



ASP.NET with NoSQL Workshop

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- Install database (Couchbase)
- Hello, world .NET console application
- ASP.NET WebAPI RESTful services
- Angular UI



- Visual Studio 2017
- Couchbase Server 5.x
- node/npm/angular-cli
 - (or Postman / Fiddler / etc?)
- Source code
 - (or you can follow along and build from scratch)



Workshop 1 – Setting up Couchbase



- Installation locally
- Installation on cloud (Amazon / Azure)
- Installation with Docker
- Basic Configuration



Couchbase
DEVELOPER COMMUNITY

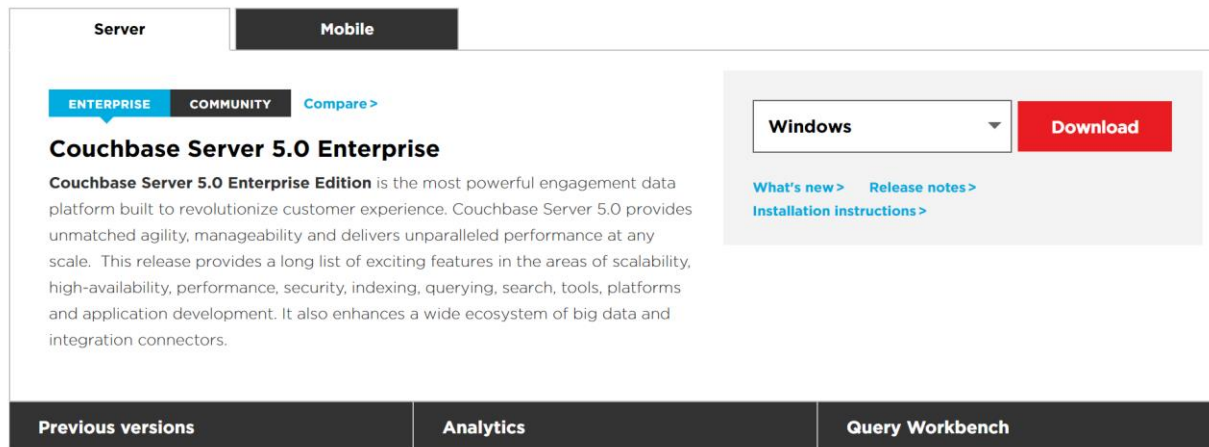


1.1 – Installing Couchbase Server

- <http://couchbase.com/downloads>
- USB thumb drive available

DOWNLOADS

The best way to learn is to download the software and try it out



The screenshot shows the Couchbase website's download section. At the top, there are tabs for 'Server' and 'Mobile', with 'Server' selected. Below these are tabs for 'ENTERPRISE' (highlighted in blue), 'COMMUNITY', and a 'Compare >' link. The main heading is 'Couchbase Server 5.0 Enterprise'. Below this is a paragraph describing the product as the most powerful engagement data platform. To the right, there is a dropdown menu set to 'Windows' and a red 'Download' button. Below the dropdown are links for 'What's new >', 'Release notes >', and 'Installation instructions >'. At the bottom, there are three dark grey buttons: 'Previous versions', 'Analytics', and 'Query Workbench'.

