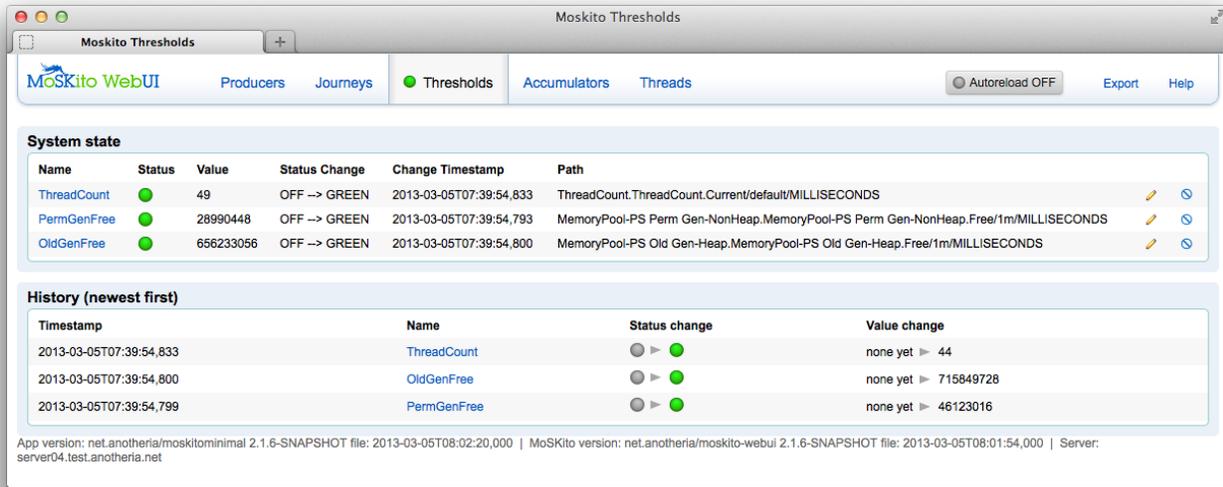


# 6. Thresholds

- What is a threshold?
  - Threshold Concepts to Remember
- Adding Thresholds
  - Via WebUI
  - Programmatically
- Thresholds Tab
  - Threshold screen
  - History Display Section
  - Inactive Thresholds



## What is a threshold?

A thresholds marks the performance boundaries for a producer. When a producer goes beyond (above or below) these boundaries, threshold changes status, thus letting you know this producer needs attention.

## Threshold Concepts to Remember

- **There are not build-in thresholds.**  
It is you who create them, every time
- **Thresholds are not created automatically.**  
You choose a producer and then add a threshold to it.
- **A threshold monitors one parameter.**  
Only one, not several.
- **There are no default boundary values for new thresholds.**  
It's you who defines the values, thus telling a threshold when to change color.

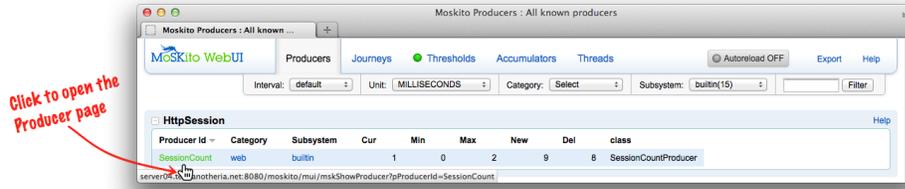
## Adding Thresholds

### Via WebUI

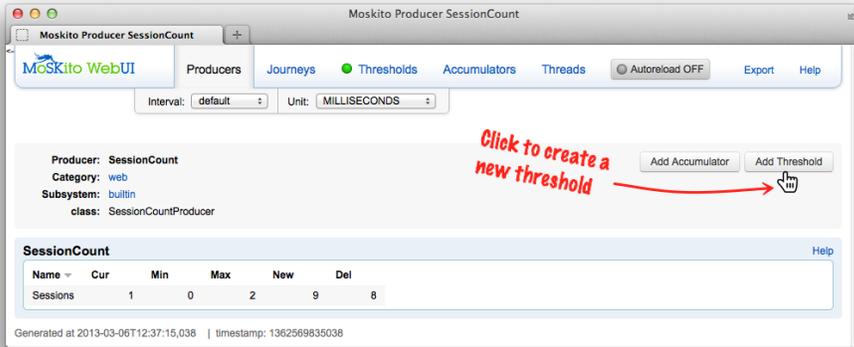
To add a threshold via WebUI:

First, you'll have to know what parameter are you going to monitor. Let's continue with an example above and say we would like to know *the SessionCount* (the number of sessions) on our website.

1. Go to **Producers** tab.
2. Find and click the needed producer (**SessionCount** in our case)

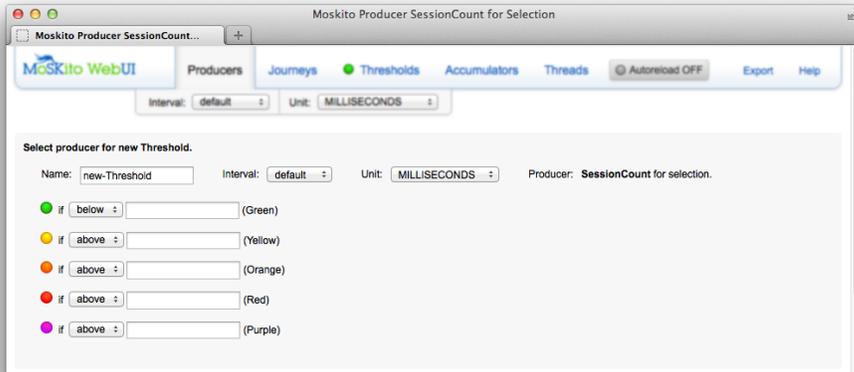


3. On the appearing producer page, click the **Add Threshold** button (upper-right corner).

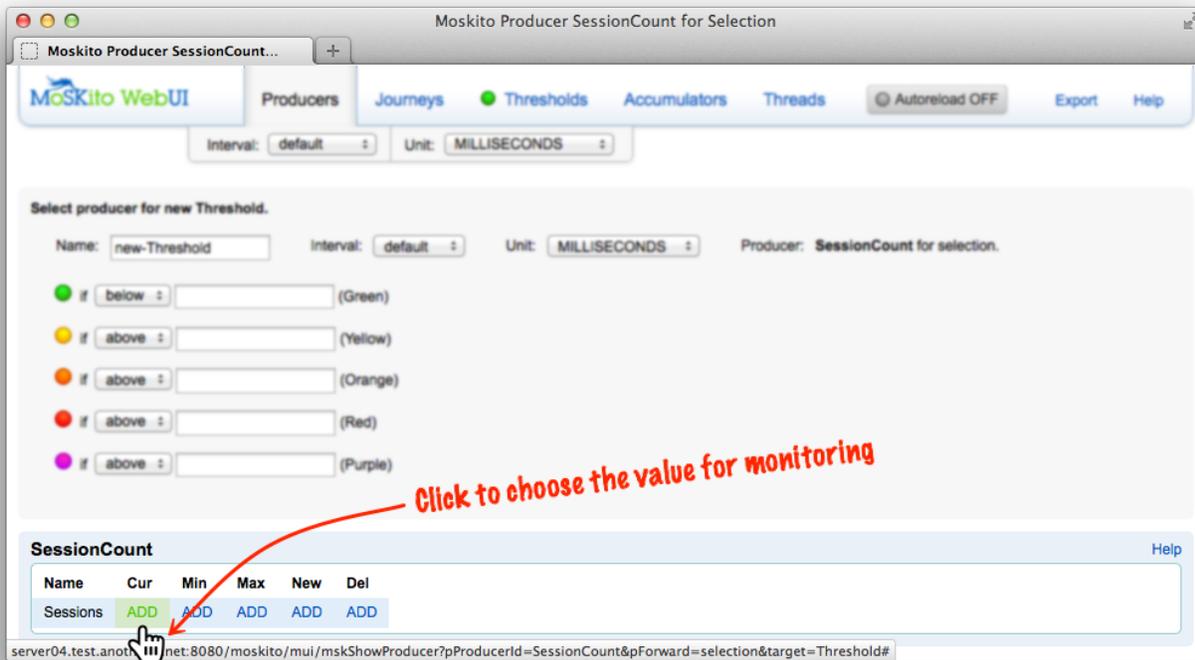


4. In the appearing New Threshold box:

- i. name the new threshold (**Name** box),
- ii. select the monitoring interval (**Interval** menu),
- iii. choose the measurement units (**Unit** menu),
- iv. specify boundary values for threshold statuses:
  1. choose if the value should be above/below your entry (above/below menus),
  2. fill in the values.



5. Go to Stats and StatValues Table below the New Threshold box, choose the value to monitor and click the corresponding **ADD** link.



Congratulations, a new threshold has been added!

Now you can see it among the others on the **Thresholds** tab.

## Programmatically

This section shall be added soon.

For now, please kindly add thresholds via WebUI.

## Thresholds Tab

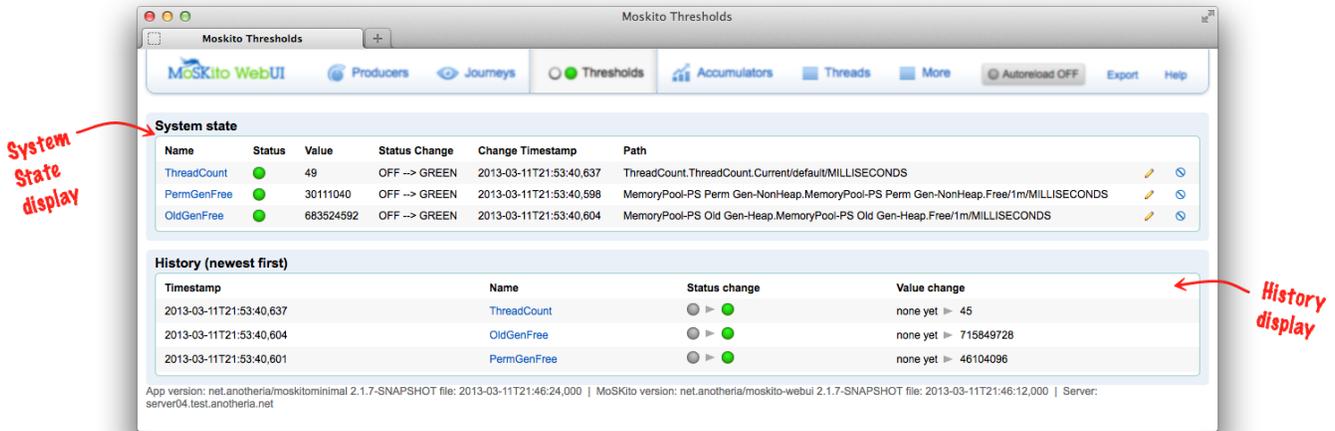
To see all active thresholds: click the **Thresholds** tab.



The tab's header also has an indicator, it shows the worst status of all available thresholds.

The **Thresholds** tab has 2 display sections:

