

## 初始化监控服务

```
chain.boot()

    .setNext(new CacheManagerBoot())//1.初始化缓存模块
    .setNext(new ServiceRegistryBoot())//2.启动服务注册与发现模块
    .setNext(new ServiceDiscoveryBoot())//2.启动服务注册与发现模块
    .setNext(new ServerBoot(mPushServer.getConnectionServer(), mPushServer.getConnServerNode())
    .setNext(() -> new ServerBoot(mPushServer.getWebsocketServer(), mPushServer.getWebsocketServerNode())
    .setNext(() -> new ServerBoot(mPushServer.getUdpGatewayServer(), mPushServer.getGatewayServerNode())
    .setNext(() -> new ServerBoot(mPushServer.getGatewayServer(), mPushServer.getGatewayServerNode())
    .setNext(new ServerBoot(mPushServer.getAdminServer(), null))//7.启动控制台服务
    .setNext(new RouterCenterBoot(mPushServer))//8.启动路由中心组件
    .setNext(new PushCenterBoot(mPushServer))//9.启动推送中心组件
    .setNext(() -> new HttpProxyBoot(mPushServer), CC.mp.http.proxy_enabled)//10.启动http代理服务
    .setNext(new MonitorBoot(mPushServer))//11.启动监控服务
    .end();
```

## 启动服务

```
public final class MonitorBoot extends BootJob {

    private final MPushServer mPushServer;

    public MonitorBoot(MPushServer mPushServer) {
        this.mPushServer = mPushServer;
    }

    @Override
    protected void start() {
        mPushServer.getMonitor().start();
        startNext();
    }

    @Override
    protected void stop() {
        stopNext();
        mPushServer.getMonitor().stop();
    }
}
```

调用MonitorService->BaseService#start(), 然后start()最终调用子类MonitorService#doStart()

```

MonitorService doStart()

@Override
public void run() {
    while (isRunning()) {
        MonitorResult result = collector.collect();

        if (printLog) {
            Logs.MONITOR.info(result.toJson());
        }

        if (dumpEnabled) {
            dump();
        }

        try {
            TimeUnit.SECONDS.sleep(dumpPeriod);
        } catch (InterruptedException e) {
            if (isRunning()) stop();
        }
    }
}

@Override
protected void doStart(Listener listener) throws Throwable {
    if (printLog || dumpEnabled) {
        thread = Utils.newThread(ThreadNames.T_MONITOR, this);
        thread.setDaemon(true);
        thread.start();
    }
    listener.onSuccess();
}

```

如果日志打印或者堆转储启用，则创建守护线程来处理监控信息；