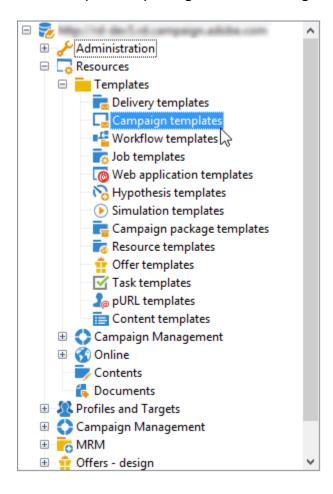
Module 6: Campaign Configuration

6.1 Create and configure campaign templates

All marketing campaigns are based on a template, which stores main characteristics and capabilities. Campaign templates are centralized in the **Resources > Templates > Campaign templates** node. A default template is supplied as standard. It lets you create a new campaign using all the available modules (Documents, Tasks, Seed addresses, etc.), but the modules offered depend on your rights and the configuration of your Adobe Campaign platform.



NOTE

The tree is displayed when you click the **Explorer** icon on the home page.

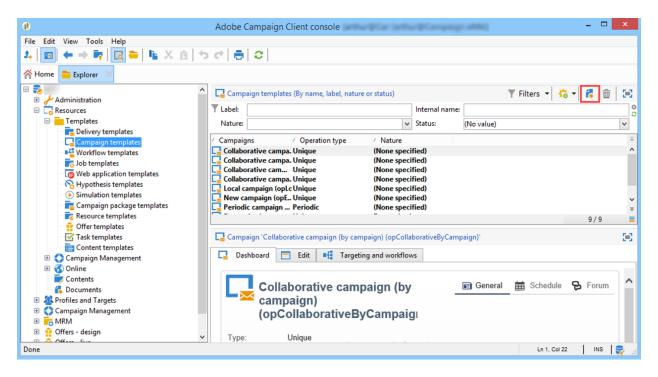
A built-in template is supplied in order to create a campaign for which no specific configuration has been defined. You can create and configure your campaign templates and then create campaigns from these templates.

For more on campaign creation, refer to this video.

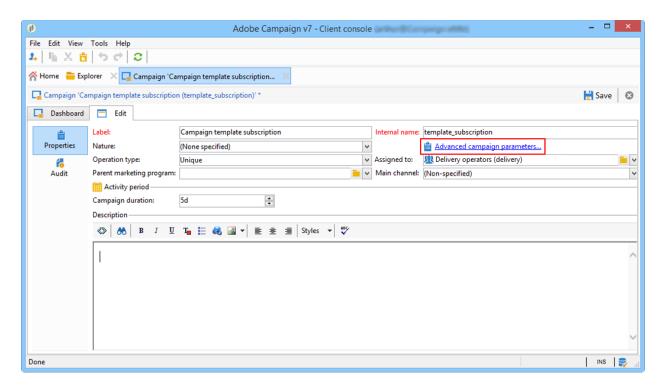
Create a campaign template

To create a campaign template, follow the steps below:

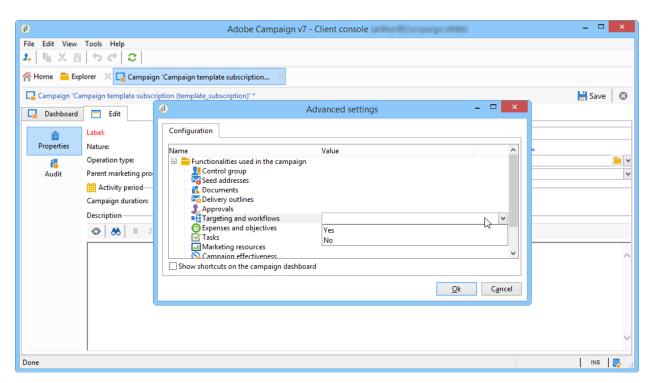
- 1. Open Campaign Explorer.
- 2. In **Resources > Templates > Campaign templates**, click **New** in the toolbar above the list of templates.



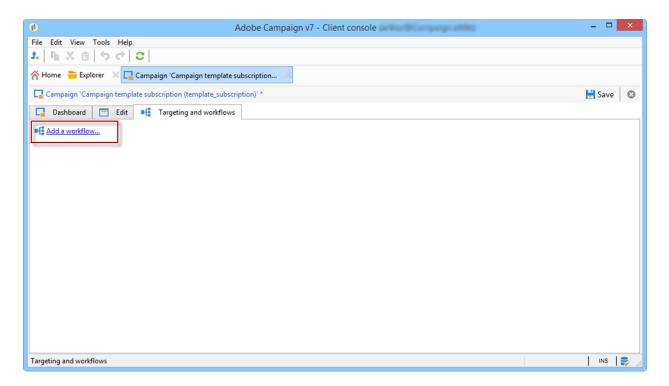
- 3. Enter the label of your new campaign template.
- 4. Click **Save** and reopen your template.
- 5. In the **Edit** tab, enter the **Internal name** and other values, if needed.
- 6. Select **Advanced campaign settings** to add a workflow to your campaign template.



7. Change the Targeting and workflows value to Yes.



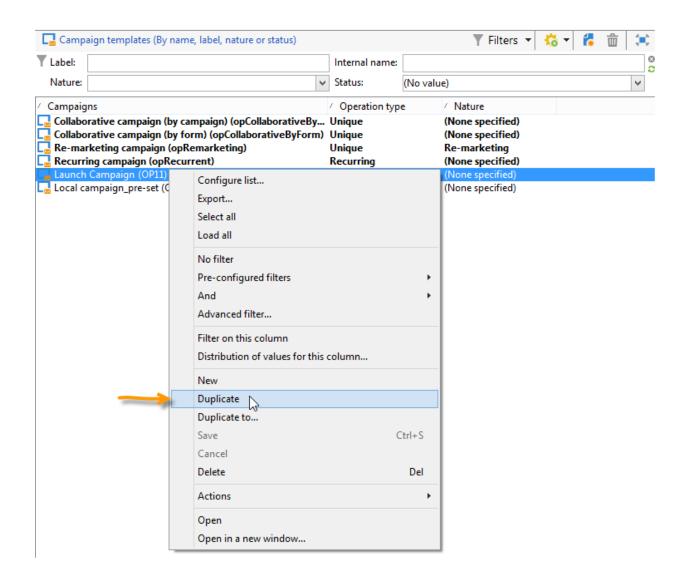
8. In the Targeting and workflows tab, click Add a workflow....



- 9. Complete the **Label** field and click **Ok**.
- 10. Create your workflow according to your requirements.
- 11. Click **Save**. Your template is now ready to be used in a campaign.

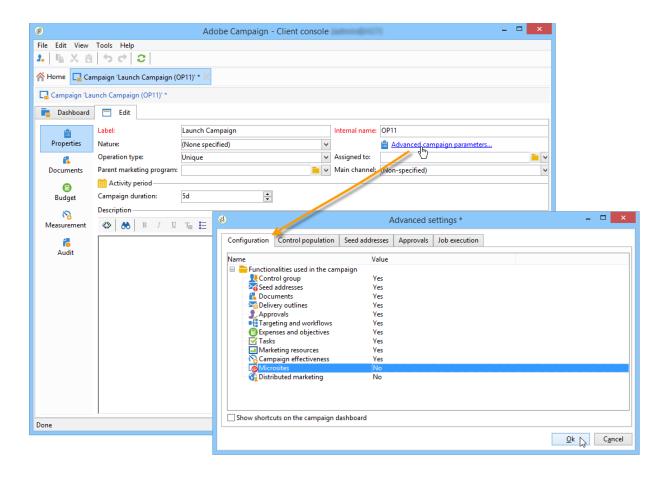
You can also duplicate the default template to re-use and adapt its configuration.

The various tabs and sub-tabs of the campaign template allow you to access its settings, described in <u>General configuration</u>.



Select modules

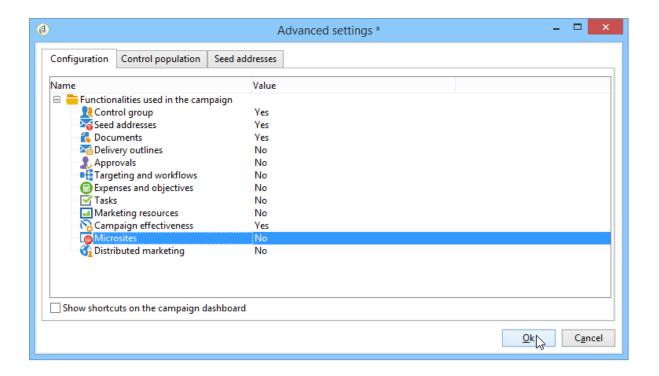
The **Advanced campaign settings...** link lets you enable and disable jobs for the campaigns based on this template. Select the capabilities you want to enable in the campaigns created based on this template.



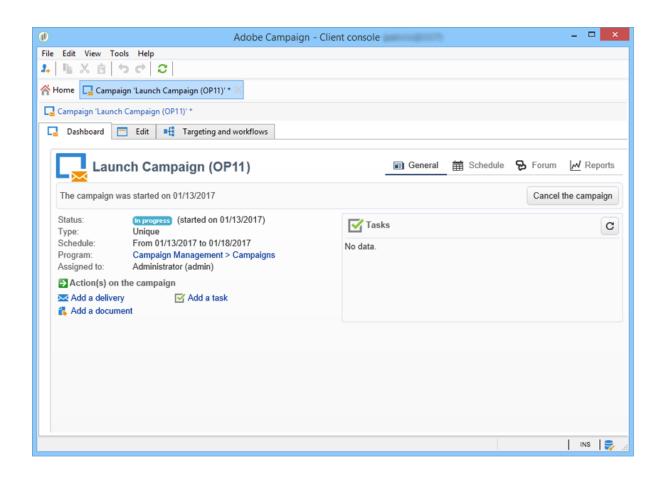
If a capability is not selected, the elements concerning the process (menus, icons, options, tabs, sub-tabs, etc.) will not appear in the interface of the template or in campaigns based on this template. The tabs to the left of the campaign details usually coincide with the processes selected in the template. For example, if **Expenses and objectives** is not selected, the corresponding **Budget** tab will not be shown in campaigns based on this template.

