TRAINING COURSE: MARIADB XPAND

This course will help experienced database administrators learn how to operate MariaDB Xpand, our distributed SQL database. Students will learn how to install and operate MariaDB Xpand and perform basic DBA tasks such as importing data, performing backups and upgrades and adding/removing nodes. Students also gain hands-on experience via lab exercises that include installing a MariaDB Xpand cluster, importing data and managing the cluster.

COURSE HIGHLIGHTS

Students will learn a wide range of skills related to MariaDB Xpand, including the following:

- List MariaDB Xpand's high-level architectural components
- Discuss Xpand's scaling characteristics, and the pros and cons of non-Xpand scaling approaches
- Explain Xpand's approach to data distribution and query execution, and the Xpand storage hierarchy, from table down to replica
- Compare common Xpand deployment types: Performance topology, Storage Engine topology, and deployment on MariaDB SkySQL – and know how to choose the best deployment for a given application
- Describe best practices and steps for upgrading from an earlier Xpand version
- Stop and start an Xpand cluster
- Add nodes to the cluster and drop nodes from the cluster
- Understand how and when to either soft-fail nodes or drop nodes
- Discuss the importance of even distribution of data across the cluster, and the role of the rebalancer in maintaining even data distribution
- Describe the various actions the rebalancer can take to optimize data distribution
- Explain best practices for importing data and managing users and permissions in MariaDB Xpand
- Demonstrate how to migrate users and permissions from MariaDB Server to MariaDB Xpand using the `clustrix_clone_users` utility
- Demonstrate how to export data from MariaDB Server to MariaDB Xpand using `clustrix_import`
- Compare and contrast Xpand fast backup and `mariadb-dump`
- Recognize the monitoring and diagnostic tools available, and understand diagnostic queries and tool output
- Understand Xpand's behavior during node failures and how data is protected

Formats: In-person course, live virtual, or on-demand course

Length: 2 days (6.5-hour sessions); self-paced for on-demand course

Prerequisites:

- ☐ Experience working with a relational database (e.g. MariaDB, Oracle, MySQL, PostgreSQL, Microsoft SQL Server)
- ☐ Experience working in the Linux operating system
- ☐ Familiarity with basic Linux server configuration tasks

Recommendation:

- ☐ Experience working with distributed systems – either databases or clustering technologies

LIVE LEARNING: ONLINE AND ON-SITE

MariaDB offers flexible training options so your team can learn the way that works best for them: online or on-site. The most popular option is the virtual classroom, where the course is delivered in a live virtual setting using technology such as Zoom. An instructor will speak during the class through an audio feed and will share screens on their computer, including a slide presentation and a terminal window. Students can interact with the instructor and other students via a text-chat interface and through their audio feeds. A copy of the slide presentation and lab exercises workbook will be provided so students may annotate them during class.

READY TO START LEARNING?

Register now or contact us to schedule an in-person class.