Go Reactive with Vert.x

in

Oracle Application Container Cloud

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Intro?

Vert.x

Application Platform

Runs on JVM

Asynchronous APIs

Polyglot

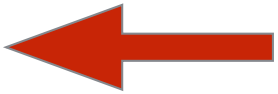
Simple

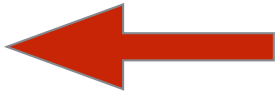
Why?

APIs

Hello World

Verticles





```
public class HelloWorldVerticle extends AbstractVerticle {
    …

    @Override
    public void start( Future<Void> fut ) {

        vertx.setPeriodic( 1000, l -> {
            vertx.eventBus()
                    .publish( "hello-bus",
                              new JsonObject(
                                      Json.encodePrettily(
                                new Message( "HelloWorld Message: " + new Date() ))));} );


        vertx.eventBus()
                .consumer( "hello-bus",
                           m -> {
                               JsonObject json = ( JsonObject ) m.body();
                               logger.info( "Receiving "
                                            + json.getString( "id" )
                                            + " : "
                                            + json.getString( "name" ) );} );
    }
}
```

Threading Model
Event Loops

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Event Loops vs. Blocking API's

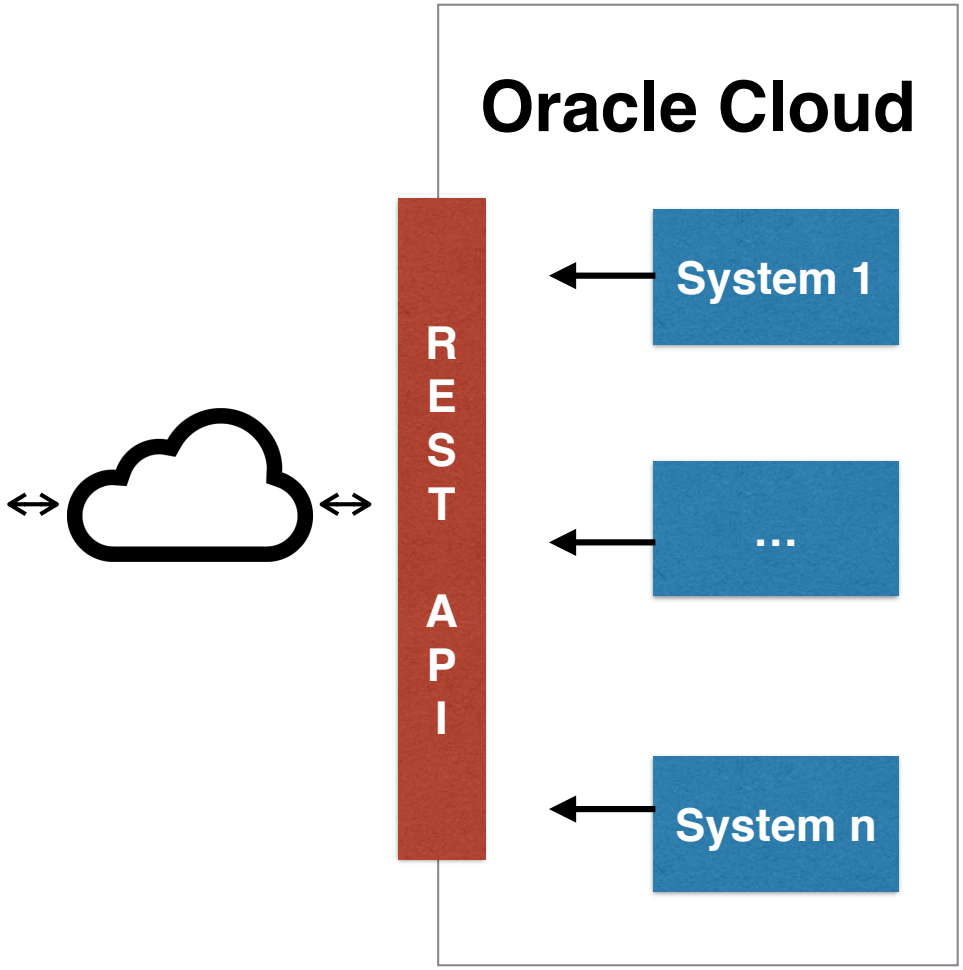
Hybrid Threading Model

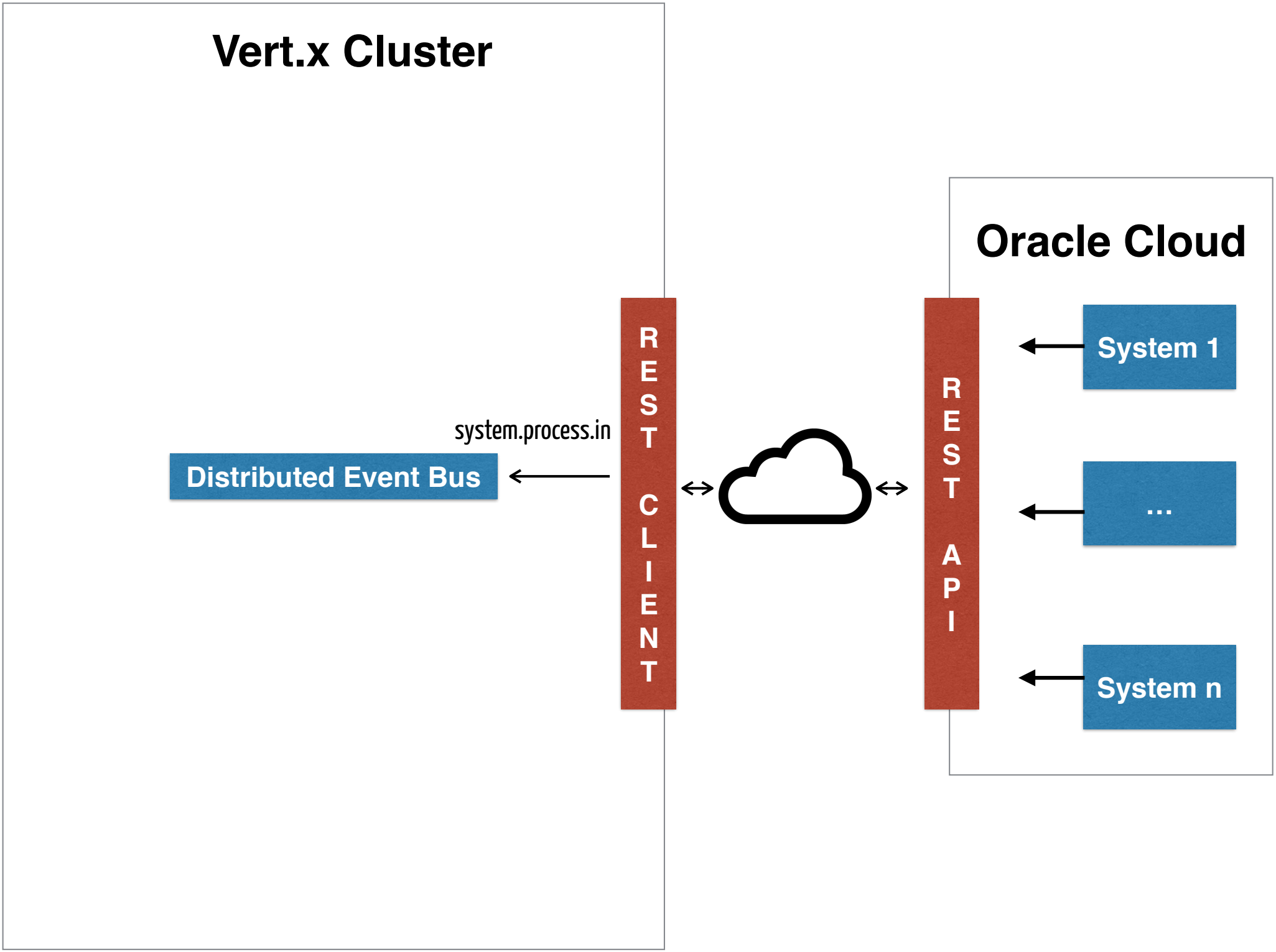
Scaling

Distributed Event Bus

Extended to the browser

Demo :)


