

# E-Track System

Cipla Limited

Installation Qualification Document

This user's guide includes the installation qualification protocols defined for the application.

*Leena Patil*  
14-9-2022

Prepared By: Leena Patil

Version Number: 1.0.0

Notice:

This document contains information, which is the proprietary property of Bar Code India. This document is received in confidence and its contents cannot be disclosed or copied without the prior written consent of Bar Code India..

Nothing in this document constitutes a guaranty, warranty, or license, express or implied. Bar Code India disclaims all liability for all such guaranties, warranties, and licenses, including but not limited to: Fitness for a particular purpose; merchantability; not infringement of intellectual property or other rights of any third party or of Bar Code India; indemnity; and all others. The reader is advised that third parties can have intellectual property rights that can be relevant to this document and the technologies discussed herein and are advised to seek the advice of competent legal counsel, without obligation of Bar Code India.


Bar Code India retains the right to make changes to this document as per discussion with the Customer.

COPYRIGHT

Copyright © BCI 2022. All rights reserved.

TRADEMARKS

\*Other product and corporate names may be trademarks of other companies and are used only for explanation and to the owners' benefit, without intent to infringe.

  
14-9-2022

## REVISION HISTORY

Revision Number	Date	Prepared By	Reviewed By	Comment
1.0	14-Sept-2022	Leena Patil	Abhishek Palwankar, Narendrababu Kota	Installation Qualification Protocol

*Patil*  
14-9-2022



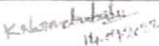
## Table of Contents


1	Protocol Approval.....	1
2	System Details .....	3
3	Purpose .....	4
4	Scope.....	4
5	Reference .....	4
6	Responsibilities.....	5
7	Schematic Process Flow .....	6
8	Pre-Installation Criteria.....	7
9	Configurations Done.....	8
9.1	Azure DevOps Configuration .....	8
9.2	On Premise E-Track Server Configuration .....	12
10	Post Results .....	13
11	Test Defect Management.....	15
12	Deviation Record .....	16
13	Summary and Conclusion.....	17
14	Post Approval .....	18


*Fahid*  
14-9-2022

System Name	E-Track System	Document No.	Cipla_E-Track -Installation Qualification_V1.0
Version No.	1.0	Page No.	Page 1 of 19

## 1 PROTOCOL APPROVAL

Prepared By		
Name	Designation	Signature & Date
Leena Patil	Technical Writer	 14-9-2022
Checked By		
Name	Designation	Signature & Date
Abhishek Palwankar	Tech Manager – Projects and Presales	 14.09.2022
Narendrababu Kota	Deployment Specialist	 14.09.2022

Approved By			
Department	Name	Designation	Signature & Date
Software	Ritu Kapoor	Head of Engineering	 14.9.2022

  
14-9-2022



System Name	E-Track System	Document No.	Cipla_E-Track -Installation Qualification_V1.0
Version No.	1.0	Page No.	Page 2 of 19

Pre-Approval (Cipla Team)			
Department	Name	Designation	Signature & Date
IT Infra			
IT BP			
Business SPOC			
Unit QA			
COA			

Refer pre-approval annexure.

IQ - Development pre-approval.

*K. Narendra Reddy*

29.09.22

*Fatima*  
14-9-2022

System Name	E-Track System	Document No.	Cipla_E-Track -Installation Qualification_V1.0
Version No.	1.0	Page No.	Page 3 of 19

## 2 SYSTEM DETAILS

Type of Validation: (Tick (✓) whichever is applicable)

Prospective Validation	Re-Validation	Retrospective Validation
✓	--	--

Testing Environment: (Tick (✓) whichever is applicable)

Test	Validation	Production
✓	--	--

System & Software Details:

System Details	System Name	Development Server
	System No.	172.16.10.242
Software Details	Software Name (PC Based)	Cipla E-Track

System Details:

Software Name:	Cipla E-Track System
System Identification Number	172.16.10.242

Takir  
14-9-2022

System Name	E-Track System	Document No.	Cipla_E-Track -Installation Qualification_V1.0
Version No.	1.0	Page No.	Page 4 of 19

### 3 PURPOSE

The purpose of installation qualification to display the audit trail of uploading the E-Track build to track server using Azure DevOps to process the flow build and release the application to Cipla E-Track system.

### 4 SCOPE

The scope of this document is to perform the installation qualification of CICD Pipeline of development server.

### 5 REFERENCE

CAPA Reference: CAPA-1025-2021-00199 Audit trail program will be added in the e-track system.

