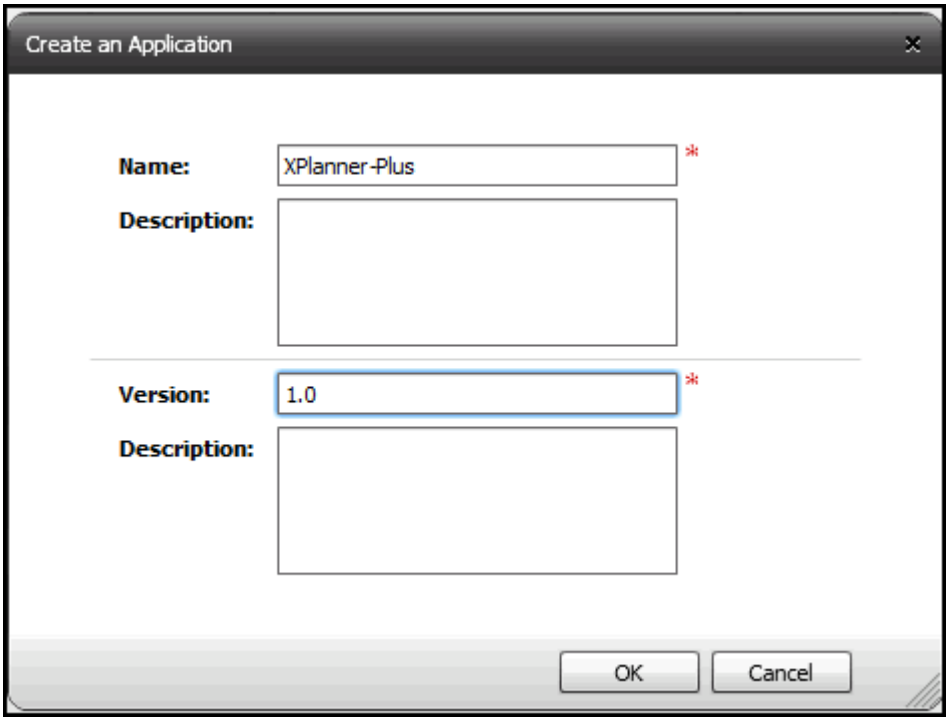
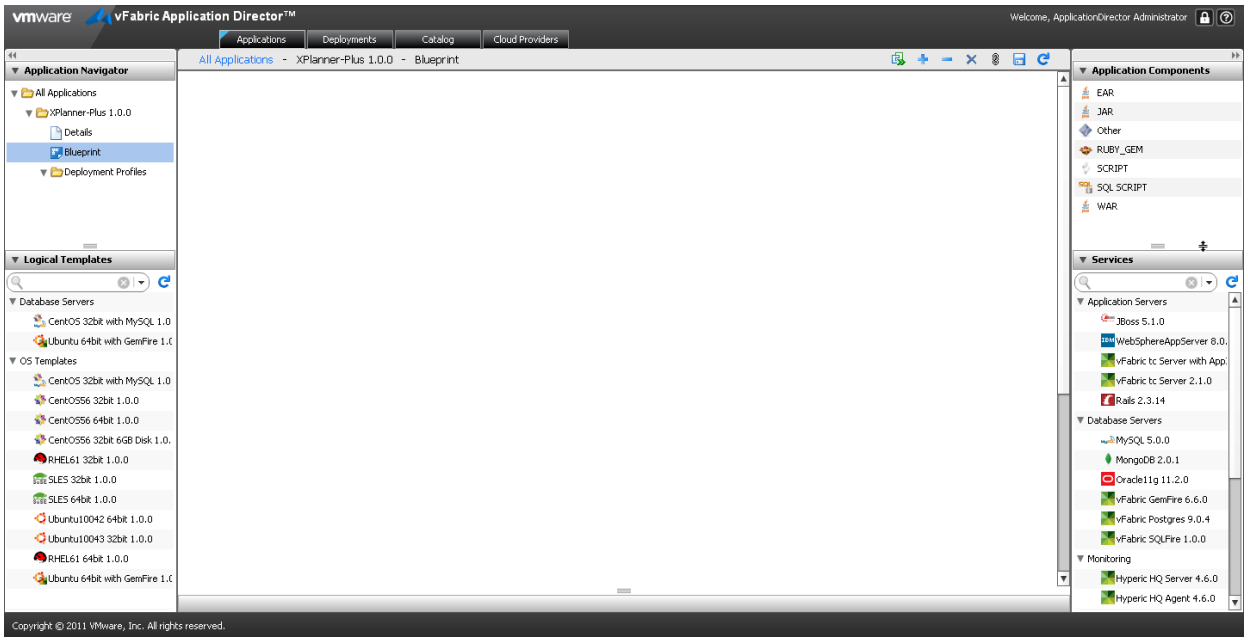
## Create XPlanner application

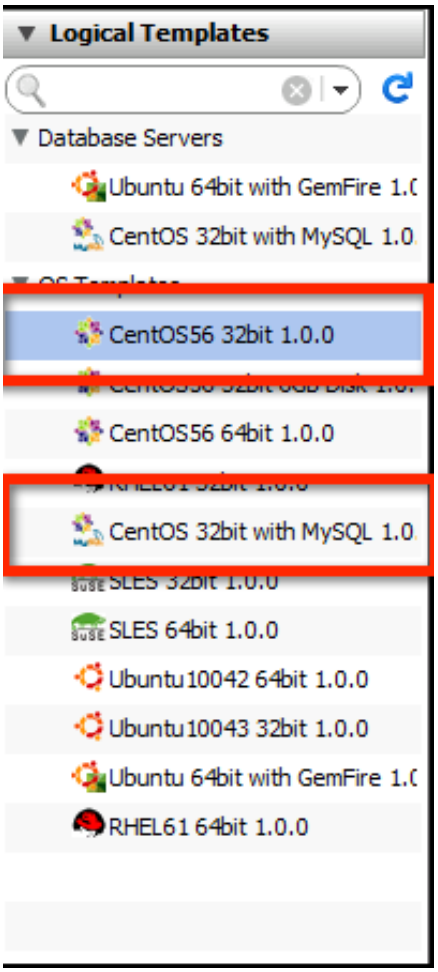
1. Login to Application Director with a user that has application architect rights.
2. Click on **Manage Applications.** This will take you to the list view of all applications.
3. Click on  to add a new application
4. Provide the following required details.
    a. Name: **XPlanner-Plus**
    b. Version: **1.0**



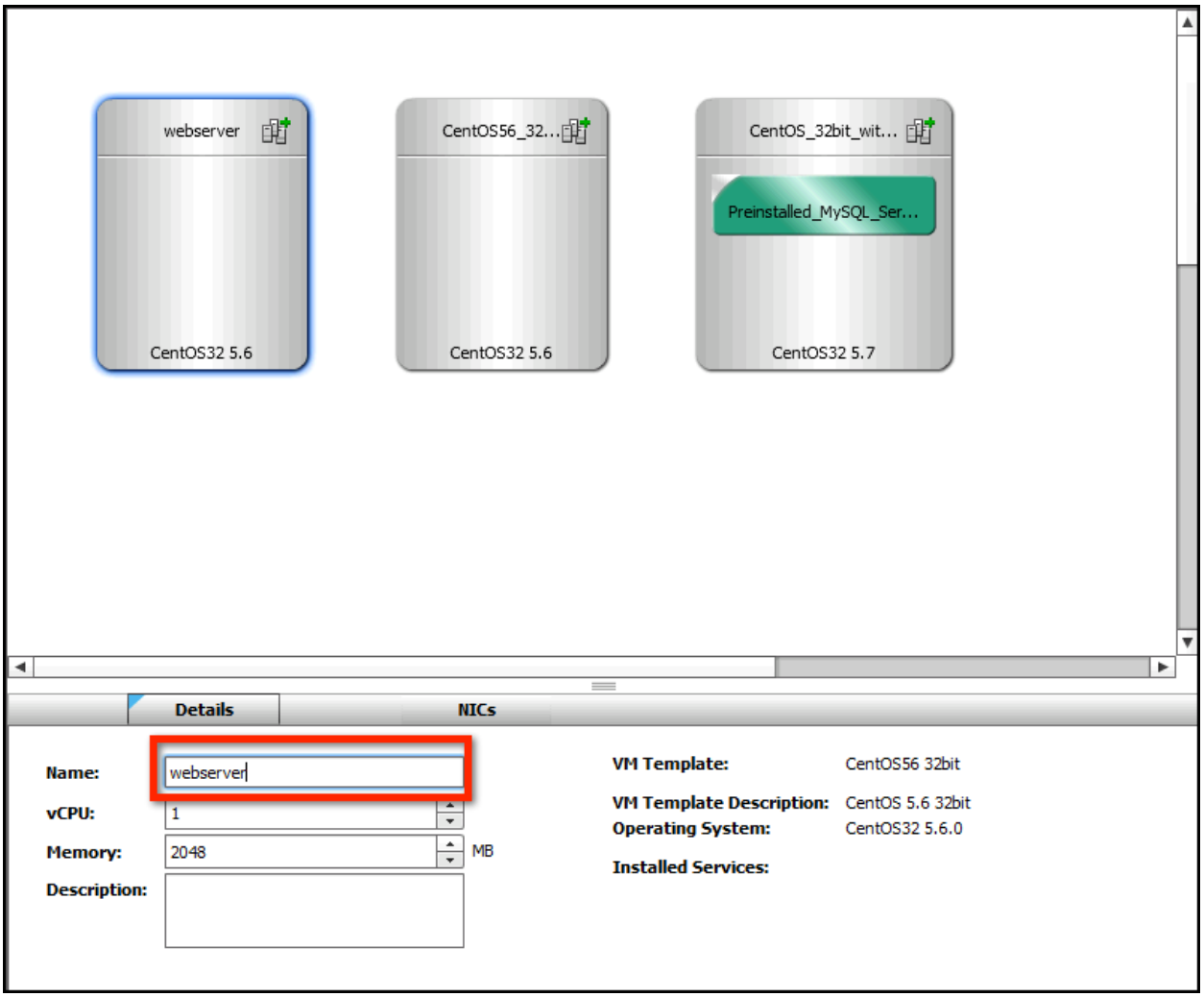

5. Click **OK**
6. On successful application creation, the user will be re-directed to the blueprint editor page. The XPlanner-plus blueprint topology consists of 3 components - database, appserver, webserver. We need to create these 3 nodes
7. You will see Logical Templates on the bottom left




8. Drag & drop the template labeled **CentOS56 32bit 1.0.0** twice in the central white canvas area. And then drag the template **CentOS 32 bit with MySQL** on the canvas. These templates need to have been uploaded and regisetered in the cloud provider.