Moreover, shortcuts to the configuration windows are added to the campaign dashboard. When a functionality is enabled, a direct link gives access to it from the campaign dashboard.

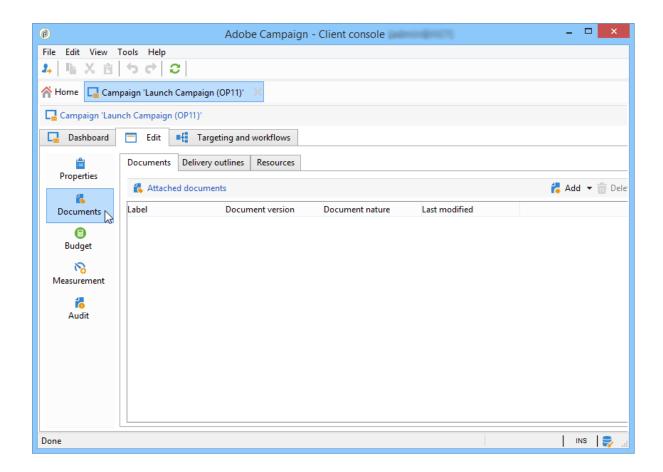
For example, with the configuration below:



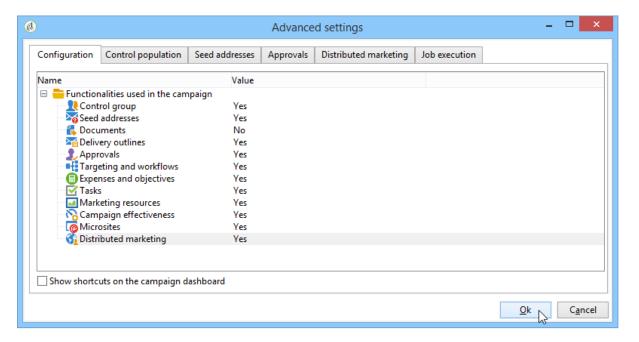
The following links are displayed in the campaign dashboard (the Add a task link is missing):



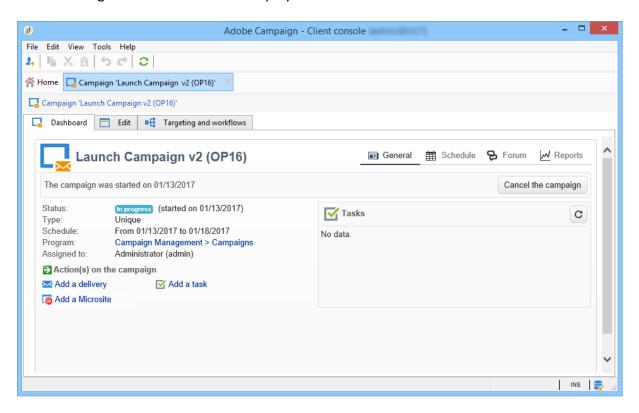
And only the following tabs will be displayed:



However, with this type of configuration:



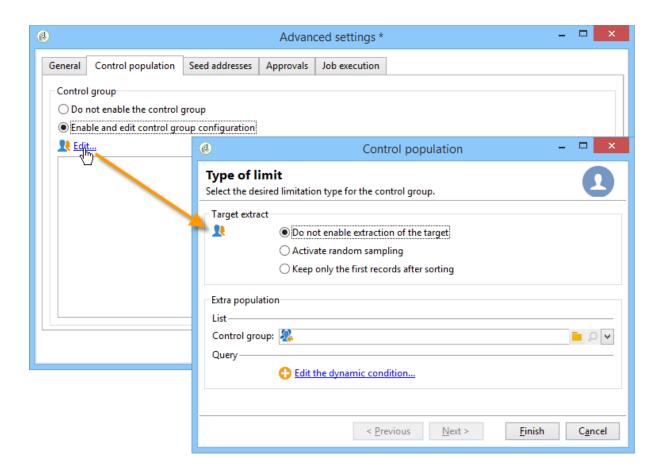
The following links and tabs will be displayed:



Typology of modules

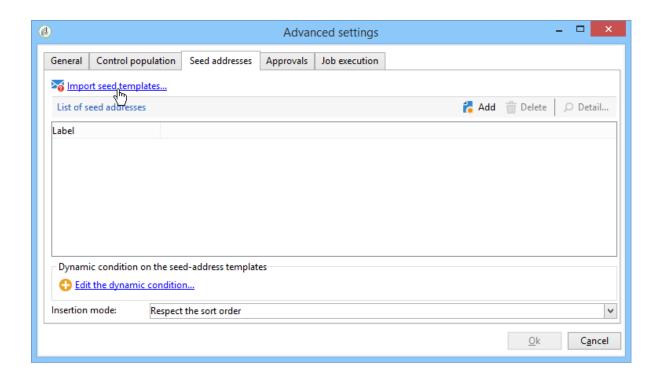
Control group

When this module is selected, an additional tab is added to the advanced settings of the template and the campaigns based on this template. The configuration can be defined via the template or individually for each campaign. Learn more about control groups in this section.



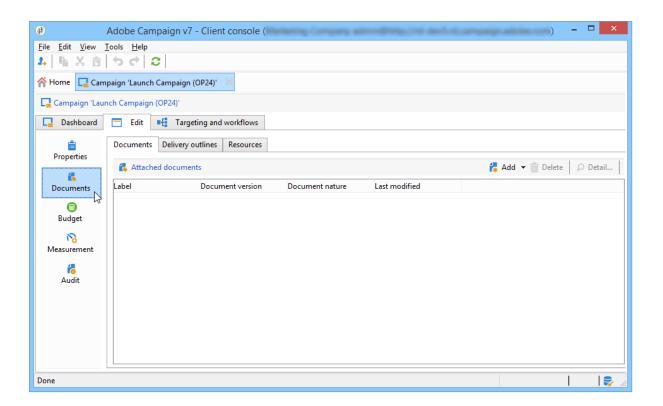
Seed addresses

When this module is selected, an additional tab is added to the advanced settings of the template and the campaigns based on this template. The configuration can be defined via the template or individually for each campaign. Learn more about seed addresses in this section.



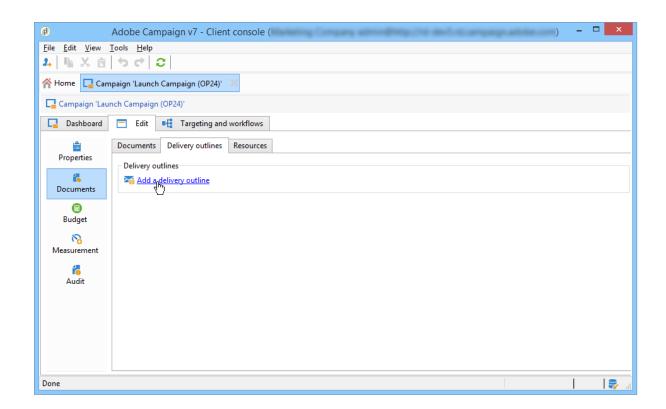
Documents

When this module is selected, an additional tab is added to the **Edition** tab of the template and the campaigns based on this template. Attached documents can be added from the template or individually for each campaign. Learn more about documents in this section.



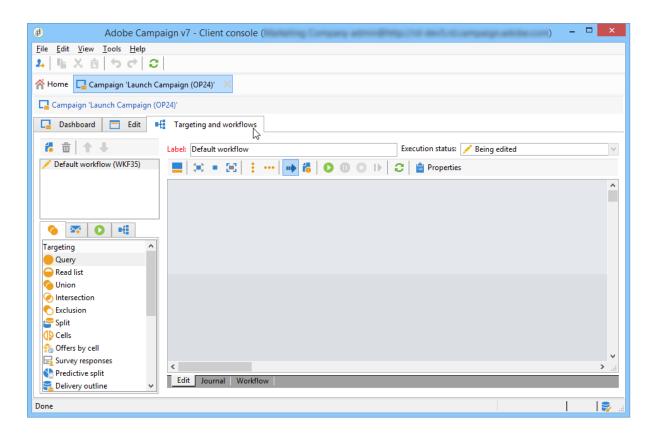
Outline

When this module is selected, a **Delivery outlines** sub-tab is added to the **Documents** tab in order to define delivery outlines for the campaign. Learn more about delivery outlines in this section.

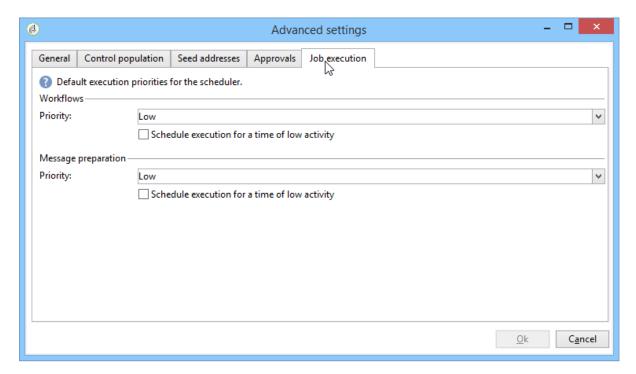


Targeting and workflows

When you select the **Targeting and workflows** module, a tab is added to let you create one or more workflows for campaigns based on this template. Workflows can also be configured individually for each campaign based on this template. Learn more about campaign workflows in <u>this section</u>.