*Tabir*  
14-9-2022




System Name	E-Track System	Document No.	Cipla_E-Track -Installation Qualification_V1.0
Version No.	1.0	Page No.	Page 5 of 19

## 6 RESPONSIBILITIES

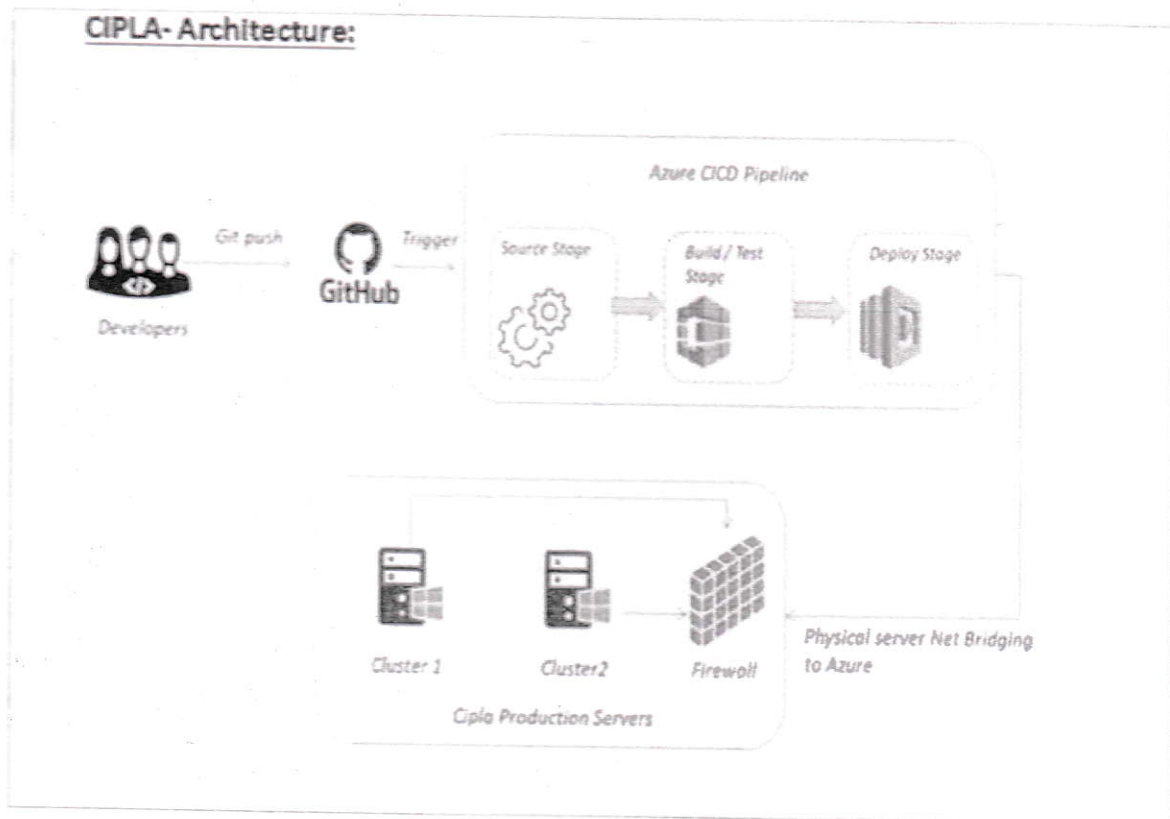
Responsible persons for validation activity as following:

Function	Name	Responsible for (Name of the Activity)
Vendor's Representative	Narendrababu Kota	Performer
Information Technology		Reviewer
Business SPOC		Reviewer
Quality Assurance		Review and Approve

  
14-9-2022

System Name	E-Track System	Document No.	Cipla_E-Track -Installation Qualification_V1.0
Version No.	1.0	Page No.	Page 6 of 19

## 7 SCHEMATIC PROCESS FLOW



Final  
14-9-2022

System Name	E-Track System	Document No.	Cipla_E-Track -Installation Qualification_V1.0
Version No.	1.0	Page No.	Page 7 of 19

## 8 PRE-INSTALLATION CRITERIA

BCIL will perform Azure development activity on DevOps CI/CD pipeline and in On-Premises server and add deployment group and configure agent pool.

1. Provide access to Microsoft DevOps and On-Premise Development Server.
2. Installing Power shell script/agent at On-Premise Development Server.
3. Manage Azure DevOps for Cipla for CI/CD configuration to a dedicated account.
4. Azure DevOps CI/CD Pipeline dedicated URL's to be opened at Firewall to access from On-Premise Development Server.

