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TPS

```

using Akka.Actor;
using Akka.Event;
using Akka.Monitoring;

namespace AkkaDotBootApi.Actor
{
    public class InfiniteMessage
    {
        public string Message { get; set; }

        public uint Count { get; set; }
    }

    public class InfiniteReflectionActor : ReceiveActor
    {
        private IActorRef ReplyActor;

        private readonly ILoggingAdapter logger = Context.GetLogger();

        public InfiniteReflectionActor()
        {
            ReceiveAsync<IActorRef>(async actorRef =>
            {
                ReplyActor = actorRef;
            });

            ReceiveAsync<InfiniteMessage>(async infiniteMessage =>
            {
                Context.IncrementCounter("akka.infinite.metric"); // <-- 1.
                var reply = new InfiniteMessage
                {
                    Message = infiniteMessage.Message,
                    Count = ++infiniteMessage.Count
                };

                if(reply.Count % 50000 == 0) // <-- 5 . TPS .
                {
                    logger.Info($"Count:{reply.Count}");
                }

                ReplyActor.Tell(reply); // 1 . ( . - )

            });
        }
    }
}

```

```

//
//custom-dispatcher , custom-task-dispatcher , default-fork-join-dispatcher
string disPacther = "default-fork-join-dispatcher"; //
int pipongGroupCount = 1; // , . ( 21)
int ballCount = 6; //

// ...
for (int i=0; i < pipongGroupCount; i++)
{
    string actorFirstName = "infiniteReflectionActorA" + i;
    string actorSecondName = "infiniteReflectionActorB" + i;

    // Test Actor
    var infiniteReflectionActorA = AkkaLoad.RegisterActor(actorFirstName,
        actorSystem.ActorOf(Props.Create(() => new InfiniteReflectionActor()).WithDispatcher
(disPacther),
            actorFirstName));

    var infiniteReflectionActorB = AkkaLoad.RegisterActor(actorSecondName,
        actorSystem.ActorOf(Props.Create(() => new InfiniteReflectionActor()).WithDispatcher
(disPacther),
            actorSecondName));

    // ,
    infiniteReflectionActorA.Tell(infiniteReflectionActorB);
    infiniteReflectionActorB.Tell(infiniteReflectionActorA);

    //
    for(int ballIdx=0; ballIdx< ballCount; ballIdx++)
    {
        infiniteReflectionActorA.Tell(new InfiniteMessage()
        {
            Message = "A",
            Count = 0
        });
    }
}

```

```

default-fork-join-dispatcher {
    type = ForkJoinDispatcher
    throughput = 100
    dedicated-thread-pool {
        thread-count = 8
        deadlock-timeout = 3s
        threadtype = background
    }
}

custom-dispatcher {
    type = Dispatcher
    throughput = 100
}

custom-task-dispatcher {
    type = TaskDispatcher
    throughput = 100
}

```

? TPL ? forkJoin .

, .

