New Application Environment Setup & Release Guide

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# Submit CER for resource request

## Budgeted New Project

If project is new budgeted project, please ask project owner to submit CER for resource request based on project scale such as below. Please go to step2 after it’s approved.

Production: 4vCPU, 32G RAM, 30G disk

Non production: 4vCPU, 32G RAM, 30G disk

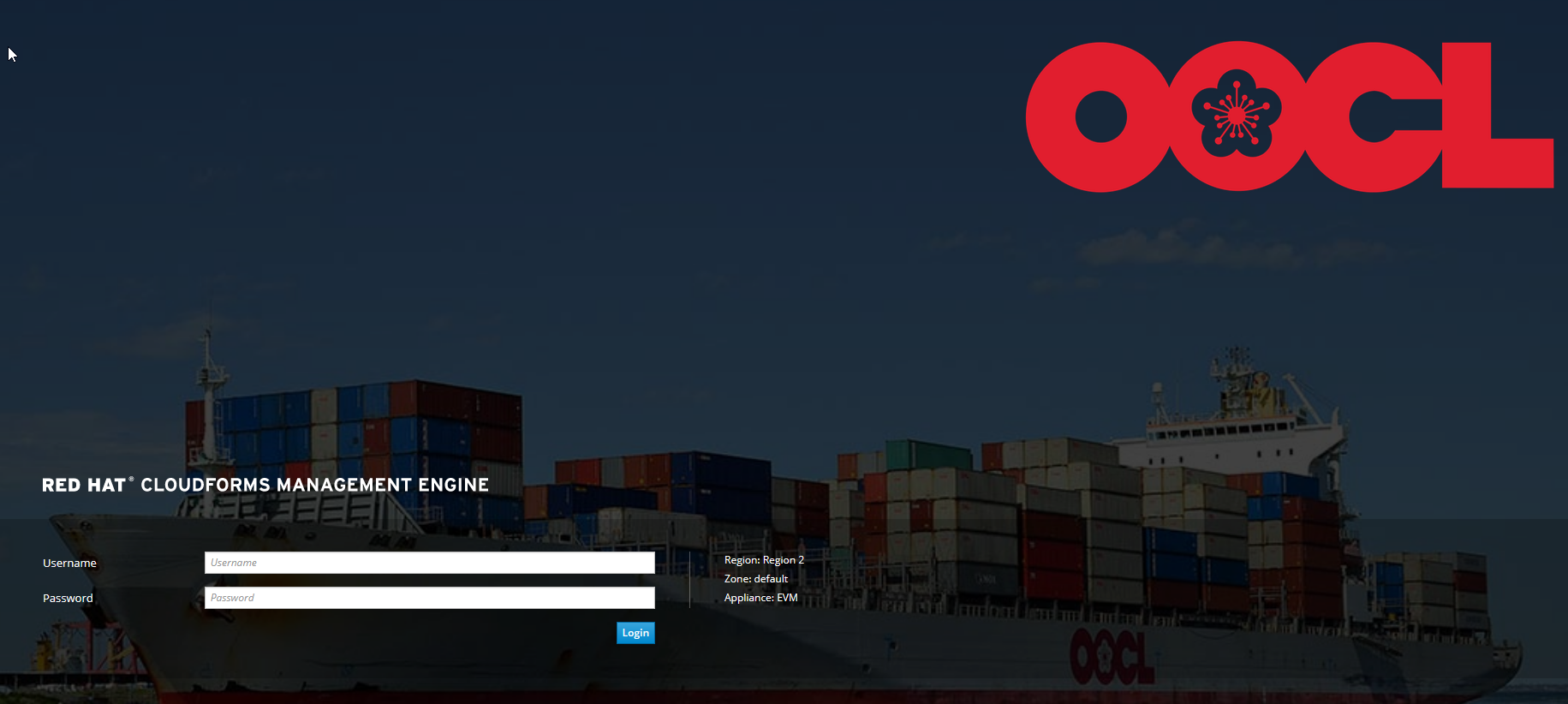
## Unbudgeted New Project

If project is new unbudgeted project and can be shared existing resources from other application, please go to step3.

# Submit request for VMware

## Access Cloudforms with below URLs

* Non prod: <https://hkdvcfme.oocl.com>; (use AD to access)
* Prod: <https://hkpdcfme.oocl.com>; (use AD to access)



## Mouse Over the Services Field and Choose Catalogs

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## Choose any item base on your decided location/tech/network etc, then click “Order” button.