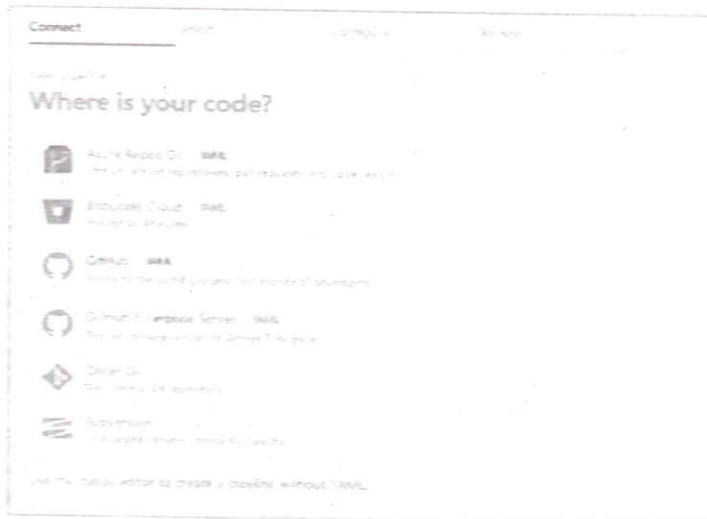
Totter  
14-9-2022

System Name	E-Track System	Document No.	Cipla_E-Track -Installation Qualification_V1.0
Version No.	1.0	Page No.	Page 8 of 19

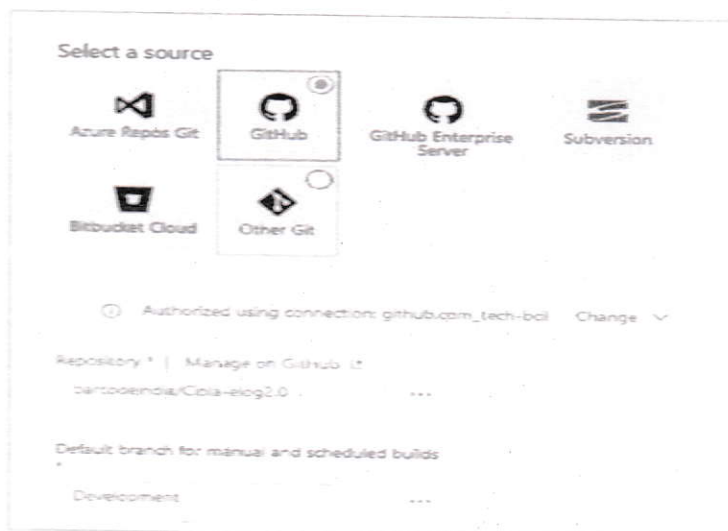
## 9 CONFIGURATIONS DONE

### 9.1 AZURE DEVOPS CONFIGURATION

1. In the pipeline section we are using creating new pipeline then select the Classic editor option:



2. After selecting the GitHub then select repository and branch where maintaining the source code:



System Name	E-Track System	Document No.	Cipla_E-Track -Installation Qualification_V1.0
Version No.	1.0	Page No.	Page 9 of 19

### 3. Select the template :

Build and test an ASP.NET Core web application.

- ASP.NET Core (.NET Framework)**  
Build an ASP.NET Core web application that targets the full .NET Framework.
- ASP.NET with containers**  
Build and push an ASP.NET application with container support.
- Azure Cloud Services**  
Build, package, test, and deploy an Azure Cloud Service.
- Azure Functions for .NET**  
Build and package a .NET based Azure Functions application to be deployed on Azure Functions.
- Azure Functions for Node.js**  
Build and package a Node.js based Azure Functions application to be deployed on Azure Functions.

### 4. Configure all the required fields:

Tasks Variables Triggers Options History Save & Queue

**Pipeline**  
Build pipeline

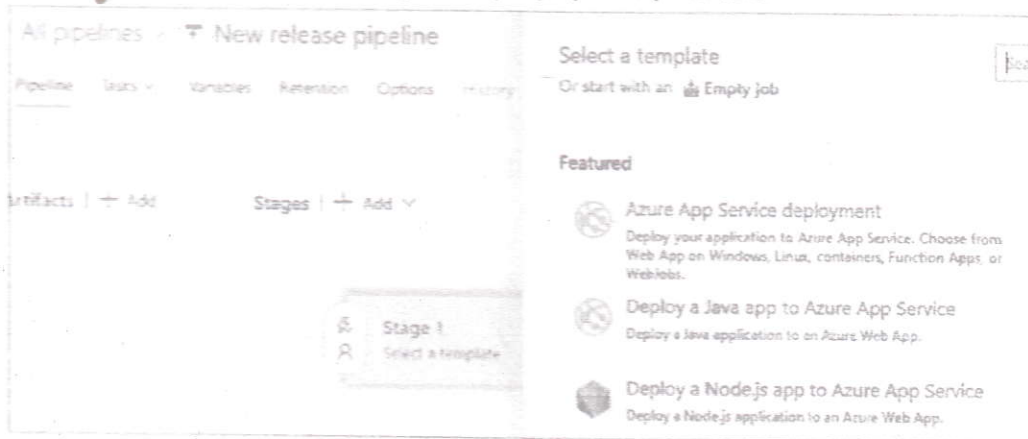
- Get sources**  
Build pipeline
- Agent job 1**  
Run on agent
- Use NuGet 4.4.1**  
NuGet tool installer
- NuGet restore**  
NuGet
- Build solution**  
Visual Studio build
- Publish Artifact**  
Publish build artifacts

