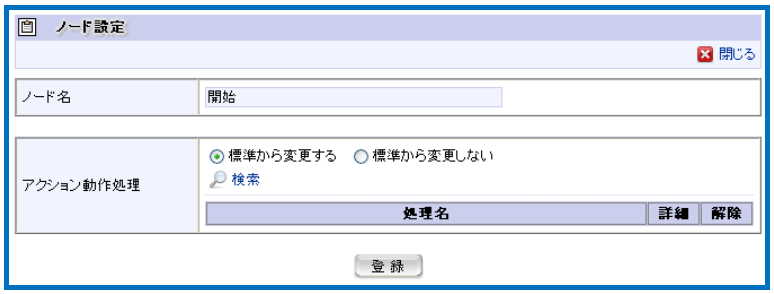


< Flow definition - Version - Edit (Tab: Route details) >

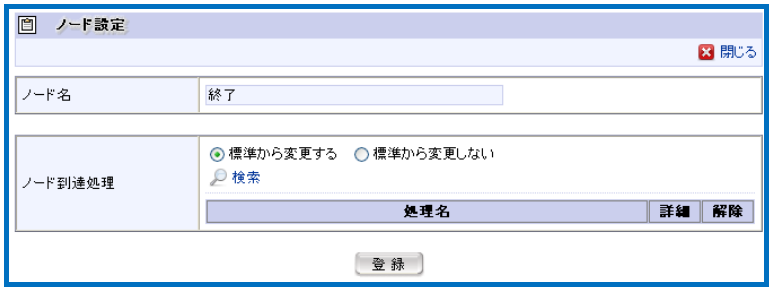
Configure detailed settings for each node.

1.2.6.1 Start/end nodes configuration

Configure start/end nodes.



< Node configuration (start node) >



< Node configuration (end node) >

Action processing	Specify the program to be executed when the processing for this node is handled. Default setting is “Do not change from standard”. When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed. A popup window < User program definition - Search > will be displayed in which list of user program executed upon end of matter as defined in content definition will be displayed, then configure the user program to be registered. If not configured, the program will not be executed upon executing this node.
Node arrival processing	Specify the program to be executed upon arriving at this node. Default setting is “Do not change from standard”. When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed. A popup window < User program definition - Search > will be displayed in which list of user program executed upon end of matter as defined in content definition will be displayed, then configure the user program to be registered. If not configured, the program will not be executed upon arriving at this node.

Click the [Register] button to register these information.

It will return to “Route details” tab of < Flow definition - Version - Edit > screen.

1.2.6.2 Application node configuration

Configure application node.

< Node configuration (Application node; Tab: Default configuration) >

Default configuration

Application screen	Specify the screen definition to be displayed upon new application in this node. Default setting is “Do not change from standard”. When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed. A popup window < Screen definition - Search > will be displayed in which list of screen definition, the screen classification defined in content definition of which is “Application screen”, will be displayed, then configure the screen definition to be registered.
Temporary saving screen	Specify the screen definition to be displayed upon temporary saving in this node. Default setting is “Do not change from standard”. When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed. A popup window < Screen definition - Search > will be displayed in which list of screen definition, the screen classification defined in content definition of which is “Temporary saving screen”, will be displayed, then configure the screen definition to be registered.
Application (drafting matter) screen	Specify the screen definition to be displayed upon application of the matter drafted in this node. Default setting is “Do not change from standard”. When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed.

A popup window < Screen definition - Search > will be displayed in which list of screen definition, the screen classification defined in content definition of which is “Application (drafting matter) screen”, will be displayed, then configure the screen definition to be registered.

Reapplication screen

Specify the screen definition to be displayed upon reapplication in this node. Default setting is “Do not change from standard”.
When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed.
A popup window < Screen definition - Search > will be displayed in which list of screen definition, the screen classification defined in content definition of which is “Reapplication screen”, will be displayed, then configure the screen definition to be registered.

Action processing

Specify the program to be executed when the processing for this node is handled. Default setting is “Do not change from standard”.
When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed.
A popup window < User program definition - Search > will be displayed in which list of user program executed upon end of matter as defined in content definition will be displayed, then configure the user program to be registered.
If not configured, the program will not be executed upon executing this node.

Node arrival processing

Specify the program to be executed upon arriving at this node. Default setting is “Do not change from standard”.
When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed.
A popup window < User program definition - Search > will be displayed in which list of user program executed upon end of matter as defined in content definition will be displayed, then configure the user program to be registered.
If not configured, the program will not be executed upon arriving at this node.

Processing request email

Specify the email to be sent upon arriving at this node. Default setting is “Do not change from standard”.
When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed. A popup window < Email definition - Search > will be displayed in which list of email the classification of which is “Processing request” as defined in content definition will be displayed, then configure the email definition to be registered.
If not configured, no email will be sent upon arriving at this node.

Function configuration

Restrictions on the use of the following items are configured.

File attaching	Configure restrictions on the use of attached file in this node. No registration with only “Addition prohibited” checked.

Automatic reminder	Configure restrictions on the use of automatic reminder in this node. Default status corresponds to the configuration in the version basic information. * If this should be configured as “Enabled”, the following additional configuration item will be displayed. ▪ Reminder deadline (required): Specify number of days after arriving at the node until executing automatic reminder.

< Node configuration (Application node; Tab: Processing configuration) >

Processing configuration

▪ Processing permission

Application	Configure whether or not to permit submitting application in this node. In application node, check status is fixed and irreversible.
Reapplication	Configure whether or not to permit submitting reapplication in this node. If checked, reapplication will be permitted from this node.
Pull-back	Configure whether or not to permit pulling-back in this node. If checked, pulling-back will be permitted from this node.
Discontinue	Configure whether or not to permit discontinuing in this node. If checked, discontinuing will be permitted from this node.
Drafting	Configure whether or not to permit drafting status in this node. In application node, check status is fixed and irreversible.

▪ Processing name

For the processing permitted in this node, unique name can be configured.

If changing name from the default one is desirable, select “Change name” and enter details of such change in the entry field displayed. It should be entered for all the locales configured in the system.

- Name of “Pull-back” processing cannot be changed.

Click the [Register] button to register these information.

It will return to “Route details” tab of < Flow definition - Version - Edit > screen.

1.2.6.3 Approval configuration

Configure approval node.

< Node configuration (Approval node; Tab: Default configuration) >

Default configuration

Processing screen	Specify the screen definition to be displayed upon processing in this node. Default setting is “Do not change from standard”. When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed. A popup window < Screen definition - Search > will be displayed in which list of screen definition, the screen classification defined in content definition of which is “Processing screen”, will be displayed, then configure the screen definition to be registered.
Action processing	Specify the program to be executed upon execution of this node. Default setting is “Do not change from standard”. When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed. A popup window < User program definition - Search > will be displayed in which list of user program executed upon end of matter as defined in content definition will be displayed, then configure the user program to be registered. If not configured, the program will not be executed upon executing this node.
Node arrival processing	Specify the program to be executed upon arriving at this node. Default setting is “Do not change from standard”. When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed. A popup window < User program definition - Search > will be

displayed in which list of user program executed upon end of matter as defined in content definition will be displayed, then configure the user program to be registered.
If not configured, the program will not be executed upon arriving at this node.

Processing request email

Specify the email to be sent upon arriving at this node. Default setting is “Do not change from standard”.

When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed.
A popup window < Email definition - Search > will be displayed in which list of email the classification of which is “Processing request” as defined in content definition will be displayed, then configure the email definition to be registered.
If not configured, no email will be sent upon arriving at this node.

Function configuration

Restrictions on the use of the following items are configured.

File attaching

Configure restrictions on the use of file attaching in this node. Checking only “Addition prohibited” is deemed an error.

Batch processing

Configure restrictions on the use of batch processing in this node. Default status corresponds to the configuration in the version basic information.

Automatic processing

Configure restrictions on the use of automatic processing by the system in this node. Default status corresponds to the configuration in the version basic information.
* If this should be configured as “Enabled”, the following additional configuration item will be displayed.

■ Processing deadline (required):
Specify number of days after arriving at the node until executing automatic processing.

■ Processing after overdue (required):
Specify whether to “approve”, “deny” or “return to specified node” after overdue.
* If specifying “return to specified node”, additional item for specifying the return destination node will be added as follows.

■ Return destination node (required):
Specify the return destination node in case of automatic processing for

	returning was executed in this node. By clicking the < Select > icon, A popup window < Node definition - Search > will be displayed, in which list of nodes which can be returned from this node, then configure the node to be registered.
Automatic reminder	Configure restrictions on the use of automatic reminder in this node. Default status corresponds to the configuration in the version basic information. * If this should be configured as “Enabled”, the following additional configuration item will be displayed. ■ Reminder deadline (required): Specify number of days after arriving at the node until executing automatic reminder.

< Node configuration (Approval node; Tab: Processing configuration) >

Processing configuration

▪ Processing permission

Approval	Configure whether or not to permit approval in this node. In approval node, check status is fixed and irreversible.
Approval end	Configure whether or not to permit doing approval end in this node. If checked, approval end will be permitted from this node.
Return	Configure whether or not to permit returning in this node. If checked, returning will be permitted from this node.
Pull-back	Configure whether or not to permit pulling-back in this node. If checked, pulling-back will be permitted from this node.

Denial	Configure whether or not to permit denial in this node. If checked, denial will be permitted from this node.
Hold	Configure whether or not to permit hold status in this node. If checked, hold status will be permitted from this node.
Release hold	Configure whether or not to permit hold releasing in this node. If checked, releasing hold will be permitted from this node.
Transfer	Configure whether or not to permit transfer in this node. If checked, transfer will be permitted from this node.

▪ Processing name

For the processing permitted in this node, unique name can be configured.

If changing name from the default one is desirable, select “Change name” and enter details of such change in the entry field displayed. It should be entered for all the locales configured in the system.

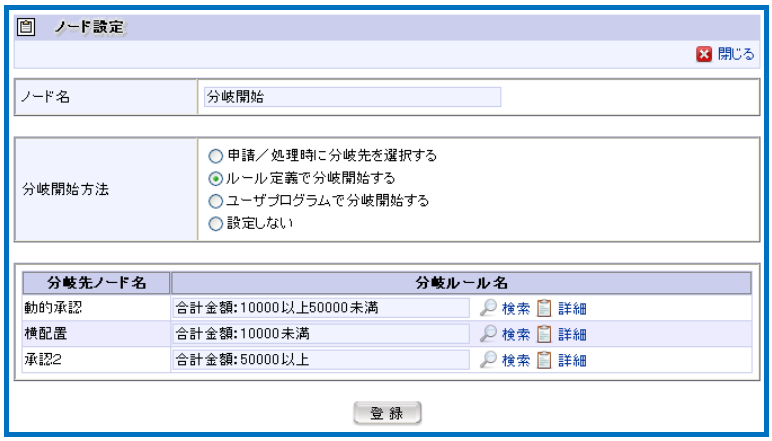
- Names of “Pull-back” and “Transfer” processings cannot be changed.

Click the [Register] button to register these information.

It will return to “Route details” tab of < Flow definition - Version - Edit > screen.

1.2.6.4 Junction start node configuration

Configure junction start node.

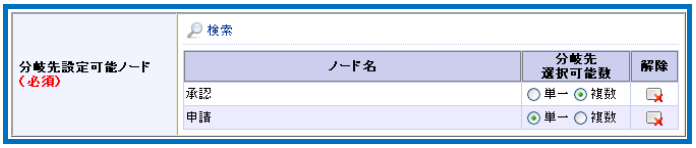


< Node configuration (junction start node) >

How to start junction

Select junction destination upon application/processing

Select this when junction destination route should be specified at application node or approval node connected before this node.
* If this method is configured, additional configuration item will be displayed.



< Additional item (junction destination upon application/approval) >

▪ Junction destination configurable node (required):

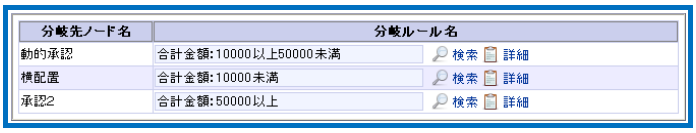
Specify the node which can be selected as junction destination upon processing.
By clicking the < Select > icon, a popup window < Node definition - Search > will be displayed, in which list of application node and processing node before this node, then select the node to which option for junction destination should be given.

▪ Number of selectable junction destinations:

Configure whether selectable route should be single or multiple.

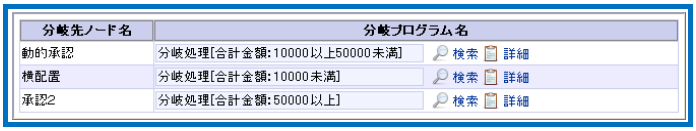
Start junction according to the rule

Select this when junction should be started according to the rule registered in content definition.
* If this method is configured, list of nodes next to the junction destination will be displayed.



< Additional item (junction by the rule) >

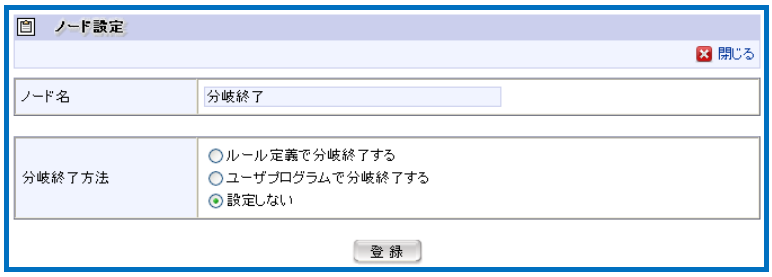
Specify junction conditions for proceeding to each node, based on

	the rule registered in the content definition. Click the < Search > icon for each node. A popup window < Rule definition - Search > will be displayed, in which list of rules registered in content definition, then select the rule to be configured as junction conditions. By clicking the < Details > icon, details on the configured rule can be confirmed.
Start junction by user program	Select this when junction should be started by the user program registered in content definition.  < Additional item (junction by user program) > * If this method is configured, list of nodes next to the junction destination will be displayed. Specify junction conditions for proceeding to each node, based on the user program registered in the content definition. Click the < Search > icon for each node. A popup window < User program definition - Search > will be displayed, in which list of user program registered in content definition, then select the user program to be configured as junction conditions. By clicking the < Details > icon, details on the configured user program can be confirmed.
Not configured	Conditions for starting junction are not configured. Processing will be brought forward to all the nodes thereafter unconditionally.

Click the [Register] button to register these information.
It will return to “Route details” tab of < Flow definition - Version - Edit > screen.

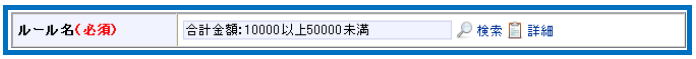
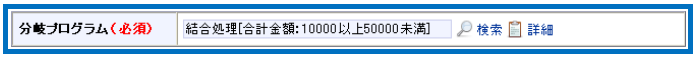
1.2.6.5 Junction end node configuration

Configure junction end node.



< Node configuration (junction end node) >

How to end junction.

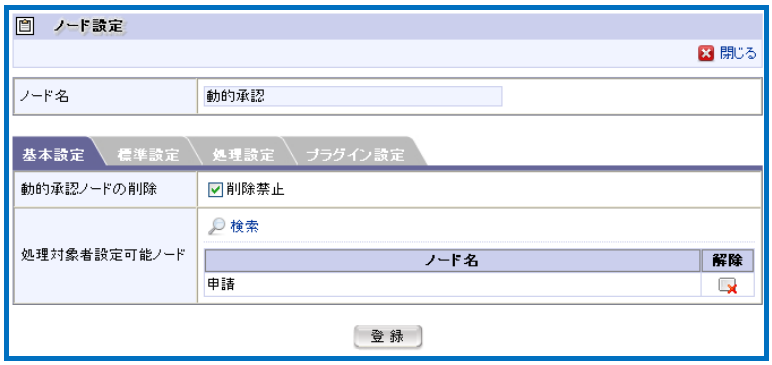
End junction according to the rule	Select this when junction should be ended according to the rule registered in content definition. * If this method is configured, a pane for specifying the rule will be displayed.  < Additional item (junction end by the rule) > Specify conditions for ending junction, based on the rule registered in the content definition. Click the [Search] icon. A popup window < Rule definition - Search > will be displayed, in which list of rules registered in content definition, then select the rule to be configured as conditions for ending junction. By clicking the < Details > icon, details on the configured rule can be confirmed.
End junction by user program	Select this when junction should be ended according to the user program registered in content definition. * If this method is configured, a pane for specifying the junction grogram will be displayed.  < Additional item (junction ended by user program) > Specify conditions for ending junction, based on the user program registered in the content definition. Click the [Search] icon. A popup window < User program definition - Search > will be displayed, in which list of user program registered in content definition, then select the user program to be configured as conditions for ending junction. By clicking the < Details > icon, details on the configured user program can be confirmed.
Not configured	Conditions for ending junction are not configured. At the time of finishing all the multiple processings connected before this node, processing will proceed to the next node.

Click the [Register] button to register these information.

It will return to “Route details” tab of < Flow definition - Version - Edit > screen.

1.2.6.6 Configuration of dynamic approval/horizontal placement/vertical placement nodes

Configure dynamic approval/horizontal placement/vertical placement nodes.



< Node configuration (Dynamic approval node; Tab: Basic configuration) >

< Node configuration (Horizontal placement node; Tab: Basic configuration) >

Basic configuration

Deleting dynamic approval node	Specify whether deleting dynamic approval node is prohibited or not. If checked off, no placement (deleting node) can be permitted. This configuration item is only for dynamic approval node. This is not displayed for horizontal placement node and vertical placement node.
Number of assignable nodes (required)	Specify maximum number and mandatory (minimum) number of nodes to be placed. By specifying the minimum number as zero, no placement (deleting node) can be permitted. This configuration item is only for horizontal placement node and vertical placement node. This is not displayed for dynamic approval node.
Processing handler configurable node	Specify the node for which processing handler of dynamic approval/horizontal placement/vertical placement nodes, and the number of placement can be configured. By clicking the < Search > icon, a popup window < Node definition - Search > will be displayed, in which list of nodes which can be specified, then configure the node to be registered.

- Value of number of assignable nodes can be specified in the range from 0 to 99.

< Node configuration (Horizontal placement node; Tab: Default configuration) >

Default configuration

Processing screen

Specify the screen definition to be displayed upon processing in this node. Default setting is “Do not change from standard”.
When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed.
A popup window < Screen definition - Search > will be displayed in which list of screen definition, the screen classification defined in content definition of which is “Processing screen”, will be displayed, then configure the screen definition to be registered.

Action processing

Specify the program to be executed upon execution of this node. Default setting is “Do not change from standard”.
When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed.
A popup window < User program definition - Search > will be displayed in which list of user program executed upon end of matter as defined in content definition will be displayed, then configure the user program to be registered.
If not configured, the program will not be executed upon executing this node.

Node arrival processing

Specify the program to be executed upon arriving at this node. Default setting is “Do not change from standard”.
When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed.
A popup window < User program definition - Search > will be displayed in which list of user program executed upon end of matter as defined in content definition will be displayed, then configure the user program to be registered.
If not configured, the program will not be executed upon arriving at

this node.

Processing request email

Specify the email to be sent upon arriving at this node. Default setting is “Do not change from standard”.
When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed.
A popup window < Email definition - Search > will be displayed in which list of email the classification of which is “Processing request” as defined in content definition will be displayed, then configure the email definition to be registered.
If not configured, no email will be sent upon arriving at this node.

Function configuration

Restrictions on the use of the following items are configured.

File attaching

Configure restrictions on the use of file attaching in this node. Checking only "Addition prohibited" is deemed an error.

Batch processing

Configure restrictions on the use of batch processing in this node. Default status corresponds to the configuration in the version basic information.

Automatic processing

Configure restrictions on the use of automatic processing by the system in this node. Default status corresponds to the configuration in the version basic information.

* If this should be configured as "Enabled", the following additional configuration item will be displayed.

■ Processing deadline (required):

Specify number of days after arriving at the node until executing automatic processing.

■ Processing after overdue (required):

Specify whether to "approve", "deny" or "return to specified node" after overdue.

* If specifying "return to specified node", additional item for specifying the return destination node will be added as follows.

■ Return destination node (required):

Specify the return destination node in case of automatic processing for returning was executed in this node. By clicking the < Select > icon, A

	popup window < Node definition - Search > will be displayed, in which list of nodes which can be returned from this node, then configure the node to be registered.
Automatic reminder	Configure restrictions on the use of automatic reminder in this node. Default status corresponds to the configuration in the version basic information. * If this should be configured as “Enabled”, the following additional configuration item will be displayed. ■ Reminder deadline (required): Specify number of days after arriving at the node until executing automatic reminder.

< Node configuration (Horizontal placement node; Tab: Processing configuration) >

Processing configuration

▪ Processing permission

Approval	Configure whether or not to permit approval in this node. In dynamic approval/horizontal placement/vertical placement nodes, check status is fixed and irreversible.
Approval end	Configure whether or not to permit doing approval end in this node. If checked, approval end will be permitted from this node.
Return	Configure whether or not to permit returning in this node. If checked, returning will be permitted from this node.
Pull-back	Configure whether or not to permit pulling-back in this node. If checked, pulling-back will be permitted from this node.
Denial	Configure whether or not to permit denial in this node. If checked,

	denial will be permitted from this node.
Hold	Configure whether or not to permit hold status in this node. If checked, hold status will be permitted from this node.
Release hold	Configure whether or not to permit hold releasing in this node. If checked, releasing hold will be permitted from this node.
Transfer	Configure whether or not to permit transfer in this node. If checked, transfer will be permitted from this node.

▪ Processing name

For the processing permitted in this node, unique name can be configured.

If changing name from the default one is desirable, select “Change name” and enter details of such change in the entry field displayed. It should be entered for all the locales configured in the system.

● Names of “Pull-back” and “Transfer” processings cannot be changed.

< Node configuration (Horizontal placement node; Tab: Plug-in configuration) >

Plug-in configuration

▪ Permission

When a user selects the processing handler of this node, type of selectable processing handler can be limited.

By checking off the box “Permit”, corresponding processing handler can be excluded when a user configures the processing handler of this node.

● When a Workflow system administrator or a Workflow operation administrator carries out node configuration in matter handling, plug-in configuration is not applied, so every processing handler can be selected.

Click the [Register] button to register these information.

It will return to “Route details” tab of < Flow definition - Version - Edit > screen.

1.2.6.7 System node configuration

Configure system node.

< Node configuration (System node; Tab: Default configuration) >

Default configuration

Action processing	Specify the program to be executed upon execution of this node. Default setting is “Do not change from standard”. When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed. A popup window < User program definition - Search > will be displayed in which list of user program executed upon end of matter as defined in content definition will be displayed, then configure the user program to be registered. If not configured, the program will not be executed upon executing this node.
Node arrival processing	Specify the program to be executed upon arriving at this node. Default setting is “Do not change from standard”. When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed. A popup window < User program definition - Search > will be displayed in which list of user program executed upon end of matter as defined in content definition will be displayed, then configure the user program to be registered. If not configured, the program will not be executed upon arriving at this node.

< Node configuration (System node; Tab: Processing configuration) >

Processing configuration

▪ Processing permission

Approval	Configure whether or not to permit approval in this node. In system node, check status is fixed and irreversible.
Approval end	Configure whether or not to permit doing approval end in this node. In system node, check status is fixed and irreversible.
Return	Configure whether or not to permit returning in this node. In system node, check status is fixed and irreversible.
Pull-back	Configure whether or not to permit pulling-back in this node. In system node, check status is fixed and irreversible.
Denial	Configure whether or not to permit denial in this node. In system node, check status is fixed and irreversible.
Hold	Configure whether or not to permit hold status in this node. In system node, check status is fixed and irreversible.
Release hold	Configure whether or not to permit releasing hold in this node. In system node, check status is fixed and irreversible.
Transfer	Configure whether or not to permit transfer in this node. In system node, check status is fixed and irreversible.

▪ Processing name

For the processing permitted in this node, unique name can be configured.

If changing name from the default one is desirable, select “Change name” and enter details of such change in the entry field displayed. It should be entered for all the locales configured in the system.

- Names of “Pull-back” and “Transfer” processings cannot be changed.

