



BT and Unisys improve efficiency, capacity planning and customer responsiveness with new data warehouse and Open Source Business Intelligence

The Company

Operating in over 170 countries, BT is one of the world’s leading providers of communications solutions and services. The company’s activities include the provision of networked IT services globally; local, national and international telecommunications services; and higher-value broadband and Internet products and services.

BT consists primarily of four lines of business: BT Global Services, BT Retail, BT Wholesale and Openreach. BT Global Services provides networked IT services to over 8,000 multi-site/multi-national companies, BT Retail serves the SME business and residential market, while BT Wholesale provides BT network services and solutions to other communication companies.

Challenge

BT’s voicemail service – known in Britain by the number dialed to access it, 1571 – is operated as a managed service by worldwide IT provider Unisys, and serves more than eight million voicemail boxes in the UK. While Unisys manages and maintains all of the technology functions, other business processes – product planning, customer support, capacity planning and more – are handled by BT’s own business units.

Naturally, many of these activities depend on accurate, up-to-date information from the voicemail system itself. For example, when a customer claims “Someone left me a voicemail message, and I saved it, but now it’s gone,” BT must quickly research the problem and respond to the customer. At the other end of the spectrum, a service provider might voice concerns about an overall slowdown in system responsiveness – a very different kind of problem, but equally as critical.

While daily operational reports were created and delivered to BT, when the need arose for any information other than daily volumes, BT staff had to submit a special request to Unisys, which would, in turn, extract the required information and format it for BT’s use.

FAST FACTS

ORGANIZATION

British Telecommunications plc (BT)

INDUSTRY

Telecommunications

SOLUTION

Statistics Data Warehouse

RESULTS

Accurate reporting and ad hoc query against voicemail system data in minutes instead of days. Improved efficiency and data accuracy; enhanced customer service; lower costs

“It used to take days to work on capacity planning for our voicemail system – because it took that long to gather data from the old system. Now we can write a query and get the same information in a few minutes.”

Andrew Hutchinson
BT Messaging
Technical Specialist

“We had reports through the old system,” says Andre Gayle, Messaging Common Capability Service Designer for BT, “but they had to be emailed to users, who had to wait for them, then dig through them as needed. It was inefficient and wasteful.”

This process was both slow and costly – and, at times, cumbersome. If, for example, a request was submitted incorrectly – with the wrong date range, customer ID, or other parameter – the process might have to be repeated, causing greater delay and higher costs.

As competitive pressures increased, BT sought new ways to improve its responsiveness to customer enquiries, and to take more pro-active measures to prevent problems before they occurred. Working with Unisys, a plan was devised to create a Statistics Data Warehouse (SDW), populated with relevant, current and historical data from the voicemail system. The SDW could then be accessed directly by BT staff using business intelligence software designed for ease of use.

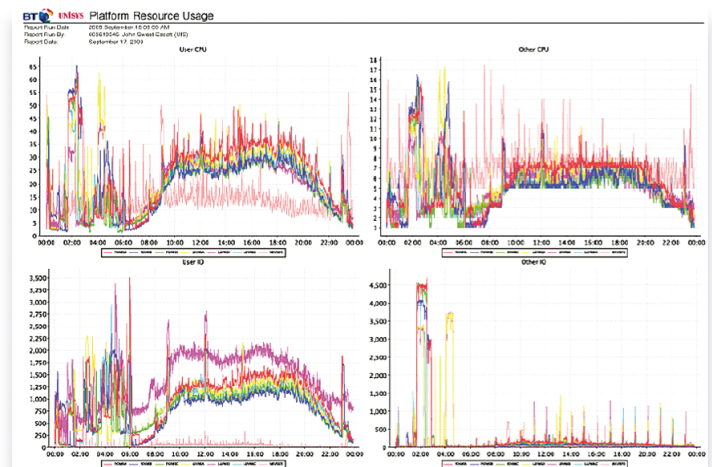
Choosing a Business Intelligence Solution

To select the most cost-effective solution for reporting an ad hoc query, Unisys conducted a study on behalf of BT, working with BT to develop a set of mandatory evaluation criteria including:

- Compliance with key elements of BT’s standard procedure document, including user log-in authorization, authentication and other security requirements
- User- or role-specific data filtering so users could only access appropriate data Low-cost in terms of licensing, plus the simplicity required to assure low ongoing support costs
- Ability to create complex reports when needed
- Choice of multiple report formats including PDF, Excel, Word, and CSV

Solution

After researching a variety of business intelligence products, Unisys and BT chose Jaspersoft for use with its Statistics Data Warehouse, for a range of reasons. First, its small footprint and simple, modular design promised fewer maintenance and support challenges – which would translate into lower ongoing costs.



Jaspersoft also offered a licensing cost advantage. The open source version is free of licensing costs, and the professional version – which BT would ultimately want for its ad hoc query capabilities – is licensed on a per-server, annual subscription basis, without any limitations on the number of concurrent users. This was important to BT due to an expected usage increase after a planned, gradual introduction to the user community, and also meant significant up-front savings.

Jaspersoft also promised less adverse impact on BT’s network security measures, and a more natural fit for its Linux-based servers.

“Other solutions would have cost more,” says John Sweet-Escott, Unisys Project Director. “And they had all the limitations that come with closed code and an older design.”

Architecture played a role in the decision as well. Adds Andrew Hutchinson, BT Messaging Technical Specialist: “Because we wanted to be able to grow and change as our needs evolved, we

chose what we felt was the more 'future-proof' platform. That and a very low cost of ownership made our choice fairly easy."

