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home of redis

# Microsoft AppFabric Replacement with Redis

## Quick Facts

- **Microsoft recommended:** Redis is the caching technology Microsoft recommends for all existing and new applications
- **Easy migration:** replacing the legacy cache with Redis is simple and can be accomplished without any design or logic changes–ask our customers
- **Full functional coverage:** Redis supports all of AppFabric's capabilities and more
- **Wide open source community:** Redis is an extremely popular open source project supported by a passionate community
- **On premises:** Redis Labs Enterprise Cluster (RLEC) delivers enterprise-grade Redis clusters with seamless scalability and true high availability
- **Cloud service:** Redis Cloud is a fully managed Redis-as-a-Service on Microsoft Azure and all other public clouds

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*"Redis' operational simplicity and high performance make it a huge asset in our infrastructure. Redis Labs' high availability and seamless scaling make our deployment truly enterprise grade"*

*"Only Redis Labs could meet our grueling requirements while providing operational simplicity and tremendous ease of deployment."*

**Brent Holliman, Director of Product Architecture**

# Redis is the Ideal Replacement for Your Legacy AppFabric Cache

The caching layer is a critical component in any system that needs to scale. Many applications rely on the cache for reducing response times to users, as well as for reducing the load on the supporting databases and storage.

Microsoft has announced that support for AppFabric will end on November 4th, 2017[1]. For your critical caching needs, it is best to take advantage of this to upgrade your caching technology to the best-in-class cache, database and message broker, Redis. Developers around the world depend on Redis, the most widely adopted in-memory NoSQL database, to deliver high performance (millions of operations/second at sub-millisecond latencies) with very little hardware.

## Moving away from AppFabric Cache

Microsoft's recommendation to AppFabric users is migrate to Redis[2]. Redis, the open source software, is the de-facto standard caching technology that powers a majority of the world's most popular applications. Redis' versatility, enabled by its data structures, reduces application complexity and resource consumption and fuels Redis usage as a database and message broker in addition to caching.

Migrating an application from AppFabric cache to Redis is simple with Redis Labs. Redis Labs' technology enhances open source Redis and delivers tangible operational benefits of high performance at lower costs, through hassle-free automated scaling, clustering, multi-zone high availability, auto-failover, continuous monitoring and 24x7 support. Our tremendous expertise with Redis deployments has helped many customers successfully make this move rapidly, with minimal interruption to their production environments.

## Migrating an ASP.NET Application to Redis

| | AppFabric Cache | Redis |
|---|---|---|
| Programming model | Client-server | Client-server |
| Scaling model | Cluster | Cluster |
| High availability | Replication | Replication |
| Expiration | Per item | Per item and more |
| Eviction | LRU | LRU and more |
| Tags | Supported | Supported |
| Concurrency model | Optimistic/pessimistic | Optimistic/pessimistic |
| Notifications | Supported | Supported |
| Security model | Signed encryption | Signed encryption* |

* TLS is part of the commercial products

[1] Microsoft AppFabric 1.1 for Windows Server Support Lifecycle Extension (reference)

[2] Microsoft AppFabric 1.1 for Windows Server Ends Support (reference)

Redis supports all of the cache semantics and features that AppFabric provides. Switching to using Redis usually requires changing the application's Output Cache provider to the open source Redis ASP.NET provider from Microsoft[3].

Once the Output Cache provider has been replaced, most applications need only a valid configuration (a Redis database) to complete the migration. In cases where the application code uses methods that are specific to AppFabric, a search-and-replace of the relevant lines of code is done in order to convert these to their respective Redis commands. No design or logic changes are needed, but utilizing Redis' data structures such as Sets, Sorted Sets, Hashes, Lists and more, can boost performance tremendously, so incorporating them where possible reduces application complexity and resource usage.

## Deploying and Managing Redis

Redis is a battle-tested, production-proven solution that is also extremely simple and easy to set up. The open source Redis project is commonly used in development stages and can be installed in under 5 minutes. For staging and production environments, our thousands of customers recommend deploying and managing Redis with the technology from Redis Labs.

Redis Labs' software and services deliver enterprise-grade Redis deployments for any scenario. Our technology makes creating and using highly-available, seamlessly scalable, high performance Redis databases a repeatable and minimum-risk effort. Our two main offerings are:


Redis Labs Enterprise Cluster (RLEC) is downloadable software for deploying enterprise grade, highly available and scalable Redis clusters with substantially lower operational costs compared to any other Redis deployment method. RLEC can be installed on premises and in any public or private cloud.


Redis Cloud is a fully-managed cloud service for hosting and running your Redis dataset in a highly-available and scalable manner, with predictable and stable top performance. Redis Cloud is available on AWS, Azure, GCP and IBM SoftLayer, as well as to users of Heroku, Bluemix, Azure Store, Pivotal Web Services and OpenShift.

## Take The First Step Now

Talk to a Redis Expert to learn how we can work together–contact expert@redislabs.com

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[3] ASP.NET Redis Providers (reference)