

# 1. Advanced Recommendation : Watson Discovery

1. Go to the [Discovery](#) page in the IBM Cloud catalog. The service instance is created in the **default** resource group if you do not choose a different one, and it *cannot* be changed later. This group is sufficient for the purposes of trying out the service. If you're creating an instance for more robust use, then learn more about [resource groups](#)
2. Sign up for a free IBM Cloud account or log in.
3. Click **Create**. After you create an instance of Discovery, you're taken to your list of services.
4. Get started by launching the service. Launch the Watson Discovery



- 5.
6. You need to create a new collection. There are two ways to create a new collection of data, by uploading documents and connect it to a data source. In this tutor we will learn how to upload our own data. select the “Upload your own data”

## Manage data

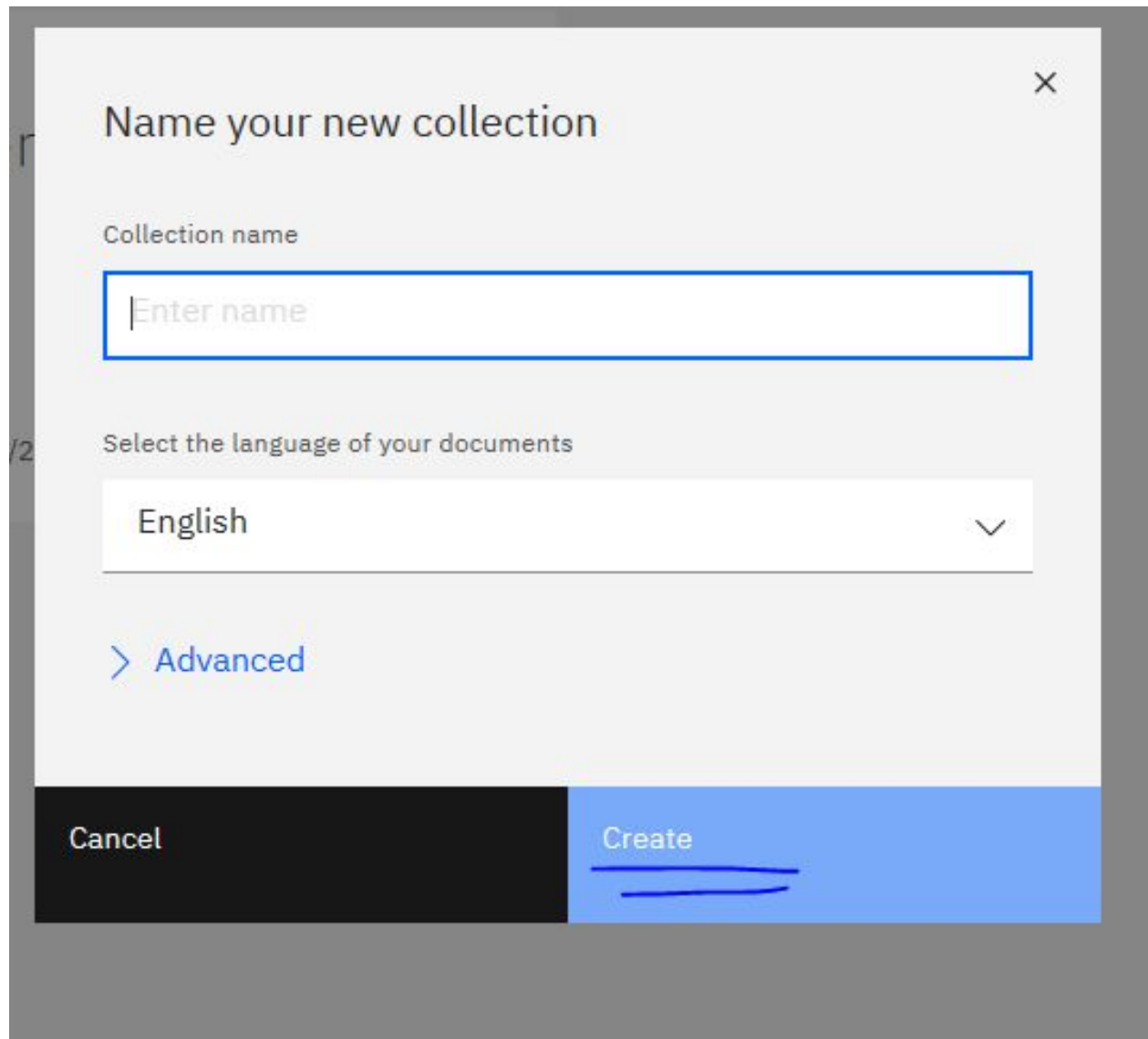
Collections of your private data and pre-enriched data to configure and query against. [Learn more.](#)

