SECURITY SHOWDOWN:

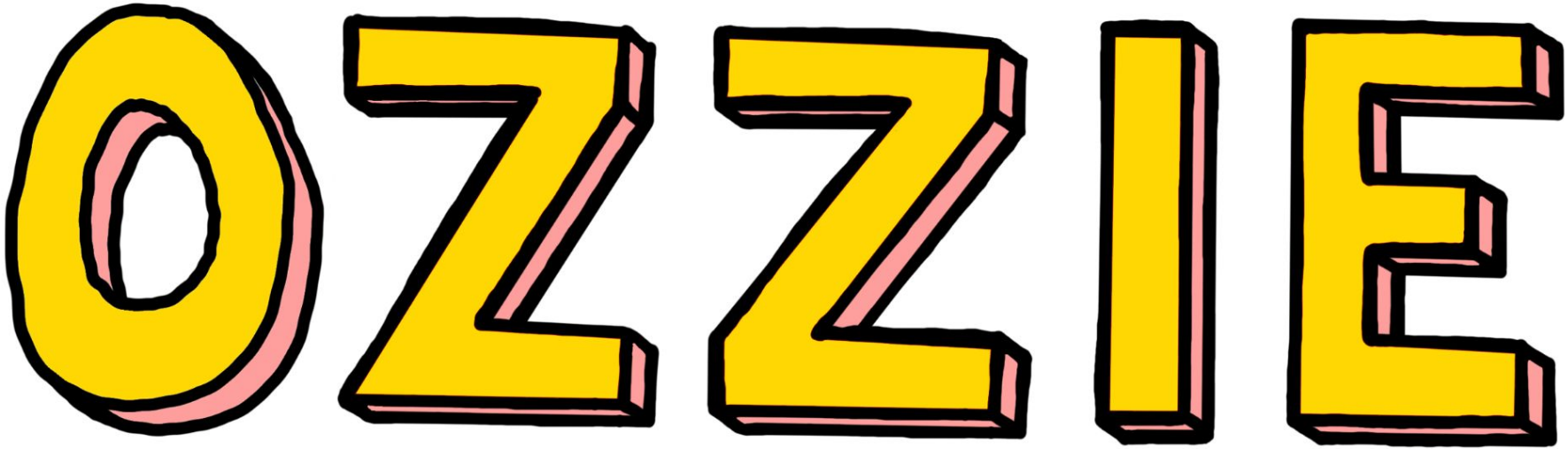
The Overconfident Operator

VS

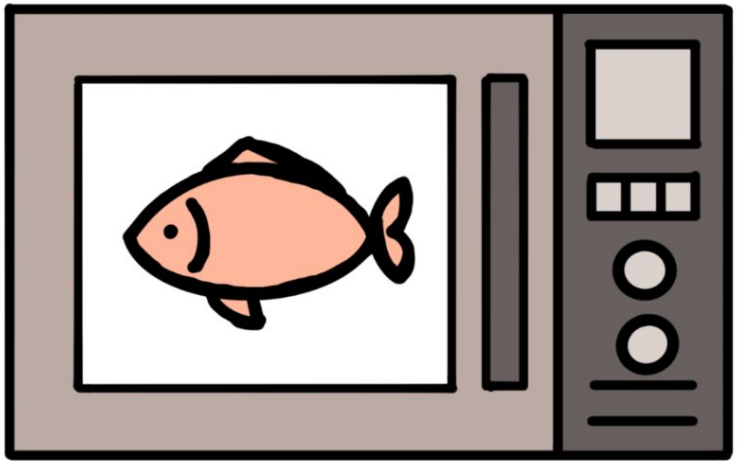
The Nefarious Ne'er-Do-Well

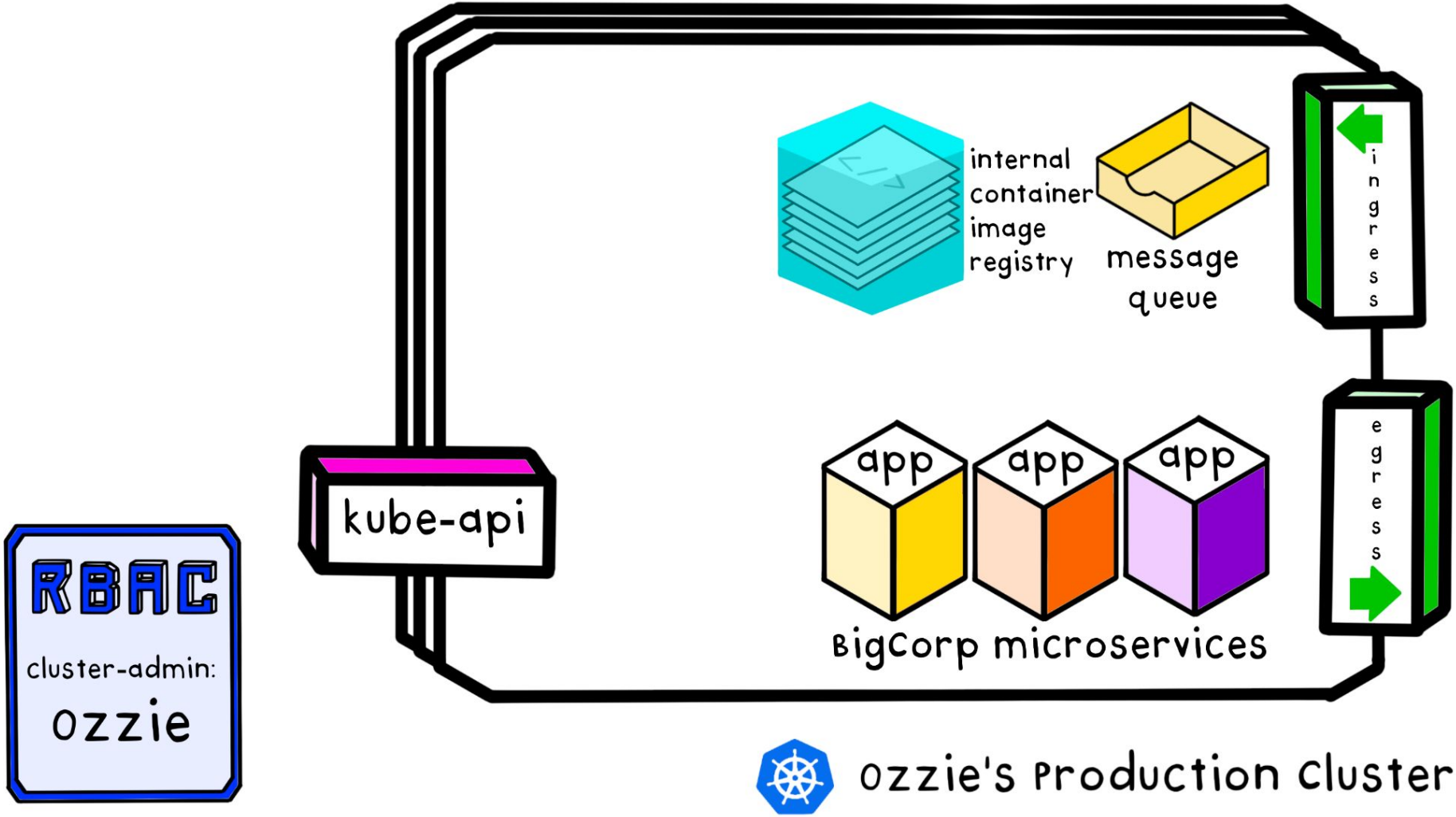
WARNING

the following awesome presentation contains slides with flashing lights for storytelling purposes


OZZIE

OZZIE




internal container image registry
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kube-api
app
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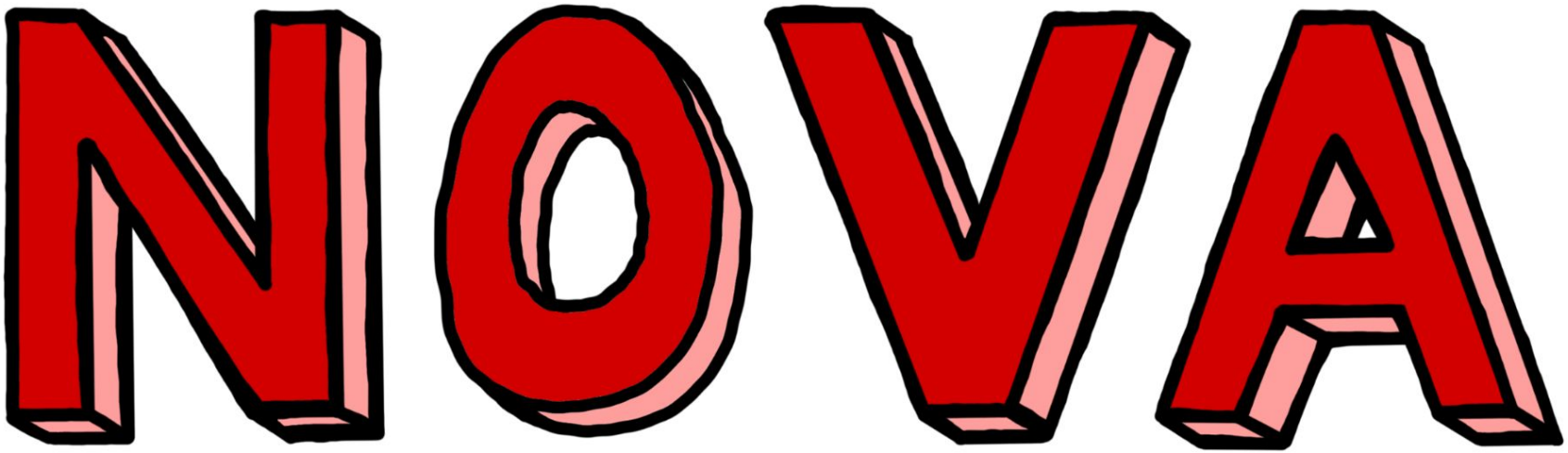
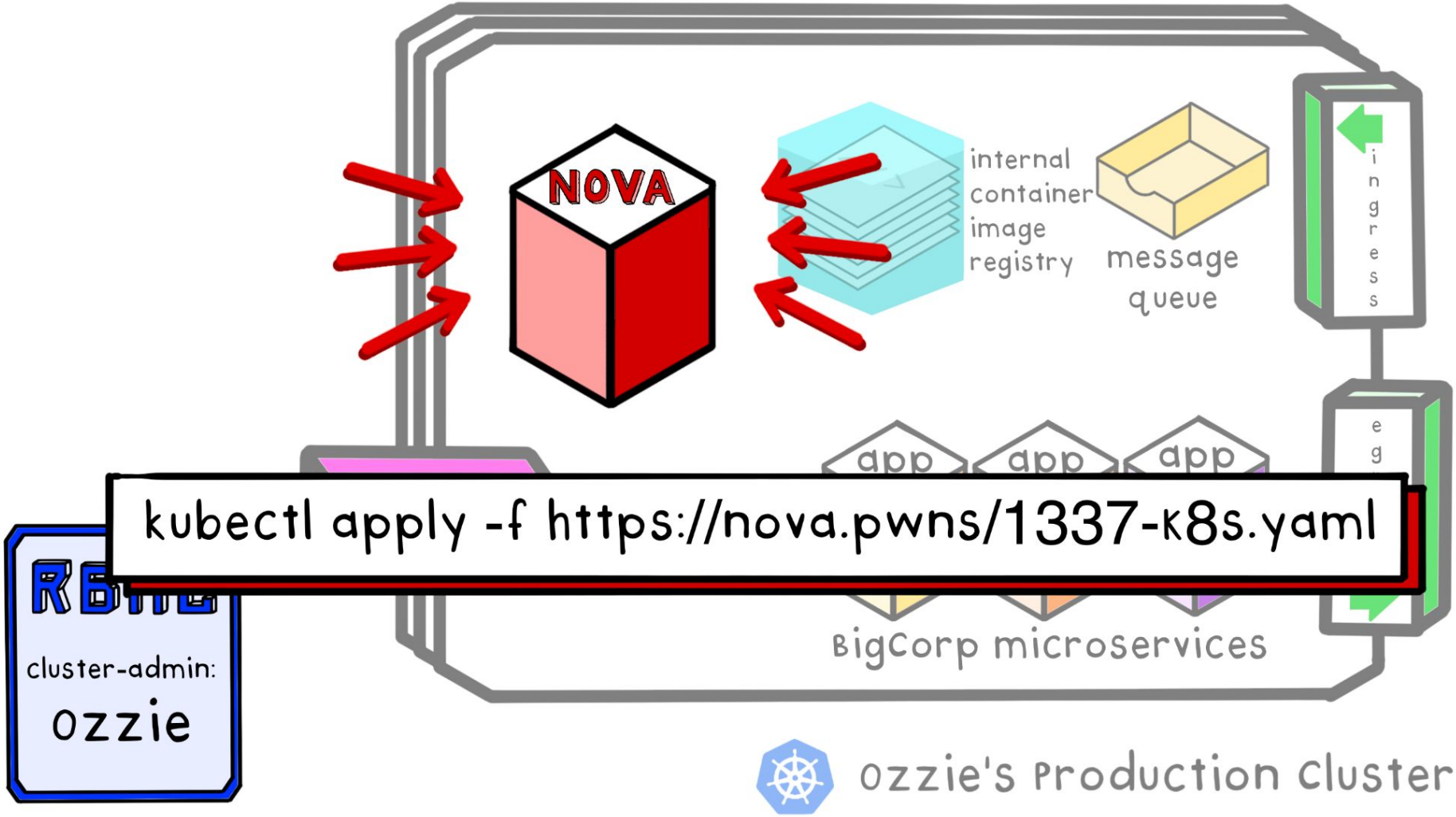
BigCorp microservices
RBAC
cluster-admin:
ozzie
ozzie's Production Cluster


NOVA


OZZIE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message queue
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BigCorp microservices
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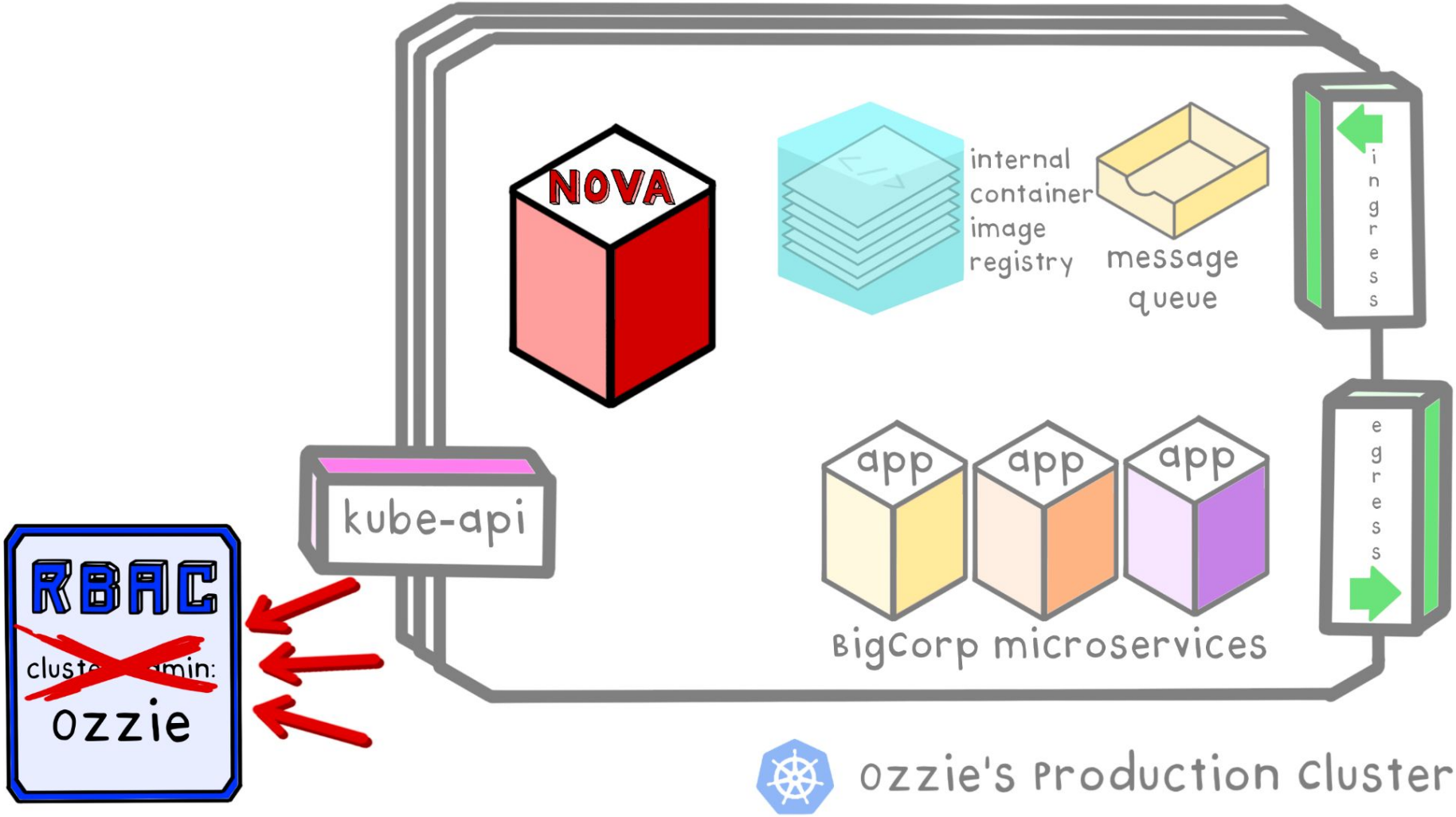
ozzie's production cluster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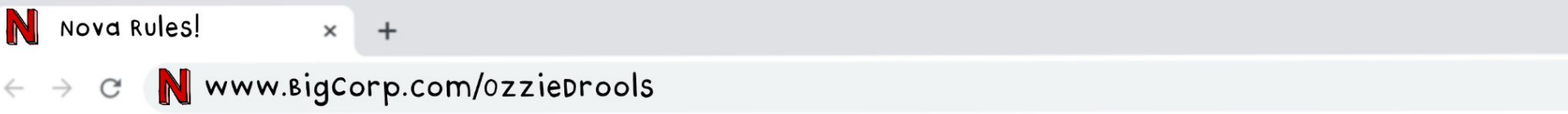
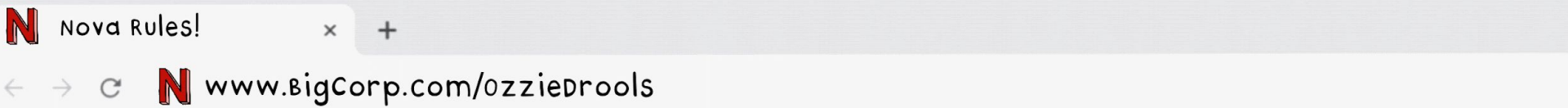

