

# BITeamwork: Install on High-Availability OBIEE

Version: 20150902

## Introduction

This document provides instruction for installing the BITeamwork system in an Oracle BI architecture configured for high availability. It also discusses how to make use of a modified customizations directory in your existing OBIEE system.

<http://www.biteamwork.com>

\* Available in version of BITeamwork 3.4.9+

## Prerequisites:

- Must have WebLogic Server 10.3.5+ running
- Must have all WebLogic Managed Servers for OBIEE you wish to deploy to up and running for OBIEE
- Must have access to the load balancer (or HTTP Server) web proxy configuration file

## Installing BITeamwork for HA

This section provides a step-by-step walkthrough of how to install and configure BITeamwork for HA in OBIEE. There are a few steps which go beyond a single server installation and that is one of the driving reasons for this document.

### Install BITeamwork on OBIEE first Server Node

On the server node containing the WebLogic Server Admin management server and OBIEE, please install BITeamwork as you would for a single server:

1. Download the zip file to the local machine
2. Unzip the file and note where the directory was established
3. Edit the installBITeamwork.bat|sh file and update the initial variables as declared by the instructions
4. Execute the script so that it runs the basic installation of components on the server. The basic components are:
  - a. Configuration XML and Page Files
  - b. JDBC Data Source
  - c. WAR (JEE) Deployment

## Verify BITeamwork on WebLogic Admin Server Console

In order to verify the initial installation went on without issue, you will need to access the WebLogic Server (WLS) Administration Console. Note, you may have encountered an error during the `installBITeamwork.sh|bat` execution. As long as the error is not related to the JDBC configuration then you may continue on below without much concern.

1. Open the WebLogic Admin Console web page and login as an administrator, ex: `weblogic`
2. Click on the Services > Data Sources link (generic data sources)
3. Verify that **biteamwork** is in this list of data sources
4. Navigate using the navigation list on the left pane of the page and click on the **Deployments** option.
5. Look for a deployment with a name of BITeamwork....
6. The status for the BITeamwork... deployment should be prepared or started but it could also be set to Failed. This isn't of much concern as you will now deploy the file manually so that it can be deployed to all servers running in the cluster in the next steps.

## If Only Scaling-Up with Additional Presentation Server(s)

Though the remainder of this guide is valuable for full High-Availability (scale-out) deployments as well as some other information for customized environments, some customers may desire to simply scale-up for performance, etc. of their OBIEE system. BITeamwork requires that the presentation services for each scaled-up instance have pertinent BITeamwork files copied the installation folder into a specific location. These files are automatically copied during an initial deployment when the installation script is executed for BITeamwork, but only on the primary server. Copy the files to the other Presentation Services folder path for each scaled-up environment. Below is a example script showing how this can be accomplished either manually or via scripting:

```
mv
/u01/app/oracle/middleware/instances/instance1/bifoundation/OracleBIPresentationServicesComponent/coreapp
lication_obips2/msgdb/l_en/customMessages
/u01/app/oracle/middleware/instances/instance1/bifoundation/OracleBIPresentationServicesComponent/coreapp
lication_obips2/msgdb/l_en/customMessages.old

mv
/u01/app/oracle/middleware/instances/instance1/bifoundation/OracleBIPresentationServicesComponent/coreapp
lication_obips2/msgdb/Pages
/u01/app/oracle/middleware/instances/instance1/bifoundation/OracleBIPresentationServicesComponent/coreapp
lication_obips2/msgdb/Pages.old

cp -r
/u01/app/oracle/middleware/instances/instance1/bifoundation/OracleBIPresentationServicesComponent/coreapp
lication_obips1/msgdb/l_en/customMessages
/u01/app/oracle/middleware/instances/instance1/bifoundation/OracleBIPresentationServicesComponent/coreapp
lication_obips2/msgdb/l_en/customMessages
```

```
cp -r  
/u01/app/oracle/middleware/instances/instance1/bifoundation/OracleBIPresentationServicesComponent/coreapp  
lication_obips1/msgdb/pages  
/u01/app/oracle/middleware/instances/instance1/bifoundation/OracleBIPresentationServicesComponent/coreapp  
lication_obips2/msgdb/pages
```

