



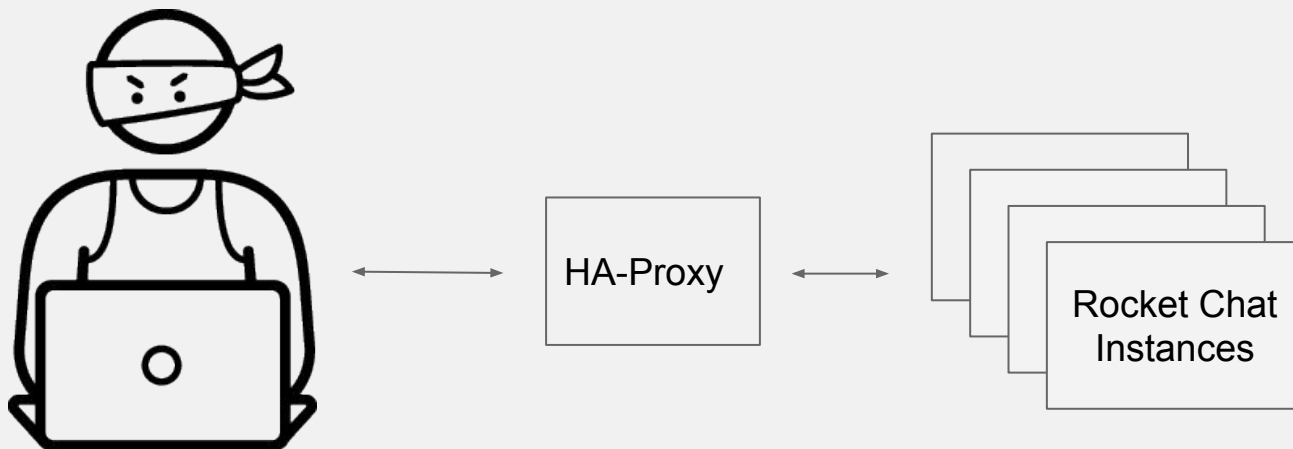
Monitoring Red Hat's RocketChat instance

Dependent items for the win!

Andrew Nelson
Senior Consultant
Zabbix Summit, Riga, October 2018

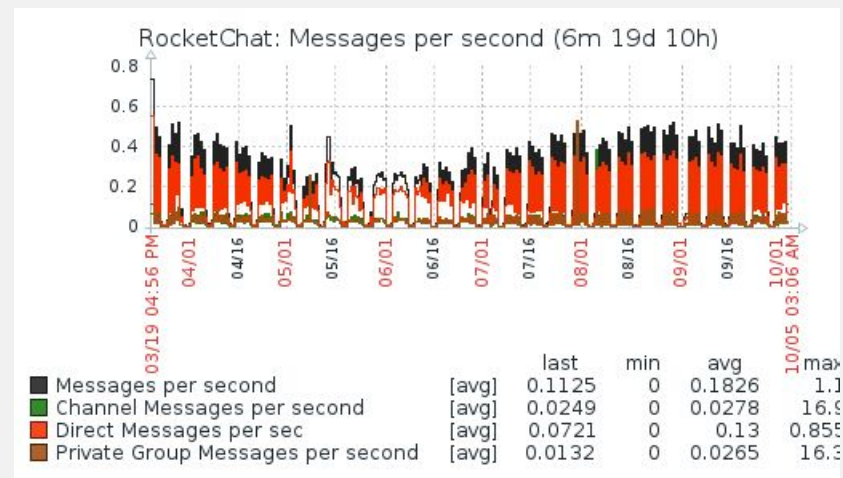
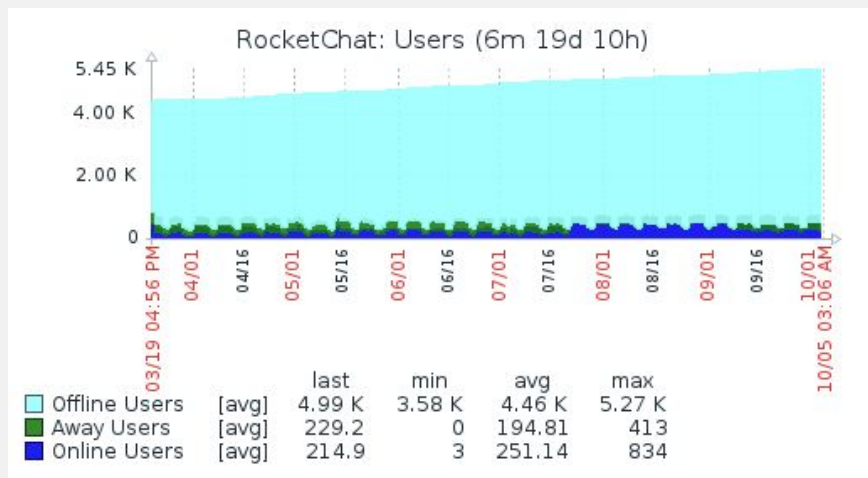
The overview