: <https://getakka.net/articles/actors/dispatchers.html>

AKKA.net Datadog

```
using Akka.Monitoring.Datadog;
using StatsdClient;
using Akka.Monitoring;

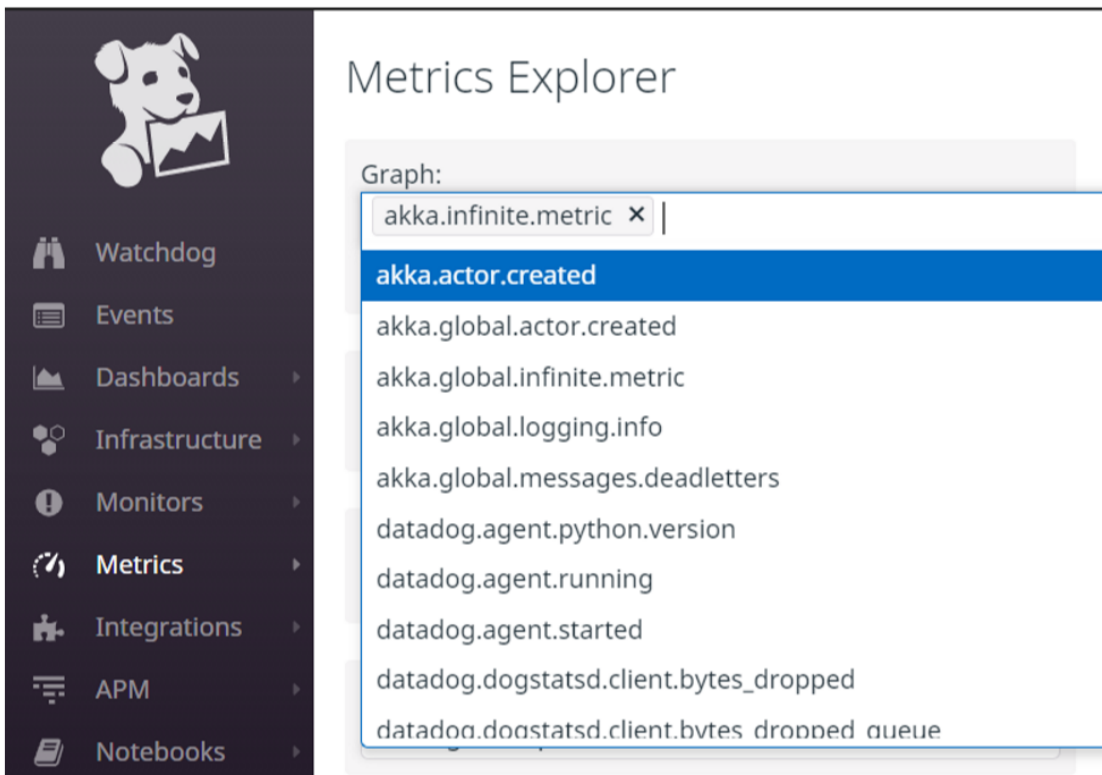
.....

//
var statsdConfig = new StatsdConfig
{
    StatsdServerName = "127.0.0.1"
};
ActorMonitoringExtension.RegisterMonitor(actorSystem, new ActorDatadogMonitor(statsdConfig));
```

Datadog Agent , Actor

IncrementCounter .

: [Real time performance counters](#)



Metrics Explorer

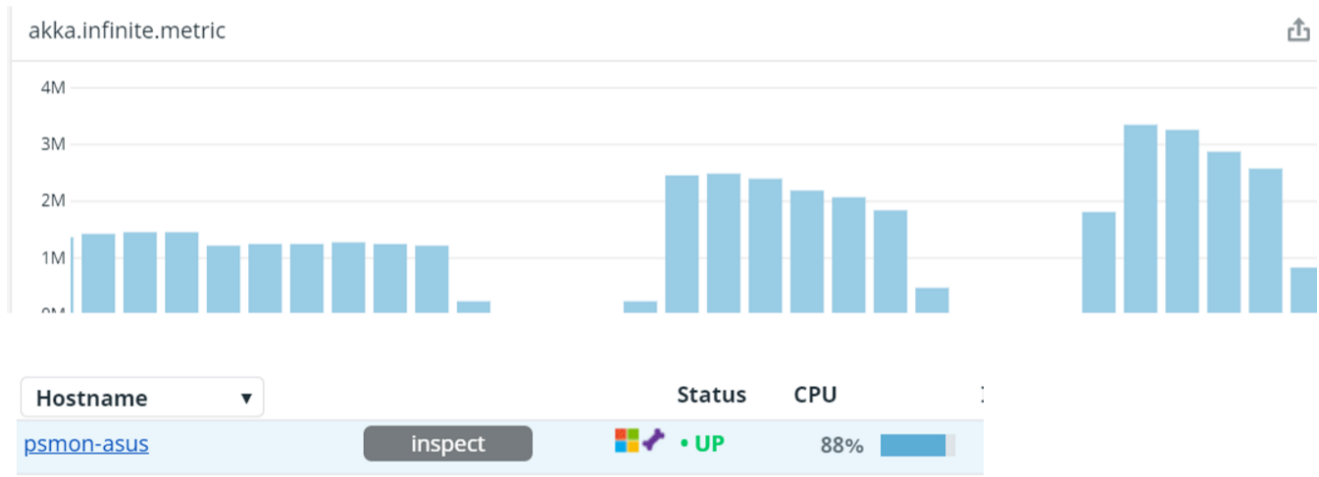
Graph:

akka.infinite.metric × |

- akka.actor.created**
- akka.global.actor.created
- akka.global.infinite.metric
- akka.global.logging.info
- akka.global.messages.deadletters
- datadog.agent.python.version
- datadog.agent.running
- datadog.agent.started
- datadog.dogstatsd.client.bytes_dropped
- datadog.dogstatsd.client.bytes_dropped_queue