Click the [Register] button to register these information.

It will return to “Route details” tab of < Flow definition - Version - Edit > screen.

1.2.6.8 Template replacement node configuration

Name of the replacement route which is already configured can be confirmed.

To confirm the route of template, click the icon displayed in the node name pane of “Template replacement node” in the list of nodes on the flow displayed in the “Route details” tab of <Route definition - Version - Edit > screen. Then < Route definition - Details > screen will be displayed, in which the route of template can be confirmed.

1.2.6.9 Confirmation node configuration

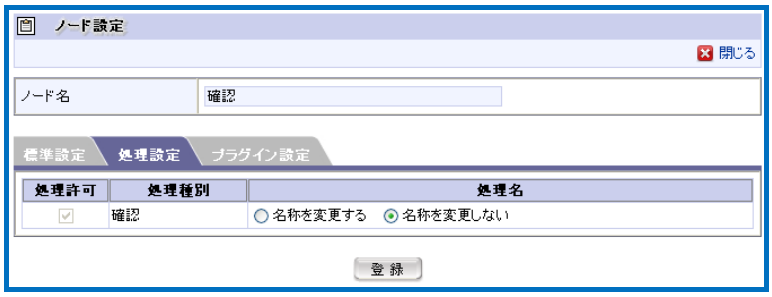
Configure confirmation node.

< Node configuration (Confirmation node; Tab: Default configuration) >

Default configuration

Confirmation screen	Specify the screen definition to be displayed upon confirmation in this node. Default setting is “Do not change from standard”. When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed. A popup window < Screen definition - Search > will be displayed in which list of screen definition, the screen classification defined in content definition of which is “confirmation screen”, will be displayed, then configure the screen definition to be registered.
Confirmation request email	Specify the email to be sent upon arriving at this node. Default setting is “Do not change from standard”. When changing from standard, select “Change from standard” and click the < Search > icon which will be displayed. A popup window < Email definition - Search > will be displayed in which list of email the classification of which is “Confirmation request” as defined in content definition will be displayed, then configure the email definition to be registered. If not configured, no email will be sent upon arriving at this node.
Confirmation handler	Specify the node for which confirmation handler can be configured

configurable node	for the confirmation node. By clicking the < Search > icon, a popup window < Node definition - Search > will be displayed, in which list of nodes which can be specified, then configure the node to be registered.



< Node configuration (Confirmation node; Tab: Processing configuration) >

Processing configuration

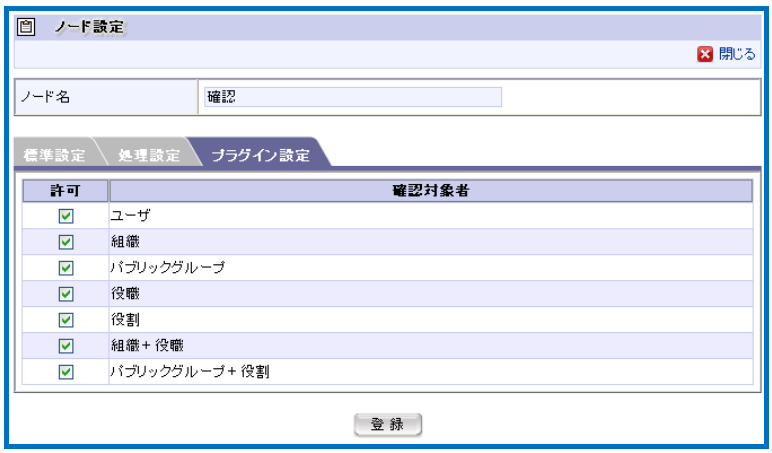
▪ Processing permission

Confirmation	Configure whether or not to permit doing confirmation in this node. In confirmation node, check status is fixed and irreversible.

▪ Processing name

For the processing permitted in this node, unique name can be configured.

If changing name from the default one is desirable, select “Change name” and enter details of such change in the entry field displayed. It should be entered for all the locales configured in the system.



< Node configuration (Confirmation node; Tab: Plug-in configuration) >

Plug-in configuration

▪ Permission

When a user selects the confirmation handler of this node, type of selectable confirmation handler can be limited.

By checking off the box “Permit”, corresponding confirmation handler can be excluded when a user configures the confirmation handler of this node.

When a Workflow system administrator or a Workflow operation administrator carries out node configuration in matter handling, plug-in configuration is not applied, so every processing handler can be selected.

Click the [Register] button to register these information.

It will return to “Route details” tab of < Flow definition - Version - Edit > screen.

1.2.7 Matter properties definition

To retain business data specific to the user content during matter processing, such business data can be retained by making use of “Matter properties”. Matter properties consist of arbitrary values in “Key & Value” format.

In matter properties definition, by defining matter properties uniformly across the system it becomes possible to use matter properties in the following features.

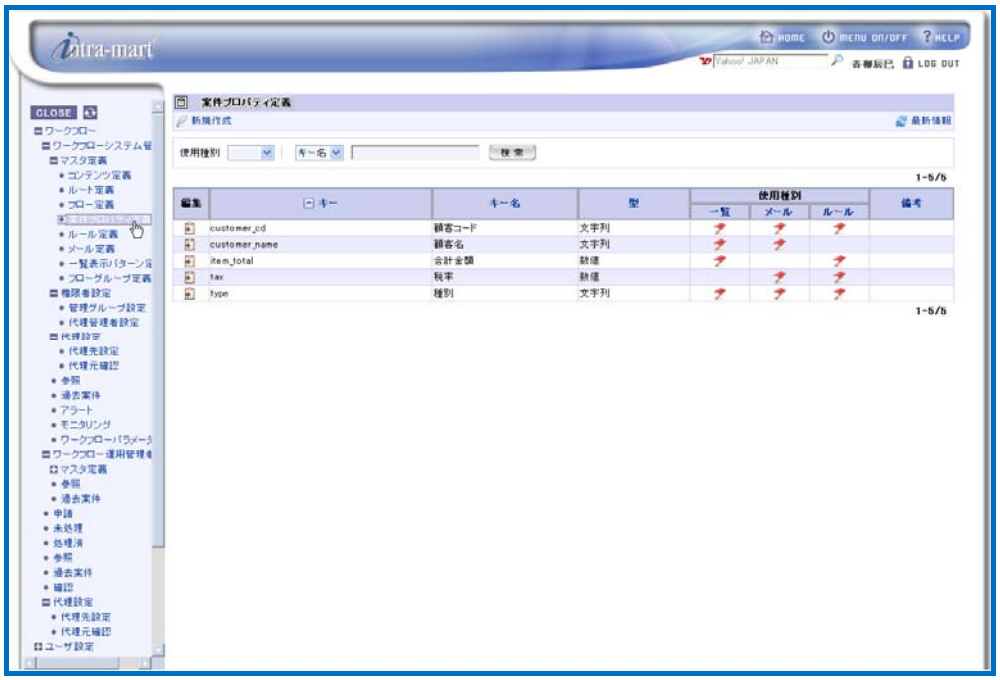
- In the screen for listing up matters, property value corresponding to the matter property key can be displayed.
- Matter property key can be selected as a parameter determined by the rule.
- Matter property key can be used as substitution string for email template.

* For details on matter properties, refer to the separate document “IM-Workflow Specifications”.

To define matter properties, it should be registered via [Workflow] - [Workflow system administrator] - [Master definition] - [Matter properties definition] menu.

1 Click the［Matter properties］button.

< Matter properties definition > screen will be displayed in which a list of registered matter properties will be displayed.



< Matter properties definition >

Column

Searching/displaying matter properties definition

■ By specifying conditions to search matter properties definition, it becomes possible to display only relevant ones.

Enter search conditions to the field for specifying search conditions located at the top of the screen.

- From the pull-down list of “Use classification”, select the use classification of matter properties definition to be search target.
  Only those for which the selected use classification is configured will be the target.
- From the pull-down list on the right, select the matter properties definition item to be search target.
- In the textbox located on the right, enter the string to be searched.
- Click the [Search] button.

As compared to the search target selected, only the matter properties definition containing partially-matching string will be displayed.

Column

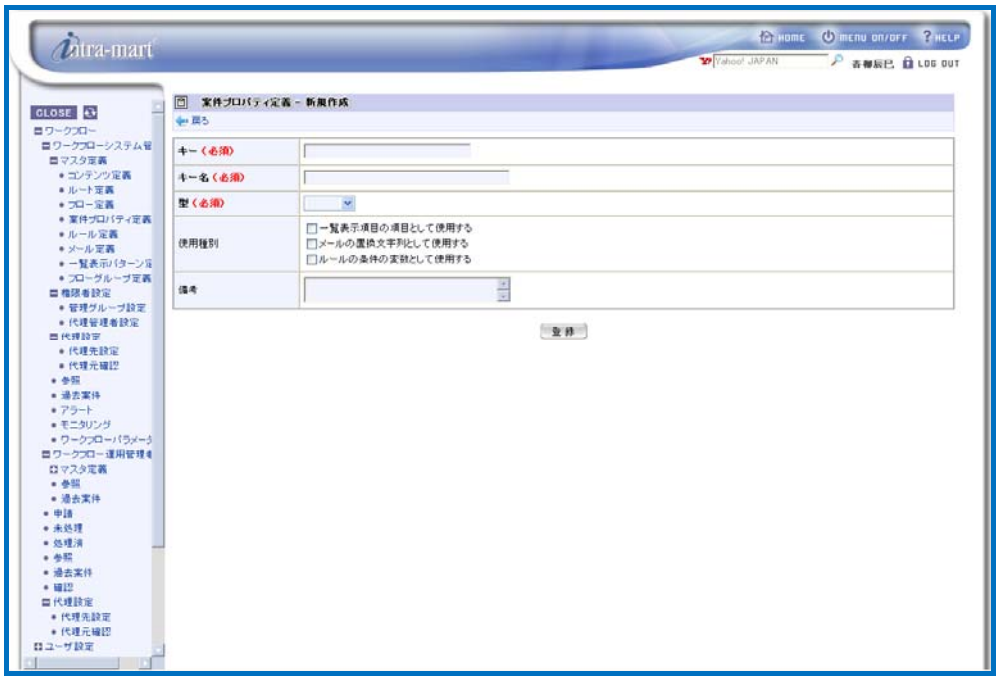
Editing/deleting matter properties definition

To edit already-registered matter properties, click the icon displayed in the [Edit] column for the matter properties to be edited.

Then < Matter properties definition - Edit > screen will be displayed. And by clicking the [Update] button after completing editing the content, it will be updated. Follow the similar steps when deleting matter properties: in the < Matter properties definition - Edit > screen which will be displayed, click the [Delete] button.

2 To create new matter properties, click the < Create new > icon.

< Matter properties definition - Create new > screen will be displayed.



< Matter properties definition - Create new>

Enter information of the matter properties.

Key (required)	Enter a unique key for the matter properties definition. Already registered key cannot be used.
Key name (required)	Enter the key name for the matter properties definition. It should be entered for all the locales configured in the system.
Type (required)	Select the key type of the matter properties definition. ▪ String type ▪ Numerical type
Use classification	Specify the element which uses this matter properties definition. **Use as items of listing**: If checked, it can be used for listing item definition. Configured as “OFF” by default. **Use as substitution characters for email**: If checked, it can be used for email definition. Configured as “OFF” by default. **Use as variables of rule conditions**: If checked, it can be used for rule definition. Configured as “OFF” by default.
Display position	Select display position of items in the list screen. ▪ Left-aligned ▪ Centered ▪ Right-aligned This will be displayed when the box “Use as items of listing” in the “Use classification” pane is checked.
Search scope	Select the searchable scope in the screen for display conditions transient from the list screen. ▪ Single selection ▪ Scope selection This will be displayed when the box “Use as items of listing” in the “Use classification” pane is checked.
Calendar display	Select whether or not calendar will be used when inputting the conditions in the screen for display conditions transient from the list screen. This will be displayed when “String type” is selected and the box “Use as items of listing” in the “Use classification” pane is checked.
Remarks	Explanation about the matter properties definition, etc. can be entered. It can be entered for all the locales configured in the system.

3 Click the [Register] button.

Matter properties definition will be registered, and then < Matter properties definition > screen will be displayed.

4 Now creating new matter properties definition is complete.

- Matter properties which have already been used in listing pattern definition and rule definition cannot be deleted.
- If matter properties which have been used in email definition is deleted, content of email to be sent may not be configured correctly; so please take care not to delete them.

Column

Copying matter properties definition

■ Newly created matter properties definition can be copied.

▪ By clicking the < Copy > icon displayed at the top of < Matter properties definition - Edit > screen, < Matter properties definition - Create new > screen will be displayed.

On the screen, information of the copy source, except “Key” has already been entered.

▪ Enter the “Key” for the matter properties definition of the copy destination to be newly created.

▪ Click the [Register] button.

Then matter properties having the same information as the copy source matter properties definition, except the “Key”, will be newly created.

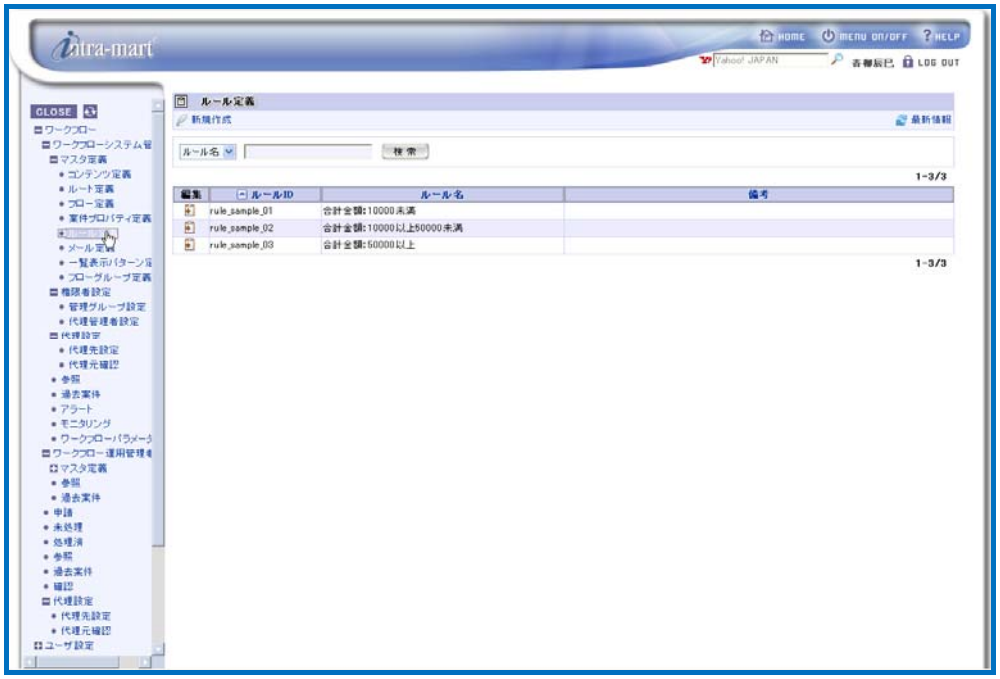
1.2.8 Rule definition

In rule definition, rules for determining conditional junction at junction start nodes and junction end nodes are created.

By specifying multiple conditions, determination can be made based on the truth/false of the conditions. Rules will be registered via [Workflow] - [Workflow system administrator] - [Master definition] - [Matter property definition] menu.

1 Click the [Rule definition] button.

< Rule definition > screen will be displayed in which a list of registered rule definition will be displayed.



< Rule definition >

Column

Searching/displaying rule definition

■ By specifying conditions to search rule definition, it becomes possible to display only relevant ones.

Enter search conditions to the field for specifying search conditions located at the top of the screen.

- From the pull-down list, select the rule definition item to be search target.
- In the textbox located on the right, enter the string to be searched.
- Click the [Search] button.

As compared to the search target selected, only the rule definition containing partially-matching string will be displayed.

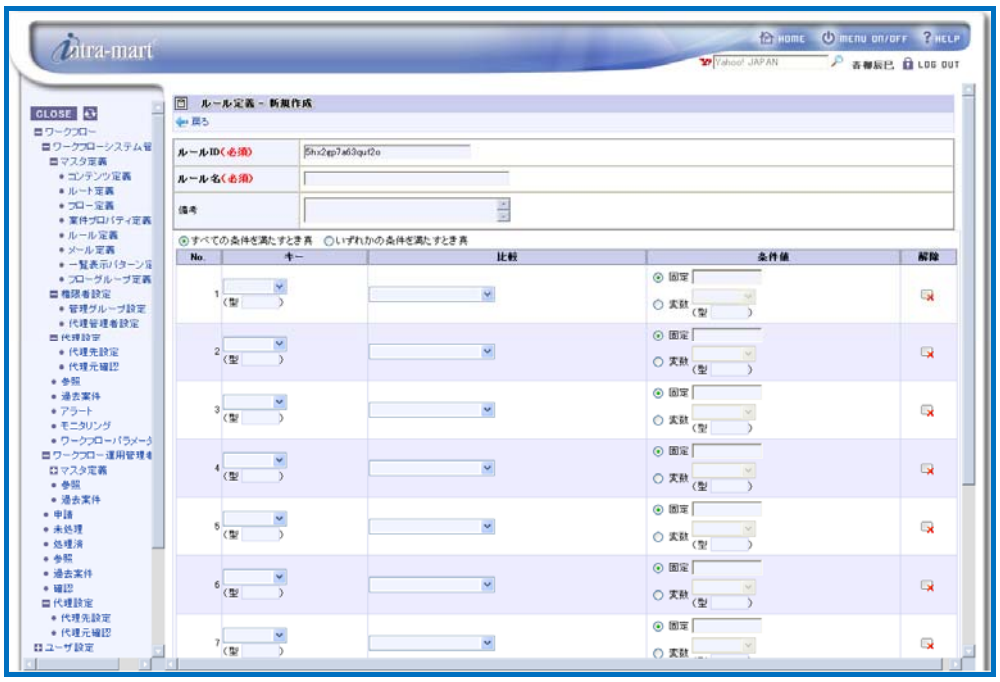
Column

Editing/deleting rule definition

To edit already-registered rule, click the icon displayed in the [Edit] column for the rule to be edited.
Then < Rule definition - Edit > screen will be displayed. And by clicking the [Update] button after completing editing the content, it will be updated. Follow the similar steps when deleting rule: in the < Rule definition - Edit > screen which will be displayed, click the [Delete] button.

2 To create new rule, click the < Create new > icon.

< Rule definition - Create new > screen will be displayed.



< Rule definition - Create new >

Enter information of the rule.

Rule ID (required)	ID for identifying the rule. Automatically numbered. Unless being already used, it can be changed arbitrarily.
Rule name (required)	Enter the name of the rule to be registered. It should be entered for all the locales configured in the system.
Remarks	Explanation about the rule, etc. can be entered. It can be entered for all the locales configured in the system.
True/false condition configuration (radio button)	As compared to the configured condition, specify whether “true if all the conditions are met”, or “true if any of the conditions are met”.

3 Enter conditions of the rule.

Specify the conditions which constitute the rule.

Key	Specify the variable to be compared. Key names of the matter properties which have been registered to the matter properties and for which use classification of “Use as variables of rule conditions” is permitted will be displayed in the pull-down list. In the [Type] field, type of the selected variable will be displayed.
Comparison	Specify details of comparison.

“include ~”	Key value partially matches the condition value.
“do not include ~”	Key value does not match the condition value even partially.
“match ~”	Key value fully matches the condition value.
“is different from ~”	Key value does not match the condition value fully.
“begin with ~”	Beginning of key value matches the condition value.
“end with ~”	End of key value matches the condition value.
“greater than ~”	Key value > condition value
“equal to or greater than ~”	Key value ≥ condition value
“less than ~”	Key value < condition value
“equal to or less than ~”	Key value ≤ condition value
“match any one of ~”	As compared to the multiple strings input with comma separation, key value matches any one of them.

Condition value	Specify condition values of the comparison target. Specify “fixed” or “variable”. ▪ Fixed: Specify fixed value as the condition. Enter the value in the text box. ▪ Variable: Likewise keys, specify the variable to be compared. Key names of the matter properties which have been registered to the matter properties and for which use classification of “Use as variables of rule conditions” is permitted are displayed in the pull-down list. In the [Type] field, type of the selected variable will be displayed.

- Up to ten conditions can be configured for one rule definition.
- To cancel any condition once configured, click the icon for the relevant condition displayed in the “Cancel” column

4 Click the [Register] button.

Rule definition will be registered, and then < Rule definition > screen will be displayed.

5 Now creating new rule definition is complete.

● Rule definition being already used in content definition cannot be deleted.

Column

Copying rule definition

■ Newly created rule definition can be copied.

▪ By clicking the < Copy > icon displayed at the top of < Rule definition - Edit > screen, < Rule definition - Create new > screen will be displayed.

On the screen, information of the copy source, except “Rule ID” has already been entered. “Rule ID” is entered with its number automatically assigned. Unless being already used, it can be changed arbitrarily.

▪ Click the [Register] button.

Then rule having the same information as the copy source rule definition, except the “Rule ID”, will be newly created.

Column

Confirming usage status of rule definition

■ It is possible to confirm which content definition is currently using the rule definition being edited.

▪ In the < Rule definition - Edit > screen, click the < Confirm usage status> icon.

▪ A popup window of < Rule definition - Confirm usage status > will be displayed.

Basic information of the rule and the content definition currently using this rule will be listed up.

< Rule definition - Confirm usage status >

1.2.9 Email definition

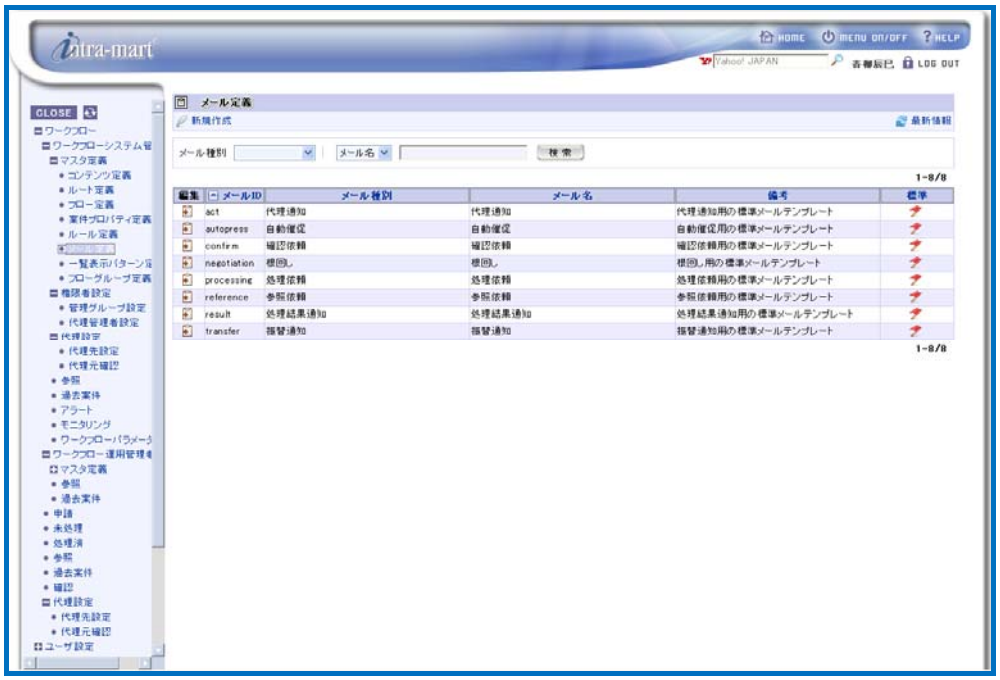
In email definition, configure the destination, content template of the email to be sent upon processing of Workflow.

Workflow system administrator registers email definition via [Workflow] - [Workflow system administrator] - [Master definition] - [Email definition] menu. Workflow operation administrator edits/creates new ones through the [Workflow] - [Workflow operation administrator] - [Master definition] - [Email definition] menu, to the extent he/she is granted appropriate privilege.

* For details on email, refer to the separate document “IM-Workflow Specifications”.

1 Click the [Email definition] button.

< Email definition > screen will be displayed in which a list of registered email definition will be displayed.



