



ARITHMOS
INFORMATION TECHNOLOGY

News & Events

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Business Intelligence: iPhone and iPad Revolutionize the Market

At the Oracle Health Sciences User Group Conference in Toronto, ARITHMOS impressed participants with its presentation on BI and integration with smart devices

As technology plays a bigger role in clinical trials, clinical study managers are looking for *readily available data* that is easy to extract. Business Intelligence is the use of computer-based techniques to collect and analyze data.

This month, ARITHMOS attended the Oracle Health Sciences User Group conference in Toronto, Canada. Already users of Oracle Business Intelligence, ARITHMOS was looking for new ways to integrate Oracle BI with new market technologies - in particular smartphones and tablets. IT Systems Analyst, **Gianluigi Albertini**, presented on Oracle BI integration with the iPhone and the iPad.

The hypothesis for this presentation was that the iPad and iPhone are ideal devices for access to study data information because:

- ◆ They are easy to use due to small size and zero footprint installation
- ◆ Accessible anytime due to Internet availability
- ◆ Able to focus on useful data

Prior to Oracle BI 11.1.1.5 there were many ways to access study data including standard reports, web portal for downloading data, excel files sent via email and sFTP reporting. These methods are considered old-fashioned and more importantly they are not portable and do not always have Internet connection availability.

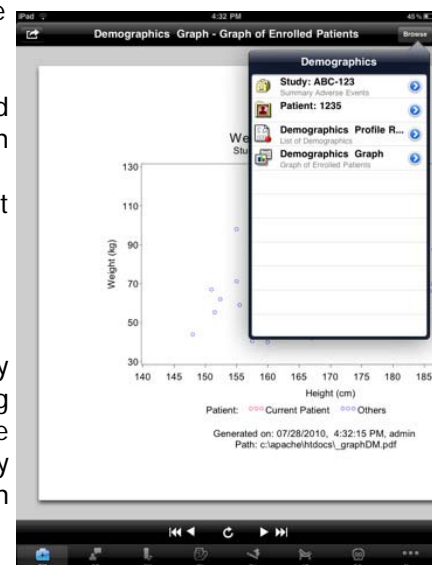
Oracle BI provides the BI Publisher "app" for iPhone and iPad which is available for download in the Apple iTunes store. The system requires first the installation of an Oracle database and the BI system. Then, BI should be installed with the Publisher component. The configuration of BI requires a WebLogic installation.

Read our ["From ePRO to iPRO: The effect of iPads on adherence and clinical trials"](#) article featured on the eyeforpharma website for more info on the iPod/iPad takeover.

The installation of Oracle BI Mobile to the iPhone is a straightforward configuration of the connection to the BI Publisher Server. Communication is secure using HTTPS, and then credentials are created for the user. This same process can be applied to the iPad.

Once logged in, data can be accessed via the Catalog where personal and shared folders are available. The iPod and iPad application also make specific reports available including enrollment status, SAE reporting, study metrics, site personnel and monitor activities, and aggregated study data. The devices are in fact easily portable and have easy access to WiFi or Internet subscriptions.

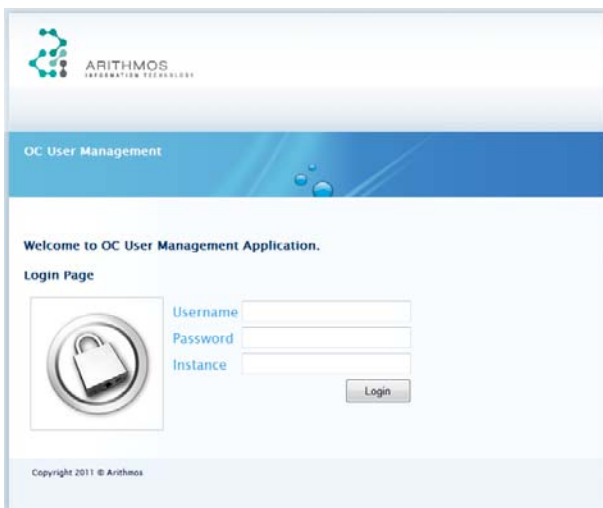
ARITHMOS has also considered the data privacy aspect. Data is transmitted securely through HTTPS via Internet and stored in the BI server and the ARITHMOS data center ensuring privacy, security and backup. For more information on Oracle BI integration or more on iPod/iPad use in clinical trials, contact ARITHMOS.



