**OpenPages Watson Assistant Accelerator**

Watson Assistant (WA) is a conversation AI platform that helps provide fast, straightforward and accurate answers to questions through an intuitive, out-of-the-box user interface that enables users to build dialogs and train the assistant without any specialized knowledge or coding skills. In the OpenPages 8.2 release, an integration with Watson Assistant was built to enable administrators to create a virtual assistant that assists OpenPages users with providing answers to common questions. By following the steps outlined in this document, you can integrate with a preconfigured Watson Assistant instance in your OpenPages 8.2 environment within a matter of minutes.

The preconfigured WA instance has been set up to respond to three different queries from users. When asked by a user how to create a particular object, WA will respond with a link to the Creation View for the object requested. When asked by a user where he or she can find a particular object, including finding objects filtered by an out-of-the-box public filter, WA will respond with a link to the Grid View with the relevant filter applied. Lastly, an example use case has been included that provides a user with guidance on evaluating risk impact factors and allows the users to select one of four options to obtain more information. If WA does not recognize a request from the user submitting a query, it will provide the user with a link to OpenPages documentation in IBM Knowledge Center. Using these three samples as a starting point, OpenPages administrators have a framework from which to build their own dialogs for use cases most applicable within their organizations.

Configuring IBM Watson Assistant is an iterative process. As you work with it, you can improve and expand the skills. To learn more about how you can utilize Watson Assistant, visit https://cloud.ibm.com/docs/assistant?topic=assistant-getting-started.

**Steps to set up the OpenPages Watson Assistant Accelerator**

1. Set up a Watson Assistant instance on your IBM Cloud account. For more information on setting up a Watson Assistant instance or a IBM Cloud account, see https://cloud.ibm.com/docs/assistant?topic=assistant-getting-started. A user can set up a free Watson Assistant – Lite Plan for the purposes of using the OpenPages Watson Assistant Accelerator.

2. Create a new assistant by clicking on **Create Assistant**.
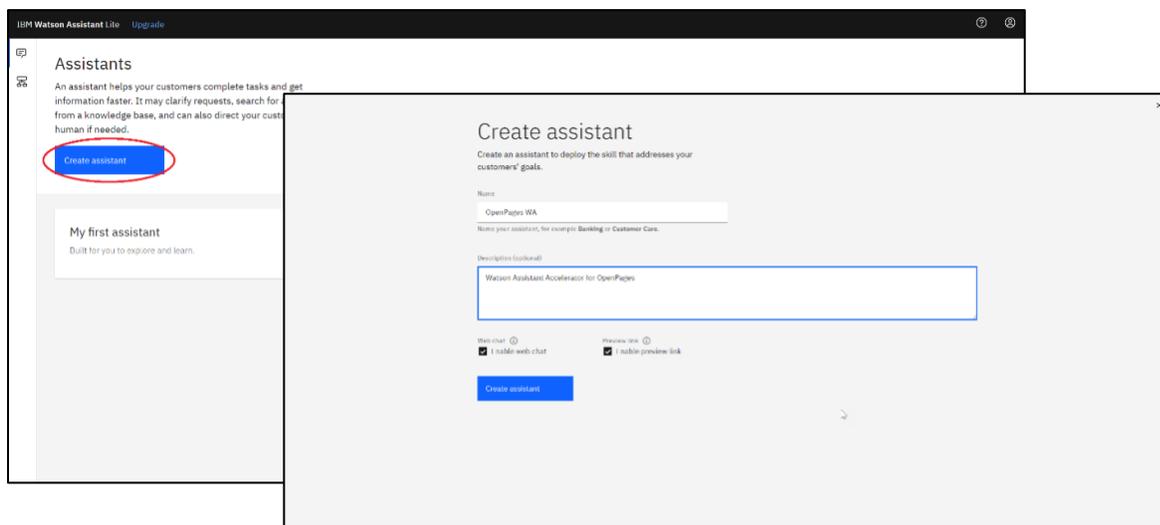
3. Click on **Add dialog skill**.
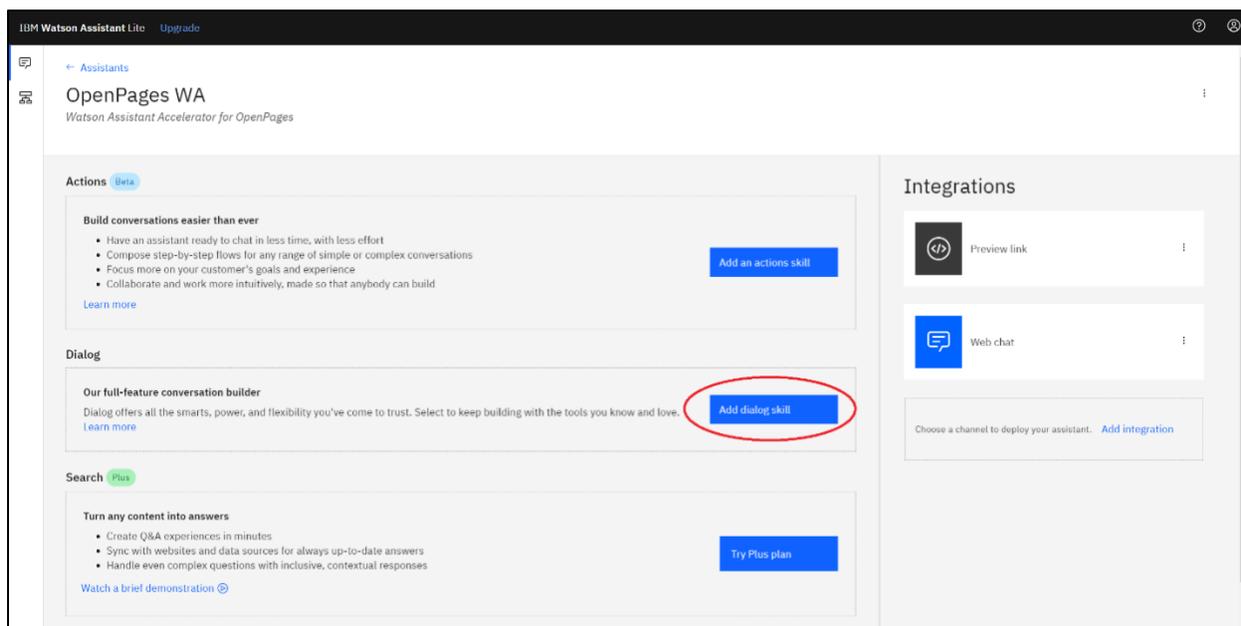
4. Click the **Import skill** Tab and import the JSON file title "skill-WA-Accelerator". Click **Import**.
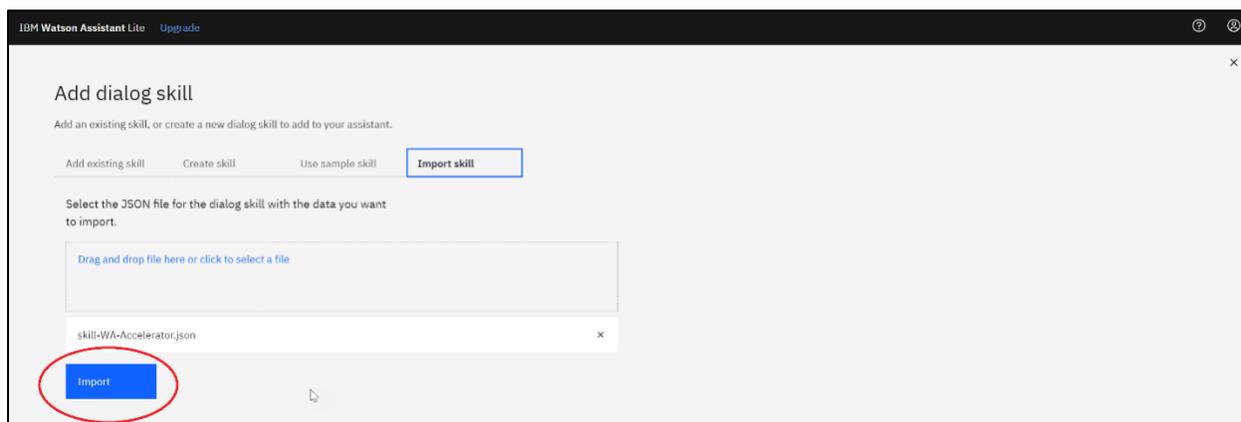