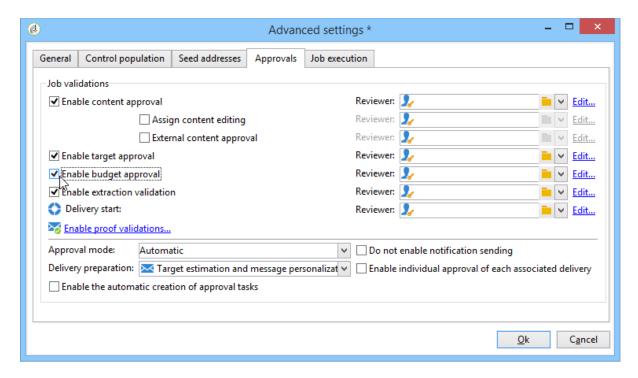


When this module is enabled, a tab is added to the advanced settings of the campaign to define the process execution sequence.



Approval

If you select the **Approval**, you can select the processes to approve as well as the operators in charge of approvals. Learn more about approvals in this section.

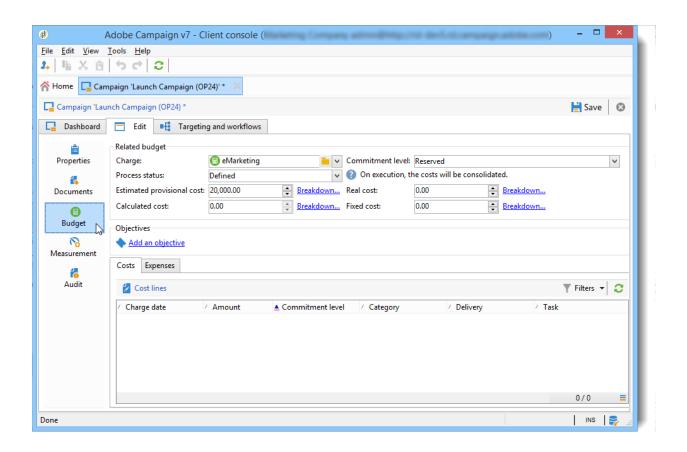


You may choose whether or not to enable process approval via the **Approvals** tab of the templates advanced settings section. The jobs for which approval is selected must be approved for message delivery to be authorized.

You must associate a reviewer operator or group of operators to each enabled approval.

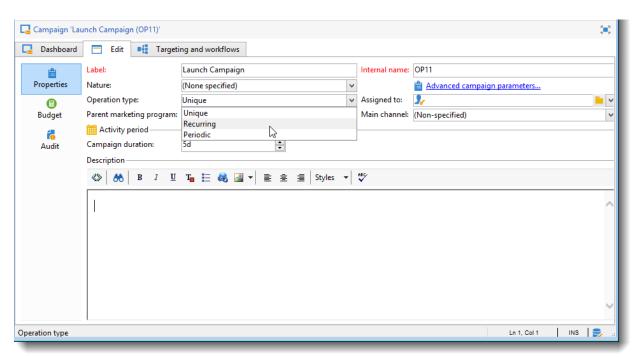
Expenses and objectives

When this module is selected, a **Budget** tab is added to the details of the template and campaigns based on this template so that the associated budget can be selected.



Properties and execution

Template properties



When you create a campaign template, you need to enter the following information:

- Enter the **label** of the template: this label will be assigned by default to all campaigns created via this template.
- Select the campaign **nature** from the drop-down list. The values available in this list are those saved in the **natureOp** enumeration.

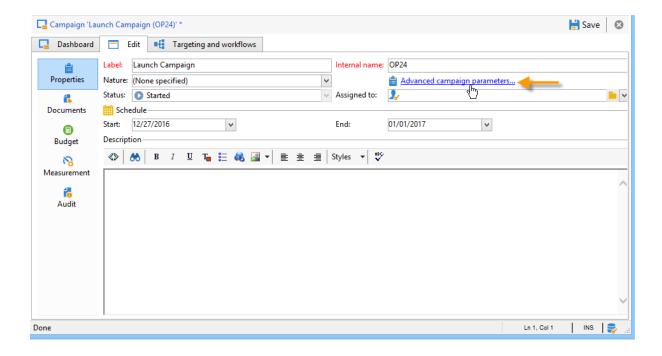
NOTE

For more information on enumerations, refer to the Getting Started section.

- Select the type of campaign: unique, recurring, or periodic. By default, campaign templates apply to unique campaigns. Recurring and periodic campaigns are detailed in this section.
- Specify the duration of the campaign, i.e. the number of days over which the campaign
 will take place. When creating a campaign based on this template, the campaign start
 and end dates will be populated automatically.
 - If the campaign is recurrent, you must specify the campaign start and end dates directly in the template.
- Specify the **related program** of the template: campaigns based on this template will be linked to the selected program.

Template execution parameters

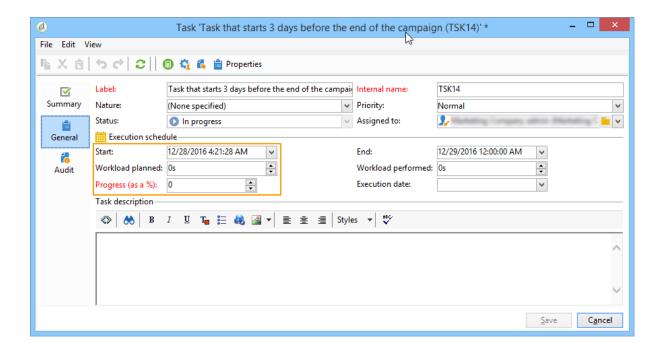
The **Advanced campaign settings...** link lets you configure the advanced options of the template for processing the delivery target (control group, seed addresses, etc.) and the configuration of campaign measurement and workflow execution.



Track campaign execution

You can create a schedule for a campaign and track accomplishments, for instance to prepare an event schedule for a specific date. Campaign templates now let you calculate the start date of a task based on the end date of a campaign.

In the task configuration box, go to the **Implementation schedule** area and check the **The start date is calculated based on the campaign end date** box. (Here, "start date" is the task start date). Go to the **Start** field and enter an interval: the task will start this long before the campaign end date. If you enter a period which is longer than the campaign is set to last, the task will begin before the campaign.



When you create a campaign using this template, the task start date will be calculated automatically. However, you can always change it later.

6.2 Set up and manage the approval process

Methods and people involved in creating and approving marketing campaigns are specific to each organization. The campaign approval process involves coordinating multiple stakeholders: digital marketers, delivery managers, content managers, and external owners such as partners or suppliers.

With Adobe Campaign, you can set up an approval flow for your campaigns and notify operators when an action is required. You can define approvals for each steps of a delivery: targeting, content, budget, extraction, and proof sending. As your campaign deliveries move through the various validation steps, Adobe Campaigns compiles an history of modifications and sign-offs, including feedback, comments, change requests, and comments.

Notification messages are sent to the Adobe Campaign operators who are designated as reviewers to inform them of an approval request.

Operators can approve in several ways:

• From the notification message. The link in the email gets the operator to Campaign through a web browser. After connecting, the reviewer can choose to approve the

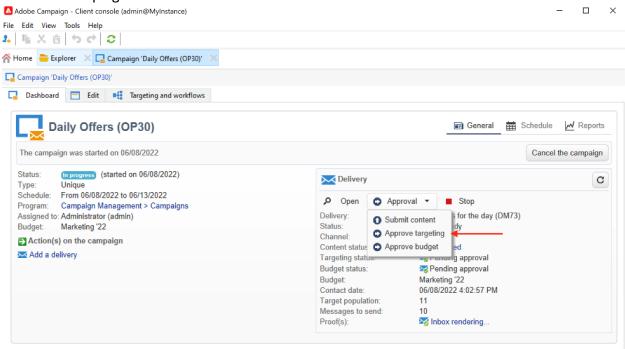
content or not.

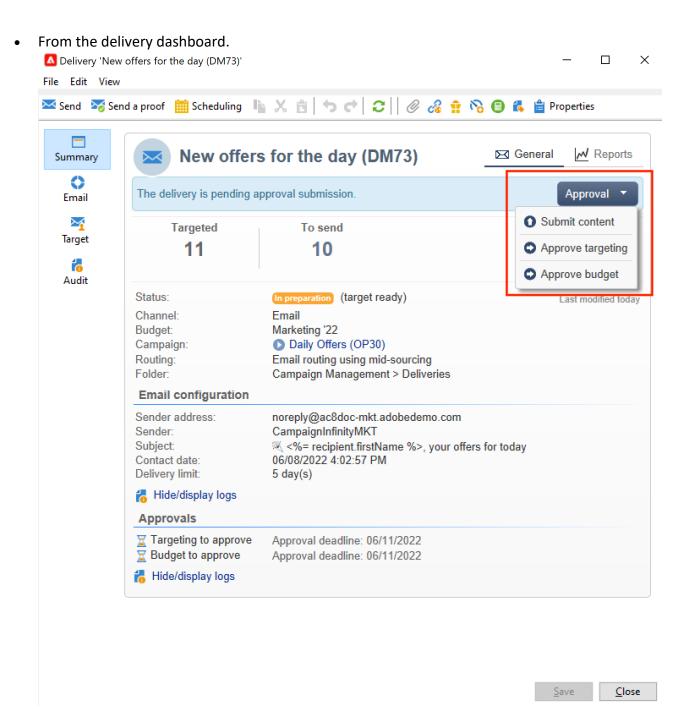
[Content approval] New collection <SUMMER> (OP1)



