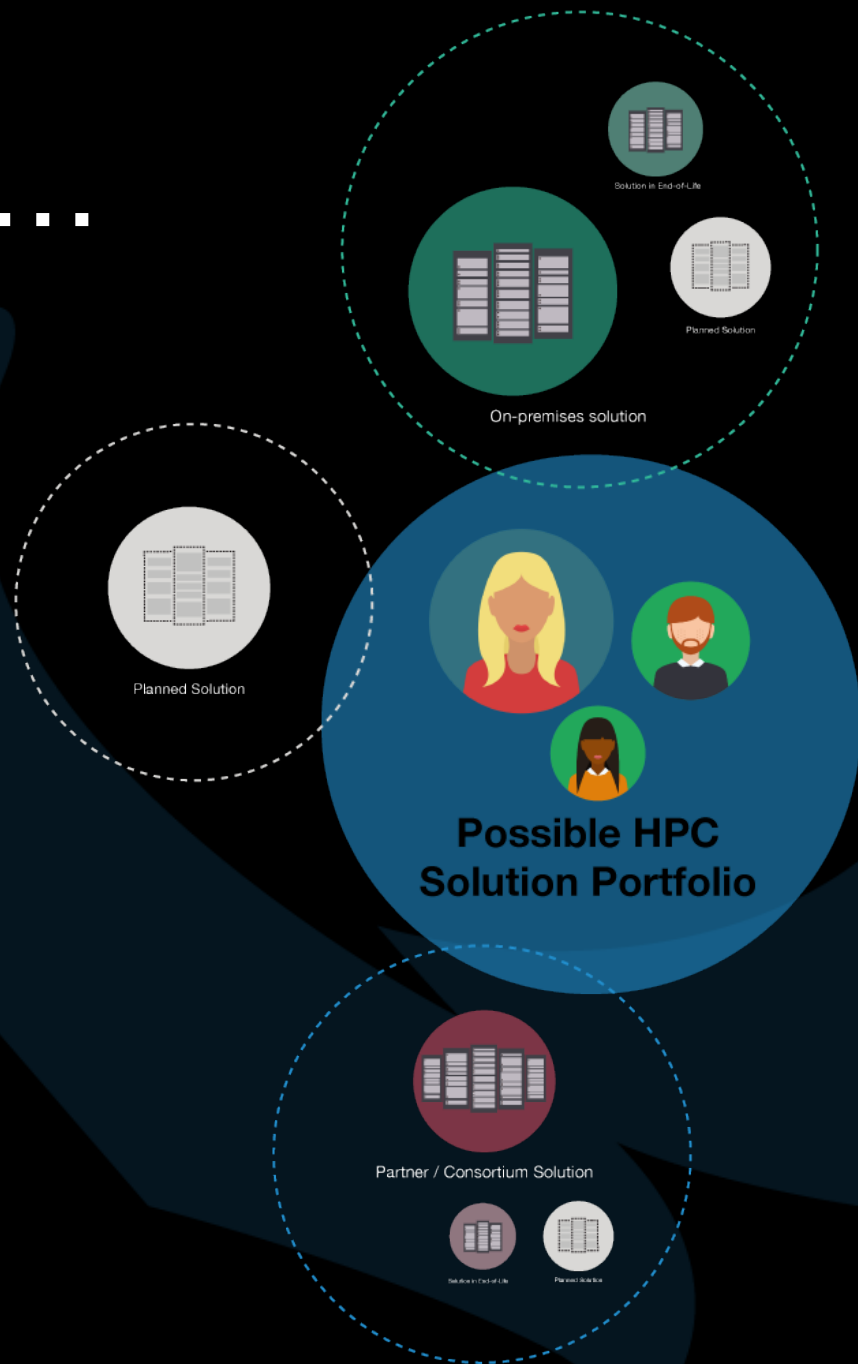


# The Virtuous HPC Compute Cycle