5. The Dialog skill is now linked to the Assistant. Click on the Dialog skill to access the Dialog.
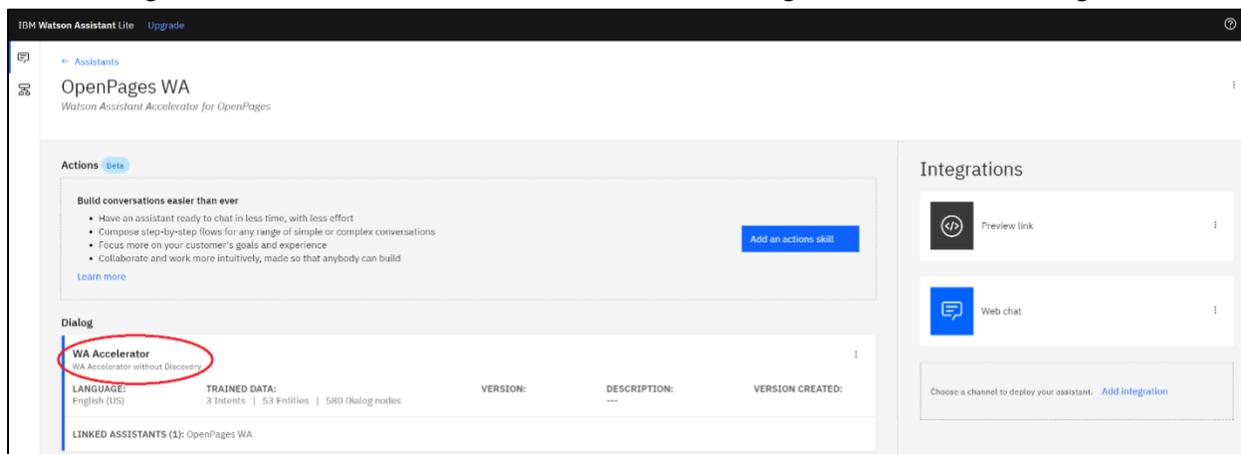
6. Next you need to define your base URL within the dialog. Click on **Dialog.**
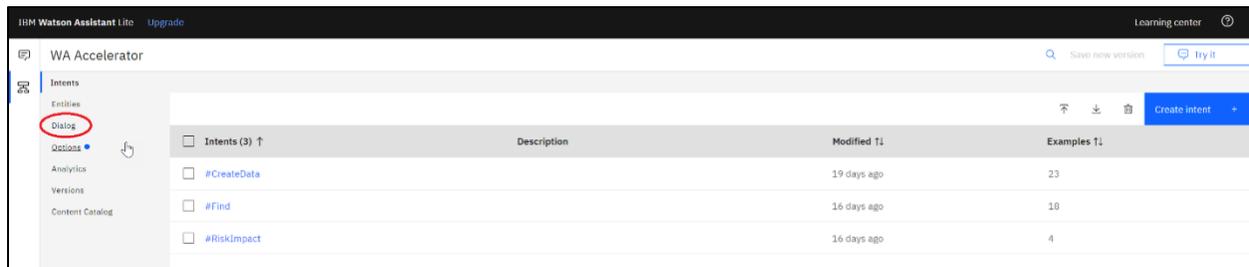
7. Click on the **Welcome** node. Select **Open context editor** from the menu selection.
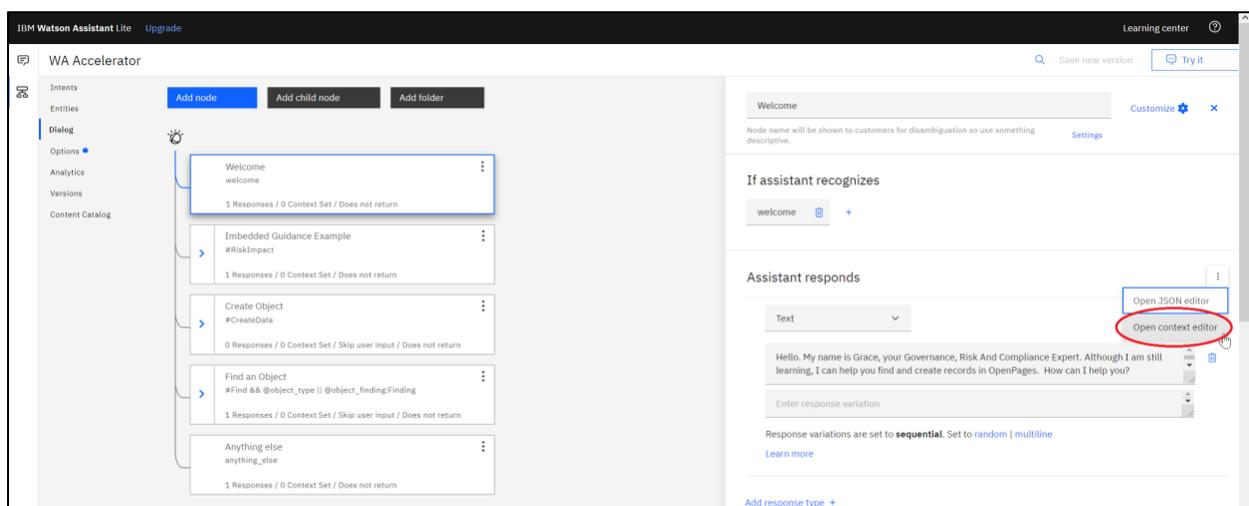
8. Input **base_url** under **Variable** and your URL under **Value**. The example below is input with the OpenPages Beta environment as an example. This will pass your base URL through the dialog to return links within your environment for creating and finding objects.
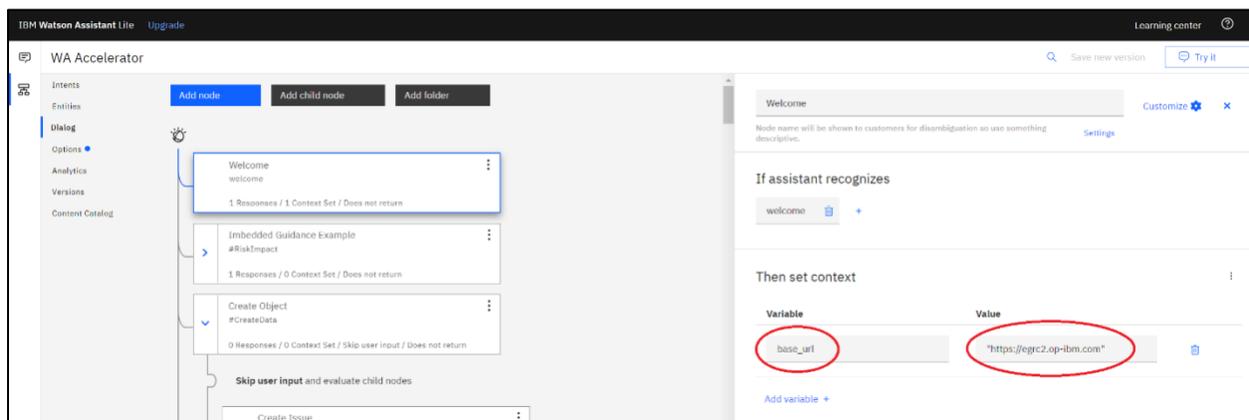
9. Return to the Assistant and click on **Web chat**.
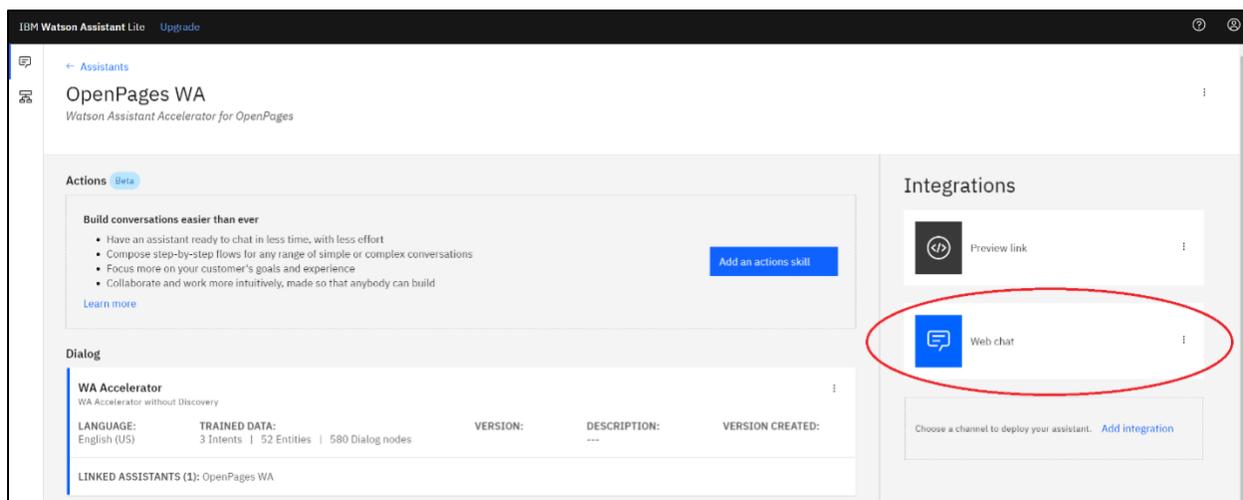

