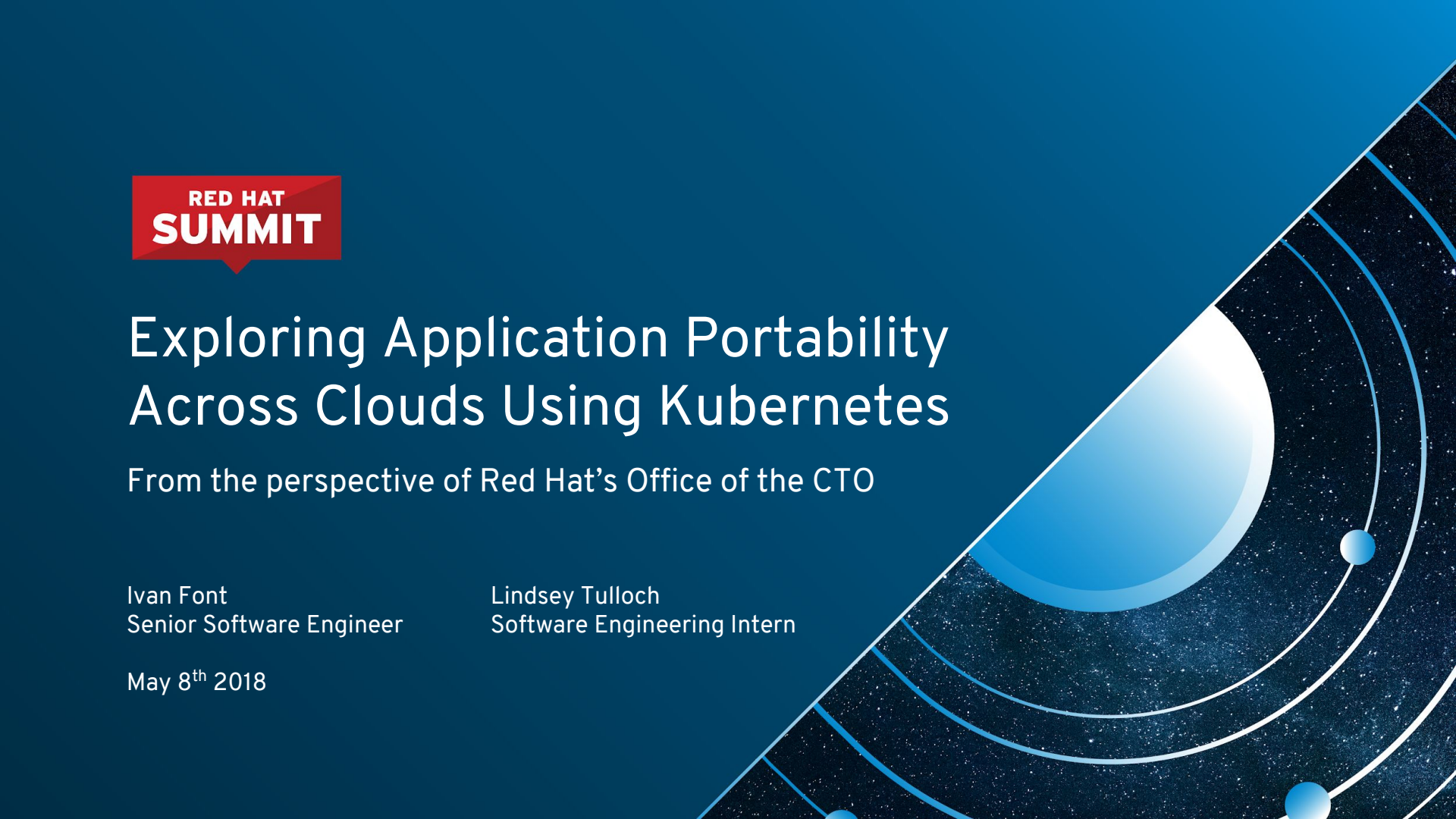


Exploring Application Portability Across Clouds Using Kubernetes

From the perspective of Red Hat's Office of the CTO

Ivan Font
Senior Software Engineer

Lindsey Tulloch
Software Engineering Intern

May 8th 2018

Background

Lindsey and I are part of the Emerging Technologies group within the Office of the CTO at Red Hat. Our charter is to:

- Build prototypes and run exploratory projects to inform Red Hat's long term technology strategy. Sometimes these will graduate into a new product feature or product.
- Develop a point of view on new emerging technologies
- Work with product teams to build alignment on technology strategy

This presentation is intended to give you some insight into an exploratory project that we are currently working on. This is all open source.

redhat.

