

# Throughput Quota Policy Usage Scenarios for Community Manager

**SOA** | software™



## Copyright

Copyright © 2015 SOA Software, Inc. All rights reserved.

## Trademarks

SOA Software, Policy Manager, Portfolio Manager, Repository Manager, Service Manager, Community Manager, SOA Intermediary for Microsoft and SOLA are trademarks of SOA Software, Inc. All other product and company names herein may be trademarks and/or registered trademarks of their registered owners.

## SOA Software, Inc.

SOA Software, Inc.

12100 Wilshire Blvd, Suite 1800

Los Angeles, CA 90025

(866) SOA-9876

[www.soa.com](http://www.soa.com)

[info@soa.com](mailto:info@soa.com)

## Disclaimer

The information provided in this document is provided “AS IS” WITHOUT ANY WARRANTIES OF ANY KIND INCLUDING WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT OF INTELLECTUAL PROPERTY. SOA Software may make changes to this document at any time without notice. All comparisons, functionalities and measures as related to similar products and services offered by other vendors are based on SOA Software’s internal assessment and/or publicly available information of SOA Software and other vendor product features, unless otherwise specifically stated. Reliance by you on these assessments / comparative assessments is to be made solely on your own discretion and at your own risk. The content of this document may be out of date, and SOA Software makes no commitment to update this content. This document may refer to products, programs or services that are not available in your country. Consult your local SOA Software business contact for information regarding the products, programs and services that may be available to you. Applicable law may not allow the exclusion of implied warranties, so the above exclusion may not apply to you.

## Contents

Throughput Quota Policy Usage Scenarios (Community Manager-specific) .....	4
Add / Configure Throughput Quota Policy .....	4
Scenario 1: How Do I Verify Throughput Quota Policy at the Service Level? .....	7
Scenario 2: How Do I Verify Throughput Quota Policy at the Contract Level?.....	10
Scenario 3: How Do I Verify Throughput Quota Policy at License > Term Level?.....	11

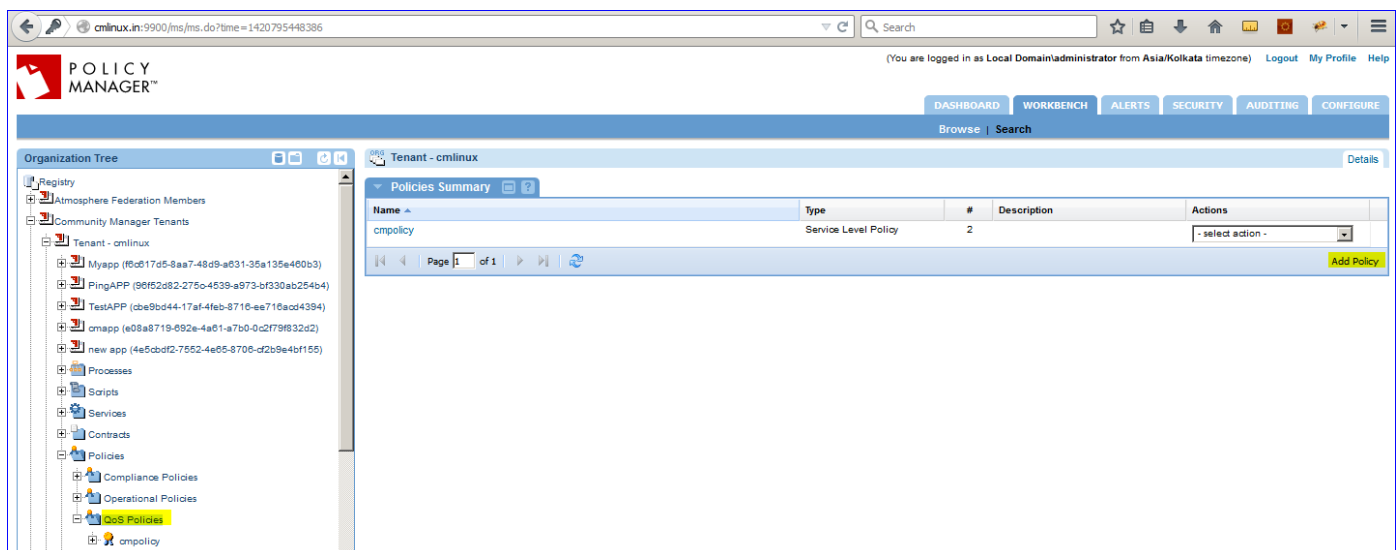
# Throughput Quota Policy Usage Scenarios (Community Manager-specific)

This document provides a list of Community Manager-specific usage scenarios for the *Throughput Quota Policy*.