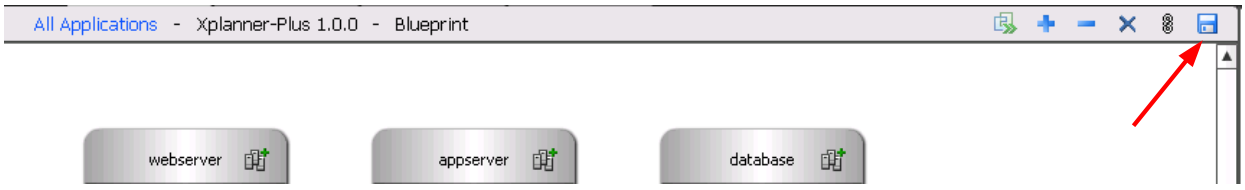

9. Now you will have 3 nodes in the canvas
10. Select the first node. In the **Details** pane type **webserver** in the name field.




11. Name second node **appserver** and the third node as **database**

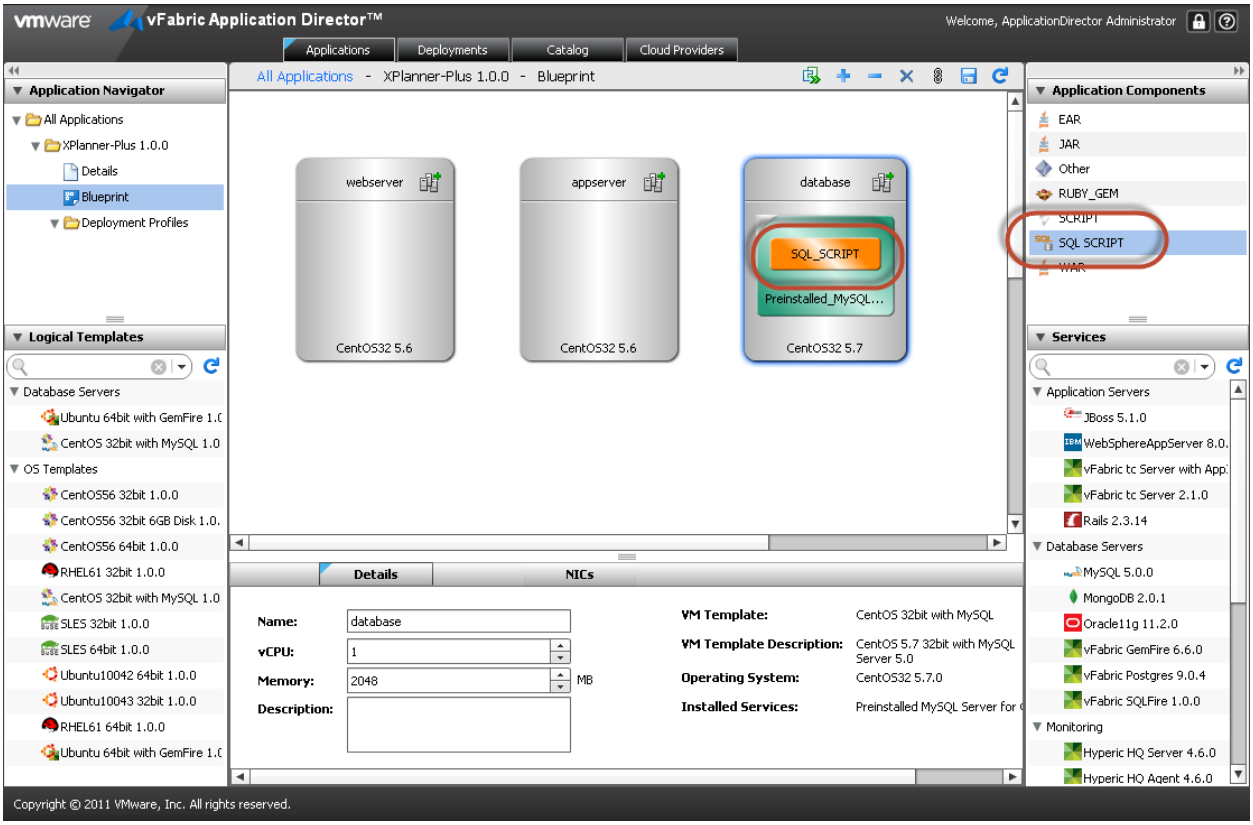
## Configuring the database

12. Click on database node
13. Keep the memory to default value which is 2048 MB and save the app

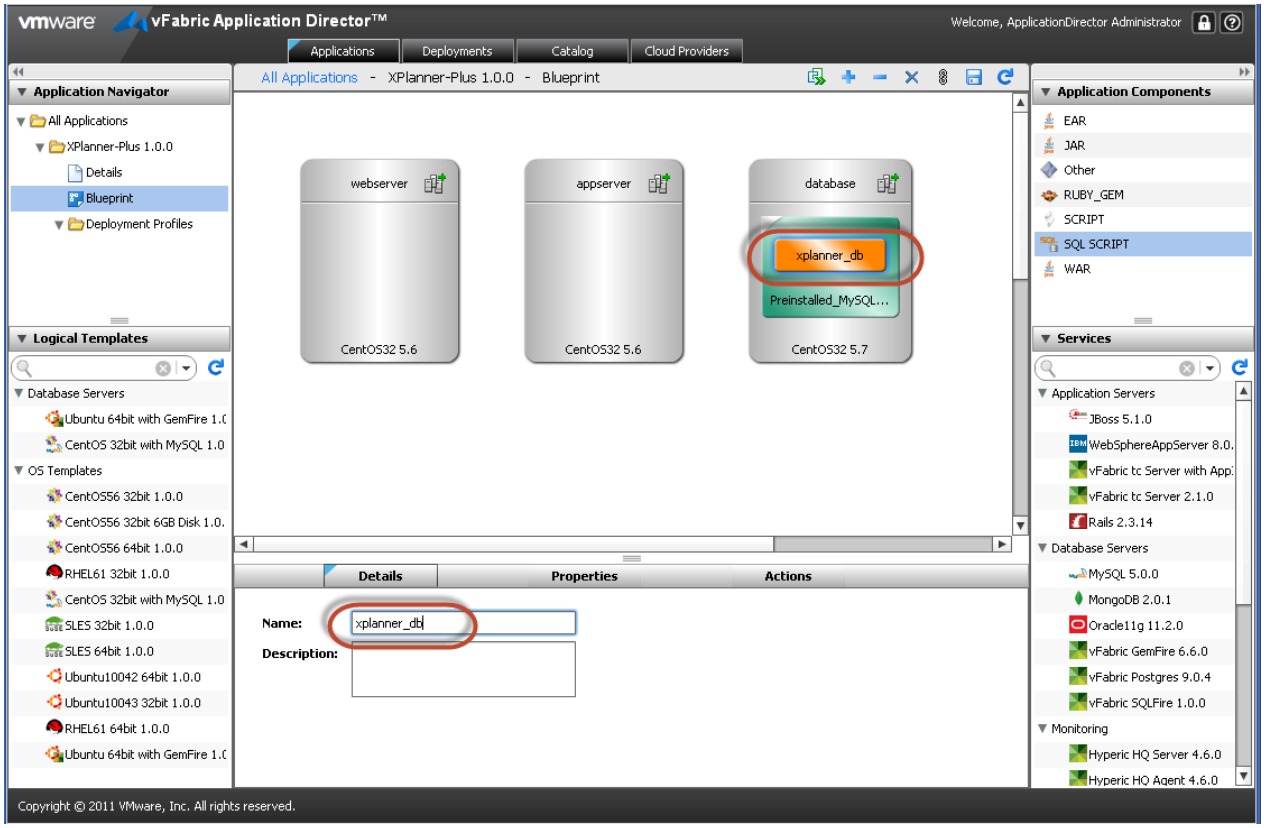



14. Now, you will configure the application component that resides in the MySql service on this node. The Application component is an sql script.

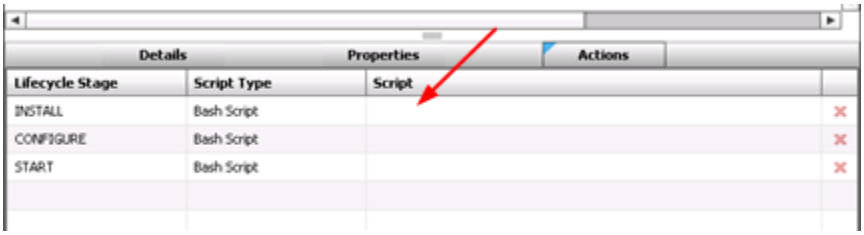
15. Now drag & drop **SQL Script** from **Application components** panel on the top-right to the Preinstalled_MySQL component within the database node.