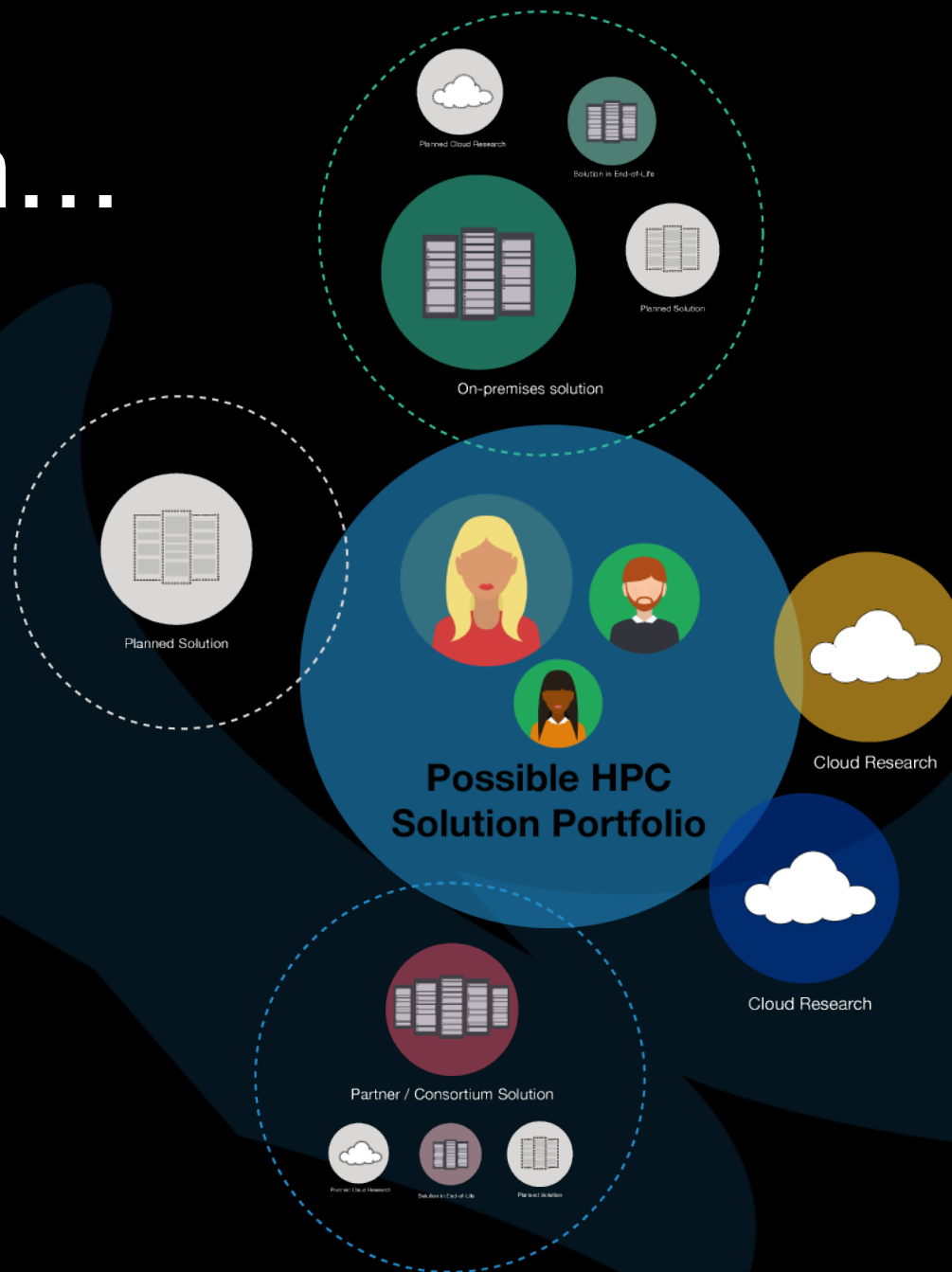
How Alces Flight establishes HPC lifecycles