## Add / Configure Throughput Quota Policy

If you are using a *Throughput Quota Policy* with Community Manager, the policy must be added to the Community Manager **Tenant** Organization for it to be available in the Community Manager UI.

- 1 Go to the *Policy Manager Management Console > Tenant Organization > Policies > QoS Policies* and click **Add Policy**.



- 2 Specify Policy Name, Policy Type (Throughput Quota Policy), click **Finish**, and then **Close**.

**Specify Policy Details**

The "Specify Policy Details" screen is used to define the following policy information:

The "Policy Details" section is used to define the "Policy Name," "Policy Key," and "Description." The "Policy Key" field allows you to enter a custom field value. If left blank, a system value is automatically assigned.

Specify the policy information. After you have completed your entries, click "Finish" to continue.

**Policy Details**

Category: QoS Policy

Policy Name:

Policy Key:

Description:

Type:

Navigation: < Back, Next >, Finish >, Cancel

3 On the *Throughput Quota Policy Details* screen, click **Modify**.

**Throughput Quota Policy (Draft)** version: v1 - 01/21/2015 17:16:06

**Policy Overview**

Information | Modify

Type: Throughput Quota Policy

Policy Name: Throughput Quota Policy

Version: 1

Description: Draft

State: Draft

**Options** | Modify

Policy not configured.

**Actions**

- Change Organization
- Delete Policy
- Delete Policy Current Version
- Export Policy
- Modify Policy Information
- View Policy References

**Policy Workflow**

Information

State: Draft

Owner: Local Domain/administrator

**Workflow Actions**

Comments:

Actions:

- Activate Policy

History

4 Provide policy details and click **Finish**.

**SOA Software Policy Manager - Modify Throughput Quota Policy Wizard - Mozilla Firefox**

cmilinux.in:9900/quotapolicy/add\_throughput\_policy1.faces?X-Csrf-Token=0xabe784d98policyKey=urn:uuid:154d77eb-a163-11e4-afab-e14bec00ea01&actionF

**POLICY MANAGER™**

### Modify Throughput Quota Policy

The "Modify Throughput Quota Policy" screen allows you to update the throughput quota policy. A Throughput Quota is defined by the "Throughput Limit" over a time period.

If the quota is exceeded, the "Consumer Fault Message" will be returned to the service consumer and an alert will be logged.

The "Time to Clear Alert" parameter defines the time that the throughput needs to be within the limit before a second alert is sent to signify that the consumer is once again within their quota.

The Reminder Alert is an alert that is sent every "Reminder Alert Interval" until the consumer is within their quota.

The "Queue Size" is an optional parameter that defines the number of concurrent threads that the runtime will queue up before denying access. This delays the consumer requests in an effort to overcome a brief spurt in traffic without denying access.

#### Throughput Quota Policy Details

**Name:** Throughput Quota Policy

**Description:**

#### Throughput Quota

**Throughput Limit:** 1 per sec

**Queue Size:** 2

**Fault Message:** Throughput Fault Message

**Fault Element Name:** Throughput Fault Element

**Fault Namespace URI:** uri:\*

**Fault Namespace Prefix:** T prefix

**Time to Clear Alert (s):** 60

**Send Reminder Alert:** ☒

**Reminder Alert Interval (s):** 60

[Help](#) [Back](#) [Next >](#) [Finish](#) [Cancel](#)

5 If you are using Policy Manager 7.2 (or above), activate the policy. Otherwise skip this step.

cmilinux.in:9900/lms/lms.do?time=1421831803688

(You are logged in as Local Domainadministrator from Asia/Kolkata timezone) Logout

