



## Part 8 - Create conversation components (Intents, Entities and Dialog)

With the IBM Watson™ Conversation service, you can build a solution that understands natural-language input and uses machine learning to respond to customers in a way that simulates a conversation between humans.

In this lab we will learn how to create a Watson Discovery service, and upload a document to the service:


1. Go to conversation service on IBM Cloud (<https://bluemix.net>) and click on it


Services (4) 17/320 Used			
20	Items per page	1-4 of 4 items	1 of 1 pages
NAME	SERVICE OFFERING	PLAN	ACTIONS
Cloudant NoSQL DB-ryc-pa	Cloudant NoSQL DB	Lite	
Conversation-ryc-pa	Conversation	Lite	

2. Click on **Launch tool** to open the conversation workspaces page

**Manage**  
Service credentials  
Plan  
Connections

Watson / Conversation-ryc-pa

 Conversation-ryc-pa



## Conversation

Add a natural language interface to your application to automate interactions with your end users. Common applications include virtual agents and chat bots that can integrate and communicate on any channel or device.

Launch tool

Developer resources:


- Documentation
- Demo

3. Click on your chatbot workspace

Watson Conversation

Workspaces

Create



Rock your Bot

No description added

English (U.S.)

Last modified: 4 days ago

Rock your Bot TEST

No description added

English (U.S.)

Last modified: 4 days ago

Car Dashboard - Sample

Cognitive Car Dashboard sample workspace which allows multi-turn conversations to perform tasks in the car.

English (U.S.)

Edit sample

Create a new workspace

Workspaces enable you to maintain separate intents, user examples, entities, and dialogs for each use or application.

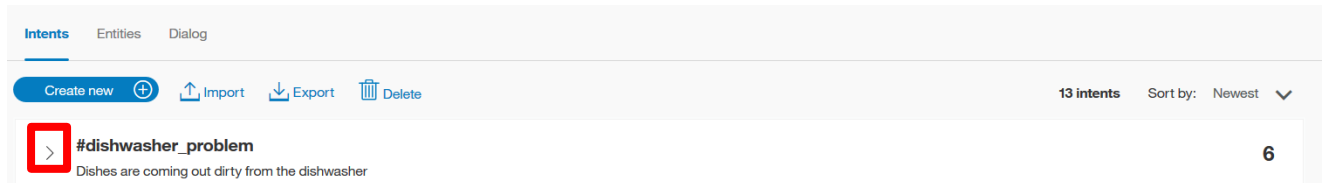
You are using 2 of 5 available workspaces in this instance.

Create

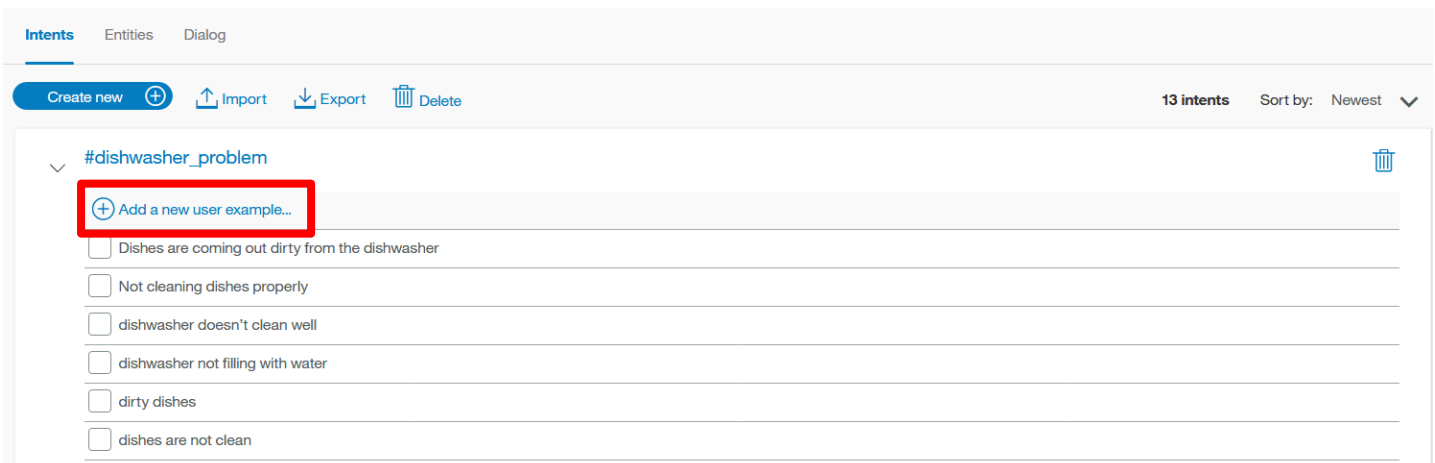
1. **Adding a new user example to an existing intent** – We will add a new machine model *dishwasher\_problem* intent.

