

# **Oracle Banking APIs**

**OHS User Interface Configuration Guide**

**Release 18.2.0.0.0**

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# 1. Preface

## 1.1 Intended Audience

This document is intended for the following audience:

- Customers
- Partners

## 1.2 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>.

## 1.3 Access to OFSS Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit

<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

## 1.4 Structure

This manual is organized into the following categories:

*Preface* gives information on the intended audience. It also describes the overall structure of the User Manual.

The subsequent chapters describes following details:

- Prerequisite
- UI Deployment
- Configuration / Installation

## 1.5 Related Information Sources

For more information on Oracle Banking APIs Release 18.2.0.0.0, refer to the following documents:

- Oracle Banking APIs Licensing Guide
- Oracle Banking APIs Security Guide

## 2. Pre-requisite

OHS software along with instance should be available for use.

For further detailed configuration of Oracle HTTP Server, please refer to <https://docs.oracle.com/middleware/12213/webtier/administer-ohs/toc.htm>.

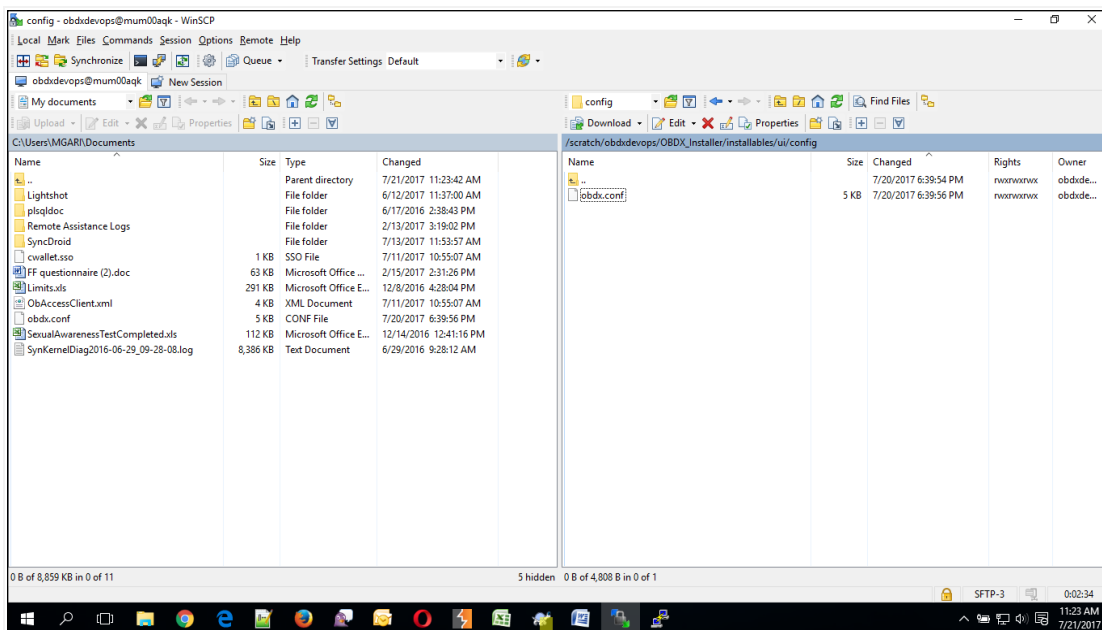
.

