Performance hacks for Analytics Plus

Introduction

We at Analytics Plus believe in empowering our users so they can get the most out of our application. That's why our product experts have compiled a list of performance hacks that will help you enhance performance in every step of the reporting life cycle. Read on to find out how you can leverage the power of Analytics Plus to get the most accurate insights from your data.

Importing data

Here are a few points to keep in mind while importing data into Analytics Plus:

From files and feeds

1. **When you have large files to upload (say greater than 500 Mb), it's best to upload them as CSV files.** Smaller files can be uploaded in any of the supported formats (XLS, HTML, XML, JSON, etc.) without affecting the application's performance.

From databases

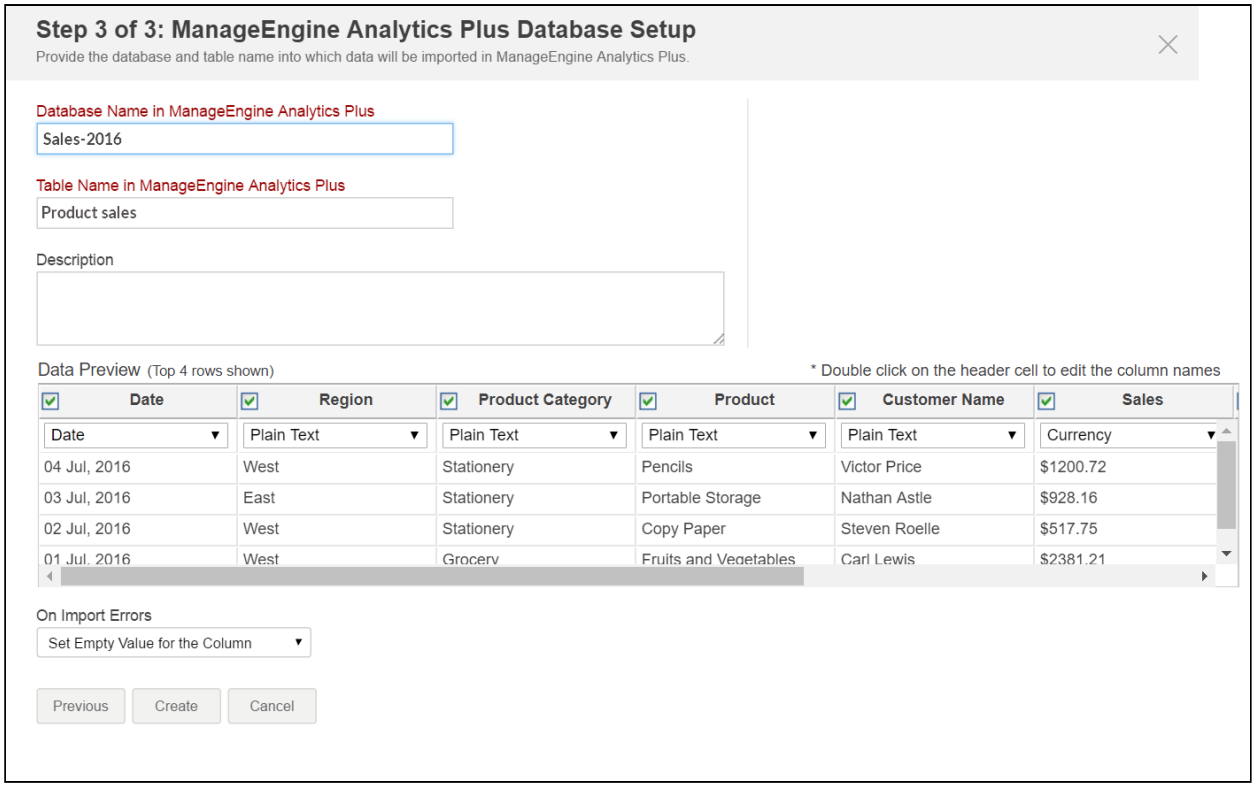
1. **It's always a good idea to have reporting data in a single, unified (de-normalized) table.** Generally, data in databases is split into multiple tables to remove data redundancy and to improve integrity. However, a database in this state is inefficient for reporting. Use SQL joins to import only relevant fields from important tables.

