

Potential Experiments/areas to tackle

Scenario

- Existing Egeria cohort including metadata repository, UI components
- Kafka already deployed
- I want to add a connector to a new technology
 - build my **integration** connector / metadata access store
 - create my image
 - deploy it in k8s
 - must work as part of existing cohort

Proof points

#	Area	Objective	Current Status	Who	
1	Containers	Build customized containers with only the content required for a particular usage: • Start with integration connector • figure out approach to gathering correct runtime dependencies easily • figure out parameterization needed to make this a useful starting point for orgs • Exclude: Value: Can help in short term with existing model - already see need for this	Already being looked at for IBM/HMS	Nigel	
2a	Application	Create a streamlined application which can startup a single server (and shutdown cleanly - we have concern here with egeria) when application is launched, based off an existing configuration. Should be runnable from the command line, and just launch as a process. It can consume files/environment variables (in k8s these can be mapped from config maps, secrets etc). will not update configuration Figure out how much, if any, of existing platform/admin is needed/can be reused. Specifically needs to be able to run a server hosting an integration connector Value: Could be used even in short-medium term as a convenience to start single platform		Ljupch o ++ David	
3	Operator	Create custom resource definition for a 'server' (just 1 per 'platform' aka java process) & create an operator that can deploy/undeploy a pod containing running this server, as well as a service based on a pre-existing configuration: • probably Java (rather than go) - general team skills? • use autostart as an initial 'hack' Value: Allows for active management in k8s environment	see egeria-kubernetes-operator for a) platform operator in go b) initial port of above to java	Nigel	
4	Document	Document our design principles ie only use of ephemeral storage (create another wiki page?) Value: Information sharing, reviews, consensus	Design Principles for Cloud native Egeria	all	
5	Configuration /storage	Determine how egeria server has no dependency on persistent storage – ie which connectors/mechanisms are needed for storage ie potentially including • Configuration • Cohort registry • audit log • (metadata repositories) Consider use of existing kubernetes resources - directly or via mapping - config maps, secrets, custom resources Look at read/write, concurrent access from multiple servers or replicas (for example we know config documents get written to during startup) All must be accessible from a k8s operator in addition to other ways Develop appropriate connectors and/or techniques to support Excluded: security connector Value: Simplification and ultimately critically important in k8s environment	Existing operator uses configmaps	nigel taylan	

[illegible]