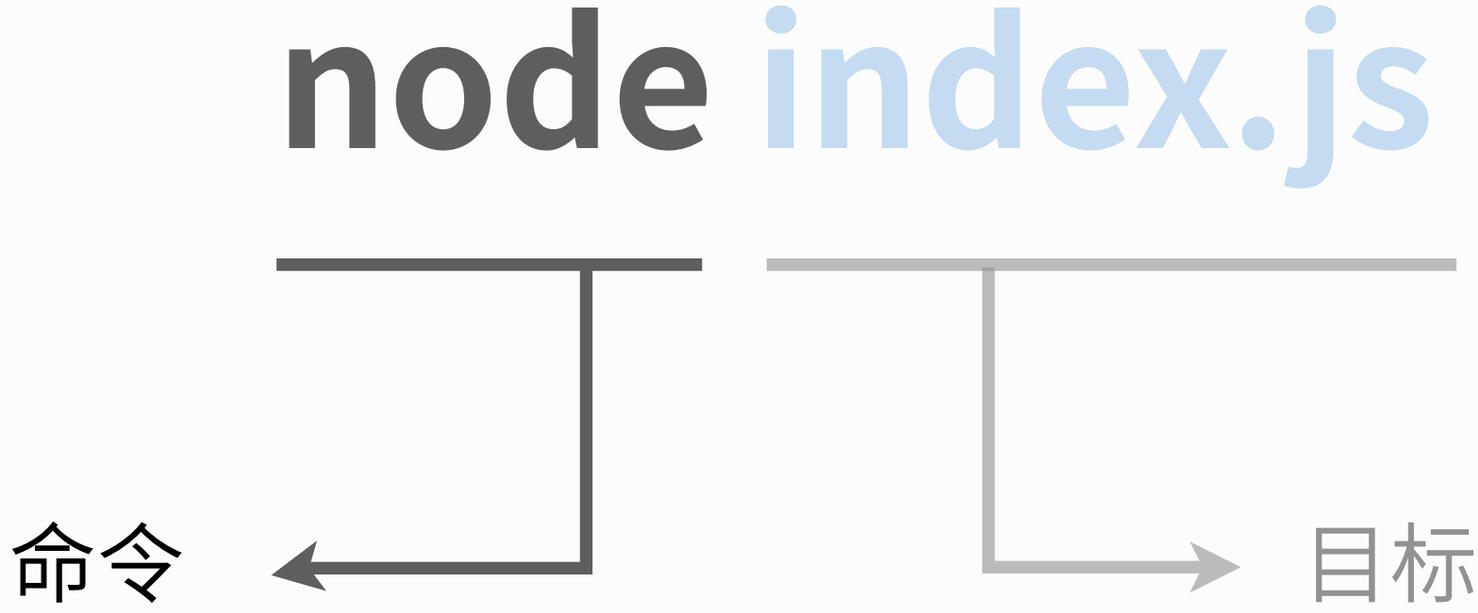
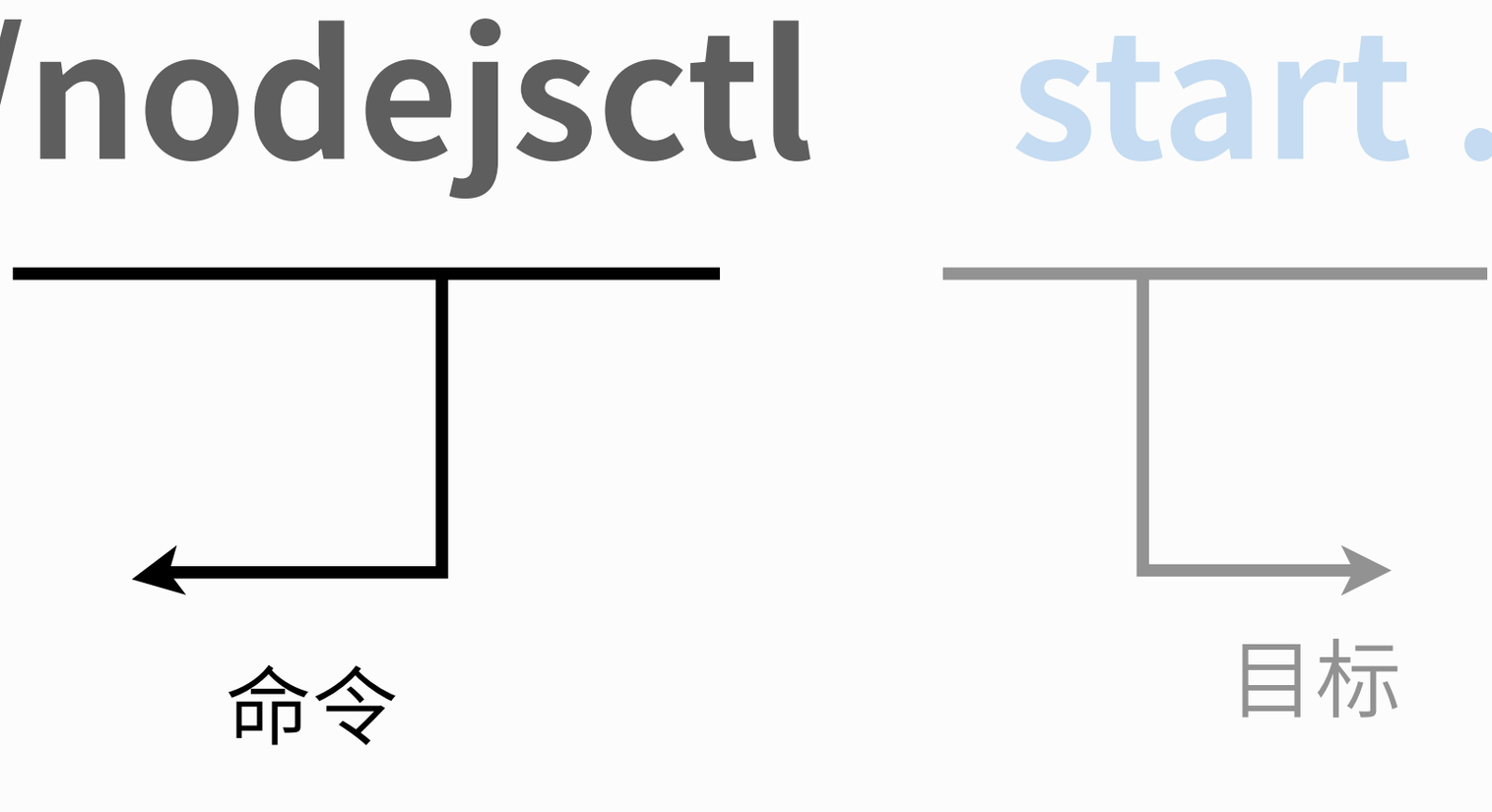
未来从