## Manually Deploy BITeamwork WAR to HA OBIEE Cluster

In the deployment section of the WLS administration console, you'll need to delete the existing BITeamwork.... deployment, install it again by deploying it to the BI Cluster having it deploy to a central location that all servers servers can access

1. Check the checkbox corresponding to the BITeamwork.... deployment(s).
2. Navigate to the top of the page and select Stop > Stop Immediately
3. Wait for the deployments to stop and follow any on-screen prompts, if any
4. Click the install button residing at the top of the table that lists the deployments
5. Locate the BITeamwork....war file that you are seeking to deploy. This will be located after the initial installation above in the following location, <FMW\_HOME>/BITeamwork/
6. Click the Next button
7. Confirm the name of the deployment
8. Click the Next button
9. Confirm the Deploy as Application option is selected
10. Click the Next button
11. Check the radio button at the bottom of the page to "deploy to each server's location automatically"
  - a. This text may be different depending on the version of WebLogic running
12. Click the Finish button
13. Enter the value 778 in the Deployment Order text field
14. Click the Save button
15. Click on the Deployments link in the left navigation pane
16. Locate the BITeamwork.... deployment item
17. Check the respective checkbox for the BITeamwork...deployment
18. Select the Start > Start Immediately option at the top of the deployments table to startup the service on the current and all actively running HA managed servers

Wait for the deployments to start up. You may need to refresh the deployments page every 30 seconds or so to see the start up change reflected in the deployments status field. When it is running it will be set to Active

## BITeamwork HA Web Proxy Configuration and Setup

When using a HA configuration, the load balancer DNS points to underlying pre-identified servers in order to route respective traffic. The servers are mainly identified by IP address however, they may also have a DNS which can take a user's requested access routing them to the appropriate server. The HA Web Proxy configuration file must be configured to take into account the **/bitw** context root. This is no different from the **/analytics** context root for OBIEE or the **/workspace** context root for Hyperion which the network administrator had once updated for those applications if running in a High-Availability architecture. Your network administrator (or you) should already be familiar with this process.

Please read the extended notes on BITeamwork HA Configuration at the following link:

<http://www.artofbi.com/blog/using-a-proxy-with-biteamwork-and-obiee/>

As part of the configuration process of leveraging a Proxy Server or HTTP Server with OBIEE, one configures the context-root paths accessible for routing to the target application servers used by Oracle BI. This logic will apply when using a proxy with BITeamwork and OBIEE as the integration of the BITeamwork application is deployed to the same application server when deployed to the on-premise OBIEE solution.

Therefore, if your Oracle BI implementation uses a Proxy or HTTP server such as Tivoli Access Manager, F5 Load Balancer, Oracle HTTP Server, MS IIS, etc. then you will also need to represent the BITeamwork context root path if you have selectively identified the other context root paths for the Oracle BI application.

For example, per the [OBIEE HA EDG Oracle documentation](#) when configuring the OHS server you will need to add the following routing information for the proxy to ensure proper OBIEE transport between the HTTP server or load balancer and the application server.

```
# BIEE Analytics
<location /analytics>
SetHandler weblogic-handler
WebLogicCluster APPHOST1VHN1:9704, APPHOST2VHN1:9704
WLProxySSL ON
WLProxySSLPassThrough ON
</location>
<location /mapviewer>
SetHandler weblogic-handler
WebLogicCluster APPHOST1VHN1:9704, APPHOST2VHN1:9704
WLProxySSL ON
WLProxySSLPassThrough ON
</location>
```

Therefore when implementing BITeamwork you will need to add the following configuration using the **/bitw** context-root as show below for Apache, Oracle HTTP, or other possible HTTP Servers:

```
# BIEE Analytics - BITeamwork
<location /bitw>
SetHandler weblogic-handler
WebLogicCluster APPHOST1VHN1:9704, APPHOST2VHN1:9704
WLProxySSL ON
WLProxySSLPassThrough ON
</location>
```

Once you've made the configuration to the appropriate httpd.conf (Apache), mod\_wl\_ohs.conf (OHS) configuration file, or the one specific to your load balancer/proxy server, then restart the HTTP Server and all should be working well to see the BITeamwork integration with your Oracle BI implementation operational.

