

Advanced Queue Routing

Advanced Queue Routing provides functionality to automatically route an applicant's application into a specified queue. For example, if an applicant is approved but accounts fail to open on the core, the application can be routed to the **Approved Needs Review** queue. All queue transitions can be configured to send an email to the applicant and specified FI users to notify them of the transition. For information about configuring the emails sent see [Email](#). To request Advanced Queue Routing functionality, contact your Q2 Customer Experience Manager.

Note: The Queue Routing framework establishes queues for Advanced Queue Routing. For more information about queues, see [Manage Queues](#).

Queue routing can be configured for the following conditions:

- KBA
- Decision on KBA
- Decisioning
- Additional Decisioning
- Core Submission
- Funding
- Incomplete Applications

Supported queues and best practices

By default, Q2 Gro offers the following queues, which must be created manually and include the following best practices, for Advanced Queue Routing.

Note: FI employees can create default queues or contact their Customer Experience Manager to have default queues created. FI employees are responsible for creating the additional queues used with Advanced Queue Routing. For more information, see [Manage Queues](#).

Queue	Description	Best practice
Incomplete	Applications with Incomplete status for over 24 hours.	Send a reminder email to the applicant after 24 hours of application inactivity.
Review	Applications that didn't pass KYC, KBA, or decisioning checks.	Send a request to the back office team to review the application and follow up with the applicant by EOB.
Approved Needs Review	Applications that failed core submission.	Send a request to the back office team to review the application and follow up with the applicant by EOB.
Not Funded	Applications that were approved and passed core submission but failed funding.	Send an email to the applicant that provides the option to either fund with digital banking or branch. Provide a link for them to enroll in digital banking if applicable.
Complete	Applications that were approved and passed core submission and funding.	Send a welcome email to the applicant.

Incomplete Applications

Advanced Queue routing introduces a new configuration that can move an application to an Incomplete queue if it has been inactive for more than 24 hours (default). Once the specified time period is exceeded, the application will automatically move to an Incomplete queue.

Tip: The default queue can be configured.

Note: For Advanced Queue Routing configuration information, see [Configuring Advanced Queue Routing](#).

Configuring Advanced Queue Routing

To configure Advanced Queue Routing, set the `server.queue.routing.enabled` Type ID to `true`. This Type ID is set to `false` by default.

Note: For more information, see [Advanced Queue Routing](#).

Configuring workflows

Each Advanced Queue Routing workflow has its own Type ID, as shown below:

- `server.workflow.service.kba.queue.setting`—configures the Queue Routing settings for the KBA workflow.

Configuration example for this Type ID

```
{
  "queueRules": [
    {
      "status": "referred",
      "logicOperator": "equals",
      "queueName": "Declined",
      "externalNotifications": "true",
      "internalNotifications": "false",
      "internalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
      "externalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
      "internalEmailIds": [
        ""
      ],
      "timeToLive": "0",
      "stopRepeatingNotifications": true
    },
    {
```

```

    "status": "declined",
    "logicOperator": "equals",
    "queueName": "Declined",
    "externalNotifications": "true",
    "internalNotifications": "false",
    "internalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
    "externalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
    "internalEmailIds": [
        ""
    ],
    "timeToLive": "0",
    "stopRepeatingNotifications": true
},
{
    "status": "pending",
    "logicOperator": "equals",
    "queueName": "Declined",
    "externalNotifications": "true",
    "internalNotifications": "false",
    "internalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
    "externalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
    "internalEmailIds": [
        ""
    ],
    "timeToLive": "0",
    "stopRepeatingNotifications": true
}
]
}

```

- `server.workflow.service.funding.queue.setting`—configures the Queue Routing settings for the funding workflow.

Configuration example for this Type ID

```
{
  "defaultQueue": "Pending",
  "stopRepeatedNotification": true,
  "defaultQueueRules": {
    "queueName": "Pending",
    "externalNotifications": "true",
    "internalNotifications": "false",
    "internalNotificationsTemplateName": "queueRoutingEmailNotificationTitle",
    "externalNotificationsTemplateName": "queueRoutingEmailNotificationTitle",
    "internalEmailIds": [
      ""
    ],
    "timeToLive": "0"
  },
  "queueRules": [
    {
      "status": "approved",
      "logicOperator": "equals",
      "queueName": "Completed",
      "externalNotifications": "true",
      "internalNotifications": "false",
      "internalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
      "externalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
      "internalEmailIds": [
        ""
      ],
      "timeToLive": "0",
```

```

        "stopRepeatingNotifications": true
    }
]
}

```

- `server.workflow.service.additionalDecisioning.queue.setting`— configures the Queue Routing settings for the additional decisioning work flow.