应用启动开始

2017 Ready To Boot

张挺 @ Taobao


node index.js
命令
目标


./nodejsctl start .
命令
目标

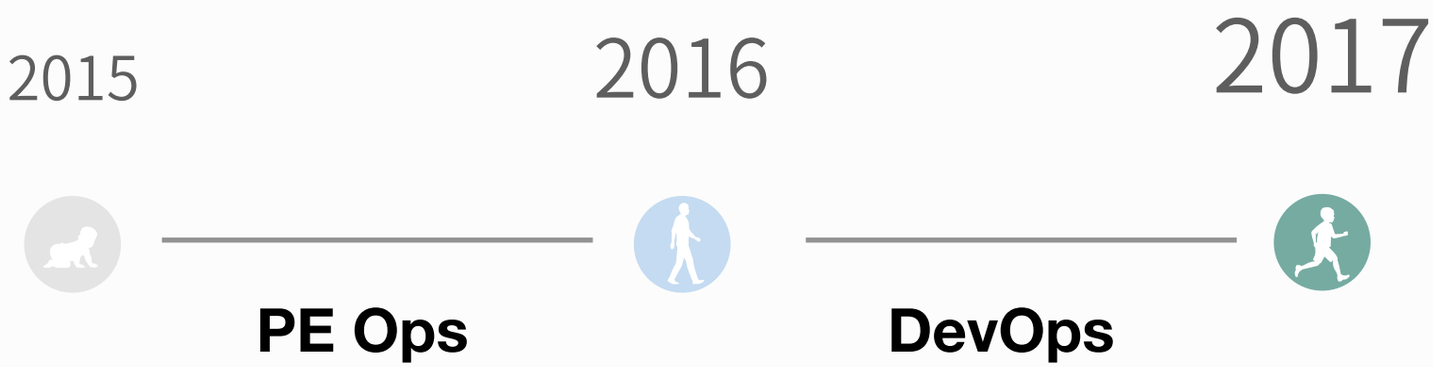
?

start .

命令

目标

契机



- 满足开发需求
- 满足管理需求
- 满足业务需求

设计 Pandora

pandora start .

pandora start

pandora dev

...

