

## TOSCA ←-----→ HP ALM Integration

To start with the TOSCA – HP ALM Integration, we need the below mentioned pre-requisites:

- HP ALM and TOSCA Installed on the Server
- HP ALM User with access to the project
- Server to install Tasktop and TOSCA License Server
- Tasktop server should be able to communicate to Tosca REST API (Port 80) and HP Server. So basically, the port needs to be enabled on which HP ALM Server is located (Default Port: 8080)
- Tasktop Connector Licenses (HP Connector and Tosca Connector, Tosca Connector License is included if you purchased via Tricentis) – A .txt file which you must have received from [license@tricentis.com](mailto:license@tricentis.com)
- REST API Installation which is a gateway to access TOSCA Artifacts, Services for Tasktop or any other tool. Hence it is used as an application Interface. Use the link [https://support.tricentis.com/community/manuals\\_detail.do?lang=en&version=10.3.0&url=tosca\\_server/server\\_component\\_setup.htm](https://support.tricentis.com/community/manuals_detail.do?lang=en&version=10.3.0&url=tosca_server/server_component_setup.htm) for installation
- Tasktop Installation by following the below guide

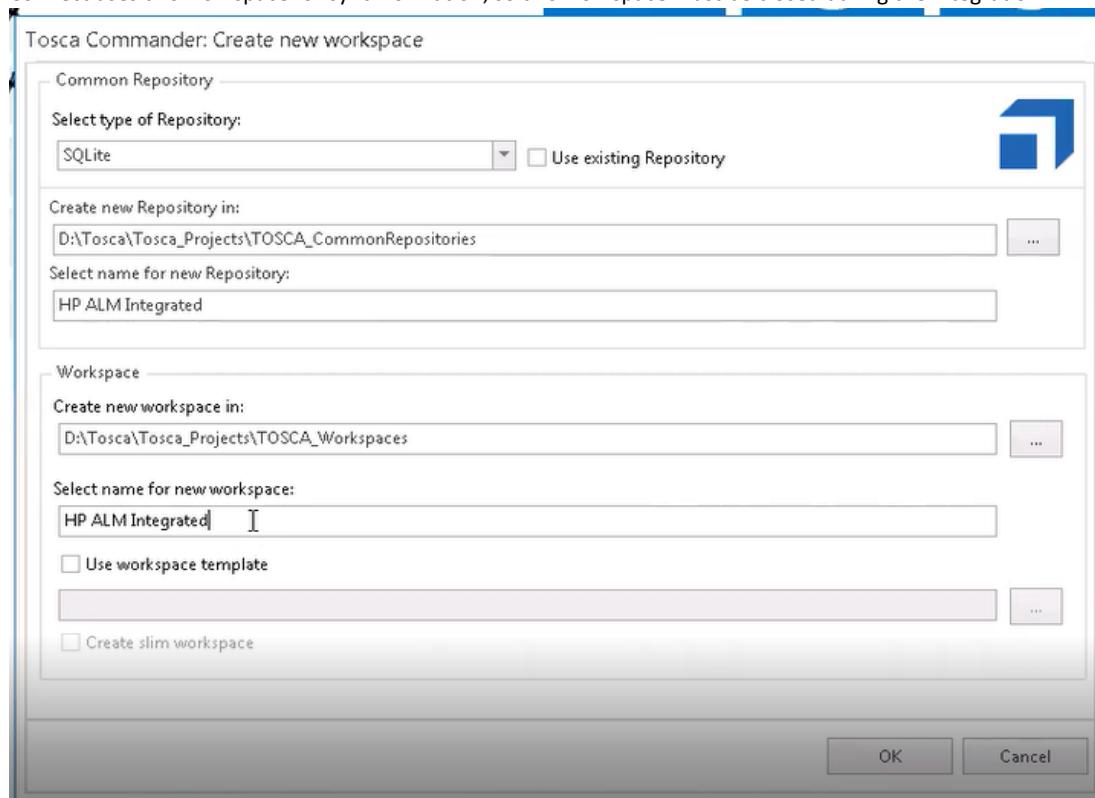


Tasktop Installation  
and Configuration (

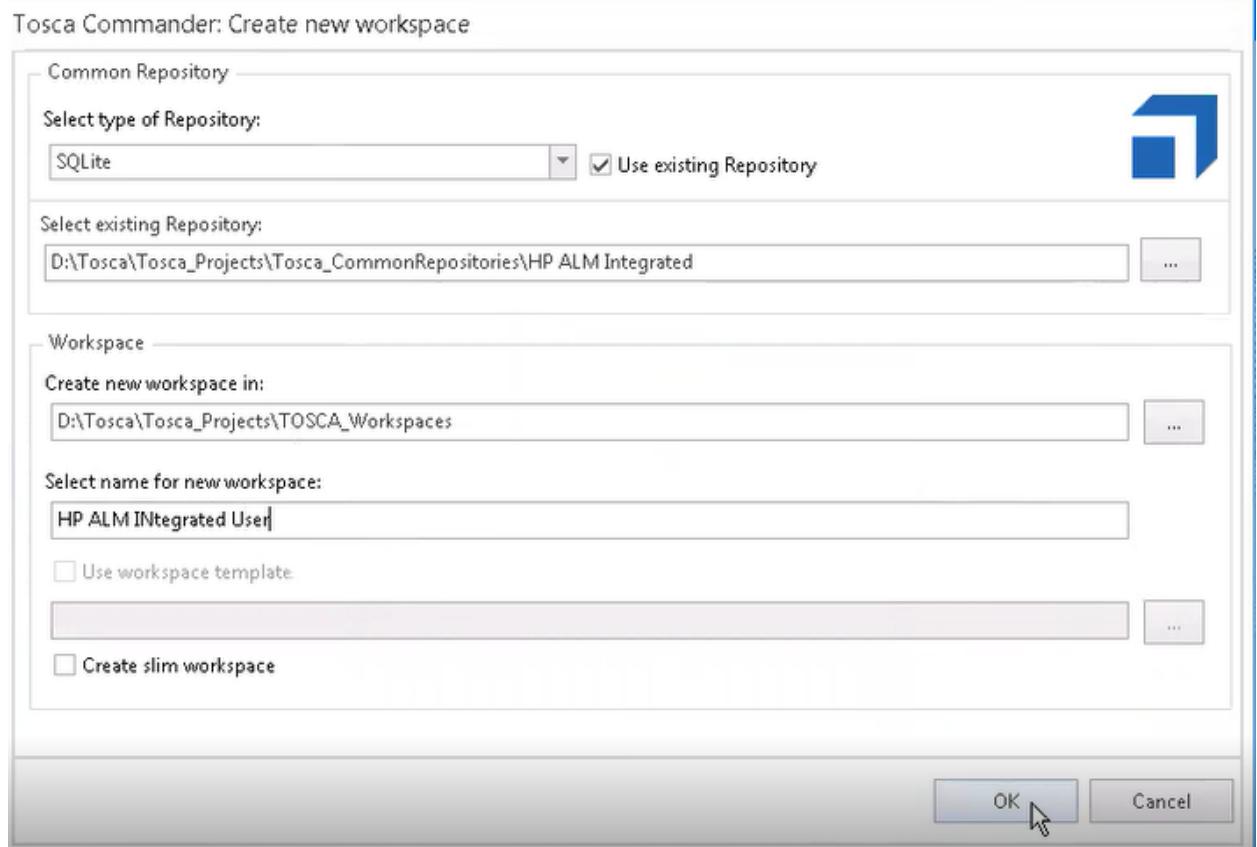
### Steps to perform the Integration:

