

JNDI Manager for Tomcat 7

Version 1.0 © 2012 Ironclaws

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Overview

The JNDI Manager for Tomcat 7 provides a support library and manager for accessing and modifying JNDI on Apache Tomcat 7 Servlet container.

Manager Interface

The manager interface appears as follows:

JNDI Manager v.1.0 Show XML Remap ?

Initial Context: java.naming.factory.initial Environment: -Djndirutilstomcatservice.configuration=E:\remaptest.xml

Name in Namespace: java:

Search Root: java:

JNDI Location	Name	Class Name	Object Hash	
java:/comp/Resources/jndimanager.jsp	jndimanager.jsp	org.apache.naming.resources.FileDirContext\$FileResource	1502499	
java:/comp/Resources/css	css	org.apache.naming.resources.FileDirContext	19399220	
java:/comp/env/jta/TransactionSynchronizationRegistry	TransactionSynchronizationRegistry	bitronix.tm.BitronixTransactionSynchronizationRegistry	1701260	
java:/comp	comp	org.apache.naming.NamingContext	20449572	
java:/comp/Resources/WEB-INF	WEB-INF	org.apache.naming.resources.FileDirContext	32739035	
java:/comp/Resources/docs	docs	org.apache.naming.resources.FileDirContext	27844611	
java:/comp/Resources/images	images	org.apache.naming.resources.FileDirContext	716817	
java:/comp/env/jta/UserTransaction	UserTransaction	bitronix.tm.BitronixTransactionManager	30365027	
java:/comp/env/jdbc/testDS1NonBTM	testDS1NonBTM	org.apache.tomcat.dbcp.dbcp.BasicDataSource	21303164	
java:/comp/env/jdbc	jdbc	org.apache.naming.NamingContext	4708910	
java:/comp/env/jdbc/testDS1	testDS1	bitronix.tm.resource.jdbc.PoolingDataSource	16500942	
java:/comp/Resources/META-INF	META-INF	org.apache.naming.resources.FileDirContext	3028574	
java:/comp/env/jta	jta	org.apache.naming.NamingContext	11437796	


Current JNDI Contents

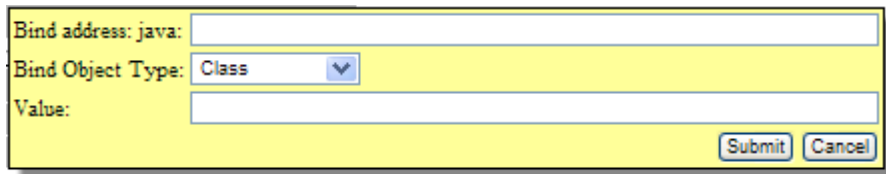
The icons have the following actions:

	Show configuration XML
	Show Help
	Refresh JNDI List Details
	Add New JNDI Item
	Show JNDI Item Detail
	Edit JNDI Item
	Delete JNDI Item

Procedures

Adding a new JNDI Item

1. Click the icon: 
2. The following form will show:



Bind address: java:

Bind Object Type:


Value:

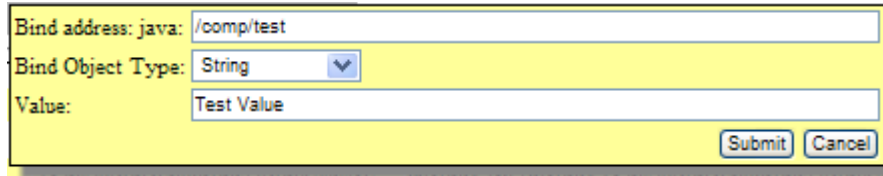
3. Enter a bind address: eg: comp/jdbc
4. Select Bind Object Type
5. Enter Value

Support Bind Object Types are as follow:

Bind Object Type	Description	Value Required
Initial Context	New root node point. To create an item: comp/a/b an initial context node comp/a is required.	No. If not specified then default initial context type will be created.
Object	Instance of Class Specify class to invoke for Object. Default parameter- less constructor required.	Yes
String	String Object	No
Integer	Integer Object	Yes / Numeric
Class	Class Object Non-instantiated class definition.	Yes

