



Implementation -Sample war file to WAS using IBM UDeploy

Table of Contents

1. Before you begin	3
2. Agent	4
3. Resource Creation.....	4
A. Create Resource	4
B. Map Agent to Resource	6
C. Configure WebSphere cell.....	8
4. Template Generation	11
A. Create component for the template	11
B. Map component	15
5. Application creation (For Template)	17
A. Create application	17
B. Create process	18
C. Environment Creation.....	19
D. Map resources	20
6. Deployment	22
A. Create component	22
B. Process creation on component level.....	24
C. Map component	28
D. Application Creation.....	29
1) Create Application.....	29
2) Map Component.....	29
3) Create environment	30
4) Add resources	32
5) Create process (Application level)	33

1. Before you begin

The following setup and preparation is required.

- Select or set up a WebSphere to use. The configuration template you create will use its configuration.
- Install an Urban Code Deploy agent on the appropriate WebSphere host. Note that you need the agent name during the procedures.

Set up plug-ins in UrbanCode Deploy

- Install the Middleware Configuration for WebSphere plug-in.
 - In UrbanCode Deploy, go to Settings > Automation Plugins.
 - Click Load Plugin.
 - In the dialog, click Choose File, then choose the MCWASPlugin-<version>.zip
 - Click Submit.
- Install the Application Deployment for WebSphere plug-in.
 - In UrbanCode Deploy, go to Settings > Automation Plugins.
 - Click Load Plugin.
 - In the dialog, click Choose File, then choose the ApplicationDeploymentForWebSphere-<version>.zip file.
 - Click Submit.
- Import the component template provided for Middleware Configuration for WebSphere. Do the following in UrbanCode Deploy. The <plugin_home> directory is the top directory where you unzipped the downloaded UrbanCode Deploy plug-ins.
 - Click the Components tab.
 - Click the Templates tab.
 - Click Import Templates.
 - Select <plugin_home>/imports/componenttemplates/Middleware Configuration for WebSphere.json. This template becomes the default template for the remaining process. You may use another template if you choose. It must already exist in UrbanCode Deploy.

2. Agent

Configure the agent which is present on WebSphere server.

The agent should know where the WebSphere server application is installed on the machine so need to provide some configuration in that agent.

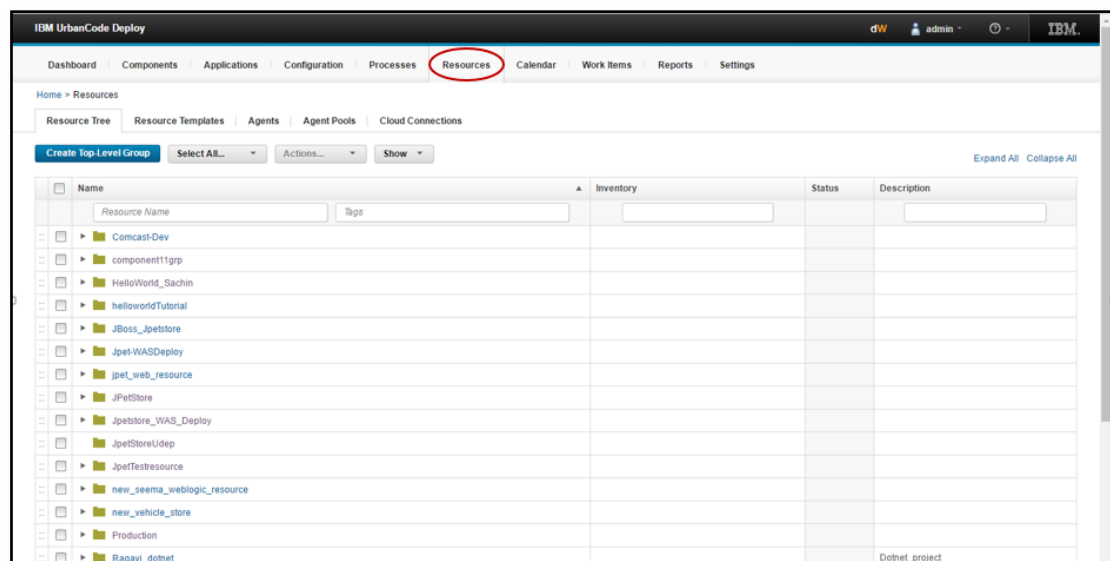
Select the agent which is installed on server machine → Go to configuration → agent property → add property

Should add here the new property “wasadmin.path” and in value pass the path of directory where the WebSphere is installed. (Up to wasadmin.sh file)

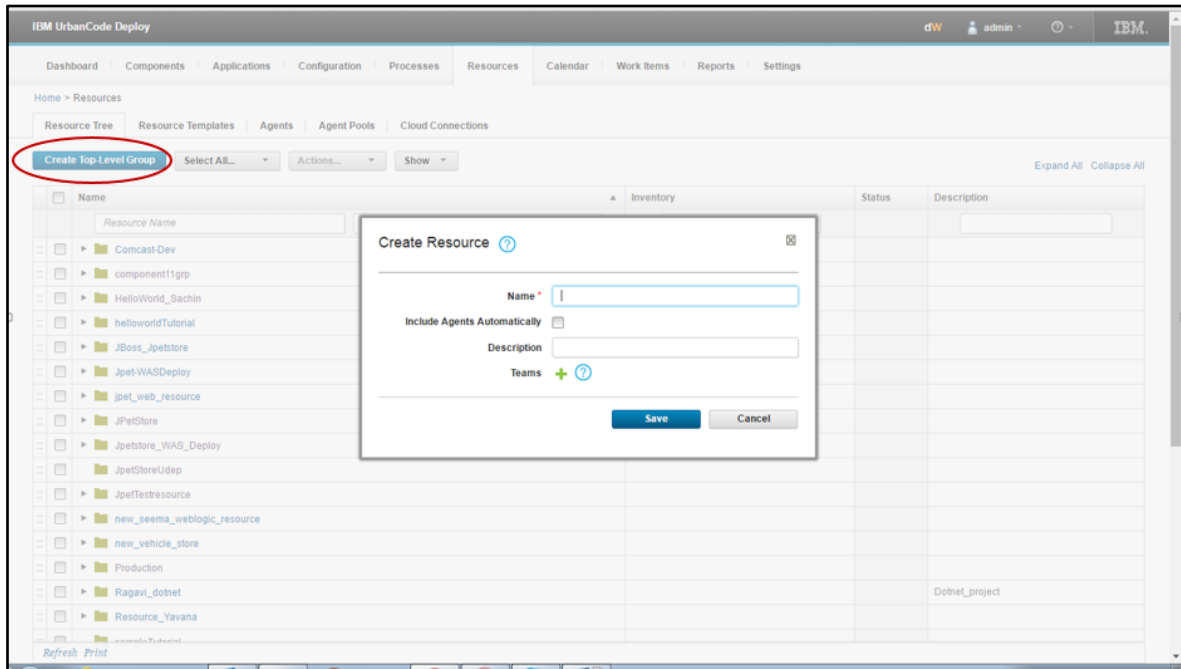
3. Resource Creation

A. Create Resource

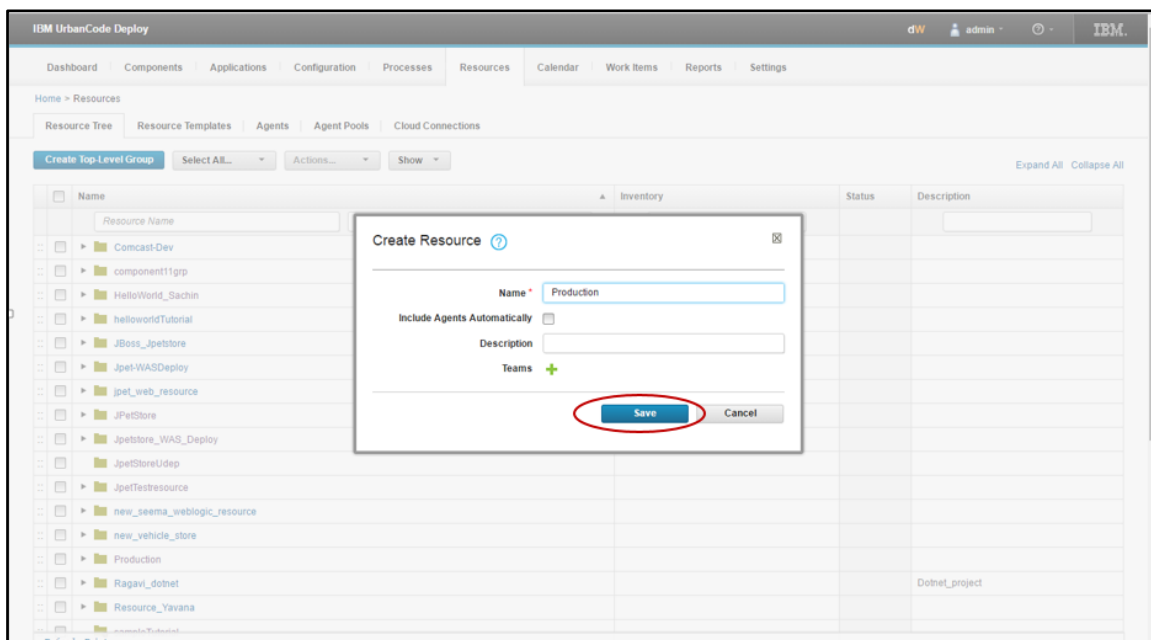
Click on resource tab



Click on create top level group

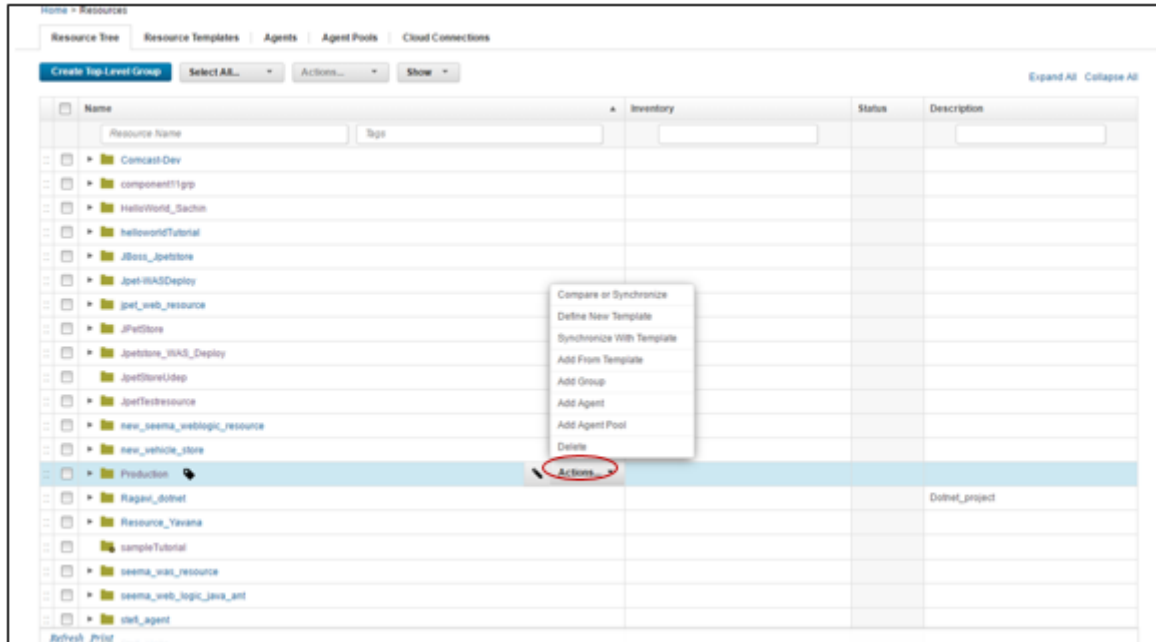


Click on create resource.

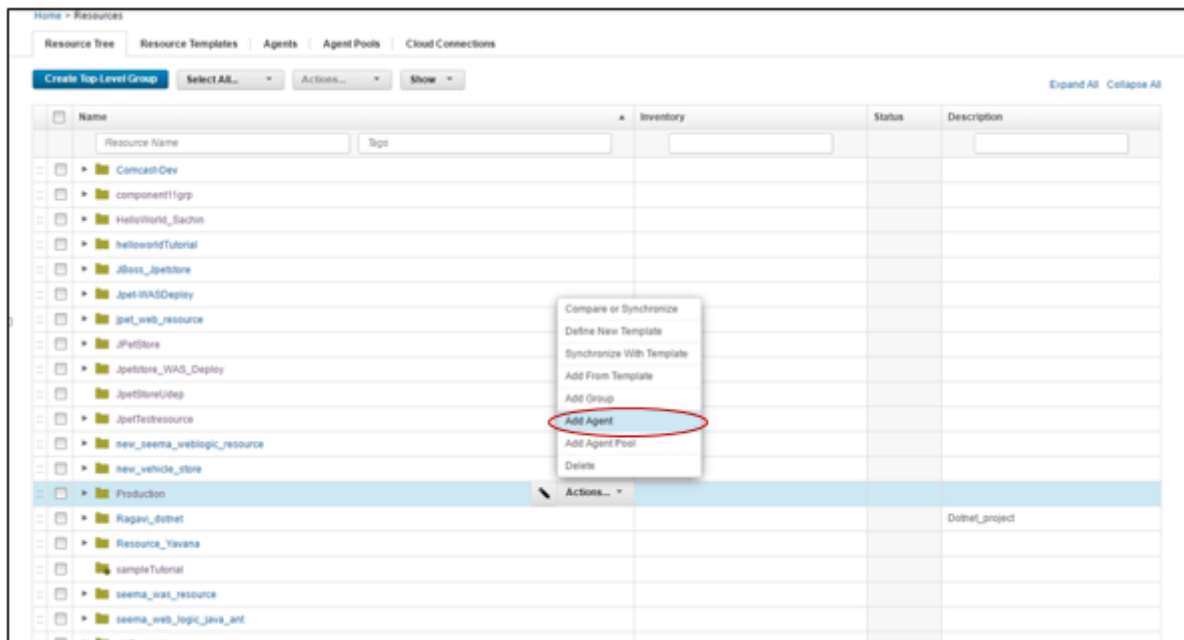


B. Map Agent to Resource

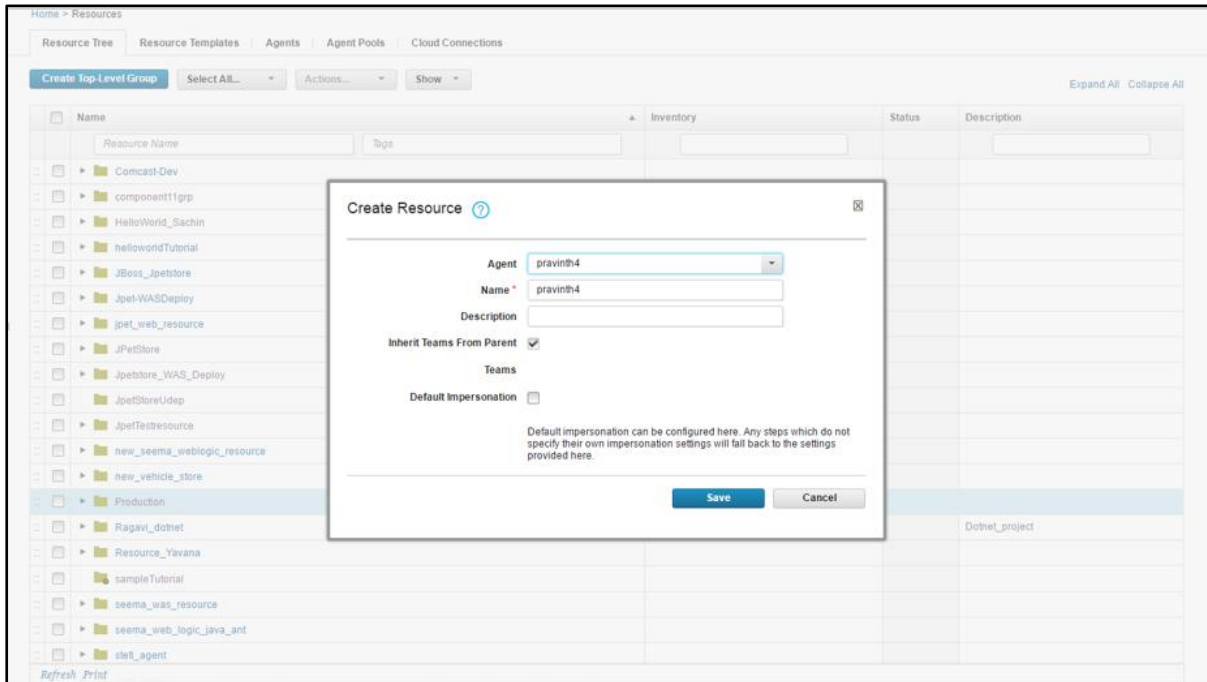
Goto the resource tab select your resource and click on action



