

## ZOLL emsCharts®

### ANALYTICS BEST PRACTICES



## Do's and Don'ts: For Optimum Performance, Follow These Important Tips

### Do's

#### DO save narrow date filters on all reports

ZOLL emsCharts Analytics runs the query when loading the report, before users have an opportunity to set or change filters. Saving narrow date ranges improves report performance and ensures users won't have to wait for large queries before being able to change filters.

#### DO open reports in design view first

If you know you have to change filters, open the report in design view (by clicking the edit icon on the bottom right corner of the report thumbnail) to prevent "running" the report prior to applying the filters.

#### DO "start small and build-up" for new reports

Work in steps and test as you go. For complex reports, this helps users identify at what point the report will "break" if it stops working, making it easier to diagnose and fix.

#### DO test reports with narrow date ranges

When building or changing reports, this ensures that the reports work before running a large data set (such as one year's worth).

#### DO ask for help

Reach out to the support team at 1-800-663-3911, or to our Custom Reporting Group at [COL-CustomReports@zoll.com](mailto:COL-CustomReports@zoll.com) for additional help, training opportunities, or consulting services.



## Don'ts

### AVOID extra, unnecessary data sources

More data sources can often mean slower report performance and undesirable results, especially if they're added without understanding why. **Instead**, try starting with a couple of data sources and adding more as needed to find what you need.

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### AVOID left joins, unless they're absolutely needed

Left joins typically perform slightly slower than inner joins, so using them when not needed can slow a report unnecessarily.

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### AVOID using several "one-to-many" data sources

Multiple, one-to-many data sources (without a relationship between each other) will cause cross-joins, duplicate results, and slow reports. **Instead**, to avoid poor results, understand how the data tables are related and specify relationships that avoid cross-joins or use grouping and aggregate functions.

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### AVOID running the same non-working report multiple times

If a report causes the analytics to "lock up," it's usually a problem with the report — not the software itself. Repeatedly running the same report causes system performance issues as those queries can keep running (even after you close the browser). **Instead**, try making small changes as you go and "rolling back" those that cause a report to be unresponsive, or reach out to the support team at 1-800-663-3911 or our Custom Reporting Group at [COL-CustomReports@zoll.com](mailto:COL-CustomReports@zoll.com) for help if something seems like it should work but is not.

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### AVOID using the CAD tables for archival reports

The CAD import tables are a temporary stop-over for data on the way into PCRs or ZOLL Fire Reports, so they are not optimized for reporting. **Instead**, try using CAD tables only for short-term report reconciliation purposes (typically less than the last 30 days of data) and remember that those same data points should be available in the fire or PCR report for historical, monthly, and/or annual reporting.

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### AVOID using dynamic and multi-select filters if possible

This includes "Equals (Select)," "Equals (Multiple)," "Equals (List)," "Equals (Popup)," and "Equals (Checkboxes)." These filters, especially pop-up and checkboxes, can dramatically slow down report performance, especially if there are several on one report. **Instead**, try using the dynamic filters only when needed or when an end user is expected to frequently change the values. For all other cases, use the Equals filter and set the value.