

# 10.0

```
package com.fr.data.impl;

import com.fr.base.TemplateUtils;
import com.fr.data.pool.DBCPConnectionPoolAttr;
import com.fr.data.pool.MemoryConnection;
import com.fr.general.ComparatorUtils;
import com.fr.general.FRLogger;
import com.fr.general.Inter;
import com.fr.json.JSONException;
import com.fr.json.JSONObject;
import com.fr.stable.CodeUtils;
import com.fr.stable.StringUtils;
import com.fr.stable.xml.XMLPrintWriter;
import com.fr.stable.xml.XMLTableReader;
import holder.ConfigHolder;
import holder.NamespaceWrapper;
import holder.factory.ConfigHolderFactory;
import holder.impl.ObjectHolder;

import java.sql.Connection;

/**
 * JDBC Database Connection
 */
public class JDBCDatabaseConnection extends AbstractDatabaseConnection {
    private ConfigHolder<String> driver = HolderFactory.simpleHolder("driver", "sun.jdbc.odbc.JdbcOdbcDriver",
getNameSpace());
    private ConfigHolder<String> url = HolderFactory.simpleHolder("url", StringUtils.EMPTY, getNameSpace());
    private ConfigHolder<String> user = HolderFactory.simpleHolder("user", StringUtils.EMPTY,
getNameSpace());
    private ConfigHolder<String> password = HolderFactory.simpleHolder("password", StringUtils.EMPTY,
getNameSpace());
    private ConfigHolder<Boolean> encryptPassword = HolderFactory.simpleHolder("encryptPassword", true,
getNameSpace());
    private ConfigHolder<DBCPConnectionPoolAttr> dbcpAttr = HolderFactory.objectHolder("dbcpAttr", null,
DBCPConnectionPoolAttr.class, getNameSpace());

    /**
     * Constructor.
     */
    public JDBCDatabaseConnection() {
        this(StringUtils.EMPTY, StringUtils.EMPTY, StringUtils.EMPTY, StringUtils.EMPTY);
    }

    /**
     * Constructor.
     */
    public JDBCDatabaseConnection(String driver, String url,
        String user, String password) {
        this.setDriver(driver);
        this.setURL(url);
        this.setUser(user);
        this.setPassword(password);
    }
}
}
```

## DataSoucemanger

```
public class DataSourceRefactor extends Configuration{
    private ConfigHolder<ConnectionN> nameConnectionMap = HolderFactory.objectHolder("nameConnectionMap", new
ConnectionN(), ConnectionN.class, getNameSpace());
```

```

    public abstract static class N extends UniqueKey {
        MapHolder<Map> map = HolderFactory.mapHolder("map", new ListMap(), null, getNameSpace()); // <String, <T
        extends XMLable>>

        public N() {
        }

        public String getNameSpace(){
            return "datasource";
        }
    }

    /**
     * map
     *
     * @return
     */
    public int size() {
        return map.get().size();
    }

    /**
     *
     *
     * @return
     */
    public java.util.Iterator getNameIterator() {
        return this.map.get().keySet().iterator();
    }

    /**
     *
     *
     * @param name
     * @return
     */
    public XMLable getValueByName(String name) {
        return (XMLable) this.map.get(name);
    }

    /**
     *
     *
     * @param name
     * @param value
     */
    public void putValueByName(String name, XMLable value) {
        if (value == null) {
            this.map.remove(name);
        } else {
            this.map.put(name, value);
        }
    }

    /**
     *
     *
     * @param oldName
     * @param newName
     * @return
     */
    public boolean rename(String oldName, String newName) {
        map.rename(oldName, newName);
        return true;
    }

    /**
     *
     *
     * @param name
     */
    public void removeValueByName(String name) {
        this.map.remove(name);
    }