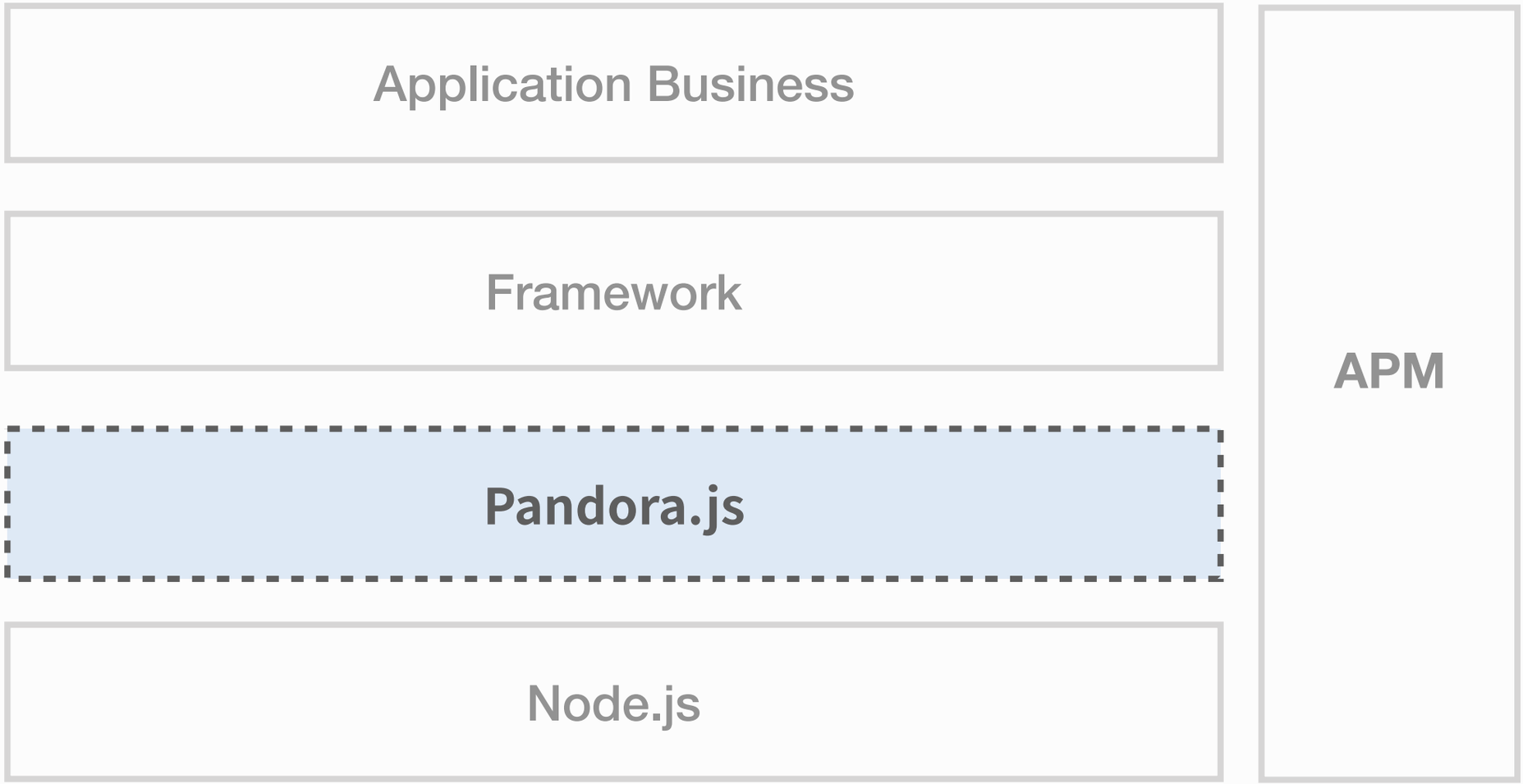
让我们重新介绍 **Pandora.js**

Pandora.js 的一句话

一个为 Node.js 应用而生的 **应用管理器**

An Application Manager Tool For Node.js Application