2. **Convert date values that are stored in UNIX to their native formats before importing.** Performing the conversion inside the application reduces the rendering speed, especially when handling large volumes of data.

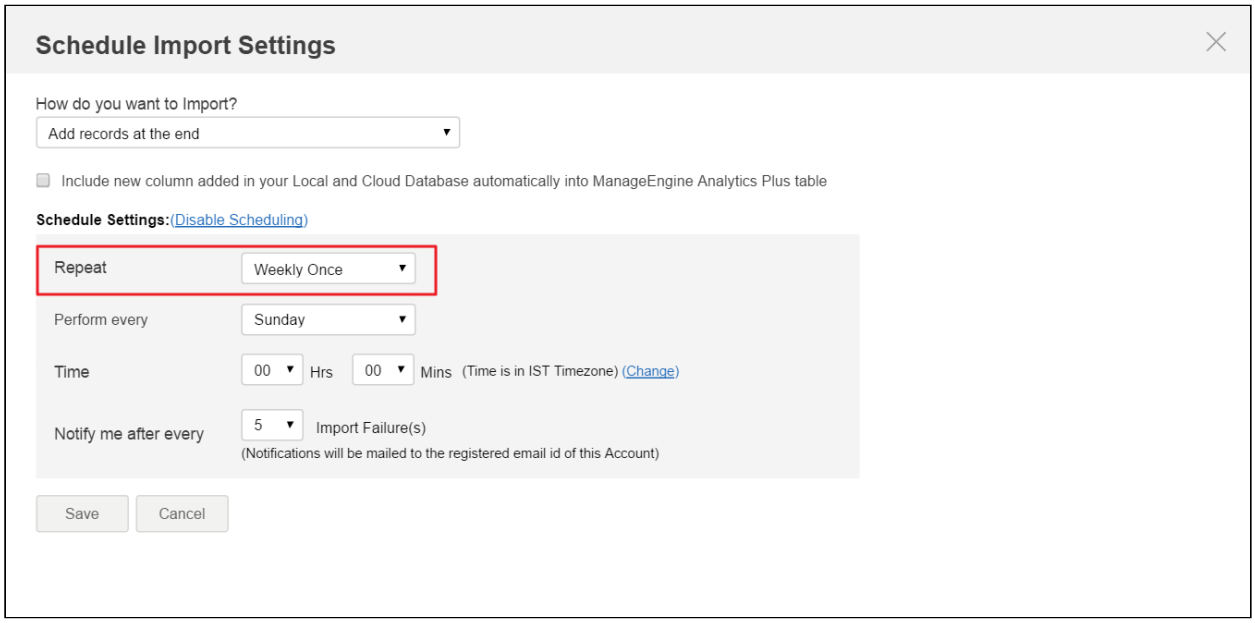
3. **Make static copies of tables that are updated frequently** before importing them into Analytics Plus. If a table gets updated during the import operation, data mismatch can occur. Avoid this by importing from a static copy instead of the live version. This is especially true for cloud databases such as Amazon RDS and other databases that are updated frequently.

4. **Import only the data that is relevant for reporting.** For instance, if you wish to generate reports for the last three months, import only the data from that time period. Utilize a *where* clause in the SQL queries to customize the import.

5. **Deselect unnecessary columns during step 3 of the data import from databases.** This will ensure irrelevant columns are not imported, improving application performance.



6. **Set your import frequency** based on how often you view the reports and how critical those reports are to your operations. For instance, a dashboard that is accessed just once a month doesn't need to be updated every hour. Effective import scheduling will enable you to use your resources more efficiently.