# How High Performance Computing Management should work...

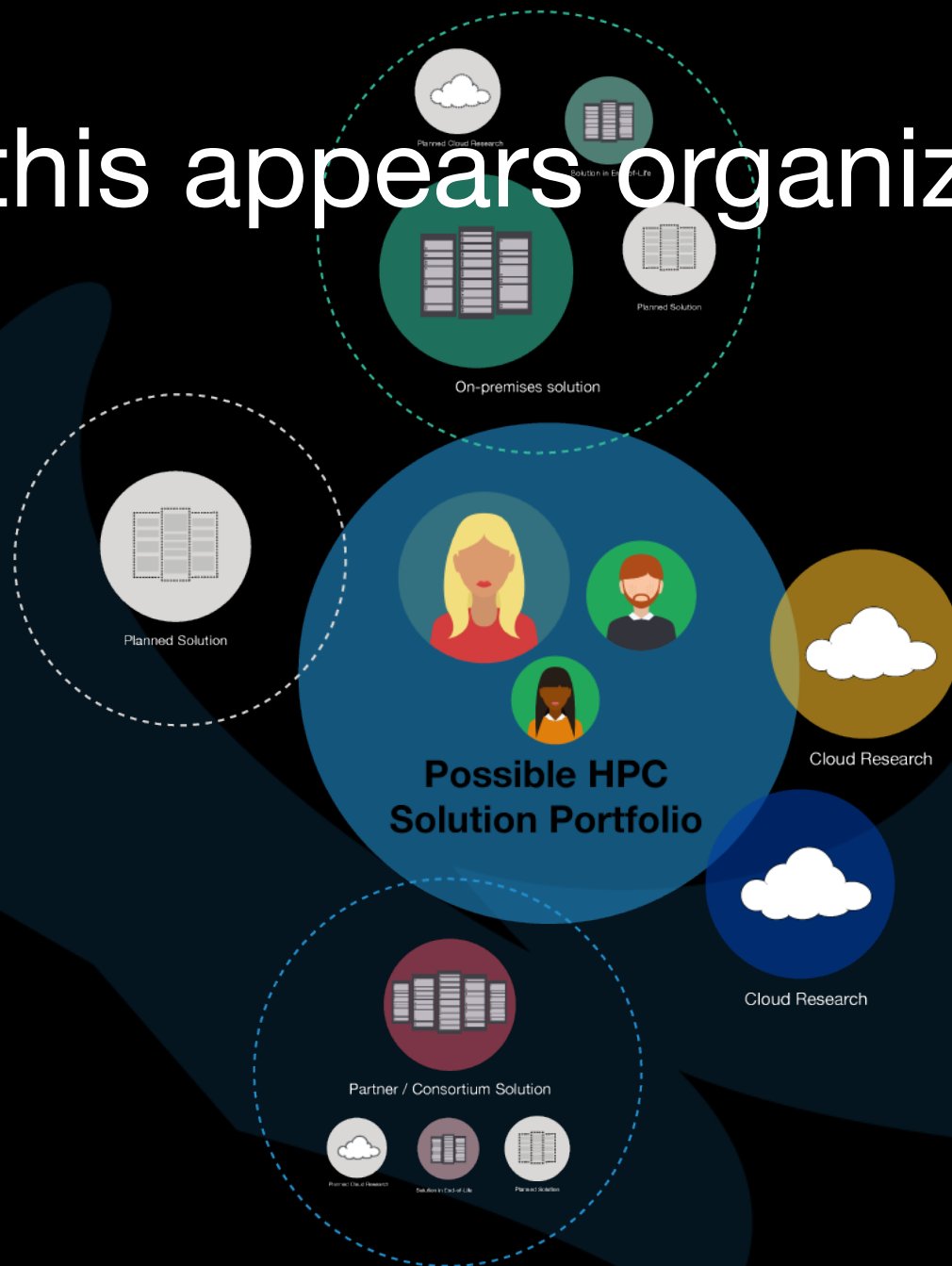
# It used to be...



... but then...