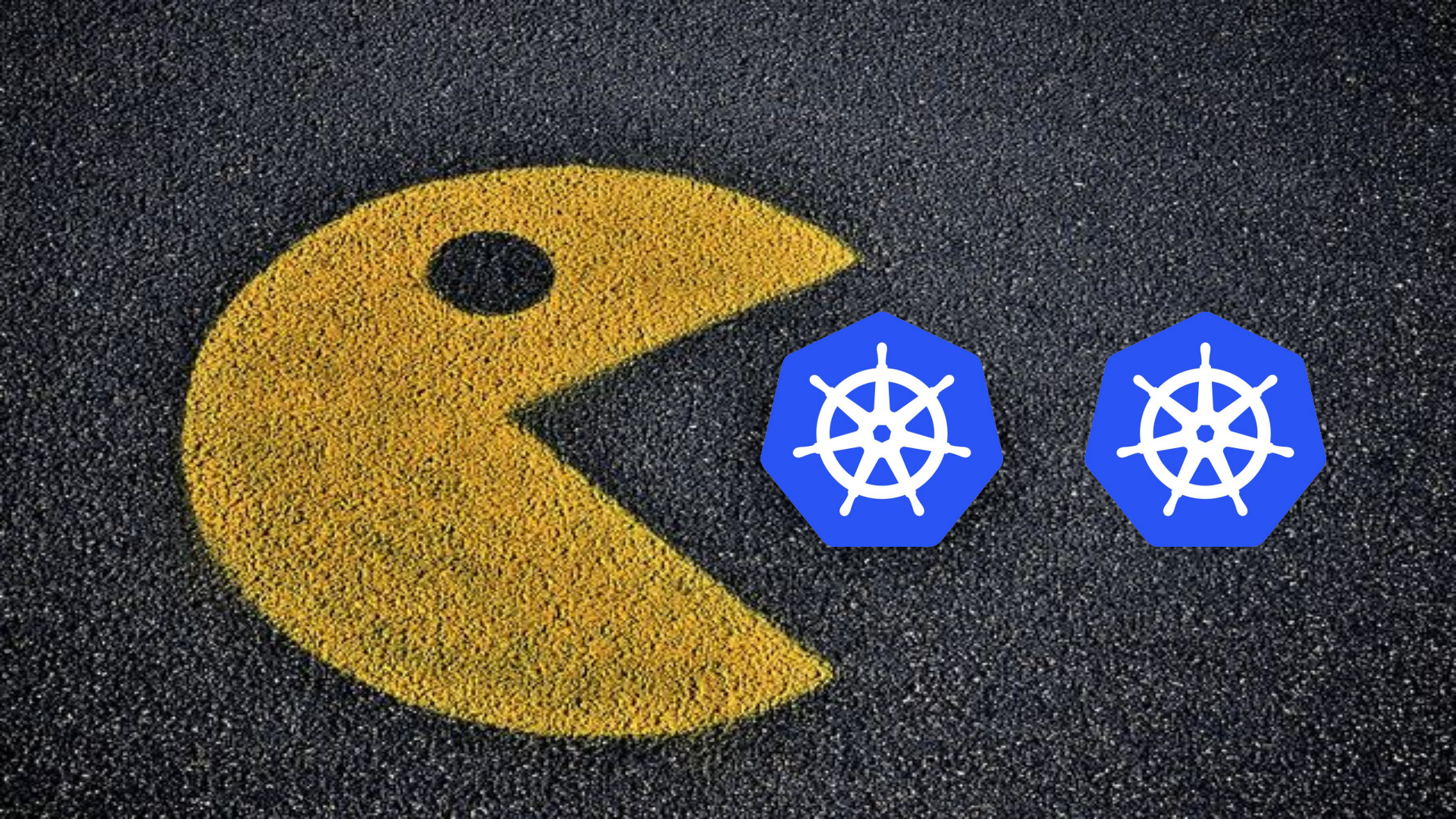
Problem Statement

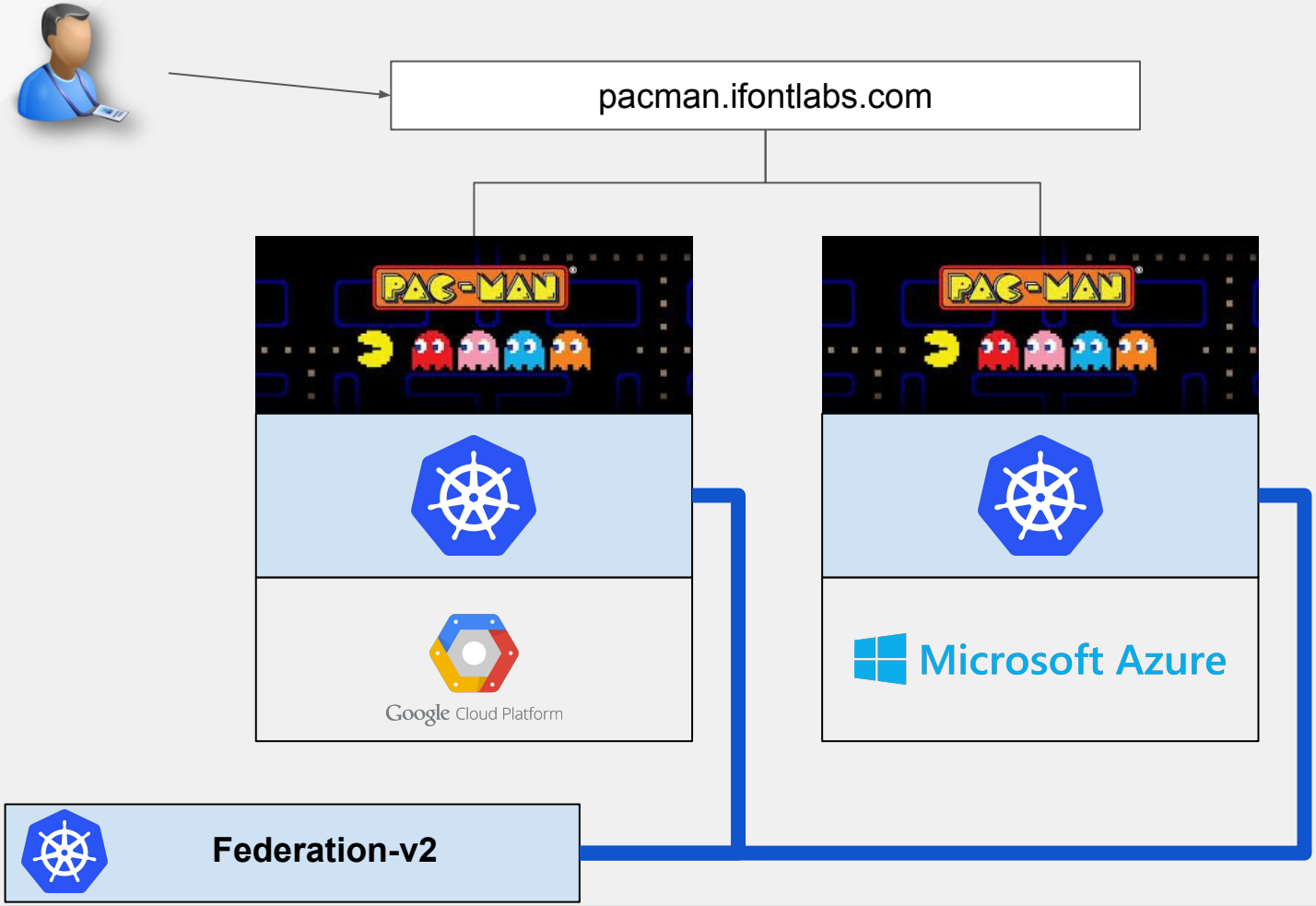
“My application is running a particular infrastructure (e.g. Azure) and I would like to move it to a different infrastructure (e.g. AWS)”

