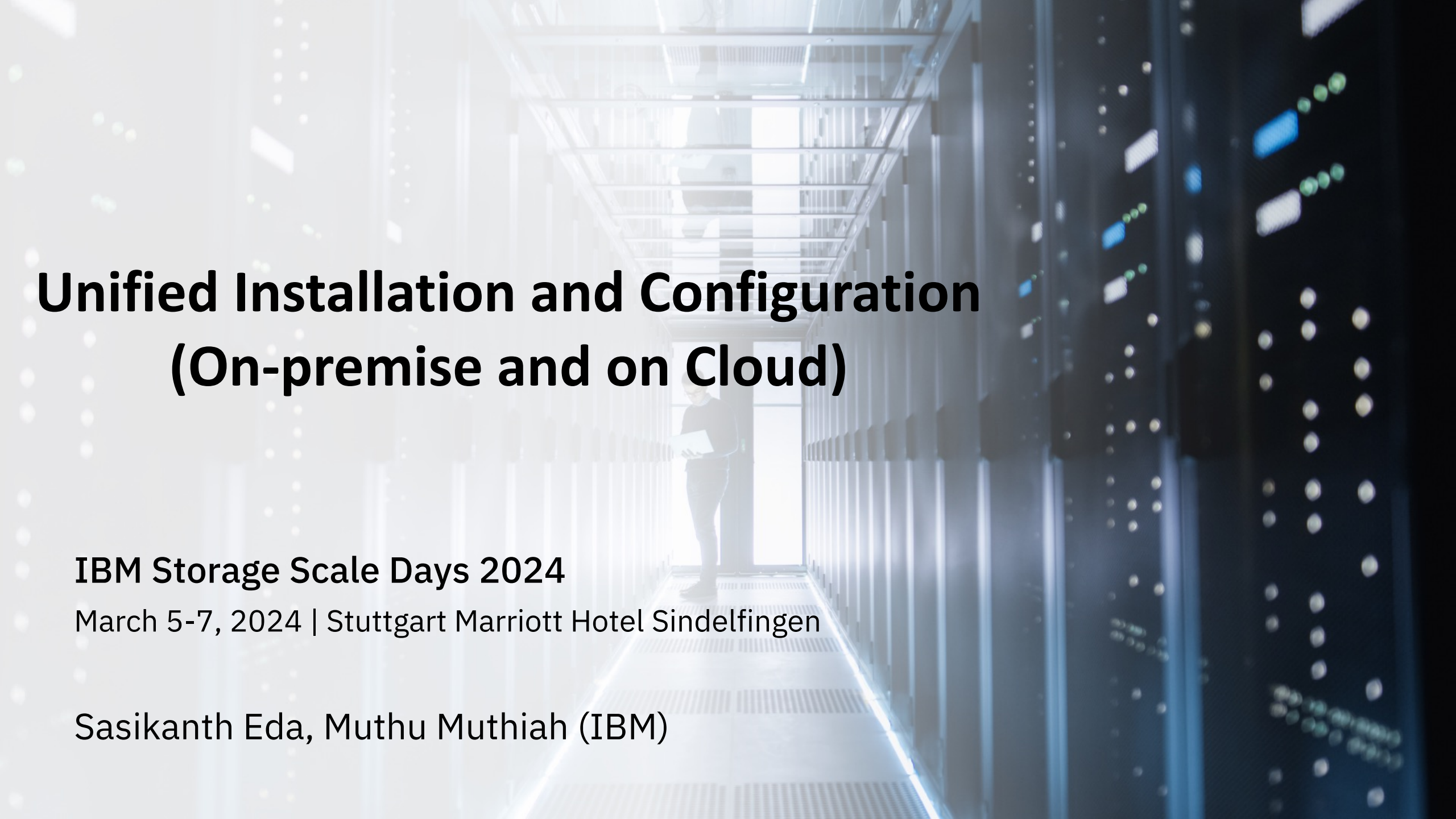


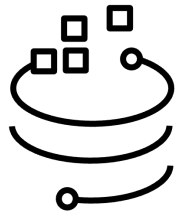
Unified Installation and Configuration (On-premise and on Cloud)

