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Welcome

News of the new 10-year .aero sponsorship agreement with ICANN was confirmed shortly before this newsletter went to press. It's a welcome endorsement of the community approach that has been taken since the launch of .aero, the first ever top level domain to be reserved for a specific industry sector.

Other news in this issue include a case study and a 'meet the registrars' interview. The range and variety of services, information provision, applications and other uses of the Web continues to grow, limited it seems only by the extent of people's imagination. Within our own industry, .aero is providing the domain focus to help encourage more imaginative uses.

However, the Web is still in its early stages, according to the interview in our special feature. Dave Raggett has been involved with the development of the World Wide Web since its earliest days. Today he is deeply involved in making it easier to build applications across the burgeoning array of devices which can be used to access the Web.

We hope you enjoy this issue and will let us have your own views and comments.

.aero team, SITA



Airport codes released

On 1 December 2008, SITA released the three-letter airport codes (location identifiers) – reserved exclusively for airport use since 2002 – for registration by eligible members of the aviation community, on a first-come-first-served basis.

Three-letter codes that have already been registered, or which cannot be registered due to contractual obligations between SITA and ICANN, have not been released as part of this process. The total number of airports that has registered three-letter codes is 237, out of which 10 were registered after the codes release in December 2008.

The total number of registrations of threeletter codes from non-airports is 390. These registrations were effected before the codes became reserved back in 2002 and also after the codes release in December 2008. Sixty-one three-letter codes were registered by non-airport customers between 1 December 2008 and 28 February 2009, compared to only 10 codes registered by airports during the same period. The highest number of registrations effected after the codes were released has been within the registrant groups of aviation suppliers and service providers, airlines, and aerospace companies.



New .aero sponsorship agreement with ICANN

SITA has signed a new 10-year sponsorship agreement with ICANN (The Internet Corporation for Assigned Names and Numbers). The original agreement, signed in December 2001, had been due to expire in December 2006 but had been extended by ICANN (as was the case with other proofof-concept sTLDs), to allow time for the conclusion of renewal negotiations.

Under the fresh agreement, SITA will remain the sponsor for the .aero top-level domain. Eligibility verification will be performed in an unchanged form and the Dot Aero Council will continue to advise SITA on policy developments. ICANN's Office of the General Counsel reviewed the request and supporting corporate documentation and found it to be acceptable.



As noted on ICANN's public website (www.icann.org/en/announcements/announc ement-2-19dec08-en.htm), the proposed .aero sponsorship agreement substantially follows the format of other recent sTLD registry agreements negotiated by ICANN. It provides for:

- compliance with consensus and temporary policies, except to the extent policy development has been delegated to the sponsoring organization,
- comprehensive registry data escrow,
- approval of new registry services and modifications to existing registry services, and fees to ICANN based on the total number of registrations.

The detailed text of the agreement, including a summary of changes confirmed against the original 2001 agreement, can be found at www.icann.org/en/tlds/agreements/aero/.

NOTE: "As a private-public partnership, ICANN is dedicated to preserving the operational stability of the Internet; to promoting competition; to achieving broad representation of global Internet communities; and to developing policy appropriate to its mission through bottomup, consensus-based processes. ICANN, a public benefit, non-profit entity, is the international organization responsible for the management and oversight of the coordination of the Internets domain name system and its unique identifiers." www.icann.org.

Skysoft-ATM Launches open source initiative through www.albatross.aero website

Skysoft-ATM, a major solution provider to the airport traffic management (ATM) industry, recently announced the launch of the Albatross[™] open source community project, based at www.albatross.aero.

The company also announced a commitment to contribute leading technologies to the project. The first of these is the Albatross Display™ – an advanced, flexible air traffic control radar display solution made available to the Albatross community under a GPL licence.

The initiative reflects a growing demand for open source software solutions within the public sector. A study aiming to assess benefits that the model can bring to ATM is proceeding at EUROCONTROL, the European organization for the safety of air navigation.

The company will also produce an enterprise version based on Albatross Display[™], which will be tested, certified, and come with full professional support services. This version will become available later in 2009.