10. Remove Suggestions
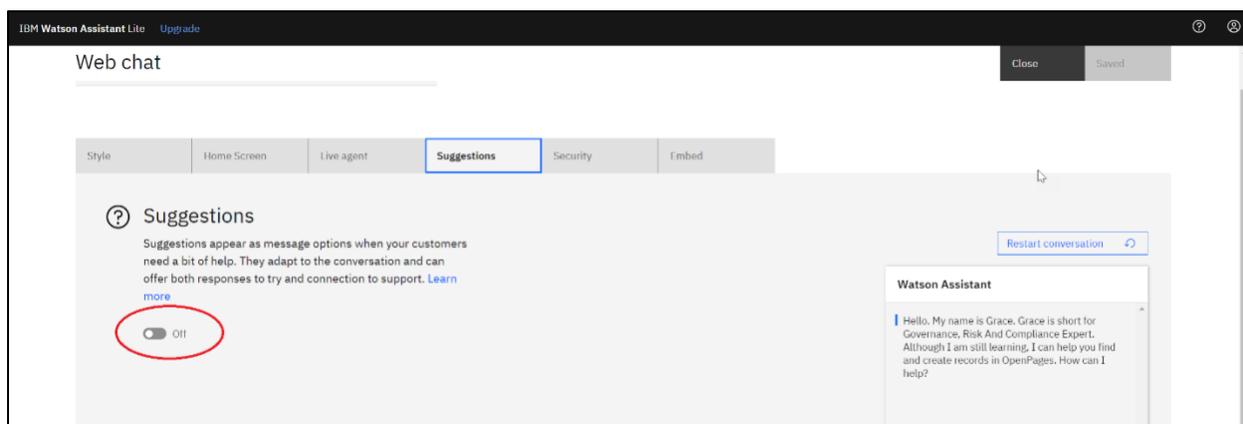
11. Access the Embed Tab
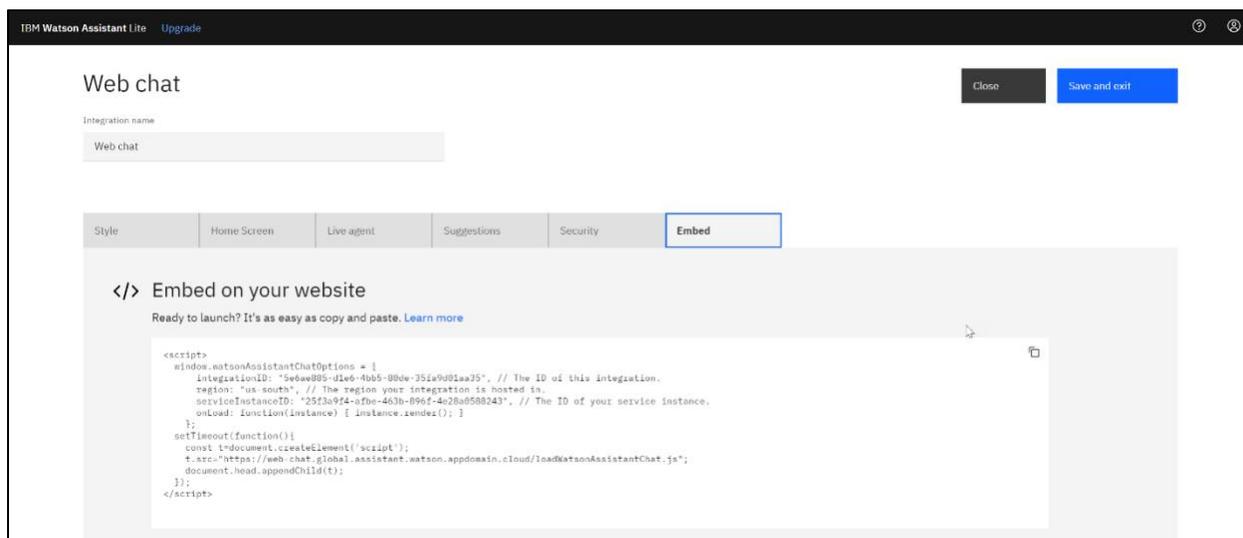
12. Log-in to OpenPages and access the Watson Assistant configuration page. If the Watson Assistant Integration selection is not available on the drop down, your user account will need to be granted permission to your user account's role template. Add the SOX > Administration > User Interfaces > Watson Assistant UI application permission to role templates that are allowed to access IBM Watson Assistant .
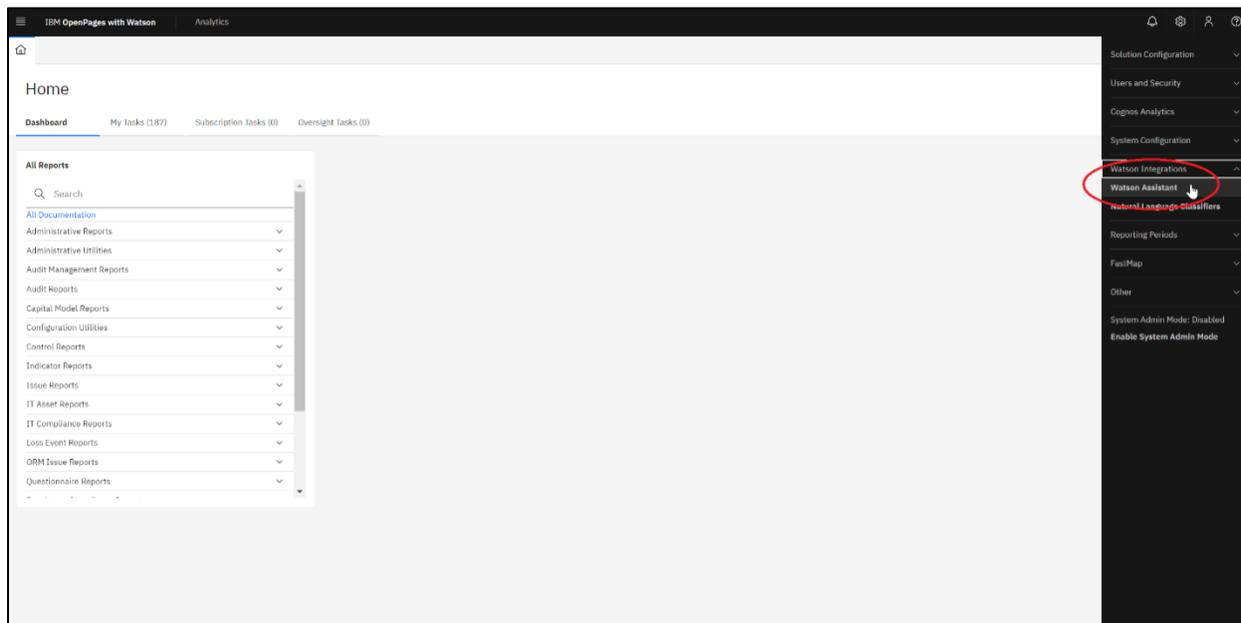