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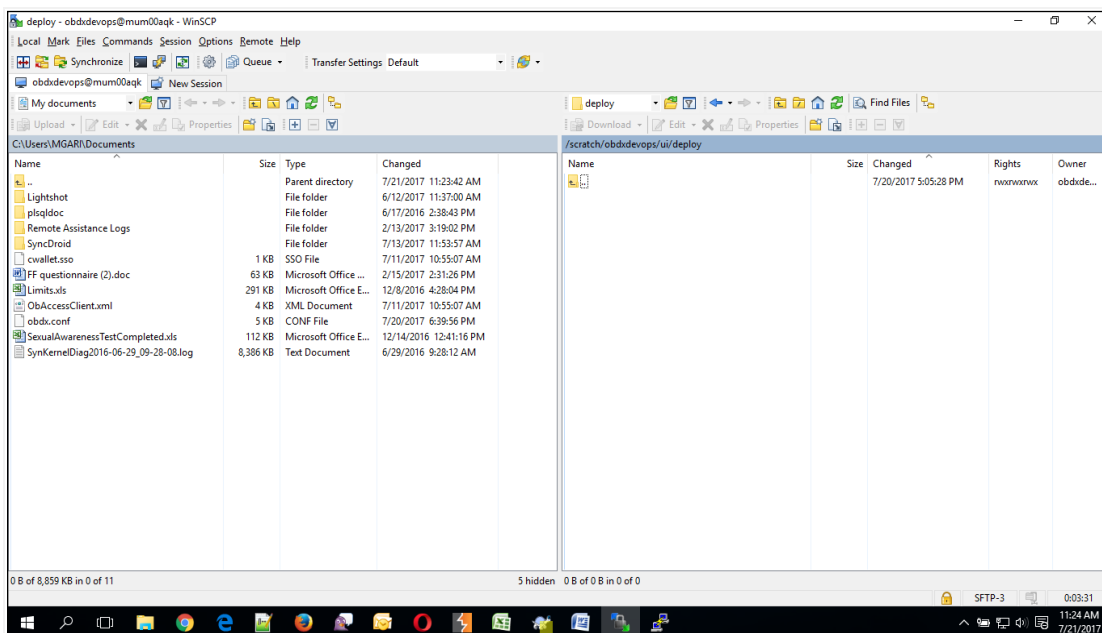
### 3. UI deployment

Below steps needs to be performed for UI deployment on OHS server.

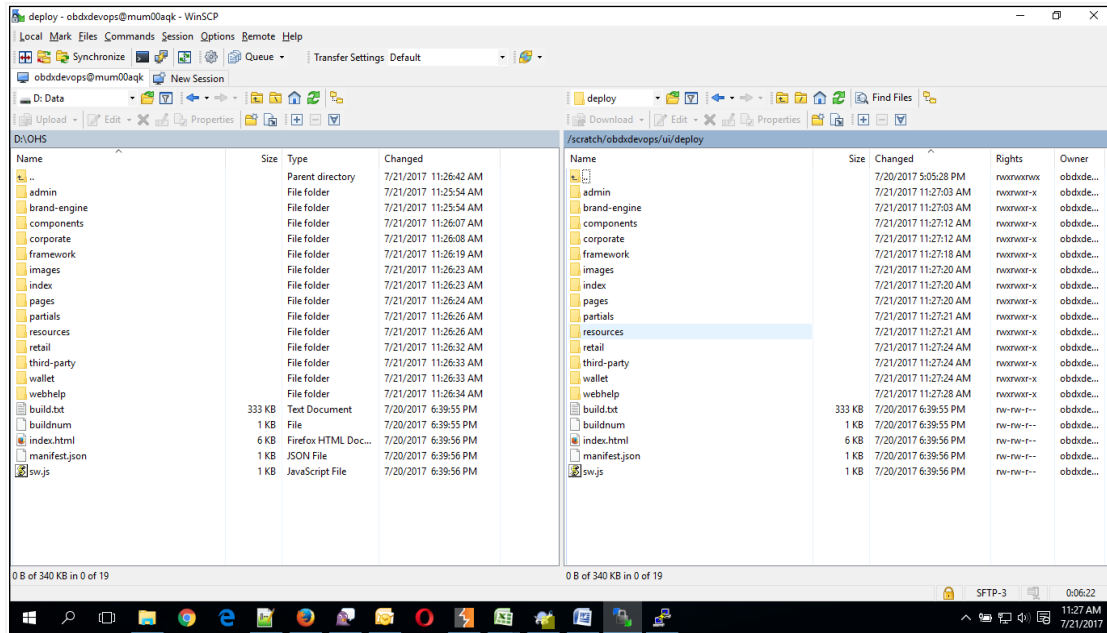
- Copy the obdx.conf from OBAPIS\_Installer/installables/ui/config directory into the instance config directory (where httpd.conf is present).