Pandora.js 位置

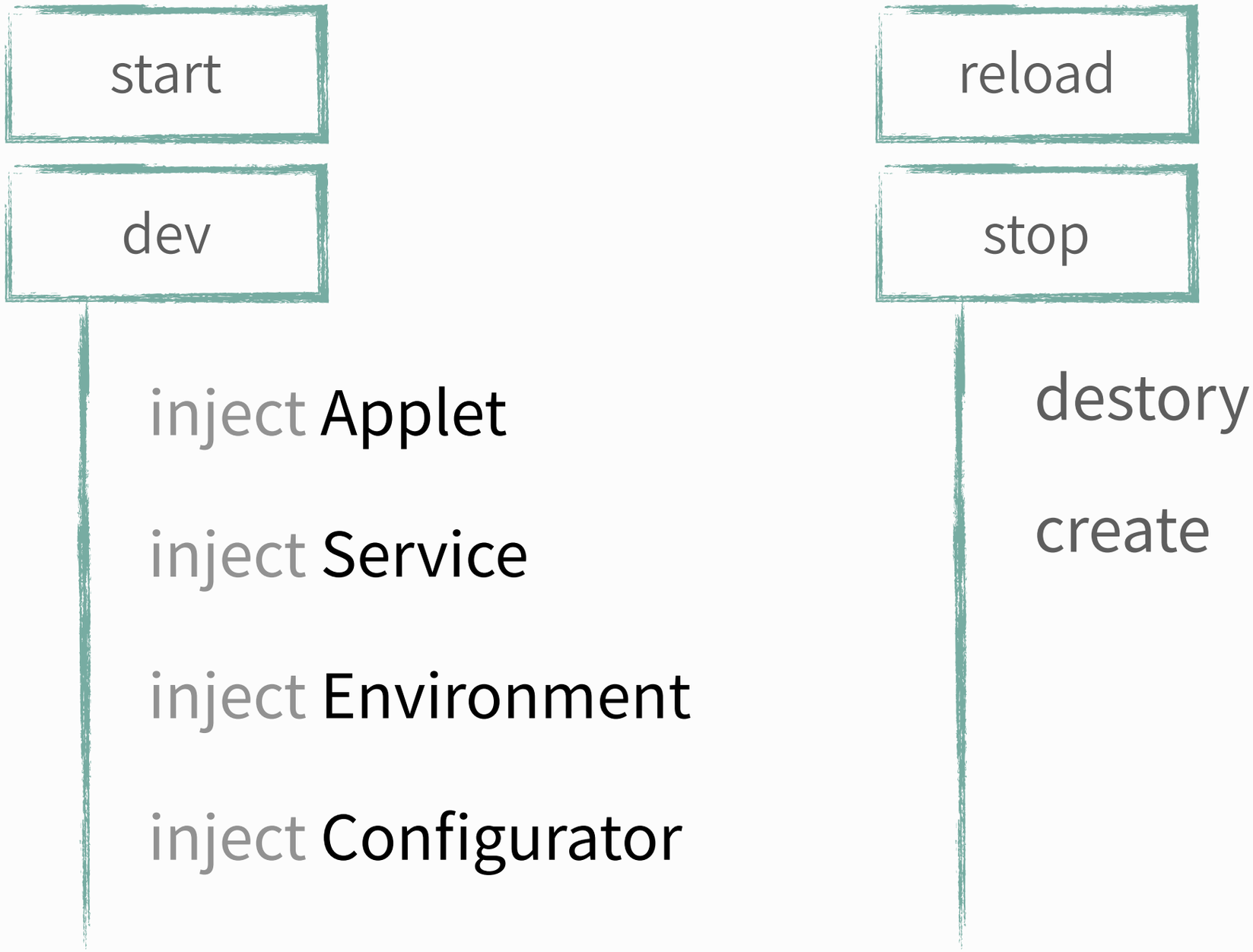


解决的痛点

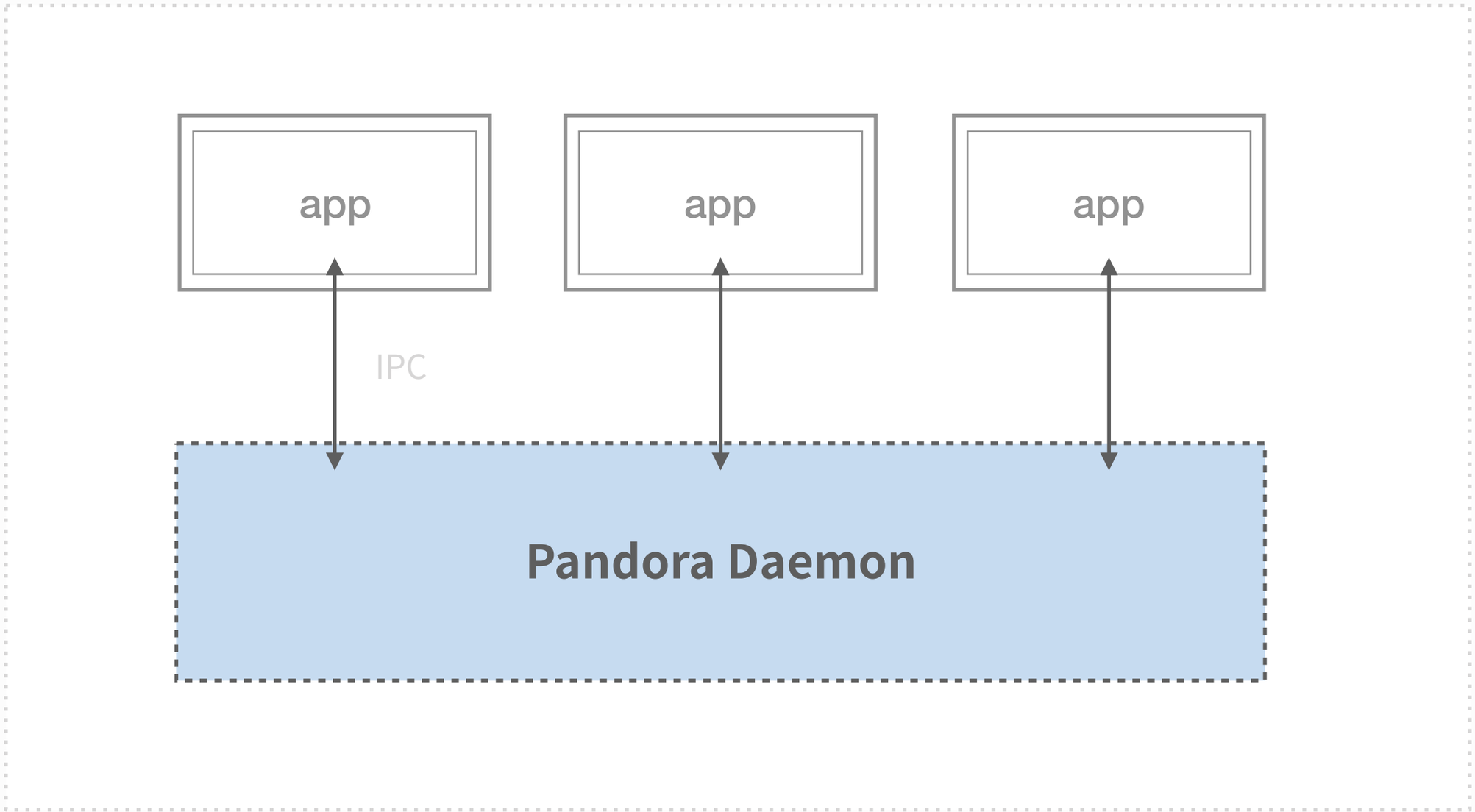
- 开发模式统一
- 框架轻量化
- 中间件管理
- 监控一致性

Pandora.js 能做什么

