

16 APRILE 2021



VIRTUAL EVENT

**AZURE ARC ENABLED
KUBERNETES, HYBRID
CLOUD TO THE MAX**



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managed/designs

il partner tecnologico per chi ha idee ambiziose. Innovazione pratica da 15 anni.



empower every person and every organization on the planet to achieve more.

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Swag and more

- Claim your attendee Learner Badge here:
- 30 Days to learn it: aka.ms/global-azure/30D2L
- Virtual background and ANOTHER Badge: blog.globalazure.net/Swag



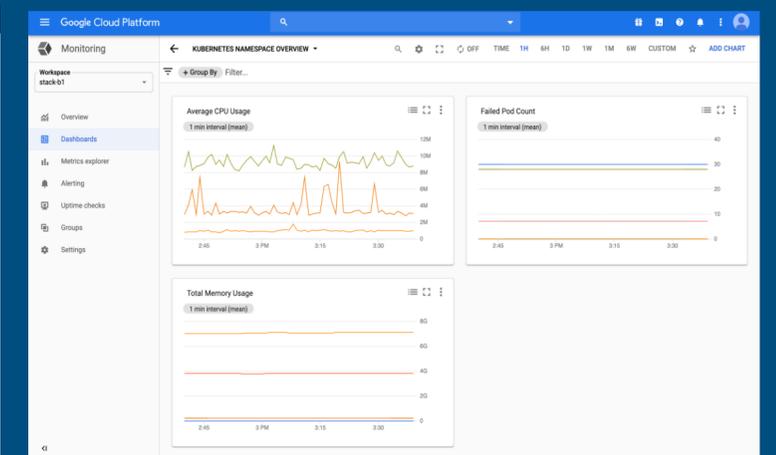
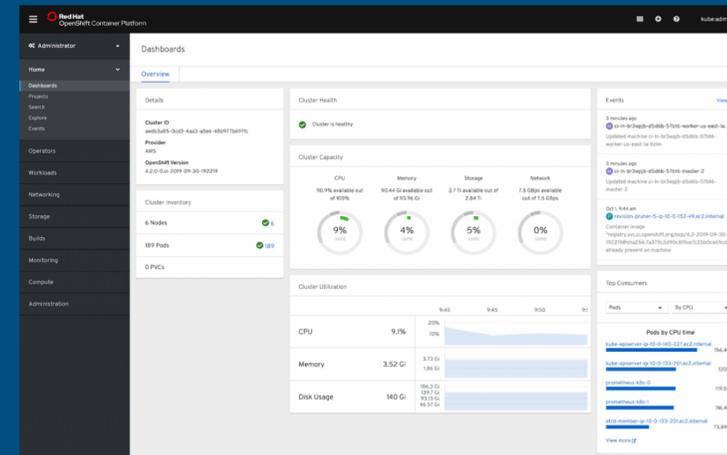
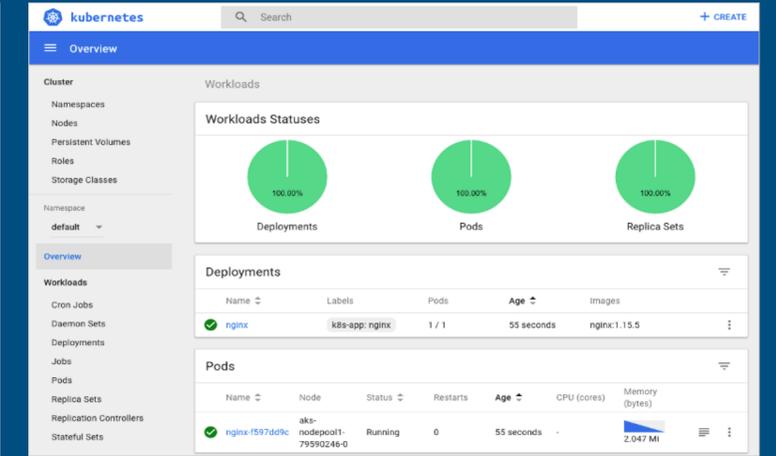
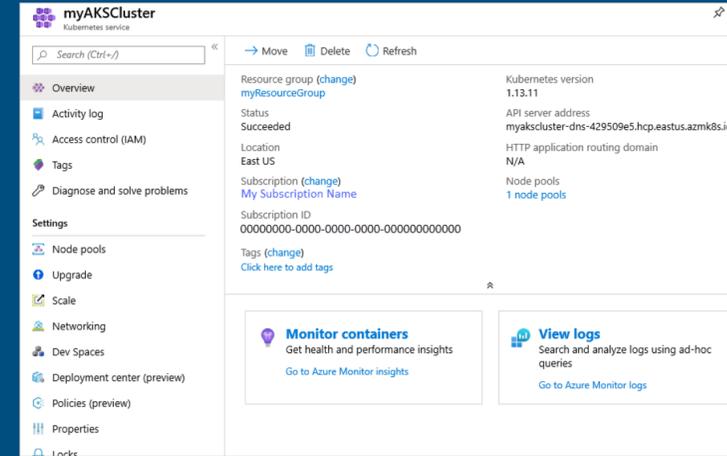
MULTI/HIBRYD CLOUD