< Email definition >

Column

Searching/displaying email definition

By specifying conditions to search email definition, it becomes possible to display only relevant ones.

Enter search conditions to the field for specifying search conditions located at the top of the screen.

- From the pull-down list of “Email classification”, select the email classification of the email definition to be search target.
- From the pull-down list on the right, select the email definition item to be search target.
- In the textbox located on the right, enter the string to be searched.
- Click the [Search] button.

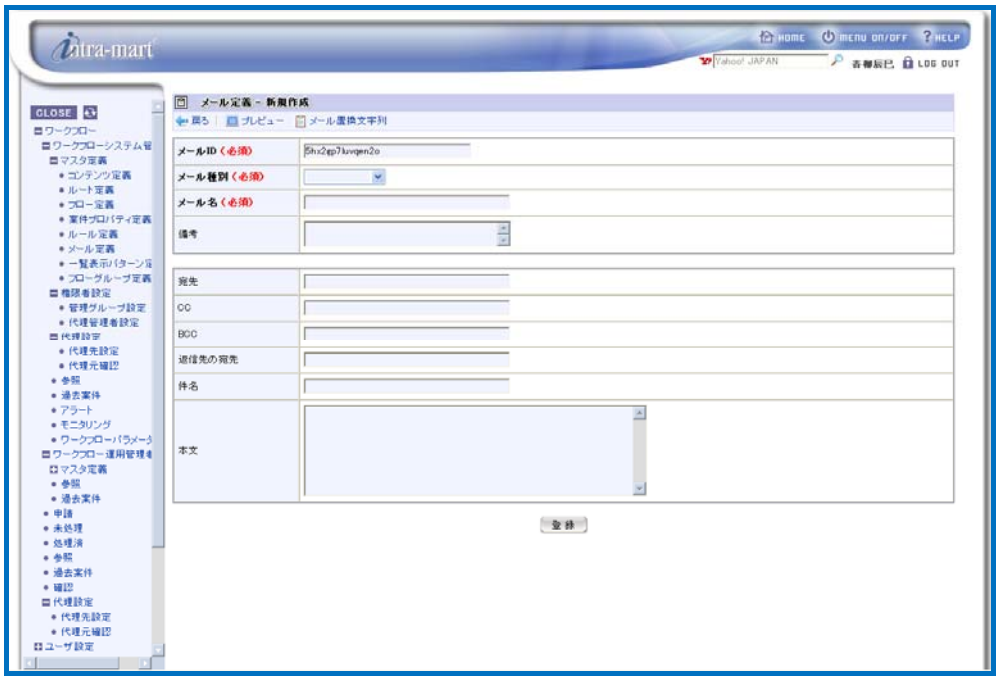
As compared to the search target selected, only the email definition containing partially-matching string will be displayed.

Column

Editing/deleting email definition

To edit already-registered email definition, click the icon displayed in the [Edit] column for the email definition to be edited.
Then < Email definition - Edit > screen will be displayed. And by clicking the [Update] button after completing editing the content, it will be updated. Follow the similar steps when deleting email definition: in the < Email definition - Edit > screen which will be displayed, click the [Delete] button.

2 To create new email definition, click the < Create new > icon.
< Email definition - Create new > screen will be displayed.



< Email definition - Create new >

Enter basic information of the email.

Email ID (required)	ID for identifying the email definition. Automatically numbered. Unless being already used, it can be changed arbitrarily.
Email classification (required)	Select the classification of the email to be registered from the pull-down list.

Processing request	Processing request email to be sent to the handler of the arriving node.
Processing result notification	Processing result notification email to be sent to the applicant upon finishing the matter.
Reference request	Processing result notification email to be sent to the reference privileged person upon application of the matter.
Confirmation	Confirmation request email to be sent to

	request the confirmation handler when the matter has arrived at the confirmation node.
Email name (required)	Enter the name of the email to be registered. It should be entered for all the locales configured in the system.
Remarks	Explanation about the email definition, etc. can be entered. It can be entered for all the locales configured in the system.

Create email template.

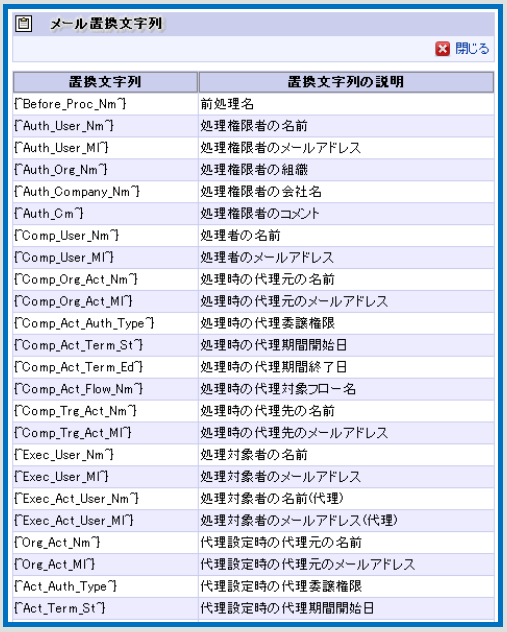
Address	Specify the destination address with comma separation. Email substitution string can be used for inputting email address.
CC	Specify the destination address (CC) with comma separation. Email substitution string can be used for inputting email address.
BCC	Specify the destination address (BCC) with comma separation. Email substitution string can be used for inputting email address.
Return address	Specify the return address (Reply To) with comma separation. Email substitution string can be used for inputting email address.
Subject	Enter the subject of the email. Email substitution string can be used for inputting. It should be entered for all the locales configured in the system.
Body text	Enter the body text of the email. Email substitution string can be used for inputting. It should be entered for all the locales configured in the system.

Column

Email substitution string

By describing “substitution string” in the email definition, dynamic information in concert with the matter can be incorporated to the email.
For example, if a substitution string “{^Comp_User_Nm^}” which represents name of a processor person is described in the body text, the name of the processor person of the node will be automatically described in the actual body text of the email.

■ Available email substitution strings can be confirmed.
▪ Click the < Email substitution strings > icon displayed at the top of the < Email definition - Create new > screen.
▪ A popup window of < Email substitution strings > will be displayed.


メール置換文字列

閉じる

置換文字列	置換文字列の説明
{^Before_Proc_Nm^}	前処理名
{^Auth_User_Nm^}	処理権限者の名前
{^Auth_User_Ml^}	処理権限者のメールアドレス
{^Auth_Org_Nm^}	処理権限者の組織
{^Auth_Company_Nm^}	処理権限者の会社名
{^Auth_Cm^}	処理権限者のコメント
{^Comp_User_Nm^}	処理者の名前
{^Comp_User_Ml^}	処理者のメールアドレス
{^Comp_Org_Act_Nm^}	処理時の代理元の名前
{^Comp_Org_Act_Ml^}	処理時の代理元のメールアドレス
{^Comp_Act_Auth_Type^}	処理時の代理委譲権限
{^Comp_Act_Term_St^}	処理時の代理期間開始日
{^Comp_Act_Term_Ed^}	処理時の代理期間終了日
{^Comp_Act_Flow_Nm^}	処理時の代理対象フロー名
{^Comp_Trg_Act_Nm^}	処理時の代理先の名前
{^Comp_Trg_Act_Ml^}	処理時の代理先のメールアドレス
{^Exec_User_Nm^}	処理対象者の名前
{^Exec_User_Ml^}	処理対象者のメールアドレス
{^Exec_Act_User_Nm^}	処理対象者の名前(代理)
{^Exec_Act_User_Ml^}	処理対象者のメールアドレス(代理)
{^Org_Act_Nm^}	代理設定時の代理元の名前
{^Org_Act_Ml^}	代理設定時の代理元のメールアドレス
{^Act_Auth_Type^}	代理設定時の代理委譲権限
{^Act_Term_St^}	代理設定時の代理期間開始日

< Email substitution string >

Column

Confirming email preview

■ It is possible to confirm preview of the created email with the substitution strings being substituted with the specified values.

▪ Click the < Preview > icon displayed at the top of the < Email definition - Create new > screen. < Email definition - Preview > screen will be displayed. Preview in which substitution strings are substituted with the explanation of the substitution strings is displayed.

< Email definition - Preview >

■ Conditions for displaying preview can be specified.

▪ In the < Email definition - Preview > screen, click the < Specify conditions > icon and expand it.

▪ Select the “Locale” to be displayed and “Substitution method” for the substitution string.

▪ By selecting “Value after substitution” from “Substitution method” and then inputting the value in the field for the value after substitution of each substitution string being displayed, these substitution strings will be substituted with the input values and then displayed in the form of preview.

▪ By clicking the [Preview] button, the preview will be displayed according to the conditions configured.

< Email definition - Preview - Condition specification items >

Column

Specifying linked URL for the substitution string

“intra-mart URL” to be substituted with the substitution string in the email definition “{^IM_URL^}” can be specified by editing the setting file in the [Workflow parameter] menu.

Enter directly to the setting file the URL to be included in the email.
By default, it is “http://localhost:8080/imart/default.portal”.

Also, in the setting file, period of validity (days) of the URL (short-cut URL) to be substituted with substitution string and included in the email can be specified.
By default, it is configured as three (3) days.
The period of validity configured can be substituted with the substitution string “{^IM_URL_Limit^}” as “Period of validity of intra-mart URL”.

* For details on “Workflow parameter”, refer to the separate document “IM-Workflow Specifications”.

3 Click the [Register] button.
Email definition will be registered, and then < Email definition > screen will be displayed.

4 Now creating new email definition is complete.

- Email definition being already used in content definition cannot be deleted.
- Email definition being the system standard cannot be deleted.

Column

Copying email definition

■ Newly created email definition can be copied.
▪ By clicking the < Copy > icon displayed at the top of < Email definition - Edit > screen, < Email definition - Create new > screen will be displayed.
On the screen, information of the copy source, except “Email ID” has already been entered. “Email ID” is entered with its number automatically assigned. Unless being already used, it can be changed arbitrarily.

▪ Click the [Register] button.
Then email definition having the same information as the copy source email definition, except the “Email ID”, will be newly created.

Column

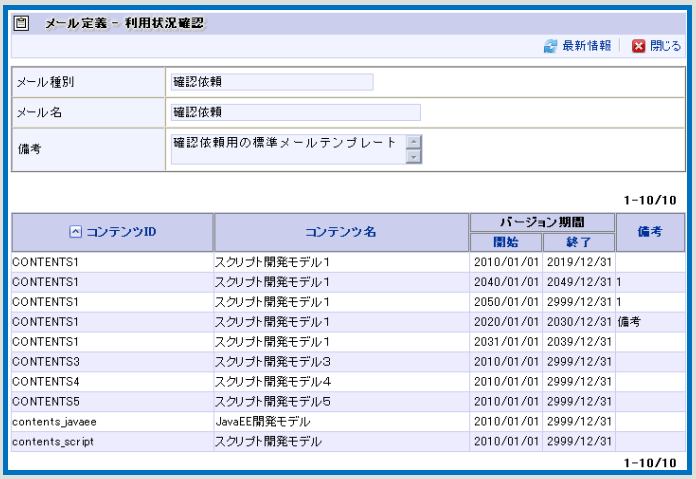
Confirming usage status of email definition

■ It is possible to confirm which content definition is currently using the email definition being edited.

▪ In the < Email definition - Edit > screen, click the < Confirm usage status> icon.

▪ A popup window of < Email definition - Confirm usage status > will be displayed.

Basic information of the email and the content definition currently using this email will be listed up.



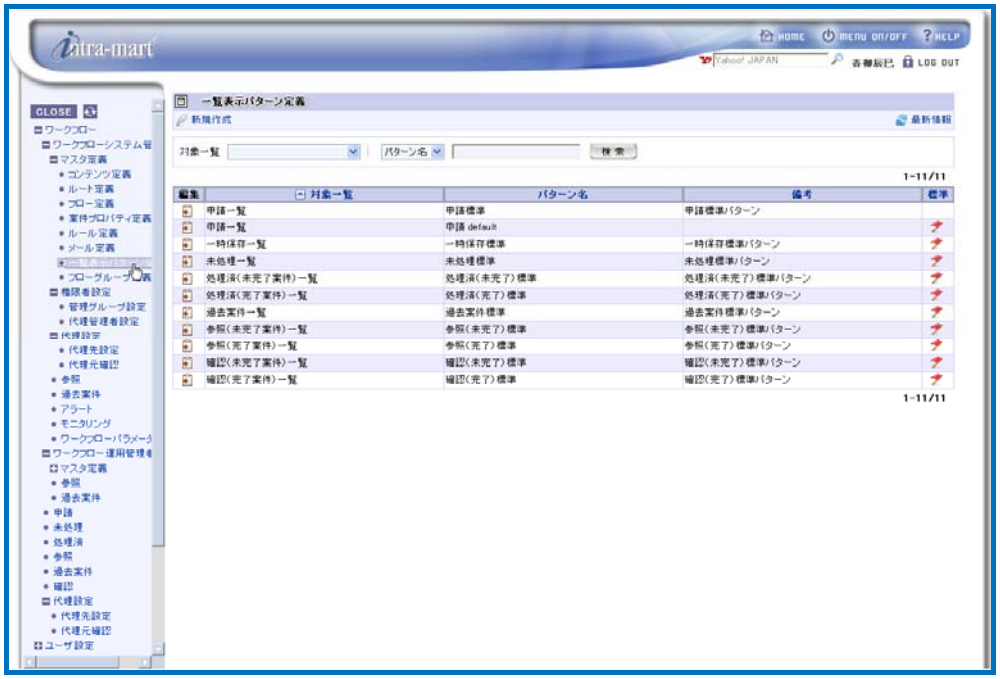
< Email definition - Confirm usage status >

1.2.10 Listing pattern definition

In listing pattern definition, arbitrary display pattern can be defined for displaying application list, outstanding matter list and etc. Users will become able to select the display pattern registered in this step in the various listing screen. These patterns will be registered via [Workflow] - [Workflow system administrator] - [Master definition] - [Matter property definition] menu.

1 Click the [Listing pattern definition] button.

< Listing pattern definition > screen will be displayed in which a list of registered listing pattern definition will be displayed.



< Listing pattern definition >

Column

Searching/displaying listing pattern definition

By specifying conditions to search listing pattern definition, it becomes possible to display only relevant ones.

Enter search conditions to the field for specifying search conditions located at the top of the screen.

- From the pull-down list of “Target list”, select the target list of listing pattern definition to be search target.
- From the pull-down list on the right, select the listing pattern definition item to be search target.
- In the textbox located on the right, enter the string to be searched.
- Click the [Search] button.

As compared to the search target selected, only the listing pattern definition containing partially-matching string will be displayed.

Column

Editing/deleting listing pattern definition

To edit already-registered listing pattern definition, click the icon displayed in the [Edit] column for the listing pattern definition to be edited.
Then < Listing pattern definition - Edit > screen will be displayed. And by clicking the [Update] button after completing editing the content, it will be updated. Follow the similar steps when deleting listing pattern definition: in the < Listing pattern definition - Edit > screen which will be displayed, click the [Delete] button.

2 To create new listing pattern definition, click the < Create new > icon.
< Listing pattern definition - Create new > screen will be displayed.

< Listing pattern definition - Create new >

Enter information of the listing pattern definition.

Target list (required)	From the pull-down list, select the target list of listing pattern to be created.	
	Application list	Listing pattern for displaying list of flow allowed to be applied in [Application] menu.
	Temporary save list	Listing pattern for displaying matters being temporarily saved in [Application] menu .
	Processing list	Listing pattern for displaying list of matters pending processing in [Outstanding] menu.

Processed matter list (unfinished matter)	Listing pattern for displaying matters processed but unfinished in [Processed] menu .
Processed matter list (finished matter)	Listing pattern for displaying matters processed and finished in [Processed] menu .
Past matter reference	Listing pattern for displaying past matters in [Past matters] menu .
Reference list (unfinished matter)	Listing pattern for displaying matters referable but unfinished in [Reference] menu .
Reference list (finished matter)	Listing pattern for displaying matters referable and finished in [Reference] menu .
Confirmation list (unfinished matter)	Listing pattern for displaying matters confirmable but unfinished in [Confirmation] menu .
Confirmation list (finished matter)	Listing pattern for displaying matters confirmable and finished in [Confirmation] menu .

Pattern name (required)

Enter the name of listing pattern to be edited.
It should be entered for all the locales configured in the system.

Remarks

Explanation about the listing pattern definition, etc. can be entered.
It can be entered for all the locales configured in the system.

Default configuration

Configure whether this listing pattern should be the default configuration for displaying the target list. By default, this box is not checked (not configured as default configuration).

Listing item (required)

Select the display item for listing. At least one item should be selected for the list of selected items.

▪ Full item list:

List of items selectable for listing. All the items of specified list from the target list will be displayed.

▪ List of selected items:
Selected item will be displayed.

From the “Full item list”, select the item to be included for listing. These items will be displayed in line with the order of list of selected items beginning from the left. For appearance, confirm the preview. Select the item on the list of selected items, and by clicking < Up > and < Down > icon located on the right of the list, display order can be changed.

▪ Width:
Enter display width of the list item in pixel units. If left blank, it will be automatically determined.

	▪ Loop back: If checked off, loop back display will be cancelled. By default, it is configured as checked off (loop back prohibited) for numerical item and date item, and as checked (loop back allowed) for strings. It cannot be changed for icon items such as “Application” and “Processing”.
Initial sorting condition	Specify, at the time of initial display, items to be sorted for display and the ascending/descending order. Of the items selected from the listing items, those which can be specified as sorting condition will be displayed in pull-down list format. Select the item to be sorted and specify its ascending/descending order.
Preview	Header image of the relevant list will be displayed. Preview of items of the List of selected items will be displayed.

- For the listing items, those defined in matter properties can be configured. However, such configuration is not allowed if the target list is “Application list”.
- Note that if display of items such as “Application” and “Processing” is disabled, such operation will also become disabled.
- Behavior in case where “width” is entered and also the checkbox “Loop back” is checked off, may differ depending on the browser being used.

3 Click the [Register] button.

List pattern definition will be registered, and then < List pattern definition > screen will be displayed.

4 Now creating new list pattern definition is complete.

- Default configuration must always be at least one configured among the listing pattern definition for the same target list. Therefore, if there is only one definition of default configuration, it is not possible to delete the default configuration, or to update such that there would be no default configuration.

Column

Configuration of listing pattern definition by means of Workflow parameter

In [Workflow parameter], by editing the setting file it is possible to configure whether users are allowed to select listing pattern functions or not.
By default, it is possible to change listing pattern individually for each user.
If such change is not allowed, listing pattern display screen for each user will be in the listing pattern as specified by the administrator. Administrators are allowed to change the listing pattern specification.

Also, in [Workflow parameter], it is possible to configure the number of items which can be specified as initial sorting condition in the listing pattern defined by the administrator.

* For details on “Workflow parameter”, refer to the separate document “IM-Workflow Specifications”.

Column

Copying listing pattern definition

■ Newly created listing pattern definition can be copied.

▪ By clicking the < Copy > icon displayed at the top of < Listing pattern definition - Edit > screen, < Listing pattern definition - Create new > screen will be displayed.
On the screen, information of the copy source has already been entered.

▪ Click the [Register] button.
Then listing pattern definition having the same information as the copy source listing pattern definition will be newly created.

1.2.11 Flow group definition

Flow group is information for categorizing flow definition for the purpose of searching. This has tree-shaped parent-child relationship, thereby enabling one flow definition to belong to more than one low group.

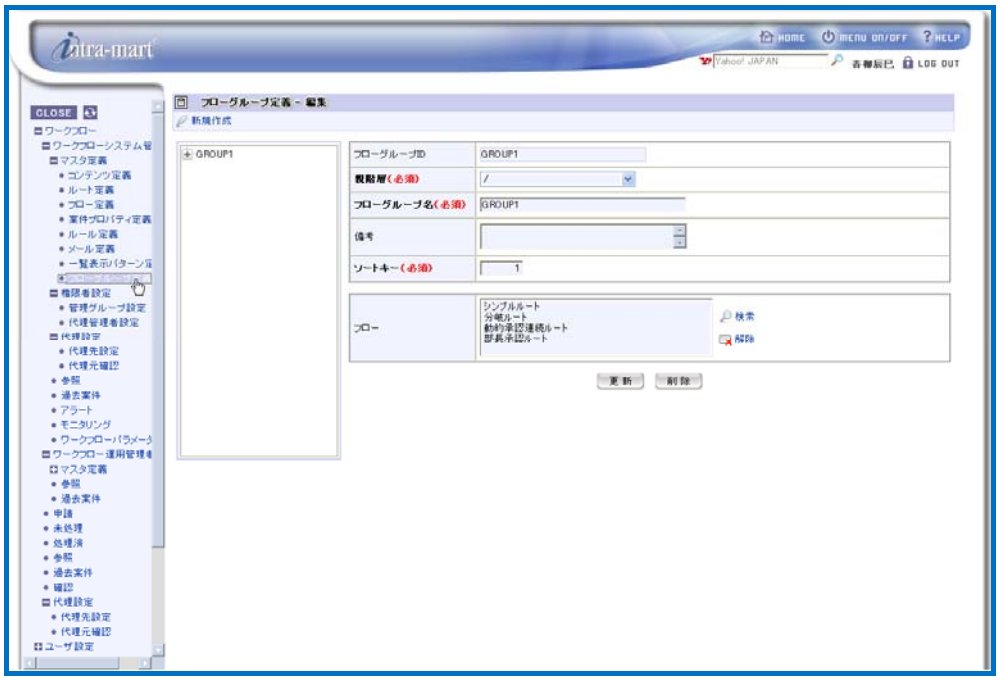
In flow group definition, creation of flow group and membership configuration of flow definition to flow group are carried out. Flow group definition will be registered via [Workflow] - [Workflow system administrator] - [Master definition] - [Flow group definition] menu.

1 Click the [Flow group definition] button.

< Flow group definition - Edit > screen (or if nothing has been defined, < Flow group definition - Create new > screen) will be displayed.

On the left, defined flow group will be listed up in tree-shaped format.

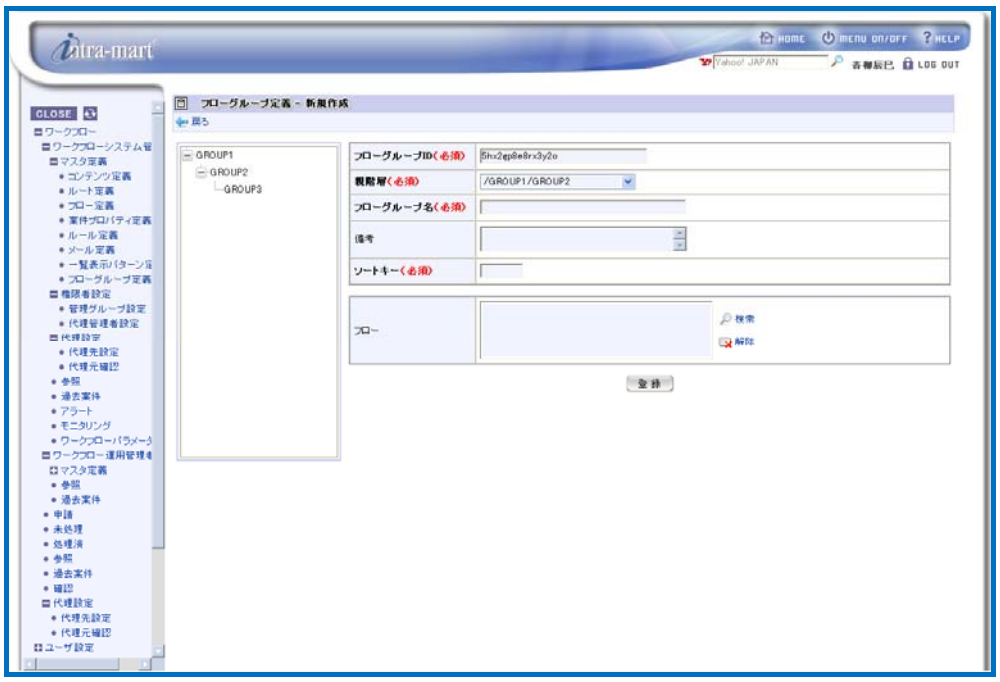
On the right, information of the flow group currently selected will be displayed.