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**Take [WMware] RHEL as an example (which also mean RHEL Server born in VMware and locate in FLDC)**

**Budget Code: CER2018-999**

**Flavor Selector: (CPU & Memory) e.g.: C01M008 = 1 vCPU + 8GB Ram, C16M128 = 16 vCPU + 128GB Ram**

**Flavor: Nothing need to fill in, just “decrypt” n tell you the Flavor Selector information**

**Catalog Item: Choose What Server Type n it depends on what u need.**

**IF [RHEL 7 DOCKER] = will include DOCKER Engine/Package once server born**

**IF [RHEL 7] = a clean RHEL7 server only…etc**

**Default Size / Catalog Item Size: No need to Fill in, just notify how many Disk GB are assigned for this server**

**Extra Disk Size: If the disk Size are not enough, you can request in this row. E.g.: 200GB Extra, just input 200**

**\*\*\* [RHEL7 WLS] OR [RHEL7 Docker] Server default have 40GB + 120GB Extra \*\*\***

**Request Type: NEW VM**

**Application Type: \*mandatory\*, if cannot find related project/type, please choose “Others” and specify in Remarks Fields**

**Application Team: Fill in back for which application Team use?**

**System/Infra Support Team: Choose who’s the System/Infra Support Team**

**VM Usage Period Type: How long you need? If more than 30 Days, please specify in Remarks Fields**

**Network Segment: depends on which NETWORK [Internal/DMZ…etc.] you required**

**Requester Remarks: For remark only**

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## Submit your request and LINUXSUPP will review and Approve the request if no concern.

**After Approval, it will create the Server and apply the required package / engine automatically (20-30mins)**

**You are expected to receive an Email notification (with Hostname/IP/request ID…etc.) once Server are ready**

# Oracle DB setup

Complete the Oracle Setup Questionnaire with below information send it to ORASUPP, ORASUPP will help to setup the DB environment. After completed, ORASUPP will provide us with the details such as db instance, schema, oem username/password, CMS credential for PP&PROD and so on, it’s better to double confirm the eWallet & AMP was setup on PP&PROD.

## Provide Oracle Setup Questionnaire

Please get the sample document from [here](https://oworkspace.sharepoint.com/sites/eucteam/Shared%20Documents/Ningbo%20EIR/Release%20Document/Oracle%20Setup%20Questionnaire%20(NingBo%20EIR(%E5%AE%81%E6%B3%A2%E8%BF%9B%E5%8F%A3EIR%E6%97%A0%E7%BA%B8%E5%8C%96)%20).xls).

## Provide DB Hostname, Env & SID and so on

For details, please refer to Oracle Setup Questionnaire.

Below table is used for EIR project, and it’s better located on diff host for diff env, and no idea why pp service name is same with prod.

|  |  |  |  |
| --- | --- | --- | --- |
| Env | Host Name | Service Name | Accounts |
| DEV | hk3cvdv00342.oocl.com | eirdev.oocl | xxxxx |
| QA | hk3cvdv00342.oocl.com | eirqa.oocl | xxxxx |
| UAT | hk3cvdv00342.oocl.com | eiruat.oocl | xxxxx |
| PP | hk3cvdv00342.oocl.com | eirprd.oocl | xxxxx |
| PROD | hkgcvpd00288.oocl.com | eirprd.oocl | xxxxx |

## Setup eWallet and AMP placeholder for PP/PROD

Remember to ask ORASUPP help to setup the eWallet and AMP placeholder, and provide us with it after completed. If ORASUPP not help on this, then need to do it by ourself, and some reference information as below, and we also need to follow the name standard.

* Application team requests SECADMIN to setup the key-value pair in AMP for different environments, the key is the string token, it should be the same across different environment, and the value is the password which should be provided by system team, ORASUPP, etc.
* SECADMIN feedbacks the AMP keys to application team once the setup is done
* Application team put the AMP keys in their config files and push the changes to GIT
* Application team uses CMS to pacakge: CMS will package the config files to Artifactory as usual (config files in Artifactory only contain AMP keys, no password).
* Application team uses CMS to deploy: CMS will get the password from AMP based on the AMP key, and replace the AMP key with the real password **during deployment.**
* System team adds the config file paths which contain the password to iView-excluded-list to block users from viewing the password from iView. (SDMC and CMS are going to automate this step in the future)

## Setup cutover framework

If we use CMS to do DB cutover, then we can ignore this step.

If we don’t use CMS to do DB cutover, then we need to upload db scripts to the FTP server used this FTP info.