IBM Storage Scale Days 2024

March 5-7, 2024 | Stuttgart Marriott Hotel Sindelfingen

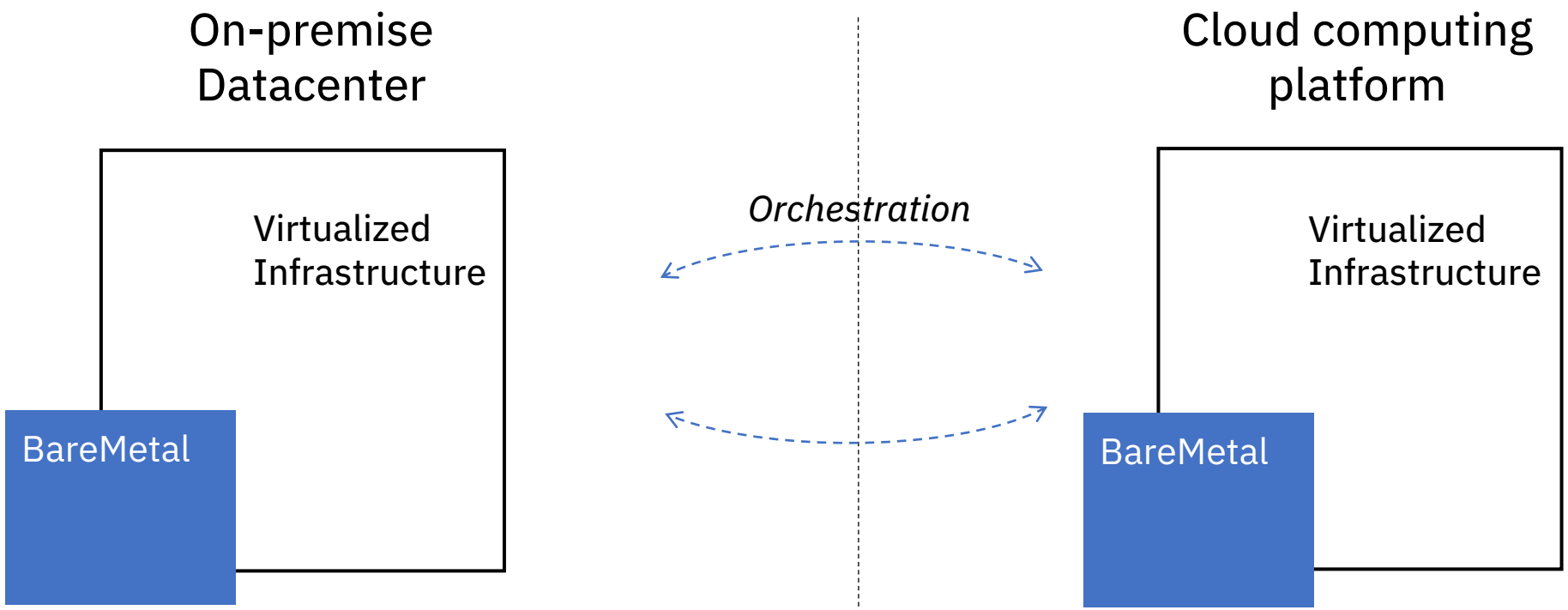
Sasikanth Eda, Muthu Muthiah (IBM)

Disclaimer



- IBM's statements regarding its plans, directions, and intent are subject to change or withdrawal without notice at IBM's sole discretion. Information regarding potential future products is intended to outline our general product direction and it should not be relied on in making a purchasing decision. The information mentioned regarding potential future products is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. The development, release, and timing of any future features or functionality described for our products remains at our sole discretion.
- IBM reserves the right to change product specifications and offerings at any time without notice. This publication could include technical inaccuracies or typographical errors. References herein to IBM products and services do not imply that IBM intends to make them available in all countries.

What is happening today ?



Lot(s) of automation, monitoring has been built around them on-premise

Clouds provides better scalable infrastructure on demand

Managing Modern Infrastructure

01

- Large on-premise footprint
- Looking to expand to cloud, bursting, stateless analytics, backup use-cases for cloud
- Infrastructure management stays on-premise

02

- Cloud First/Born users
- Multi-cloud strategy
- Small/No on-premise footprint
- Infrastructure management stays on cloud

Fit into *existing automation ecosystem*, Make it *easy to install, configure & update* Storage Scale environments, by enabling an “Infrastructure as Code” (IaC) management model.

(Consistent tooling independent of the underlying infrastructure)

Building Blocks

1

Ansible tooling for deploying and configuring IBM Storage Scale

https://github.com/ibm/ibm-spectrum-scale-install-infra (Apache 2.0 license)

Fine-grained feature selection (Modular roles)

Scope:

- Initial deployment and best practices initial configuration
- Lifecycle management
  - Add/Remove nodes
  - Add/Remove disks
  - Upgrade
  - ....

Composable deployment architecture enabling incremental addition of Scale feature(s).

Building Blocks

2

Terraform tooling to provision resources for IBM Storage Scale on cloud(s)

https://github.com/ibm/ibm-spectrum-scale-cloud-install (Apache 2.0 license)