The architecture



The stats

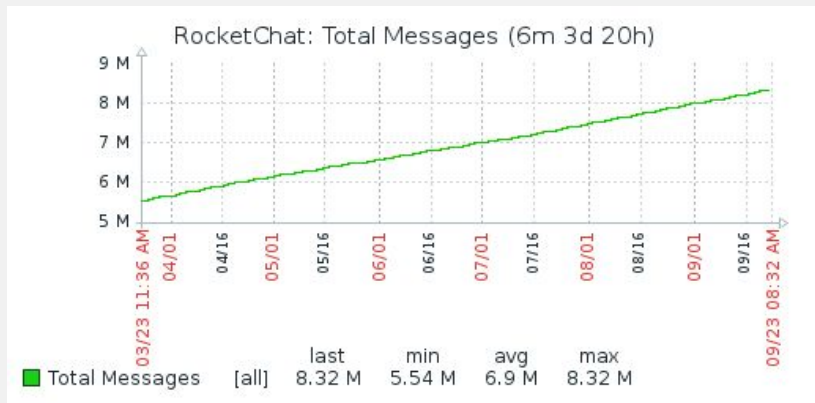
The big numbers



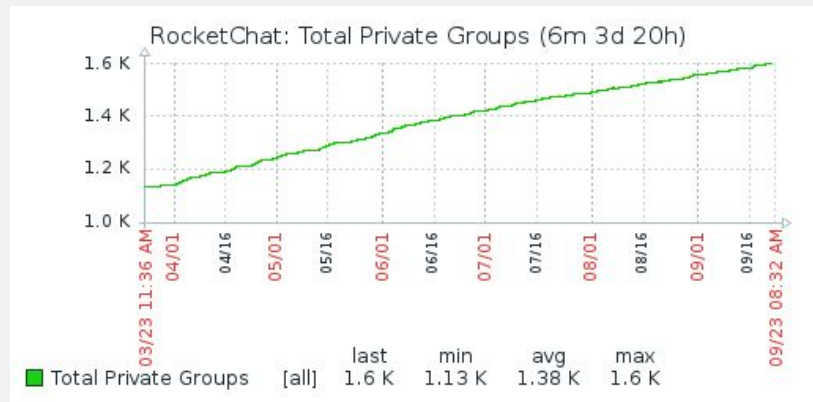
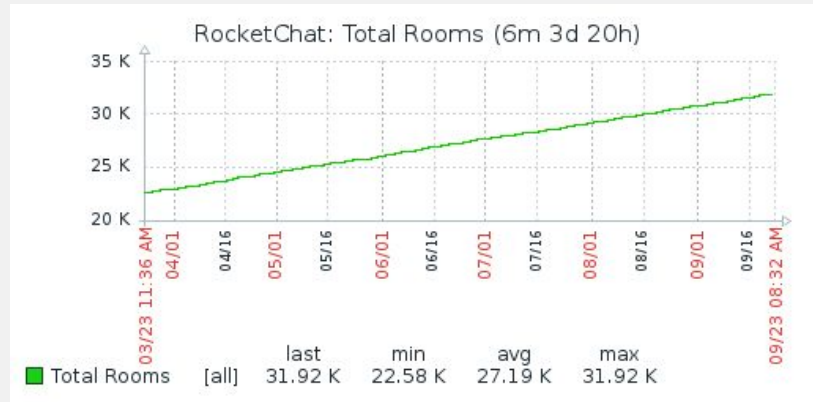
8,526,342 messages as of the morning of Oct 5, 2018