#### TestCase Section from TOSCA to Test Plan Module in HP ALM

1. Create a Workspace using SQLite for the demo. For production, please use MSSQL Server. Click “Check in all”. TOSCA Connect uses this workspace for synchronization, so this workspace must be closed during the integration



2. Create another workspace in the existing repository to create the integration as the existing workspace needs to be closed for the synchronization to work



3. Create a separate Admin user for Tosca Connect and perform and Update All in the Main repository after which the user will be authorized to access the workspace

The screenshot shows the HP ALM Integrated interface with the 'Usermanagement' tab selected in the details view. A modal dialog box titled 'Enter password' is open, prompting for a password.

**Usermanagement Table:**

Name	Domain	Description
HP ALM Integrated		Default Admin group
Admins		
Admin		
toscaconnect		
All Users		Default User group

**Password Dialog:**

Enter password

\*\*\*\*\*

OK Cancel

4. Create Repositories for TOSCA and HP ALM in Tasktop with the connection details as shown below

a. TOSCA Repository with username and password same as that of your workspace

The screenshot shows the Tasktop interface with the 'Repositories' tab selected. The main title is 'Repository Connection' with a subtitle 'View and configure your repository connection.' Below this are sections for 'Tricentis Tosca' and 'HP ALM'.

**Tricentis Tosca**

- Label:** [Empty input field]
- Location:** http://[REDACTED]:81/REST/ToscaCommander
- Workspace:** [Empty input field]

**Authentication**

- Username:** toscaconnect
- Password:** \*\*\*\*\*

**Proxy Server**  Use proxy server

Proxy Host Address: https://example.com:8080

**HP ALM**

**Repository Connection**

View and configure your repository connection.

**Back to Repositories** **Done**

b. HP ALM Repository

The screenshot shows the Tasktop interface with the 'Repositories' tab selected. The main title is 'Repository Connection' with a subtitle 'View and configure your repository connection.' Below this are sections for 'HPE QC / ALM' and 'HP ALM'.

**HPE QC / ALM**

- Label:** [Empty input field]
- Location:** http://hpalm:[REDACTED]/qcbin
- Comment Handling:** Comments (Lenient)
- Comment Date Format:** MM/dd/yy (e.g. 01/23/14)

**Authentication** Standard Authentication

Username: [REDACTED]  
Password: [REDACTED]

**Proxy Server**  Use proxy server

**HP ALM**

**Repository Connection**

View and configure your repository connection.

**Back to Repositories** **Done**

**HP ALM**

**Repository**

The location of your artifact repository. Please provide a descriptive Label as this will be referenced in other places in Tasktop.

**Authentication**

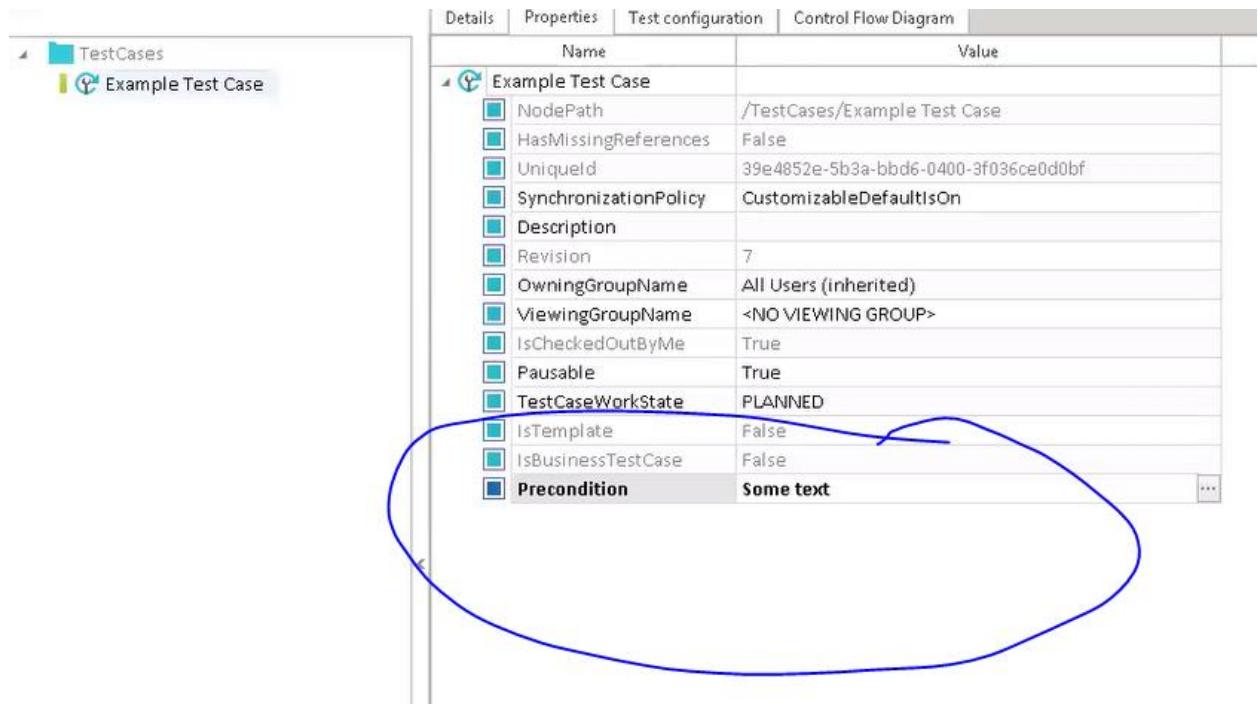
Provide authentication credentials so that Tasktop can access the artifacts in the above repository. Multiple authentication styles are available, but some may not apply to your organization.

