

S*%\$ Happens

How You Build to Survive

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CLOUDANT IS THE...

DISTRIBUTED DATABASE as a SERVICE



Cloudant

The Do More Data Layer

Cloudbant Highlights

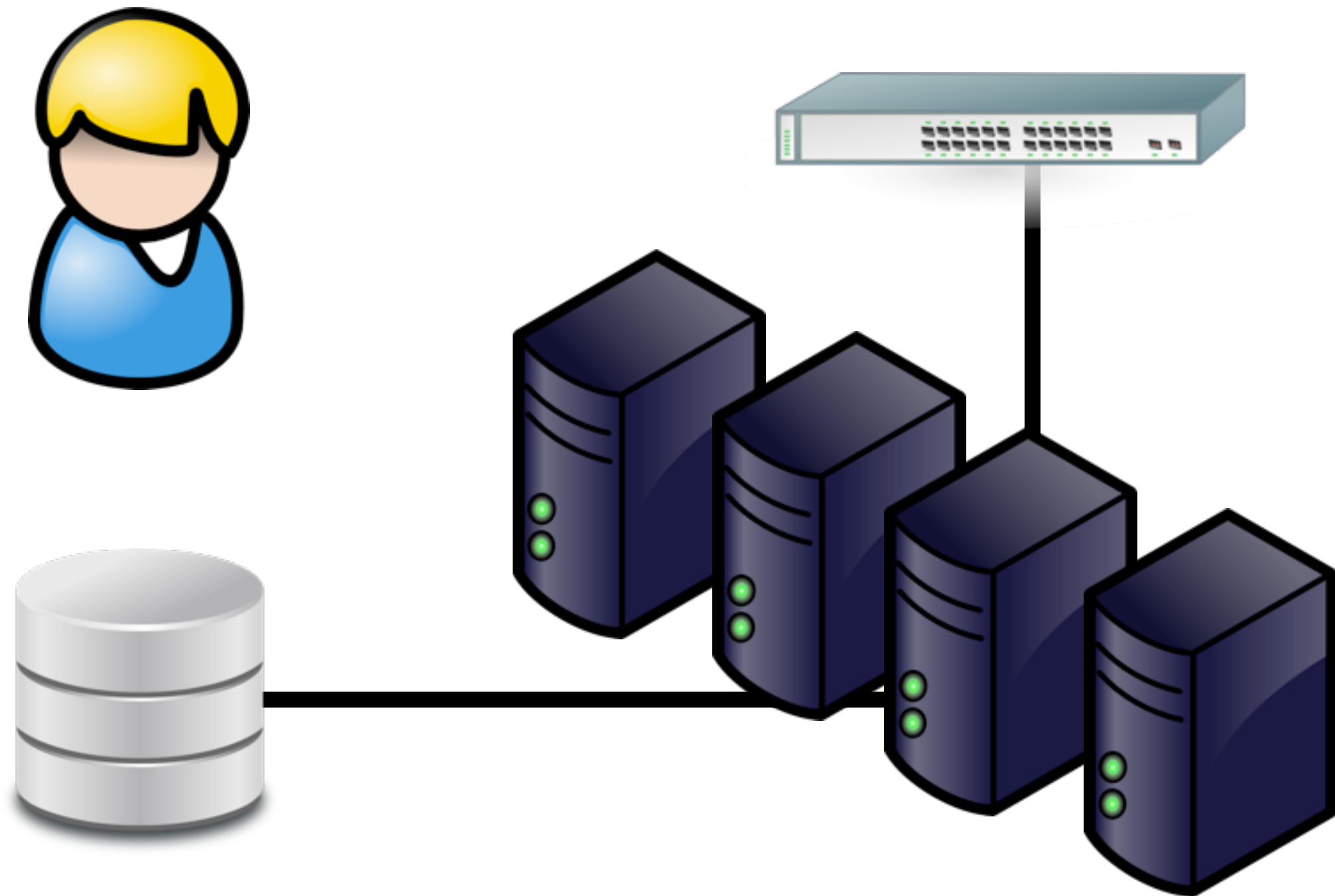
- Distributed Database as a Service (DBaaS)
 - Premise: Apps should grow into their data layer, not out of it
- For developers of high-velocity web & mobile apps
- Founded in 2008 by 3 MIT physicists



