| | The DNS and the IoT: opportunities, risks, and challenges |
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| Group / Affiliation | ccNSO |
| Contact Name | Barbara Povse |
| Brief Description | "The DNS and the IoT: opportunities, risks, and challenges" is a proposed high-interest session at ICANN67 that enables community members to learn and advance their thinking on: (1) the opportunities, risks, and challenges resulting from the interaction of the DNS and the IoT and (2) the potential role of ICANN and the ICANN community in this space. |
| Rationale / Desired Outcomes | The Internet of Things (IoT) promises to make our lives easier and our societies safer, smarter, and more sustainable through tens of billions of connected devices that passively and autonomously sense and act upon our physical environment [1]. While this makes the IoT vastly different from traditional interactive Internet applications like email and web browsing, many IoT devices will use the Domain Name System (DNS) to locate the remote services they need, for example to offload the analysis of sensor data [2]. |
| | The SSAC recently published SAC105 [3], a report that discusses opportunities, risks, and challenges of the interaction between the DNS and the loT. The proposed high-interest session at ICANN67 would give further substance to the dialogue that SAC105 aims to trigger and facilitate, specifically by enabling community members from all constituencies to discuss the topic with subject matter experts (e.g., from the DNS, loT, and ISP communities) as well as with each other. The session would be a follow-up of the ccNSO session on SAC105 at the Montreal meeting, which had a particular focus on ccTLDs. |
| | The DNS-and-the-IoT session at ICANN67 is relevant in light of ICANN's 2021-2025 strategic plan [4], which includes the strategic goal to "Improve assessment of and responsiveness to new technologies which impact the security, stability, and resiliency of the Internet's unique identifier systems by greater engagement with relevant parties." |
| | Learning goals (desired outcome) |
| | At the end of the session, ICANN community members will: • Better understand how the IoT differs from traditional interactive Internet applications and how it uses the DNS and domain names • Better understand how DNS and IoT players think of the interaction between their two ecosystems in terms of opportunities, risks, and challenges |
| | Have acquired building blocks to advance their thinking on the role that the ICANN community could potentially play in this space |
| Session Format | 1. Introduction (session chair, 15 minutes): a. Rationale and desired outcome of the session b. Explain SAC105 model of the loT and how loT deployments use the DNS c. Live demo to illustrate these interactions (using the SPIN loT visualizer) 2. Sharing perspectives (panellists, 30 minutes): presentations on opportunities, risks, and challenges from different perspectives, in particular: a. DNS operators b. loT device manufacturers c. ISPs/network operators |
| | 3. Interactive discussion and Q&A (45 minutes) |
| Session Leaders / Facilitators | We expect 4 people on the panel: a session chair to provide a general introduction and 3 subject matter experts (a DNS operator, an IoT device manufacturer, and an ISP/network operator). We will ask other relevant experts to respond from the audience. The session chair will introduce both the panellists as well as the experts in the audience. |
| | Table 1 provides an overview of the relevant roles for the session, potential candidates, and if they're on the panel (P) or in the audience (A). |
| | Table 1. Session roles, potential candidates, and their constituencies. |
| | Session role Potential candidates ICANN constituency |
| | Session chair (P) Cristian Hesselman (.nl) SSAC, ccNSO DNS operator (P) Jacques Latour (.ca) SSAC, ccNSO ISP/network operator (P) Lise Fuhr (ETNO) - IoT device manufacturer (P) Howard Benn (ETSI, Samsung) Tech Liaisons Group Resolver operator (A) Warren Kumari (Google) SSAC DNS software developer (A)Ondrej Filip (.cz) SSAC, ccNSO IoT software/OS developer (A) TBD - |
| | Standardization/policy body (A) TBD - Government (A) TBD GAC Research (A) KC Claffy (CAIDA) SSAC |
| Community Interest | We expect a significant interest from the community based on the talk at the ccNSO session at ICANN66. Also, we previously received positive responses from the ALAC on SAC105, although we expect that only a few people actually read the report. |

| Building greater Trust in the ICANN Multi-stakeholder process among Policymakers in Government | | |
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| Group / Affiliation | APRALO | |
| Contact Name | Sivasubramanian M | |
| Brief Description | The proposed topic is to address any remaining reluctance from the multilateral forum in acknowledging the unique advantages of the multi-stakeholder process for the global DNS which often requires a Governance approach different from the relatively formal multilateral tradition; What efforts are needed by the Community and the committed participants of the Community within and outside ICANN, and what efforts are needed from the ICANN organization to further inspire trust in the ICANN Multi-stakeholder model? | |
| Rationale / | Desired Outcomes: could vary depending on the deliberations, outcomes ranging from further exploration of the topic of Trust to actually | |
| Desired Outcomes | identifying a few steps in the direction. | |
| Session Format | Round Table. | |
| Session Leaders / Facilitators | (suggestion of a facilitator / co-faciltator) Jan Aart Scholte. | |
| Community Interest | Of possible interest to the Board, GAC, ALAC and of indirect business interest to the DNS business participants. | |

| Group / Affiliation | GNSO RySG |
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| Contact Name | Jonathan Robinson |
| Brief Description | An education, outreach and engagement session aimed at improving broader community understanding of the key dynamics of the indust sector on which the finances of ICANN and the ICANN community are based. Generic Top Level Domain Registries and Registrars occupy a unique position within the ICANN community in that they are directly contracted with ICANN. Moreover, ICANN's current funding model depends on the commercial success these domain name businesses. This session will provide insights into the current marketplace for domain names and related services as well as the dynamics driving change within that market place. Second, it will provide insight into the various business models of service providers within the marketplace and the key drivers of these business models. Third, it will create the opportunity for questions, answers and discussions around key business and economic aspects of the businesses and how these may net to be considered within the broader ICANN Community and policy making functions. In addition to the development of the market, topics such as the secondary market for domain names, approaches to abuse and issues with resellers will be covered by Registrars. From Registries, consideration will be given to the different approaches generic (open) TLDs, brand TLDs and geographic TLDs, as well as key contractual requirements. |
| Rationale / Desired Outcomes | A recent session targeted at ensuring that ICANN Board members have a robust understanding of the variety of Registrar and Registry approaches to the marketplace was very well-received. Following on from the session with the ICANN Board it was proposed that a similar expanded and interactive session with the broader community could provide good value to all. Policy making that is well-informed by fact it clearly optimal. Such policy making includes having the best access to all data including an understanding of the commercial drivers of the protagonists. The domain name services sector has seen far reaching changes take place over a number of years including the development of a range a diversity of business models within both Registry and Registrar business. Extensive competition has developed some areas and substantial consolidation and corporate transactions continue to take place. The broader ICANN community will benefit from an understanding of the key marketplace drivers and dynamics when considering all future policy, including high-profile current issue such as future rounds of new gTLDs. |
| Session Format | Given the outreach and informative nature of the session, it is expected that it will be biased towards presentation of material. But, emphas will be placed on question, answer and discussion as well as any other techniques to drive levels of interactivity. |
| Session Leaders / Facilitators | To be confirmed |
| Community Interest | Broad. As above, the business and commercial drivers of the registry and registrar businesses underpin their own finances as well as thos of ICANN. This is a crucial pillar of understanding for the broad community and so interest is expected to be high and broad. |