**Proxy Server**

If your organization uses a proxy server to access the above repository, please provide the proxy host address and port number.

5. Create Model in Tasktop to connect HP ALM and TOSCA

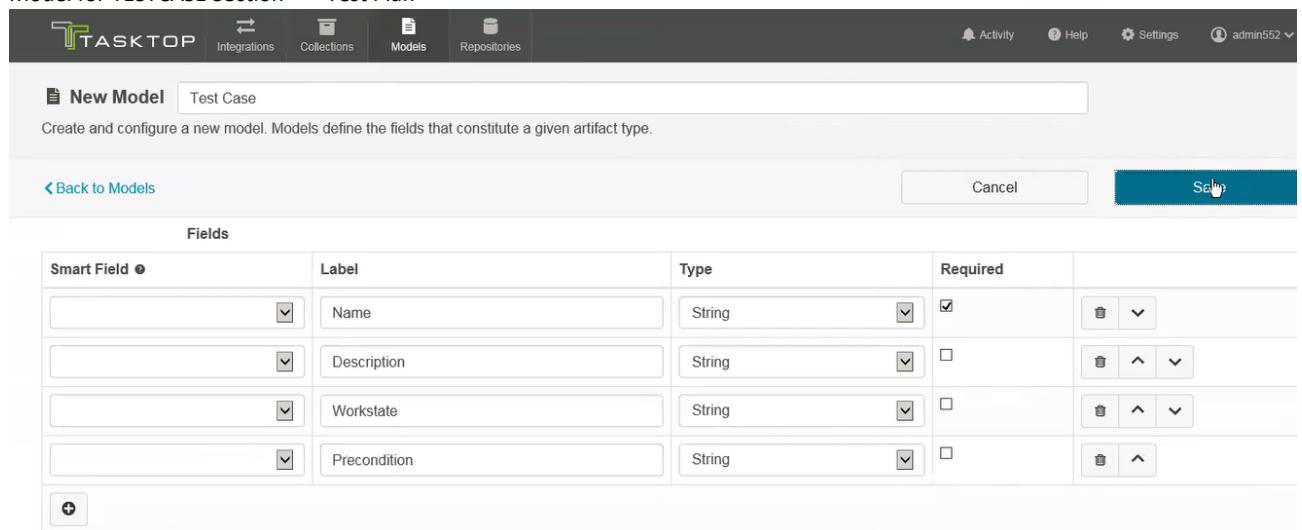
- a. Note: In TOSCA, user defined field can be created as a part of the model at testcase level-



The screenshot shows the Tasktop interface with the 'TestCases' view selected. A specific test case, 'Example Test Case', is expanded to show its properties. A large blue oval highlights the 'Precondition' row, which contains the value 'Some text'. The table has columns for 'Name' and 'Value'.

Name	Value
Example Test Case	
NodePath	/TestCases/Example Test Case
HasMissingReferences	False
UniqueId	39e4852e-5b3a-bbd6-0400-3f036ce0d0bf
SynchronizationPolicy	CustomizableDefaultIsOn
Description	
Revision	7
OwningGroupName	All Users (inherited)
ViewingGroupName	<NO VIEWING GROUP>
IsCheckedOutByMe	True
Pausable	True
TestCaseWorkState	PLANNED
IsTemplate	False
IsBusinessTestCase	False
Precondition	Some text

b. Model for TESTCASE Section <-> Test Plan



The screenshot shows the 'New Model' configuration screen for a 'Test Case'. The 'Fields' section lists four fields: 'Name' (String, Required), 'Description' (String), 'Workstate' (String), and 'Precondition' (String). The 'Required' column for 'Name' has a checked checkbox, while others are unchecked. There are also up/down arrows for reordering the fields.

Smart Field	Label	Type	Required
	Name	String	<input checked="" type="checkbox"/>
	Description	String	<input type="checkbox"/>
	Workstate	String	<input type="checkbox"/>
	Precondition	String	<input type="checkbox"/>

6. Create Collection to transfer the fields and data from the TOSCA TestCase Section to the Created Model. In the Projects, select the common repository

**New Collection** Tosca Test Cases to Test Case Model

Configure your new collection. Collections comprise a group of artifacts that can be used in one or more integrations.

[Back to Collections](#) [Cancel](#) [Save](#)

**Connection** http://[REDACTED]:81/REST/ToscaCommander

**Projects** Choose the projects that contain the artifacts that you would like to include in this collection.

**Field Mapping** Choose the artifact type from your end repository and the model on which you'd like to base this collection. Map between the fields on each side to form the field mapping for this collection.

Artifact: TestCase Model: Test Case

Map Fields

1 of 14 projects

HP ALM Integrated

Manage Projects

Test Case

Test Case

ALM Integration Day 1

7. Select Field Mapping as shown below

**Field Mapping: Tosca Test Cases to Test Case Model**

View and manage the field mapping for this collection. The field mapping specifies how fields from your repository artifact map to fields in your model.

[Back to Collection](#) [Done](#)

http://[REDACTED]:81/REST/ToscaCommander: TestCase Model: Test Case

4 of 35 fields mapped 3 of 4 fields mapped

Search "Tosca Test Cases to Test Case Model" artifact... Select a field on each side to configure additional field mappings Search "Test Case" model fields by name or type [Suggest Mappings](#)

--> SynchronizationPolicy --> CustomizableDefaultsOn

Name --> \* Name

Description --> Description

Precondition --> Precondition

Configure

Configure

Configure

Configure

8. Create Collection to map HP ALM artifacts to the Test Case Model

The screenshot shows the Tasktop interface with the 'Collections' tab selected. A new collection is being created with the name 'HP ALM Test Cases to Test Case Model'. The 'Connection' section shows a connection to 'HPE QC / ALM' at 'http://hpalm.../qcbin'. The 'Projects' section lists one project, 'LG\_MASTER - Test'. The 'Field Mapping' section shows mappings between 'Artifact: Test - MANUAL' and 'Model: Test Case', with 3 of 36 fields mapped. The 'Relationship Specification' section shows 0 of 16 relationships mapped.

9. Select Field Mapping for HP ALM. Subject is the mandatory field in HP ALM and we have created a separate folder in QC names Tosca Connect to create testcases specifically in the same folder

The screenshot shows the 'Field Mapping: HP ALM Test Cases' interface. It displays the mapping between 'http://hpalm.../qcbin: Test - MANUAL' and 'Model: Test Case', with 3 of 36 fields mapped. Below this, there are search boxes for artifact fields and model fields, and a detailed view of specific field mappings like 'Subject' and 'Test Name'.