Server Mobile

ENTERPRISE COMMUNITY Compare >

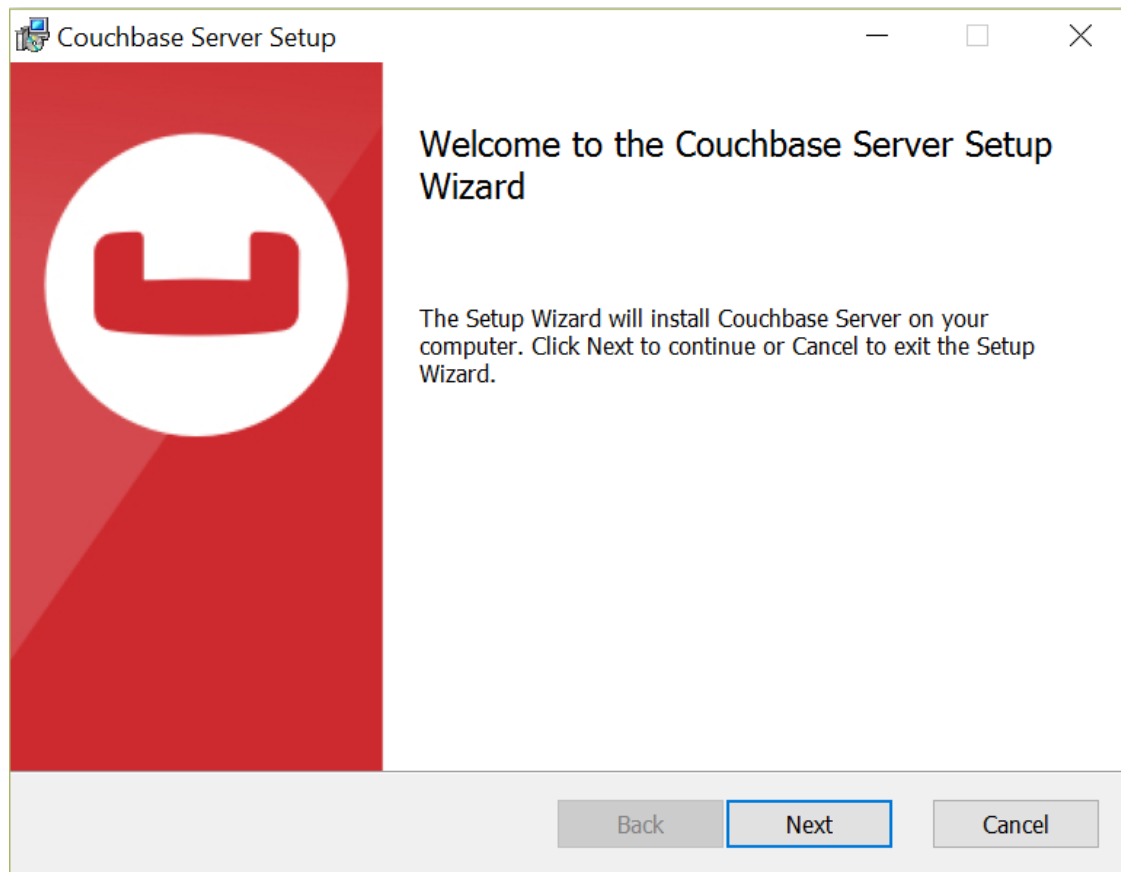
Couchbase Server 5.0 Enterprise

Couchbase Server 5.0 Enterprise Edition is the most powerful engagement data platform built to revolutionize customer experience. Couchbase Server 5.0 provides unmatched agility, manageability and delivers unparalleled performance at any scale. This release provides a long list of exciting features in the areas of scalability, high-availability, performance, security, indexing, querying, search, tools, platforms and application development. It also enhances a wide ecosystem of big data and integration connectors.

Windows Download

[What's new >](#) [Release notes >](#)
[Installation instructions >](#)

Previous versions Analytics Query Workbench




- <https://portal.azure.com>
- <https://azuremarketplace.microsoft.com/en-us/marketplace/apps/couchbase.couchbase-enterprise>

Microsoft Azure

- Why Azure
- Solutions
- Products
- Documentation
- Pricing
- Training
- Marketplace
- Partners
- Blog
- Resources

- Azure Marketplace
- Browse
- Sell
- Learn

Products > Couchbase Enterprise



Couchbase Enterprise

Couchbase

- Overview
- Plans

Couchbase Enterprise

Couchbase delivers NoSQL database technology for businesses focused on digital innovation. Organizations around the world choose Couchbase for its advantages in data model flexibility, elastic scalability, performance, and 24x365 availability to build enterprise web, mobile, and IoT applications. The Couchbase Data Platform includes Couchbase, Couchbase Lite -- the first mobile NoSQL database -- and Couchbase Sync Gateway. Couchbase is designed for global deployments, with configurable cross datacenter replication to increase data locality and availability. All Couchbase products are open source projects.

