A test drive of EscrowAl

EscrowAI DRAFT Demonstration Guide

Exported on 11/15/2023

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This information is to help you test drive BeeKeeperAl's EscrowAl multi-party confidential computing collaboration platform.

The goal of the EscrowAl test drive is to see the results of an algorithm run against a sample target dataset and to illustrate how EscrowAl helps you collaborate to achieve the results.

These instructions are for the two main actors involved in an EscrowAl project:

- An algorithm owner
- · A data steward

There are two major parts to the test drive.

1. **Basic set-up**: download from here the BeeKeeperAl-supplied project artifacts that you will use as part of your test drive.

In EscrowAI, project documentation, such as programmed ML algorithm models, datasets, and other collaborative documents, are called *project artifacts*.

For your test drive, BeeKeeperAI has provided all artifacts related to a fictitious study of COVID 19.

After you download your artifacts, in **Take the test drive** you will upload them to your EscrowAI test drive project.

- 2. **Take the test drive**: collaborate with each other in EscrowAI by following procedures in our user manual:
 - Upload your downloaded sample project artifacts to your EscrowAl project to furnish complete documentation for your project.
 - Configure an algorithm run, request that it be run, run the algorithm against its sample dataset target, and review the results of the run.

1 Follow collaboration steps for test drive

The complete sequence of steps for the test drive includes steps to upload the sample project artifacts and steps that do not involve project artifacts.

1.1 Step sequences for algorithm owner and data steward

All steps need collaboration between you.

The complete test drive steps for both of you are shown in these sequences:

- I am an Algorithm Owner¹
- I am a Data Steward²

Download the samples as part of the steps to upload the project documentation.

In between steps you will need to communicate with each other so your collaborator can move on to the next step.

1.1.1 Project artifacts for algorithm owner steps

Download these files to upload later.

The algorithm owner uploads these project artifacts at the proper step in the complete sequence of the test drive.

¹ https://docs.escrow.beekeeperai.com/v1.5.0/i-am-an-algorithm-owner

² https://docs.escrow.beekeeperai.com/v1.5.0/i-am-a-data-steward

BeeKeeperAl-supplied test drive project artifact	Description	Related step
COVID_X-ray_Luspira_Proj (see page 3)	The algorithm owner's discussion/ description of the ML approach to the target dataset.	Create and upload Data Specification ³
bk-demo-covid.zip	The algorithm owner's ML model.	 Encrypt algorithm files⁴ Upload algorithm⁵
(see	e 3)	

³ https://docs.escrow.beekeeperai.com/v1.5.0/create-and-upload-data-specification

⁴ https://docs.escrow.beekeeperai.com/v1.5.0/encrypt-algorithm-files

⁵ https://docs.escrow.beekeeperai.com/v1.5.0/upload-algorithm

BeeKeeperAl-supplied test drive project artifact	Description	Related step
	The algorithm owner's validation criteria for the expected results of a model run.	Create and upload the Validation Criteria ⁶
Covid schema.json		
(see page 3)		

1.1.2 Project artifacts for data steward steps

Download these files to upload later.

The data steward uploads these project artifacts at the proper step in the complete sequence of the test drive.

 $^{{\}small 6\,https://docs.escrow.beekeeperai.com/v1.5.0/create-and-upload-the-validation-criteria}\\$

BeeKeeperAl-supplied test drive project artifact	Description	Related step
COVID_X-ray_CUMC_DataAtt (see page 3)	The data steward's attestation in response to the algorithm owner's data specification.	Attest conformance to the data specification ⁷
bkdataset.zip ⁸	The data steward's	Encrypt dataset ⁹
On the displayed page, click Download .	dataset.	Upload encrypted dataset to Azure Blob container ¹⁰

⁷ https://docs.escrow.beekeeperai.com/v1.5.0/attest-conformance-to-data-specification

⁸ https://beekeeperai.sharepoint.com/:u:/s/Sales-CustomersChannels/EX-gAYsJ7N1LISXOhty539IBH8n0HA5Qsg00NhoByO1wpw?e=wucYHo

⁹ https://docs.escrow.beekeeperai.com/v1.5.0/encrypt-dataset

¹⁰ https://docs.escrow.beekeeperai.com/v1.5.0/upload-encrypted-dataset-to-azure-blob-container