Challenges:

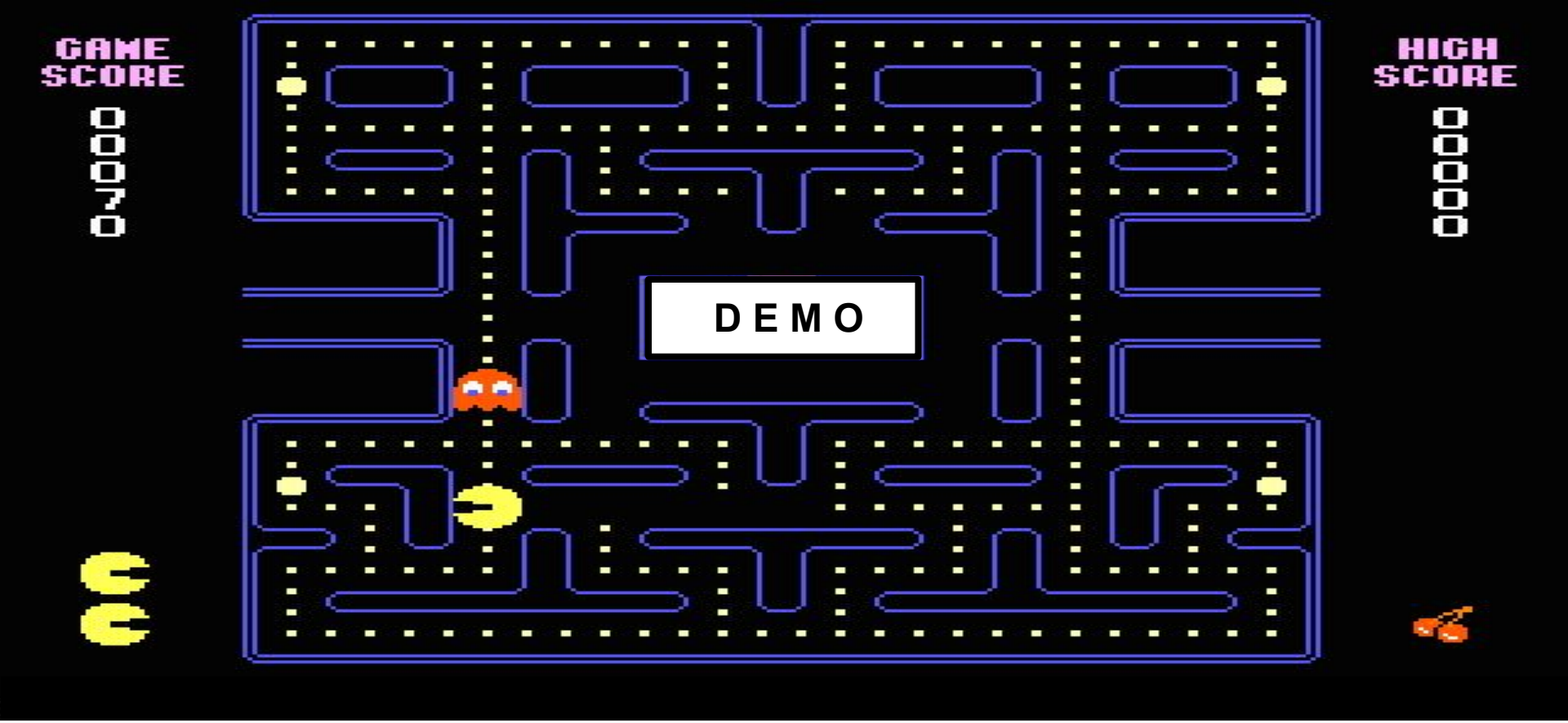
- How do I have Kubernetes automate this for me?
- How do I ensure that I don’t lose data?
- How do I maintain uptime?

redhat.