16. Click on the SQL_SCRIPT component and in the Details pain type **xplanner_db** in the name field.

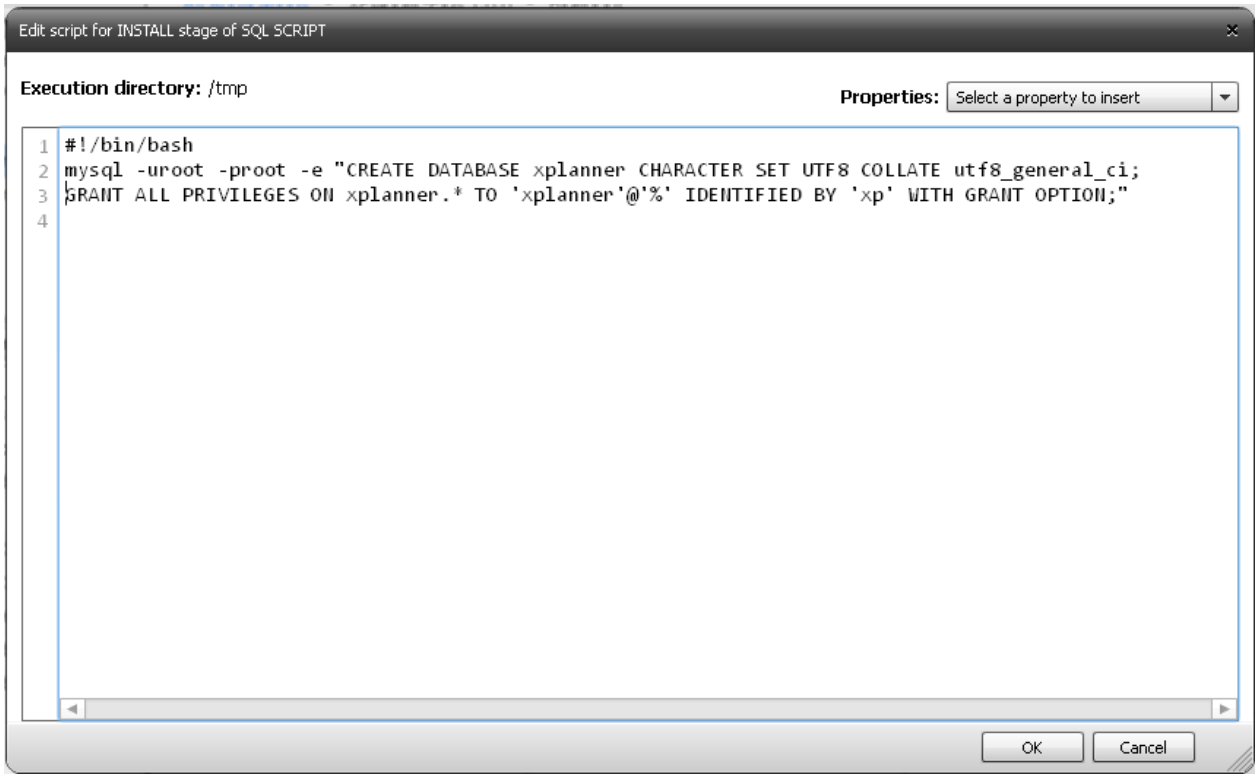



17. Click on the **xplanner_db** component and go to actions tab in the lower pane
18. Click on the first empty cell in the Script column. This is where you would click to bring up the script window to paste the INSTALL SCRIPT of the application component (xplanner_db).




19. Click on the cell. It will bring up a scripting window.
20. Copy and paste the script below in the window for install script for xplanner_db component and save. Please refer to file **install_db.txt**.

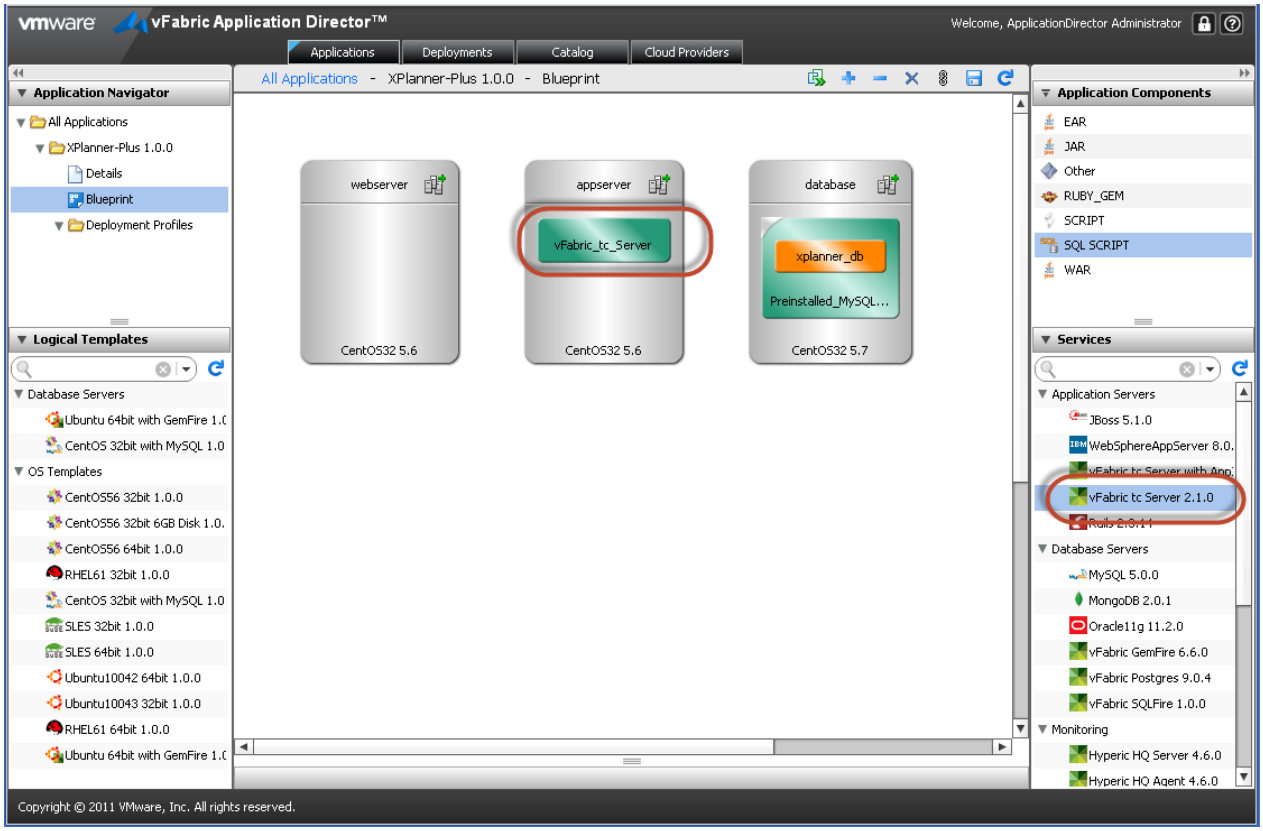
```
#!/bin/bash

mysql -uroot -proot -e "CREATE DATABASE xplanner CHARACTER SET UTF8 COLLATE utf8_general_ci; GRANT ALL PRIVILEGES ON xplanner.* TO 'xplanner'@'%' IDENTIFIED BY 'xp' WITH GRANT OPTION;"
```



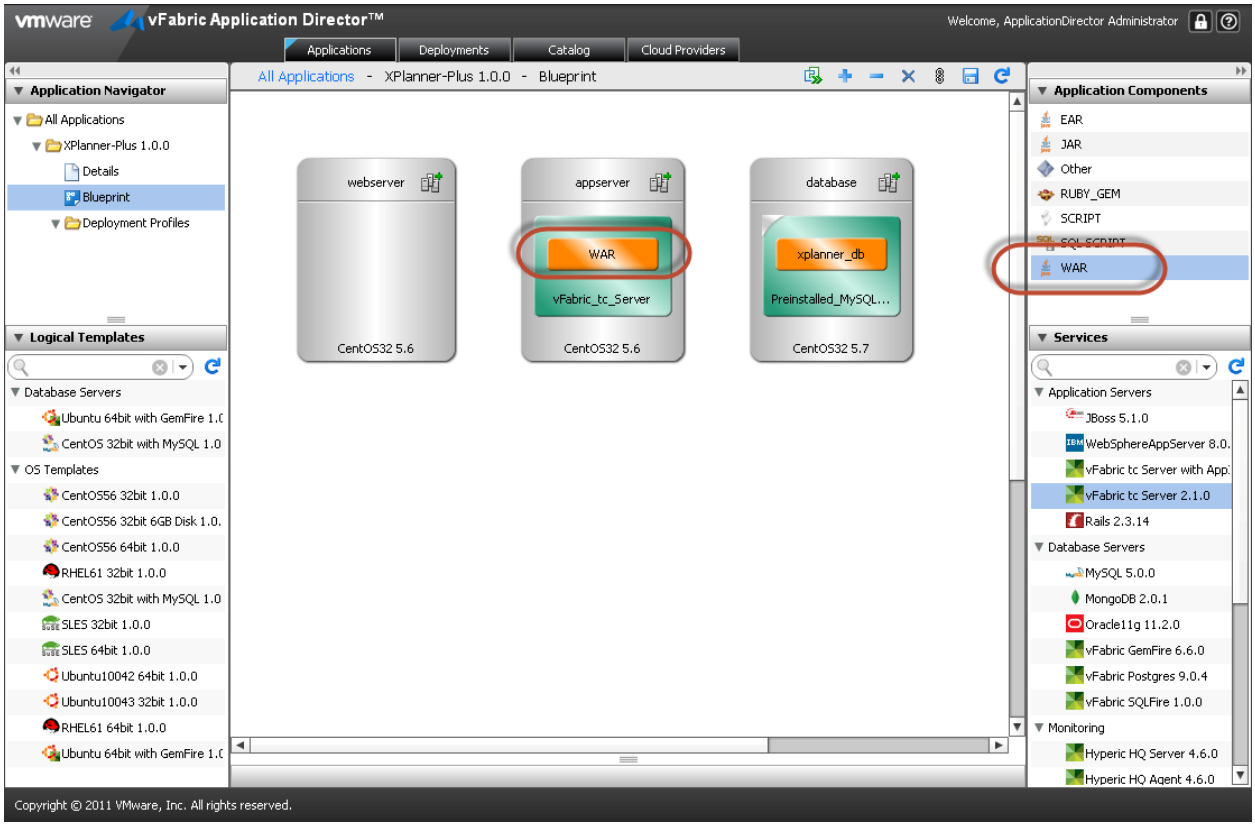

NOTE – keep saving your blueprint periodically. Save icon is on the top right of the palette on the canvas. This is to make sure you don't lose your valuable work.

