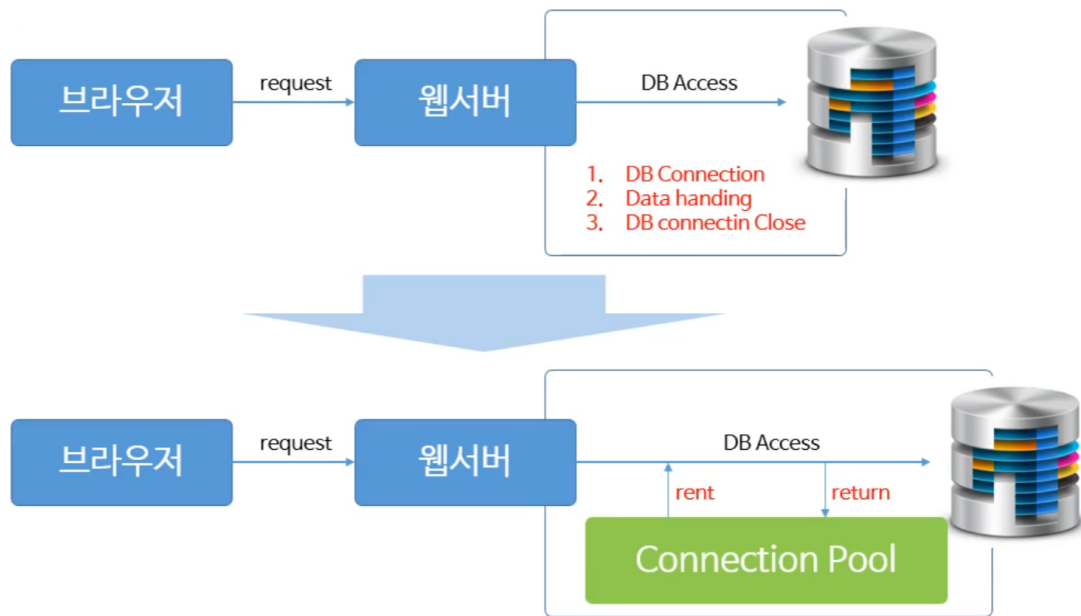


# JSP & Servlet - Connection Pool



DBCP

데이터 베이스와 통신하는 자원을 효율적으로 관리하기 위한 기법

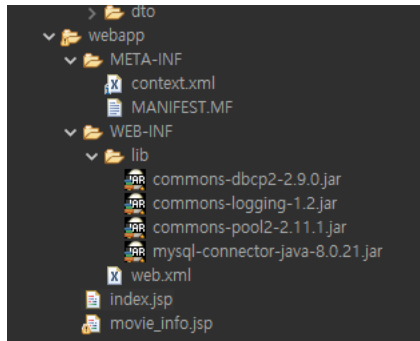


커넥션풀

JNDI (Java Naming and Directory Interface)

웹 서버 실행시 톰캣이 만들어 놓은 ConnectionPool 객체에 접근할 때는 JNDI 를 이용한다.

즉, 미리 접근할 자원에 키를 지정한 후 애플리케이션이 실행 중일 때 키를 이용해 자원을 접근해서 처리한다.



## context.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<!--
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contributor license agreements.  See the NOTICE file distributed with
this work for additional information regarding copyright ownership.
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distributed under the License is distributed on an "AS IS" BASIS,
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
See the License for the specific language governing permissions and
limitations under the License.
--><!-- The contents of this file will be loaded for each web application --><Context>

    <!-- Default set of monitored resources. If one of these changes, the    -->
    <!-- web application will be reloaded.                                -->
    <WatchedResource>WEB-INF/web.xml</WatchedResource>
    <WatchedResource>WEB-INF/tomcat-web.xml</WatchedResource>
    <WatchedResource>${catalina.base}/conf/web.xml</WatchedResource>

    <!-- Uncomment this to disable session persistence across Tomcat restarts -->
    <!--
    <Manager pathname="" />
    -->
    <Resource
    name="jdbc/mysqlDB"
    auth="Container"
    type="javax.sql.DataSource"
    username="root"
    password="asd1234"
    driverClassName="com.mysql.cj.jdbc.Driver"
    url="jdbc:mysql://localhost:3306/movies?serverTimezone=Asia/Seoul"
    maxActive="50"
    minIdle="10"
    />

</Context>
```

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://xmlns.jcp.org/xml/ns/javaee" xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/xml/ns/javaee/web-app_3_0.xsd" >
  <display-name>setvlet-dao</display-name>
  <welcome-file-list>
    <welcome-file>index.html</welcome-file>
    <welcome-file>index.jsp</welcome-file>
    <welcome-file>index.htm</welcome-file>
  </welcome-file-list>
</web-app>
```

```

        <welcome-file>default.html</welcome-file>
        <welcome-file>default.jsp</welcome-file>
        <welcome-file>default.htm</welcome-file>
    </welcome-file-list>

    <resource-ref>
        <res-ref-name>jdbc/mysqlDB</res-ref-name>
        <res-type>javax.sql.DataSource</res-type>
        <res-auth>Container</res-auth>
    </resource-ref>

</web-app>

```

## index.jsp

```

<%@page import="javax.sql.DataSource"%>
<%@page import="java.sql.DriverManager"%>
<%@page import="java.sql.ResultSet"%>
<%@page import="java.sql.PreparedStatement"%>
<%@page import="java.sql.Connection"%>

<%@page import="javax.naming.InitialContext"%>
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Insert title here</title>
</head>
<body>
    <%

        // 톨캣 서버에서 자원을 찾기 위해 InitialContext 인스턴스 생성
        InitialContext initialContext = new InitialContext();
        // lookup() 메소드로 JNDI 이름으로 등록되어 있는 서버 자원을 찾을
        DataSource dataSource = (DataSource)initialContext
            .lookup("java:comp/env/jdbc/mysqlDB");

        Connection conn = null;
        PreparedStatement pstmt = null;
        ResultSet rs = null;

        String query = "select * from 영화 ";

        // 커넥션 풀에 rent 해서 데이터 베이스 연결 객체를 가져 온다.
        conn = dataSource.getConnection();
        pstmt = conn.prepareStatement(query);
        rs = pstmt.executeQuery();

        while(rs.next()) {
            out.print(rs.getString("이름"));
            out.print("<br>");
        }

    %>

    <h3><a href="/boot/movieInfo"> 영화 정보 조회하기 </a></h3>
</body>
</html>

```