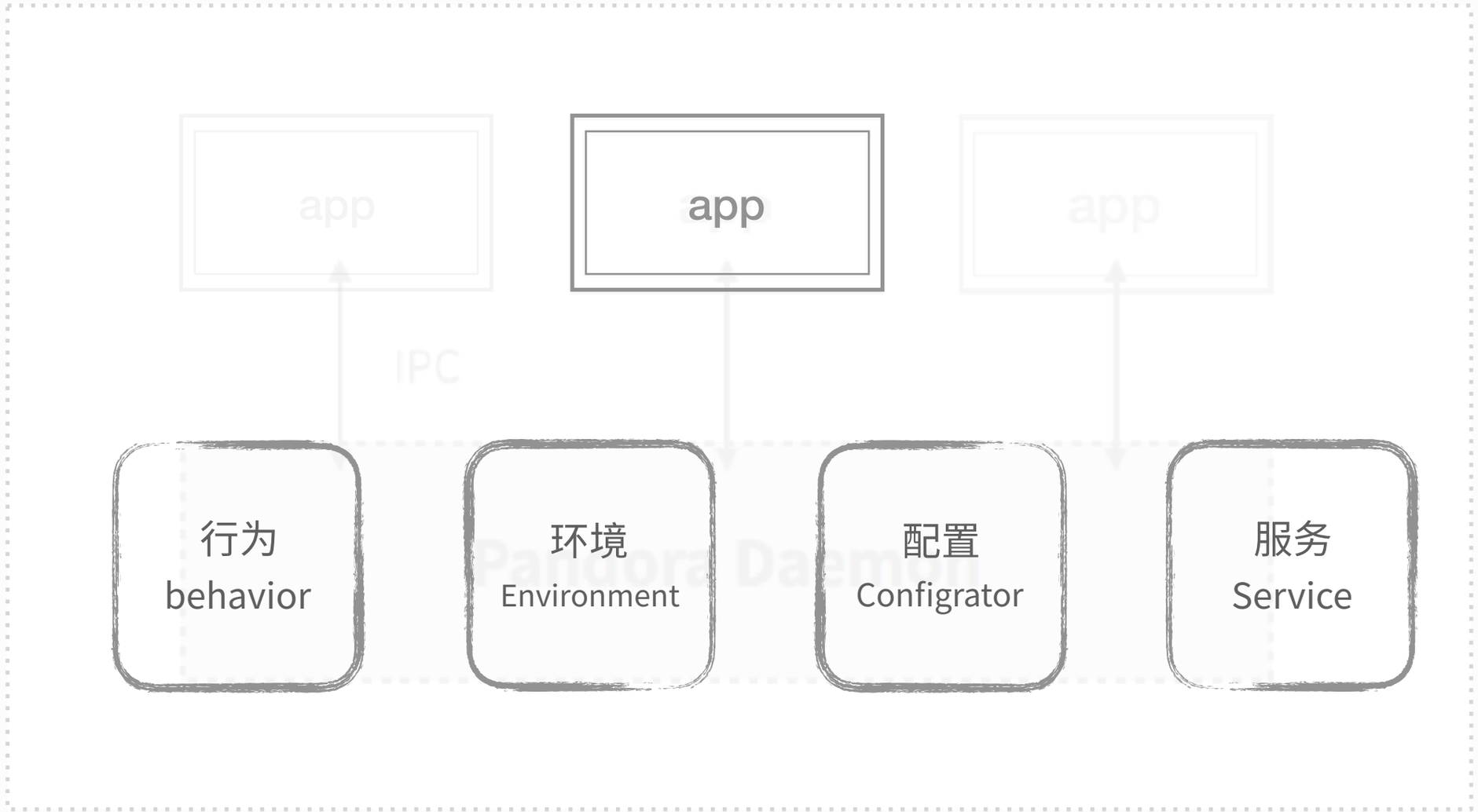
应用的生命周期


start
dev
inject Applet
inject Service
inject Environment
inject Configurator
reload
stop
destory
create

