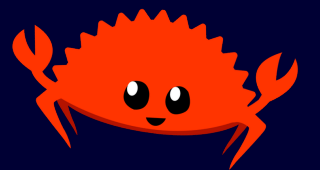
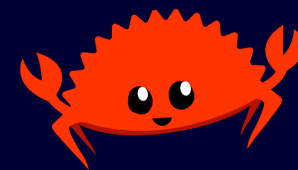


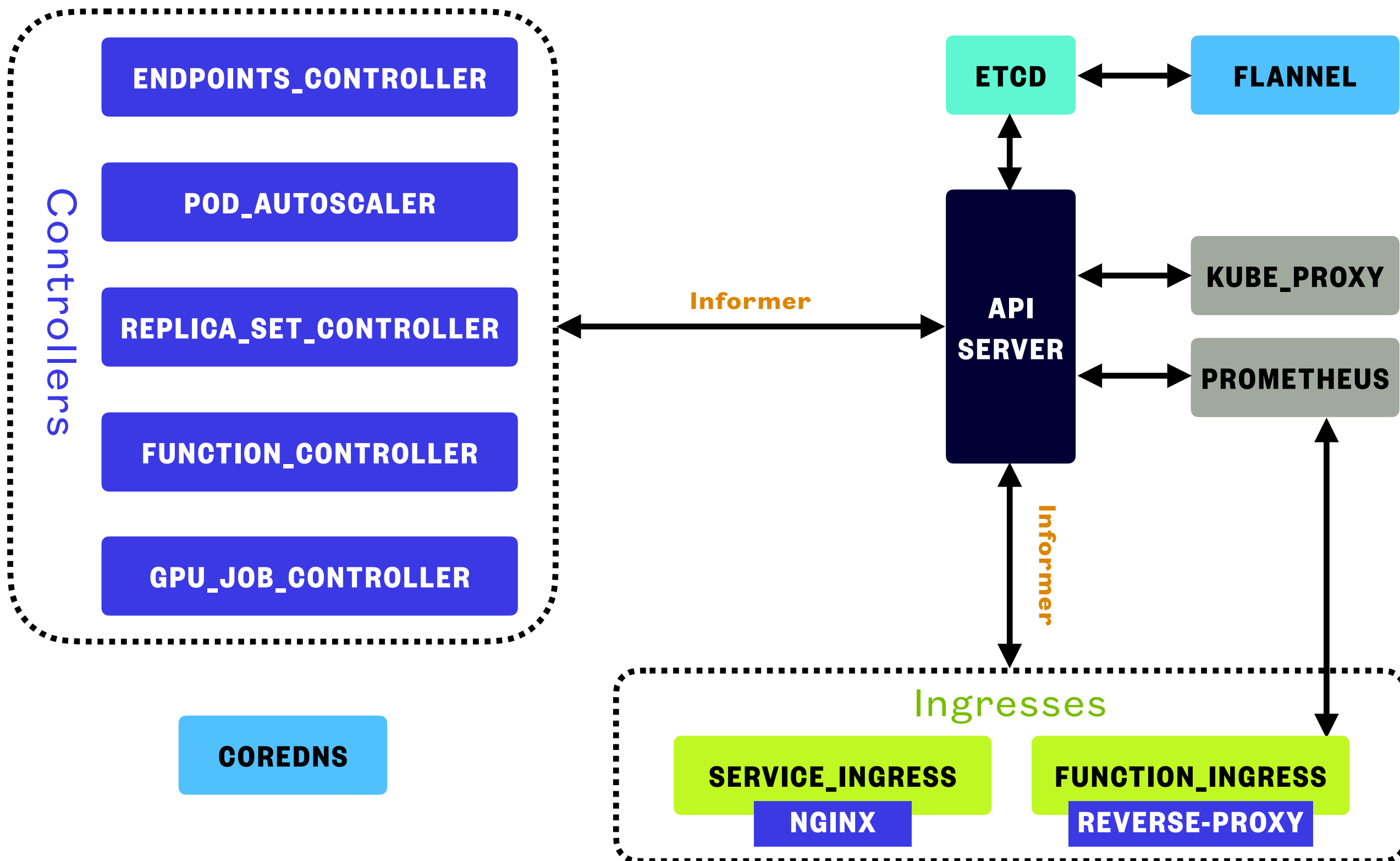
Group 1

MiniK8s, but Rust



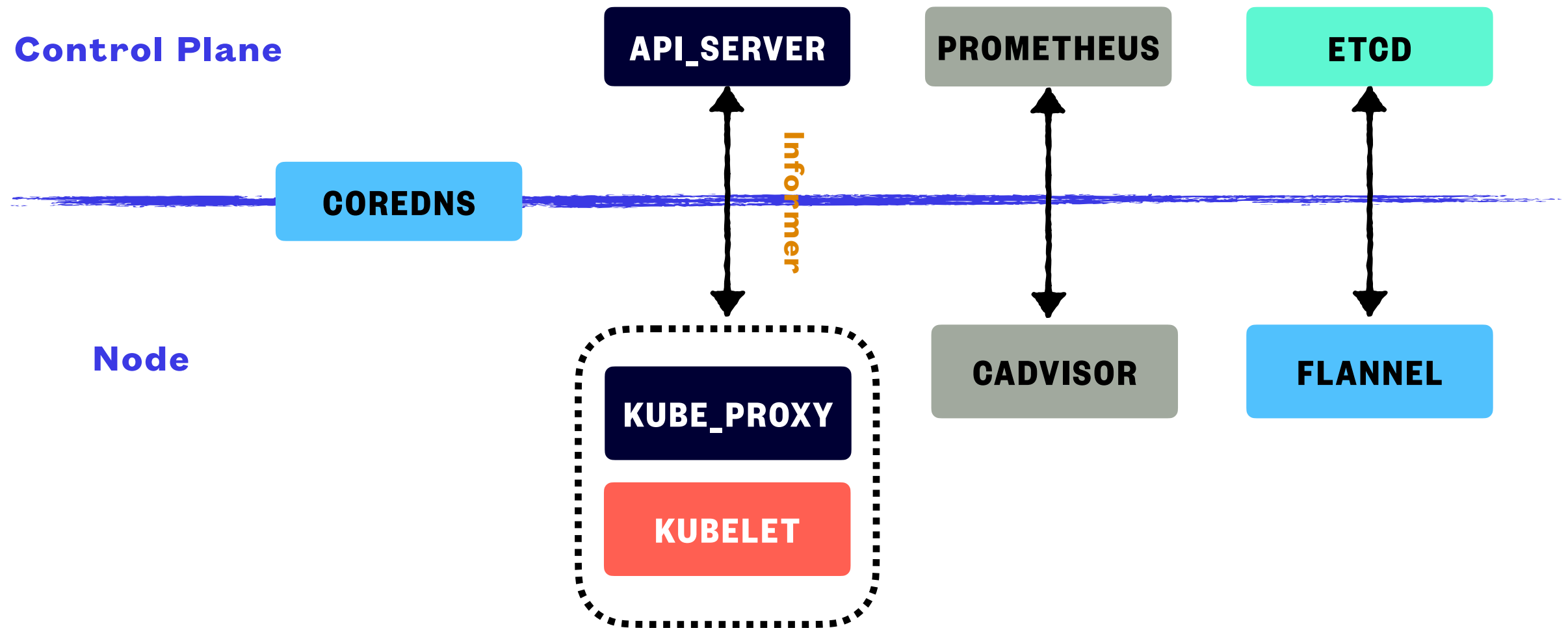


Control Plane





Worker



Others

Dependencies

```
1 anyhow = {version = "1.0.56", features = ["backtrace"]}
2 async-trait = "0.1.53"
3 axum = {version = "0.5.1", features = ["ws", "multipart"]}
4 axum-macros = "0.2.0"
5 bollard = "0.12.0"
6 chrono = "0.4.19"
7 chrono-humanize = "0.2.1"
8 clap = {version = "3.1.8", features = ["derive"]}
9 config = {version = "0.13.1", features = ["yaml"]}
10 dashmap = "5.3.3"
11 deadpool = {version = "0.9.3", features = ["rt_tokio_1"]}
12 dotenv = "0.15.0"
13 enum_dispatch = "0.3.8"
14 etcd-client = "0.9.0"
15 futures = "0.3.21"
16 futures-delay-queue = "0.5.2"
17 futures-intrusive = "0.4"
18 futures-util = "0.3.21"
19 iptables = "0.5.0"
20 lazy_static = "1.4.0"
21 nginx-config = "0.13.2"
22 parking_lot = "0.12.0"
23 prometheus-http-api = "0.2.0"
24 rand = "0.8.5"
25 request = {version = "0.11", features = ["blocking", "json"]}
26 serde = {version = "1.0.136", features = ["derive"]}
27 serde_json = "1.0.79"
