Cloudera Runtime 7.1.6

Atlas Audits

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Audit Operations

As an Atlas administrator you can view the audit operations listed in the Audits tab in the Atlas UI. The audit data is captured implicitly by Atlas for various operations.

The audit operations include:

- Import
- Export
- · Server start
- Server state active (In case of HA environment)
- Type Definition create
- Type Definition update
- Type Definition delete

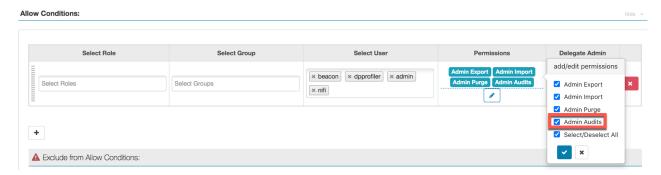
The Type Definition can be of any type category listed:

- Business Metadata
- Classification
- Enum
- Entity
- · Relationship
- Struct

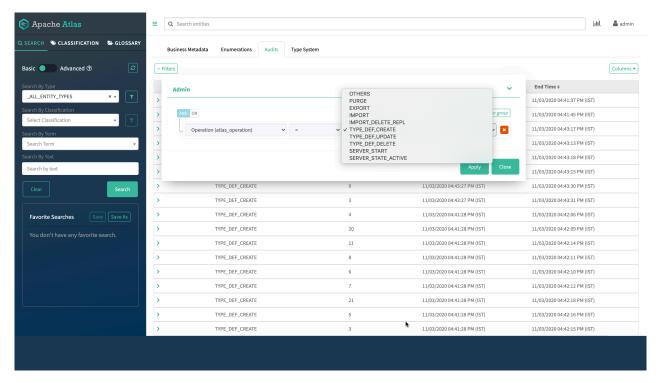
Audit is collected for every create, update and delete operations.



Note: A user or a group must have the Admin Audits Ranger permission to access audits and related information.



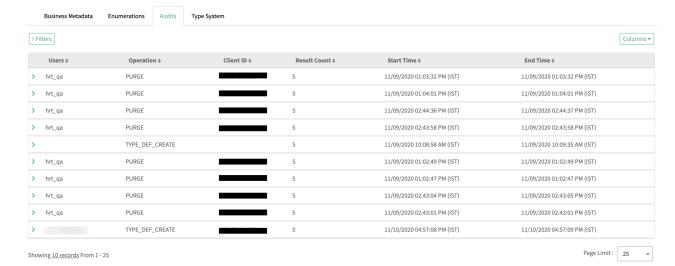
The JSON data is the payload which contains the actual data. You can submit the payload using the appropriate REST API tool.



An audit entry logs the total number of Type Definitions that are created for create, update, and delete operations. Type Definitions are categorized according to entity types, struct types, Enum types, relationships, classification, and Business Metadata. For every Type Definition, the JSON data is stored in the audit entry.

Each audit entry logs the following details:

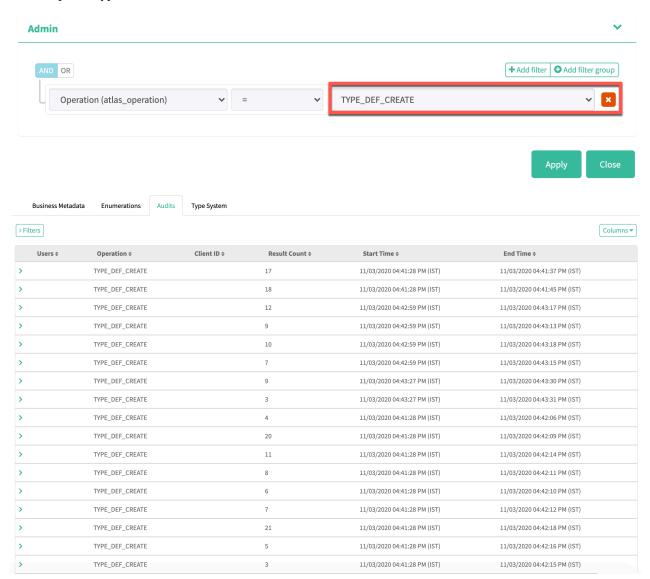
- · Users Indicates the user name of the user who performed the audit operation..
- Operation Indicates an operation enum; can be used for searching audit entities as well
- Client ID Indicates the IP address of the machine from which the request was generated.
- Result Count Provides the total number of artifacts on which the operation was performed.
- Start Time Indicates the actual time when the request was generated.
- End Time Indicates the actual time when the requested operation was completed.
- Duration Indicates the time taken by a request to complete the intended operation.



