

# Casa connessa pilotata ad eventi

*Event-Driven Ansible  
con Zigbee2MQTT*



 **EXTRAORDY**  
La formazione ufficiale Red Hat • WeAreProject

 **Red Hat**

Lorenzo  
Prosseda

(GitHub, Telegram:  
**procsiab**)

-  Microcontrollori di Espressif
-  Osservare con soddisfazione l'operazione di un sistema autonomo
-  Documenti formattati in LaTeX
-  Suonare la batteria



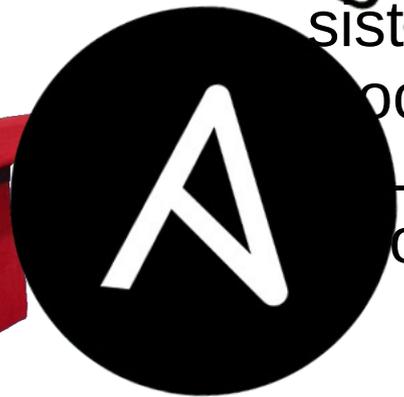
ANSIBLE

(... telegram:  
prod...)

- 👍 Microcom
- Espressi
- 👍 Osserva
- soddisfazio
- l'operazione di un
- sistema autonomo
- documenti formattati
- LaTeX
- onata a batteria



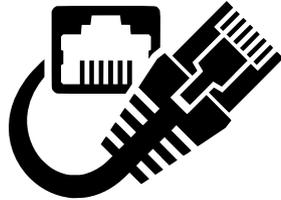
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ANSIBLE

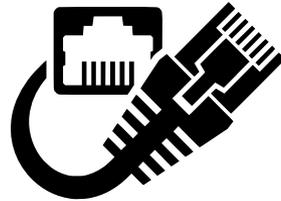


# Casa **connessa**





# Casa **connessa**



Smart Home™ ≠ Casa **furba**



works with  
**Gulag Home**



Works with  
**Apple HomeSh\*t**

works  
with

| **alezza**  




Home  
Assistant



OpenHAB

# Sistema di automazione **locale**

-  No dipendenze esterne
-  Controllo su SW e HW
-  Ciclo di vita senza fretta
-  Integrazione senza limiti

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# Sistema di automazione **locale**