**POLICY MANAGER™**

DASHBOARD WORKBENCH ALERTS SECURITY AUDITING

Browse | Search

Organization Tree

- Tenant - cmilinux
  - MyAPP55 (cd3930bf-80da-45ad-b700-eed27378bb7b)
  - Myapp (f0cd17d5-8aa7-48d9-a031-35a135e460b3)
  - PingAPP (90f52d82-2750-4539-a973-bf330ab254b4)
  - TestAPP (d0e9bd44-17af-4feb-8716-ee716a0d4394)
  - omapp (e08a8719-692e-4a51-a7b0-02f79632d2)
  - Irishna (c1fd717-a7fb-41cb-ae2f-90ab88b75d78)
  - New app (4e5bdf2-7552-4e55-8705-d2b9e4bf155)
  - Processes
  - Scripts
  - Services
  - Contracts
  - Policies
    - Compliance Policies
    - Operational Policies
    - QoS Policies
      - Concurrency Quota Policy
      - Script Policy
      - Service Level Enforcement Policy
      - Service Level Policy
      - Throughput Quota Policy

Throughput Quota Policy v3 version: 10-01/2015 17:24:48

#### Policy Overview

**Information**

Type: Throughput Quota Policy

Policy Name: Throughput Quota Policy (urn:uuid:154d77eb-a163-11e4-afab-e14bec00ea01)

Version: 3

Description:

State: **Active**

#### Throughput Quota Policy

**Options | View**

Throughput Limit: 1 per sec

Queue Size: 00

Fault Message: Throughput Fault Message

Fault Element Name: Throughput Fault Element

Fault Namespace URI: uri:\*

Fault Namespace Prefix: T prefix

Time to Clear Alert (s): 60

Send Reminder Alert: ☒

Reminder Alert Interval (s): 60

#### Actions

- Change Organization
- Copy Policy
- Delete Policy
- Export Policy
- Start New Version
- View Policy References

#### Policy Workflow

**Information**

State: Active

Owner: Local Domainadministrator

#### Workflow Actions

History

## Scenario 1: How Do I Verify Throughput Quota Policy at the Service Level?

- 1 Launch *Community Manager*.
- 2 Attach *Throughput Quota Policy* at the Service Level.

The screenshot shows the SOA Community Manager interface for configuring a service level policy. At the top, there is a 'REST' tab and a 'Default Profile' dropdown set to 'Any in and out'. Below this, a note states: 'Note: You Must Add New Operations to Target First!'. To the right of the note are two status indicators: 'Path synced with target' (green checkmark) and 'Path not synced with target' (yellow warning triangle).

Method	Path	Operation Name	Settings
GET	/[path: +]	Default_Operation	delete show >

Below the table, there are two sections for policy selection:

- Operational Policies:** A list box containing 'AtmosphereApplicationSecurityPolicy', 'AtmosphereApplicationSecurityPolicy-Signature', 'BasicAuditing', and 'CORSAllowAll'.
- Quality of Service Policies:** A list box containing 'Service Level Enforcement Policy', 'Service Level Policy', 'Throughput Quota Policy' (highlighted in yellow), and 'cmpolicy'.

At the bottom right, there are three buttons: 'Cancel', 'Back', and 'Save'.

- 3 Send requests from the *APP > DEV CONSOLE*. If the throughput limit exceeded, a fault message will display in the response window. Alerts will display (as illustrated below).

The screenshot displays three log entries from the 'API Monitoring > Logs' section. Each entry is a card with a light blue header and a white body. The first two entries have a blue title 'Throughput Limit Quota Policy is still being exceeded' and a red bell icon, while the third has a blue title 'Throughput Limit Quota Policy exceeded' and a red bell icon. All entries show the user 'adminomlinux' and the environment 'Sandbox'. The first two entries have a priority of 'Minor' and a timestamp of '1/21/2015 5:47 PM' and '1/21/2015 5:46 PM' respectively. The third entry has a priority of 'Major' and a timestamp of '1/21/2015 5:45 PM'. Each entry includes a 'Write a comment' button.

Title	Message	Priority	Environment	Timestamp
Throughput Limit Quota Policy is still being exceeded	Throughput Limit Quota Policy is still being exceeded	Minor	Sandbox	1/21/2015 5:47 PM
Throughput Limit Quota Policy is still being exceeded	Throughput Limit Quota Policy is still being exceeded	Minor	Sandbox	1/21/2015 5:46 PM
Throughput Limit Quota Policy exceeded	Throughput Limit Quota Policy exceeded	Major	Sandbox	1/21/2015 5:45 PM

- 4 Go to *API Monitoring > Logs* and observe that error logs are displayed with the correct error message.