Couchbase customers include industry leaders like AOL, Amadeus, AT&T, Cisco, Comcast, Concur, Disney, Dixons, eBay, General Electric, Marriott, Nordstrom, Neiman Marcus, PayPal, Ryanair, Rakuten / Viber, Tesco, Verizon, Wells Fargo, as well as hundreds of other household names.

GET IT NOW

TEST DRIVE

What's Test Drive?

Test Drive duration
3 hours

Pricing information
[Cost of deployed template components](#)

Categories
[Compute](#)

- <https://aws.amazon.com/marketplace>

The screenshot shows the AWS Marketplace interface for Couchbase. At the top, the AWS Marketplace logo is on the left, and navigation links for 'Hello, matthew.groves@cou...', 'Your Account', 'Help', and 'Sell on AWS Marketplace' are on the right. Below the navigation bar is a search bar with 'Shop All Categories' and 'Search AWS Marketplace' dropdowns, a 'GO' button, and a 'Your Software' link. The main content area features the Couchbase logo and a detailed description of their data management capabilities. To the right, there's a section for 'Couchbase' with a link to their website and a list of products. Three product listings are visible: 'Couchbase Server Community Edition' (twice) and 'Couchbase Server Enterprise Edition (Gold)'. Each listing includes a Couchbase logo, a star rating, version information, and a brief description. The Enterprise Edition listing also includes a 'Free Trial' badge and pricing information.

awsmarketplace Amazon Web Services Home

Hello, matthew.groves@cou... (Sign out) Your Account Help Sell on AWS Marketplace

Shop All Categories Search AWS Marketplace GO Your Software

Couchbase

About Couchbase


Couchbase provides an unmatched lineup of data management capabilities built with Apache CouchDB document database technology, Memcached distributed caching technology and the Membase cluster management system. The Couchbase product family combines these capabilities creating software solutions that scale from large clusters down to mobile phones and tablets. The Couchbase team is a veritable NoSQL dream team. The leading contributors to the CouchDB, Membase and memcached open source projects form the backbone of the engineering team. With our unified resources, Couchbase will rapidly deliver increasingly innovative data management solutions, with zero compromises and unquestioned production readiness. Couchbase is headquartered in Mountain View, California, with development offices around the world. We are a privately held company funded by Accel Partners, Ignition Partners, Mayfield Fund, North Bridge Venture Partners and Redpoint Ventures. Our advisory board consists of the best and brightest minds from the database, open source and web application worlds.

Couchbase

Visit the Couchbase Website

Couchbase Products (8)

showing 1 - 8




Couchbase Server Community Edition

★★★★★ (0) | Version 4.0.0 | Sold by Couchbase, Inc

Couchbase Server is an open source NoSQL database, and its available in an enterprise edition. It is a scalable, high performance NoSQL database engineered to support AWS...

Linux/Unix, Amazon Linux 2014.03 - 64-bit Amazon Machine Image (AMI)




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Linux/Unix, Amazon Linux 2014.03 - 64-bit Amazon Machine Image (AMI)



Couchbase Server Enterprise Edition (Gold)

★★★★★ (0) | Version 4.5.0 | Sold by Couchbase, Inc


Starting from \$1.47/hr or from \$9,900.00/yr (up to 51% savings) for software + AWS usage fees

Couchbase Server is an open source NoSQL database, and it's available in an enterprise edition. It is a scalable, high performance NoSQL database engineered to support AWS...

