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AIRPORT INFORMATION TECHNOLOGY

Airports & Ground Handling

SolarWinds®, a provider of IT management software to more than 90 000 customers worldwide, has announced that Raleigh-Durham International Airport (RDU), NC, uses SolarWinds' Orion® family of network management solutions to monitor and support its technology infrastructure and IT systems. RDU began to use SolarWinds' products in 2007, selecting SolarWinds Engineer's Toolset to perform deep root network troubleshooting and diagnostics, as well as IP address management. Two years later, RDU has a full SolarWinds environment, deploying the Orion suite of products, LANsurveyor and multiple copies of Engineer's Toolset. "We needed our network management system to be able to talk to multiple vendors rather than only one or just provide one specific technology," said Brian de Loureiro, manager of Systems & Integration, Raleigh-Durham Airport Authority. "On top of that, our tremendous network growth, staff additions, and the use of servers and systems inherited from previous projects that were externally-supported, made our management of all these systems much more complicated and critical."

Network management is vital to ensuring the proper workings of RDU's growing network of 4000+ IP addressed devices, 180+ network devices, 75 servers, and 20 virtual servers. From monitoring flight information to passenger processing, the SolarWinds offers the RDU networking team a real-time, comprehensive and easy-to-understand view of the health of their network. Prior to implementing SolarWinds' products, RDU used native monitoring and reporting tools. These proved to be too basic for their evolving needs and didn't give administrators the information needed to troubleshoot network problems. #875.AIT1

Austin, TX-based AvFinity can now facilitate Advance Passenger Information (API) for air carriers travelling to Caribbean Community (CARICOM) member states. AvFinity recently successfully completed testing of the submission of API with the Joint Regional Communications Centre (JRCC). The JRCC is CARICOM's agent for collecting, collating and vetting API for all air and sea carriers arriving at and departing from each member state. CARICOM legislation requires mandatory API submissions for all participating CARICOM members (Antigua and Barbuda, Barbados, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago). AvFinity also is an authorized API service provider for U.S. Customs and Border Protection (CBP). CBP has approved AvFinity to send both traditional batch and AQQ (pre-departure) submissions. Aviation companies comply with API regulations through the AvFinity Integrated Services Router™ (AIRS™), a plug-and-play appliance that combines powerful connectivity software with the reliability and consistency of the Cisco brand. Customers use AIRS™ software technology to submit required passenger and crew information directly to CBP and CARICOM. The AIRS™ APIS Navigator™ service formats the data to meet requirements of both CBP and CARICOM. This means an air carrier can file API through submission of a single message that conforms to filing standards of both border authorities. Other AIRS™ features include integration with a customer's passenger and crew database and data vetting to identify errors that an air carrier can correct before they result in fines. #875.AIT2

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Aviation Authorities & Air Traffic Management

Passur Aerospace has announced that Fort Lauderdale Executive Airport (FXE) in Florida has contracted for the collaborative version of Passur® AirportMonitor™, a web-based airspace education tool for airport communities. AirportMonitor is the pioneering community airspace awareness tool, which provides an interactive display of air traffic and flight information in and around the terminal airspace, designed for airport websites. It enables residents to view traffic in 'near-live' and replay mode, with a host of user-friendly online tools designed to promote airspace education, answer questions about specific flight behavior, and promote openness and trust between residents and the airport. FXE has been a long-time user of Passur data feeds and software for its noise monitoring programme, as well as for aircraft identification. "Passur AirportMonitor strengthens our relations with our neighboring communities, creating the trust that comes from transparent and accurate information," said Clara Bennett, Airport Manager, Fort Lauderdale Executive Airport.

