**Learning Doc – Amazon Kendra**

This document shows how to create a data source and add documents, create an index, get search results, and get code samples to help you integrate Kendra into your application.

* **Setting up Amazon Kendra**

Before using Amazon Kendra, you must have an Amazon Web Services (AWS) account. After you have an AWS account, you can access Amazon Kendra through the Amazon Kendra console, the AWS Command Line Interface (AWS CLI), or the AWS SDKs.

* **Sign up for AWS**

When you sign up for Amazon Web Services (AWS), your account is automatically signed up for all services in AWS, including Amazon Kendra. You are charged only for the services that you use. If you have an AWS account already, skip to the next task. If you don't have an AWS account, use the following procedure to create one.

1. Open <https://aws.amazon.com>, and then choose **Create an AWS Account**.
2. Follow the on-screen instructions to complete the account creation. Note your 12-digit AWS account number. Part of the sign-up procedure involves receiving a phone call and entering a PIN using the phone keypad.
3. Create an AWS Identity and Access Management (IAM) admin user.

**Important point**

An endpoint is a URL that is the entry point for a web service and each endpoint is associated with a specific AWS region so if you use a combination of the Amazon Kendra console, the AWS CLI, and the Amazon Kendra SDKs, pay attention to their default regions as all Amazon Kendra components of a given campaign (index, query, etc.) must be created in the same region.

* **Creating and testing an Amazon Kendra index**

The following procedure show how to create and test an Amazon Kendra index by using the AWS console. In the procedures you create an index and a data source for an index. Finally, you test your index by making a search request.

Step 1: To create an index

1. Choose Create index to start creating a new index.
2. In Specify index details, give your index a name and a description.
3. In IAM role choose Create a new role and then give the role a name. The IAM role will have the prefix "AmazonKendra-".
4. Leave all of the other fields at their defaults. Choose Next.
5. In the Configure user access control page, choose Next.
6. On Provisioning details page, choose Enterprise edition.
7. Choose Create to create your index.
8. Wait for your index to be created. Kendra provisions the hardware for your index. This operation can take some time.

Step 2: To add a data source to an index

Create a data source that connects the Amazon Kendra index to your documents. You can choose from one of the following to create a data source.

• Confluence data source   
• Microsoft OneDrive for Business data source   
• Amazon S3 data source   
• Salesforce data source   
• ServiceNow data source   
• Microsoft SharePoint data source

Step 3: To search an index

1. In the navigation pane, choose Search console2. Enter a search term that's appropriate for your index. The top results and top document results are shown.

* **Using Amazon S3 as data source**

We can use the Amazon Kendra console to get started using an Amazon S3 bucket as a data store. When we use the console, we specify all of the connection information you need to index the contents of the bucket. Use the following procedure to create a basic S3 bucket data source using the default configuration.

1. Sign into the AWS Management Console and open the Amazon Kendra console at <https://console.aws.amazon.com/kendra/home>.
2. From the list of indexes, choose the index that you want to add the data source to.
3. Choose Add data sources.
4. From the list of data source connectors, choose Amazon S3.
5. On the Define attributes page, give your data source a name and optionally a description. Leave the Tags field blank. Choose Next to continue.
6. In the Enter the data source location field, enter the name of the S3 bucket that contains your documents. You can enter the name directly, or you can browse for the name by choosing Browse. The bucket must be in the same Region as the index.
7. In IAM role choose Create a new role and then type a role name.
8. In the Set sync run schedule section, choose Run on demand.
9. Choose Next to continue.
10. On the Review and create page review the details of your S3 data source. If you want to make changes, choose the Edit button next to the item that you want to change. When you are satisfied with your choices, choose Create to create your S3 data source.

* **Syncing data source**

After you choose Create, Amazon Kendra starts creating the data source. It can take several minutes for the data source to be created. When it is finished, the status of the data source changes from Creating to Active.

After creating the data source, you need to sync the Amazon Kendra index with the data source. Choose Sync now to start the sync process. It can take several minutes to several hours to synchronize the data source, depending on the number and size of the documents.

* **Mapping data source fields, if data store not S3**

When the source of your data is a data source other than Amazon Simple Storage Service (Amazon S3), you can map data source fields to fields in your index. For example, if you have a field that contains department information for a document, you can map it to an index field called "Department" so that you can use the field in queries.

Mapping your data source fields to an index field is a three-step process:

1. Create an index.
2. Update the index to add custom fields.
3. Create a data source that maps data source fields to the index fields.  
     
   To update the index to add custom fields, use the console or the UpdateIndex operation. You can add a total of 500 custom fields to your index. When you are using the console, you can choose to map a data source field to one of the seven reserved field names, or you can choose to create a new index field that maps to the field. For database data sources, if the name of the database column matches the name of a reserved field, the field and column are automatically mapped.