Configuration example for this Type ID

```

{
  "queueRules": [
    {
      "status": "referred",
      "logicOperator": "equals",
      "queueName": "Declined",
      "externalNotifications": "true",
      "internalNotifications": "false",
      "internalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
      "externalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
      "internalEmailIds": [
        ""
      ],
      "timeToLive": "0",
      "stopRepeatingNotifications": true
    },
    {
      "status": "declined",
      "logicOperator": "equals",
      "queueName": "Declined",

```

```

        "externalNotifications": "true",
        "internalNotifications": "false",
        "internalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
        "externalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
        "internalEmailIds": [
            ""
        ],
        "timeToLive": "0",
        "stopRepeatingNotifications": true
    },
    {
        "status": "pending",
        "logicOperator": "equals",
        "queueName": "Declined",
        "externalNotifications": "true",
        "internalNotifications": "false",
        "internalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
        "externalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
        "internalEmailIds": [
            ""
        ],
        "timeToLive": "0",
        "stopRepeatingNotifications": true
    }
]
}

```

- `server.workflow.service.kba.decisionOnKba.queue.setting`—configures the Queue Routing settings for the challenge question workflow.

Configuration example for this Type ID

```
{
  "queueRules": [
    {
      "status": "referred",
      "logicOperator": "equals",
      "queueName": "Declined",
      "externalNotifications": "true",
      "internalNotifications": "false",
      "internalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
      "externalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
      "internalEmailIds": [
        ""
      ],
      "timeToLive": "0",
      "stopRepeatingNotifications": true
    },
    {
      "status": "declined",
      "logicOperator": "equals",
      "queueName": "Declined",
      "externalNotifications": "true",
      "internalNotifications": "false",
      "internalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
      "externalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
      "internalEmailIds": [
        ""
      ],
      "timeToLive": "0",
```



```

        "stopRepeatingNotifications": true
    },
    {
        "status": "pending",
        "logicOperator": "equals",
        "queueName": "Declined",
        "externalNotifications": "true",
        "internalNotifications": "false",
        "internalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
        "externalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
        "internalEmailIds": [
            ""
        ],
        "timeToLive": "0",
        "stopRepeatingNotifications": true
    }
]
}

```

- `server.workflow.service.custom.queue.setting.submissionWorkflow`—configures the Queue Routing settings for the submission workflow.

Configuration example for this Type ID

```

{
  "queueRules": [
    {
      "status": "referred",
      "logicOperator": "equals",
      "queueName": "Approved Needs Review",

```

```

    "externalNotifications": "false",
    "internalNotifications": "false",
    "internalNotificationsTemplateName": "",
    "externalNotificationsTemplateName": "",
    "internalEmailIds": [
        ""
    ],
    "timeToLive": "0",
    "stopRepeatingNotifications": true
  },
  {
    "status": "declined",
    "logicOperator": "equals",
    "queueName": "Approved Needs Review",
    "externalNotifications": "false",
    "internalNotifications": "false",
    "internalNotificationsTemplateName": "",
    "externalNotificationsTemplateName": "",
    "internalEmailIds": [
        ""
    ],
    "timeToLive": "0",
    "stopRepeatingNotifications": true
  }
]
}

```

- `server.workflow.service.custom.queue.setting.decisioningWorkflow`—configures the Queue Routing settings for the decisioning workflow.

[Configuration example for this Type ID](#)

```
{
  "queueRules": [
    {
      "status": "referred",
      "logicOperator": "equals",
      "queueName": "Declined",
      "externalNotifications": "true",
      "internalNotifications": "false",
      "internalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
      "externalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
      "internalEmailIds": [
        ""
      ],
      "timeToLive": "0",
      "stopRepeatingNotifications": true
    },
    {
      "status": "declined",
      "logicOperator": "equals",
      "queueName": "Declined",
      "externalNotifications": "true",
      "internalNotifications": "false",
      "internalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
      "externalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
      "internalEmailIds": [
        ""
      ],
      "timeToLive": "0",
      "stopRepeatingNotifications": true
    }
  ]
}
```

```

    },
    {
      "status": "pending",
      "logicOperator": "equals",
      "queueName": "Declined",
      "externalNotifications": "true",
      "internalNotifications": "false",
      "internalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
      "externalNotificationsTemplateName":
"queueRoutingEmailNotificationTitle",
      "internalEmailIds": [
        ""
      ],
      "timeToLive": "0",
      "stopRepeatingNotifications": true
    }
  ]
}