# And while this appears organized...





Planned Solution



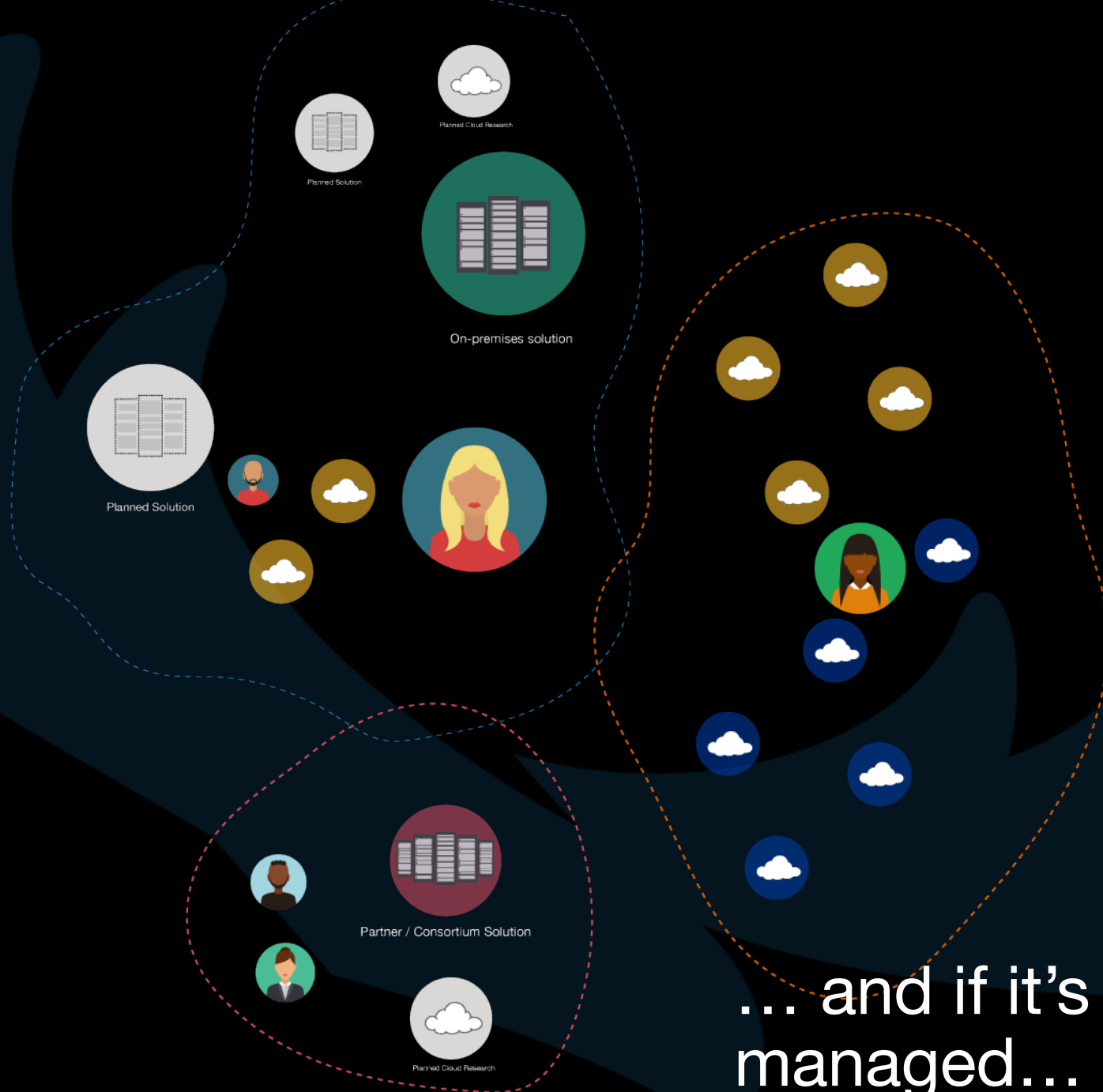
On-premises solution



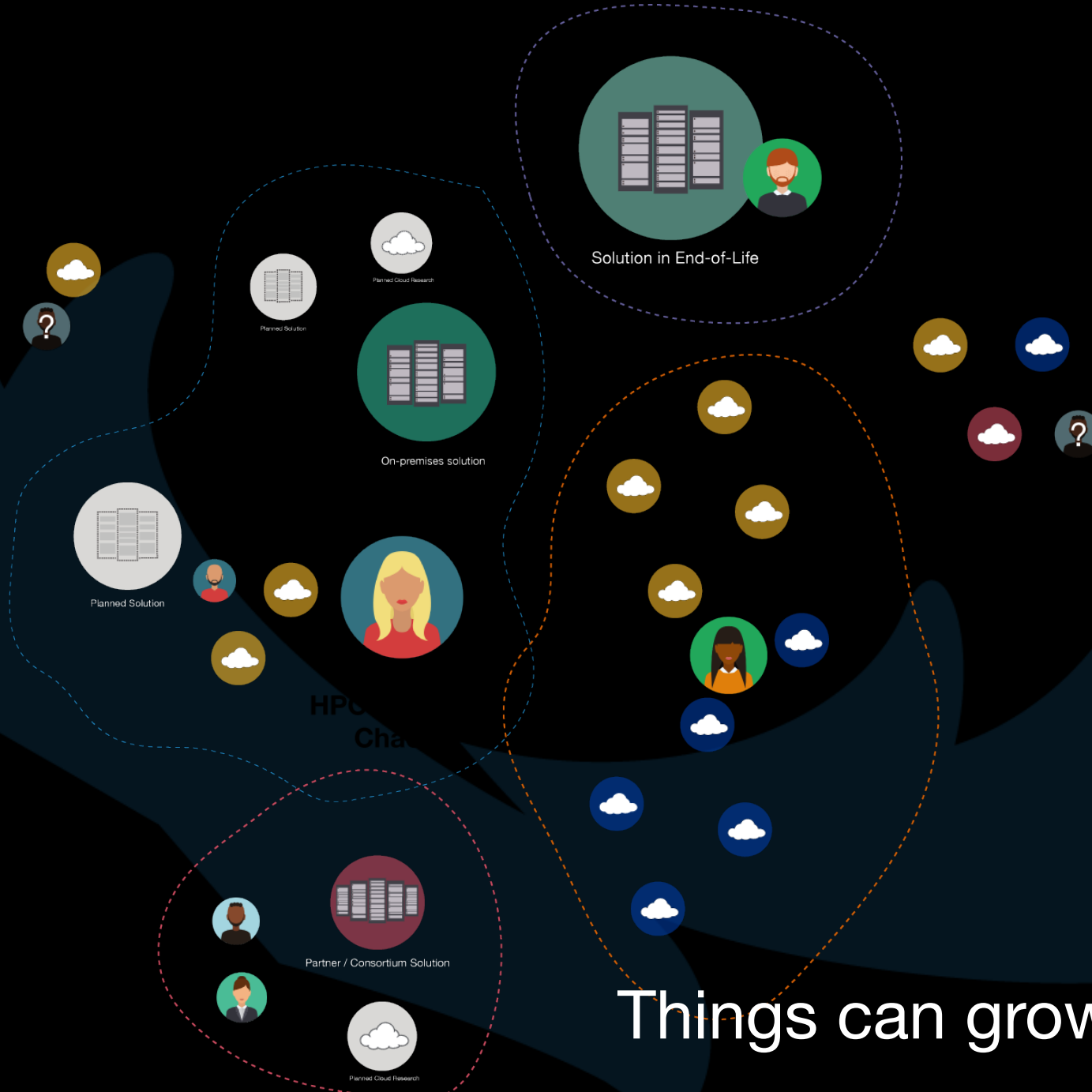
Partner / Consortium Solution



Chances are... this is the reality.



... and if it's not properly managed...



Things can grow unwieldy.



How do you avoid creating a vicious cycle of HPC compute?

# TIP #1: Balance your Research & Production

(Feed evolution, not stagnation)

### Unknown Characteristics

Moderate Risk

Users over Admins

Project Focused

Open Source

Platform Agnostic

Time Banded

## Unknown

What's my solution capability?

## Known

What's my solution capacity?

### Known Characteristics

Admin Tailored

Results Focused

Commerical Overlay

Optimised Platform

Defined Lifecycle

Research

Production



New



Run Rate



Live Work



Disaster  
Recovery

# TIP #2: Ask Meaningful Questions

(Motivation and Innovation)

# Questions for Cloudy Projects

*(But also not a bad idea for on-premises!)*

- What is your workload (job)?
- What calls you to cloud? *(ex. Time/Cost Savings, Historical difficulties with current platform(s), New Idea/Untested, Time banded project, Training exercise)*
- What is your (or your teams) current cloud skill level?
- Do you know the resources you are after? *(Compute/Storage)*
- Do you need commercial software/applications?
- How much data will you be dealing with? Is it public?
- What's the security constraint(s)?
- Is there a defined budget for this?