4-9-2022

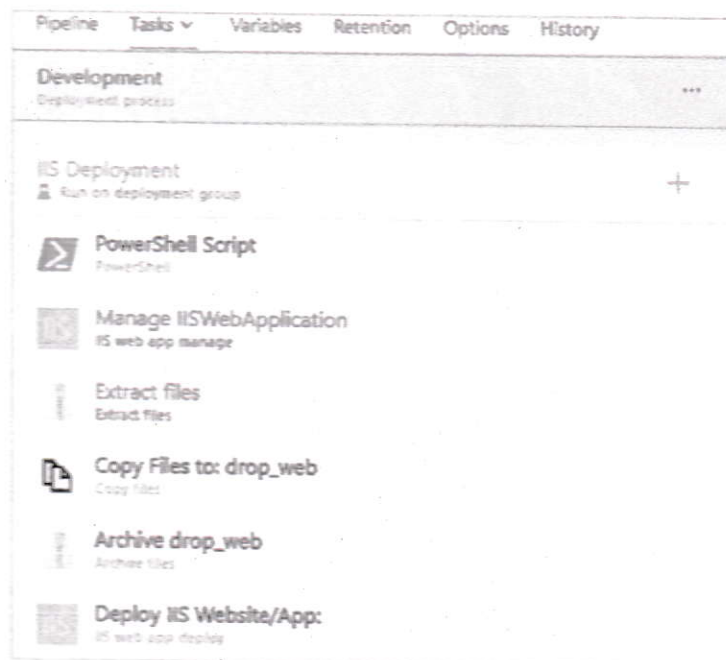


System Name	E-Track System	Document No.	Cipla_E-Track -Installation Qualification_V1.0
Version No.	1.0	Page No.	Page 10 of 19

## 5. Release Pipeline: Select the template as per project requirement.



## 6. Add the tasks to deploy the application in to IIS web server:



Tab 1  
14-9-2022

System Name	E-Track System	Document No.	Cipla_E-Track -Installation Qualification_V1.0
Version No.	1.0	Page No.	Page 11 of 19

### Deployment Groups:

Added the deployment group of the Development server to configure Azure Pipelines to deploy the application onto the server:



### Agent Pools:

An agent pool is a collection of agents. Instead of managing agent individually, this can organize agents into agent pools. When an agent configured, it gets registered with a single pool and the pipeline create can specify to the pool in which the pipeline runs. And when the pipeline run, it runs on an agent server from that pool meets the pipeline.

14-9-2022

System Name	E-Track System	Document No.	Cipla_E-Track -Installation Qualification_V1.0
Version No.	1.0	Page No.	Page 12 of 19

## 9.2 ON-PREMISE E-TRACK SERVER CONFIGURATION

Configuring deployment group in on premise servers to communicate between Azure DevOps and Development On-Premises server:

```
Windows PowerShell
Copyright (C) 2014 Microsoft Corporation. All rights reserved.

PS C:\Users\barcodeadm> cd c:\
PS C:\> cd .\agent
PS C:\agent> .\config.cmd

Azure Pipelines
agent v2.209.0 (commit 664989c)

>> Connect:
Enter server URL > _
```

When we run .\run.cmd command there it shows listening for jobs there the connection established from Azure DevOps to Cipla on-prem server.

```
PS C:\> cd .\azagent
PS C:\azagent> ls

Directory: C:\azagent

Mode                LastWriteTime         Length Name
----                -
d-----          8/29/2022      14:44         A1
d-----          8/29/2022      16:11         A2
d-----          8/29/2022      14:50         A3
d-----          8/29/2022      23:02         bin
d-----          8/29/2022      14:41         .git
d-----          8/17/2022      10:23      2987 config.cmd
d-----          8/17/2022      10:13      3290 run.cmd

PS C:\azagent> .\run.cmd
Error reported in diagnostic logs. Please examine the log for more details.
- C:\azagent\diag\Agent_20220902-093554-utc.log
An error occurred: Not configured
PS C:\azagent> cd A2
PS C:\azagent\A2> .\run.cmd
Scanning for host capabilities.
Connecting to the server.
2022-09-02 09:36:30: listening for jobs
```