The new version of AirportMonitor includes instant airport messaging, based on the existing collaborative decision making technology developed for Passur Portal™ and Passur OPSnet™. This allows the airport to instantly communicate about airspace conditions which may be affecting residents' noise quality. #875.AIT3

Infrastructure software developer, Autonomy Corporation's meanings-based computing platform, IDOL, has been selected by the Civil Aviation Administration of China (CAAC) to manage and access more than 10 million documents in its digital library. Autonomy will integrate the sources within the CAAC library, which forms a part of the Chinese Ministry-owned National Library, to provide users with fast and accurate access to the information. According to CAAC, the digital library has experienced a dramatic increase in size due to the rapid development of the Chinese aviation industry. Consequently CAAC recognized the need to implement a sophisticated information access solution, to deliver scalability and high-speed access to the millions of documents in the library. "With the dramatic growth in China's aviation industry, it is critical that users are able to not just find the right information to do their job, but it is equally important for them to share their knowledge and expertise in the field," Autonomy CEO Mike Lynch said.

The Autonomy IDOL data-management platform performs conceptual and contextual analysis and probability matching on information to find the meaning within and the inter-relationships between and among disparate pieces of content. The software suite will allow the CAAC to integrate all of its different data types, provide advanced functionality and including conceptual-data features including search, classification, clustering, and document recommendations. #875.AIT4

The UAE General Civil Aviation Authority (GCAA) has launched the first phase of e-Licensing systems development project in line with the government's aim of developing electronic services across all governmental sectors. GCAA appointed leading IT company Logica to initially identify various requirements and software for the development of e-Licensing systems. Laila Bin Hareb, head of Strategic Planning and Corporate Excellence, said the GCAA developed new strategies to improve and facilitate dealings with airline operators in the UAE.

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"Most GCAA services will be automated in order to develop the existing services and make them available to all airlines and clients, accommodate the continued growth of the UAE aviation sector and provide excellent services to GCAA clients", she said. Walid Ghanim Al Ghaith, chief of licensing, GCAA, pointed out that e-licensing would save a lot of time for pilots, engineers and others working in the aviation sector. "More than 1500 licensing transactions are conducted every month by those working in the civil aviation sector. Each transaction involves sitting for exams, submitting applications and issuance of licenses. This takes a lot of time and efforts", he added. #875.AIT5

MRO

Lufthansa Technik has announced a new WebService within its manage/m® Technical Operations WebSuite. With the tool, called 'm/modification/software', a variety of configurations of onboard software and hardware on can be managed and controlled. This is becoming increasingly important as platforms such as the Airbus A380 and Boeing 787 contain more than 800 different software components. The new WebService enables users to retrieve current software configurations and look back at historic configurations as of any date. Using multiple software-to-hardware assignments, m/modification/software is able to map field-loadable software precisely, even in complex, virtualized hardware environments. The planning function of m/modification/software allows the central coordination of software updates for individual aircraft or entire fleets. To support the planning feature, a variety of interfaces link m/modification/software to other WebServices and modules of the manage/m® WebSuite.

Some 170 airlines with more than 5500 users are working regularly with the comprehensive manage/m toolbox of 15 web-based modules for the technical operations management. The ready-to-go IT platform offers simple and quick access with a single sign-on and a user-friendly interface. The modules and WebServices accessible in the WebSuite are tailored to each individual customer's need and the corresponding MRO agreements with Lufthansa Technik. #875.AIT6

Aircraft services company M7 Aerospace has adopted applications from Swedish IT provider IFS to support its aviation services organization. San Antonio, TX-based M7 Aerospace has a long history of supporting aircraft fleets for the United States military, including the C-20, C23 and C-26 aircraft. These support efforts require the staffing and coordination of the materials that are stationed with the aircraft worldwide. In addition to the military support programmes, M7 Aerospace supports the entire fleet of 700 Fairchild Metro and Merlin aircraft for both commercial and military customers.
M7 Aerospace's growth in recent years has outpaced its current enterprise systems, and as the company continues to experience growth and wins additional contracts, it required a fully integrated solution for support. As a result, the company went looking for a reliable, streamlined solution.
The company will implement IFS' financials, distribution, manufacturing, engineering and human resources applications. The IFS applications will replace M7 Aerospace's existing legacy system. #875.AIT7

ARINC Engineering Services has introduced MxSIM™, a breakthrough in PC-based aircraft maintenance training systems. The low-cost simulator meets both military and commercial training requirements with a wider choice of features and capabilities than any similar maintenance training system. The ARINC MxSIM simulator is a software-intensive maintenance training system, using touch

screen virtual instrument mockups and/or simulated aircraft components (functional equipment mock-ups) supported by the same software models to represent on-board aircraft systems in real time. The modular technology can be configured to support high fidelity (hardware-based) training, virtual-hardware training, and task-based classroom training and instruction. The design includes user-controlled update rates and scheduling on a PC platform with high speed PXI interface, touch graphics displays, video and audio as required.