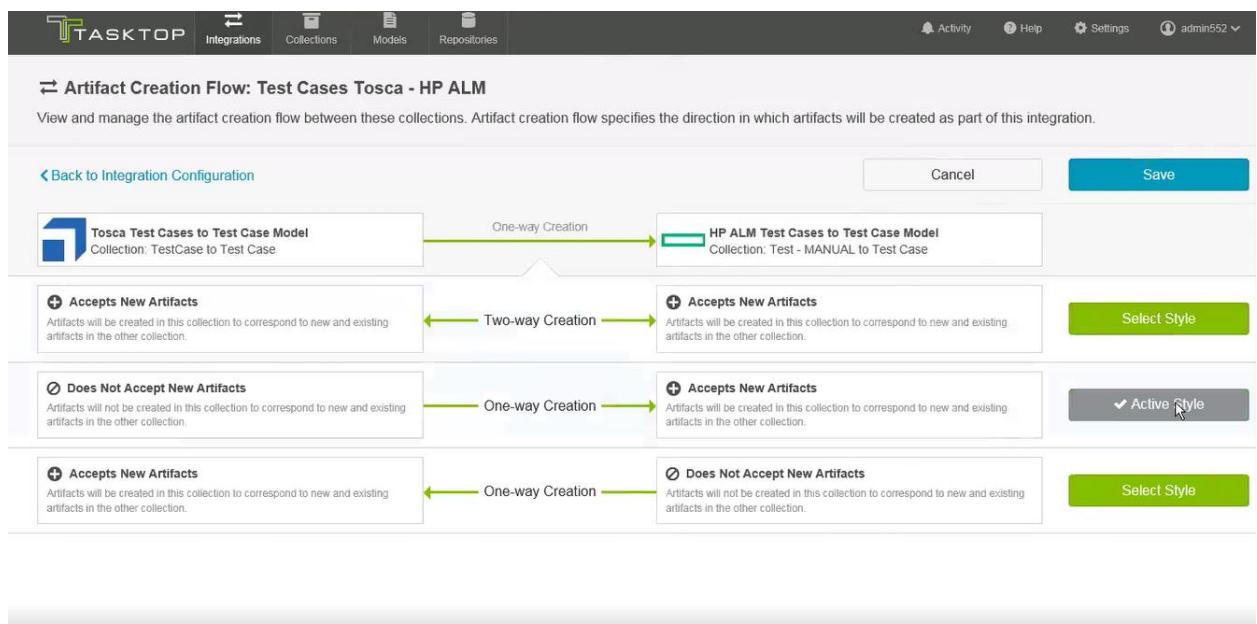
## 10. Select Integration

The screenshot shows the Tasktop Integration Configuration interface. At the top, there are tabs for Integrations, Collections, Models, and Repositories. On the right, there are links for Activity, Help, Settings, and a user account. The main area is titled "Integration Configuration" with the subtitle "Test Cases Tosca - HP ALM". It says "Configure your integration. Integrations flow artifacts between collections to achieve a specific goal." Below this, there is a "Back to Integrations" link and a "Done" button. The central part of the screen displays two repository collections: "1 Repository - 1 Collection" (Tosca) and "1 Repository - 1 Collection" (HP ALM). A green double-headed arrow connects them. Between these two main nodes are two intermediate nodes: "Tosca Test Cases to Test Case Model" (Tricentis Tosca) and "HP ALM Test Cases to Test Case Model" (HPE QC / ALM). A vertical yellow line connects the two intermediate nodes. A green arrow points from the Tosca node to the ALM node. On the far right, there is an "Overview" sidebar with various integration-related options.

## 11. Artifact Routing

The screenshot shows the Tasktop Artifact Routing interface. At the top, there is a header for "Artifact Routing: Test Cases Tosca - HP ALM" with a subtitle "View and manage the artifact routes between these collections. Artifact routes specify where artifacts will be created in your collection(s) as part of this integration." Below this is a "Back to Integration Configuration" link and a "Done" button. The main area shows two collections: "Tosca Test Cases to Test Case Model" and "HP ALM Test Cases to Test Case Model". A "Two-way Creation" route is shown as a double-headed arrow between them. Below this, there are two large suitcase icons labeled "1" connected by a horizontal line, representing the artifact flow. At the bottom, there are sections for "Route More Projects" and a list of routes. One route is visible: "HP ALM Integrated / TestCases" to "LG\_MASTER - Test". There are also delete icons for each route entry.

## 12. Artifact Flow



## 13. Select time for synchronization

The screenshot shows the 'Settings' configuration page. At the top, there are tabs for 'Integrations', 'Collections', 'Models', and 'Repositories'. On the right, there are links for 'Activity', 'Help', 'Settings', and a user account. The main title is 'Settings'. Below it, a subtitle says 'View and manage your application settings.' There is a link 'Back to Integration Configuration'.

**Configuration** (Configuration description: Describes how often Tasktop checks repositories for changes to artifacts.)

Change Detection Polling Interval	10	x Seconds ▾
Full Scan Change Detection Polling Interval	10	Hours ▾
Integration Maximum Concurrency	10	

Buttons at the bottom include 'Save' (with a cursor icon), 'Restore Defaults', and 'Cancel'.

**Logging**

Current Log Level: Normal

Enable Troubleshooting: Select a duration ▾

#### 14. User defined fields creation and mapping

The screenshot shows the HP ALM Integrated interface. On the left, there is a navigation tree with categories like Execution, Issues, Modules, Reporting, Requirements, TestCaseDesign, TestCases, and TestPlanning. On the right, there is a table titled "Properties definition" with columns: Name, Visible, DefaultValue, and ValueRange. The table lists various entities such as ComponentFolder, ExecutionList, ExecutionLog, Folder, Module, Project, ReportDefinition, Requirement, RequirementSet, TDClass, and TestCase. Under TestCase, two fields are selected: EXTURL and Precondition, both of which have the "Visible" and "DefaultValue" checkboxes checked.

#### 15. Map the additionally created fields in the Collection Section In TOSCA and HP ALM and run the integration

The screenshot shows the Tasktop interface for field mapping. At the top, it says "Field Mapping: Tosca Test Cases to Test Case Model". Below that, it says "View and manage the field mapping for this collection. The field mapping specifies how fields from your repository artifact map to fields in your model." There are two sections: "Model: Test Case" on the right and "http://[REDACTED]:81/REST/ToscaCommander: TestCase" on the left. The "Model: Test Case" section shows "4 of 5 fields mapped". The "http://[REDACTED]:81/REST/ToscaCommander: TestCase" section shows "5 of 36 fields mapped". A central area shows mappings between fields: "SynchronizationPolicy" maps to "CustomizableDefaultsOn", "EXTURL" maps to "EXTURL", "Name" maps to "\* Name", "Description" maps to "Description", and "Precondition" maps to "Precondition". Each mapping has a "Configure" button and a trash icon. At the bottom, there are search bars for "Search 'Tosca Test Cases to Test Case Model' artifact" and "Search 'Test Case' model fields by name or type", and a "Suggest Mappings" button.