Create a new data collection

[Upload your own data](#)

[Connect a data source](#)

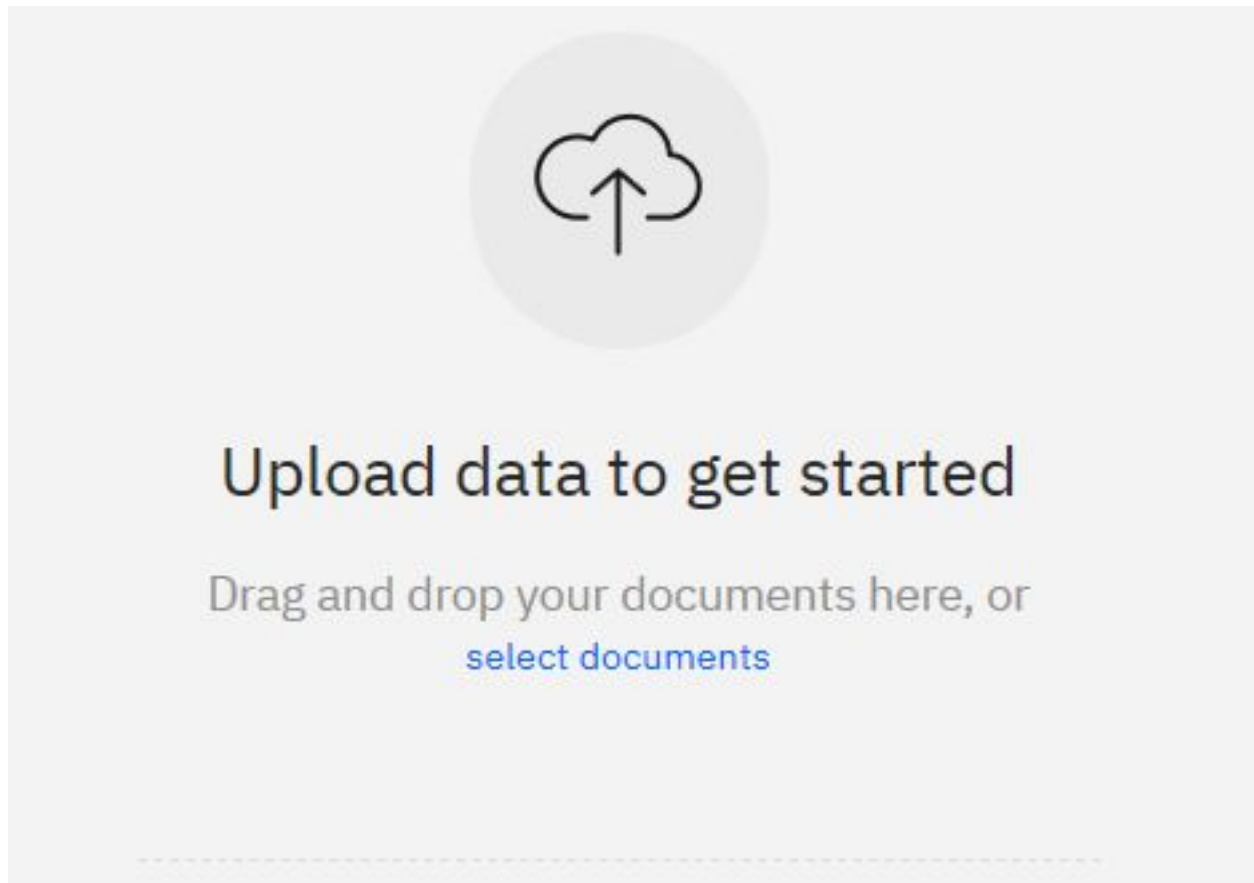
7. Insert your name for your new collection, for example: small-retail-bot, then click create