Tested  
14-9-2022



System Name	E-Track System	Document No.	Cipla_E-Track -Installation Qualification_V1.0
Version No.	1.0	Page No.	Page 13 of 19

## 10 POST RESULTS

Sr. No.	Test	Expected Result	Actual Result	Result Pass/Fail	Performed by Sign & Date
1	Open port number 80	This is the port number for the application which we configure in the IIS web server.	Refer Annexure 1.0	Pass	K. Narasimhaiah 29.09.22 Narendran.K
2	Open port number 443	This is the default port number for the HTTPS protocol for communicating the external websites to the on-prem servers like dev.azure.com	Refer Annexure 1.0	Pass	K. Narasimhaiah 29.09.22 Narendran.K
3	Agent installed and should be running up	.\run.cmd to verify whether the agent is working or not in the server. After running this command there we observe listening for jobs then it is working fine.	Refer Annexure 1.0	Pass	K. Narasimhaiah 29.09.22 Narendran.K
4	Configuration of pipelines while creating CI/CD to build and release the application	After configuring the CI/CD pipeline to run a CI pipeline the build is executed successfully then everything is working fine here. In the release pipeline section, we release the application then it fetches all the changes into the specific target	Refer Annexure 1.0	Pass	K. Narasimhaiah 29.09.22 Narendran.K

14-9-2022

System Name	E-Track System	Document No.	Cipla_E-Track -Installation Qualification_V1.0
Version No.	1.0	Page No.	Page 14 of 19

Sr. No.	Test	Expected Result	Actual Result	Result Pass/Fail	Performed by Sign & Date
		folder. There we observe whether the changes reflecting or not into the particular server.	Refer Annexure 1.0	Pass	K. Narasimhaiah 29.09.22
5	Audit Trail	Build upload on server are completed and same is displayed in Audit Trail report.	Refer Annexure 1.0	Pass	Narasimhaiah K. Narasimhaiah 29.09.22 Narasimhaiah

*Tatya*  
14-9-2022



System Name	E-Track System	Document No.	Cipla_E-Track -Installation Qualification_V1.0
Version No.	1.0	Page No.	Page 15 of 19

## 11 TEST DEFECT MANAGEMENT

Test Defect Record				
Page No.	Test No.	Brief description of the Test Defect	Report attached (Yes/No)	Resolution date

Attach a Test Defect Report and supporting documentation (if any) to the Attachments.

N.A

K. Narasimhan

29.09.22

Test  
14-9-2022

System Name	E-Track System	Document No.	Cipla_E-Track-Installation Qualification_V1.0
Version No.	1.0	Page No.	Page 16 of 19

## 12 DEVIATION RECORD

Deviation Record				
Page No.	Test No.	Brief description of Deviation	Report attached (Yes/No)	Resolution Date

Attach deviation report and supporting documentation (if any) to the attachments.

NA

*K. Narendra Reddy*  
29.09.22

*Tat*  
14-9-2022

System Name	E-Track System	Document No.	Cipla_E-Track -Installation Qualification_V1.0
Version No.	1.0	Page No.	Page 17 of 19

### 13 SUMMARY AND CONCLUSION

All Installation Qualification implemented  
Successfully and ready for OQ. Audit Trail  
report is done under E-log and will be  
Validated in OQ.

K. Narasimhaiah  
29.09.22

*For*  
14-9-2022

System Name	E-Track System	Document No.	Cipla_E-Track -Installation Qualification_V1.0
Version No.	1.0	Page No.	Page 18 of 19

## 14 POST APPROVAL

In the list below all persons having participated in the execution of IQ and having signed on any of the tests are identified with their full name, department and function and their signature. With this signature the test participant confirms awareness of procedures to be followed in qualification tests and completion of associated documentation.

Review & Approval (Cipla Team)			
Department	Name	Designation	Signature & Date
IT Infra			
IT BP			
Business SPOC			
Unit QA			
CQA			

*Handwritten signature*  
14-9-2022



System Name	E-Track System	Document No.	Cipla_E-Track -Installation Qualification_V1.0
Version No.	1.0	Page No.	Page 19 of 19

*Handwritten signature*  
14-9-2022



Installation Qualification Document  
E-Track, Cipla Limited  
Confidential & Copyright©2022