



WINTER CORPORATION

www.wintercorp.com

EXPERTS IN LARGE SCALE DATA MANAGEMENT

PROVE YOUR DATABASE CAN—OR CANNOT—MEET REQUIREMENTS

T ERABYTE-SCALE and petabyte-scale data warehouses behave differently from other databases. Smaller systems tend to scale in a linear fashion. Doubling their database size and user population, for example, typically quadruples their capacity requirements. But large data warehouses are far less predictable in both performance and scalability. Depending on complexity, a two-fold increase in data volume and users can raise capacity requirements by ten times or more. And resolving downstream performance problems takes more than a little new hardware. It can require months spent redesigning, rebuilding and reloading the database. What's more, it can disrupt crucial business operations.

Given these large-scale risks and complexities, how can you be confident that your proposed platform will meet requirements and deliver the price/performance you're seeking? Do you place your bet on vendor claims that may—or may not—prove accurate? Or do you pursue a sound strategy for managing risk that ensures your solution will scale and perform to meet critical needs?

► **A RISK MANAGEMENT APPROACH TO DATABASE SUCCESS**

*Performance Measurement*SM from WinterCorp delivers the proof you need to identify the best solution for your large-scale database requirements. Whether you're considering a new or expanded platform, *Performance Measurement* provides an objective approach to testing the

scalability, performance and availability of your solution long before it goes live. With this approach, WinterCorp either validates your solution's ability to meet changing needs or makes engineering conclusions regarding its architecture, design and requirements. No other independent consultant can match our experience in conducting such tests for leading commercial and government enterprises.

PROOF-OF-CONCEPT

Feasibility test measuring one solution's ability to perform and scale cost effectively to meet growing needs

At WinterCorp, we develop the best performance measurement strategy to address your time and budget constraints. We plan, design and implement tests which realistically simulate the structure of your database and workload. Then we analyze the results—quantifying how well your proposed solution meets its requirements...where it falls short... and what you can do about it. This lets you make sound architectural decisions, avoid costly rework, and maximize performance and scalability to ensure success.

► **GET ANSWERS TO TOUGH QUESTIONS**

- Will your proposed platform scale and perform to meet growing requirements?

Performance Measurement

Consulting - Research - Architecture - Engineering

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- Do you need to modify your requirements—or your solution—to ensure success?
- How much will it cost to implement a solution that delivers the expected business benefits?
- Can a new data warehouse appliance handle your existing requirements with higher efficiency and lower cost?
- How large a test is necessary to deliver accurate and predictable results? And what exactly must be tested?
- What is the optimal implementation strategy to reach your goal?

► **EXPERT, REALISTIC, UNBIASED TESTING ENSURES ACCURATE RESULTS**

WinterCorp's Performance Measurement service includes the following steps:

1. Develop the test plan.

After identifying your test objectives, we create a plan which ensures that your tests sufficiently explore all data volume and usage requirements—factors that significantly affect performance and scalability. This plan identifies the test steps, schedule, data and responsibilities of all participants. It also specifies the test size and scale needed to ensure that requirements are met long term—not just on Day One of the implementation.

2. Develop all test specifications.

Next we detail the specific tests to be performed and establish a set of rules to guide vendors in conducting each test.

3. Design a comprehensive, realistic test kit.

Using our performance measurement workbench, we quickly and economically create a test kit which realistically simulates the structure of your database and workload. This kit ensures accurate, consistent testing among all vendors. It also provides you with a repeatable tool for retesting throughout system development and implementation.

4. Manage and audit the testing process.

WinterCorp serves as an independent auditor to oversee all vendor tests and certify the results.

We structure and control the testing process, keep it on track, define and monitor check points, and ensure the integrity of each test.

BENCHMARK

Competitive test measuring how well alternative solutions perform and scale to support new requirements

5. Analyze the test results and tradeoffs.

We compile your comprehensive test results in a performance measurement database for detailed analysis. Then we accurately evaluate whether your platform can perform, scale and respond as needed. When your solution falls short of the requirements, we quantify the gap, analyze the tradeoffs between modifying requirements and improving the solution, and define the optimal implementation strategy.

6. Report findings and recommendations.

Based on our in-depth analysis, we deliver technical findings and engineering conclusions that enable you to maximize the business value of your chosen platform.

► **WINTERCORP: THE LARGE-SCALE DATA MANAGEMENT EXPERTS**

WinterCorp is an independent consulting firm that focuses exclusively on the performance and scalability of terabyte-scale and petabyte-scale data management systems. Since our inception in 1992, we have architected many of the world's largest, most challenging databases. Our expertise in conducting and auditing large-scale database benchmarks is unmatched in the industry. With decades of experience in large-scale database implementations and in-depth knowledge of database products, we deliver insight into the issues that impede performance and the technologies that enable success. We also survey the owners of the world's largest databases—providing additional visibility into today's most effective database products, tools and techniques.