28 serde_yaml = "0.8.23"
29 strum = {version = "0.24", features = ["derive"]}
30 tokio = {version = "1.17.0", features = ["full"]}
31 tokio-tungstenite = "0.17.1"
32 tokio-util = "0.7.2"
33 tower-http = {version = "0.3.3", features = ["fs"]}
34 tracing = "0.1.32"
35 tracing-subscriber = "0.3.10"
36 uuid = {version = "0.8", features = ["serde", "v4"]}
```

工程细节

- 全程使用Jetbrains Space作为开发平台
- Code Review ✕ 31

Merged	36	Release 0.1.0	main	←	develop	rminiks	2 Jun 14:21		
Merged	35	feature/rtr-scheduler	develop	←	feature/rtr-scheduler	rminiks	1 Jun 20:27		
Merged	34	feature/get-job-result	develop	←	feature/get-job-result	rminiks	1 Jun 14:30		
Merged	33	feat: update function	develop	←	feature/function-update	rminiks	1 Jun 14:29		
Merged	32	feature/container-exec	develop	←	feature/container-exec	rminiks	1 Jun 11:36		
Merged	31	feature/workflow	develop	←	feature/workflow	rminiks	31 May 19:37		
Merged	30	feature/pod-logs	develop	←	feature/pod-logs	rminiks	31 May 17:46		
Merged	29	feature/metrics-target-api	feature/deploy	←	feature/metrics-target-api	rminiks	30 May 18:06		
Merged	28	feature/describe	develop	←	feature/describe	rminiks	26 May 21:20		