Skysoft-ATM aims to encourage a new era of cooperation of ATM users, manufacturers, developers, regulators and academics to contribute to more open and cost-efficient ATM solutions, for a more secure airspace and to better service the global airport sector.

The project is now live on the Albatross Community website. To get involved or learn more about the Albatross community project, visit: www.albatross.aero. Contributor agreements are available on the site, as well as a forum to start sharing ideas, topics and other project initiatives.

A white paper: "It is in the DNA": How to induce change and innovation in the ATM industry is available at www.albatross.aero/resources/whitepapers/index.php (registration required).

www.jcg.aero: "Securing the future of commercial aviation"

(www.jcg.aero)



The Joint Co-Ordination Group (JCG) was formed by a group of aerospace industry information security experts to ensure harmonization between the information security efforts of all of the standards bodies affecting the commercial air transport industry.

The Group does not make standards of its own, but serves as an informal central forum for co-ordination and dissemination of information of interest to the civil air transport security community. It meets only as needed, with an agenda built on recommendations of representatives. Decisions are made by consensus and can only be in the nature of recommendations, having no mandatory status. The JCG has come to realize that the 'impacts' are not just limited to those activities managed by organizations such as the Air Transport Association (US) and AEEC (formerly Airlines Electronic Engineering Committee), but must be extended to cover other interested parties that control and manage information exchange in the complete civil aviation ecosystem. This includes air transport organizations such as ICAO, IATA and FAA but also others such as the Internet Engineering Task Force (IETF) and industry service providers such as SITA. A number of governmental and defence counterparts are also involved, such as Certipath and TSCP (Transglobal Secure Collaboration Program).

InterNetX / PSI-USA

Since its foundation in 1998 in Regensburg, Germany, InterNetX has been recognized as a top provider of domain products and hosting solutions. With more than 2.7 million managed domains and approximately 1,400 hosted servers, InterNetX is one of the most successful wholesale traders for resellers and professional users in the international market. The company, with a reseller network of more than 19,500 partners, has established itself as one of the leading providers for white label solutions in the international marketplace.

InterNetX is accredited with a number of registries – including VeriSign, Afilias, PIR and NeuLevel. Through its subsidiary PSI-USA Inc., the company is also an official ICANN registrar. Its domain portfolio is immense, including over 300 ccTLDs and gTLDs worldwide.

InterNetX also markets customized server solutions, server housing and the domain management interface called AutoDNS. This regularly updated software and in-house creation makes domain management efficient, simple and versatile.

InterNetX has recorded strong growth year on year. In December 2004, United Internet AG became shareholder of InterNetX; in return InterNetX acquired Schlund Technologies GmbH. We discussed their work with Jasmine Begg, the company's Teamleader for Marketing, International Marketing and Public Relations.

SITA: When did PSI-USA Inc. start, where is it based and what does the company offer?

InterNetX: PSI-USA, Inc. is part of the InterNetX group. InterNeX acquired PSI-USA, Inc. in 2001. The company is a provider of domain products and hosting solutions offering an ample variety of domain products as well as virtual and dedicated servers and customized server solutions for resellers and providers. InterNetX operates as a technical and strategic partner in the background for enterprises around the globe.

SITA: You were working with .aero and SITA as a reseller long before you became an authorized registrar. What made you decide to switch from reseller to registrar?

InterNetX: For us, good business means having strong and reliable relationships. We wanted to be independent from a registrar and strengthen our contacts with registries such as .aero. Becoming a registrar gave us the opportunity to exert influence on TLDs. Of course, another important fact is the improved price scheme from which we can profit as a registar – and as a result hand on a price bonus to our customers.



Meet the registrars continued...

SITA: On your website, you don't offer direct .aero domain name registrations, but you do offer opportunities to resellers. Why did you decide to go for this business model? What is the thinking behind the strapline for resellers on your website: "Do you want to offer your customers .aero domains at an unbeatable price?"?

InterNetX: InterNetX is the leading provider for white label solutions with partners all over the world. We set great store by meeting our customer's demands. So one of our main focuses lies in offering quality and an effective workflow. As a link between registry and reseller we can provide all parties involved with the advantages of our successful reseller system – such as excellent cost effectiveness, quick and straightforward services and, of course, high quality products. SITA: What do you see as the positive and negative aspects of .aero as a TLD and where would you place .aero in your marketing portfolio?