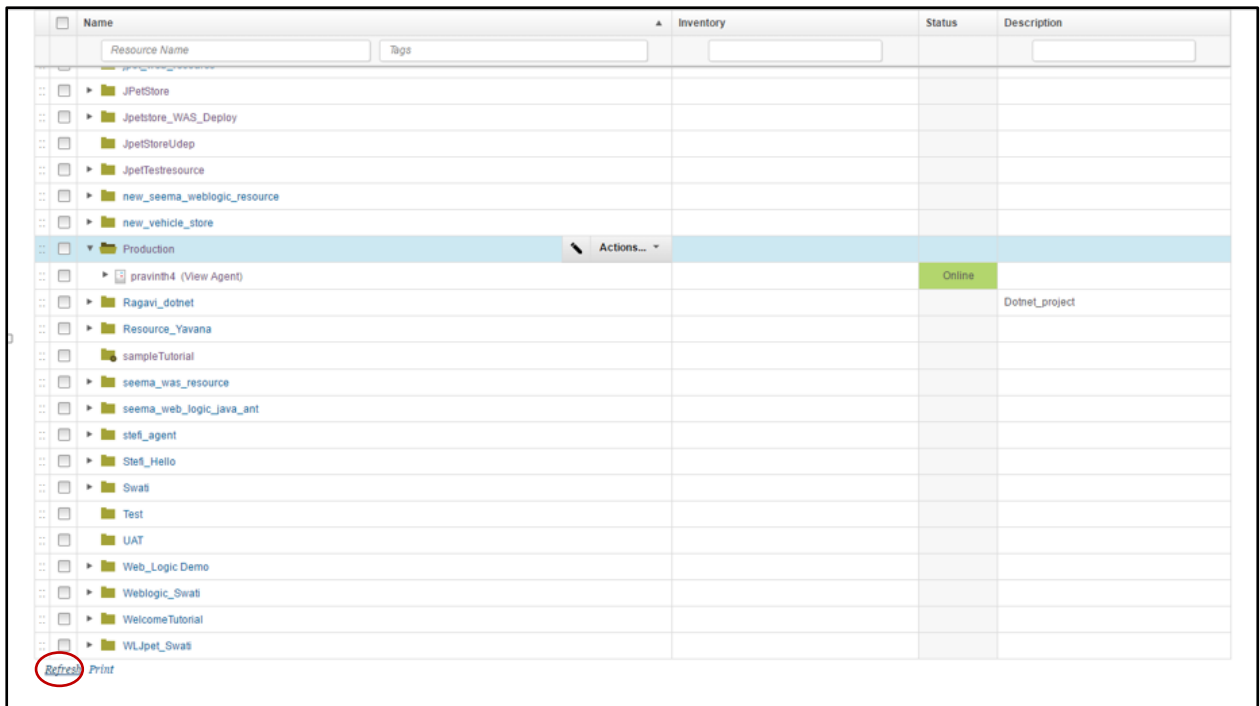
Click on add agent and map agent with resource



While mapping that agent with resource, should choose the agent which is present in the machine where the WebSphere server is installed.



Refresh it by clicking on refresh tag.



Now you will get web sphere cell.

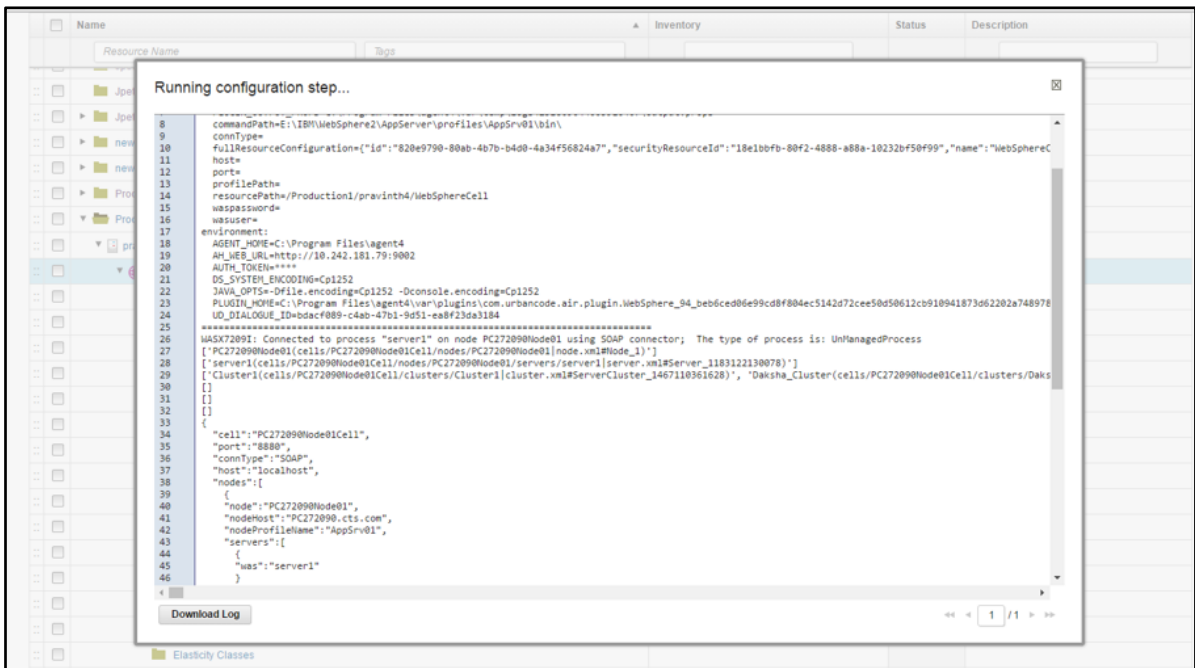
Name	Inventory	Status	Description
Resource Name	Tags		
JpetStoreUdep			
JpetTestresource			
new_seema_weblogic_resource			
new_vehicle_store			
Production			
Production1			
pravinb4 (View Agent)		Online	
WebSphereCell	Actions...		
Ragavi_dotnet			Dotnet_project
Resource_Yavana			
sampleTutorial			
seema_was_resource			
seema_web_logic_java_ant			
stef_agent			
Stef_Hello			
Swat			
Test			
UAT			
Web_Logic Demo			
Weblogic_Swat			
WelcomeTutorial			
WLJpet_Swat			

C. Configure WebSphere cell

Now click on action tab → Select configure using WebSphere topology

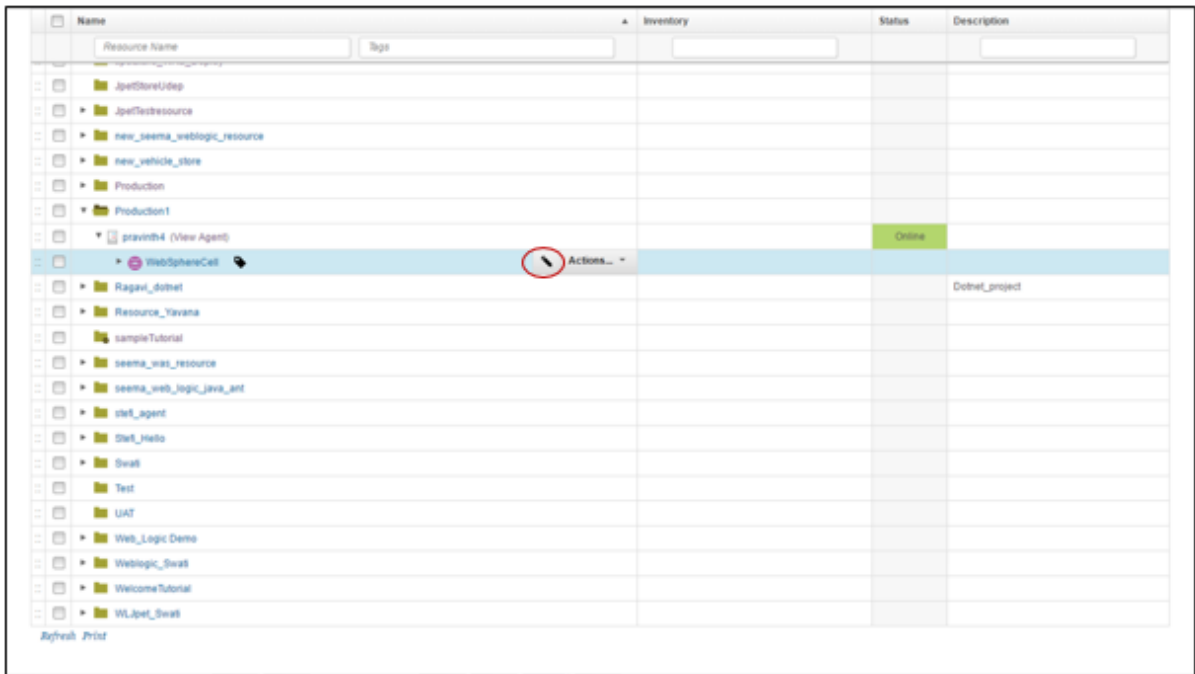
Name	Inventory	Status	Description
Resource Name	Tags		
JpetStoreUdep			
JpetTestresource			
new_seema_weblogic_resource			
new_vehicle_store			
Production			
Production1			
pravinb4 (View Agent)		Online	
WebSphereCell	Actions...		
Ragavi_dotnet			Dotnet_project
Resource_Yavana			
sampleTutorial			
seema_was_resource			
seema_web_logic_java_ant			
stef_agent			
Stef_Hello			
Swat			
Test			
UAT			
Web_Logic Demo			
Weblogic_Swat			
WelcomeTutorial			
WLJpet_Swat			

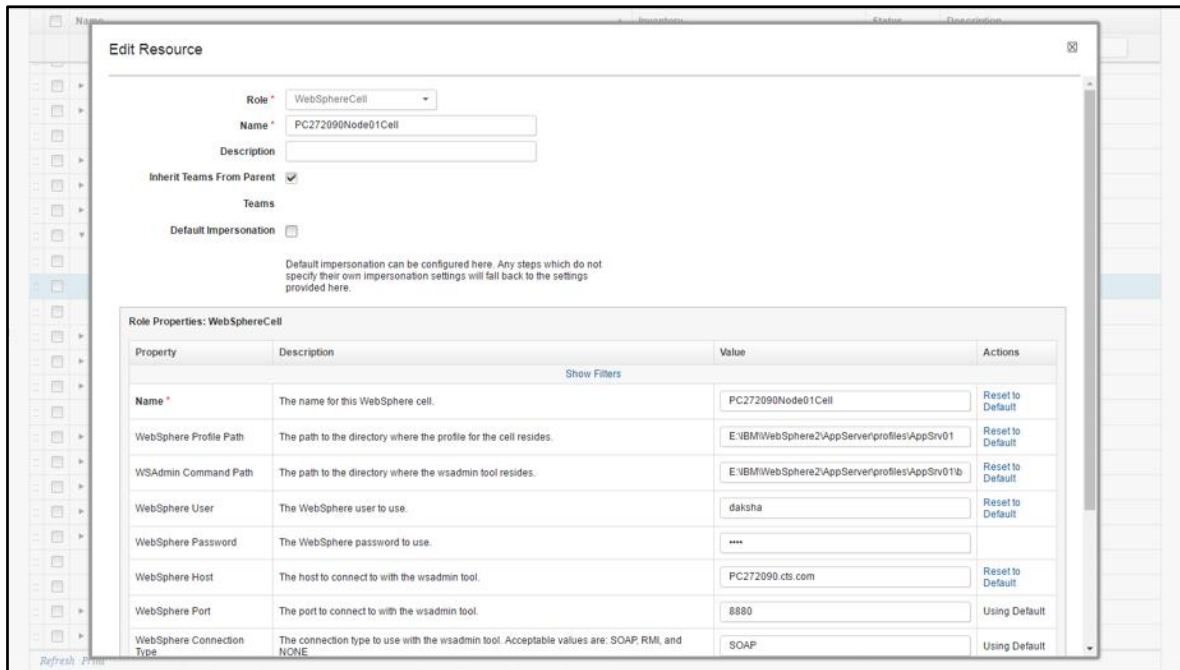
- Compare or Synchronize
- Define New Template
- Synchronize With Template
- Add From Template
- Add Group
- Add Component
- Add Component Tag
- Configure using WebSphere Topology Discovery**
- Compare using WebSphere Topology Discovery
- Delete



It will configure and show as connected to server.

Click on edit to configure the properties of WebSphere cell.





- 1) The Name of WebSphere cell will appear automatically when you configure it with WebSphere topology.
- 2) WebSphere profile path – give the path of root location of WebSphere server.
- 3) WSAAdmin command path - give the path of root location of WebSphere server. (up to bin folder)
- 4) User – provide the username.
- 5) Password – provide the password.
- 6) WebSphere host – Provide the hostname.
- 7) Port – provide the port to connect with WSAAdmin tool. (by default it is 8880)
- 8) Then click on save to save this configuration.

You will get that node and server cluster.

Name	Inventory	Status	Description
JPetStore			
JPetStore_WAS_Deploy			
JPetStoreUdep			
JPetTestresource			
new_seema_weblogic_resource			
new_vehicle_store			
Production			
pravinth4 (View Agent)		Online	
PC272090Node01Cell			
Nodes			
ServerClusters			
webcontainerwar	1.0		
Production1			
Ragavi_dotnet			Dotnet_project
Resource_Yavana			
sampleTutorial			
seema_was_resource			
seema_web_logic_java_ant			
stef_agent			
Stef_Hello			
Swati			
Test			
UAT			

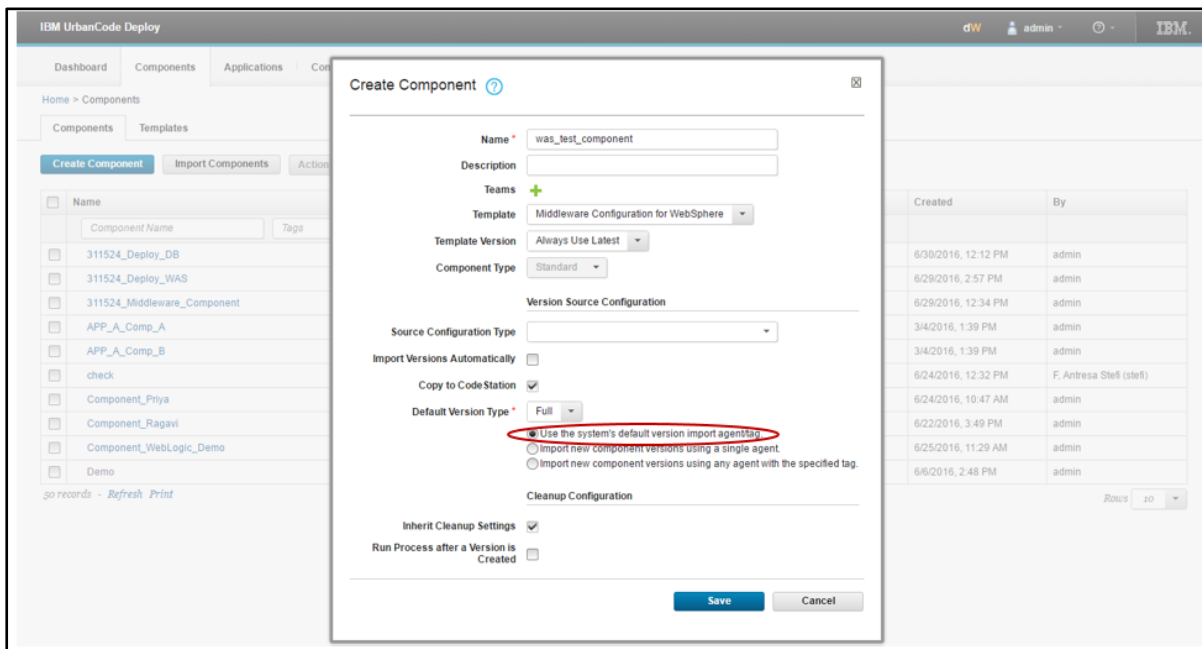
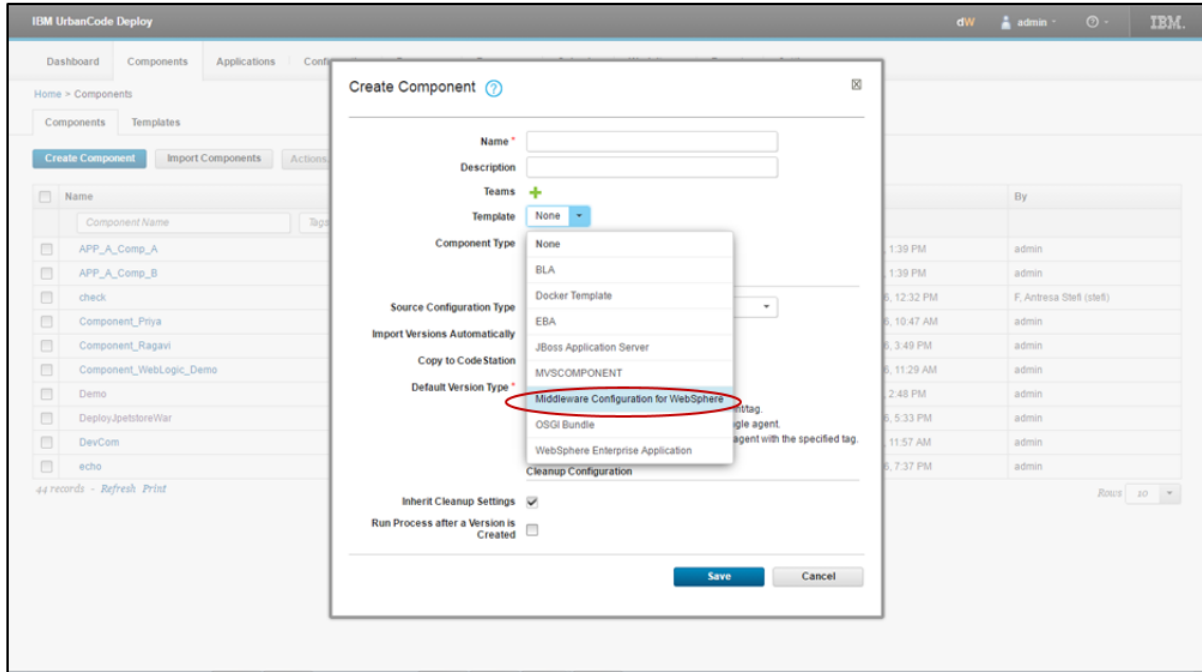
4. Template Generation