Pandora.js 的多应用管理



Pandora.js 的应用定义



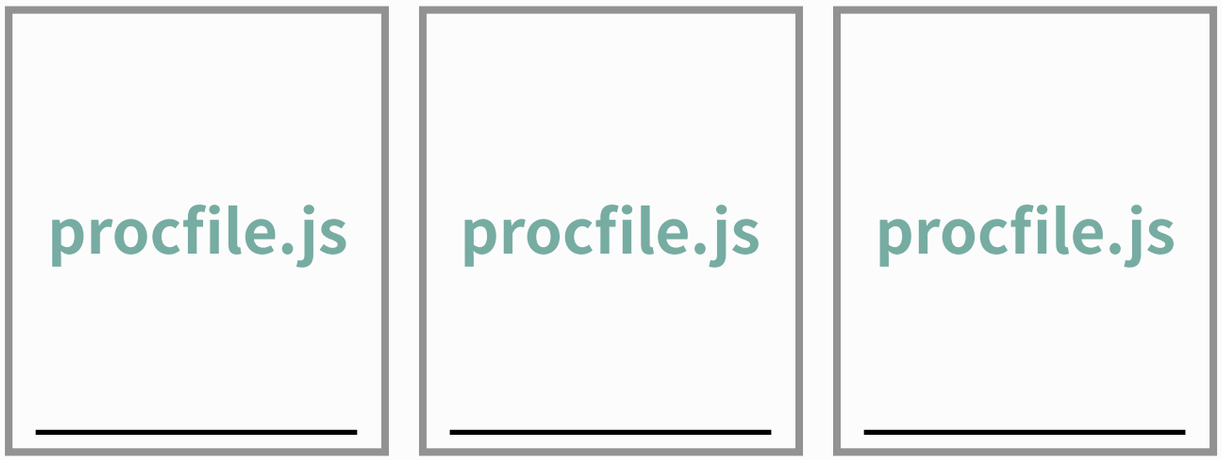
- 进程伸缩
- 进程守护

进程传统模式的支持

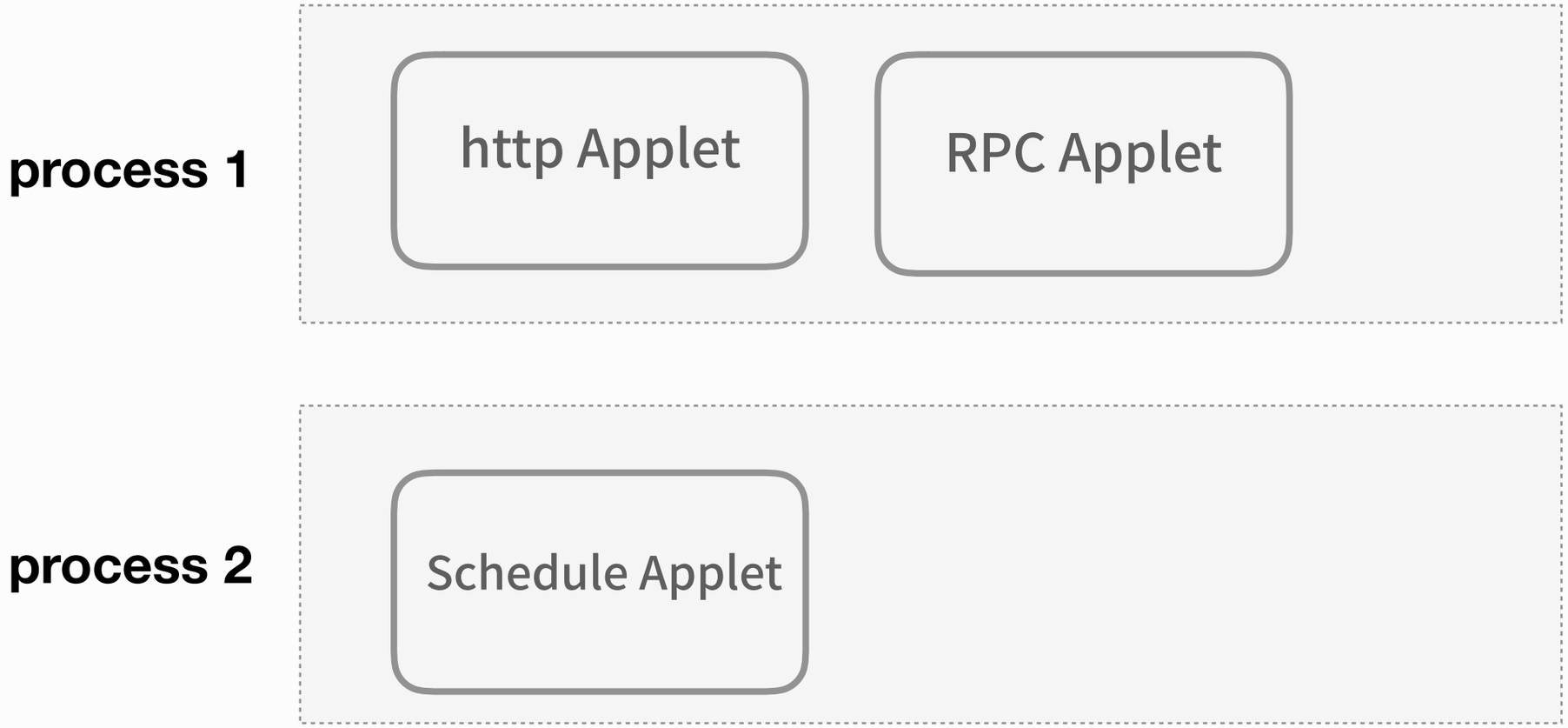
pandora start **—mode fork** app.js

pandora start **-m cluster** app.js

进程扩展 - 第三种模式



procfile.js 进程模型



#start

#stop

procfile.js

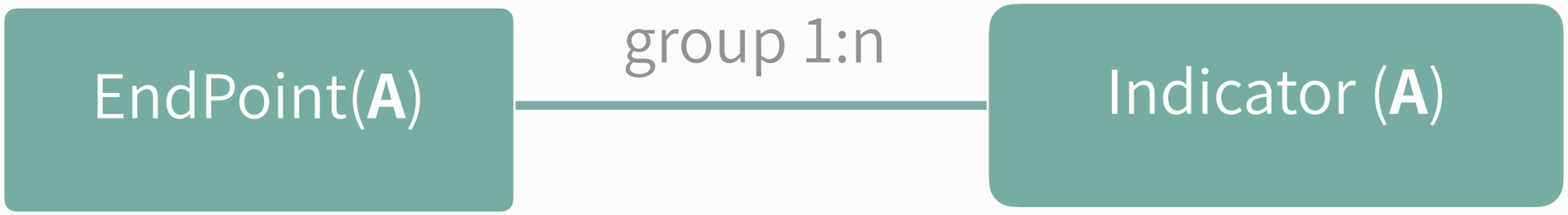
```
module.exports = function (pandora) {
  pandora.configurator(MyConfigurator);
  pandora.service(A)category('background');
  pandora.service(B).category('background');
  pandora.applet(AppletA).name( ‘XXX’ ).category('background');
  pandora.applet(AppletB).config((context) => {
    return context.config;
  });
};
```

进程全景


Pandora Daemon
Daemon
Monitor
Application 1
Agent
Agent Applet
Worker
HTTP Applet
RPC Applet
Socket Applet
background
Schedule Applet
Application 2
Agent
Agent Applet
Worker
HTTP Applet
RPC Applet
background
Schedule Applet