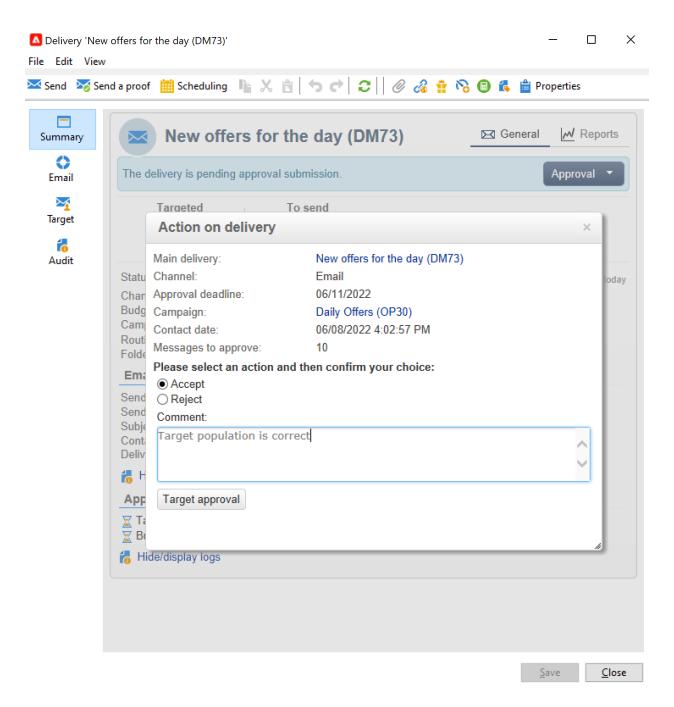
Adobe Campaign **Content approval** The delivery content was submitted for approval. Approve or reject the delivery content -Delivery: Summer Offers (DM58) Channel: **Direct Mail** 06/10/2022 Approval deadline: Campaign: New collection <SUMMER> (OP1) Extraction request: 06/16/2022 12:00:00 AM Contact date: 06/17/2022 12:00:00 AM

• From the campaign dashboard.

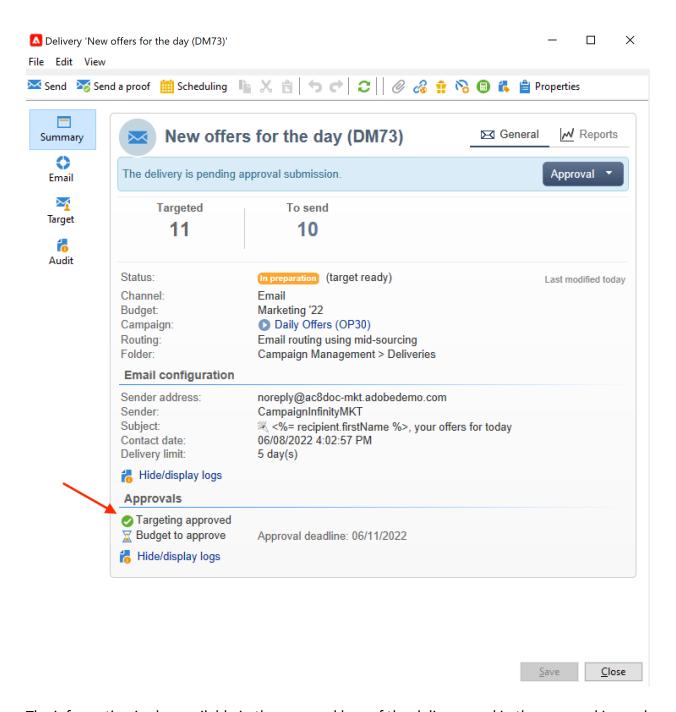




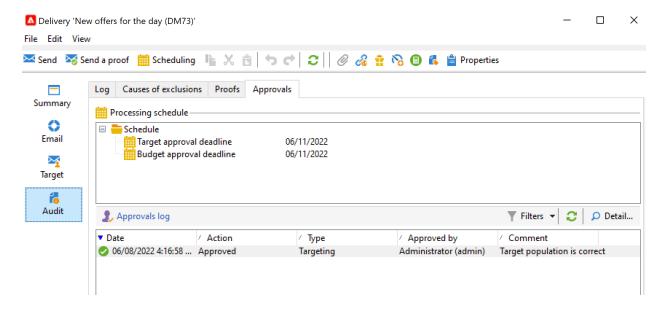
Operators can access the campaign and the delivery from the approval window. They can also enter a comment.



Once an operator validates, the information is displayed in the campaign and delivery dashboards, and in the logs.



The information is also available in the approval logs of the delivery, and in the approval journal of the campaign. These logs are accessed via the **Edit > Audit > Approvals** tabs.



Enable approvals

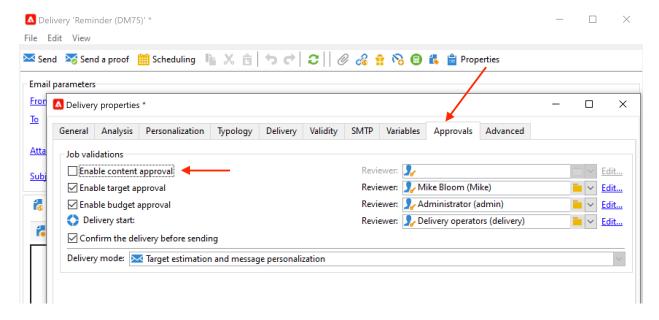
Approval notifications are sent to the operators affected to each process for which approval was enabled.

They can be enabled for the campaign template, for each campaign individually, or for a delivery.

All jobs requiring approval are selected in the campaign template, through the **Properties** > **Advanced campaign parameters...** > **Approvals** tab. Reviewers or groups of reviewers are selected from this tab. They receive notifications, unless this option is not enabled. Learn more.

These settings can be overridden for each campaign created using this template, and individually for each delivery. Browse the **Properties** button of the delivery, then the **Approvals** tab.

In the following example, the delivery content will not require approvals:



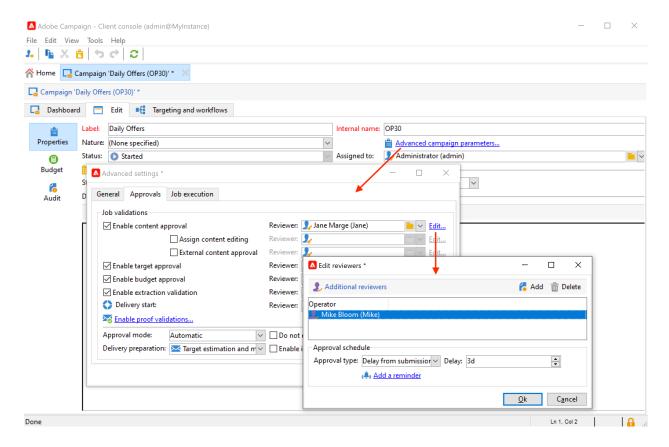
CAUTION

Check that the reviewers have the **appropriate permissions** for approving, and that their security zone is correctly defined. <u>Learn more</u>.

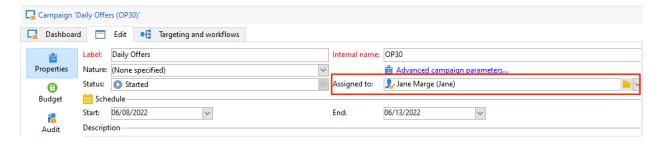
The approval process for deliveries is detailed in this section.

Select reviewers

For each type of approval, the operators or operator groups in charge of approval are selected from the drop-down list in the delivery. More operators can be added using the **Edit...** link. This window also lets you edit the approval deadline. By default, reviewers have three days starting from the submission date to approve a process. To add an automatic reminder, use the **Add a reminder** link.



If no reviewer is specified, the campaign owner is responsible for approvals and receives the notifications. The campaign owner is specified in the **Edit > Properties** tab of the campaign:

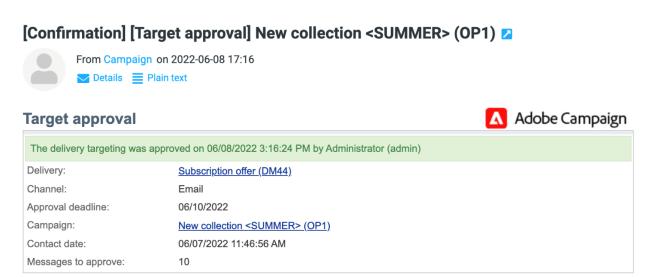


All other Adobe Campaign operators with **Administrator** rights can also approve jobs, but they do not receive notifications.

NOTE

By default, the campaign owner cannot carry out the approval or start the deliveries if approval operators have been defined. As an Adobe Campaign administrator, you can modify this behavior and allow the campaign owners to approve/start deliveries by creating the **NmsCampaign_Activate_OwnerConfirmation** option, set to **1**.

If a list of reviewers is defined, a job is approved when one reviewer has approved it. The approval link is then no longer available in the campaign and delivery dashboards. When the sending of notifications is enabled, if another reviewer clicks the approval link in the notification message, they are notified that another operator has already approved the job.



Review and approve deliveries

For each campaign you can approve the delivery target, <u>delivery content</u> and costs. Adobe Campaign operators in charge of approval can be notified by email and can accept or reject approval from the Client Console or via a web connection. <u>Learn more</u>.

For direct mail deliveries, Adobe Campaign operators can view the extraction file before it is sent to the router, and if necessary they can change the format and re-launch extraction. <u>Learn more</u>.