- Create a directory where obapis UI files would be deployed on OHS server.



- Copy all files / directories from OBAPIS\_Installer/installables/ui/deploy into newly created directory.



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## 4. Configuration to run UI on Oracle HTTP Server

Make sure following OHS modules must be loaded

- mod\_rewrite.so
- mod\_deflate.so
- mod\_expires.so
- mod\_mime.so
- mod\_headers.so

Following are the changes need to be done in the obdx.conf file and place this file in same folder where httpd.conf file exists.

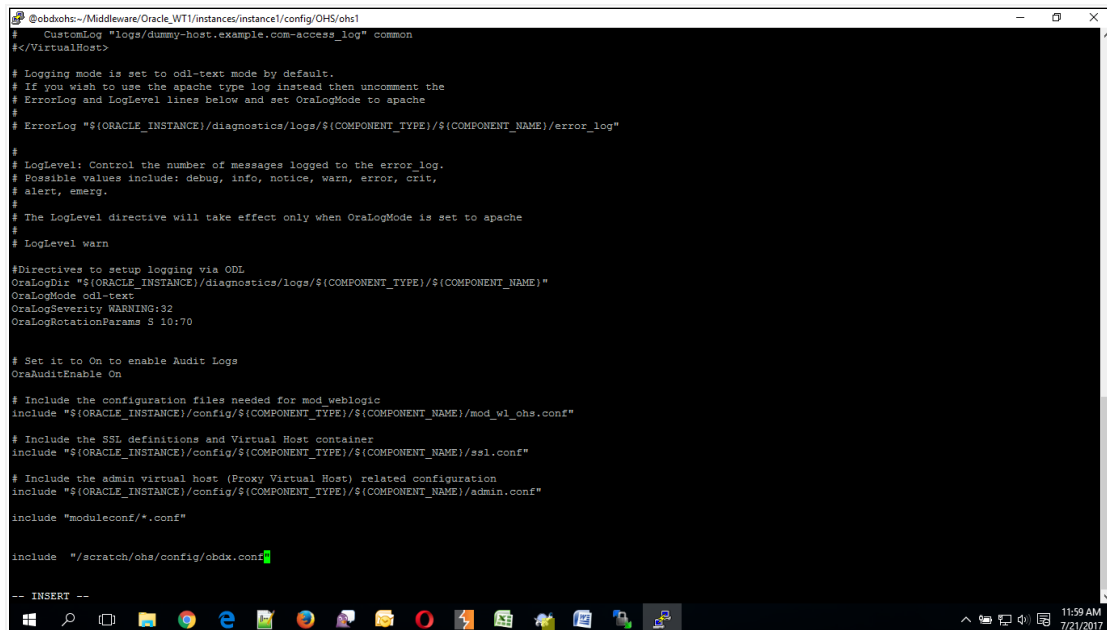
1. Replace the <CHANNEL\_PATH> (all occurrences) with the newly created directory (from previous UI deployment step).
2. Configuration for Content Security Policy, refer to the below document

Oracle Banking APIs Security Guide

Include the obdx.conf into httpd.conf using below configuration

include "obdx.conf" (needs to be added in httpd.conf)

