

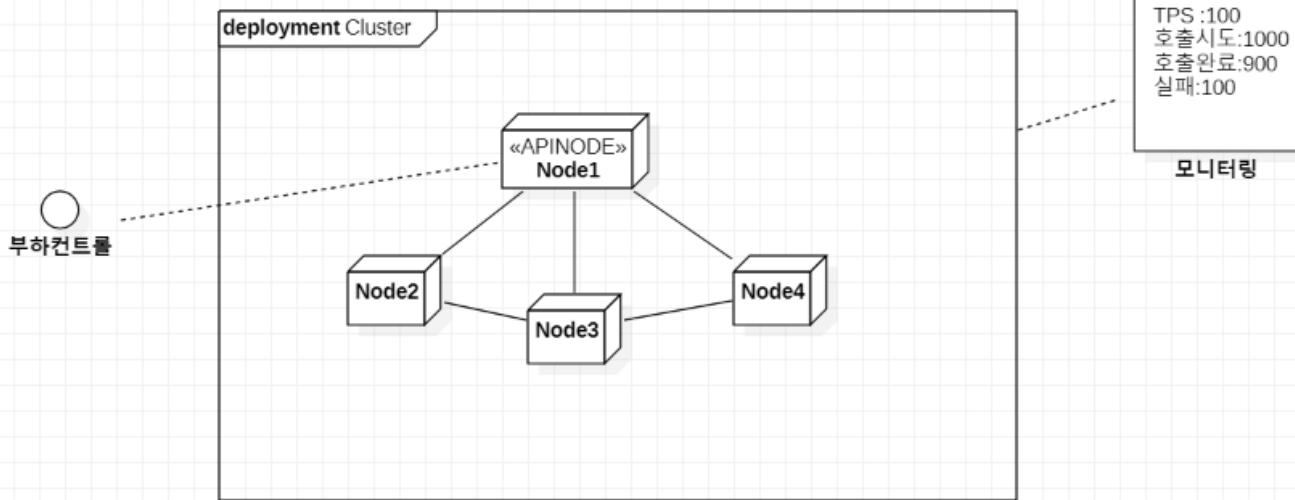
LoadTest

API , API

, LoadRunner

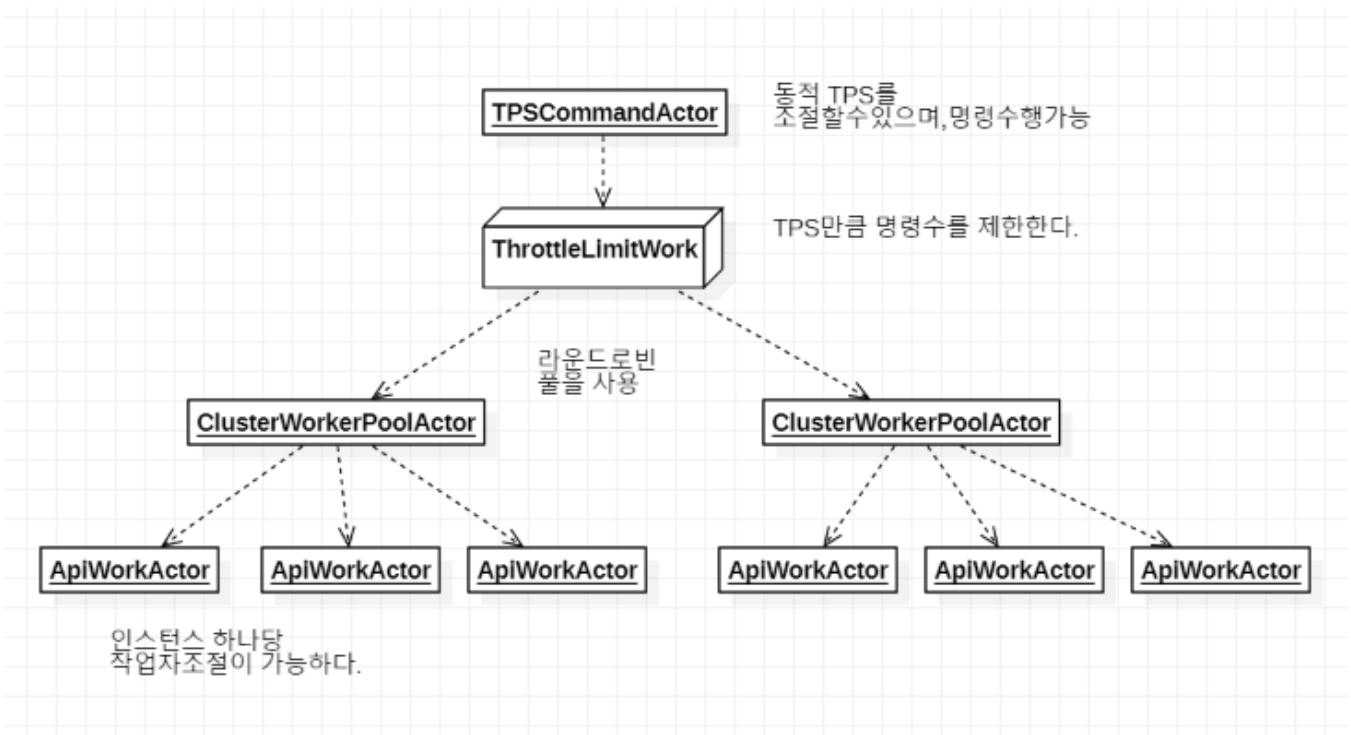
,

git : <https://github.com/psmon/AkkaForNetCore> - - -



Spec

- . . .
- . . .
- 1 . . (ex> 300)
- , , TPS . (* .)
- . ()



(L7,Nginx) .

. - Akka

: <https://github.com/psmon/AkkaForNetCore/tree/master/AkkaNetCore/Actors/LoadTest>

API ApiWorkActor .

ApiCallSpec API , .(,Object .)

```

// ,TPS .
public class TPSCommandActor : ReceiveActor
{
    IActorRef batchActor;
    IActorRef throttleLimitWork;
    int seqNo;

    public TPSCommandActor(IActorRef workerPool)
    {
        seqNo = 0;

        // 1 . - FSM
        batchActor = Context.ActorOf(Props.Create(() => new BatchActor(1)));
        // TPS .
        throttleLimitWork = Context.ActorOf(Props.Create(() => new ThrottleLimitWork()));

        // .
        batchActor.Tell(new SetTarget(throttleLimitWork));
        // .()
        throttleLimitWork.Tell(new SetTarget(workerPool));

        // 5 .
        throttleLimitWork.Tell(5);

        // .
        ReceiveAsync<int>(async limit =>
        {
            throttleLimitWork.Tell(limit);
        });

        // LoadTest .
        // batchActor -> throttleLimitWork -> _worker
        ReceiveAsync<ApiCallSpec>(async msg =>