The screenshot shows a dialog box titled "Name your new collection" with a close button (X) in the top right corner. Below the title, there is a label "Collection name" followed by a text input field containing the placeholder text "Enter name". Below this, there is a label "Select the language of your documents" followed by a dropdown menu showing "English" with a downward arrow. Below the dropdown, there is a link "> Advanced". At the bottom of the dialog, there are two buttons: "Cancel" on the left and "Create" on the right. The "Create" button is highlighted with a blue background and has two blue horizontal lines drawn over it.

8. Download all the documents for discovery from Moodle. Upload your data to get it started. select upload your documents, and select all the 15 documents and start

uploading.



9. IBM now processing your data, wait until all your 15 documents are processed.

small-retail-bot [🔗](#) [Configure data](#) [🔗](#) [📄](#)

[Overview](#) [Errors and warnings \(0\)](#) [Search settings](#)

15 documents

0 documents failed  
[View details](#)

Created on 6/26/2019 12:13:53 am EDT  
Last updated 6/26/2019 12:13:53 am EDT

Upload documents [🔗](#)

Identified **9 fields** from your data

text

ID

image\_url

extracted\_metadata

price

id

category

title

product\_page

Added **4 enrichments** to your data

Entity Extraction

IBM (4) | 100% (3) | 11 oz (2) | 12 hours (1) | 12 oz (1)

Concept Tagging

Printmaking (4) | IBM (3) | Logo (3) | Screen-printing (3) | Corrosion (2)

5 enrichments available. [Add enrichments](#)

Now you're ready to **query**!

Most common entity types and their top entities

Run

Top entities with their average, min, max sentiment score

Run

Documents about **100%** as a **Quantity** with a very negative sentiment

Run

[Build your own query](#) →

10. Lets train the discovery by building query. On the left side, select the magnifier glass, select your collection small-retail-bot, then select get started



Build queries



Choose a collection to query

Choose collection



Get started

11. Select “Search for Documents”, select use natural language, and type “shirt” to query about shirt in our documents. Select run query.

The screenshot shows the IBM Watson Assistant search interface. At the top, there is a grey bar with a plus icon and the text "Search for documents". Below this is a white search box with the title "Search for documents" and a trash icon on the right. Inside the search box, there are two tabs: "Use natural language" (which is selected and underlined) and "Use the Discovery Query Language". The text "shirt" is entered in the search box. Below the search box, there are two grey bars with plus icons and the text "Include analysis of your results" and "Filter which documents you query". At the bottom left of the search box, there is a link "> More options". At the bottom right of the interface, there are two buttons: "Run query" (a blue button) and "Close" (a white button with a blue border).

12. After that Go to IBM Watson Assistant. Make sure you already have a plus-trial plan. If not, change it from “Lite Plan” to “Plus Trial”. Tutorial about how to change it, please go to document about **Advanced Feature: Intent Recommendation** If you

already have a Plus Trial plan, launch the Watson Assistant.

Get started by launching the tool.

**Plan: Plus Trial** [Upgrade](#)

**Launch Watson Assistant** [Getting started tutorial](#) [API reference](#)

Credentials [Download](#) [Show Credentials](#)

API Key: .....

URL: <https://gateway-syd.watsonplatform.net/assistant/api>

13. Download the skill-simple-retail-store.json from Moodle. Create a new assistant. Click add the dialog skill. Import the skill-simple-retail-store.json in the skill page to add intents, entities, and dialog.

## Create Assistant

Create an assistant to deploy the skill that addresses your customers' goals.

### Name

Name your assistant, for example Banking or Customer Care.

new-retail bot

### Description (optional)

Add a description for this assistant

Preview Link [?](#)

☒ Enable Preview Link

Create assistant

## Skills

A dialog skill provides specific responses you've created. You can use a search skill to provide answers from linked documents or web pages. Choose one or both skills for your assistant. [Learn more](#)

### Dialog



#### Add a dialog skill to design your conversation flow

Dialog skills use Watson natural language processing and machine learning technologies to understand user requests and respond appropriately.