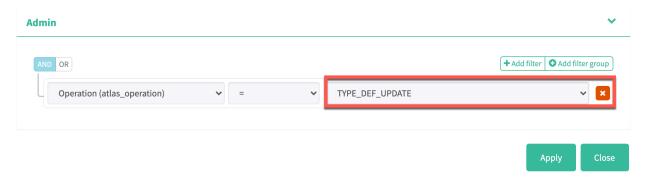
Atlas Type Definitions

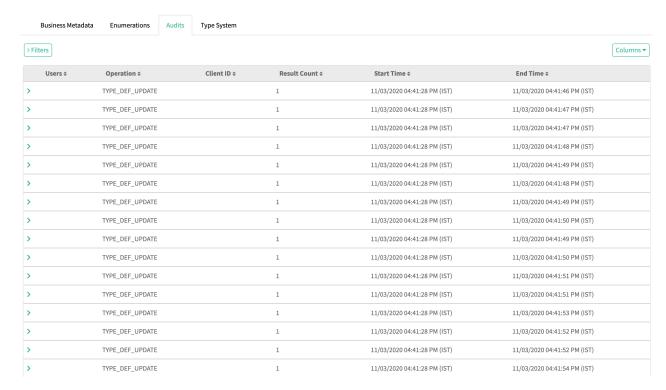
Using Type Definitions, you can create, update, and delete entities of various types.