13. Input the Assistant Integration ID, Assistant Region, and Assistant Script URL fields as indicated in the screenshots below. In the 8.2.0.1 release, of OpenPages, the user can copy and paste the entire script into OpenPages. Select the Profiles that will have access to Watson Assistant. Click **Submit** in OpenPages and **Save and exit** in the Watson Assistant instance.
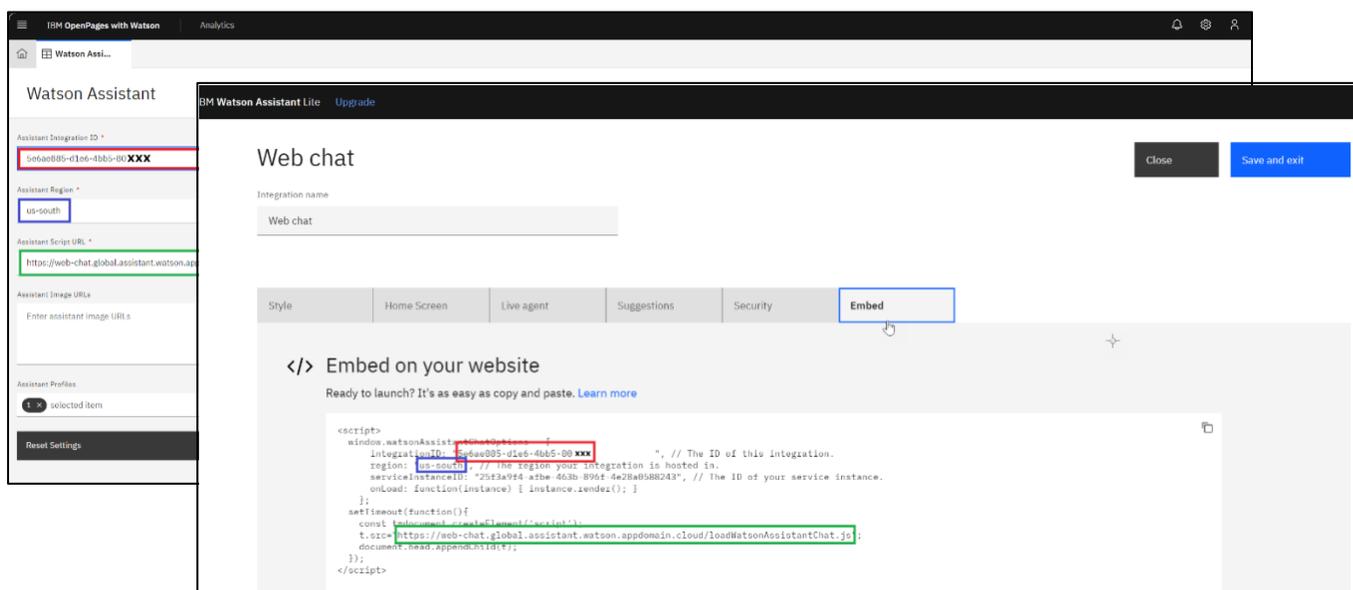
14. Log out of OpenPages. Log back into OpenPages with a user account under a Profile with access to the Watson Assistant. The Watson Assistant chat icon will be present in the lower righthand corner of the screen. Click Start Chat to begin interacting with Watson Assistant.
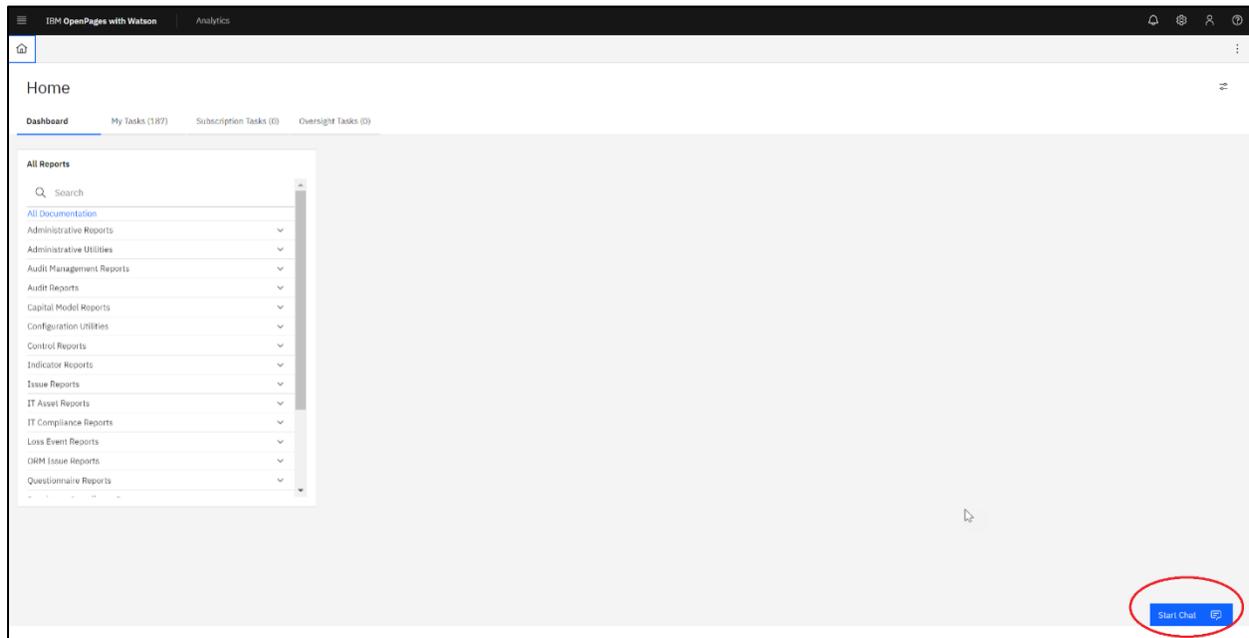
Debugging. If you have followed the instructions above and the instructions above, and the webchat does not appear, replace the value of the src parameter within the Watson Assistant Configuration page with the value {https://web-chat.global.assistant.watson.appdomain.cloud/loadWatsonAssistantChat.js}
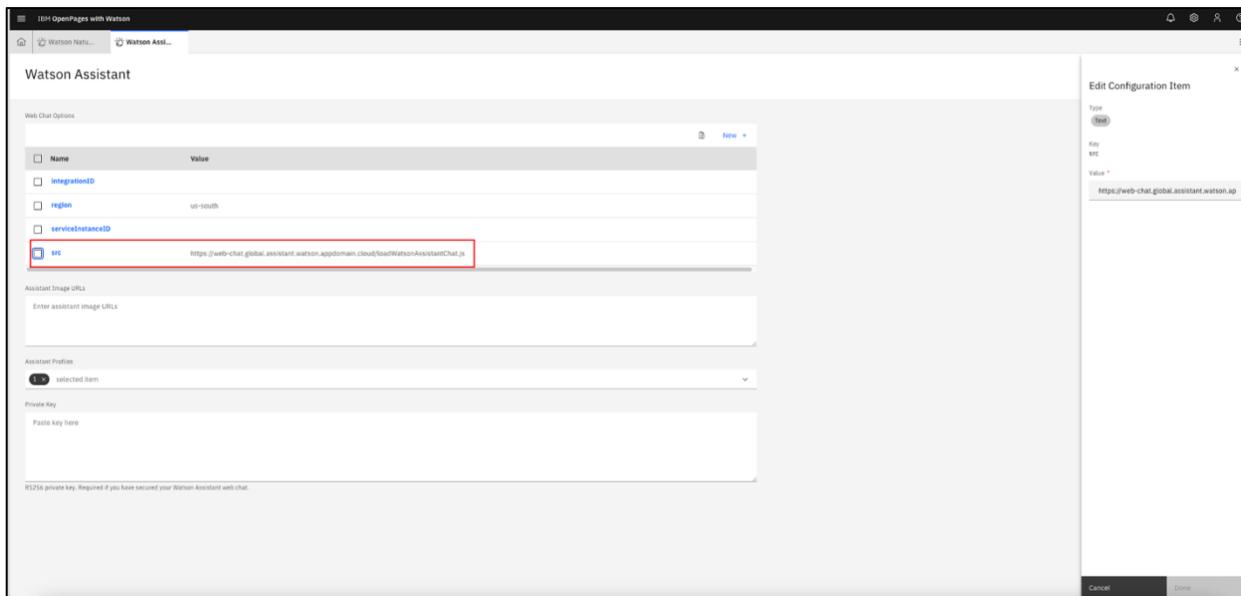
**Explanation of the OpenPages Watson Assistant Accelerator**