        {
            msg.SeqNo = seqNo; // 
            // Queue .
            batchActor.Tell(new Queue(msg));
            seqNo++;
        });
    }

    protected override void PreStart()
    {
        Context.IncrementActorCreated();
    }

    protected override void PostStop()
    {
        Context.IncrementActorStopped();
    }
}

```

```
dotnet run --configuration Release --project AkkaNetCore --environment "Development" --port 5001 --akkaip 127.0.0.1 --akkaport 7100 --roles akkanet --akkaseed akka.tcp://actor-cluster@127.0.0.1:7100 --MonitorTool win

dotnet run --no-build --configuration Release --project AkkaNetCore --environment "Development" --port 5002 --akkaip 127.0.0.1 --akkaport 5102 --roles akkanet,apiwork --akkaseed akka.tcp://actor-cluster@127.0.0.1:7100 --MonitorTool win

dotnet run --no-build --configuration Release --project AkkaNetCore --environment "Development" --port 5003 --akkaip 127.0.0.1 --akkaport 5103 --roles akkanet,apiwork --akkaseed akka.tcp://actor-cluster@127.0.0.1:7100 --MonitorTool win
```

Akka

- .
- .
- P2P , Zero .

TPS Api .

- :2
- (work) : int workCount = 10;
, API .(50~300)



ApiTest.mp4

MSA ,

: 4 .

- Cluster with Actor
- Stream - ThrottleActor
- Finite State Machines
- Real time performance counters