< Flow group definition - Edit >

2 To create new flow group, click the < Create new > icon.

< Flow group definition - Create new > screen will be displayed.



< Flow group definition - Create new >

Enter information of the flow group definition.

Flow group ID(required)	This is the ID for identifying the flow group. Automatically numbered. Unless being already used, it can be changed arbitrarily.
Parent hierarchy (required)	Select parent hierarchy from the pull-down list. Of all the hierarchy currently present, configurable ones will be shown in the pull-down list. Hierarchies are represented with “/” separation.
Flow group name (required)	Enter the name of the flow group to be registered. It should be entered for all the locales configured in the system.
Remarks	Explanation about the flow group, etc. can be entered. It can be entered for all the locales configured in the system.
Sort key (required)	Enter display order of the flow group tree and pull-down list in number
Flow	Select the flow definition desirable to belong to this flow. By clicking the < Search > icon, a popup window of < Flow definition - Search > will be displayed, in which already registered flow definition will be listed up.

3 Click the [Register] button.

Flow group definition will be registered, and then < Flow group definition > screen will be displayed.

4 Now creating new flow group definition is complete.

- Number of flow group hierarchies to be defined by the configuration in the [Workflow parameter] can be increased up to five hierarchies. On the other hand, configuration with no flow group is also possible. By default, up to three hierarchies are available. For details, refer to the separate document “IM-Workflow Specifications”.
- All the flow definition do not have to belong to a flow group. Otherwise, flow definition which does not belong to any flow group is also configurable.

1.2.12 Import/Export

Import/Export are the functions having abilities to store definition information registered under the [Master definition] menu such as content, route and flow, and configuration of administration group and of surrogate administrator under the [Privileged user configuration], and at the same time to read them from various files and register them to IM-Workflow.

These are used to backup [Master definition] and [Privileged user configuration], to copy definition information from other IM-Workflow environment, and to move data manually from IM-WorkflowDesigner.

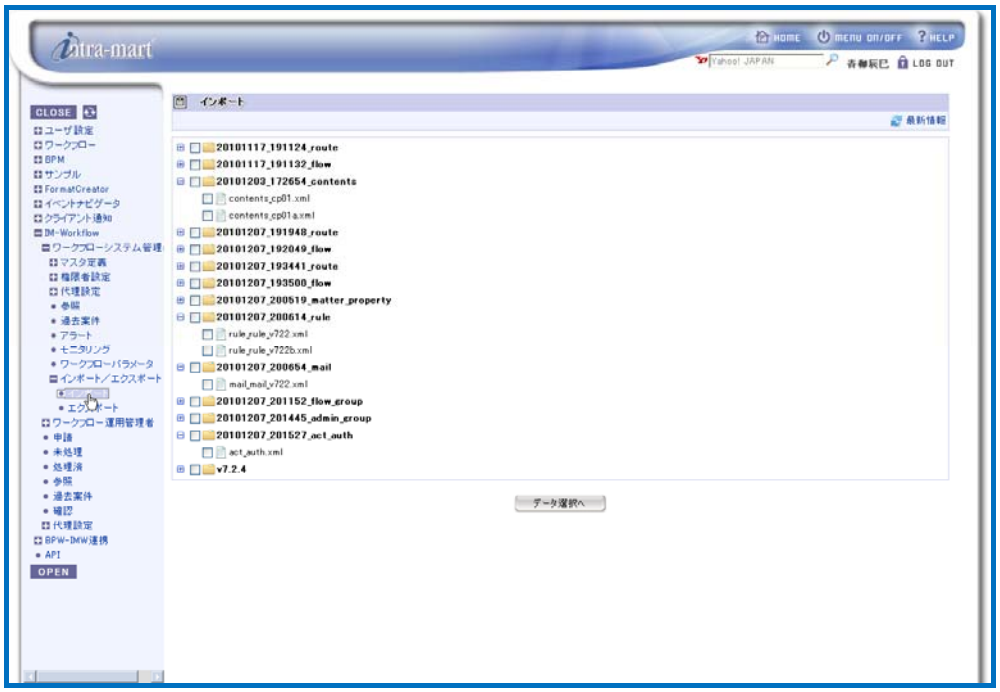
1.2.12.1 Import

In import, definition information is read from a file and registered to IM-Workflow.

To do import, from [Workflow] - [Workflow system administrator] - [Import/Export] menu, open [Import].

1 Click the [Import] button.

< Import > screen will be displayed. Then list of directories and files stored in IM-Workflow will be displayed.



< Import >

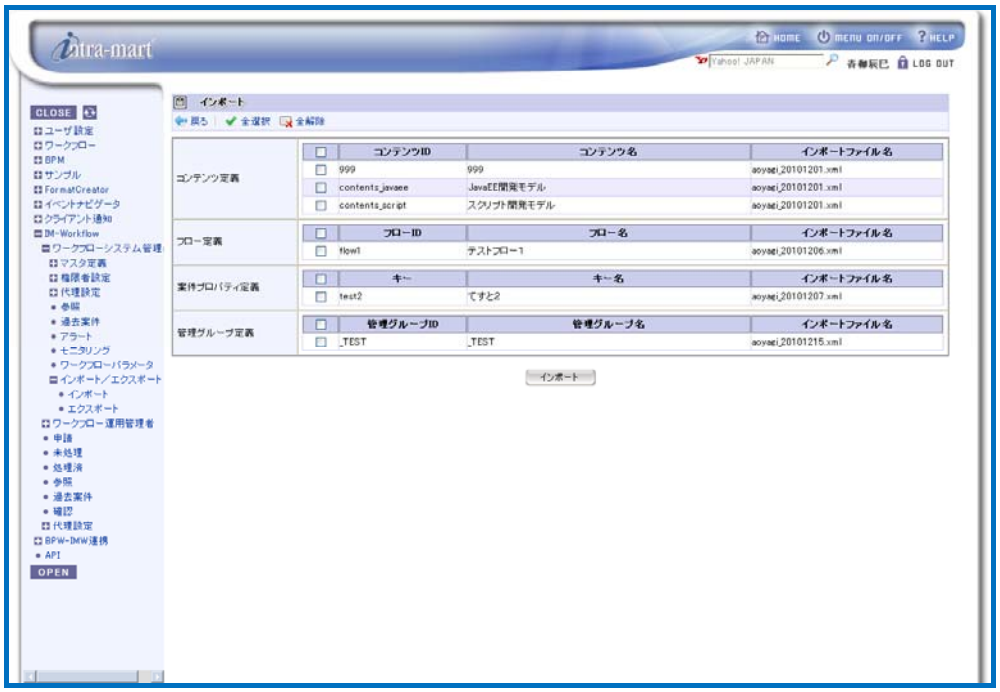
2 Select the file to be imported and click the [To data selection] button.

< Master definition selection > screen will be displayed.

- List of directories and files displays the content stored under “/storage/workflow/data/(login group ID)/import_export/”.
- By checking/checking off the box of a directory, status of the checkboxes of all the directories and files under that directory are also switched.

3 List of master definition stored in the selected file will be displayed; then check the box of master definition to be imported and click the [Import] button.

Confirmation message will be displayed. By clicking the [OK] button, import processing will start.



< Master definition selection >

- To import all the master definitions, click the < Select all > icon. All the master definitions which can be imported will be checked.
- To return to initial status, click the < Cancel all > icon. Checked status of the selected master definition will be cancelled.
- In case of overlapping key (for example, where multiple same content ID present in a content definition), when one definition is selected remaining definition cannot be selected.
- If master definition has been registered with the same key, only that definition does not carry out import.

4 Import will be carried out.

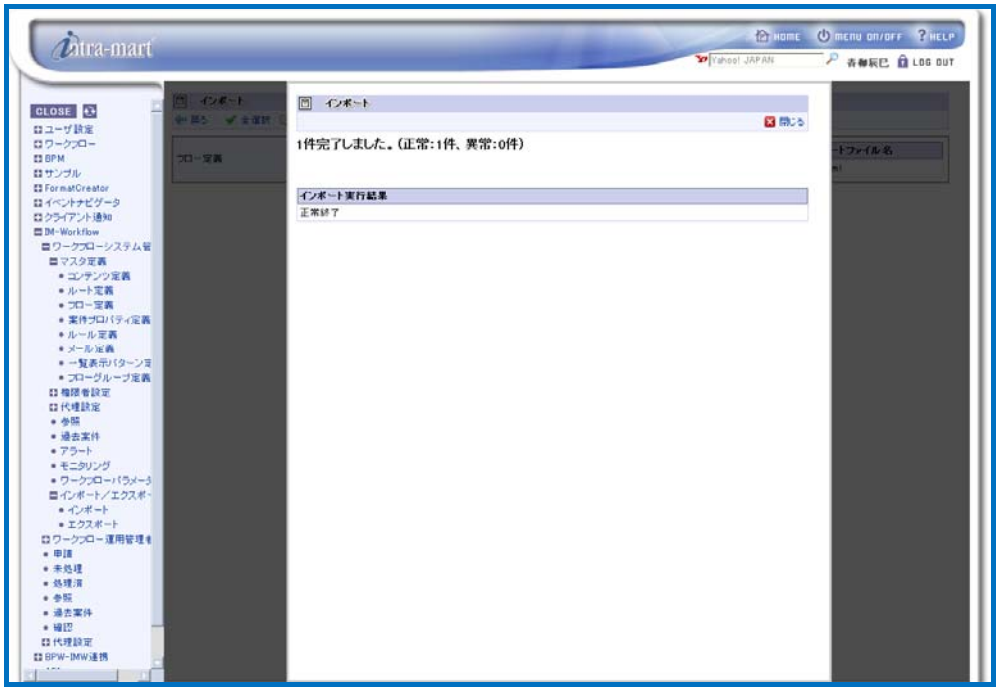
During import, number of processed master definitions will be displayed on real-time basis. Wait until import is complete and do not switch the page.

- During import, by clicking the < Close > icon, import processing can be discontinued. However, master definitions which have already been imported by then cannot be restored.

5 Upon completing import, import execution result will be displayed.

If all the master definitions have been imported with no problem, import execution result will indicate “Finished successfully”. For master definition imported with some problem, content of the problem will be indicated in red letters. Definition information indicated in red letters has not been registered. Definition indicated in black letters has been registered. For details, refer to the column “Consistency checking and processing sequence at the time of import”.

By clicking < Close > icon. it will return to < Master definition selection > screen.



< Import execution result >

Contents of and measures for especially frequent problem are as follows.

< key > is already present; it cannot be registered.	Same key as the master definition of which import was attempted has already been registered. Delete the overlapping master definition before carrying out import.
< key > registered in the < definition name > does not exist; it cannot be registered.	Other master definition associated with the master definition of which import was attempted did not exist. Such associated master definition should be registered in advance, or import it concurrently.

Column

Consistency checking and processing sequence at the time of import

■ Consistency checking

At the time of import, the following consistency checking will be carries out. Lack of consistency is deemed an error (indicated in red), the relevant definition will not be registered.

Content definition	Existence checking of “email definition” and “rule definition” used in the definition will be carried out.
Flow definition	Existence checking of “content definition” and “route definition” used in the definition will be carried out.
Rule definition	Existence checking of “matter properties definition” used in the definition will be carried out.
Listing pattern definition	Existence checking of “matter properties definition” used in the definition will be carried out.
Flow group definition	Existence checking of “flow definition” used in the definition will be carried out. Existence checking of parent flow group will be carried out.
Administration group definition	Existence checking of “content definition”, “route definition”, “flow definition” and “email definition” used in the definition will be carried out.

If any problem has been found in other consistency checking, warning about the content will be displayed (in black) and the definition itself will be registered. In such a case, it must be confirmed on the master definition screen whether the data has been registered as intended.

■ Processing sequence

At the time of import, since consistency checking will be carried out as mentioned above, import will be carried out in the following sequence so as to maintain consistency between existing definition information and the definition information to be imported.

“Surrogate administrator configuration” → “Matter properties definition” → “Listing pattern definition” → “Email definition” → “Rule definition” → “Content definition” → “Route definition” → “Flow definition” → “Flow group definition” → “Administration group definition”

Even if mixture of multiple definition information exists in the file to be imported, registration will be carried out in accordance with the abovementioned sequence.

1.2.12.2 Export

In export, various definition information registered on IM-Workflow will be output to a file.
To do export, from [Workflow] - [Workflow system administrator] - [Import/Export] menu, open [Export].

1 Click the [Export] button.

< Export > screen will be displayed. Click the < Search > icon for the master definition to be exported, then select from the search screen which will be displayed.

< Export >

- By checking the box “Export (all)”, full export can be carried out for each master definition.
- If the box “Include information about association with the flow” in the “Flow group definition” pane is checked off, export can be carried out without including in the file link information of the flow associated with the flow group definition
- If the box “Include information about association with the flow, route. content, and email” in the “Administration group definition” pane is checked off, export can be carried out without including in the file link information of the flow, route, content, and email associated with the administration group definition

2 Click the [Export] button.

Confirmation message will be displayed. By clicking the [OK] button, export processing will start.

3 Export will be carried out.

During export, number of processed master definitions and information will be displayed on real-time basis. Wait until export is complete and do not switch the page.

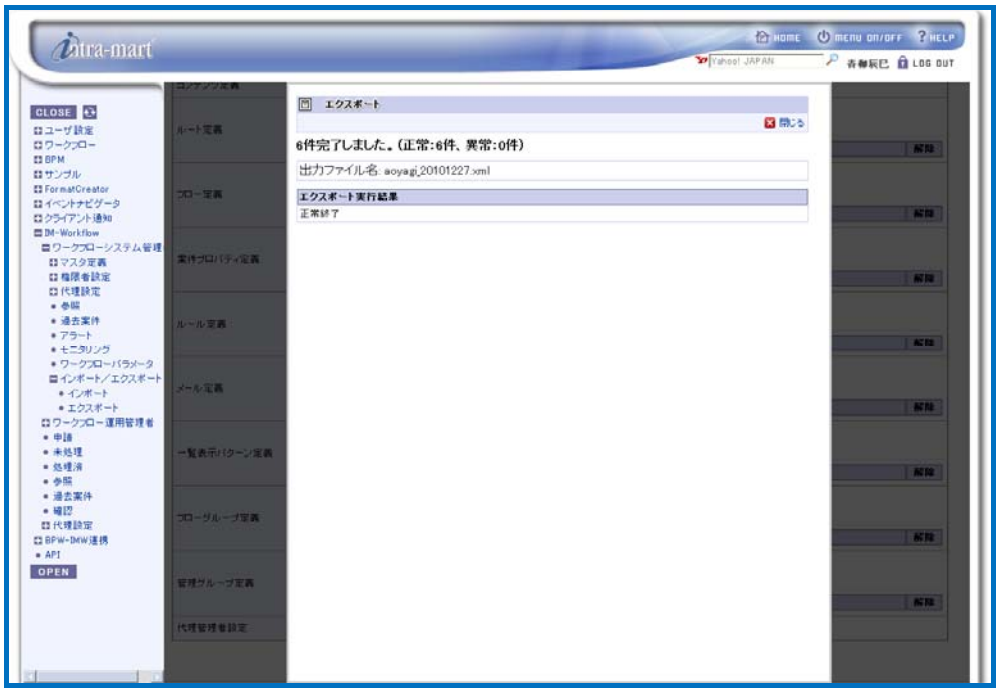
- During export, by clicking the < Close > icon, export processing can be discontinued. If export processing is discontinued, files which have been output by then will be deleted.

4 Upon completing export, export execution result will be displayed.

If all the master definitions have been exported with no problem, export execution result will indicate “Finished successfully”. For master definition exported with some problem, content of the problem will be indicated in red letters. Definition information indicated in red letters has not been output.

In addition, names of exported files will be displayed in the “Exported file name” field.

By clicking < Close > icon. it will return to < Export > screen.



< Export execution result >

- Upon export, the file containing master definition will be stored directly under “/storage/workflow/data/(login group ID)/import_export/” in XML format.
- Do not alter directly the content of exported file.

1.3 Portlet usage configuration

Operation menu of IM-Workflow can be displayed as portlet on the users' portal screen.
By default, two of Workflow menu, i.e. "Display newly arriving outstanding matter" and "List of flow definition for which application can be submitted" are available to be registered as portlets.
In "Display newly arriving outstanding matter", operation to be carried out in "Outstanding" in the workflow menu, and in "List of flow definition for which application can be submitted", operation to be carried out in "Application" in the Workflow menu respectively, can be carried out on the portlet.

Registration for use of portlet is allowed only for login group administrators.

< Portal screen >

Configure IM-Workflow portlet.
* For new registration of portlet, refer to the separate document "Portal Group Administrator Operation Guide".

In the < New portlet registration screen >, configure the page type as "Presentation Page".
Configure the screen path or URL type as follows.

■ For "Display newly arriving outstanding matter"
"/workflow/portlet/portlet_newly_proc_list/portlet_newly_proc_list"

■ For "List of flow definition for which application can be submitted"
"/workflow/portlet/portlet_apply_list/portlet_apply_list"

* For how to register portlet on user portal screen, refer to the separate document "Portal User Operation Guide".

intra-mart WebPlatform/AppFramework

Chapter 2 Workflow administration

2.1 Administrative operation of Workflow

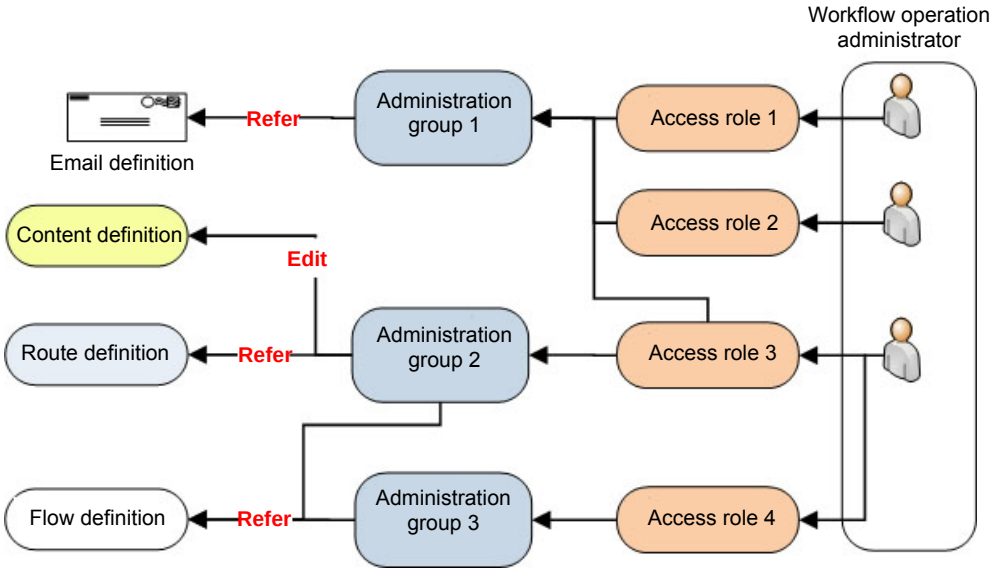
This section describes about the operation which administrators carry out for the defined flow. Administrators are allowed to refer, confirm and handle applied matters. In addition, they can use alert function and monitoring function to comprehend the status of the matters.

Administrative privileges of Workflow are granted to “Workflow system administrator”, “Workflow operation administrator”, “Matter handling privileged user”, and “Surrogate configuration privileged user”.* For details on the functions each of them is allowed to use, refer to the separate document “IM-Workflow Specifications”.

Workflow system administrator	Administrator who performs administration over the entire Workflow.
Workflow operation administrator	Administrator who is granted administrative privilege from the Workflow system administrator. The privilege can be granted through [Privileged user configuration] - [Administration group configuration] menu for Workflow system administrators.
Matter handling privileged user	User who is granted privileges to refer and handle matters from the Workflow system administrator. This privileged user is specified for each flow in the “Flow definition” menu for Workflow system administrator.
Surrogate configuration privileged user	User who is granted privilege for surrogate configuration from the Workflow system administrator. This user is allowed to carry out surrogate configuration on behalf of the surrogate source user. This privilege is granted in the [Privileged user configuration] - [Surrogate administrator configuration] menu for Workflow system administrator.

2.1.1 Privileged user configuration - Administration group configuration

In administration group configuration, administration group is created and the scope of administrative privilege granted to Workflow operation administrator is configured.
“Workflow operation administrator” is allowed to carry out administrative operation by being granted administrative privilege from the “Workflow system administrator”.
Workflow operation administrator is configured for each administration group, and his/her administration targets are limited to “flow definition”, “route definition”, “content definition” and “email definition”, which have been associated with the administration group he/she belongs and which newly created by him/her. For each definition being the administration target, edit privilege can be configured.



< administration group and Workflow operation administrator >

Administration group is configured via [Workflow] - [Workflow system administrator] - [Privileged user configuration] - [Administration group configuration] menu.

- In [Workflow parameter] by default, administration group cannot use administrative functions of operation administrator. If administration by operation administrator is desired, it is necessary to change configuration of the setting file in [Workflow parameter]. For details, refer to the separate document “IM-Workflow Specifications”.

Column

Access privilege of administration group

Access privilege of administration group is configured by role.
To make particular user a Workflow operation administrator, specify the role he/she belongs as access privilege. Then all the users belonging to the same role will be Workflow operation administrators, being allowed to refer/edit the same item.

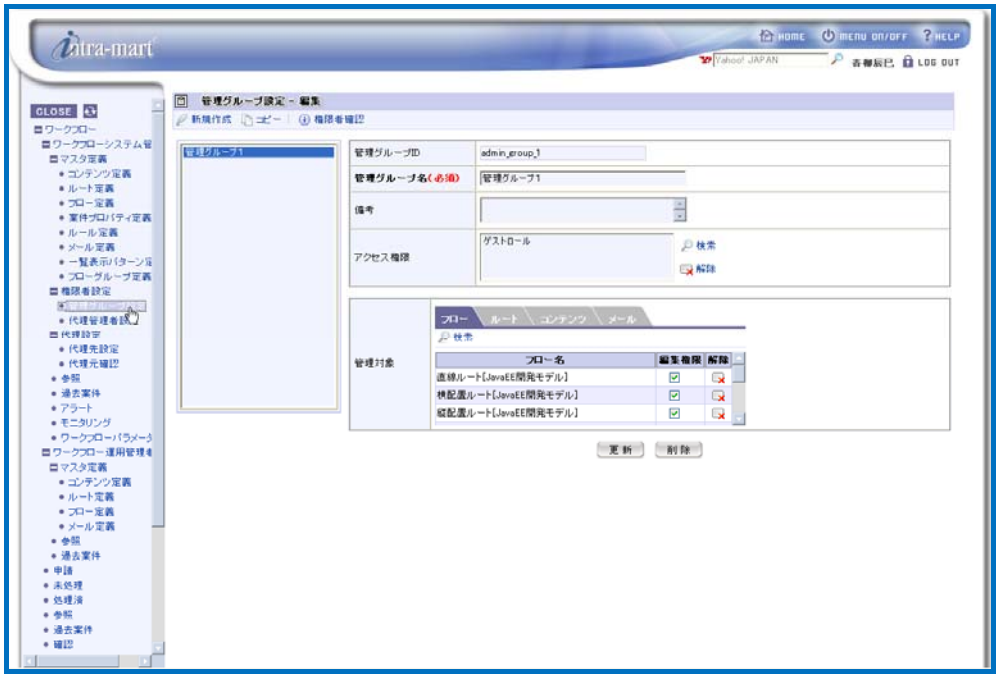
Role necessary for operational administration of the administration group needs to be made available by the login group administrator in advance. This role needs to have been granted privilege to use Workflow operation administrator menu. Without such use privilege, even if logging in as a user specified as Workflow operation administrator, administrative menu will not be displayed.
* For how to configure the role and privilege to use the menu, refer to the separate document “Portal Group Administrator Operation Guide”.

1 Click the [Administration group configuration] button.

< Administration group configuration - Edit > screen (or if nothing has been defined, < Administration group configuration - Create new > screen) will be displayed.

On the left, defined administration group will be listed up.