▶ GET /sand/ undefined 24B 500 2ms

▶ GET /sand/ undefined 24B 500 2ms

▶ GET /sand/ undefined 24B 500 2ms

▼ GET /sand/ undefined 24B 500 2ms

Body Headers Info

Property Name	Property Value
API Version Id	a71fd6f7-5b1f-4960-99a8-2c31d1cc8357.cmlinux
Method Name	Default_Operation
Client Host	10.7.20.129
Request Date	01/21/15 17:51
Response Status Code	500
Response Error Message	Throughput Fault Message
Response Time	2ms
Request Message Size	
Response Message Size	24B
API URL	http://10.7.20.129:8900/sand/

- 5 In the *Policy Manager Management Console*, observe the following logs for the service in *Monitoring > Logs*.

Organization Tree

- OAuthAPI\_v1\_Production
- OAuthAPI\_v1\_Production\_Virtual
- PingAPI\_v1\_Production
- PingAPI\_v1\_Production\_Virtual
- RETBorrower
- RETBorrower\_vs0
- RETBorrower\_vs1
- TestAPI\_Version1.0\_Production
- TestAPI\_Version1.0\_Production\_Virtual
- TestAPI\_Version1.0\_Sandbox
- TestAPI\_Version1.0\_Sandbox\_Virtual
- h\_g\_Production
- h\_g\_Production\_Virtual
- krishna API\_07\_Production
- krishna API\_07\_Production\_Virtual
- myAPI\_v1\_Production
- myAPI\_v1\_Production\_Virtual
- myAPI\_v1\_Sandbox
- myAPI\_v1\_Sandbox\_Virtual
- oauth api\_xx\_Production
- oauth api\_xx\_Production\_Virtual
- oauth api\_xx\_Sandbox
- oauth api\_xx\_Sandbox\_Virtual
- proxyapi\_as\_Production

TestAPI\_Version1.0\_Sandbox\_Virtual

Details Operations Bindings Access Points Categories Rules Monitoring

Alerts Logs Real-Time Charts Historical Charts Dependencies

User Id:  Consumer Id:

Contract Key:

Client IP:  Operation:

Transaction Filter

Errors:  Transactions (All)

Request Date/Time	Operation	Response Time	Contract Name	Errors
01/22/2015 11:27:10.344	Default_Operation	2189 ms	deb5b371-322e-4a4a-a59a-22f5587ed25.cmlinux	None
01/22/2015 11:27:10.769	Default_Operation	659 ms	deb5b371-322e-4a4a-a59a-22f5587ed25.cmlinux	None
01/22/2015 11:27:14.288	Default_Operation	2238 ms	deb5b371-322e-4a4a-a59a-22f5587ed25.cmlinux	None
01/22/2015 11:27:14.513	Default_Operation	973 ms	deb5b371-322e-4a4a-a59a-22f5587ed25.cmlinux	None
01/22/2015 11:27:14.842	Default_Operation	2 ms	deb5b371-322e-4a4a-a59a-22f5587ed25.cmlinux	Throughput Fault Message
01/22/2015 11:27:13.967	Default_Operation	528 ms	deb5b371-322e-4a4a-a59a-22f5587ed25.cmlinux	None
01/22/2015 11:27:05.265	Default_Operation	8171 ms	deb5b371-322e-4a4a-a59a-22f5587ed25.cmlinux	None
01/22/2015 11:27:11.71	Default_Operation	1341 ms	deb5b371-322e-4a4a-a59a-22f5587ed25.cmlinux	None
01/22/2015 11:27:11.770	Default_Operation	1 ms	deb5b371-322e-4a4a-a59a-22f5587ed25.cmlinux	Throughput Fault Message
01/22/2015 11:27:11.441	Default_Operation	2 ms	deb5b371-322e-4a4a-a59a-22f5587ed25.cmlinux	Throughput Fault Message
01/22/2015 11:27:10.18	Default_Operation	1409 ms	deb5b371-322e-4a4a-a59a-22f5587ed25.cmlinux	None
01/22/2015 11:27:09.233	Default_Operation	1208 ms	deb5b371-322e-4a4a-a59a-22f5587ed25.cmlinux	None

## Scenario 2: How Do I Verify Throughput Quota Policy at the Contract Level?

- 1 Launch *Community Manager*.
- 2 Attach the *Throughput Quota Policy* at the Contract Level and activate the contract.