**Field Mapping: HP ALM Test Cases to Test Case Model**

View and manage the field mapping for this collection. The field mapping specifies how fields from your repository artifact map to fields in your model.

[Back to Collection](#) [Cancel](#) [Save](#)

**Model: Test Case**

**Field Mapping**

Specify how the fields on your repository artifact align to fields in your model. The mapping between the fields on each side forms the field mapping for this collection.

**Artifact:** http://hpalm... qcbin: Test - MANUAL **Model:** Test Case

4 of 36 fields mapped | 3 of 5 fields mapped

Search "HP ALM Test Cases to Test Case Model" artifact ... Select a field on each side to configure additional field mappings Search "Test Case" model fields by name or type [Suggest Mappings](#)

Configure [Edit](#)

Configure [Edit](#)

Configure [Edit](#)

Configure [Edit](#)

Configure [Edit](#)

16. Set up the Integration and Run. Check for Activity to view the status and errors, if any

**Integration Configuration** Test Cases Tosca - HP ALM

Configure your integration. Integrations flow artifacts between collections to achieve a specific goal.

[Back to Integrations](#) [Done](#)

1 Repository - 1 Collection [Stop](#)

http://... 81/REST/ToscaCommander Tricentis Tosca

Tosca Test Cases to Test Case Model

Projects 1 of 1 routed Model Test Case

http://hpalm... qcbin HPE QC / ALM

HP ALM Test Cases to Test Case Model

Model Test Case Projects 1 of 1 routed

Overview

- Artifact Creation Flow
- Field Flow
- Artifact Routing
- Artifact Filtering
- Comment Flow
- Attachment Flow
- Conflict Resolution Strategy

## Execution List from TOSCA to Test Lab Module in HP ALM

### 1. Create a Model for Execution List

The screenshot shows the 'Model Configuration' screen for creating a new model named 'ExecutionList'. The 'Fields' section contains one entry:

Smart Field	Label	Type	Required
	Name	String	<input checked="" type="checkbox"/>

Below the table is a 'Done' button.

### 2. Create a Collection for Execution List from TOSCA to the Model

The screenshot shows the 'New Collection' screen. It includes a 'Connection' section with a dropdown set to 'http://[REDACTED]:81/REST/ToscaCommander' and a 'Projects' section with a dropdown set to 'HP ALM Integrated'. Below these are sections for 'Field Mapping' and 'Model Configuration'.

**Connection:** http://[REDACTED]:81/REST/ToscaCommander

**Projects:** HP ALM Integrated

**Field Mapping:**

- Artifact: ExecutionList
- Model: ExecutionList
- Map Fields: A diagram showing two document icons connected by a horizontal line with arrows pointing towards each other, labeled 'Map Fields'.
- Description: Choose the artifact type from your end repository and the model on which you'd like to base this collection. Map between the fields on each side to form the field mapping for this collection.

### 3. Map the fields from TOSCA -> Execution List Model

The screenshot shows the Tasktop Tosca Commander interface for field mapping. At the top, there's a navigation bar with icons for Integrations, Collections, Models, and Repositories. Below that is a header for "Field Mapping: Tosca ExecutionList to Execution List Model". The main area displays two sides of the mapping:

- Left Side (Tosca ExecutionList):** Shows a document icon and the URL "http://[REDACTED]:81/REST/ToscaCommander: ExecutionList". It indicates "2 of 37 fields mapped".
- Right Side (Execution List Model):** Shows a list icon and the Model name "ExecutionList". It indicates "1 of 1 fields mapped".

Below the sides, there are search bars for "Tosca ExecutionList to Execution List Model" and "ExecutionList model fields by name or type", along with a "Suggest Mappings" button.

The central mapping table shows two mappings:

- A mapping from "++ SynchronizationPolicy" to "CustomizableDefaultsOn".
- A mapping from "Name" to "\* Name".

Each mapping has a "Configure" button and a trash can icon.

### 4. Create a Collection to map Test Set from HP ALM to the Model

The screenshot shows the Tasktop Tosca Commander interface for creating a new collection. At the top, there's a navigation bar with icons for Integrations, Collections, Models, and Repositories. Below that is a header for "New Collection: HP Test Set to Execution List Model".

The main area includes:

- Connection:** A dropdown menu set to "http://hpalmr[REDACTED].qcbin".
- Projects:** A section showing "1 of 1 projects" with a "LG\_MASTER - Test" project selected. There's a "Manage Projects" button.
- Field Mapping:** A section titled "Field Mapping" with the sub-section "Map Fields". It shows a mapping between "Artifact: Test Set - Default" and "Model: ExecutionList".

At the bottom right, there's a "Save" button.

## 5. Map fields from HP ALM to Execution List Model

The screenshot shows the Tasktop Field Mapping interface for the collection "HP Test Set to Execution List Model". At the top, there are tabs for Integrations, Collections, Models, and Repositories. On the right, there are links for Activity, Help, Settings, and a user account. The main title is "Field Mapping: HP Test Set to Execution List Model". Below it, a sub-header says "View and manage the field mapping for this collection. The field mapping specifies how fields from your repository artifact map to fields in your model." A "Back to Collection" link is on the left, and a "Done" button is on the right.

The central area shows two entities: "http://hpalm.../qcbin: Test Set - Default" on the left and "Model: ExecutionList" on the right. A mapping diagram shows arrows connecting fields from the test set to the execution list model. Below the diagram, it says "2 of 21 fields mapped" on the left and "1 of 1 fields mapped" on the right. To the right of the diagram, there is a section titled "Field Mapping" with a description: "Specify how the fields on your repository artifact align to fields in your model. The mapping between the fields on each side forms the field mapping for this collection." There are also search bars for "Search 'HP Test Set to Execution List Model' artifact fi..." and "Search 'ExecutionList' model fields by name or type", and a "Suggest Mappings" button.

Below the main mapping area, there is a detailed view of specific mappings. It shows two pairs of fields being mapped: "Region - Testset" to "RCN" and "Name" to "Name". Each pair has a "Configure" button and a delete icon.

