

ZEMA has several tools that help you ensure that the data you collect is the data that should be there. Whether it is assessing the energy data warehouse maintained by ZEMA or assessing your own databases and spreadsheets, we help to put peace of mind into your data and analysis.

The database fortress resides on your premises giving you full control over who has access to both critical real-time, historical and internally generated market data. At the same time, the ZEMA suite provides you with extreme flexibility in terms of access to data and your ability to use it for your daily activities and integration with downstream systems.

Not only does ZE PowerGroup supply the software that helps to download and analyze market data, we are proactively monitoring every source site to ensure that it is importing as expected. If something goes down, we are on top of it right away and provide you with the updates as soon humanly possible. We know that data is important to your business because it is important to ours.

How ZEMA does it:

Data Auditing and Archiving

Every corporation should know what is going on with their data and the database itself. ZEMA maintains a full log of when data and database objects have been changed or removed. Not only does ZEMA let you know when market data or table structures have changed, it lets you know when, how many times and by whom.

Error Checking and Data Validation

Your decisions are important, that's why it is also important to make sure that the information used to support those decisions is clean and passes the logical check. You can't always catch every mistake but you can definitely be smart about finding them. ZEMA uses multi-level checks and balances to make sure that the integrity of your data and analysis passes natural logic tests.

Common errors can easily include:

- ♦ Invalid or suspicious value
- ♦ Lower or higher than expected record counts
- ♦ Inverted numbers or misplaced decimals
- ♦ Erroneous dates

Revision Tracking

ZEMA's data importing capabilities includes the ability to collect revisions and the reposting of market data. ZEMA is constantly back-checking source sites and files to import the latest data. Once ZEMA encounters a change, it imports the change and maintains when it was first imported, when it was last changed and how many iterations it has been through. ZEMA also archives the previous values for auditing purposes.

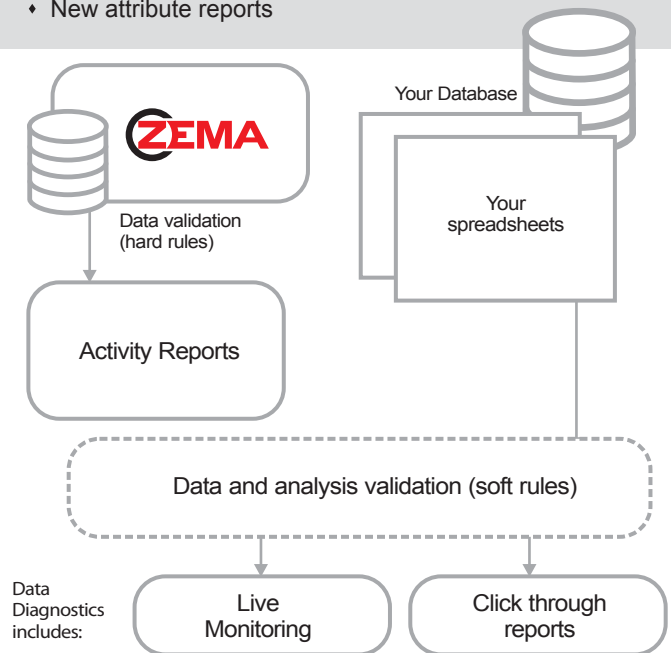
Activity Reports

ZEMA maintains a source by source activity log. It lets you know if sources were successful or if they failed. Sometimes source sites are not available or you lose a database connection, if this is the case, ZEMA tracks and logs the event and then tries to import the source again. You will also receive emailed activity reports on the frequency that you choose indicating the last 24 hours of activity.

ZEMA's job is not only to provide you data management and analysis tools, its job is to help you make decisions based on quality market data.

tech talk

- ♦ Data and database object auditing/archiving
- ♦ Database level integrity checks including primary key violations
- ♦ Update and insert date tracking
- ♦ Full event logs
- ♦ Thread pool activity logs
- ♦ Database comparison reports
- ♦ Current and historic record counts
- ♦ Locally generated logs files
- ♦ Emailed activity reports
- ♦ New attribute reports



ZE PowerGroup's ZEMA suite is your answer to managing market data and the data integrity requirements surrounding it. Whether or not you are a publicly traded corporation, Sarbanes Oxley (SOX) Legislation either governs or has influenced the way you think about data management. The need for clean, accurate and consistent data that you can account for is key for making your daily business decisions.