ARITHMOS Develops Oracle Clinical User Application

ARITHMOS, experts in the installation and hosting of Oracle Clinical Remote Data Capture, have developed a new application to make user creation simpler and less time consuming.

As the current process stands, user creation takes too long and there is a high probability of human error in entering data such as passwords, job role, sites and study assignment. The basic requirements for this application are a web server, Oracle connection driver and MS Access database to manage user profiles.



The screenshot shows the 'OC User Management' application interface. At the top left is the ARITHMOS logo. Below it, the text reads 'Welcome to OC User Management Application.' and 'Login Page'. There is a login form with fields for 'Username', 'Password', and 'Instance', and a 'Login' button. A padlock icon is visible on the left side of the form. At the bottom left, it says 'Copyright 2011 © Arithmos'.

This application allows the automation of the Access Database completion and Oracle and HelpDesk Management user creation. With the current procedure, Oracle Clinical user creation can take up to 5 minutes and then HelpDesk user creation can take an additional 2-3 minutes. With the new ARITHMOS application, both Oracle Clinical and HelpDesk user creation can be done in 1 second.

In terms of system performance, the application can automatically fill in system credentials for Windows, Oracle Clinical, HelpDesk and eventually Life Science Learning (eLearning) if applicable. The system performance cycle for 1 user takes on average 18 minutes without the Oracle Clinical User Application.

In a recent study in conjunction with CROS NT, ARITHMOS was able to register 340 users in 3.61 working days based on an average time of 5.1 minutes per user using the Oracle Clinical User Application. With the current procedure it would take 12.75 working days and therefore the application was able to save 9 working days.

ARITHMOS continues to improve and analyze the application. For more information, contact us.

ARITHMOS to Present Survey Results at Spanish ePharma Day

After launching an international survey in May, ARITHMOS will release the results of 132 respondents in Barcelona with a brief presentation.

ARITHMOS will be a co-sponsor with CROS NT of Spanish ePharma Day, to be held on 27 October 2011 in Barcelona, Spain. Official languages for the event are Spanish and English. Attending will be IT Systems Analyst, **Gianluigi Albertini**, and Marketing Officer, **Mary Wieder**.

ARITHMOS will also be presenting at the inaugural Spanish ePharma Day as it has chosen this event to share the results and analysis of the Electronic Data Capture Survey launched in May. The global survey focused on EDC experience,

SPANISH ePHARMA DAY 2011

knowledge and usage in clinical trials. With 132 respondents in 22 countries, the survey included information on EDC training, HelpDesk support services and advantages and barriers to EDC. The survey was composed and conducted by Mary Wieder and Head of Health Science Services, **Silvia Gabanti**, with support from Gianluigi Albertini.

The Big Five IT Trends: What is ARITHMOS' Stance?

A recent article on Enterprise Web 2.0 highlights the "Big Five" IT trends in the next half decade. Innovation and leadership are now shifting to IT departments, see how ARITHMOS is adapting.

In his article "The 'Big Five' IT trends of the next half decade: Mobile, social, cloud, consumerization, and big data, Dion Hinchcliffe predicts the big trends in IT and the change in the roles and responsibilities of the IT department.

1. Smart Devices and Tablets - As discussed in the article on page 1, these new technologies are revolutionizing all types of markets. The estimated tablet market in 2015 is 479 million units. ARITHMOS is already working with applications on the iPhone and iPad and working to implement the iPad for a new study due to its ability to increase patient compliance. ARITHMOS also has experience with the Blackberry and clinical trial integration.