HW aggiuntivo



Manutenzione



Competenze specifiche



“Troppa” scelta

# Sistema di automazione **locale**



HW aggiuntivo



Manutenzione



Competenze specifiche



“Troppa” scelta

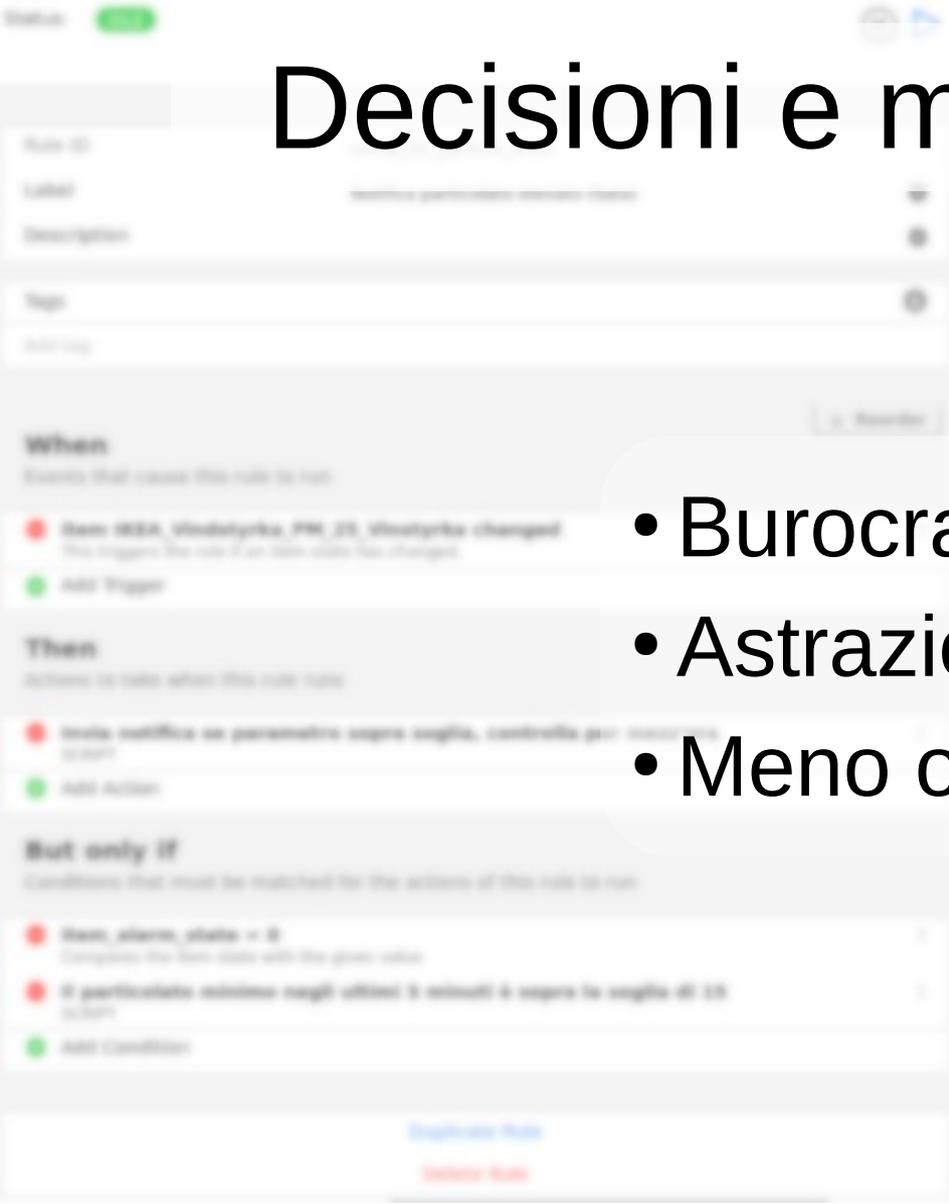
# Dashboardedulcorate

The image displays five overlapping screenshots of the openHAB dashboard interface, showcasing various home automation features:

- Overview:** Shows a top navigation bar with a 'DONE' button and a status bar displaying '10.5 °C', '70.4%', and 'Away'. Below are several widget panels for different rooms: 'Study' (Spotlights 49%, Floor lamp 70%, Shutter Open - 100%, Nest Hub Off), 'Kitchen' (Shutter Open - 100%, Worktop Off, Fridge Closed, Voltage 232.19 V), 'Living room' (Meeting m... On, Desk 72 cm, Nest mini Playing), and 'Outdoor' (Door light 100%, Motion Clear, Illuminance 555 lx).
- Overview (Detailed):** Shows the 'Presence & Alarm' section with 'Home' (green) and 'Away' (red) buttons. Below are 'General Scenes' for Morning, Reading, TV, Dinner, Evening, and Night.
- Positions:** A map view showing the location of various devices on a geographical map.
- Charts:** A line chart titled 'Average Temp' showing temperature data over a 24-hour period. The y-axis ranges from 0 to 25 °C, and the x-axis shows hours from 0 to 23. A green shaded area indicates a temperature range between approximately 18°C and 22°C.
- Temperatures:** A control panel for 'Heating' and 'Windows'. It features a 'Run Climate Control Rule' button and a circular temperature gauge for the 'Kitchen' showing a current temperature of 22.5 °C.