```

Configured attributes

The following table describes each of Advanced Queue Routing's associated attributes, along with a sample value for each:

Key	Description	Sample value
queueName	The application is routed to the specified queue when the queue rule matches. Case sensitive.	Pending Funding

Key	Description	Sample value
<code>status</code>	The status that will trigger the specified rule. Case sensitive.	<code>Pending</code>
<code>logicOperator</code>	Specifies the operation to perform on the result. The default value is "equals".	<code>Equals</code>
<code>internalNotifications</code>	Enables or disables notification emails directed to internal FI recipients.	<code>True</code>
<code>internalEmailIds</code>	The list of internal notification email recipients, formatted in square brackets as an array contains.	<code>[test1@q2.com test2@q2.com],</code>
<code>externalNotifications</code>	Enables or disables notification emails directed to applicants. Valid values are <code>true</code> or <code>false</code> .	<code>true</code>
<code>timeToLive</code>	Maximum time period in hours for applications to be in queue. When an application has been in queue for the specified time period, a cron job sends the internal and external notification. For information about configuring the cron job, see the Incomplete applications section.	<code>1</code>

Key	Description	Sample value
<code>externalNotificationsTemplateName</code>	<p>Specifies the email template, defined in the <code>client.portal.queue.emailTemplateTypeID</code>, to use for external notifications.</p> <p>Note: The content of email templates are defined on the Email page in the Gro admin portal.</p>	<code>external-completedEmailNotificationTitle</code>
<code>internalNotificationsTemplateName</code>	<p>Specifies the email template, defined in the <code>client.portal.queue.emailTemplateTypeID</code>, to use for internal notifications.</p> <p>Note: The content of email templates are defined on the Email page in the Gro admin portal.</p>	<code>internal-completedEmailNotificationTitle</code>

Incomplete applications

Note: For more information about Incomplete applications, see [Advanced Queue Routing](#)

Configure Incomplete queues

Note: Before adding Incomplete queue configuration to your Prod (Production) environment, be advised that configuration for this queue also applies to any existing applications that meet the default criteria. Q2 recommends moving existing applications to a queue other than

Incomplete prior to adding queue configuration.

The following configuration values will be automatically included when the Advanced Queue Routing feature is enabled:

- The `server.queue.routing.incompleteApps.settings` Type ID:

Configuration example for this Type ID

```
{
  "appStatus": "incomplete",
  "timeUnit": "MINUTE",
  "timeGreaterThan": 24,
  "targetQueueName": "Incomplete",
  "externalNotifications": false,
  "internalNotifications": false,
  "internalNotificationsTemplateName":
"abandonedApplicationInternalNotificationTitle",
  "externalNotificationsTemplateName":
"abandonedApplicationExternalNotificationTitle",
  "internalEmailIds": [
    "q2test@q2.com"
  ],
  "timeToLive": 0,
  "stopRepeatingNotifications": true
}
```

- The `server.workflow.service.custom.queue.setting.submissionWorkflow`

Type ID:

Configuration example for this Type ID

```
{
  "defaultQueue": "Incomplete",
  "stopRepeatedNotification": true,
  "defaultQueueRules": {
    "queueName": "Incomplete",
    "externalNotifications": "false",
    "externalNotificationsTemplateName": "",
    "internalNotifications": "false",
    "internalNotificationsTemplateName": "",
    "internalEmailIds": [
      ""
    ],
    "timeToLive": "0"
  },
  "queueRules": [
    {
      "queueName": "Approved Needs Review",
      "status": "Referred",
      "logicOperator": "equals",
      "externalNotifications": "false",
      "externalNotificationsTemplateName": "external-
submissionWorkflowEmailNotificationTitle",
      "internalNotifications": "false",
      "internalNotificationsTemplateName": "internal-
submissionWorkflowEmailNotificationTitle",
      "internalEmailIds": [
        ""
      ],
      "timeToLive": "0"
    }
  ]
}
```



```

    ]
  }

