Kubernetes & KAS versioning
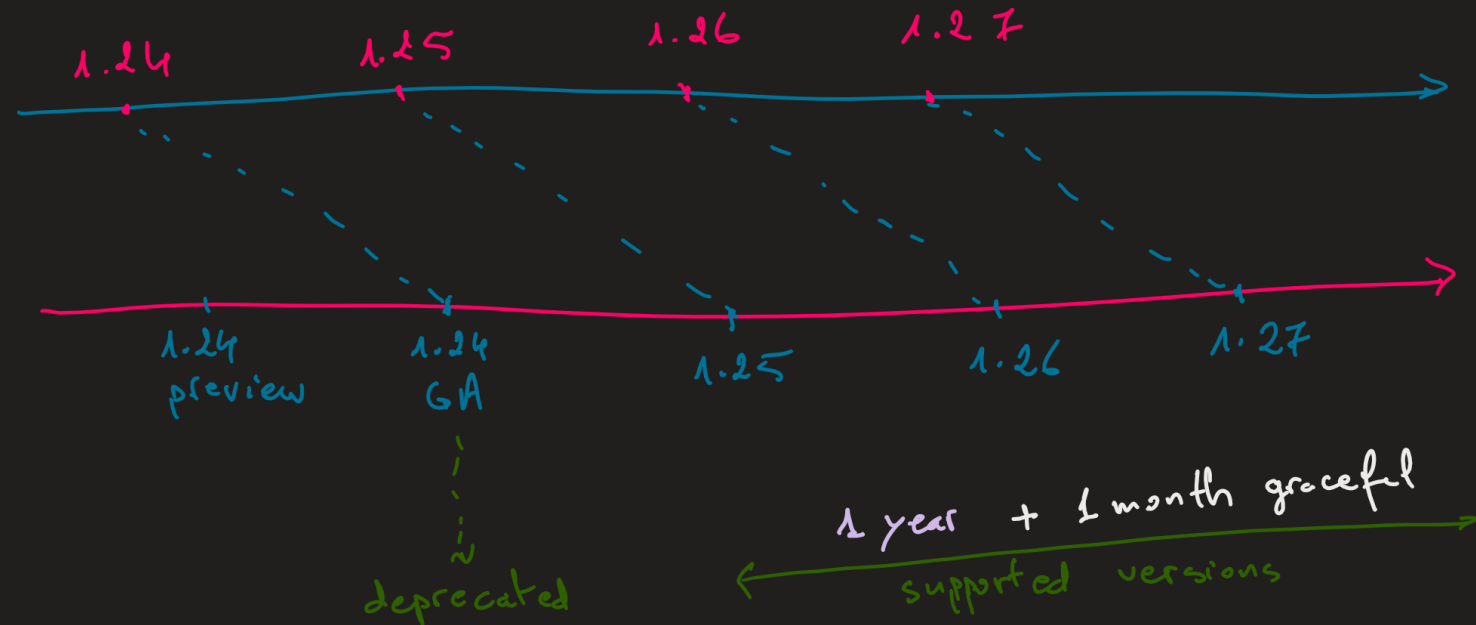

kubernetes

1.24   1.25   1.26   1.27

AKS

1.24 preview   1.24 GA   1.25   1.26   1.27

deprecated

1 year + 1 month graceful
supported versions

Support: n-2

LTS version :   1.27 , 2 years support (paid)

Upgrade cluster :   1.20   skip versions   1.25   ⟶   1.26   ⟶   1.27

⤷ No downgrade

AKS release calendar

K8s version	Upstream release	AKS preview	AKS GA	End of life
1.24	Apr-22-22	May 2022	Jul 2022	Jul 2023
1.25	Aug 2022	Oct 2022	Dec 2022	Dec 2023
1.26	Dec 2022	Feb 2023	Apr 2023	Mar 2024
1.27	Apr 2023	Jun 2023	Jul 2023	Jul 2024

learn.microsoft.com/en-us/azure/aks/supported-kubernetes-versions?tabs=azure-cli#aks-kubernetes-release-calendar

AKS upgrade options

cluster blue/green

Traffic Manager → blue-cluster ↓ 1.26 subnet 1
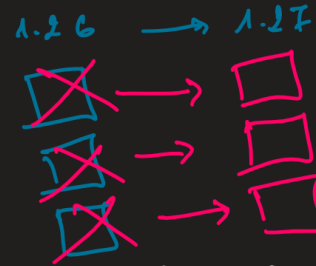
green-cluster ↓ 1-27 subnet 2
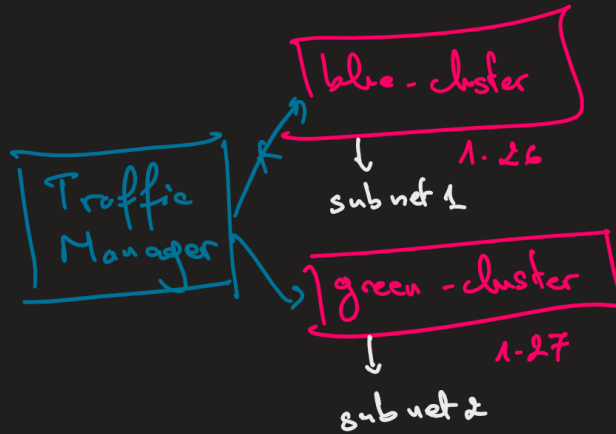
(+) easy rollback
(+) change config
  ↳ CNI overlay, VNET-integ
    subnet, etc...

(-) changes CD pipelines
(-) restore persistent volumes

in-place upgrade

1.26 ⟶ 1.27

1- upgrade ctrl plane
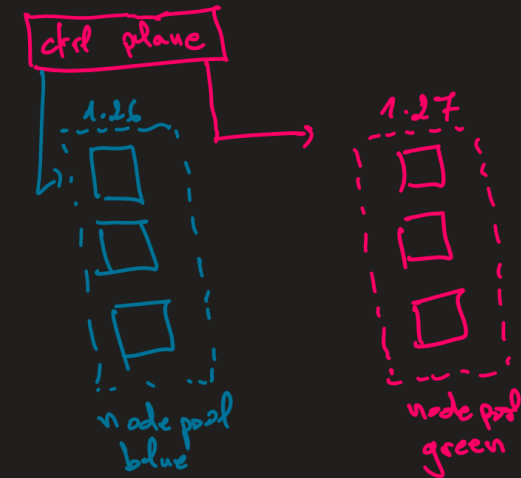2- upgrade node pools

  ↳ system node pool
  ↳ users node pool
    ↳ one by one

(+) easy & fast
(-) difficult rollback
(-) no testing

nodepool blue green

ctrl plane

1.26   1.27

node pool blue   node pool green

1- upgrade ctrl plane
2- create new green node pool
3- redeploy or migrate apps
4- test apps
5- delete old blue nodepool

(+) easy
(+) rollback
(+) testing