ORASUPP will provide the cutover framework FTP info, as below sample.

Cutover framework FTP info

ID (ftp): EIRco

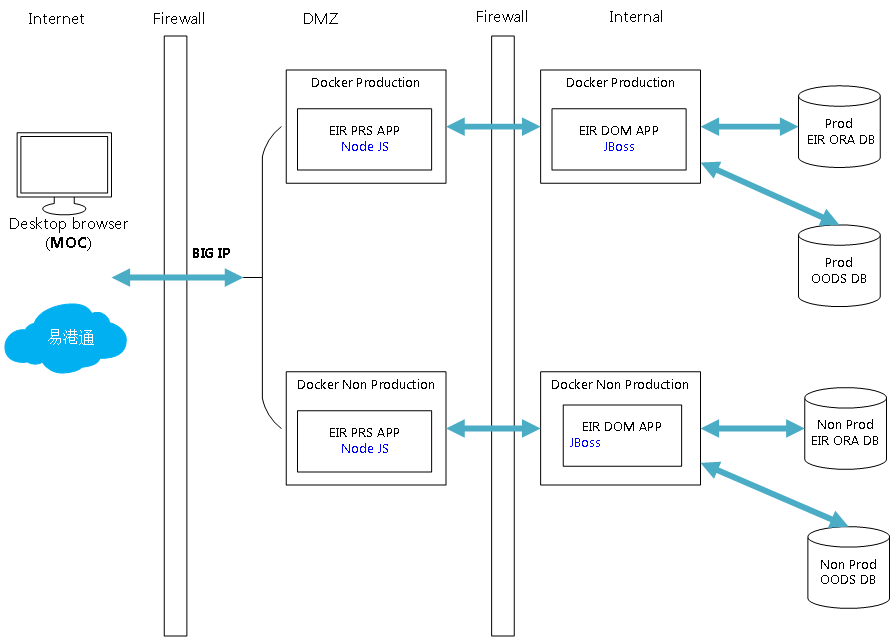
PW: EIR1916

## Setup OEM

Remember ask ORASUPP to setup [OEM](https://oemnprd.oocl.com) and provide the account.

# Project Architecture review

Before we ask MIPS team to setup the environment, we need to send email to Infra team as they need to review the project architecture as below sample.



# Docker & iView env setup

After Infra team reviewed the project architecture and no concern on this, then we can send email to MIPS team and ask them to setup the env, and we need to provide some information such as 1~7 items. MIPS team will update us with the details such as below sample. And please noted that we need to keep project build\_app/pom.xml artifactId is same with below app name.

1. Provide the project name
2. Provide the docker type
3. Provide the domain ids for iView permission control
4. Provide the entry point
5. Provide the app & db server
6. Check whether need to request Production CA SSL cert for bigip & dns setup, if it’s an external app, should be need.
7. [Submit DNS request](http://sysportal.oocl.com/dns_host_update/login_page.php) to update external DNS if need access it from external internet. [NonPROD](http://sysportal.oocl.com/dns_host_update/dns_host_update_form.php?mode=view&id=2817)/[PROD](http://sysportal.oocl.com/dns_host_update/dns_host_update_form.php?mode=view&id=2818)

App settings:

Project name: EIR

App name: JB\_EIR, NJ\_EIR

App home: /home/jbeir, /home/njeir

Port:

SSAuto Environment Name: EIRQA, EIRUAT, EIRPP, EIRPRD

Entry point

QA: <http://digitalflowqa.oocl.com/eir>

UAT: [https://digitalflowuat.oocl.com/eir](https://apc01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdigitalflowuat.oocl.com%2Feir&data=02%7C01%7Cmarquis.hu%40oocl.com%7Cd1cb163aed274f15de4c08d6f919b67e%7C7851b4cc2c5c459f96d916731d6b4ca4%7C0%7C0%7C636970286176150460&sdata=qAfBlYeBnWUXjt21fAlYcRXup39GaZvgCG675o5jpqk%3D&reserved=0)

PP: [https://digitalflowpp.oocl.com/eir](https://apc01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdigitalflowpp.oocl.com%2Feir&data=02%7C01%7Cmarquis.hu%40oocl.com%7Cd1cb163aed274f15de4c08d6f919b67e%7C7851b4cc2c5c459f96d916731d6b4ca4%7C0%7C0%7C636970286176160456&sdata=HiK04TyNjijoXcMx5Sug4GLcwc%2FdDevPgXnS4bcrhZc%3D&reserved=0)