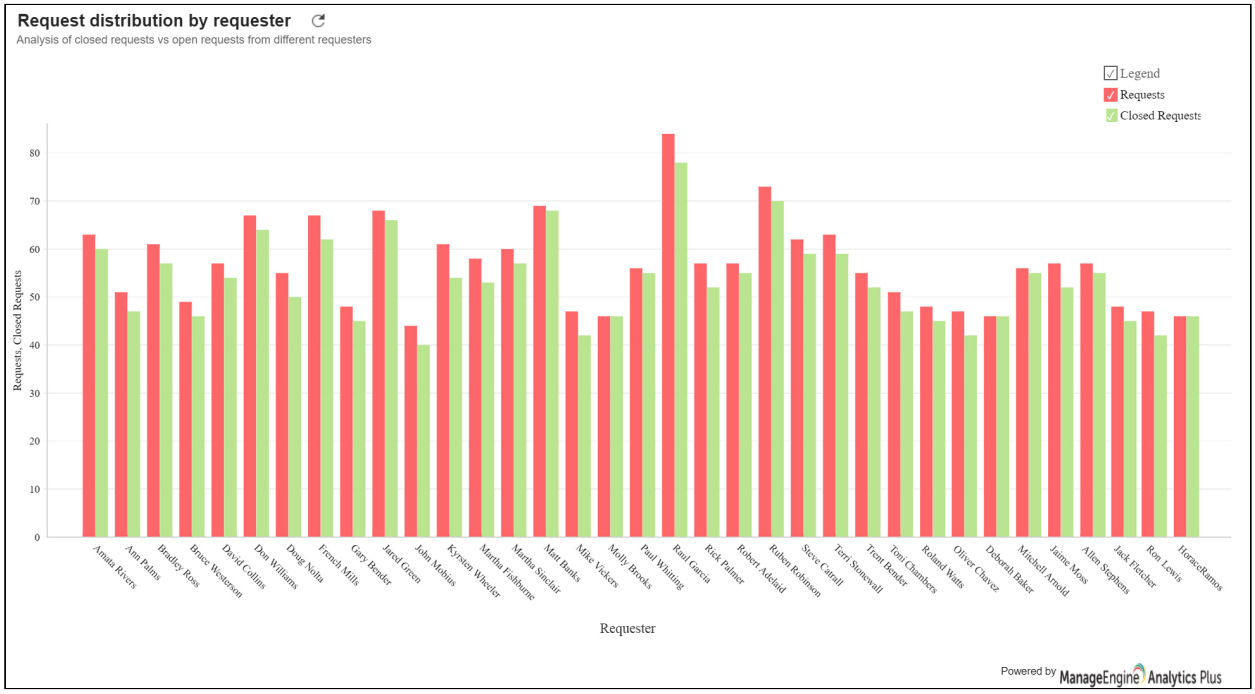


Generating and using reports

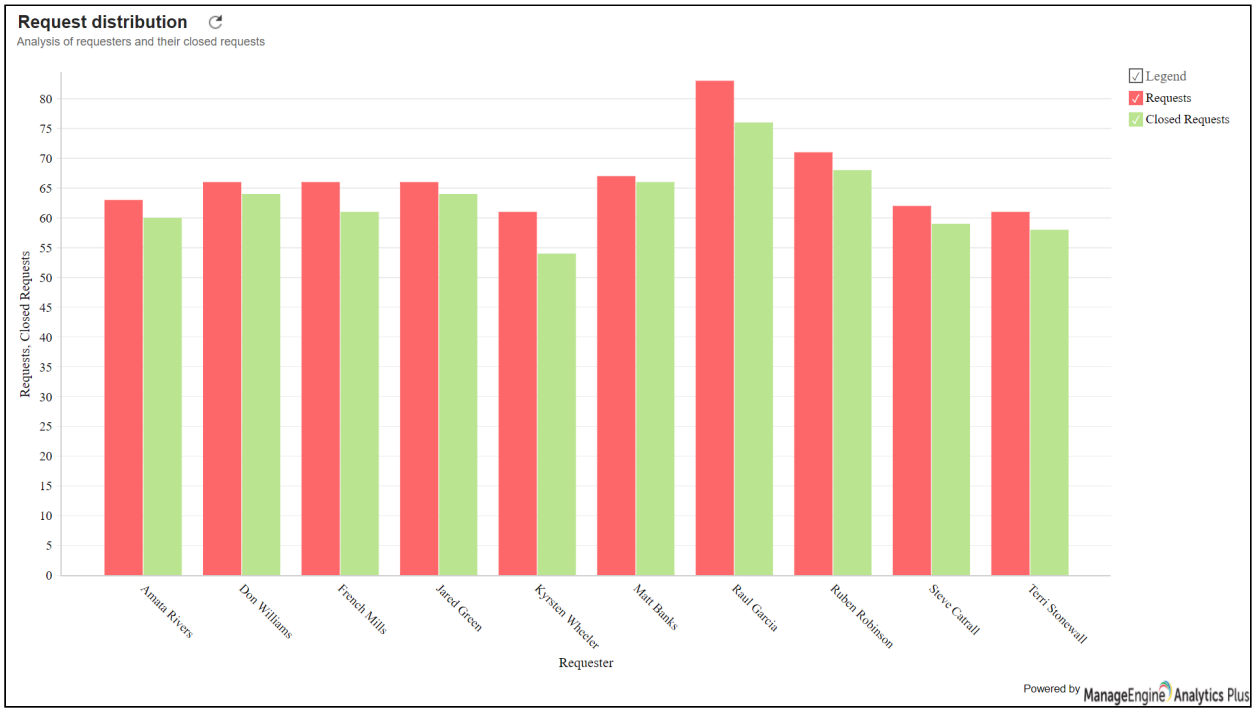
1. **While creating reports, it's better to limit the number of points in the x- and y-axes.** This improves readability and ensures quicker rendering of the report.