A. Create component for the template

Name	Template	Description	Created	By
APP_A_Comp_A			3/4/2016, 1:39 PM	admin
APP_A_Comp_B			3/4/2016, 1:39 PM	admin
check			6/24/2016, 12:32 PM	F, Antresia Steff (stef)
Component_Priya			6/24/2016, 10:47 AM	admin
Component_Ragavi		Component_dotnet	6/22/2016, 3:49 PM	admin
Component_WebLogic_Demo			6/25/2016, 11:29 AM	admin
Demo			6/6/2016, 2:48 PM	admin
DeployJPetstoreWar			6/25/2016, 5:33 PM	admin
DevCom			3/4/2016, 11:57 AM	admin
echo			6/24/2016, 7:37 PM	admin

While creating that component fill following fields –

- 1) Name of component.
- 2) Template type - middleware configuration for WebSphere.
- 3) Choose the Use the system default version import agent/tag.



Go to component → Click on created component → Click on configuration

Component: Was_test_component

Created By admin
Created On 6/25/2016, 3:26 PM
Template Middleware Configuration for WebSphere
Used By Deploy application, was_test_application

Dashboard Usage **Configuration** Calendar Versions Processes Changes

Basic Settings
Component Properties
Environment Property Definitions ▶
Resource Property Definitions
Version Property Definitions
Configuration File Templates
Version Import History

Environment Property Definitions

Define properties here to be given values on each environment the component is used in.

[Add Property](#)

Version 2 of 2
◀ ▶

Name	Label	Pattern	Required	Default Value	Description	Actions
Websphere cluster variable token	Websphere cluster variable token		false	Production cluster		Edit Delete

1 record - [Refresh](#) [Print](#)

◀◀ ◀ 1 / 1 ▶ ▶▶ Rows 10 ▼

Set Environment property definition.

Component: Was_test_component

Created By admin
Created On 6/25/2016, 3:26 PM
Template Middleware Configuration for WebSphere
Used By Deploy application, was_test_application

Dashboard Usage Configuration Calendar Versions Processes Changes

Basic Settings
Component Properties
Environment Property Definitions ▶
Resource Property Definitions
Version Property Definitions
Configuration File Templates
Version Import History

Environment Property Definitions

Define properties here to be given values on each environment the component is used in.

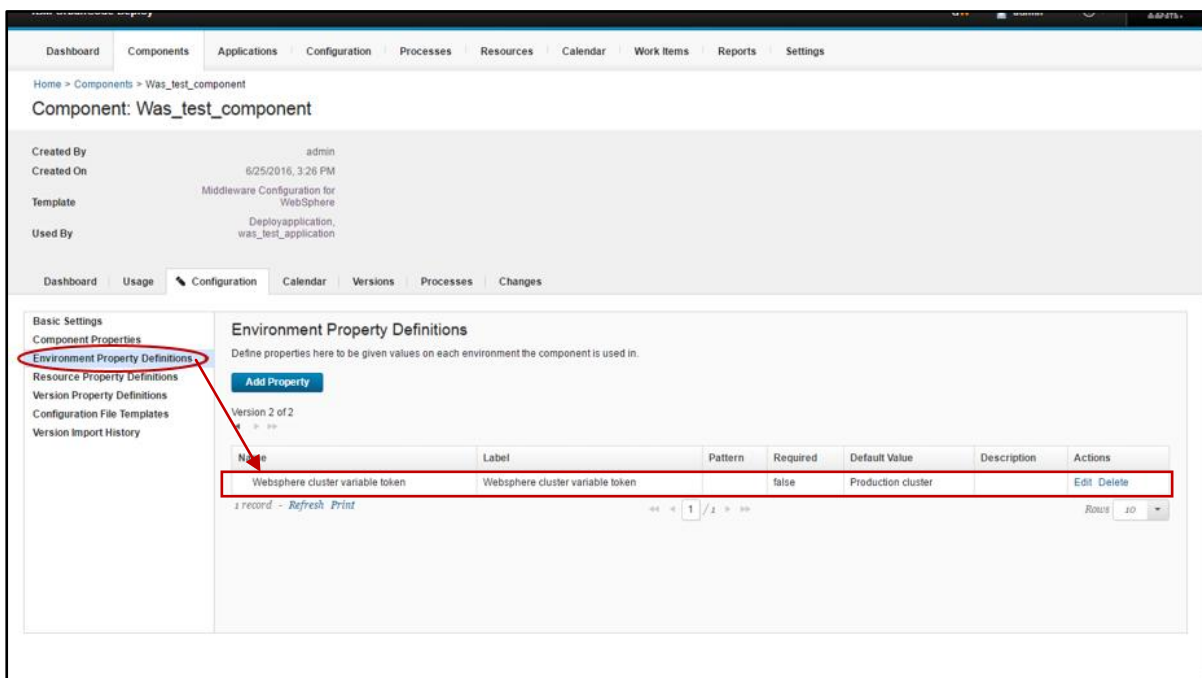
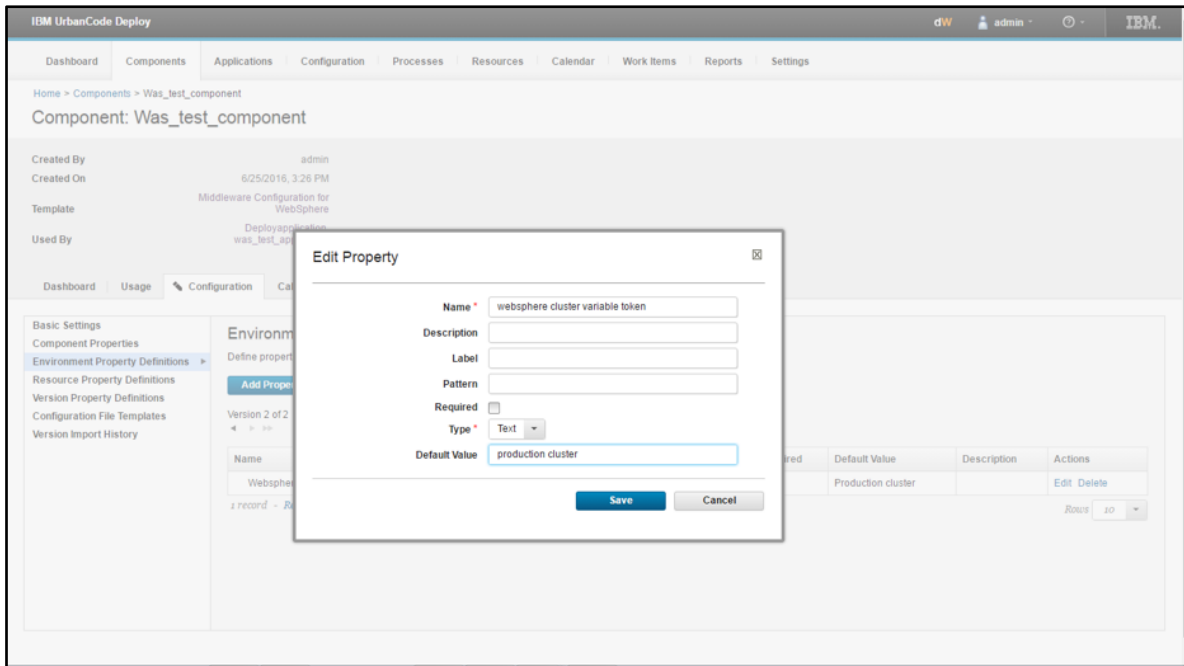
[Add Property](#)

Version 2 of 2
◀ ▶

Name	Label	Pattern	Required	Default Value	Description	Actions
Websphere cluster variable token	Websphere cluster variable token		false	Production cluster		Edit Delete

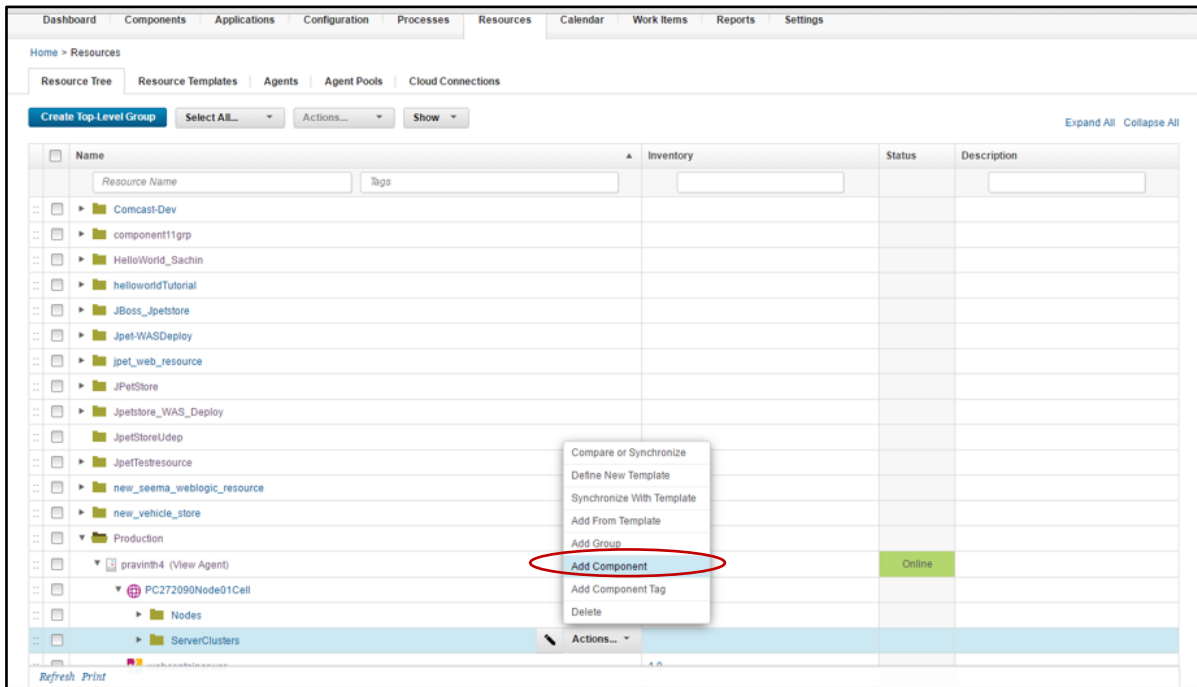
1 record - [Refresh](#) [Print](#)

◀◀ ◀ 1 / 1 ▶ ▶▶ Rows 10 ▼

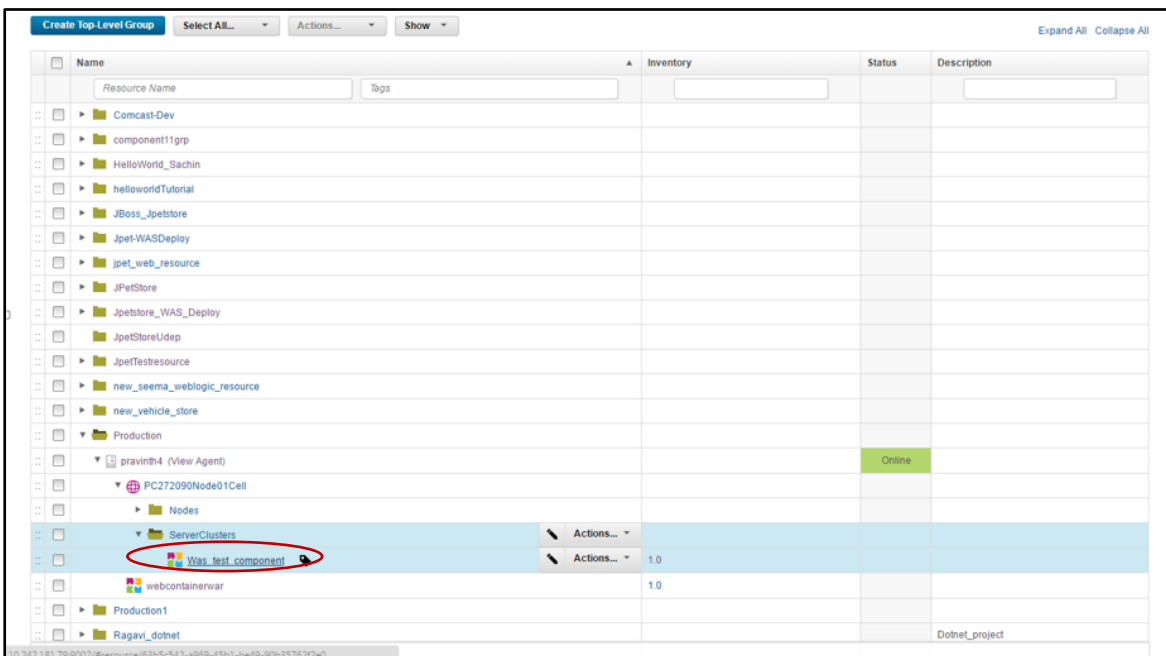


B. Map component

Go to resource → Click on created resource

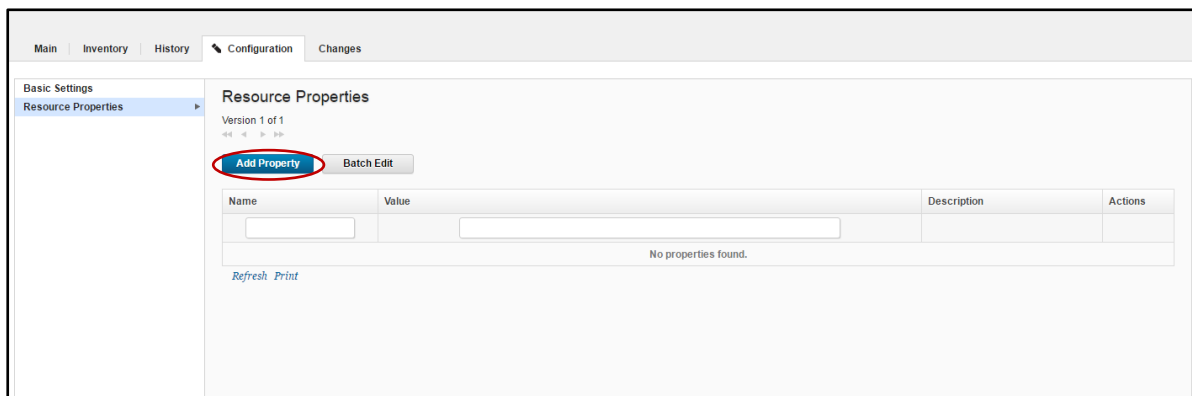


The screenshot shows the Nagios XI 'Resources' page. The interface includes a navigation bar with tabs for Dashboard, Components, Applications, Configuration, Processes, Resources, Calendar, Work Items, Reports, and Settings. Below the navigation bar, there are tabs for Resource Tree, Resource Templates, Agents, Agent Pools, and Cloud Connections. A toolbar contains 'Create Top-Level Group', 'Select All...', 'Actions...', and 'Show'. The main table has columns for Name, Inventory, Status, and Description. A context menu is open over the 'ServerClusters' resource, with the 'Add Component' option highlighted by a red circle. Other menu items include 'Compare or Synchronize', 'Define New Template', 'Synchronize With Template', 'Add From Template', 'Add Group', 'Add Component Tag', and 'Delete'.