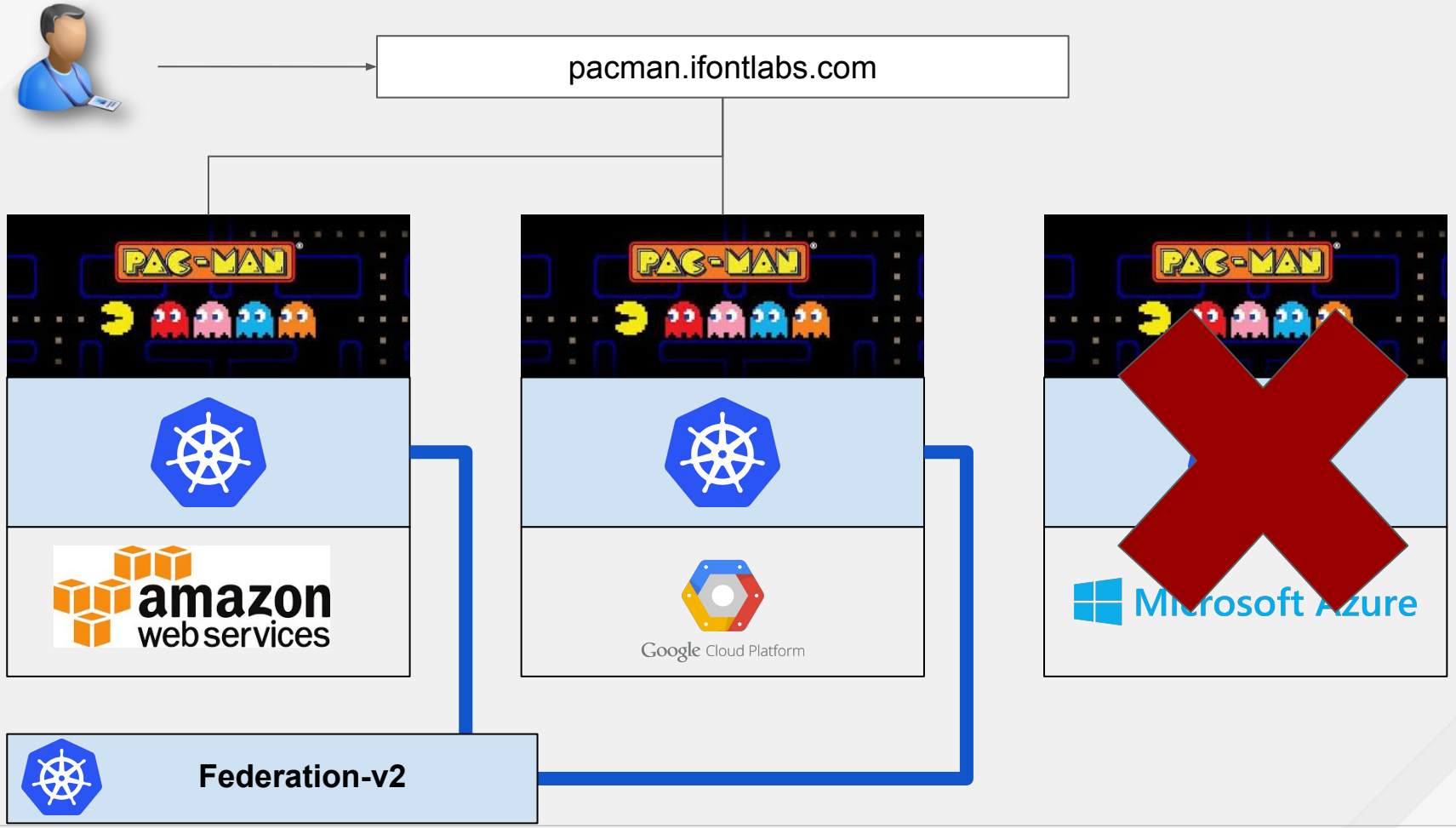

pacman.ifontlabs.com
PAC-MAN
PAC-MAN
Google Cloud Platform
Microsoft Azure
Federation-v2

redhat.

