

Solution Note

## Migrating to Oracle® 10g: Powerful Analysis and Predictive Capabilities for IT Managers

Today's high-powered businesses and organizations increasingly rely on newer and better Oracle versions to exploit the value in business intelligence and run the company's core processes. IT Managers are being asked to do more with less while also promoting better alignment of IT with the needs of the business. It has become incumbent upon them to ensure the smooth deployment of new database versions that will support well-performing, uninterrupted business activity. As with any major change, the path to Oracle 10g is not without risk. Many powerful new features and a new optimizer present uncertainties for the migration. In order to address these issues, some important and challenging questions must be answered, including:

- How will my applications perform and scale in 10g and for how long?
- Will my current infrastructure support the migration? How much, if at all, should I increase the capacity of my servers? Should it be a cluster of servers, more CPUs per server, more and faster disks, or other changes?
- Will new features of 10g expose unforeseen weaknesses in my applications?
- How can I minimize the risk and maximize the success of migrating to 10g?

In all probability, you won't get credit for getting it right. It's expected. And the downside risks are high. There's a strong temptation to ignore the migration, postpone it, or let it drag on for longer than it should, but BEZ can help remove some of the risk of migrating and help make it a smooth and proactive transition.

**BEZVision™ for Oracle® Databases** is an automated management solution enabling IT Managers to deliver high performing, uninterrupted database services to the business at the lowest cost. It does this by measuring, managing and predicting performance, resource consumption, and usage of data by workload.



**BEZVision** automatically profiles complex database processing by individual line-of-business (workload) to understand data usage, resource consumption, response time and throughput. BEZVision notifies you of both current and future performance issues and provides a guided process to help identify, analyze and quickly resolve service-level issues.

**“Just backing up the view that we’re moving from a very reactive organization to one that’s proactive and actually sees what needs to be done. I can’t speak highly enough of BEZ...; it’s been quite fantastic for us.”**

Jason Fichtl  
Senior DBA

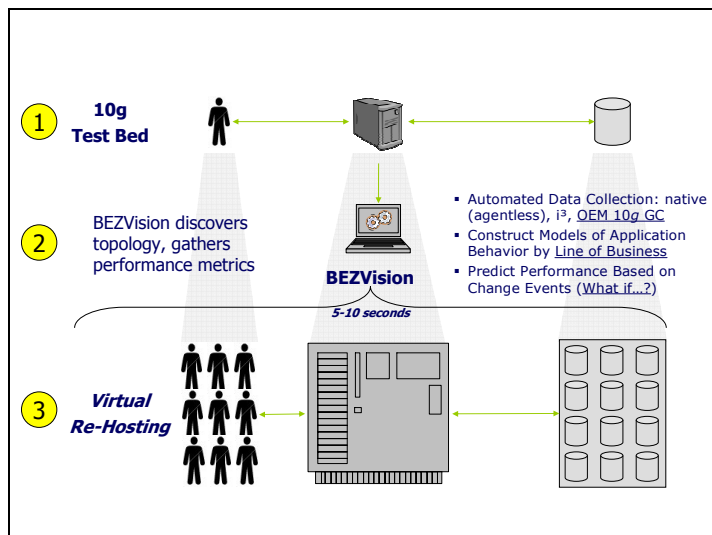
## Powerful Predictive Capabilities that Yield Valuable Results

Based on its core prediction technology, BEZVision for Oracle Databases combines performance management and capacity planning as core disciplines supporting the need to understand current and future data service delivery expectations for key lines-of-business. The BEZVision prediction engine provides powerful capabilities that look ahead to identify performance bottlenecks or service delivery breaches on the horizon. This information provides managers and technical staff with enough time to properly plan and compare alternatives to find the most cost-effective remedy.

## Confidently Plan Your Oracle 10g Migration

Pre-deployment testing of Oracle 10g in a small development or test environment provides some rough measurements about the new version’s performance but systems supporting production applications are significantly larger and more complex. Even though 10g passes all of its pre-deployment functional, operational and performance tests, there is no guaranty that it will continue to perform well once it is placed into the mix of production applications running on production servers. By using BEZVision for Oracle Databases to analyze and predict what will happen when 10g is deployed, IT Managers are in a position to ensure a smooth implementation by accurately identifying performance tuning and capacity issues which will need to be addressed prior to 10g roll out and implementation. Proactively quantifying the impact and setting realistic expectations greatly reduces the risk of unpleasant surprises.

