

## Download and Install

### Download the Docmosis Tornado Server

The Tornado software and other resources for Tornado can be downloaded from the Docmosis web site under the Resources area:

<https://www.docmosis.com/resources/tornado.html>

You will also need to obtain a license key to allow the server to run. Free trial licenses are available on request or by signing up to a free trial under the Docmosis “Try” menu on the web site.

### Install LibreOffice

Docmosis works best with LibreOffice and the “Still” edition is the most appropriate Libre Office edition for production environments. Libre Office is available here:

<https://www.libreoffice.org/download/libreoffice-still/>

Docmosis works with either the 32 or 64 bit editions. You must make sure you choose the 32 bit or 64 bit version that matches your platform and the version of Java you will be using. They should all be 32 bit or all be 64 bit.

### Install Java 6 or Later

Install the latest version of Java if you do not already have it.

<https://java.com/en/download/manual.jsp>

Note: if you have installed a 32-bit version of LibreOffice you will need a 32-bit version of Java.

## Starting and Connecting

The following commands assume the Tornado distribution is called docmosisTornado.war. This name may be slightly different so you should adjust the following commands to refer to the file you downloaded.

### To launch the server

Launching the server is easy:

```
java -jar docmosisTornado.war
```

The download also contains example scripts:

```
startTornado.bat  
startTornado.sh
```

That can launch Tornado for you. The scripts contain comments about some common settings you can apply.

By default, Tornado will run on port 8080. The server will log what it is doing to the screen. Later when you have completed configuration, logging will move to the configured location.

## 32-Bit vs 64-Bit

If you see warnings about 32 bit or 64 bit issues, remember the golden rule:

You must make sure you choose the 32 bit or 64 bit version of Libre Office that matches your platform and the version of Java you will be using. They should all be 32 bit or all be 64 bit.

On Windows, if LibreOffice is installed under “C:\Program Files” – then it is a 64-bit version and you will need to use a 64-bit Java installed in “C:\Program Files”. If LibreOffice is installed under “C:\Program Files (x86)” – then it is a 32-bit version and you will need to use a 32-bit Java installed in “C:\Program Files (x86)”.

On OSX, the Java installed is typically a 64 bit version so you should install a 64 bit Libre Office.

## Choosing a Different Port

If you have a requirement to use a different port for the server, you can override the default as follows:

```
java -Dport=8090 -jar docmosisTornado.war
```

## Control of Logging

Logging of information by Tornado can be controlled by several command line settings:

Setting	Description
<code>log.level=debug info error</code>	Specify the level of logging to the console and log files. eg: <code>java -Dlog.level=debug -jar docmosisTornado.war</code>
<code>log4j.config.file=path</code>	Specify log4j logging configuration file. eg: <code>java -Dlog4j.config.file=c:/projects/log4j.properties -jar docmosisTornado.war</code>
<code>java.util.logging.config.file=path</code>	Specify the Java Util logging configuration file. eg: <code>java -Djava.util.logging.config.file=c:/logging.properties ..</code>

## Configuring

When Tornado first runs, it will not have a valid license key, so you cannot yet generate documents.

You can connect to Tornado using any web browser by visiting this address:

```
http://localhost:8080/
```

This will present you with the Tornado Server configuration page on your first visit:

The diagram above illustrates the basics of the areas to be configured. The page provides valuable tool tips for the fields also when you hover your cursor over the field.

## Minimum Configuration

To start with you only need to enter values for the:

- *Licence Key*
- *LibreOffice Location*
- *Source Templates From*
- *Working Area.*

Then click on Save.

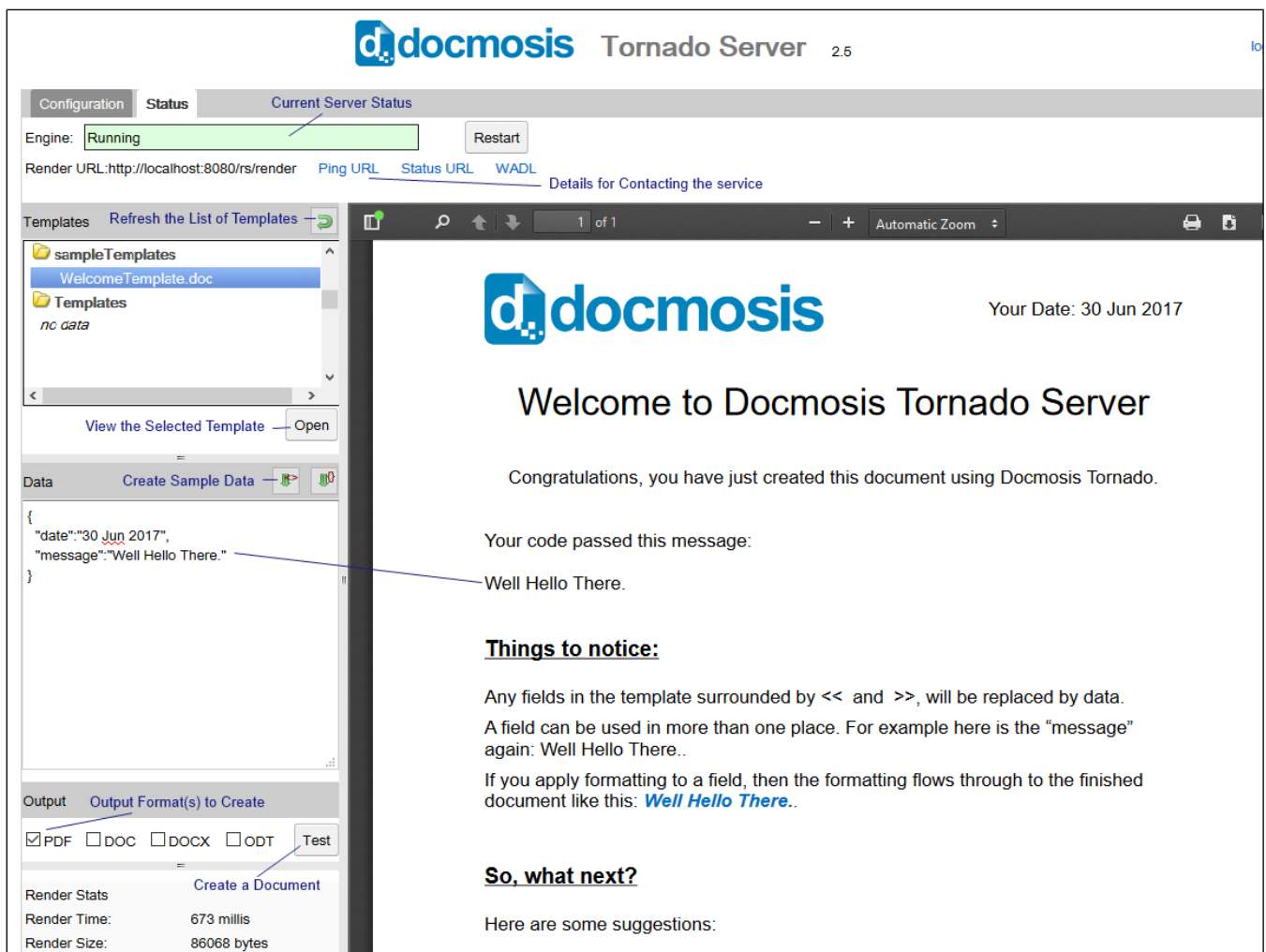
## Where Configuration Information Lives