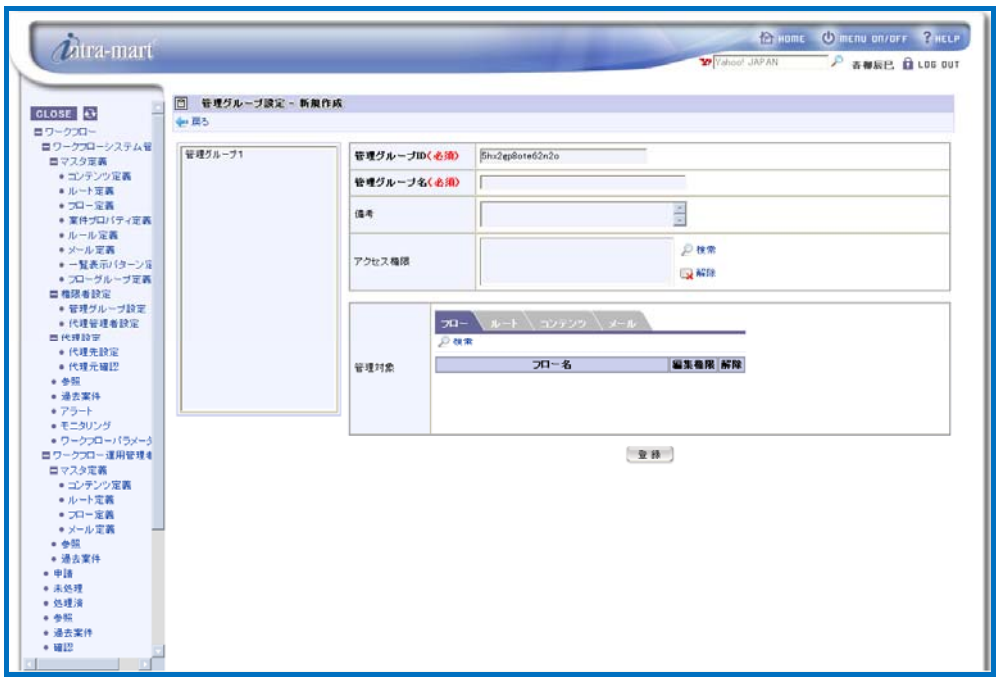
On the right, information of the administration group currently selected will be displayed.



< Administration group configuration - Edit >

2 To create new administration group, click the < Create new > icon.

< Administration group configuration - Create new > screen will be displayed.



< Administration group configuration - Create new >

Enter information of the administration group configuration.

Administration group ID(required)	ID for identifying the administration group. Automatically numbered. Unless being already used, it can be changed arbitrarily.
Administration group name (required)	Enter the administration group name. It should be entered for all the locales configured in the system.
Remarks	Explanation about the administration group, etc. can be entered. It can be entered for all the locales configured in the system.
Access privilege	Specify the target to be granted access privilege by role. A user who has this role will become the Workflow operation administrator. By clicking the <Search > icon, search screen of IM-Common Master will be displayed; then select the role of the target to be granted access privilege. By clicking the icon, registration of the role will be cancelled.
Administration target	Configure the “flow”, “route”, “content”, and “email” to be administration target. [Tab: Flow]: Select the flow definition desirable to belong to this administration group. By clicking the < Search > icon, a popup window < Flow definition - Search > will be displayed. Already registered flow definition will be listed up; then select the flow definition to be the administration target.

[Tab: Route]:

Select the route definition desirable to belong to this administration group.
By clicking the < Search > icon, a popup window < Route definition - Search > will be displayed.
Already registered route definition will be listed up; then select the route definition to be the administration target.

[Tab: Content]:
Select the content definition desirable to belong to this administration group.
By clicking the < Search > icon, a popup window < Content definition - Search > will be displayed.
Already registered content definition will be listed up; then select the content definition to be the administration target.

[Tab: Email]:
Select the email definition desirable to belong to this administration group.
By clicking the < Search > icon, a popup window < Email definition - Search > will be displayed.
Already registered email definition will be listed up; then select the email definition to be the administration target.

▪ To grant edit privilege for the administration target to those configured as access privileged user, check the box of edit privilege in the relevant administration target list.

The access privileged user will become able to edit such checked administration target, but for the administration target checked off, only reference privilege will be granted.
* To cancel each definition configured, click the icon in the [Cancel] column of the list in which the definition is shown.

3 Click the [Register] button.

Administration group definition will be registered, and then < Administration group definition - Edit > screen will be displayed.

4 Now creating new administration group definition is complete.

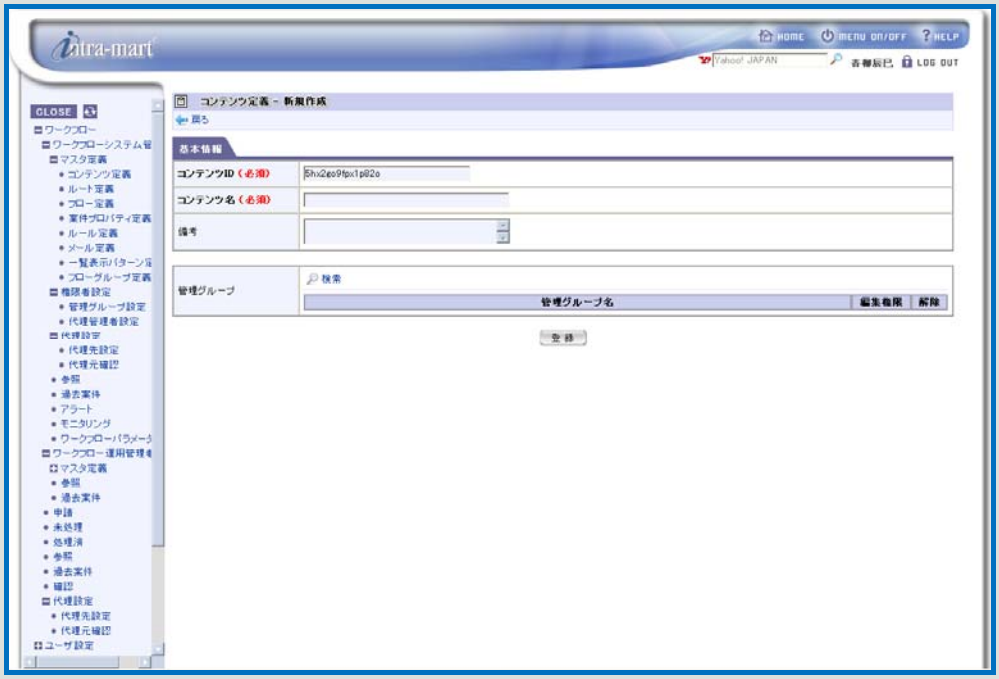
- Administration target which does not belong to any administration group can be administered only by the Workflow system administrator.
- For administration target newly created by Workflow operation administrator, he/she is also allowed to refer/edit.

Column

Specifying administration group from definition screen

By allowing to “Use administration group function” in editing the setting file of [Workflow parameter], it becomes possible to configure the membership configuration of each definition to the administration group, from the definition screen of “flow definition”, “content definition”, “route definition”, as well as from the definition copy screen.

■ By allowing to "Use administration group function" in the setting file, administration group configuration item will be additionally displayed in the [Create new] screen or [Basic configuration] tab of [Edit] screen of "flow definition", "content definition", and "route definition”. If already belonging to some administration group, such administration group will be listed up.

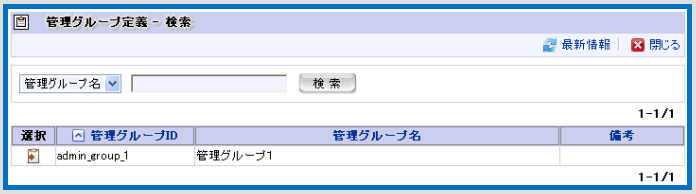


< Content definition - Create new (administration group is allowed to use) >

Specify administration group.

Click the < Search > icon in the “Administration group” pane.

A popup window of < Administration group definition - Search > will be displayed in which a list of registered administration group will be displayed.



< Administration group definition - Search >

Click the icon of the administration group to be configured.

For the administration group displayed in the list, by clicking the icon in the [Cancel] column, registration of the administration group will be cancelled.

* For details on “Workflow parameter”, refer to the separate document “IM-Workflow Specifications”.

Column

Copying administration group

■ Newly created administration group can be copied.

▪ By clicking the < Copy > icon displayed at the top of < Administration group definition - Edit > screen, < Administration group definition - Create new > screen will be displayed.

On the screen, information of the copy source, except “Administration group ID” has already been entered. “Administration group ID” is entered with its number automatically assigned. Unless being already used, it can be changed arbitrarily.

▪ Click the [Register] button.

Then administration group having the same information as the copy source, except the "Administration group ID", will be newly created.

Column

Confirming privileged user of the administration group

■ IT is possible to confirm the user to be the target of the role configured for “access privilege”.

▪ By clicking the < Confirm privileged user > icon displayed at the top of < Administration group definition - Edit > screen, < Administration group definition - Confirm privileged user > screen will be displayed.

The user to be the target of the role configured for "access privilege".

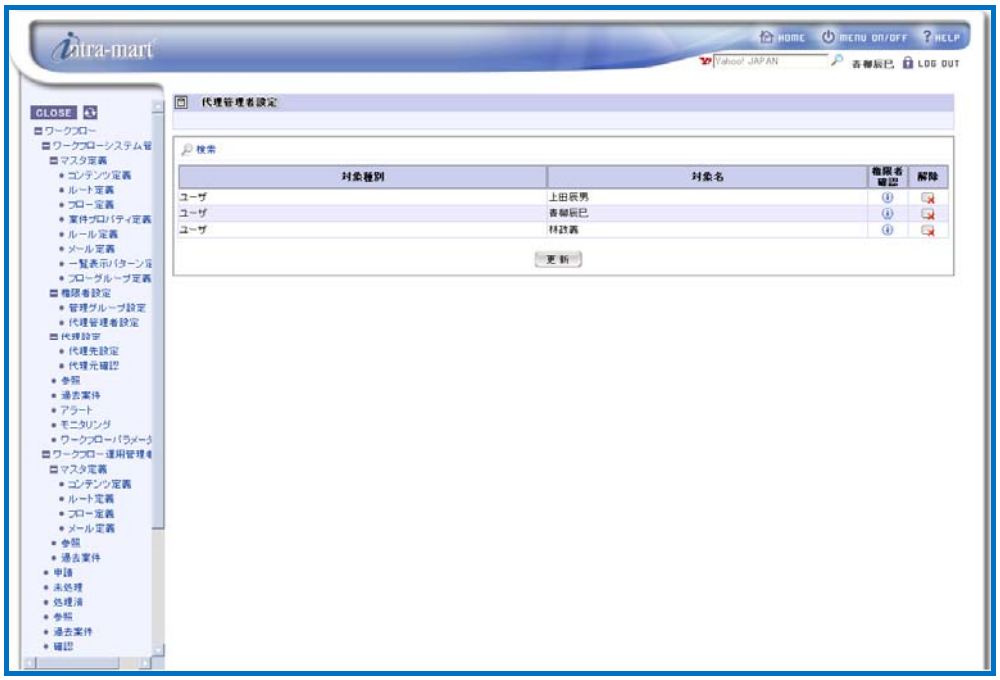
2.1.2 Privileged user configuration - Surrogate administrator configuration

In surrogate administrator configuration, privilege for surrogate configuration is granted to Workflow users. User having surrogate privilege is allowed to carry out surrogate configuration on behalf of the surrogate source person.

This is configured via [Workflow] - [Workflow system administrator] - [Privileged user configuration] - [Surrogate administrator configuration] menu.

1 Click the [Surrogate administrator configuration] button.

< Surrogate administrator configuration > screen will be displayed in which a list of registered Surrogate administrator will be displayed.



< Surrogate administrator configuration >

Column

Confirming privileged user as surrogate administrator

■ Relevant user configures as surrogate administrator can be confirmed.

- In the < Surrogate administrator configuration > screen, click the icon displayed in the [Confirm privileged user] column of surrogate administrator list. A popup window of < Confirm privileged user > will be displayed, in which relevant user to be the target of surrogate administrator configuration for the selected row.

2 Configure new surrogate administrator. Click the [Search] icon.

A popup window of < Processing target > will be displayed.

Then by clicking the icon for the item to be the processing handler, search screen of IM-Common Master will be displayed.

Select the target to be surrogate administrator.

3 Click the [Register] button.

The surrogate administrator will be registered.

4 Now configuring new surrogate administrator is complete.

- * To cancel surrogate administrator configuration, click the icon in the [Cancel] column of the list in which the configuration is shown.

2.1.3 Surrogate configuration

Surrogate configuration makes it possible for user with processing privilege to request other user to carry out the processing on his/her behalf. The user being requested surrogate is allowed to carry out application and approval in the same way as the requester.
Workflow system administrator, or user who has been granted privilege by the Workflow system administrator's surrogate administrator configuration (surrogate configuration privileged user) are allowed to configure a third party other than himself/herself as surrogate source.

There are two types of surrogate configuration as follows.

Surrogate	Meaning in case of such as absence of the user, requesting to carry out processing of a matter on behalf of the user. Only user can be specified as surrogate destination, and all the flow are included as target.
Particular business surrogate	Meaning having a user's work to be carried out by other user. It can be specified for user, organization, public group, job title and task. Target flow should be specified.

Column

Settings for whether use of surrogate configuration is allowed or not

By editing the setting file of [Workflow parameter], settings for whether use of surrogate configuration is allowed or not can be established.
Such settings can be established for "Surrogate" and "Particular business surrogate" respectively.
By default, both use are allowed.
If neither of them are allowed, function of surrogate configuration itself becomes unavailable.

* For details on "Workflow parameter", refer to the separate document "IM-Workflow Specifications".

* For details on surrogate configuration, refer to the separate document "IM-Workflow Specifications".

2.1.3.1 Surrogate destination configuration

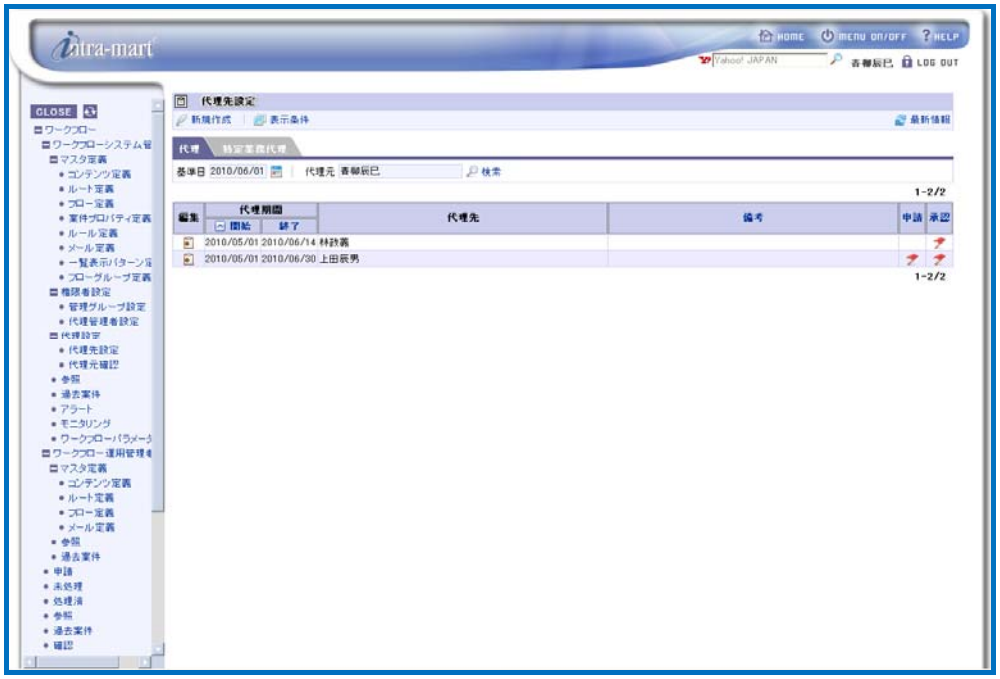
This section explains about the operation of third party surrogate configuration, as the operation of administrator.

Workflow system administrator is allowed by [Workflow] - [Workflow system administrator] - [Surrogate configuration] - [Surrogate destination configuration] menu, and the surrogate configuration privileged user is allowed at the time of being granted privilege, from the Workflow user menu: [Workflow] - [Surrogate configuration] - [Surrogate destination configuration], to carry out surrogate configuration specifying a third party as surrogate source.

1 First, carry out surrogate configuration. Click the [Surrogate destination configuration] button.

< Surrogate destination configuration > screen will be displayed.

Surrogate configurations in which “Base date” displayed at the top of the screen (system date by default) is within the surrogate period and the user specified as “surrogate source” (logged-in user by default) is the surrogate source, will be listed up.



< Surrogate destination configuration screen (Tab: Surrogate) >

Column

Specifying display conditions for surrogate configuration

■ By specifying display conditions, currently displayed surrogate configuration can be further narrowed down.

Click the < Display condition > icon.

< Display conditions > screen will be displayed.

< Display conditions (Surrogate destination configuration; Tab: Surrogate) >

▪ Surrogate destination: Specify surrogate destination user.

Only the surrogate configuration in which specified user is the surrogate destination will be displayed. By clicking the <Search > icon, user search screen of IM-Common Master will be displayed; then select the user to be specified.

To cancel input, click the < Cancel > icon.

▪ Remarks: Specify search conditions on remarks.

Those in which the specified content partially matches the content of the remarks of surrogate configuration will be displayed.

▪ Privilege: Specify privileges for “Application ” and “Approval” are specified.

Only the surrogate configuration for which the specified privilege has been granted will be displayed. Check the box of privilege to be specified.

▪ Click the [Search] button.

Surrogate configuration corresponding to the “Surrogate destination” and “Base date” specified in the < Surrogate destination configuration > screen will be displayed being further narrowed down by the display conditions.

Column

Editing/deleting surrogate configuration

To edit already-registered surrogate configuration, click the icon displayed in the [Edit] column for the surrogate configuration to be edited.

Then < Surrogate destination configuration - Edit > screen will be displayed. And by clicking the [Update] button after completing editing the content, it will be updated. Follow the similar steps when deleting surrogate configuration: in the < Surrogate destination configuration - Edit > screen which will be displayed, click the [Delete] button.

2 Specify the user to be the surrogate source. Click the < Search > icon in the “Surrogate source” pane at the top of the screen.

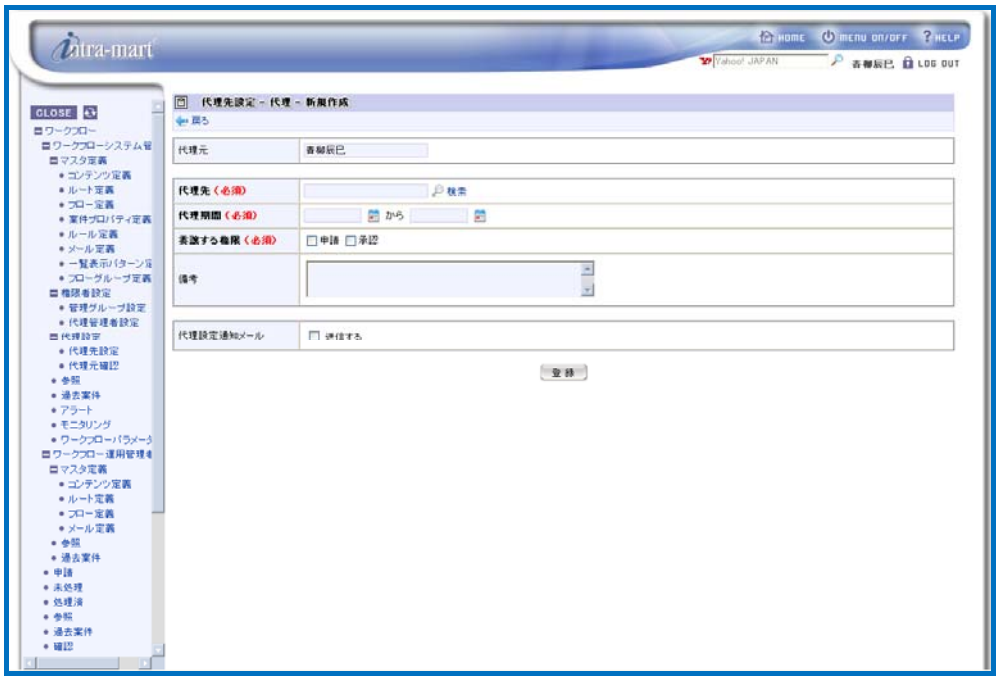
User search screen of IM-Common Master will be displayed.

Select the user to be specified as the surrogate source, and click the [OK] button.

3 Click the [Create new] button.

< Surrogate destination configuration - Surrogate - Create new > screen will be displayed.

Specified user is displayed in the “Surrogate source” pane. Now, carry out surrogate configuration in which this user is the surrogate source.



< Surrogate destination configuration - Surrogate - Create new >

Enter surrogate information.

Surrogate destination (required)	Specify the user to be the surrogate destination. By clicking the <Search > icon, user search screen of IM-Common Master will be displayed; then select the user to be specified.
Surrogate period (required)	Configure the period during which this surrogate configuration is valid. End date also must be specified. From the calendar displayed by clicking icon, select dates.
Privilege to be transferred (required)	Configure the privilege to be transferred to the surrogate destination. ▪ Application: On behalf of the surrogate source, permit “Application”, “Reapplication”, “Pull-back”, and “Discontinue” of the matter. ▪ Approval: On behalf of the surrogate source, permit “Approval”, “Approval end”, “Denial”, “Hold”, “Release hold”, “Return” and “Pull-back” of the matter.
Remarks	Explanation about the surrogate configuration, etc. can be entered.

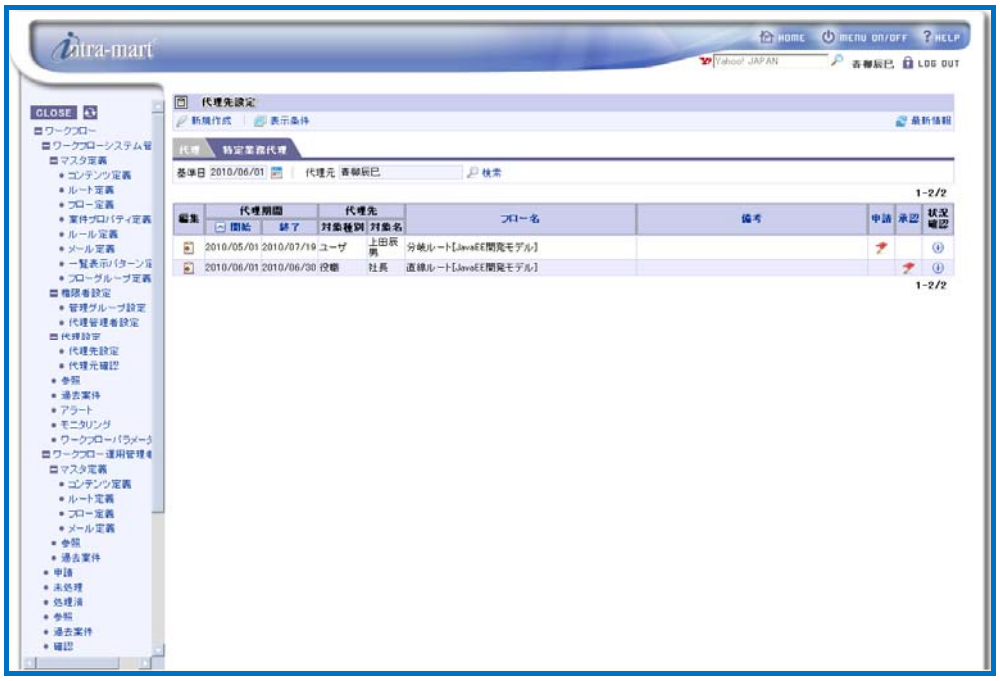
	It can be entered for all the locales configured in the system.
Surrogate configuration notification email	Upon registration, an email will be sent to the surrogate destination notifying that surrogate configuration has been carried out. The surrogate configuration notification email defined in email definition will be sent. If checked, field for comment entry will be displayed in addition. Enter any comment to be added to the body text of the email.

4 Click the [Register] button. Surrogate configuration is complete. It will return to < Surrogate destination configuration > screen.