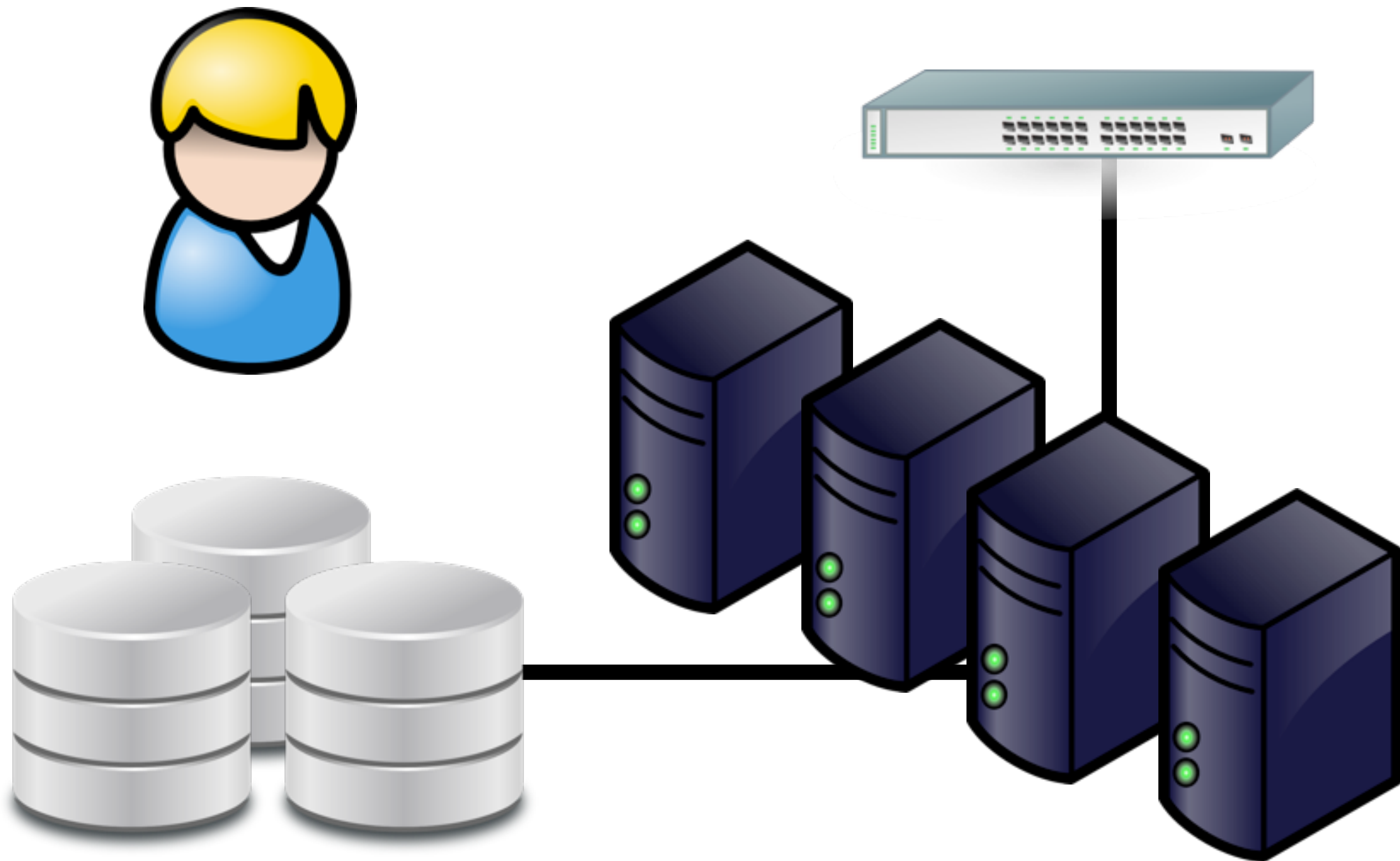


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