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# Future of Singularity



— Michael Bauer —

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# Contact Information

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# Roadmap

1. Service Support in Singularity
  2. Kubernetes support for Singularity
  3. Trusted containers / data containers
  4. Singularity and RStor
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# Services & Singularity

```
$ singularity start container.img [name]
```

```
$ singularity exec [name/container.img] ...
```

```
$ singularity stop container.img [name]
```

HOST PID NS

PID NS

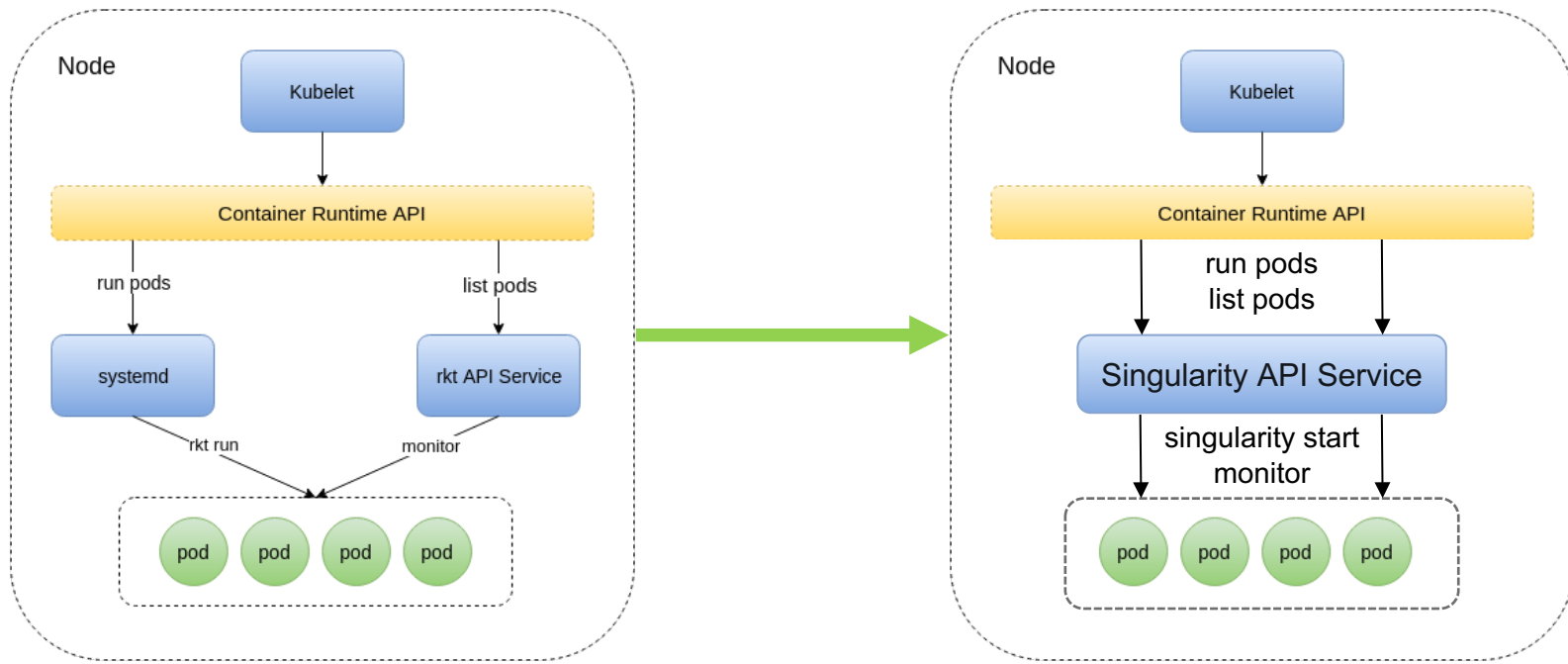
[1] sinit

[2] my\_proc

[...]

# Singularity + Kubernetes?

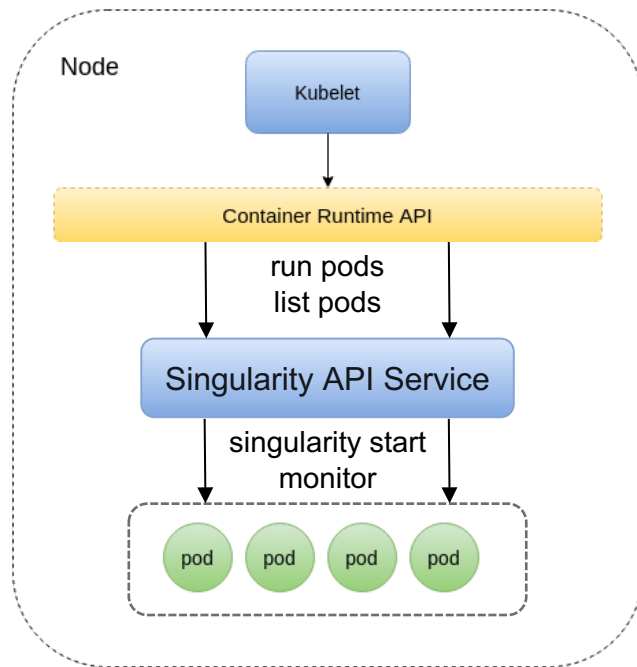
# Proposed Implementation Architecture



# Motivation for Integration

Engaged with large US  
Government Entity to  
investigate integration

Deploy Kubernetes services  
via Singularity with start/stop



# Trusted/Data Containers



## Data Container

Package data into a container

Can be mounted for use by a container with software installed

## Trusted Container

Verify and ensure integrity of container contents

Use for highly secure data (i.e. medical, government, financial...)



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# What's the deal with RStor?

Primary funding entity of Singularity development

Developing research data management and cloud orchestration technologies

Using Singularity to develop said advanced technologies

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**www.RStor.io – *Coming Soon***