Oracle Cloud
REST API
System 1
...
System n


Vert.x Cluster
Oracle Cloud
system.process.in
Distributed Event Bus
REST CLIENT
REST API
System 1
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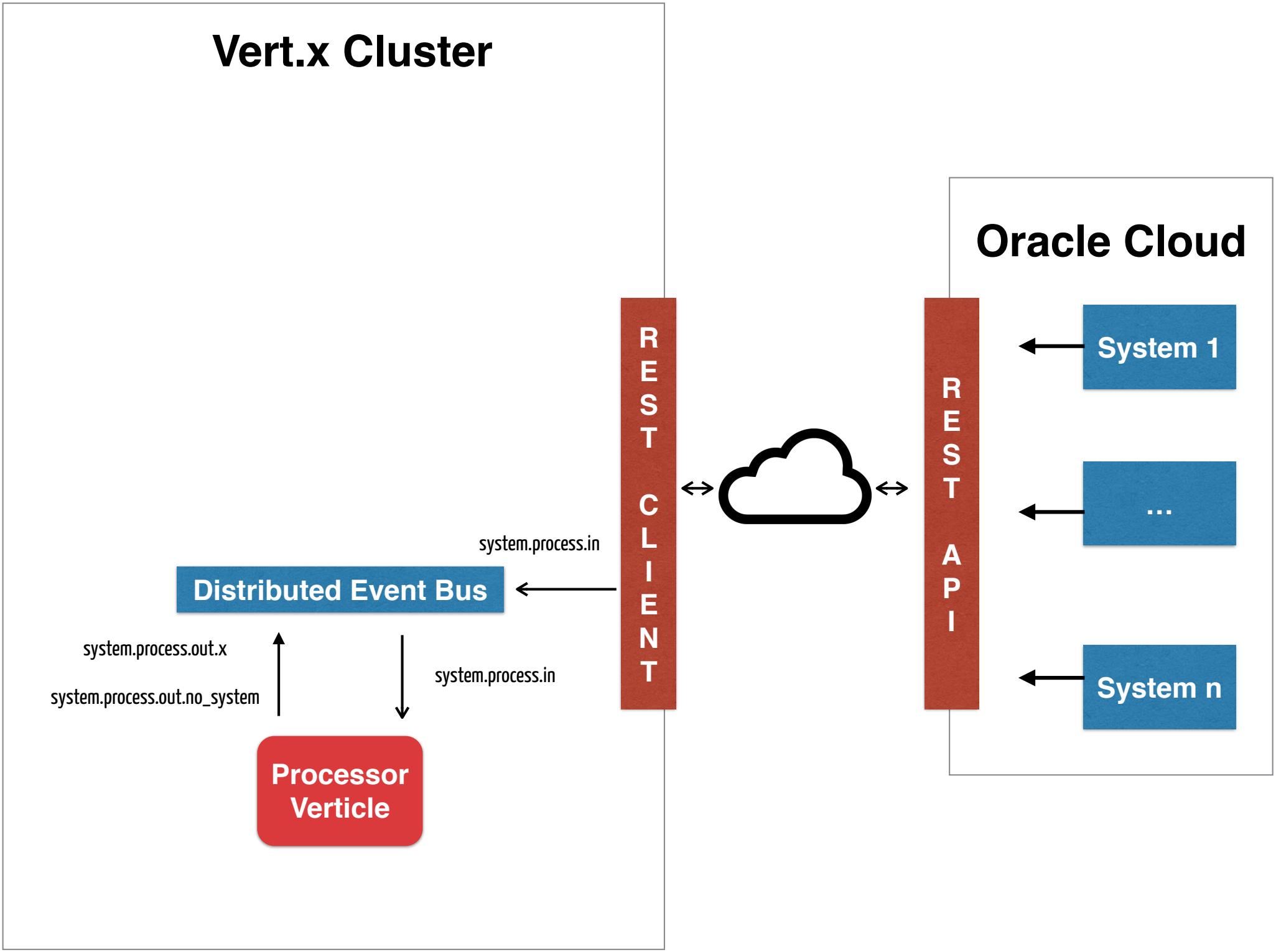
