

Smart Cities R6 API Document

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The purpose of this Document is to enumerate the APIs which are exposed by Akraino Blue print project to the external projects Akraino/Non Akraino for interaction/integration.

This document should be used in conjunction with the architecture document to understand APIs at modular level and their interactions.

This document should function as a glossary of APIs with its functionality, interfaces, inputs and expected outcomes as the following example:

API1 < var 1, var 2, var 2>

(

functional description

) ret 1, ret 2

API 1: Parsec API

Smart Cities deploys Parsec, it's official documentation in <https://parallaxsecond.github.io/parsec-book/>.

Parsec client invoke API over the IPC transport between Parsec Service. In order to make an API call, the client must use the [wire protocol specification](#) to form a valid request to the service.

Parsec Operations Coverage can be found in https://parallaxsecond.github.io/parsec-book/parsec_client/operations/service_api_coverage.html.

Parsec Client Libraries are available in the following languages:

- [Rust](#)
- [C](#)
- [Go](#)

API 2: K3s API

Smart Cities deploys K3s, it's official documentation in <https://rancher.com/docs/k3s/latest/en/>.

K3s is a fully compliant Kubernetes distribution, use the same command line tool (kubectl) as k8s to control the cluster.

The usage of kubectl refer to <https://kubernetes.io/docs/reference/kubectl/>.

API 3: Triton API

Smart Cities deploys Triton, it's official site in <https://github.com/triton-inference-server>.

Triton Client use HTTP/REST or GRPC requests to Triton Server, usage refer to <https://github.com/triton-inference-server/client/>.

API 4: EdgeFaaS API

Smart Cities deploys EdgeFaaS, it's official site in <https://gitlab.com/arm-research/smarter/edgefaas/edgefaas>.

Usage refer to <https://gitlab.com/arm-research/smarter/edgefaas/edgefaas/-/blob/master/README.md>.