

# Plato Infrastructure Services Installation Guide

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Plato Infrastructure Services Installation Guide  
Oracle Banking Trade Finance Process Management  
Oracle Financial Services Software Limited

Oracle Park  
Off Western Express Highway  
Goregaon (East)  
Mumbai, Maharashtra 400 063  
India  
Worldwide Inquiries:  
Phone: +91 22 6718 3000  
Fax: +91 22 6718 3001  
[www.oracle.com/financialservices/](http://www.oracle.com/financialservices/)

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# 1. Preface

## 1.1 Introduction

This guide would help you to install the Plato infrastructure services on designated environment. It is assumed that all the prior setup is already done related with WebLogic 12c installation, WebLogic managed server creation and Oracle DB installation. It is recommended to use dedicated managed server for each of the Plato infrastructure services.

## 1.2 Audience

This document is intended for WebLogic admin or ops-web team who are responsible for installing the OFSS banking products.

## 1.3 Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

## 1.4 Organization

This installation user guide would allow you to configure the security configuration and tools installation

## 1.5 Related Documents

- Day 0 Setup Guide
- LDAP Setup Guide
- Oracle Banking Installer Product\_14.3.0.1.0\_Installation\_Guide
- Oracle Banking Trade Finance Process Management Annexure
- Oracle Banking Trade Finance Process Pre-Installation Guide
- Process Flow Services Installation Guide
- SSL Setup Guide

## 2. Security Configuration and Tools Installation

### 2.1 Pre-requisite

Before you proceed with below, please make sure LDAP server details is provided to you- Like LDAP\_URL, USER\_STORE, LDAP\_SERVER\_CREDENTIAL\_SALT, LDAP\_SERVER\_USER, LDAP\_SERVER\_BASE, LDAP\_SERVER\_CREDENTIAL, LDAP\_USER\_SEARCH\_BASE, LDAP\_USER\_PREFIX, CORS\_ALLOWED\_ORGINS, LDAP\_SERVER\_CREDENTIAL\_SALT etc.

#### 2.1.1 Plato Security JWT

Plato security module enables securing API micro services with JWT (JSON Web Tokens). JSON Web Tokens are an open, industry standard RFC 7519 method for representing claims securely between two parties. JSON Web Token (JWT) is a compact, URL-safe means of representing claims to be transferred between two parties. The claims in a JWT are encoded as a JSON object that is used as the payload of a JSON Web Signature (JWS) structure or as the plaintext of a JSON Web Encryption (JWE) structure, enabling the claims to be digitally signed.

#### 2.1.2 Plato Security Configuration

Plato recommend to create new schema for security to keep the security related database objects at one place. If the environment is configured for multi-tenant, we require a security schema per tenant.

All the Plato security configurations are maintained at SECURITY\_CONFIG table

Steps to configure:

1. Open the **INC** mentioned in **From-Path** section
2. Change the below KEY with provided LDAP details:

LDAP_SERVER_CREDENTIAL_SALT	Enter LDAP server Credential salt e.g. 0.9482628451234567
CORS_ALLOWED_ORGINS	valid host names  (comma delimited)
LDAP_URL	Enter LDAP Server URL Example: ldap://localhost:12345
LDAP_SERVER_USER	Enter LDAP Server USERID Example: uid=admin
LDAP_SERVER_BASE	Enter LDAP server BASE Example: dc=oracle,dc=com
LDAP_SERVER_CREDENTIAL	Enter LDAP server encrypted password using provided jwr algorithm Example: m0o/F3UvIwvBSv5C/TSckA== (use plato encryption utility to generate encrypted password)
LDAP_USER_SEARCH_BASE	Enter LDAP User search Base Example: ou=people
LDAP_USER_PREFIX	Enter LDAP User Prefix Example: uid

3. Compile it into Plato Security Schema.

Service Name	From-Path	Compile To
plato-api-gateway	Plato\plato-api-gateway\Database\DOMAIN\INC	Plato Security Schema

### 2.1.3 User Store

Plato supports following user stores for authentication

Users Maintained at table.

1. Plato security can authenticate the users maintained at table (APP\_USER) in the security schema. However we do not recommend to use this option.
2. LDAP user store.
3. Plato security can integrate with LDAP server to authenticate the users.
4. For production deployment, the LDAP server should be an industry standard production grade server.

## 3. Zipkin Server Setup

### 3.1 Introduction

In this section you are going to install recommended Zipkin server for tracing and monitoring the micro services calls

#### 3.1.1 Download the Artifact

Before proceeding with the below steps ensure Plato database setup section completed. Zipkin Server 2.6.0 should be downloaded and store in local file system to execute on host machine.

Zipkin Server 2.6.0 JAR location: <https://zipkin.io/pages/quickstart>

Running the Zipkin Server

Zipkin server could be run by using the following syntax.

`java -jar <location of zipkin-server-2.6.0-exec.jar> &`

Here, & is added to execute it in background mode. On Windows, you can ignore it.

Zipkin runs on default port 9411.

#### 3.1.2 Accessing the Zipkin Server

You can access the zipkin server by hitting the following URL

`http://<HOSTNAME_OR_IP>:<PORT>/zipkin/`

The screenshot shows the Zipkin web interface. At the top, there is a navigation bar with links: "Zipkin", "Investigate system behavior", "Find a trace", "View Saved Trace", "Dependencies", and a "Go to trace" button. Below this is a search form with the following fields:

- Service Name:** A dropdown menu with "customer-service" selected.
- Span Name:** A dropdown menu with "all" selected.
- Lookback:** A dropdown menu with "1 hour" selected.
- Annotations Query:** A text input field containing the example query: "e.g. 'http.path=/foo/bar/ and cluster=foo and cache.miss'".
- Duration (µs) >=:** An empty text input field.
- Limit:** A text input field with the value "10".
- Sort:** A dropdown menu with "Longest First" selected.

Below the search fields is a blue button labeled "Find Traces" and a small circular icon with a question mark. At the bottom of the form, there is a light blue message box that says: "Please select the criteria for your trace lookup."

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## 4. Logging Area

### 4.1 Introduction

This part of the document will talk about the logs area where after deployment of Plato Applications in WebLogic server.

#### 4.1.1 Logging Area:-

Plato Application writes logs in the below area of the server-

<WEBLOGIC\_DOMAIN\_CONFIG\_AREA>/ logs/plato-api-gateway.log

Let's assume a domain has been created **platoinfra\_domain** in the following area of the server "/scratch/oracle/middleware/user\_projects/domains/platoinfra\_domain". Logging area for Plato would be **/scratch/oracle/middleware/user\_projects/domains/platoinfra\_domain/logs**.