An example of Type Definition - Create

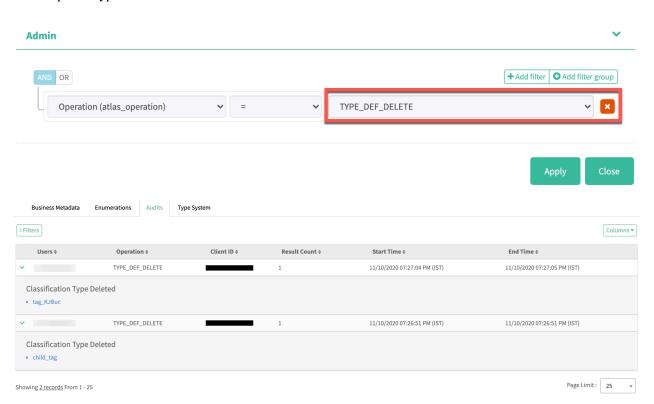


An example of Type Definition - Update





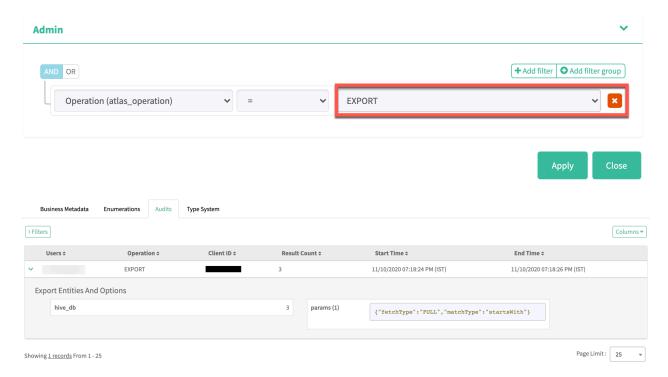
An example of Type Definition - Delete



Atlas Export and Import Operations

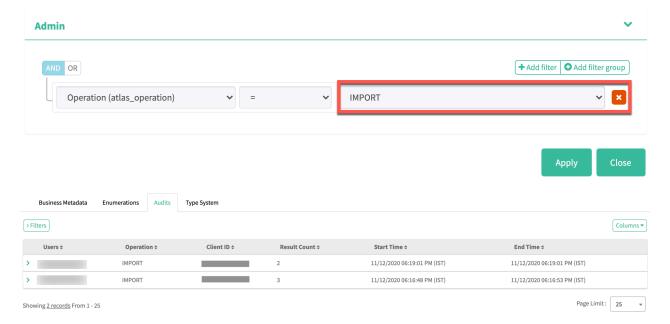
An audit entry is created for every export and import operation.

An example of - Export operation



Each import audit entry provides information about the total number of entities imported, along with the number of entities imported with each Type Definition.

An example of - Import operation

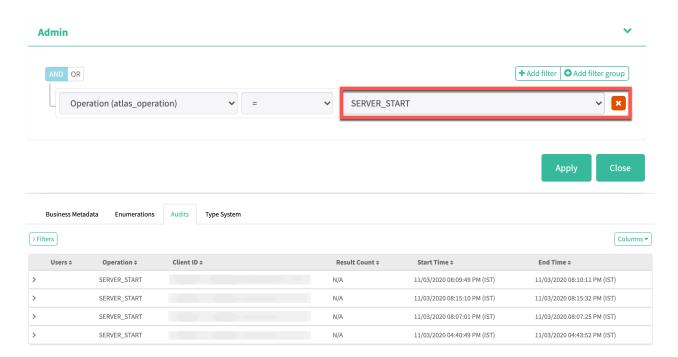


Atlas Server Operations

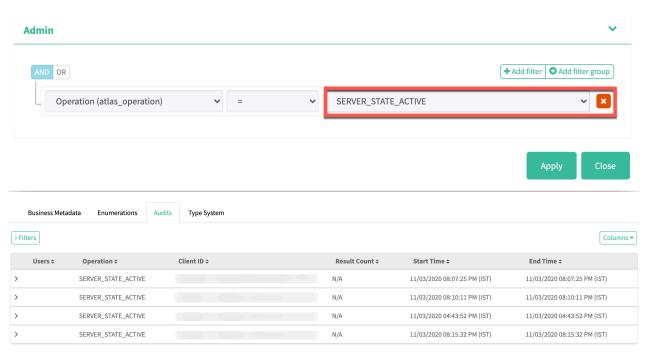
When you perform server related tasks, audit entries are logged.

When the Atlas server is started, an audit entry is logged. Also, when the server is started in the Active mode using High Availability (HA), an audit entry is logged. For more information, see About Atlas High Availability.

An example of - Server Start operation



An example of - Server State Active operation



Examples of Audit Operations

Some examples of payload submission for audit operations.

An example of creating a Type Definition:

enumDefs:
1.days_of_week
entityDefs:

```
1.Country
2.State
3.Vehicle
relationshipDefs:
1.country_state_rel
curl --location --request POST -u admin:admin 'http://carl23.test1234.root
.hwx.site:23400/api/atlas/v2/types/typedefs' \
--header 'Content-Type: application/json' \
--data-raw '{
"enumDefs": [
"name": "days_of_week",
"typeVersion": "1.0",
"elementDefs": [
"ordinal": 1,
"value": "MONDAY"
"ordinal": 2,
"value": "TUESDAY"
"ordinal": 3,
"value": "WEDNESDAY"
"ordinal": 4,
"value": "THURSDAY"
"ordinal": 5,
"value": "FRIDAY"
"ordinal": 6,
"value": "SATURDAY"
"ordinal": 7,
"value": "SUNDAY"
"entityDefs": [
"category": "ENTITY",
"createdBy": "admin",
"updatedBy": "admin",
"createTime": 1537261952180,
"updateTime": 1537262097732,
"version": 1,
"name": "Vehicle",
"description": "desc Vehicle",
"typeVersion": "1.1",
"attributeDefs": [
"name": "no_of_wheels",
"typeName": "int",
"isOptional": true,
"cardinality": "SINGLE",
"valuesMinCount": 1,
```

```
"valuesMaxCount": 1,
"isUnique": false,
"isIndexable": false,
"includeInNotification": false
"category": "ENTITY",
"createdBy": "admin",
"updatedBy": "admin",
"createTime": 1537261952180,
"updateTime": 1537262097732,
"version": 1,
"name": "Country",
"description": "desc Country",
"typeVersion": "1.1",
"attributeDefs": [
"name": "ISD_CODE",
"typeName": "string",
"isOptional": false,
"cardinality": "SINGLE",
"valuesMinCount": 1,
"valuesMaxCount": 1,
"isUnique": false,
"isIndexable": false,
"includeInNotification": false
"category": "ENTITY",
"createdBy": "admin",
"updatedBy": "admin",
"createTime": 1537261952180,
"updateTime": 1537262097732,
"version": 1,
"name": "State",
"description": "desc State",
"typeVersion": "1.1",
"attributeDefs": [
"name": "STD_CODE",
"typeName": "string",
"isOptional": false,
"cardinality": "SINGLE",
"valuesMinCount": 1,
"valuesMaxCount": 1,
"isUnique": false,
"isIndexable": false,
"includeInNotification": false
"relationshipDefs": [
"name": "country_state_rel",
"typeVersion": "1.1",
"relationshipCategory": "AGGREGATION",
"endDef1": {
"type": "Country",
"name": "state_st",
```

```
"isContainer": false,
"cardinality": "SINGLE",
"isLegacyAttribute": true
},
"endDef2": {
"type": "State",
"name": "country_ct",
"isContainer": true,
"cardinality": "SET"
},
"propagateTags": "NONE"
}
```

An example of updating a Type Definition:

```
enumDefs:days_of_week
entityDefs:Country
curl --location --request PUT -u admin:admin 'http://carl23.carl23-1.root.
hwx.site:31000/api/atlas/v2/types/typedefs' \
--header 'Content-Type: application/json' \
--data-raw '{
"enumDefs": [
"name": "days_of_week",
"typeVersion": "1.0",
"elementDefs": [
"ordinal": 1,
"value": "MONDAY"
"ordinal": 2,
"value": "TUESDAY"
"ordinal": 3,
"value": "WEDNESDAY"
"ordinal": 4,
"value": "THURSDAY"
"ordinal": 5,
"value": "FRIDAY"
"ordinal": 6,
"value": "SATURDAY"
"ordinal": 7,
"value": "SUNDAY"
"ordinal": 8,
"value": "HOLIDAY"
```

```
"entityDefs": [
"category": "ENTITY",
"createdBy": "admin",
"updatedBy": "admin",
"createTime": 1537261952180,
"updateTime": 1537262097732,
"version": 1,
"name": "Country",
"description": "desc Country Updated",
"typeVersion": "1.1",
"attributeDefs": [
"name": "ISD_CODE",
"typeName": "string",
"isOptional": false,
"cardinality": "SINGLE",
"valuesMinCount": 1,
"valuesMaxCount": 1,
"isUnique": false,
"isIndexable": false,
"includeInNotification": false
} '
```

An example of deleting a Type Definition:

```
curl --location --request DELETE -u admin:admin
    'http://carl23.carl23-1.root.hwx.site:31000/api/atlas/v2/types/typ
edef/name/Vehicle'
```

An example of exporting an Atlas entity:

For additional reference related to exporting entities, see https://atlas.apache.org/#/ExportAPI.

An example of importing an Atlas entity:

Performing an import operation should create an entry in the audits tab.

For additional reference related to exporting entities, see https://atlas.apache.org/#/ImportAPI.