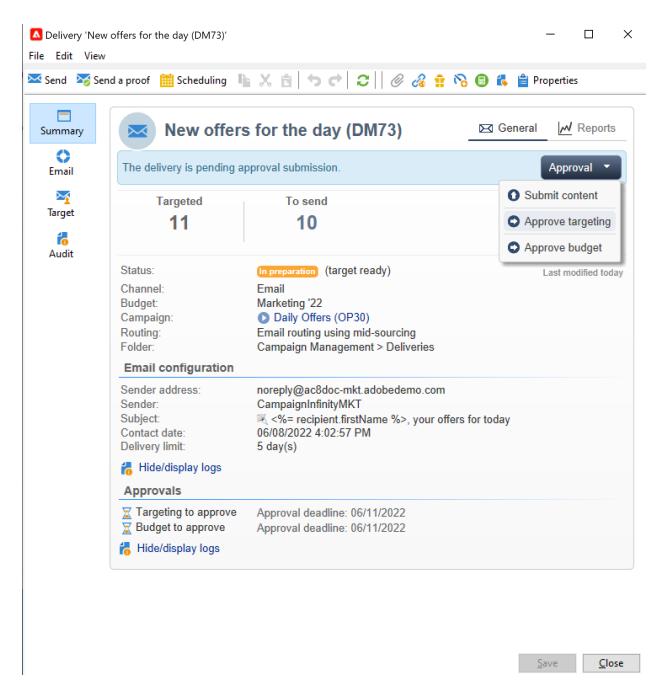
When these validation phases are complete, the delivery can be launched. Learn more.

NOTE

Processes which require an approval are selected in the campaign template. Learn more.

Steps to approve a delivery

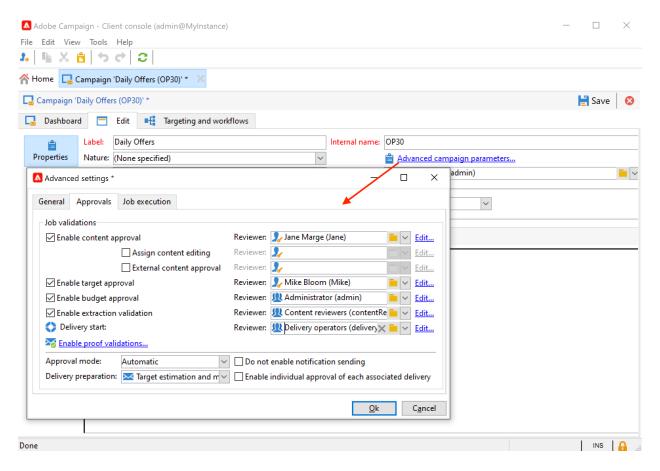
The stages requiring approval appear on the campaign dashboard (via the Client Console or the web interface). They also appear in the delivery tracking table and on the delivery dashboard.



For each delivery in the campaign, you can approve the following processes:

• Targeting, content and budget

When the Enable target approval, Enable content approval or Enable budget approval options are selected in the approval settings window, the related links are shown in the campaign and delivery dashboards.



NOTE

Budget approval is only available if target approval is enabled in the approval settings window. The link for budget approval is only displayed once the target has been analyzed.

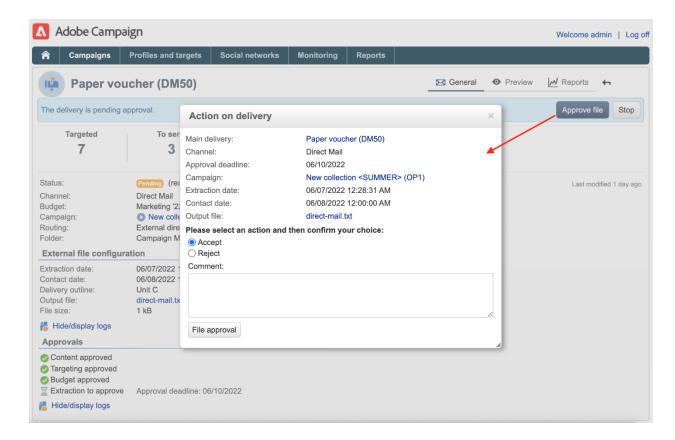
If the **Assign content editing** or **External content approval** options are selected in the approval settings window, the dashboard will show the **Available content** and **External content approval** links.

Content approval lets you access the proofs sent.

Extraction approval (direct mail delivery)

When **Enable extraction approval** is selected in the approval settings window, the extracted file must be approved before the router can be notified.

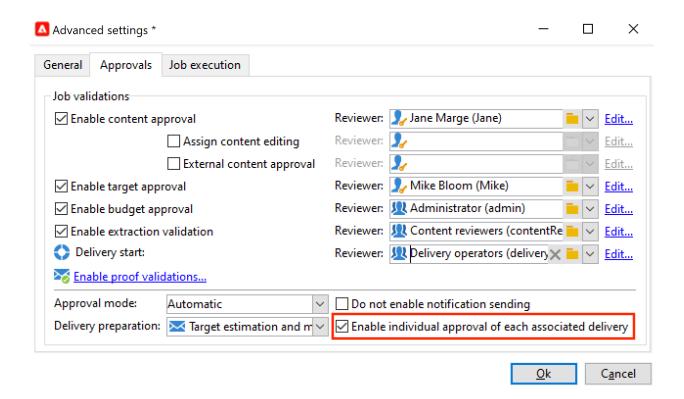
The **Approve file** option is available on the campaign and delivery dashboards.



You can preview the output file before validation. The extraction file preview shows a data sample only. The entire file is not loaded.

Approving associated deliveries

The **Enable individual approval of each associated delivery** option is used for one primary delivery associated with secondary deliveries. By default, this option is not selected so that an overall approval of the main delivery can be performed. If this option is selected, each delivery must be approved individually.



NOTE

In a targeting workflow, if an error linked to a configuration issue occurs during message preparation, the **Restart message preparation** link is shown on the dashboard. Fix the error and use this link to restart message preparation while bypassing the targeting stage.

Approve a content

CAUTION

To approve a content, a proof cycle is mandatory. Proofs let you approve the display of information, personalization data and check that links are working.

The content approval functionalities detailed below relate to the proof delivery.

It is possible to configure a content approval cycle. To do this, select the **Enable content approval** option in the approval settings window. The main steps of the content approval cycle are:

1. After creating a new delivery, the campaign manager clicks the **Submit content** link on the campaign dashboard to start the content approval cycle.

NOTE

If the **Enable the sending of proofs** option (for email deliveries) or **Enable the sending** and approval of proofs (for direct mail deliveries) options were selected in the approval settings window, proofs will be sent automatically.

- 2. A notification email is sent to the person responsible for content, who can choose whether to approve it or not:
 - via the notification email: the notification email contains a link to the proofs already sent, and possibly to a rendering of the message for the various webmails if the **Deliverability** add-on is enabled for this instance.
 - via the Client Console or web interface, delivery tracking, the delivery dashboard or the campaign dashboard. This campaign dashboard lets you view the list of proofs that have been sent, by clicking the **Inbox rendering...** link. To view their content, click the **Detail** icon to the right of the list.
- 3. A notification email is sent to the person responsible for the campaign informing them of whether the content has been approved or not. The person responsible for the campaign can re-start the content approval cycle at any time. To do this, click the link on the **Content status** line of the campaign dashboard (at delivery level), then click **Reset content approval to submit it again**.

Assign content editing

This option lets you define someone in charge of content editing, such as a webmaster. If the **Assign content editing** option is selected in the approval settings window, several approval steps are added between delivery creation and delivery of the notification email to the person in charge of content:

- 1. After creating a new delivery, the person responsible for the campaign clicks the **Submit content editing** link in the campaign dashboard to start the content editing cycle.
- 2. The person responsible for content editing will receive an email telling them that the content is available.
- 3. They can then log on to the Client Console, open the delivery and edit it using a simplified wizard to change the subject, HTML and text content, and send proofs.

NOTE

If the **Enable the sending of proofs** option (for email deliveries) or **Enable the sending** and approval of proofs (for direct mail deliveries) options were selected in the approval settings window, proofs will be sent automatically.

4. Once the person in charge of content editing has finished making any changes to the delivery content, they can make the content available.

To do this, they can use:

- o the **Available content** link in the Adobe Campaign Client Console.
- o the link in the notification message.
 - The operator can add a comment before submitting the content to the person in charge of the campaign.
 - The notification message lets the reviewer approve or reject the content.

External content approval

This option lets you define an external operator in charge of approving delivery rendering, such as brand communication consistency, rates, etc. When the **External content approval** option is selected in the approval settings window, several approval steps are added between content approval and the delivery of the notification to the person in charge of the campaign:

- 1. The external content manager receives a notification email telling them that the content has been approved and requesting external approval.
- 2. The notification email contains links to the proofs sent, which lets you view delivery rendering, and a button for approving or rejecting the delivery content.

These links are only available if one or more proofs have been sent. Otherwise, delivery rendering is only available via the Client Console or the web interface.

Approve an extraction file

For offline deliveries, Adobe Campaign generates an extraction file which, depending on how it is set up, is sent to the router. Its content depends on the export template used.

When the content, targeting and budget have been approved, the delivery changes to **Extraction pending** until the extraction workflow for the campaigns is launched.

On the extraction request date, the extraction file is created and the delivery status changes to **File to approve**.

You can view the content of the extracted file (by clicking its name), approve it or, if necessary, change the format and re-launch the extraction using the links on the dashboard.

Once the file has been approved, you can send the notification email to the router. Learn more.