Add dialog skill

### Search BETA



#### Extend your conversation flow with a search skill

Once you've created a dialog skill, you can add a search skill. Search skills find relevant information from external data sources and provide responses to user queries that the dialog is not designed to handle.

Add search skill

## Add Dialog Skill

Add an existing skill, or create a new dialog skill to add to your assistant.

Add existing skill

Create skill

Use sample skill

Import skill

Select the JSON file for the dialog skill with the data you want to import and choose the artifacts to import to the new skill.

Choose JSON File

skill-simple-retail-store.json



☒ Everything (Intents, Entities, and Dialog)

☐ Intents and Entities

Import

- Now you have Watson-online-store as your dialog skill. Now add a search skill. a Search skill is where you add your document collection in Watson Discovery Service. Create a new search skill, then select your document collection in Watson Discovery. Select your "small-retail-bot" and then click configure

# Skills

A dialog skill provides specific responses you've created. You can use a search skill to provide answers from linked documents or web pages. Choose one or both skills for your assistant. [Learn more](#)

## Dialog

watson-online-store

LANGUAGE:

English (US)

TRAINED DATA:

1 Intents | 1 Entities | 10 Dialog Nodes

VERSION:

Development

CREATED:

Jun 26, 2019 2:50 PM AEST

UPDATED:

Jun 26, 2019 2:50 PM AEST

LINKED ASSISTANTS (1): new-retail bot

## Search BETA

Extend your conversation flow with a search skill

Once you've created a dialog skill, you can add a search skill. Search skills find relevant information from external data sources and provide responses to user queries that the dialog is not designed to handle.

Add search skill



# Add Search Skill <sup>BETA</sup>

Add an existing skill, or create a new dialog skill to add to your assistant.

Add existing skill

Create skill

## Name

Name your skill, for example **Account application** or **Personal banking**.

small-retail-data

## Description (optional)

Add a description for this skill

Continue

## Skills / small-retail-data

IBM Watson Discovery instances house collections of data your assistant can leverage to answer end user queries. [Learn more](#)

Choose a Discovery instance to connect to

Watson Discovery Lite - 1561453563214

Choose which collection you want to use

☐ small-retail-data

[Open Watson Discovery](#)

☒ small-retail-bot

[Open Watson Discovery](#)

Collection limit reached. [Learn more](#)

Configure

15. Customise how Watson Discovery can give the response to Watson Assistant. You can leave it blank or fill it like in this picture below. Select Title in the Title, Text in

Body, and Product Page in URL. click create in the bottom right corner.

#### Configure Search Response

Search skill results will be surfaced to end users as a card. Map your data schema from Discovery to the title, body, and URL fields below to define what results will be surfaced to end users in the card results.

**Title (optional)**

title Example: Crew Sweatshirt by New Era X

**Body (optional)**

text Example: Great for wearing over a button-down o... X

**URL (optional)**

product\_page Example: https://logostore-globalid.us/ProductID... X

Title — **Crew Sweatshirt by New Era**

Body — Great for wearing over a button-down or on its own. Details: -Sueded, 9 oz., 52% cotton/48% polyester French terry. -Crewneck with rib- ✓

URL — <https://logostore-globalid.us/ProductDetail...>

Define the text your search skill will display to the end user

**Message** No results found Connectivity issue

I searched my knowledge base and found this information which might be useful:

Cancel

Create

16. Now, your assistant will have a dialog skill and a search skill

< Assistants

new-retail bot

## Skills

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### Dialog

watson-online-store

LANGUAGE:	TRAINED DATA:	VERSION:	CREATED:	UPDATED:
English (US)	1 Intents   1 Entities   10 Dialog Nodes	Development	Jun 26, 2019 2:50 PM AEST	Jun 26, 2019 2:50 PM AEST