## Configuring the application server

21. Click on **appserver** node
22. Leave the default memory of 2048 MB & Save the app
23. From the Services panel on the bottom right, drag and drop the service labeled **vFabric tc Server 2.1.0** on the appserver node.




24. Click on the **vFabric tc Server 2.1.0** component and label it **tcServer** and save the blueprint.
25. Now drag and drop **WAR** component from **Application components** panel" on to the **tcServer** component

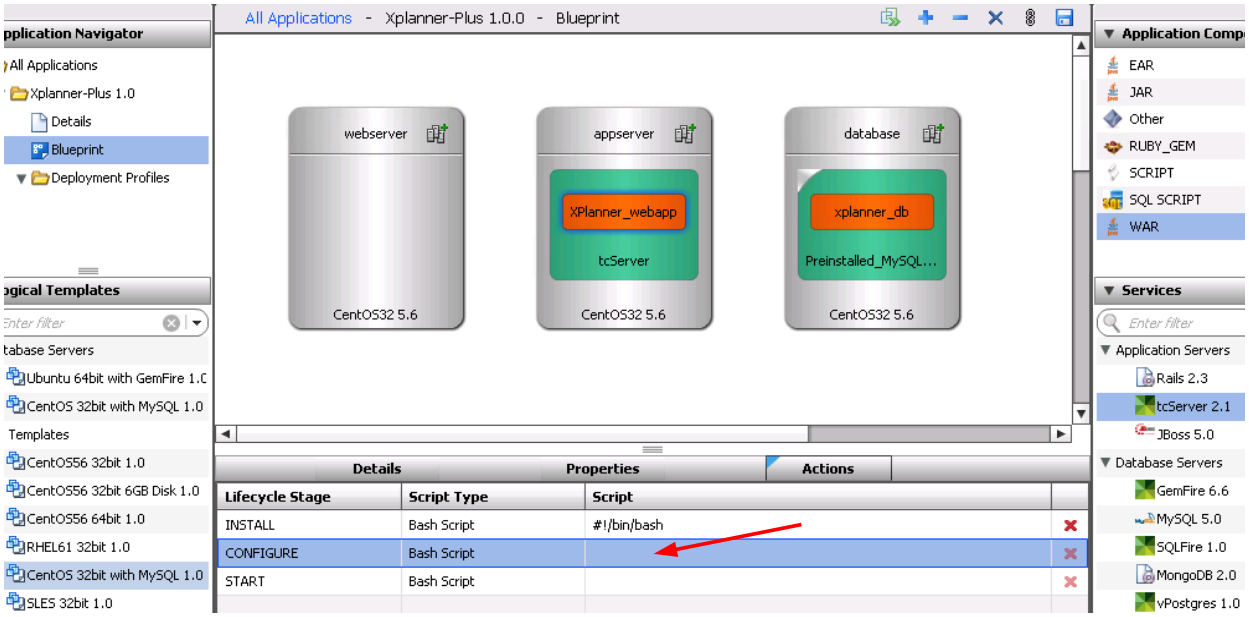



26. In the **Details** pane, label this **WAR** component as **XPlanner_webapp**
27. While in the **XPlanner_webapp** component is selected, click on **Actions** tab
28. Click on the cell under Script column to bring up a script window for the INSTALL script
29. Replace the existing script with the following. Please refer to file **install_webapp.txt** to copy the script.

```
#!/bin/sh

env > /tmp/env.txt

# Stop the application server. This parameter should point to the script used to stop the application server.

$service_stop

cp $war_file /tmp

yum -y install unzip

mkdir $webapps_dir/xplanner-plus

unzip  /tmp/xplanner-plus.war -d $webapps_dir/xplanner-plus


# Start the application server. This parameter should point to the script used to start the application
```

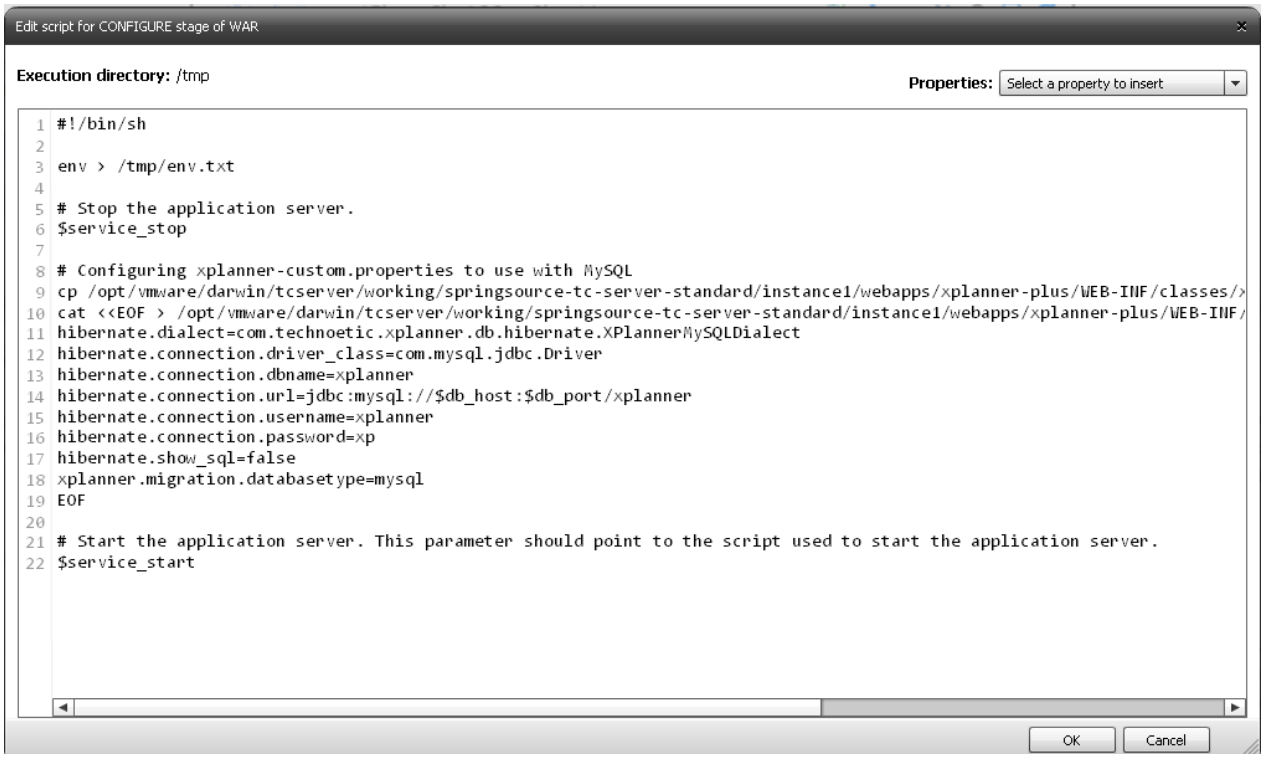
```
server.
$service_start

# xplanner has permission issues with log, this will avoid that
touch xplannerActivity.log
```