Approval modes

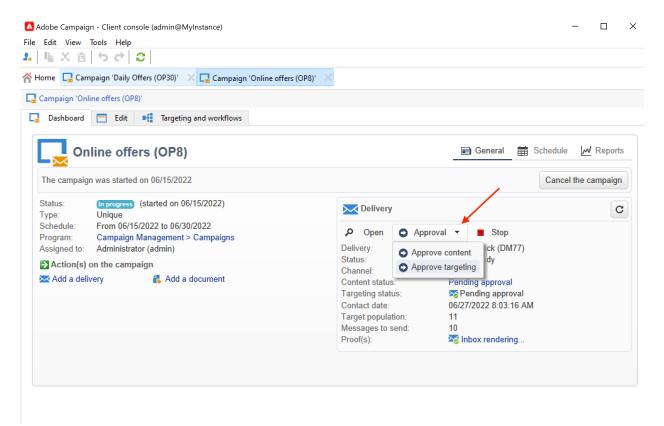
Jobs can be approved in the campaign dashboard, in delivery tracking tab, the delivery dashboard, or in the email notification sent to the reviewers.

Approve in the dashboard

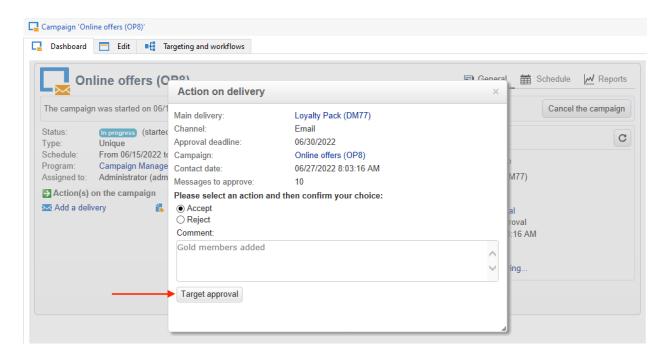
To approve a job via the Client Console or the web interface, click the appropriate link on the campaign dashboard.

For example, once delivery analysis has been executed:

1. Select Approve targeting.

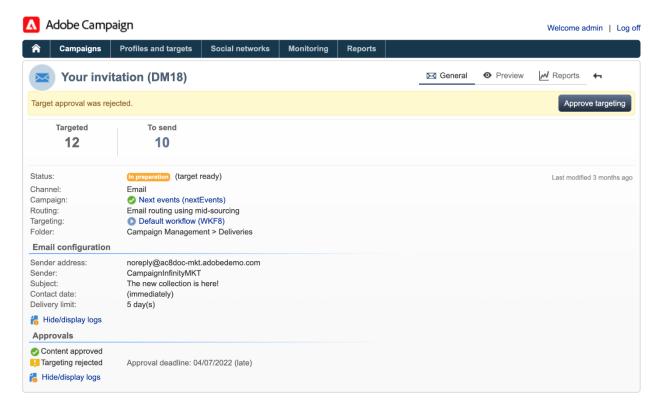


- 1. In the popup window, check the information to be approved.
- 2. Select **Accept** or **Reject** and enter a comment if necessary. This comment will be displayed in the validation logs.
- 3. Confirm your choice with the **Target approval** button.



If a process has already been approved by another operator, the approval link is not available.

If a process has been rejected, the information is displayed in the delivery dashboard as follows:



Approve from the notification messages

To approve a job from the notification message:

- 1. Click the link in the notification.
- 2. Log on to Adobe Campaign.
- 3. Check the information to be approved
- 4. Select Accept or Reject and enter a comment if necessary.
- 5. Validate. Your choice and comment are displayed in the validation logs.

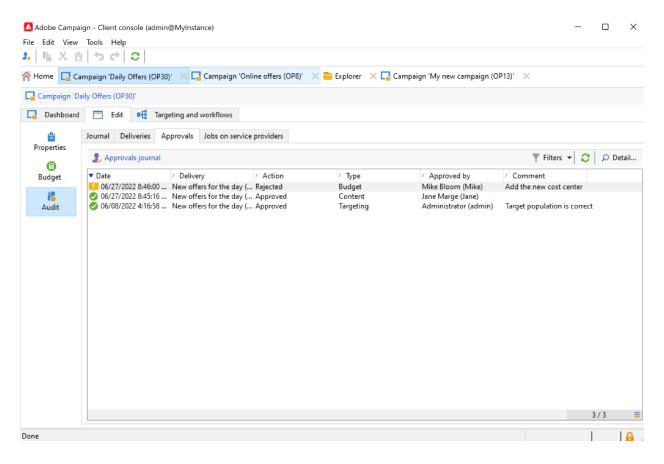
NOTE

If warnings were raised during the process, a warning is displayed in the notification.

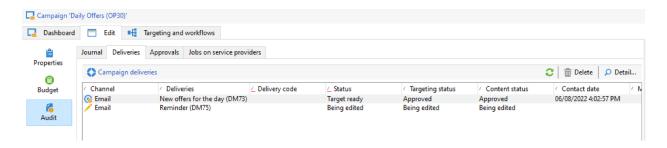
Track the approval

Approval logs are available in the user interface:

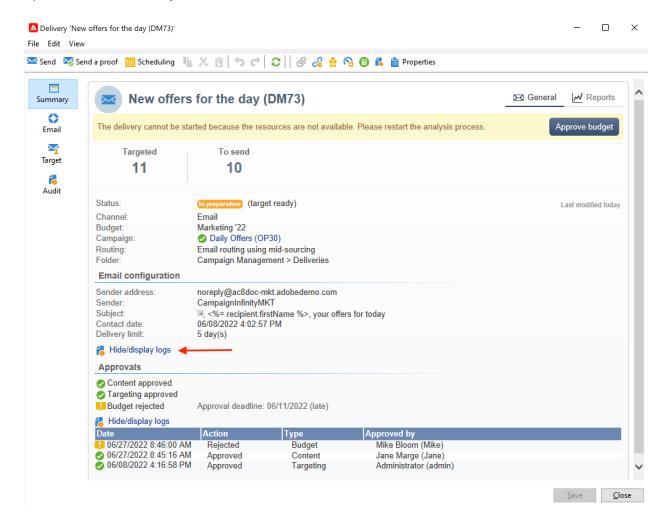
In the campaign approval log, Approvals sub-tab of the Edit > Audit tab:



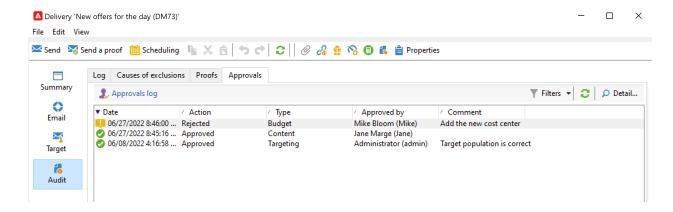
In the campaign delivery log, Deliveries sub-tab of the Edit > Audit tab:



• The approval status for each delivery can be viewed by clicking the **Hide/display logs** option of the **Summary** tab.



This information can also be accessed via the Audit > Approvals tab of each delivery:



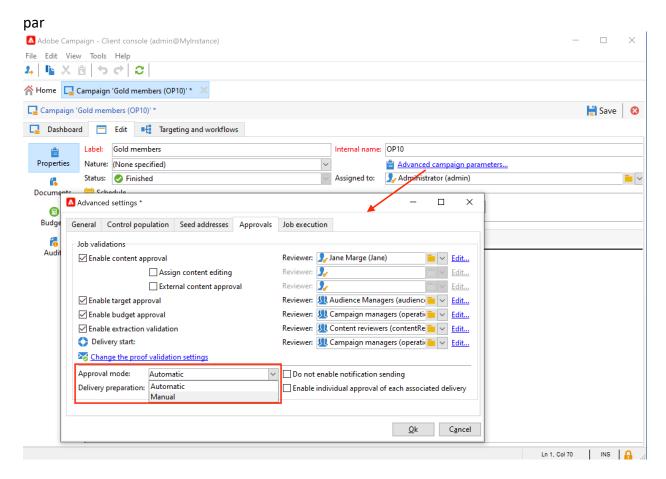
NOTE

Once an operator has approved or rejected a job, the other reviewers can no longer change it.

Automatic/Manual approvals

When creating a targeting workflow, if approval is automatic (default mode), Adobe Campaign displays the approval link or sends a notification as soon as an approval is required.

To choose the approval mode (manual or automatic), click the **Edit > Properties** tab of the campaign or campaign template, then click **Advanced campaign parameters...** and finally the **Approvals** tab.



NOTE

The approval mode applies to all deliveries of the campaign.

When a targeting workflow is being built, manual approval lets you avoid creating approval links or sending notifications automatically. The campaign dashboard then offers a **Submit targeting for approval** link to launch the approval process manually.

A confirmation message lets you authorize approvals on the jobs selected for this delivery.

The approval buttons are then displayed on the campaign dashboard (for this delivery), on the delivery dashboard and in delivery tracking. If notifications are enabled, they will be sent in parallel.

This method of enabling approvals lets you work on targeting without sending spurious notifications to reviewers.

Notifications

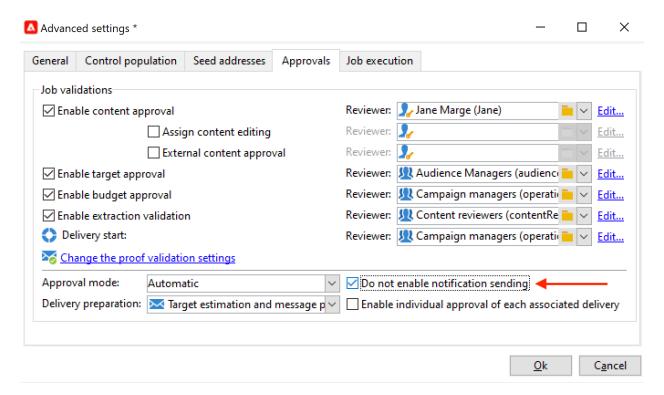
Notifications are specific email messages sent to reviewers to inform them that a process is pending approval. When the operator clicks the link in the message, an authentication page appears and, after logging in, the operator can view the information and approve or reject the job. A comment can also be entered in the approval window.