LINKED ASSISTANTS (1): new-retail bot

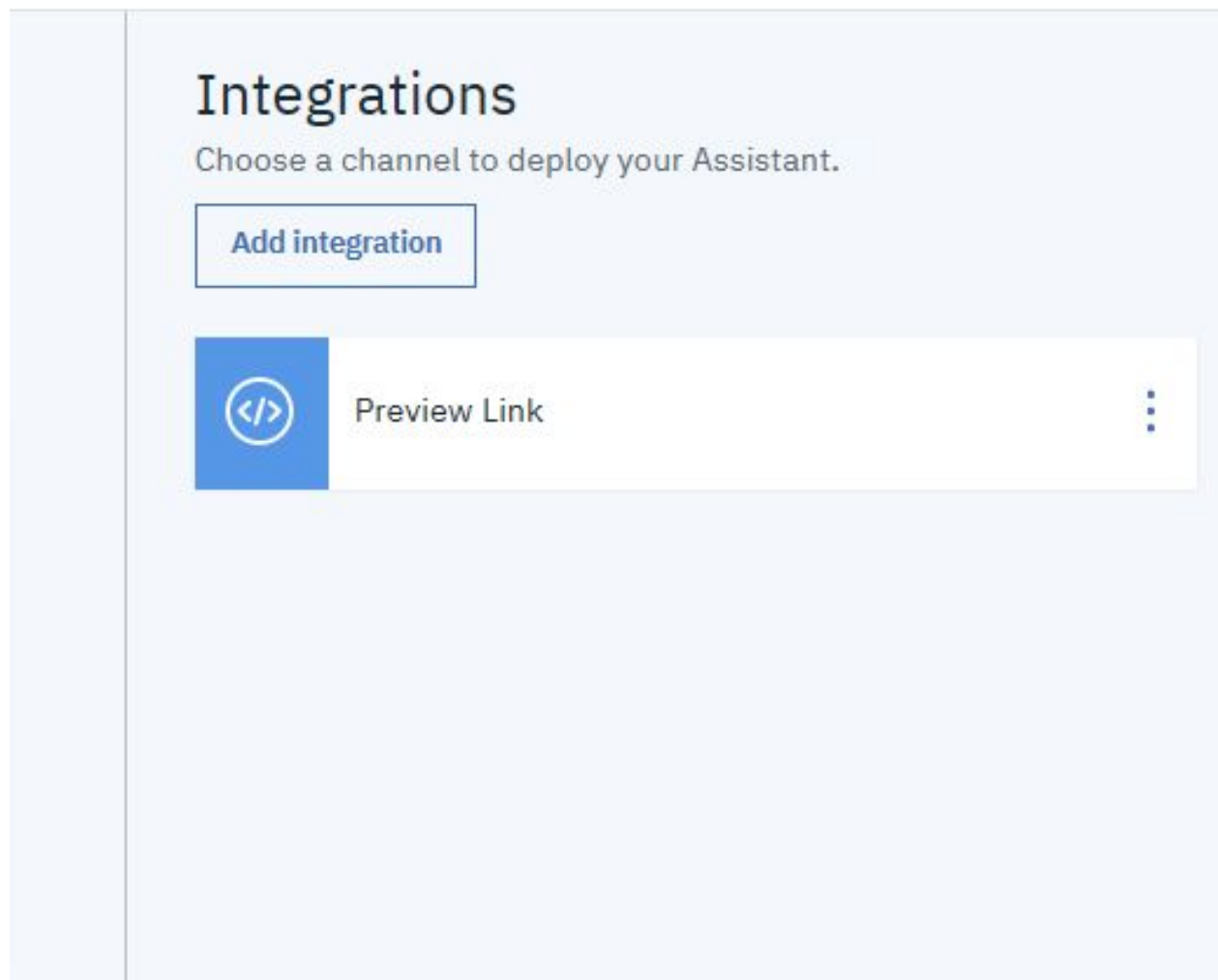
### Search BETA

small-retail-data

CREATED:  
Jun 26, 2019 3:07 PM AEST

LINKED ASSISTANTS (1): new-retail bot

17. Now let's test it. Select preview link in the right side.



18. Click in the link to test your chatbot.

## Preview Link Integration

**Name**

Preview Link


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**Description**

A public link you can share to test your assistant outside of the tooling.

