Audit Logs Reports for Entities in ALM Project

This document provides guidance on creating reports for audit logs related to entity fields such as Requirements, Tests, Defects, and other components within ALM Projects
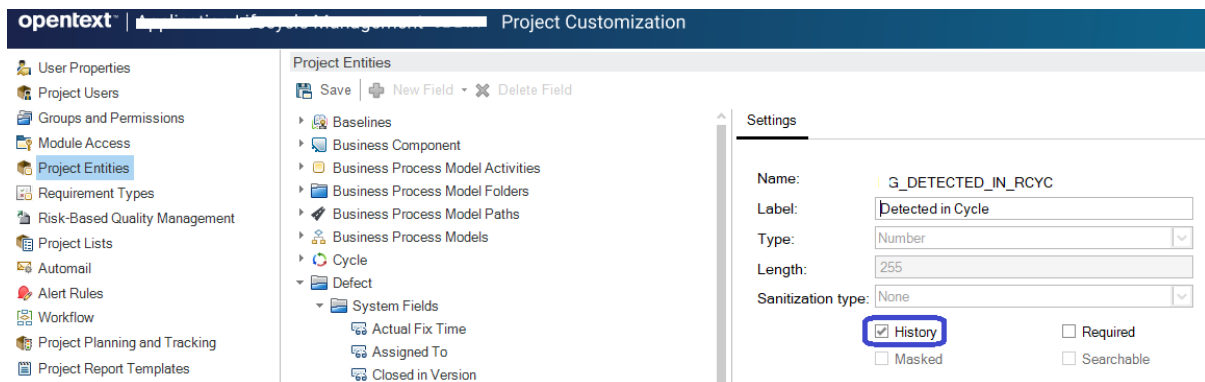
Table of Contents

Introduction

Audit logs are captured for various entity fields in ALM Projects, including Requirement fields, Test fields, Defect fields, and more. This document addresses the requirement to create reports based on these audit logs.
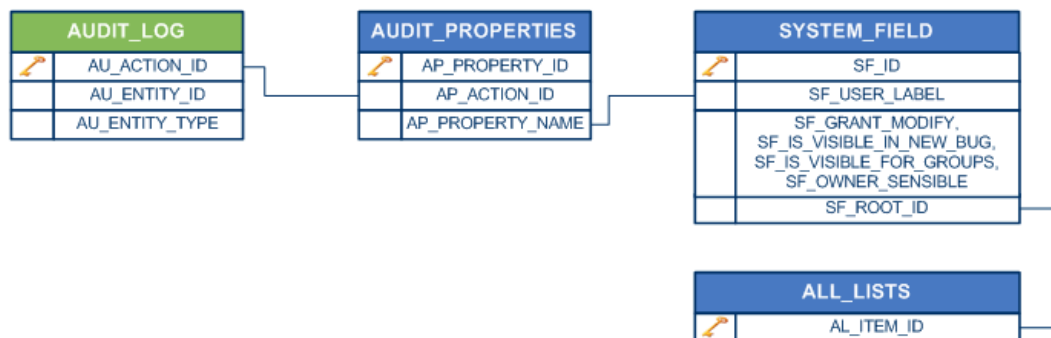
Note: Audit logs are recorded only for entity fields where the History option is enabled in the entity field settings.

Database Schema

The data for audit logs of entity fields is stored in two database tables: **AUDIT_LOG** and **AUDIT_PROPERTIES**. The schema illustrating how these tables are linked can be found in the image below.

https://admhelp.microfocus.com/alm/api_refs/project_db/Content/project_db/topic10.html

Reports for Audit Logs

Excel reports for audit logs can be created using the following methods:

- **Business View Excel Reports**
- **Excel Reports**

1.Business View Excel Reports

To create a **Business View Excel Report** for audit logs, follow these steps:

Step 1: Create a Business View

- **Log in to the ALM Project.**
- Navigate to **Project Customization** → **Business Views**.
- Select **New Business View**.
- Add the **Audit Log Table** and **Audit Properties Table** to the view.
- Link the tables using the **Log Record ID** field.
- Select the required fields for the report.
- Use the **Preview** option to verify that the results meet your expectations.
- **Validate** the Business View.
- Change the status of the Business View to **Published**.
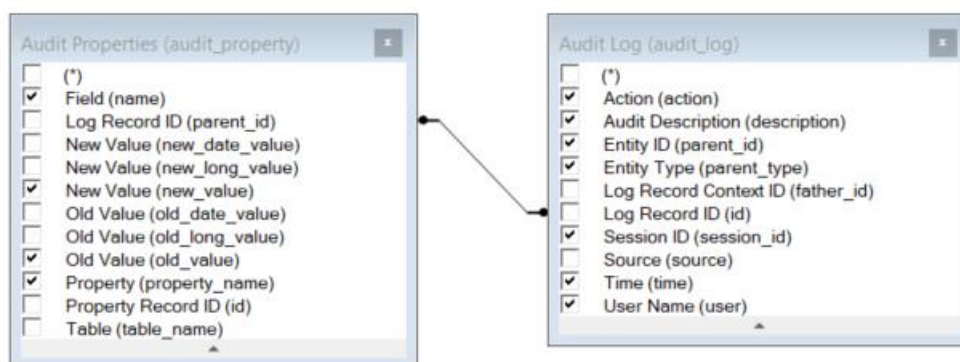- Save the Business View.