**API Access**

① Select App ② Endpoint ③ Policies ④ Legal Agreements

Select Policy:

Policy Name	Description	Select
Concurrency Quota Policy		<input type="checkbox"/>
Script Policy		<input type="checkbox"/>
Service Level Enforcement Policy		<input type="checkbox"/>
Service Level Policy		<input type="checkbox"/>
Throughput Quota Policy		<input checked="" type="checkbox"/>
cmpolicy		<input type="checkbox"/>

Cancel Back Next

- 3 Send requests from *APP > DEV CONSOLE*. If the throughput limit exceeded, you will see a fault message in the response window. Alerts will be displayed as illustrated below.

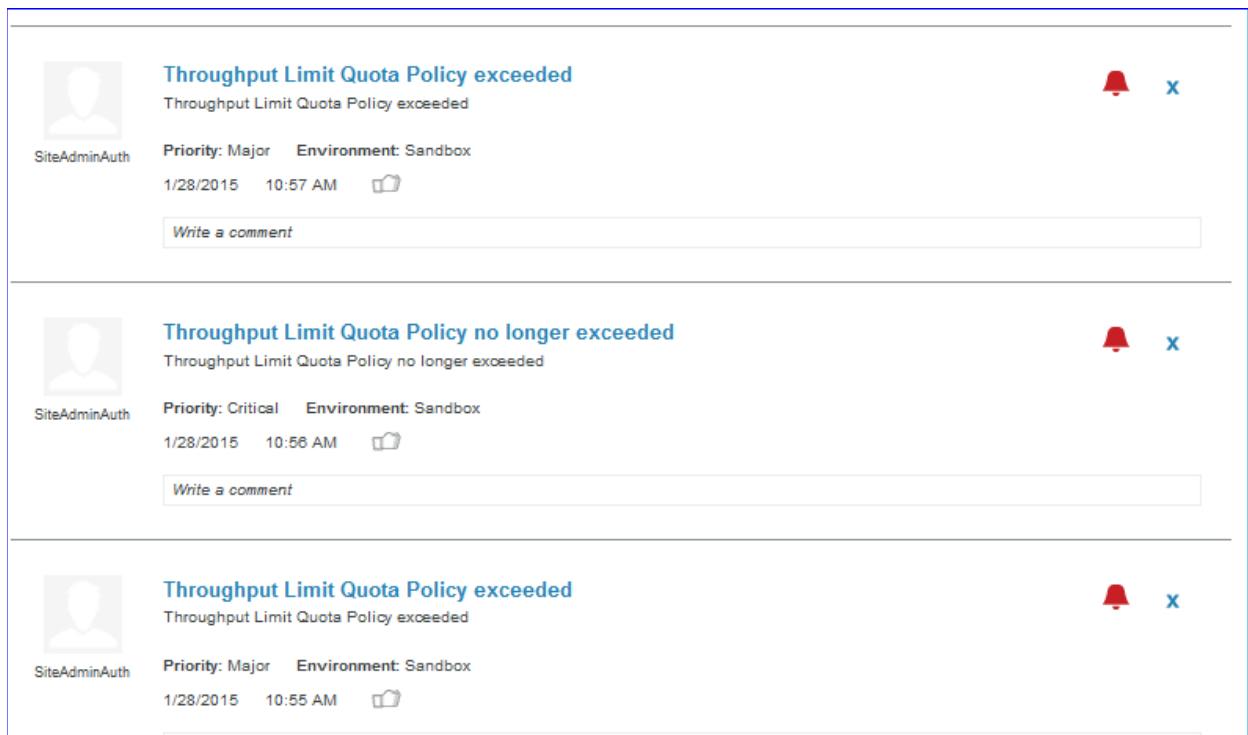
**Run It**

```
GET /sand/ HTTP/1.1
User-Agent : Mozilla/5.0 (Windows NT 6.1; WOW64; rv:34.0) Gecko/20100101 Firefox/34.0
Host : 10.7.20.129:8900
Accept : */*
Content-Type : application/x-www-form-urlencoded
Authorization : Atmosphere realm=http://atmosphere,atmosphere_app_id=TestAppRuntimeID, atmosphere_signature_method=NONE
```

---

```
HTTP/1.1 500 Internal Server Error
Content-Type: text/plain
Content-Encoding: gzip
Transfer-Encoding: chunked
Server: Jetty(7.6.10.v20130312)

Throughput Fault Message
```