# TIP #3: Track Your Focus

(aka Spend)

# How you spend today might not be how you spend tomorrow.

## Trending towards more flexible spending models

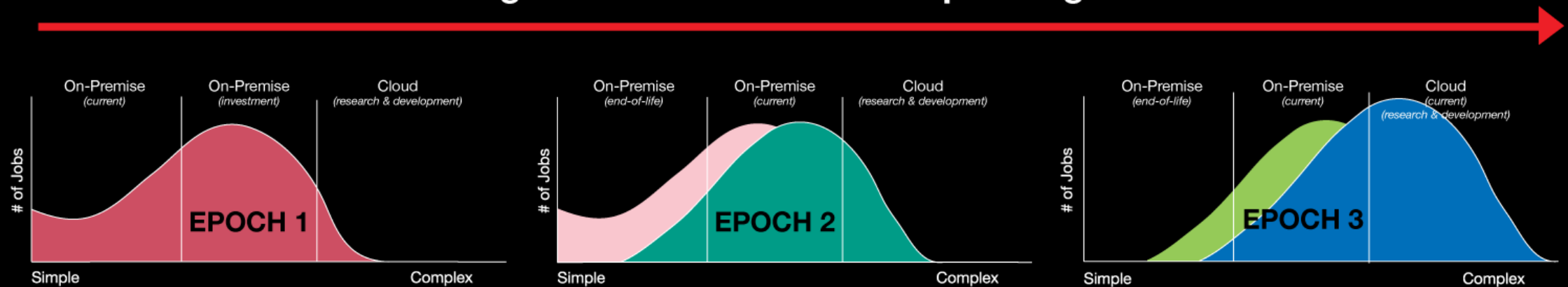


Figure 3: Flexible spending in HPC - engaging in cloud investment for the purpose of expansion yields progressive cascading models. [3]

# How you spend today might not be how you spend tomorrow.

## Trending towards more flexible spending models

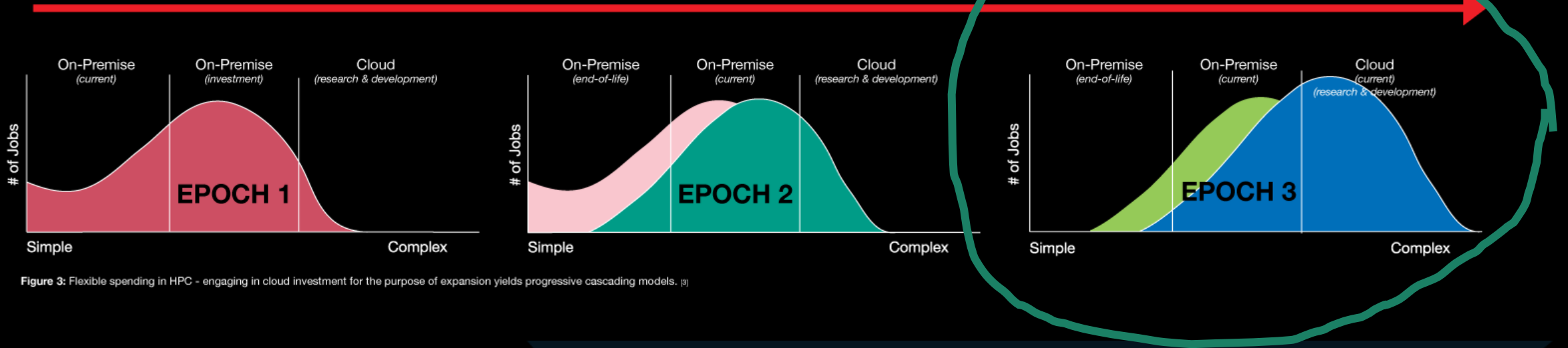


Figure 3: Flexible spending in HPC - engaging in cloud investment for the purpose of expansion yields progressive cascading models. [3]



