

# Server Health Checks

## Enabling health checks

You may wish to periodically poll Posit Workbench to ensure that it's still responding to requests as well as to examine various indicators of server load. You can enable a health check endpoint using the `server-health-check-enabled` setting. For example:

```
# /etc/rstudio/rserver.conf
server-health-check-enabled=1
```

After restarting the server, the following health-check endpoint will be available:

```
http://<server-address-and-port>/health-check
```

By default, the output of the health check will appear as follows:

```
active-sessions: 1
idle-seconds: 0
cpu-percent: 0.0
memory-percent: 64.2
swap-percent: 0.0
load-average: 4.1
license-status: Activated
license-days-left: 153
license-allow-product-usage: 1
```

## Customizing responses

The response to the health check is determined by processing a template that includes several variables. The default template is:

```
active-sessions: #active-sessions#
idle-seconds: #idle-seconds#
cpu-percent: #cpu-percent#
memory-percent: #memory-percent#
swap-percent: #swap-percent#
load-average: #load-average#
license-status: #license-status#
license-days-left: #license-days-left#
license-allow-product-usage: #license-allow-product-usage#
```

You can customize this template to return an alternate format (e.g. XML or JSON) that is parse-able by an external monitoring system. To do this you simply create a template and copy it to `/etc/rstudio/health-check` For example, an XML format:

```
<!--/etc/rstudio/health-check-->
<?xml version="1.0" encoding="UTF-8"?>
<health-check>
  <active-sessions>#active-sessions#</active-sessions>
  <idle-seconds>#idle-seconds#</idle-seconds>
  <cpu-percent>#cpu-percent#</cpu-percent>
  <memory-percent>#memory-percent#</memory-percent>
  <swap-percent>#swap-percent#</swap-percent>
  <load-average>#load-average#</load-average>
  <license-status>#license-status#</license-status>
  <license-days-left>#license-days-left#</license-days-left>
  <license-allow-product-usage>#license-allow-product-usage#</license-allow-product-usage>
</health-check>
```

Or a [Prometheus](#) endpoint. Prometheus is an open-source systems monitoring and alerting toolkit with a custom input format:

```
# /etc/rstudio/health-check
# HELP active_sessions health_check metric Active RStudio sessions
# TYPE active_sessions gauge
active_sessions #active-sessions#
# HELP idle_seconds health_check metric Time since active RStudio sessions
# TYPE idle_seconds gauge
idle_seconds #idle-seconds#
# HELP cpu_percent health_check metric cpu (percentage)
# TYPE cpu_percent gauge
cpu_percent #cpu-percent#
```

```
# HELP memory_percent health_check metric memory used (percentage)
# TYPE memory_percent gauge
memory_percent #memory-percent#
# HELP swap_percent health_check metric swap used (percentage)
# TYPE swap_percent gauge
swap_percent #swap-percent#
# HELP load_average health_check metric cpu load average
# TYPE load_average gauge
load_average #load-average#
```

## Changing the URL

It's also possible to customize the URL used for health checks. Posit Workbench will use the first file whose name begins with `health-check` in the `/etc/rstudio` directory as the template, and require that the full file name be specified in the URL. For example, a health check template located at the following path:

```
/etc/rstudio/health-check-B64C900E
```

Would be accessed using this URL:

```
http://<server-address-and-port>/health-check-B64C900E
```

Note that changes to the health check template will not take effect until the server is restarted.