The report shown below is quite difficult to read since it has too many points in the x-axis. A filter can be used to reduce the number of data points. Click here to learn how to create a filter. The second report utilizes a "Top 10" filter.

Without filter:



With filter:



2. **Avoid adding too many columns in tabular reports (Summary view and Pivot view).** Too many columns in a tabular report significantly reduces the application's performance since these reports require a lot of processing. Instead, create multiple tabular reports with fewer columns. This improves readability as well. In general, tabular views perform better when populated with fields that have less unique values. Avoid fields with a large number of unique values like the primary key of a table.

Formulas and query tables

1. **Analytics Plus allows you to use powerful formulas to derive KPIs from your raw data.** Formulas can be used to derive formula columns or aggregate values.

Example of formula columns:

Column (A) + Column (B) = Column (A)+(B)

Example of aggregate values:

Sum of Column (A), Average of Column (A)

Learn how you can create formula columns and aggregate formulas here.

2. **Query tables are very useful when you're trying to combine data from multiple sources or multiple tables.** Though Analytics Plus doesn't allow nested queries, it is possible to include the result of one query table in a second query table. As a rule of thumb, limit such operations to three queries. When the nesting goes beyond the third level, loading the reports created from the nested table takes a long time and in turn affects application performance.

3. **Avoid creating formula columns that process a large amount of data.** Instead, perform those operations in the underlying query itself. This reduces the processing load of the application and boosts performance significantly.

Dashboards

1. Widgets are used to display KPIs in a dashboard. **Using formula columns as display metrics in your widget can increase widget loading time.**

2. **User filters allow the viewer to filter the values in a report or dashboard.** In scenarios where you know a certain filter value will be used often, you can set it as the default value. Default values limit the volume of data displayed, resulting in quicker loading times. Learn more about user filters here.

Sharing and collaboration

1. **Reduce the number of admin logins to Analytics Plus.** Admin licenses are not required for the section of your organization that is not involved in the creation of reports or dashboards. One good way to go about reducing the amount of licenses in your organization while ensuring users can access the information they need is by utilizing concurrent viewer licenses. Concurrent viewer licenses allow your colleagues to view reports and dashboards without logging in.

Application maintenance

1. **Perform a periodic cleanup of your databases by deleting old data.** It is common for unused data to pile up over time. Create a cleanup cycle based on your reporting needs. For example, if you create reports based only on the data from the last three months, perform a cleanup every quarter. Apply a filter to display the data from the outdated period and then delete it. If your data requires a more complex approach, contact us at *analyticsplus-support@manageengine.com* and we will help you create and maintain a good cleanup cycle for your data.

2. We release new features and application updates at least twice each quarter. **Upgrade your Analytics Plus application regularly to keep up with the latest enhancements and bug fixes.** You can check for updates on this page or watch for the in-product notifications on the top right corner of your Analytics Plus console.

Learning resources

Now that the performance is optimized, start building custom reports and dashboards with these resources.

Schedule a free 1-on-1 session with our experts

Learn to build custom reports & dashboards, get questions answered and features clarified from our experts.

Take a stroll through our forums.

See what other Analytics Plus users have to say. Exchange ideas, learn and grow in our community.