InterNetX: As an industry-oriented TLD focusing on the aviation business, .aero serves a definite business branch with very clear demands. As a result .aero has a distinct position in our domain portfolio. For our marketing activities we can address directly the specific aviation community and customize campaigns to this very explicit branch.

SITA: Have you found that dealing with the .aero domain has involved complexities not found in dealing with other domains?

InterNetX: InterNetX offers more than 300 gTLDs and ccTLDs. It follows that we are quite experienced in implementing new TLDs into our systems. As a sponsored TLD restricted to the aviation community, and as with other special TLDs, .aero requires extra technical work but within a "normal" frame.

SITA: How do you see the .aero TLD evolving as part of your portfolio? What plans and ideas do you have for further promotion?

InterNetX: InterNetX currently has a customer base of more than 19,500 partners. New customers and resellers are recruited by out sales team on a daily basis. Campaigns tailored to the needs and desires of our customers and the aviation community is a focal point of our marketing strategy for .aero throughout 2009.

SITA: Based on your experience, are there any key issues that you believe .aero should address as part of its own future development?

InterNetX: In order to acquire more interested customers it would be necessary to make .aero open to everyone for registration. A first step was taken last year with the relaxation of some rules. But it's also important to make the process of registration as easy as possible, for example by giving as much information as necessary and avoiding complicated technical and formal steps. It would be also very helpful to provide relevant information in different languages (e.g. Spanish) in order to open new marketplaces and inform customers about .aero and its targets.



Deep down inside the Web

The World Wide Web Consortium (known universally as W3C) continues to be the driving force behind protocols and guidelines that ensure the long-term evolution and development of the Web. We took the opportunity of talking to one of the leaders behind that process, W3C Fellow Dave Raggett.



Dave Raggett has been deeply involved with the development of key Web standards since 1992. In 1994 he launched and chaired the IETF (Internet Engineering Task Force) HTTP working group and drove early standards work on HTML+, HTML 3.0, HTML tables and HTML forms. Since 1995, he has been a Fellow of the Boston-based World Wide Web Consortium (W3C), the body started, and still chaired by Sir Tim Berners-Lee, the inventor of the WWW.

We met up with Dave Raggett at home, grabbing a quiet moment in his dizzying schedule of international travel, to talk about his role in W3C. This includes work on standards for a new generation of authoring tools for distributed Web applications. They involve a wide diversity of devices such as desktop computers, office equipment, home media appliances, mobile devices, physical sensors and effectors (including RFID and bar-codes). It is self-evidently of interest to the air transport community.

SITA: What is driving this work?

DR: People are increasingly using the Web for applications, but html has become more complicated, which makes it harder to build applications. It is also increasingly expensive, because of variations across browsers – not just versions but also different vendors. So W3C is exploring the idea of using modelbased approaches to support cheaper and easier authoring of applications.

Take the range of skills and people involved in producing a web application. Some are worried about graphic design, some about the business rules, others about the user experience. They must all be concerned with accessibility and privacy. A whole range of people are involved, each bringing different concerns and different perspectives. To be effective, they need to be able to work independently. But the current approaches of markup, scripting and so on don't really cut it, because it's all jumbled up together.

Model-based approaches allow for a separation of concerns via models that support the different roles and perspectives people bring to their work. The authoring tools look after the complexity involved in keeping the different levels of models in sync.

Another part of the Group's work is to help people adapt applications to a particular delivery channel, especially since now we have mobile devices and TVs that offer webbrowsing technology.

Special feature continued...

SITA: The principle seems to be the same that has always underpinned the Web – keep it simple so that more and more people can do it.

DR: That's right. You can't really cope with all these challenges if you're buried in the code or the scripts, so you need to find a way of abstracting away from that. The W3C Ubiquitous Web Applications Working Group is focusing on context adaptation and personalization. It's about what model you have for the user preferences of the device capabilities and environment and then how can that be exposed to applications.

SITA: If we take mobiles, there's great variety in appliances that have greater or lesser levels of web access...