Read obdx.conf for inline documentation.



```
@obdxohs:~/Middleware/Oracle_WT1/instances/instance1/config/OHS/ohs1
# CustomLog "logs/dummy-host.example.com-access_log" common
#</VirtualHost>

# Logging mode is set to odt-text mode by default.
# If you wish to use the apache type log instead then uncomment the
# ErrorLog and LogLevel lines below and set OraLogMode to apache
# ErrorLog "${ORACLE_INSTANCE}/diagnostics/logs/${COMPONENT_TYPE}/${COMPONENT_NAME}/error_log"
#
# LogLevel: Control the number of messages logged to the error log.
# Possible values include: debug, info, notice, warn, error, crit,
# alert, emerg.
#
# The LogLevel directive will take effect only when OraLogMode is set to apache
#
# LogLevel warn

# Directives to setup logging via ODL
OraLogDir "${ORACLE_INSTANCE}/diagnostics/logs/${COMPONENT_TYPE}/${COMPONENT_NAME}"
OraLogMode odt-text
OraLogSeverity WARNING:32
OraLogRotationParams S 10:70

# Set it to On to enable Audit Logs
OraAuditEnable On

# Include the configuration files needed for mod_weblogic
include "${ORACLE_INSTANCE}/config/${COMPONENT_TYPE}/${COMPONENT_NAME}/mod_wl_ohs.conf"

# Include the SSL definitions and Virtual Host container
include "${ORACLE_INSTANCE}/config/${COMPONENT_TYPE}/${COMPONENT_NAME}/ssl.conf"

# Include the admin virtual host (Proxy Virtual Host) related configuration
include "${ORACLE_INSTANCE}/config/${COMPONENT_TYPE}/${COMPONENT_NAME}/admin.conf"

include "moduleconf/*.conf"

include "/scratch/ohs/config/obdx.conf"

-- INSERT --
```



Following are the changes need to be done in mod\_wl\_ohs.conf

Copy below configuration into mod\_wl\_ohs.conf

```
<IfModule weblogic_module>
    WebLogicHost HOSTNAME
    WebLogicPort MANAGE_SERVER_PORT
    Debug ON
    WLLogFile DIR/FILENAME
    MatchExpression /digx/*
</IfModule>
```

Configure below properties

- a. HOSTNAME – Weblogic server hostname (where OBAPIs weblogic domain is configured)
- b. MANAGE\_SERVER\_PORT – Weblogic manage server port (where OBAPIs application is deployed)
- c. DIR / FILENAME – Path where log file should be generated

Sample configuration (for reference purpose only)

```
<IfModule weblogic_module>
    WebLogicHost wls_server1
    WebLogicPort 7003
    Debug ON
    WLLogFile /tmp/weblogic_obp.log
    MatchExpression /digx/*
</IfModule>
```

```
@obdxohs~/Middleware/Oracle_WT1/instances/instance1/config/OHS/ohs1
drwx----- 1 devops devops 4096 Nov 10 2016 fastcgi-bin
drwx----- 1 devops devops 4096 Nov 10 2016 fcgi-bin
drwx----- 1 devops devops 4096 Nov 10 2016 htdocs
-rw-rw-r-- 1 devops devops 38092 Jul 21 06:29 httpd.conf
-rw-rw-r-- 1 devops devops 38047 Nov 10 2016 httpd.conf.ORG
drwx----- 1 devops devops 4096 Nov 10 2016 icons
drwx----- 1 devops devops 4096 Nov 10 2016 keystores
-rw-rw-r-- 1 devops devops 12959 Nov 10 2016 magic
drwx----- 1 devops devops 4096 Nov 10 2016 man
drwx----- 1 devops devops 12288 Nov 10 2016 manual
-rw-rw-r-- 1 devops devops 15020 Nov 10 2016 mime.types
drwx----- 1 devops devops 4096 Nov 10 2016 mod_plsql
-rw-rw-r-- 1 devops devops 617 Jul 20 10:45 mod_wl_ohs.conf
drwx----- 1 devops devops 4096 Nov 10 2016 moduleconf
drwx----- 1 devops devops 4096 Nov 10 2016 proxy-wallet
-rw-rw-r-- 1 devops devops 2986 Nov 10 2016 ssl.conf
drwx----- 1 devops devops 4096 Nov 11 2016 webgate
-rw-rw-r-- 1 devops devops 2121 Nov 11 2016 webgate.conf
[devops@obdxohs ohs1]$
[devops@obdxohs ohs1]$
[devops@obdxohs ohs1]$
[devops@obdxohs ohs1]$
[devops@obdxohs ohs1]$ vi mod_wl_ohs.conf
[devops@obdxohs ohs1]$ cat mod_wl_ohs.conf
# NOTE : This is a template to configure mod_weblogic.

LoadModule weblogic_module      "${ORACLE_HOME}/ohs/modules/mod_wl_ohs.so"

# This empty block is needed to save mod_wl related configuration from EM to this file when changes are made at the Base Virtual Host Level
<IfModule weblogic_module>
    WebLogicHost mum00aon
    WebLogicPort 7003
    Debug ON
    WLogFile /tmp/weblogic.log
    MatchExpression /digx/*
</IfModule>

# <Location /weblogic>
#     SetHandler weblogic-handler
#     PathInfo /weblogic
#     ErrorPage http://WEBLOGIC_HOME:WEBLOGIC_PORT/
# </Location>

[devops@obdxohs ohs1]$
```

