

RE-THINKING PRODUCT ADOPTION THROUGH DOCUMENTATION DESIGN

By Pedro MC Fernandes at  PERCONA

PEDRO

- A father and a lover
- Living in greater Lisbon, Portugal
- Hands-on creator inspired by arts
- Experience with 0-1 projects +
eCommerce + operations
- All-round designer
- Product designer at Percona
- Generalist contributor in FOSS





- Freedom to choose ethos
- Provider of open-source database services, support, and software

Known for

- Open-source, drop-in replacements for **PostgreSQL/MySQL/MongoDB**
- **Percona Toolkit** command-line tools
- **PMM** database monitoring tools
- Cloud-native database **Operators**



RE-THINKING PRODUCT ADOPTION THROUGH DOCUMENTATION DESIGN

Why would we?

MOTIVATIONS

- Databases for everyone
- Promote independence
- More and better contributions
- Optimization of Support
- Don't break the bank



**DATABASES = HARD
SOFTWARE = HARD
DESIGN = HARD**

Technical, complex, costly

Error 404: Design culture not found

Rapid software ≠ Rapid UX



**We'll ask for estimates
and then treat them as
deadlines**

While we create something better in-product,
what else could we do **now**?

Imagine assembling this...

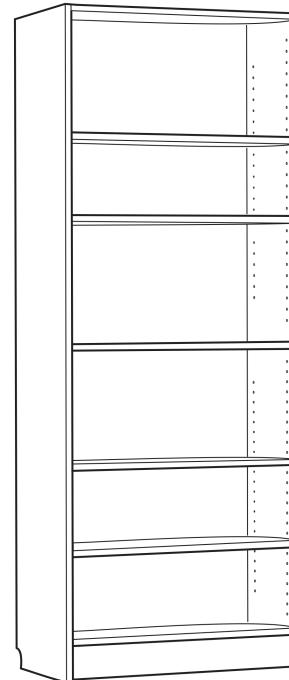


By only guessing



With documentation, we
can promote the adoption
and good use of products.

BILLY



IKEA
Design and Quality
IKEA of Sweden

With databases, even if you're an expert,
you must keep the documentation tab open.