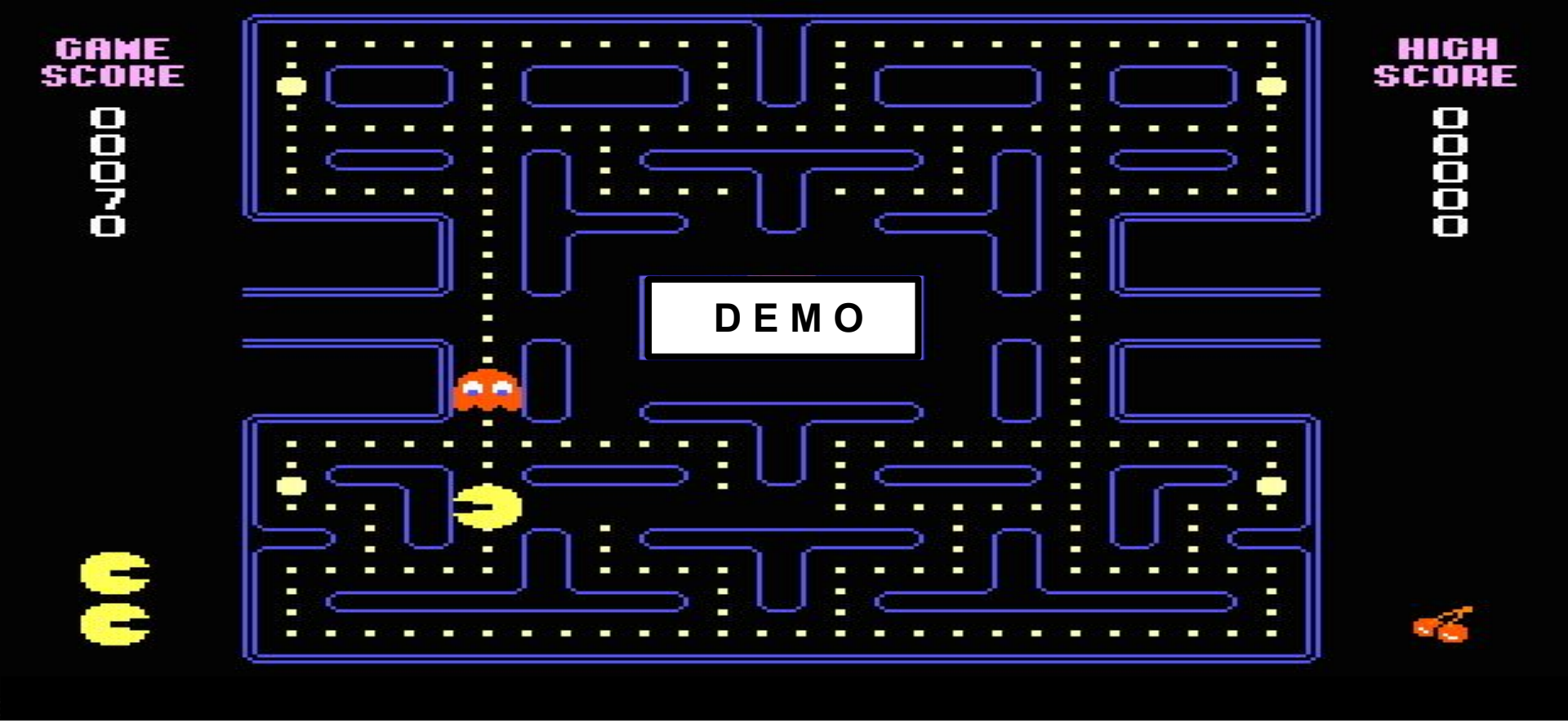


Google Cloud Platform

Microsoft Azure


pacman.ifontlabs.com
PAC-MAN
amazon web services
PAC-MAN
Google Cloud Platform
PAC-MAN
Microsoft Azure
Federation-v2

redhat.



amazon web services

Google Cloud Platform

For More Information

- Federation-v2
  - https://github.com/kubernetes-sigs/federation-v2
- Pac-Man Migration Demo
  - https://bit.ly/2rIGKS6
- Pac-Man Tutorials
  - https://github.com/font/k8s-example-apps/tree/master/pacman-nodejs-app

redhat.

THANK YOU


plus.google.com/+RedHat


facebook.com/redhatinc


linkedin.com/company/red-hat


twitter.com/RedHat

youtube.com/user/RedHatVideos