How to Configure the Web Services Server in Aleph

Versions 22 and later
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Introduction

Aleph offers features that are activated through the Web Services server.

For example, Aleph’s RESTful API is activated through the Web Services server. More details can be found in EL commons: http://www.exlibrisgroup.org/display/AlephOI/*Introduction+to+Aleph+RESTful+API

In addition, the SMS proxy is activated through the Web Services sever. More details can be found in the SMS Proxy User Guide.

In Aleph 18, 20 and 21 these features were activated through JBoss. In Aleph 22 and later these features are activated through Apache Tomcat.

Starting and Stopping the Web Services Server

Use util/w/3/7/9 to run the Web Services server and util/w/2/7/1 to stop the Web Services server.

To start the Web Services (Apache Tomcat) server automatically with Aleph, add the following to alephe/aleph_startup:

```
#*******************************************
# Apache Tomcat
#*******************************************
cd $aleph_dev/ng/aleph/home/system/bin
bash jboss_startup.sh
echo " "
echo "All done "
```

Web Services Server General Configuration

The /alephe/jboss_conf/main.properties file includes required configurations for the Tomcat server. This file is automatically created during installation. If necessary, Tomcat can be configured after upgrading from the old Aleph version.

To configure Web Services server:

1. Stop Tomcat using util/w/2/7/1.
2. Configure the following files according to customer’s definitions:
Advanced Web Services Server Configuration – Tomcat

The following instructions are relevant for Aleph 22 and later with Tomcat 7.

Configuring the Tomcat Server to Use Local IP Addresses

You may want to configure the Tomcat server to use the actual local IP address rather than localhost.

To configure the Tomcat server to use local IP address:

1. Add the following to $alephe_root/www_server.conf:
   ```
   setenv local_ip_address a.b.c.d (the IP address in digits)
   ```

2. In $alephe_root/jboss_conf/main.properties:
   a. Add the following line:
      ```
      xservice.server.use_defined_name=Y
      ```
   b. Make sure that the variable xservice.server.name has the value of the local IP address.

Configuring Tomcat to Accept Requests Only From Specific IP Addresses

By default, new Aleph installations contain this line in server.xml, in the Tomcat conf directory:
With the above line, Tomcat allows access only from the local IPs. All other IPs are blocked.

You may want to configure the Tomcat server to accept requests from other specific IP addresses, for example – only from the Primo server.

To do this, add the IP addresses to the above line. Note that addressed should be in regular expression format, separated by "|" sign, as shown in the above line.

### Tomcat Log Level Configuration

Tomcat can create access log files and detailed debug message information in the server log file, which is located in the in the jlog directory.

**To create a Tomcat access log file:**

1. Go to the Tomcat `conf` directory:
   
   ```bash
   /aleph_dev/ng/aleph/home/system/thirdparty/tomcat/conf/
   ```

2. In the file `server.xml`, uncomment the following line:

   ```xml
   org.apache.catalina.valves.AccessLogFileValve
   ```

   A log file named `localhost_access_log.<date>.log` is created in the jlog directory.

**To enable debug level messages in the server log file:**

1. Go to the Tomcat “lib” directory:

   ```bash
   /aleph_dev/ng/aleph/home/system/thirdparty/tomcat/lib/
   ```

2. In the `log4j.xml` file, below the following line:

   ```xml
   <!-- Limit categories -->
   ```

   add the following:

   ```xml
   <category name="com.exlibris">
   <priority value="DEBUG"/>
   </category>
   ```

   This can be added after the `</appender>` element and before the `<root> ...` element.

### Configuring Tomcat to Compress All Sent Data

You can compress the text data sent (for example to Primo) in order to save server bandwidth.
To configure the JBoss server to compress all sent data:

1. Go to the Tomcat conf directory:
   $aleph_dev/ng/aleph/home/system/thirdparty/tomcat/conf/

2. In the file server.xml, below the line:
   <Connector protocol="HTTP/1.1" port="1891"
   address="${jboss.bind.address}"

   add the following:

   compression="on" compressionMinSize="2048"
   compressableMimeType="text/html,application/xml"