- EndPoint 暴露能力
- Metrics 自定义能力

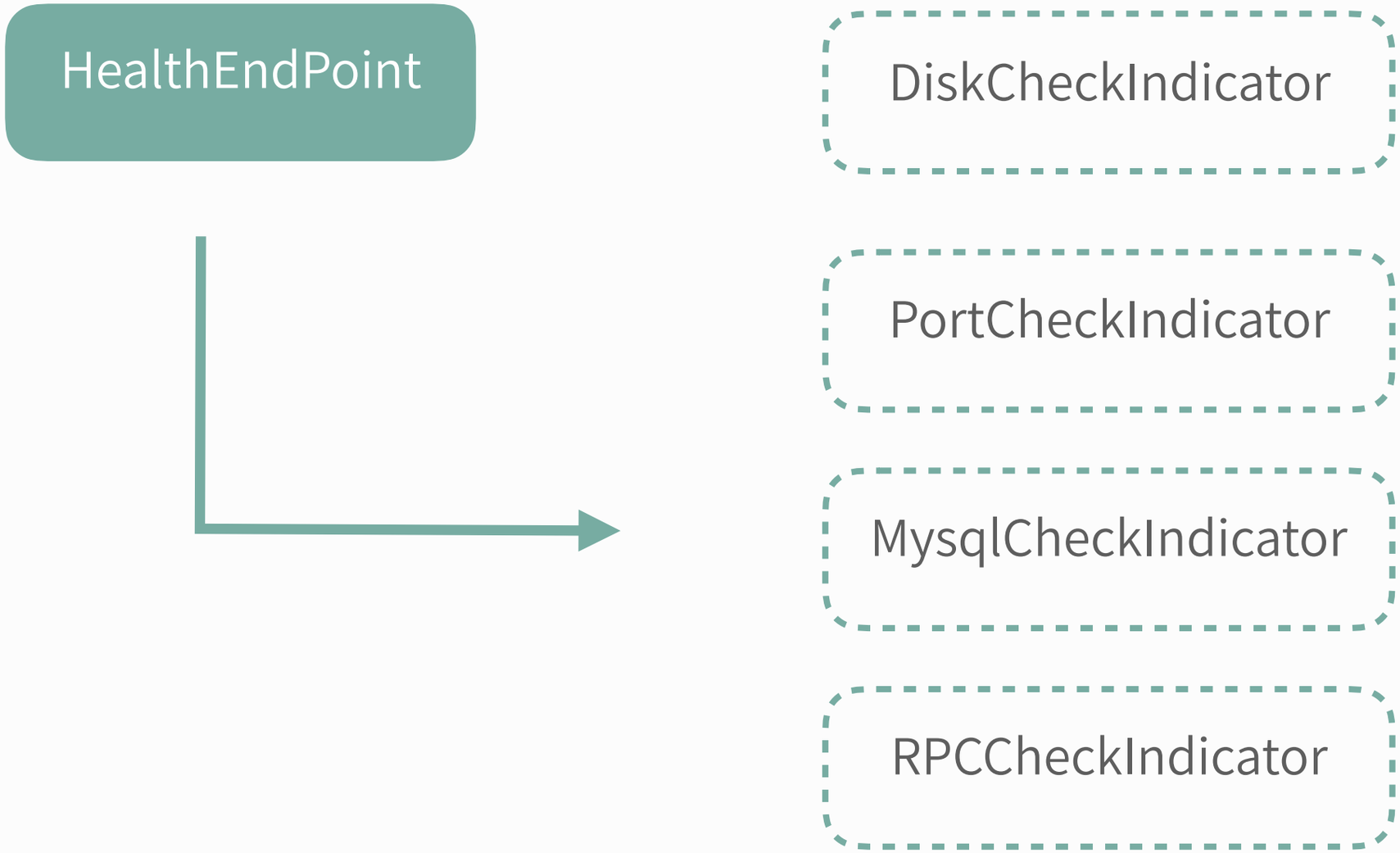
EndPoint 能力



Server

Client

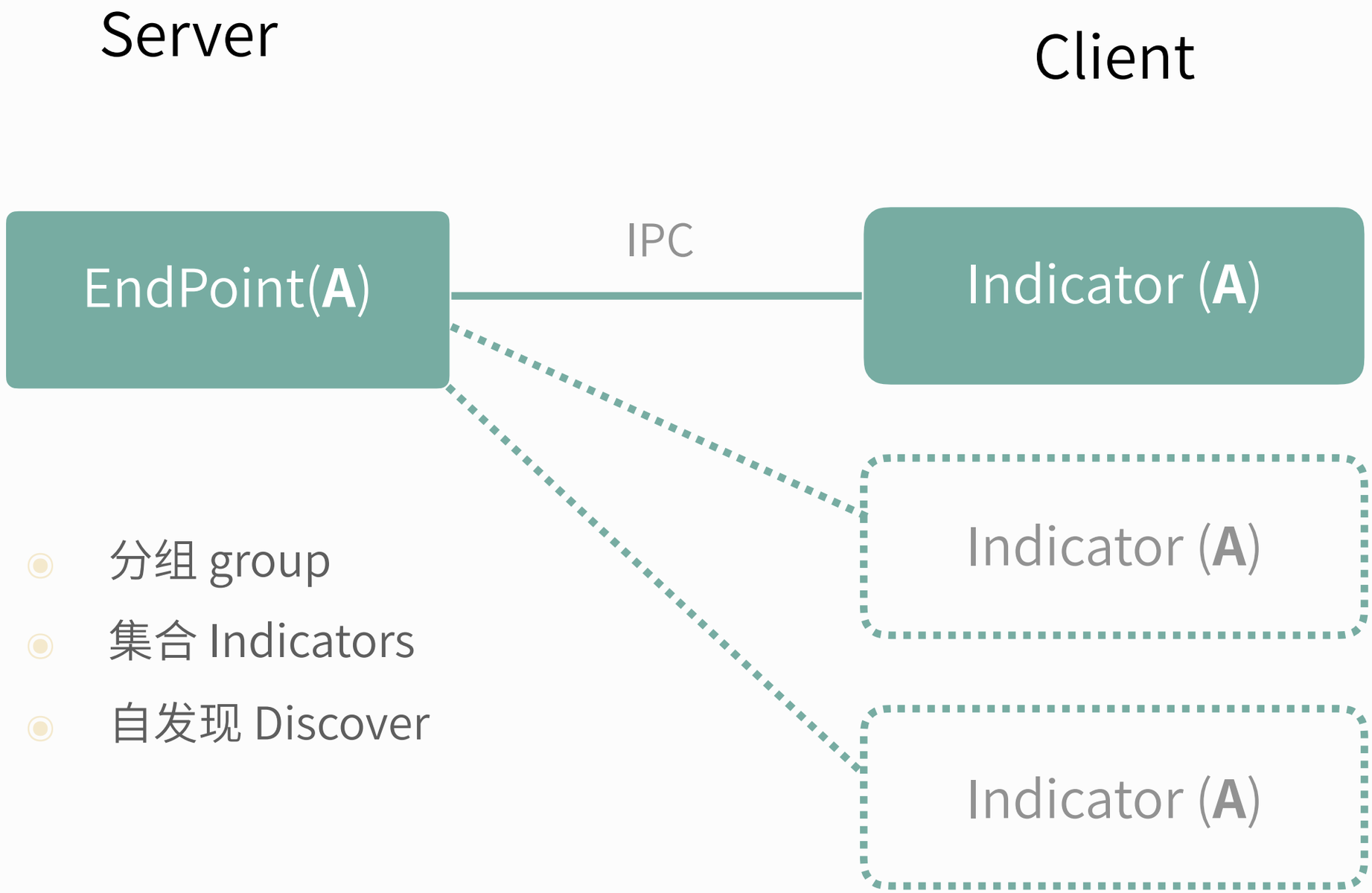
EndPoint 能力


HealthEndPoint
DiskCheckIndicator
PortCheckIndicator
MysqlCheckIndicator
RPCCheckIndicator

EndPoint 能力

HealthEndPoint	/health	健康检查
InfoEndPoint	/info	静态信息，应用名，路径等
RuntimeEndPoint	/runtime	运行时，配置等
ErrorEndPoint	/error	错误数据
ProcessEndPoint	/process	进程信息
MetricsEndPoint	/metrics	metrics指标数据