DR: Our Group did evolve originally from work being done on mobiles, but it's broadened out. There was a device independence working group but they were talking about the concept of device independent authoring, preceding the mobile web initiative. There are a number of other groups within W3C that focus on the mobile industry.

Some of the standards work is about taking material that's already been deployed, but where companies want an interoperable standard because customers are complaining... They reckon they'll grow the market if they build the standard. So standards groups can knock off the rough edges of an already de facto standard. Companies are willing to work together to do that.



Then there's work that is typically in the precompetitive phase. We're trying to put mileposts down, as it were, around which research groups and industry can steer by. We're developing an ontology – essentially a model or vocabulary – that can be exposed into different interfaces. The idea is that, although there may be different interfaces or contexts, the work is all based on the same fundamental assumptions. An example would be the difference between portrait and landscape. What does that mean?

SITA: Your work is still based on those first days of Berners Lee trying to simplify things, making the Web accessible and available to the biggest number of people at the minimum cost?

DR: Yes. Essentially it's fulfilling the potential of the Web...

SITA: ... On the understanding that the Web is something ubiquitous, available to everybody...

DR: ... Right – its not the possession of individual governments or companies. Although people are very familiar with accessing the Web through computers and now mobile phones, Web technologies have a much broader applicability. If we want to have different devices networked and we want to be able to allow people to build applications around them, Web technologies will help to realize that.

Special feature continued...



SITA: How about security issues?

DR: We're still in early days. For example, banks have tended to decide it's cheaper to fix problems as they occur rather than provide improved security. That's slowly changing. The fact that we expect the user to remember a whole range of user names and passwords is not very practical. Security on the Web today is not very usable. This allows abuse, unfortunately.

Lawyers might say that if people want to access a service, you show them a legal disclaimer and everything's ok. But that doesn't really work, because ordinary people, when they see security disclaimers, do not necessarily understand them. There's a lot of potential for improvements in security and trust – maybe by using delegation models. Rather than expecting you as an individual to know about a particular service or website, maybe you can 'call a friend' or trusted authority. Privacy is another key issue. I'm involved with a number of companies researching privacy and identity management. As you interact with the Web, a vast amount of information is being collected about you. We cannot put the clock back, but we need to empower people to control their lives. This is another big challenge for the Web. Trust, privacy and identity management are big issues.

SITA: What progress is being made with the Semantic Web?

DR: Tim Berners-Lee's first proposal for the Web used links between pages and sites that were labelled, whereas conventional links were all the same. So even then he had the idea of attaching semantics to the links. The Semantic Web is essentially about creating a Web of machine interpretable data that can be used to support systems and services.

Today corporate IT is centred around databases, but the data within the database

can be likened to an island surrounded by sea. You can send a ship over to get some data and take it to another island, but they're not really integrated. We'd like to be able to connect all these things up. So the next problem is that the data within these databases is not very well described – the semantics of it is buried in code. There is documentation about the data models but it's buried somewhere else and most likely out of date.

To allow computers to know that this is an email record and that it is someone's address, you need good machine readable descriptions. Text, diagrams and pictures are things that computers have difficulty understanding. Google has shown that statistical techniques for text analysis work to a certain extent, but the kind of links you get back show the limitations to that approach. If you can describe the meaning of something in a way that a machine can understand... It's the difference between having an isolated computer to one that is networked with the world. There's a lot of activity going on in this area, with a whole slew of specifications coming through.

SITA: So if the air transport industry wants people to be able to pass from kerb to aircraft without breaking stride*, as was suggested 10 years ago, the Semantic Web is integral to that.

Special feature continued...

DR: In the long run, yes. The Semantic Web will be very important for this. Today, if you search for flights, by and large you don't get a lot of useful stuff back. If there were standards around services, then search engines could work with different industry statements to define these application programming interfaces. Today you have to go to different websites for the different components of a trip, whereas if the site could come back to you with possibilities that suit you personally at that moment very quickly... It's about understanding the intent of the search. Doing the work on behalf of the user so that users don't have to spend a lot of time on different websites. There's huge potential there.

SITA: So with a context-based search, it becomes easier and faster and more reliable to find and book a flight from a mobile, for example?

