



Liferay Training and Weekend Liferay Workshops

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Working with Liferay URLs

[Meera Prince](#)

Working with Liferay URLs

In liferay development we have many options to create liferay URLs
i.e.

Render URL, Action URL and Resource URL.

We have many ways to create liferay URL in development the
following are the ways to create URLs

1. **Using tag library**
2. **Using complete java classes and java objects**
3. **Using Java script**

Using Tag Library:

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Liferay provide build in tag library from that we can create liferay URLs.

We have two tag libraries from which we can create URLs

- **Portlet tag library**
- **Liferay Portlet tag library.**

Portlet Tag Library :

Portlet tag library is stand tag library for every portal means it's just JSR 168 and JSR 286 standard tag library.

To make use of this tag library in jsp page we need to use following tag.

```
<%@ taglib uri="http://java.sun.com/portlet_2_0" prefix="portlet"%>
```

Render URL creation:

```
<portlet:renderURL var="simpleDialogIframeExample"
windowState="<%=LiferayWindowState.POP_UP.toString()%>">
<portlet:param name="mvcPath"
value="/html/alloyuidialog/iframe_alloyui_dialog_example.jsp"/>
</portlet:renderURL>
```

The following are important attribute for tag:

var : This is variable name so that we can reference URL by this name

Window state: This is liferay window state like normal. Maximized ,minimized and pop_up.

portlet mode : this is mode of portlet view or edit

copyCurrentRenderParameters: This is whether you want copy all render parameters

If you want add more addition parameters we should use another tag called **<portlet:param/>**

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This is used to add more parameters or custom parameters

Finally this tag converted and the URL like following

For example my portlet Name: **LiferayAlloyUIDialogportlet**

I am creating Render URL in **view.jsp** page for this portlet

Then finally URL look like this in browser address bar its simple query string

```
http://localhost:8080/web/guest/who-is-using-liferay?
p_p_id=alloyuidialog_WAR_LiferayAlloyUIDialogportlet&
p_p_lifecycle=0&p_p_state=
normal&p_p_mode=view&p_p_col_id=column-
1&p_p_col_count=1
&_alloyuidialog_WAR_LiferayAlloyUIDialogportlet_mvcPath=
%2Fhtml%2Falloyuidialog%2Fsimple_alloyui_dialog.jsp
```

p_p_id: current portlet id

p_p_state: window state

p_p_mode: portlet mode either view/edit

p_p_lifecycle: this is life cycle of portlet 0/1/2

0: render phase or render URL

1: action phase or action URL

2: server resource URL

mvcPath: this is another parameter which we passed from
<portlet:param/> tag

Note:

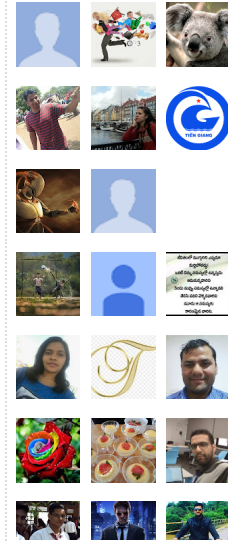
Similarly all URL have same parameters like above when we create URL from portlet tag library

Examples for URLs created from portlet tag library:

Render URL:

```
<%@ taglib uri="http://java.sun.com/portlet_2_0" prefix="portlet"
%>
<portlet:renderURL var="simpleDialog" windowState="normal">
<portlet:param name="mvcPath"
value="/html/alloyuidialog/simple_alloyui_dialog.jsp"/>
```

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```
</portlet:renderURL>
```

Action URL:

```
<%@ taglib uri="http://java.sun.com/portlet_2_0" prefix="portlet"
%>
<portlet:actionURL var="iFrmedilogActionURL" windowState="
<%=LiferayWindowState.POP_UP.toString()%>">
<portlet:param name="<%=ActionRequest.ACTION_NAME%>"
value="getActionMessageForSimpleDialog"/>
</portlet:actionURL>
```

Resource URL:

```
<portlet:resourceURL var="feedBackResourceURL" id="view.jsp"
escapeXml="false" />
```

Note:

With this tag library we can create URL for only current portlet .means where jsp page is located in portlet for that particular portlet only we can create.

Liferay Portlet Tag library:

This is another tag library which is from liferay by this we can create URLs but the difference between standard tab library and liferay tag library is we can create URL for other portlet also.

Means if you work with **PortletA** in **portletA** JSP page we can create URL for **PortletB**. This is using in some scenarios where you want pass some parameters form **portletA** to **portletB**.

To make use of this library we need to add following tag library in jsp page