The design provides intuitive full simulation control, on-the-fly diagnostics, student action monitoring and reporting, free-play operation, scenario-based operation, malfunction insertion, freeze, reset, record, playback, and lesson plan development capability. The open architecture makes it easily adaptable to work with other military and commercial maintenance training devices and procedures trainers. MxSIM technology can be extended for virtual training, computer-based training, and interactive multi-media instruction. A Virtual MxSIMTM solution will support familiarization, cognitive, and practice-oriented training, greatly reducing hands-on equipment time, and will be configurable as a self-paced or instructor-led training tool. #875.AIT8

Ramco Aviation has announced version 5.2 of the Series 5 M&E / MRO Aviation Solution. Continuing to simplify the processes by which people interact with IT systems, version 5.2 expands the centralized graphical planning board, providing planners with full visibility into materials, man-power, tools and ground time constraints. Further simplifying the planning process, all maintenance due can be displayed within the new interface thereby reducing the opportunity for errors and maximizing the utilization of available ground time. Series 5 also provides centralized data entry for maintenance technicians, thus eliminating the need for technicians to remember several screens. Reducing screen complexity means the technicians spend less time in the system and more time solving maintenance problems. Consolidating the maintenance execution screens into a simple and insightful interface allows the critical elements of the aircraft status to be contained in a single view, including all deferrals, discrepancies, planned and opportunity maintenance, as well as material, tools and special equipment requests. “We are very proud of the Series 5 product and the newest advancements in usability and functional additions delivered in version 5.2. These concepts will continue to be perpetuated in our products throughout the Series 5 lifecycle. Our Series 5 customers are excited and enjoying the ease of use and the new technological advances,” said Jim Fitzgerald, President, Ramco’s Global Aviation Solutions. #875.AIT9

The need for integration and more efficient business cycles is propelling the global commercial aviation asset management software market, with revenues projected to grow at about 8% from 2008 to 2018, reports consulting firm Frost & Sullivan. There is considerable potential to be tapped as airlines increasingly implement IT asset management solutions. However, factors such as development costs and the lack of an existing IT infrastructure in certain regions must be addressed first. New analysis from Frost & Sullivan and Global Commercial Aviation Asset Management Software Market Assessment, finds that the market earned revenues of about USD 325 million in 2008, and is estimated to exceed USD 680 million by 2018. The total market includes the asset management spending by airlines and MRO organiztions.

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"The implementation of an IT system in this market has cut the time lag in business cycles by 20% on average", notes Frost & Sullivan Team Leader, John Siddharth. "Shorter business cycles reflect directly on the increased efficiency of an organization."

The need for interdepartmental integration is another major driver. The efficiency of an integrated system can be judged when invoicing or raising a purchase order in an organization. This usually takes 24 to 48 hours in a non-integrated environment. "Airlines are implementing IT asset management solutions to keep track of fleet, inventory and also human resources." Siddarth concluded. #875.AIT10

Rotorcraft Leasing Company (RLC) recently credited Component Control's Quantum Control aviation enterprise resource planning (ERP) software for completing a physical count of more than 635 million parts in seven weeks. "Since we had doubled our inventory value from USD 12 million in 2008 to USD 26 million in 2009, we anticipated the count taking far longer than usual," said Joyce Cornett, RLC Business Process Manager. "To our surprise, we completed the physical inventory of 10 bases and our parts distribution centre by the third week in December [2009]. Prior to 2009, we couldn't complete the physical inventory by year's end." RLC used Quantum's barcode scanning and physical inventory features to initiate a new batch-based inventory procedure. According to Cornett, the barcoding process allowed RLC to identify and research variances immediately rather than waiting days for the inventory to be entered by hand. Cornett anticipates the 2010 inventory process to be even more efficient since all bases are now using the barcoding system on a daily basis. Quantum Control combines manufacturing, shop floor control, inventory management, accounting, e-commerce, sales and invoicing, and other business functions into one integrated software suite. #875.AIT11