Vert.x Cluster
Oracle Cloud
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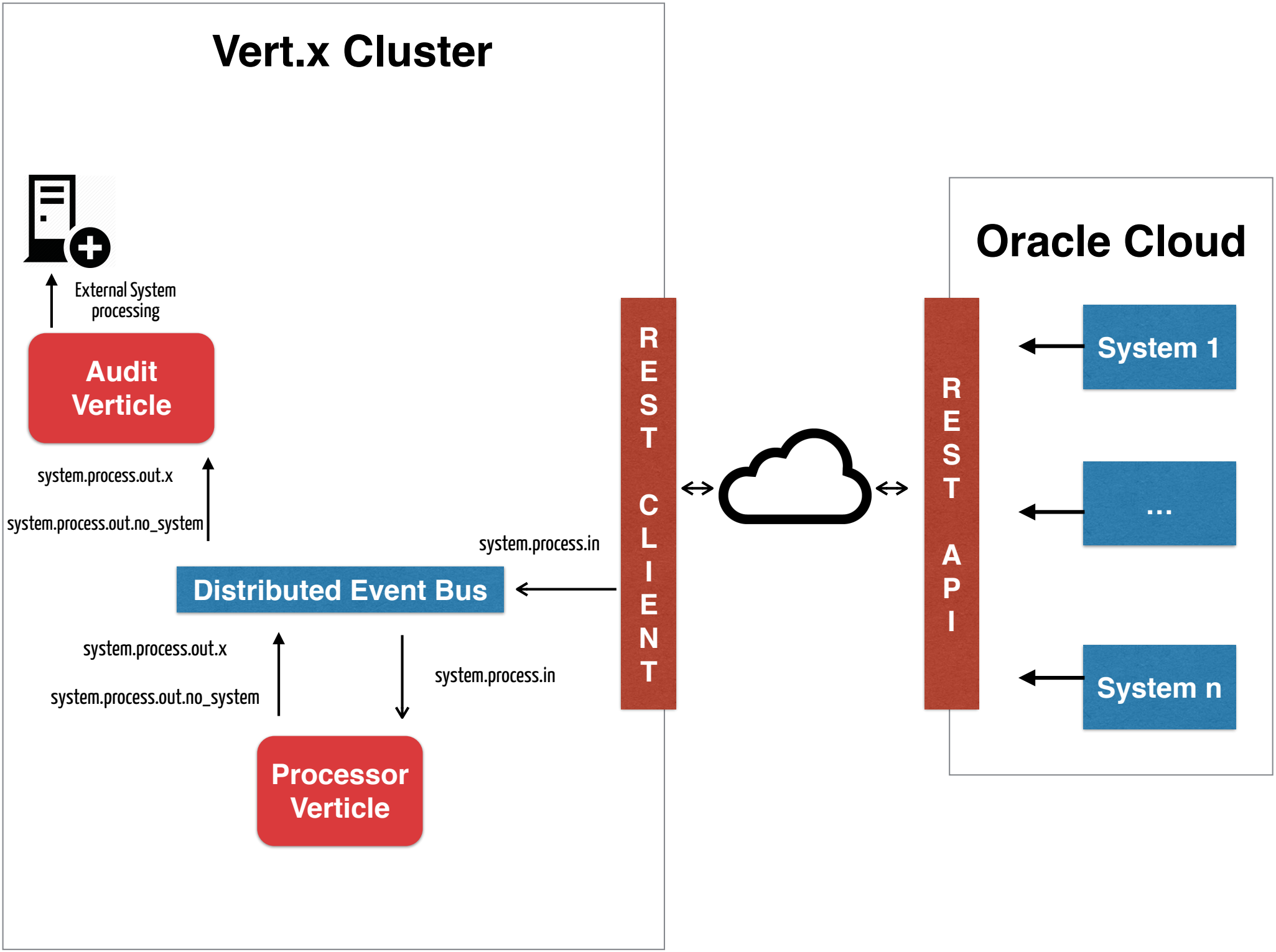
system.process.in
Distributed Event Bus
system.process.out.x
system.process.out.no_system
system.process.in
Processor Verticle