Stats pt 2

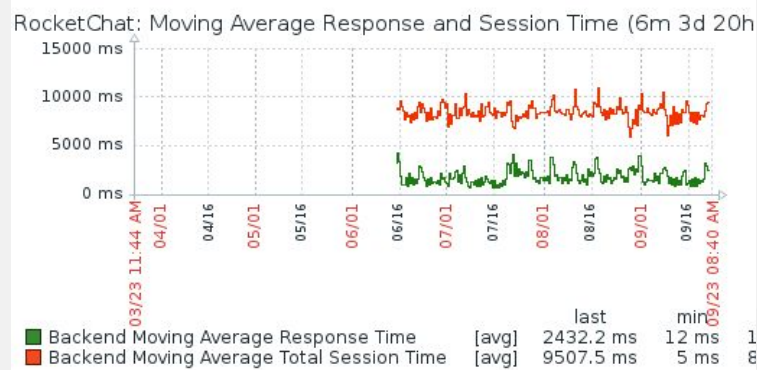
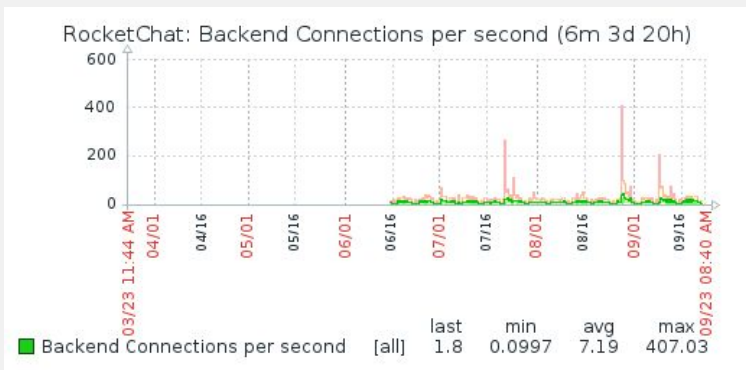
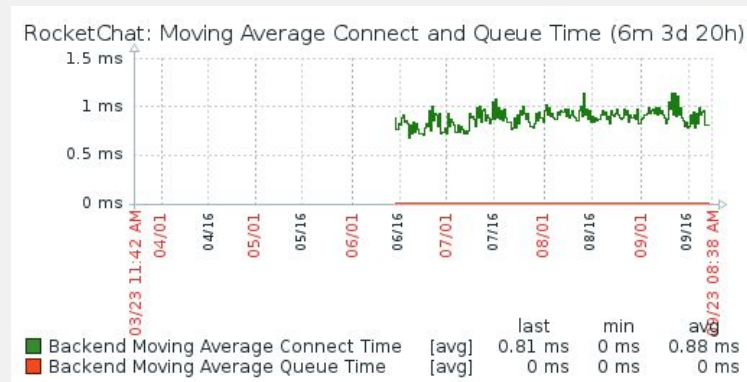
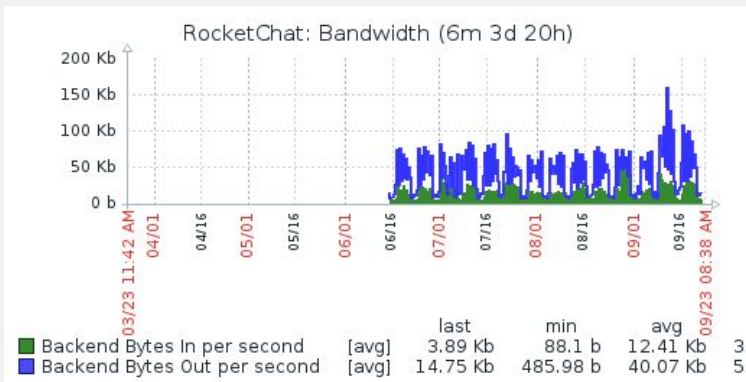
The growth



Nearly 2.8 million messages in just over 6 months.
An average of 15K messages a day.