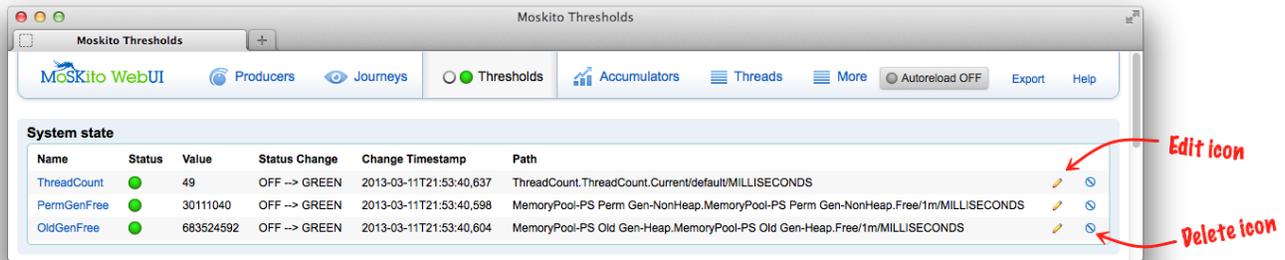
1. [System state](#),
2. [History](#).



As with all other tabs, you may set [auto-reloading](#), [export](#) threshold data or [view help](#).

## System State Display Section

This section shows all thresholds that you've created and have not deleted yet.



The section has 6 columns:

Column	Shows...
Name	threshold name
Status	threshold state (within the last interval)
Value	threshold value (within the last interval)
Status Change	the last status change for the threshold (this change might have occurred within older intervals, not necessarily within last one)
Change Timestamp	date and time of the last status change
Path	threshold description, used in internal MoSKito data exchange configuration files.  The description uses the following format:  <Producer.Stat.Value/Interval/TimeUnit> <b>For example:</b> <i>SessionCount.Sessions.Cur/1m/MILLISECONDS</i>

The section also has 2 control elements: **Edit** and **Delete** icons.

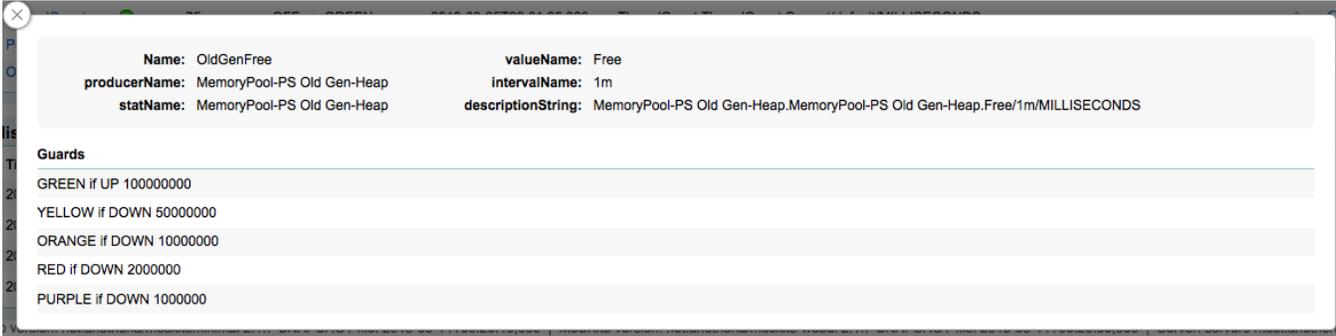
### To edit a threshold:

1. Click the corresponding **Edit** icon (✎) on the same line with the needed threshold.
2. On the appearing page, specify the new name or the boundary value.
3. Click the **Update** button.

**To delete a threshold:** click the corresponding **Delete** icon (🗑) on the same line with the needed threshold.

## Threshold screen

The threshold screen is a private threshold's space that contains all the essential threshold info (including settings for boundary values).



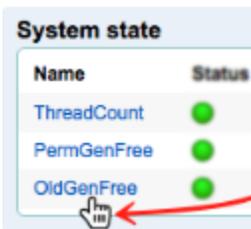
The screenshot shows a modal window for a threshold named 'OldGenFree'. It displays the following configuration:

- Name:** OldGenFree
- valueName:** Free
- producerName:** MemoryPool-PS Old Gen-Heap
- intervalName:** 1m
- statName:** MemoryPool-PS Old Gen-Heap
- descriptionString:** MemoryPool-PS Old Gen-Heap.MemoryPool-PS Old Gen-Heap.Free/1m/MILLISECONDS