2. Social Media - "Revenue growth of social businesses is 24% higher than less social firms". Being "social" on social media requires a partnership between IT and marketing/comm. Social media should be a primary channel in the next decade. ARITHMOS is already on LinkedIn and Facebook and has used social media in the past to conduct market surveys.

3. Cloud Computing - The pharma industry has already been using cloud computing primarily for research purposes. Benefits include access to data management applications and tools readily available on a Web platform. ARITHMOS applies cloud computing models through software as a service (SaaS) by offering Oracle Clinical and Oracle Clinical Remote Data Capture.

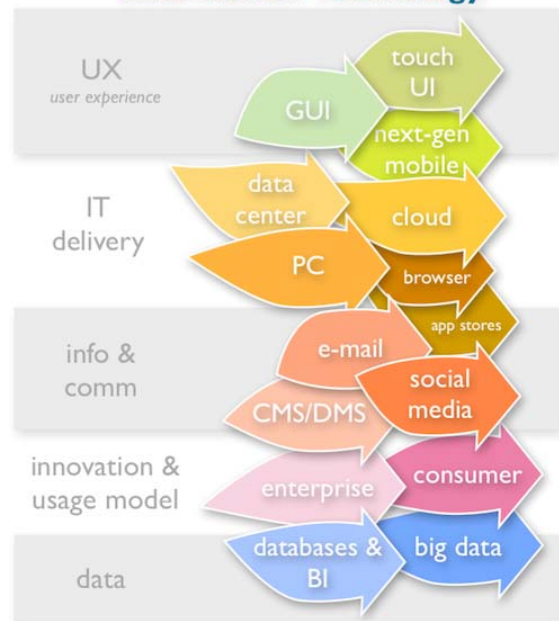
4. Consumerization of IT - "The source of innovation for technology is coming largely from the consumer world". Consumer needs push development and innovation from IT. ARITHMOS has been developing new ways to use devices and applications in clinical trials based on market gaps and consumer demands. On a side note, ARITHMOS is working with CROS NT to influence innovation among its employees. At the end of

the year, the company will award an iPad2 to the employee with the best innovative idea.

5. Big data - "The term 'big data' was coined to describe new technologies and techniques that can handle an order of magnitude or two more data than enterprises are today". Being the IT hub for CROS NT, ARITHMOS understands the importance of managing large amounts of significant data. As seen on page 1 and 2, ARITHMOS is developing "apps" to handle data easily and immediately.

Overall, within the next five years, IT will play a bigger part in overall business strategy. Technology plays a crucial role in meeting consumer demands for faster and more efficient ways of doing business. ARITHMOS mission as an IT company is to "fill the gap" where a technological need exists for our clients or in the marketplace.

The Major Shifts in 21st Century Information Technology



From <http://zdnet.com/blog/hinchcliffe> on 

Announcement:

We would like to advise our clients and contacts that ARITHMOS has changed its office address. The new contact details can be found below. We ask you to please update your records.

	ARITHMOS INFORMATION TECHNOLOGY	Via Roveggia 122 37135 Verona, Italy Tel: +39 045 58 54 92 Fax: +39 045 8209471 info@arithmos.it www.arithmos.it
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About the ARITHMOS Newsletter

The ARITHMOS newsletter is published bi-monthly alternatively with the CROS NT newsletter. The goal of the newsletter is to share relevant news and events from the biotechnology sector and showcase work ARITHMOS has been doing in industry. Content is produced in-house by ARITHMOS staff. For more information, contact ARITHMOS Marketing Officer, Mary Wieder: mary.wieder@crosnt.com

About ARITHMOS

Founded in 2010, ARITHMOS is the technology branch of the CROS NT Group. Based in Verona, Italy, ARITHMOS offers IT solutions such as hosting, data integration, computer system validation and software development to “fill the gap” where a technological need exists for our clients or in the marketplace.