Intents

Intents are the purposes or goals expressed in the user's input, such as answering a question. By recognizing the intent expressed by a user's input, Watson Assistant can choose the correct dialog flow for responding to it.

The OpenPages Watson Assistant Accelerator consists of three intents. The #CreateData intent is used to identify when a user wants to create an object. The #Find intent is used to identify when a user is searching for an object. Lastly, the #RiskImpact intent has been provided as an example of how guidance can be imbedded within a Watson Assistant dialog. This intent is used to identify when a user is looking for guidance on the factors for assessing the impact of a risk.
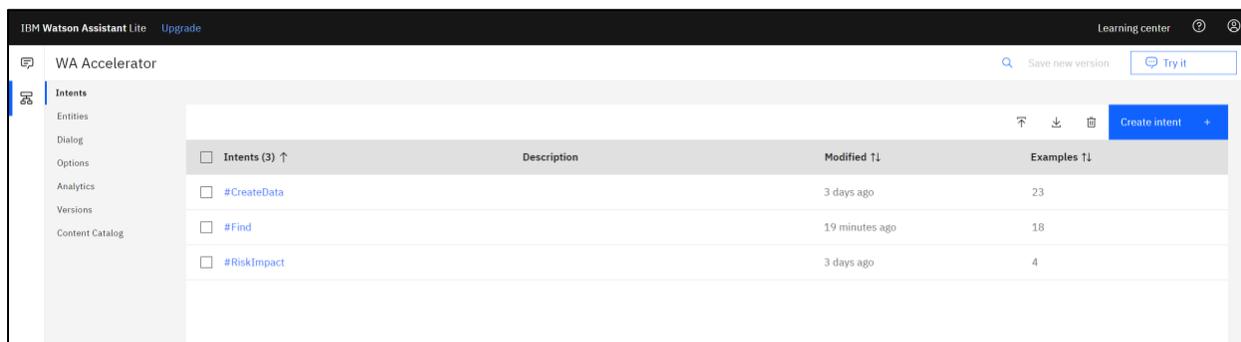
Upon clicking on an Intent, the user can add or remove examples to assist in training Watson Assistant on the intent as seen below.
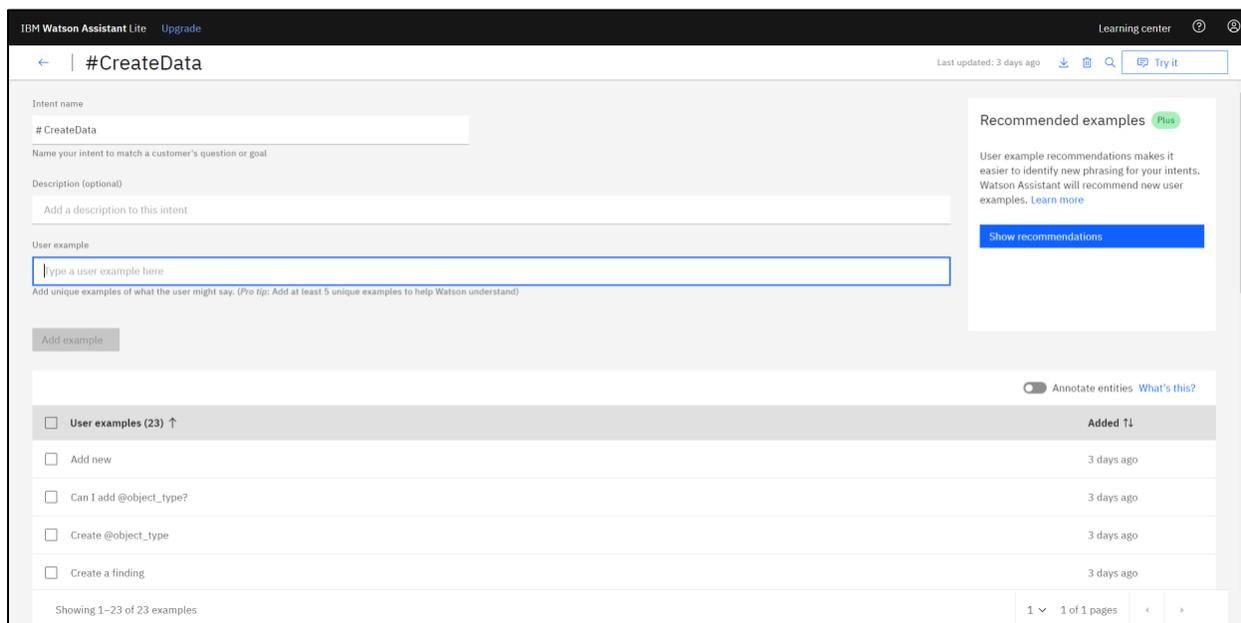
To learn more about creating Intents, visit https://cloud.ibm.com/docs/assistant?topic=assistant-intents.