```
<%@ taglib uri="http://liferay.com/tld/portlet" prefix="liferay-
portlet" %>
```

Example for create Liferay URLs from Liferay Portlet Tag Library:

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For example I want create RenderURL for portlet **47** means this is document library portlet

The following is example

```
<liferay-portlet:renderURL portletName="47"
var="openPortletURL" plid="<%=themeDisplay.getPlid()%>"
varImpl="openPortletURL" windowState="
<%=LiferayWindowState.POP_UP.toString()%>">
</liferay-portlet:renderURL>
```

Important Attributes:

portletName: the name of portlet for which you going to create URL.

plid : In which page your portlet is reside. Means its layout id

var : This is variable name so that we can reference URL by this name

Window state: This is liferay window state like normal. maximized, minimized and pop_up.

Portlet Mode: this is mode of portlet view or edit

copyCurrentRenderParameters: This is whether you want copy all render parameters or not means if you make this tru parameter will available in complete request cycle.

Finally URL likes this:

```
http://localhost:8080/web/guest/who-is-using-liferay?
p_p_id=47&p_p_lifecycle=0&p_p_state=pop_up&p_p_mode=view
&
p_p_col_id=column-1&p_p_col_count=1
```

p_p_id: current portlet id

p_p_state: windiow sate

p_p_mode: portlet mode either view/edit

p_p_lifecycle: this is life cycle of portlet

0: render phase or render URL

1: action phase or action URL

2: server resource URL

To pass custom parameters to this URL we need to use **<liferay-portlet:param/>** tag

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Note:

If we not pass **portletName** and **plid** then URL will be created for current portlet.

Examples for create Liferay URLs from Liferay Portlet Tag Library:

Render URL:

```
<%@ taglib uri="http://liferay.com/tld/portlet" prefix="liferay-
portlet" %>
<liferay-portlet:renderURL portletName="47"
var="openPortletURL" plid="<%=themeDisplay.getPlid()%>"
varImpl="openPortletURL" windowState="
<%=LiferayWindowState.POP_UP.toString()%>">
<liferay-portlet:param name="name" value="meera"/>
</liferay-portlet:renderURL>
```

Action URL:

```
<%@ taglib uri="http://liferay.com/tld/portlet" prefix="liferay-
portlet" %>
<liferay-portlet:actionURL portletName="47" var="actionURL"
plid="<%=themeDisplay.getPlid()%>"
varImpl="openPortletURL" windowState="
<%=LiferayWindowState.MAXIMIZED.toString()%>">
<liferay-portlet:param name="name" value="meera"/>
</liferay-portlet:actionURL>
```

Resource URL:

```
<%@ taglib uri="http://liferay.com/tld/portlet" prefix="liferay-
portlet" %>
<liferay-portlet:resourceURL var="resourceURL" plid="
<%=themeDisplay.getPlid()%>" varImpl="openPortletURL"
windowState="
<%=LiferayWindowState.MAXIMIZED.toString()%>">
<liferay-portlet:param name="name" value="meera"/>
</liferay-portlet:resourceURL>
```

[lui input validate \(4 \)](#)[lui javascript \(4 \)](#)[lui validate tag \(4 \)](#)[lui validator \(4 \)](#)[authentication verifier \(4 \)](#)[consume web service \(4 \)](#)[custom lui validator \(4 \)](#)[generic portlet \(4 \)](#)[kafka cluster \(4 \)](#)[liferay cluster \(4 \)](#)[liferay hook \(4 \)](#)[liferay validator \(4 \)](#)[portlet development \(4 \)](#)[portlet preferences \(4 \)](#)[portlet web services \(4 \)](#)[render url \(4 \)](#)[rest \(4 \)](#)[serve resource \(4 \)](#)[AUI Ajax \(3 \)](#)[Blueprint \(3 \)](#)[DS \(3 \)](#)[Declarative Services \(3 \)](#)[Felix Gogo Shell \(3 \)](#)[Layout \(3 \)](#)[Liferay 7 DDM Custom Field. \(3 \)](#)[Liferay 7 Gogo shell \(3 \)](#)

Using complete java classes and java objects

- **Create From renderResponse object**
- **PortletURLFactoryUtil Class**

Create From renderResponse object:

We can create URLs from render response object this is implicit variable we can directly use this. To make it available we need add following tag in jsp page then we can use renderResponse object in jsp page