## 4.1 Authentication Configuration:

OBAPIs product ships with two type of authentication methods:

1. OAM Authentication
2. Non OAM Authentication

### 4.1.1 Configuring the OAM Authentication

By default OAM server URL is set as <http://mum00aon.in.oracle.com:14100/oam/server>

Replace it to your OAM server URL in the following files:

1. <CHANNEL\_PATH>/components/login/login-form-web/ko/bindings/login-form-web-bindings.js
2. <CHANNEL\_PATH>/framework/js/constants/constants.js
  - a. Set the **authenticator** property as “**OUD**”.

### 4.1.2 Configuring the Non OAM Authentication

Configuring Non OAM Authentication implementer needs to change following files:

1. <CHANNEL\_PATH>/framework/js/constants/constants.js
  - a. Set the **authenticator** property as “**OBDXAuthenticator**”.
2. \$MIDDLEWARE\_HOME/  
Oracle\_WT1/instances/instance1/config/OHS/ohs1/httpd.conf
  - b. Remove webgate.conf entry

**Google Map Configuration:**

By default Google map SDK URL is set as

<https://maps.googleapis.com/maps/api/js?key=AlzaSyCYFGuo6wj7CTEaBILF3qaRcJJWuYI53f8&libraries=geometry.places>

Replace it to your Google map SDK URL in the following files:

- <CHANNEL\_PATH>/components/inputs/map/ko/bindings/map-bindings.js
- <CHANNEL\_PATH>/components/location-maintenance/location-add/ko/bindings/location-add-bindings.js
- <CHANNEL\_PATH>/components/location-maintenance/location-update/ko/bindings/location-update-bindings.js
- <CHANNEL\_PATH>/components/atm-branch-locator/locator/ko/bindings/locator-bindings.js

**Social Media Configurations:**

By default LinkedIn and Facebook API key is set as

**LinkedIn Key: 86hg2yshsq76yd**

**Facebook Key: 233137313819556**

Replace it to your social media API keys in the following files:

- <CHANNEL\_PATH>/components/social-media/facebook/ko/bindings/facebook-bindings.js
- <CHANNEL\_PATH>/components/social-media/linkedin/ko/bindings/linkedin-bindings.js

**Configuring HOST specific static resources lookup:**

In Origination module there are host specific static resource lookup are needed. So depends on the HOST you need to set HOSTID property in UI. For this implementer needs to do following change:

1. <CHANNEL\_PATH>/framework/js/constants/constants.js
  - a. Set host property value to **fcubs** in case of UBS and THP
  - b. Set host property value to **obp** in case of OBP Base and OBP LZN.
  - c. Set host property value to **ofsll** in case of FLL

**Wallet Configurations:**

By default OBAPIs Base server URL is set as <http://mum00apu.in.oracle.com:7777/digx/v1/>

Replace it to your OBAPIs Base server URL in the following files:

- <CHANNEL\_PATH>/components/wallet-external/addfund/ko/bindings/addfund-bindings.js
- <CHANNEL\_PATH>/components/wallet/add\_paymentMode/ko/bindings/add\_paymentMode-bindings.js

Since OBAPIs UI support Subresource integrity and changing files mentioned above will impact it and files which are changed won't work. SHA hash for all files are maintained in **<CHANNEL\_PATH>/framework/js/pages/security.js**. There are two ways for solving this problem:

- Remove the SHA hash of the changed files along with the file name in security.js
- Generate SHA hash of modified files and update it in the security.js

Once all above steps are completed, restart the OHS server.