Vert.x Cluster
External System processing
Audit Verticle
system.process.out.x
system.process.out.no_system
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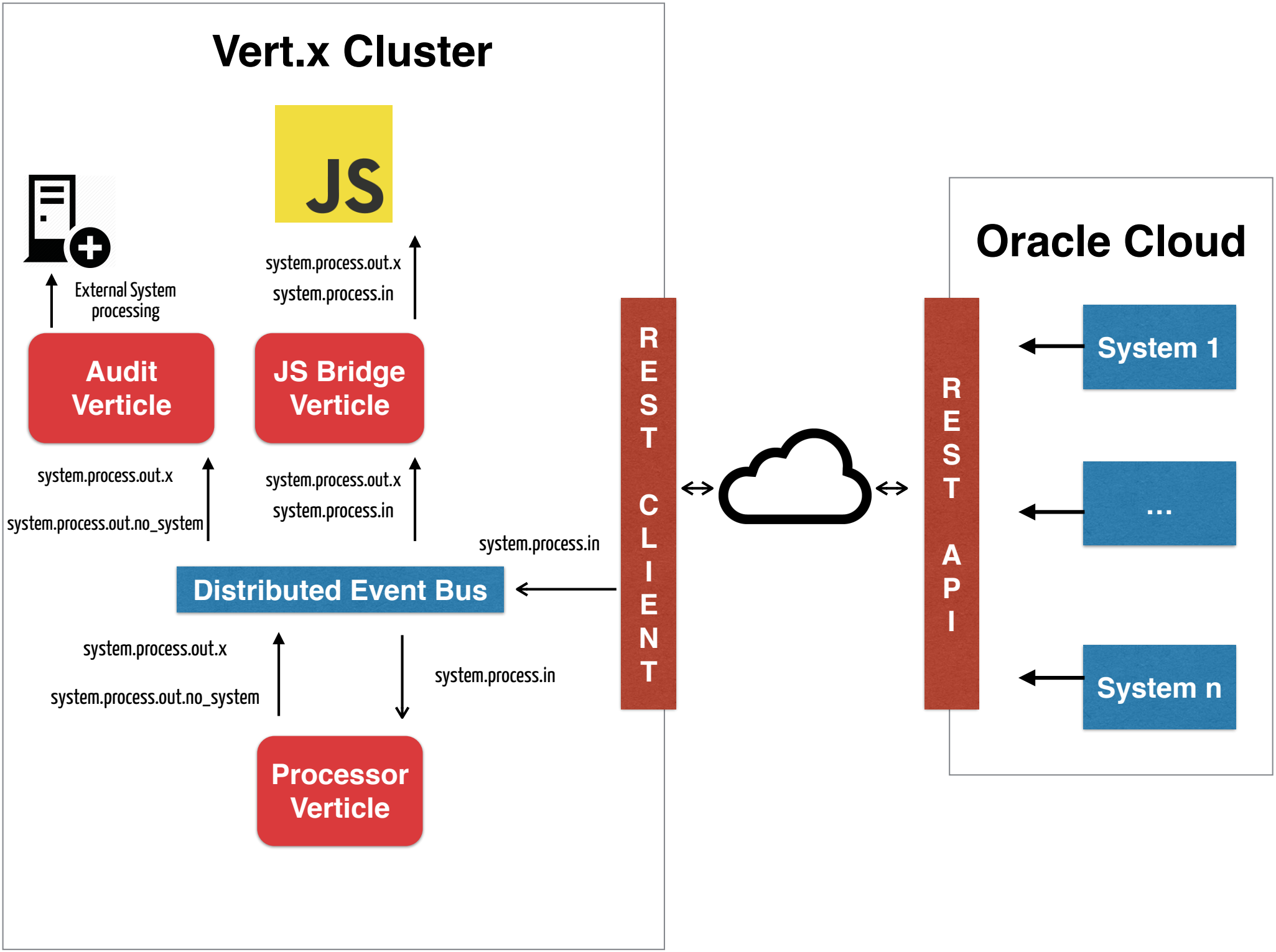
Vert.x Cluster
JS
External System processing
system.process.out.x
system.process.in
Audit Verticle
JS Bridge Verticle
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system.process.out.no_system