```
<%@ taglib uri="http://java.sun.com/portlet_2_0" prefix="portlet"
%>
<portlet:defineObjects />
```

The following is sample code:

Render URL:

```
<%@ taglib uri="http://java.sun.com/portlet_2_0" prefix="portlet"
%>
<portlet:defineObjects />
<%@page import="javax.portlet.PortletURL"%>
<%
PortletURL myRenderURL=renderResponse.createRenderURL();
myRenderURL.setWindowState(LiferayWindowState.MINIMIZE
D);
myRenderURL.setParameter("name", "meera");
%>
```

Action URL:

```
<%@ taglib uri="http://java.sun.com/portlet_2_0" prefix="portlet"
%>
```

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```

<portlet:defineObjects />
<%@page import="javax.portlet.PortletURL"%>

<%

PortletURL myActionURL=renderResponse.createActionURL();
myActionURL.setWindowState(LiferayWindowState.MAXIMIZE
D);
myActionURL.setParameter("name", "meera");

%>

```

Resource URL:

```

<%@ taglib uri="http://java.sun.com/portlet_2_0" prefix="portlet"
%>
<portlet:defineObjects />
<%@page import="javax.portlet.ResourceURL"%>

<%

ResourceURL
myResourceURL=renderResponse.createResourceURL();
myResourceURL.setResourceID("myResource");
myResourceURL.setParameter("name", "meera");

%>

```

Note: from renderResponse we can create URLs for only current portlet.

PortletURLFactoryUtil Class:

PortletURLFactoryUtil is util class from which we can create liferay URLs. Here we can create URL to other portlet also. Means from **portletA** we can create URL for **portletB**.

The following is examples:

Render URL:

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[kafka prometheus \(3 \)](#)
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[server \(3 \)](#)
[service builder many to many \(3 \)](#)


```
<%@page
import="com.liferay.portal.kernel.portlet.LiferayPortletURL"%>
<%@page import="com.liferay.portlet.PortletURLFactoryUtil"%>
<%
LiferayPortletURL
myRenderURL=PortletURLFactoryUtil.create(renderRequest,
"47", themeDisplay.getPlid(), "0");
myRenderURL.setWindowState(LiferayWindowState.MINIMIZE
D);
myRenderURL.setParameter("name", "meera");
%>
```

Action URL:

```
<%@page
import="com.liferay.portal.kernel.portlet.LiferayPortletURL"%>
<%@page import="com.liferay.portlet.PortletURLFactoryUtil"%>
<%
LiferayPortletURL
myActionURL=PortletURLFactoryUtil.create(renderRequest, "47",
themeDisplay.getPlid(), "1");
myActionURL.setWindowState(LiferayWindowState.MAXIMIZE
D);
myActionURL.setParameter("name", "meera");
%>
```

Resource URL:

```
<%@page
import="com.liferay.portal.kernel.portlet.LiferayPortletURL"%>
<%@page import="com.liferay.portlet.PortletURLFactoryUtil"%>
<%
LiferayPortletURL
myResourceURL=PortletURLFactoryUtil.create(renderRequest,
"47", themeDisplay.getPlid(), "2");
myResourceURL.setParameter("name", "meera");
```

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```
%>
```

Finding portlet name or p_p_id:

Go through following link and find **How to find portlet Id or p_p_id or portlet Name** section.

<http://www.liferay savvy.com/2013/11/working-with-liferay-alloy-ui-dialogs.html>

Using Java script:

We can also create liferay URL from java script in liferay. Liferay provides java script module called **liferay-portlet-url** from this we can create URLs in java script

First we need to use AUI tag library then we have to use AUI use method to load **liferay-portlet-url** module

```
<%@ taglib uri="http://liferay.com/tld/au" prefix="au" %>
<au:script>
AUI().use('au-base','liferay-portlet-url','au-node', function(A) {

});
</au:script>
```

Examples:

Render URL:

```
<%@ taglib uri="http://liferay.com/tld/au" prefix="au" %>
<au:script>
AUI().use('au-base','liferay-portlet-url','au-node', function(A) {
var myRenderURL =Liferay.PortletURL.createRenderURL();
myRenderURL.setPortletId('47')
myRenderURL.setWindowState('pop_up');

});
```

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[Liferay 7 SCR \(2 \)](#)

[Liferay 7 Telnet \(2 \)](#)

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```
</lui:script>
```

Action URL:

```
<%@ taglib uri="http://liferay.com/tld/lui" prefix="lui" %>
<lui:script>
AUI().use('lui-base','liferay-portlet-url','lui-node', function(A) {
var myActionURL =Liferay.PortletURL.createActionURL();
myActionURL.setPortletId('47')
myActionURL.setWindowState('MAXIMIZED');
myActionURL.setParameter("name","meera");
});
</lui:script>
```

Resource URL:

```
<%@ taglib uri="http://liferay.com/tld/lui" prefix="lui" %>
<lui:script>
AUI().use('lui-base','liferay-portlet-url','lui-node', function(A) {
var myResourceURL =Liferay.PortletURL.createResourceURL();
myResourceURL.setResourceId('someid');
myResourceURL.setParameter("name","meera");});
</lui:script>
```

Note: all these code snippets use in jsp pages only.

Important points:

- We can create Liferay URLs in different ways from tag library java classes and java script.
- From **render response** and **portlet tag library** we can create URL for only current portlet.

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- From **PortletURLFactoryUtil** class and **liferay-portlet tag library** we can create URLs to other portlets means from one portlet to other portlet we can create .Here main attributes are **portletName** and **plid**. Plid is page layout id.
- When we create any URL finally url converted into normal URL query string which we can see in browser address bar.
- Liferay portlet have different lifecycles action render and resource each phase we represent as p_p_lifecycle attribute. 1 for action phase, 0 for render phase and 2 for recourse phase.
- Liferay portlet have edit and view mode.
- When create URL using java script we have to **liferay-portlet-url** module this module can be loaded by **au** use method.

Author:
Meera Prince

📁 action url , lifecycle , liferay url , liferay window state , portlet lifecycle , portlet mode , render url , resource url , window state 💬 1 comment

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Follow below Article to understand more about Message Bus in Liferay.<http://www.liferay savvy.com/2021/07/working-with-liferay-message-bus.html> [Implementation Steps](#) [Create Destination](#)

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Working with Liferay Message Bus

Liferay Message Bus is Java Message Service (JMS) implementation which works like publish and subscribe to model. This is light weight component integrated in Liferay Portal. Multiple senders will send messages on destination and other-end receivers listens the messages. It is useful for batch...

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Working with Liferay Scheduler

Scheduler is one of the important components in any application. To perform jobs periodically then application is required scheduler. Liferay portal is providing scheduler in portal and we can schedule jobs in portal applications. Liferay implemented scheduler on top of the quartz scheduler engine....

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Configure Remote Elasticsearch Cluster in Liferay Cluster

Liferay 7.x is using Elasticsearch and it's embedded in the bundle. When we start Liferay then embedded elastic instance also will start. Development environments, this embedded search is ok but for production environments we must need external Elasticsearch cluster. If we are building...

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Liferay Portal Monitoring with Prometheus and Grafana

Grafana is popular open-source solution for monitoring applications. It will provide graphical dashboards to build monitoring visualization. Any graphical view required data or metrics, so metrics data will be provided by Prometheus. Prometheus is another monitoring tools to pull data...

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Liferay Portal Monitoring with Prometheus

Prometheus is popular opensource monitoring tool. It can monitor applications with help of JMX Exporter Java agent. This Article demonstrate the Liferay Portal Server Monitoring with Prometheus.

Prerequisite Install Liferay Cluster ...

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Liferay Portal Logs Monitoring with PLG

PGL is Grafana Labs stack which is similar to ELK stack. PLG is combination of Promtail, Loki and Grafana. P ---> Promtail L ---> Loki G ---> Grafana Promtail Promtail is independent agent which runs in every server and send logs to Loki. Loki Grafana Loki is a...