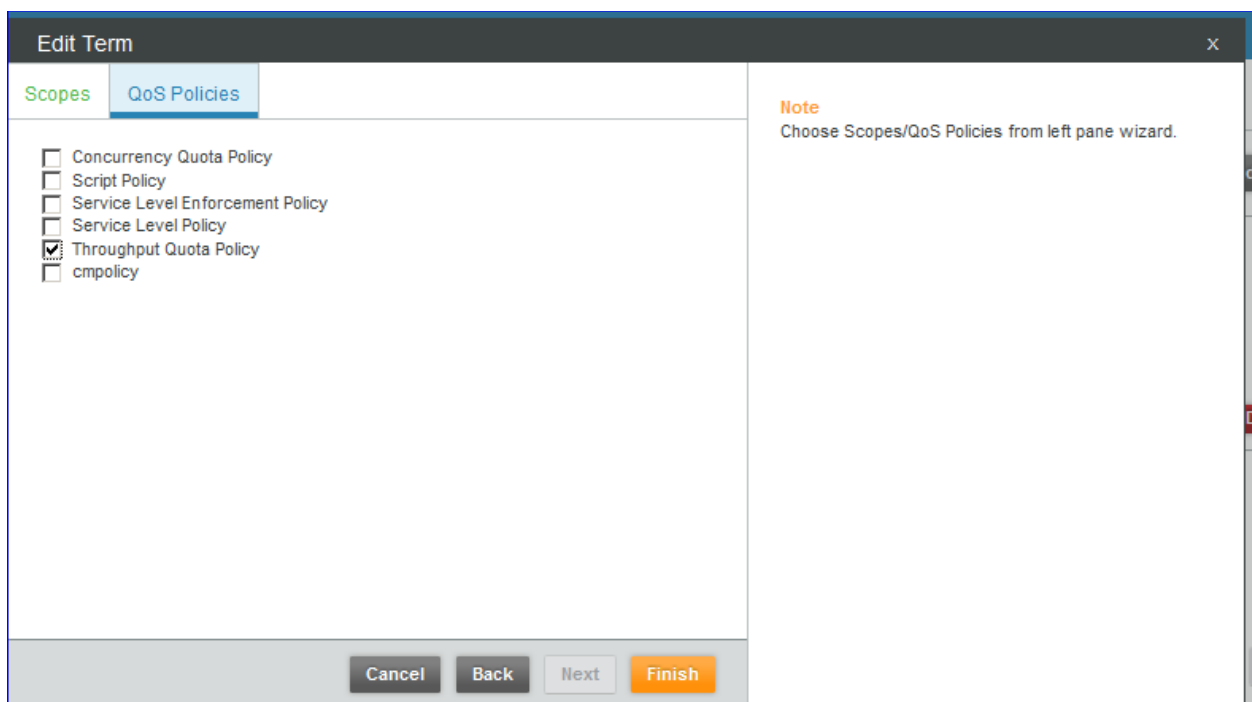


The image displays three notification cards from SiteAdminAuth. Each card includes a user icon, a title, a description, priority, environment, timestamp, and a 'Write a comment' field.

- Card 1:** Title: "Throughput Limit Quota Policy exceeded". Description: "Throughput Limit Quota Policy exceeded". Priority: Major. Environment: Sandbox. Timestamp: 1/28/2015 10:57 AM.
- Card 2:** Title: "Throughput Limit Quota Policy no longer exceeded". Description: "Throughput Limit Quota Policy no longer exceeded". Priority: Critical. Environment: Sandbox. Timestamp: 1/28/2015 10:56 AM.
- Card 3:** Title: "Throughput Limit Quota Policy exceeded". Description: "Throughput Limit Quota Policy exceeded". Priority: Major. Environment: Sandbox. Timestamp: 1/28/2015 10:55 AM.

## Scenario 3: How Do I Verify Throughput Quota Policy at License > Term Level?

- 1 Launch *Community Manager*.
- 2 Attach *Throughput Quota Policy* at *License > Term* level.



The image shows the "Edit Term" dialog box in Community Manager. The "QoS Policies" tab is selected, showing a list of policies with checkboxes. The "Throughput Quota Policy" is checked. A note on the right instructs the user to choose Scopes/QoS Policies from the left pane wizard. At the bottom are buttons for Cancel, Back, Next, and Finish.