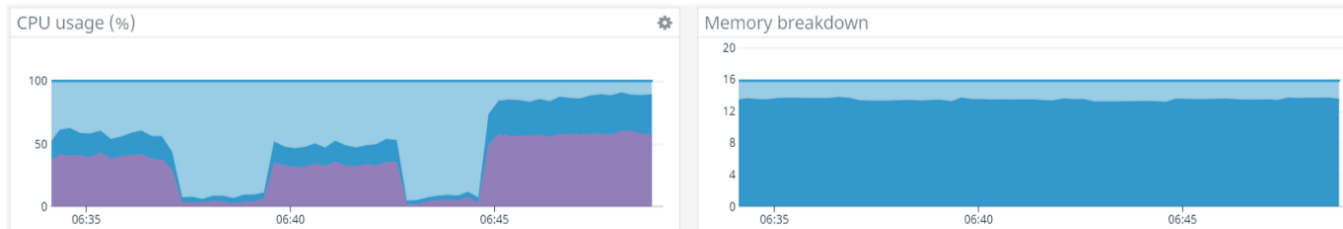
,

M =

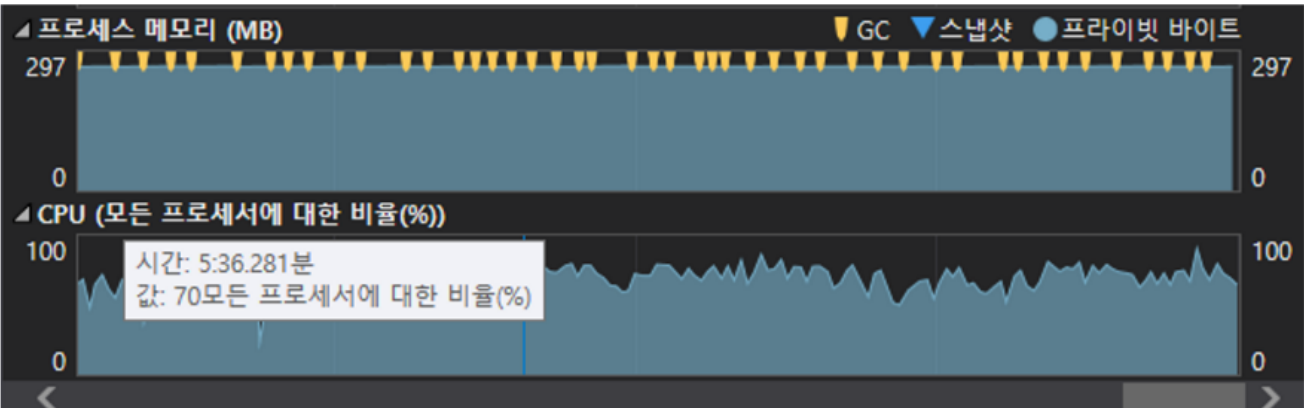


: 3 / 30 , 10/sec

CPU

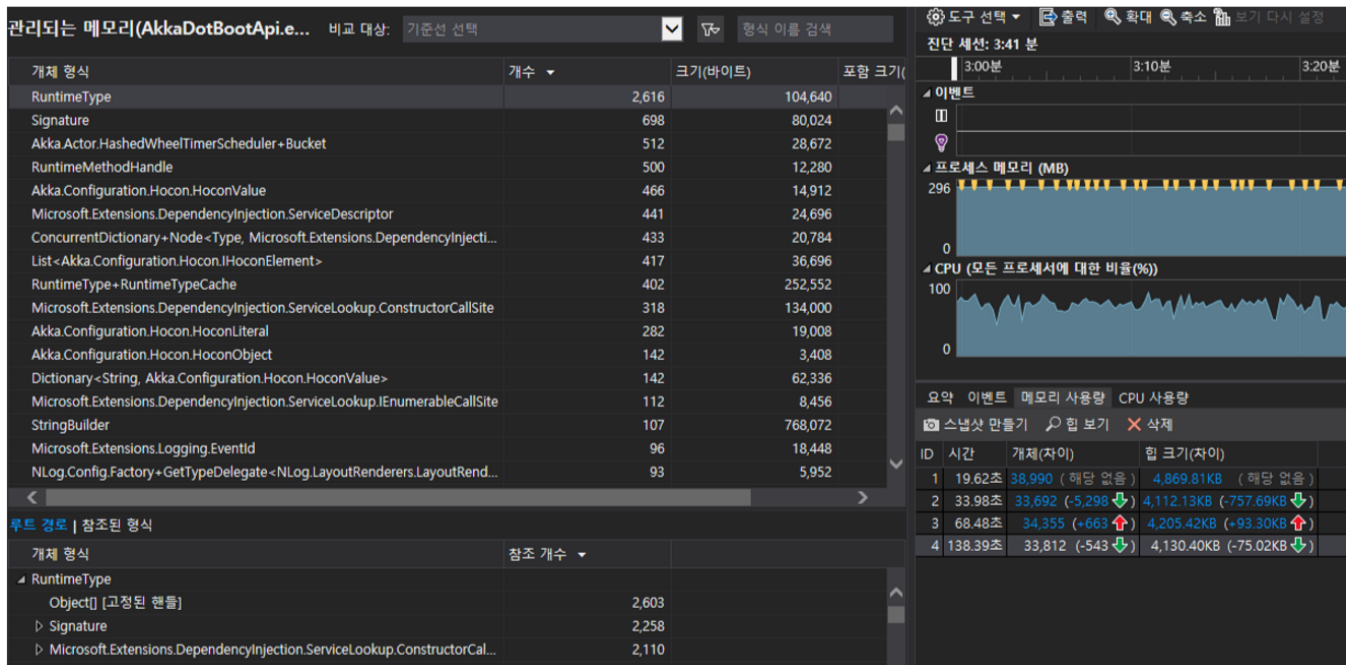


CPU



CPU , GC

GC



- ?
- ?
- ?

- 10
- 4~6
- GC ,

High Performance