```

- The `server.workflow.service.funding.queue.setting` Type ID:

Configuration example for this Type ID

```

{
  "defaultQueue": "Incomplete",
  "stopRepeatedNotification": true,
  "defaultQueueRules": {
    "queueName": "Incomplete",
    "externalNotifications": "false",
    "externalNotificationsTemplateName": "",
    "internalNotifications": "false",
    "internalNotificationsTemplateName": "",
    "internalEmailIds": [
      ""
    ],
    "timeToLive": "0"
  },
  "queueRules": [
    {
      "queueName": "Pending Funding",
      "status": "Pending",
      "logicOperator": "equals",
      "externalNotifications": "false",
      "externalNotificationsTemplateName": "external-
pendingFundingEmailNotificationTitle",
      "internalNotifications": "false",
      "internalNotificationsTemplateName": "internal-
pendingFundingEmailNotificationTitle",

```

```

        "internalEmailIds": [
            ""
        ],
        "timeToLive": "0"
    }
],
"queueRules": [
    {
        "queueName": "Completed",
        "status": "Approved",
        "logicOperator": "equals",
        "externalNotifications": "false",
        "externalNotificationsTemplateName": "external-
completedEmailNotificationTitle",
        "internalNotifications": "false",
        "internalNotificationsTemplateName": "internal-
completedEmailNotificationTitle",
        "internalEmailIds": [
            ""
        ],
        "timeToLive": "0"
    }
]
}

```

- The `server.workflow.service.kba.decisionOnKba.queue.setting` Type ID:

Configuration example for this Type ID

```

{
    "defaultQueue": "Incomplete",
    "stopRepeatedNotification": true,
}

```

```

"defaultQueueRules": {
  "queueName": "Incomplete",
  "externalNotifications": "false",
  "externalNotificationsTemplateName": "",
  "internalNotifications": "false",
  "internalNotificationsTemplateName": "",
  "internalEmailIds": [
    ""
  ],
  "timeToLive": "0"
},
"queueRules": [
  {
    "queueName": "Manual Review",
    "status": "Referred",
    "logicOperator": "equals",
    "externalNotifications": "false",
    "externalNotificationsTemplateName": "external-
manualReviewEmailNotificationTitle",
    "internalNotifications": "false",
    "internalNotificationsTemplateName": "internal-
manualReviewEmailNotificationTitle",
    "internalEmailIds": [
      ""
    ],
    "timeToLive": "0"
  }
]
}

```

- The `server.workflow.service.kba.queue.setting` Type ID:

[Configuration example for this Type ID](#)

```
{
  "defaultQueue": "Incomplete",
  "stopRepeatedNotification": true,
  "defaultQueueRules": {
    "queueName": "Incomplete",
    "externalNotifications": "false",
    "externalNotificationsTemplateName": "",
    "internalNotifications": "false",
    "internalNotificationsTemplateName": "",
    "internalEmailIds": [
      ""
    ],
    "timeToLive": "0"
  },
  "queueRules": [
    {
      "queueName": "Manual Review",
      "status": "Referred",
      "logicOperator": "equals",
      "externalNotifications": "false",
      "externalNotificationsTemplateName": "external-
manualReviewEmailNotificationTitle",
      "internalNotifications": "false",
      "internalNotificationsTemplateName": "internal-
manualReviewEmailNotificationTitle",
      "internalEmailIds": [
        ""
      ],
      "timeToLive": "0"
    }
  ]
}
```

- The `server.workflow.service.additionalDecisioning.queue.setting` Type ID:

Configuration example for this Type ID

```
{
  "defaultQueue": "Incomplete",
  "stopRepeatedNotification": true,
  "defaultQueueRules": {
    "queueName": "Incomplete",
    "externalNotifications": "false",
    "externalNotificationsTemplateName": "",
    "internalNotifications": "false",
    "internalNotificationsTemplateName": "",
    "internalEmailIds": [
      ""
    ],
    "timeToLive": "0"
  },
  "queueRules": [
    {
      "queueName": "Manual Review",
      "status": "Referred",
      "logicOperator": "equals",
      "externalNotifications": "false",
      "externalNotificationsTemplateName": "external-
manualReviewEmailNotificationTitle",
      "internalNotifications": "false",
      "internalNotificationsTemplateName": "internal-
manualReviewEmailNotificationTitle",
      "internalEmailIds": [
        ""
      ],
      "timeToLive": "0"
    }
  ]
}
```

```

    }
  ]
}