In addition, if you are using the caching or compression settings of the OHS or Apache HTTP servers you will need to clear the static file cache to allow an upgrade of BITeamwork's files to be refreshed properly on your user's browsers. To do this run the following commands as the root user (or owner of the OHS/Apache installations).

Run `htcacheclean -D`

Then run, `htcacheclean -r`

Then run, `apachectl restart`, to restart the server.

Lastly, if there is a need to bypass any of the static cached files you can cherry pick these by updating the config file as described by [this Oracle documentation](#)

## Using a Customized OBIEE Customizations Folder Location

Some Oracle BI customers have modified their OBIEE systems to allow for a different directory location on the server to store native OBIEE configuration files instead of using the product's default location. BITeamwork can account for this modification by referencing the process in this section to identify the customizations folder's location and move the appropriate BITeamwork files and/or folders into that location for normal operation.

After the BITeamwork installation, the BITeamwork customMessages XML file, `bitwMessages(...).xml` will be installed into the Fusion Middleware Home path of your OBIEE installation in the following path,

`<OBI_INSTANCE>/bifoundation/OracleBIPresentationServicesComponent/coreapplication_obips1/msgdb/l_en/customMessages`. The **`bitwMessages(...).xml`** file will need to be copied to the **`customMessages`** location specified in your OBIEE instanceConfig.xml file per your OBIEE implementation. This location should be known to your OBIEE Administrator and may appear as `/apps/obi/obishare/company_files/, /u01/fmw/obi/shared_files/`,

D:\FMW\Oracle\FMW\Shared\, or any other configuration directory that your team has previously decided. Regardless, a reference to this custom location would already be defined in the existing OBIEE instanceConfig.xml file.

1. Move the ./msgdb/l\_en/customMessages/bitwMessages(..).xml file to your adjusted customMessages directory
2. The ./msgdb/l\_en/customMessages/bitwMessages(..).xml file and or parent folder (ex: l\_en) from the BITeamwork installation can then be removed or simply backed up (or placed in a backup folder above the /msgdb folder level) so that the reference is not actually picked up by the OBIEE system seeking to find XML files in that location. Usually zipping/compressing the /msgdb folder and then deleting the /l\_en folder or bitwMessages(..).xml file is sufficient.

BITeamwork also creates another folder and set of files in a similar location during installation, referred to as /Pages. This directory and the files below this parent location should remain in the same location unmodified after the core BITeamwork installation. That location is typically,

<OBI\_INSTANCE>/bifoundation/OracleBIPresentationServicesComponent/coreapplication\_obips1/msgdb/Pages/

With the bitwMessages(..).xml file moved to your specified OBIEE customizations file directory, and the original bitwMessages(..).xml file removed from the default installation location, the next step is to restart the BI services.

1. Restart the OPMN services after the above steps to allow the OBIEE system to pick up the changes and render BITeamwork as intended by using one of the following methods:
  - a. opmnctl stopall and then opmnctl startall from a terminal window
  - b. Enterprise Manager
2. Navigate to your OBIEE portal and access a dashboard page having content and you should see BITeamwork active on the system and your standard customizations in place.

For additional information on removing parts of the BITeamwork customization such as the header text in OBIEE, please see the following article, <http://www.artofbi.com/blog/biteamwork-and-your-obiee-customizations/>

**NOTE:** Please note that upon each upgrade of BITeamwork, consider the possibility that the BITeamwork configuration files may be modified. A reference to this change should be accounted for per any standard technical upgrade as similar to any other software product upgrade.

## Provide Feedback

We would very much appreciate an any feedback that you have concerning your installation, configuration, and actual usage, inputs, and interactions with BITeamwork. Please use <https://artofbi.zendesk.com/> to submit any general feedback, issues or concerns. Please include the following information when you provide the feedback:

- Name
- Company Name
- OBIEE Version

- Database Version
- If using an HTTP Web Tier or Proxy and what product (IIS, OHS, Apache, etc.)
- If the OBIEE environment has any customizations, skins or styles, and which?