```

```

}

/**
 *
 */
public void clearAll() {
    this.map.clearAll();
}

}

public static class ConnectionN extends N {
    public ConnectionN() {
    }
}

}

public static void main(String[] args) {
    DataSourceRefactor dataSourceRefactor = new DataSourceRefactor();
    DBCPConnectionPoolAttr dbcpConnectionPoolAttr = new DBCPConnectionPoolAttr();
    dbcpConnectionPoolAttr.setInitialSize(111);
    dbcpConnectionPoolAttr.setMaxActive(111);
    dbcpConnectionPoolAttr.setMaxIdle(111);
    dbcpConnectionPoolAttr.setMaxWait(111);
    dbcpConnectionPoolAttr.setMinIdle(111);
    dbcpConnectionPoolAttr.setMinEvictableIdleTimeMillis(111);
    dbcpConnectionPoolAttr.setNumTestsPerEvictionRun(111);
    dbcpConnectionPoolAttr.setTimeBetweenEvictionRunsMillis(111);
    dbcpConnectionPoolAttr.setValidationQuery("heihei");
    dbcpConnectionPoolAttr.setTestOnBorrow(false);
    dbcpConnectionPoolAttr.setTestOnReturn(false);
    dbcpConnectionPoolAttr.setTestWhileIdle(false);
    JDBCDatabaseConnection jndiDatabaseConnection = new JDBCDatabaseConnection();
    jndiDatabaseConnection.setDbcpAttr(dbcpConnectionPoolAttr);
    jndiDatabaseConnection.setUser("2222");
    jndiDatabaseConnection.setURL("fdsfafasfaf");
    jndiDatabaseConnection.setPassword("sfsafsafhb");
    dataSourceRefactor.putConnection("chen", jndiDatabaseConnection);
    JNDIDatabaseConnection jndiDatabaseConnection1 = new JNDIDatabaseConnection();
    jndiDatabaseConnection1.setJNDIName("liang");
    Hashtable hashtable = new Hashtable();
    hashtable.put("1", "1");
    hashtable.put("2", "2");
    jndiDatabaseConnection1.setContextHashtable(hashtable);
    dataSourceRefactor.putConnection("liang", jndiDatabaseConnection1);
}
}

```

main,

```

id value
datasource.nameConnectionMap.map.chen.dbcpAttr.initialSize 111
datasource.nameConnectionMap.map.chen.dbcpAttr.maxActive 111
datasource.nameConnectionMap.map.chen.dbcpAttr.maxIdle 111
datasource.nameConnectionMap.map.chen.dbcpAttr.maxWait 111
datasource.nameConnectionMap.map.chen.dbcpAttr.minEvictableIdleTimeMillis 111
datasource.nameConnectionMap.map.chen.dbcpAttr.minIdle 111
datasource.nameConnectionMap.map.chen.dbcpAttr.numTestsPerEvictionRun 111
datasource.nameConnectionMap.map.chen.dbcpAttr.testOnBorrow false
datasource.nameConnectionMap.map.chen.dbcpAttr.testOnReturn false
datasource.nameConnectionMap.map.chen.dbcpAttr.testWhileIdle false
datasource.nameConnectionMap.map.chen.dbcpAttr.timeBetweenEvictionRunsMillis 111
datasource.nameConnectionMap.map.chen.dbcpAttr.validationQuery heihei
datasource.nameConnectionMap.map.chen.driver true
datasource.nameConnectionMap.map.chen.encryptPassword true
datasource.nameConnectionMap.map.chen.newCharsetName
datasource.nameConnectionMap.map.chen.originalCharsetName
datasource.nameConnectionMap.map.chen.password sfsafsafhb
datasource.nameConnectionMap.map.chen.url fdsfafasfaf
datasource.nameConnectionMap.map.chen.user 2222
datasource.nameConnectionMap.map.liang.contextHashtable.1 1
datasource.nameConnectionMap.map.liang.contextHashtable.2 2
datasource.nameConnectionMap.map.liang.jndiName liang
datasource.nameConnectionMap.map.liang.newCharsetName
datasource.nameConnectionMap.map.liang.originalCharsetName

24 rows in set (0.00 sec)

mysql> select * from helper;
+----+-----+
| id | className |
+----+-----+
| datasource.nameConnectionMap.map.chen | com.Fr.data.impl.JDBCDatabaseConnection |
| datasource.nameConnectionMap.map.liang | com.Fr.data.impl.JNDIDatabaseConnection |
+----+-----+

