## **NLP Classification**

Use Natural language processing (NLP) to identify sentiment from email.

The NLP Classification scenario includes the Sentiment output field that determines if the vocabulary used in the email from which a case is created, is positive or negative and the degree of positivity or negativity.

## Restriction

Sentiment analysis only identifies sentiment for cases created from email channels.

NLP sentiment classification returns the following possible values:

- Not Available
- Strong Positive
- Weak Positive
- Neutral
- Weak Negative
- Strong Negative

The sentiment value from an email from which a case is created, indicates the overall emotion. The magnitude of sentiment indicates how much emotional content is present within the email, and is often proportional to the length of the text.

The natural language algorithm differentiates between positive and negative emotion in a case, but doesn't identify specific positive and negative emotions. For example, angry and sad are both negative emotions. However, the sentiment classification only indicates that the text is negative, not sad, or angry.

An email with a neutral value can indicate a low-emotion, or email text expressing mixed emotions; containing both high positive and high negative values that cancel out each other.

## **Configure NLP Classification**

As an administrator, you must add, train, and activate the NLP Classification model.

## Procedure

- 1. Navigate to your user profile, and select Settings > All Settings > Machine Learning > Intelligent Service > NLP Classification.
- 2. Under NLP Classification, click the create icon to add a model.
- 3. Enter a name for your model.
- 4. Turn on the Sentiment toggle button to enable sentiment detection.
- 5. Click Save and Train to save your model and start the training.

The model goes through the following statuses during the training: Created Training in Preparation Data Extraction is Pending Data Extraction is in Progress Data Preprocessing is Pending Data Preprocessing is in Progress Training Triggered Training is Pending Training in Progress Training Completed or Training Failed Active or Inactive.

You can refresh and update the training status of the model by selecting Get Status from the Actions (2) menu.

Note - You can also save your model and train your model later.

Locate your model and click Train from the Actions (2) menu to start training the model.

6. After the training is complete, click Activate from the Actions (2) menu to activate the model.

You can deactivate a model by selecting Deactivate.

Note - You can adjust the threshold confidence level. The default value of the confidence level is 60.

Note - You can use the test console to test if the model is functioning correctly. Select your model, enter a description in the Input field and click Classify. The test console invokes the prediction model API using the sample case data you provide.