30. Click on the empty cell on the row for **CONFIGURE** as shown. This will bring up a scripting window



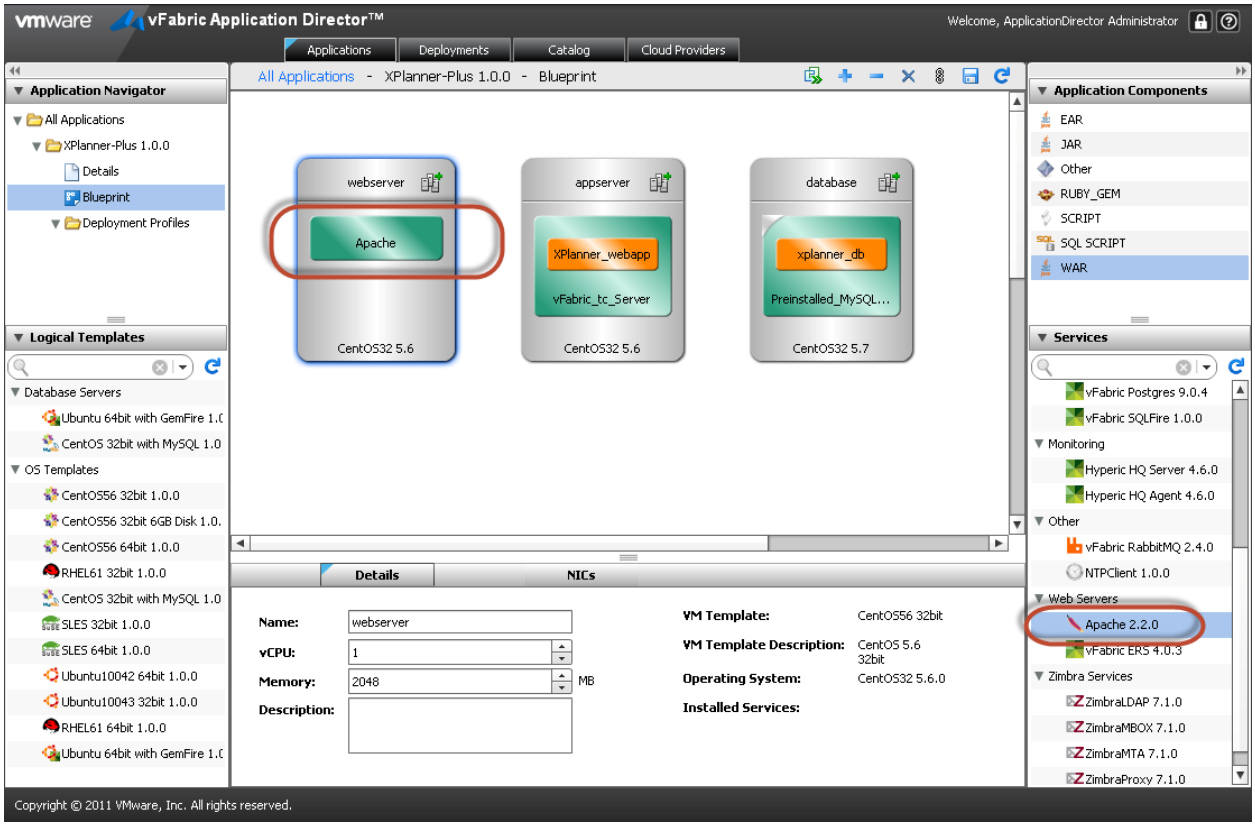

31. In the scripting window, copy and paste the below script. Please refer to file **configure_webapp.txt** to copy the script.

```
#!/bin/sh


env > /tmp/env.txt

# Stop the application server.

$service_stop

# Configuring xplanner-custom.properties to use with MySQL

cp /opt/vmware/darwin/tcserver/working/springsource-tc-server-standard/instance1/webapps/xplanner-plus/WEB-INF/classes/xplanner-custom.properties /tmp/xplanner-custom.properties.backup

cat <<EOF > /opt/vmware/darwin/tcserver/working/springsource-tc-server-standard/instance1/webapps/xplanner-plus/WEB-INF/classes/xplanner-custom.properties

hibernate.dialect=com.technoetic.xplanner.db.hibernate.XPlannerMySQLDialect

hibernate.connection.driver_class=com.mysql.jdbc.Driver

hibernate.connection.dbname=xplanner

hibernate.connection.url=jdbc:mysql://$db_host:$db_port/xplanner

hibernate.connection.username=xplanner

hibernate.connection.password=xp

hibernate.show_sql=false

xplanner.migration.databasetype=mysql

EOF


# Start the application server. This parameter should point to the script used to start the application server.

$service_start
```




## Configuring the WEB server

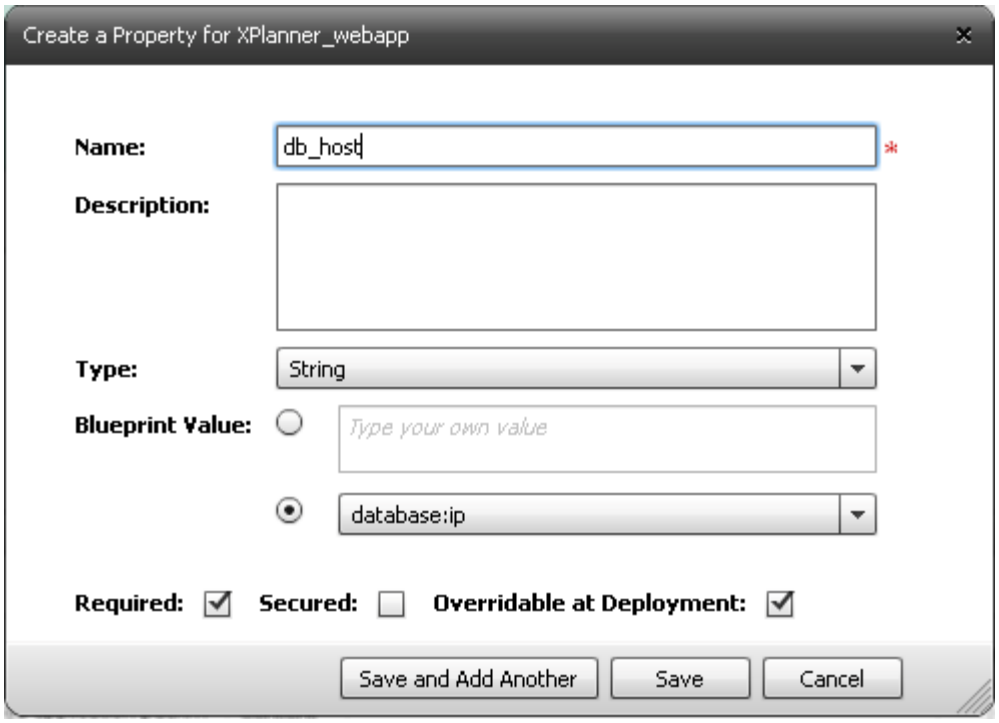
32. Click on **webserver** node
33. From the Services Panel on the bottom right, drag and drop the **Apache 2.2.0** from the **Web Servers** list to the **webserver** node.



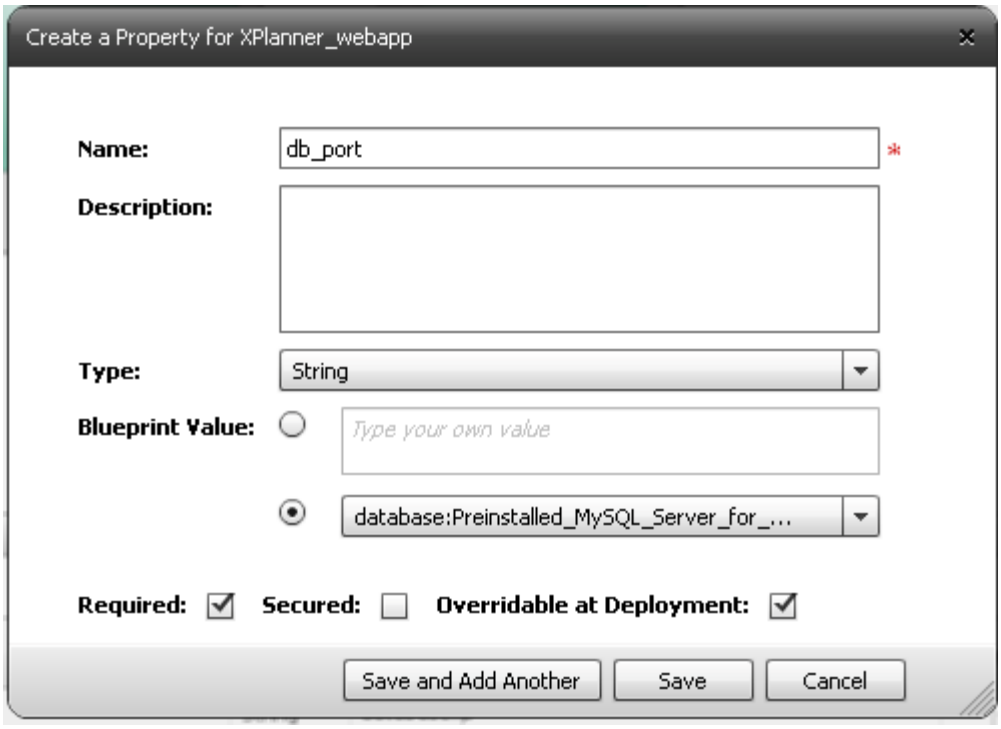

34. Save this application

## Configuring Properties

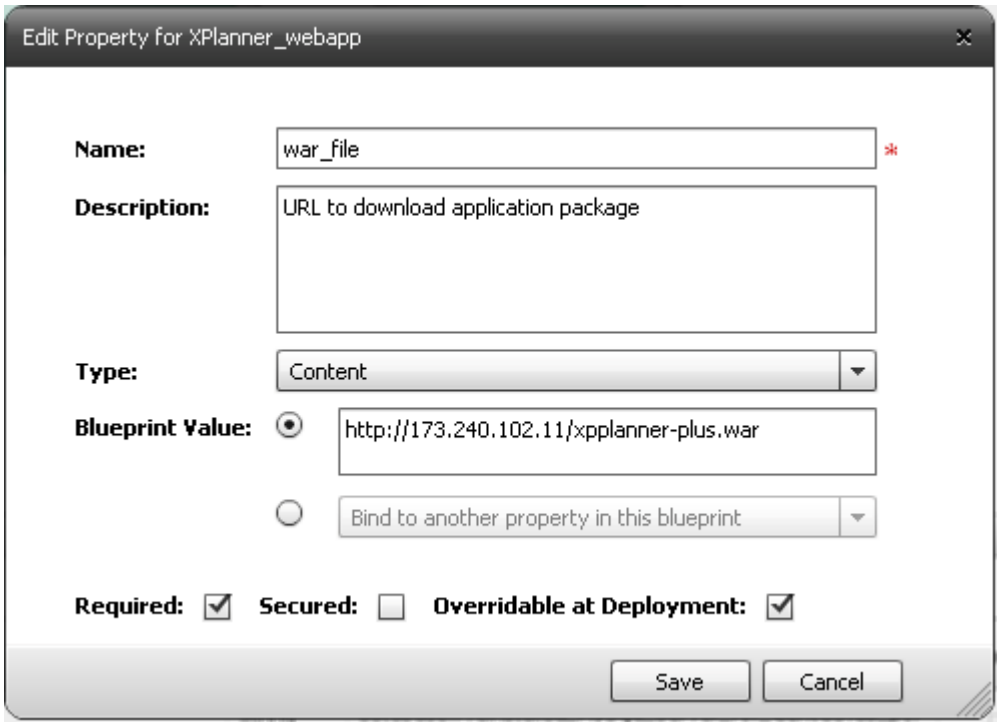
35. Click on **XPlanner_webapp** component
36. Click on the Properties Palette. You will need to create new properties and associate values
37. Click on the ✚ icon
38. In the dialog box type the following information:
    a. Name: **db_host**
    b. Type: **String**
    c. Blueprint Value: (Bind value) **database:ip**




39. Click **Save and Add Another**
40. In the dialog box type the following information:
    a. Name: **db_port**
    b. Type: **String**
    c. Blueprint Value: (Bind value)
       **database:Preisntalled_MySQL_Server_for_CentOS:db_port**




41. Click on **Save** and then **Save** again
42. In the **Properties** section, double click on the **war_file** property
43. For the blueprint value select the first radio button and type **http://<file server IP>/xplanner-plus.war**