# How you spend today might not be how you spend tomorrow.

## Trending towards more flexible spending models

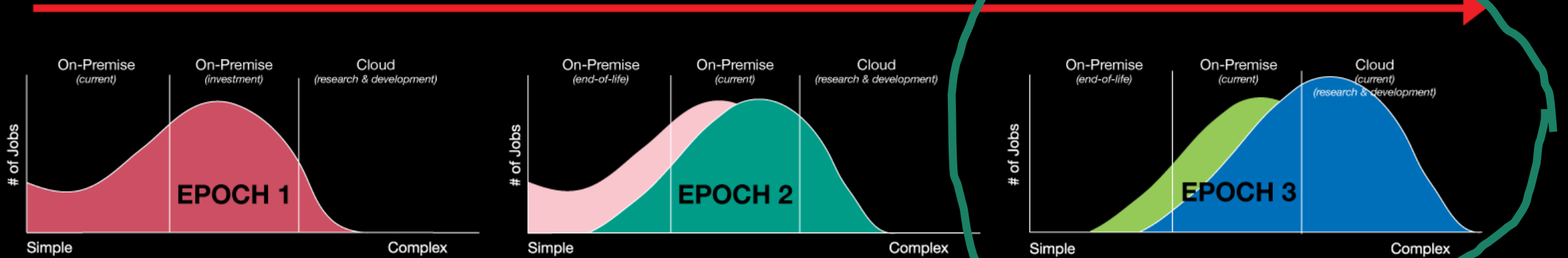
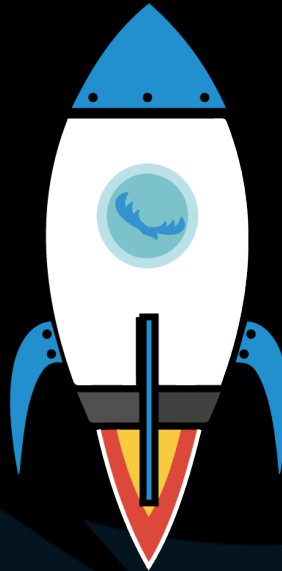


Figure 3: Flexible spending in HPC - engaging in cloud investment for the purpose of expansion yields progressive cascading models. [3]

How we make HPC happen.

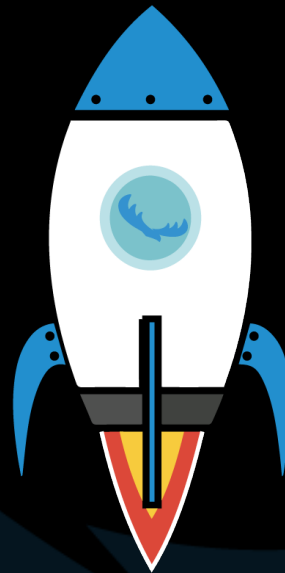
# From Ideas to Production: Platform Agnostic Alces Resources



# From Ideas to Production: Platform Agnostic Alces Resources



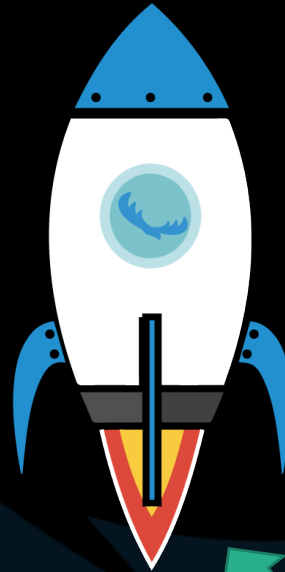
Open Source HPC Stack Creation



# From Ideas to Production: Platform Agnostic Alces Resources



Open Source HPC Stack Creation

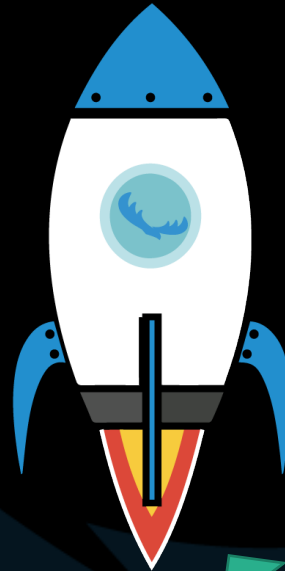


Alces Flight Launch  
*One-click HPC environments*  
(credit grants available)