Below the configuration, there is a section titled 'Guards' with the following rules:

- GREEN if UP 100000000
- YELLOW if DOWN 50000000
- ORANGE if DOWN 10000000
- RED if DOWN 2000000
- PURPLE if DOWN 1000000

**To see the threshold screen:** select a threshold and click its name link (in the **Name** column of System State ).



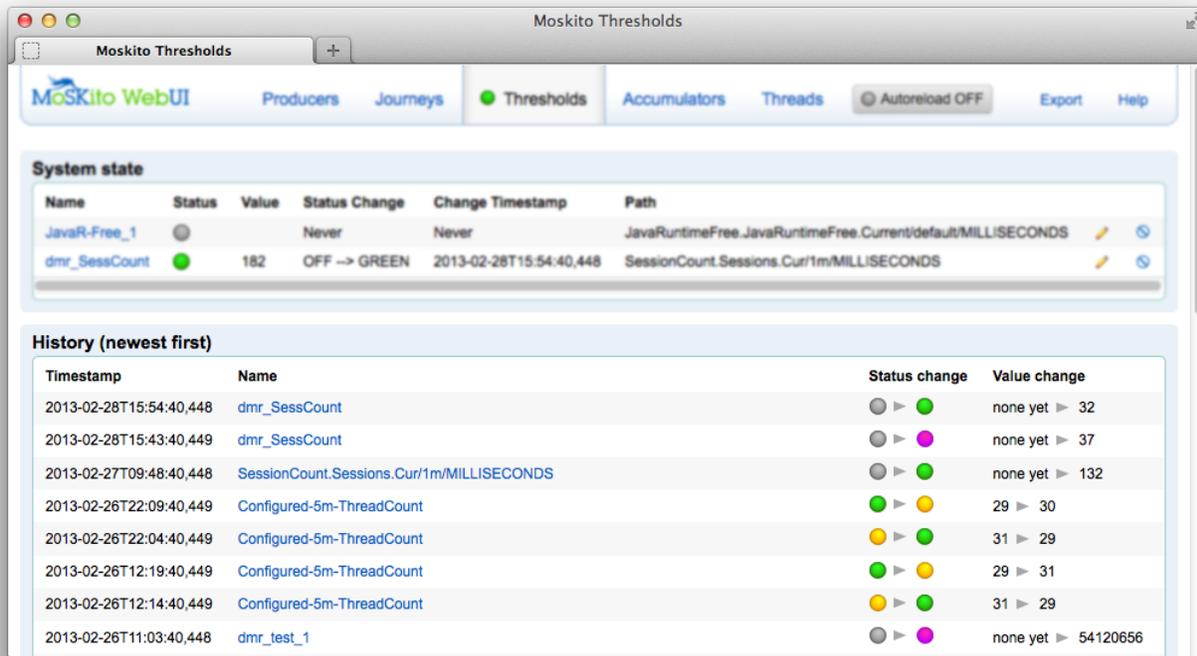
System state	
Name	Status
<a href="#">ThreadCount</a>	●
<a href="#">PermGenFree</a>	●
<a href="#">OldGenFree</a>	●

*Click to open the Threshold screen*

## History Display Section

This section lists all threshold status changes (including deleted thresholds).

As soon as you create a new threshold and it passes its first monitoring interval, a new status change line appears in **History** display. Also, any status change with existing thresholds is also being reflected here.



The Section has 4 columns:

Column	Shows...
Timestamp	the time when the change occurred (date & time, with milliseconds)
Name	threshold name
Status change	previous and changed status
Value change	previous and changed value

## Inactive Thresholds

Some of the thresholds might be inactive, you will know them by grey status color.

Why do they appear and what to do with them? See the Table below.

A threshold might be inactive because...	How do I fix it?
<p>the time interval for this threshold have not passed yet.</p> <p><b>For example:</b>  <i>The interval is 5 min, and only 3 min passed since the moment you added it.</i></p>	<p>Wait until the interval time passes</p>