Air Cargo & Logistics

CargoWise®, a globally recognized technology supplier for logistics service providers, says that 2010, a year of change and challenge, calls for international freight and logistics companies to carefully evaluate lessons learned from the global recession and address future business sustainability to avoid future operating risks. Simon Clark, Business Development Manager - EMEA, said: "The global recession reshaped the manner in which the freight and logistics industry conducted business. Operating decisions and business models were dissected and resources were reduced to survive. Moving forward in 2010, it's time to rethink and alter our approach to business sustainability in order to reflect changing economic dynamics." The solution for optimizing business continuity planning and reducing operational risk in today's increasingly IT-based global supply chain lies in taking preventative steps, says Clark. This can be accomplished by archiving all transactional documentation electronically in a single software platform. The electronic solution offers several significant paperless benefits: virtually all transactional data can be automatically archived electronically, eliminating the need to store paper documents that can be damaged or lost. Electronic documentation also provides the ability to have email and content automatically added to the document archive and indexed back to the job file, which offers obvious continuity benefits. Integrated CRM solutions powered by a robust IT solution are a powerful component in preventing adversity and optimizing the business continuity planning process of logistics operations in any business environment, summarizes Clark. #875.AIT12

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Security & Surveillance

Vidient Systems, a technology leader in intelligent video, announced that a major U.K. airport has completed the deployment of MFlow, an automated exit lane security system using Vidient's SmartCatch video analytics suite, while a second U.K. airport, Newcastle International, has just purchased another such system. The SmartCatch system is a major component of the MFlow Exit Lanes solution developed by U.K.-based Human Recognition Systems (HRS). The MFlow Exit Lane solution, using the SmartCatch system, has been proven for use in U.K. airports after successfully meeting rigorous testing against the Department for Transport (DfT) security regulations. The solution automatically identifies people attempting to enter through the exit lane and, upon detection, immediately activates an escalating series of alerts to allow an operator to respond to the emerging threats appropriately. The passengers are initially alerted via audio message, and if the behavior continues, maximum alert will activate doors to close.

The SmartCatch Exit Lane analytic automatically identifies exit lane breach attempts through real-time analysis of CCTV video. The software accurately detects violations even at times of high exit traffic flow and when the intruder is barely visible. As well as monitoring the flow of passengers, the system detects people standing near the exit lane. In the case of a suspicious event, both human and automated actions, such as spoken audio warnings to turn back, are initiated to respond and contain the situation. By combining video analytics technology with real-time control of security doors, and without the requirement for at-location security personnel, the airport has significantly improved security and efficiency while reducing ongoing cost.

Frank Pao, CEO of Vidient, said: "With continued successful deployments, together with HRS, we are supplying the aviation industry with a sophisticated, cost effective and rapidly deployable application for securing airport exit lanes. With this complete solution, our airport customers can rest confident that they can prevent exit lane violations that cause drastic consequences like the one that occurred recently in the U.S." #875.AIT13

Avsec, the New Zealand government's provider of aviation security services, has chosen Quintiq's employee scheduling solution to increase operational efficiencies. Avsec is responsible for all pre-board screening of passengers at major airports throughout New Zealand. Avsec's activities also include screening checked baggage, screening of airport workers, airport access controls, random patrols, aircraft security and managing the Airport Identity Card system for restricted areas. Avsec is implementing Quintiq's employee scheduling software for operational staff with the goal of optimizing rosters by matching workload to staff resources. The net result will be a reduction in operational costs, efficiency and productivity improvements, and a higher level of staff satisfaction and retention. Quintiq is capable of supporting all Avsec requirements, without the need for modifications to the standard software. Quintiq's flexible solution will allow real time adjustments for changed or delayed flights, helping Avsec achieve accurate demand driven rostering. There will be one system covering different locations, staff and processes. With the new system Avsec will gain a global view on resource management which will aid in the effectiveness of the whole organization. #875.AIT14