Nova Rules!
www.BigCorp.com/OzzieDrools


OZZIE
Touch ID or Enter Password
Cancel
Switch User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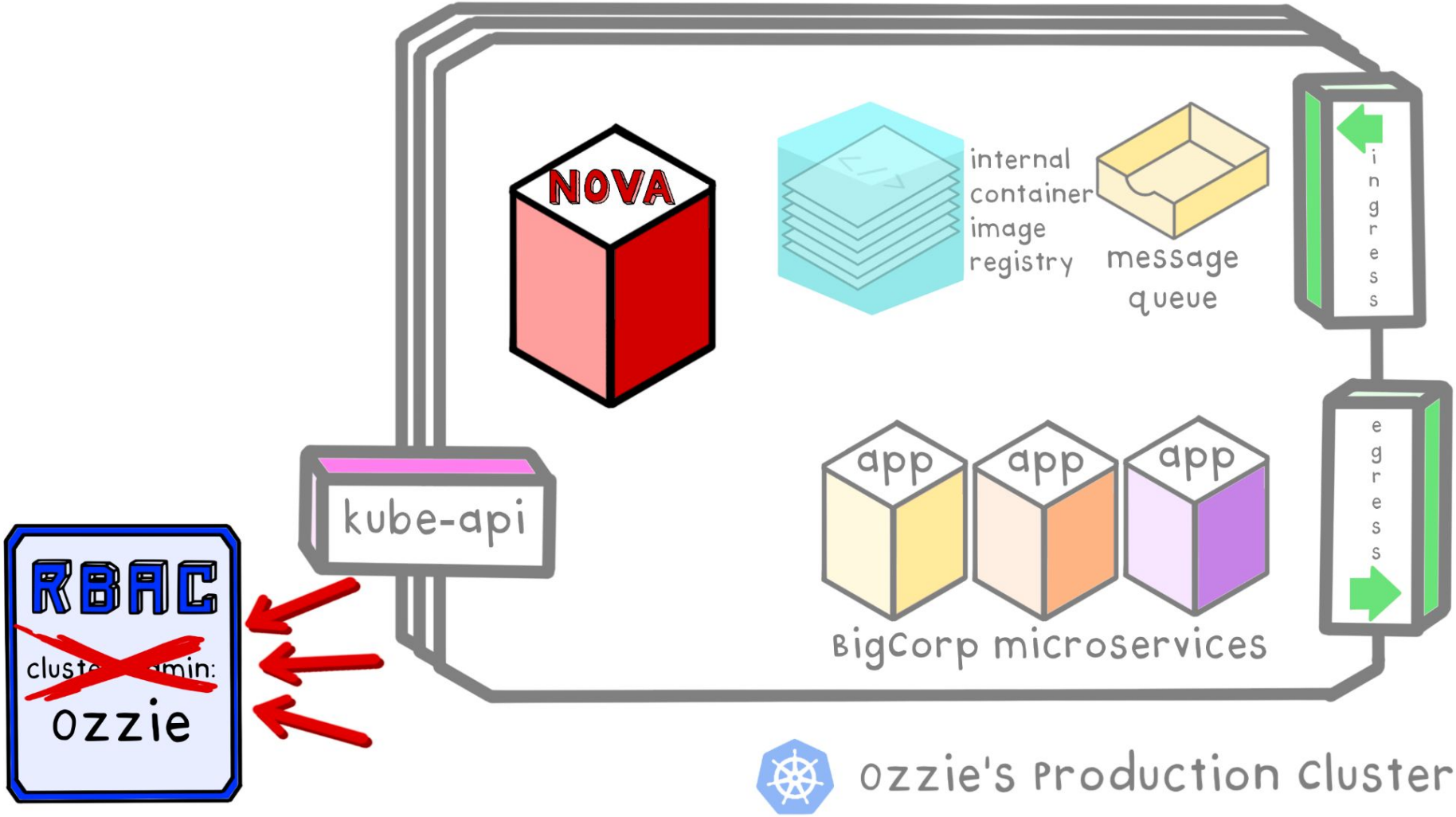
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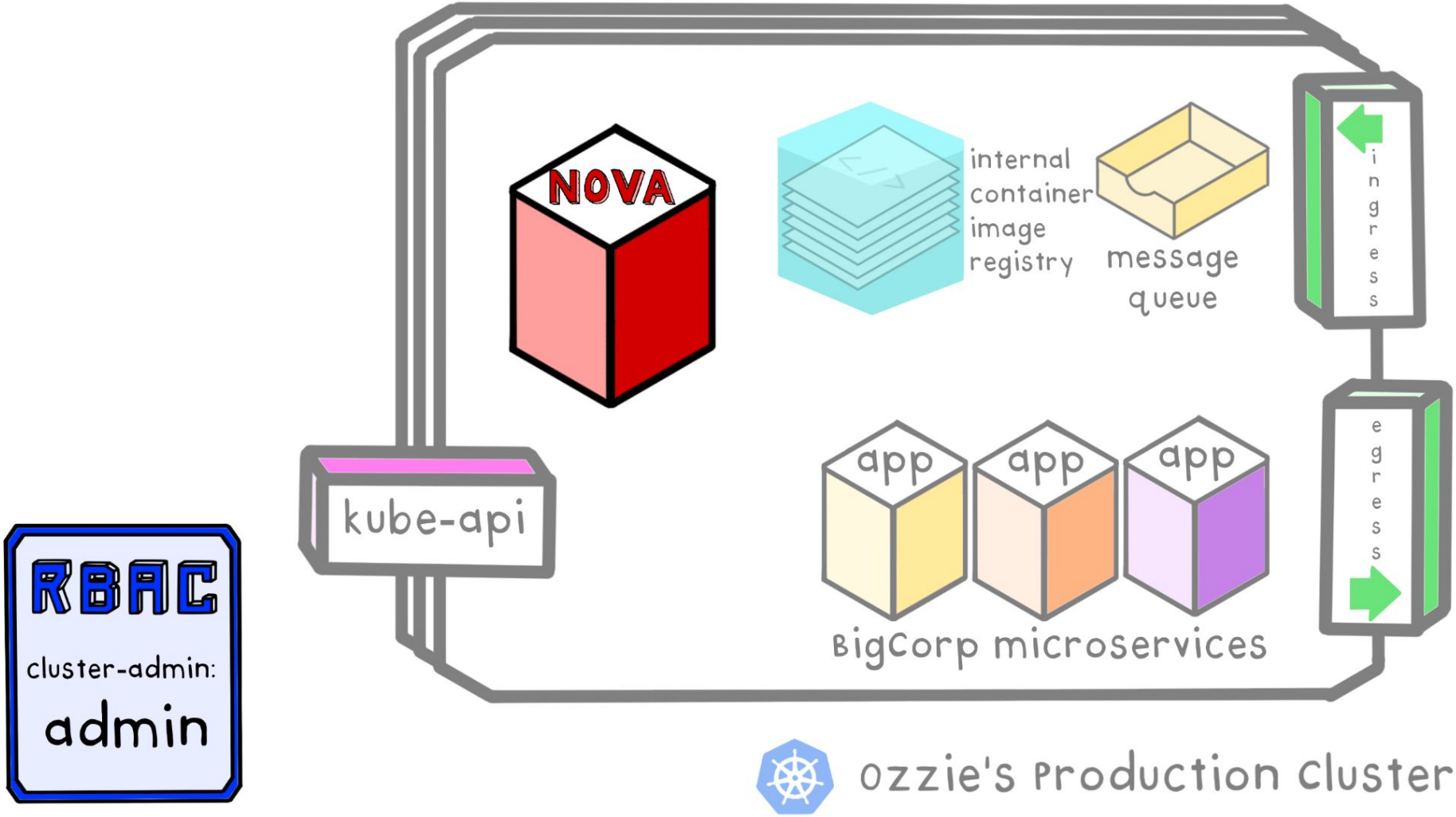
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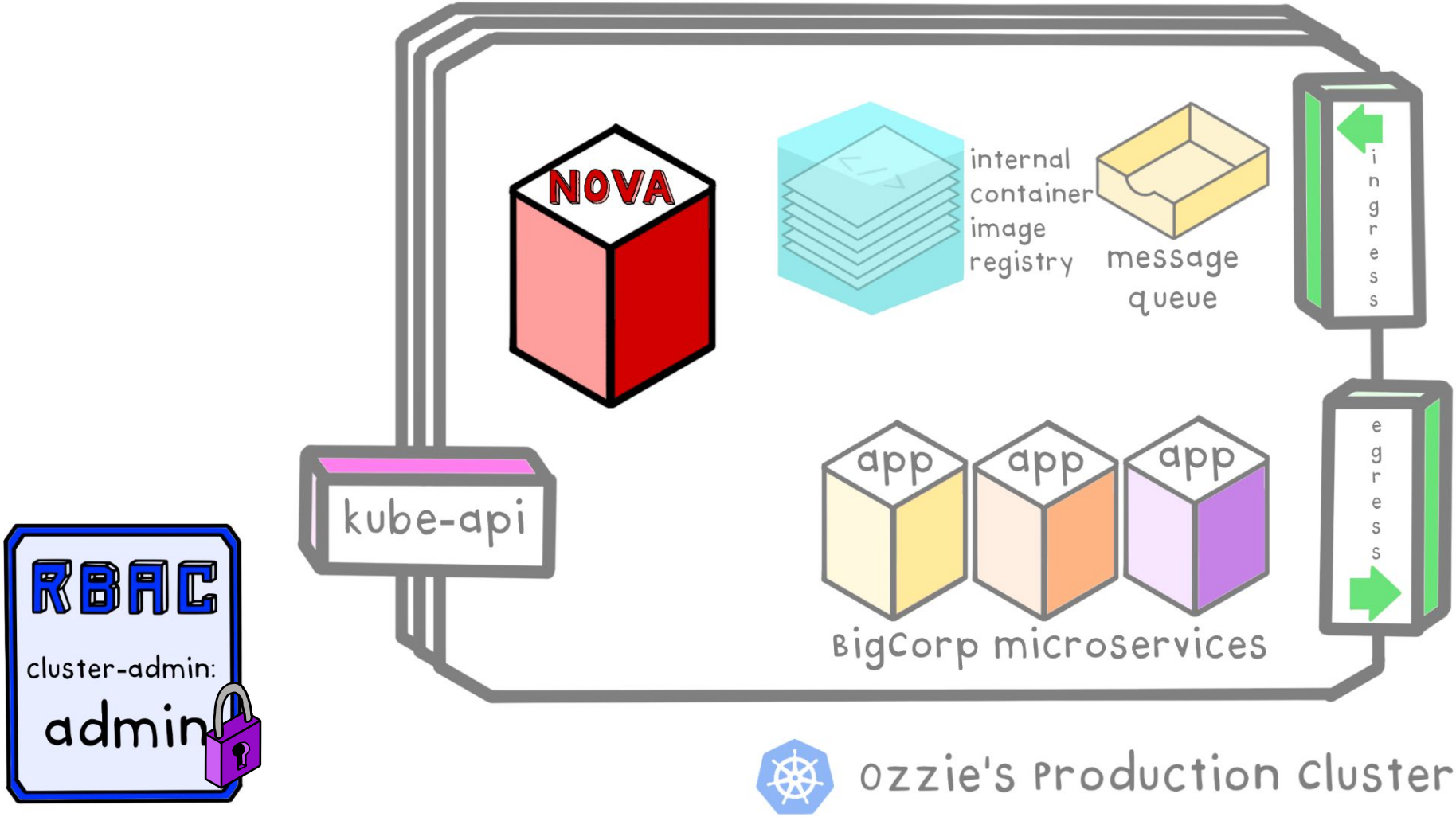
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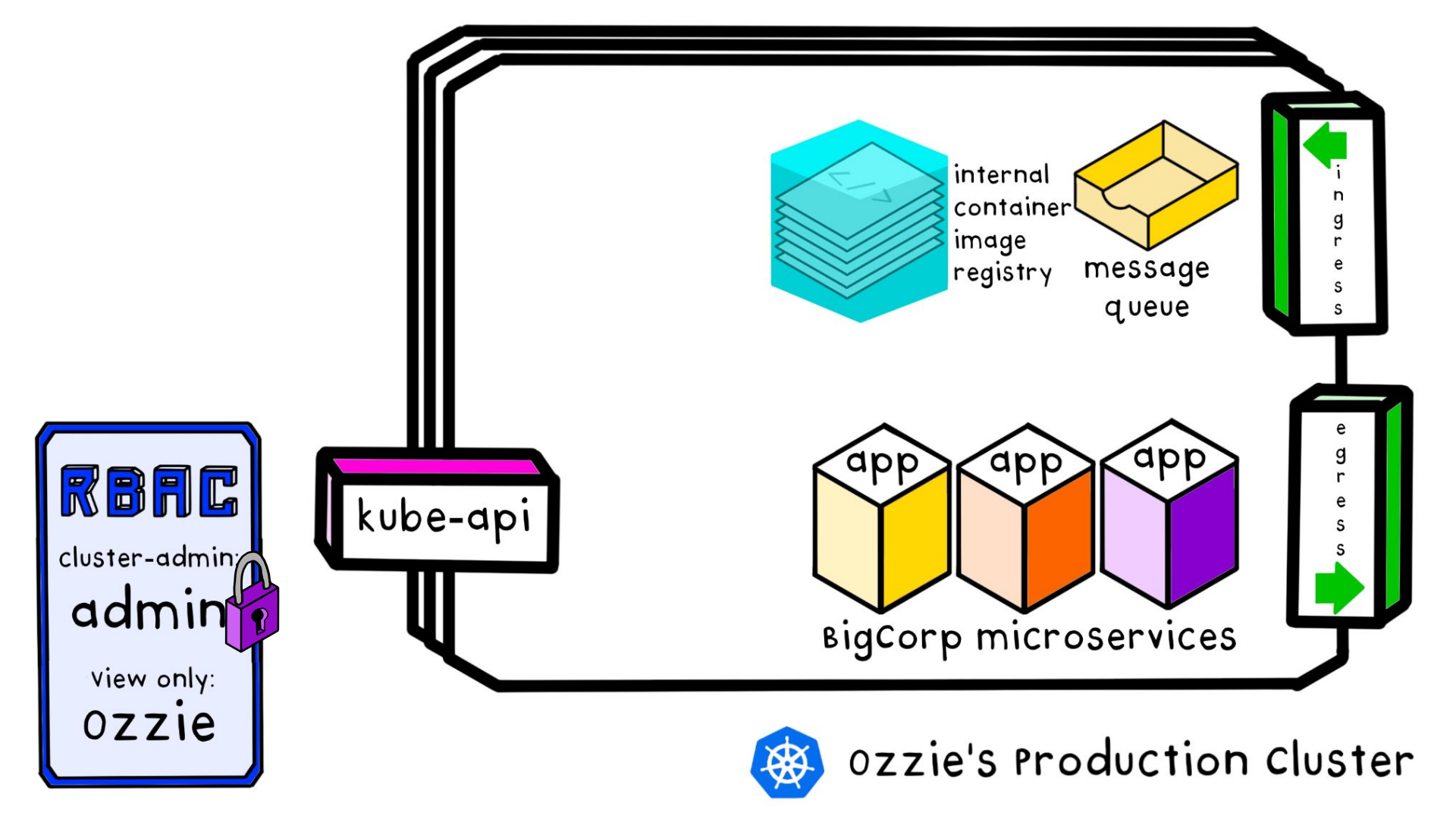
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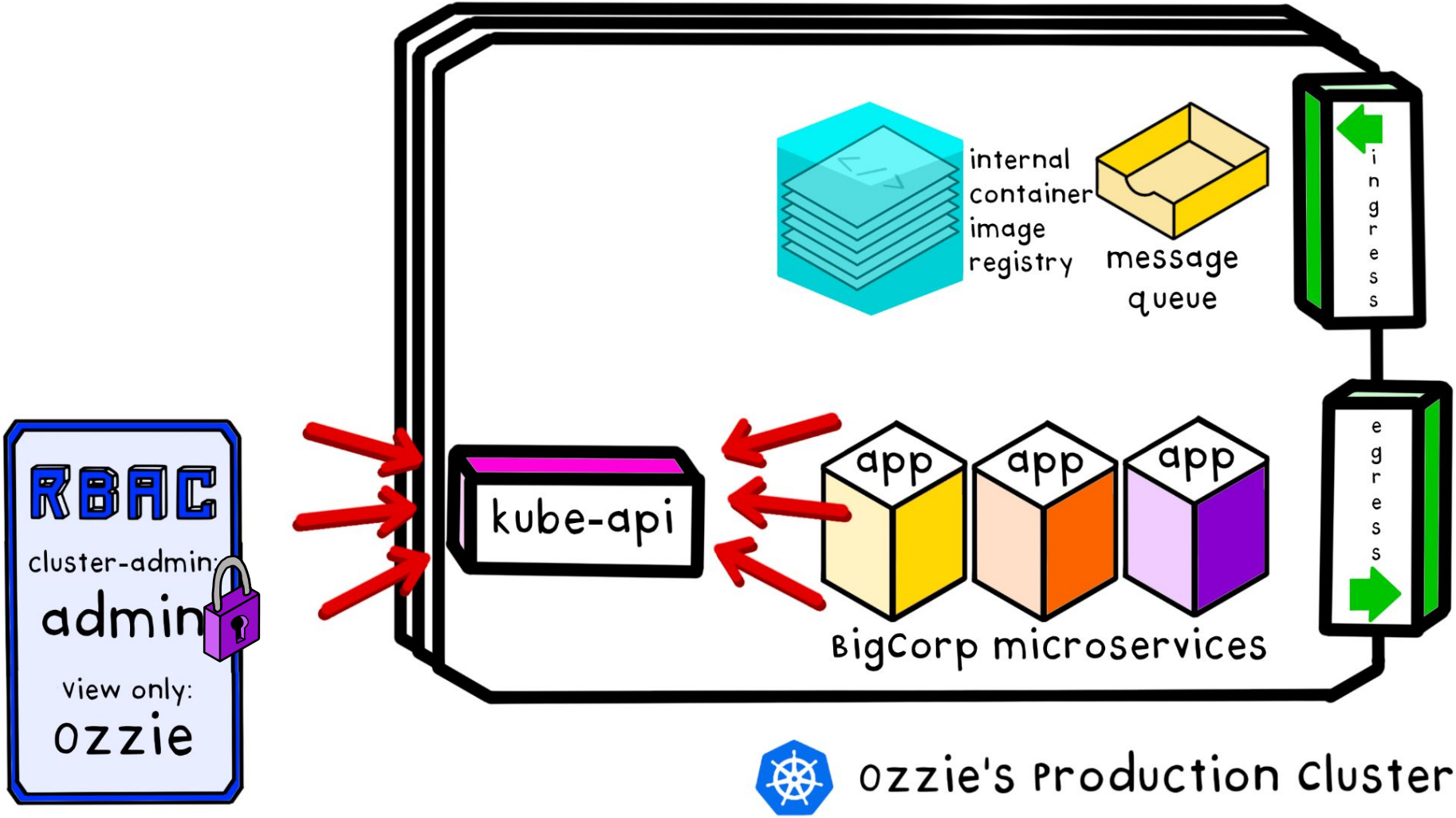
Ozzie's Production Cluster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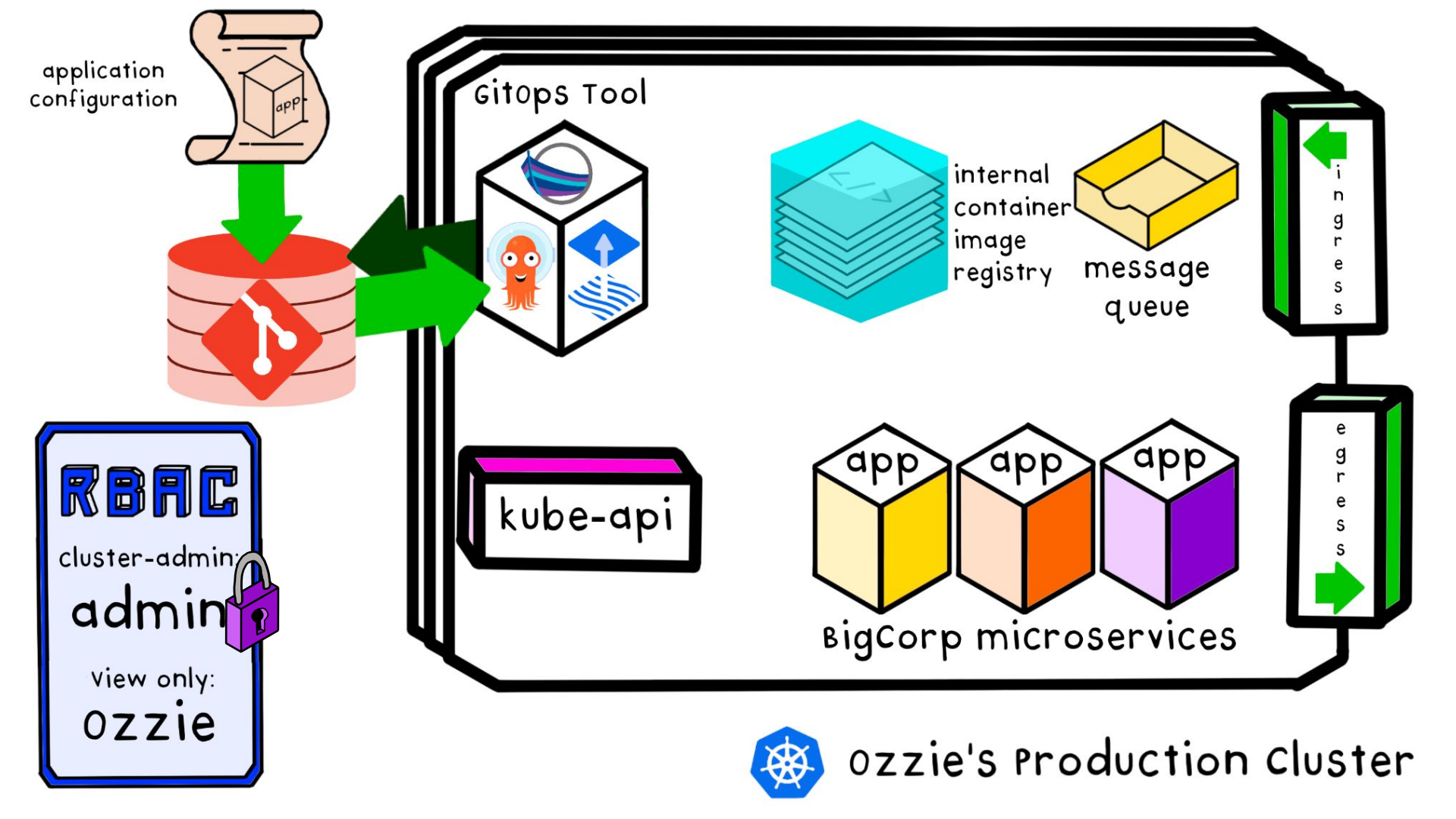
application configuration
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internal container image registry
message queue
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cluster-admin:
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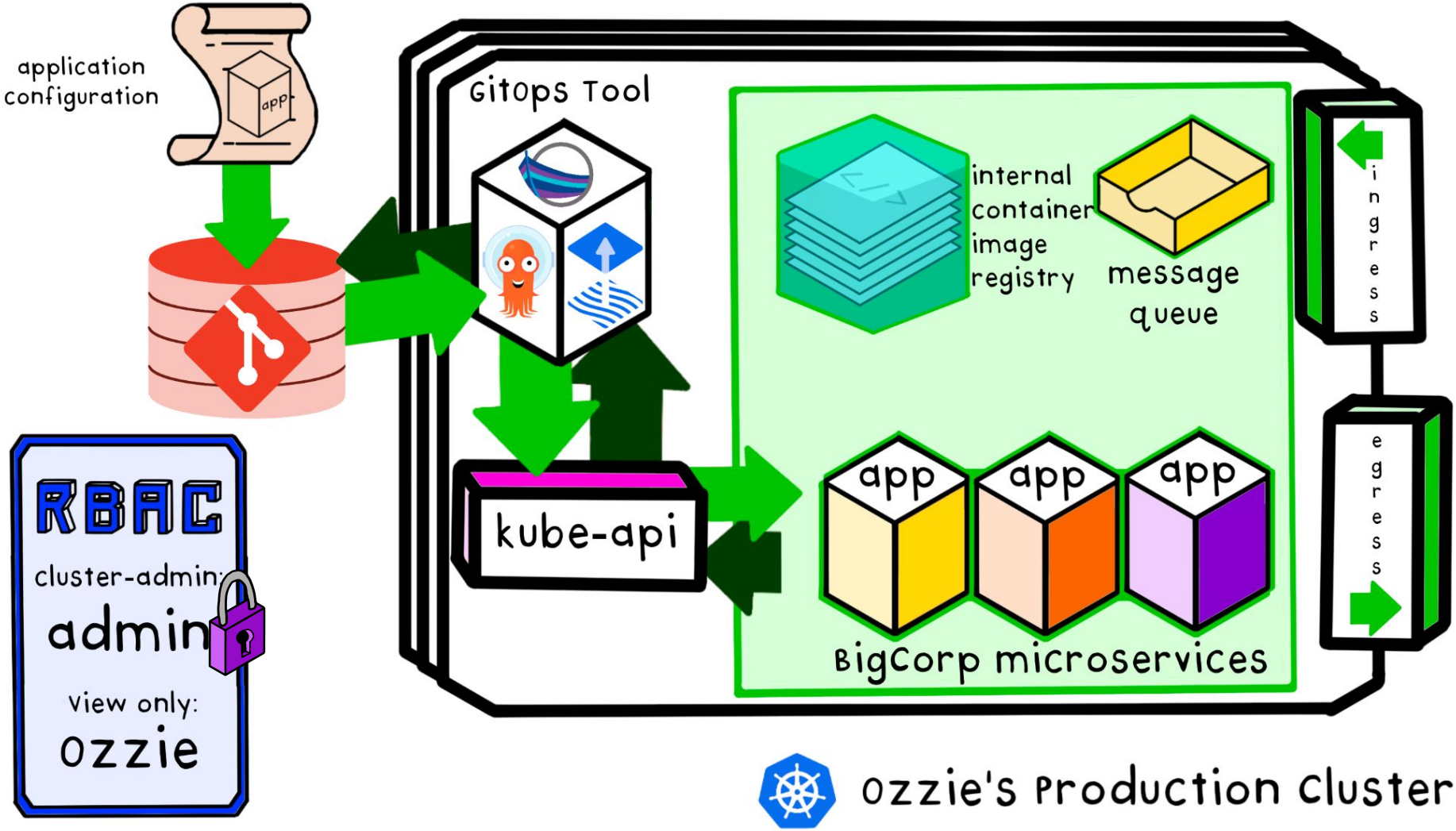
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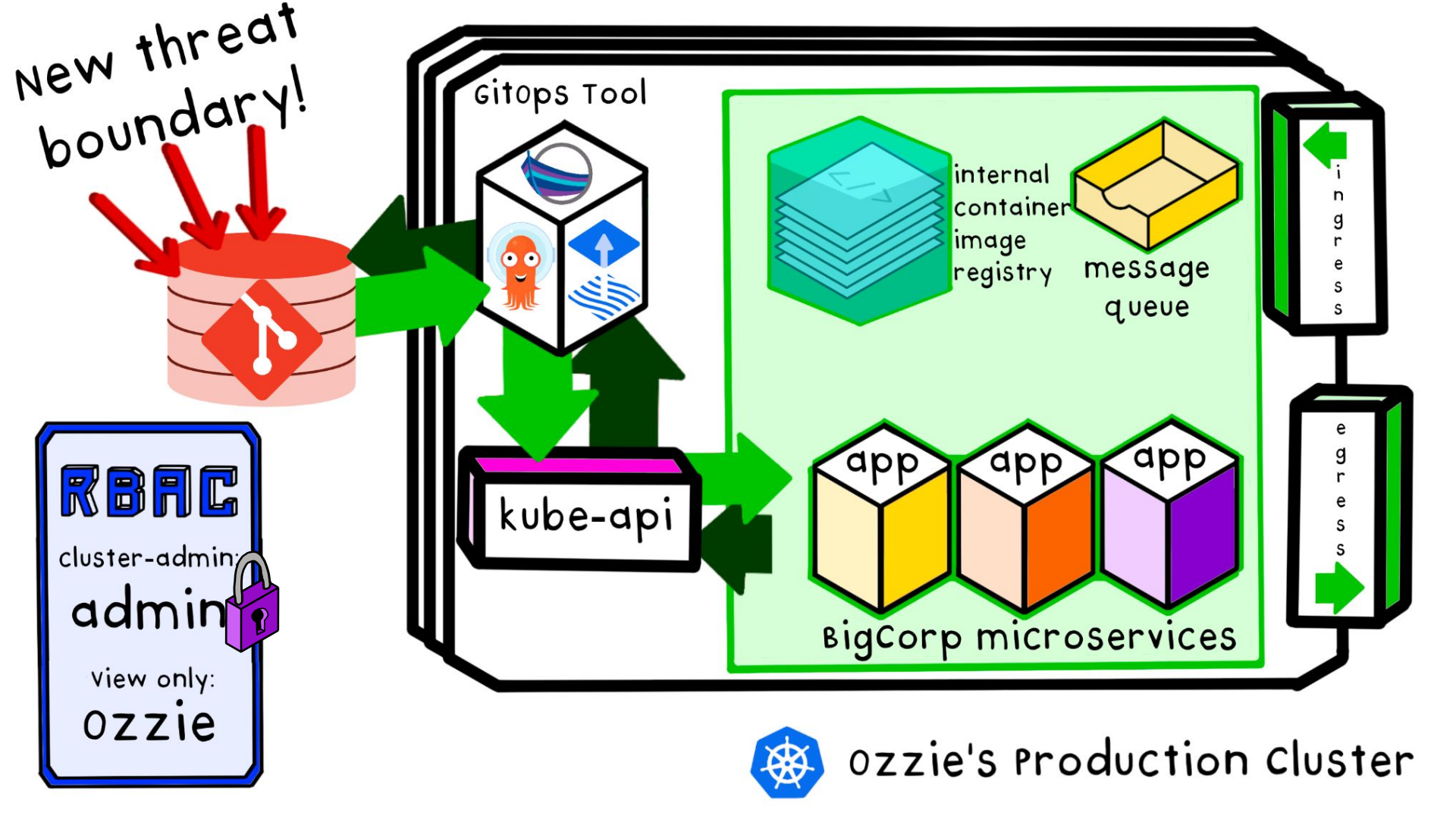
New threat boundary!
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kube-api
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BigCorp microservices
RBAC
cluster-admin:
admin
View only:
Ozzie
Ozzie's Production Cluster

Kubescape


Nova Rules!
www.BigCorp.com/OzzieDrools
BIGCORP
404
There has been a critical error on this website


OZZIE

✷ copy of kubeconfig

Now I know Ozzie's cluster's IP address!

```
$ nmap -A scanme.nmap.org

Starting Nmap 6.47 ( http://nmap.org ) at 2014-12-29 20:02 CET
Nmap scan report for scanme.nmap.org (74.207.244.221)
Host is up (0.16s latency).
Not shown: 997 filtered ports
PORT     STATE SERVICE    VERSION
22/tcp   open  ssh        OpenSSH 5.3p1 Debian 3ubuntu7.1 (Ubuntu Linux; protocol 2.0)
| ssh-hostkey:
|   1024 8d:60:f1:7c:ca:b7:3d:0a:d6:67:54:9d:69:d9:b9:dd (DSA)
|_  2048 79:f8:09:ac:d4:e2:32:42:10:49:d3:bd:20:82:85:ec (RSA)
80/tcp   open  http       Apache httpd 2.2.14 ((Ubuntu))
|_http-title: Go ahead and ScanMe!
9929/tcp open  nping-echo Nping echo
Warning: OSScan results may be unreliable because we could not find at least 1 open and 1 closed port
Device type: general purpose|phone|storage-misc|WAP
Running (JUST GUESSING): Linux 2.6.X|3.X|2.4.X (94%), Netgear RAIDiator 4.X (86%)
OS CPE: cpe:/o:linux:linux_kernel:2.6.38 cpe:/o:linux:linux_kernel:3 cpe:/o:netgear:raidiator:4 cpe:/o:linux:linux_kernel:2.4
Aggressive OS guesses: Linux 2.6.38 (94%), Linux 3.0 (92%), Linux 2.6.32 - 3.0 (91%), Linux 2.6.18 (91%), Linux 2.6.39 (90%), Linux 2.6.32 - 2.6.39 (90%), Linux 2.6.38
- 3.0 (90%), Linux 2.6.38 - 2.6.39 (89%), Linux 2.6.35 (88%), Linux 2.6.37 (88%)
No exact OS matches for host (test conditions non-ideal).
Network Distance: 13 hops
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel

TRACEROUTE (using port 80/tcp)
HOP RTT       ADDRESS
1   14.21 ms  151.217.192.1
2   5.27 ms   ae10-0.mx240-iphh.shitty.network (94.45.224.129)
3   13.16 ms  hmb-s2-rou-1102.DE.eurorings.net (134.222.120.121)
4   6.83 ms   blnb-s1-rou-1041.DE.eurorings.net (134.222.229.78)
5   8.30 ms   blnb-s3-rou-1041.DE.eurorings.net (134.222.229.82)
6   9.42 ms   as6939.bcix.de (193.178.185.34)
7   24.56 ms  10ge10-6.core1.ams1.he.net (184.105.213.229)
8   30.60 ms  100ge9-1.core1.lon2.he.net (72.52.92.213)
9   93.54 ms  100ge1-1.core1.nyc4.he.net (72.52.92.166)
10  181.14 ms 10ge9-6.core1.sjc2.he.net (184.105.213.173)
11  169.54 ms 10ge3-2.core3.fmt2.he.net (184.105.222.13)
12  164.58 ms router4-fmt.linode.com (64.71.132.138)
13  164.32 ms scanme.nmap.org (74.207.244.221)

OS and Service detection performed. Please report any incorrect results at http://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 28.98 seconds
```

✷ copy of kubeconfig

Now I know Ozzie's cluster's IP address!

✷ private ssh key

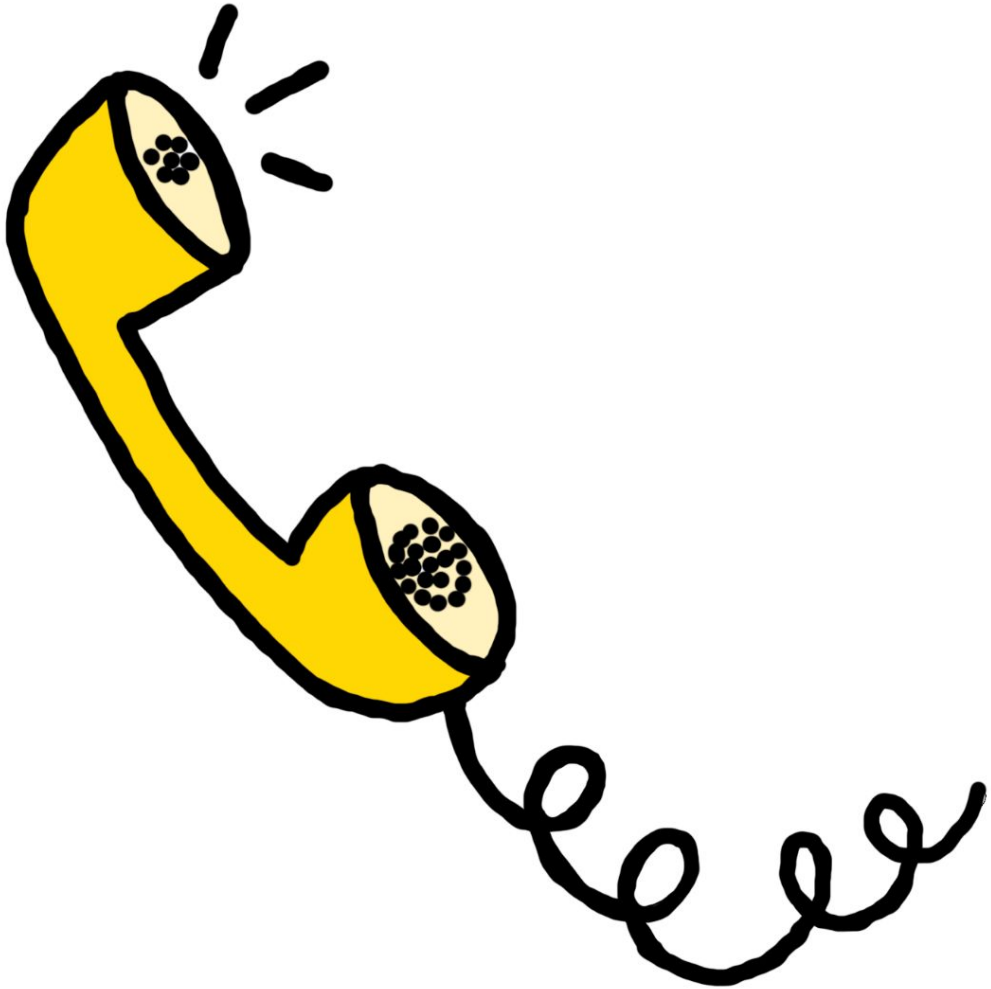
Now I have ozzie's identity!

✷ ssh config file

Now I know where I can use Ozzie's identity!

- git config files

Now I know all of the urls of all of the Git Repos Ozzie has contributed to recently!

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You
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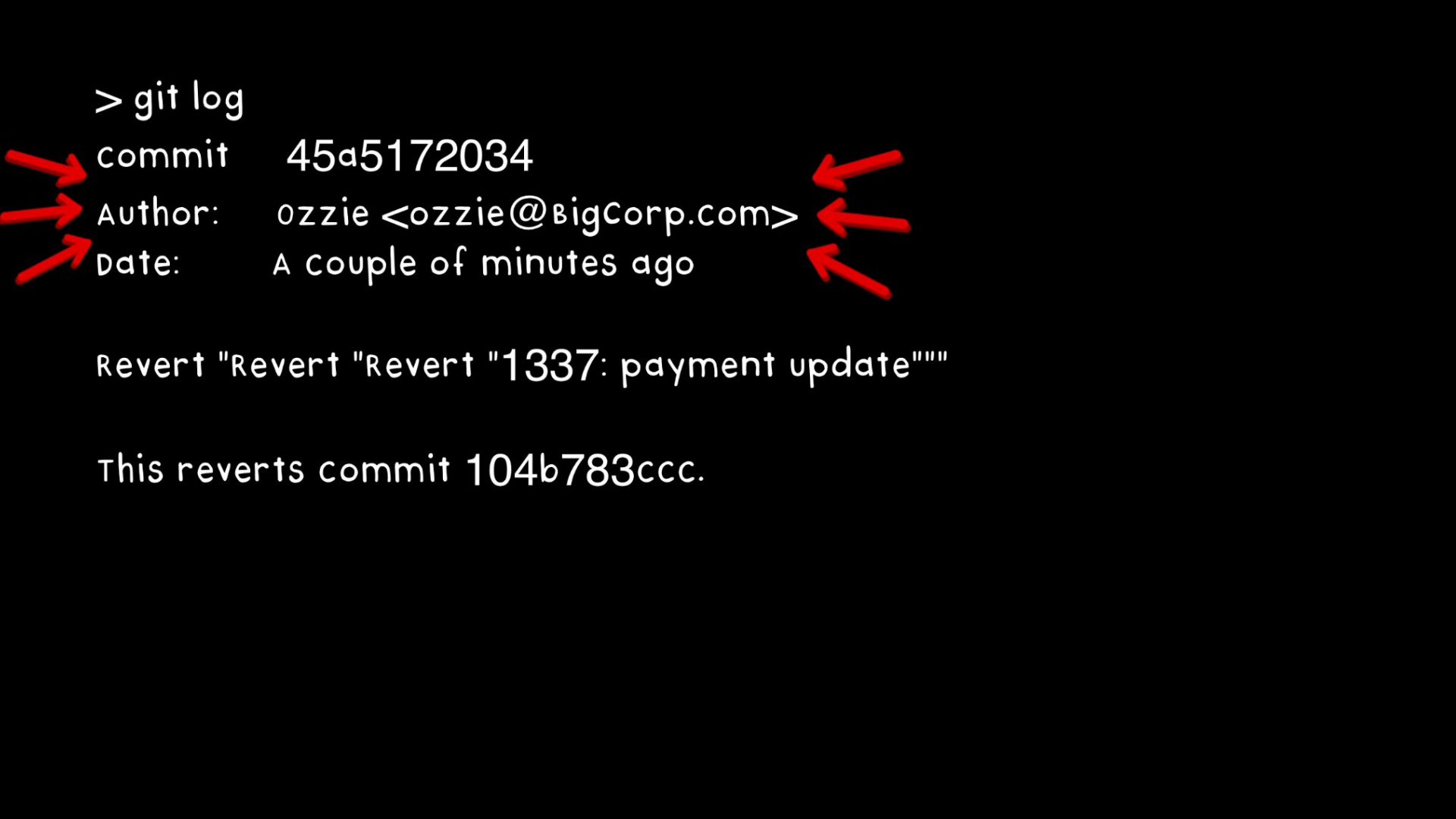
144
Up
$13.37

```
> git log
commit    8096372861
Author:   Ozzie
Date:     A couple of minutes ago

1337: payment update

- set cost to 13.37
- mahah
- ahaha
- hahaha
```

```
> git revert 8096372861

Revert "1337: payment update"

This reverts commit 8096372861.
```

```
> git log
commit 104b783ccc
Author: ozzie
Date:  A couple of minutes ago

Revert "Revert "1337: payment update""

This reverts commit 0a71741194.
```


> git log
commit 45a5172034
Author: Ozzie <ozzie@BigCorp.com>
Date: A couple of minutes ago
Revert "Revert "Revert "1337: payment update""
This reverts commit 104b783ccc.