KUBERNETES EVERYWHERE



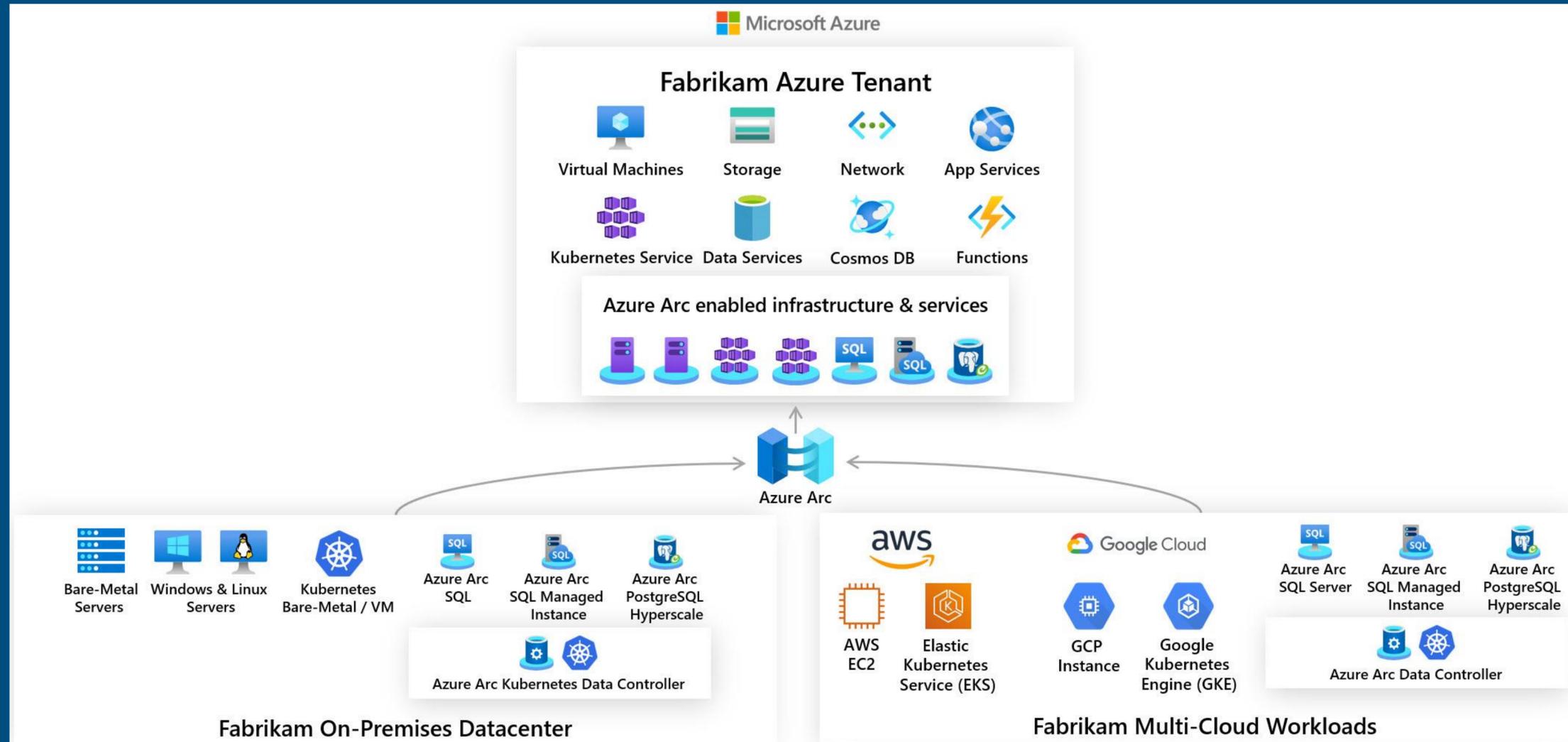
Managing multiple cluster environments can quickly become a mess:

- Inventory
- Monitoring (dashboard)
- Security
- Configuration



AZURE ARC

PROJECT RESOURCES INTO AZURE



ARC ENABLED KUBERNETES

FEATURES

- Out-of-the-box support for most CNCF–certified Kubernetes
- Placed in an Azure subscription and resource group
- Appear in the Azure portal with an Azure Resource Manager ID and a managed identity
- Consistent security configuration at scale
- Consistent cluster extensions for Monitor, Policy, Security, and other agents
- Tags



ARC ENABLED KUBERNETES

AGENTS

- Run in the azure-arc Kubernetes namespace as standard Kubernetes deployments
- Handle connectivity to Azure
- Collect Azure Arc logs and metrics
- Watch for configuration requests
- SSL to secure data in transit
- Data stored encrypted at rest in an Azure Cosmos DB database



CLUSTER ONBOARDING



```
az connectedk8s connect -name <AZURE_RESOURCE_NAME> -resource-group <AZURE_RESOURCE_GROUP>
```

Requirements

```
Azure CLI      # >= 2.16.0
```

```
Helm           # v3
```

```
Kubectl
```

```
az extension add --name connectedk8s
```

```
az extension add --name k8s-configuration
```

```
az provider register -namespace Microsoft.Kubernetes
```

```
az provider register -namespace Microsoft.KubernetesConfiguration
```

```
az provider register -namespace Microsoft.ExtendedLocation
```

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DEMO
Cluster Onboarding

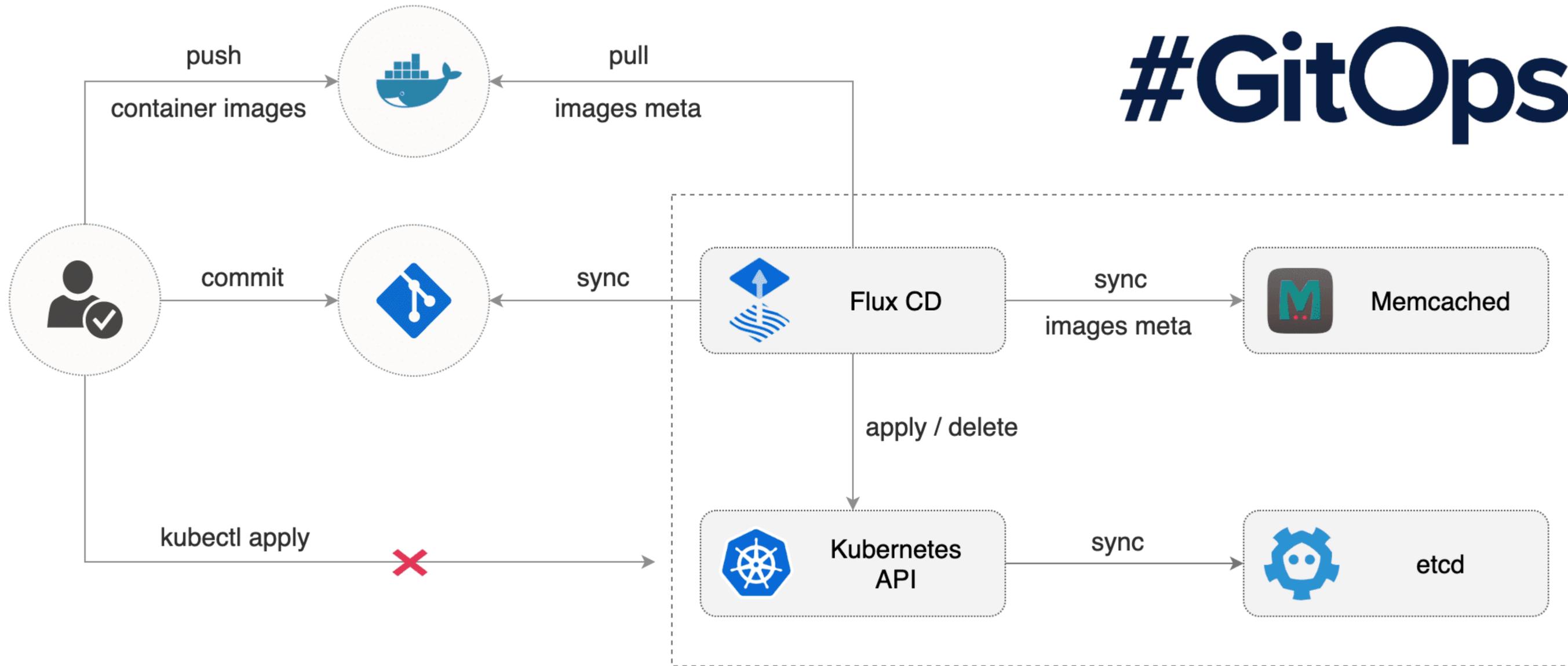
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GITOPS?