**Edit Term**

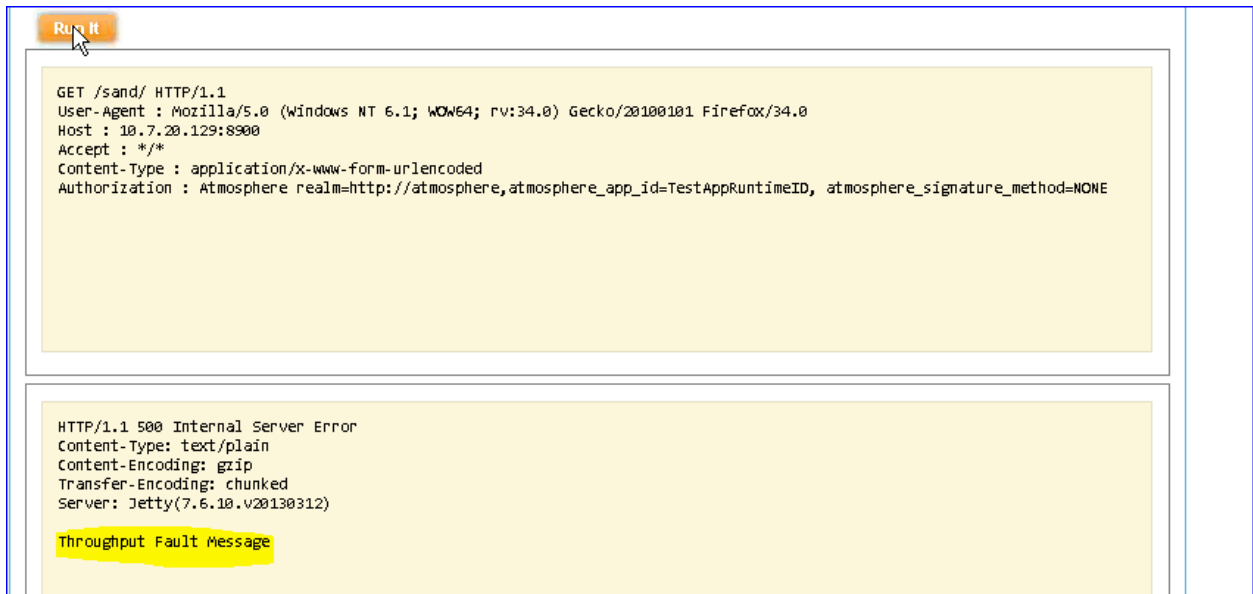
**Scopes** **QoS Policies**

**Note**  
Choose Scopes/QoS Policies from left pane wizard.

- ☐ Concurrency Quota Policy
- ☐ Script Policy
- ☐ Service Level Enforcement Policy
- ☐ Service Level Policy
- ☒ Throughput Quota Policy
- ☐ cmpolicy

Cancel Back Next Finish

- 3 Next, test the *Throughput Quota Policy* at the *License > Term* level. This assumes that the same scope (as above) is used for Scope mapping, and the same license is selected while requesting API access.
- 4 Go to the *DEV CONSOLE* and send requests. If the throughput limit exceeded, a fault message will display in the response window:



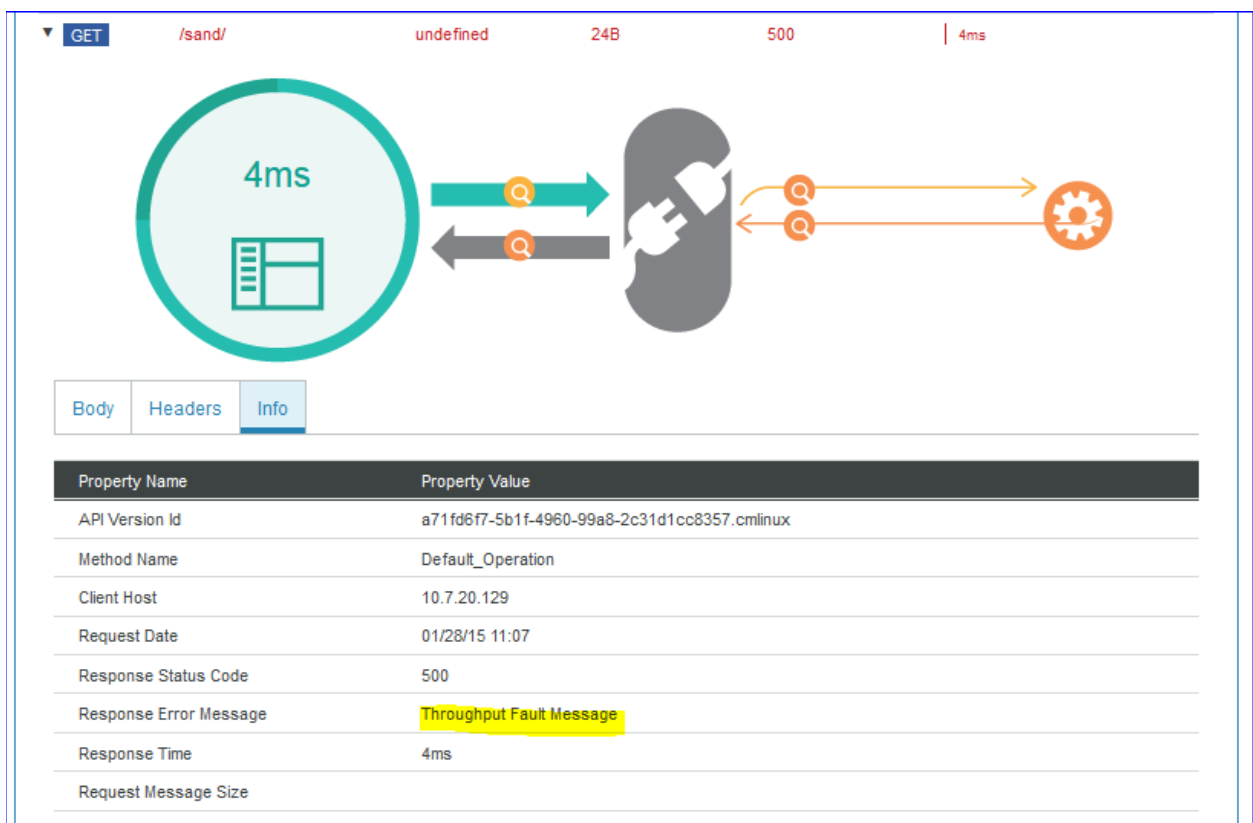
Run It

```
GET /sand/ HTTP/1.1
User-Agent : Mozilla/5.0 (Windows NT 6.1; WOW64; rv:34.0) Gecko/20100101 Firefox/34.0
Host : 10.7.20.129:8900
Accept : */*
Content-Type : application/x-www-form-urlencoded
Authorization : Atmosphere realm=http://atmosphere,atmosphere_app_id=TestAppRuntimeID, atmosphere_signature_method=NONE
```

```
HTTP/1.1 500 Internal Server Error
Content-Type: text/plain
Content-Encoding: gzip
Transfer-Encoding: chunked
Server: Jetty(7.6.10.v20130312)

Throughput Fault Message
```

- 5 Logs will display in *API > Monitoring Logs*:




GET /sand/ undefined 24B 500 4ms

4ms

Body Headers Info



Property Name	Property Value
API Version Id	a71fd6f7-5b1f-4960-99a8-2c31d1cc8357.cmlinux
Method Name	Default_Operation
Client Host	10.7.20.129
Request Date	01/28/15 11:07
Response Status Code	500
Response Error Message	Throughput Fault Message
Response Time	4ms
Request Message Size	24B

- 6 Alerts will display on the *API Board*:




SiteAdminAuth


**Throughput Limit Quota Policy no longer exceeded**  
Throughput Limit Quota Policy no longer exceeded



Priority: Critical   Environment: Sandbox



1/28/2015   11:08 AM   

---




SiteAdminAuth


**Throughput Limit Quota Policy exceeded**  
Throughput Limit Quota Policy exceeded



Priority: Major   Environment: Sandbox

1/28/2015   11:07 AM   

---



adminomlinux

**API Access Request: TestAPI (Version1.0)**  
**TestAPP (v1)**  
omlinux member adminomlinux has requested access to the Sandbox environment for the TestAPI (Version1.0) on behalf of the TestAPP (v1) application. API Licenses: mylicense API Policies: **Throughput Quota Policy.**

1/28/2015   11:06 AM   