Up to this level, if we insert the following input: *"I have a problem with my panel"* - the bot recognize we have a problem, but doesn't recognize with what machine we have a problem with (because the machine type is not specified, and then it asks for the machine type). To associate the problem to the dishwasher, we will add it as a new user example for the *dishwasher\_problem* intent.


2. Click on the arrow next to the intent *#dishwasher\_problem*

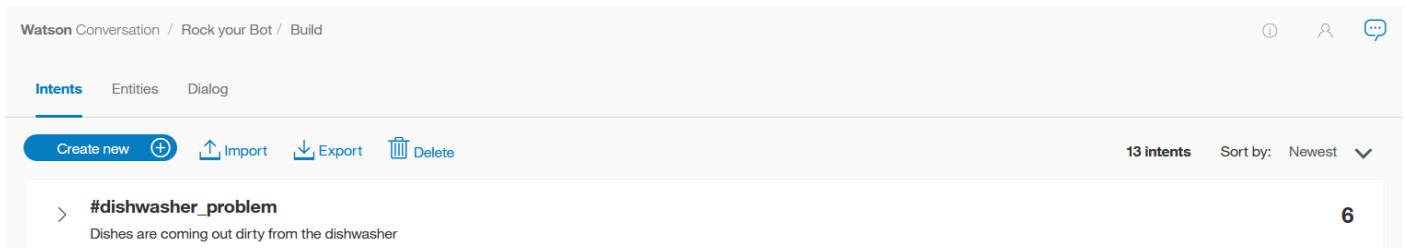


On the following window add the input *"I have a problem with my panel"* in **add a new user example**



And then you can write the new example.

3. When adding the new example, if you open the conversation test window (clicking on the icon  )





Watson will **learn** the new user example, so we can use it on our conversation flow:

The screenshot shows the IBM Watson Assistant interface. The 'Build' tab on the left displays a list of 13 intents, sorted by 'Newest'. The first intent is 'I have a problem with my panel successfully added to the intent'. The 'Try it out' tab on the right shows the bot is training and provides a text input field for testing the bot.

Intent	Count
I have a problem with my panel successfully added to the intent	7
I have a problem with my panel	4
I have a problem with my panel	9
I have a problem with my panel	12
I have a problem with my panel	6
I have a problem with my panel	15
I have a problem with my panel	13

4. The result is:

The screenshot shows the 'Try it out' tab with the input 'I have a problem with my panel' and the bot's response 'What is your dishwasher model?'. The input is also shown as a hashtag '#dishwasher\_problem' in a dropdown menu.

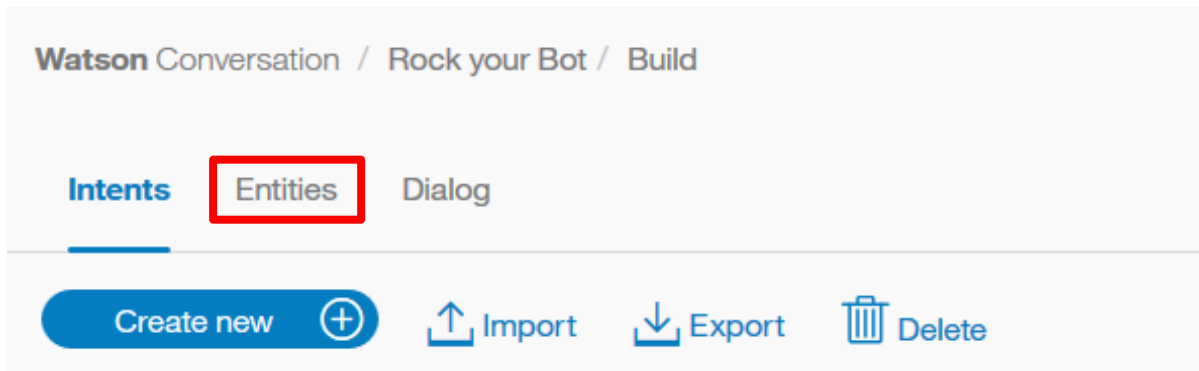
### Pay attention!!