For the restarting of the OHS Server first go to the bin directory of the OHS instance.

```
@obdxkxh:/Middleware/Oracle_WT1/instances/instance1/bin
Using username: "obdxkxh"
obdxkxh@mm00a9k's password:
Last login: Thu Jul 20 23:25:34 2017 from dhcp-in-0fss-10-100-57-108.in.oracle.com
This is a Devops-managed system. To make changes, please visit
http://devops.oraclecorp.com

User: bhushan.s.mande
Expires: None

Reservation type: group
This host is currently reserved for group use by the user above.

Use: OBDX 17.2 Installer Testing

Host specific info (below) - you can modify contents of /etc/motd_hostinfo as needed to update data:

[obdxkxh@mm00a9k ~]$ docker ps -a
CONTAINER ID        IMAGE               COMMAND             CREATED             STATUS              PORTS                               NAMES
5df5b8f650af        ubi172/ohs         "/bin/bash"         20 hours ago        Up 20 hours         0.0.0.0:7776->7777/tcp              Installer_OHS_THP
e8eb0d2f6420        ubi172/ohs         "/bin/bash"         20 hours ago        Up 20 hours         0.0.0.0:7777->7777/tcp              Installer_OHS_UBS
236c8719824c        wls12212           "/bin/bash"         20 hours ago        Up 20 hours         0.0.0.0:8001->8001/tcp, 0.0.0.0:8003->8003/tcp  Installer_WLS_THP
97824a3274ea        wls12212           "/bin/bash"         20 hours ago        Up 20 hours         0.0.0.0:7001->7001/tcp, 0.0.0.0:7003->7003/tcp  Installer_WLS_UBS

[obdxkxh@mm00a9k ~]$ docker exec -itu Installer_OHS_UBS
"docker exec" requires at least 2 argument(s).
See 'docker exec --help'.

Usage: docker exec [OPTIONS] CONTAINER COMMAND [ARG...]

Run a command in a running container
[obdxkxh@mm00a9k ~]$ docker exec -itu Installer_OHS_UBS /bin/bash
"docker exec" requires at least 2 argument(s).
See 'docker exec --help'.

Usage: docker exec [OPTIONS] CONTAINER COMMAND [ARG...]

Run a command in a running container
[obdxkxh@mm00a9k ~]$ docker exec -itu devops Installer_OHS_UBS /bin/bash
ndevops@obdxkxh: /$ cd /home/devops/Middleware/Oracle_WT1/instances/instance1/bi
[devops@obdxkxh bin]$
```

Note : please ignore docker commands.

opmnctl is the command for controlling all the instance of OHS including start, stop, restart and status.

```
@obdxhps:/Middleware/Oracle_WT1/instances/instance1/bin
Using username "obdxdevops".
obdxdevops@mmum00a9k's password:
Last login: Thu Jul 20 23:25:34 2017 from dhcp-in-0fss-10-180-57-108.in.oracle.com
This is a DevOps-managed system. To make changes, please visit
http://devops.oraclecorp.com

User: bhushan.s.mande
Expires: None

Reservation type: group
This host is currently reserved for group use by the user above.

Use: OBDX 17.2 Installer Testing

Host specific info (below) - you can modify contents of /etc/motd_hostinfo as needed to update data:

[obdxdevops@mmum00a9k ~]$ docker ps -a
CONTAINER ID        IMAGE               COMMAND             CREATED             STATUS              PORTS              NAMES
5d5fb8f650af        ubi172/ohs         "/bin/bash"        20 hours ago        Up 20 hours        0.0.0.0:7776->7777/tcp    Installer_OHS_THP
e8eb0d2f6420        ubi172/ohs         "/bin/bash"        20 hours ago        Up 20 hours        0.0.0.0:7777->7777/tcp    Installer_OHS_UBS
236c8719824c        wls12212           "/bin/bash"        20 hours ago        Up 20 hours        0.0.0.0:8001->8001/tcp, 0.0.0.0:8003->8003/tcp    Installer_WLS_THP
97824a3274ea        wls12212           "/bin/bash"        20 hours ago        Up 20 hours        0.0.0.0:7001->7001/tcp, 0.0.0.0:7003->7003/tcp    Installer_WLS_UBS

[obdxdevops@mmum00a9k ~]$ docker exec -itu Installer_OHS_UBS
"docker exec" requires at least 2 argument(s).
See 'docker exec --help'.

Usage: docker exec [OPTIONS] CONTAINER COMMAND [ARG...]

Run a command in a running container
[obdxdevops@mmum00a9k ~]$ docker exec -itu Installer_OHS_UBS /bin/bash
"docker exec" requires at least 2 argument(s).
See 'docker exec --help'.

Usage: docker exec [OPTIONS] CONTAINER COMMAND [ARG...]

Run a command in a running container
[obdxdevops@mmum00a9k ~]$ docker exec -itu devops Installer_OHS_UBS /bin/bash
ndevops@obdxhps [/]$ cd /home/devops/Middleware/Oracle_WT1/instances/instance1/bin
[devops@obdxhps bin]$ ls
opmnctl
[devops@obdxhps bin]$ ./opmnctl status
```