# Decisioni e modello semantico

- Burocrazia di modello
- Astrazione elevata
- Meno osservabilità



# Allocazione di risorse

ID	NAME	CPU %	MEM USAGE / LIMIT	MEM %	NET IO	BLOCK IO	PIDS	CPU TIME	AVG CPU%
583e9f658dd0	influxdb	0.76%	438.4MB / 8.064GB	5.44%	206B / 5.756kB	0B / 0B	22	29m29.066693s	0.76%
0f0d7daf495d	openhab	0.86%	1.51GB / 8.064GB	18.72%	0B / 0B	0B / 0B	305	33m12.19151s	0.86%
11e6cc6cc3c0	zigbee2mqtt	1.67%	159.6MB / 8.064GB	1.98%	61.28MB / 63.28MB	0B / 0B	12	1h5m0.728188s	1.67%
4d7a2155d8d0	mosquitto	0.06%	8.929MB / 8.064GB	0.11%	0B / 0B	0B / 0B	1	2m15.807212s	0.06%

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
docker.io/library/influxdb	2.7.12	b4355848b856	3 months ago	383 MB
docker.io/openhab/openhab	5.0.1-alpine	0f125ee0d8e3	8 weeks ago	560 MB
docker.io/koenkk/zigbee2mqtt	2.6.2	ae5e6f614bf2	13 days ago	169 MB
docker.io/library/eclipse-mosquitto	2.0.22	be9a1b48937a	3 months ago	17.4 MB

# Un sistema ben congegnato



Fonte: Reddit, [Articolo](#)

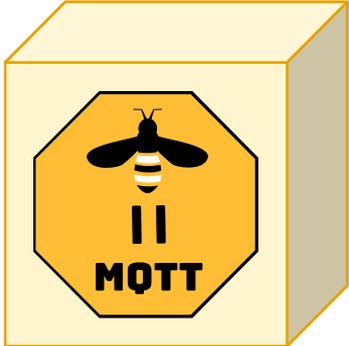
# Scotch™



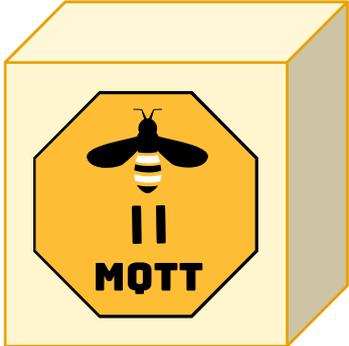


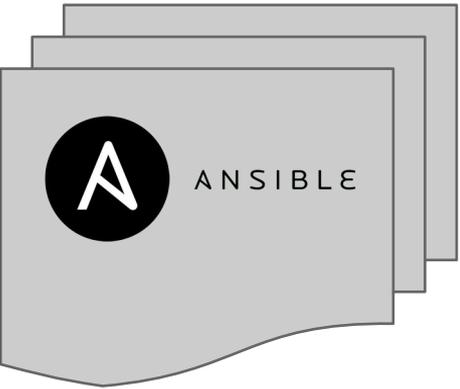
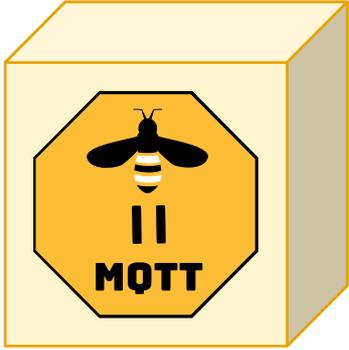
*(Message Queuing Telemetry Transport)*