44. Double click on the property **service_start** and type the following in the blueprint value textbox (first radio button) and then click Save.

```
/opt/vmware/darwin/tcserver/working/springsource-tc-server-standard/instance1/bin/tcruntime-ctl.sh start
```

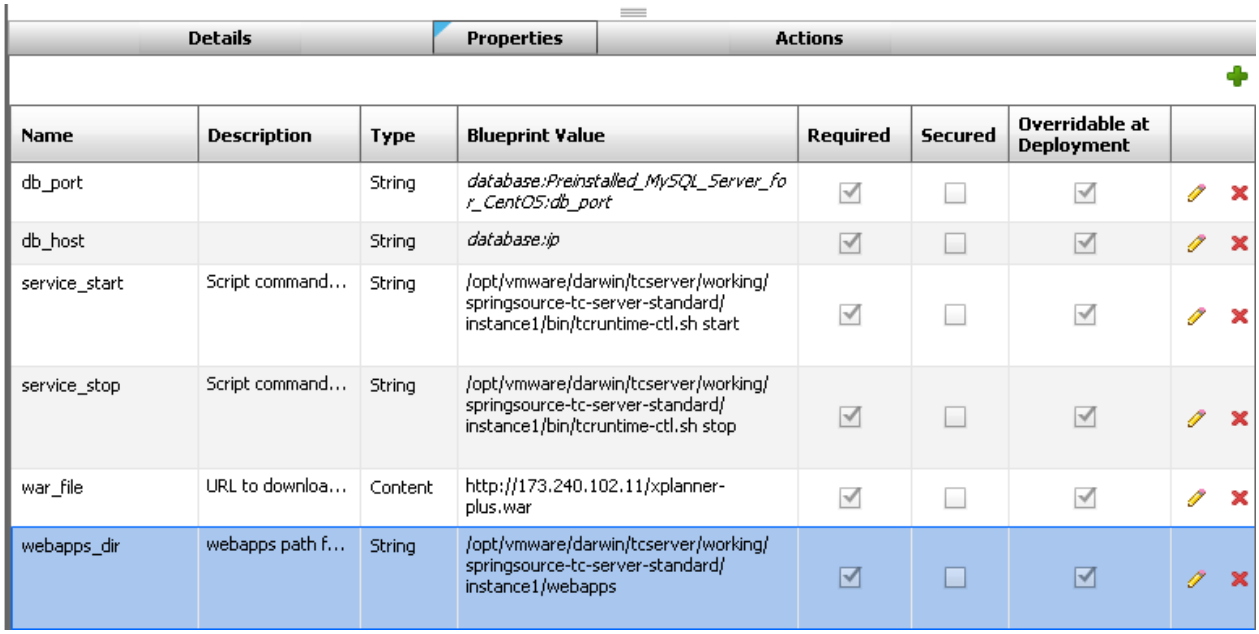
45. Double click on the property **service_stop** and type the following in the blueprint value textbox (first radio button) and then click Save.

```
/opt/vmware/darwin/tcserver/working/springsource-tc-server-standard/instance1/bin/tcruntime-ctl.sh stop
```

46. Double click on the property **webapps_dir** and type the following in the blueprint value textbox (first radio button) and then click Save.

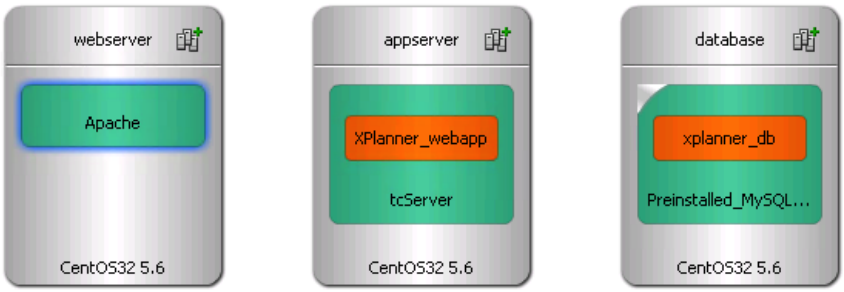
```
/opt/vmware/darwin/tcserver/working/springsource-tc-server-standard/instance1/webapps
```

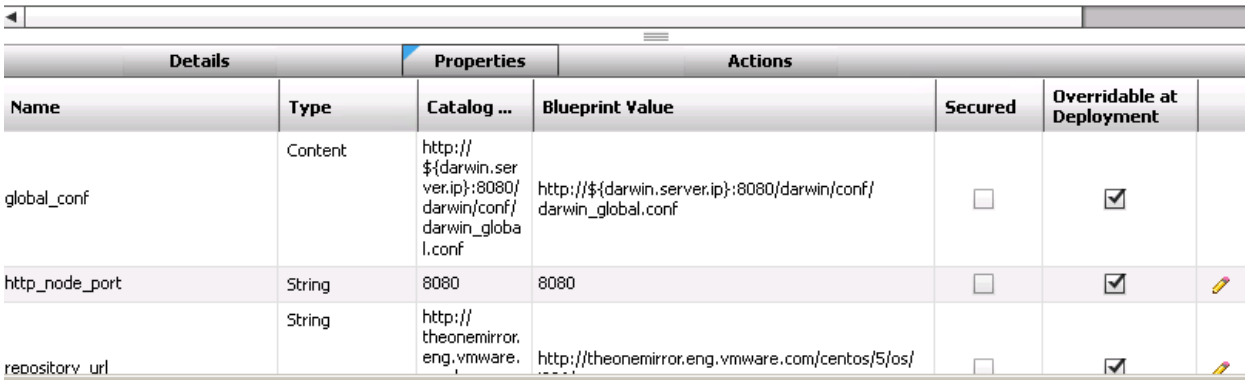
47. Once properties are all created for the XPlanner_webapp, the property palette should look like the screenshot below.




| Name | Description | Type | Blueprint Value | Required | Secured | Overridable at Deployment |
|---|---|---|---|---|---|---|
| db_port | | String | *database:Preinstalled_MySQL_Server_for_CentOS5:db_port* | ☑ | ☐ | ☑ |
| db_host | | String | *database:ip* | ☑ | ☐ | ☑ |
| service_start | Script command... | String | /opt/vmware/darwin/tcserver/working/springsource-tc-server-standard/instance1/bin/tcruntime-ctl.sh start | ☑ | ☐ | ☑ |
| service_stop | Script command... | String | /opt/vmware/darwin/tcserver/working/springsource-tc-server-standard/instance1/bin/tcruntime-ctl.sh stop | ☑ | ☐ | ☑ |
| war_file | URL to downloa... | Content | http://173.240.102.11/xplanner-plus.war | ☑ | ☐ | ☑ |
| webapps_dir | webapps path f... | String | /opt/vmware/darwin/tcserver/working/springsource-tc-server-standard/instance1/webapps | ☑ | ☐ | ☑ |

