

# Steps

Complete the steps below.

## Before you begin

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- Create an IBM Cloud account – [Sign up](#) for IBM Cloud, or use an existing account. Your account must have available space for at least one app and two Watson services.
- Make sure that you have the following prerequisites installed:
  - The [Node.js](#) runtime, including the [NPM](#) package manager.
  - The [Cloud Foundry](#) CLI.

## Setting up Assistant service

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The Watson Assistant service is used to provide underline infrastructure for the virtual agent in this code pattern.

### Creating an Assistant service

Watson Assistant service is to be setup to simulate help desk level 1 activities. For topics that the virtual agent has been trained, it can help end users interactively. For subjects that the virtual agent does not understand, it searches the knowledge base through Discovery service, collects information from end user and creates a new ticket in back-office ticketing system, for example Maximo/ICD, if necessary.

Slots are configured in the Assistant service to collect additional information from end users.

1. At the command line, go to the local project directory (`vaticketbot`).
  2. Connect to IBM Cloud with the Cloud Foundry command-line tool. For more information, see the [IBM Cloud documentation](#).
  3. `lcf login`
  4. Create an instance of the Assistant service in IBM Cloud. For example:
- ```
5. lcf create-service conversation free my-conversation-service
```

### Importing the Assistant workspace

1. In your browser, navigate to the [IBM Cloud console](#).
2. From the **All Items** tab, click the newly created Assistant service in the `Cloud Foundry Services` list.
3. On the next page, click `Launch tool`.
4. In the Watson Assistant page, navigate to `Workspace` tab.
5. Click the `Import workspace` icon on the top of the Assistant workspaces.
6. Specify the location of the workspace JSON file in your local copy of the app project:  
`<project_root>/training/ITSM_workspace.json`
7. Select `Everything (Intents, Entities, and Dialog)` option and then click `Import`.
8. The sample ITSM workspace is created.

# Setting up Discovery service

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The Watson Discovery service is used to provide underline infrastructure in this code pattern when searching in knowledge base.

## Creating a Discovery service

Watson Discovery service is to be setup to search in the knowledge base when the virtual agent is not trained to cover specific topics.

1. At the command line, go to the local project directory (vaticketbot).
2. Connect to IBM Cloud with the Cloud Foundry command-line tool.

3. `cf login`

4. Create an instance of the Discovery service in IBM Cloud. For example:

5. `cf create-service discovery lite my-discovery-service`

6. Check the status of Discovery service instance in IBM Cloud, if necessary

7. `cf services`

## Creating a collection and ingesting documents into Discovery service

1. Download and unzip the `knowledgebase.zip` in this repo to reveal a set of JSON documents
2. Navigate to your Discovery instance in your IBM Cloud dashboard

3. Click `Launch tool`

4. Create a new data collection, name it whatever you like, and select the default configuration.

5. After you're done, a new private collection is displayed in the UI
6. Click `Drag and drop your documents here or browse from computer` section

7. Select three JSON files from local file system where you downloaded and unzipped `knowledgebase.zip` file. This may take a few seconds, you will see a notification when the process is finished