The screenshot shows the Nagios XI 'Resources' page after a component has been added. The 'ServerClusters' resource is expanded, and a new component named 'Was_test_component' is visible, circled in red. The component has a status of '1.0'. The 'Production' resource is also visible with a status of 'Online'.

Goto the resource tab → Select resource → Goto configuration → Add resource property



Edit property

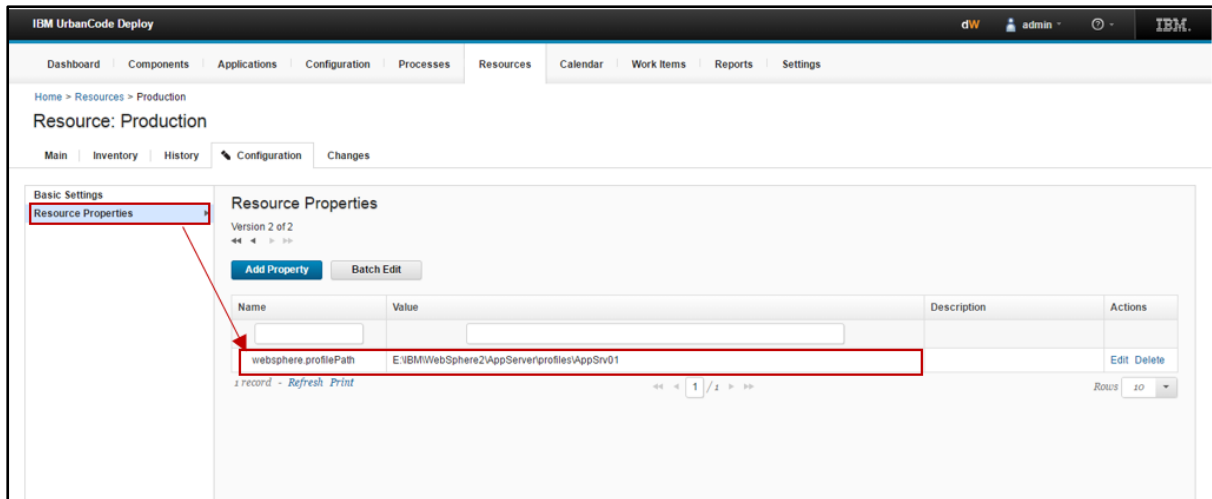
Set the name – websphere.profile.path

Value – The path of location where WebSphere server is present.

The screenshot shows a dialog box titled 'Edit Property'. It has a close button (X) in the top right corner. The dialog contains the following fields and controls:

- Name ***: A text input field containing 'websphere.profilePath'.
- Description**: An empty text input field.
- Secure**: A checkbox that is currently unchecked.
- Value**: A text input field containing the path 'E:\IBM\WebSphere2\AppServer\profiles\AppSrv01'. The path is highlighted with a blue selection box.

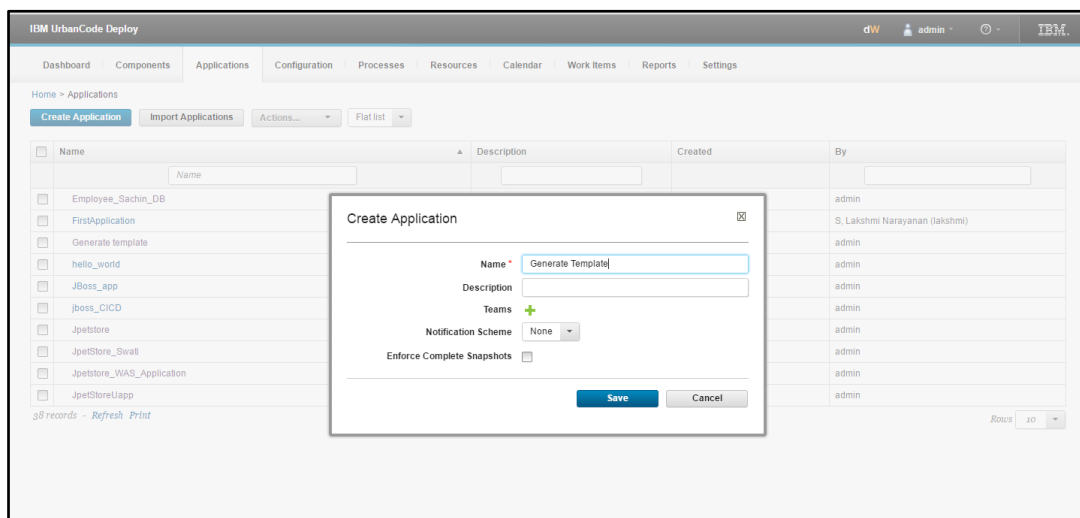
At the bottom of the dialog, there are two buttons: 'Save' (highlighted in blue) and 'Cancel'.



5. Application creation (For Template)

A. Create application

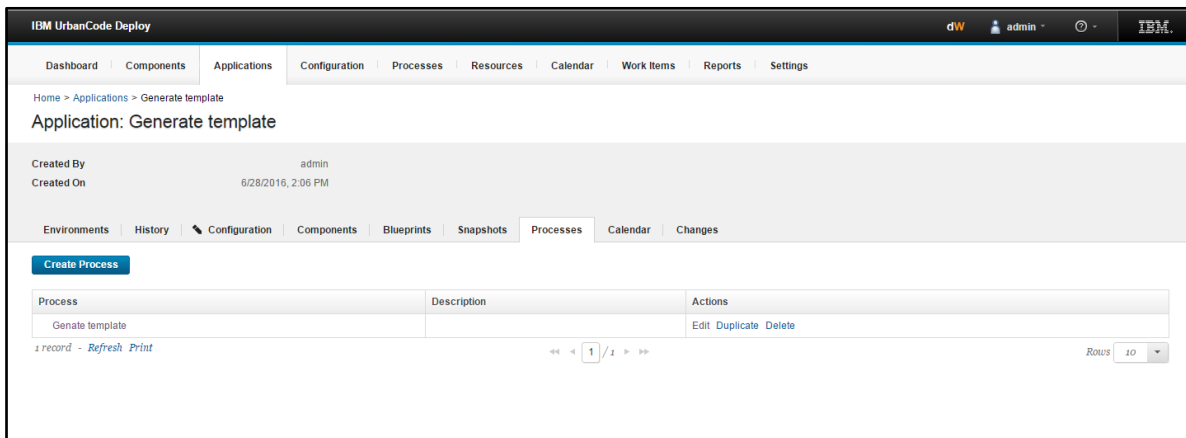
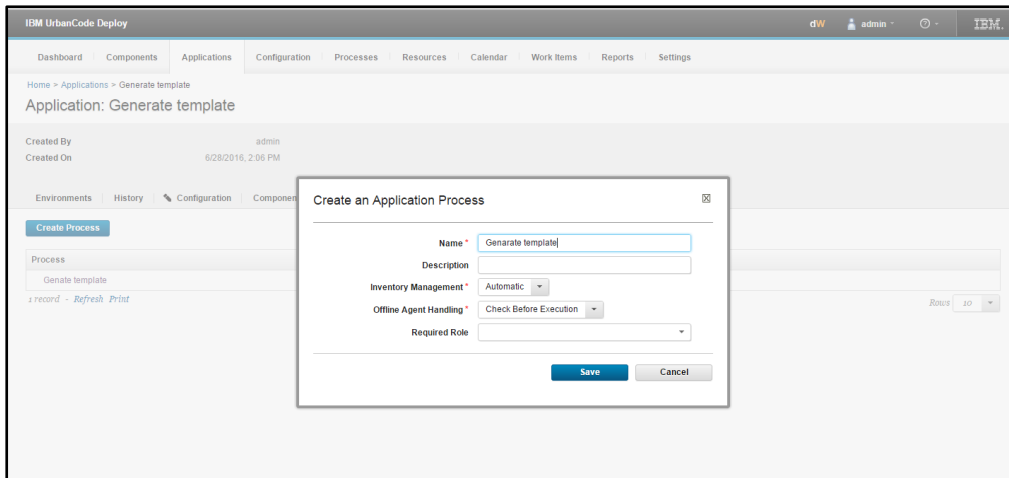
Goto application → Create application



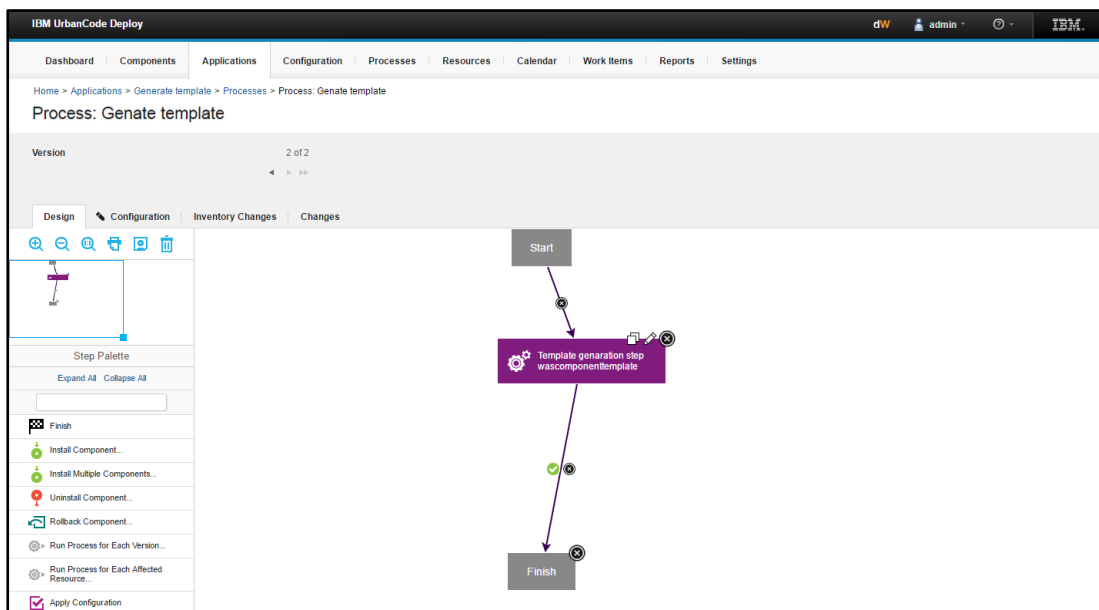
Give the name of application and save it.

B. Create process

Now click on application → Process → Create process

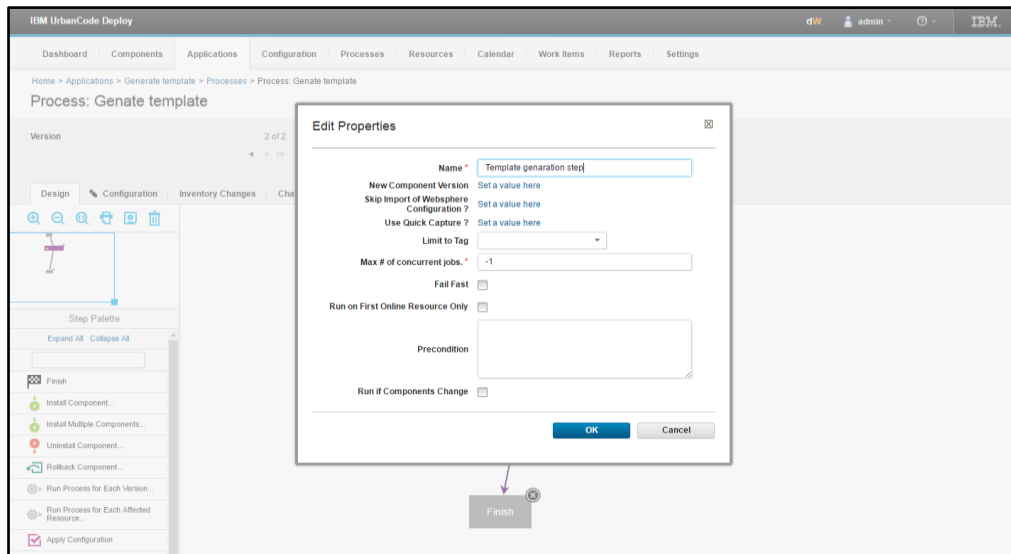


Click on process → Select your component from step palette → under that select generate template step



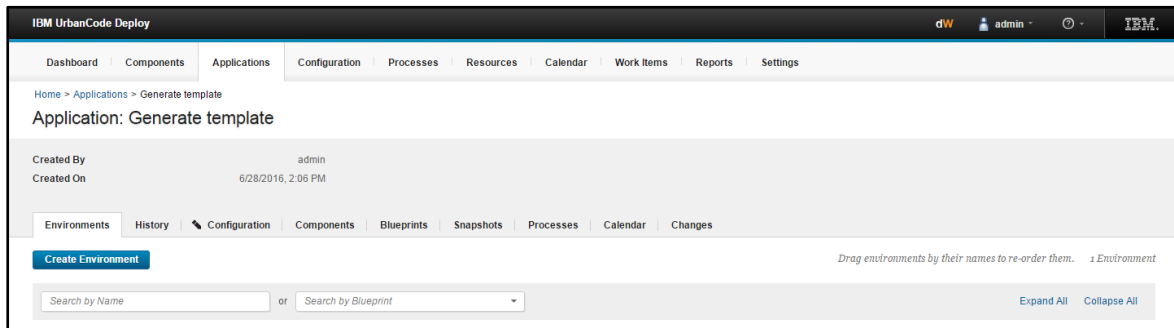
Edit properties –

- 1) Name – Give name of step
Save it.



C. Environment Creation

Go to application tab → Select your application → Create environment



Create Environment

Name *

Description

Blueprint

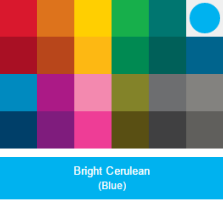
Teams +

Require Approvals

Exempt Processes

Lock Snapshots

Color



Inherit Cleanup Settings

D. Map resources

Click on the environment → Click on resource → Add base resource

IBM UrbanCode Deploy dW

Dashboard | Components | Applications | Configuration | Processes | Resources | Calendar | Work Items | Reports | Settings

Home > Applications > Deployapplication > Environments > Environment: Production

Environment: Production for Deployapplication

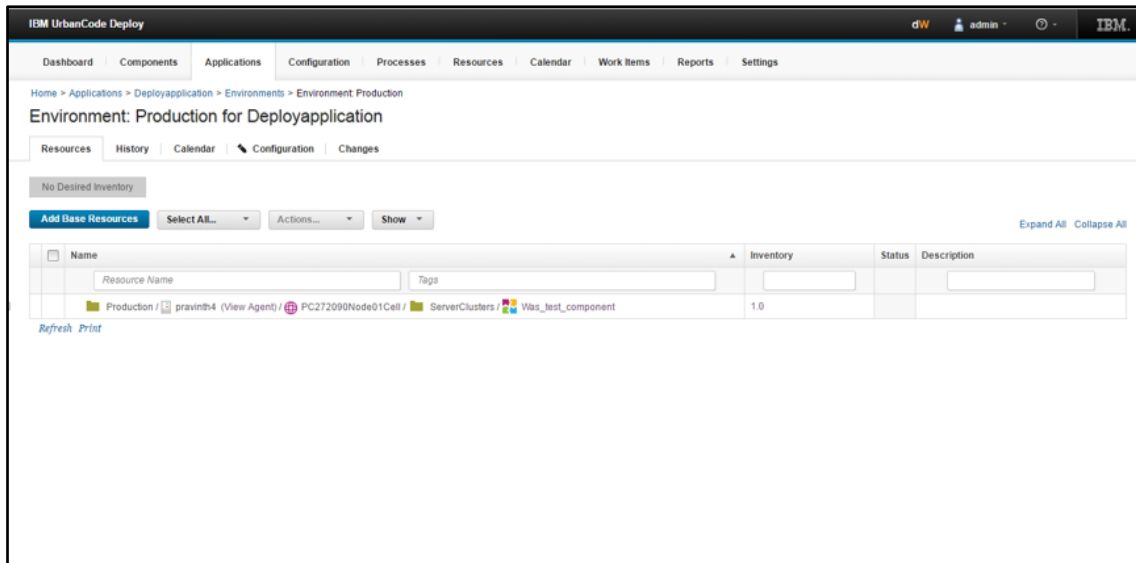
Resources | History | Calendar | Configuration | Changes