> git log
commit 45a5172034
Author: Ozzie <ozzie@BigCorp.com>
Date: A couple of minutes ago
Revert "Revert "Revert "1337: payment update""
This reverts commit 104b783ccc.
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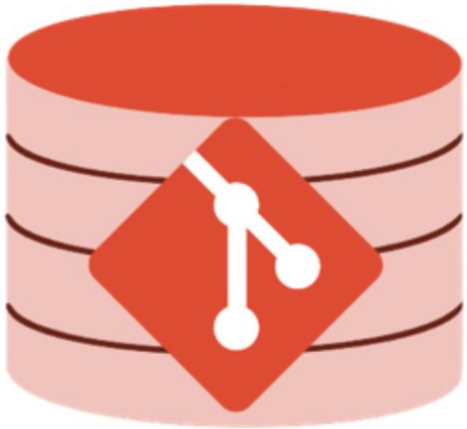
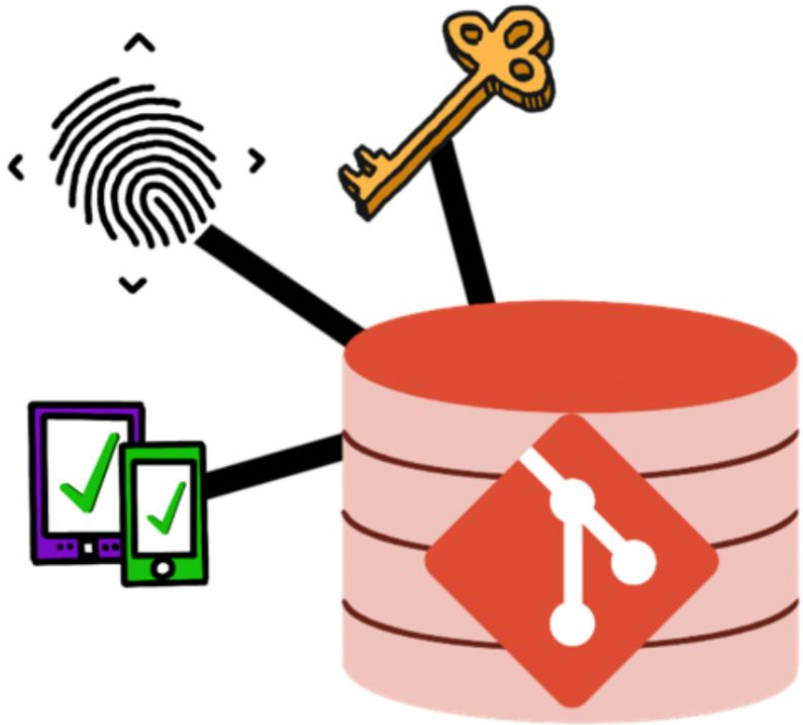
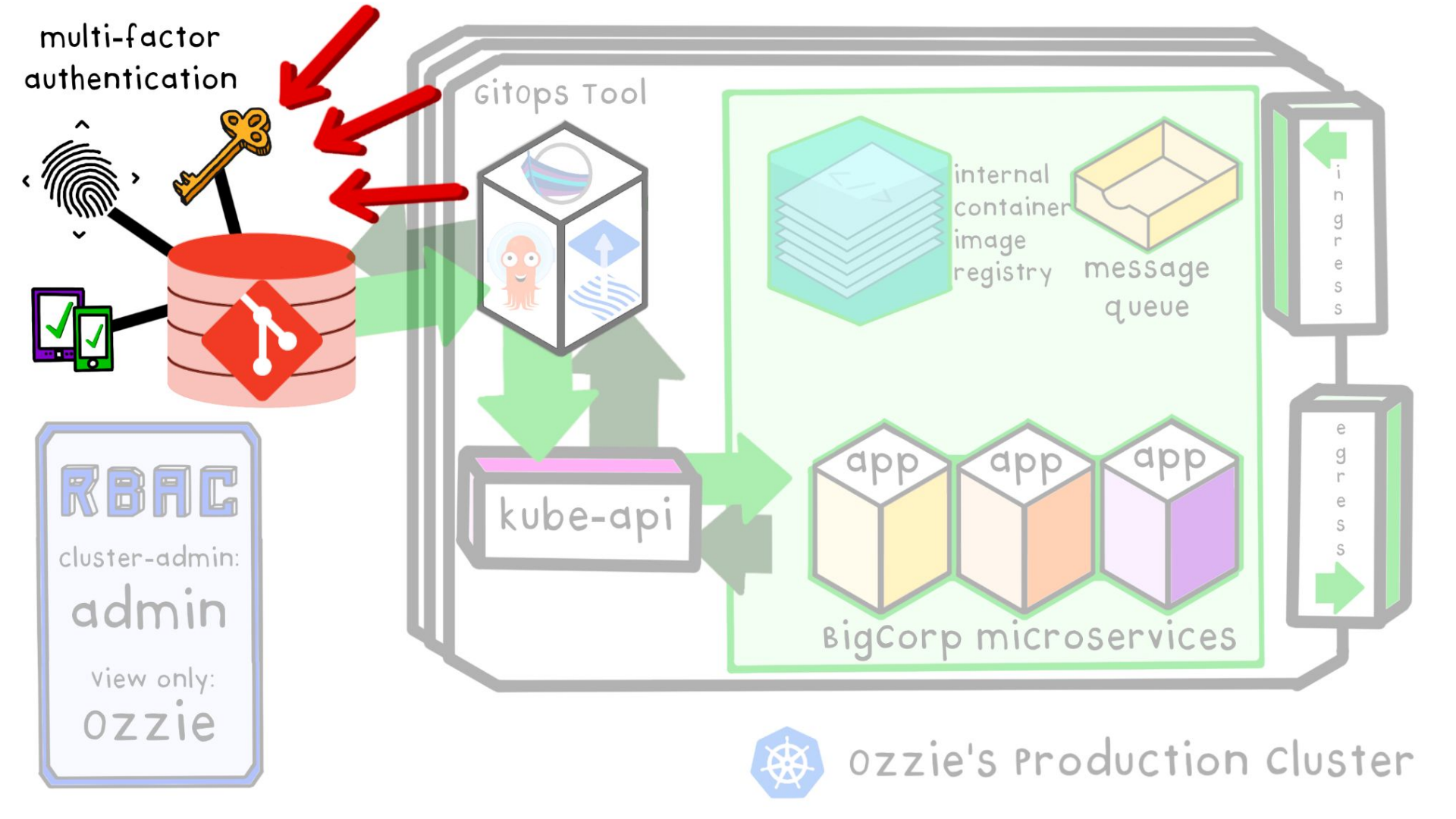


multi-factor
authentication




multi-factor authentication
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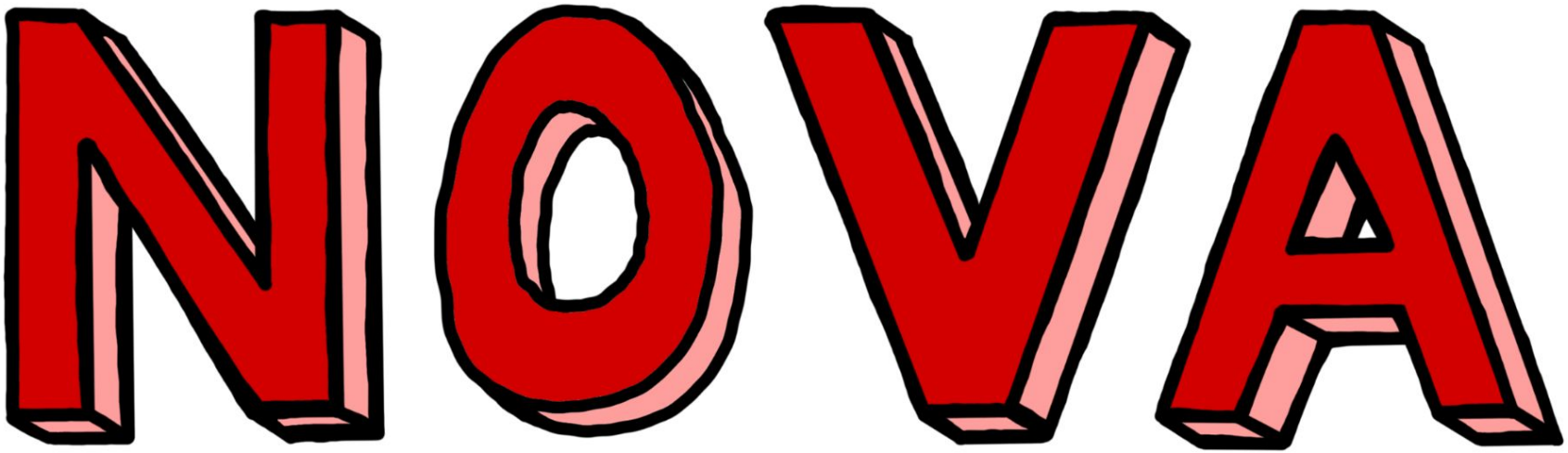
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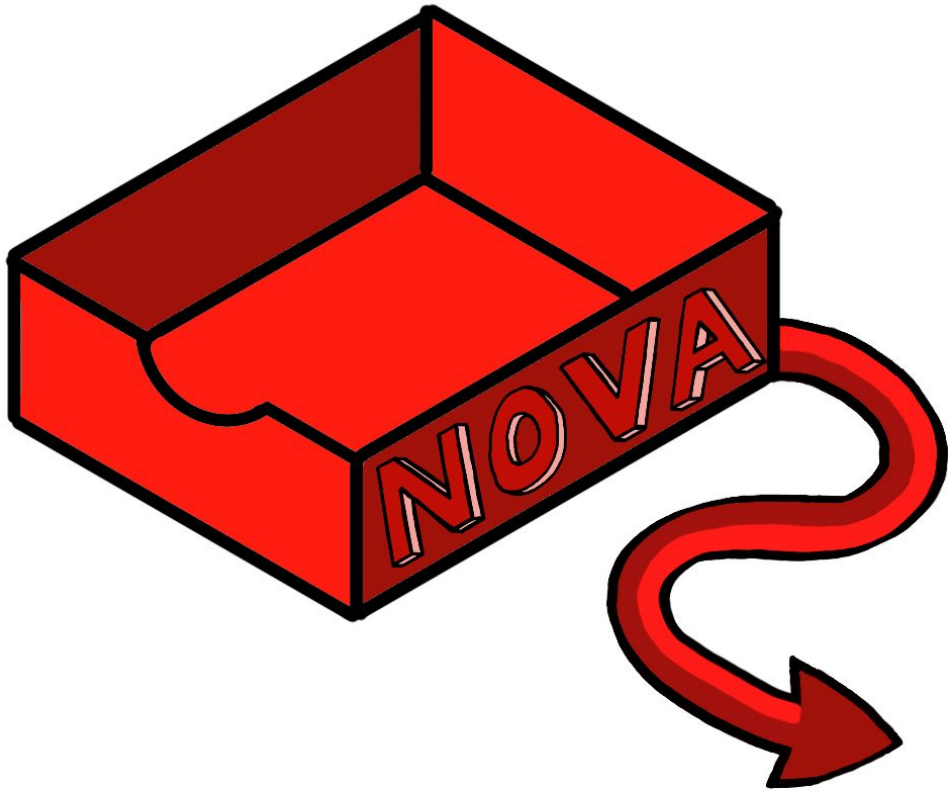
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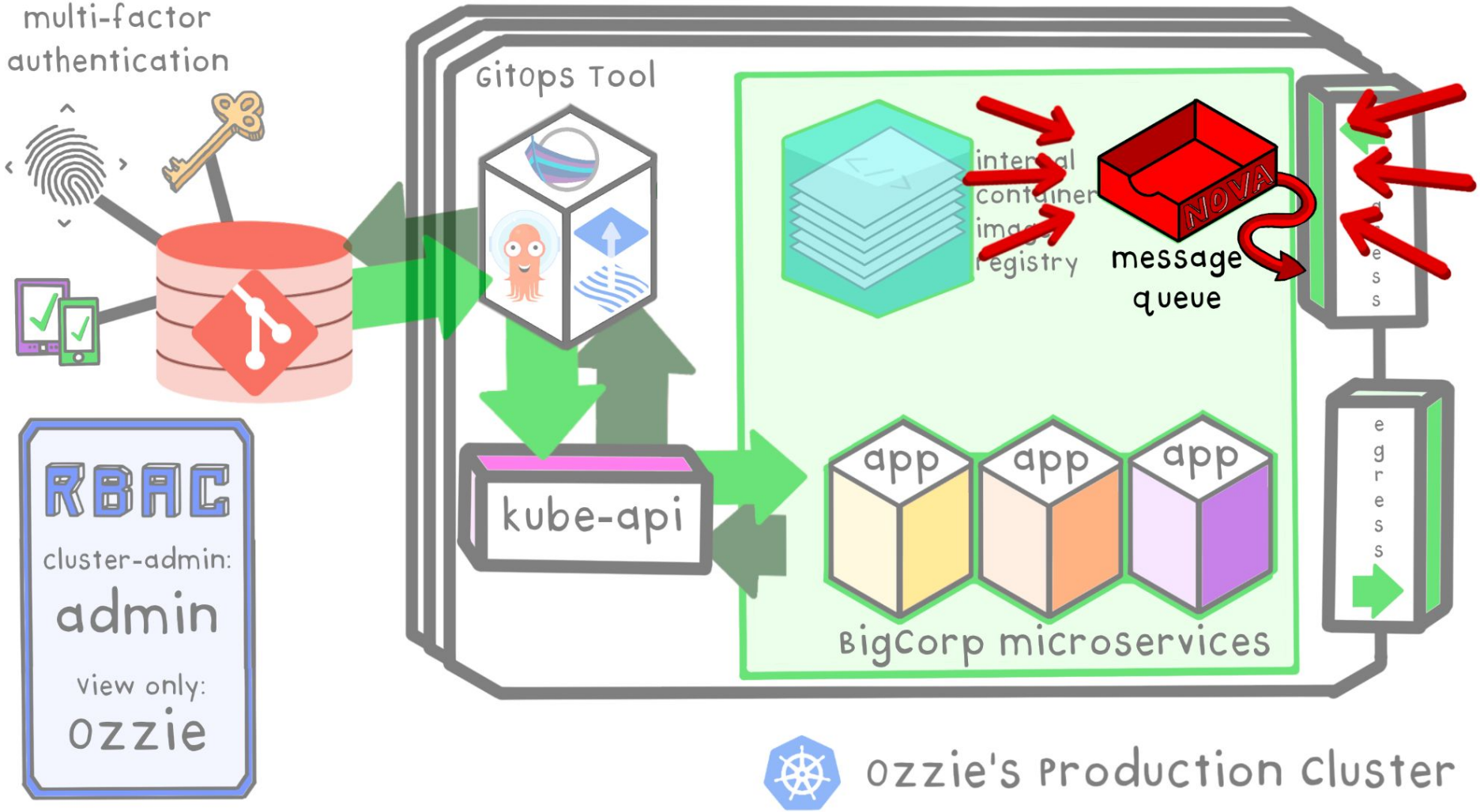
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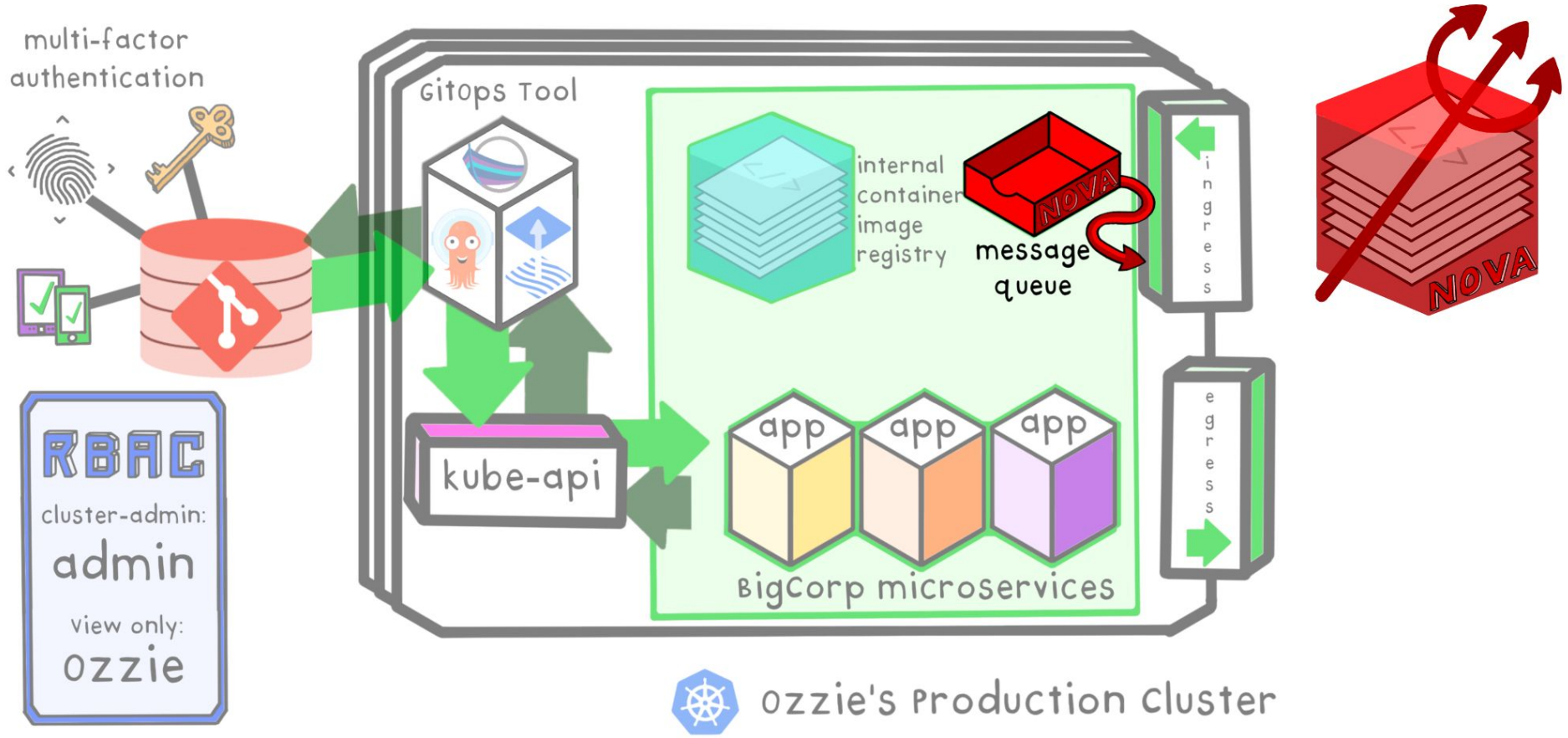
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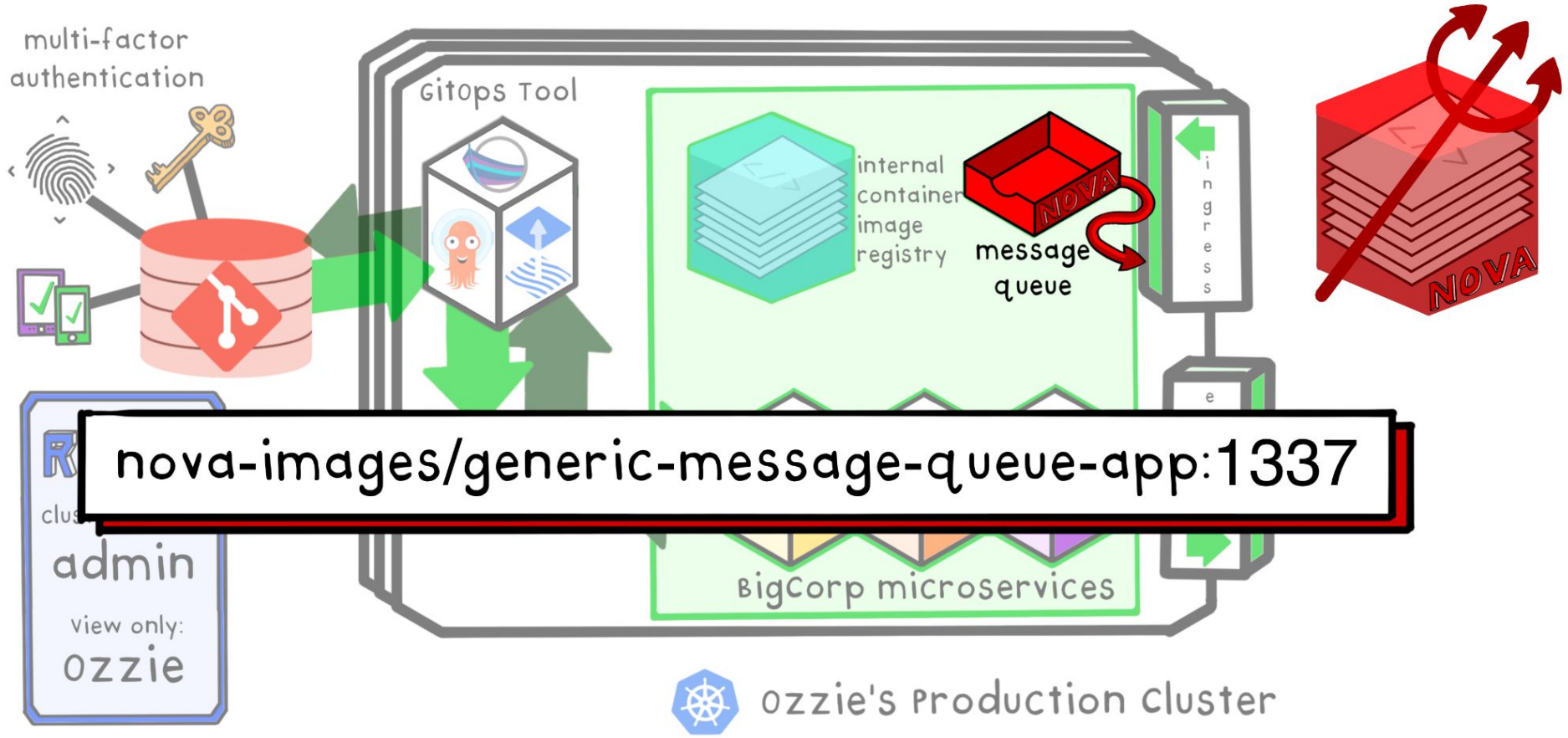

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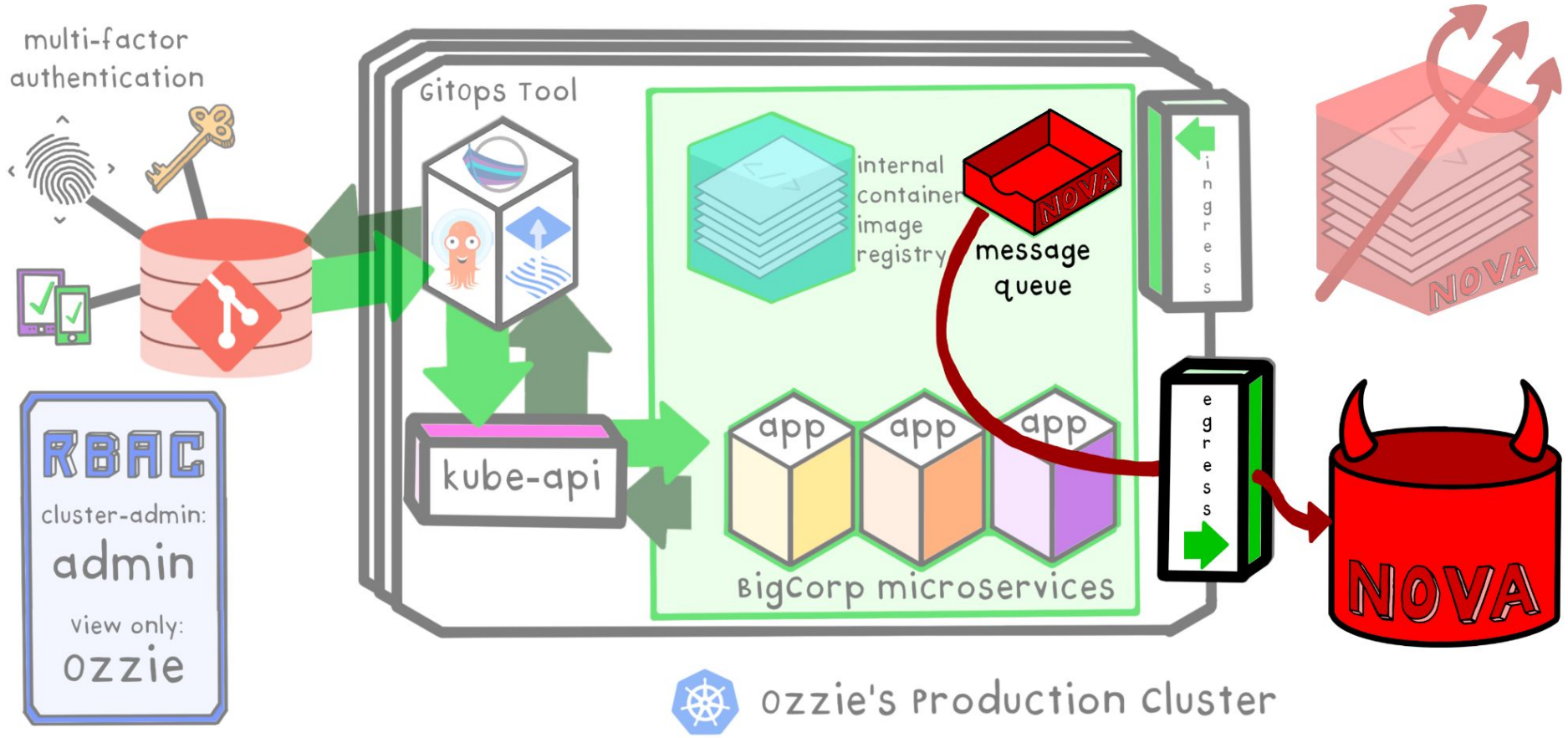
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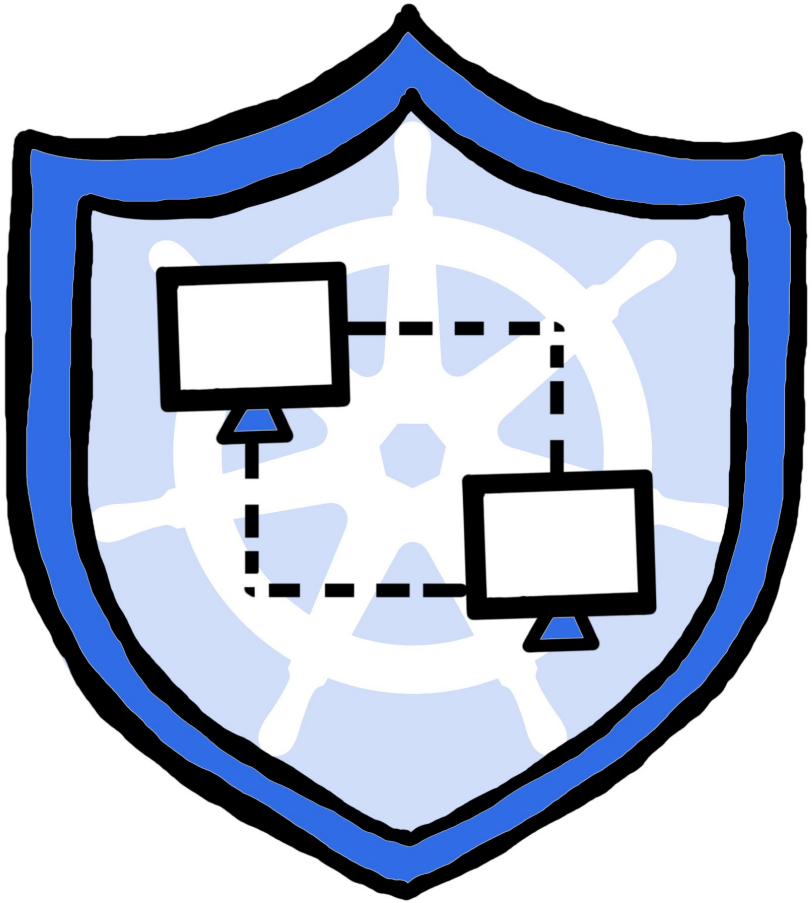