# From Ideas to Production: Platform Agnostic Alces Resources



Open Source HPC Stack Creation

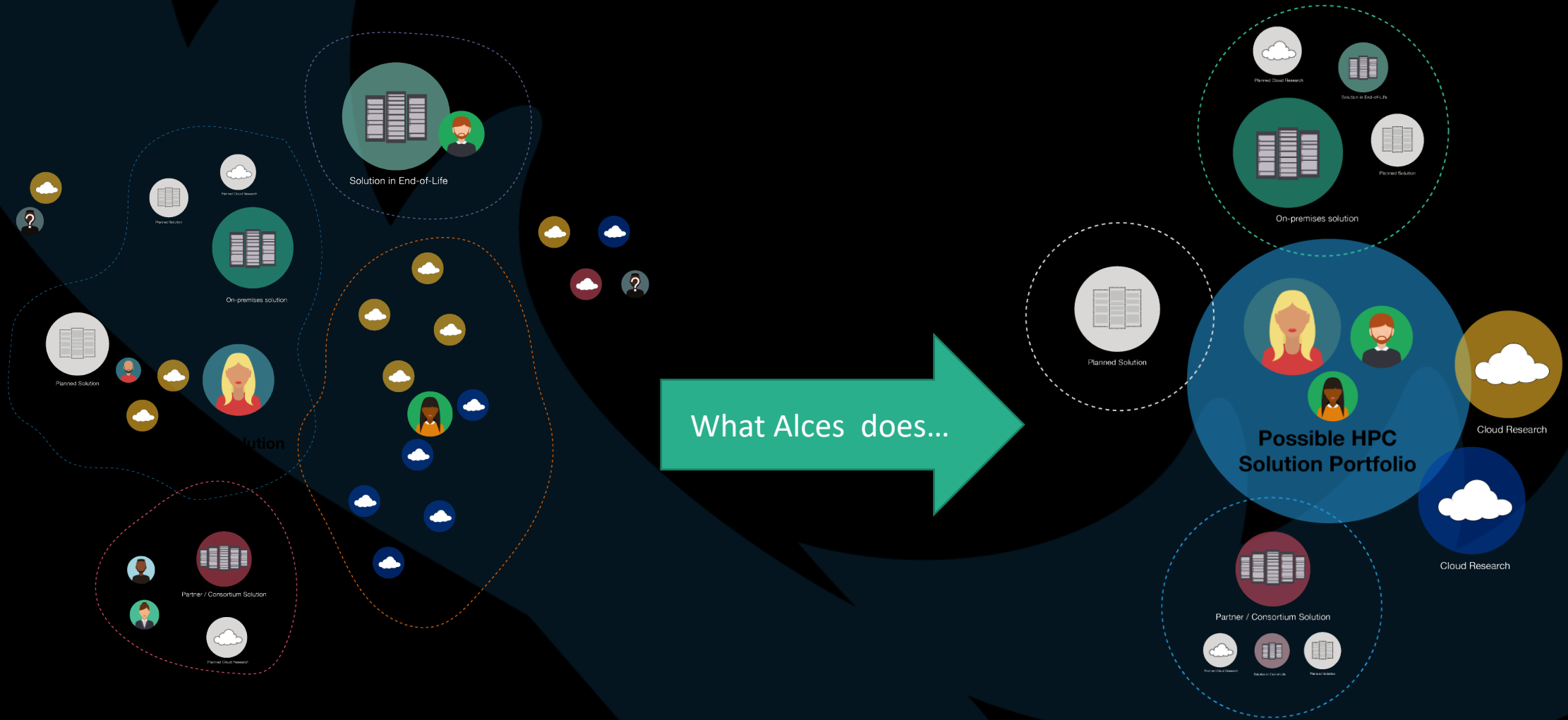


Alces Flight Launch  
*One-click HPC environments*  
(credit grants available)



Fully managed commercial  
systems, standard and  
bespoke solutions.

What Alces does...



# IF YOU ONLY REMEMBER ONE THING:

Give your product and/or service the capability to evolve. Invest in creating a lifecycle for your computing.



# QUESTIONS?

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Flight Launch: <https://launch.alces-flight.com/>