## 6. Create Integration for the Execution List

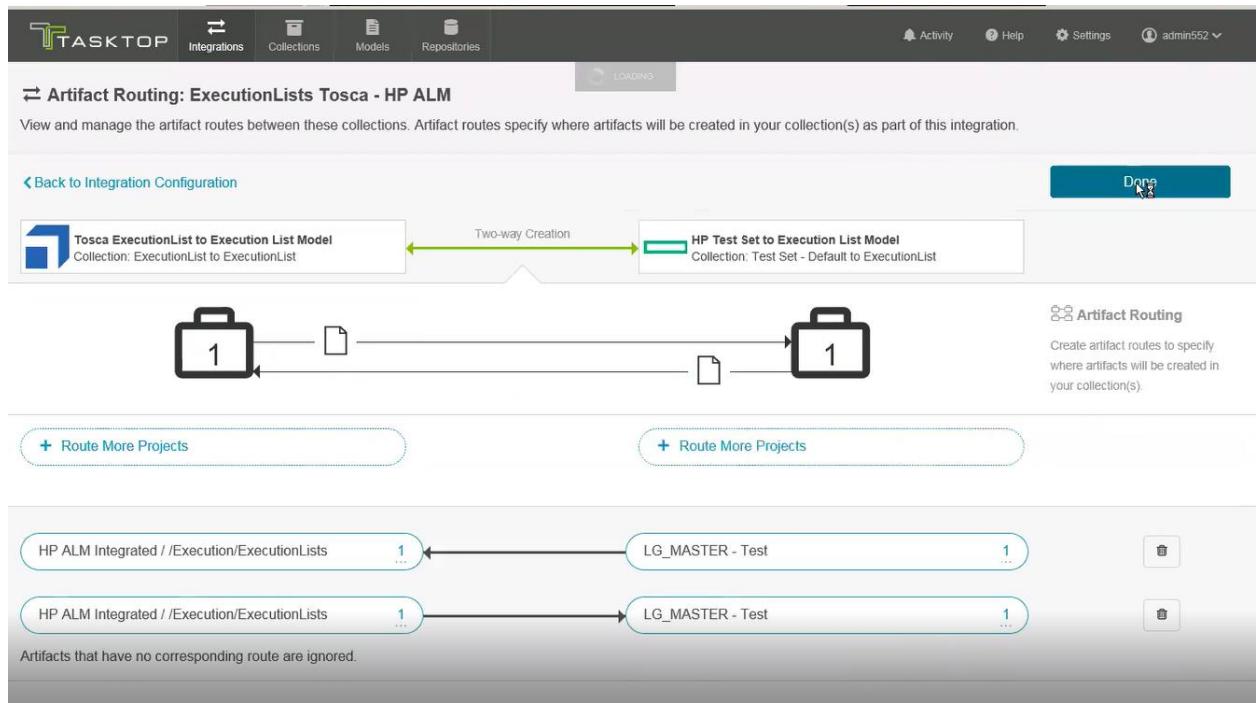
The screenshot shows the Tasktop Integration creation interface for "ExecutionLists Tosca - HP ALM". The top bar includes tabs for Integrations, Collections, Models, and Repositories, along with activity, help, settings, and user links. The main title is "New Integration | Tasktop".

The integration configuration screen shows a flow between two collections: "1 Repository - 1 Collection" (Tosca) and "1 Repository - 1 Collection" (HP ALM). The Tosca collection is connected to the HP ALM collection via a central node labeled "Tosca ExecutionList to Execution List Model". The Tosca collection has a sub-node "Tricentis Tosca" and the HP ALM collection has a sub-node "HPE QC / ALM". Both sub-nodes have their own "Overview" sections on the right.

On the right side of the interface, there is a sidebar with a tree view under "Overview" containing the following items:

- Artifact Creation Flow
- Field Flow
- Artifact Routing
- Artifact Filtering
- Comment Flow
- Attachment Flow
- Conflict Resolution Strategy

7. Go to Artifact Routing, select Artifacts and, define the required Artifact Creation Flow



## Mapping of Execution Entry from TOSCA to Test Runs/Test Lab Module in HP ALM

### 1. Create a Model for Execution Entry

The screenshot shows the Tasktop interface for creating a new model. The title bar says "TASKTOP". The top navigation bar includes "Integrations", "Collections", "Models", and "Repositories". On the right, there are "Activity", "Help", "Settings", and a user dropdown. The main area is titled "Model Configuration" with "Execution Entry" selected. A sub-header says "View and configure your model. Models define the fields that constitute a given artifact type." Below this is a "Back to Models" link and "Cancel" and "Save" buttons. The central part is a table titled "Fields" with columns: "Smart Field", "Label", "Type", and "Required". It contains two rows: one for "Linked Test Case" (Relationship type) and one for "Linked Execution List" (Relationship type). Both rows have checkboxes for "Required" and "Edit" buttons. A plus sign icon is at the bottom left of the table.

### 2. Create a Collection to map TOSCA to the Execution entry model in Tasktop

The screenshot shows the Tasktop interface for creating a new collection. The title bar says "TASKTOP". The top navigation bar includes "Integrations", "Collections", "Models", and "Repositories". On the right, there are "Activity", "Help", "Settings", and a user dropdown. The main area is titled "New Collection" with "Tosca ExecutionEntry to Execution Entry Model" selected. A sub-header says "Configure your new collection. Collections comprise a group of artifacts that can be used in one or more integrations." Below this is a "Back to Collections" link and "Cancel" and "Save" buttons. The "Save" button has a mouse cursor hovering over it. The page is divided into sections: "Connection" (choose a repository connection), "Projects" (choose projects for artifacts), and "Field Mapping" (map artifacts from the source to the target model). In the "Connection" section, the URL "http://[REDACTED]:81/REST/ToscaCommander" is selected. In the "Projects" section, there is a list of 1 project. In the "Field Mapping" section, "Artifact: ExecutionEntry" is mapped to "Model: Execution Entry".

3. Configure the relationship in the Collection as shown below

**Relationship Specification: Tosca ExecutionEntry to Execution Entry Model**

View and manage the relationship specification for this collection. The relationship specification defines how your repository artifact aligns to the relationship types in your model.

[Back to Collection](#) [Cancel](#) [Save](#)

http://[REDACTED]:81/REST/ToscaCommander: ExecutionE... Model: Execution Entry

2 of 11 relationships mapped 2 of 2 relationships mapped

Relationship Specification  
Specify how your repository artifact aligns to the relationship types in your model

Search "Tosca ExecutionEntry to Execution Entry Model" Select a field on each side to configure additional relationship mappings Search "Execution Entry" model fields by name or type [Suggest Mappings](#)

--> % TestCase --> % Linked Test Case [Configure](#) [Delete](#)  
--> % ExecutionList --> % Linked Execution List [Configure](#) [Delete](#)

4. Create collection to map HP ALM Test Set Entry to Execution entry model in Tasktop

**New Collection** HP Test Set Entries to Execution Entry Model

Configure your new collection. Collections comprise a group of artifacts that can be used in one or more integrations.