Entities

Entities represent information in the user input that is relevant to the user's purpose. The entities provided in the OpenPages Watson Assistant Accelerator include out-of-the-box objects, public filters for each object, and impacts types related to factors for assessing the impact of a risk.
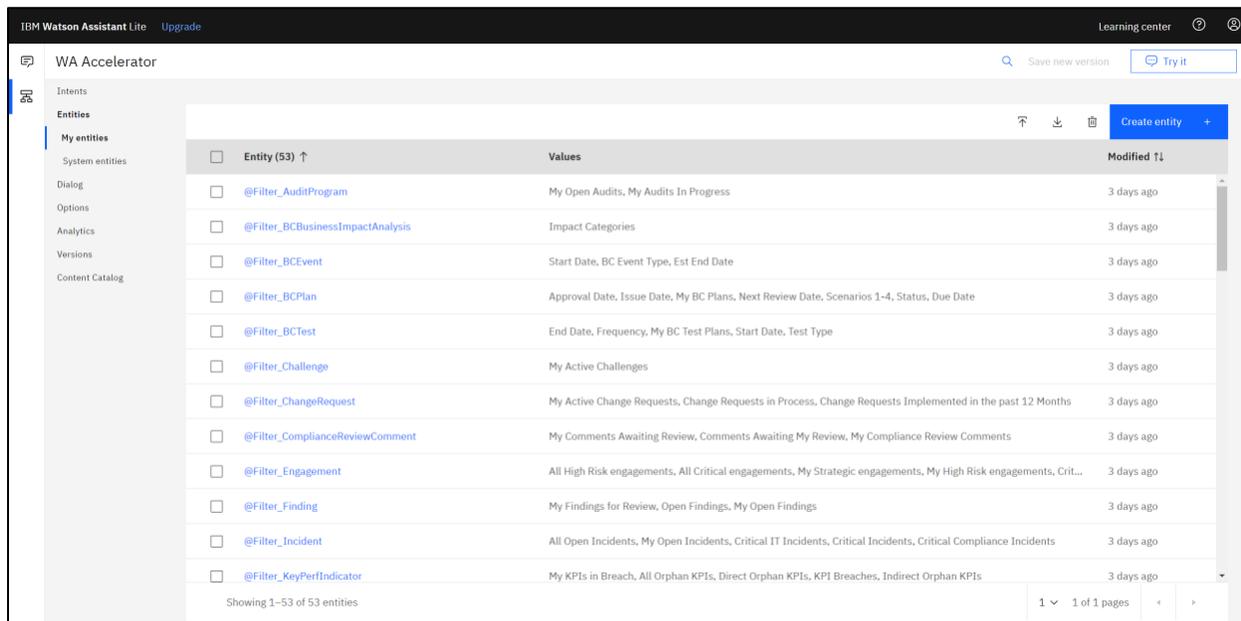
Clicking on an entity enables a user to add values and synonyms for existing values.
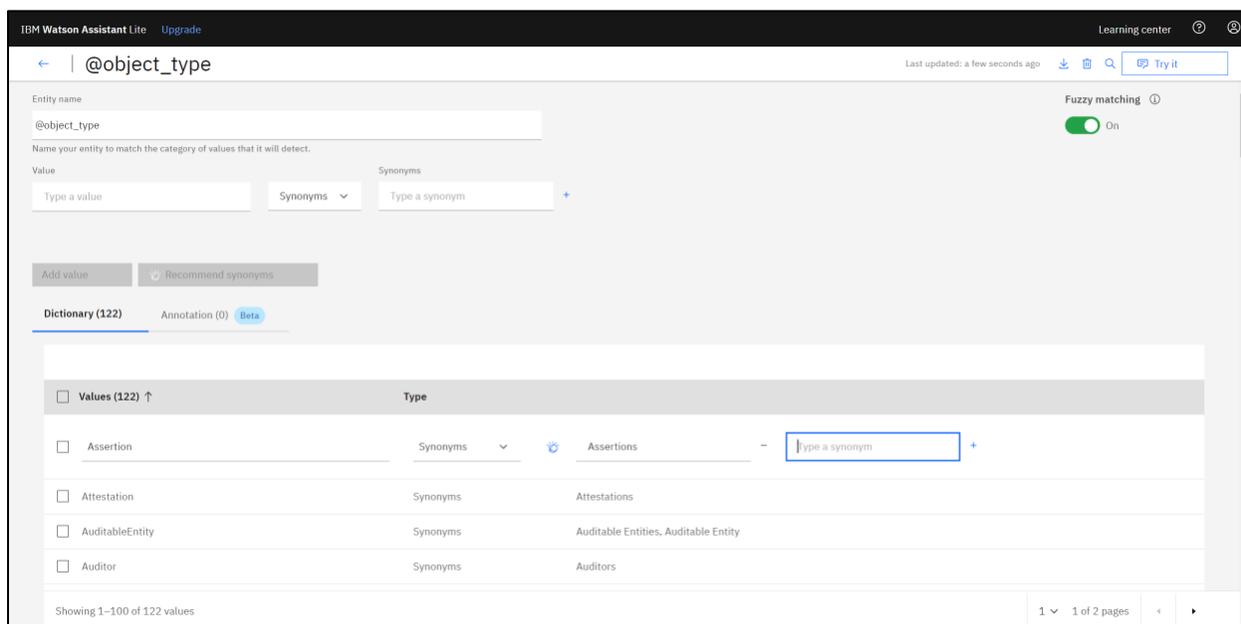
To learn more about Entities, visit https://cloud.ibm.com/docs/assistant?topic=assistant-entities.

