

DataStax



Setting up Apache Cassandra™ 4.0 locally in a Windows machine

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Nov 3rd, 2021

Welcome!



Apache Cassandra™ 4.0 officially removed support for the Windows OS.

- **Cassandra on Windows**

<https://www.datastax.com/blog/cassandra-and-windows-past-present-and-future>

Josh McKenzie, Dec 4 2014

The State of Cassandra on Windows



CASSANDRA-16171

Implemented in 4.0 beta

- Removed ***.bat** and ***.ps1** files.
- Issues cited were maintenance and test coverage.

DISCLAIMER



This presentation is **NOT** about getting Cassandra to run on Windows Server.

- This is all about local development on your workstation.



Have people been asking for this?



cassandra

'cassandra' not recognized - Windows

Fatal Java error on starting
Cassandra on Windows

Cassandra Server starting issue on Windows



stackoverflow

Can't start Cassandra on
Windows

How to install Cassandra on Windows?

Error in starting cassandra
in windows 10 PC

Cassandra executable not recognized in
Windows

Specs for today




- AMD A8-5500 Quad Core
- 8GB RAM
- WD Black 7200 RPM HD
- NVIDIA 9800GT 4GB



Solutions?



- Docker Desktop 
- VirtualBox + *fav Linux distro*
- WSL2 + *fav Linux distro*



minikube



- FOSS (Apache 2.0)
- Runs Kubernetes locally
- Uses Windows native Hyper-V
- Community Docker image of Apache Cassandra™



minikube



<https://minikube.sigs.k8s.io/docs/start/>

- The **.exe** installer takes care of the rest!



- Run Powershell **as Administrator!**
- Add your user to “hyper-v administrators”
- Optional: set up alias for `kubectl`:

```
alias kubectl="minikube kubectl --"
```



minikube



Start:

```
minikube start --memory 3072 --cpus=2
```

Verify:

```
minikube kubectl -- get pods -A
```



kubernetes



cassandra

Create a K8s service:

```
minikube kubectl -- apply -f cassandra-service.yaml
```

Create a K8s statefulset:

```
minikube kubectl -- apply -f cassandra-minikube_1node.yaml
```



kubernetes



cassandra

Verify:

```
minikube kubectl -- get svc cassandra
```

```
minikube kubectl -- get statefulset cassandra
```

```
minikube kubectl -- get logs cassandra
```

```
minikube kubectl -- exec -it cassandra-0 -- nodetool status
```



kubernetes



cassandra

Open up port 9042!!!

```
minikube kubectl -- port-forward service/cassandra 9042:9042
```

Port-forward runs in the foreground!



Powershell script:

https://github.com/aar0np/cassandra_minikube

start-cassandra-minikube.ps1



Accessing Cassandra w/ DBeaver Community

Sarma Pydipally:

<https://www.youtube.com/watch?v=zCHe3V50kVs>

- Connect w/ JDBC
- Build new connection using Simba Cassandra JDBC driver.
- Driver Manager, `com.simba.cassandra.jdbc42.Driver` class.

Astra DB

**The quickest way to implement your own
free Cassandra Dev cluster!**

Links & Resources

DS

DataStax

Astra: <https://astra.datastax.com/>



: <https://minikube.sigs.k8s.io/docs/start/>

Git : https://github.com/aar0np/cassandra_minikube

DS



Questions?