Edit JNDI Item

1. Click the icon: 
2. The edit form will appear as follows for the relevant JNDI Item:



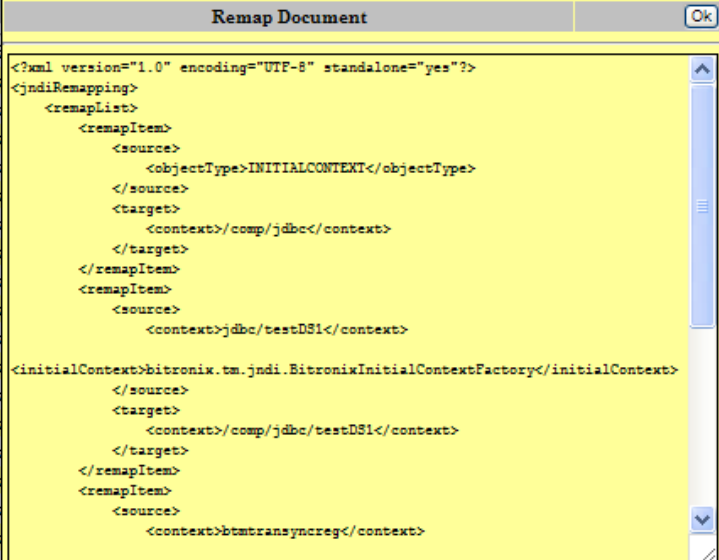
The screenshot shows a yellow dialog box for editing a JNDI item. It contains three input fields: 'Bind address: java:' with the value '/comp/test', 'Bind Object Type:' with a dropdown menu set to 'String', and 'Value:' with the value 'Test Value'. At the bottom right, there are two buttons: 'Submit' and 'Cancel'.

The editing procedure is the same as per the add item procedure – however the Bind address may not be changed.

Viewing XML Configuration File

The implied XML for JNDI items set through this management tool can be accessed by clicking the 'Show XML Remap' button.

The XML will be displayed as follows:



```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<jndiRemapping>
  <remapList>
    <remapItem>
      <source>
        <objectType>INITIALCONTEXT</objectType>
      </source>
      <target>
        <context>/comp/jdbc</context>
      </target>
    </remapItem>
    <remapItem>
      <source>
        <context>jdbc/testDS1</context>
      </source>
      <target>
        <context>/comp/jdbc/testDS1</context>
      </target>
    </remapItem>
    <remapItem>
      <source>
        <context>bitronix.tm.jndi.BitronixInitialContextFactory</initialContext>
      </source>
      <target>
        <context>/comp/jdbc/testDS1</context>
      </target>
    </remapItem>
    <remapItem>
      <source>
        <context>btmtransyncreg</context>
      </source>
      <target>
        <context>/comp/jdbc/testDS1</context>
      </target>
    </remapItem>
  </remapList>
</jndiRemapping>
</xml>
```

Clicking within the document region will cause the document text to be selected for manual copying.

Remap Container XML

The remap container XML can be derived mainly from within the JNDI manager.

There does exist functionality available for startup remapping which is not accessible from within the management interface at present as follows.

Remap Item Processing

Remap items should be processed sequentially from top to bottom of the remapping document.

Remapping Object from existing Initial Context

The following example demonstrates how to remap a copy of object 'jdbc/testDS1' defined in some.other.InitialContextFactory to Tomcat JNDI node: java:/comp/jdbc/testDS1

```
<remapItem>
  <source>
    <context>jdbc/testDS1</context>
    <initialContext>some.other.InitialContextFactory</initialContext>
  </source>
  <target>
    <context>/comp/jdbc/testDS1</context>
  </target>
</remapItem>
```

Note: The remote context should not specify items in the java: name space, as Tomcat will always default to it's own JNDI for looking up items in that context.