No Desired Inventory

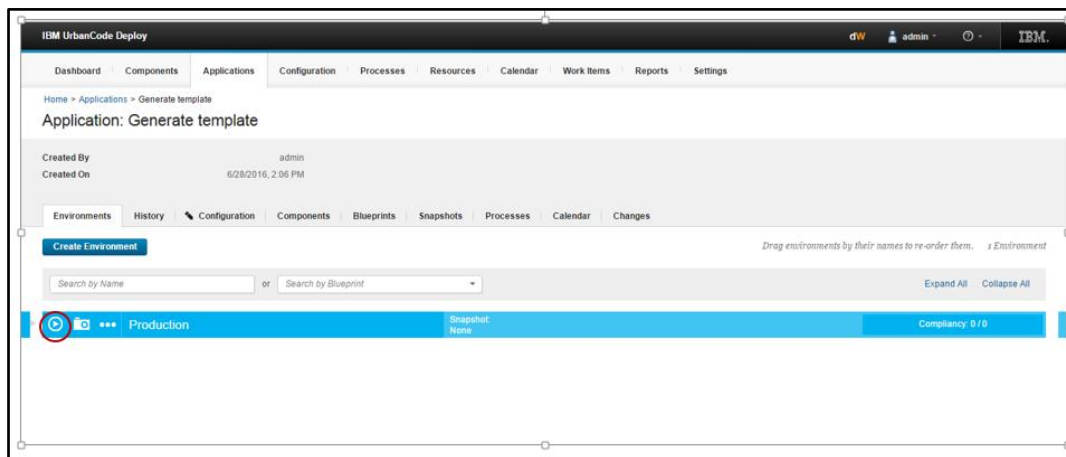
Name	Inventory	Status	Des
<input type="text" value="Resource Name"/>	<input type="text" value="Tags"/>	<input type="text"/>	<input type="text"/>

Name	Inventory	Description
<input type="text" value="Resource Name"/>	<input type="text" value="Tags"/>	<input type="text" value="Description"/>
<ul style="list-style-type: none"> ▶ Comcast-Dev ▶ component11grp ▶ HelloWorld_Sachin ▶ helloworldTutorial ▶ JBoss_jpetstore ▶ Jpet-WASDeploy ▶ jpet_web_resource ▶ JPetStore ▶ Jpetstore_WAS_Deploy ▶ JpetStoreUdep ▶ JpetTestresource ▶ new_seema_weblogic_resource ▶ new_vehicle_store ▶ Production ▶ pravinth4 <ul style="list-style-type: none"> ▶ PC272090Node01Cell <ul style="list-style-type: none"> ▶ NeGas ▶ ServerClusters <ul style="list-style-type: none"> ▶ Was_test_component 		
	1.0	

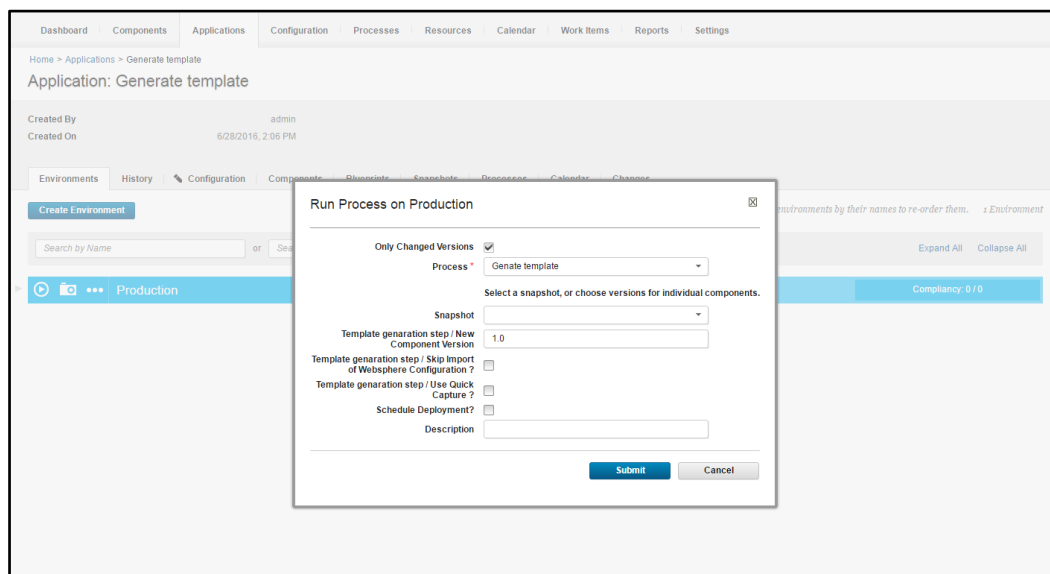
[Refresh](#) [Print](#)



Again go to the application and run that



Uncheck the Template generation step / Use Quick Capture



Process	generate_template (Version 2)
Environment	prod
Only Changed Versions	true
Date Requested	6/29/2016, 1:07 PM
Requested By	admin
Scheduled For	6/29/2016, 1:07 PM

[View Deployment Request](#) | [Process Request](#)

[Log](#) | [Properties](#) | [Manifest](#) | [Configuration Changes](#) | [Inventory Changes](#)

Execution

[Pause](#) | [Cancel](#) | [Download All Logs](#)
[Expand All](#) | [Collapse All](#)

Step	Progress	Start Time	Duration	Status
1. generate_template	0 / 1	1:07:29 PM	0:01:07	Running
Generate Template (/seema_was_resource / pravinth4 / PC272090Node01Cell / ServerClusters / seema_websphere)		1:07:30 PM	0:01:07	Running
1. Acquire Lock		1:07:31 PM	0:00:00	Success
2. Generate Template		1:07:31 PM	0:01:06	Running
3. Create Version				Not Started
4. Release Lock				Not Started
Total Execution	0 / 1	1:07:29 PM	0:01:07	Running

6. Deployment

A. Create component

Create the component which represent the War file.

IBM UrbanCode Deploy

Dashboard | Components | Applications | Configuration | Processes | Resources | Calendar | Work Items | Reports | Settings

Home > Components

Components | Templates

Create Component | Import Components | Actions... | Flat list

Name	Template	Description	Created	By
Component Name	Target			
APP_A_Comp_A			3/4/2016, 1:39 PM	admin
APP_A_Comp_B			3/4/2016, 1:39 PM	admin
check			6/24/2016, 12:32 PM	F.Antresia Steff (staff)
Component_Priya			6/24/2016, 10:47 AM	admin
Component_Ragavi		Component_dotnet	6/22/2016, 3:49 PM	admin
Component_WebLogic_Demo			6/25/2016, 11:29 AM	admin
Demo			6/6/2016, 2:48 PM	admin
Deploy.petstoreWar			6/25/2016, 5:33 PM	admin
DevCom			3/4/2016, 11:57 AM	admin
echo			6/24/2016, 7:37 PM	admin

44 records - Refresh Print

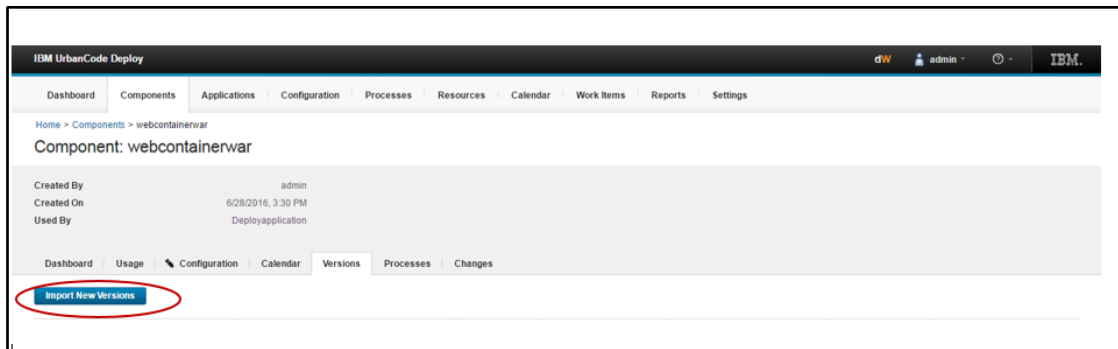
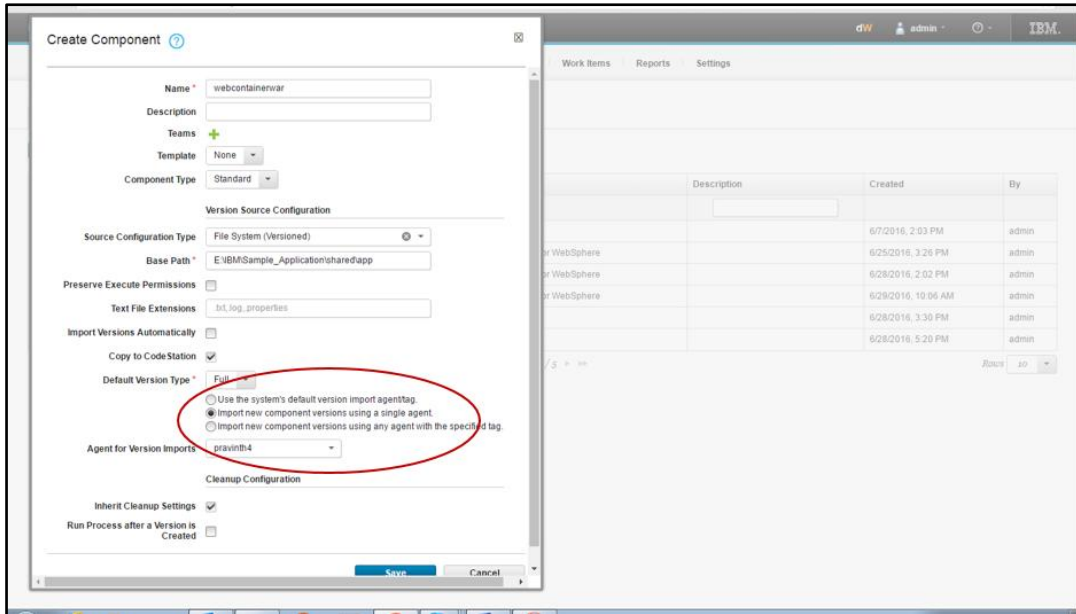
« 1 / 5 »

Rows 10

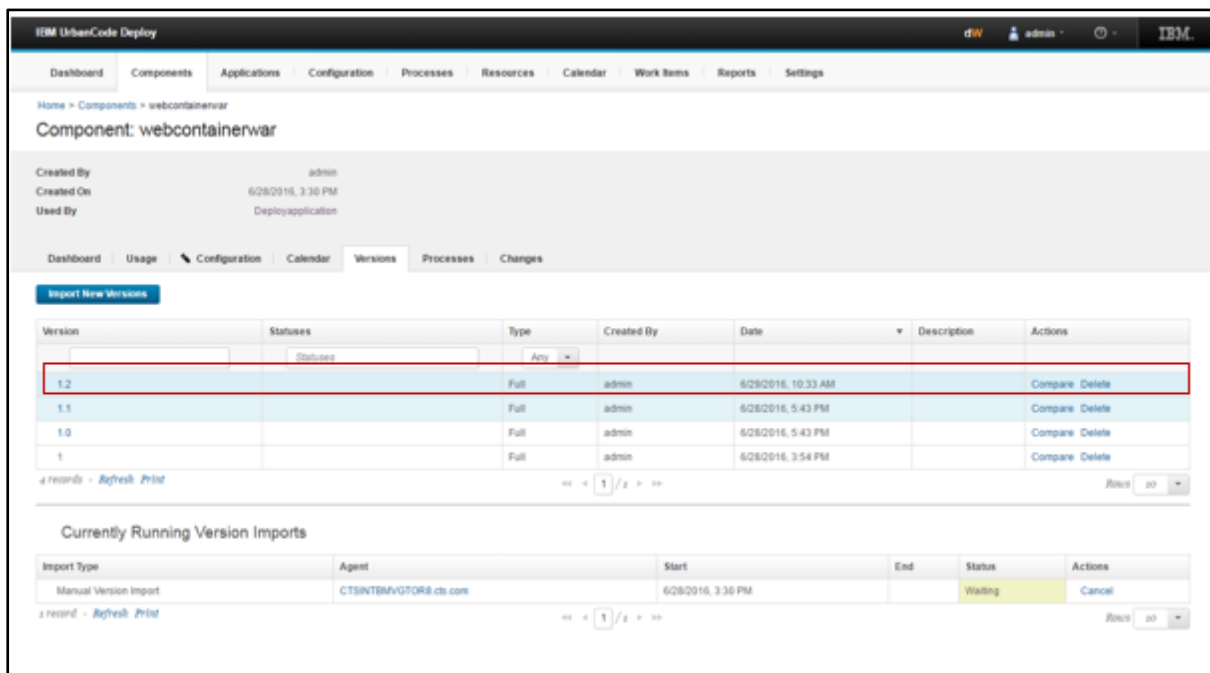
In Base path pass the path of location where war file of application is present.

In create component click on import new component versions using single agent.

In agent for import version select the agent which is present in WebSphere server.

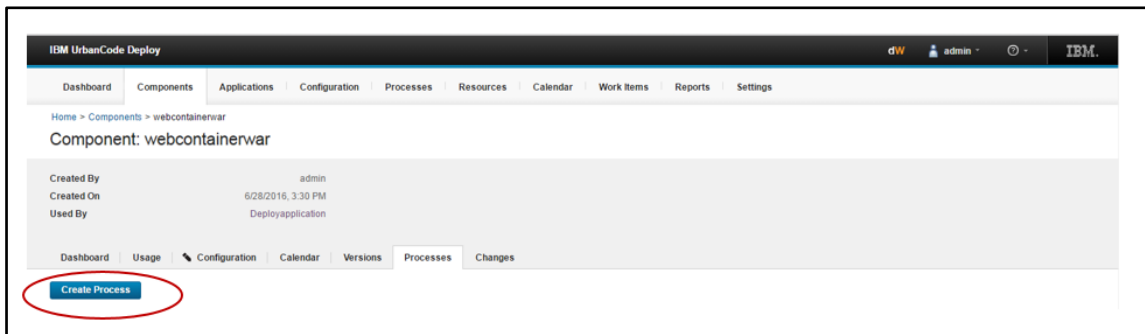


Click on component → version → Import version → you will get the version here.

