

Data Cloud: Error Handling & Notifications - Admin Installation & Setup Guide - October 2024 (Unmanaged Package v1.1)

Introduction

This package has been created to provide a basic setup for notifying an organisation's Data Cloud admin users of failures that may occur with the Data Cloud platform in relation to the following configuration:

- Data Streams
- Data Transforms
- Calculated Insights
- Segments
- Activations
- Identity Resolution Rules

For each of the above configuration types ("metadata"), a flow has been created to manage the failures. Using Custom Metadata, you can control the behaviour of any error notifications.

Pre-Requisites

The very nature of this package means that Data Cloud is the minimum requirement for making use of the included Flows.

Installation

This package is available for installation via the App Exchange as an unmanaged package: <https://appexchange.salesforce.com/appxListingDetail?listingId=fae50489-3e41-40c2-acc0-2bbdf3999be8>.

The following Flows are installed by the unmanaged package:

Flow Name	Flow Description
Data Cloud: Data Stream Failure Notifications	This flow is triggered when a Data Stream status changes to an error state. It calls the "Data Cloud: Failure Notifications Sub Flow" to manage the notification send.
Data Cloud: Data Transform Failure Notifications	This flow is triggered when a Data Transform status changes to an error state. It calls the "Data Cloud: Failure Notifications Sub Flow" to manage the notification send.
Data Cloud: Segment Failure Notifications	This flow is triggered when a Segment status changes to an error state. It calls the "Data Cloud: Failure Notifications Sub Flow" to manage the notification send.
Data Cloud: Identity Resolution Failure Notifications	This flow is triggered when an Identity Resolution Rule status changes to an error state. It calls the "Data Cloud: Failure Notifications Sub Flow" to manage the notification send.
Data Cloud: Calculated Insight Failure Notifications	This flow is triggered when a Calculated Insight status changes to an error state. It calls the "Data Cloud: Failure Notifications Sub Flow" to manage the notification send.
Data Cloud: Activation Failure Notifications	This flow is triggered when an Activation status changes to an error state. It calls the "Data Cloud: Failure Notifications Sub Flow" to manage the notification send.
Data Cloud: Failure Notifications Sub Flow	This flow is a Sub Flow, called from each of the above flows. It queries the custom metadata to get the settings for the triggering object/record and sends the notification amongst other things.
Data Cloud: Purge Failure Logs	This flow runs on a schedule weekly to delete any Data Cloud Failure Logs from Salesforce Core older than the specified time period.

Each of the flows provides a starting point, which can be enabled and configured as is, or added to by incorporating your own business process.

Setup

Once the package is installed, assign the Permission Set called "Data Cloud Failure" to any admin users. Business Users shouldn't need access to this functionality. The Permission Set provides full access to the Data Cloud Failure object & fields, the Custom Metadata Type called "Data Cloud Notification Feature" and any flows mentioned in this document.

Next, navigate to Setup > Custom Metadata Type > Data Cloud Notification Feature. Here, click New to start the configuration process. These records allow you to configure the behaviour of the notification that you will receive. The functionality is designed to allow you to be notified differently for each Data Cloud configuration element. For example, you may wish to receive notifications about errors for only specific Data Streams, or business critical Calculated Insights but not bothered about Identity Resolution Rules failing.

The following details are required:

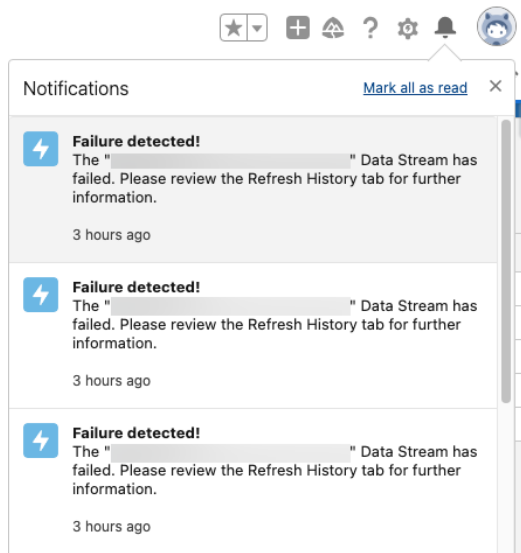
- **Label:** This can be anything you like but it is best to set this to the Type/Record Name from Data Cloud
- **Data Cloud Type:** Set this to the relevant Data Cloud object - this can currently be Data Stream, Calculated Insight, Data Transform, Identity Resolution, Segment or Activation.
- **Data Cloud Record Name:** Set this to the label value of the relevant Data Cloud object configuration. For example, if you have a Data Stream called "Test", enter the value Test here.
- **Enable Notification:** Set to TRUE to enable the notifications to be sent via your configured route.
- **Notification Title:** This is either the title that appears in the Salesforce Notification Bell, or the Email Subject if sending emails instead.
- **Notification Body:** This is either the body of the notification that appears in the Salesforce Notification Bell, or the Email Body if sending emails instead.
- **Notification Type:** Set to either Notification Bell or Email.
 - NOTE: Salesforce Core has a limitation of 5000 emails per day. If choosing email, consider all other business processes and whether these notifications will cause your org to exceed those limits.