Watson understands that the new input ***I have a problem with my panel*** is a problem related to dishwasher and automatically asks for your dishwasher model

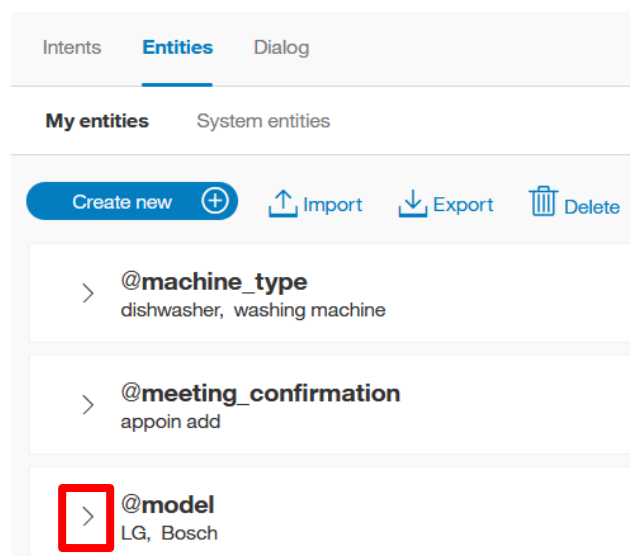


5. **Adding a new value to an existing entity** - We will add a new machine model *model* entity. Up to this level, if we insert the input "Samsung" to the question "What is your machine model" - the bot doesn't recognize we have a problem with this model. To associate the new model to our supporting models list, we will add it as a new value to the *model* entity.

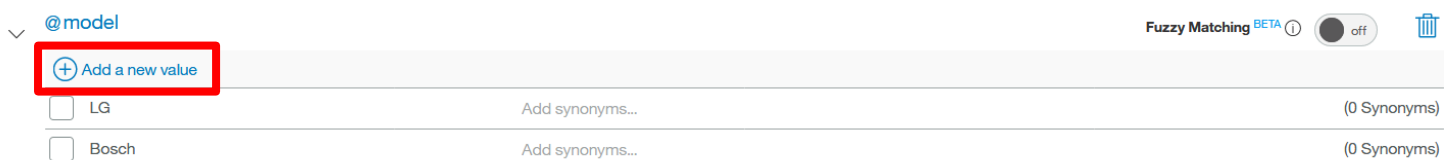
6. Click on **entities** next to intents



7. Click on the arrow next to the entity *@model*



8. On the following window add the value "Samsung" in add a new value



You can add synonyms to each entity you add, so the conversation service will recognize the synonyms as well as the value you insert.



Watson will **learn** the new user example, so we can use it on our conversation flow:

The screenshot shows the Watson Assistant 'Build' interface. At the top, a notification states: 'I have a problem with my panel successfully added to the intent'. Below this, there are 'Export' and 'Delete' buttons. The main area displays a list of 13 intents, sorted by 'Newest'. The list includes the following values in the second column: 7, 4, 9, 12, 6, 15, and 13. To the right, the 'Try it out' panel is visible, showing 'Watson is training' and a message: 'I didn't understand. You can try rephrasing.' At the bottom of the panel, there is a text input field with the placeholder 'Enter something to test your bot' and a note 'Use the up key for most recent'.

9. The result is:

The screenshot shows the 'Try it out' panel of the Watson Assistant interface. At the top, there are 'Clear' and 'Manage Context' buttons, with a blue circle containing the number 6. The conversation flow is as follows: 1. User input: 'I have a problem with my dishwasher'. The system shows a dropdown menu with '#problem' selected and '@machine\_type: dishwasher' below it. 2. System prompt: 'What is your dishwasher model?'. 3. User input: 'Samsung'. The system shows a dropdown menu with 'Irrelevant' selected and '@model: Samsung' below it. 4. System response: 'I understand that you have a Samsung dishwasher. Let me check what I can do'. At the bottom, there is a text input field with the placeholder 'Enter something to test your bot' and a note 'Use the up key for most recent'.

### **Pay attention!!**

Watson understands that the new value ***Samsung*** is a machine model and will search for results with the same machine model