# Istio RFC: Supporting Cluster-Local Services

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| **Owner**: nathanmittler@<br>**Working Group:** Networking | **Status**: **WIP** \| In Review \| Approved \| Obsolete<br>**Created**: 2020-01-24<br>**Approvers**: costinm [], nrjpodder [], ... |

## Objective

Make it configurable whether services are mesh-wide or cluster-local.

## Background

As systems migrate from single cluster to multicluster, it may be desirable to allow mesh operators to selectively incorporate individual services into the multi-cluster mesh.

In addition, there are some services that are inherently cluster-local and should not be accessed from other clusters. This is true for everything in the **kube-system** namespace, for example. There is an outstanding bug (#14692) in which requests to the Kube API Server will round-robin across the various clusters.

## Requirements

- Configure mesh-wide/cluster-local setting on a per-service basis.
- Configure default mesh-wide/cluster-local setting on a per-namespace basis
- Allow mesh-wide services to be accessed via a mesh domain (e.g. name.namespace.svc.mesh.local)
- Use sensible defaults so that the **kube-system** namespace (and possibly **default**) are cluster-local.