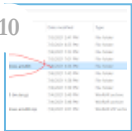
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Kafka Cluster Monitoring with Prometheus and Grafana

Grafana is popular open-source solution for monitoring applications. It will provide graphical dashboards to build monitoring visualization. Any graphical view required data or metrics, so metrics data will be provided by Prometheus. Prometheus is another monitoring tools to pull data from...

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Prometheus installation on Windows

Prometheus is an open-source system monitoring and alerting toolkit. Download and Extract Go to Prometheus download page and download latest version. <https://prometheus.io/download/> Direct Links as follows ...

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Grafana Installation on Windows

Grafana is open-source analytics and visualization solution. It provides charts, graphs and alerts. It connects to multiple data sources and fetch the metrics data and monitor in Grafana visualization dashboards. It can be integrated with Prometheus monitoring tool to create dashboard and...

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Kafka Monitoring with Prometheus

Prometheus is monitoring opensource tool. Previous Article we have enabled Zookeeper metrics and monitor in the Prometheus. <http://www.liferay savvy.com/2021/07/enable-metrics-provider-in-zookeeper.html> This article demonstrates the Kafka monitoring using Prometheus. Prometheus uses the JMX...

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Liferay Tomcat Access Logs to Kafka

Tomcat access logs to keep the record of all requests processed by the application which are deployed in tomcat server. It will log every request and its response status. We can build many reports based on access logs. Default Tomcat Access logs will be writing all logs into file when we enable it...

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Liferay Portal Logs Monitoring with ELKK

This article demonstrates the Liferay Portal Logs monitoring using ELKK stack. Elastic Search Logstash Kibana Kafka Previous Article We already implemented Liferay Centralized logging system using Kafka. Now we will use Logstash to pull the Liferay Logs from Kafka...

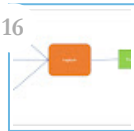
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Kibana Installation

Kibana is analytics, visualization and monitoring tool from Elastic stack. It will connect to Elastic search and analyze and visualize the data. Most of the organizations are using Kibana for applications log monitoring. We can build nice Dashboards in Kibana and configure alerts as well. ...

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Logstash Installation

Logstash is one of the software from Elastic stack to collect logs from different data sources and send logs to Elastic search. It will take data from different sources and process data as per our requirements. Software and Tools Windows 10 Java 1.8 or higher ...

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Install Elastic Search Cluster

Elastic search is open-source distributed search and analytics engine based on Lucene search engine. It's completely Restful implementation and easy to use. Elastic search is core of Elastic stack and there are many products from elastic stack. Example demonstrating 3 nodes elastic search cluster....

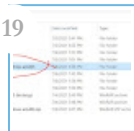
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Centralized Logging for Liferay Portal

Kafka is distributed streaming system based on “publish and subscribe to” model. We can use Kafka for centralized logging system for applications. This article demonstrate the implementation of Kafka centralized logging system for Liferay Portal. This will be used in Liferay cluster...

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Enable Metrics Provider in Zookeeper

Zookeeper provided “metrics provider” such a way user can monitor zookeeper. Prometheus is one of the monitoring services can be used

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to monitor zookeeper. The following are the steps to enable metrics provider in Zookeeper. Configure Metrics provider in Zookeeper configuration....

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Enable Admin Server in Zookeeper

Admin Server Zookeeper is providing embedded jetty container to provide HTTP interface to execute commands. From Zookeeper 3.5.0 onwards HTTP interface is available. We need to enabled the Admin server from zookeeper configuration. Zookeeper is providing set of 4 letters commandsto manage and...


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Liferay AUI Validator

Objective: Use AUI Form Validator to validate form data from client side. Environment: Liferay 6.2 +Tomcat 7.x+MySQL 5.1 ...


Working with Liferay URLs

Working with Liferay URLs In liferay development we have many options to create liferay URLs i.e. Render URL, Action URL and Resou...



Liferay Search Container

Introduction: Liferay have very build in UI components and we can simply use those UI components when we develop portlets. Liferay...



Liferay Spring Portlet

Environment: Liferay Portal 6.2 CE+ Tomcat Server 7.x + MySQL 5.1 Objective: Create Spring Portlet in Liferay. Download Lifer...

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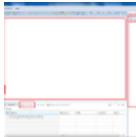
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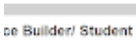
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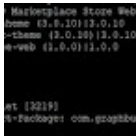
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