Architecture

In technical terms, SQL DM for MySQL is basically a very low footprint web server. As such it has much in common with popular web-servers like Apache, IIS, Lighttpd etc., but there are also important and significant differences.

SQL DM for MySQL is a dedicated and specialized server program for collecting and storing information concerning MySQL servers and the systems on which they are installed. You can not use it to display your own webpage. It is 'locked' to display the pages that SQL DM for MySQL program is designed for.

> ⊘ SQL DM for MySQL is basically a low footprint web server that is optimized for Monitoring MySQL servers.

SQL DM for MySQL uses state-of-the-art web technology

These pages use AJAX (Asynchronous JavaScript and XML) to communicate with SQL DM for MySQL server. With AJAX, it is possible to generate pages that are divided into small independent objects that are updated individually when required. This reduces the bandwidth consumption as compared to traditional method of reloading the whole page. And well-designed AJAX pages provide a much more pleasant user experience than traditional HTML pages. You can display and compare as many MySQL servers simultaneously as you want. It is handled by the browser itself. Also, you will need not reload the page to display the latest data. Each of the small HTML objects in SQL DMfor MySQL AJAX pages refresh automatically when new data are available. And this refresh is done independently for every MySQL server that is displayed. Actually, this refresh happens at the server level which means for "Server A" interval is 15 seconds to collect server data and for "Server B" it is 10 minutes, then the respective display of data for every server refreshes after that interval.

SQL DM for MySQL is configurable using the de-facto web scripting language: JavaScript

SQL DM for MySQL also includes an embedded JavaScript (JS) engine - not unlike most modern browsers. In fact, the entire SQL DM for MySQL "application logic" like defining threshold values, calculating performance metrics, and sending alerts are defined as JS objects. The complete source code of these JS objects is available to the user for customization. The JavaScript objects are fully editable, extensible, and configurable.

SQL DM connects to MySQL directly: no JAVA, no PHP, no 'agents' install required

Also, unlike other web-servers SQL DM for MySQL has the MariaDB Connector/C 'compiled in'. It can connect to MySQL directly without depending on any sort of external code (PHP, JAVA or whatever) as other web-servers do. Also, it does not make use of any 'agents' on the computers where the MySQL servers are running. You install SQL DM for MySQL on one computer and that is it!

SQL DM for MySQL has a built-in high-performance database

Further! SQL DM for MySQL has a built-in high-performance embedded database. Whatever server parameters are retrieved from the MySQL servers are also stored in that database. Various ways to display 'counters' or 'metrics' based on these data are provided.

SQL DM for MySQL is compatible with all modern browsers

All you need, to view the results that SQL DM for MySQL throws up, is a web browser that is capable of handling AJAX. This has been tested on Google Chrome, Internet Explorer (versions 11.09 and later), Mozilla Firefox and related browsers, and all recent releases of the Opera browser.