

The STAC Bi-Temporal Data Special Interest Group Questions and Answers

26 September 2011

Q: What is bi-temporal data?

A: Bi-temporal data (or BTD) are data for which changes are recorded over two independent dimensions of time. These dimensions are referred to as “valid time” and “transaction time,” where valid time denotes the period during which a fact is true with respect to the real world and transaction time denotes the period during which a fact is stored in a database.

Q: What are the use cases for bi-temporal data?

A: Trading firms use bi-temporal data in applications ranging from risk management and back-testing of trading strategies to P&L Explain and regulatory reporting.

Q: What are some of the big issues in bi-temporal data?

A: Problems with bi-temporal data can include costly development, poor data maintenance performance, poor query performance, and complexity in areas such as derived data, schema migration, and maintaining data integrity. In large part, these stem from the fact that BTD is a complex topic with many competing thought leaders and schools of thought. This has led to a proliferation of methodologies, techniques and solutions.

Q: What is the STAC Bi-Temporal Data SIG?

A: A group of end-user organizations and vendors who meet (sometimes physically, sometimes virtually) to discuss key issues related to bi-temporal data.

Q: What is STAC?

A: STAC (the Securities Technology Analysis Center) facilitates the STAC Benchmark Council (www.STACresearch.com/members), which is a group of trading organizations and vendors with two missions: 1) to define standard technology benchmarks based on trading-related workloads, 2) to facilitate substantive dialog among customers and vendors with respect to technology topics. The Council started a few years ago by focusing on low-latency, real-time workloads in automated trading. In the last year, it has expanded into tick databases, derivatives risk management, and other areas where the size or complexity of the workload is a bigger challenge than the speed of the data.

Q: How will the SIG operate?

A: Generally, there will be at least one teleconference per month. The first meeting will be in October 2011 by phone. The first in-person meetings will be in New York and London in November 2011. The inaugural co-chairs for the group will be Paul Smeaton-Russell, Vice President, Architect, Global Markets Bank of America Merrill Lynch, and Craig Baumunk, Principal, BitemporalData.com. Co-chairs are expected to change every 6 to 12 months, with timing and replacement chairs decided by the SIG members. The agenda for the SIG will be prioritized by end-user members.

**For more information or to indicate your interest, visit
STACresearch.com/btd**

Q: Is this just about performance benchmarks?

A: No. While performance benchmarks are expected to play an important role in the evolution of bi-temporal data solutions (especially benchmarks that follow the STAC Benchmark Principles), this group is not confined to discussing benchmarks. On the contrary, several other topics have already been raised by the initial SIG members.

Q: What is on the initial agenda?

A: Several things have been suggested so far:

- Round robin of end users willing to voice their priorities, needs, concerns regarding BTD.
- Opportunities for vendors to lay out their vision for BTD and what they would like from the end-user community.
- View from the co-chairs: POV on where the industry should head and a call for reaction/feedback.
- View from the co-chairs: How to evaluate a BTD solution.
- Seed question: What are the best/most important use cases?
- Seed question: What are the requirements for initial benchmark specifications?

Q: What are the benefits of participation for end user firms?

A: Several:

- Learn how different end users and vendors are approaching bi-temporal data.
- Become better versed in bi-temporal data issues.
- Convey points of view and requirements to vendors.
- Find areas of common interest and potential for collaboration with other end-user firms.
- Influence and understand benchmark standards for bi-temporal data solutions.

Q: What are the benefits of participation for vendor firms?

A: Several:

- Convey your company's bi-temporal data message to key customers in various ways.
- Leverage an important channel for collecting end-user requirements and priorities.
- Influence and understand benchmark standards for bi-temporal data solutions.
- Shorten the sales cycle for new products.

Q: What kind of people should be on this SIG?

A: Several types of people will have an interest in these meetings, depending on each meeting agenda. From end-user organizations, this includes CTOs and CIOs, enterprise architects, database architects, and performance engineers. From vendors, this includes both business and technical functionaries such as product managers, heads of engineering, solution architects, business development managers, and performance engineers.

Q: What firms can participate?

A: Initially the SIG will be open to financial trading organizations such as brokerages, exchanges, and hedge funds, along with software and hardware vendors with an interest in BTD. However, we may eventually broaden membership to other financial and non-financial firms, academia, and government.

**For more information or to indicate your interest, visit
STACresearch.com/btd**

Q: What does it cost to participate?

A: For end-user firms: Participating in the initial year of the Bi-Temporal Data SIG will be free for Contributing Members* of the STAC Benchmark Council (i.e., not Observer Members) who join the SIG in 2011. We anticipate that participation in subsequent years will carry a fee and that participation in the initial year of the SIG will carry a fee for members who join the SIG in 2012.

* For end-user organizations, becoming a Contributing Member of the Council involves a one-time USD 5K fee.

For DBMS vendors: Participating in the initial year of the Bi-Temporal Data SIG will cost USD 10K/year. This is separate from fees for standard STAC membership or other STAC activities.

For vendors that are primarily DBMS users: Participating in the initial year of the Bi-Temporal Data SIG will cost USD 5K/year. This is separate from fees for standard STAC membership or other STAC activities.

For other organizations (academia, consultants, etc.): Discuss with STAC.

**For more information or to indicate your interest, visit
STACresearch.com/btd**