IBM

RealPlus accelerates online real estate listings service with IBM Informix Dynamic Server, Version 10 and Linux.

Overview

■ *Challenge*

Accelerate response times from online real estate listings service for Manhattan real estate agents

■ *Why IBM?*

IBM Business Partner One Point Solutions provided the assurance that migration to Version 10 would solve performance problems; RealPlus has had uninterrupted, trouble-free, 20-year history running Informix database products

■ *Solution*

Migrate from IBM Informix® Dynamic Server, Version 7 on SCO UNIX® to Version 10 on Linux®

■ *Key Business Benefits*

Queries that took five minutes to complete now take just seconds; seamless migration to Version 10 avoided rewriting of applications; higher productivity of users and database administrators; real estate agents extremely pleased with results; enhanced performance of mobile solution; ability of agents to benefit from added functionality RealPlus had built into its application

The online real estate listings service provided by RealPlus helps residential real estate agents choose from a wide variety of properties that have the features their customers want — all in real time.

In the real estate industry, it's location, location, location that drives sales. For RealPlus, L.L.C., however, which provides the New York City real estate industry with an online listings database service, the key to satisfying real estate agents is performance, performance, performance.

> *"The migration solved our performance problem overnight. We were stunned by the difference. Queries that took five minutes to complete took seconds with Informix Dynamic Server, Version 10."*
>
> *−Eric Gordon, Managing Director, RealPlus, L.L.C.*

Key Components

Software

- IBM Informix Dynamic Server, Version 10
- IBM Informix 4GL
- Red Hat Enterprise Linux

IBM Business Partners

- One Point Solutions
- Unique Systems

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– Eric Gordon

RealPlus, L.L.C. (RealPlus) provides real estate agents with an online real estate listings service covering residential properties in Manhattan. A borough of New York City, Manhattan boasts one of the world's hottest, most expensive and most competitive real estate markets. Manhattan real estate agents depend upon RealPlus's online application to access their own listings and shared listings from RealPlus's collective client list. That client list reads like a who's who of real estate brokerages in Manhattan, numbering approximately 250 firms, among them the largest firms in New York City.

For RealPlus's clients, prompt access to listings is essential because agents want to provide their own customers with responsive service. Yet, just the opposite was happening: queries were taking up to five minutes to complete.

For several years, RealPlus had run its application on IBM Informix Dynamic Server (IDS), Version 7 on an SCO OpenServer UNIX platform. Since SCO UNIX does not support the later versions of the database, which include significant performance improvements — added by IBM to the most recent releases of Informix Dynamic Server — RealPlus was cut off from the option of simply migrating to a more modern database server. Hoping that a tune-up would improve performance, RealPlus contacted One Point Solutions, a database-focused IBM Business Partner, to tune SQL code and improve query response time to acceptable levels.

One Point Solutions had a better suggestion, however: migrating to Informix Dynamic Server, Version 10 on a stable, secure and cost-effective Linux operating system. An easy migration from UNIX, Linux posed no requirements for rewriting applications and supported a wide range of open source applications as well as the latest version of Informix Dynamic Server. One Point Solutions, together with Unique Systems — an IBM Business Partner and Linux specialist — helped migrate RealPlus's workloads to Red Hat Enterprise Linux and Informix Dynamic Server, Version 10 and tune the database.

"The migration solved our performance problem overnight," says Eric Gordon, managing director of RealPlus. "We were stunned by the difference. Queries that took five minutes to complete took seconds with Informix Dynamic Server, Version 10."

Seamless migration to Linux poses no problems

RealPlus was initially reluctant to make what it considered a major move from UNIX to Linux. "I wasn't really familiar with Linux at the time," says Gordon. "I had been working with UNIX for many years. But One Point Solutions gave us the confidence to proceed with the migration, and as it turned out, the learning curve for Linux was practically nonexistent and the migration itself went extremely smoothly. We were also extremely satisfied with the Linux support provided by One Point's strategic Linux partner Unique Systems."

Choosing Red Hat Enterprise Linux, RealPlus was delighted to discover that solving its performance problems would not be the only benefit delivered by the migration to a Linux platform. "Linux is less expensive than SCO," says Gordon. "And it's more secure. With SCO we were much more vulnerable to virus threats than we are on Linux. And Red Hat is very easy to manage."

Upgrading to Version 10 nets real benefits

Anticipating the upgrade from Informix Dynamic Server, Version 7 Gordon also had qualms about possible difficulties. "We had a large number of stored procedures and triggers in the database. I was expecting to have to redo these, but I didn't have to redo anything," says Gordon. "The migration just happened."

The ease with which this can be done results from utilities and tools included within Informix Dynamic Server to support problem-free migration. "For instance," says Gordon, "the IDS 10 installation script was much easier to use and the error log provided more detailed messages when I misconfigured something."

Another useful feature—configurable page sizes—doubles the size of the page that can be tuned in Version 7. "Some of our pages were exceeding the default page, and this probably contributed to slow performance previously," Gordon says.

In addition, larger chunk sizes and the table-level restore features dramatically speed up database maintenance and availability for the user. "Larger chunk size increases the size of the dataset that the database manages, which greatly speeds administrative tasks," says Gordon. "Table-level restore enables us to restore a single table without taking the whole database offline. This increases database availability, and as a result, user productivity—and ultimately, user satisfaction."

"With Informix Dynamic Server, Version 10 and the Linux operating system, we have a product that's very marketable, truly allowing us to provide our customers with information on demand."

– Eric Gordon

Improving performance

As pleased as Gordon is with the ease of these migrations, the main purpose of the upgrade to Informix Dynamic Server, Version 10 was to improve performance in the database, and the upgrade did not disappoint.

Real estate agents typically work with numerous fields in their search to find the perfect property that matches a buyer's need. Price, number of rooms, number of bedrooms, location, fireplace, doorman — the list goes on. "These are very complex queries that include a large number of conditions that must be met," says Gordon. "In IDS, Version 10 long clauses like this just rip through the database in one or two seconds, producing near instantaneous results."

Enhanced mobility

RealPlus offers its clients a mobile access option through BlackBerry and other handheld devices. With the migration to IDS, Version 10 performance using this technology is also dramatically improved. "We offered the service on pervasive devices when we were using IDS, Version 7," says Gordon. "But performance was so slow that it wasn't a realistic option for agents in the field, dealing with buyers who are pressed for time and demanding to see as many properties as possible. With IDS, Version 10 handhelds are now a terrific option for agents to check listings from anywhere, at any time."

In addition to Informix Dynamic Server, RealPlus depends on Informix 4GL development tools for creating SQL code that runs in the background and speeds up access to the database. "Informix 4GL is our development tool of choice," says Gordon. "It enables us to develop, debug and compile applications using SQL code instead of COBOL or C code. Combined with Informix Dynamic Server, Version 10 we have the database and development tools we need to serve our clients with the applications they need, when they need them. With Informix Dynamic Server, Version 10 and the Linux operating system, we have a product that's very marketable, truly allowing us to provide our customers with information on demand."

For more information

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