INSTALL

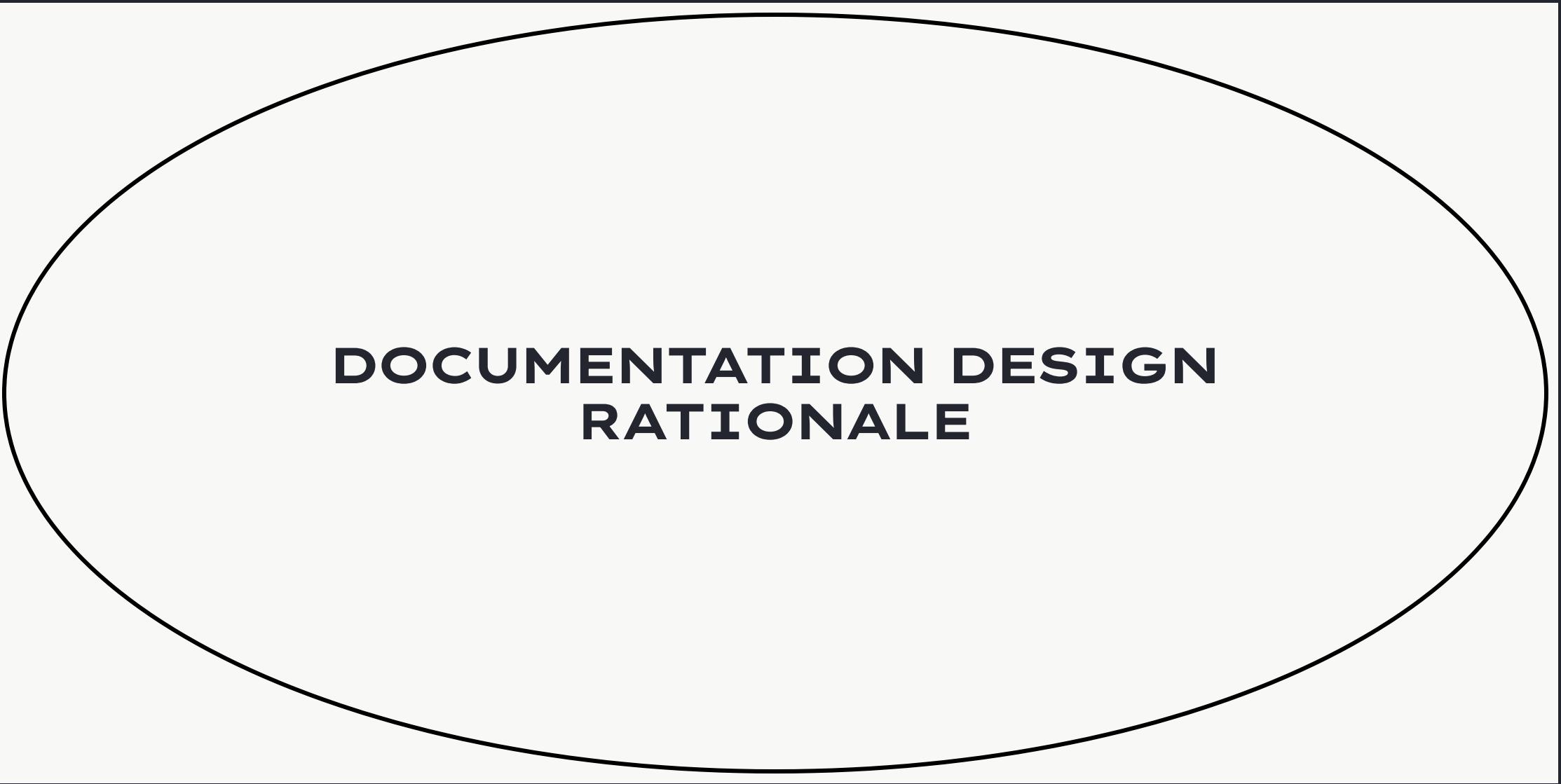


DEVELOP



UPKEEP





DOCUMENTATION DESIGN RATIONALE

DEFINE A STRATEGY

Who's reading our documentation?

How can it help them and us achieve our goals?

How do we know if it is helping?



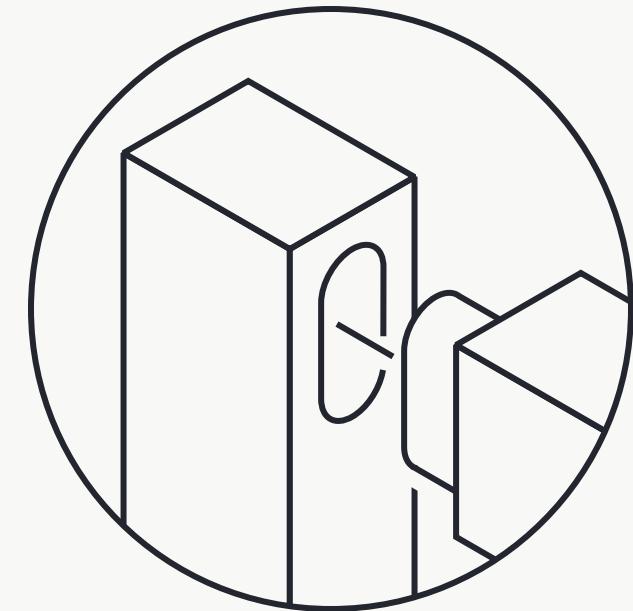
We want documentation to reach out to more **developers** interested in open-source databases for their applications so that adoption increases through more **installations**, proper **retention**, and evident **ease of use**.