PROD: [https://digitalflow.oocl.com/eir](https://apc01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdigitalflow.oocl.com%2Feir&data=02%7C01%7Cmarquis.hu%40oocl.com%7Cd1cb163aed274f15de4c08d6f919b67e%7C7851b4cc2c5c459f96d916731d6b4ca4%7C0%7C0%7C636970286176160456&sdata=BVyln2GGQdvKT2fPIZzbuKVMBcpXM%2BE%2BMjog34VIo08%3D&reserved=0)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ENV** | **App Server** | | | | **DB** | |
| **PRS(NodeJS)** | | **DOM(JBoss)** | |
| **Host** | **DMZ** | **Host** | **DMZ** | **Host** | **Service Name** |
| QA | hkgcfdv01779 | N | hkgcfdv01758 | N | hk3cvdv00342.oocl.com | eirqa.oocl |
| UAT | hln2199p | Y | hk3cvdv00486 | N | hk3cvdv00342.oocl.com | eiruat.oocl |
| PP | hln2381p | Y | hk3cvdv00158 | N | hk3cvdv00342.oocl.com | eirprd.oocl |
| PRD | hklp706p | Y | hkgcvpd00353 | N | hkgcvpd00288.oocl.com | eirprd.oocl |

MIPS will update us with below information.

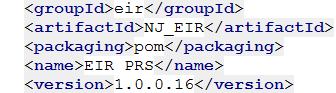
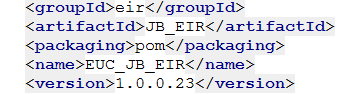
Project name: EIR

App name: **JB\_EIR**, **NJ\_EIR**

App home: /home/jbeir, /home/njeir

Port: 8680

SSAuto Environment Name: EIRQA, EIRUAT, EIRPP, EIRPRD



And ensure project properties/{env}deploy.properties files use the same app name with above highlight.

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# Update firewall ruleset

Check whether need to update firewall ruleset in term of the server (internal / dmz server). Firewall ruleset default setting: only need to enable DMZ to Internal, as internal to DMZ and DMZ to external is default on, and please note that for prod firewall, it's only can be update on non-working day. If need to update firewall ruleset, then please help to submit a SR, and sent this SR to NSC team, they will help to do it. Please refer to below link.

If need to access application from external internet, then need to update the firewall rule:

from internet to bigip 443 port, for example: from internet to digitalflow.oocl.com 443 port

NonPROD: <http://gdsc/gdscappsr/Layouts/SR/DisplayForm.aspx?SRNumber=PTS-00649482>

PROD: <http://gdsc/gdscappsr/Layouts/SR/DisplayForm.aspx?SRNumber=PTS-00652426>

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Rule number** | **Source:** | **Destination:** | **UDP/TCP Port release** |  |
| **hostname** | **hostname** | **Purpose:** |
| 1 | hklp706p | hkgcvpd00353 | 8680 | EIR PROD web prs -> dom |
| 2 | hkgcvpd00353 | hklp706p | 8680 | EIR PROD web dom -> prs |
| 3 | hklp706p | 202.96.124.20 | 8888 | EIR PROD web prs -> external edi api |

# GIT Repo Creation & GIT SSH Key Registration

1. After completed the "[GIT Repositories Creation Request Form](https://oworkspace.sharepoint.com/sites/ISD/FADev/ccreplacement/Lists/GIT%20Repositories%20Creation%20Request%20Form/AllItems.aspx?viewpath=%2Fsites%2FISD%2FFADev%2Fccreplacement%2FLists%2FGIT%20Repositories%20Creation%20Request%20Form%2FAllItems.aspx)" request, please send email to GITADMIN, and they will help to setup and update to us.
2. [Create GIT SSH Key](http://i2isd/sites/ISD/DevPractice/Lists/githowto/DispForm.aspx?ID=2&Source=http%3A%2F%2Fi2isd%2Fsites%2FISD%2FDevPractice%2FBasic%2520Page%2Fgitkb%2Easpx), and submit it to [GIT SSH Key Registration](https://oworkspace.sharepoint.com/sites/isd/fadev/ccreplacement/lists/git%20ssh%20key%20registration/myitems.aspx) page.

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# CMS deployment setup

After env & git reps setup completed, please send email to CMSSUPP to require CMS deployment setup with app name, server name, git repo and deploy permission for below sample.