Stats pt 3



How we monitor it

Rocket Chat provides JSON data, we pull it using a script

```
"statistics": { "_id": " ... ", "_updatedAt": "2018-09-23T12:59:25.830Z",  
  "activeUsers": 5348, "awayUsers": 23,  
  "createdAt": " ... ", "deploy": { ... }, "installedAt": " ... ", "instanceCount": 5,  
  "lastLogin": " ... ", "lastMessageSentAt": " ... ", "lastSeenSubscription": " ... ",  
  "migration": { ... }, "nonActiveUsers": 6, "offlineUsers": 5074, "onlineUsers": 257,  
  "oplogEnabled": true,  
  "os": { "arch": "x64", "cpus": [ ... ], "freemem": 1480355840, "loadavg": [ ... ],  
    "platform": "linux", "release": "3.10. ... .el7.x86_64", "totalmem": 16649412608,  
    "type": "Linux", "uptime": 11970127 },  
  "process": { ... },  
  "totalChannelMessages": 1342310, "totalChannels": 1412, "totalDirect": 28913,  
  "totalDirectMessages": 5740795, "totalLivechat": 0, "totalLivechatMessages": 0,  
  "totalMessages": 8322486, "totalPrivateGroupMessages": 1142483, "totalPrivateGroups": 1599,  
  "totalRooms": 31923, "totalUsers": 5354, "uniqueId": " ... ", "version": "0.69.1",  
  "wizard": { ... } },  
"success": true}
```

How we monitor it

Total Messages: Messages per second	MessagesPerSec	30d	365d	Dependent item
Rocket Chat Stastics: Non Active Users	nonActiveUsers	30d	365d	Dependent item
Rocket Chat Stastics: Offline Users	offlineUsers	30d	365d	Dependent item
Rocket Chat Stastics: Online Users	onlineUsers	30d	365d	Dependent item
Total Private Group Messages: Private Group Messages per second	PrivateGroupMessagesPerSec	30d	365d	Dependent item
Rocket Chat Stastics: RC Versiion	rcversion	90d		Dependent item
Rocket Chat Stastics	Triggers ¹ get_chat_stats.sh	15m	1d	External check
Rocket Chat Stastics: Total Channel Messages	totalChannelMessages	30d	365d	Dependent item
Rocket Chat Stastics: Total Channels	totalChannels	30d	365d	Dependent item
Rocket Chat Stastics: Total Direct	totalDirect	30d	365d	Dependent item
Rocket Chat Stastics: Total Direct Messages	totalDirectMessages	30d	365d	Dependent item
Rocket Chat Stastics: Total Live Chat	totalLivechat	30d	365d	Dependent item
Rocket Chat Stastics: Total Memory	totalmem	30d	365d	Dependent item
Rocket Chat Stastics: Total Messages	totalMessages	30d	365d	Dependent item

How we monitor it

Dependent item inception!

Name	<input type="text" value="Total Channel Messages"/>	
Type	<input type="text" value="Dependent item"/>	
Key	<input type="text" value="totalChannelMessages"/>	<input type="button" value="Select"/>
Master item	<input type="text" value="Rocket Chat Stastics: get_chat_stats.sh"/>	<input type="button" value="Select"/>

How we monitor it

Dependent item inception!

Name

Type

Key

Master item

Preprocessing steps	Name	Parameters	Action
	<input type="text" value="JSON Path"/>	<input type="text" value="\$..statistics.totalChannelMess"/>	Remove

`$.statistics.totalChannelMessages`

How we monitor it

Dependent item inception!

Name

T

Master i

Name	<input type="text" value="Channel Messages per second"/>
Type	<input type="text" value="Dependent item"/>
Key	<input type="text" value="ChannelMessagesPerSec"/> <input type="button" value="Select"/>
Master item	<input type="text" value="Total Channel Messages: totalChannelMessages"/> <input type="button" value="Select"/>

How we monitor it

Dependent item inception!

Name

Name

Type

Key

Master item

Preprocessing steps	Name	Parameters	Action
	<input type="text" value="Change per second"/>		Remove
			Add

Some final notes

HA Proxy was similar, but different.

- Zabbix does not support parsing CSV for dependent items
 - Let's not regex this...
- The version of HA Proxy we were using does not support JSON statistics
- HA Proxy data is pulled in CSV and converted to JSON and accessed via a UserParameter.



THANK YOU



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