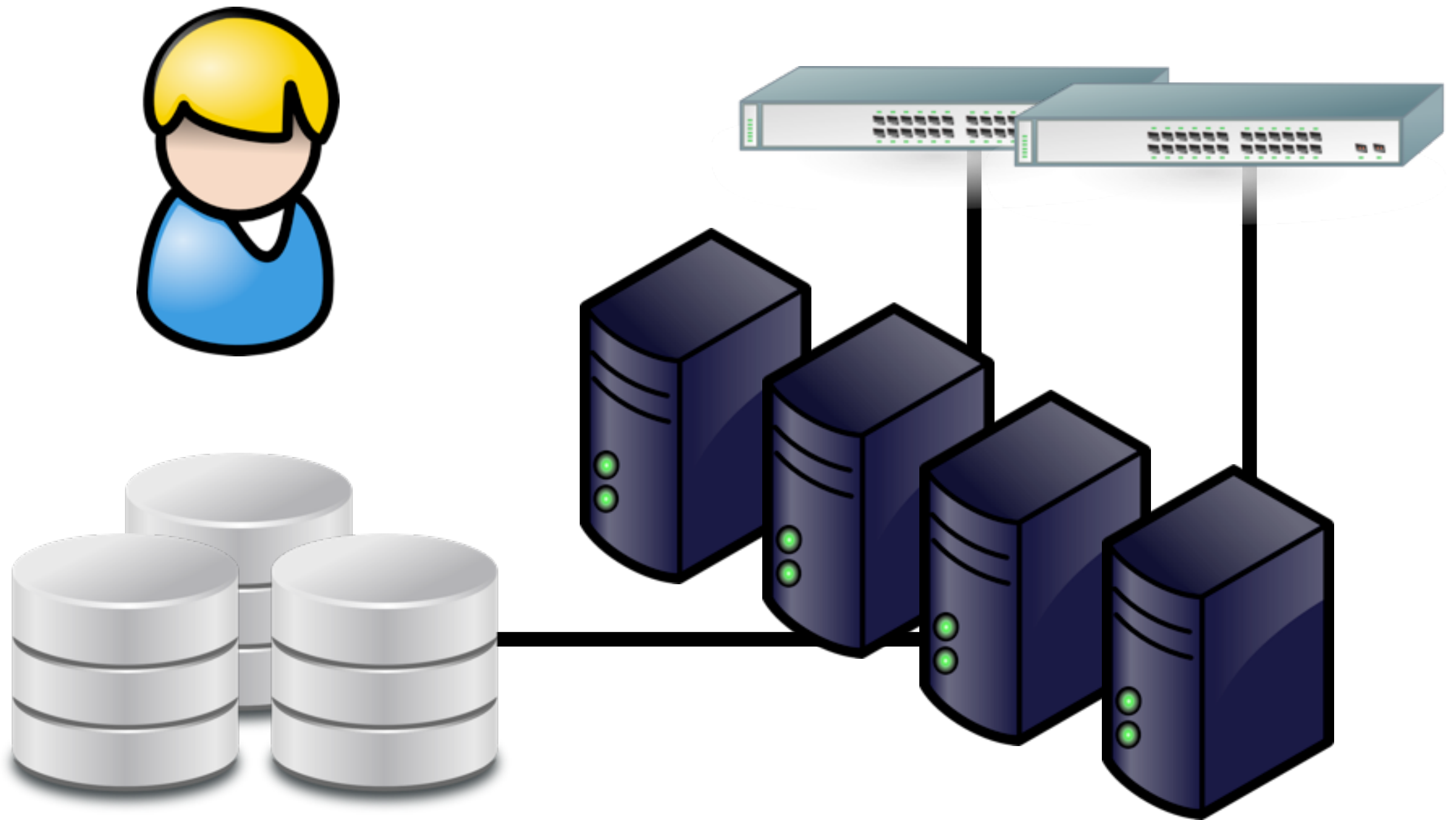
Spot the Single Point of Failure