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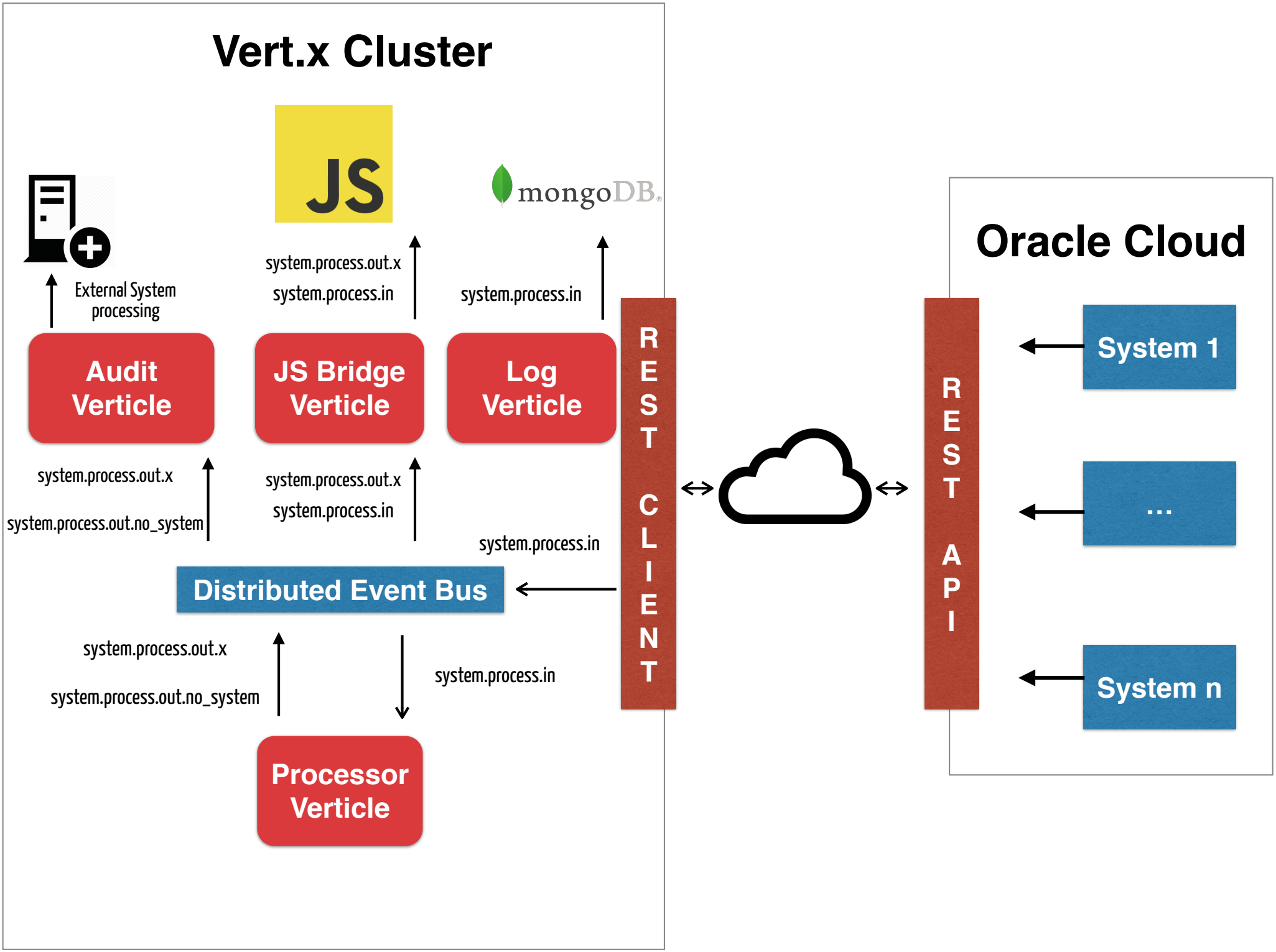
Vert.x Cluster
JS
mongoDB
External System processing
system.process.out.x
system.process.in
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Audit Verticle
JS Bridge Verticle
Log Verticle
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Vert.x talks

Obrigado

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