[Back to Collections](#) [Cancel](#) [Save](#)

Connection http://hpalm[REDACTED]/qcbin [Choose Connection](#)

Projects LG\_MASTER - Test [Manage Projects](#)

Artifact: Test Instance - MANUAL Model: Execution Entry

Map Fields

Field Mapping  
Choose the artifact type from your end repository and the model on which you'd like to base this collection. Map between the fields on each side to form the field mapping for this collection.

## 5. Configure the relationship with the existing model

The screenshot shows the Tasktop interface for configuring relationship specifications. At the top, there are tabs for Integrations, Collections, Models, and Repositories. On the right, there are links for Activity, Help, Settings, and a user account (admin552). The main title is "Relationship Specification: HP Test Set Entries to Execution Entry Model". Below it, a sub-header says "View and manage the relationship specification for this collection. The relationship specification defines how your repository artifact aligns to the relationship types in your model." There are back and cancel buttons, and a save button with a checkmark icon.

On the left, there's a URL: <http://hpalm.../qcbin>: Test Instance - MANUAL. On the right, it says "Model: Execution Entry". A "Relationship Specification" section on the right describes how the repository artifact aligns to the relationship types in the model. It shows two relationships mapped: "2 of 21 relationships mapped" and "2 of 2 relationships mapped".

Below this, there are search fields for "HP Test Set Entries to Execution Entry Model" and "Execution Entry" model fields, along with a "Suggest Mappings" button. The central part shows two mappings: "TestSet" to "Linked Execution List" and "Test" to "Linked Test Case", each with a "Configure" and a delete icon.

## 6. Create the corresponding Integration

The screenshot shows the Tasktop interface for creating a new integration. The top navigation bar includes Integrations, Collections, Models, and Repositories, along with activity, help, settings, and user links. The main title is "New Integration" with a subtitle "Execution Entries Tosca - HP ALM". A sub-instruction says "Configure your new integration. Integrations flow artifacts between collections to achieve a specific goal." There are back and cancel buttons, and a save button with a checkmark icon.

The central area shows a flow diagram. It starts with "1 Repository - 1 Collection" on the left, connected by a green line to another "1 Repository - 1 Collection" on the right. Below these, two artifact flows are shown: one from "Tricentis Tosca" (HTTP://.../REST/ToscaCommander) to "HPE QC / ALM" (HTTP://.../qcbin), and another from "Tosca ExecutionEntry to Execution Entry Model" to "HP Test Set Entries to Execution Entry Model". The "Tosca ExecutionEntry to Execution Entry Model" flow has a "Projects" section with "0 of 1 routed" and a "Model" section with "Execution Entry". The "HP Test Set Entries to Execution Entry Model" flow also has a "Model" section with "Execution Entry" and a "Projects" section with "0 of 1 routed".

On the right, there's an "Overview" sidebar with sections for Artifact Creation Flow, Field Flow, Artifact Routing, Artifact Filtering, Comment Flow, Attachment Flow, and Conflict Resolution Strategy.

## 7. Artifact routing for the integration

The screenshot shows the Tasktop Integration Configuration interface for managing artifact routes between collections. At the top, there are tabs for Integrations, Collections, Models, and Repositories. On the right, there are buttons for Activity, Help, Settings, and a user account.

The main title is "Artifact Routing: Execution Entries Tosca - HP ALM". Below it, a sub-header says "View and manage the artifact routes between these collections. Artifact routes specify where artifacts will be created in your collection(s) as part of this integration." There are "Back to Integration Configuration" and "Save" buttons.

A diagram illustrates the artifact routes. It shows two boxes: "Tosca ExecutionEntry ro Execution Entry Model Collection: ExecutionEntry to Execution Entry" and "HP Test Set Entries to Execution Entry Model Collection: Test Instance - MANUAL to Execution Entry". A green double-headed arrow labeled "Two-way Creation" connects them. Below this, there are two icons of briefcases with the number "1" inside, connected by a horizontal line with arrows pointing left and right, indicating a bidirectional route.

To the right, a section titled "Artifact Routing" with a sub-section "Create artifact routes to specify where artifacts will be created in your collection(s)" is shown. Below this are two "Route More Projects" buttons.

At the bottom, there are two rows of artifact routes. Each row consists of a source collection ("HP ALM Integrated") and a target collection ("LG\_MASTER - Test"). Each row has a delete icon on the right. The first row has a green arrow, and the second row has a red arrow. A note below says "Artifacts that have no corresponding route are ignored."

## Mapping of Test Result from TOSCA to Test Lab/Test Runs Modules in HP ALM

1. Create a Model to sync the execution log from TOSCA to ALM

The screenshot shows the 'Model Configuration' screen in Tasktop. The title bar says 'Model Configuration' and 'TestCaseLog'. Below it, a sub-header says 'View and configure your model. Models define the fields that constitute a given artifact type.' A 'Back to Models' link is on the left, and 'Cancel' and 'Save' buttons are on the right. The main area is titled 'Fields' and contains a table:

Smart Field	Label	Type	Required	
	ExecutionEntry	Relationship	<input type="checkbox"/>	
	Name	String	<input type="checkbox"/>	
	Result	Single Select	<input type="checkbox"/>	
		Field Values...		
		Passed		
		Failed		
		Error		
		NoResult		

Below the table is a checkbox 'Allow unmapped values to flow'.

2. Create Collection to sync the data from HP ALM to created model

The screenshot shows the 'New Collection' screen in Tasktop. The title bar says 'New Collection' and 'HP Run to TestCaseLog Model'. Below it, a sub-header says 'Configure your new collection. Collections comprise a group of artifacts that can be used in one or more integrations.' A 'Back to Collections' link is on the left, and 'Cancel' and 'Save' buttons are on the right. The main area has sections:

- Connection:** A dropdown menu set to 'http://hpalm...cbin'.
- Projects:** A section to choose projects containing artifacts to include in the collection.
- Field Mapping:** A section to map artifacts between the 'Run - MANUAL' model and the 'TestCaseLog' model. It shows 'Artifact: Run - MANUAL' and 'Model: TestCaseLog' with a 'Map Fields' button.