- Surrogate configuration is immediately reflected upon registration.

5 Next, carry out particular business surrogate configuration. Switch the tab to [Particular business surrogate].

Particular business surrogate configurations in which “Base date” displayed at the top of the screen (system date by default) is within the surrogate period and the user specified as “surrogate source” (logged-in user by default) is the surrogate source, will be listed up.



< Surrogate destination configuration screen (Tab: Particular business surrogate) >

Column

Specifying the conditions for displaying particular business surrogate configuration

■ By specifying the conditions for display, currently displayed particular business surrogate configuration can be further narrowed down.
Click the < Display condition > icon.
< Display conditions > screen will be displayed.

< Display conditions (Surrogate destination configuration; Tab: Particular business surrogate) >

▪ Surrogate destination: Specify surrogate destination target.
Only the surrogate configuration in which specified target is the surrogate destination will be displayed. By clicking the <Search > icon, a popup window of target search will be displayed; then select the target to be specified.
To cancel input, click the < Cancel > icon.

▪ Flow name: Specify search conditions on flow name.
Those in which the specified content partially matches the flow name of particular business surrogate configuration will be displayed.

▪ Remarks: Specify search conditions on remarks.
Those in which the specified content partially matches the content of the remarks of surrogate configuration will be displayed.

▪ Privilege: Specify privileges for “Application ” and “Approval” are specified.
Only the surrogate configuration for which the specified privilege has been granted will be displayed. Check the box of privilege to be specified.

▪ Click the [Search] button.
Particular business surrogate configuration corresponding to the “Surrogate destination” and “Base date” specified in the < Surrogate destination configuration > screen will be displayed being further narrowed down by the display conditions.

Column

Editing/deleting particular business surrogate configuration

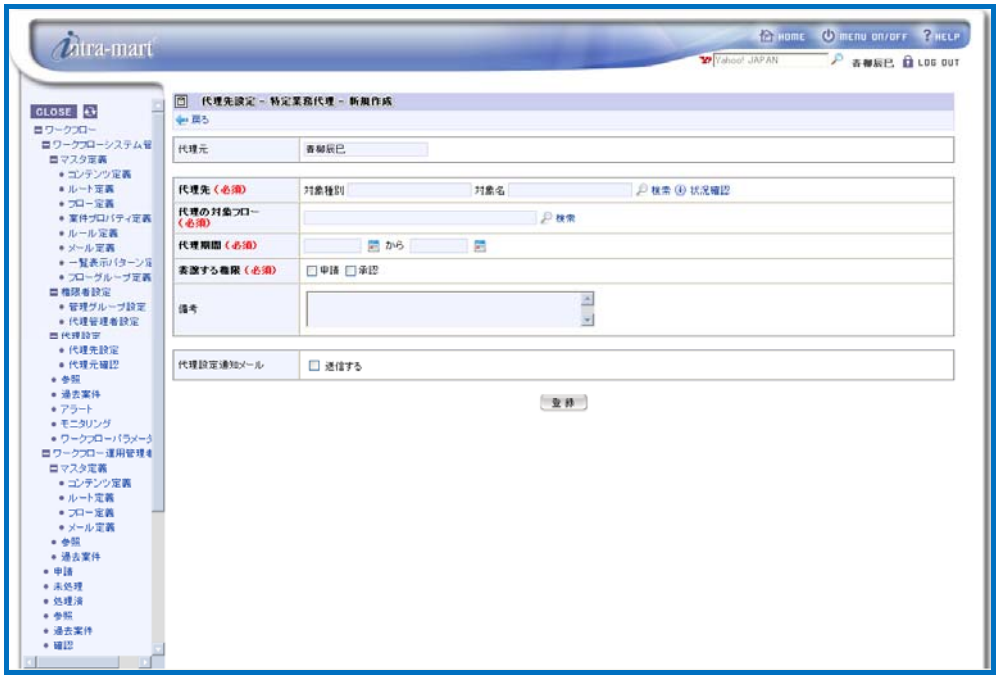
To edit already-registered particular business surrogate configuration, click the icon displayed in the [Edit] column for the particular business surrogate configuration to be edited.
Then < Surrogate destination configuration - Particular business surrogate -Edit > screen will be displayed. And by clicking the [Update] button after completing editing the content, it will be

updated. Follow the similar steps when deleting surrogate configuration: in the < Surrogate destination configuration - Particular business surrogate -Edit > screen which will be displayed, click the [Delete] button.

6 Click the [Create new] button.

< Surrogate destination configuration - Particular business surrogate - Create new > screen will be displayed.

Specified user is displayed in the “Surrogate source” pane. Now, carry out surrogate configuration in which this user is the surrogate source.



< Surrogate destination configuration - Particular business surrogate - Create new >

Enter surrogate information.

Surrogate destination (required)	Specify the target to be the surrogate destination. By clicking the < Search > icon, a popup window < Processing handler > will be displayed. Then by clicking the icon for the item to be the processing target, search screen of IM-Common Master will be displayed; then select the target to be specified. Target type: type of the selected target will be displayed. Target name: name of the selected target will be displayed. To confirm the user belonging to the specified target, click the < Confirm status > icon.
Surrogate target flow	Specify the flow to be the surrogate target. By clicking the <Search > icon, a popup window of flow search will be displayed; then select the flow to be specified.
Surrogate period (required)	Configure the period during which this particular business surrogate configuration is valid. End date also must be specified. From the calendar displayed by clicking icon, select dates.
Privilege to be transferred (required)	Configure the privilege to be transferred to the surrogate destination. ▪ Application: On behalf of the surrogate source, permit “Application”,

	“Reapplication”, “Pull-back”, and “Discontinue” of the matter. ▪ Approval: On behalf of the surrogate source, permit “Approval”, “Approval end”, “Denial”, “Hold”, “Release hold”, “Return” and “Pull-back” of the matter.
Remarks	Explanation about the particular business surrogate configuration, etc. can be entered. It can be entered for all the locales configured in the system.
Surrogate configuration notification email	Upon registration, an email will be sent to the surrogate destination notifying that particular business surrogate configuration has been carried out. The surrogate configuration notification email defined in email definition will be sent. If checked, field for comment entry will be displayed in addition. Enter any comment to be added to the body text of the email.

7 Click the [Register] button. Surrogate configuration is complete. It will return to < Surrogate destination configuration > screen.

- Particular business surrogate configuration is immediately reflected upon registration.
- Surrogate of surrogate is not allowed.

Column

Changing base date

When base date is changed in the < Surrogate destination configuration > screen, only the surrogate configuration/particular business surrogate configuration the base date of which is within the surrogate period are allowed to be displayed.
Click the icon for the “Base date” displayed at the top of the screen.
A popup window of < Calendar > will be displayed.
▪ Click the date to be specified.
Then only the surrogate configuration/particular business surrogate configuration the specified base date of which is within the surrogate period will be displayed.

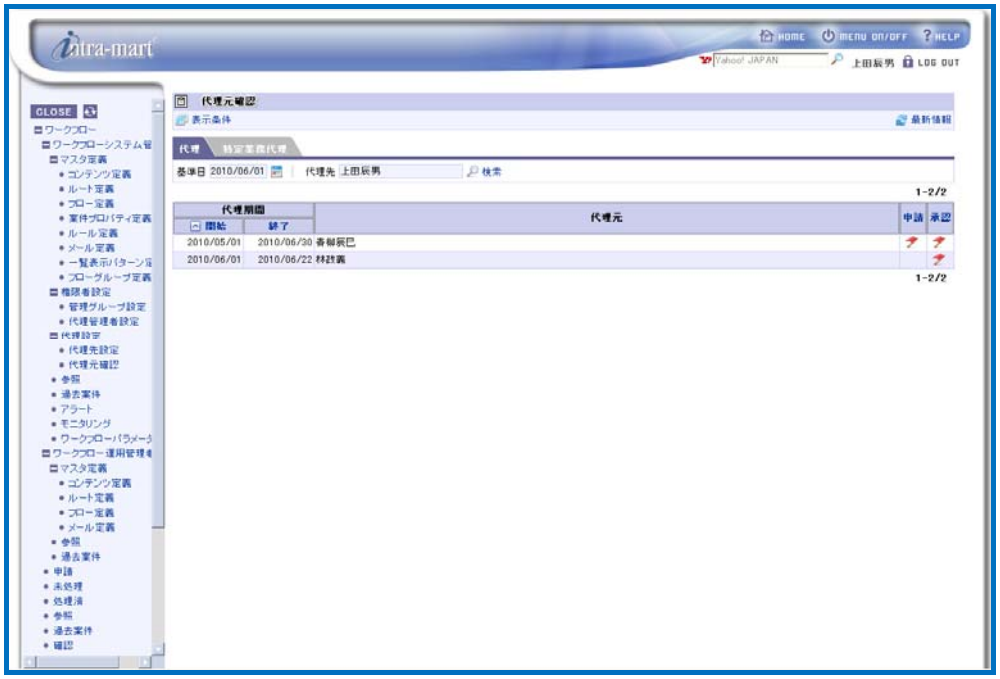
2.1.3.2 Surrogate source confirmation

If there is some surrogate configuration/particular business surrogate configuration in which the user himself/herself is specified as surrogate destination, its surrogate source can be confirmed.
Workflow system administrator and the surrogate configuration privileged user are allowed to confirm third party surrogate source other than the user himself/herself.

Workflow system administrator is allowed by [Workflow] - [Workflow system administrator] - [Surrogate configuration] - [Surrogate source configuration] menu, and the surrogate configuration privileged user is allowed at the time of being granted privilege, from the Workflow user menu: [Workflow] - [Surrogate configuration] - [Surrogate source confirmation], to confirm third party surrogate source.

1 First, carry out surrogate source confirmation of surrogate/particular business surrogate. Click the [Surrogate source confirmation] button.

< Surrogate source confirmation > screen will be displayed.
Surrogate configurations in which “Base date” displayed at the top of the screen (system date by default) is within the surrogate period and the user specified as “surrogate destination” (logged-in user by default) is the surrogate destination, will be listed up. By switching the tab to “Particular business surrogate”, particular business surrogate configuration in which specified "Base date" is within the surrogate period and the user specified as "surrogate destination” is included in the target of the surrogate destination, will be listed up.



< Surrogate source confirmation >

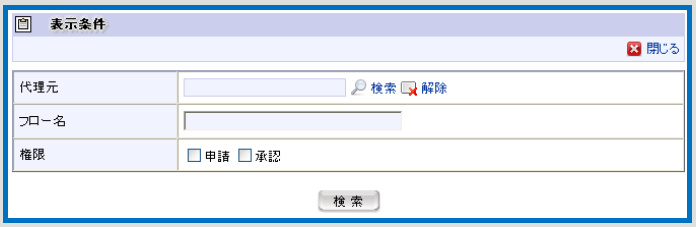
Column

Specifying the conditions for displaying the surrogate confirmation screen for surrogate/particular business surrogate configuration

■ By specifying the conditions for display, currently displayed surrogate source list can be further narrowed down.

Click the < Display condition > icon.

< Display conditions > screen will be displayed.



< Display conditions (Surrogate source confirmation; Tab: Particular business surrogate) >

▪ Surrogate source: Specify the target of surrogate source.

Only the surrogate configuration in which specified user is the surrogate source will be displayed. By clicking the <Search > icon, user search screen of IM-Common Master will be displayed; then select the user to be specified.

To cancel input, click the < Cancel > icon.

▪ Flow name: Specify search conditions on flow name.(Only in case of Particular business surrogate)

Those in which the specified content partially matches the flow name of particular business surrogate configuration will be displayed.

▪ Privilege: Specify privileges for “Application ” and “Approval” are specified.

Only the surrogate configuration for which the specified privilege has been granted will be displayed. Check the box of privilege to be specified.

▪ Click the [Search] button.

Surrogate configuration corresponding to the “Surrogate destination” and “Base date” specified in the < Surrogate source confirmation > will be displayed being further narrowed down by the display conditions.

2 Change the user to be the surrogate destination. Click the < Search > icon in the “Surrogate destination” pane at the top of the screen.

User search screen of IM-Common Master will be displayed.

Select the user to be specified as the surrogate destination, and click the [OK] button.

Surrogate configuration in which specified surrogate destination user is requested for some processing will be displayed.

2.1.4 Reference/Matter handling

In the Reference menu, it is possible to refer matters, and to confirm the status. In addition, matter handling privileged user is allowed to do matter handling.

Workflow system administrator is allowed to refer matters of every flow and to handle matters of every flow.

Workflow operation administrator is allowed to refer/handle matters of the flow under his/her administration.

User being granted reference privilege for individual flow definition from the Workflow system administrator (matter handling privileged user) is allowed to refer the matter of the relevant flow, and to handle the matter to the extent he/she is granted privilege.

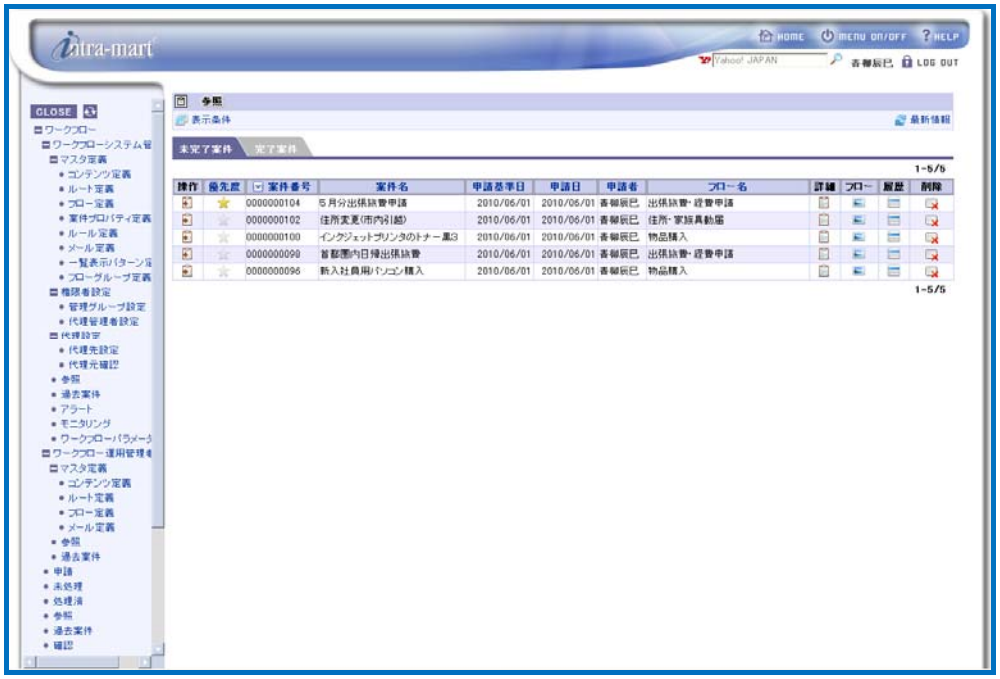
These can be executed via [Workflow] - [Workflow system administrator] - [Reference], [Workflow operation administrator] - [Reference], or [Workflow] - [Reference].

2.1.4.1 Reference

Carry out reference to matters.

1 Click the [Reference] button.

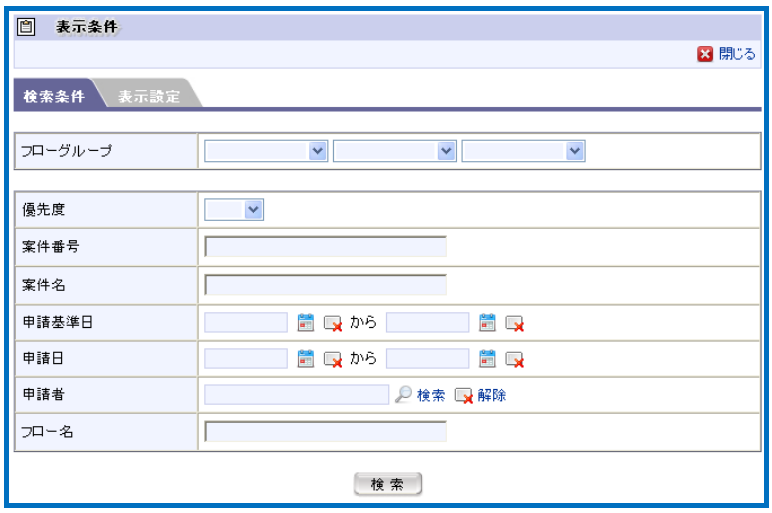
< Reference > screen will be displayed, and matters to which reference is enabled by granting reference privilege to logged-in users will be listed up being sorted to “Unfinished matters” and “Finished matters”. These are displayed in accordance with the listing pattern of “Reference list” as configured (By default, this listing pattern is the one configured as default by the Workflow system administrator in the [Listing pattern definition].



< Reference >

2 Carry out search/display configuration of matters. Click the < Display condition > icon.

< Display conditions > screen (Tab: Search condition) will be displayed.



< Display conditions (Finished matters; Tab: Search condition) >

Specify the search conditions for the matter to be displayed. Search target will be narrowed down with the specified conditions, and matters meeting the conditions will be displayed.

Flow group	Specify the flow group to which the flow of the matter to be searched belongs, as a search condition. Flow groups which have been defined will be shown in pull-down list format for each hierarchy. This item will not be displayed if: ▪ It is configured as “Do not use flow group” in the individual login group configuration; or ▪ Flow group has not been registered at all.
Priority	Specify the priority assigned to the matter, as a search condition. From the pull-down list select “Normal”, “High” or “Low”.
Matter number	Specify the matter number as a search condition. This will be searched by partial match of the input value.
Matter name	Specify the matter name as a search condition. This will be searched by partial match of the input value.
Application base date	Specify the scope of application base date of the matter as a search condition. From the calendar displayed by clicking icon, select dates. To cancel the value once specified, click the icon.
Application date	Specify the scope of application date of the matter as a search condition. From the calendar displayed by clicking icon, select dates. To cancel the value once specified, click the icon.
Applicant	Specify the applicant of the matter as a search condition. By clicking the <Search > icon, a popup window of applicant search will be displayed; then select the applicant to be a search condition.

	To cancel the value once specified, click the icon.
Flow name	Specify the flow name of the matter as a search condition. This will be searched by partial match of the input value.

* Only in case of specifying the display condition for “Finished matter”, the following items will be displayed additionally.

Matter end date	Specify the scope of matter end date as a search condition. From the calendar displayed by clicking icon, select dates. To cancel the value once specified, click the icon.
Finish status	Specify the finish status of the matter as a search condition. From the pull-down list, select “Arrived at end node” “Approval ended”, “Discontinue” or “Denied”.

3 By clicking the [Search] button, it will return to < Reference > screen. Search target will be narrowed down with the specified conditions, and matters meeting the conditions will be listed up.

4 Change the listing pattern of matters. Click the < Display condition > icon, and switch the tab to [Display configuration].

< Display conditions > screen (Tab: Search condition) will be displayed.

< Display conditions (Finished matters; Tab: Display configuration) >

Select the listing pattern.

Listing pattern	Pattern name the target lists of which are defined as “Reference list (unfinished matters) and “Target list (finished matters)” in the listing pattern definition will be displayed in pull-down list format. Select the listing pattern to be configured.

In the “Preview” pane, preview of the selected listing pattern will be displayed.

If initial sort is configured, sorting will be performed before displaying for the specified item in the sequence (ascending/descending).

5 Confirm the information of the matter.

By clicking the icons displayed in the “Details”, “Flow” and “History” columns of the matter listed in the <Reference > screen, such information can be confirmed respectively.

Details	By clicking the icon, a popup window showing detailed content of the matter will be displayed, in which content of the application can be confirmed.
Flow	By clicking the icon, a popup window of flow reference of the matter will be displayed, in which the flow diagram, nodes currently in process, handlers of each node, processing date/time and etc. of the

	matter can be confirmed.
History	By clicking the icon, a popup window of history reference of the matter will be displayed, in which the flow diagram, processing date/time of already processed node, comments attached by the handler during processing, etc. can be confirmed.

Column

Deleting the matters

■ Workflow system administrator is allowed to delete unfinished matters and finished matters. By clicking the icon displayed in the “Delete” column for the matters listed in the < Reference > screen (Tab: Unfinished matters or Finished matters), the relevant matter will be deleted.

* Unfinished matters can be deleted from matter handling screen. For details, refer to [2.1.4.2 Matter handling] as described below.

2.1.4.2 Matter handling

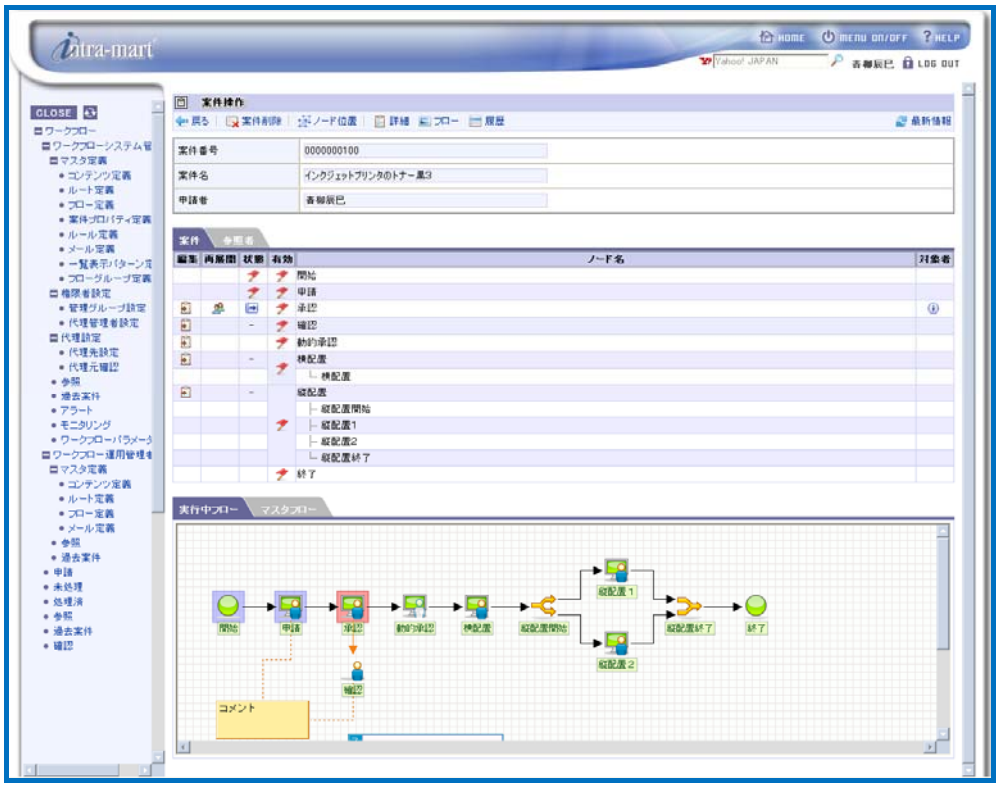
In matter handling, various operations can be carried out such as reediting nodes in the flow, move nodes, and releasing hold status of the nodes. Below are the explanations.

Release hold	Release hold for the node in hold status can be carried out.
Change processing/confirmation handler of the node	Configuration of processing handler of the node can be added/deleted. Processing handler of already processed node cannot be changed.
Reexpand processing/confirmation handler of the node	Based on the configuration of process handler of the node, processing handler can be reexpanded.
Delete dynamic approval node	Dynamic approval node of the matter can be deleted.
Restore dynamic approval node	Deleted dynamic approval node can be restored.
Reconfigure/reexpand horizontal placement node	Horizontal node can be reconfigured/reexpanded. If having already arrived at a node expanded within horizontal placement node, it cannot be reconfigured/reexpanded.
Reconfigure/reexpand vertical placement node	Vertical node can be reconfigured/reexpanded. If having already arrived at a node expanded within vertical placement node, it cannot be reconfigured/reexpanded.
Move nodes	Processing can be moved to any other node. By granting privilege, restriction on moving direction and whether or not to permit moving to end node can be controlled. For finished matters, nodes cannot be moved.
Add matter handling privileged user	For matters in process, matter handling privileged user can be added.
Delete the matter	Specified matter can be deleted.
Edit node position	Node position can be changed for visibility. For finished matters, node position cannot be altered.