An expansive database – offering plentiful business intelligence

With over 11 billion records and growing – more than 30 million rows are added every day, according to John Sweet-Escott, Unisys Project Director – the SDW captures fine-grained, keystroke-level data on every voicemail session that occurs among BT customers.

"The security issues have worked out well, too," adds Sweet-Escott. "It was easy to integrate the Jaspersoft technology with BT's SiteMinder access control solution." With this BT staff can manage both the SDW and the extent of stored data in SDW that an account is entitled to 'see' based on existing login credentials. This ensures that BT continues to meet its regulatory obligations in this area.

The implementation began with about 20 standard reports, most of which focus on operational statistics on voicemail system usage, and replace those produced by the previous system. Since that time, users have requested – and themselves added – another 80 reports.

Other reports are designed to assist with a range of problem-solving issues – and a large number of ad hoc queries have been created to audit for data accuracy – for internal purposes or at the request of customers.

"We have a number of ad hoc mailbox listing reports," explains Gayle. "These allow our operations people to quickly analyze mailbox and message counts by class of service, service provider, level of usage, or usage frequency."

Additional queries have been developed for the sole purpose of checking and improving data integrity within the core Voicemail system. Gayle says, "People have come to us specifically requesting a data cleanup. That says volumes about the level of confidence in our database – and in the Jaspersoft technology."

More recently, BT has begun using the Jaspersoft solution to integrate data from its Fixed SMSC and Managed SMS systems with the Voicemail statistics, giving the company a more complete, customer-centric view of messaging activity. "The Jaspersoft technology has proven its flexibility," says Sweet-Escott. "We're able to point at new data stores and get useful information quickly, without any big drama."

Results

Now, when that customer inquiry about a "missing" voicemail message comes in, BT staff can avoid the need to create – and wait for – a special request for Unisys resources to create custom queries against the Voicemail system. Instead, BT staff can simply open a portal and see when a message was deleted, or, if necessary, develop a new ad hoc query and submit it immediately – with answers in minutes instead of days.

"This represents a huge time savings for us," says Hutchinson. "And it's much more efficient in terms of cost."

The new capabilities have also led to other uses of the voicemail statistics – notably in capacity planning and management. "This was previously a laborious exercise, involving several days of effort to dig up the numbers," says Gayle. "Now we can do capacity assessment and planning on demand, in a fact-based manner, in just a few minutes." Reports and queries are also used to confirm service fulfillment, make and validate usage forecasts, and to streamline other key processes.

Though primarily used in BT's operations area to date, the SDW is already showing promise as a strategic weapon. Recent uncertainty about alleged system congestion was clarified in a matter of minutes when a BT user quickly built a graphical report showing "ports in use." The suspected shortage was quickly confirmed – and this armed BT with the information they needed to provide more capacity to the customer.

"Now we can see how much capacity we need, where we're overloaded, and what we can do to prevent problems," explains Hutchinson. "It would have taken us much more effort before we had the SDW and Jaspersoft."

One of the most important benefits the new system has brought is confidence. “We feel much more confident about the accuracy of our data now,” says Hutchinson. “And that goes hand in hand with our confidence in the Business Intelligence part of the solution. The user interface is nice and clean, and that lets us focus on the data.”

Looking forward: a steady increase in usage – and value.

BT has more than doubled the number of users who leverage Voicemail system data, now that the SDW has made it more accessible – and that trend is expected to continue.

“We can build on progress we’ve already made,” says Sweet-Escott. “We’ve already integrated Voicemail data with Telephone Exchange information, for example. With this accomplished, we can do geographical analysis on voicemail usage, which BT can use enhance capacity planning.”

Gayle calls out other plans for the future. “We’ll be better able to track customer problems, inquiries, and behavior, which can lead us to new cost efficiencies through the ability to more easily identify problem areas and correct them quickly and permanently.”

The possibilities still need to be communicated to various business units who stand to gain, Hutchinson points out. “But we’re on our way,” he says. “Usage and understanding of SDW are increasing steadily, just as we intended. We’re happy with our progress – and there’s a lot of potential.”

About Jaspersoft Corporation

Jaspersoft’s open source business intelligence is the world’s most widely used BI software, with more than 11 million product downloads worldwide and more than 12,000 commercial customers in 100 countries. Jaspersoft provides a web-based, open and modular approach to the evolving business intelligence needs of the enterprise and is the only BI vendor enabling true multi-tenancy while providing a common platform for on-premise, virtualized, SaaS and Cloud deployments. Jaspersoft’s products span the continuum of core BI requirements, including production reporting, operational & embedded reporting and analysis, interactive end-user query & reporting, dashboards and mash-ups, data analysis, and data integration. Its BI software is updated constantly by a development community of more than 135,000 registered members working on more than 350 projects, which represents the world’s largest business intelligence community. More information is available at www.jaspersoft.com and www.jasperforge.org.

CONTACT US

Jaspersoft EMEA (Europe, Middle East and Africa)

Jaspersoft Ltd., Dublin, Ireland
Phone: + 353 1 443 4700
Germany + 49 30 8939 1934
UK + 44 207 193 9321
France + 33 970 446 126
Italy: +39 024 792 1670
Spain: +34 911 829 976
Poland + 48 22 219 6087
Switzerland (FR): + 41 44 586 76 99
Switzerland (DE): +49 69 57 80 49 98
Sweden + 46 85 19 71 245
Email: sales-emea@jaspersoft.com

Jaspersoft Headquarters

539 Bryant Street, Suite 100
San Francisco, CA 94107
1-888-399-2199
Phone: 415.348.2380
Fax: 415.281.1987
Email: sales@jaspersoft.com

www.jaspersoft.com