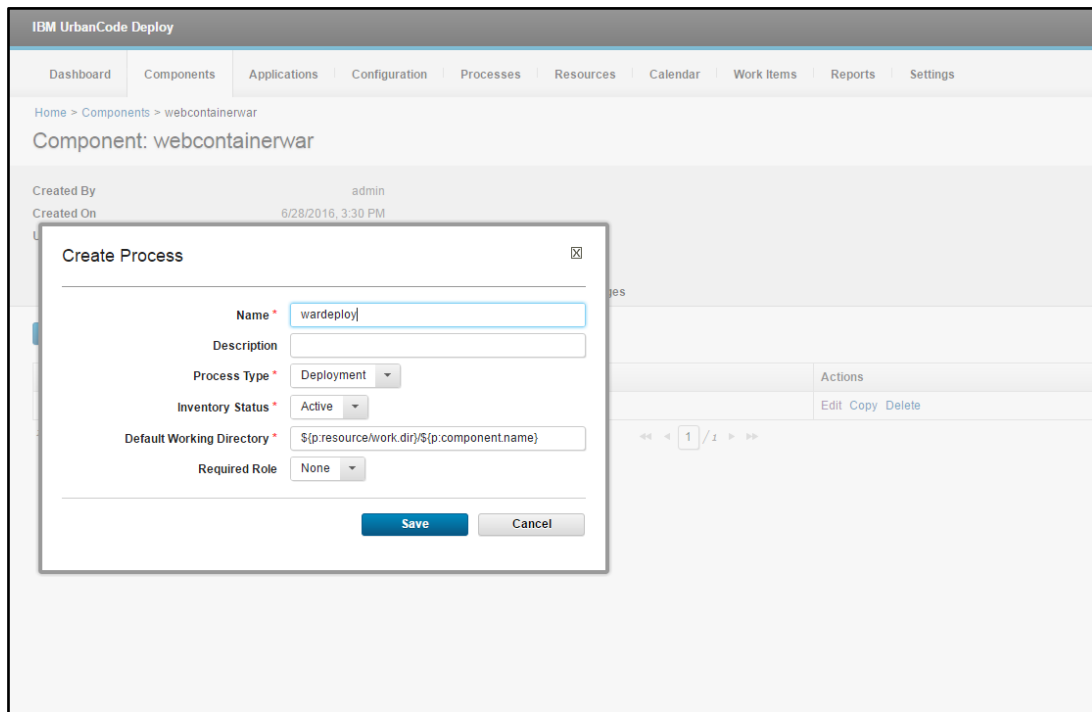


B. Process creation on component level

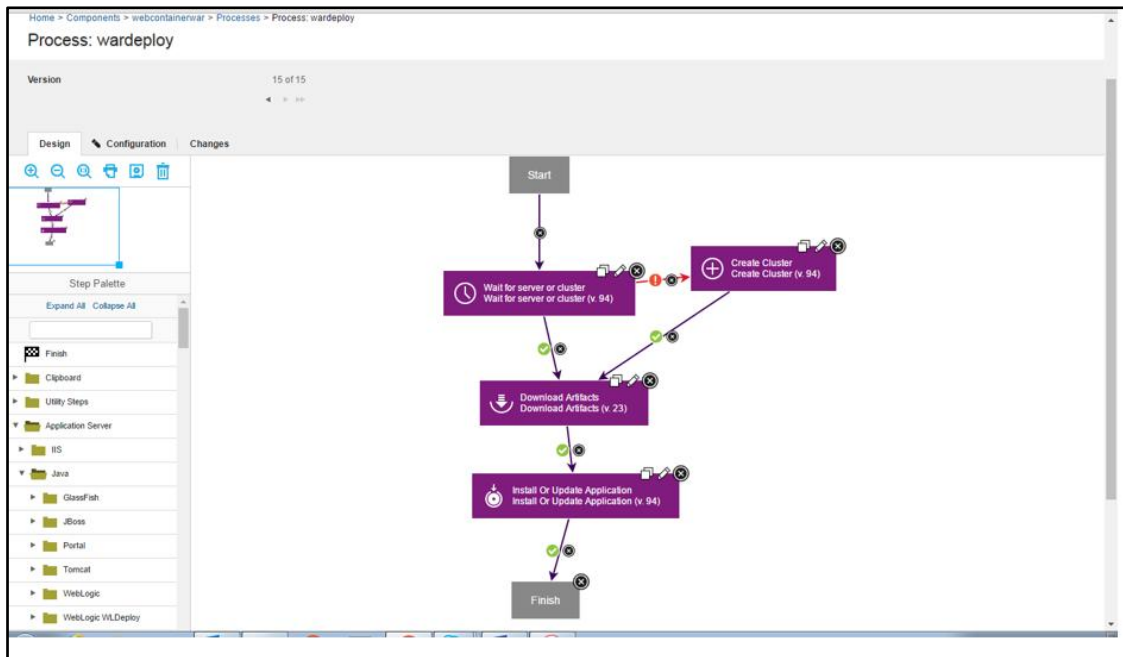
Click on process → Create process



In create process add the name of process and save it.



Click on process name you will get the design of process.



Edit properties

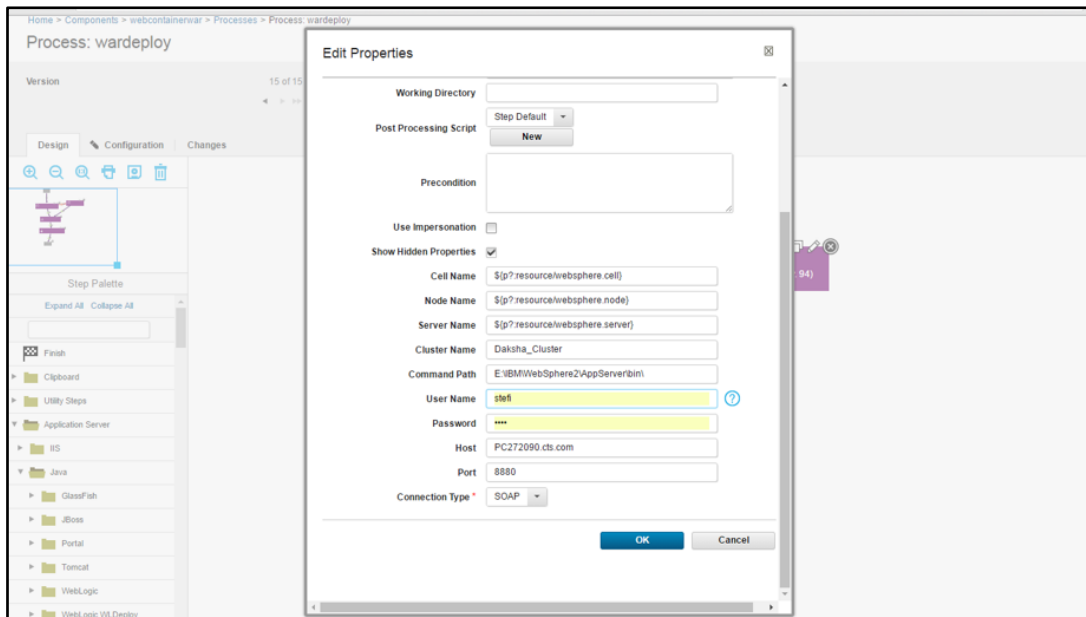
1) Wait for server or cluster

The 'Edit Properties' dialog for the 'Wait for server or cluster' step is shown. The properties are:

Name	Wait for server or cluster
Timeout(Seconds)	3
Interval(Seconds)	2
Delete Script File On Failure	<input checked="" type="checkbox"/>
Additional CommandLine Arguments	
Working Directory	
Post Processing Script	Step Default New
Precondition	
Use Impersonation	<input type="checkbox"/>
Show Hidden Properties	<input checked="" type="checkbox"/>
Cell Name	<code>\${p?.resource/webSphere.cell}</code>
Node Name	<code>\${p?.resource/webSphere.node}</code>
Server Name	<code>\${p?.resource/webSphere.server}</code>
Cluster Name	Daksha_Cluster
Command Path	E:\BM\WebSphere2\AppServer\bin
User Name	self
Password	****

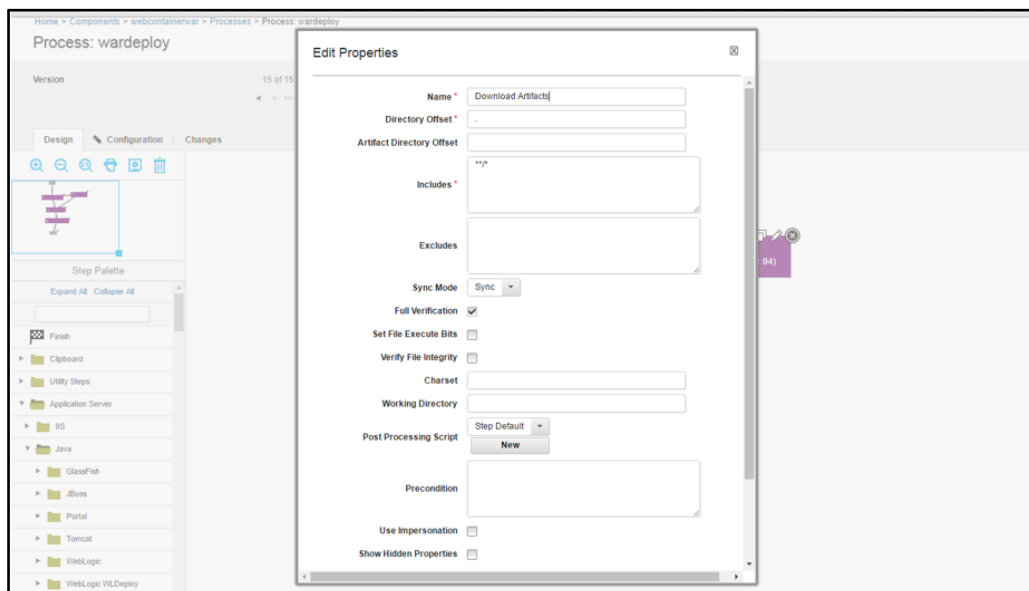
- 1) Name – add the name of step.
- 2) Time out – pass the time out in second.
- 3) Interval - pass the time out in second.

Set hidden properties



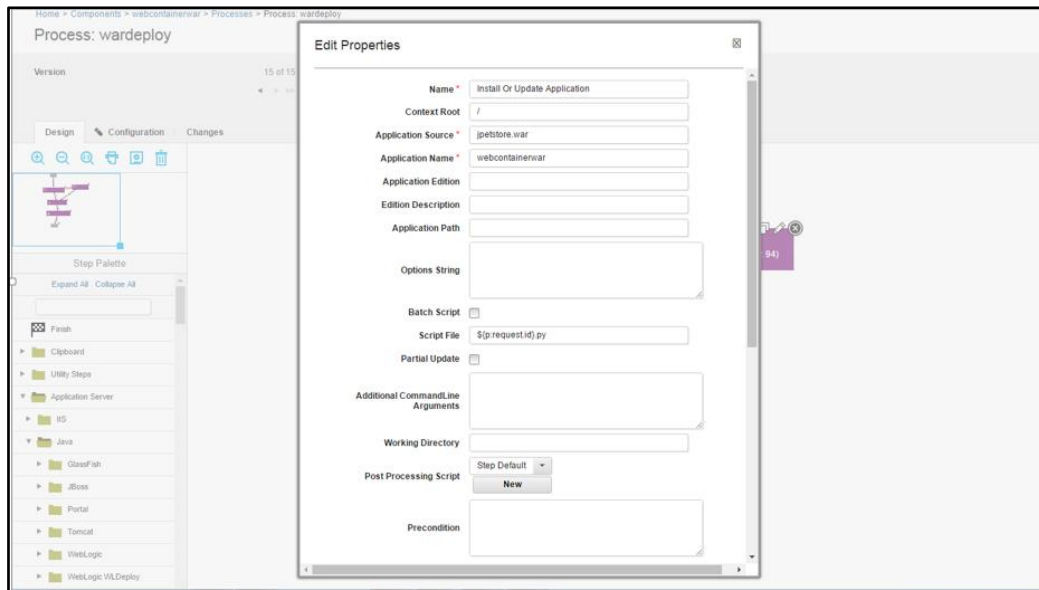
- 1) Cluster name - pass the name of cluster.
- 2) Command path – the path of root where server is installed.(upto bin folder)
- 3) User name - pass user name.
- 4) Password - pass the password.
- 5) Host - Pass the host name.
- 6) Port - pass the port number.

2) Download artifact



Only give the Name here and keep rest of properties as it is and save it.

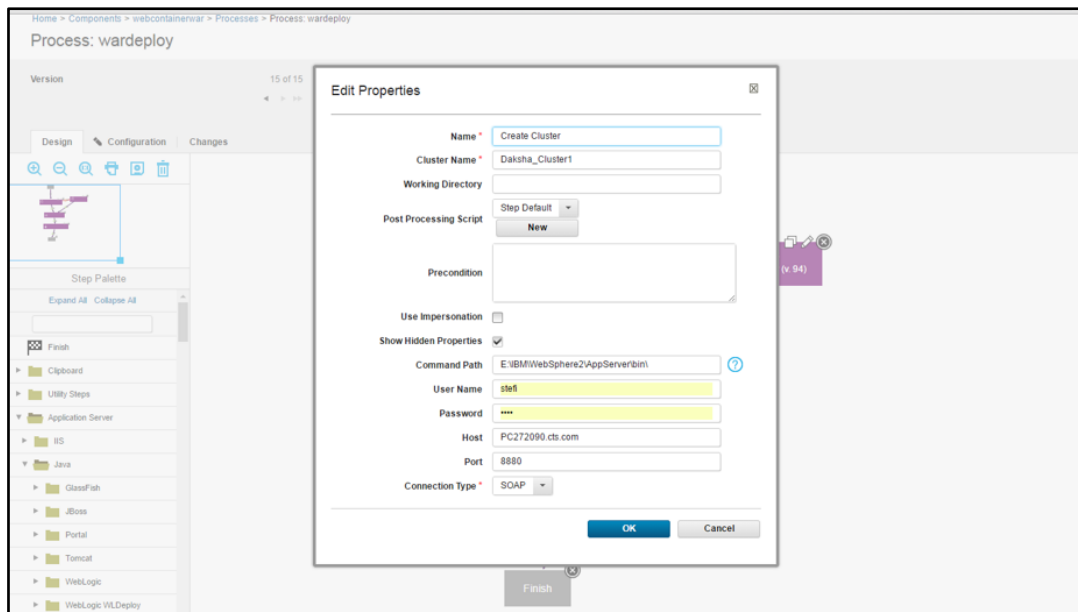
3) Install or update application



The properties -

- 1) Name - Pass the name of step.
- 2) Context root - It is where you want to store your application.
- 3) Application source - Name of war file.
- 4) Application name - Pass the name of application.

4) Create cluster



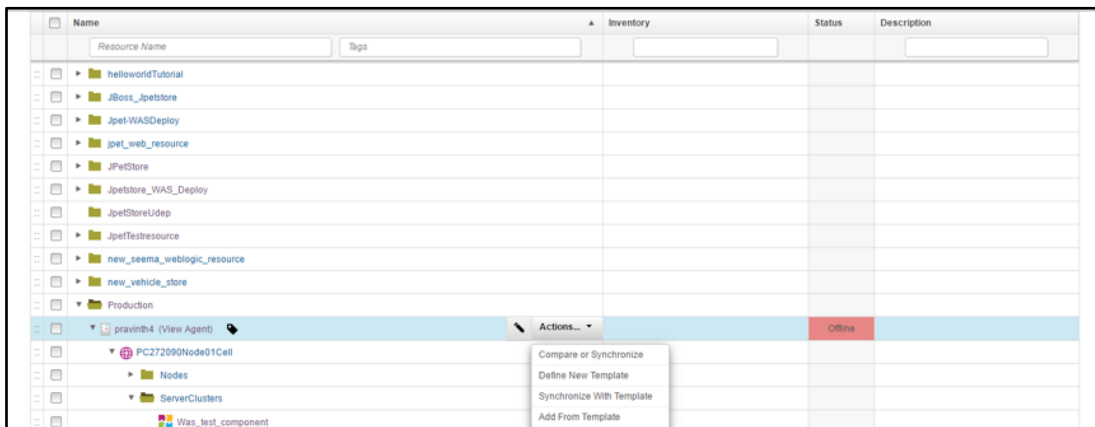
Properties -

- 1) Name - Pass the name of step.
- 2) Cluster Name - Pass the name of cluster.
- 3) Command path - Pass the path of root location of websphere server.

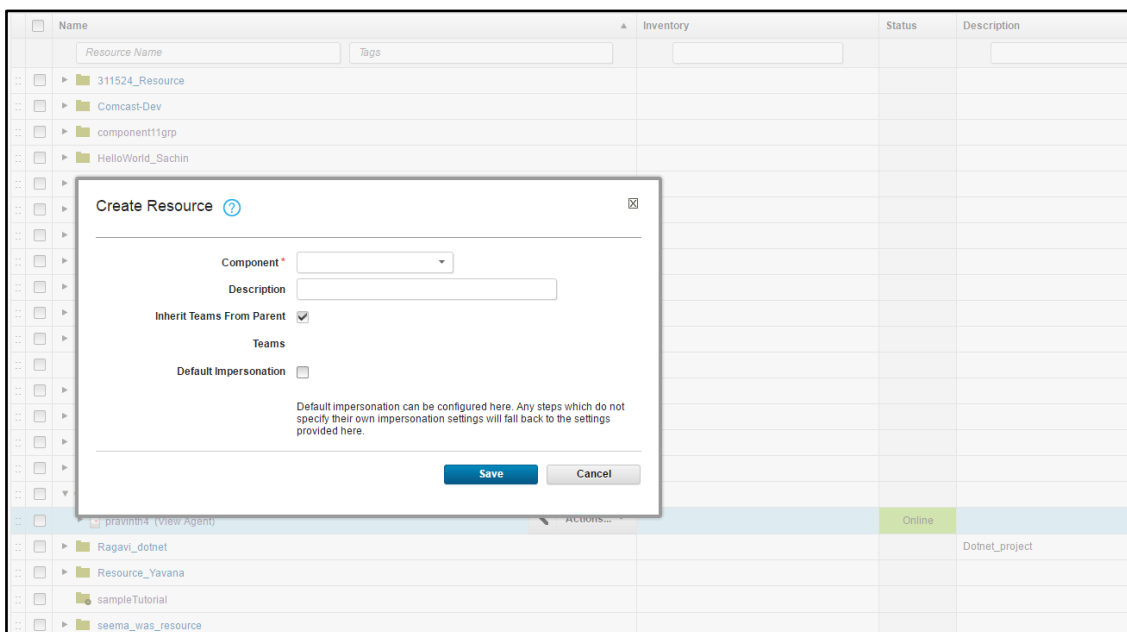
- 4) User name - Pass the user name.
- 5) Password - Pass the password.
- 6) Pass the host and port .
- 7) Save it.