Note : please ignore docker commands.

```
@obdxhps:/Middleware/Oracle_WT1/instances/instance1/bin
Using username "obdxdevops".
obdxdevops@mmum00a9k's password:
Last login: Thu Jul 20 23:25:34 2017 from dhcp-in-0fss-10-180-57-108.in.oracle.com
This is a DevOps-managed system. To make changes, please visit
http://devops.oraclecorp.com

User: bhushan.s.mande
Expires: None

Reservation type: group
This host is currently reserved for group use by the user above.

Use: OBDX 17.2 Installer Testing

Host specific info (below) - you can modify contents of /etc/motd_hostinfo as needed to update data:

[obdxdevops@mmum00a9k ~]$ docker ps -a
CONTAINER ID        IMAGE               COMMAND             CREATED             STATUS              PORTS              NAMES
5d5fb8f650af        ubi172/ohs         "/bin/bash"        20 hours ago        Up 20 hours        0.0.0.0:7776->7777/tcp    Installer_OHS_THP
e8eb0d2f6420        ubi172/ohs         "/bin/bash"        20 hours ago        Up 20 hours        0.0.0.0:7777->7777/tcp    Installer_OHS_UBS
236c8719824c        wls12212           "/bin/bash"        20 hours ago        Up 20 hours        0.0.0.0:8001->8001/tcp, 0.0.0.0:8003->8003/tcp    Installer_WLS_THP
97824a3274ea        wls12212           "/bin/bash"        20 hours ago        Up 20 hours        0.0.0.0:7001->7001/tcp, 0.0.0.0:7003->7003/tcp    Installer_WLS_UBS

[obdxdevops@mmum00a9k ~]$ docker exec -itu Installer_OHS_UBS
"docker exec" requires at least 2 argument(s).
See 'docker exec --help'.

Usage: docker exec [OPTIONS] CONTAINER COMMAND [ARG...]

Run a command in a running container
[obdxdevops@mmum00a9k ~]$ docker exec -itu Installer_OHS_UBS /bin/bash
"docker exec" requires at least 2 argument(s).
See 'docker exec --help'.

Usage: docker exec [OPTIONS] CONTAINER COMMAND [ARG...]

Run a command in a running container
[obdxdevops@mmum00a9k ~]$ docker exec -itu devops Installer_OHS_UBS /bin/bash
ndevops@obdxhps [/]$ cd /home/devops/Middleware/Oracle_WT1/instances/instance1/bin
[devops@obdxhps bin]$ ls
opmnctl
[devops@obdxhps bin]$ ./opmnctl status
opmnctl status: opmn is not running.
[devops@obdxhps bin]$ ./opmnctl startall
```

Note : please ignore docker commands.

Refer [https://docs.oracle.com/cd/E14571\\_01/doc.1111/e14007/opmnctl.htm#ASPMN129](https://docs.oracle.com/cd/E14571_01/doc.1111/e14007/opmnctl.htm#ASPMN129) for the all option available in opmnctl command.

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