Configuration information is saved against the account of the user running the server. This configuration is persisted in the Windows registry on Windows platforms and in the user's home directory on linux/unix based systems.

## Running the Server and Testing

Once you have completed and saved the Configuration Page, you can move to the Status page, to start the server.

In future, the server will start automatically when you run the `java -jar docmosisTornado.war` command.



The screenshot shows the Docmosis Tornado Server web interface. The top navigation bar includes 'Configuration', 'Status', and 'Current Server Status'. The 'Status' tab is selected, displaying 'Engine: Running' and a 'Restart' button. Below this, there are links for 'Render URL: http://localhost:8080/rs/render', 'Ping URL', 'Status URL', and 'WADL'. The main content area shows a 'Welcome to Docmosis Tornado Server' message with the date '30 Jun 2017'. A 'Data' section displays a JSON snippet: 

```
{"date":"30 Jun 2017", "message":"Well Hello There."}
```

. The 'Output' section shows 'PDF' selected as the output format. The 'Render Stats' section shows 'Render Time: 673 millis' and 'Render Size: 86068 bytes'.

## Templates

The Tornado Status Page allows you to view a list of your templates and open them (if you are running the server on your local machine). You can then edit and save your templates so you can test the changes immediately. Note that this will change the templates in the path you have configured, so don't modify templates unless you mean to.

## Creating Dummy Data

From the Tornado Status Page can create dummy data (either JSON or XML) based on the template you have selected. Tornado queries the template for fields and has its “best guess” at creating data that matches the template.

Templates can contain complicated structures for repeating and nested data, so you may need to adjust the generated data structure so that it looks like your expected data.

Tornado will generate data values : “value1”, “value2” and so on – which you can change to look more like your data.

## Creating a Document

You can create a document from the Tornado Status Page.

If you render a PDF only and your browser is configured with a PDF viewer, the output file will be displayed in the browser panel on the right.

If you choose any other formats, or combinations of formats, you will receive the rendered document as a download.

## Generating Documents from Your Application

The Tornado Status Page displays the Render URL to use for calling the Render service (just below the Engine status).

This is the URL to use with your client code / libraries to request documents to be rendered.

You should refer to the Tornado Web Services Guide in the Resources area of the Docmosis site <https://www.docmosis.com/resources/tornado.html> for details about invoking the render service.

## Comparing Tornado with Docmosis Cloud

Note that Docmosis Tornado provides only the render service. The Docmosis Cloud service provides other services to support producing documents in a cloud environment. The render service is identical to that provided by the cloud service except for:

1. The URL is different - you will direct the requests to your local Docmosis Tornado server instead of the public Cloud Service
2. The following REST web services are provided (more details are provided in the Tornado Web Services Guide):
  - a. “render” – create a document

- b. “getTemplateStructure” – get a JSON description of the structure of a template
  - c. “convert” – convert the supplied document to another format (without any data merging)
  - d. “ping” and “status” – determine the Tornado operational status
3. Store-to directives for cloud and AWS (Amazon S3) storage are not available
  4. REST clients do not need to supply an access key (unless you set one in the configuration tab)
  5. Emailing documents is supported as long as you have configured an email gateway into Docmosis Tornado configuration

## Monitoring Tornado

Tornado includes two web service end-points to support automated monitoring:

“ping” eg <http://localhost:8080/rs/ping>

“status” eg <http://localhost:8080/rs/status>

See the Tornado Web Services Guide for details about these monitoring end-points.

## More Help

Docmosis document generation provides a large number of features controlled from both the templates and from the data. To get the most out of Docmosis, please read the Developer Guide and Template Guides on the Docmosis web site under the Resources area:

<https://www.docmosis.com/resources/all-resources.html>

We hope you enjoy using Tornado.