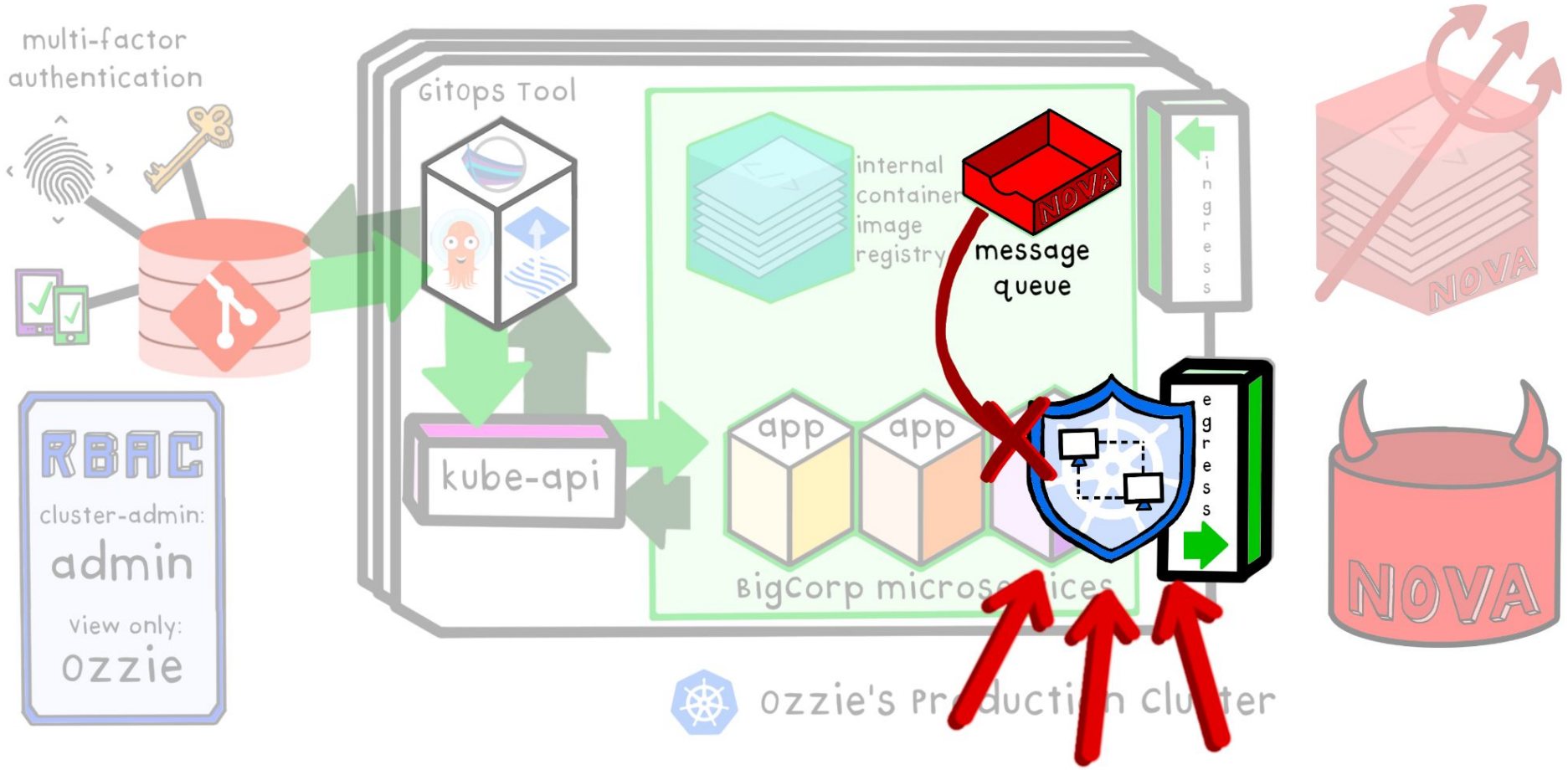
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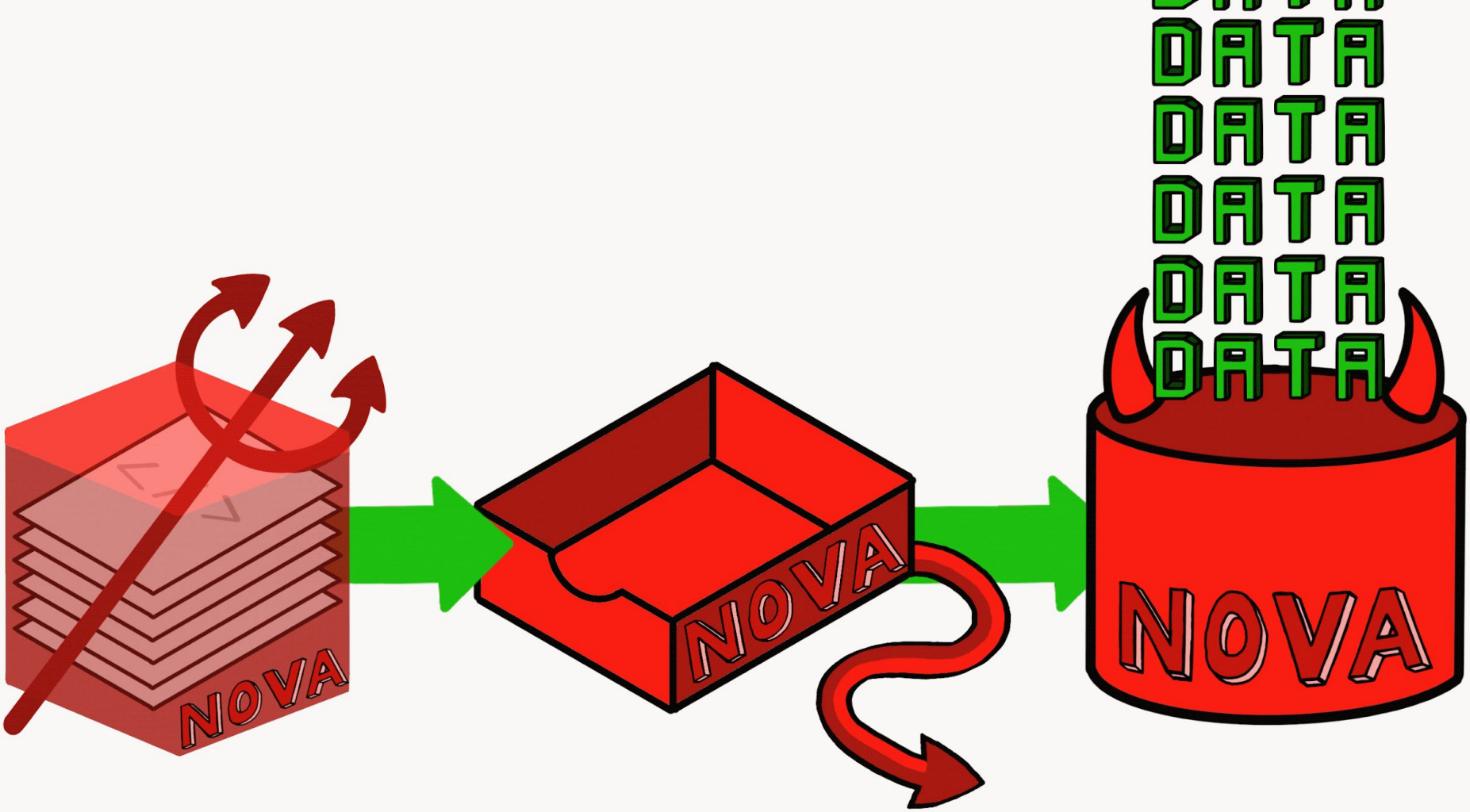
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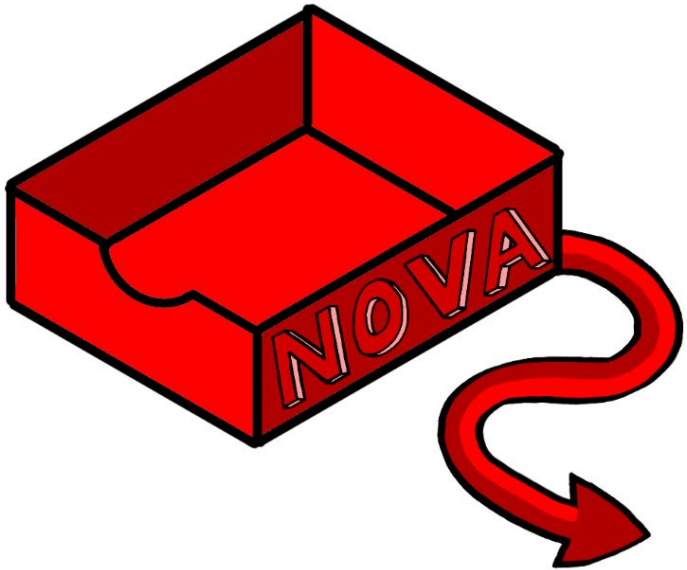
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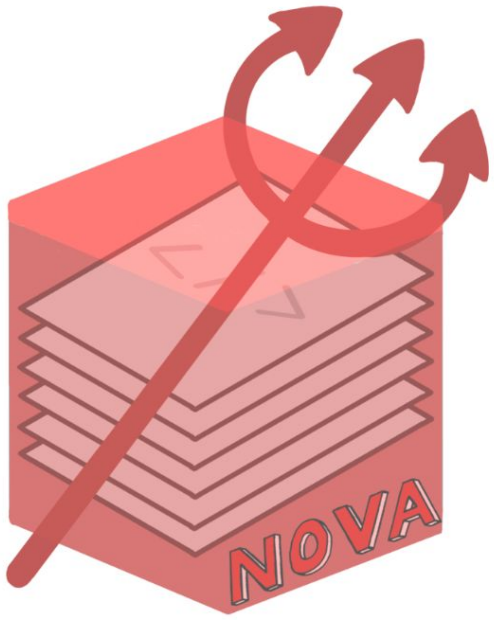
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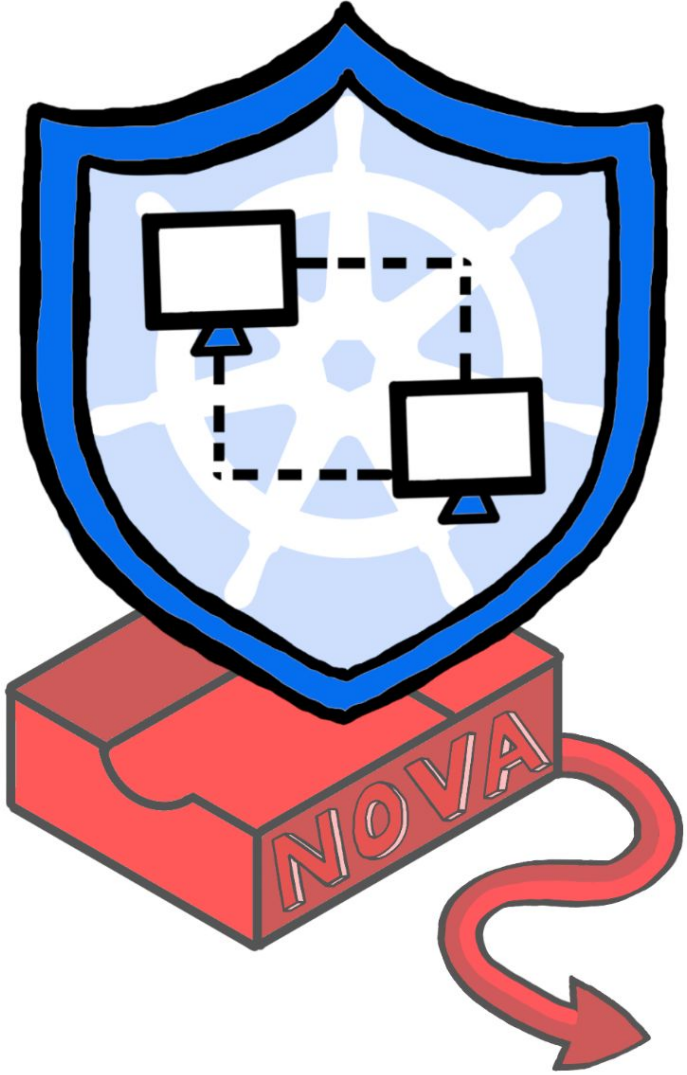
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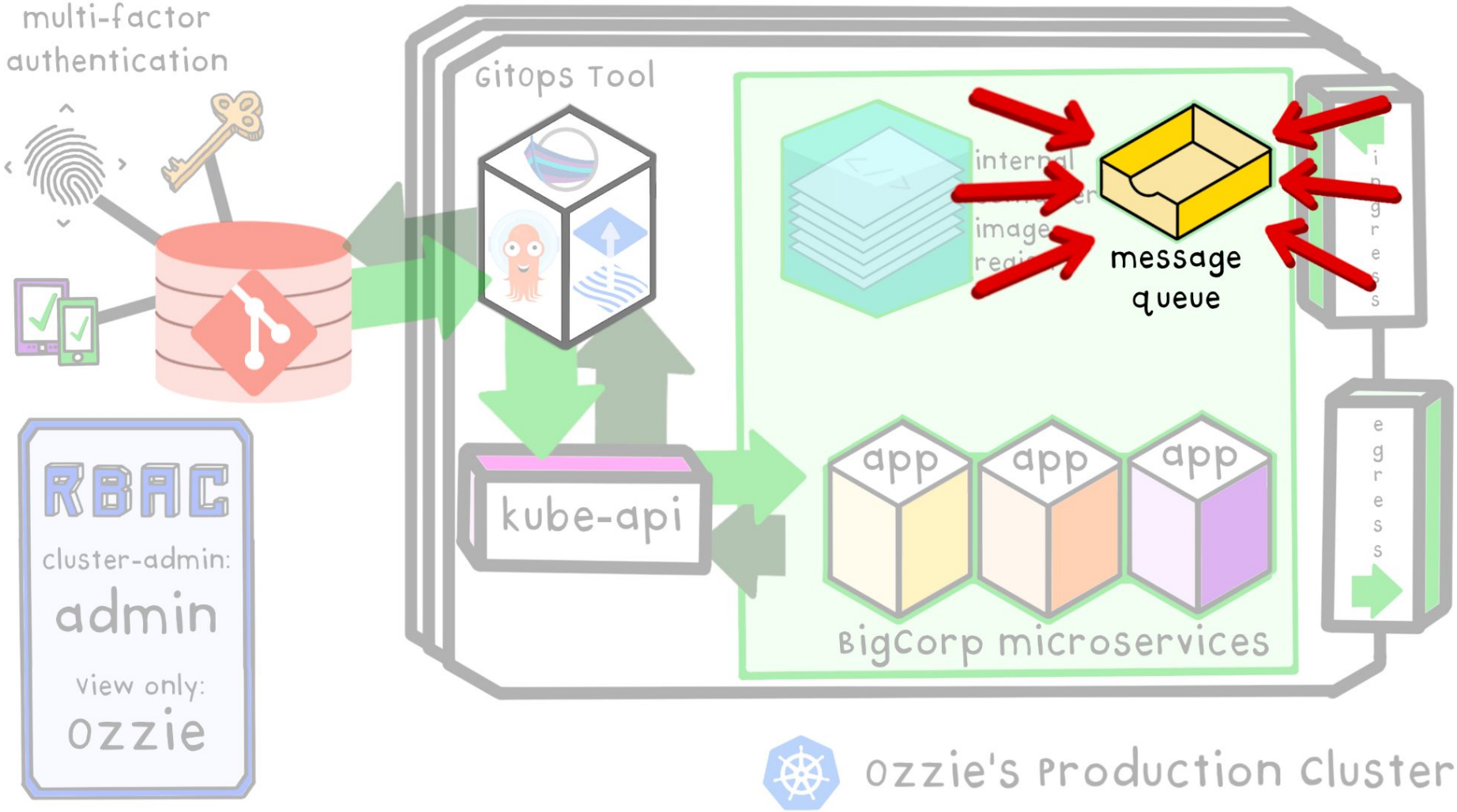
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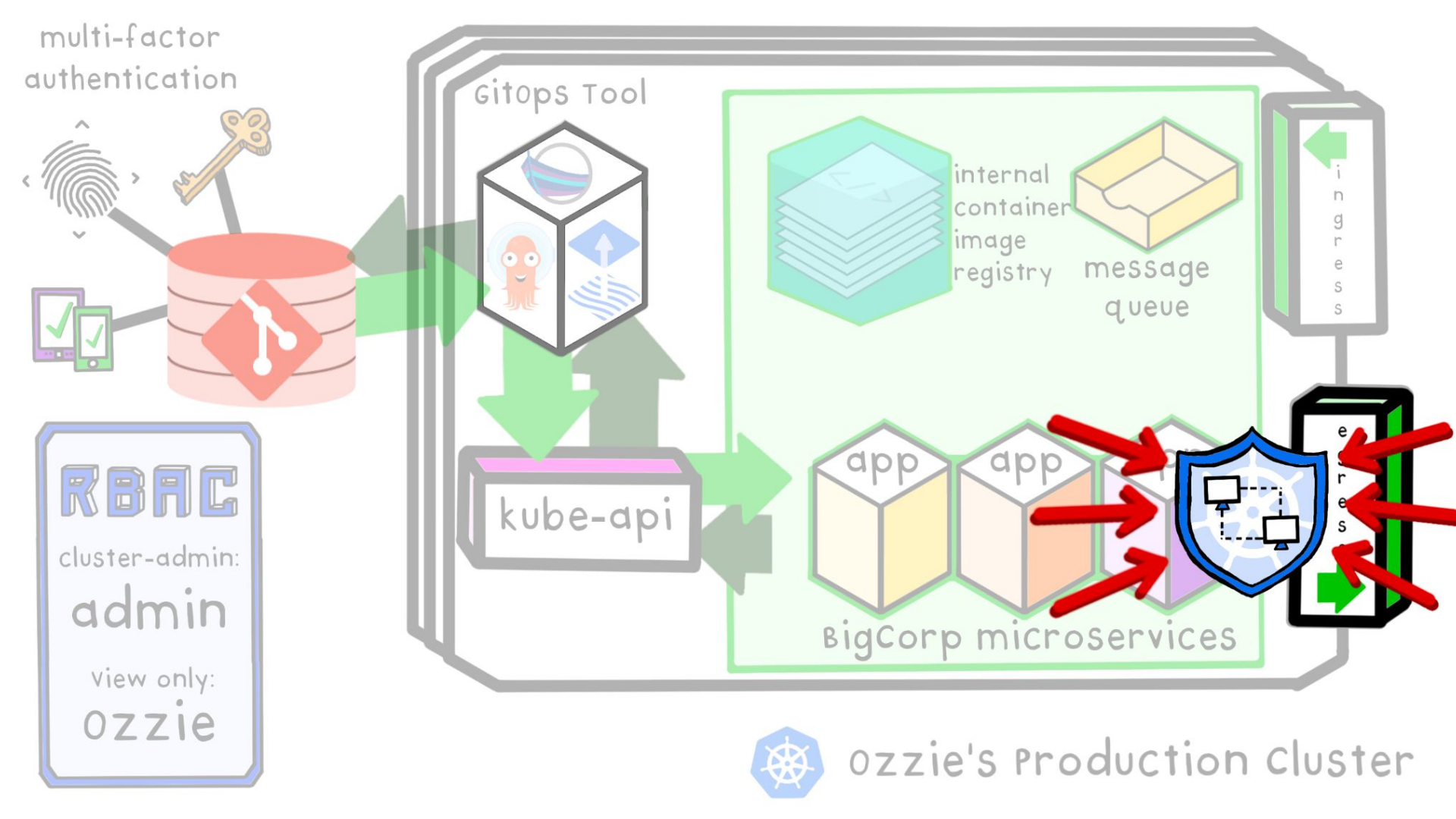
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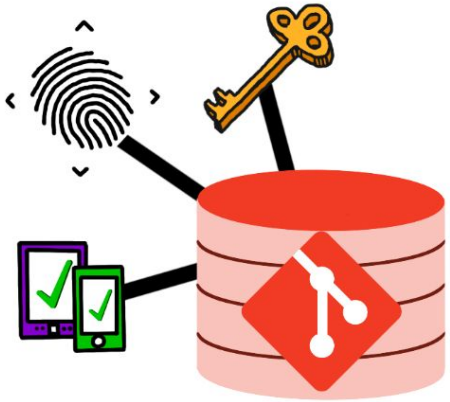

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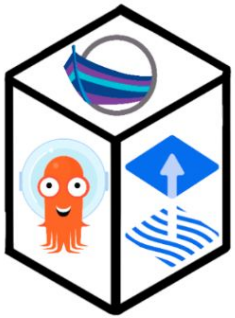

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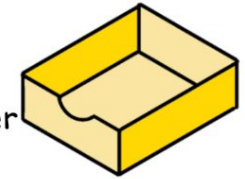

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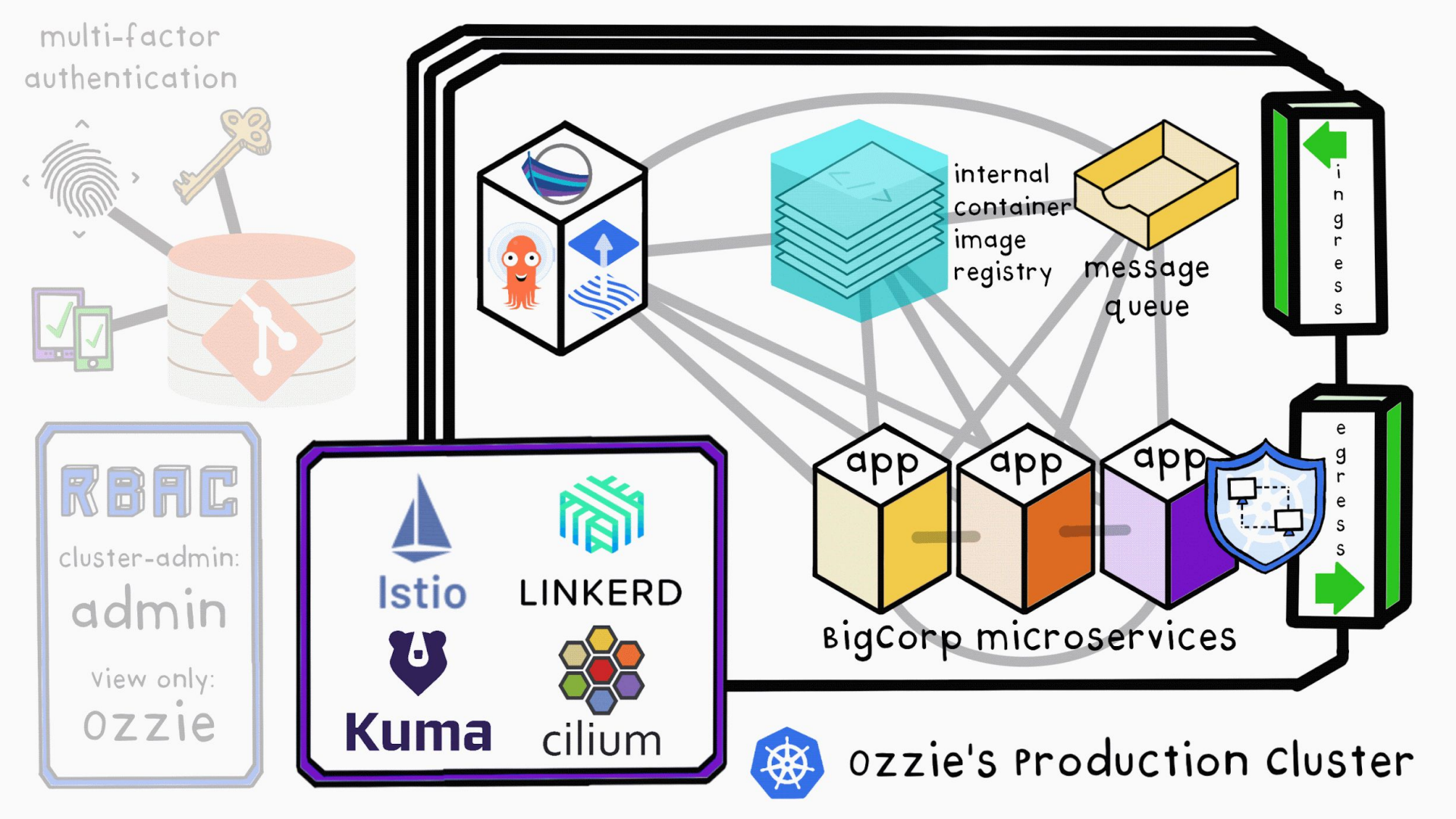
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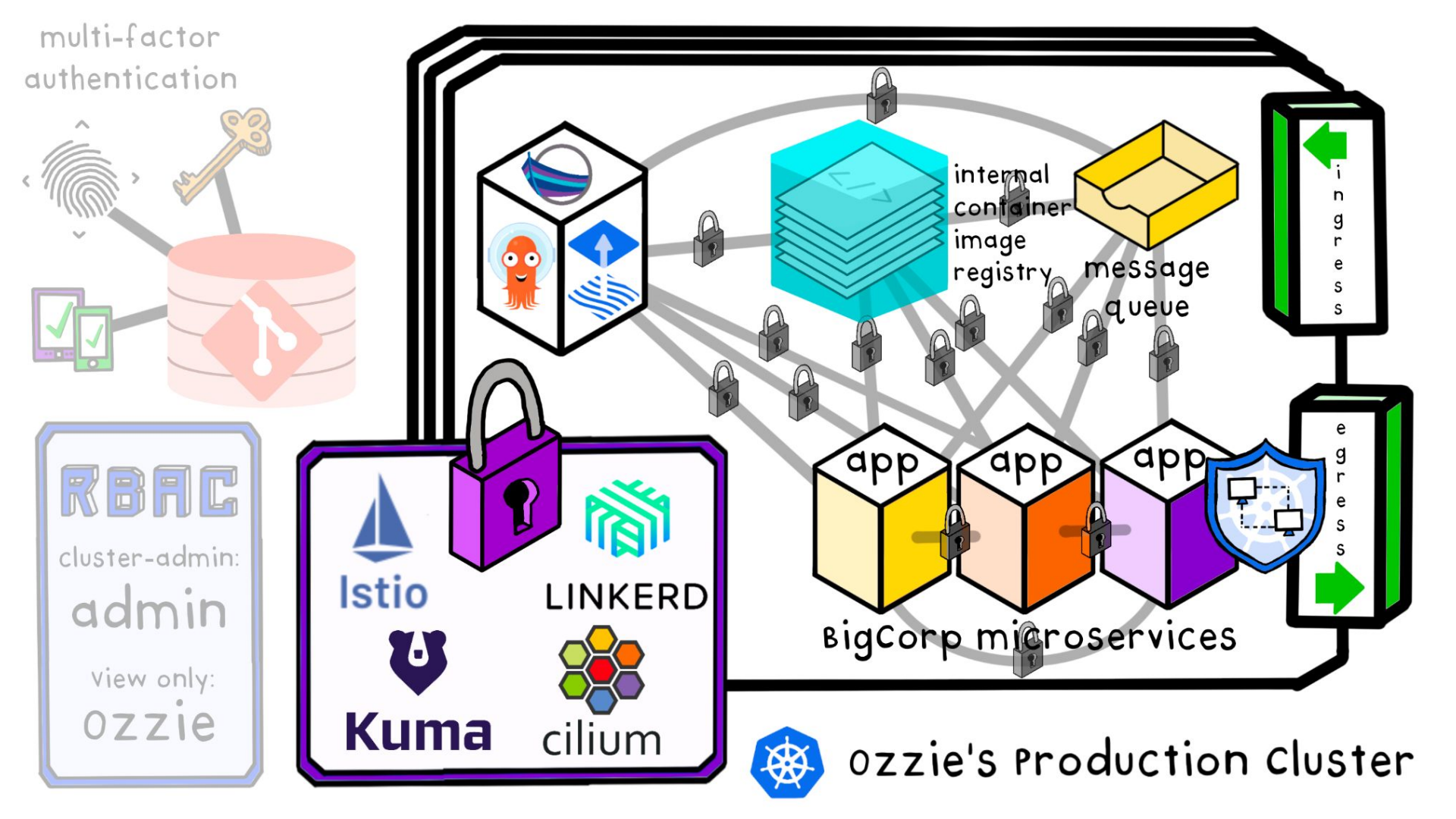
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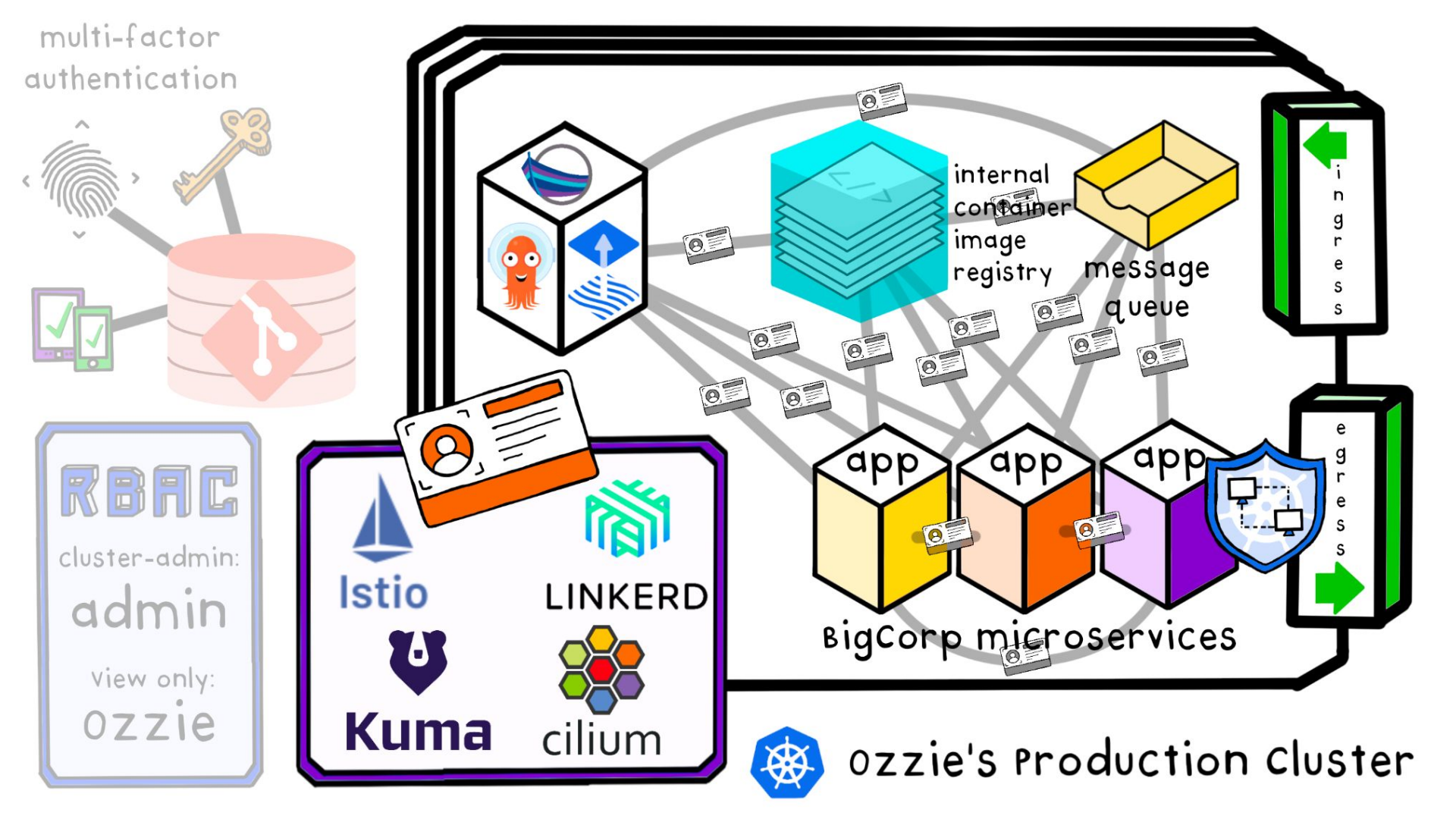
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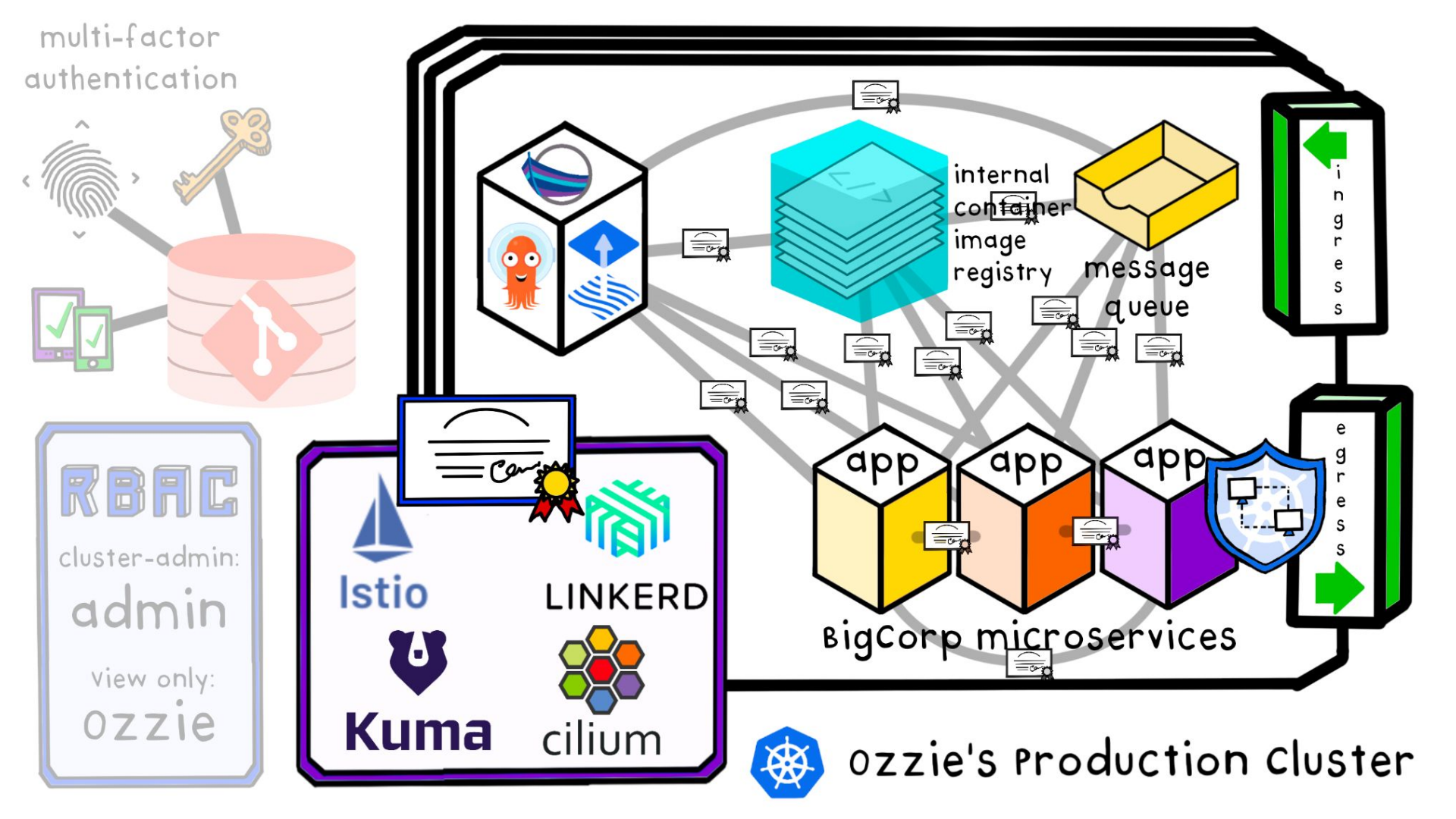
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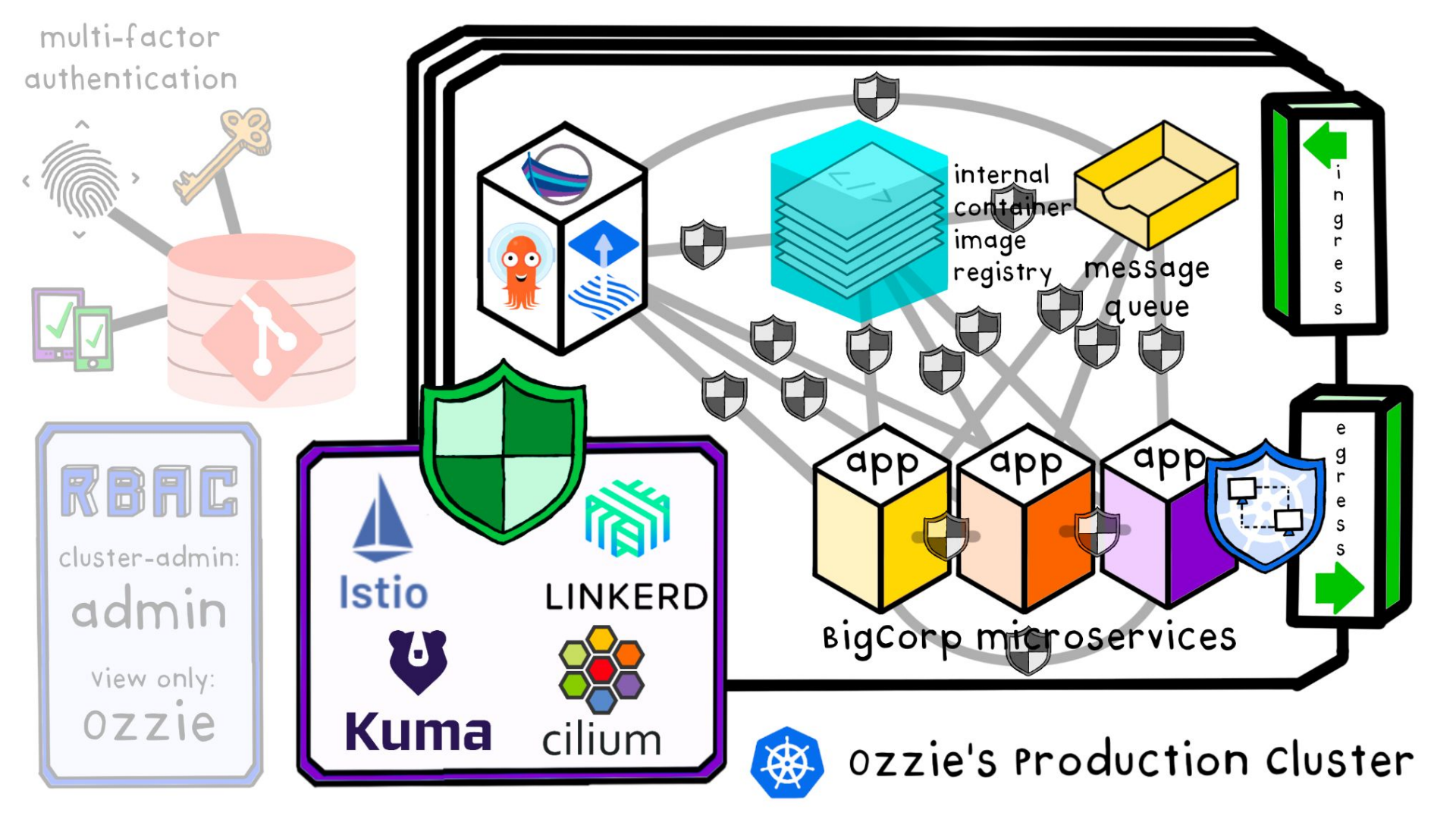
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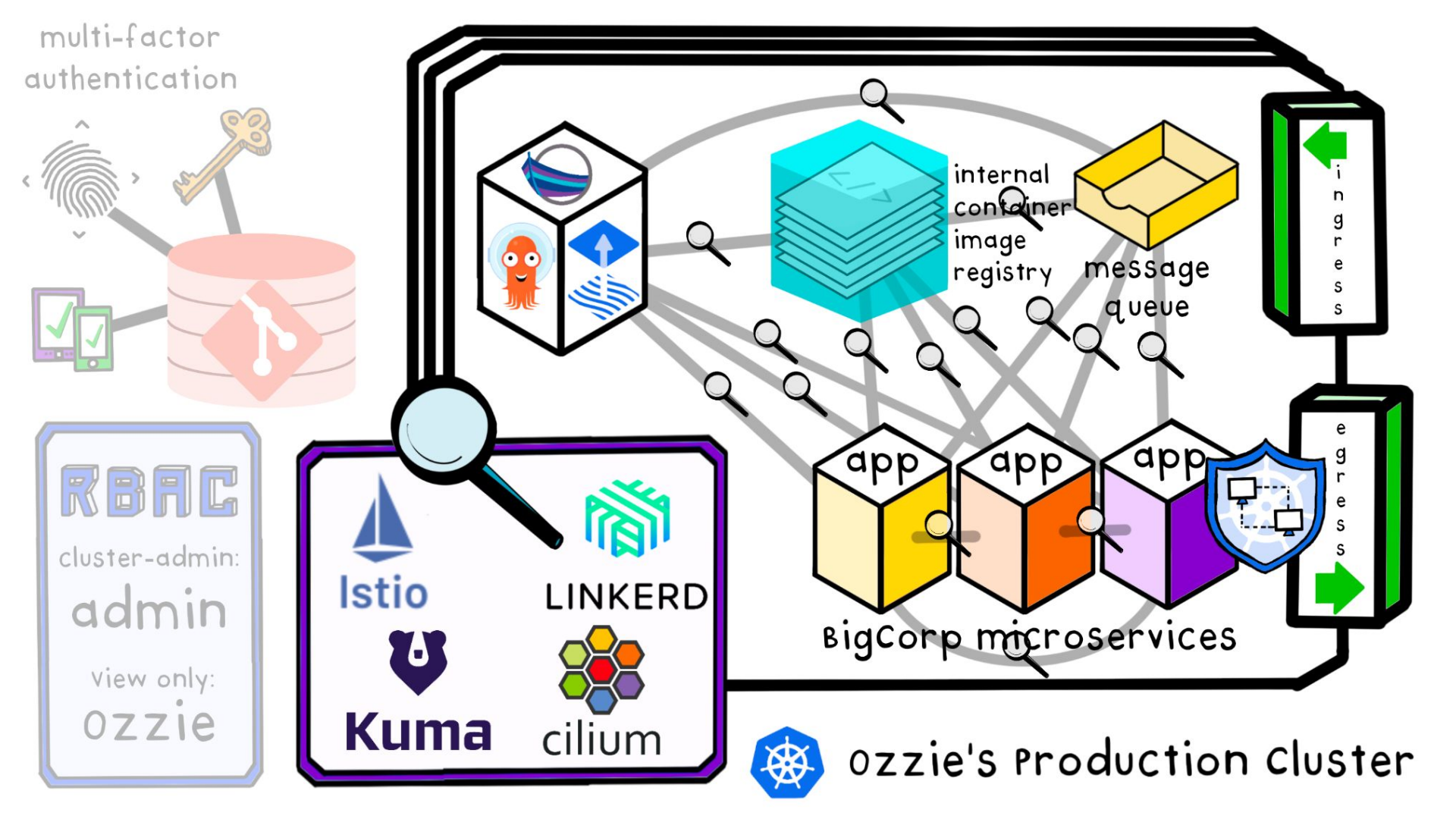
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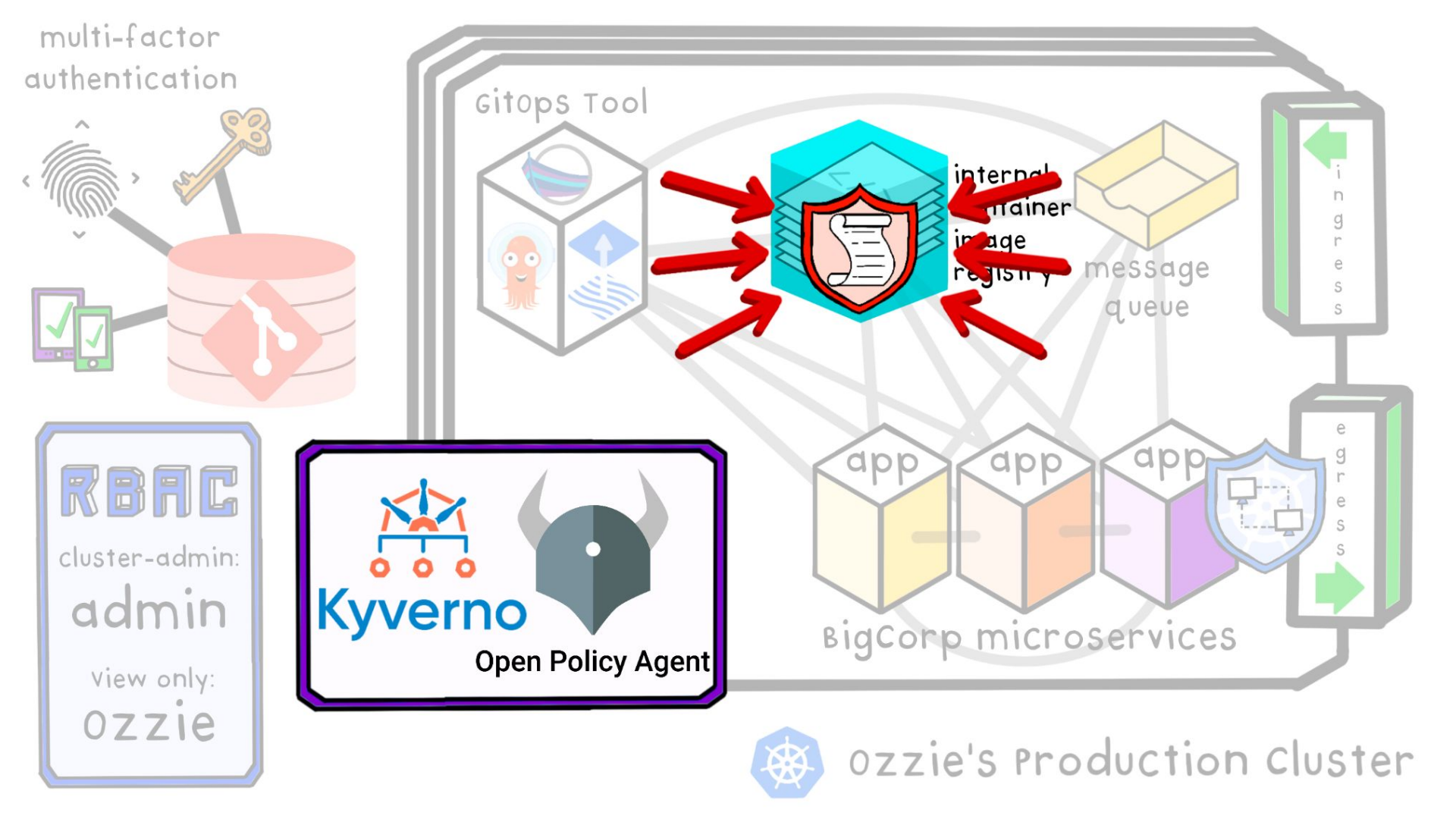
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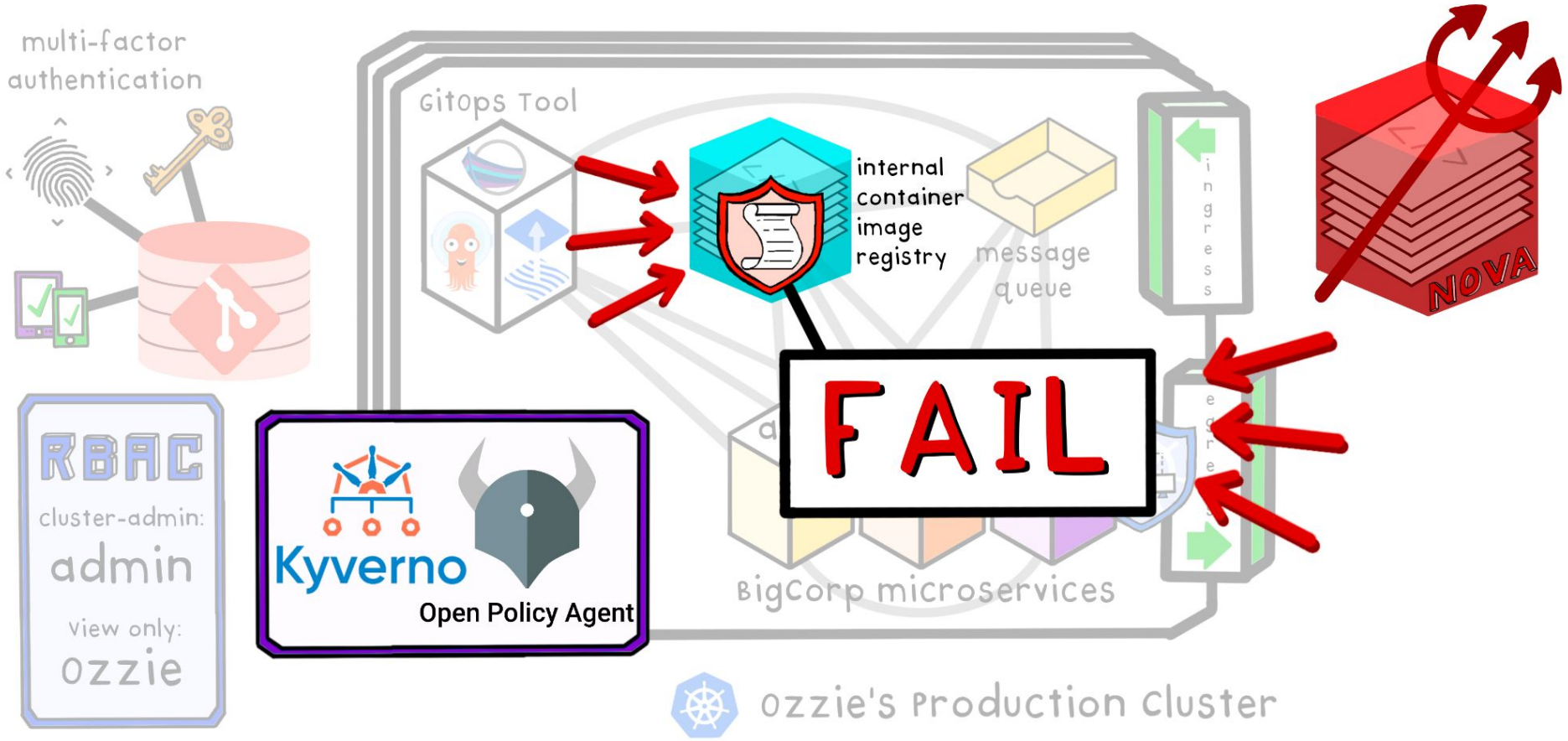
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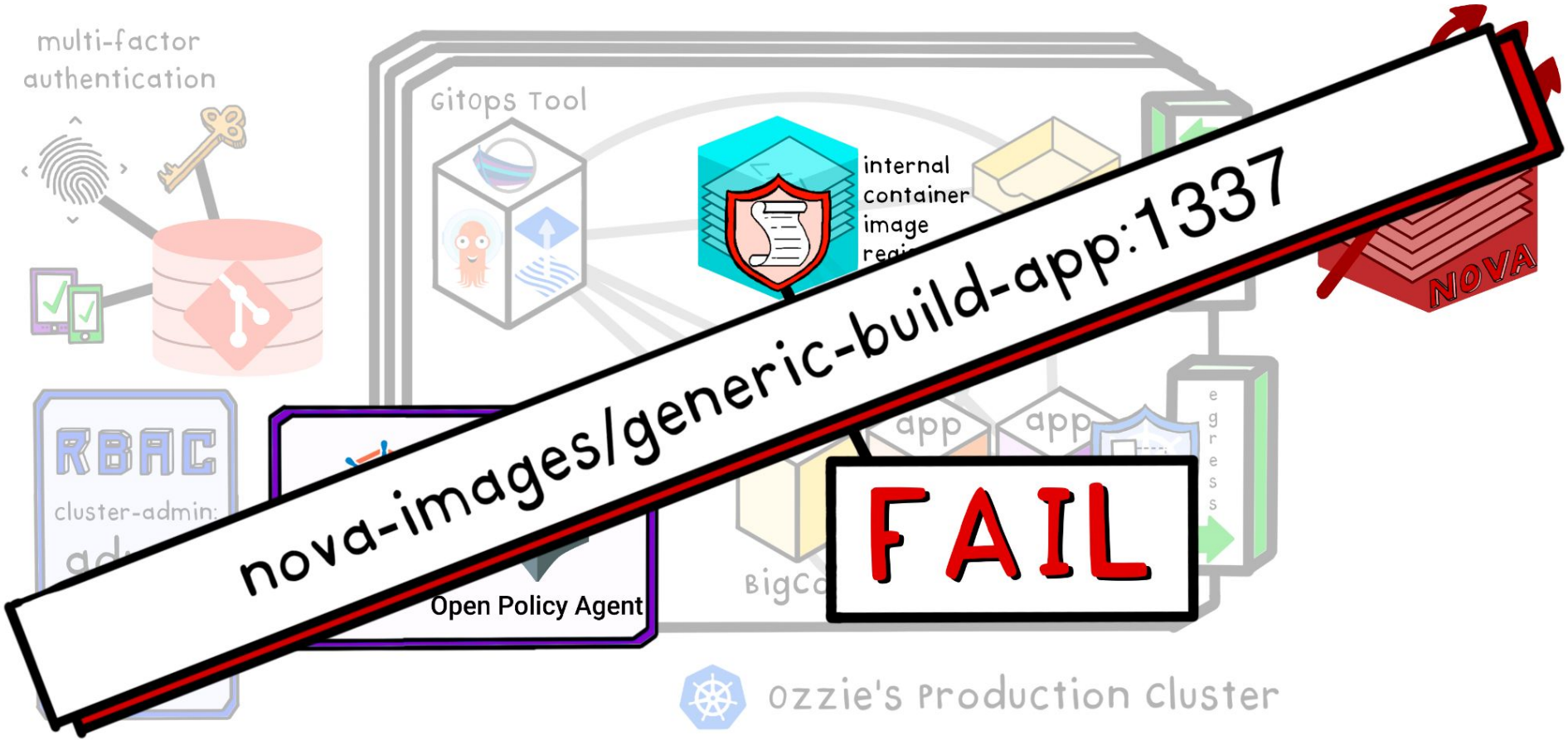
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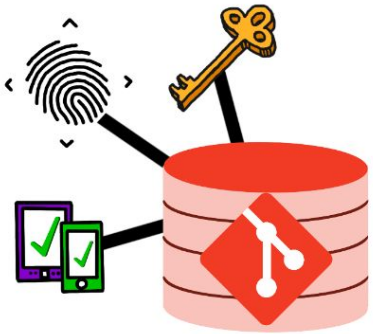

