

Alchemy Cloud Material Integration Test Plan

As part of João Prado selection process - 2023-03-23

Objective

The purpose of this document is to describe the test plan for the testing the **Alchemy Cloud Material Integration** workflow.

Motivation

As part of João Prado selection process instructions as follow:

"We need to connect a new integration to our system. It should access the system as an integration user and look for a certain Material record in the system. If the Material already exists it should update it with the new info, if it does not exist it should create a new Material record with all the needed data.

Using our integration API documentation prepare a plan for how you would implement and test this new integration we should add to our system."

Scope

. In Scope

Operation	API Method	Parameters/Constraints
Find Material	Find Records Request	recordTemplateIdentifier: "Material", queryTerm: "Result.Name == Material A'."
Get material data if material found	Read Record	id
Create record if material not found	Create Record	recordTemplateIdentifier: "Material", properties
Update material properties if material found	Update Record	properties

. Out of Scope

- User Interfaces
- Hardware Interfaces
- Software Interfaces
- Database logical
- Communications Interfaces
- API Security

Testing Tools

Tool	Type of Test
Postman	Manual Testing
Selenium	Automated Test
Python Request	Automated Test

Testing Levels

Level	Description
Workflow Testing	Assure that the workflow works as described in instructions including validation of the properties to be created/updated.
API Testing	Assure that every method used in the workflow works as expected and send the proper error/validation messages back when the calls fail for any reason.

Test Cases

1. Test when material not found and property validation pass
 - a. Find Records Request
 - b. Read Record
 - c. Create Record
2. Test when material not found and validation fail
 - a. Find Records Request
 - b. Read Record
 - c. Send back validation messages
3. Test when material found and property validation pass
 - a. Find Records Request
 - b. Read record
 - c. Update Record
4. Test when material found and property validation fail
 - a. Find Records Request
 - b. Read Record
 - c. Send back validation messages

Test Workflow

Alchemy Cloud Material Integration Workflow

As part of João Prado selection process.