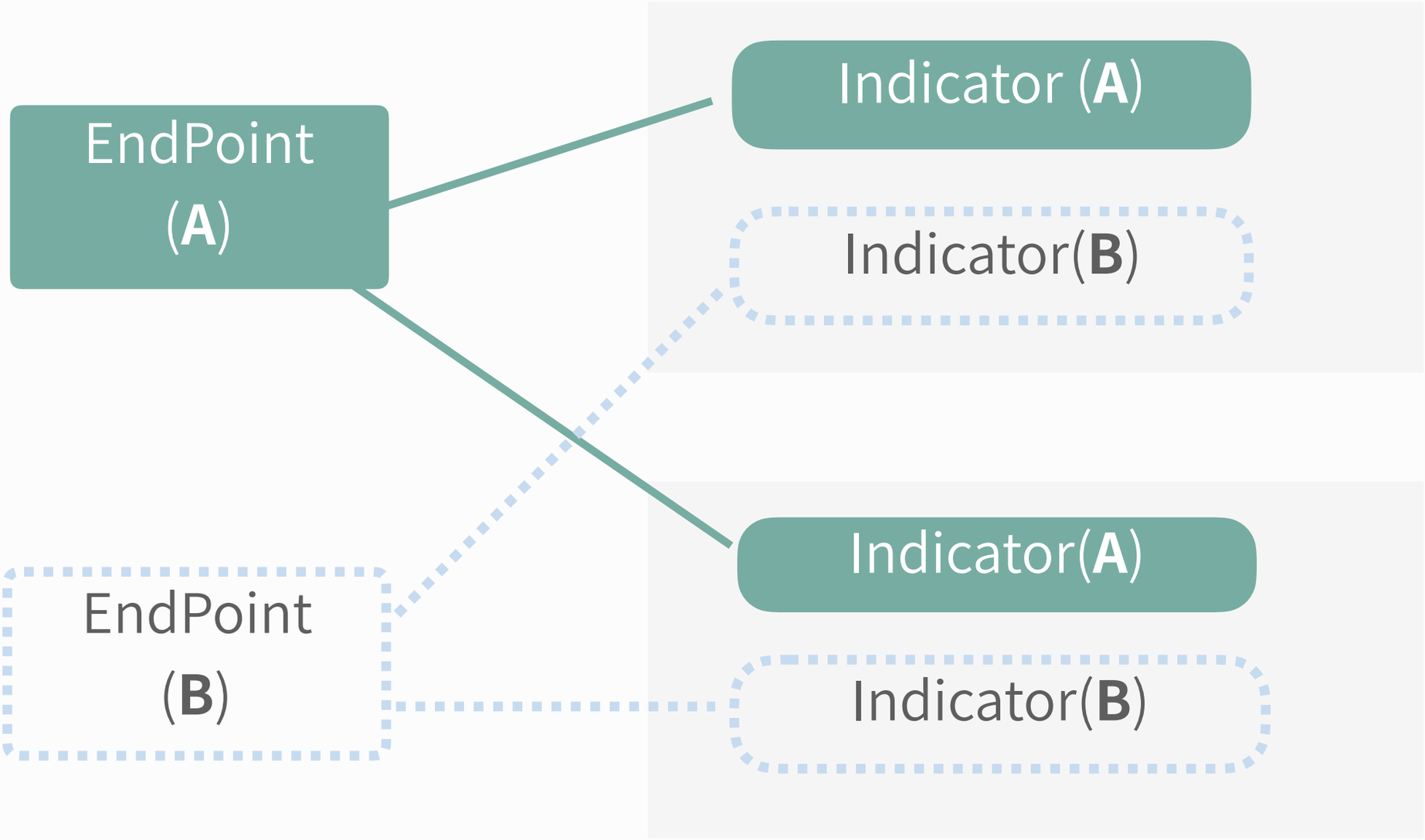
EndPoint 能力



- 分组 group
- 集合 Indicators
- 自发现 Discover

Server

Client



Metrics 能力

- MetricsManager
- MetricsReporter

Metrics 能力

- Gauge
- Counter
- Histogram
- Meter
- Timer

Metrics 能力

Client.**register**(‘test’ , ‘test.metrics.key’ , new ?<Metric>())

Metrics 能力

- MetricsManager
- MetricsReporter

数据采集

日志

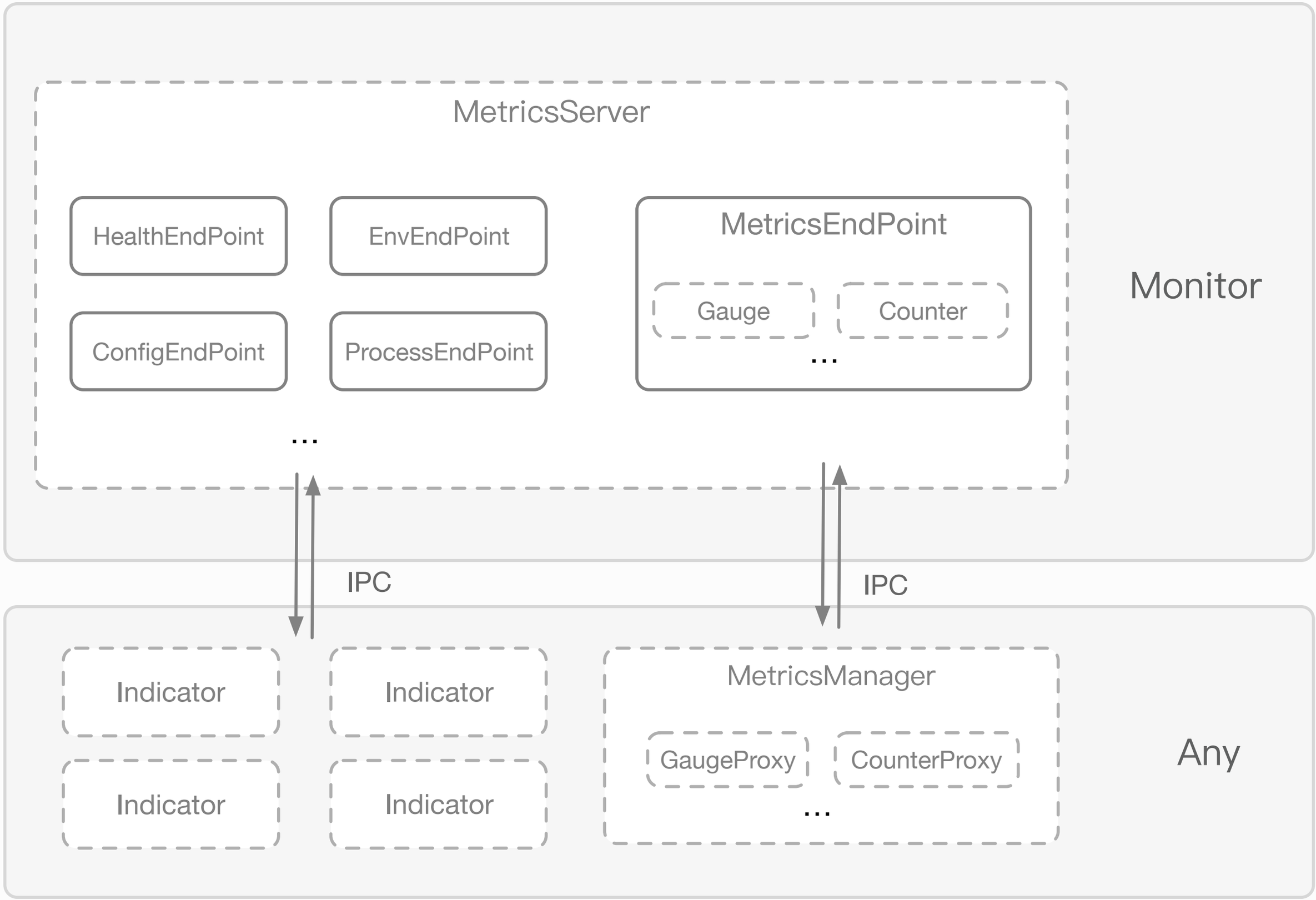
数据流

- OneAPM
- Alinode
- NewRelic
- open-falcon
- ...

区别

- Metrics 是 EndPoint 体系的一部分
- Metrics 的高实时性
- EndPoint 的数据体量大很多

Metrics 全景


MetricsServer
HealthEndPoint
EnvEndPoint
ConfigEndPoint
ProcessEndPoint
MetricsEndPoint
Gauge
Counter
...
...
Monitor
IPC
IPC
Indicator
Indicator
Indicator
Indicator
MetricsManager
GaugeProxy
CounterProxy
...
Any

More Framework

express

koa

egg

ThinkJS

sails

use typescript

Typescript

github

midwayjs/pandora

FAQ

&

thanks