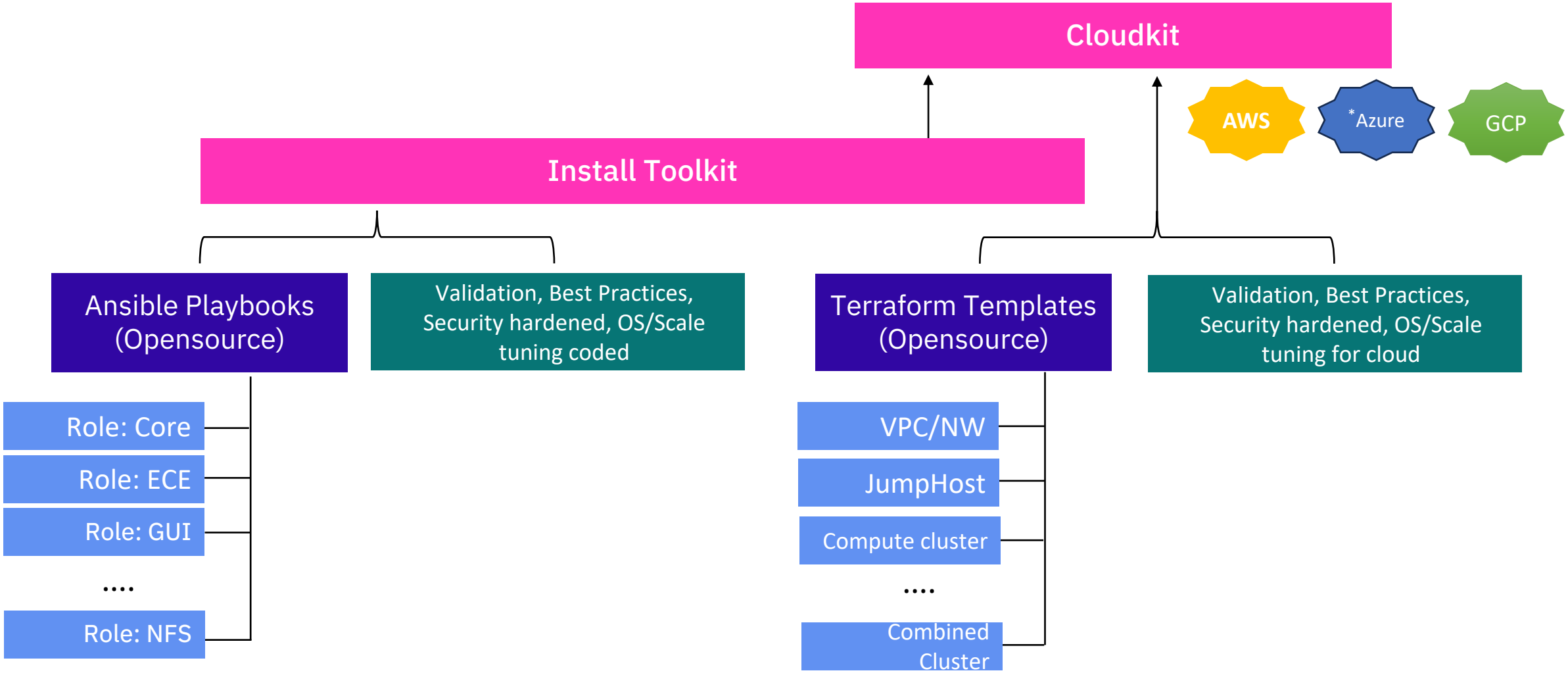
Cloud-agnostic: AWS, GCP, Azure, IBM Cloud

Scope:

- Deployment patterns:
    - Single / Multiple availability zones
    - Single / Multiple clusters
    - Re-use existing VPC/network

Composable deployment architecture to provision infrastructure resources.

Composable Deployment Architecture



*Azure: In tech-preview for 5.2.0

Consistent Tooling *(wherever your infrastructure is – covered)*

Scenario	Toolkit	Cloudkit
Admin driven management for scale install and configuration On-premise and cloud	✓	
Manually provisioned scale cluster for further administration & upgrade	✓	
Admin driven management for resource provisioning on cloud *(along with scale install and configuration)*	✓	✓
Management of lifecycle operations[1] In-conjunction with provisioned resources		✓

[1] Life cycle operations includes - Expansion, AFM, Protocols etc.

Summary

Every automation use case is different.

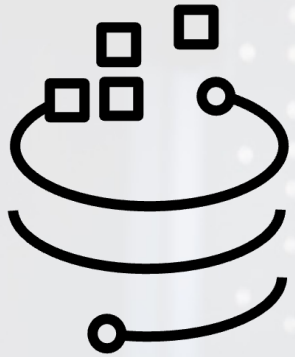
- Make it easy to deploy IBM Storage Scale
  - Fit into existing automation ecosystem
  - Composable architecture
  - Open source, community-driven initiative
  - On-prem, public, hybrid – without vendor lock-in

- Learn more about Cloudkit & Ansible Toolkit:
  - Discuss various architectural options available in cloud
  - Use cases of with Cloudkit (& Storage Scale)
  - Getting started with Ansible Toolkit (& Storage Scale)

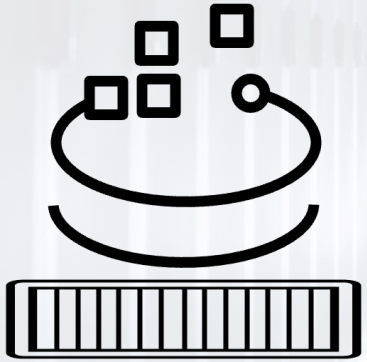
→ *Cloudkit and Ansible Toolkit Deep Dive*

Thu, 7th March 11:00 – 11:55 AM

Thank you for using



Storage Scale



Storage Scale System