Merged	27	feature/deploy	develop	←	feature/deploy	rminiks	26 May 12:01		
Merged	26	feature/node-status	develop	←	feature/node-status	rminiks	25 May 19:34		
Merged	25	Serverless ingress & activator	develop	←	feature/serverless-function	rminiks	25 May 12:14		
Merged	24	feature/gpu-job-refactor	develop	←	feature/gpu-job-refactor	rminiks	24 May 19:01		
Closed	23	feature/gpu-job-refactor	main	←	feature/gpu-job-refactor	rminiks	24 May 18:57		
Merged	22	refactor/kube-object	develop	←	refactor/kube-object	rminiks	21 May 20:12		
Merged	21	feature/image-pull-policy	develop	←	feature/image-pull-policy	rminiks	20 May 21:30		
Merged	20	feature/add-resync-in-informer	develop	←	feature/add-resync-in-informer	rminiks	20 May 16:36		
Merged	19	Metrics API & Horizontal Pod Autoscaler	develop	←	feature/hpa	rminiks	19 May 16:45		

- CI/CD
 - 使用Jetbrains Space Automation
 - Clippy: Lint for static code analysis, 自动化静态代码分析
 - Cargo test自动测试
 - 自动构建
 - 构建包缓存
 - Docker Image自动构建并发布至minik8s.xyz自建Registry
 - 二进制可执行文件自动上传至FileServer发布

Build docker images ★

#54

develop



Finished successfully

Run tests & Build ☆

#15

develop



Finished successfully

- Rust带来的好处：少Debug，代码质量下限高，并发正确性，后期开发效率高

DEMO