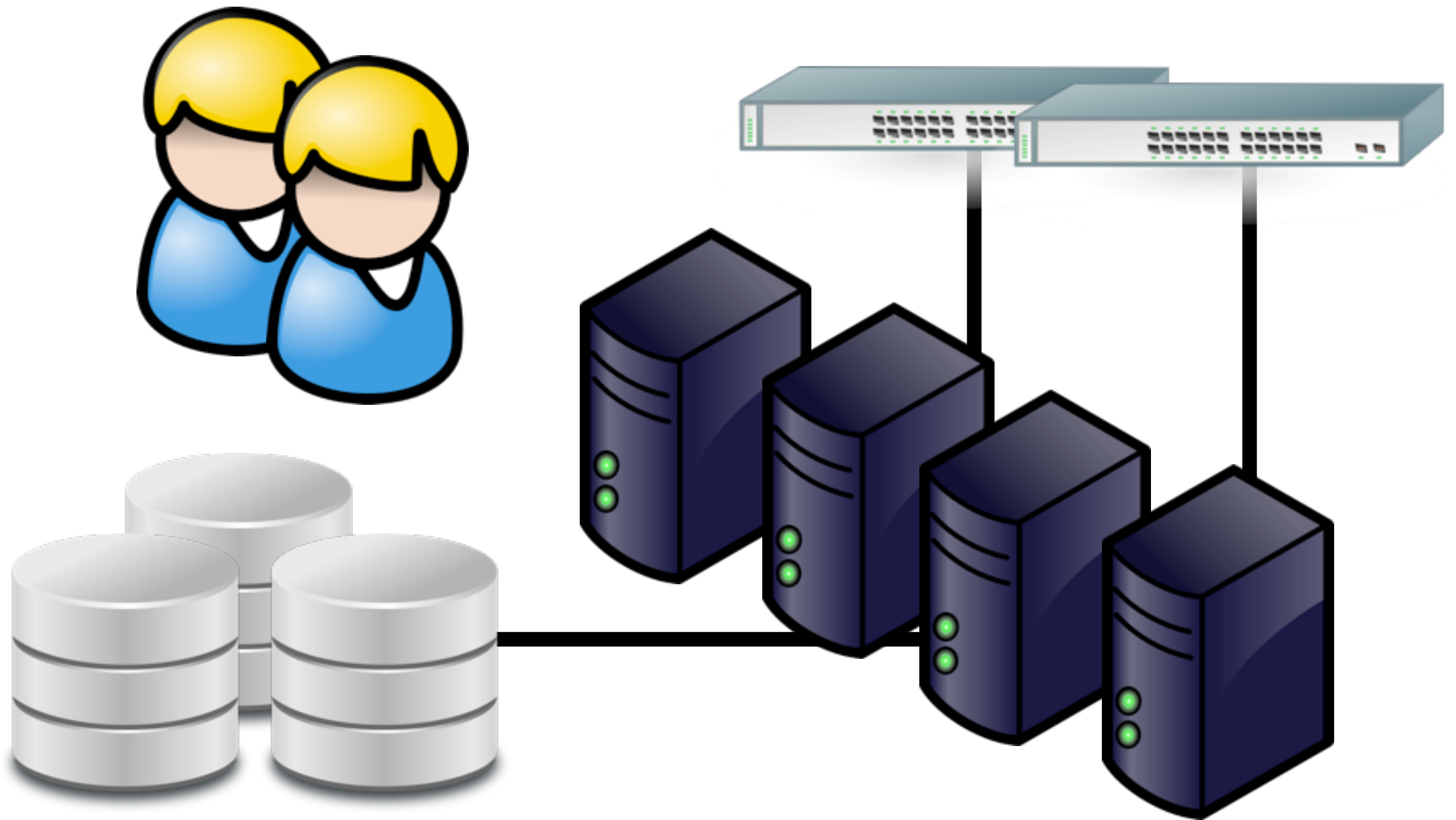
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Scale horizontal vs scale vertical

- SPOF's can be managed if you understand them
 - e.g. Hadoop name node
- Can address by vertical scaling
 - beef up the machine as much as you can afford
- Alternative is to find a suitable scale out architecture
 - shared nothing
 - stateless

CAP theorem



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Bus factor



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Let me tell you a story...



OUR BEST APPLE FEATURE



Temporary Delay

Servers melted: 4. Empty pizza boxes: 13. Pots of coffee brewed: 21. We're working hard to get Big Win working at 100%. Thanks for your patience!

OK



Beware the app store effect

Plan for success

Anticipate failures



“Our code makes **hundreds of millions** of transactions a day. Moving our data to Cloudant has **freed up our team** to focus on what matters most: making a great experience for users.”

Joel DeYoung, Hothead Games



GROW MORE



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Monitoring and alerting

Monitor everything

Understand normal, define alerts

Be ruthless about false positives

Don't train your devops to ignore alerts.



SLEEP MORE

Don't worry about usage spikes tipping over your database. The big data experts at Cloudant manage the data layer so you can do other things, like get a good night's sleep.



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Time bombs

There is something in your system that isn't quite right

Everyone knows it

It will bite you

The question is when



Data structures

```
{  
  "url": "http://example.com",  
  "clicks": [  
    {"date": 1362667330, "uid": "af51as"},  
    {"date": 1362667330, "uid": "af52as"},  
    {"date": 1362667330, "uid": "af5cas"}  
  ]  
}
```



Data structures

```
{“date”: 1362667330, “uid”:”af51as”, “url”:  
“http://example.com”, “type”: “click”}
```

```
{“date”: 1362667330, “uid”:”af52as” “url”:  
“http://example.com”, “type”: “click”}
```

```
{“date”: 1362667330, “uid”:”af5cas” “url”:  
“http://example.com”, “type”: “click”}
```



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BUILD MORE



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Build partnerships

Build trust in who you work with

Ensure solid technical communication between partners



When things go wrong

Keep calm and fix things

Keep your customers informed



Thanks for listening!

Take the data layer for a spin at <http://cloudant.com/signup>

Keep the conversation going @drsm79

Chat with Cloudant on IRC #cloudant