* For details on matter handling, refer to the separate document “IM-Workflow Specifications”.

Carry out matter handling.
In the reference matter list displayed in the < Reference > screen, icon is displayed in the “Handling” column; by clicking this icon for the matter on which matter handling is to be carried out, < Matter handling > screen will be displayed.

- If icon is not displayed, that means for the flow which the matter has been applied for, matter handling privilege has not been granted to the user.



< Matter handling >

Below are the explanations on the procedure for each matter handling.

- If the user has not been granted edit privilege for the node, will not be displayed in the “Edit” column.
- If the user has not been granted reexpand privilege for the node, will not be displayed in the “Reexpand” column.

Column

Frame border in the flow diagram

■ In the flow diagram displayed in the matter handling screen, icons for each node are displayed with colored frame borders according to the status.

Red : in process/pending processing

Yellow: hold status

Blue: already processed

No frame: outstanding

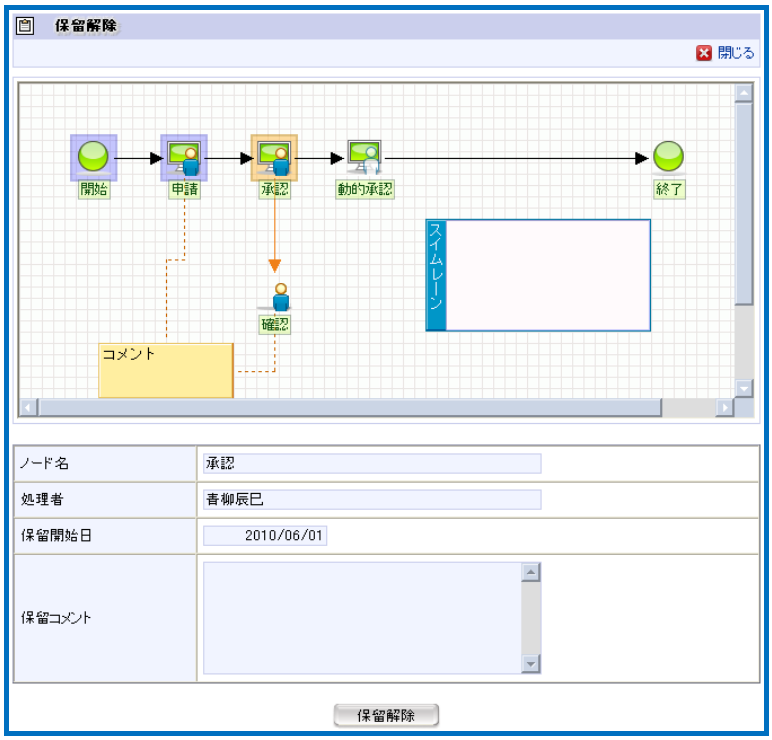
* If dynamic approval node expanded with horizontal/vertical placement nodes is in hold status, corresponding horizontal/vertical placement nodes in master flow will be displayed as in process (red frame).

* In moving node, if a node is moved backward to start node, destination node and thereafter which have already been processed will be handles as not arriving yet.

* Confirmation node is displayed with no frame border.

Release hold

When a node processing is in hold status, icon is displayed in the “Status” column of the “Matter” tab. By clicking the < Release hold > icon, a popup window < Processing handler > will be displayed.



< Matter handling - Release hold >

Click the [Release hold] button.

- If the user has not been granted release hold privilege, clicking icon cannot cause releasing hold.

Change processing/confirmation handler (change handler of “approval node”, “dynamic approval node” and “confirmation node”)

By clicking the icon displayed in the “Edit” column of the “Matter” tab, < Edit node > screen will be displayed.

< Matter handling - Edit node (dynamic approval) >

Enter the content to be changed.

Node name	Node name to be edited will be displayed.
Valid	Displayed only when the node is dynamic approval node. Configure this node as valid or invalid (deleted).Valid if checked.
Saved configuration	Configuration for processing handler saved by a logged-in user can be used. When using, select configuration name from the pull-down list.
Configuration name	If current configuration should be saved, enter name of the configuration to be saved. By clicking the [Save] button, current configuration for the processing handler will be saved with the name entered in this field.
Processing handler	Configure the processing handler of the node. The processing handler specified in route definition is configured by default. ▪ Specify the processing handler. Click the [Search] icon. Search screen of IM-Common Master will be displayed. Specify the target to be processing handler. Status of the target can be confirmed. By clicking the icon in the “Confirm status” column, a popup window for confirming the status of the target will be displayed. Already configured target can be cancelled. Click the icon in the “Cancel” column of the target to be cancelled.

Click the [Update] button.

Reexpand processing/confirmation handler of the node

When a node processing is “now in process (except hold status) only, icon is displayed in the “Reexpand” column of “Matter” tab.

By clicking the icon, processing handler of the node will be reexpanded.

Delete/restore dynamic approval node

By clicking the icon displayed in the “Edit” column of the “Matter” tab, < Edit node > screen will be displayed.

If the box in “Valid” pane is checked off, dynamic approval node will be deleted from the route.

If this box is checked again from deleted condition, dynamic approval node will be restored on the route.

- If only the privilege “Delete dynamic approval node” is granted, it is possible only to make dynamic approval node in valid status invalid (deleted).
- If only the privilege “Restore dynamic approval node” is granted, it is possible only to make dynamic approval node in invalid status valid.
- If having already arrived at dynamic approval node, dynamic approval node in valid status cannot be made invalid.

Reconfigure/reexpand horizontal placement node; Reconfigure/reexpand vertical placement node

By clicking the icon displayed in the “Edit” column of the “Matter” tab, < Edit node (horizontal placement/vertical placement) > screen will be displayed.

< Matter handling - Edit node (horizontal placement) >

Reconfigure placement node.

Saved configuration	Configuration for processing handler saved by a logged-in user can be used. When using, select configuration name from the pull-down list.
Configuration name	If current configuration should be saved, enter name of the configuration to be saved. By clicking the [Save] button, current configuration for the processing handler will be saved with the name entered in this field.
Processing configuration (checkbox)	Configure placement nodes. Entry field will be displayed corresponding to the maximum number of assignable nodes as configured in flow definition. At least, corresponding to the minimum number of assignable nodes as configured must be available. Check the box of the “Processing configuration” corresponding to the number of nodes to be placed.
Node name (required)	Enter the node name to be configured.
Processing handler (required)	Configure the processing handler for the node. ▪ Specify the processing handler. By clicking the <Search > icon, search screen of IM-Common

Master will be displayed; then select the target to be specified.

Status of the target can be confirmed. By clicking the icon in the “Confirm status” column, a popup window for confirming the status of the target will be displayed.

To cancel the target already configured, click the icon in the "Cancel" column of the target to be cancelled

Click the [Update] button.

- If already processed at the placed node, it cannot be edited.
- Of the placed nodes, configuration cannot be cancelled for those currently in process. However, node name and processing handler can be edited.

Reexpand placement node.

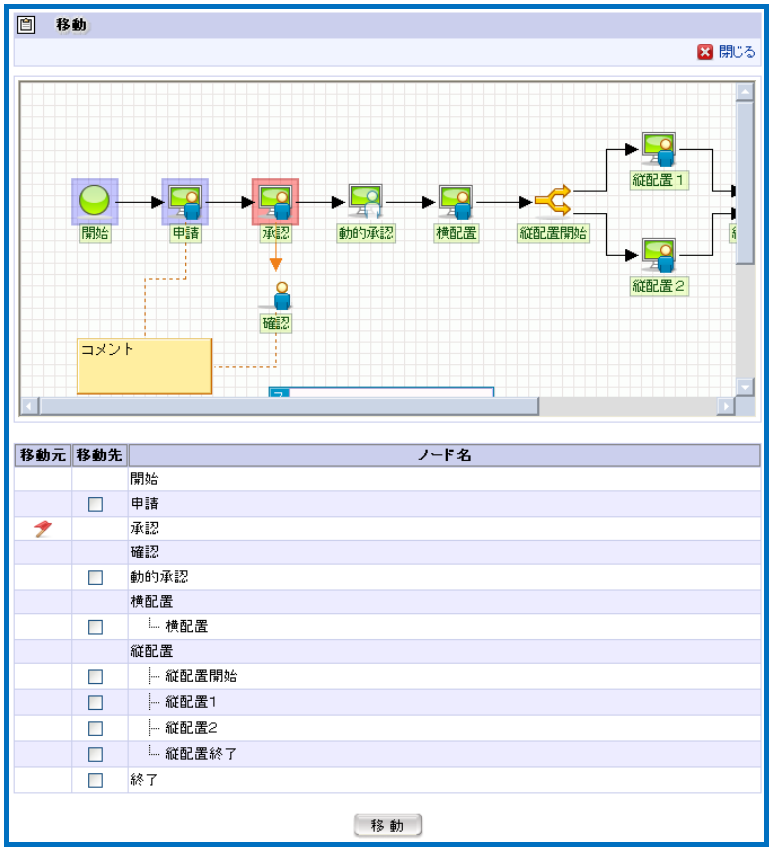
When a placement node is “now in process (except hold status) only, icon is displayed in the “Reexpand” column of “Matter” tab.

By clicking the icon, processing handler of the node will be reexpanded.

Move nodes

Only when any one of “move node in process” privileges (“forward”, “back”, “end”) is granted, this operation can be carried out.

By clicking the icon displayed in the “Status” column for nodes in process of the “Matter” tab, < Move > screen will be displayed.



< Matter handling - Move >

All the nodes on the flow will be listed up.

For a node expected to be the destination, checkbox is displayed in the “Destination” column.
Check the box of the nodes the processing of which should be moved.
Click the [Move] button.

* For details on moving nodes, refer to the separate document “IM-Workflow Specifications”.

- If "move node in process" privilege granted is only "forward", only movement in the flow's forward direction is allowed. However, it cannot be moved to end node.
- If "move node in process" privilege granted is only "back", only movement in the flow's backward direction (already processed node) is allowed.
- If "move node in process" privilege granted is only "end", only movement toward end node is allowed.
- If the user has not been granted privilege to move nodes, nodes cannot be moved even if icon is clicked.

■Add matter handling privileged user

This operation is allowed only for Workflow system administrator and Workflow operation administrator.

Switch the "Matter" tab to "Referrer", and configure referrer.

* For configuring referrer, refer to the step 7 in [1.2.5 Flow definition] above.

■Delete the matter

This operation is allowed only for Workflow system administrator.

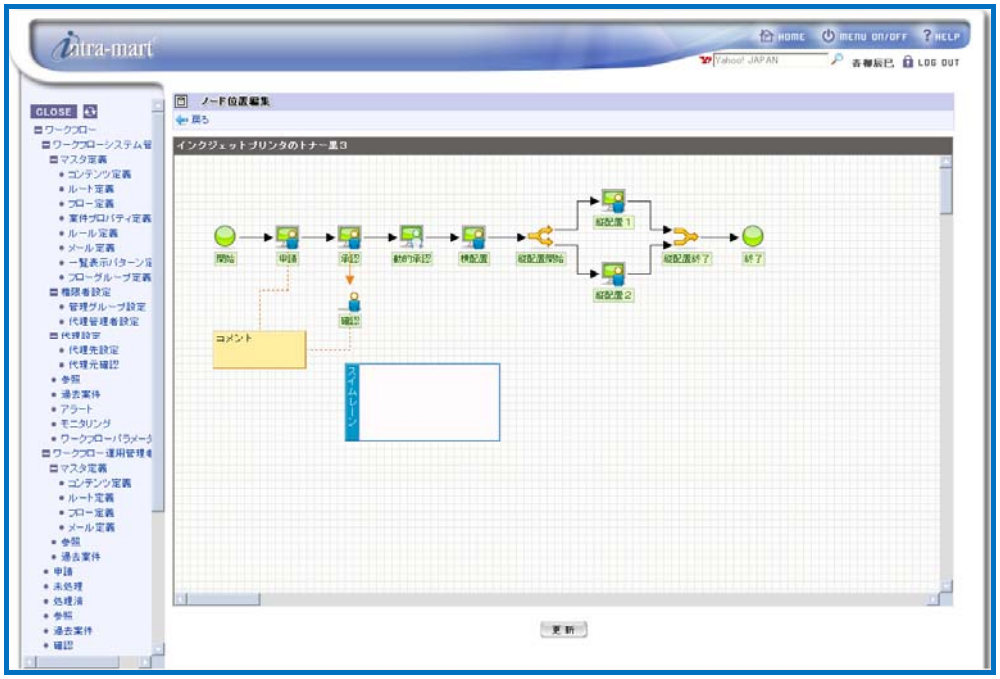
By clicking the < Delete the matter > icon displayed at the top of the < Matter handling > screen, the matter will be deleted.

Such as processing history and confirmation history, data relating to the matter will be entirely deleted.

■Edit node position

In the < Matter handling > screen, flow diagram of the matter is displayed. It can be re-positioned for visibility by changing the node position of the flow being in execution.

By clicking the < Node position > icon displayed at the top of the < Matter handling > screen, node position editing screen will be displayed.



< Node position editing screen >

Flow diagram will be displayed.

Change the position of node, comment and swimlane, and then click the [Update] button.

- It is only possible to change position of node, comment and swimlane, whereas name of each node, comment content, arrowed line connection, and etc. cannot be changed.

Flow information display

■ Flow can be confirmed.

In the < Matter handling > screen, flow of the matter is displayed. By switching tabs, “Flow in execution” and “Master flow” can be confirmed.

Flow in execution	Flow in execution for the target matter is displayed.
Master flow	Flow defined in the flow definition of the target matter is displayed.

Information of the matter can be confirmed.

By clicking the icons < Details >, < Flow >, and < History > displayed at the top of the < Matter handling > screen, such information can be confirmed respectively.

Details	By clicking the icon, a popup window showing detailed content of the matter will be displayed, in which content of the application can be confirmed.
Flow	By clicking the icon, a popup window of flow reference of the matter will be displayed, in which the flow diagram, nodes currently in process, handlers of each node, processing date/time and etc. of the matter can be confirmed.
History	By clicking the icon, a popup window of history reference of the matter will be displayed, in which the flow diagram, processing date/time of already processed node, comments attached by the handler during processing, etc. can be confirmed.

2.1.5 Past matters

“Past matters” mean finished matters which have been saved in the archive region by means of “archive function”.

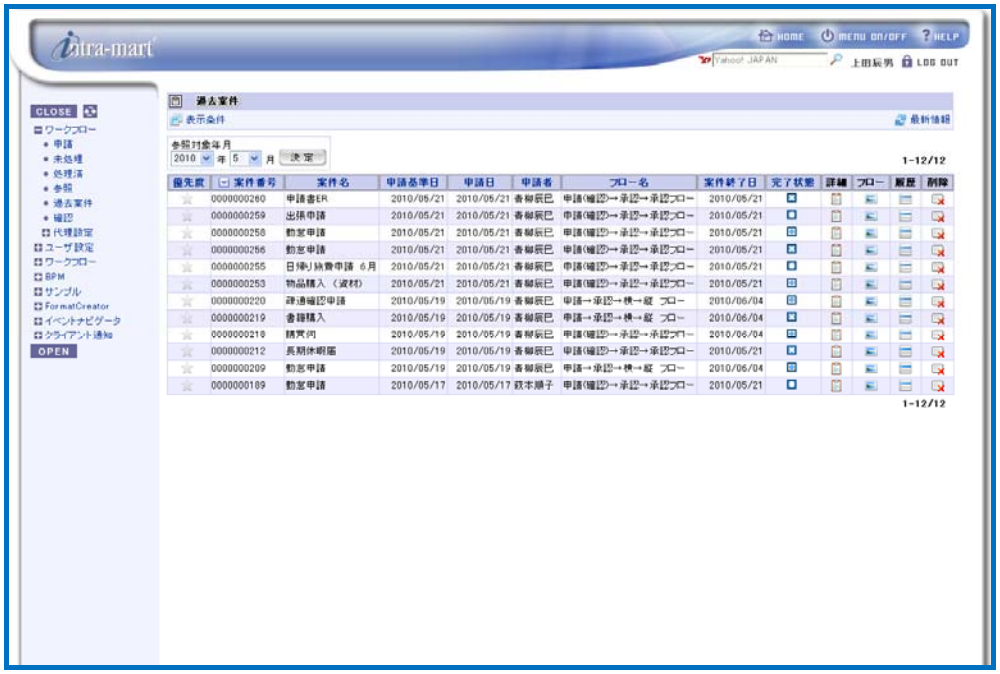
In "Past matters” menu, past matters saved in the archive region can be referred. Workflow system administrator and Workflow operation administrator are allowed to delete past matters.
Workflow system administrator is allowed to refer/delete all the past matters.
Workflow operation administrator is allowed to refer/delete past matters of the flow under his/her administration.
Users are allowed to refer past matters for which the user himself/herself handled.
“Archive function” archives finished matters in batch mode.
Confirm past matters.
These can be executed via [Workflow] - [Workflow system administrator] - [Past matters], [Workflow operation administrator] - [Past matters], or [Workflow] - [Past matters].

* For details on archive function, refer to the separate document “IM-Workflow Specifications”.

- Detailed configuration of archive batch (e.g. specifying archiving period) is carried out in [Workflow parameter]. (For details on “Workflow parameter”, refer to the separate document “IM-Workflow Specifications”.)

1 Click the [Past matters] button.

< Past matters > screen will be displayed, in which past matters that can be referred will be listed up. This will be displayed in accordance with the listing pattern configured for “Past matters list”. (By default, this listing pattern is the one configured as default by the Workflow system administrator in the [Listing pattern definition].)



< Past matters >

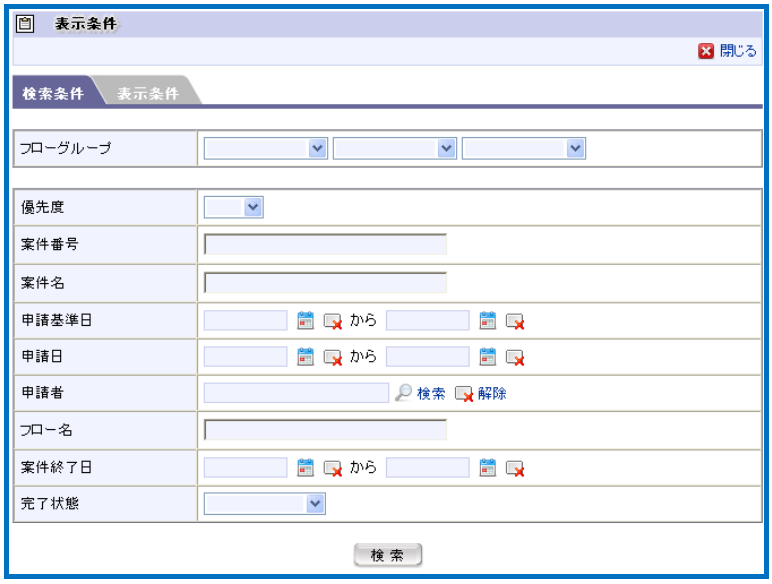
2 Specify the referenced year and month.

From the pull-down list of “Referenced year and month” upper left on the screen, specify the year and month, then by clicking the [OK] button past matters corresponding to the specified year and month will be displayed.

From the system start date, through to the year of current system date can be selected.

3 Carry out search/display configuration of past matters. Click the < Display condition > icon.

< Display conditions > screen (Tab: Search condition) will be displayed.



< Display conditions (Past matters; Tab: Search condition) >

Specify the search conditions for the matter to be displayed. Search target will be narrowed down with the specified conditions, and matters meeting the conditions will be displayed.

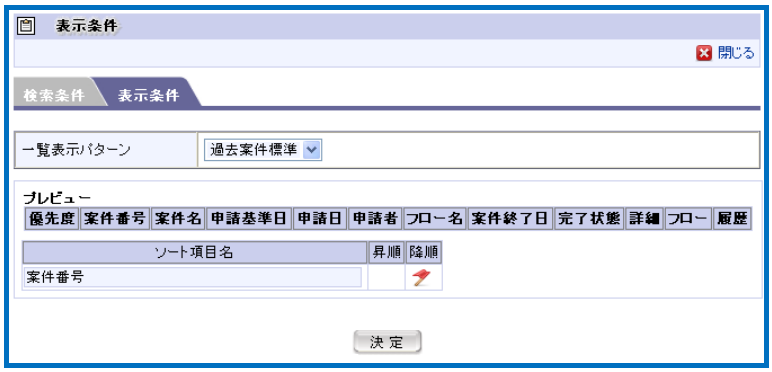
Flow group	Specify the flow group to which the flow of the past matter to be searched belongs, as a search condition. Flow groups which have been defined will be shown in pull-down list format for each hierarchy. This item will not be displayed if: ▪ It is configured as “Do not use flow group” in the individual login group configuration; or ▪ Flow group has not been registered at all.
Priority	Specify the priority assigned to the past matter, as a search condition. From the pull-down list select “Normal”, “High” or “Low”.
Matter number	Specify the matter number of the past matter as a search condition. This will be searched by partial match of the input value.
Matter name	Specify the matter name of the past matter as a search condition. This will be searched by partial match of the input value.
Application base date	Specify the scope of application base date of the past matter as a search condition. From the calendar displayed by clicking icon, select dates.

	To cancel the value once specified, click the icon.
Application date	Specify the scope of application date of the past matter as a search condition. From the calendar displayed by clicking icon, select dates. To cancel the value once specified, click the icon.
Applicant	Specify the applicant of the past matter as a search condition. By clicking the < Search > icon, applicant search screen will be displayed. Select the applicant to be search condition. To cancel the value once specified, click the icon.
Flow name	Specify the flow name of the past matter as a search condition. This will be searched by partial match of the input value.
Matter end date	Specify the scope of matter end date of the past matter as a search condition. From the calendar displayed by clicking icon, select dates. To cancel the value once specified, click the icon.
Finish status	Specify the finish status of the past matter as a search condition. From the pull-down list, select “Arrived at end node” “Approval ended”, “Discontinue” or “Denied”.

4 By clicking the [Search] button, it will return to < Reference > screen. Search target will be narrowed down with the specified conditions, and past matters meeting the conditions will be listed up.

5 Change the listing pattern of past matters. Click the < Display condition > icon, and switch the tab to [Display configuration].

< Display conditions > screen (Tab: Search condition) will be displayed.



< Display conditions (Past matters; Tab: Display configuration) >

Select the listing pattern.

Listing pattern	Pattern name the target lists of which are defined as “Past matters list” in the listing pattern definition will be displayed in pull-down list format. Select the listing pattern to be configured.

In the “Preview” pane, preview of the selected listing pattern will be displayed.

If initial sort is configured, sorting will be performed before displaying for the specified item in the sequence (ascending/descending).

6 Confirm the information of the past matter.

By clicking the icons displayed in the “Details”, “Flow” and “History” columns of the matter listed in the <Reference > screen, such information can be confirmed respectively.

Details	By clicking the icon, a popup window showing detailed content of the past matter will be displayed, in which content of the application can be confirmed.
Flow	By clicking the icon, a popup window of flow reference of the past matter will be displayed, in which the flow diagram, handlers of each node, processing date/time and etc. of the matter can be confirmed.
History	By clicking the icon, a popup window of history reference of the past matter will be displayed.

7 Delete past matters.

Only Workflow system administrator and Workflow operation administrator are allowed to delete.

Click the icon displayed in the “Delete” column for the displayed past matter.

The past matter will be deleted.

2.1.6 Alert

“Alert function” is the one which checks the status of Workflow, and gives a message when certain conditions are met.
Information given by “Alert function” can be confirmed. Only Workflow system administrator is allowed to use it.
Alert detection is carried out on unfinished matters.
For alert information, error level called “alert level” can be configured.
There are three types of alert levels: “Information (INFO)”, “Warning (WARN)”, and “ERROR”.

Alert is detected by executing alert detection program in batch mode.
By default, an alert detection program provided by the system as standard will be executed.

Alerts detected by the alert detection program provided as standard are as follows.

Detected no processing handler	Detected a node of which no processing handler present.
Detected processing stop (junction start)	Detected a node which stopped processing at junction start node.
Detected processing stop (junction end)	Detected a node which stopped processing at junction end node.
Detected matter in process (elapsed day/hour specified)	Detected a matter which has not finished yet after specified date had passed.
Detected node in process (elapsed day/hour specified)	Detected a node not processed yet after arrival and specified date had passed.

