## END-TO-END ANALYTICS & BUSINESS INTELLIGENCE PLATFORM



# Increase speed and efficiency with: **SPECTRE DATA ENGINE**<sup>®</sup>

## SPECTRE KEY FEATURES



#### **Scalability**

Spectre's design is robust enough for challenging enterprise-level business intelligence analysis. It delivers fast performance without taxing resources.

#### Low per-user overhead

Spectre delivers fast user performance with a low idleconnection cost-per-user to support more simultaneous users without a linear increase in memory and processor usage. User connections are closed when the operation completes, and resources are not devoted to idle user sessions.

#### Cache

Cached dives deliver fast response while avoiding stale results. As an in-memory data engine, Spectre answers most queries without having to access the hard drive. It caches the results for reuse, thereby eliminating costly disk accesses.

#### Consolidate data sources

Enterprise-level businesses are seeing an increase in the quantity and diversity of data in varied formats from different platforms and the increased need to combine views. Spectre takes advantage of the latest hardware advances, such as faster core speeds and multiple cores for built-in parallel processing, large amounts of memory, solid state disk (SSD), and advanced compiler technology, to radically boost performance in these environments.

#### **Run-time performance**

Spectre engine algorithms optimize run-time performance for some of the most commonly used computations. The Spectre calculation engine compiles formulas into machine code optimized for the processor on which it is running, and runs the machine code runs raw. These design optimizations shave off computation processing time making run-time performance extremely fast.



#### Installation

Dimensional Insight's global team of BI consultants assists with the design, implementation, and customization of your application. Consulting service plans offer the flexibility to deliver complete turnkey solutions or remote support for your internal IT team or any level of service in between, putting you in control of your application.



#### Database size

Spectre does not maintain separate database indexes so the on-disk size of the columnar cBase is small relative to the data input. Spectre handles large data volumes in a single cBase without limits on file size, column count, or number of dimensions, minimizing maintenance tasks.



#### Memory

When Spectre loads parts of a cBase into memory, it can share the cBase across multiple Spectre processes. Multiple dives running at the same time for users with different access share this memory. Spectre processes ensure that each user gets the right results without compromising security.



#### Manageability

Users need rapid information access and IT needs to make sure it can manage and support user requirements. Dimensional Insight Platform with Spectre does both with Workbench for developers and DiveTab to keep your mobile workforce connected on the go.



#### Speed

Spectre is built for speed, both for calculations and for builds, significantly boosting run-time performance for clients and productivity of IT staff.



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#### DiveTab<sup>®</sup> client

Powered by Spectre, the DiveTab client is a tablet-based mobile technology for self-service reporting and analysis that drives data-driven decision-making and informationdelivery using dashboards. DiveTab uses the speed of Spectre for rapid and secure access to your data and other resources, such as presentations and documents, from a central location.

Workbench<sup>®</sup>

An integrated development environment (IDE), helps developers manage the entire backend process, from data source to portal. Spectre configuration and scripts use a single text-based scripting language, which developers access and edit with the robust Workbench editor. The scripting language is simple and powerful for builds and dives. Workbench speeds development with highlights for important parts of the script, code suggestions, and descriptive help.

Dimensional Insight has completely re-engineered columnar database technology to create Spectre—a columnar database that delivers scalable, manageable business intelligence at unparalleled speed.

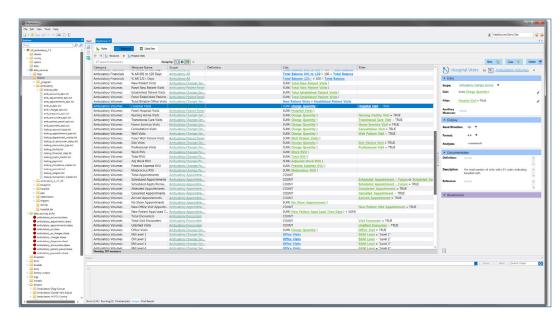
	Classic	Spectre
BUILD TIME	<b>3 hours</b> in parallel	<b>24 minutes</b> 13 Dimensions
MODEL/CBASE SIZE	<b>227 GB</b> 51 Models	<b>20GB</b> 1 cBase
MARKER OPEN	<b>4200 seconds</b> 70 minutes	3 seconds

#### COLUMNAR DATABASE DESIGN

Spectre uses an in-memory, binary-format columnar database. So, just what is columnar database technology and what makes it so fast?

In a non-columnar or relational, database, fields of information are stored consecutively like rows in a table. This means that processing a specific query requires the application to sort through the entire dataset. Alternately, in columnar database design, records are indexed into rows based on their category or likeness, so the application can skip over all of the irrelevant information to locate the requested record. Because only the relevant columns are accessed, specific calculations or inquiries can be processed very fast.

### HERE'S MEASURE FACTORY, AN INTEGRATED IDE FOR MANAGING BACKEND PROCESS:



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## ABOUT DIMENSIONAL INSIGHT

Dimensional Insight<sup>®</sup> is a leading provider of analytics, data management, and performance management solutions, offering a complete portfolio of capabilities ranging from data integration and modeling to sophisticated reporting, analytics, and dashboards. The company is an ten-time Best in KLAS winner in healthcare business intelligence and analytics, most recently ranking #1 in 2024.

#### **CONSULTING & CUSTOMER SUPPORT**

Dimensional Insight's professional services team offers an array of services that span the entire project lifecycle—from needs assessment to system maintenance. Our consultants employ best-in-class project delivery practices to design, implement, and customize your Dimensional Insight deployment. Our consultants draw on their extensive knowledge of healthcare to deliver optimal results, faster implementations, and cost savings for our clients. We partner with each of our customers to ensure rapid implementation of all BI project initiatives. Our #1 objective is to provide the expertise and process knowledge to maximize return-oninvestment and minimize risk.

#### **TRAINING OPTIONS**

Dimensional Insight training helps users, developers, and IS/IT staff fully understand and benefit from the power of Dimensional Insight. Courses are delivered onsite at customer organizations or online. Courses can be customized to meet specific needs and organizational challenges.

#### DIMENSIONAL INSIGHT IS A COMPLETE BI PLATFORM

Every implementation includes the installation of all back-end server and production components. There are no hidden costs or expensive third-party tools required to deploy additional features. Users access data through a number of interface options depending on their specific information-viewing and analysis needs.

#### SEE OUR CUSTOMER RATINGS IN ANALYST RESEARCH



Gartner Peer Insights...







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