DEV/QA/UAT: <http://hklp795p:8080/>

PP: [http://cms.oocl.com](http://cms.oocl.com/)

(Login in with deploy permission account such as EUCLABADMIN)

Project name: EIR

App name: JB\_EIR, NJ\_EIR

App home: /home/jbeir, /home/njeir

Port: 8680

SSAuto Environment Name: EIRQA, EIRUAT, EIRPP, EIRPRD

**Deploy permission: EUCLABADMIN**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ENV** | **App Server** | | | |
| **PRS(NodeJS)** | | **DOM(JBoss)** | |
| **Host** | **DMZ** | **Host** | **DMZ** |
| QA | hkgcfdv01779 | N | hkgcfdv01758 | N |
| UAT | hln2199p | Y | hk3cvdv00486 | N |
| PP | hln2381p | Y | hk3cvdv00158 | N |
| PRD | hklp706p | Y | hkgcvpd00353 | N |

# DEV/QA/UAT Deployment

Jenkins URL: <http://hklp795p:8080/>

Account/Password: EUCLABADMIN/Password01!

JOB: App Build and Deploy/Build\_And\_Deploy

## Push code to HKGGIT

EUC Lab PC: zha-euclab-w10

Account: OOCLDM\EUCLABADMIN

Login in ECU Lab team PC with EUCLABADMIN, use Git Extensions to pull the latest merged code from our Gitlab repo, and push code to HKGGIT. **Please remember to update the app & db pom version before push code to HKGGIT for new deployment**.

In Step 7 - GIT Repo Creation & GIT SSH Key Registration, we just make EUCLABADMIN as the integrator, suggest only integrator have permission to push code to HKGGIT.

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## Trigger deployment

Please pay attention on Build Type/Application Name/Branch Name and so on, and choose the Build Profile, then click the Build button, will trigger the deployment.

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## Check the build log

After triggered the deployment, you can see a new build job on the Build History, and click the job number, we can see the full deploy log after click the Console Output menu on this new page. It’s better to check the details log for DB job by click the related job link.

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# Create new main category & subcategory on TT portal

Please submit the following documents to the counter service in Release & Change Management Web that for our technical review at least 2 weeks prior to the production rollout.

In this step, we need prepare some document such as Supporting Document, Security Assessment Form, and remember to upload it to the specified website, then inform Yogo Chan/Jim Ma or HKCTR to create new main/subcategory in TT portal also provide support information as well. After category & subcategory created, it will be synchronized to Change Request portal afterward. **please remember to share it to CMSSUPP about this, CMSSUPP will based on it to update CMS deployment for PP&PROD.**

Primary Support:

Secondary Support:

Team leader:

Supporting Document: <https://oworkspace.sharepoint.com/sites/TS/psdocdc/AppSupDoc/CounterServiceCommonLibrary/Forms/AllItems.aspx>

Security Assessment Form:

<https://oworkspace.sharepoint.com/sites/TS/psdocdc/AppSupDoc/SecurityAssessmentForm/Forms/AllItems.aspx>

# Submit PCRS

After main category & subcategory synchronized to Change Request portal, we can create PCRS for new project rollout, and based on it to do PP deployment.

# PP Deployment

EUC Lab PC: zha-euclab-w10

Account: OOCLDM\EUCLABADMIN

Login in EUC Lab team PC with EUCLABADMIN, and open cms [http://cms.oocl.com](http://cms.oocl.com/) link, will see below Home page.

A screenshot of a cell phone

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## Create Change Ticket Generation

Please pay attention on the app & db version, you can select other version to do deployment if found it’s not the latest or correct version – just click the item such as NJ\_EIR, it will pop up a window that is “Please select version for deployment”. We can check the latest version from [OOCL Artifact Repository](http://artifact:8081/artifactory/webapp/#/artifacts/browse/tree/General/cs4_deploy).

For example:

jboss: <http://artifact:8081/artifactory/webapp/#/artifacts/browse/tree/General/jboss-local/eir>

nodejs: <http://artifact:8081/artifactory/webapp/#/artifacts/browse/tree/General/npm-local/eir>

oracledb:<http://artifact:8081/artifactory/webapp/#/artifacts/browse/tree/General/oracledb-local/eir/EIR_Data_EIR>

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## Submit Change Ticket Generation

After confirmed the selected app & db version, please submit this change ticket generation.

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## Update Ticket status from Pending to Approve to PP

After ticket was submitted, you will found the status is Pending, we need to update it to Approve to PP, after that, it will trigger PP deployment. And we can found the PP deploy log on <http://cmsjenkins/>

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## Check PP deploy log

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# Setup Web Application Firewall

If the application is open to internet, we need to ask Infra team help to setup web application firewall and provide them with the Web Application Firewall Profile Request Form.