C. Map component

Goto resource → Select your resource → Click on agent → Action



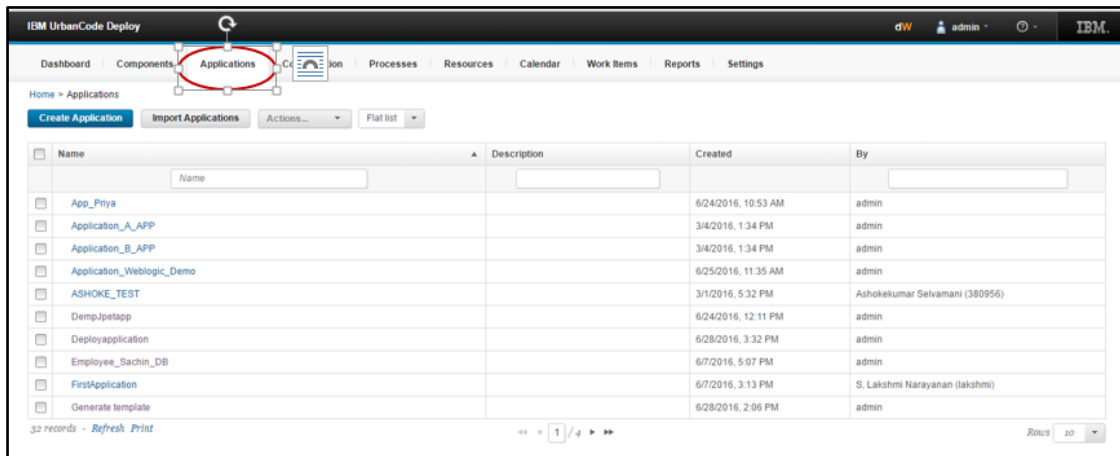
Add component → add your second component here



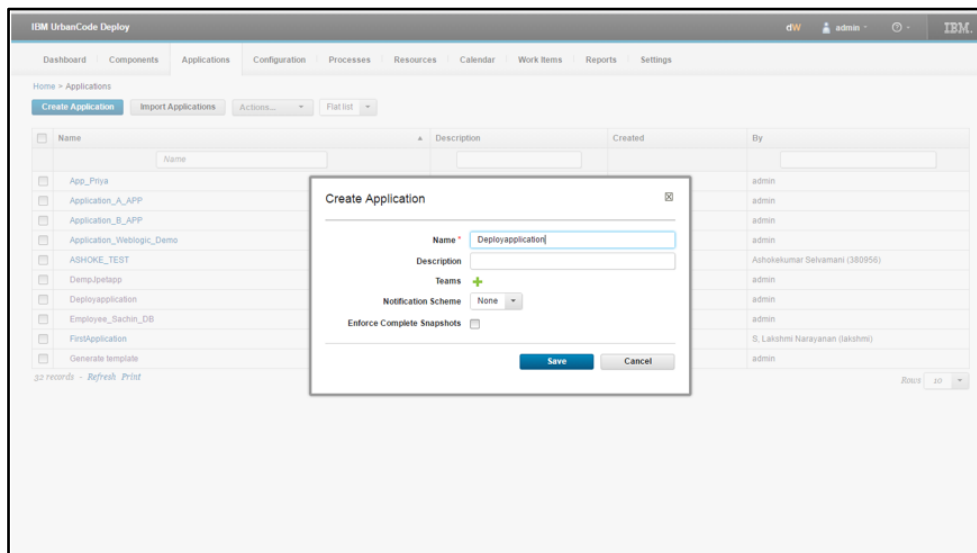
D. Application Creation

1) Create Application

Create the application for deployment.

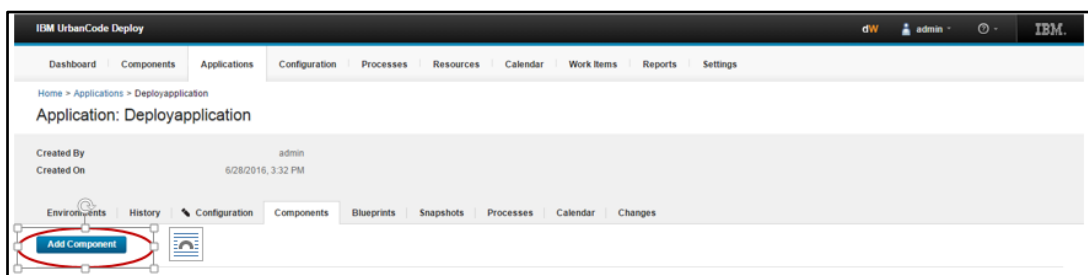


Give the name of application and save it.

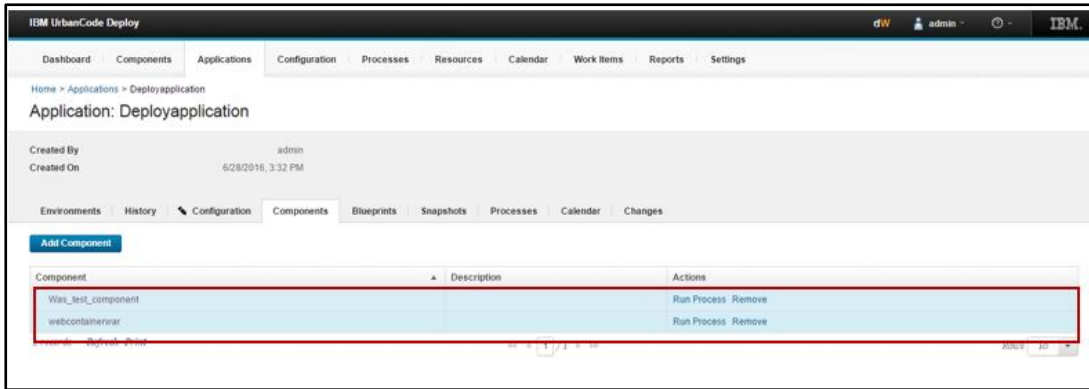


2) Map Component

Click on application name → Component tab → Add component

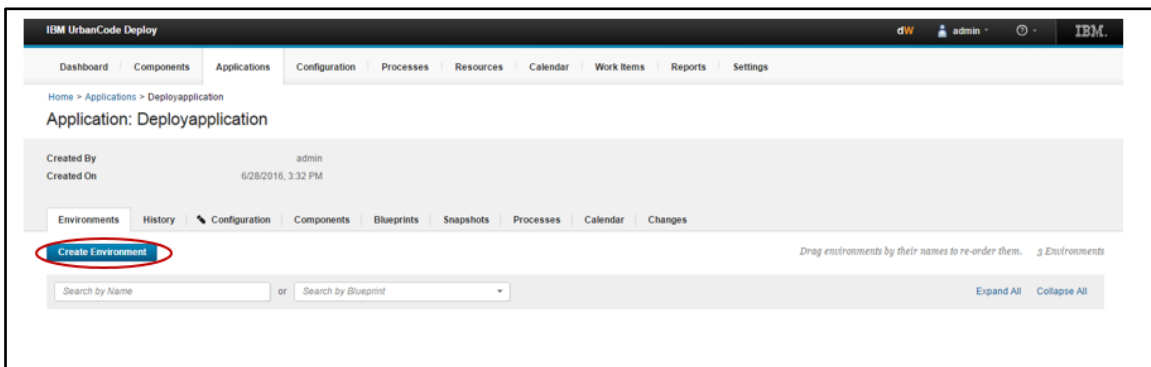


Select the created component from drop down and save it.



3) Create environment

Click on create environment tab



Create Environment ✕

Name *

Description

Blueprint


Teams +

Require Approvals

Exempt Processes

Lock Snapshots

Color



Bright Cerulean (Blue)

Inherit Cleanup Settings

Home > Applications > Deployapplication

Application: Deployapplication

Created By admin

Created On 6/28/2016, 3:32 PM

[Environments](#) |
 [History](#) |
 [Configuration](#) |
 [Components](#) |
 [Blueprints](#) |
 [Snapshots](#) |
 [Processes](#) |
 [Calendar](#) |
 [Changes](#)

[Create Environment](#) *Drag envi*

or

▶
⏪
📷
⋮
QA

Snapshot:
None

Click on environment

Home > Applications > Deployapplication

Application: Deployapplication

Created By admin

Created On 6/28/2016, 3:32 PM

[Environments](#) |
 [History](#) |
 [Configuration](#) |
 [Components](#) |
 [Blueprints](#) |
 [Snapshots](#) |
 [Processes](#) |
 [Calendar](#) |
 [Changes](#)

[Create Environment](#) *Drag envi*

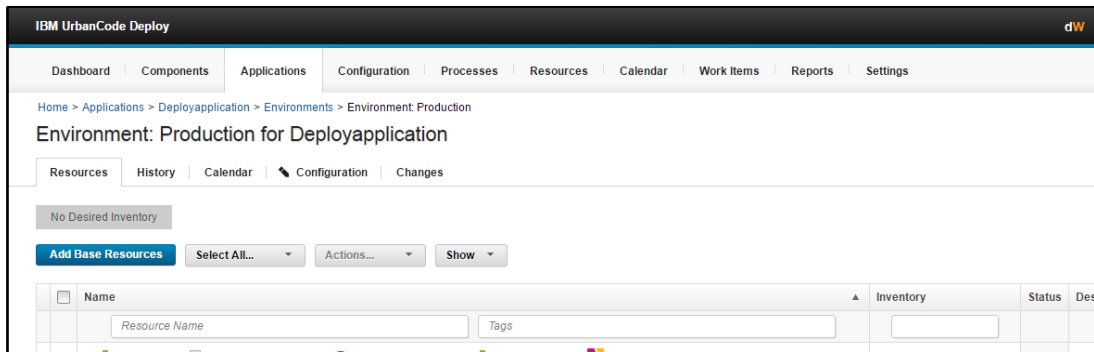
or

▶
⏪
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⋮
QA

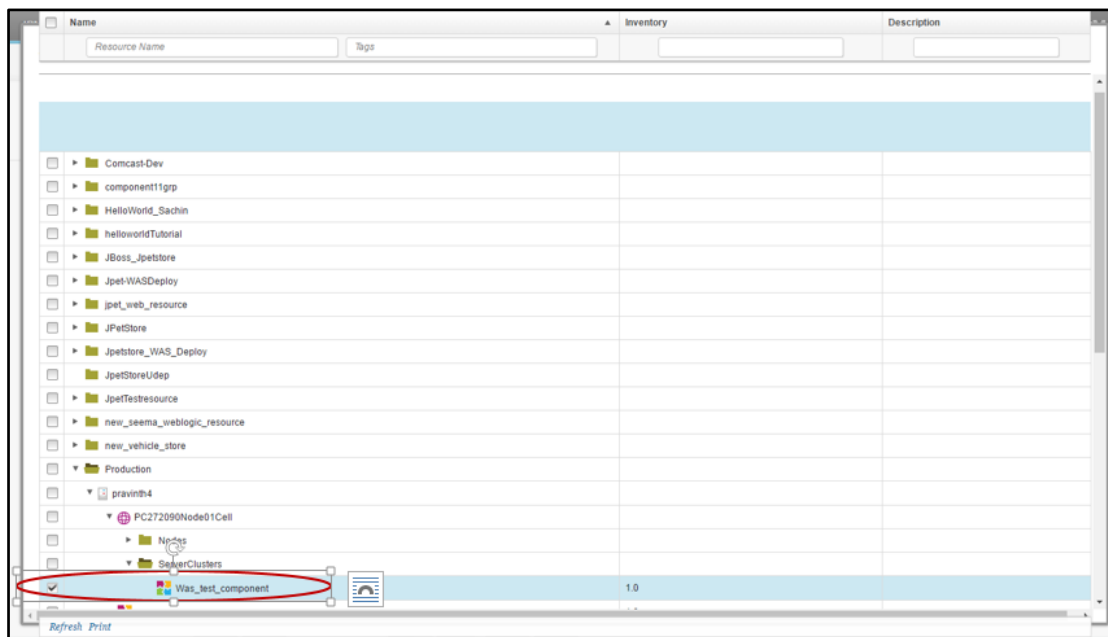
Snapshot:
None

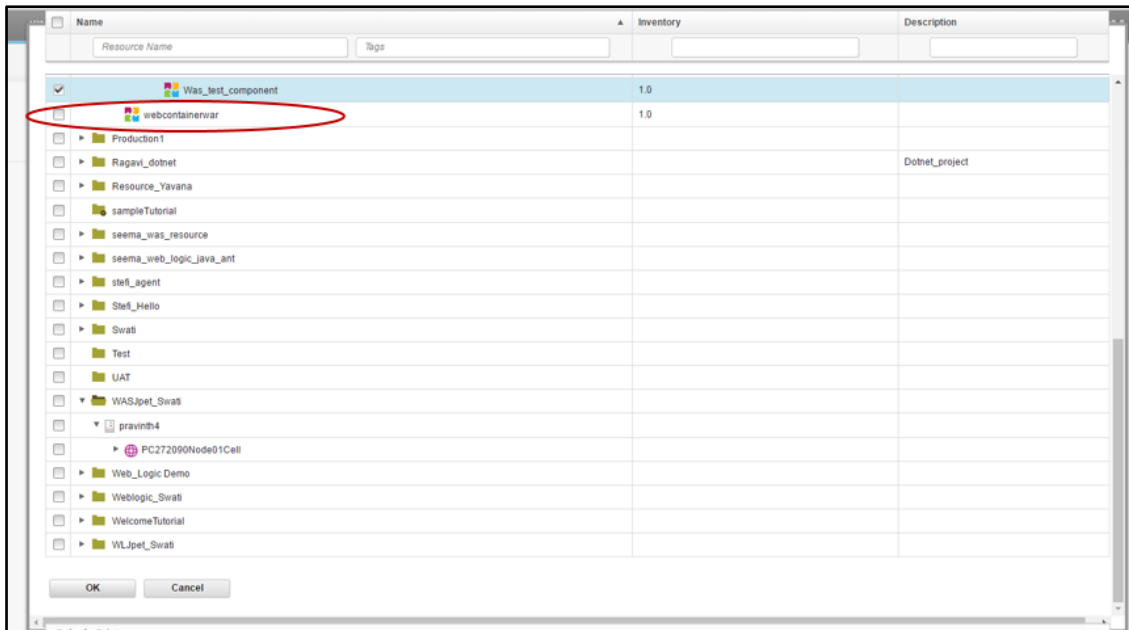
4) Add resources

Click on add base resource:-

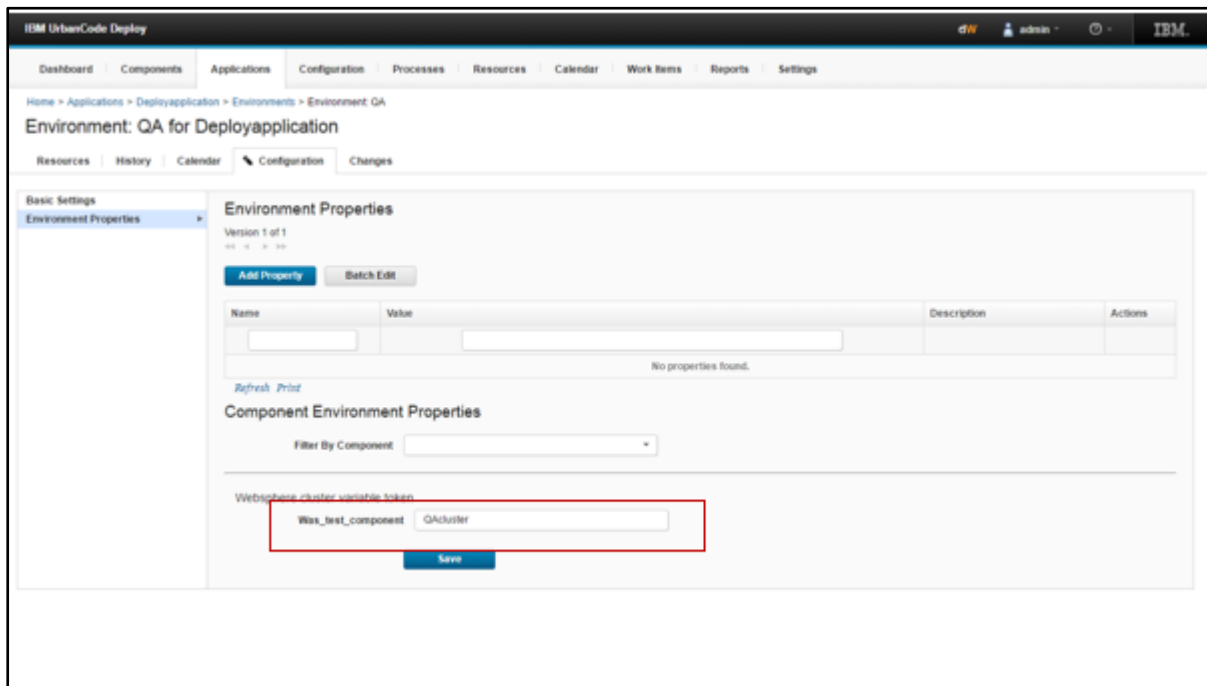


Select the component from list and save it.