ESTABLISH CO-OWNERSHIP

Who could help?

Where's the knowledge?

Who could share responsibilities?

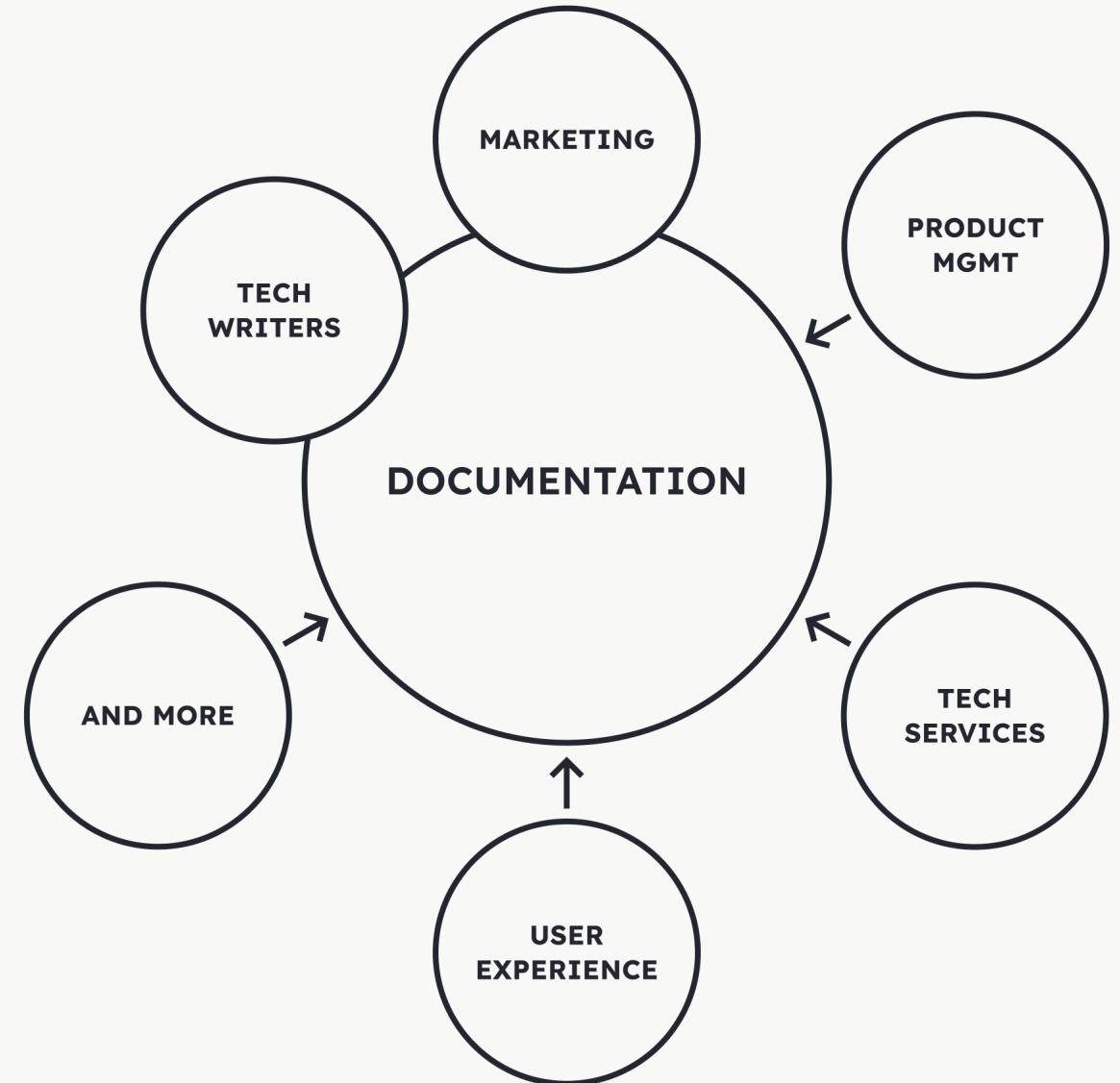


Kept

- Creation of content • Management
- Data analysis

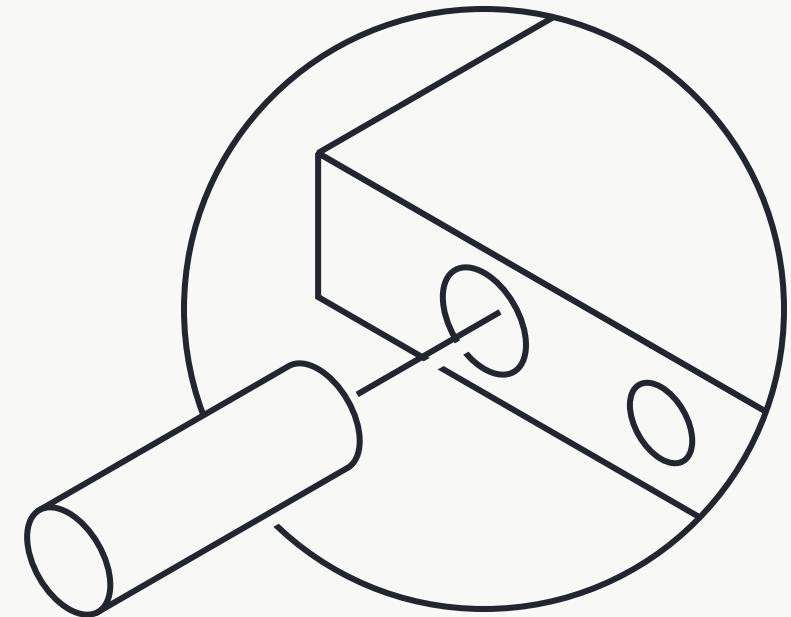
Added

- Speed • Visibility • Openness
- User's POV • Horizontal communication
- New methods • New tools



BOOST CLARITY

Is the content accessible to people?
Does it provide intuitive access to their needs?
Are there untapped opportunities?



Version 0.6.0 of the Percona Operator for MySQL is a **tech preview release** and it is **not recommended for production environments**. As of today, we recommend using Percona Operator for MySQL based on Percona XtraDB Cluster, which is production-ready and contains everything you need to quickly and consistently deploy and scale MySQL clusters in a Kubernetes-based environment, on-premises or in the cloud.



Percona Operator for MySQL based on Percona Server for MySQL

Welcome

Upgrade Database and Operator



Table of contents

Upgrading the Operator and CRD

Manual upgrade

Upgrade via helm

Upgrading Percona Server for MySQL

Manual upgrade

Automated upgrade

More on upgrade strategies

Features

Quickstart guides

Installation

Configuration and Management

Backup and restore

Upgrade Database and Operator

Application and system users

Anti-affinity and tolerations

Labels and annotations

Changing MySQL Options

Load Balancing with HAProxy

MySQL Router Configuration

Exposing the cluster

Transparent Encryption (TLS)

Starting from the version 0.6.0, Percona Operator for MySQL based on Percona Server for MySQL fully supports upgrades to newer versions. The upgradable components of the cluster are the following ones:

- the Operator;
- Custom Resource Definition (CRD),
- Database Management System (Percona Server for MySQL).

The list of recommended upgrade scenarios includes two variants:

- Upgrade to the new versions of the Operator and Percona Server for MySQL,
- Minor Percona Server for MySQL version upgrade without the Operator upgrade.

Upgrading the Operator and CRD



Note

The Operator supports **last 3 versions of the CRD** including the newest one, so it is technically possible to skip upgrading the CRD and just upgrade the Operator. If the CRD version is one of these, you will be able to continue using the old CRD and even carry on Percona Server for MySQL minor version upgrades with it. But the recommended way is to update the Operator and CRD.



