



Pivotal.

# Load Shedding with Hystrix

---

# Load Shedding

- In some cases we do not want a binary circuit breaker, but we need bulkheading instead:
  - Downstream service is available, but slow
  - Protect client container from client api behavior
  - Once max threads are depleted for protected code, divert to fallback

# How does it work?

- Hystrix circuit breakers run on the client (where protecting code)
- Hystrix Command uses AOP (and associated Spring Dynamic Proxies)
- Hystrix Proxies generate keyed thread pool used to run wrapped (protected) method.
- Hystrix Proxies will divert call execution path to fallback method on Hystrix command's thread pool depletion.

# Load Shedding is Not...

- Rate Limiting

# Hystrix Configuration

Configuration	Description	Default
<code>hystrix.threadpool.HystrixThreadPoolKey.maximumSize</code>	The maximum thread-pool size. This is the maximum amount of concurrency that can be supported without starting to reject HystrixCommands	10
<code>execution.isolation.semaphore.maxConcurrentRequests</code>	sets the maximum number of requests allowed to a HystrixCommand.run() method when you are using ExecutionIsolationStrategy.SEMAPHORE	10

See here for full set configuration: <https://github.com/Netflix/Hystrix/wiki/Configuration>