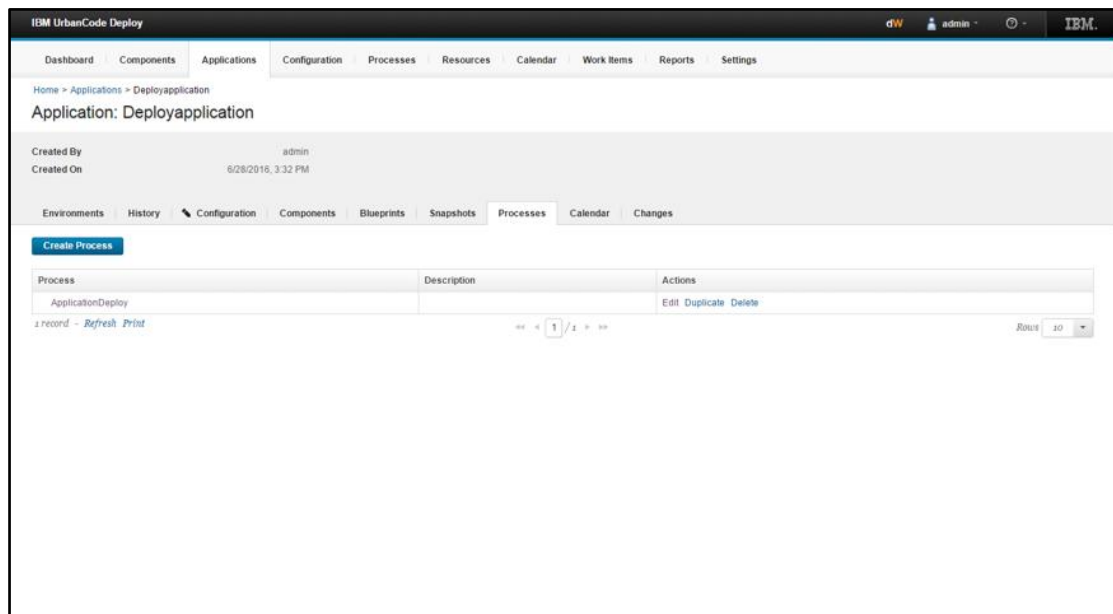
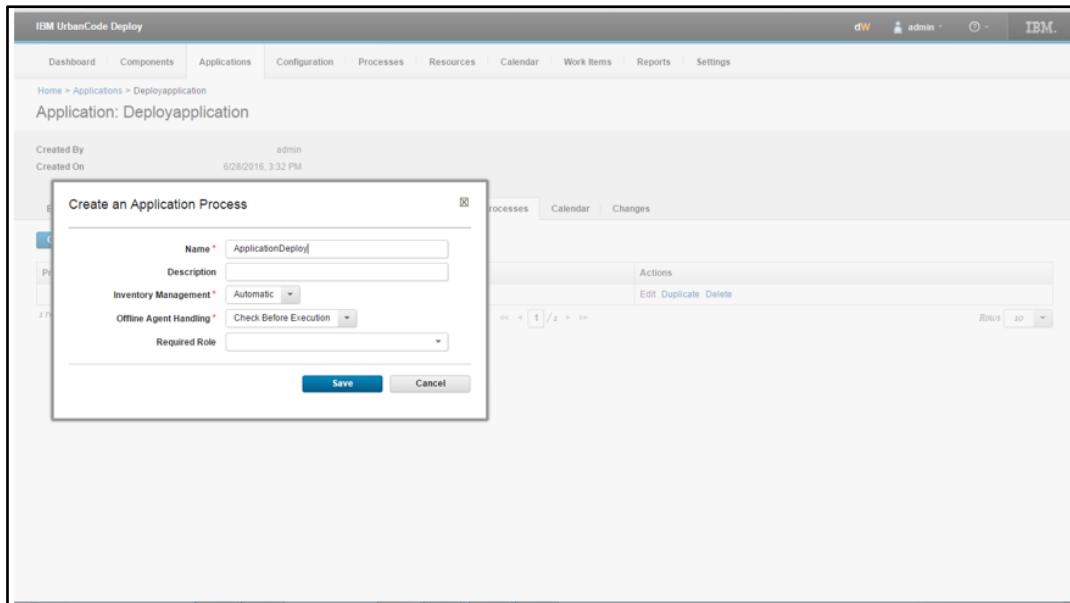



Go to environment → configuration → Environment properties → change the cluster variable token.

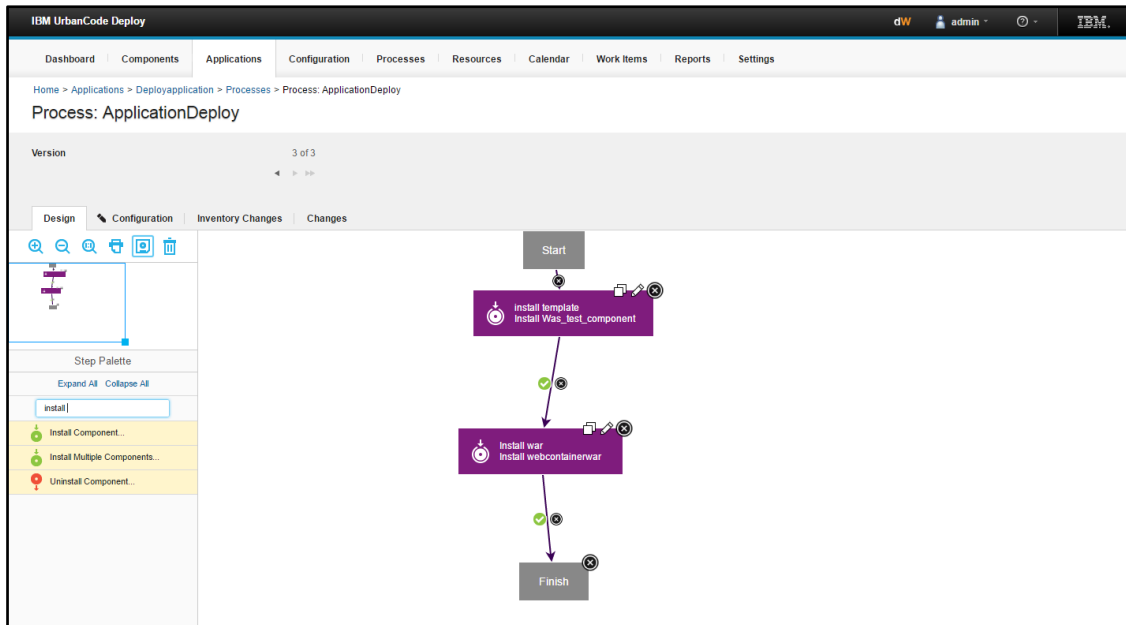


5) Create process (Application level)

Click on application → Click on process → Create process



Click on process design the steps and click on  icon to save it.



1) Install template -

The 'Edit Properties' dialog for the 'Install template' step is shown with the following configuration:

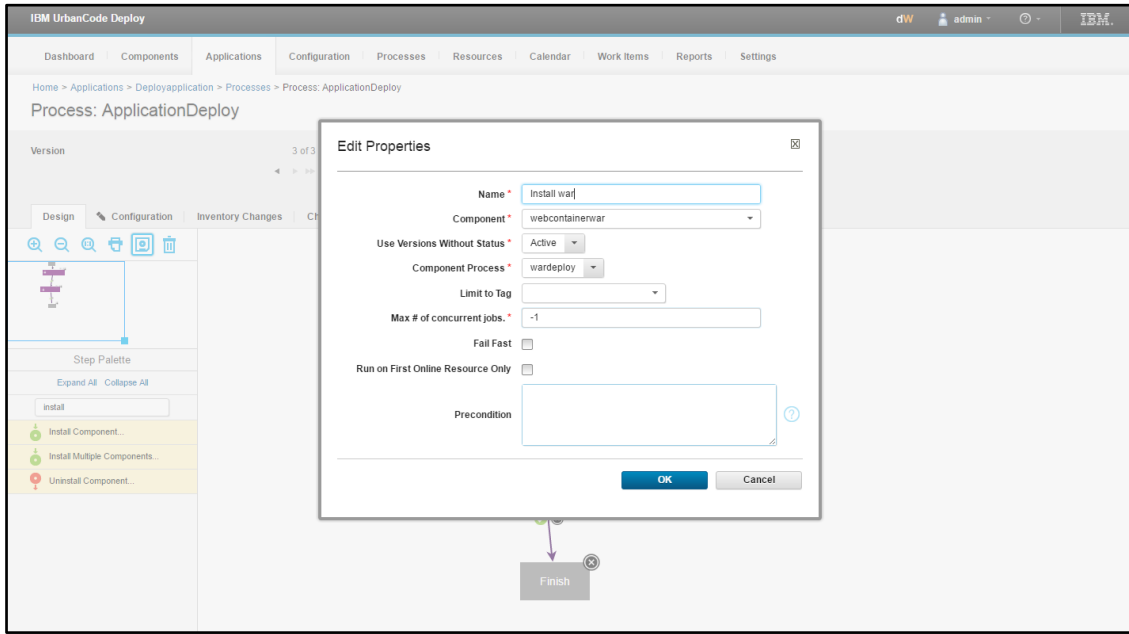
- Name:** install template
- Component:** Was_test_component
- Use Versions Without Status:** Active
- Component Process:** Configure WebSphere Application Server (Temp)
- Limit to Tag:** (Empty)
- Max # of concurrent jobs:** -1
- Fail Fast:**
- Run on First Online Resource Only:**
- Precondition:** (Empty text area)

The dialog has 'OK' and 'Cancel' buttons at the bottom.

Properties-

- 1) Name- Pass name of step.
- 2) Component – Pass the template.
- 3) Component process – select the component process as Configure WebSphere application server.
- 4) Save it.

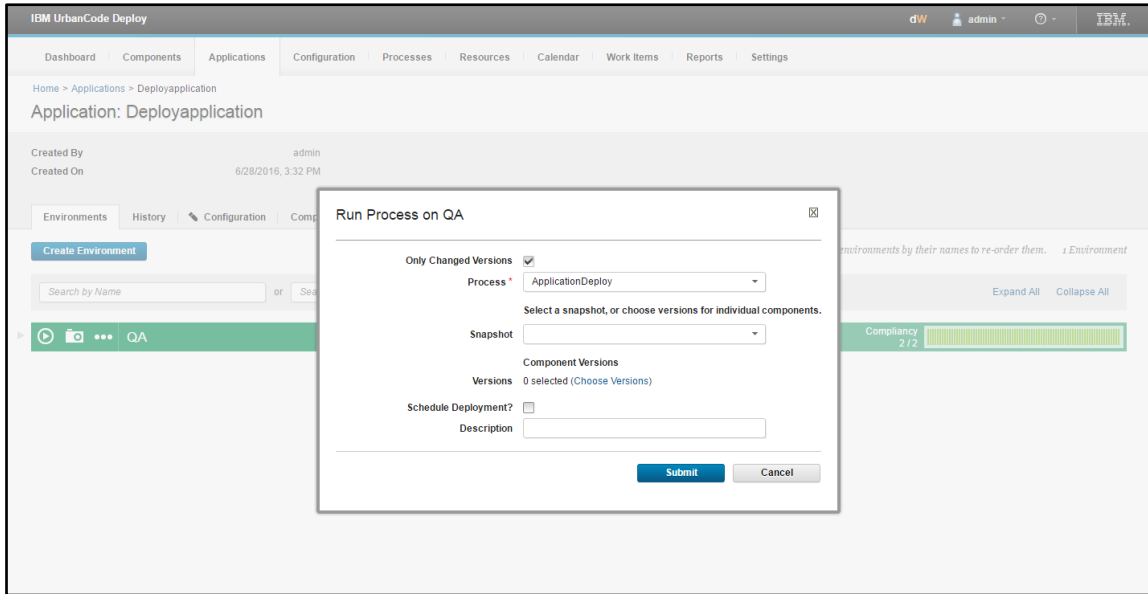
2) Install war -



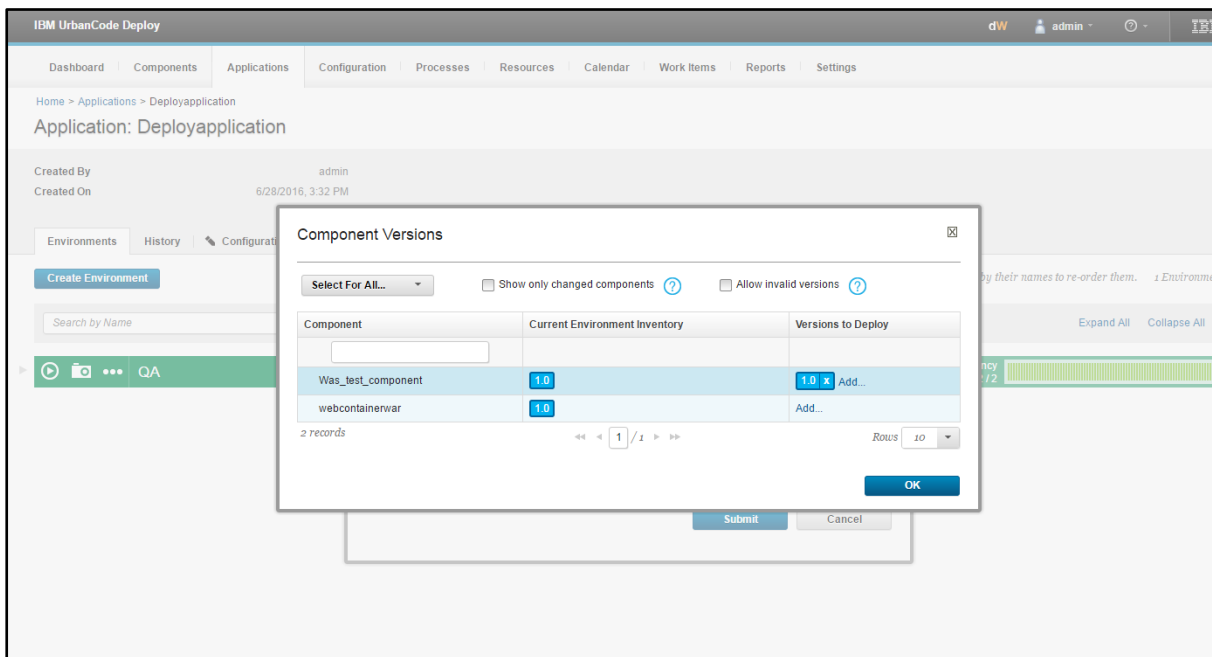
Properties-

- 1) Name- name of the step.
- 2) Component - Pass the component which represent the war file.
- 3) Component process - select the component process as war deploy.
- 4) Save it.

Application → Click on application → Run → add properties



Choose the version



Click on ok and submit.

IBM UrbanCode Deploy

Dashboard | Components | Applications | Configuration | Processes | Resources | Calendar | Work Items | Reports | Settings

Home > Applications > Deployapplication

Application: Deployapplication

Created By: admin
Created On: 6/28/2016, 3:32 PM

Environments | History | Configuration | Components | Blueprints | Snapshots | Processes | Calendar | Changes

Create Environment Drag environments by their names to re-order them. 1 Environment

Search by Name or Search by Blueprint Expand All Collapse All

QA Snapshot: None Compliance: 2/2

Environment: QA

Only Changed Versions: true

Date Requested: 6/28/2016, 7:16 PM

Requested By: admin

Scheduled For: 6/28/2016, 7:16 PM

View Deployment Request | Process Request

Log | Properties | Manifest | Configuration Changes | Inventory Changes

Execution Dock timeline at top

Start: 7:17:01 PM | Progress: 1/1 | Status: Success | Duration: 0:00:45 | End: 7:17:46 PM

Repeat Request | Download All Logs Expand All Collapse All

Step	Progress	Start Time	Duration	Status
1. install template	0 / 0	7:17:01 PM	0:00:00	Success
2. Install war	1 / 1	7:17:01 PM	0:00:44	Success
Total Execution	1 / 1	7:17:01 PM	0:00:45	Success

10.219.193.77:9080/jpet

Java Pet Store demo

Sign-in? Search

Fish | Dogs | Reptiles | Cats | Birds

Fish
Saltwater, Freshwater

Dogs
Various Breeds

Cats
Various Breeds, Exotic Varieties

Reptiles
Lizards, Turtles, Snakes

Birds
Exotic Varieties

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References- <https://www.youtube.com/watch?v=gowB49bxzr8>