Tweaked

- Applied readable fonts
- Added spacing
- Increased chromatic contrast
- Increased reading contrast (headings Vs. running text blocks)
- On-brand re-styling

BEFORE

The screenshot shows the 'Percona Operator for MySQL 0.6.0 (2023-09-05)' documentation page. The header includes the Percona logo, title, a 'Search' bar, and a navigation bar with links like 'About', 'Installation', 'How to', 'Backup and Restore', 'Security', 'Storage Engines', 'Troubleshoot', 'Reference', and 'Installing PMM'. The main content area has a dark blue background with white text. It features a sidebar with sections like 'Welcome', 'Features', 'Quickstart guides', 'Installation', 'Configuration and Management', 'Troubleshooting', 'Reference', and 'Release Notes'. The main content includes a 'Highlights' section with bullet points about Smart Upgrade functionality and HAProxy load balancer support, and a 'New features' section listing K8SPS-283 and K8SPS-160. A 'Table of contents' sidebar on the right lists 'About', 'Highlights', 'New features', 'Improvements', 'Bugs Fixed', 'Deprecation and removal', and 'Supported Platforms'.

AFTER

The screenshot shows the 'Latest Release 8.0.33-25' documentation page. The header includes the Percona logo, title, a 'Search' bar, and a navigation bar with links like 'About', 'Installation', 'How to', 'Backup and Restore', 'Security', 'Storage Engines', 'Troubleshoot', 'Reference', and 'Installing PMM'. The main content area has a light blue background with dark blue text. It features a sidebar with sections like 'About', 'Features', 'Release Notes', and 'Latest Release 8.0.33-25'. The main content includes a 'New features' section with a bullet point about PS-8188, a 'Bug fixes' section with a list of issues like PS-8647 through PS-8747, and a 'Useful links' section with links to GitHub and product downloads. A 'Table of contents' sidebar on the right lists 'About', 'Release highlights', 'New features', 'Bug fixes', 'Useful links', and 'Get expert help'.

Added

- Guidelines and resources to place icons, buttons, dividers, and tabs
- Guidelines to flag critical bits of content and decision-making points

BEFORE

The screenshot shows a documentation page for the Percona Operator for MySQL. The top navigation bar includes links for 'About', 'Installation', 'How to', 'Backup and Restore', 'Security', 'Storage Engines', 'Troubleshoot', 'Reference', and 'Installing PMM'. A search bar and a user profile icon are also present. The main content area features a title 'Install Percona Server for MySQL on Google Kubernetes Engine (GKE)'. Below the title is a 'Prerequisites' section with instructions for using Google Cloud Shell or a local shell. It also includes sections for 'System Requirements' (specifically 'Install on Google Kubernetes Engine (GKE)'), 'Install on Amazon Elastic Kubernetes Service (AWS EKS)', 'Generic Kubernetes installation', 'Configuration and Management', 'Troubleshooting', 'Reference', and 'Release Notes'. A 'Note' section at the bottom contains a note about using the gcloud tool. A 'Table of contents' sidebar on the right lists topics like 'Create and configure the GKE cluster', 'Install the Operator and deploy your MySQL cluster', 'Verifying the cluster operation', 'Troubleshooting', and 'Removing the GKE cluster'.

AFTER

The screenshot shows a documentation page for Percona Server for MySQL. The top navigation bar includes links for 'About', 'Installation', 'How to', 'Backup and Restore', 'Security', 'Storage Engines', 'Troubleshoot', 'Reference', and 'Installing PMM'. A search bar and a user profile icon are also present. The main content area features a title 'Quickstart Guides'. Below the title is a 'Quickstart Guides' section with a list of installation methods: 'Install via apt', 'Install via yum', 'Kubernetes', 'Docker', 'Manual Download', 'Post-installation tips', 'Upgrade', and 'Downgrade'. A 'Package Manager' section is highlighted with a blue background. A note below the guides says, 'If you're on Ubuntu or Debian, use apt for convenience. On the other hand, if you're on Red Hat Enterprise Linux or CentOS, you can easily use yum.' A 'Install via apt' button is shown. The 'Table of contents' sidebar on the right lists topics like 'Install via apt', 'Install via yum', 'Next steps', and 'Get expert help'.