Dialogs

The dialog uses the intents that are identified in the user's input, plus context from the application, to interact with the user and ultimately provide a useful response. The OpenPages Watson Assistant Accelerator provides five nodes within the dialog. The five nodes provide the following: 1) a welcome message, 2) an example of imbedded guidance for explaining factors for assessing risk impact, 3) a link to a Creation View when a user indicates an intent to create a record, 4) a link to the Grid View filtered by a public filter when a user indicates an intent to view a particular record, and 5) a final node to request additional information or link to OpenPages documentation whenever a user's intent is not recognized.
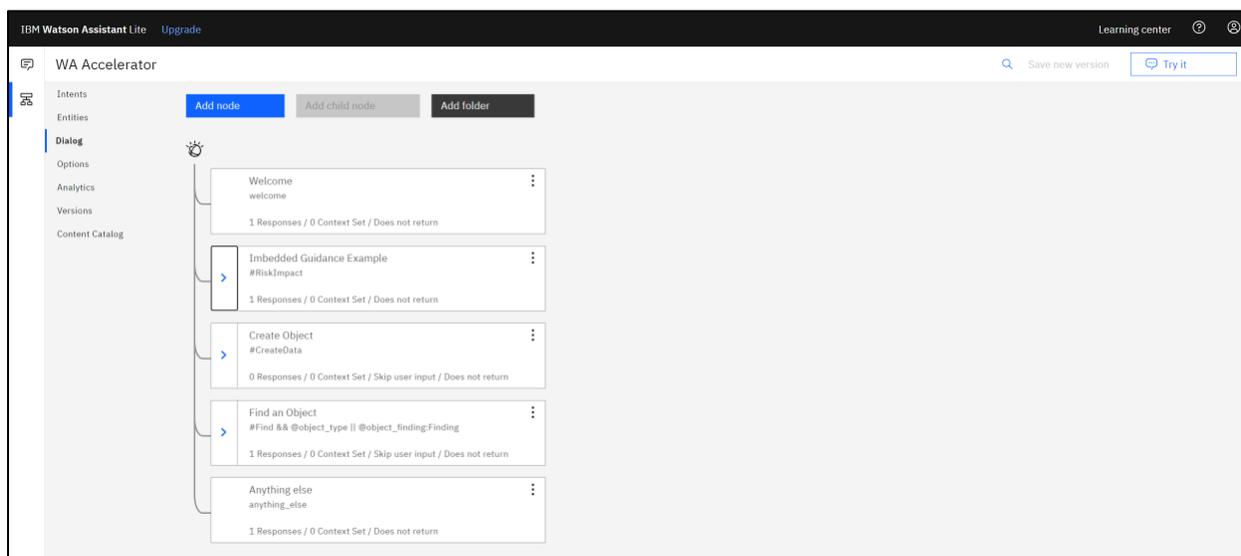
Dialog nodes can be modified by clicking on the nodes.
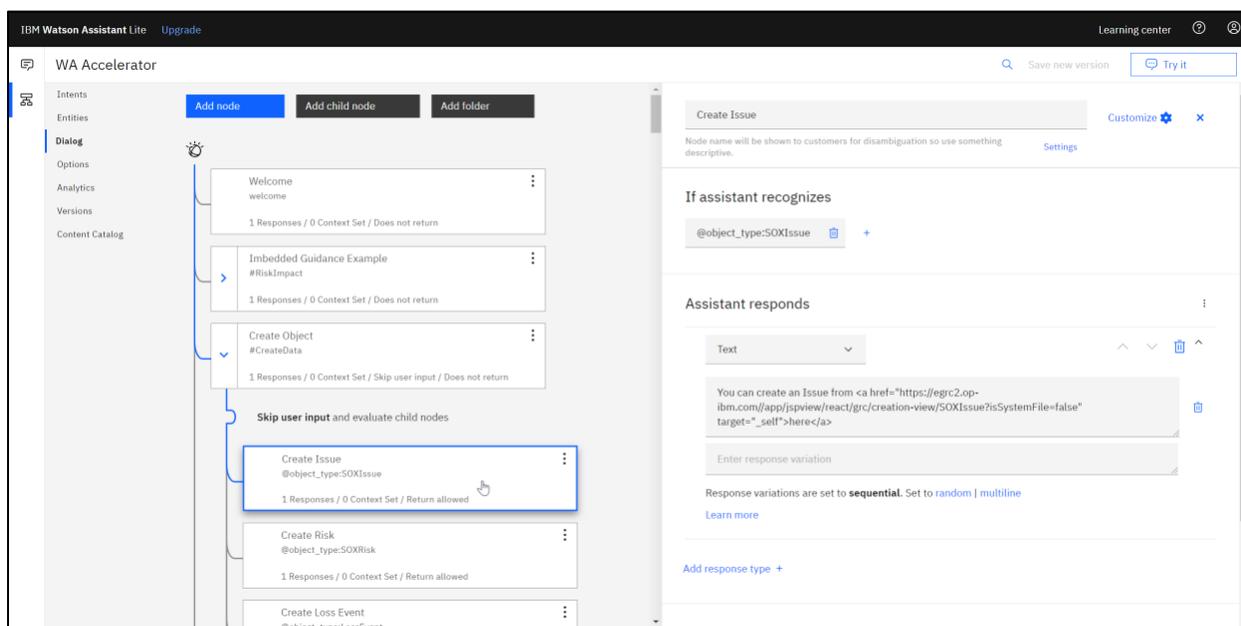
Dialogs can be tested by clicking on "Try it" in the upper right-hand corner of the screen.
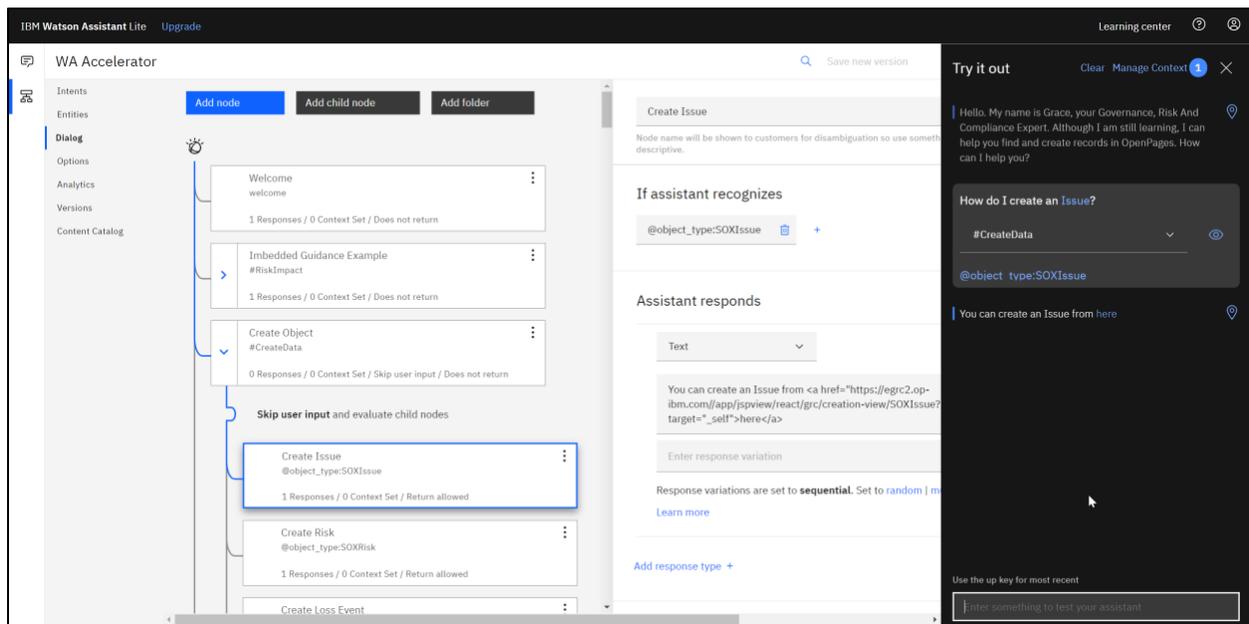
To learn more about Dialogs, visit https://cloud.ibm.com/docs/assistant?topic=assistant-dialog-build.