FLUX



#GitOps



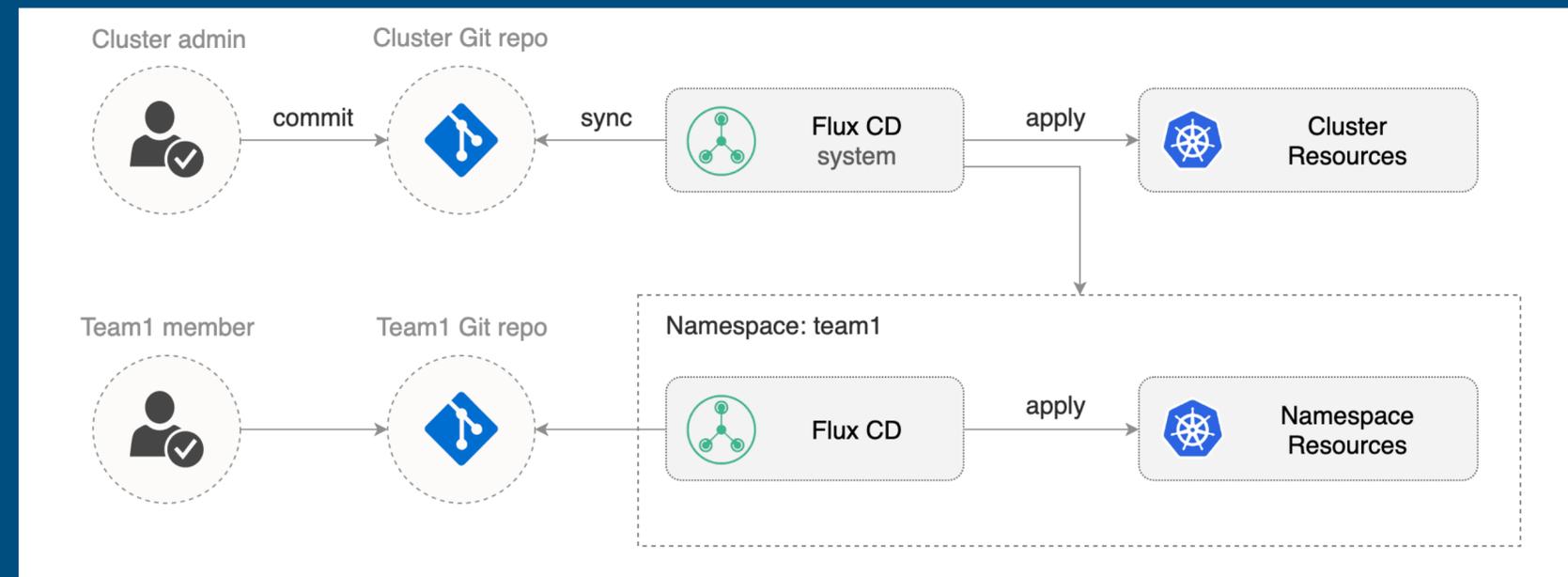
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FLUX

CONFIGURATIONS



- Supports both the cluster and namespace scopes
- An operator deployed with namespace scope can only deploy Kubernetes objects within that specific namespace



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DEMO

GitOps

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MONITORING

PREVIEW



Integration with:

- Azure Insight for Containers
- Azure Logs
- Azure Workbook



For both cluster and workloads metrics and logs

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DEMO
Monitoring

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PRICING

REGION: WEST EUROPE



Azure Arc Resource	
Azure control plane functionality	Free
GitOps Configuration	First 6 vCPU are free, then € 1,6866/vCPU/mont

Other management services such as Azure Policy for Kubernetes, Azure Monitor for Containers and Azure Defender are in preview so there is no cost to use the service at this time. However, for Azure Policy for Kubernetes and Azure Monitor for Containers, any data retained by those services may incur charges as per the pricing for that service.

❖ Source: <https://azure.microsoft.com/en-us/pricing/details/azure-arc/>

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THANK YOU!



Questions?

See you on UGIdotNET Discord
Global Azure 2021 # Track2 Channel
<https://discord.gg/9EduVp2U>

get in touch

<https://twitter.com/enosrecanati>



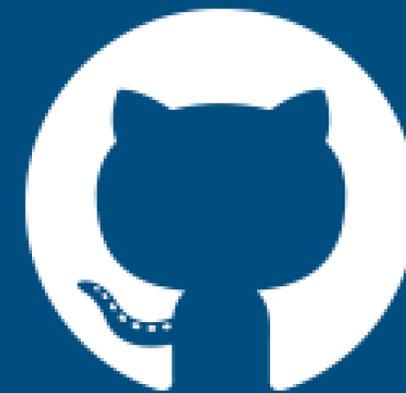
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