Up to 50 million msg/sec on a single machine. Small memory footprint; ~2.5 million actors per GB of heap.

5 .

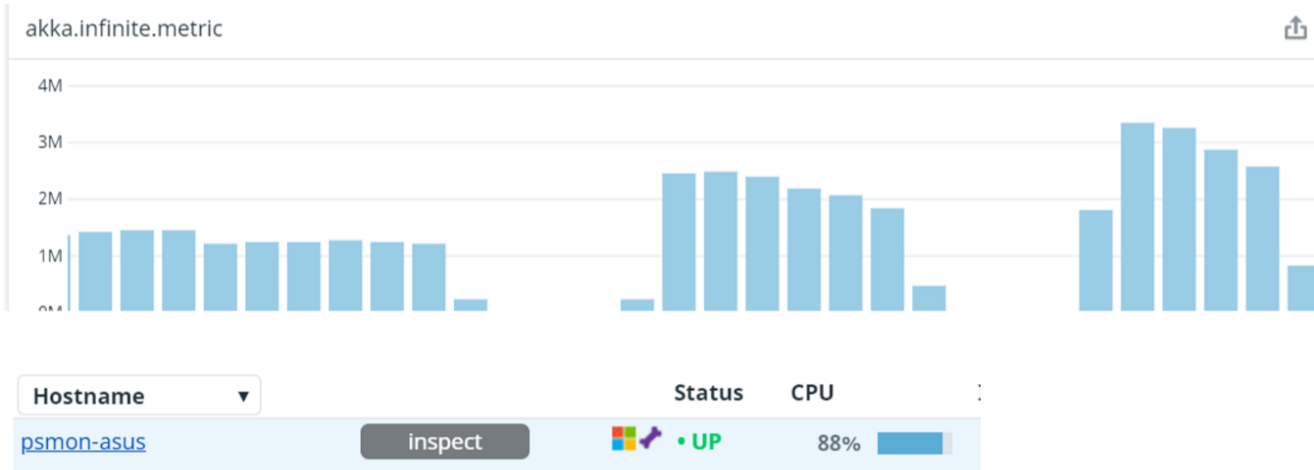
. (, 10 .)

git : <https://github.com/psmon/AkkaDotModule/blob/master/AkkaDotBootApi/Actor/InfiniteReflectionActor.cs>

: 30

: M ()

1 : : 2.17



2 : : 2.18