48. Click on Apache component and click on Properties palette

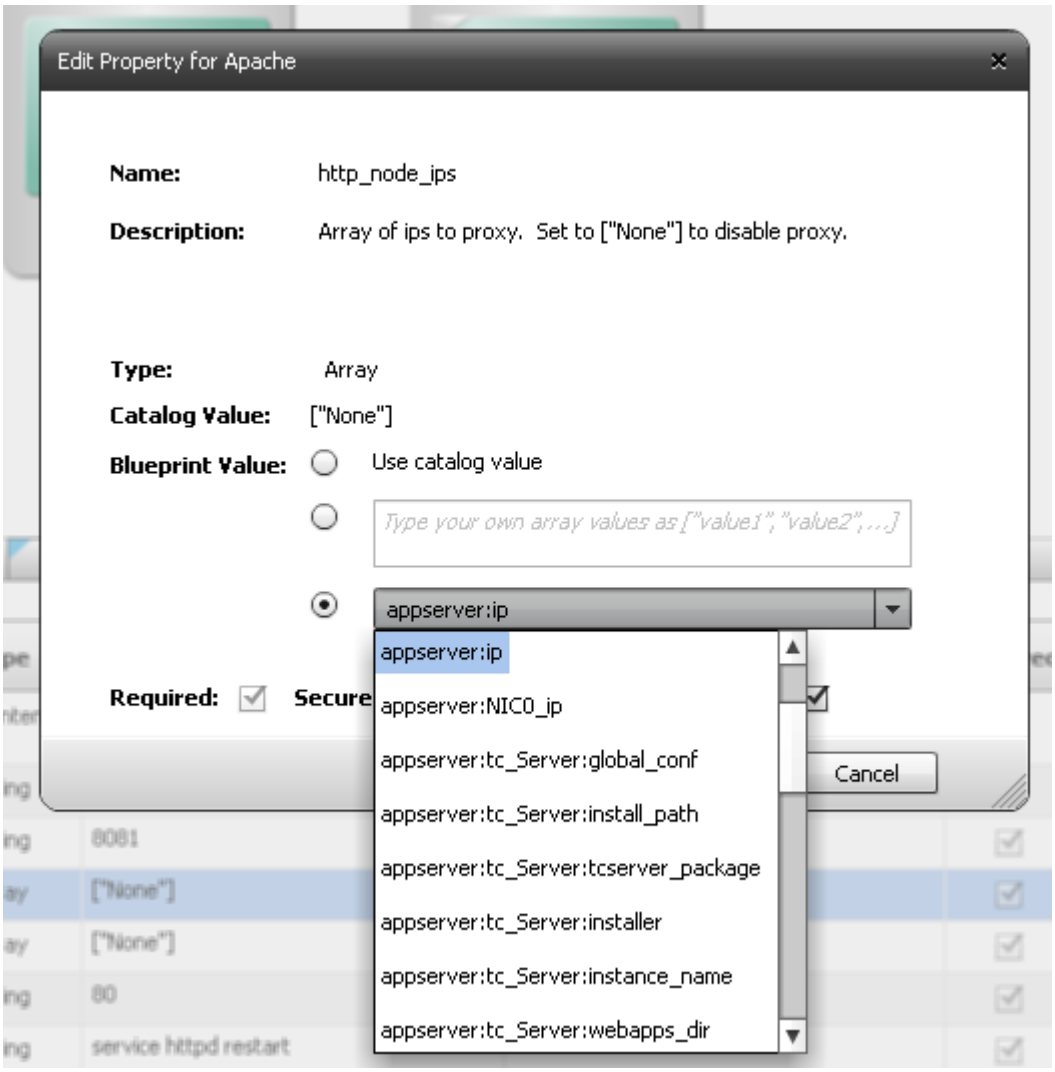


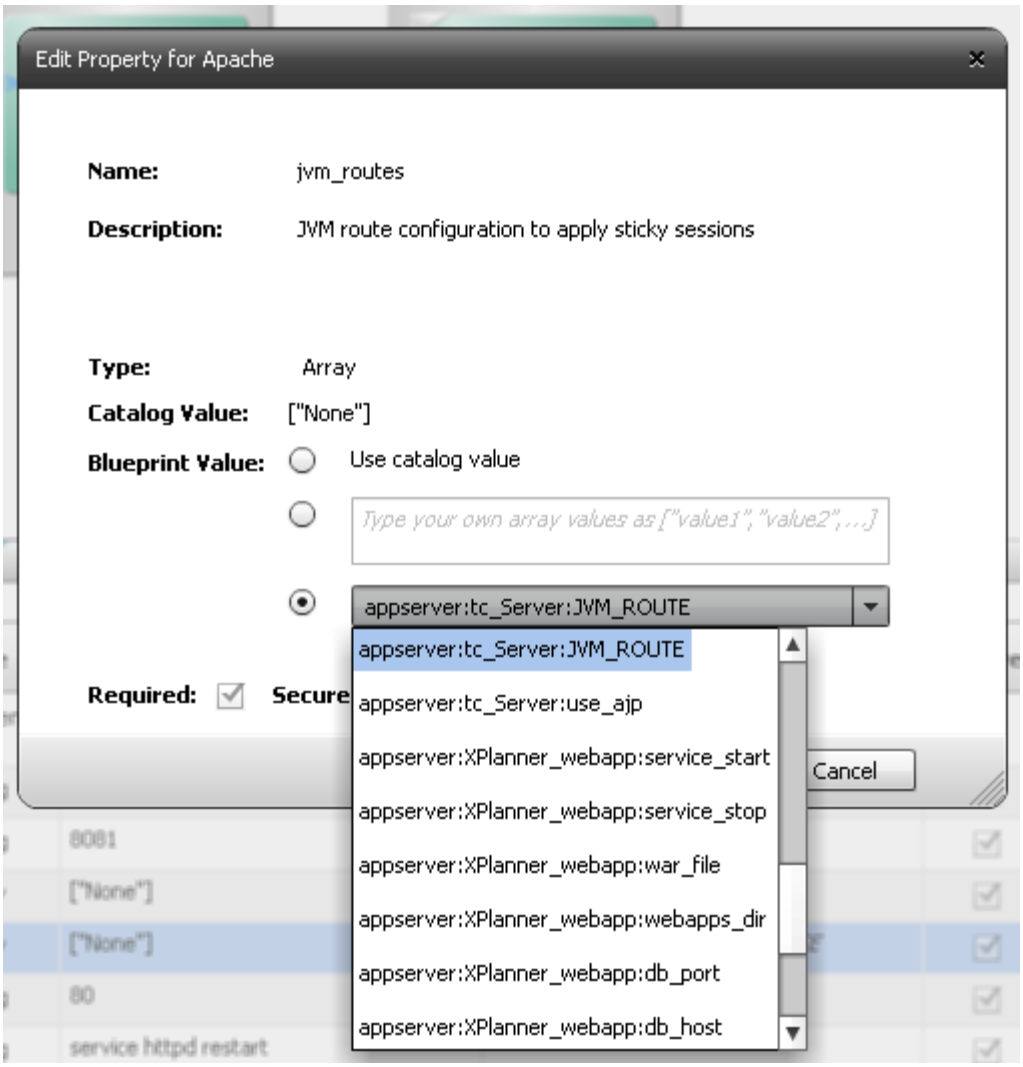
Details | Properties | Actions

| Name | Type | Catalog ... | Blueprint Value | Secured | Overridable at Deployment |
|---|---|---|---|---|---|
| global_conf | Content | http://${darwin.server.ip}:8080/darwin/conf/darwin_global.conf | http://${darwin.server.ip}:8080/darwin/conf/darwin_global.conf | ☐ | ☑ |
| http_node_port | String | 8080 | 8080 | ☐ | ☑ |
| repository_url | String | http://theonemirror.eng.vmware. | http://theonemirror.eng.vmware.com/centos/5/os/ | ☐ | ☑ |

49. Scroll down until you see **http_node_ips** property. Double click this value.
50. Pick the blueprint value from second radio button option for bound properties - **appserver:ip**

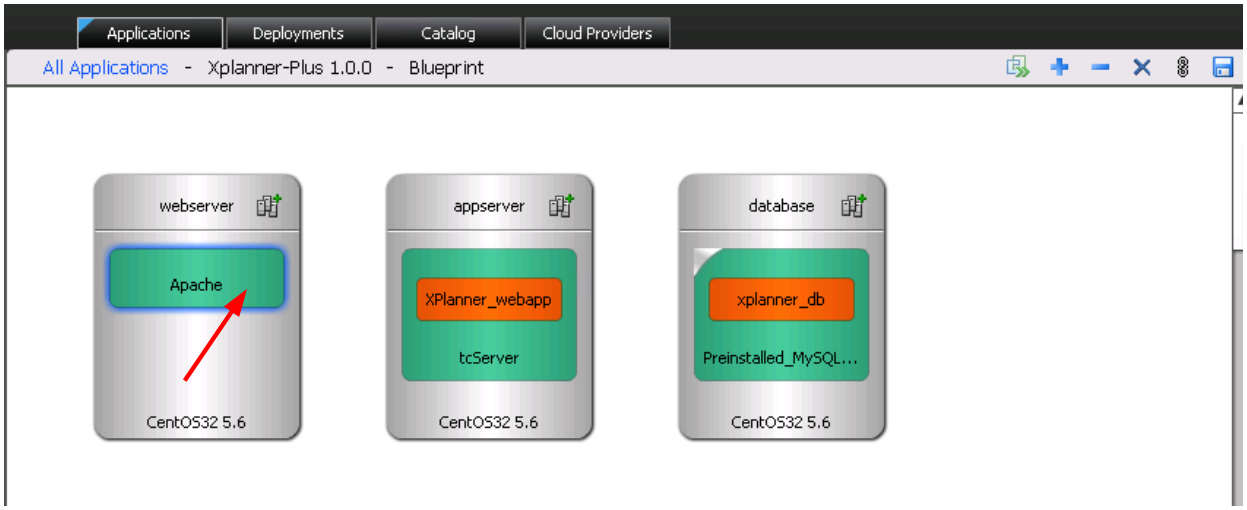



51. Scroll down until you see **jvm_routes** property. Double click this value.
52. Pick the blueprint value from second radio button option for bound properties – appserver:**tc_Server:JVM_ROUTE**