Extended

- New custom components
- Use of more out-of-the-box components

The screenshot shows a documentation page for "Uninstall". The top navigation bar includes links for About, Installation (which is underlined), How to, Backup and Restore, Security, Storage Engines, Troubleshoot, Reference, and Installing PMM. A search bar and a user profile icon are also present.

The main content area has a sidebar on the left with links: Installation, Quickstart Guides, Install via apt, Installation guide, Run/Stop, apt Pinning, Uninstall (which is bolded), Install via yum, Kubernetes, Docker, Manual Download, Post-installation tips, Upgrade, and Downgrade. Two arrows point from the "Uninstall" link in the sidebar to the "Get expert help" section at the bottom right.

The "Get expert help" section contains the following text:

Either remove the packages.
\$ sudo apt remove percona-server\

This will leave the data files (databases, tables, logs, configuration, etc.) behind. If you don't need them, you must remove them manually.

Or purge the packages and delete data files.
\$ sudo apt purge percona-server\

Warning: This command removes all the packages and deletes all the data files (databases, tables, logs, and so on.).

At the bottom of the page, there is a "Was this page helpful?" section with up and downvote icons, and a footer with copyright information and a Material for MkDocs note.

IMPROVE THE USER EXPERIENCE

What can we do for people?

How might we anticipate their needs?

How can we make them succeed?



Invested in

- Understanding people's needs
- Experimenting
- Creating guidelines
- Forming quickstart guides
- Visual prominence for what matters the most

The screenshot shows a navigation bar with links for About, Installation (which is underlined), How to, Backup and Restore, Security, Storage Engines, Troubleshoot, Reference, and Installing PMM. Below the navigation is a search bar and a user profile icon.

The main content area has a sidebar with sections like Installation, Quickstart Guides, Install via apt, and a expanded "Installation guide" section containing Run/Stop, apt Pinning, Uninstall, Install via yum, Kubernetes, Docker, Manual Download, Post-installation tips, Upgrade, and Downgrade.

The main content area starts with a note about updating apt repositories and installing curl. It then lists five numbered steps:

- 1 The first step is downloading the `percona-release` repository package:

```
$ curl -O https://repo.percona.com/apt/percona-release_latest.generic_all.deb
```
- 2 Install the downloaded package with `apt` as root or with `sudo`, and then refresh the local cache to update the package information:

```
$ sudo apt install gnupg2 lsb-release ./percona-release_latest.generic_all.deb  
$ sudo apt update
```
- 3 Use `percona-release` to set up the repository for the Percona Server for MySQL 8.0 version:

```
$ sudo percona-release setup ps80
```
- 4 Install the server package with the `percona-release` command:

```
$ sudo apt install percona-server-server
```
- 5 It should now be installed! Percona Server runs automatically after installation. To control the

On the right side of the page, there are "Table of Contents", "Install the repository", "Improvement (option)", "Install", and "Get experience" links.

We crafted journeys and woven them together so we could guide people into **discovering the value** of our software.



The screenshot shows the Percona Server for MySQL homepage. The header includes a navigation menu, a search bar, and a toggle switch. The main title is "Percona Server for MySQL". Below the title, there's a brief introduction: "Percona Server for MySQL is a high-performance, open-source drop-in replacement for MySQL. It allows you to enhance your database with superior performance, scalability, availability, and enhanced backups and is trusted by enterprises for demanding workloads." A section titled "Starting with Percona Server for MySQL is easy. Follow our documentation guides, and you'll be set up in a minute." is followed by two call-to-action buttons: "Quickstart Guides →" and "Production Requirements →".