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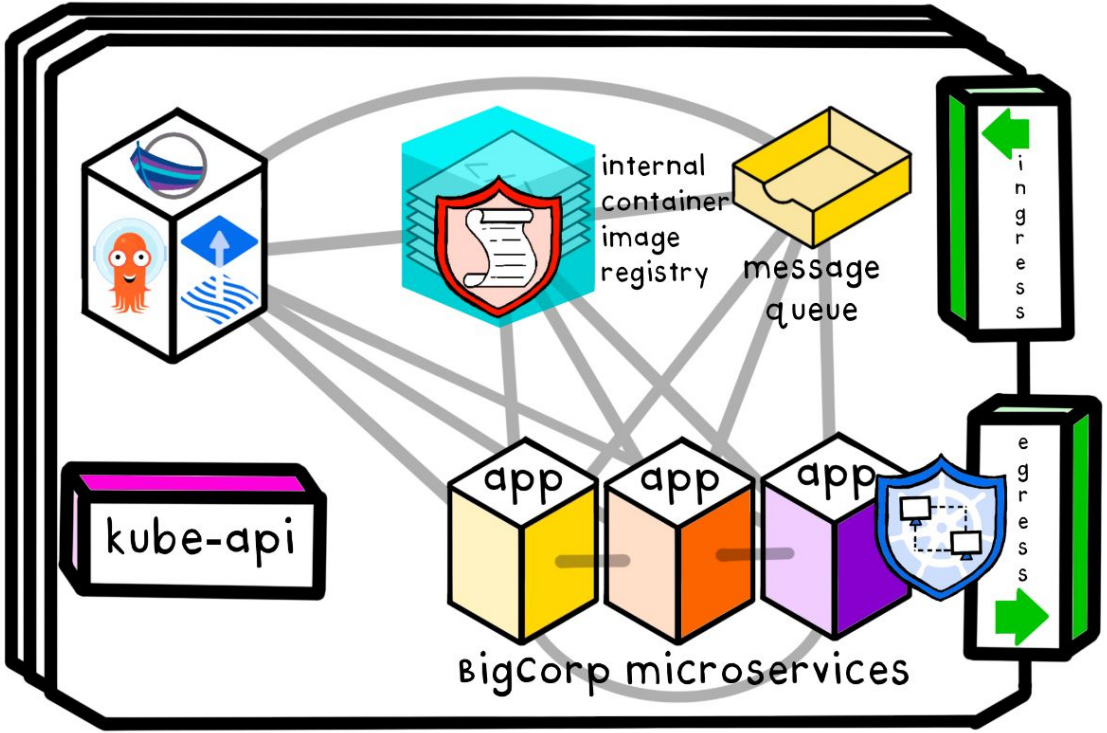
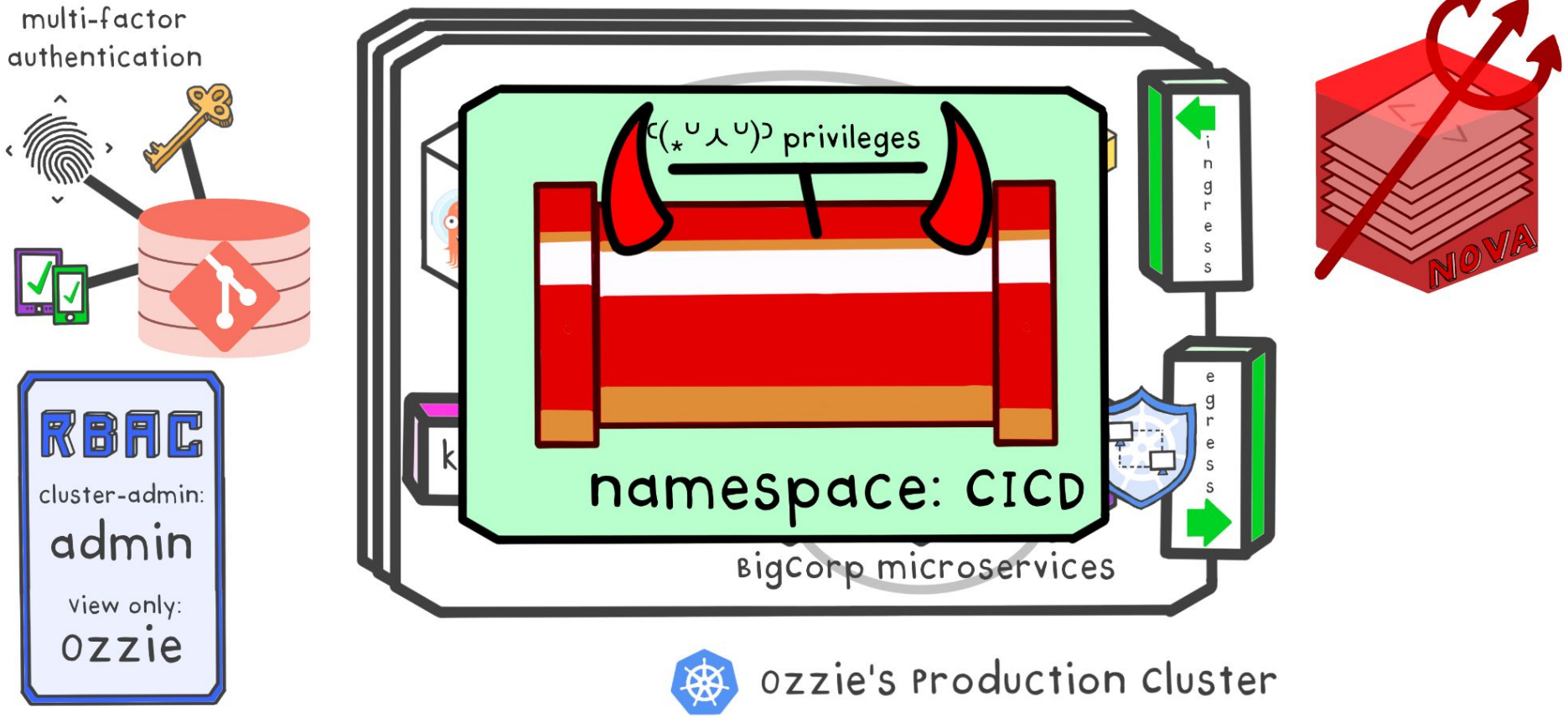


Ozzie's Production Cluster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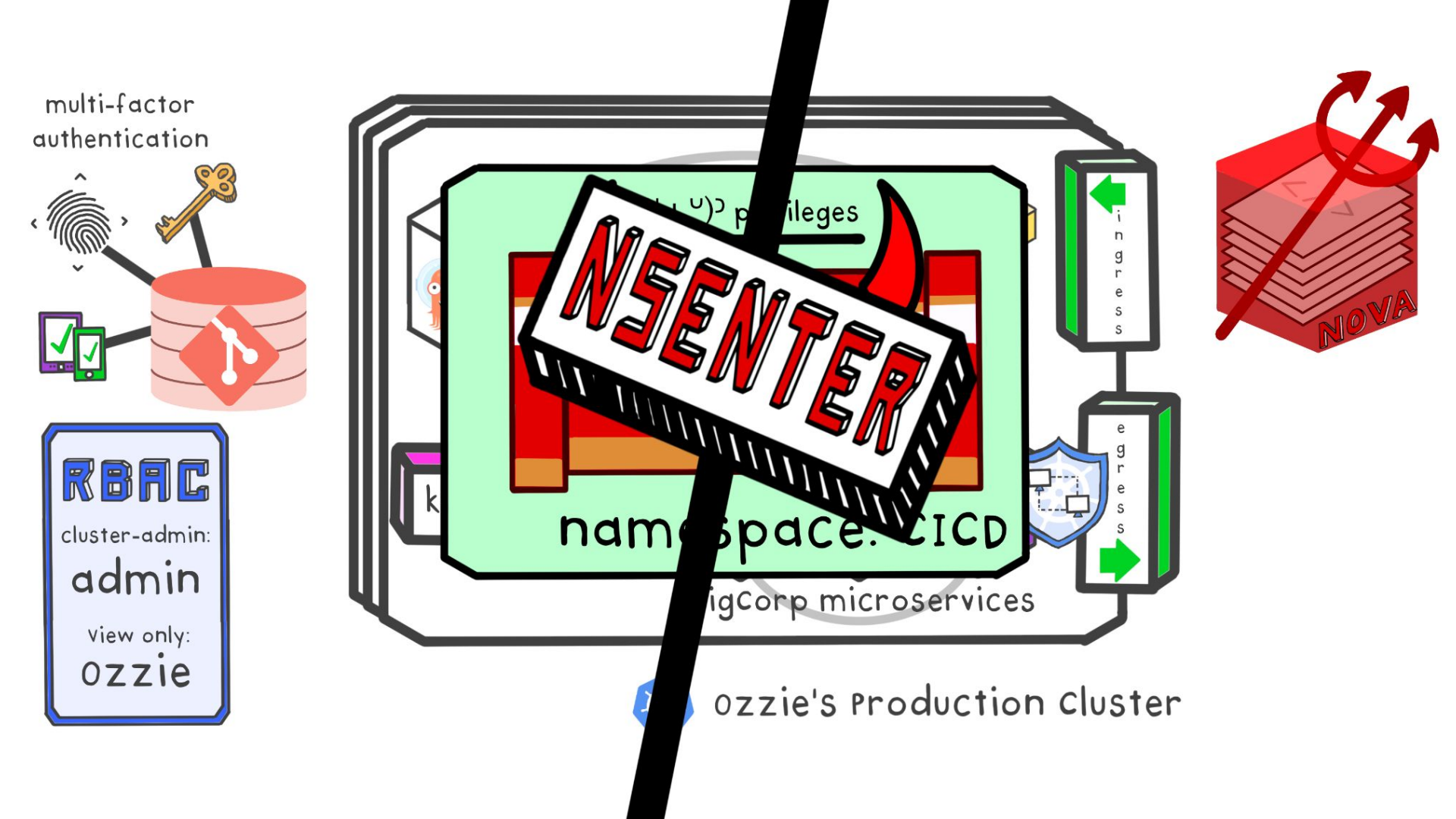
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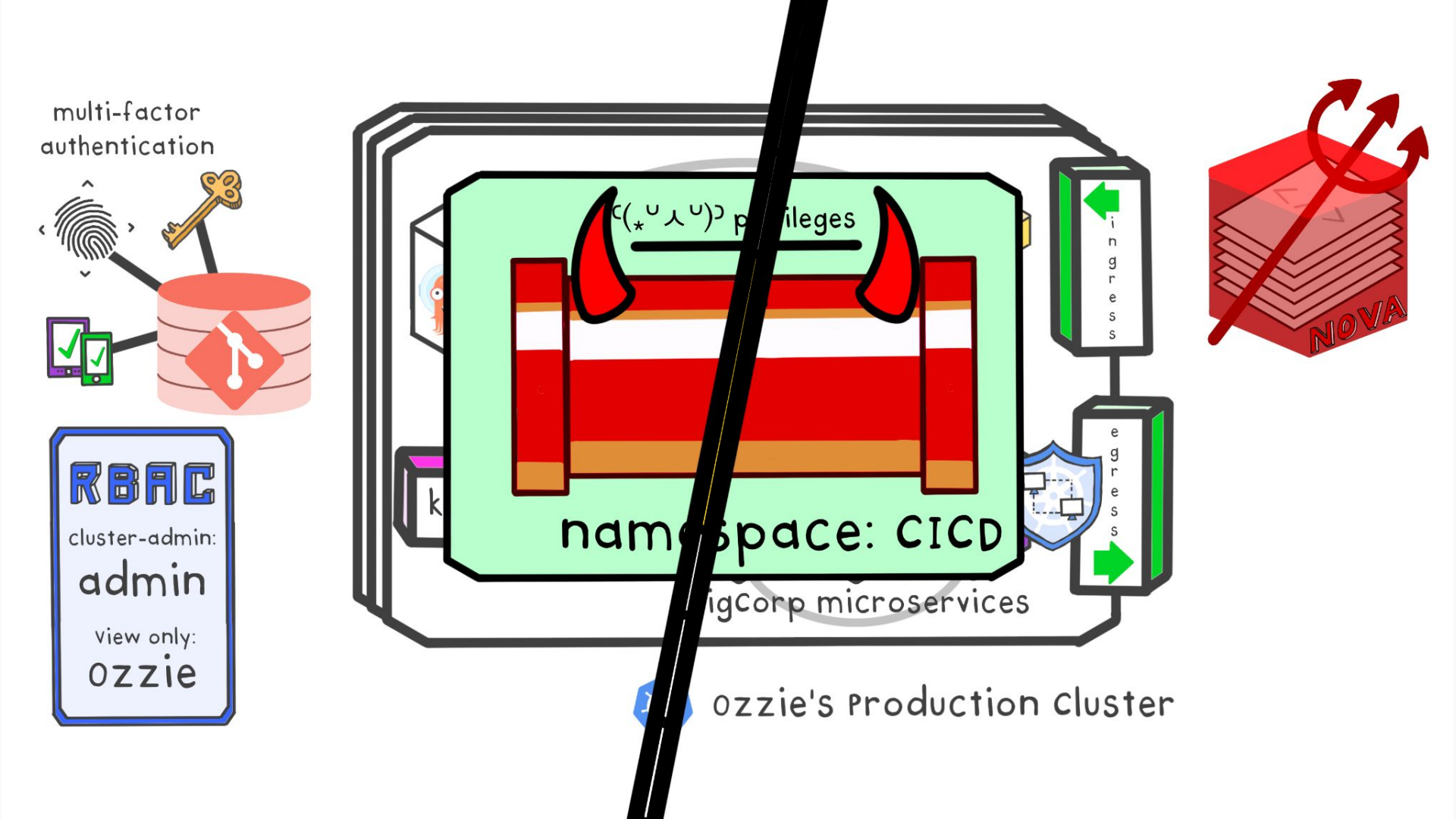
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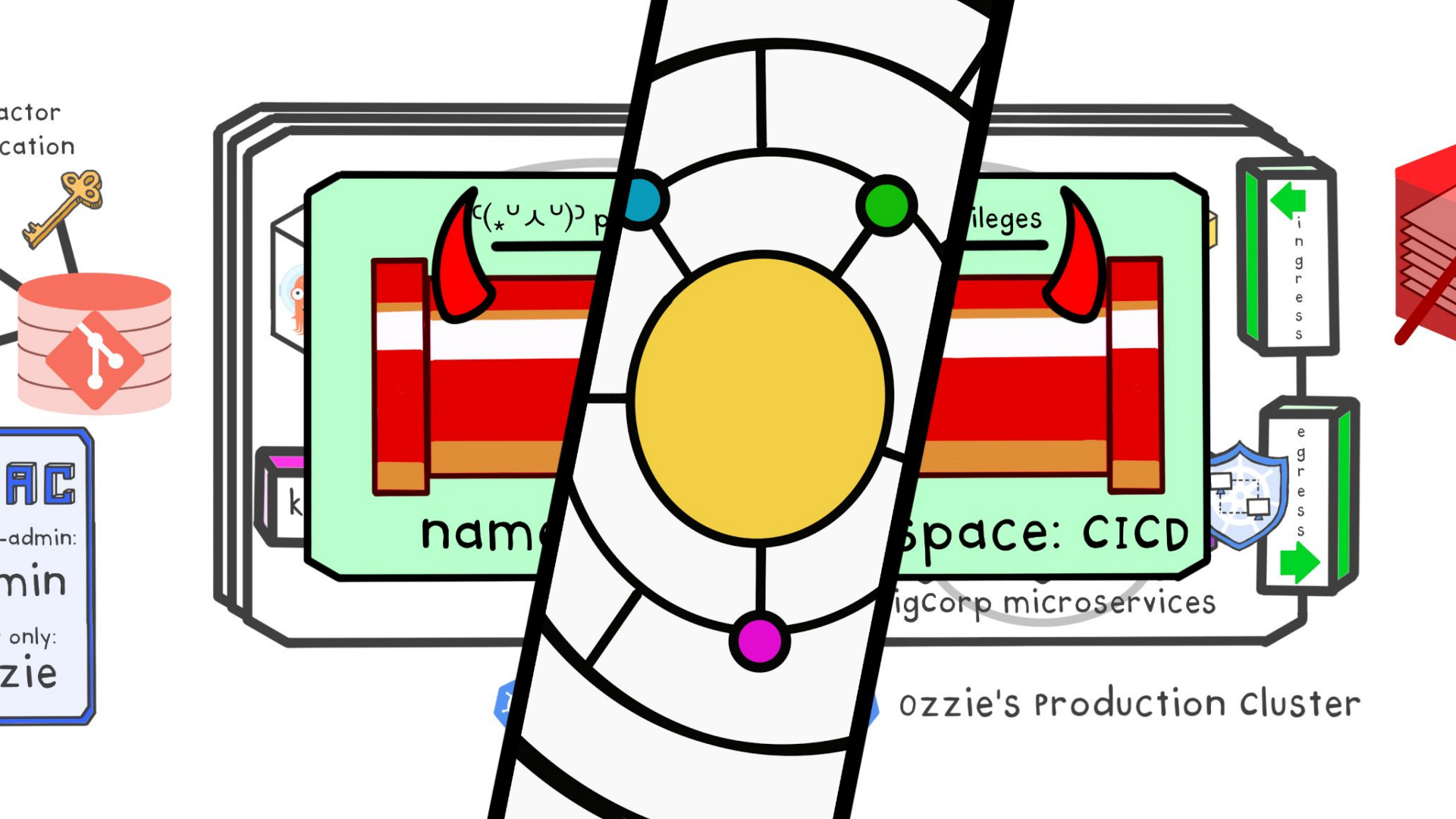
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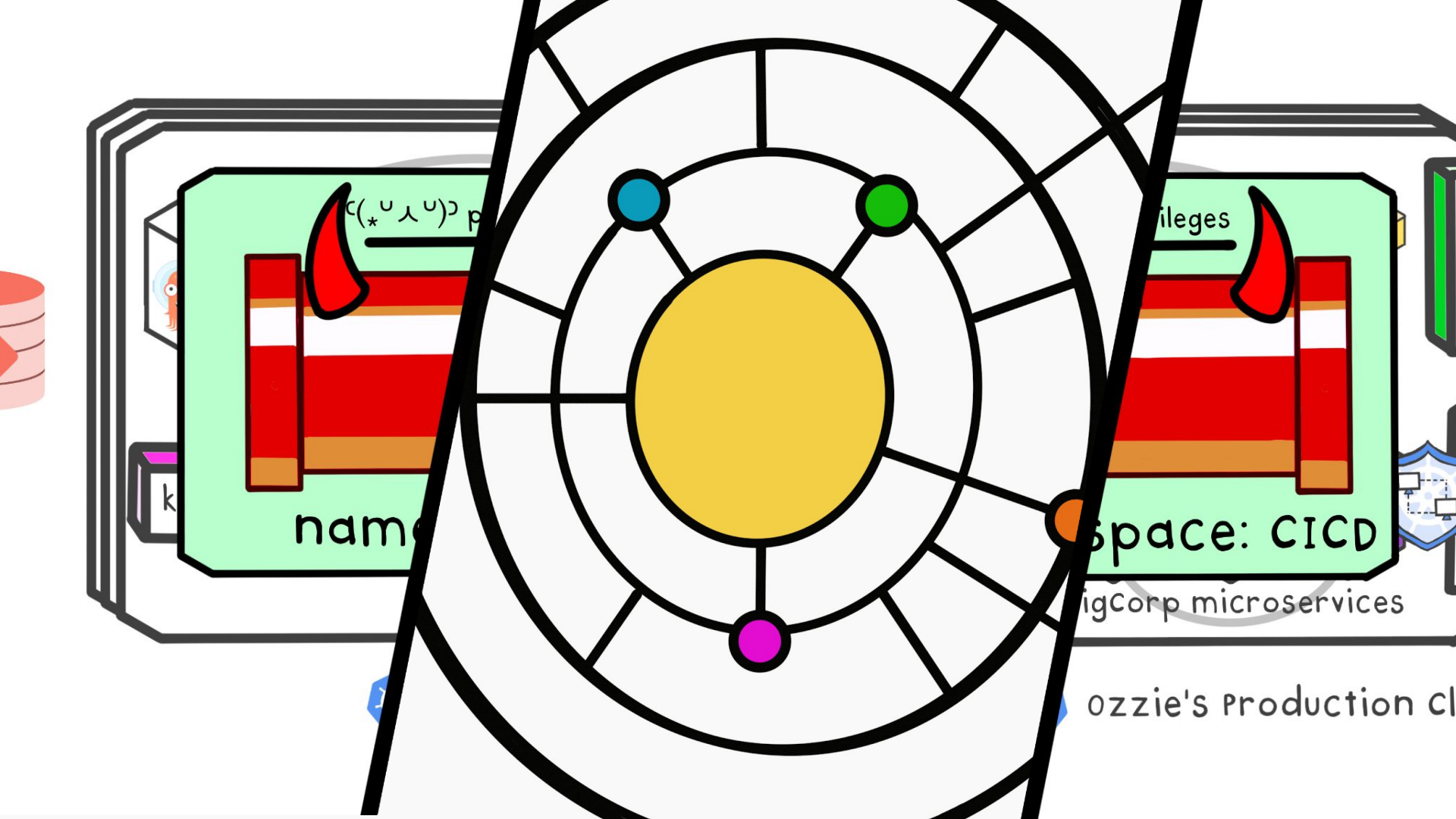
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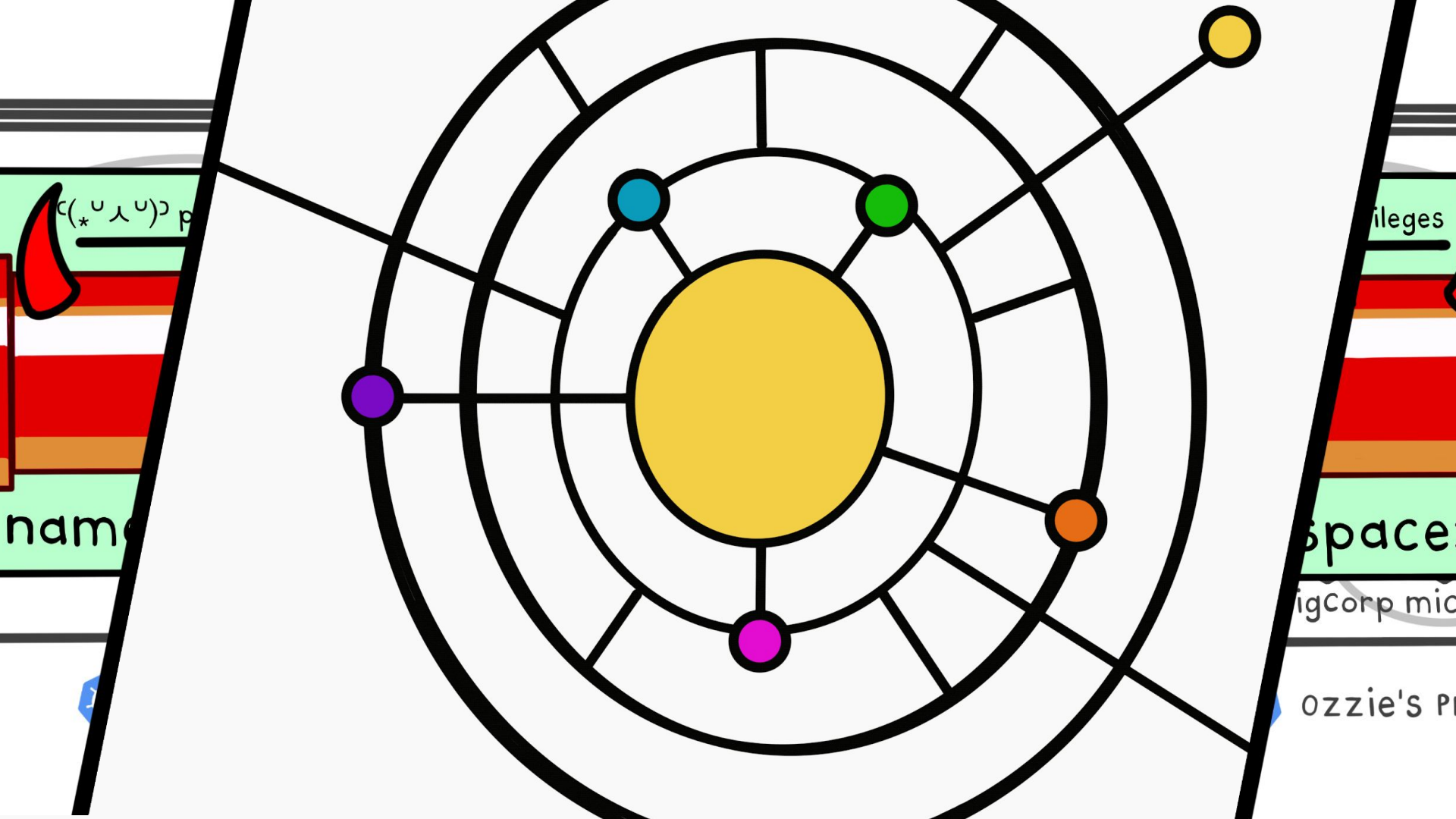