Linux/Unix, Amazon Linux 2014.03 - 64-bit Amazon Machine Image (AMI)



- https://hub.docker.com/_/couchbase/
- couchbase:enterprise-5.0.0
- `docker run -d --name db -p 8091-8094:8091-8094 -p 11210:11210 couchbase:enterprise-5.0.0`
- `docker ps -a`

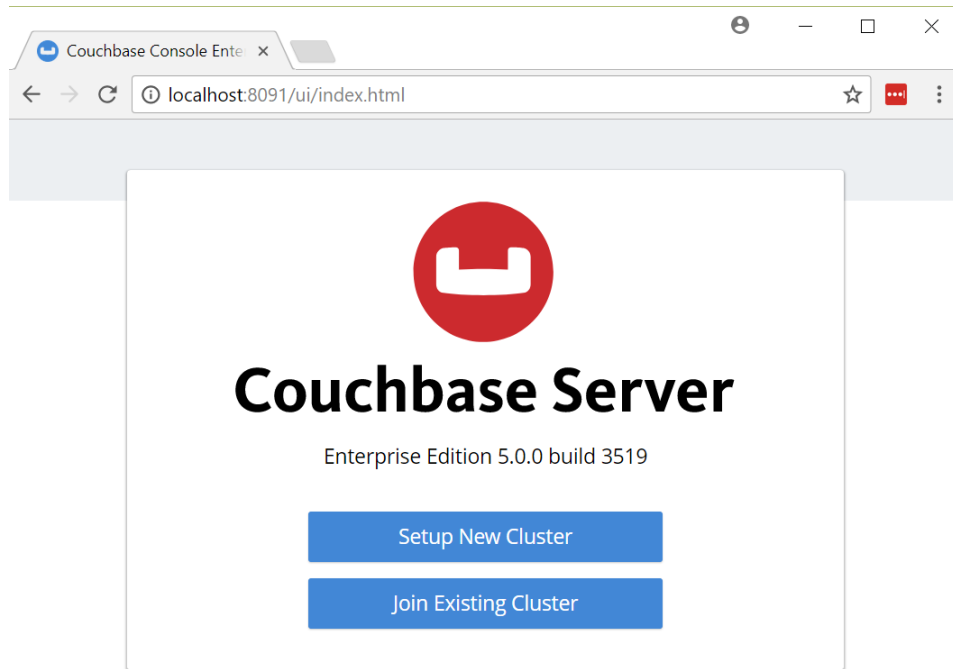
 Administrator: Windows PowerShell

```
PS C:\zproj\aspnet-nosql-workshop> docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
354f0d223be0	couchbase:4.6.1	"/entrypoint.sh co..."	26 seconds ago	Up 25 seconds	0.0.0.0:8091-8094->	db