Percona Server for MySQL

Percona Server for MySQL is a high-performance, open-source drop-in replacement for MySQL. It allows you to enhance your database with superior performance, scalability, availability, and enhanced backups and is trusted by enterprises for demanding workloads.

Starting with Percona Server for MySQL is easy. Follow our documentation guides, and you'll be set up in a minute.

Installation guides

Want to see it for yourself? Get started quickly with our step-by-step installation instructions.

[Quickstart Guides →](#)

Top-notch security

Rest assured! Learn more about our security features designed to protect your valuable data.

[Security Measures →](#)

Smooth your deployment

Discover the requirements to start with Percona Server for MySQL production.

[Production Requirements →](#)

Troubleshooting and Q&A

Our comprehensive resources will help you overcome challenges, from everyday issues to specific doubts.

[Troubleshoot and Q&A →](#)

Quickstart Guides

```
$ sudo percona-release setup ps80
```

You can check the repository setup for the Percona original release list in `/etc/apt/sources.list.d/percona-original-release.list`.

- 4 Install the server package with the `percona-release` command:

```
$ sudo apt install percona-server-server
```

For more information on `percona-release` command see [Configuring Percona Repositories](#).

- 5 It should now be installed! Percona Server runs automatically after installation. To control the service, learn how to [Stop/Run Percona Server](#).

Next steps

Want to quickly test Percona Server for MySQL? Navigate into our easy-to-follow guide below, so you can understand the power of fast and performant databases with Percona.

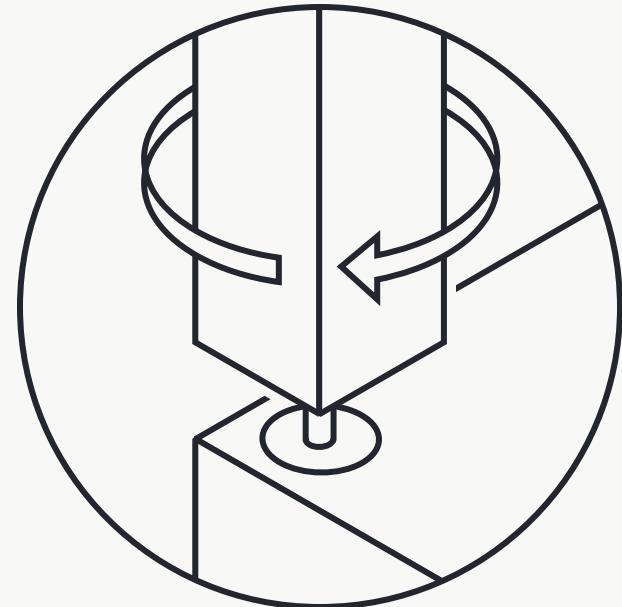
[Create a database →](#)

Here are a few other useful topics to continue venturing into Percona Server:

- Follow our [Prepare for production guide](#) to run a robust and scalable enterprise-grade database.
- Check if you want to [change the storage engine](#).

