TIPSHEET Percona Monitoring and Management

3 Top Tips to Start Using Percona Monitoring and Management

Percona Monitoring and Management (PMM) is an open-source database monitoring and management tool. It works with community and enterprise versions of MySQL, MariaDB, MongoDB, and PostgreSQL no matter where they are deployed.

Our top tips highlight important features that you can utilize to get the most out of PMM from the very beginning!

TIP - 01 Configure PMM Client to Meet Your Business Needs

Add Databases For Monitoring

Getting PMM configured is simple. Just <u>follow these quick steps</u> to add databases for monitoring, or jump ahead to one of these technologies:

- MySQL
- ProxySQL
- PostgreSQL
- MongoDB

Once you've got Percona Monitoring and Management <u>downloaded</u> and <u>installed</u>, you should ensure it is correctly configured to monitor the databases you need.

PMM Admin Settings

Percona Monitoring and Management admin users can <u>configure general settings</u> in relation to:

- Metrics resolutions
 - » The PMM default resolution setting is to pull data every five seconds. Resolution can be set higher to enable better troubleshooting insights, but be aware this requires more storage.
- Data retention
 - You should consider how much space you should allocate for the PMM Server. For example, an environment with 46GB / 25 hosts / 8 days = ~230MB/host/day or ~6.9GB/host/30 day retention period. Every environment is different and storage allocation will directly relate to what you choose to enable.

TIP - 02 Familiarize Yourself with PMM Dashboards

The power of Percona Monitoring and Management is in its diagnostics and troubleshooting capabilities. Once an issue is identified and alerted, PMM provides the tools necessary to perform root cause analysis (RCA). PMM helps you get to the bottom of the issue, and enables you to develop a plan of attack to bring the database environment back to stability. By utilizing PMM's optimization functionality, you should be able to avoid the same issue occurring in future. PMM's out of the box functionality includes numerous dashboards to perform RCA, remedy the issue, and optimize the database. These include:

MySQL Instances Overview Dashboard

This dashboard compares your running MySQL instances against each other to look for behavior outliers when comparing their workloads. You can select the appropriate data source under node name to view metrics on a per-server basis, including a visualized health check on:

- Connection/network details
- Total number of services running
- CPU usage

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MySQL Replication Summary Dashboard

Replication lag times can cause confusing behavior within your application. Here you can view replication lag in comparison to your target. Replication metrics available include:

- Whether threads are running
- Any existing replication errors
- Replication <u>lag times</u>



MySQL Table Details Dashboard

This provides a detailed view of table data, allowing you to see metrics, including:

- Table size data by row count and size on disk
- Total database size
 - » How large your data set is as a whole over time
 - » Determine how fast your database is growing to plan for costs
- Auto increment usage
 - » Determine when to increase the integer type to store in order to avoid issues resulting from hitting max values/being full.

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TIP - 03 Utilize Customizations within PMM

To make the most of PMM, Percona recommends customizing dashboards to align with your organization's measurements for success. This means you can monitor the metrics critical to your business, and leverage the diagnostic and troubleshooting tools to gain important information.

- Build your own custom dashboards utilizing Grafana. For example, <u>read</u> how Percona CEO, Peter Zaitsev created a dashboard to see which resource is a bottleneck and which queries contribute the most to usage in order to optimize or eliminate them.
- Customize SQL queries to create meaningful metrics from the data you are collecting that is unique to your organization.
- Use external exporters to link to other existing services, such as Cassandra, to bring additional data into the PMM tool. This gives you the ability to have information about all of your open source database technologies in one central location, providing better overall observability.

If you need any further information on Percona Monitoring and Management you can find this on our <u>website</u>. You can also visit our <u>blog</u> for more detailed practical and technical insights.



Contact Us

Percona Support services are accessible 24x7x365 online or by phone to provide assistance with issues and help you keep your databases running optimally.

We can provide onsite or remote Percona Consulting for current or planned projects, migrations, or emergency situations. Every engagement is unique and we work alongside you to plan and create the most effective solutions for your business.

Percona Managed Services can support and help you manage your existing database infrastructure; whether hosted on-premise, or at a co-location facility, or if you purchase services from a cloud provider or database-as-a-service provider.

To learn more about how Percona can help, and for pricing information, please contact us at +1-888-316-9775 (USA), +44 203 608 6727 (Europe), or email us at sales@percona.com.