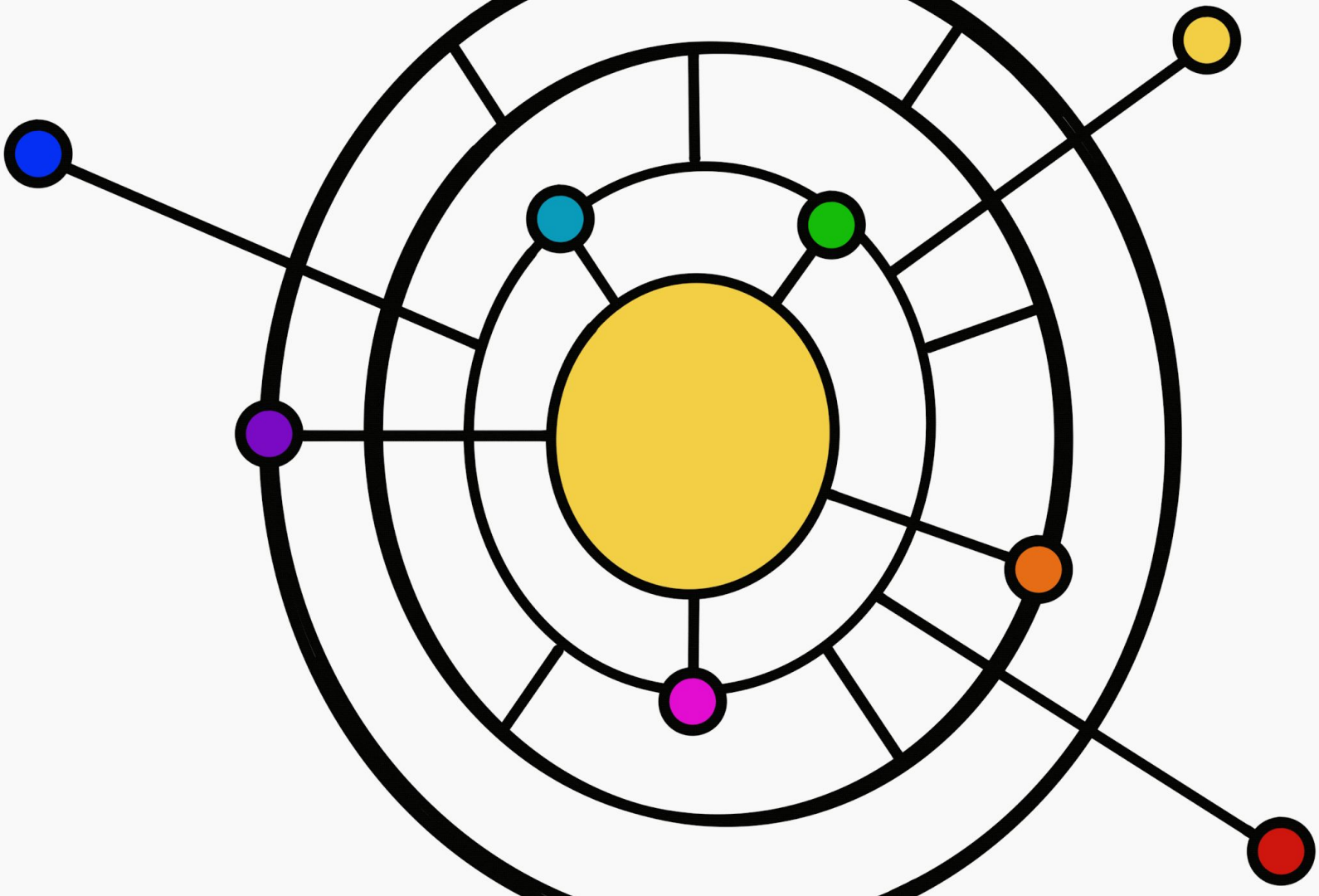

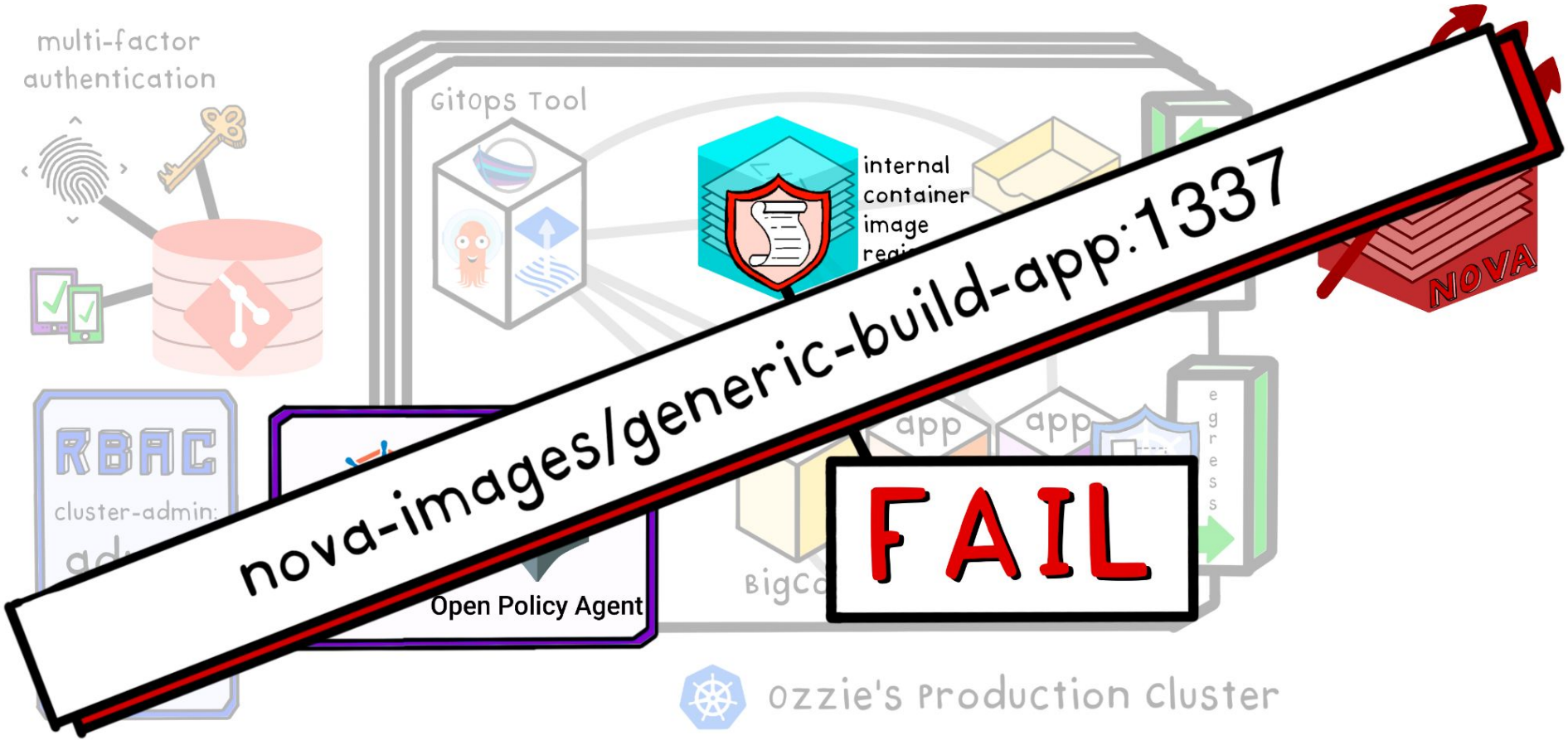
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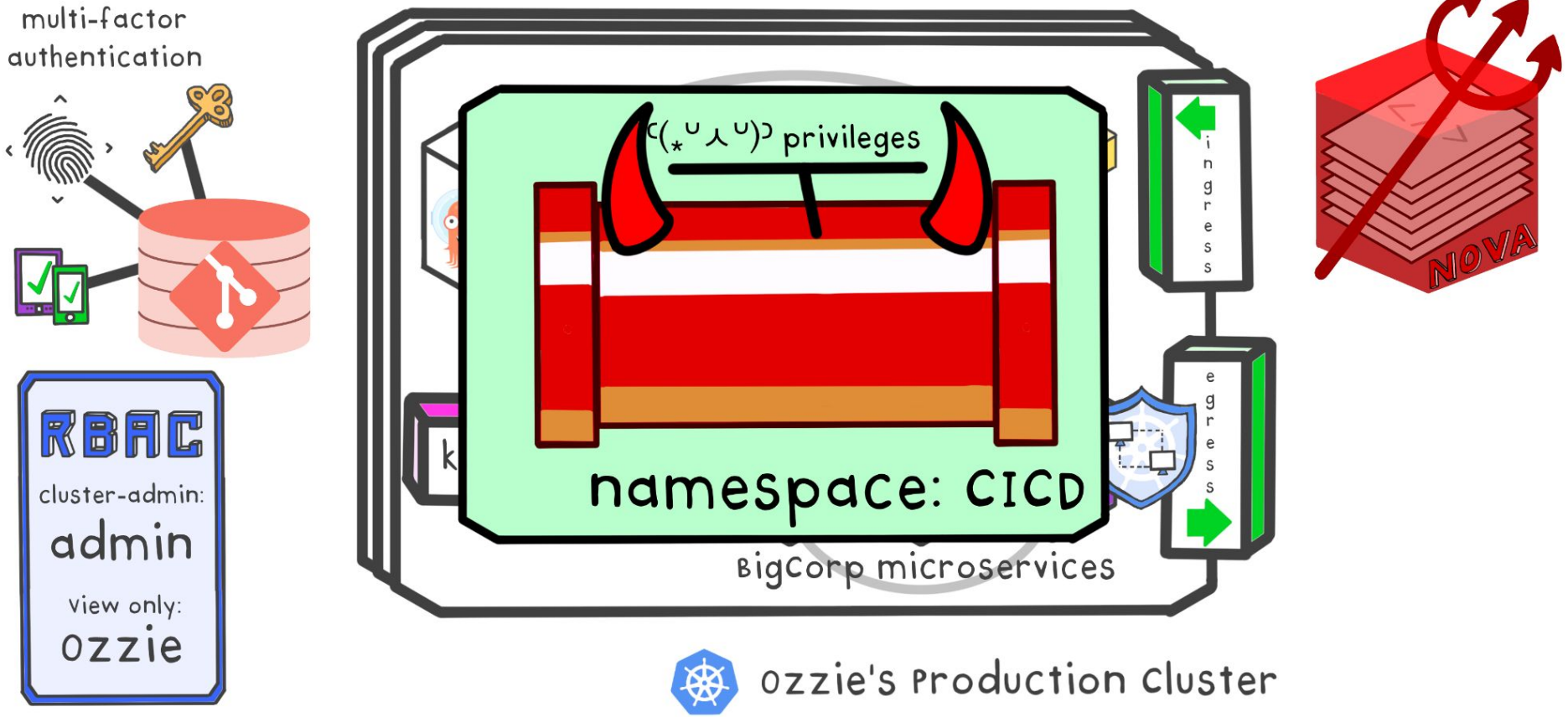
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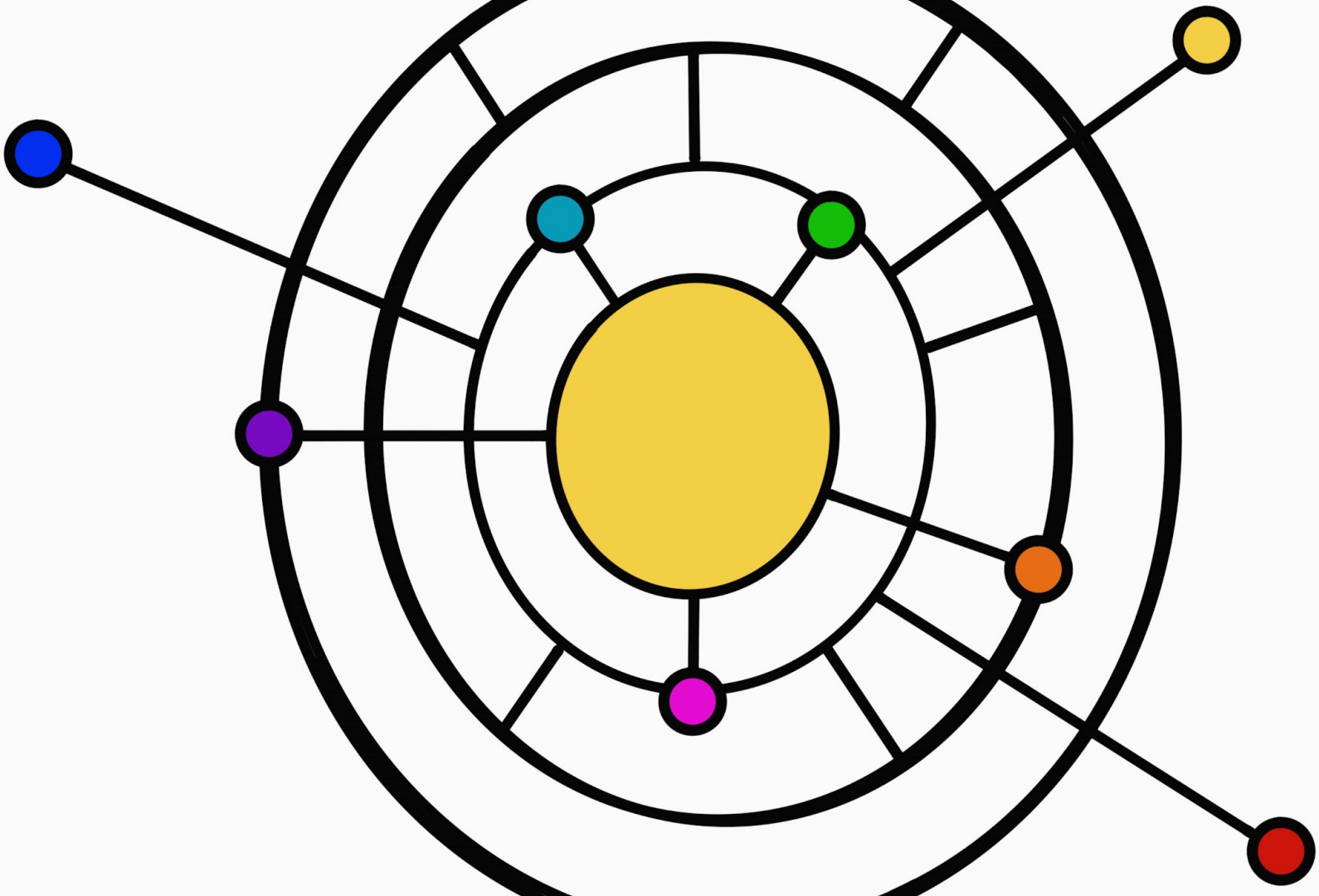

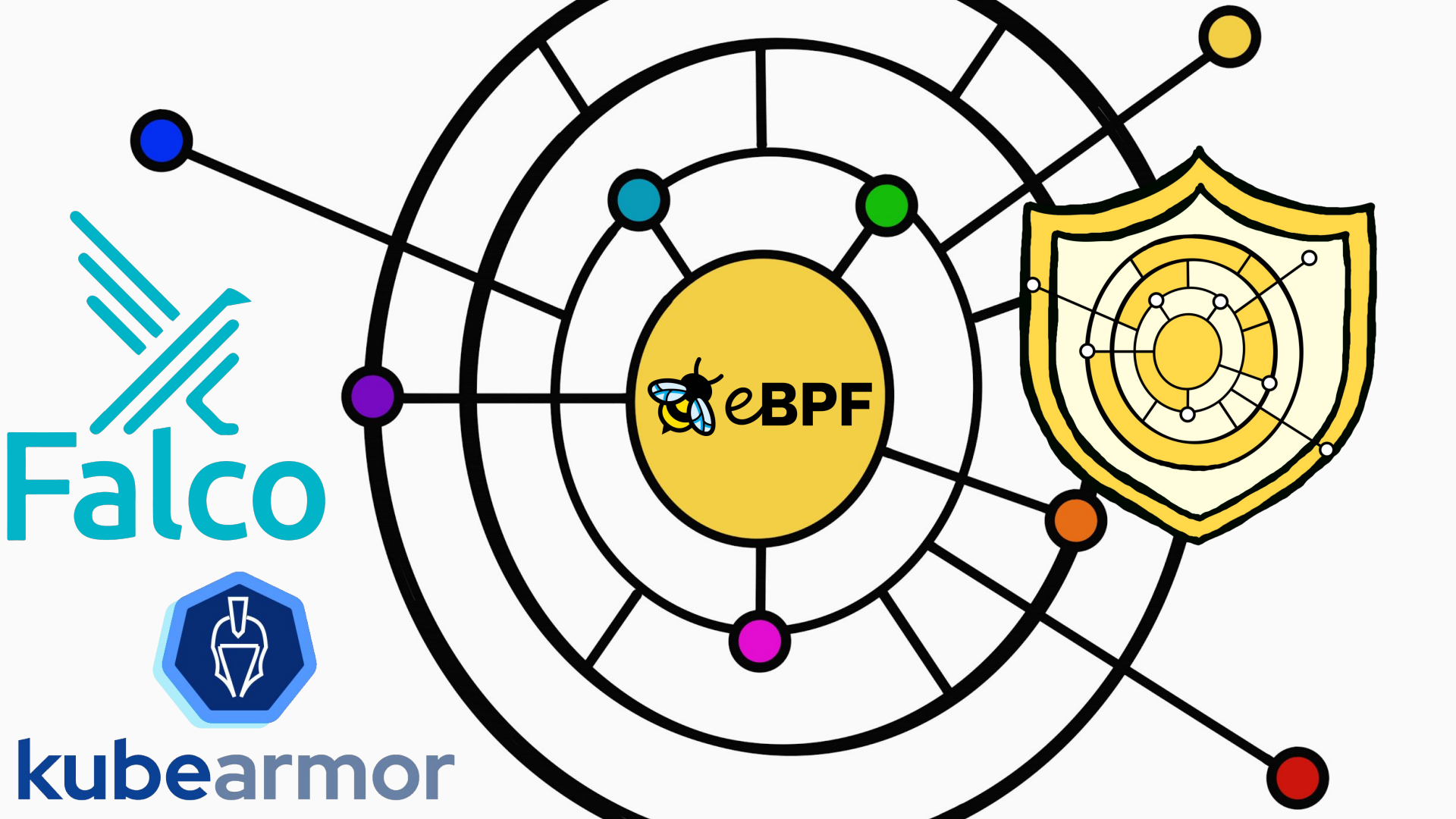
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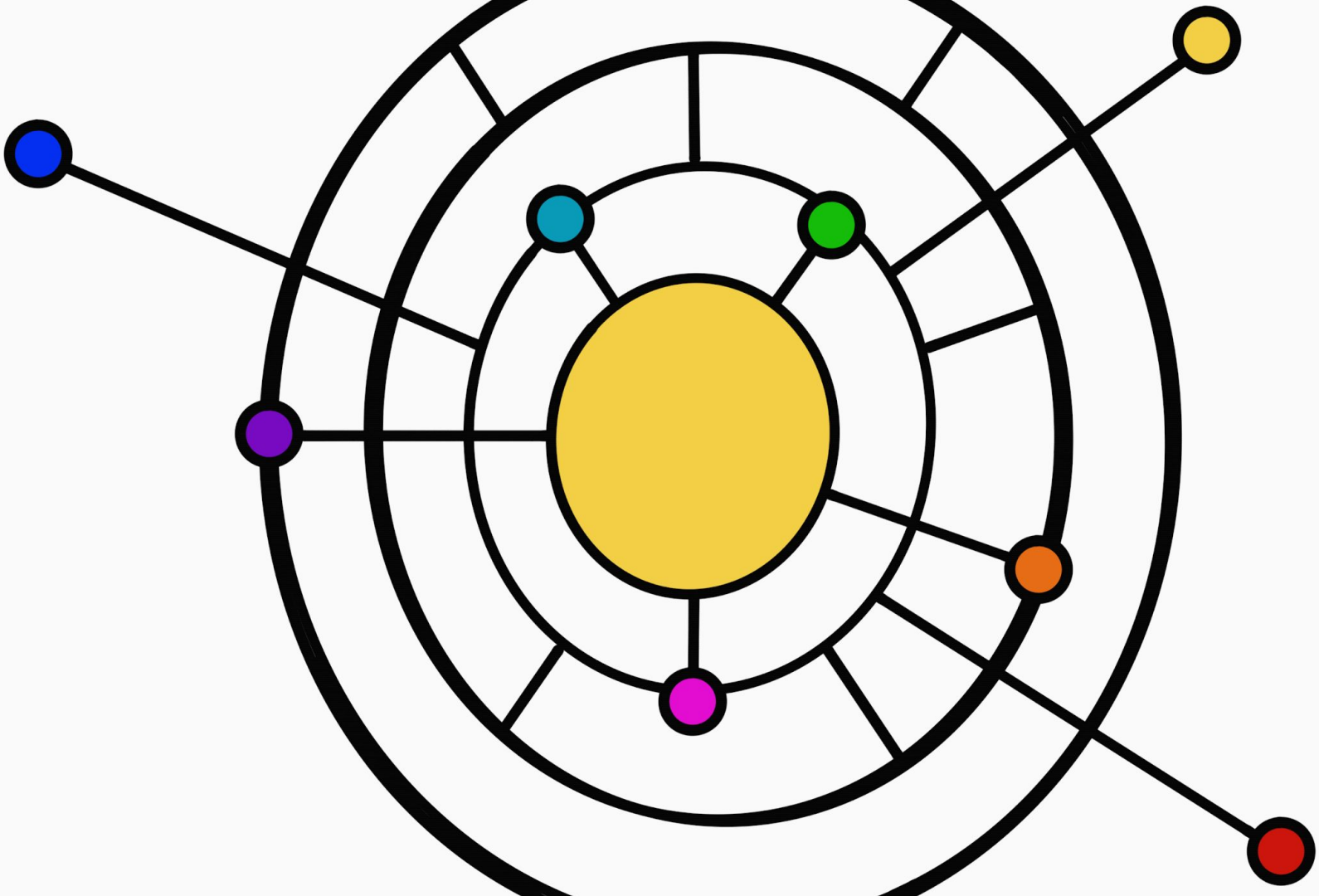
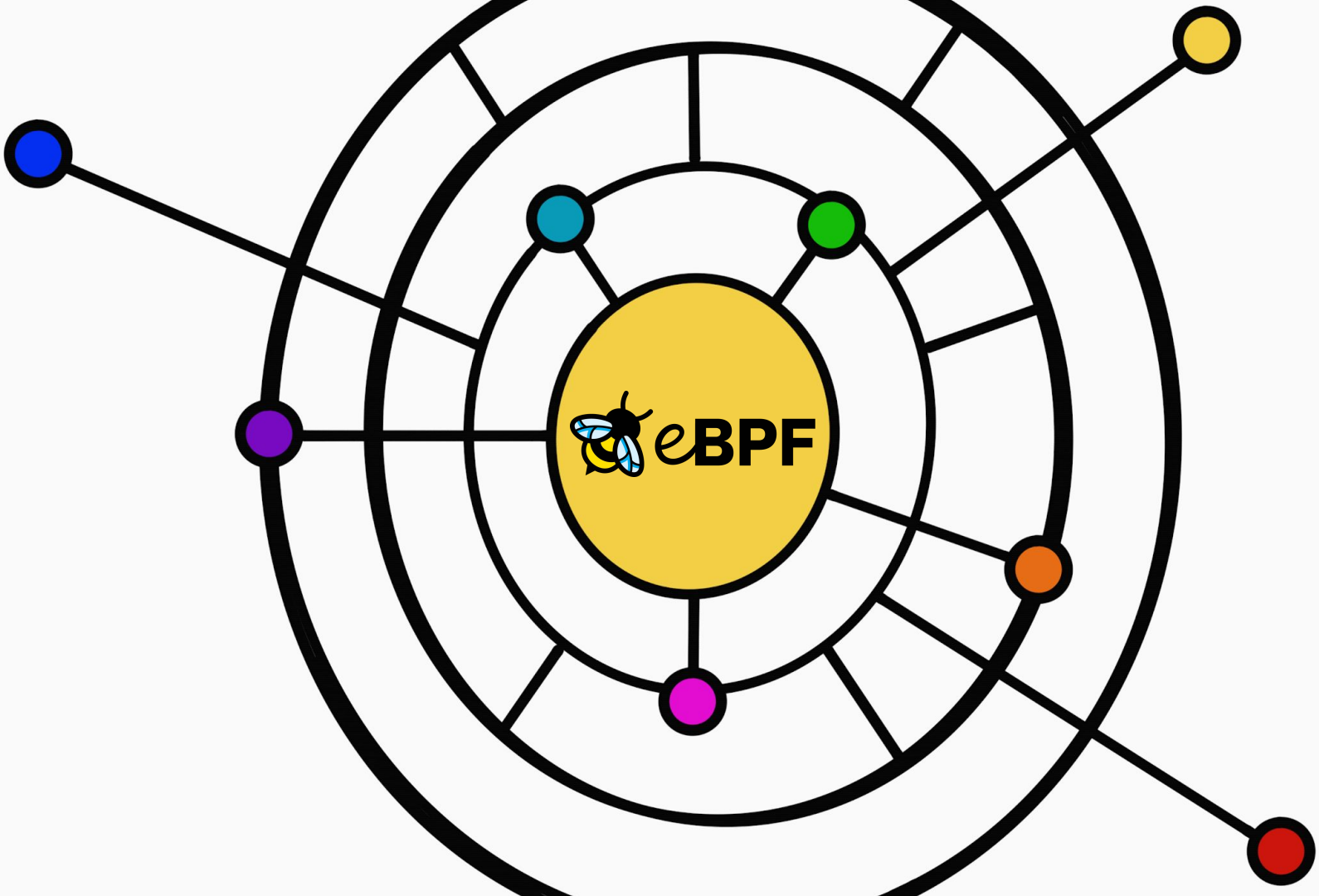



eBPF

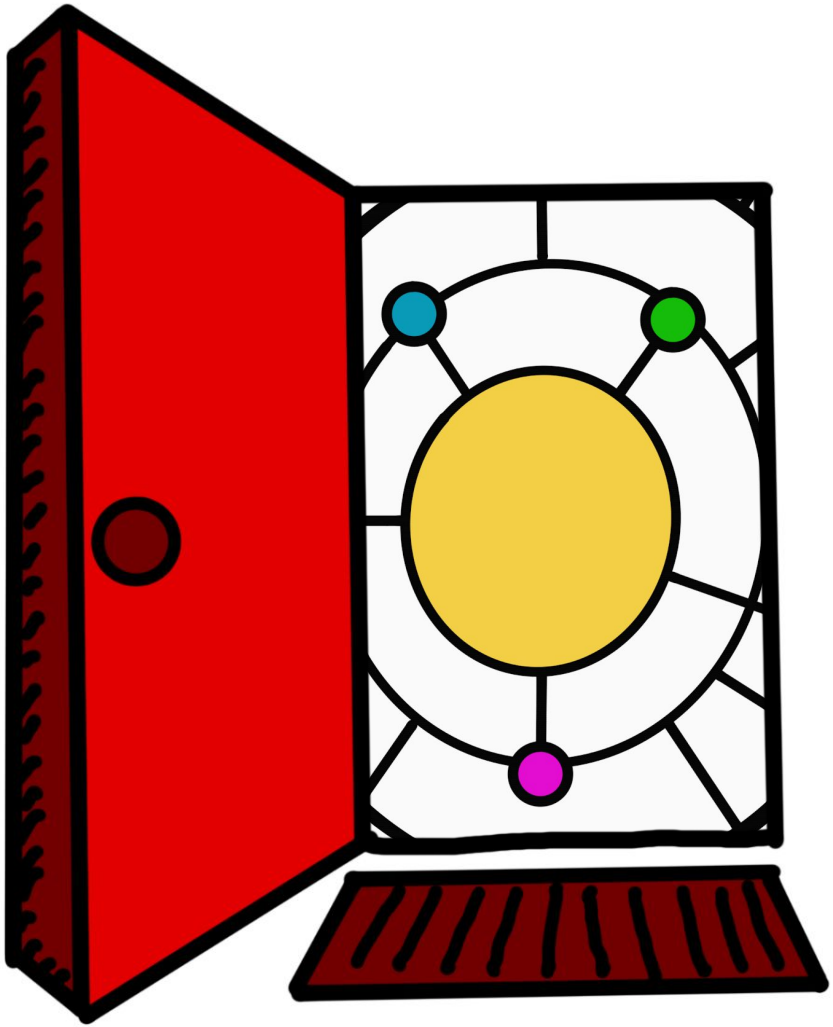
BCC - Tools for BPF-based Linux IO analysis, networking, monitoring, and more