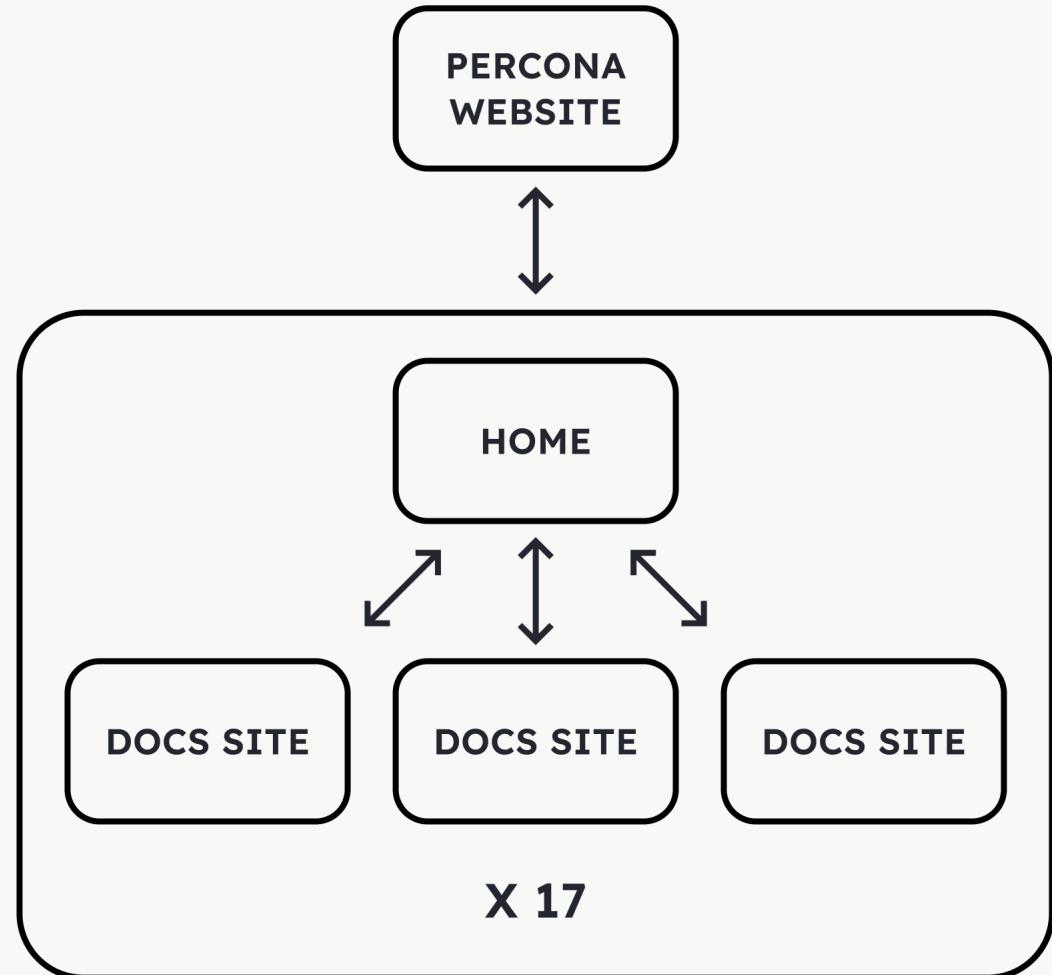
UNIFY THE EXPERIENCE

Imagine using the documentation.
How does it look? How might we improve it?
Does it feel whole and credible?





X 17



X 17

OPEN-SOURCE DATABASES

Learn how to set up Percona's open-source solutions for your database needs. Pick your favorite technology to access our step-by-step guidance and documentation.



Percona for PostgreSQL

All Percona software for PostgreSQL databases documentation.



Percona for MongoDB

All Percona software for MongoDB databases documentation.



Percona for MySQL

All Percona software for MySQL databases documentation.

CLOUD-NATIVE DATABASES

Leverage the power of modern open-source databases on the cloud with Percona solutions for PostgreSQL, MongoDB, and MySQL. Click to start



Percona Everest

Documentation for Percona's private database-as-a-service open-source software.

OVERVIEW

- Defined a strategy for the documentation
- Established the co-ownership
- Made it clearer and accessible
- Improved the user experience
- Unified documentation websites' experience

TO DO

- How users are experiencing
- Review outdated content
- Weed out inconsistencies
- Add practical examples/recipes



THANK YOU!

Re-thinking product adoption through documentation design

By Pedro MC Fernandes at  PERCONA

pedro@pmcf.xyz

freenandes@mastodon.social

Rendered with [Marp](#) and [Lexend](#)