```
PS C:\zproj\aspnet-nosql-workshop>
```

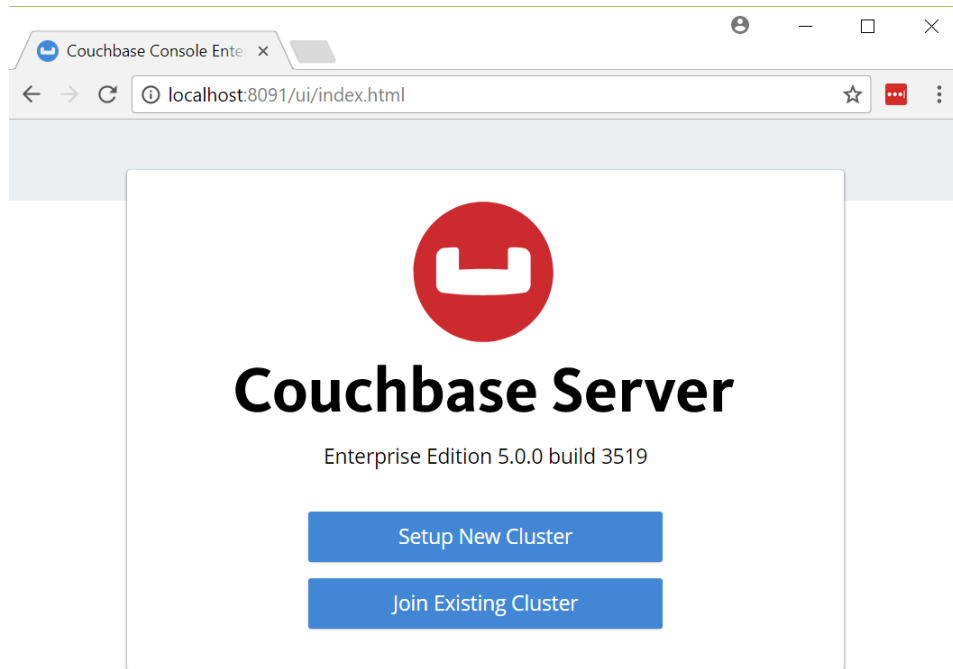
- <http://localhost:8091>







1.2 – Configuring Couchbase Server

- <http://localhost:8091>



 Couchbase > New Cluster

Cluster Name

Workshop 

Create Admin Username

Administrator

Create Password


.....

Confirm Password

.....

< Back

Next: Accept Terms

 Couchbase > New Cluster

Terms and Conditions Enterprise Edition
Couchbase Server must be licensed for use in production environments.


Couchbase Inc. Enterprise Subscription License Agreement

This Enterprise Subscription License Agreement ("Agreement") is made and entered into by and between Couchbase and Licensee, and sets forth the terms under which Licensee may use certain Couchbase software and/or receive certain consulting services under Orders governed by this Agreement.

Note that this Agreement cannot be changed without a mutually signed amendment. Couchbase will not in any way change the terms posted at the

☒ I accept the [terms & conditions](#) ☐ Register for updates

[< Back](#) [Finish With Defaults](#) [Configure Disk, Memory, Services](#)

 Couchbase > New Cluster / Configure

Host Name / IP Address

Usually localhost or similar

Data Disk Path

Path cannot be changed after setup

Free: 57 GB

Indexes Disk Path

Path cannot be changed after setup

Free: 57 GB

Couchbase Memory Quotas

Per service / per node

☒ Data Service

MB

☒ Index Service

MB

☒ Search Service

MB

☒ Query Service

TOTAL QUOTA 1536MB

RAM Available 16292MB

Max Allowed Quota 15268MB