The content of notification emails can be personalized. See Notification content.

Enable/Disable Notification

By default, notification messages are sent if the approval of the related job is enabled in the campaign template, the campaign, or the delivery. Notifications can, however, be disabled in order to authorize approvals from the Client Console only.

To do this, edit the approval window of the campaign or campaign template (Edit > Properties > Advanced campaign parameters... > Approvals tab) and select Do not enable notification sending.



Notification content

Notification content is defined in a specific template: **Notification of validations for the marketing campaign**. This template is saved in the **Administration > Campaign management > Technical delivery templates** folder of the Adobe Campaign tree.

6.3 Audit trail

In Adobe Campaign, the **Audit trail** gives you access to the complete history of changes made within your instance.

Audit trail captures, in real-time, a comprehensive list of actions and events occurring within your Adobe Campaign instance. It includes a self-serve way to access a history of data to help answer questions such as: what happened to your workflows, and who last updated them or what did your users do in the instance.

NOTE

Adobe Campaign is not auditing changes made within user rights, templates, personalization or campaigns.

Audit trail can only be managed by administrators of the instance.

Audit Trail consists of three components:

Schema audit trail: Check the activities and last modifications done to your schemas.

For more information on schemas, refer to this page.

- **Workflow audit trail**: Check activities and last modifications done to workflows, and additionally, the state of your workflows such as:
 - Start
 - Pause
 - o Stop
 - Restart
 - Cleanup which equals to the action Purge history
 - o Simulate which equals to the action Start in simulation mode
 - Wakeup which equals to the action Execute pending tasks now
 - o Unconditional Stop

For more information on workflows, refer to this page.

For more on how to monitor workflows, refer to the dedicated section.

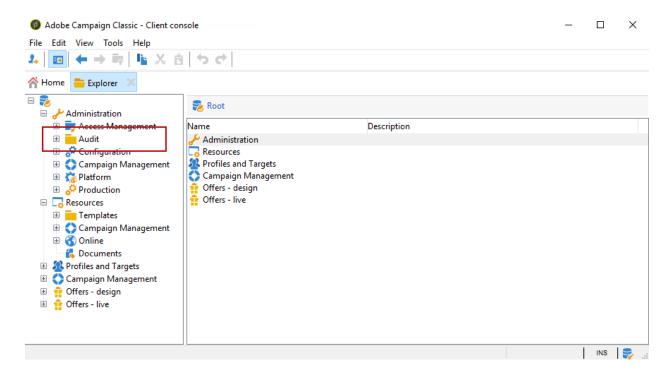
Option audit trail: Check the activities and last modifications done to your options.

For more information on options, refer to this <u>page</u>.

Accessing Audit trail

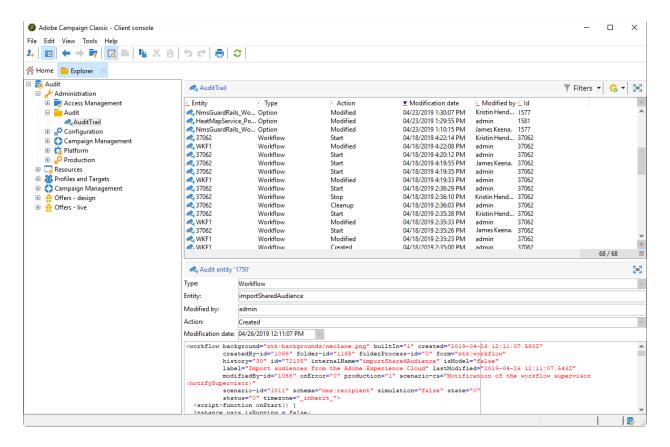
To access your instance's **Audit trail**:

- 1. Access the **Explorer** menu of your instance.
- 2. Under the Administration menu, select Audit .



3. The **Audit trail** window opens with the list of your entities. Adobe Campaign will audit the create, edit and delete actions for workflows, options and schemas.

Select one of the entities to learn more about the last modifications.



- 4. The **Audit entity** window gives you more detailed information on the chosen entity such as:
 - Type: Workflow, Options or Schemas.
 - Entity: Internal name of your activities.
 - o **Modified by**: Username of the last person who last modified this entity.
 - o **Action**: Last action performed on this entity, either Created, Edited or Deleted.
 - Modification date: Date of the last action performed on this entity.

The code block gives you more information on what was changed exactly in your entity.



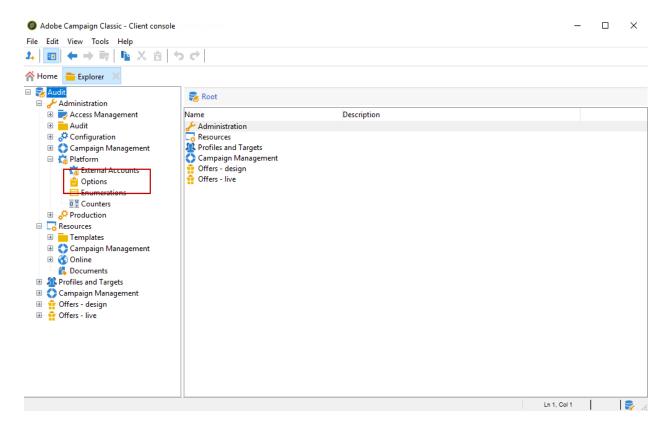
By default, retention period is set to 180 days for **Audit logs** . To learn more on how to change the retention period, refer to this page.

Enable/disable Audit trail

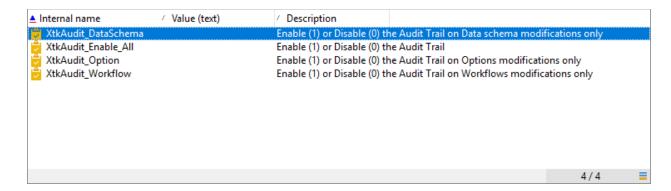
Audit trail can be easily activated or deactivated for a specific activity if, for example, you want to save some space on the database.

To do so:

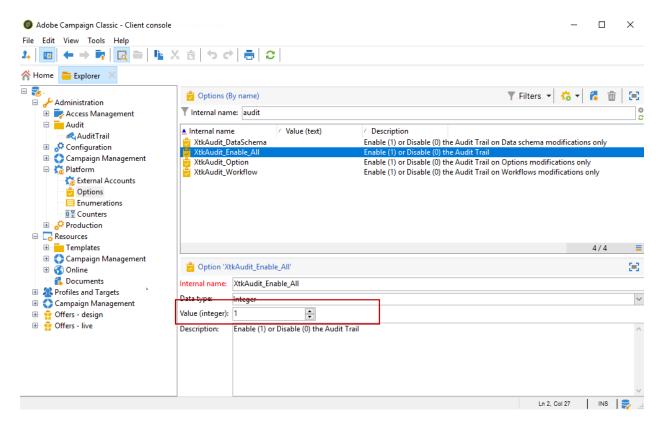
- 1. Access the **Explorer** menu of your instance.
- Under the Administration menu, select Platform then Options.



- 3. Select one of the following options depending on the entity you want to activate/deactivate:
 - For Workflow: XtkAudit_Workflows
 - For Schemas: XtkAudit_DataSchema
 - o For Options: XtkAudit_Option
 - For every entity: XtkAudit_Enable_All



4. Change the **Value** to 1 if you want to enable the entity or to 0 if you want to disable it.



5. Click Save.

6.4 Use templates

Delivery templates allow for increased efficiency by providing ready-made scenarios for most common types of activities. With templates, marketers can deploy new campaigns with minimal customization in a shorter amount of time.

Learn more about delivery templates in this section.

Get started with delivery templates

A <u>delivery template</u> enables you to define once a set of technical and functional properties that suit your needs and that can be reused for future deliveries. You can then save time and standardize deliveries when needed.

When you manage several brands in Adobe Campaign, Adobe recommends having one subdomain per brand. For example, a bank can have several sub-domains corresponding to each of its regional agencies. If a bank owns the bluebank.com domain, its sub-domains can be @ny.bluebank.com, @ma.bluebank.com, @ca.bluebank.com, etc. Having one delivery template per sub-domain enables you to always use the right pre-configured parameters for each of your brand, which avoids errors and saves you time.

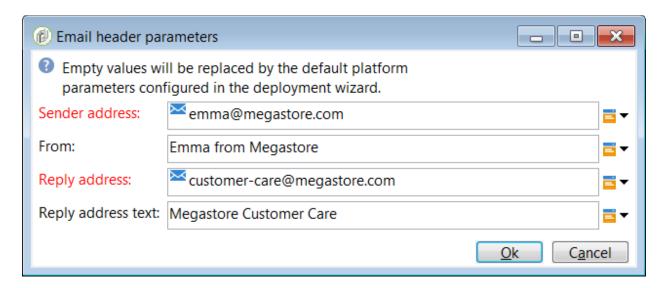
Tip: To avoid configuration errors, we recommend that you duplicate a native template and alter its properties rather than create a new template.

Configure addresses

- The sender's address is mandatory to allow an email to be sent.
- Some ISPs (Internet Service Providers) check the validity of the sender address before accepting messages.
- A badly formed address may result in it being rejected by the receiving server. You must make sure a correct address is given.
- The address must explicitly identify the sender. The domain must be owned by and registered to the sender.
- Adobe recommends creating email accounts that correspond to the addresses specified for deliveries and replies. Check with your messaging system administrator.