The first step in Oracle 10g migration is to create and stage your applications in an Oracle 10g test environment. A load generator can be used to drive activity. BEZVision can then be used to discover the infrastructure and monitor load, performance and resource consumption. BEZVision will automatically build profiles of each application/line-of-business. These profiles provide a detailed view of resource consumption, data usage, response time and throughput. Once a profile is built you can easily “virtually re-host” the application(s) onto the target production infrastructure, user count and database size. BEZVision will automatically produce performance predictions for the next 12 months or use your own planning horizon. New predictions exploring load, infrastructure variations and options, and application mixes can be produced in a matter of seconds. You can easily explore server configurations, server consolidation, storage combinations and RAC.



**BEZVision builds an analytic profile of an Oracle 10g test environment with load generated statistics of the current production applications to help technical staff properly plan and compare alternatives such as server re-hosting or consolidation.**

Managers and DBAs can ask important “what if” questions regarding the performance impact of migration, such as:

- How will the new version scale according to my application growth plans?
- Will the current production environment have suitable capacity to absorb the expected growth in the new environment? If not, what do I need to do?
- How will the new production environment run if I decide to re-host my applications on different servers to reduce cost and complexity?
- Will Oracle 10g expose unforeseen weaknesses in my applications?
- Will the new 10g performance optimizer help or hurt and are there any tuning activities, such as adding an index, which will help maintain good performance and meet agreed upon service levels?

“IT management needs to be proactive and focus on results that matter to the business, such as, consistent service delivery. Solutions such as BEZ... are a big step in that direction.”

Jasmine Noel of  
Ptak, Noel & Associates

### A Solid Solution for Today and Tomorrow

BEZVision addresses immediate tactical problems and longer term strategic service management issues:



#### **Current: tactical, reactive use - Using Technology to solve immediate problems**

BEZVision profiles complex database processing to understand data usage, resource consumption and workload response time and throughput. BEZVision notifies you of both current, and future potential performance issues, and provides a guided process to help identify, and proactively resolve service-level problems quickly.

#### **Future: Proactive use - Using Technology to Manage IT**

BEZVision forecasts performance, resource utilization and data usage at an application workload level, and predicts when service levels for individual lines of business will not be met and business growth will be affected.

BEZVision can also be used while migrating to Oracle 10g, to evaluate a possible consolidation of two or more small servers onto a single larger server or quantify a possible OS change, for example, from UNIX to Linux. Once the migration is complete, BEZVision can be used to ensure ongoing acceptable database service as the business continues to change and grow.

## Summary

BEZVision for Oracle Databases provides a powerful solution for accurately assessing the impact of Oracle 10g performance and capacity needs which should be addressed prior to implementation. It also provides realistic expectations and minimizes the risk of unpleasant surprises. Built-in automated functions, such as 'set and forget' monitoring and hands-free "As-Is™" predictions minimize the time and effort required to build models and ask "what if" questions regarding the performance impact of migrating a production server environment to Oracle 10g.

With BEZVision, you can:

- Accurately profile resource consumption and performance of Oracle 10g in a test environment
- Evaluate the performance of production applications while running under 10g with the same cardinality of the production database
- Quantify the impact of re-hosting to a different server, consolidating to fewer servers, or evaluating a possible shift from UNIX to Linux
- Evaluate a host of "what if" questions, including predicting the impact of workload growth, database cardinality, and index creation to pinpoint system changes that will ensure ongoing delivery of acceptable performance

### About BEZ Systems

Since 1993, BEZ Systems has been offering innovative solutions that provide a line-of-business view of application performance, resource and data utilization for today and tomorrow. These solutions include performance tuning, database performance optimization and capacity recommendations allowing IT Managers to accurately compare 'change and growth' alternatives and forecast future requirements. Future performance predictions are an invaluable component of justifying specific actions assuring that business objectives and performance goals can be met, thereby minimizing any shortfalls in service.



**BEZ Systems, Inc.** ♦ 345A Summer St., Boston, MA 02210 ♦ USA  
617.532.8800 ♦ [info@bez.com](mailto:info@bez.com) ♦ [www.bez.com](http://www.bez.com)

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