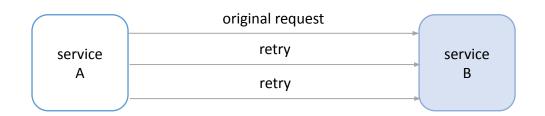
How to retry



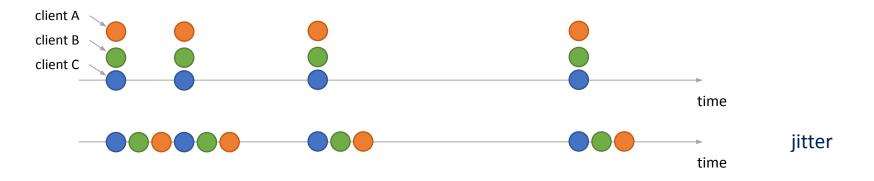
• introduce delays between retry attempts



• limit the number of retries

e.g. retry 3 times and then cancel or failover or fallback

force clients to retry at different times



How to retry

libraries

Resilience4i Polly

```
retry if request failed with this exception
                                                 5 times
Random jitterer = new Random();
Policy
  .Handle<SomeExceptionType>().WaitAndRetry(5, retryAttempt =>
       TimeSpan.FromSeconds(Math.Pow(2, retryAttempt))
                                                                                with exponential backoff (2, 4, 8 etc.)
    + TimeSpan.FromMilliseconds(jitterer.Next(0, 1000)) ←
                                                                                and jitter (up to 1 second)
);
```

code sample: www.thepollyproject.org

How to retry

not only retries need jitter

workloads that run periodically

data aggregation scenarios

e.g. application monitoring

I should add jitter to request job avoid starting all tasks at scheduler the same time. application I should add jitter to task task task task avoid traffic spikes. log exceptions and metrics flush data monitoring log files on disk agent every minute system data store aggregate data (e.g. 1 minute of logs) server