```

```

public class DBCPConnectionPoolAttr extends UniqueKey implements XMLReadable, Cloneable, java.io.Serializable {

    private static final int MAX_ACTIVE = 50;
    private static final int MAX_IDLE = 10;
    private static final int MAX_WAIT = 10000;
    private static final int MIN_EVICTABLE_IDLE_TIME_MILLIS = 1000 * 60 * 30;

    private ConfigHolder<Integer> initialSize = HolderFactory.simpleHolder("initialSize", 0, getNameSpace());
    // :,
private ConfigHolder<Integer> maxActive = HolderFactory.simpleHolder("maxActive", 50, getNameSpace());
// :,,
private ConfigHolder<Integer> maxIdle = HolderFactory.simpleHolder("maxIdle", 10, getNameSpace());
// :,,0
private ConfigHolder<Integer> minIdle = HolderFactory.simpleHolder("minIdle", 0, getNameSpace());
// :,(,)-1
private ConfigHolder<Integer> maxWait = HolderFactory.simpleHolder("maxWait", 10000, getNameSpace());
// SQL,..,SQL SELECT
private ConfigHolder<String> validationQuery = HolderFactory.simpleHolder("validationQuery", StringUtils.EMPTY,
getNameSpace());
// ...
// : true,validationQuery
private ConfigHolder<Boolean> testOnBorrow = HolderFactory.simpleHolder("testOnBorrow", true, getNameSpace());
//
// : true,validationQuery
private ConfigHolder<Boolean> testOnReturn = HolderFactory.simpleHolder("testOnReturn", true, getNameSpace());
// (,..
// : true,validationQuery
private ConfigHolder<Boolean> testWhileIdle = HolderFactory.simpleHolder("testWhileIdle", false,
getNameSpace());
// ..
private ConfigHolder<Integer> timeBetweenEvictionRunsMillis = HolderFactory.simpleHolder
("timeBetweenEvictionRunsMillis", -1, getNameSpace());
// ()
private ConfigHolder<Integer> numTestsPerEvictionRun = HolderFactory.simpleHolder("numTestsPerEvictionRun", 3,
getNameSpace());
// ()
private ConfigHolder<Integer> minEvictableIdleTimeMillis = HolderFactory.simpleHolder
("minEvictableIdleTimeMillis", 1000 * 60 * 30, getNameSpace());

    public int getInitialSize() {
        return initialSize.get();
    }

    public void setInitialSize(int initialSize) {
        this.initialSize.set(initialSize);
    }

    public int getMaxActive() {
        return maxActive.get();
    }

    public DBCPConnectionPoolAttr() {
    }

    /**
     *
     *
     * @param maxActive
     */
    public void setMaxActive(int maxActive) {
        this.maxActive.set(maxActive);
    }

    public int getMaxIdle() {
        return maxIdle.get();
    }
}

```

```

/**
 * @param maxIdle
 */
public void setMaxIdle(int maxIdle) {
    this.maxIdle.set(maxIdle);
}

public int getMinIdle() {
    return minIdle.get();
}

public void setMinIdle(int minIdle) {
    this.minIdle.set(minIdle);
}

public int getMaxWait() {
    return maxWait.get();
}

public void setMaxWait(int maxWait) {
    this.maxWait.set(maxWait);
}

public String getValidationQuery() {
    return validationQuery.get();
}

public void setValidationQuery(String validationQuery) {
    this.validationQuery.set(validationQuery);
}

/**
 *
 *
 * @return true
 */
public boolean isTestOnBorrow() {
    return testOnBorrow.get();
}

public void setTestOnBorrow(boolean testOnBorrow) {
    this.testOnBorrow.set(testOnBorrow);
}

/**
 *
 *
 * @return true
 */
public boolean isTestOnReturn() {
    return testOnReturn.get();
}

public void setTestOnReturn(boolean testOnReturn) {
    this.testOnReturn.set(testOnReturn);
}

/**
 * ()
 *
 * @return true
 */
public boolean isTestWhileIdle() {
    return testWhileIdle.get();
}

public void setTestWhileIdle(boolean testWhileIdle) {
    this.testWhileIdle.set(testWhileIdle);
}

```

```
public int getTimeBetweenEvictionRunsMillis() {
    return timeBetweenEvictionRunsMillis.get();
}

public void setTimeBetweenEvictionRunsMillis(int timeBetweenEvictionRunsMillis) {
    this.timeBetweenEvictionRunsMillis.set(timeBetweenEvictionRunsMillis);
}

public int getNumTestsPerEvictionRun() {
    return numTestsPerEvictionRun.get();
}

public void setNumTestsPerEvictionRun(int numTestsPerEvictionRun) {
    this.numTestsPerEvictionRun.set(numTestsPerEvictionRun);
}

public int getMinEvictableIdleTimeMillis() {
    return minEvictableIdleTimeMillis.get();
}

public void setMinEvictableIdleTimeMillis(int minEvictableIdleTimeMillis) {
    this.minEvictableIdleTimeMillis.set(minEvictableIdleTimeMillis);
}
}
```