DR: Yes, but it also brings us back to the privacy issue. You might be willing to disclose information about yourself to a company in exchange for information, providing they don't hang on to the information. So we're back to the old adage about the quality of information you get back being impacted by the quality of information you give them. If the company knows your frequent flyer details, where you are right now etc, it can do a lot more.



At the same time, you don't want to give that information away too readily. So this is where privacy comes in. It's about accepting different levels of risk. You want to know whether the sites that are collecting information are trustworthy... Hence the importance of delegation models – at the moment people are trying to make judgments with incomplete information.

SITA: In summary, we're still at a fairly young stage in the evolution of the Web?

DR: We're still learning about and understanding what we have here. It's all about breaking down silos. People make investments in technologies and they have to use them for many years. But the Web allows people to put a layer in front of that and make information much more useful, more accessible. We're still only beginning to realize the full potential of the World Wide Web. * "What do customers want? They want to be treated like royalty. They want to be able to get on the plane without breaking stride." Nobel Prize winner Dr Arno Penzias speaking at SITA's 'Celebrating the Future' 50th anniversary conference, 30 June 1999. He was talking about the idea of being able to arrive at the airport terminal and walk straight through to your flight, with radio networks able to check you in and direct you to the correct gate for departure without the need to stop, queue or interface with multiple systems.



Industry events

Aviation Outlook Summit - Australia Pacific

03-06 August 2009 Four Seasons Hotel - Sydney, Australia

This yearly event, held in cooperation with the Centre for Asia Pacific Aviation (CAPA), sees ATI players in the Australia and Pacific region get together to explore opportunity and strategy for airlines and airports.

The 2009 theme is: consolidation, liberalisation and competition; sourcing the strategies, partnerships and solutions needed for survival and profitability in turbulent economic times.

Four days of discussions revolving around the current state of affairs of the airline industry will be supplemented by networking opportunites.

For more information, please visit www.terrapinn.com/2009/aviation.

Check-in 2009

16-18 September 2009 Mandalay Bay Resort & Casino - Las Vegas, Nevada (US)

This conference provides a forum for all levels of experience related to the check-in process.

Beginners and established travel industry stakeholders alike can share experiences and work to agree standards, best practice and procedures, as well as provide key insight on how check-in practices will evolve in the long term.

The conference programme will represent all sectors of air cargo and include debate and round table discussions.

For more information, please visit www.check-in.aero.

ACI North America

11-14 October 2009 Hilton Austin and Austin Convention Center - Austin, Texas (US)

The theme of this year's conference is "Committing to the Future: Transforming Ideas into Actions".

In addition to the opportunities for networking, interaction and discussion on a myriad of airport-related subjects, participants will be able take advantage of the hundreds of exhibitors who will be on hand to demonstrate their expertise and latest products in the Exhibition Hall.

For more information, please visit www.acina.org/austin09/welcome.

ACI World Annual General Assembly & ACI Asia-Pacific Conference & Exhibition

02-04 November 2009 Kuala Lumpur Convention Centre - Kuala Lumpur, Malaysia

The Airports Council International (ACI) World Annual General Assembly is the global meeting of ACI World Airport members, attracting up to 1,000 senior decision makers.

The two-day conference is scheduled around official and regional ACI board meetings and committees.

This is the biggest and most influential airport event in the Calendar, allowing unparalleled access to the global community of ACI Airport decision makers.

For more information, please visit www.aci.aero/events.

The Future of Air Transport

02-03 December 2009 Radisson SAS Portman Hotel – London, UK

Now in its 17th year, The Future of Air Transport event has grown in size and reputation and is acknowledged throughout the industry.

Last year over 150 senior delegates converged on London to network and explore the key issues and challenges facing the industry.

For more information, please visit www.marketforce.eu.com/airtransport.

Online information and late breaking news are available at www.information.aero

This newsletter is issued by SITA, the Sponsor of the .aero Top Level Domain. SITA also operates the official .aero web site www.information.aero – providing information about domain registrations, policies and procedures and new developments in the .aero domain.

If you would like to comment on any of the articles in this issue or you would like more information, please contact our editor, Elena Vladkova, at aero.enquiries@sita.aero

News from.aero – the domain of aviation

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