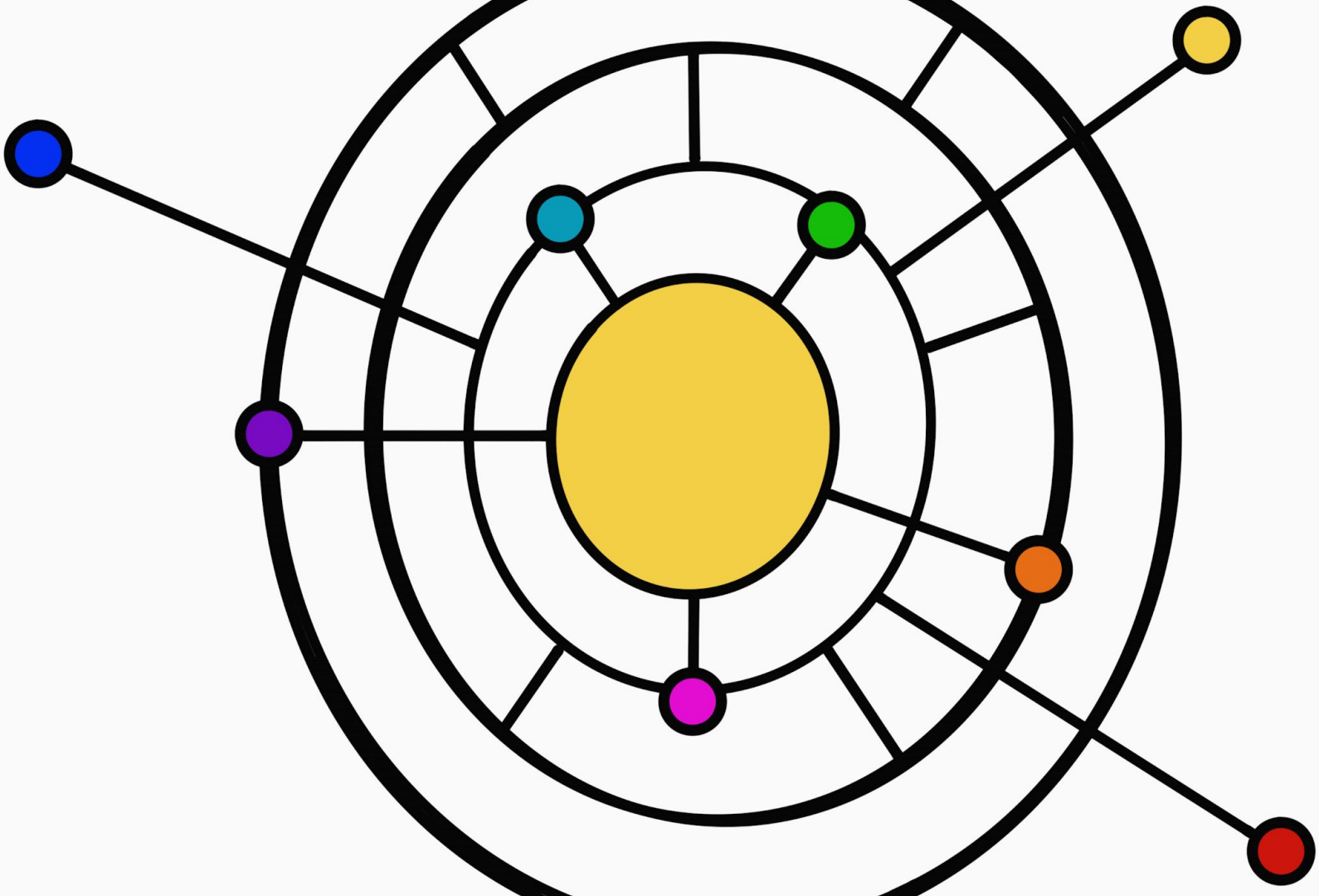
Author: Kris Nóva <kris@nivenly.com> Version 1.4.0

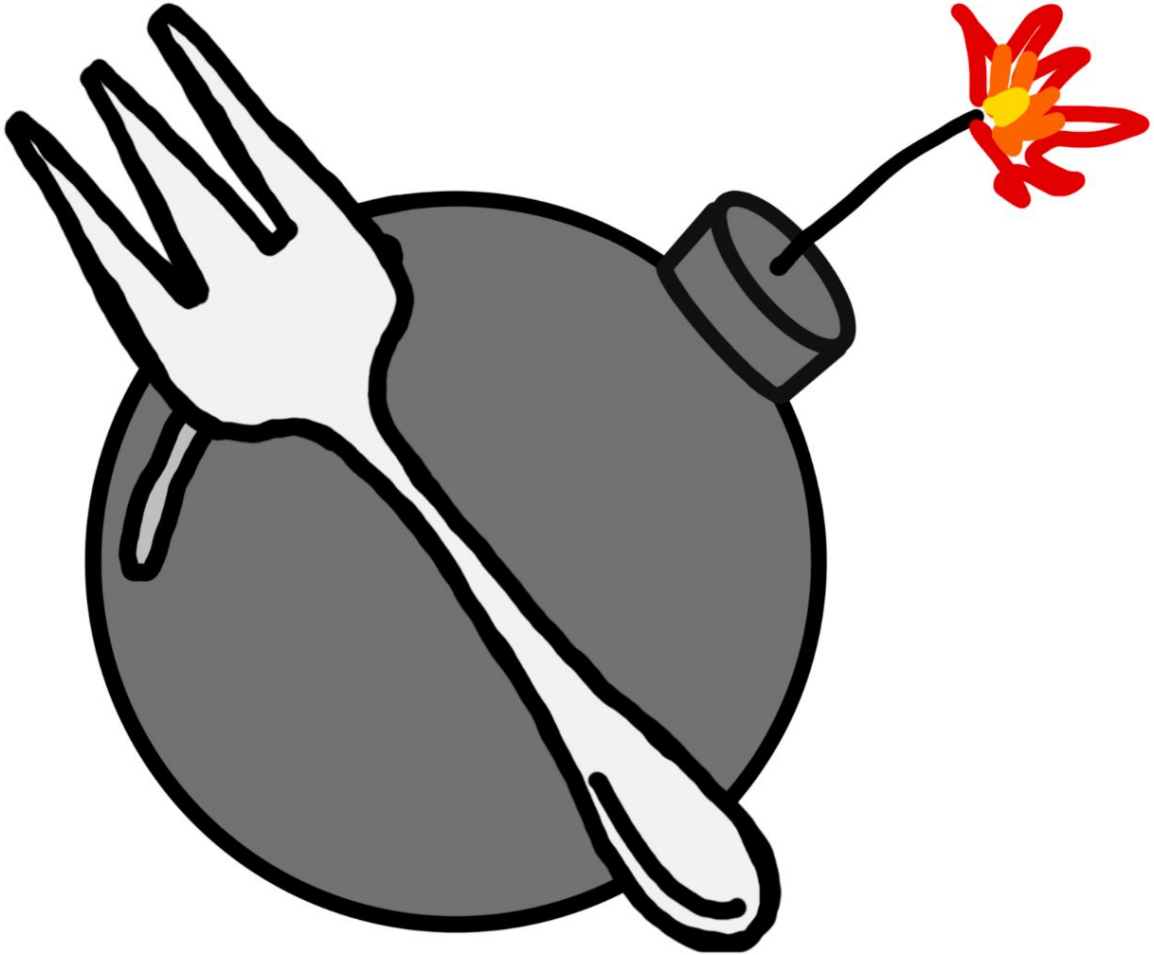
BCC

Author: Kris Nóva <kris@nivenly.com> Version 1.4.0

Kris Nóva







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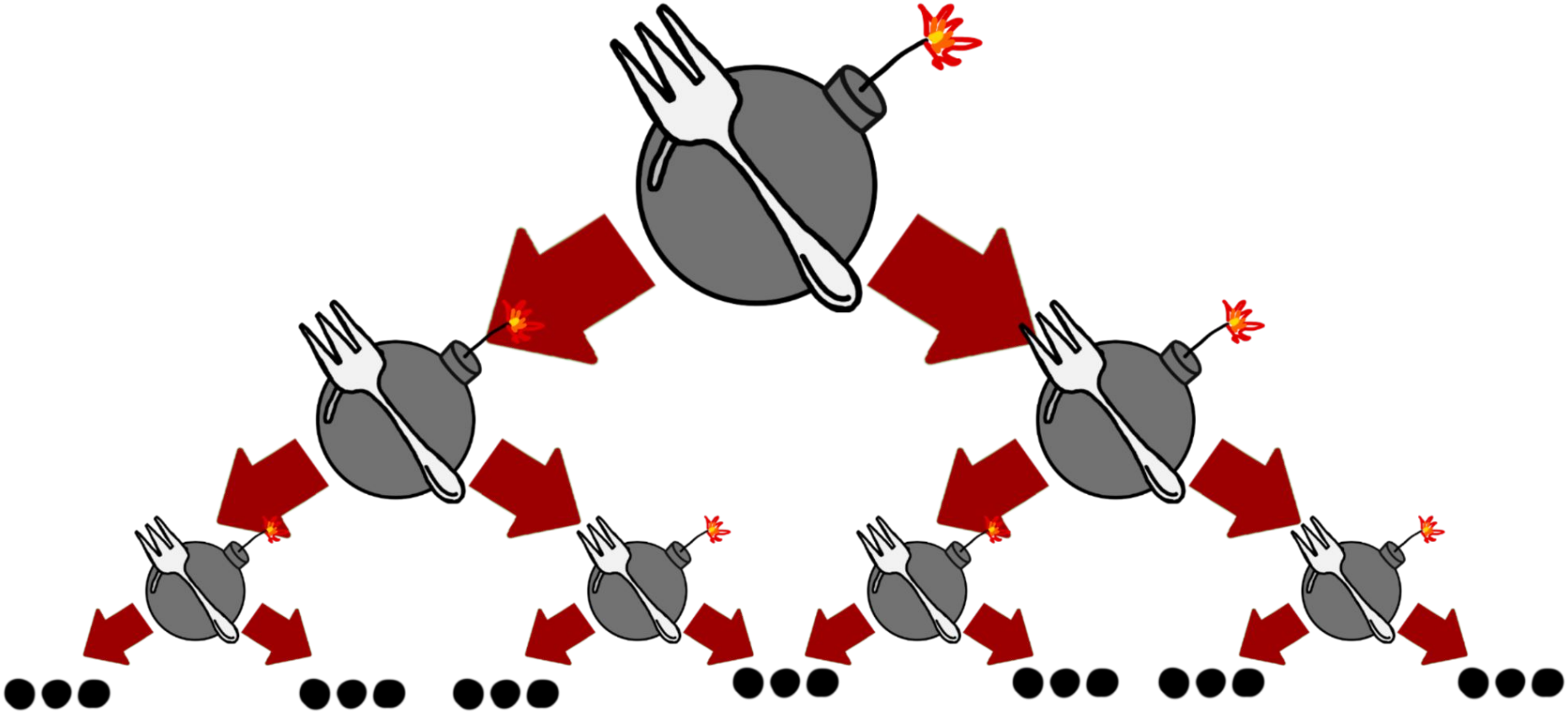