* For details on alert, refer to the separate document “IM-Workflow Specifications”.

- Elapsed day/hour for alert detection by alert detection program, and other information is specified in [Workflow parameter]. (For details on “Workflow parameter”, refer to the separate document “IM-Workflow Specifications”.))

Confirm alert information.
This can be executed [Workflow] - [Workflow system administrator] - [Alert] menu.

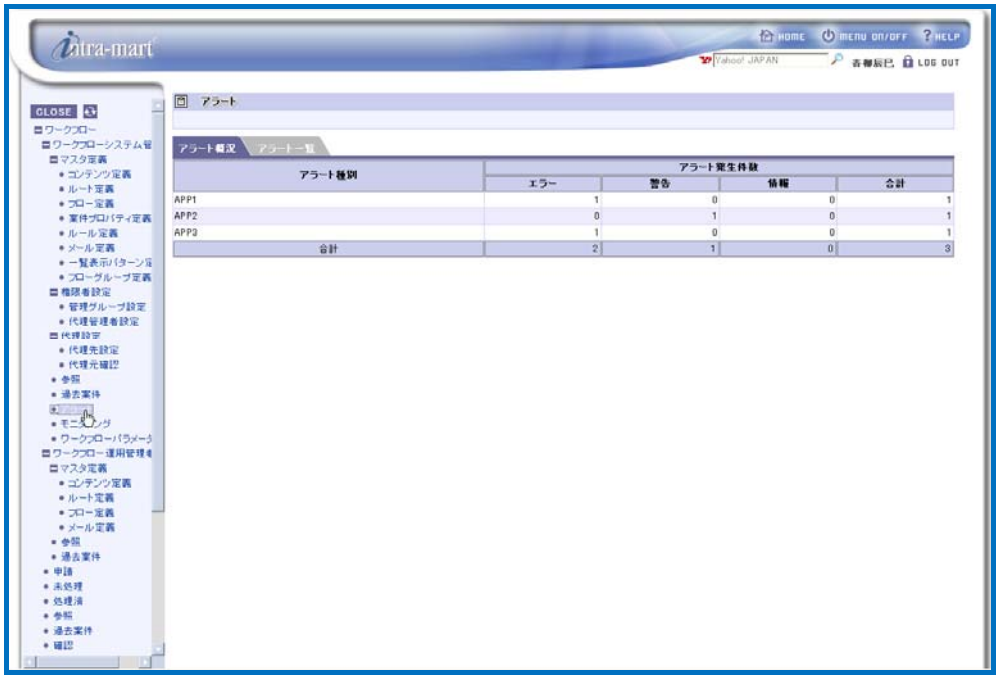
1 Click the [Alert] button.

< Alert > screen will be displayed.

▪ Outline of alert

This screen is for listing up number of alert detected for each flow, each alert level.

With respect to unfinished matters, aggregate information of alert detected by batch will be displayed.



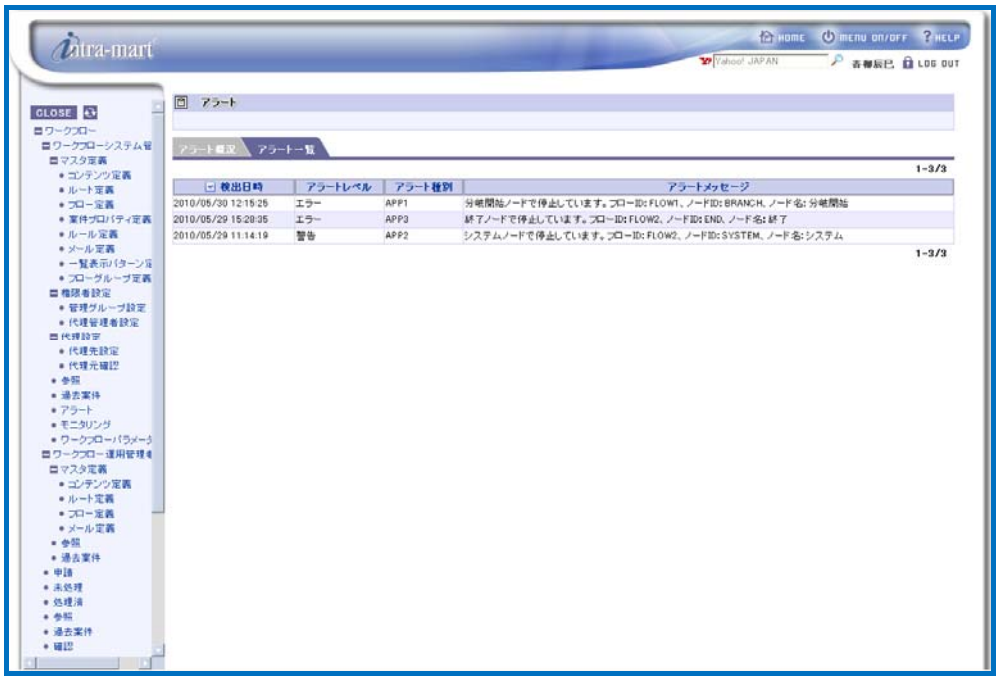
< Alert screen (Tab: Outline of alert >

2 Switch the tab to [Alert list].

▪ Alert list

This screen is for listing up detected alerts.

With respect to unfinished matters, information of alert detected by batch will be displayed.



< Alert screen (Tab: Alert list) >

2.1.7 Monitoring

In monitoring, finished matters are aggregated and processing time and processing results of the matters will be displayed. Only Workflow system administrator is allowed to use it.

In monitoring, aggregation is carried out by batch processing, and finished matters during the period starting from the previous batch launching date until last launching day are included for aggregation.

* For details on monitoring, refer to the separate document “IM-Workflow Specifications”.

Confirm monitoring information.

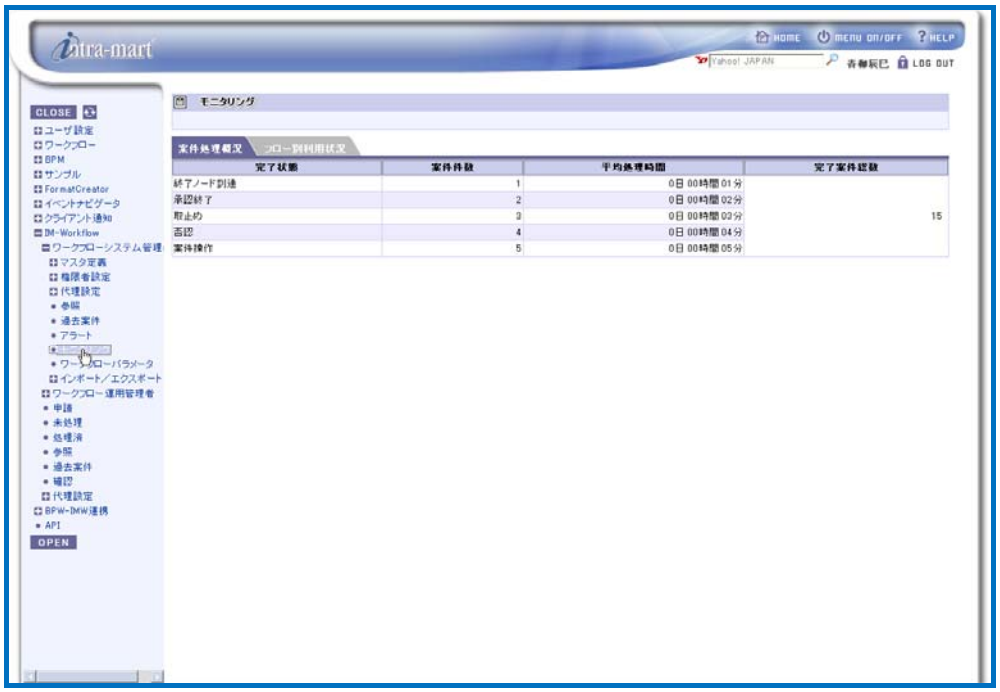
This can be executed [Workflow] - [Workflow system administrator] - [Monitoring] menu.

1 Click the [Monitoring] button.

< Monitoring > screen will be displayed.

▪ Outline of matter processing

Number of finished matters (subdivided by status) will be displayed.

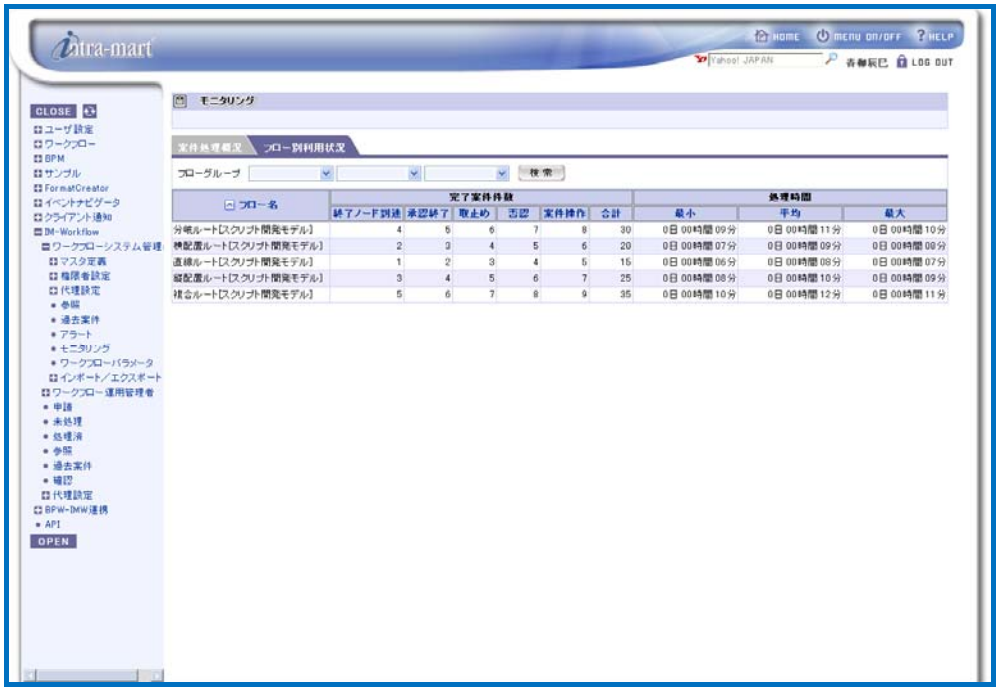


< Monitoring (Tab: Outline of matter processing) >

2 Switch the tab to [Usage situation by flow].

▪ Usage situation by flow

Number of matters used and required time will be listed up by flow and by status.



< Monitoring (Tab: Usage situation by flow) >

3 Narrow down the monitoring information to be displayed, by specifying flow group.

From the pull-down list of flow groups, select those to be specified. Select them for each hierarchy of flow group.

Click the [Search] button.

Only the monitoring information of the flow belonging to the flow group as specified will be displayed.

2.2 Workflow parameter

This section describes [Workflow parameter].
In the [Workflow parameter] screen, setting files which configure the parameters for various functions and items can be edited.
It is also capable of configuring whether use of various functions is allowed or not, and configuring batch processing for alert function.

By changing and updating the parameters of xml files being displayed, configuration change will be reflected.
This operation is allowed only for Workflow system administrator.
Editing will be carried out via [Workflow] - [Workflow system administrator] - [Workflow parameter] menu.

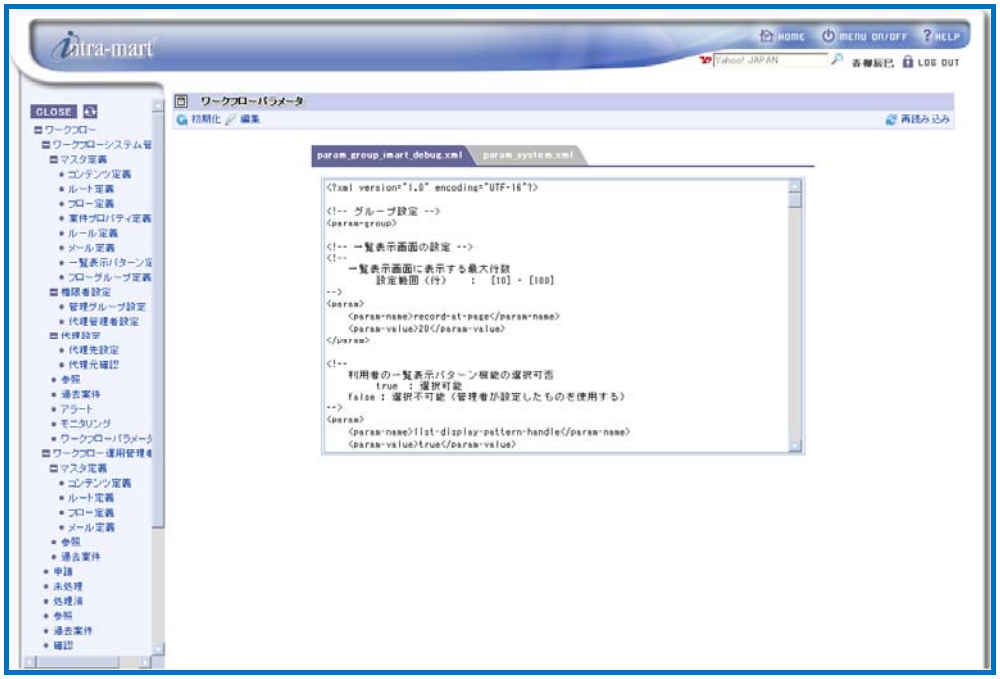
There are two types of parameter setting files as follows.

System setting file	Settings for the entire IM-Workflow system are configured. “param_system.xml”
Login group setting file	Settings for each login group are configured. “param_group_<login group name>.xml”

* For details on each parameter for these setting file, refer to the separate document “IM-Workflow Specifications”.

Change parameters for the setting files.

1 Click the [Workflow parameter] button.
< Workflow parameter > screen will be displayed.



< Workflow parameter >

2 Switch to the tab of the file to be edited.

3 Change the value of “param-value” for the item to be changed.
With respect to input value, follow the configuration of each item.

4 Upon finishing parameter change, click the < Edit > button.
Parameter change will immediately be reflected on the system.

- To return to the initial configuration, click the < Initialize > icon. Note that immediately after initializing, configuration content will be reflected on the system right away.

Column

When editing setting files directly

Parameters for setting files can be changed by direct editing of the setting files.
Setting files are stored under “/storage/workflow/conf/param/”

To have setting files which have been directly edited being reflected on the system, it is necessary to reboot the server, or to click the < Reload > icon on the [Workflow parameter].

2.3 Workflow synchronization listener

This section describes [Workflow synchronization listener].
In case of change in master on the access security side operation and IM-Common Master side operation, listeners for synchronization processing for such change can be configured on the Workflow side.

There are nine types of listeners as follows, provided on the Workflow side.

Node processing handler (fixed specification) synchronization listener	jp.co.intra_mart.system.workflow.sync.NodeExecUserEventListener
Surrogate destination synchronization listener	jp.co.intra_mart.system.workflow.sync.TargetActUserEventListener
Matter handling privileged user synchronization listener	jp.co.intra_mart.system.workflow.sync.MatterHandleUserEventListener
Surrogate configuration privileged user synchronization listener	jp.co.intra_mart.system.workflow.sync.ActAdministrationEventListener
Administration group synchronization listener	jp.co.intra_mart.system.workflow.sync.AdminGroupEventListener
Standard organization synchronization listener	jp.co.intra_mart.system.workflow.sync.DefaultDepartmentEventListener
Temporary saved matter synchronization listener	jp.co.intra_mart.system.workflow.sync.TemporarySaveUserEventListener
User selection listing pattern synchronization listener	jp.co.intra_mart.system.workflow.sync.UserSelectColumnListEventListener
User node configuration synchronization listener	jp.co.intra_mart.system.workflow.sync.UserNodeConfigEventListener

* For details on synchronization listener, refer to the separate document “IM-Workflow Specifications”.

There are two types of listener setting files as follows.

Access security side	For master change on the access security side, this file configures synchronization listener for Workflow.

	“/conf/access-security.xml”
IM-Common master side	For master change on the IM-Common Master side, this file configures synchronization listener for Workflow. “/plugin/jp.co.intra_mart.standard/plugin.xml”

Configuring of synchronization listener is as follows.

1 For master change on the access security side, configure the synchronization listener for Workflow.

- /conf/access-security.xml

```
<access-config>

   <!-- role -->
   <role>
     <accessor>
        <accessor-class>jp.co.intra_mart.foundation.security.StandardRoleAccessor
</accessor-class>
     </accessor>

     <!-- ↓ Workflow synchronization listener configuration ↓ -->

     <!-- Node processing handler (fixed specification) synchronization listener -->
     <post-writer-listener>
         <writer-listener-class>jp.co.intra_mart.system.workflow.sync.NodeExecUserEven
tListener</writer-listener-class>
     </post-writer-listener>
     <!-- Surrogate destination synchronization listener -->
     <post-writer-listener>
         <writer-listener-class>jp.co.intra_mart.system.workflow.sync.TargetActUserEve
ntListener</writer-listener-class>
     </post-writer-listener>
     <!-- Matter handling privileged user synchronization listener -->
     <post-writer-listener>
         <writer-listener-class>jp.co.intra_mart.system.workflow.sync.MatterHandleUser
EventListener</writer-listener-class>
     </post-writer-listener>
     <!-- Surrogate configuration privileged user synchronization listener -->
     <post-writer-listener>
         <writer-listener-class>jp.co.intra_mart.system.workflow.sync.ActAdministratio
nEventListener</writer-listener-class>
     </post-writer-listener>
     <!-- Administration group synchronization listener -->
     <post-writer-listener>
         <writer-listener-class>jp.co.intra_mart.system.workflow.sync.AdminGroupEventL
istener</writer-listener-class>
     </post-writer-listener>

   </role>
</access-config>
```

2 For master change on the IM-Common Master side, configure the synchronization listener for Workflow.

- /plugin/jp.co.intra_mart.standard/plugin.xml

```
<!-- company/organization -->
<extension
  point="jp.co.intra_mart.foundation.master.accessor.company" >
  <accessor
```

```
     name="standard"
     id="jp.co.intra_mart.standard"
     version="7.2"
     rank="1" >
    <reader class="jp.co.intra_mart.system.master.company.impl.StandardCompanyAccessor
" />
    <writer class="jp.co.intra_mart.system.master.company.impl.StandardCompanyAccessor"
 />
    <listener class="jp.co.intra_mart.system.master.company.impl.StandardCompanyListene
r" />
    <listener class="jp.co.intra_mart.system.master.sync.SynchronousCompanyListener" />

    <!-- ↓ Workflow synchronization listener configuration ↓ -->

    <!-- Node processing handler (fixed specification) synchronization listener -->
    <listener class="jp.co.intra_mart.system.workflow.sync.NodeExecUserEventListener" /
>
    <!-- Surrogate destination synchronization listener -->
    <listener class="jp.co.intra_mart.system.workflow.sync.TargetActUserEventListener"
/>
    <!-- Matter handling privileged user synchronization listener -->
    <listener class="jp.co.intra_mart.system.workflow.sync.MatterHandleUserEventListene
r" />
    <!-- Surrogate configuration privileged user synchronization listener -->
    <listener class="jp.co.intra_mart.system.workflow.sync.ActAdministrationEventListen
er" />
    <!-- Standard organization synchronization listener -->
    <listener class="jp.co.intra_mart.system.workflow.sync.DefaultDepartmentEventListen
er" />

    <importer category="standard" class="jp.co.intra_mart.system.master.company.impl.St
andardCompanyImporter" />
    <exporter category="standard" class="jp.co.intra_mart.system.master.company.impl.St
andardCompanyExporter"/>
  </accessor>
</extension>

<!-- public group -->
<extension
  point="jp.co.intra_mart.foundation.master.accessor.public_group" >
  <accessor
     name="standard"
     id="jp.co.intra_mart.standard"
     version="7.2"
     rank="1" >
     <reader class="jp.co.intra_mart.system.master.public_group.impl.StandardPublicGro
upAccessor" />
     <writer class="jp.co.intra_mart.system.master.public_group.impl.StandardPublicGro
upAccessor" />
     <listener class="jp.co.intra_mart.system.master.sync.SynchronousPublicGroupListen
er" />

    <!-- ↓ Workflow synchronization listener configuration ↓ -->

    <!-- Node processing handler (fixed specification) synchronization listener -->
    <listener class="jp.co.intra_mart.system.workflow.sync.NodeExecUserEventListener" /
>
    <!-- Surrogate destination synchronization listener -->
    <listener class="jp.co.intra_mart.system.workflow.sync.TargetActUserEventListener"
/>
```

```
    <!-- Matter handling privileged user synchronization listener -->
    <listener class="jp.co.intra_mart.system.workflow.sync.MatterHandleUserEventListene
r" />
    <!-- Surrogate configuration privileged user synchronization listener -->
    <listener class="jp.co.intra_mart.system.workflow.sync.ActAdministrationEventListen
er" />

    <importer category="standard" class="jp.co.intra_mart.system.master.public_group.im
pl.StandardPublicGroupImporter" />
    <exporter category="standard" class="jp.co.intra_mart.system.master.public_group.im
pl.StandardPublicGroupExporter"/>
  </accessor>
</extension>

<!-- User -->
<extension
  point="jp.co.intra_mart.foundation.master.accessor.user" >
  <accessor
     name="standard"
     id="jp.co.intra_mart.standard"
     version="7.2"
     rank="1" >
    <reader class="jp.co.intra_mart.system.master.user.impl.StandardUserAccessor" />
    <writer class="jp.co.intra_mart.system.master.user.impl.StandardUserAccessor" />
    <listener class="jp.co.intra_mart.system.master.user.impl.StandardUserListener" />
    <listener class="jp.co.intra_mart.system.master.sync.SynchronousUserListener" />

    <!-- ↓ Workflow synchronization listener configuration ↓ -->

    <!-- Node processing handler (fixed specification) synchronization listener -->
    <listener class="jp.co.intra_mart.system.workflow.sync.NodeExecUserEventListener" /
>
    <!-- Surrogate destination synchronization listener -->
    <listener class="jp.co.intra_mart.system.workflow.sync.TargetActUserEventListener"
/>
    <!-- Matter handling privileged user synchronization listener -->
    <listener class="jp.co.intra_mart.system.workflow.sync.MatterHandleUserEventListene
r" />
    <!-- Surrogate configuration privileged user synchronization listener -->
    <listener class="jp.co.intra_mart.system.workflow.sync.ActAdministrationEventListen
er" />
    <!-- Temporary saved matter synchronization listener -->
    <listener class="jp.co.intra_mart.system.workflow.sync.TemporarySaveUserEventListen
er" />
    <!-- User selection listing pattern synchronization listener -->
    <listener class="jp.co.intra_mart.system.workflow.sync.UserSelectColumnListEventLis
tener" />
    <!-- User node configuration synchronization listener -->
    <listener class="jp.co.intra_mart.system.workflow.sync.UserNodeConfigEventListener"
 />

    <importer category="standard" class="jp.co.intra_mart.system.master.user.impl.Stand
ardUserImporter" />
    <exporter category="standard" class="jp.co.intra_mart.system.master.user.impl.Stand
ardUserExporter"/>
  </accessor>
</extension>
```

- In the configuration example described above, among the listeners provided on Workflow side, only those actually implementing synchronization processing for individual master change event (role, company/organization, public group, user) have been configured.

- For surrogate destination, actual synchronization processing is carried out by batch processing [surrogate destination synchronization batch].
  To launch [surrogate destination synchronization batch], it is supposed that surrogate destination synchronization listener has already configured, and therefore when carrying out synchronization of surrogate destination, surrogate destination synchronization listener must have been configured.
  * For details on [surrogate destination synchronization batch], refer to the separate document "IM-Workflow Specifications".

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Administrator Operation Guide

NTT DATA INTRAMART CORP.

3rd Floor, Akasaka Twin Tower Main Building, 2-17-22 Akasaka, Minato-ku, Tokyo 107-0052

TEL (03) 5549-2821　FAX (03) 5549-2816

E-mail: info@intra-mart.jp

Homepage:　http://www.intra-mart.jp/

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