

# Automation Engineer Level 1

**Exercise Grand Scenario**



### Objective

By the end of this exercise, you will be able to automate an end-to-end test case in Tosca that includes usage of PDF Engine, Excel Engine, Mail Engine, Folder operations and File operations.

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### Why is this Important?

Tosca Engines 3.0 and Standard Modules simplify the process of creating TestCases for multiple technologies. This end-to-end use case will give an exposure to those Engines and Standard Modules.

### High level use case:

- Login to demo web shop - <https://demowebshop.tricentis.com/>
  - Order a Fiction book, download the invoice PDF and logout
  - Verify the pdf content and copy the content to Excel
  - Send the PDF file and Excel file via email
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### Instructions

#### Part 1- Generate and verify the PDF

1. Log in to your Tosca Commander workspace and navigate to the path **AE1 Exercises>> Execution>> ExecutionLists**
2. Execute the Execution List **Ficton book E2E test**
3. Open the downloaded pdf – **order\_orderNumber.pdf**
4. Navigate to **AE1 Exercises>> Modules>> Grand Scenario - Demo web shop** and create a new Module folder **PDF Modules**
5. From the PDF Modules folder, launch PDF Scan from XScan and select the downloaded PDF for scanning

6. Scan the following areas as Text – **Order number, Company** from **Billing Information** and **Order total**
7. Save the Module and rename it to **Order Invoice**
8. In the **Grand Scenario - Process TestCase** folder create a new TestCase and name it as **Verify order invoice pdf**
9. Add the Module **Order Invoice** in the TestCase **Verify order invoice pdf** and rename the TestStep to **Verify invoice details**
10. Input **Values** as shared in the table below:

TestStep Value	Value	ActionMode
Target PDF	<Filepath\Filename.pdf>	Input
Company	Demowebshop	Verify
Order number	{B[orderNumber]}	Verify
Order total	41.00	Verify

11. Mark the TestCase **Completed**

### Part 2 – Copy data to Excel

1. In the Grand Scenario TestCase - Process folder create a new TestCase and name it as **Copy data to Excel**
2. Within this TestCase, create three **TestStepFolders** – ‘Precondition’, ‘Process’, and ‘Postcondition’
3. Add the Standard Module **TBox Open Excel Workbook** to the folder **Precondition** and rename it as **Create and open new Excel workbook**
4. Input **Values** as shared in the table below:

TestStep Value	Value	ActionMode
Workbook Name	Order_Details	Input
Path	C:\Tosca_Projects\ Order_Details.xlsx	Input
Create New	True	Input

5. Add the Standard Module **TBox Create Excel Worksheet** to the folder **Precondition** and rename it as **Create new Excel worksheet**

6. Input **Values** as shared in the table below:

TestStep Value	Value	ActionMode
Workbook Name	Order_Details	Input
Worksheet Name	Order_Details	Input

7. Add the Standard Module **TBox Define Excel Range** to the folder **Precondition** and rename it as **Define Excel range**

8. Input **Values** as shared in the table below:

TestStep Value	Value	ActionMode
Workbook Name	Order_Details	Input
Worksheet Name	Order_Details	Input
Range Name	OrderDataRange	Input
Start Cell	A1	Input
End Cell	D5	Input

9. Add the Standard Module **TBox Excel Range Manipulation** to the folder **Process** and rename it as **Define headers**

10. Input **Values** as shared in the table below:

TestStep Value	Value	ActionMode
Range Name	OrderDataRange	Input
Data Table		Select
<b>Enter values in \$header row to define header</b>		
\$header		Select
\$1	Company	Input
\$2	OrderNumber	Input
\$3	OrderTotal	Input

11. Add the Standard Module **TBox Excel Range Manipulation** to the folder **Process** and rename it as **Enter data in Excel**

12. Input **Values** as shared in the table below:

TestStep Value	Value	ActionMode
Range Name	OrderDataRange	Input
Data Table		Select
<b>Enter values in \$1 row to enter data in 1<sup>st</sup> row</b>		
\$1		Select
Company	Demowebshop	Input
OrderNumber	{B[orderNumber]}	Input
OrderTotal	41.00	Input

13. Add the Standard Module **TBox Close Excel Workbook** to the folder **Postcondition** and rename it as **Close Excel workbook**

14. Input **Values** as shared in the table below:

TestStep Value	Value	ActionMode
Workbook Name	Order_Details	Input
Path	C:\Tosca_Projects	Input
Save	True	Input

15. Mark the TestCase **Completed**

### Part 3 – Move the pdf file

1. In the Grand Scenario - Process TestCase folder create a new TestCase and name it as **Move the pdf file**

2. Add the Standard Module **TBox Move/Rename File** in the TestCase **Move the pdf file** and rename the TestStep to **Move pdf file**

3. Input **Values** as shared in the table below:

TestStep Value	Value	ActionMode
Existing Path	<Filepath\Filename.pdf>	Input
New Path	C:\Tosca_Projects\Invoice.pdf	Input

4. Mark the TestCase **Completed**

### Part 4 – Send the files in email

**Disclaimer:** Please use a personal email for this exercise if your organization email has Multifactor Authentication (MFA).

1. In the Grand Scenario - Process TestCase folder create a new TestCase and name it as **Send the files in email**
2. Add the Standard Module **Connect to Exchange Server** in the TestCase **Send the files in email**
3. Input **Values** as shared in the table below:

TestStep Value	Value	ActionMode
Connection Name	MailConnection	Input
Username	<your email id>	Input
Password	<your password>	Input
Exchange Web Services Url	https://outlook.office365.com/EWS/Exchange.asmx	Input
Authentication Type	Direct	Select

4. Add the Standard Module **Send Mail** in the TestCase **Send the files in email**
5. Input **Values** as shared in the table below:

TestStep Value	Value	ActionMode
Connection Name	MailConnection	Input
From ->Address	<Your email id>	Input
From ->Name	<Your Name>	Input
Subject	Order Invoice Details	Input
To	<Your email id>	Input
Body	Hi,    Please find the order invoice and details attached.    Regards	Input
Attachment	C:\Tosca_Projects\Invoice.pdf	Input
Attachment	C:\Tosca_Projects\Order_Details.xlsx	Input

6. Mark the TestCase **Completed**
7. Drag and drop these 4 new TestCases to the Execution List **Fiction book E2E test** and execute these 4 TestCases from the Execution List

### Expected outcome

The Execution List should be executed successfully, performing all the steps and verifications successfully.

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### Hints

1. To use Gmail account for mail automation using Tosca, you need to enable 2FA and set an app password
2. Personal outlook account can be used directly for mail automation using Tosca with Direct Authentication
3. When using outlook email id use - <https://outlook.office365.com/EWS/Exchange.asmx> as the Exchange Web Services URL
4. Use the mail server - **smtp.office365.com**, Port – **587** and Protocol – **SMTP** for sending mails using outlook email id in Tosca
5. Use the mail server - **smtp.office365.com**, Port – **993** and Protocol – **IMAP** for sending mails using outlook email id in Tosca