To configure addresses in Campaign interface, follow the steps below:

1. In the <u>delivery template</u>, click the **From** link. In the **Email header parameters** window, fill in the following fields:

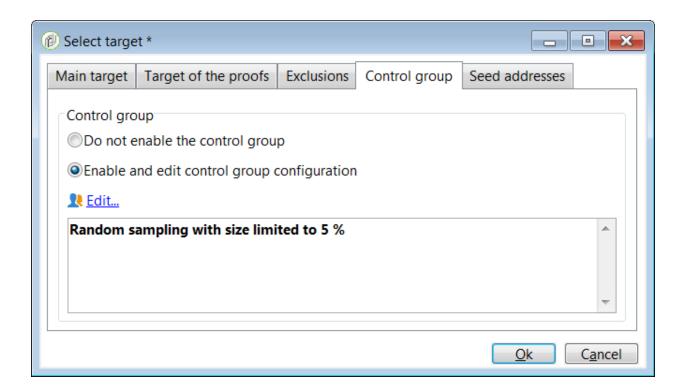


- 2. In the **Sender address** field, make sure the address domain is the same as the subdomain that you delegated to Adobe. You can change the part preceding the '@' but not the domain address.
- 3. In the **From** field, use a name that is easily identifiable by the recipients, such as your brand's name, to increase the opening rate of your deliveries. To further improve the recipient's experience, you can add a person's name, for example "Emma from Megastore".
- 4. In the **Reply address text** fields, the sender's address is used by default for replies. However, Adobe recommends using an existing real address such as your brand's customer care. In this case, if a recipient sends a reply, the customer care will be able to handle it.

Set up a control group

Once the delivery is sent, you can compare the behavior of the excluded recipients with the recipients who did receive the delivery. You can then measure the efficiency of your campaigns. Learn more about control groups this section.

To set up a control group, click the **To** link. In the **Select target** window, select the **Control group** tab. You can extract a portion of the target, for example a 5% random sample.



Use typologies to apply filters or control rules

A typology contains checking rules that are applied during the analysis phase, before sending any message.

In the **Typology** tab of the template's properties, change the default typology according to your needs.

For example, to better control the outbound traffic, you can define which IP addresses can be used by defining one affinity per sub-domain and creating one typology per affinity. The affinities are defined in the instance's configuration file. Contact your Adobe Campaign administrator.

For more on typologies, refer to this section.

6.5 Get started with workflows

About workflows

Adobe Campaign includes a workflow module that empowers you to orchestrate the full range of processes and tasks across the different modules of the application server. This comprehensive graphical environment lets you design processes including segmentation,

campaign execution, file processing, human participation, etc. The workflow engine executes and tracks these processes.

You can use a workflow, for example, to download a file from a server, decompress it, and then import records contained within into the Adobe Campaign database.

A workflow can also involve one or more operators to be notified or who can make choices and approve processes. In this way, it is possible to create a delivery action, assign a task to one or more operators to work on content, specify targets, and to approve proofs before starting the delivery.

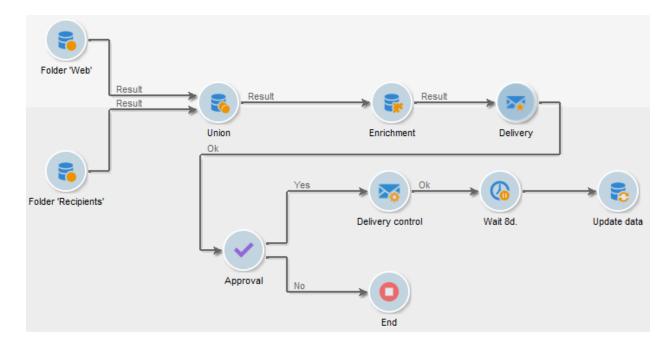
Workflows occur within various contexts and stages of the campaign management process.

Adobe Campaign uses workflows to:

- Carry out targeting campaigns. Learn more
- Build campaigns: for each campaign, the **Workflow** tab lets you build the target and create the deliveries. <u>Learn more</u>
- Perform technical processes: cleanup, collecting tracking information or provisional calculations.
 Learn more

A workflow can mean both a process definition (the workflow model, which is a representation of what is supposed to happen) and an instance of this process (a workflow instance, which is a representation of what is actually happening).

The workflow template describes the various tasks to be performed and how they are linked together. The task templates are called activities and are represented by icons. They are linked together by transitions.



Each workflow contains:

Activities

An activity describes a task template. The various activities available are represented on the diagram by icons. Each type has common properties and specific properties. For example, while all activities have a name and label, only the **Approval** activity has an assignment.

In a workflow diagram, a given activity can produce multiple tasks, in particular when there is a loop or recurrent (periodic) actions.

All workflow activities are listed in this section, including use cases and samples.

Transitions

Transitions enable you to link activities and to define their sequence. A transition links a source activity to a destination activity. There are several sorts of transitions, which depend on the source activity. Some transitions have additional parameters such as a duration, a condition or a filter.

A transition which is not linked to a destination activity is colored orange and the arrow head is shown as a diamond.

NOTE

A workflow containing unterminated transitions can still be executed: a warning message will be generated and the workflow will pause once it reaches the transition but it will not generate an error. It is thus possible to start a workflow without it being finished and to add to it as you go along.

For more information about how to build a workflow, refer to this section.

Worktables

The worktable contains all the information carried by the transition. Each workflow uses several worktables. The data conveyed in these tables can be accelerated and used throughout the workflow's life cycle, as long as it is not purged. Indeed, unneeded tables are purged each time the workflow is passivated, and possibly during the execution of the largest workflows to avoid overloading the server.

Learn more on workflow data and tables in this section.

Key principles and best practices

Refer to these sections to find guidance and best practices to automate processes with workflows:

- Learn more about workflow activities in this page.
- Learn how to build a workflow in this section.
- Discover how to use workflows to import data in Campaign in this section.
- Workflow best practices are detailed in this page.
- Find guidance about workflow execution in this section.
- Learn how to monitor workflows in this page.
- Learn how to grant access to users to use workflows in this page.

6.6 Workflow execution

The section below presents information on common issues related to workflows execution and how to troubleshoot them.

For more information on workflows, refer to these sections:

- About workflows
- Starting a workflow
- Workflow life cycle
- Best practices when using workflows

Start as soon as possible in campaigns

In some cases, workflows executed from a campaign do not start when clicking the **Start** button. Instead of starting, it goes to a "Start as soon as Possible" state.

There can be several causes for this issue, follow the steps below to solve it:

 Check the <u>operationMgt</u> technical workflow status. This workflow manages jobs or workflows inside a campaign. If it fails, this will result in workflows to not start / stop. Restart it to resume the running of campaign workflows.

For more on technical workflows monitoring, refer to this page.

NOTE

Once the workflow restarted, make sure you execute the pending tasks (right-click the **Scheduler** activity / **Execute pending task(s) now**) in order to check if it fails again on any of the activities.

If the workflow still fails, check the audit log for specific error, troubleshoot accordingly, then restart the workflow again.

 Check the wfserver module state in the Monitoring tab, accessible from Campaign Classic homepage (see Monitoring processes). This process is responsible for running all workflows.

An admin user can also check that the **wfserver@<instance>** module is launched on your main application server using the command below.

```
nlserver pdump

HH:MM:SS > Application server for Adobe Campaign Version X.Y (build XXXX) of

DD/MM/YYYY

[...]

wfserver@<instance-name> (9340) - 11.3 Mb

[...]
```

If the module is not running, contact Adobe Customer Care. If you have an on-premise installation, an admin user must restart the service using the command below.

```
nlserver start wfserver@<instance-name>
```

2. NOTE

Replace <instance-name> with the name of your instance (production, development, etc.). The instance name is identified via the configuration files:
[path of application]nl6/conf/config-<instance-name>.xml

For more on how to restart modules, refer to this section.

3. Check if the **number of campaign processes running** on the instance is more than the threshold. There is a limit defined by the **NmsOperation_LimitConcurrency** option on how many campaign processes can run on the instance in parallel. When this limit is reached, the workflow stays in the "Start as soon as possible" state as long as the number of workflows running is above the limit.

To solve this issue, stop unwanted workflows and delete failed deliveries. If the threshold was reached, this will allow the running of new processes.

To check the number of workflows running of your instance, we recommend using the predefined views, accessible by default in the **Administration / Audit** folder. For more information, refer to this page.

IMPORTANT

Increasing the **NmsOperation_LimitConcurrency** option threshold may lead to performance issues on your instance. In any case, do not perform this on your own and reach out to your Adobe Campaign contact.

For more on how to monitor you workflows, refer to this section.

Start in progress

If workflows aren't executing and their status is **Start in progress**, this might mean that the workflow module isn't launched.

To check this and to start the module if necessary, apply the following steps:

1. Check the **wfserver** module state in the **Monitoring** tab, accessible from Campaign Classic homepage (see <u>Monitoring processes</u>).

An admin user can also check that the **wfserver@<instance>** module is launched on your main application server using the command below.

```
nlserver pdump
HH:MM:SS > Application server for Adobe Campaign Classic (7.X YY.R build XXX@SHA1) of DD/MM/YYYY
[...]
wfserver@<instance-name> (9340) - 11.3 Mb
[...]
```

For more on how to monitor modules, refer to this section.

If the module is not running, contact Adobe Customer Care. If you have an on-premise installation, an admin must restart it using the command below.

```
nlserver start wfserver@<instance-name>
```

2. NOTE

Replace <instance-name> with the name of your instance (production, development, etc.). The instance name is identified via the configuration files:

[path of application]nl6/conf/config-<instance-name>.xml

For more on how to restart modules, refer to this section.

Failed workflow

If a workflow fails, take the following steps:

- 1. Check the workflow journal. For more on this, refer to the Monitoring workflow execution and Display logs sections.
- 2. Monitor technical workflows. For more on this refer to the this section.
- 3. Look for failures on the individual workflow activities.