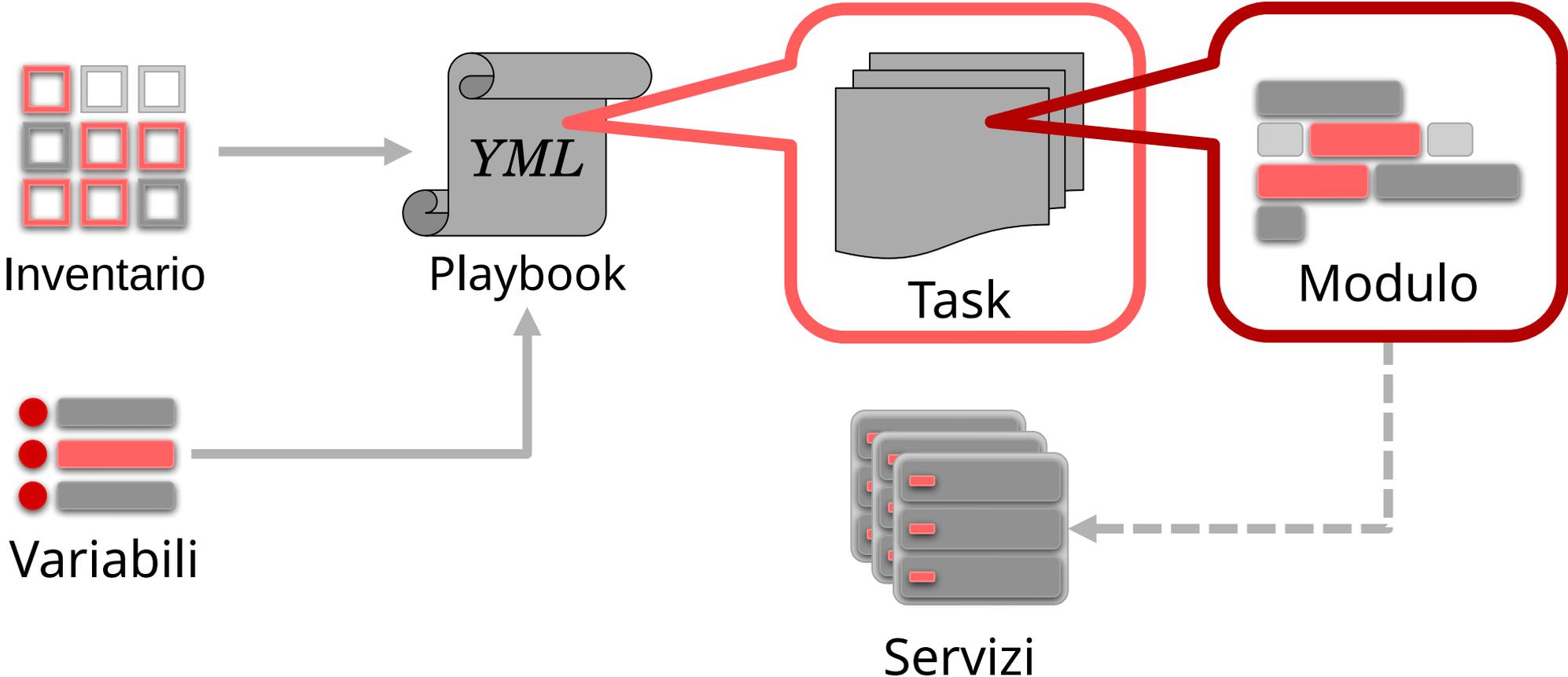


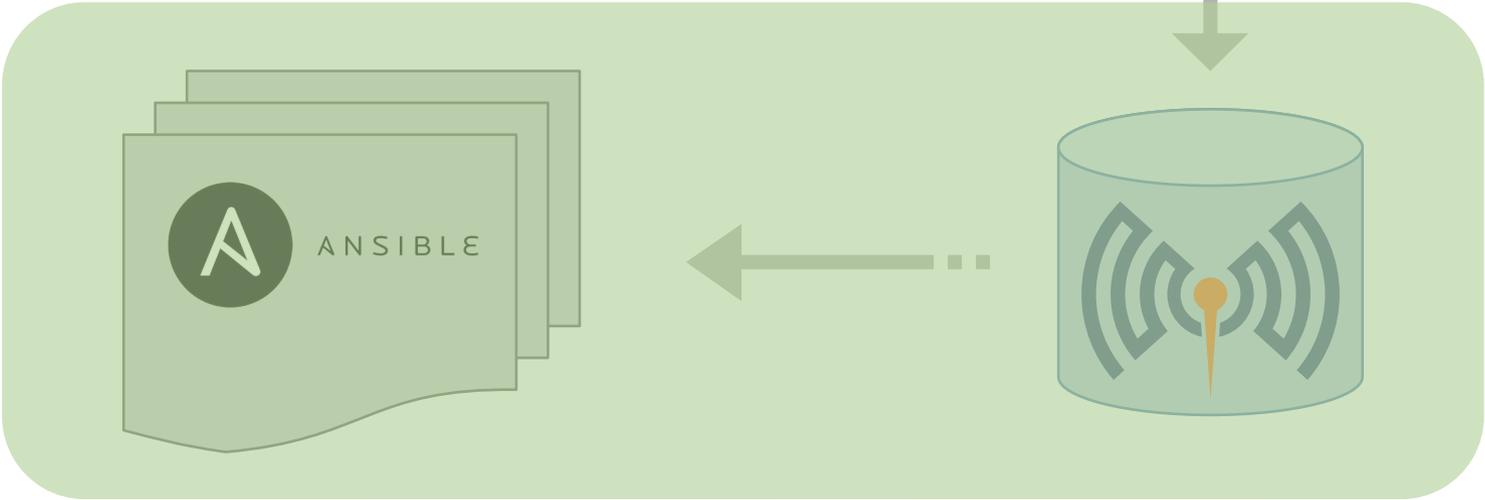
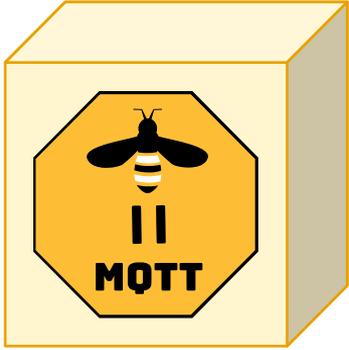






# Componenti di Ansible





# Luce comandata con movimento



# Passo davanti a un sensore di movimento



# Zigbee2MQTT riporta al broker

```
[2025-10-25 11:15:23] info: z2m:mqtt: MQTT  
publish: topic  
'zigbee2mqtt/ikea_hall_movement', payload  
'{"battery":54, "illuminance":1,  
"last_seen":"2025-10-25T09:15:23.766Z",  
"linkquality":40, "occupancy":true,  
"voltage":2500}'
```

# Il broker mantiene il messaggio

The screenshot shows the MQTT5 Explorer interface. The connection is named "Auriga (openhab)". The topic is "zigbee2mqtt/ikea\_hall\_movement". The