

Advanced Server Configuration Options

The following is a list of advanced configuration options you can specify in a properties file. For details on working with properties files, as well as the most commonly-used options, see [Server Configuration](#).

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General Virtualize Options

- [misc.character.encoding](#)
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misc.character.encoding

Specifies the character encoding; valid values are any encodings available on the JVM being used. The default is UTF-8.

misc.default.timeout

The default timeout in milliseconds. Allows you to customize the length of delay after which Virtualize should consider your HTTP, JMS, or MQ requests to be “timed out.” The default is 30000 milliseconds.

misc.project.file.format

Specifies what file format to use for saving project files (e.g., .pva, .pvn, .changetemplate). Project files can be saved in three formats—XML, binary, and compressed XML. The default is XML.

misc.automatically.backup.project.files

Tells Virtualize to automatically back up and save the project files you are working on. The default is false.

misc.warn.file.size

Specifies the threshold at which the REST API will return an error about large .pva file size. You can then reduce the file size (and prevent performance problems) by dividing it into smaller files. The default is 20.

traffic.wizard.xpath.ignores

Lets you globally indicate that you want certain values (such as timestamps) ignored whenever:

- you are creating parameterized .pvas from traffic, and
- request body correlations are configured automatically.

Exclusions are specified in the format:

```
traffic.wizard.xpath.ignores=[element name 1]:[value pattern 1];[element name 2]:[value pattern 2];[element name 3]:[value pattern 3]
```

Default Value

```
*:[0-9]{4}-[0-9]{2}-[0-9]{2}T[0-9]{2}:[0-9]{2}:[0-9]{2}([.][0-9]{1,3})?(([-+][0-9]{2}:[0-9]{2})|Z)?
```

Example Usage

```
traffic.wiz-ard.xpath.ignores=*[0-9]{4}-[0-9]{2}-[0-9]{2}T[0-9]{2}:[0-9]{2}:[0-9]{2}([.][0-9]{1,3})?(((+)[0-9]{2}:[0-9]{2})|Z)?;uuid:[a-fA-F0-9]{8}-[a-fA-F0-9]{4}-[a-fA-F0-9]{4}-[a-fA-F0-9]{4}-[a-fA-F0-9]{12}
```

Backslashes in Regular Expressions Must be Escaped

When the backslash character (\) is used in the regular expression, it needs to be escaped. For example, the regex [\\d], which represents a single digit, would be entered as [\\d].

xml.conversion.data.model.directories

Specifies a comma-separated list of directories where fixed length data model files are located (for use in Fixed Length responders).

Proxy Options

- [proxy.enable.proxy](#)
- [proxy.use.system.proxy.configuration](#)
- [proxy.use.automatic.configuration.script](#)
- [proxy.enable.proxy.authentication](#)
- [proxy.same.proxy.server.for.all.protocols](#)
- [proxy.automatic.configuration.script.location](#)
- [proxy.http](#)
- [proxy.http.port](#)
- [proxy.ftp](#)
- [proxy.ftp.port](#)
- [proxy.secure](#)
- [proxy.secure.port](#)
- [proxy.username](#)
- [proxy.password](#)
- [proxy.exceptions](#)

proxy.enable.proxy

Enables/disables the application of Windows and IE proxy settings.

If Windows/IE are properly configured so that the proxy accesses the relevant websites, set this option to `false` and set the [proxy.use.system.proxy.configuration](#) option to `true`. Otherwise, set this option to `true` and set the other relevant proxy properties.

The default is `false`.

proxy.use.system.proxy.configuration

If Windows and IE (which use the same settings) are configured to properly use the proxy to access the relevant websites, set this property to `true`.

The default is `true`.

proxy.use.automatic.configuration.script

Enables/disables ability to use an automatic configuration script. Set this to `true` and enter the proxy address with [proxy.automatic.configuration.script.location](#) setting.

The default is `false`.

proxy.enable.proxy.authentication

If your proxy server requires authentication, set this property to `true`, then enter a valid user name and password with `proxy.username` and `proxy.password`. The default is `false`.

proxy.same.proxy.server.for.all.protocols

If you want to use the same proxy server for all protocols, set this property to true, then enter the address and port of the proxy server you want to use in the `proxy.http`, `proxy.ftp`, `proxy.secure`, and `proxy.*.port` properties. The default is true.

proxy.automatic.configuration.script.location

The value should be a URL to the script: either an HTTP(S) URL or a file URL. File URLs should be formatted as "file:///" followed by the file system path where the proxy autoconfiguration script lives. For example, on Windows this could be `file:///c:/Users/user/scripts/proxy.pac`. On Linux, it might be [file:///home/machine/scripts/proxy.pac](#).

proxy.http

Address of the http proxy to use. If the same proxy server will be used for all protocols, this is the value that will be used.

proxy.http.port

Port of the http proxy to use. If the same proxy server will be used for all protocols, this is the value that will be used.

proxy.ftp

Address of the ftp proxy to use.

proxy.ftp.port

Port of the ftp proxy to use.

proxy.secure

Address of the secure proxy to use.

proxy.secure.port

Port of the secure proxy to use.

proxy.username

Username to use when proxy authentication is enabled.

proxy.password

Password to use when proxy authentication is enabled.

proxy.exceptions

If you want to allow Web traffic from designated IP addresses to pass through directly (avoiding the proxy), enter those IP addresses in this property. If you enter multiple addresses, use a semicolon (;) to separate the entries.

Security Options

- [security.mq.ssl.trust.store.location](#)
- [security.mq.ssl.key.store.location](#)
- [security.mq.ssl.key.store.password](#)

security.mq.ssl.trust.store.location

Specifies the location of the trust store to be used for Server-Side SSL (authentication of the Queue Manager by the client).

security.mq.ssl.key.store.location

Specifies the location of the key store to be used for Client-Side SSL (authentication of the client by the Queue Manager).

security.mq.ssl.key.store.password

Specifies the MQ SSL Key Store password.

System Properties

You can set the following system properties when executing the startup command to fine-tune server operation.

Asynchronous Processing

Asynchronous processing enables better concurrency when responders are configured with delays (e.g., in performance profiles). You can control how the server processes requests by setting the following system properties during startup.

parasoft.async.support.mode

This property sets the asynchronous processing mode. The following modes are supported:

- `ON` - all requests are processed asynchronously
- `DELAY` - only response that have a delay are processed asynchronously, default
- `OFF` - no asynchronous processing

parasoft.async.support.workers

This property sets the number of worker threads available for performing asynchronous processing. Default is 200.

Supported Listeners

HTTP, JMS, MQ and Http Listeners are supported.

Application Performance Monitoring

You can monitor the SOAtest and Virtualize Server with an APM tool, such as Dynatrace or AppDynamics. Refer to your tool's documentation for information about deploying APM software to monitor the SOAtest and Virtualize Server.

AppDynamics Configuration

Additional SOAtest and Virtualize Server configuration is required to deploy AppDynamics.

1. Open the `<SERVER_INSTALL>/WEB-INF/osgi.properties` file in an editor.
2. Add the `com.singularity` class package used by App Dynamics to the `org.osgi.framework.bootdelegation` property using a wild card, e.g.:

```
org.osgi.framework.bootdelegation=sun.reflect,org.w3c.dom,org.w3c.dom.events,__redirected,com.singularity.*
```

3. Save the file and restart the server.