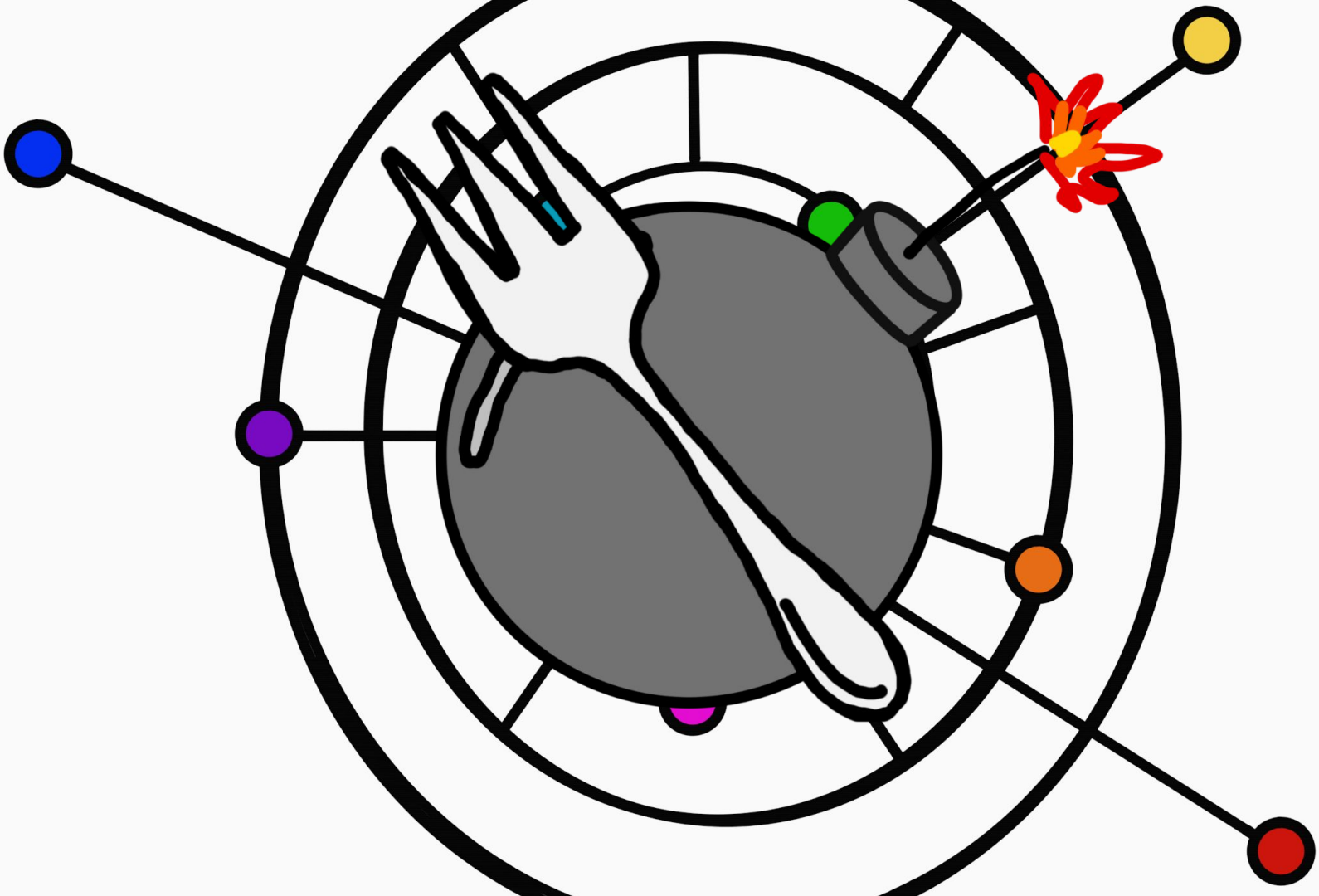


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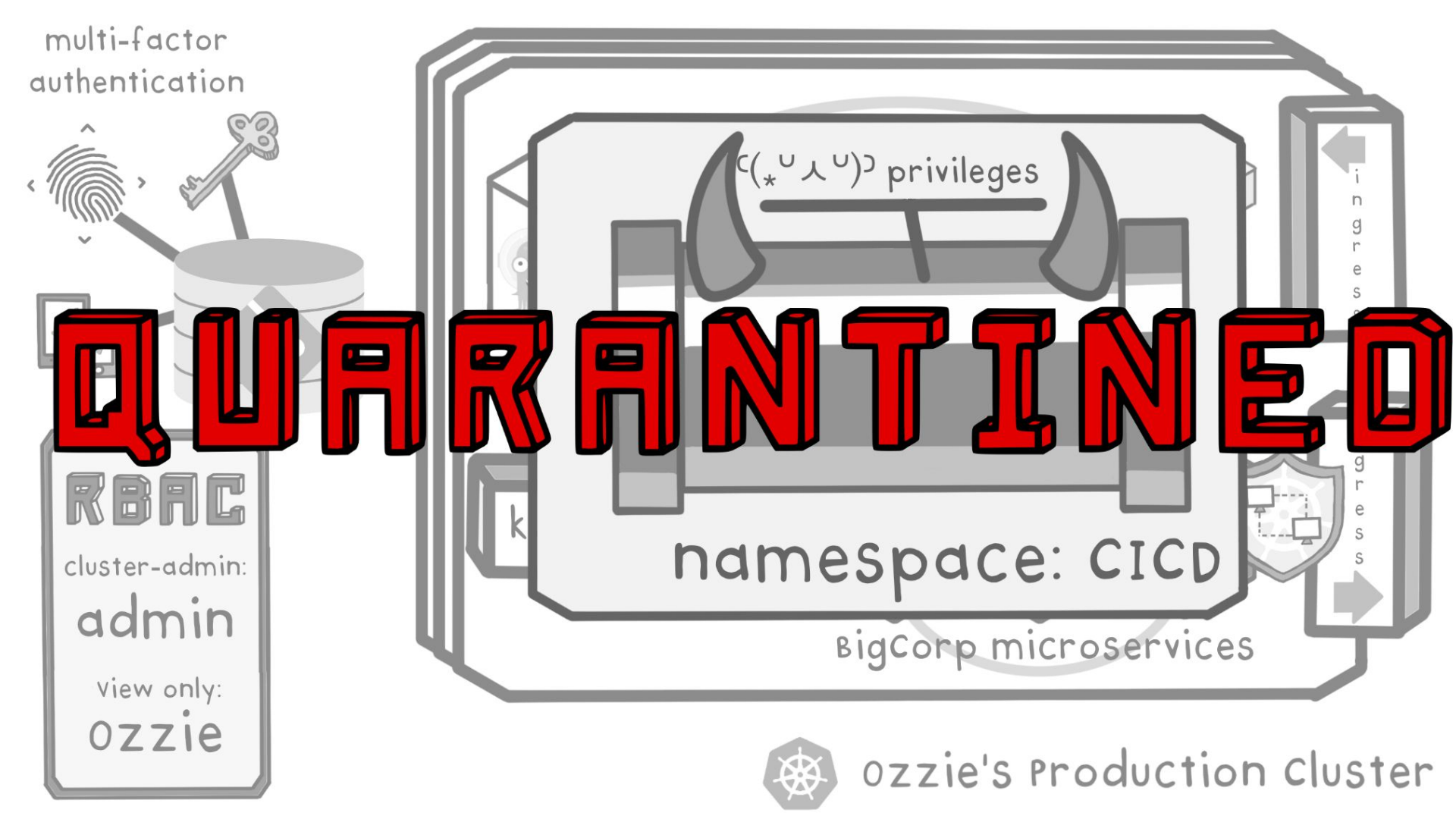
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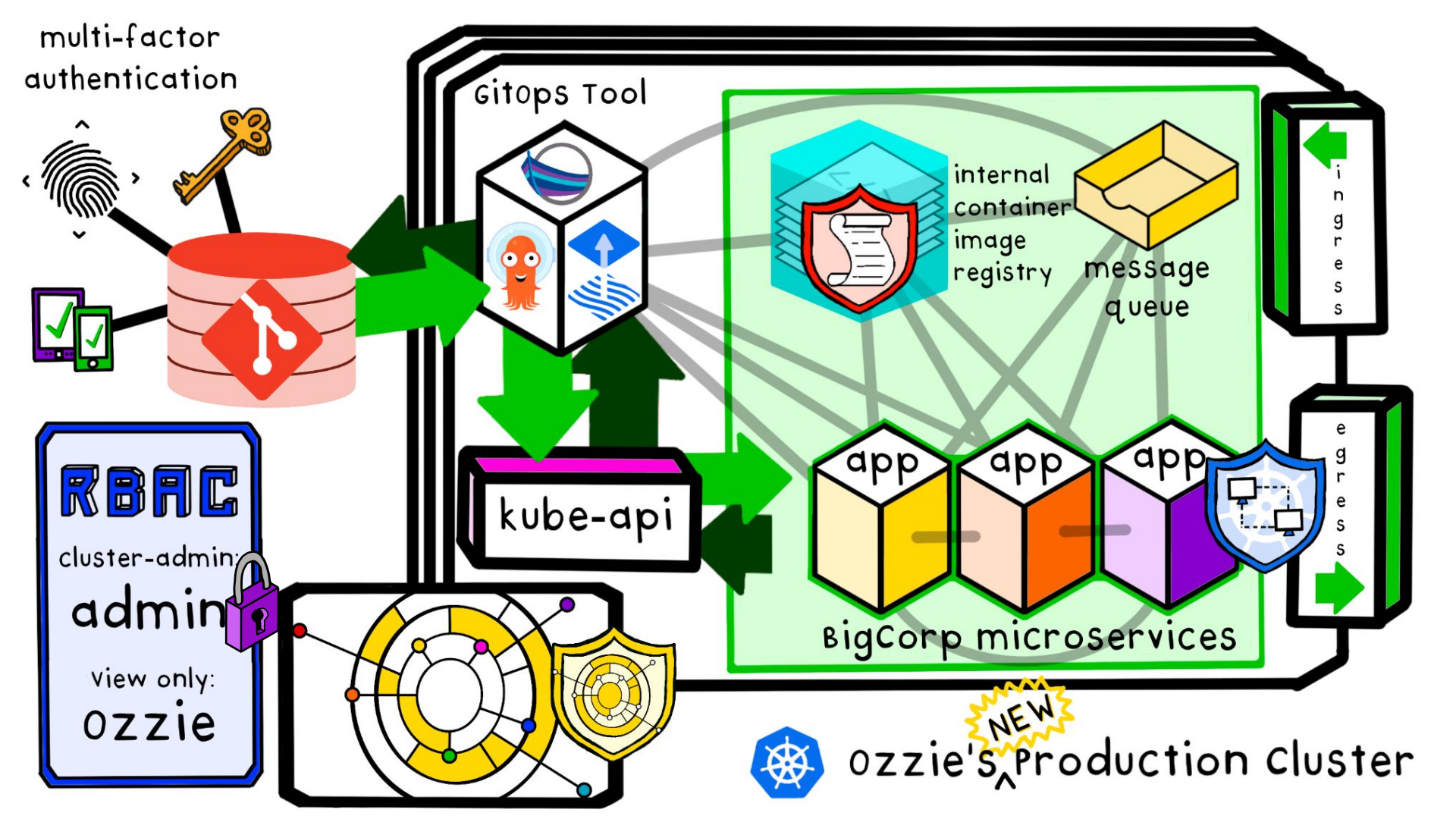
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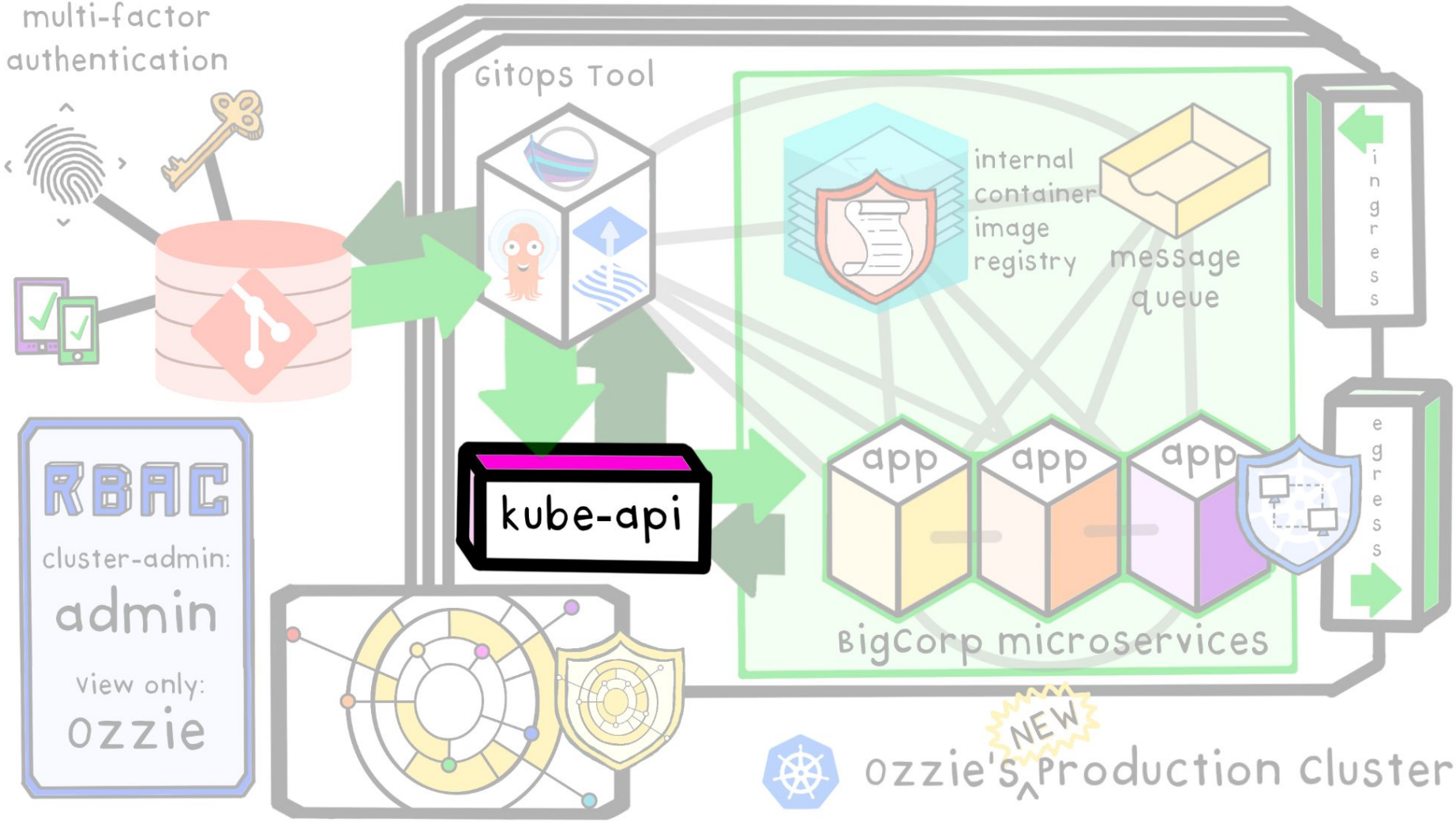
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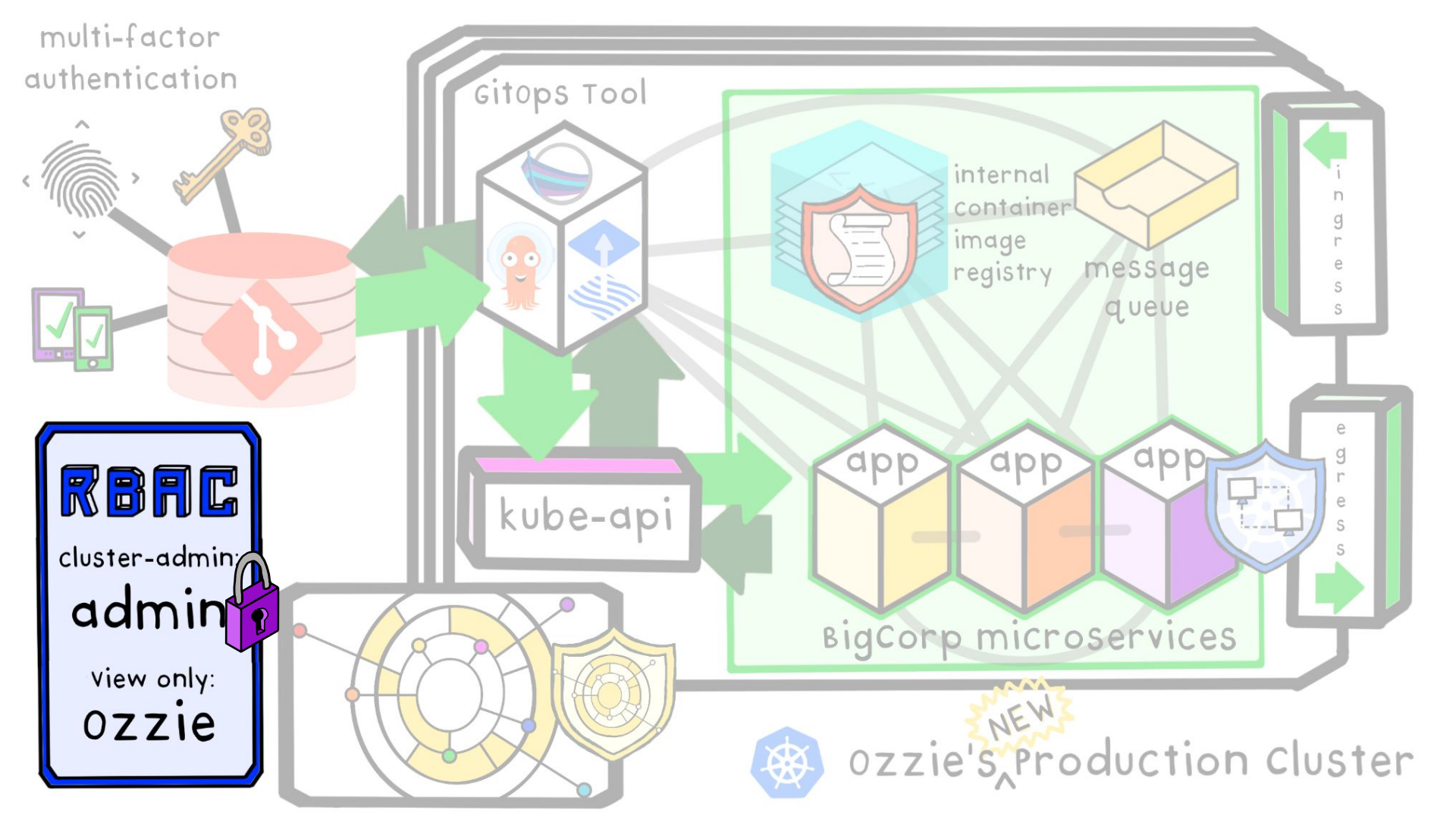
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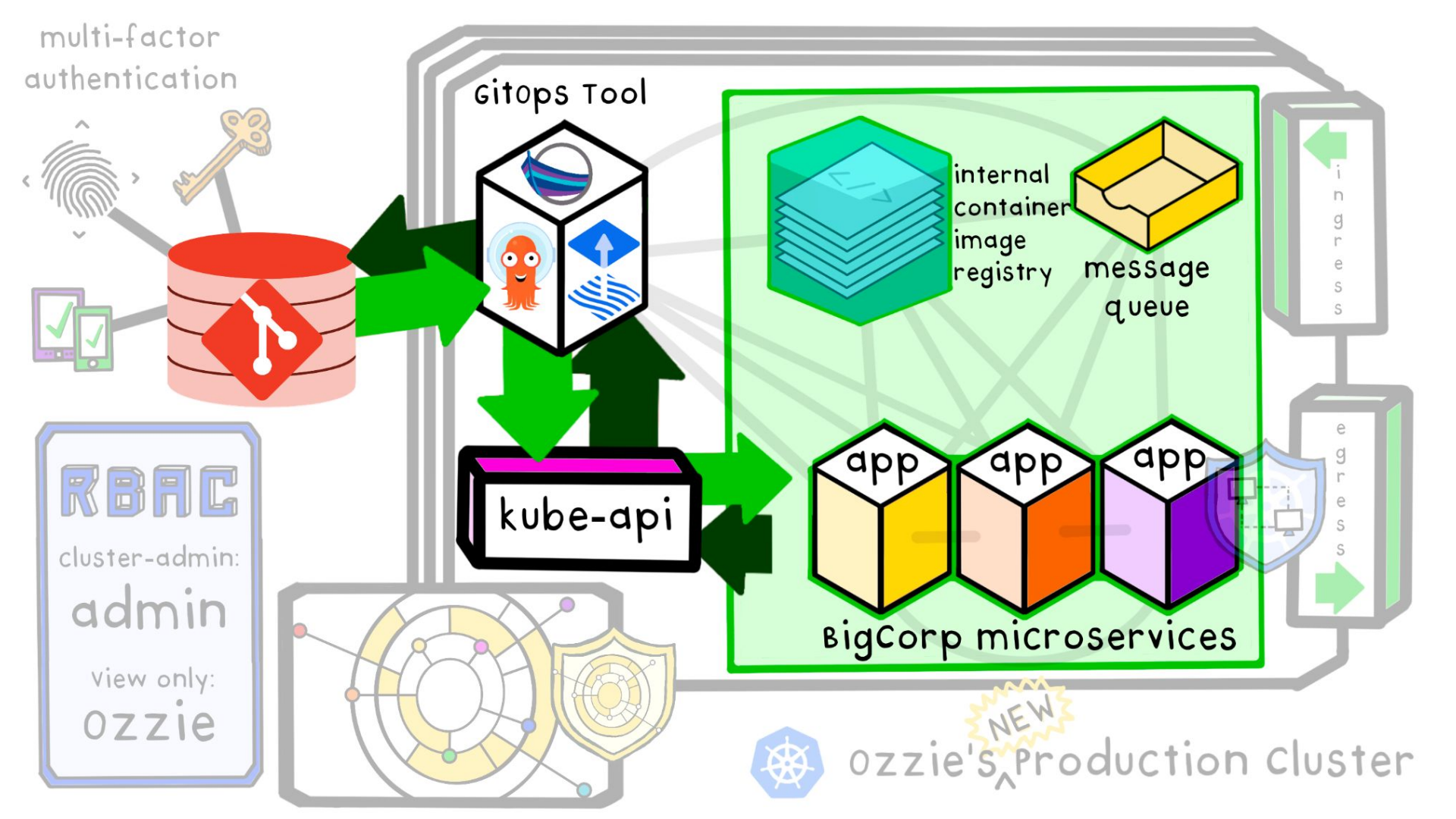
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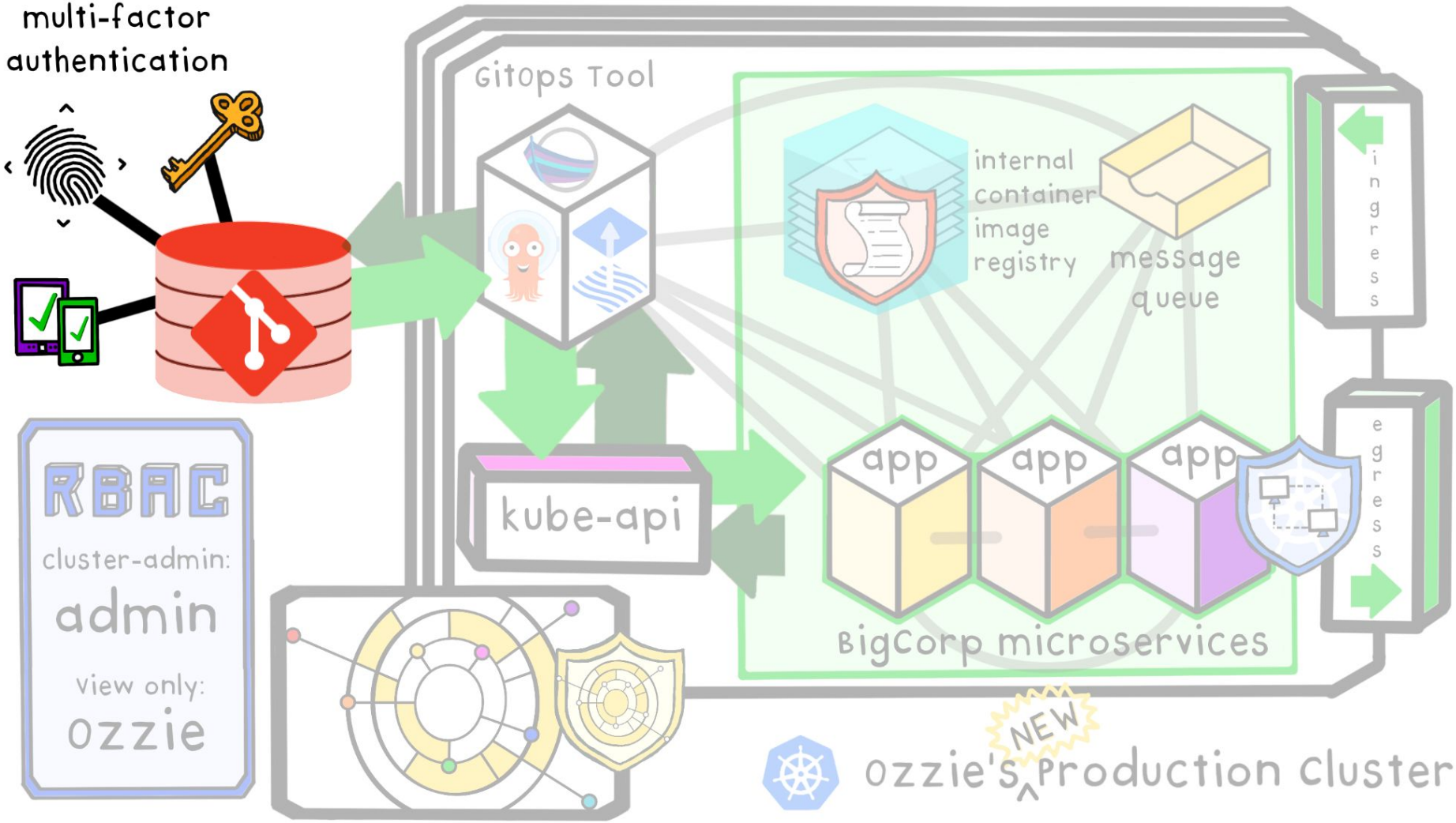
NEW
ozzie's Production Cluster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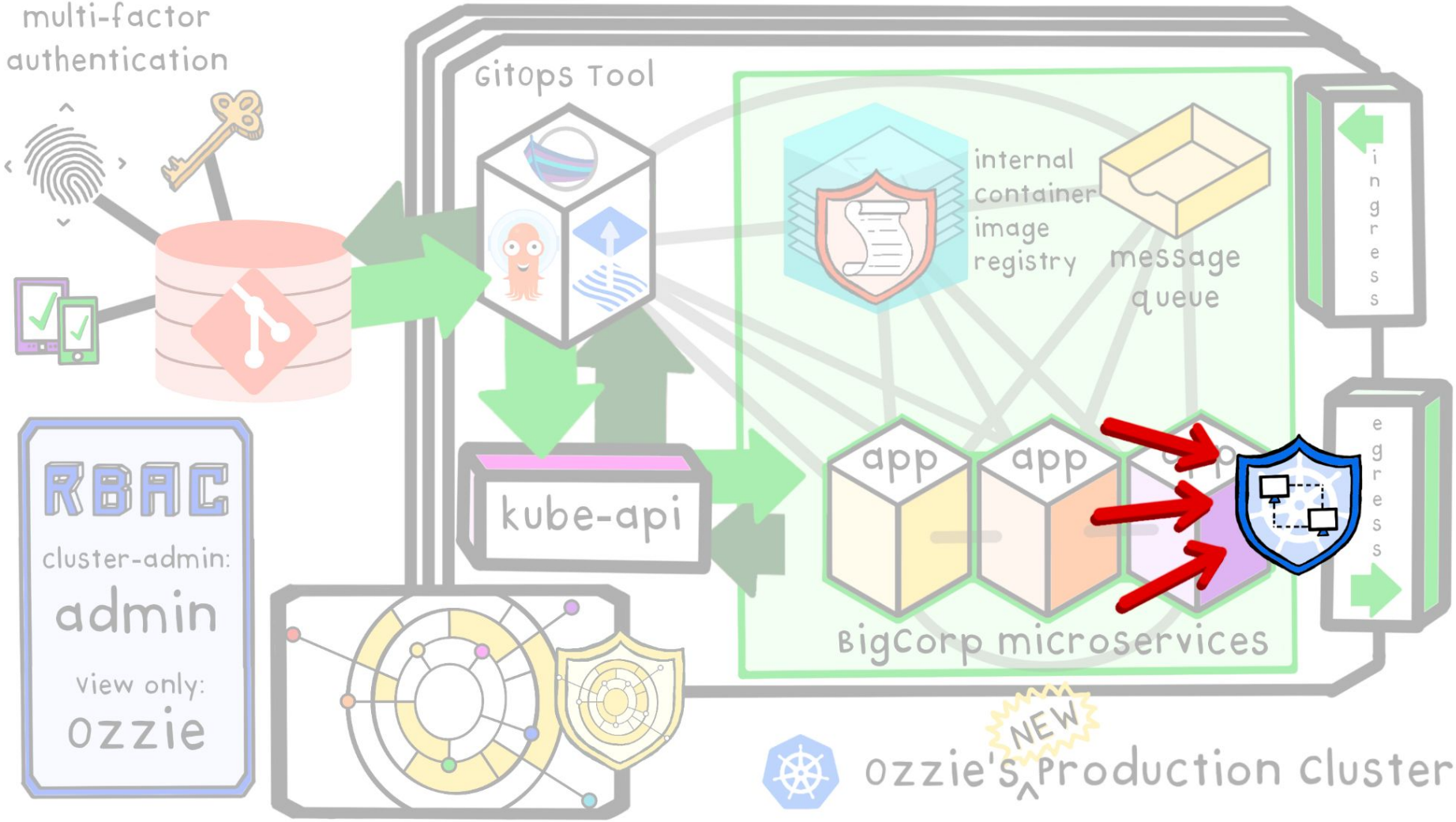
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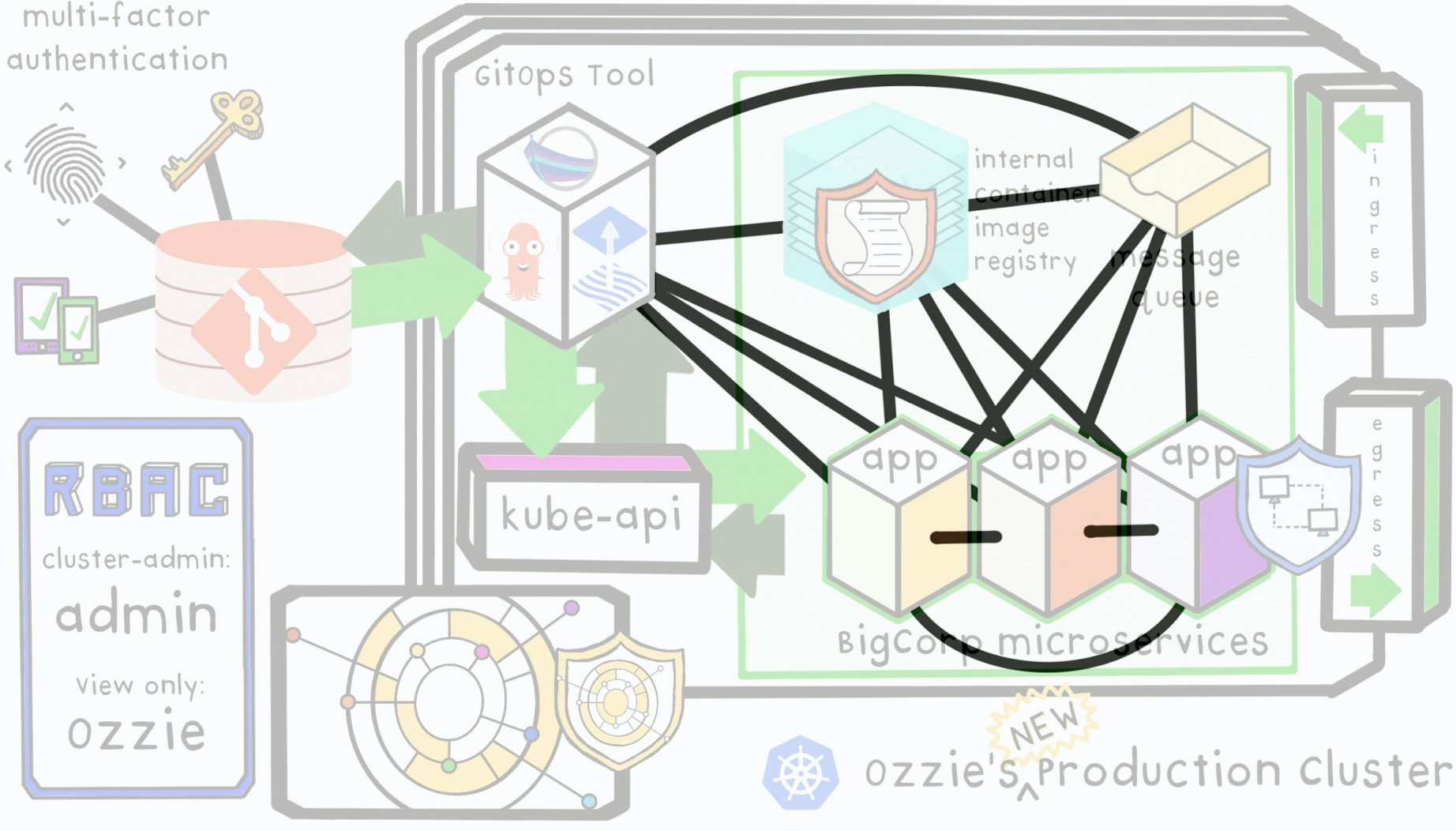
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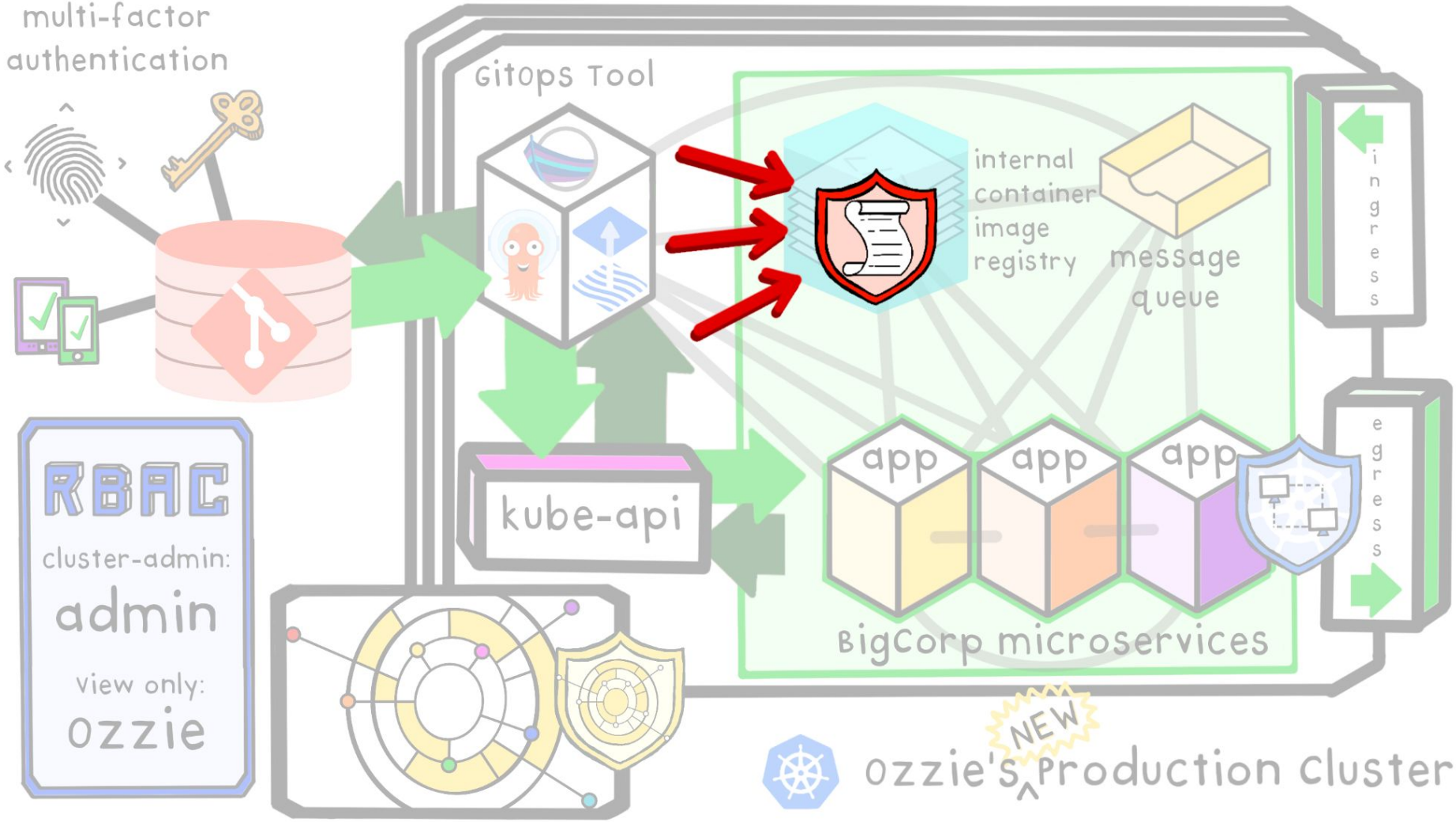
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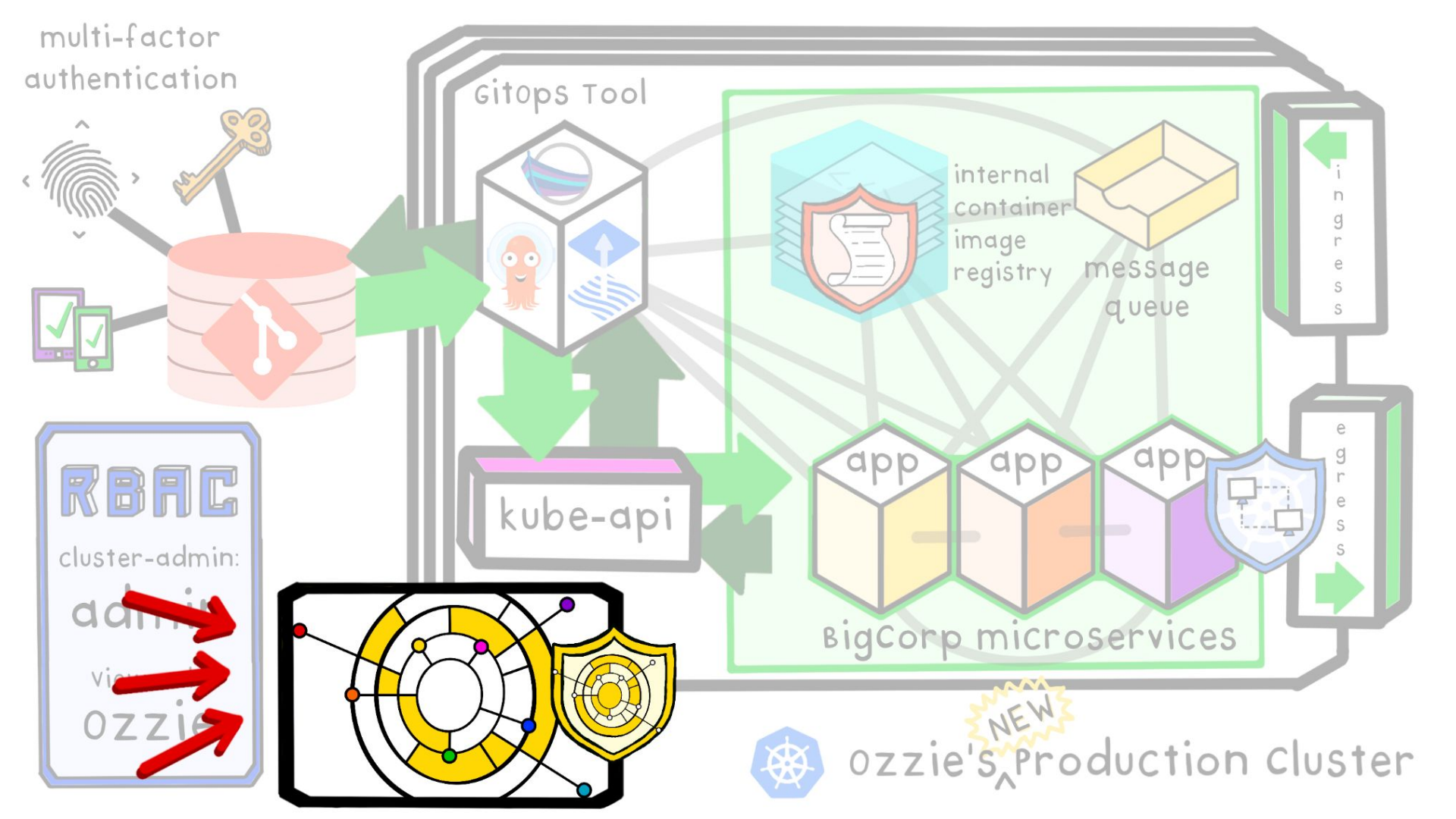
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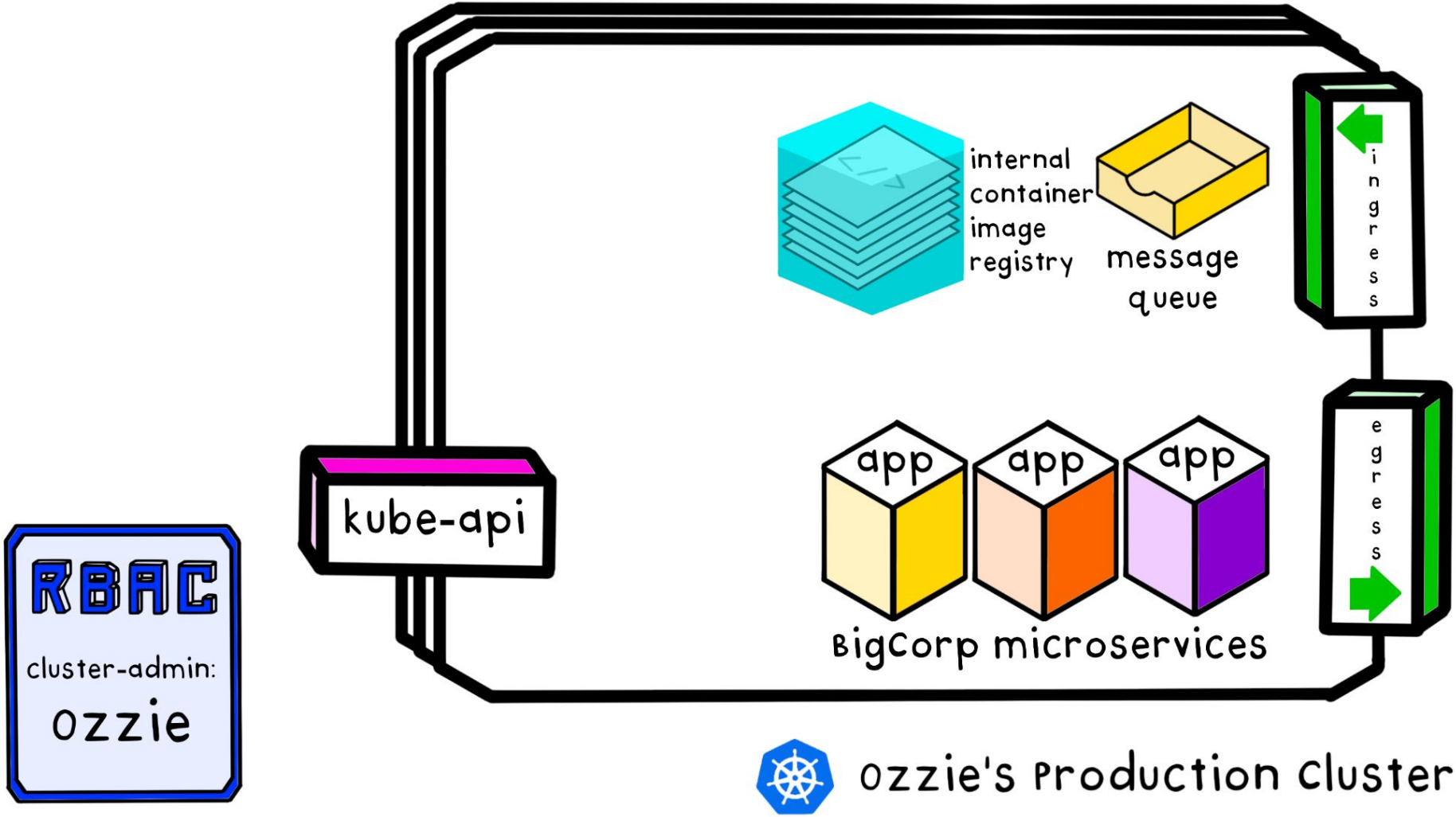
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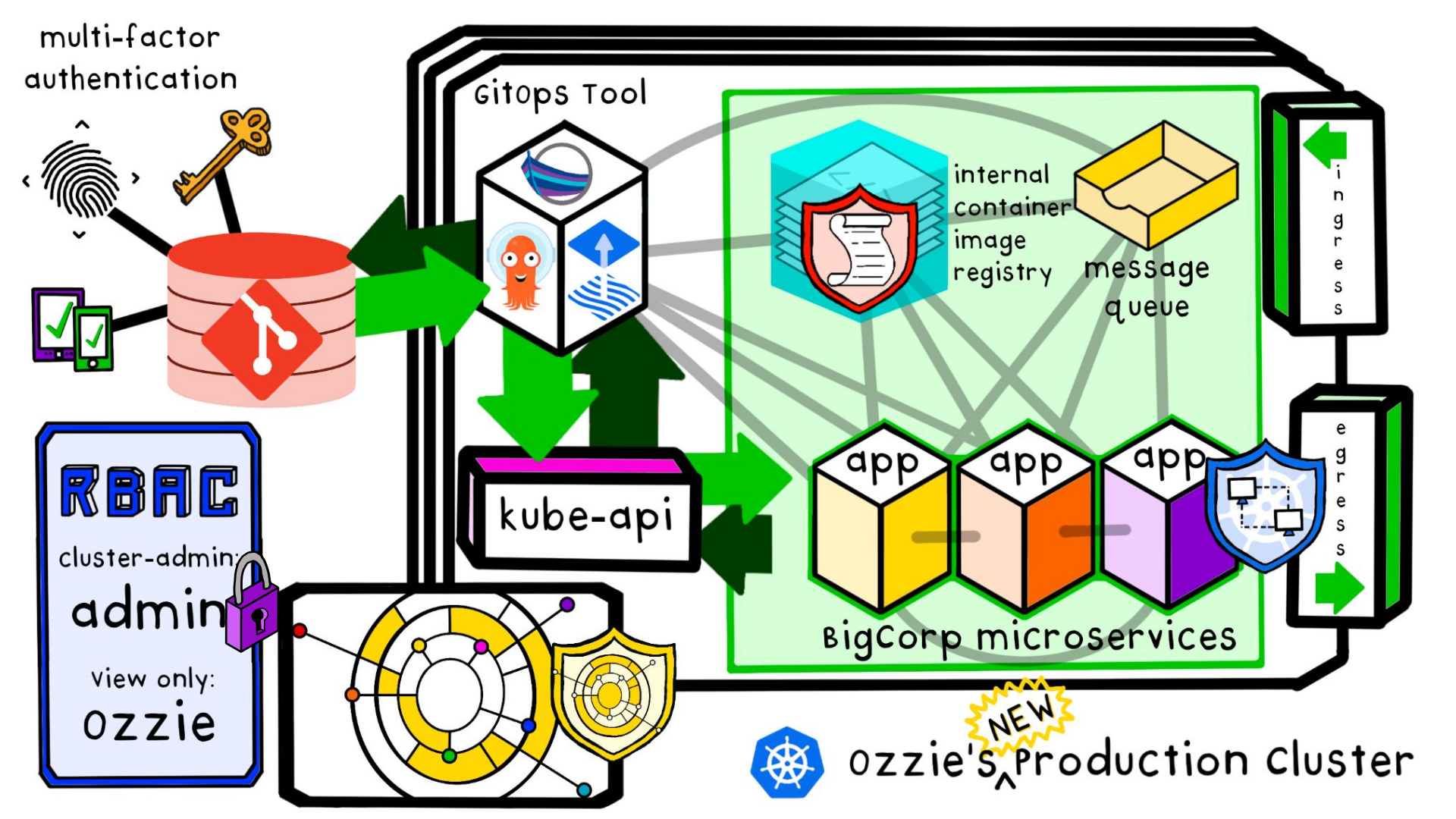
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NOVA

Kris Nóva

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