Index Storage Setting

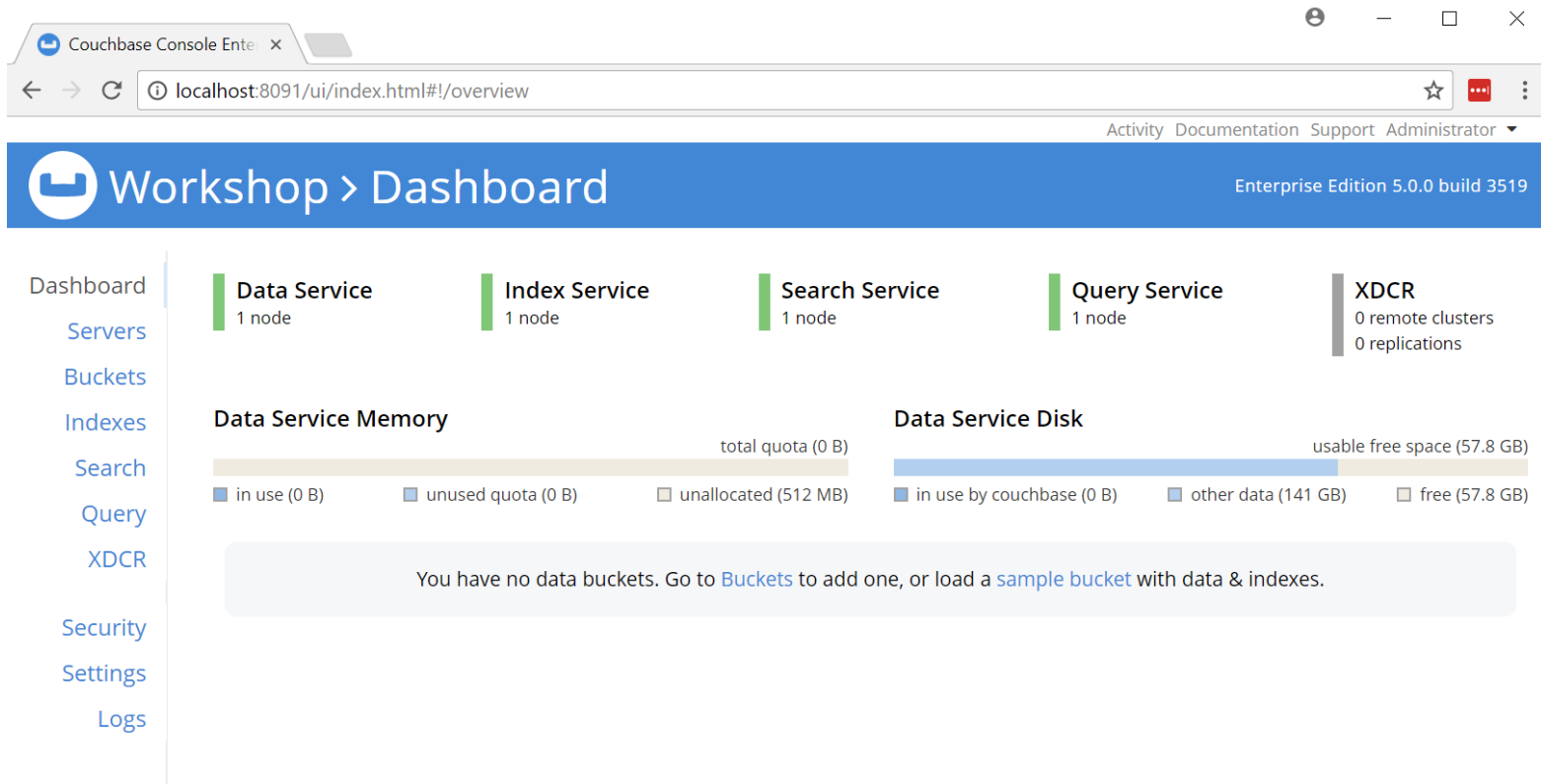
☒ Standard Global Secondary

☐ Memory-Optimized ⓘ

☒ Enable software update notifications in the web console

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Save & Finish



The screenshot shows the Couchbase Console Enterprise web interface. The browser address bar displays `localhost:8091/ui/index.html#!/overview`. The page header includes navigation links for Activity, Documentation, Support, and Administrator, along with the version information "Enterprise Edition 5.0.0 build 3519".

The main dashboard area features a sidebar on the left with links to Dashboard, Servers, Buckets, Indexes, Search, Query, XDCR, Security, Settings, and Logs. The central content area displays the status of various services:

- Data Service:** 1 node
- Index Service:** 1 node
- Search Service:** 1 node
- Query Service:** 1 node
- XDCR:** 0 remote clusters, 0 replications

Below the service status, there are two horizontal bar charts:

- Data Service Memory:** A bar chart showing memory usage. The total quota is 0 B. The bar is divided into three segments: in use (0 B), unused quota (0 B), and unallocated (512 MB).
- Data Service Disk:** A bar chart showing disk usage. The usable free space is 57.8 GB. The bar is divided into three segments: in use by couchbase (0 B), other data (141 GB), and free (57.8 GB).

A message box at the bottom states: "You have no data buckets. Go to [Buckets](#) to add one, or load a [sample bucket](#) with data & indexes."



Demo



Questions