payload is a JSON object: {"battery":54,"illuminance":1,"last\_seen":"...", "linkquality":83,"occupancy":true,"voltage":2500}. The topic "ikea\_hall\_movement" is highlighted in purple in the left pane, and the payload is highlighted in green in the right pane.

MQTT5 Explorer

Window Edit Tools Help

← Connection: Auriga (openhab) mqt://

Topic

zigbee2mqtt/ikea\_hall\_movement

Payload (1 message received)

⚡ {"battery":54,"illuminance":1,"last\_seen":"...", "linkquality":83,"occupancy":true,"voltage":2500}

Properties

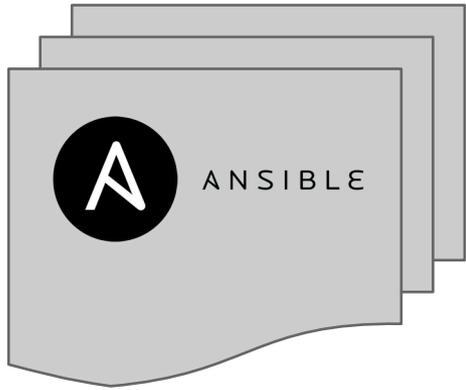
Publish

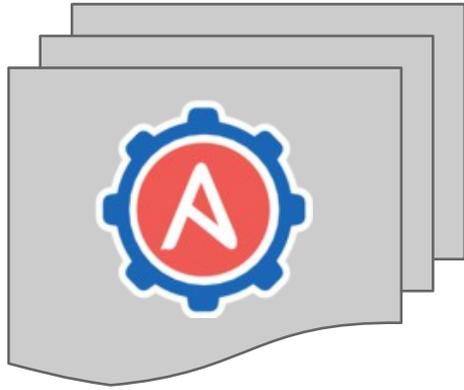
ikea\_hall\_movement = {"battery":54,"illuminance":1,"la