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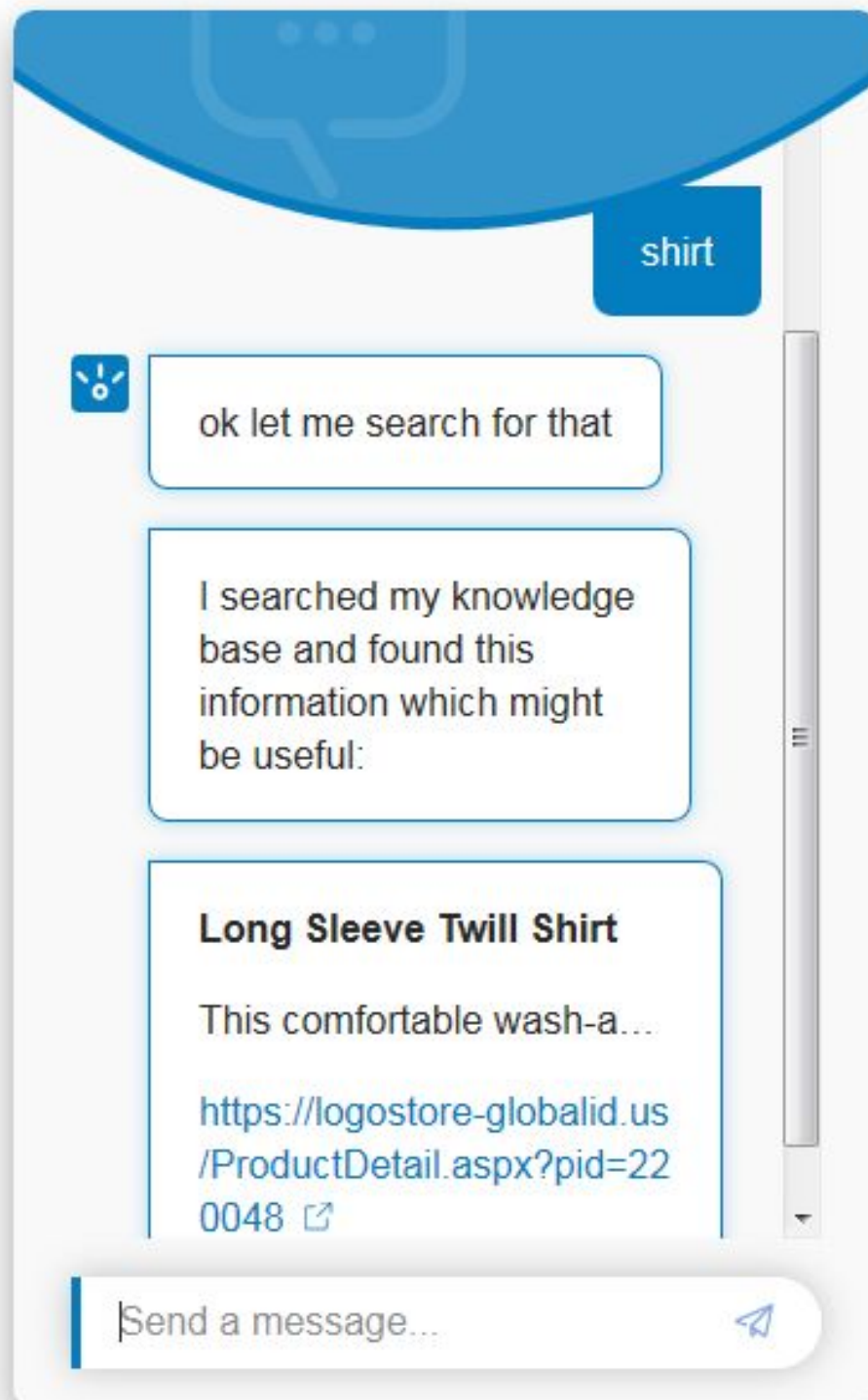
### Try it out and share the link

Use of the assistant embedded in this web page incurs billing charges. 

<https://assistant-chat-au-syd.watsonplatform.net/web/public/738e50a6-4e08-4c53-8dc9-07618896be27> 

**Save Changes**

19. If you type “shirt” your chatbot will show you the product from documents that we upload.



20. Final comment: This chatbot is still not perfect because the feature “Search skill” in beta. We also cannot set up an advanced query in the Watson Assistant. We need to do coding to make an advanced query.