EIR WAF Profile: [Web Application Firewall Profile Request Formt](https://teams.microsoft.com/l/file/A9668197-8534-4C9C-AB01-BEC9CA2D2796?tenantId=7851b4cc-2c5c-459f-96d9-16731d6b4ca4&fileType=xlsx&objectUrl=https%3A%2F%2Foworkspace.sharepoint.com%2Fsites%2Feucteam%2FShared%20Documents%2FNingbo%20EIR%2FRelease%20Document%2FWeb%20Application%20Firewall%20Profile%20Request%20Formt.xlsx&baseUrl=https%3A%2F%2Foworkspace.sharepoint.com%2Fsites%2Feucteam&serviceName=teams&threadId=19:d84d7729ad5d415187f6c759acaa5e9d@thread.skype&groupId=0b37eb06-8720-4663-893d-572d5ffba551)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Web Application Firewall Profile Request Form** | | |  |  |  |  |
|  |  |  |  |  |  |  |
| \*\* This part should be completed by the requester and all field must be filled \*\* | | | | | | |
| New setup / Change / Remove | New setup | | | | | |
| Associate PCRF number: | PCRS041428 | | | | | |
| Request Date (MM/DD/YYYY): | 6/21/2019 | | | | | |
| Request by (Domain ID): | HUMA4 | | | | | |
| Endorsed by (Domain ID): | WANGTI2 | | | | | |
| Effective Date on PP (MM/DD/YYYY): | 6/21/2019 | | | | | |
| Effective Date on Production (MM/DD/YYYY): | 6/28/2019 | | | | | |
| Application Name: | **eEIR** | | | | | |
| Default Site: | <https://digitalflow.oocl.com/eir> | | | | | |
| IP address (Prod): | 146.222.49.42 | | | | | |
| IP address (Pre-Prod): | 146.222.50.64 | | | | | |
| Application Port: | 8680 | | | | | |
| SSL Key used? Yes/No | Yes | | | | | |
| Support Group (Domain Group): | GLPSUPP | | | | | |
| Notification email: |  | | | | | |
| customized WAF blocked page? Yes/No (should be less than 4KB) | No | | | | | |
|  | | | | | | |
| \*\* This part should be completed by SECADMIN \*\* | | | | | | |
| Profile Group: |  | | | | | |
| Server Group: |  | | | | | |
| Task Completed on PP (MM/DD/YYYY) |  | | | | | |
| Task Completed on Production (MM/DD/YYYY) |  | | | | | |
| Handled by (Domain ID): |  | | | | | |

# Operational Acceptance Test

Besides WAF setup, before prod rollout and PP deploy completed, we need to do Operation acceptance test with Jim Ma or Yogo Chan, To test the start/stop and availability alerts after PP deployment complete. After completed, then will update the result to us.

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# Rollout

In PCRS procedure, add a task that Trigger Deployment through CMS, and Change by HKCTR.

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# Reference

How to request the environment for your application

<https://oworkspace.sharepoint.com/sites/KM/OOCLWIKI/Pages/Change_Management_System_(CMS)_-_Environment_Setup_(non-IRIS).aspx>

Change Management System (CMS) – Deployment Flow (non-IRIS)

<https://oworkspace.sharepoint.com/sites/KM/OOCLWIKI/Pages/Change_Management_System_(CMS)_-_Deployment_Flow_(non-IRIS).aspx#Setup_AMP_password_placeholder_for_PP.2FPrd>

How to adopt AMP with CMS

<https://oworkspace.sharepoint.com/sites/KM/OOCLWIKI/Pages/How_to_adopt_AMP_with_CMS.aspx>

How to apply Oracle DB change on non-IRIS

<https://oworkspace.sharepoint.com/sites/KM/OOCLWIKI/Pages/HOW-TO_apply_Oracle_DB_change_in_Non-IRIS4.aspx>

OOCL JBoss Docker Template

<https://oworkspace.sharepoint.com/sites/KM/OOCLWIKI/Pages/OOCL_JBoss_Docker_Template.aspx>

OOCL NodeJS Docker Template

<https://oworkspace.sharepoint.com/sites/KM/OOCLWIKI/Pages/OOCL_NodeJS_Docker_Template.aspx>

OOCL Artifactory

<http://artifact:8081/artifactory/webapp/#/home>