availability = {"state":"online"}

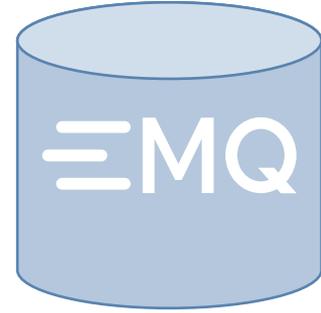
# Ansible aspetta invano







Event-Driven  
Ansible



EMQX server





# EMQX server



Installazione



Creazione topic



Preparazione webhook



# EDA



Installazione



Scrittura rulebook



Pubblicazione su broker MQTT

# Interfaccia per gestire i rulebook

You have become the very thing you swore to destroy



# EDA server



Installazione



Utilizzo EDA controller

# Allocazione di risorse con passaggi extra

NAME	CPU %	MEM USAGE / LIMIT	MEM %	BLOCK IO	PIDS	CPU TIME	AVG CPU%
postgres_1	0.93%	24.79MB / 16.47GB	0.15%	46.65MB/1.716MB	9	911.298ms	0.93%
redis_1	0.40%	6.136MB / 16.47GB	0.04%	18.22MB / 0B	5	394.725ms	0.40%
podman_1	0.52%	41.89MB / 16.47GB	0.25%	32.71MB / 929.8kB	25	499.735ms	0.52%
<b>eda-api_1</b>	<b>46.60%</b>	<b>660.4MB / 16.47GB</b>	<b>4.01%</b>	<b>148.8MB / 0B</b>	<b>5</b>	<b>42.55578s</b>	<b>46.60%</b>
eda-sched_1	6.43%	169.1MB / 16.47GB	1.03%	81.57MB / 0B	1	5.869021s	6.43%
eda-ui_1	0.10%	5.628MB / 16.47GB	0.03%	4.915MB / 28.67kB	3	59.26ms	0.10%
eda-ws_1	11.86%	164.4MB / 16.47GB	1.00%	553kB / 0B	1	7.154539s	11.86%
eda-dwrk_1	12.92%	165.3MB / 16.47GB	1.00%	122.9kB / 0B	2	7.784022s	12.92%
eda-awrk_1	11.82%	165.6MB / 16.47GB	1.01%	73.73kB / 0B	2	7.137949s	11.82%
<b>emqx</b>	<b>46.34%</b>	<b>385.1MB / 16.47GB</b>	<b>2.34%</b>	<b>237.3MB / 8.094MB</b>	<b>60</b>	<b>26.857738s</b>	<b>46.34%</b>

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
<b>procsiab/linuxday2025-decision-env</b>	<b>0.0.6</b>	<b>d38dc4c74c82</b>	<b>22 minutes ago</b>	<b>796 MB</b>
quay.io/ansible/eda-ui	main	ec11d007987f	9 days ago	72.1 MB
quay.io/sclorg/postgresql-13-c9s	latest	1c071c0658cc	9 days ago	383 MB
<b>docker.io/emqx/emqx-enterprise</b>	<b>6.0.0</b>	<b>53c9fdc3475c</b>	<b>3 weeks ago</b>	<b>270 MB</b>
<b>quay.io/ansible/eda-server</b>	<b>main</b>	<b>15d174fc7485</b>	<b>3 weeks ago</b>	<b>1.09 GB</b>
<b>quay.io/ansible/ansible-rulebook</b>	<b>latest</b>	<b>7056dc0614e7</b>	<b>5 weeks ago</b>	<b>1.53 GB</b>
quay.io/sclorg/redis-6-c9s	latest	c7ac11061bbe	9 months ago	280 MB
quay.io/containers/podman	v4	366b6e1c31a3	18 months ago	493 MB

Posso aggiungere altro Scotch™?