### 3. Configure the Relationship

The screenshot shows the Tasktop interface for configuring a relationship specification. At the top, there's a navigation bar with 'TASKTOP' logo, 'Integrations', 'Collections', 'Models', and 'Repositories'. On the right, there are 'Activity', 'Help', 'Settings', and a user 'admin552'. Below the navigation, a title bar says 'Relationship Specification: HP Run to TestCaseLog Model'. A sub-instruction below it reads: 'View and manage the relationship specification for this collection. The relationship specification defines how your repository artifact aligns to the relationship types in your model.' There are two main sections: one for the 'HP Run' artifact and one for the 'TestCaseLog' model. The 'HP Run' section shows a URL 'http://hpalm.../qcbin: Run - MANUAL' and a 'Model: TestCaseLog'. It indicates '1 of 22 relationships mapped' and '1 of 1 relationships mapped'. The 'TestCaseLog' section has a 'Relationship Specification' link with a note: 'Specify how your repository artifact aligns to the relationship types in your model.' Below these sections are search fields for artifact fields and model fields, and a 'Suggest Mappings' button. A large central area displays a diagram where a 'Test Instance' artifact is connected to an 'ExecutionEntry' model field. A 'Configure' button is available for this mapping.

### 4. Map the fields

The screenshot shows the Tasktop interface for field mapping. The top navigation and user interface are similar to the previous screenshot. The title bar here is 'Field Mapping: HP Run to TestCaseLog Model'. A sub-instruction below it says: 'View and manage the field mapping for this collection. The field mapping specifies how fields from your repository artifact map to fields in your model.' The 'HP Run' section shows a URL 'http://hpalm.../qcbin: Run - MANUAL' and a 'Model: TestCaseLog'. It indicates '3 of 34 fields mapped' and '2 of 2 fields mapped'. The 'TestCaseLog' section has a 'Field Mapping' link with a note: 'Specify how the fields on your repository artifact align to fields in your model. The mapping between the fields on each side forms the field mapping for this collection.' Below these sections are search fields for artifact fields and model fields, and a 'Suggest Mappings' button. A large central area displays a diagram with three mappings: 'Tester' to 'exin08dd', 'Status' to 'Result', and 'Run Name' to 'Name'. Each mapping has a 'Configure' button and a delete icon.

The screenshot shows the Tasktop interface for 'Field Mapping: HP Run to TestCaseLog Model'. At the top, there are navigation tabs: Integrations, Collections, Models, and Repositories. On the right, there are links for Activity, Help, Settings, and a user account (admin562). Below the tabs, a message says 'View and manage the field mapping for this collection. The field mapping specifies how fields from your repository artifact map to fields in your model.' A 'Back to Field Mapping' link is on the left, and 'Cancel' and 'Save' buttons are on the right.

Below the message, there are two 'Transform' dropdowns: 'Status' (Single Select, Copy) and 'Result' (Single Select, Copy). The main area is titled 'Mapped Options' and contains five mappings:

- Failed → Failed
- [ Passed ] , Passed wmd → Passed
- Empty → Empty
- Blocked , Function not ready in SAP , [ Not Completed ] → Error
- N/A , [ No Run ] → NoResult

An 'Automatic' checkbox is checked at the bottom. Each mapping has a trash icon on the right.

## 5. Create Collection to Map TOSCA to TestCase Log Model

The screenshot shows the Tasktop interface for creating a new collection. The title bar says 'New Collection' and 'Tosca TestCaseLog to TestCaseLog Model'. A message below says 'Configure your new collection. Collections comprise a group of artifacts that can be used in one or more integrations.' A 'Back to Collections' link is on the left, and 'Cancel' and 'Save' buttons are on the right.

The 'Connection' section shows 'http://[REDACTED]:81/REST/ToscaCommander' selected. A 'Connection' link is to the right, with the note 'Choose the repository connection on which you'd like to base this collection.'

The 'Projects' section shows 'HP ALM Integrated' with a 'Manage Projects' button. A 'Projects' link is to the right, with the note 'Choose the projects that contain the artifacts that you would like to include in this collection.'

The 'Field Mapping' section shows 'Artifact: ExecutionTestCaseLog' and 'Model: TestCaseLog'. A 'Map Fields' button is in the center. A 'Field Mapping' link is to the right, with the note 'Choose the artifact type from your end repository and the model on which you'd like to base this collection. Map between the fields on each side to form the field mapping for this collection.'

## 6. Map the fields

The screenshot shows the Tasktop Field Mapping interface. At the top, there's a navigation bar with icons for Integrations, Collections, Models, and Repositories. On the right, there are links for Activity, Help, Settings, and a user account (admin552). Below the navigation is a title bar: "Field Mapping: Tosca TestCaseLog to TestCaseLog Model". A sub-header says "View and manage the field mapping for this collection. The field mapping specifies how fields from your repository artifact map to fields in your model." Below this are two sections: "http://[REDACTED]:81/REST/ToscaCommander: ExecutionT..." and "Model: TestCaseLog". The first section shows "2 of 33 fields mapped" with a diagram showing a file icon connected to a database icon. The second section shows "2 of 2 fields mapped" with a similar diagram. To the right, a sidebar titled "Field Mapping" explains the purpose: "Specify how the fields on your repository artifact align to fields in your model. The mapping between the fields on each side forms the field mapping for this collection." Below the sections are search bars and a "Suggest Mappings" button. The main area contains a mapping table with two rows. The first row maps "Result" from the source to "Result" in the target. The second row maps "Name" from the source to "Name" in the target. Each row has "Configure" and "Delete" buttons.

## 7. Set up the Integration and Run

The screenshot shows the Tasktop Integration Configuration interface. At the top, there's a navigation bar with icons for Integrations, Collections, Models, and Repositories. On the right, there are links for Activity, Help, Settings, and a user account (admin552). Below the navigation is a title bar: "Integration Configuration | TestCaseLog Tosca - HP ALM". A sub-header says "Configure your integration. Integrations flow artifacts between collections to achieve a specific goal." Below this is a "Back to Integrations" link and a "Done" button. The main area displays an integration flow diagram. It starts with two "1 Repository - 1 Collection" nodes at the top, connected by a double-headed arrow. Below them are two artifact nodes: "Tricentis Tosca" (HTTP endpoint) and "HPE QC / ALM" (HTTP endpoint). These two are connected by a vertical line. From the bottom of this vertical line, two arrows point down to two "HP Run to TestCaseLog Model" nodes. Each of these "Run" nodes has a "Model" section (TestCaseLog) and a "Projects" section (1 of 1 routed). To the right of the integration flow is an "Overview" sidebar with links: Overview, Artifact Creation Flow, Field Flow, Artifact Routing, Artifact Filtering, Comment Flow, Attachment Flow, and Conflict Resolution Strategy.

To Summarize, you should have 4 integrations up and running as shown below-

