

Apache ZooKeeper

From Wikipedia, the free encyclopedia

Apache ZooKeeper is a software project of the Apache Software Foundation. It is essentially a distributed hierarchical key-value store, which is used to provide a distributed configuration service, synchronization service, and naming registry for large distributed systems.^[2] ZooKeeper was a sub-project of Hadoop but is now a top-level project in its own right.

ZooKeeper's architecture supports high availability through redundant services. The clients can thus ask another ZooKeeper leader if the first fails to answer. ZooKeeper nodes store their data in a hierarchical name space, much like a file system or a tree data structure. Clients can read from and write to the nodes and in this way have a shared configuration service. ZooKeeper can be viewed as an atomic broadcast system, through which updates are totally ordered. The ZooKeeper Atomic Broadcast (ZAB) protocol is the core of the system.^[3]

ZooKeeper is used by companies including Rackspace, Yahoo!,^[4] Odnoklassniki, Reddit^[5], NetApp SolidFire^[6] and eBay as well as open source enterprise search systems like Solr.^[7]

Contents

- 1 Typical use cases
- 2 See also
- 3 References
- 4 External links

Typical use cases

- Naming service
- Configuration management
- Synchronization
- Leader election
- Message Queue
- Notification system

See also

- Hadoop

References

1. "Apache ZooKeeper - Releases"(<https://zookeeper.apache.org/releases.html>). Retrieved 21 April 2017.
2. "Index - Apache ZooKeeper - Apache Software Foundation"(<https://cwiki.apache.org/confluence/display/ZOOKEEPER/>). *cwiki.apache.org*. Retrieved 2016-08-26
3. "Zookeeper Overview"(<https://cwiki.apache.org/confluence/display/ZOOKEEPER/ProjectDescription>)

Apache ZooKeeper

Developer(s)	Apache Software Foundation
Stable release	3.4.10 / March 30, 2017 ^[1]
Preview release	3.5.3-beta / April 17, 2017 ^[1]
Written in	Java
Operating system	Cross-platform
Type	Distributed computing
License	Apache License 2.0
Website	zookeeper.apache.org

4. "ZooKeeper/Powered By"(<http://wiki.apache.org/hadoop/ZooKeeper/PoweredBy>)
5. "Why Reddit was down on Aug 1" (https://www.reddit.com/r/announcements/comments/4y0m56/why_reddit_was_down_on_aug_1/).
6. "5 Big DaaS Challenges and How to Overcome Them | NetApp Newsroom"(<https://newsroom.netapp.com/blogs/5-big-daas-challenges-and-how-to-overcome-them/>)*NetApp Newsroom*. 2016-06-20. Retrieved 2017-05-24.
7. "SolrCloud" (<https://cwiki.apache.org/confluence/display/solr/SolrCloud>)

External links

- Official website
- Article in [highscalability.com](#)
- Software Development Times article of ZooKeeper moving to Apache
- Eclipse ECF Discovery based on Apache ZooKeeper

Retrieved from "https://en.wikipedia.org/w/index.php?title=Apache_ZooKeeper&oldid=783960188"

Categories: [Apache Software Foundation](#) | [Configuration management](#)
| [Free software programmed in Java \(programming language\)](#) | [Hadoop](#)

-
- This page was last edited on 5 June 2017, at 18:08.
 - Text is available under the Creative Commons Attribution-ShareAlike License; additional terms may apply. By using this site, you agree to the Terms of Use and Privacy Policy. Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a non-profit organization.