```

- The `server.workflow.service.custom.queue.setting.decisioningWorkflow` Type ID:

Configuration example for this Type ID

```

{
  "defaultQueue": "Incomplete",
  "stopRepeatedNotification": true,
  "defaultQueueRules": {
    "queueName": "Incomplete",
    "externalNotifications": "false",
    "externalNotificationsTemplateName": "",
    "internalNotifications": "false",
    "internalNotificationsTemplateName": "",
    "internalEmailIds": [
      ""
    ],
    "timeToLive": "0"
  },
  "queueRules": [
    {
      "queueName": "Manual Review",
      "status": "Referred",
      "logicOperator": "equals",
      "externalNotifications": "false",
      "externalNotificationsTemplateName": "external-
manualReviewEmailNotificationTitle",
      "internalNotifications": "false",

```

```

        "internalNotificationsTemplateName": "internal-
manualReviewEmailNotificationTitle",
        "internalEmailIds": [
            ""
        ],
        "timeToLive": "0"
    }
]
}

```

- The cron job configuration for the `server.quartz.settings.jobs` Type ID:

Note: In the below example, `cronExpr` resolves to an expression that will run at second :00 of every minute, starting at minute :00 of every hour of every day, starting on the first day of every month. For help with translating and generating cron expressions, see [Cron Expression Generator & Explainer](#).

Configuration example for this Type ID

```

[
  {
    "name": "RoutingJob",
    "description": "Moves abandoned apps",
    "cronExpr": "0 0/1 * 1/1 * ? *",
    "typeOfJob": "QueueRoutingJob",
    "enable": false,
    "brandId": "999999"
  }
]

```

Note: For information about moving applications between queues, see [Manage Queues](#).

Configured attributes

The following table describes each of the associated attributes for Incomplete queues, along with a sample value for each:

Key	Description	Sample value
name	Specifies the name of the job. Caution: The provided sample value is the only possible value for name.	RoutingJob
description	Specifies the descriptor of the job. This value is for reference only.	N/A
cronExpr	Specifies the frequency of the job.	0 0/1 * 1/1 * ? *
typeOfJob	Specifies the type of job. Caution: The provided sample value is the only possible value for typeOfJob.	QueueRoutingJob
enable	Enables or disables the job. Valid values are true or false.	false

Key	Description	Sample value
brandId	<p>The branding ID for FI's tenant. The value is most commonly set to 999999 but may differ per FI.</p> <p>Note: For guidance on which value to use, consult other cron jobs configured for <code>server.quartz.settings.jobs</code>.</p>	999999
appStatus	Specifies whether the application is complete or incomplete.	incomplete
timeUnit	<p>Specifies the time unit to use when fetching apps from an app(s) in a queue with "incomplete" status. Used with <code>timeGreaterThan</code>. Must be MINUTE, DAY, or HOUR. Case sensitive.</p>	MINUTE

Key	Description	Sample value
<code>timeGreaterThan</code>	Specifies the time interval to use when fetching an app(s) in a queue with "incomplete" status.	60
<code>targetQueueName</code>	References <code>queueName</code> for its value.	Abandoned
<code>internalNotifications</code>	Enables or disables notification emails directed to internal FI recipients. Valid values are <code>true</code> or <code>false</code> .	<code>true</code>
<code>internalNotificationsTemplateName</code>	Specifies the email template to use for internal email notifications.	<code>abandonedApplicationInternalNotificationTitle</code>
<code>externalNotificationsTemplateName</code>	Specifies the email template to use for external email notifications.	<code>abandonedApplicationExternalNotificationTitle</code>
<code>internalEmailIds</code>	The list of internal notification email recipients, formatted in square brackets as an array contains.	<code>test@q2.com</code>

Key	Description	Sample value
<code>timeToLive</code>	Maximum time period in hours for applications to be in queue. When an application has been in queue for the specified time period, a cron job sends the internal and external notification.	0
<code>stopRepeatingNotifications</code>	When <code>QueueNotificationJob</code> is enabled and this key is set to <code>true</code> , a scheduled message is sent. Valid values are <code>true</code> or <code>false</code> .	<code>true</code>