Step 2: Create the Business View Excel Report

Use the newly created Business View in the **Dashboard** → **Analysis Module** of the project.

Generate the **Business View Excel Report** based on the selected fields from the Business View.

This process ensures accurate reporting of audit log data.

Example screenshot below

DQL Query example below
Select audit_log."action",

  audit_log.parent_id As parent_id1,

audit_log.parent_type,

audit_log."time",

audit_log."user",

audit_property.new_value As new_value1,

audit_property.old_value As old_value1,

audit_property.name As name1,

audit_property.property_name As property_name1,

audit_log.description,

audit_log.session_id

From audit_property

Inner Join audit_log On audit_log.id = audit_property.parent_id

Query Result Example below

Query Results

Query Results

Action...	Entity ID...	Entity Type...	Time (time)	User Name...	New Value...	Old Value...	Field (name1)	Property...	Audit...	Session ID...
UPDATE	1	COMPONENT	2011-01-22 1...	alex_alm	Ready	NULL	CO_STATUS	Status	NULL	66
UPDATE	2	COMPONENT	2011-01-22 1...	alex_alm	Ready	NULL	CO_STATUS	Status	NULL	66
UPDATE	8	COMPONENT	2011-01-22 1...	alex_alm	Browser	NULL	CO_USER_04	Browser Versi...	NULL	66
UPDATE	8	COMPONENT	2011-01-22 1...	alex_alm	Ready	NULL	CO_STATUS	Status	NULL	66
UPDATE	8	COMPONENT	2011-01-22 1...	alex_alm	Reviewed	NULL	CO_USER_02	Reviewed	NULL	66
UPDATE	8	COMPONENT	2011-01-22 1...	alex_alm	alex_alm	NULL	CO_USER_03	Reviewer	NULL	66
UPDATE	9	COMPONENT	2011-01-22 1...	alex_alm	Ready	NULL	CO_STATUS	Status	NULL	66
UPDATE	9	COMPONENT	2011-01-22 1...	alex_alm	Reviewed	NULL	CO_USER_02	Reviewed	NULL	66
UPDATE	9	COMPONENT	2011-01-22 1...	alex_alm	alex_alm	NULL	CO_USER_03	Reviewer	NULL	66
UPDATE	10	COMPONENT	2011-01-22 1...	alex_alm	Internet Explo...	NULL	CO_USER_04	Browser Versi...	NULL	66
UPDATE	10	COMPONENT	2011-01-22 1...	alex_alm	Ready	NULL	CO_STATUS	Status	NULL	66
UPDATE	10	COMPONENT	2011-01-22 1...	alex_alm	Reviewed	NULL	CO_USER_02	Reviewed	NULL	66
UPDATE	10	COMPONENT	2011-01-22 1...	alex_alm	alex_alm	NULL	CO_USER_03	Reviewer	NULL	66
UPDATE	11	COMPONENT	2011-01-22 1...	alex_alm	Browser	NULL	CO_USER_04	Browser Versi...	NULL	66
UPDATE	11	COMPONENT	2011-01-22 1...	alex_alm	Ready	NULL	CO_STATUS	Status	NULL	66

2.Excel Reports

To create **Excel Reports** in the **Dashboard → Analysis Module**, follow these steps:

1. **Log in to the ALM Project.**
2. Navigate to **Dashboard → Analysis Module.**
3. Select **New Excel Report** (Note: This option is disabled by default, as the recommendation is to use Business Views. To enable it, please raise a request).
4. Use the **Query Builder** to create a new SQL query.
5. Select the **Audit Log** and **Audit Properties** tables.
6. Choose the fields required for the report.

7. **Test the Query** to ensure it runs correctly.
8. **Run the Query** to fetch results.
9. Verify the results.
10. If everything looks fine, click **OK.**
11. Generate the report.
    This allows you to create a customized Excel report based on audit log data.

SQL Query example below

```
SELECT

  audit_log.AU_ACTION AS action,

  audit_log.AU_ENTITY_ID AS parent_id1,

  audit_log.AU_ENTITY_TYPE AS parent_type,

  audit_log.AU_TIME AS AuditTime,

  audit_log.AU_USER AS Audituser,

  audit_property.AP_NEW_VALUE AS new_value1,

  audit_property.AP_OLD_VALUE AS old_value1,

  audit_property.AP_FIELD_NAME AS name1,

  audit_property.AP_PROPERTY_NAME AS property_name1,

  audit_log.AU_DESCRIPTION AS description,

  audit_log.AU_SESSION_ID AS session_id

FROM

  AUDIT_PROPERTIES audit_property

  INNER JOIN AUDIT_LOG audit_log ON audit_log.AU_ACTION_ID =
audit_property.AP_ACTION_ID
```

Query Result Example below

Reference

For more details, please refer to the **ALM Help Center**.

Database Reference

https://admhelp.microfocus.com/alm/api_refs/project_db/Content/project_db/topic10.html

Reports Reference

https://admhelp.microfocus.com/alm/en/24.1/online_help/Content/UG/t_analyze_data.htm