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Application for Second Security, Stability, and Resiliency of the DNS (SSR2)
Review Team

1. CV

Dear colleagues,

It's difficult to describe all my related experience in a quite short CV / motivation letter, so I'll try to focus only at the most interesting aspects of my background here. I will be happy to send a more detailed CV or provide necessary comments on my experience if needed.

ENOG Programme committee, 2010 — present, and other non-commercial projects in internet area

I have joined the Eurasian Network Operators' Group (ENOG) programme committee at 2010, back when it was called RIPE NCC Regional meeting – both then and now, this conference is a major event regarding Internet infrastructure and governance in Eastern Europe, Russian Federation, Transcaucasia and Central Asia. As a programme committee member, I was mostly focused on topics related to key interest technologies, organising and moderating panels and BoF sessions as well as making and running own talks and tutorials. Most of these are related to DNS technologies – for example, I had organised a successful ENUM BoF session and had my own talks about such technology before, had created several talks and tutorials on DNSSEC and DANE, organised DNS-related panels, etc. – it's hard to describe my experience briefly, as it spans over 16 meetings.

I had also presented a lot of talks at regional conferences, meetings, official workgroups and roundtables. These were mostly related to different key internet technologies, like the talk on secure zone update between DNS operator and registry without involving the client and the registrar (mostly about RFC 7344), or the talk that discussed the problem of the new DNSSEC algorithm support by regional registries and registrars I've given on TLDCON as an example of talk related to ICANN area.

Under financial support of RIPE NCC, I had created a unique set of events developed for cities with little to no internet-related activities (like a major part of my region). These events combine educational content with policy discussion, being something between a meeting, a training and a roundtable, and lasts over six hours. Such meetings have proved themselves as an effective way to discuss new internet technologies and attract new members to the global community. These meetings were held in 8 cities, including Minsk (Belarus), Krasnodar (Russia), Odessa (Ukraine) or Tashkent (Uzbekistan). They have recently evolved into community-driven ENOG regional meetings (in addition to large-scale ENOG meetings we have) that are going to be launched in November 2016 by one of ENOG committees.

Recently I have also started coordinating an academic programme within ENOG that should be launched in several universities next month. It aims to solve the problem of lack of research projects related to internet technologies (as compared to other computer science areas) as well as quite low number of participants from East Europe, Russia, Transcaucasia and Middle Asia in standardisation activities, like IETF. The idea is to deliver a series of lectures in leading regional universities on different Internet technologies, preferably by local experts and in Russian. The goal of these lectures is not only to provide overview of such technologies as an area of research, but also to involve interested students into related activities, such as creating IETF drafts, BCP development or working with relevant working groups and committees where the lecturers are actively involved.

Independent consultant, 2014 — present

In recent years I was mostly focused on consultancy in the area of designing complex solutions and software architecture, mostly within the enterprise sector – large companies that are interested in developing specific solutions for their business (unlike software development organisations I had consulted before that). While the major part of my work is not related to internet technologies, the design principles in both areas have a lot of in common, and this helps me a lot.

Sometimes I run certain projects related to internet technologies as well. I would like to briefly describe some of them related to DNS. First is a research on covert channel detection and mitigation in DNS data streams. It includes reviewing possible methods to transmit illegal data hidden in usual DNS traffic and several detection scenarios as well as their limitations. It was quite exciting, taking into account that traffic could be monitored at network (AS) operator level, which means that almost all traffic sources are hidden behind several recursive servers.

The second project is essentially development of detailed methodical recommendations on application level protocol measurements like DNS, TLS, SMTP, e.g. for an internet measurements project developed by a Moscow-based NGO. I was interested in creating a measurement system that will provide more complex and detailed view on protocols than its analogues while focusing on security in order to make public and private services of internet more stable and secure.

Adviser, RIPE NCC, 2014 — 2016

As a consultant and External Relations Officer at RIPE NCC (but not its employee) I was responsible for communicating with stakeholders in East Europe, Russian Federation, Transcaucasia and Central Asia mostly focusing on member engagement and communication of technical aspects to the relevant groups in regional governments, law enforcement, regulatory and standardisation agencies as well as internet-related organisations. Among all activities I did in my region I would like to highlight two that had significant impact. One is the new format of

events described above – it was developed specifically for my region that was previously not covered with sufficient number of internet related events – and, as it turned out, this format fit really well. Another one is a policy development newsletter originally intended for Russian-speaking community but later it was also adapted for Europe and Middle East. Both of these had significant impact on participation in policy development process and general meetings.

Software design specialist, 2011 — 2014

Self-employed as an independent software design specialist providing consultancy services on product concept design and software architecture design, technical research and consulting; successfully led several software development projects. Sometimes I participated in executing non-technical projects, organising and performing researches, developing strategic plans and providing comprehensive reports. During that period I had consulted several software development companies in Russia. For example, in 2011 — 2012 I've been responsible for technical strategy of a Moscow-based software development company as its director of research, consulting customers and internal teams on software design and project/product management. Similarly, in 2011 I have participated in development of the company positioning and strategy for a software development firm from St. Petersburg.

Software architect and product manager at St. Petersburg State University IT research institute and several other commercial organisations, 2006 – 2010

I have led several projects in telecommunication, mobile applications, portals and banking services fields, including high reliability telecommunication management system for Governmental telecommunication department of the Federal Protective Service. The last one took over four years.

Lecturer at Saint Petersburg State University, 2004 – 2008, 2010

I have been creating and teaching several courses at Saint Petersburg State University, Faculty of Mathematics and Mechanics, for five years. One of these was a course on key Internet technologies, highly popular and esteemed among the students. In 2008 this course received a university award. Also I had certain experience in organising technological conferences for up to eight hundred attendees.

Education at St. Petersburg State University, Faculty of Mathematics and Mechanics, 2003 — 2008, 2008 — 2011

I hold a Master degree (2008, mathematics and computer science) and have successfully passed PhD certification (postgraduate studentship).