Videos

Watson Assistant can be configured to respond with instructional videos providing a different source of support for users. They can be added in the [Assistant responds] section. The Watson Assistant Accelerator contains instructional videos on how to copy views, how to use the calculation engine, and more. To enable videos to be displayed on OpenPages, the video source website must be added to the OpenPages Content Security Policy (CSP) settings.
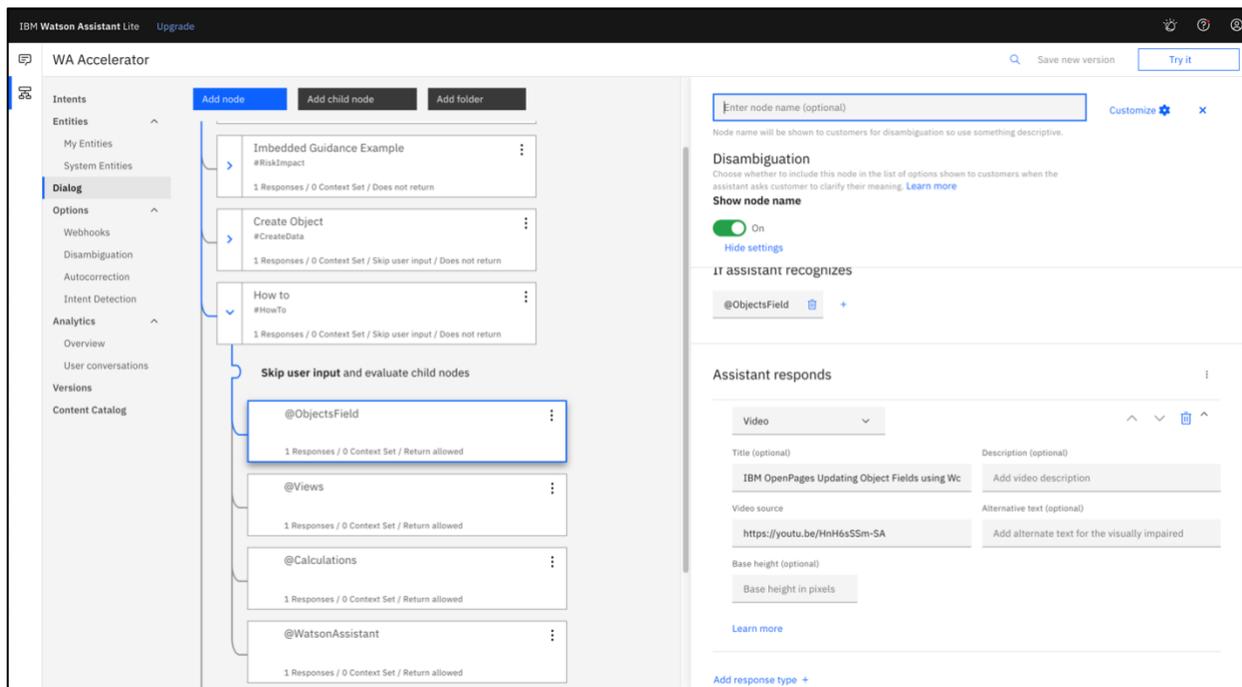
You can navigate to the CSP settings through Settings -> Platform -> Security -> Headers -> Content-Security-Policy. Add the video source URL in the specified format to the setting to enable the videos from the source to be displayed on OpenPages. Example, to enable videos from youtube, add **{https://www.youtube.com *.https://www.youtube.com}** after {default-src 'self'}.

Frequently Asked Questions

1. How can I improve the accuracy of the understanding of user interactions with the OpenPages Watson Assistant Accelerator?

- The OpenPages Watson Assistant Accelerator includes all out-of-the-box objects for all solutions. Remove unused objects not utilized in your environment from the values provided in the @object_type entity within your Watson Assistant instance.

- The OP Watson Assistant Accelerator includes all out-of-the-box public filters. Remove unused filters not utilized in your environment.

- Add synonyms for different phrasing of requests to access public filters in the @Filter entities.

- Add additional examples for different ways of phrasing intents.

2. How do I include an object that has been relabeled in OpenPages?

- All objects are listed by object name within the object_type entity, except for the Finding object. Find the object name in the OpenPages Watson Assistant Accelerator and change the value to your label within your environment and add additional synonyms as needed. Go to the "Find an Object" dialog node for the object that has been changed and modify to match the re-named entity. Go to the "Create Object" dialog node for the object that has been changed and modify to match the re-named entity. After making the changes, test WA by clicking on the Try it Button and verify that that the re-labeled entity is recognized.

3. Can I perform bulk changes within the Watson Assistant instance?

- Yes. Excel import and export functionality is available for Intents and Entities. Bulk changes to the Dialog is possible through an export and import of the JSON file.

4. Why is the Finding object treated differently from all other objects?

- The Finding object's name is closely related to terms, such as "find," used to search for an object as part of the #Find intent. By separating the object and restricting the fuzzy matching capabilities of Watson for this entity, more consistent search results are possible.


5. Can I use Watson Assistant to query internal policies and documents?

- Yes. Watson Assistant can integrate with Watson Discovery to query internal or external documents and webpages. After making a few small changes to the OpenPages Watson Assistant Accelerator dialog, Watson Assistant can integrate with the Watson Discovery service to enable the retrieval of answers derived from identified documents. A separate publication with step-by-step instructions will be forthcoming on integrating with Watson Discovery. For more information on the Watson Discovery

integration, see https://cloud.ibm.com/docs/assistant?topic=assistant-skill-search-add#skill-search-add-connect-discovery.

6. Why are the links provided in Watson Assistant broken or display a Grid View unrelated to the requested information?

- The links provided in Watson Assistant reference URLs associated to the OOB public filters available in 8.2. If the public filters have been deleted or modified from the out-of-the-box public filters, then the QueryId provided in the URL will need to be updated within the dialog. The QueryId can be modified in the JSON file or through the Watson Assistant UI.
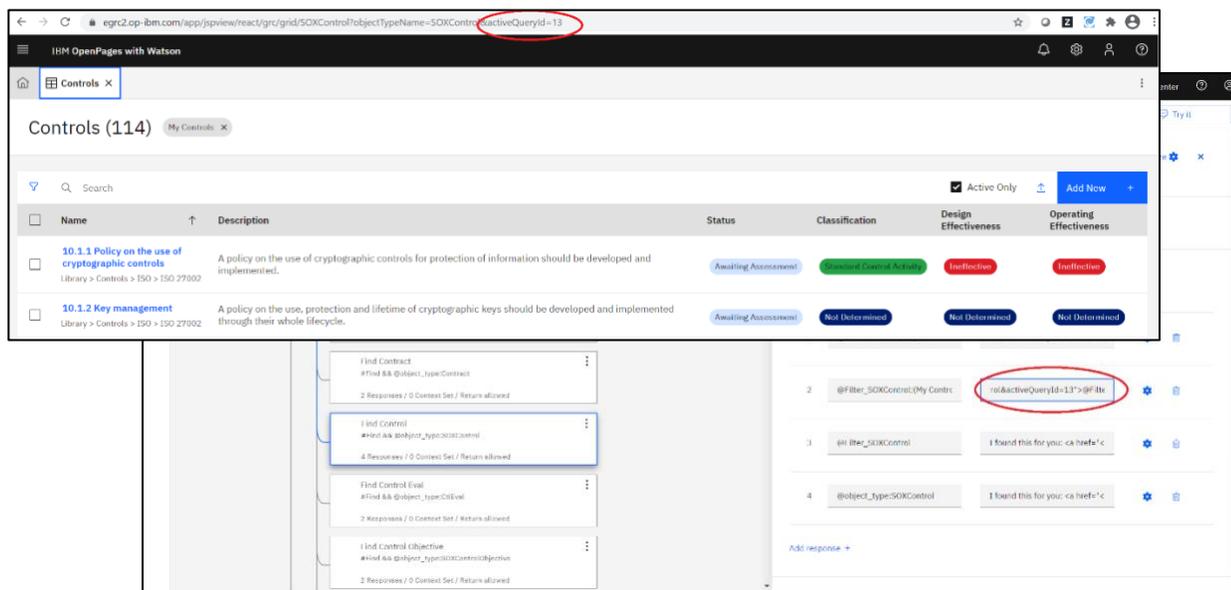
***Note**: this can be used with IBM OpenPages with Watson version 8.2 or higher.*