- **Notification Frequency:** Set to either “First Error” to be notified of an error once a day. This can be particularly useful if your Data Cloud configuration is set to refresh regularly and you are not able to fix the problem straight away. It can save you from being bombarded with repeat notifications each time the Data Cloud config retries. Alternatively, set to “All Errors” to be notified each time the Data Cloud configuration runs, regardless of what has already been sent for that day.
- **Permission Set Name:** By default, it is best to set this to “GenieAdmin”. This is the API name for the out of the box Data Cloud Admin Permission Set. This ensures that only a user that has full access to Data Cloud receives failure notifications. You can change accordingly, but ensure the users that are assigned to the custom Permission Set have the required access to Data Cloud to prevent notifications generating errors. For example, if the user does not have access and they click the notification in Salesforce that they receive, it will not be accessible.

Data Cloud Notification Feature

Repeat this process for each Data Stream, Data Transform, Calculated Insight etc as required. Thats its! Dependant on the frequency, you will be notified accordingly via your chosen method of either email or the in-app Salesforce notification bell.

Salesforce Notification Example



Flow Steps Explained

Lets look at one of the Flows installed from the package to understand how this package works - this example follows the “Data

Cloud: Data Stream Failure Notifications” Flow. All flows installed follow this pattern, with the exception of the entry criteria which differs slightly for each object.

- Trigger Object: Data Stream
- Trigger: Record is created or updated
- Conditions: Data Stream Status = Error OR Import Run Status = FAILURE OR Import Run Status = ERROR

Called async, is the “Data Cloud: Failure Notifications Sub Flow” Flow (NOTE: This is necessary to prevent a MIXED_DML error in the flow):

- Get Notification Settings: This retrieves the Custom Metadata that you created above, using the Record Name from Data Cloud and Record Type configured in the flow. For the Data Stream Flow, this is set to “Data Stream” so it is important that the “Data Cloud Type” field matches this value exactly.
- Get Notification Type: This gets the Id for a custom notification type called Data_Cloud which manages sending the in-app notifications. This is installed by the package.
- Get Permission Set: Retrieves the Id for the Permission Set specified in the Custom Metadata. By default, this is expected to be the Data Cloud Admin permission set.
- Get Users Assigned Data Cloud Permission Set: Using the above Id, the flow finds users who are assigned that permission set and returns the Ids. From here, the flow counts the number of records returned and then loops over the data to create a collection of the Ids. If the count = 0, then the flow stops here.
- The flow checks the Notification Frequency at this point;
 - If set to “First Error”, then the flow gets existing errors from the Data Cloud Failure Logs custom object (NOTE: This is separate from the Refresh History tab in Data Cloud as this data is not accessible to a Flow). It creates a record for the current error. If any records are found, excluding the one just created, where Failure Date = TODAY, then the flow stops at this point.
 - If set to “All Errors”, the flow will move forward to the next action
- The Notification Type is then checked
 - If set to “Notification Bell” then: A custom notification is sent to each User Id from the collection created above.
 - If set to “Email” then the flow retrieves all users with the Permission Set assigned and builds a new collection with those users’ email addresses. This collection is then used to send an email to each user.

Purge Data Cloud Failure Logs

This flow is configured to run on a weekly basis. It finds any Data Cloud Failure Log records where the Failure Date = TODAY - 365 by default. The value is configurable from Setup > Custom Labels > Data_Cloud_Purge_Failure_Logs. Change the value as required. Logs older than this value are deleted.

Custom Label
Data_Cloud_Purge_Failure_Logs

Custom Label Edit Save Save & New Cancel

Short Description Name Data_Cloud_Purge_Failure_Logs

Language English ⓘ

Categories ⓘ

Value

Save Save & New Cancel