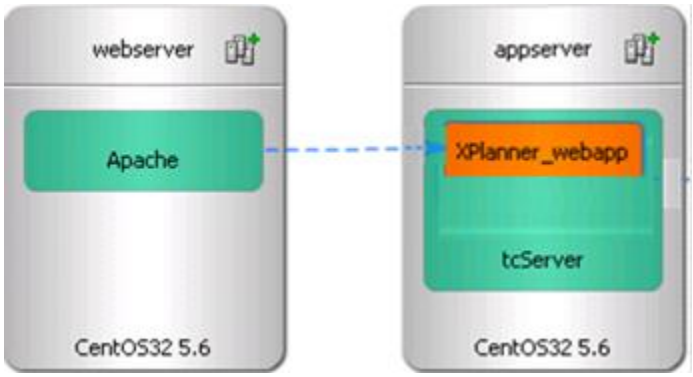



53. Link Apache to XPlanner_webapp. The way to do this is as follows
    a. Click on the link icon

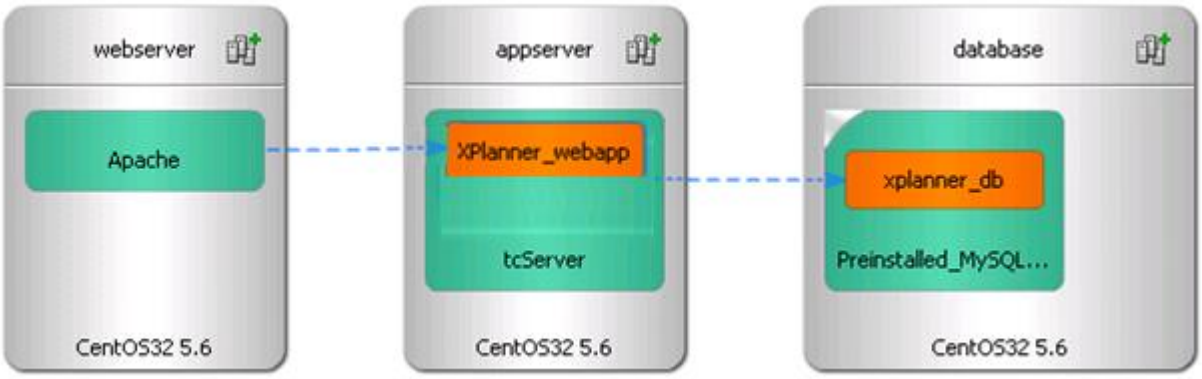

b. Click on Apache node



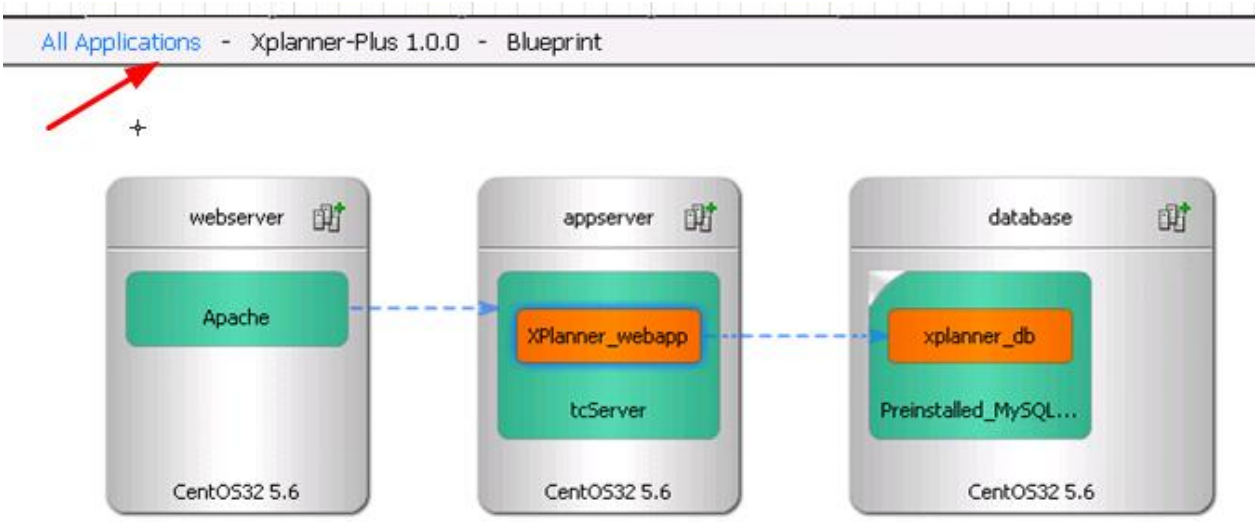

c. And then click on the XPlanner_webapp node. You will see a link drawn between the two.



54. Similarly draw a link from "XPlanner_webapp" to "xplanner_db" by clicking on the link icon on the palette first, click on the XPlanner_webapp, and then clicking on xplanner_db
    *Note – Essentially click link icon ⇢ click from-node -> click to-node*



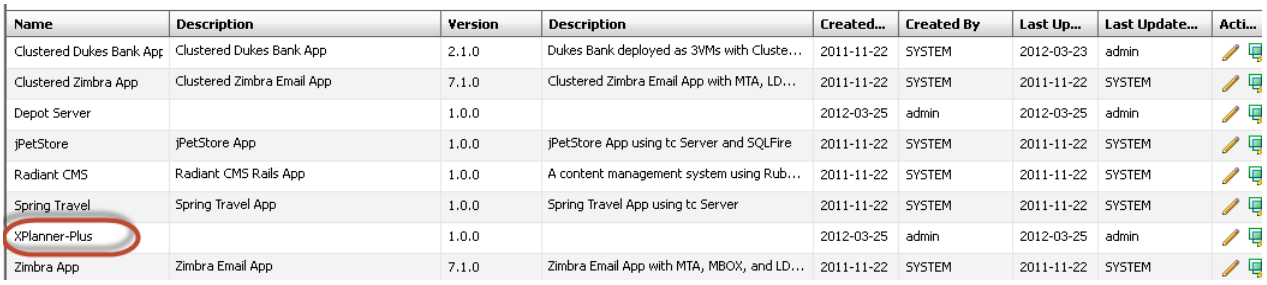

55. Save the blueprint
56. Click on All Applications link. Click Save.




57. You should see this application in the Application list.
58. You can stop or continue to deploy the application.

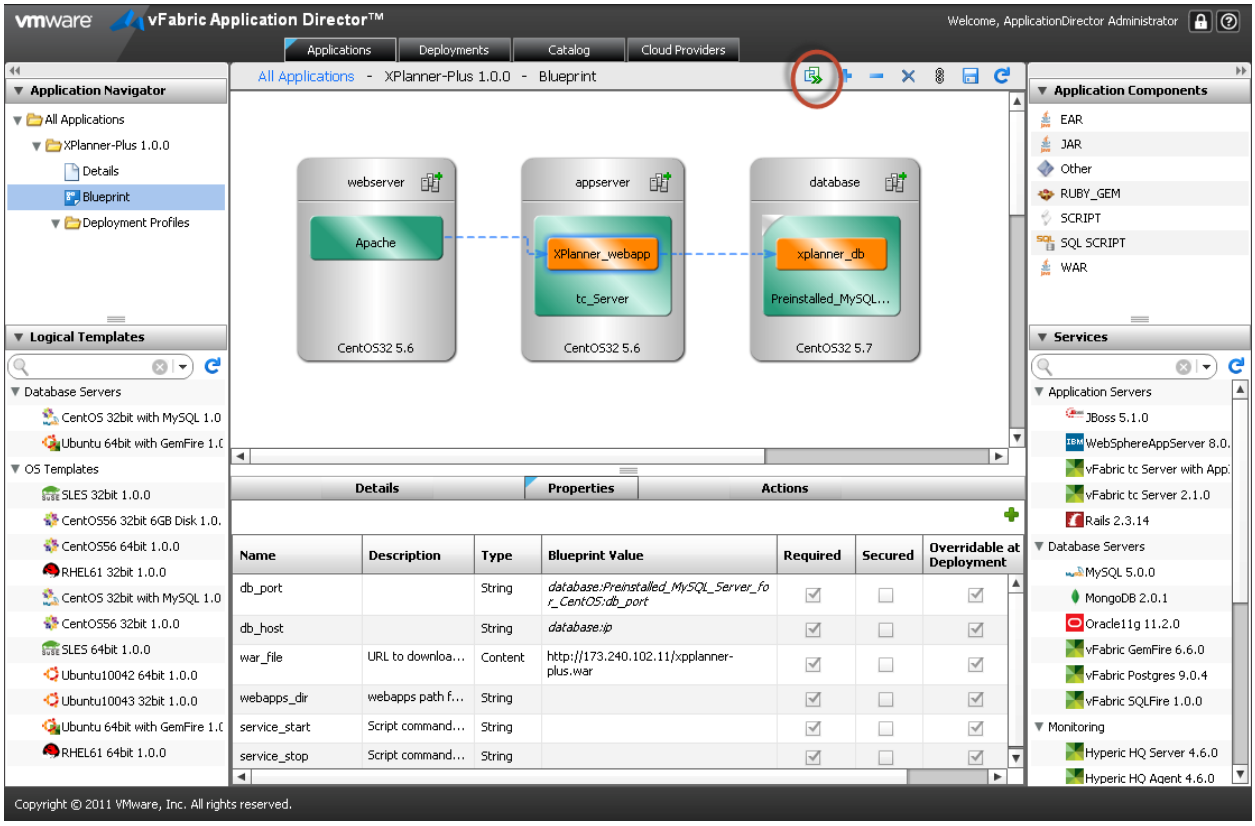
## Deploying the XPlanner_app

59. Login to the Application Director UI with a user that had deploy rights
60. Click on **Manage Applications**
61. Select the XPlanner-Plus application



| Name | Description | Version | Description | Created... | Created By | Last Up... | Last Update... | Acti... |
|---|---|---|---|---|---|---|---|---|
| Clustered Dukes Bank App | Clustered Dukes Bank App | 2.1.0 | Dukes Bank deployed as 3VMs with Cluste... | 2011-11-22 | SYSTEM | 2012-03-23 | admin | |
| Clustered Zimbra App | Clustered Zimbra Email App | 7.1.0 | Clustered Zimbra Email App with MTA, LD... | 2011-11-22 | SYSTEM | 2011-11-22 | SYSTEM | |
| Depot Server | | 1.0.0 | | 2012-03-25 | admin | 2012-03-25 | admin | |
| jPetStore | jPetStore App | 1.0.0 | jPetStore App using tc Server and SQLFire | 2011-11-22 | SYSTEM | 2011-11-22 | SYSTEM | |
| Radiant CMS | Radiant CMS Rails App | 1.0.0 | A content management system using Rub... | 2011-11-22 | SYSTEM | 2011-11-22 | SYSTEM | |
| Spring Travel | Spring Travel App | 1.0.0 | Spring Travel App using tc Server | 2011-11-22 | SYSTEM | 2011-11-22 | SYSTEM | |
| XPlanner-Plus | | 1.0.0 | | 2012-03-25 | admin | 2012-03-25 | admin | |
| Zimbra App | Zimbra Email App | 7.1.0 | Zimbra Email App with MTA, MBOX, and LD... | 2011-11-22 | SYSTEM | 2011-11-22 | SYSTEM | |

62. Click on Deploy icon on blueprint




63. It will bring up the deployment profile window. Enter a deployment profile called **dev_profile**. Click OK.
64. This will bring up the deploy wizard. Click on the **Map Details** button.
65. Click on the deployment environment **Development** and click on the **Map Details** button

66. Click **Next** and **Next** again to view the execution plan
67. If needed add a “Yum Repository Config” task to the VMs
68. Click **Next** again and then click the **Deploy** button on the bottom button panel of the wizard
69. Wait for deployment details screen to come up. This will take a minute or so. At this time, the system is preparing to initiate the deployment.
70. Click on the refresh icon and check the deployment status. Note that it says “In Progress”

## Review status of deployment

71. Track the status of deployment by refreshing frequently (click on the refresh icon on the deployment details page)

## Verify Smoke test passed

72. Wait until the deployment status is reported as Deployed Successfully
73. Click on the **Execution plan**
74. Click on the execution plan to see green status marks on each task

## Launch deployed application

75. Click back on the Details page to copy the appserver IP from the VM table. You will need these to launch the app
76. Go to browser and type: http://<appserver IP>:8080/xplanner-plus/index.jsp.
77. Login as user "sysadmin" and password "admin". This should launch the app
78. Now, get the webserver IP, and go to : http://<webserver IP >:8081:/xplanner- plus/index.jsp.
79. Login as user "sysadmin" and password "admin"