

Organization Profile Form April 1st, 2017

Organization name: **Solana Networks**

Kind of organisation: Company



-- **Traffic Anomaly Detection for Network Security**
-- **Intelligent Network Discovery and Monitoring Solutions**

Founded in 2003, Solana Networks Inc is a Canadian technology vendor of network and cyber security monitoring solutions for IP networks. The company has an exceptional track record of creating scalable, robust and innovative solutions that tackle the most challenging issues faced by modern businesses. The company's products are designed to improve the performance and security of mission-critical networks. Solana Networks' three product lines include SmartFlow, SmartHawk and SparrowIQ, providing capabilities in Cyber threat detection, Traffic anomaly detection, Network topology discovery and monitoring, and Traffic Analytics.

The Solana services arm offers customized solutions for network and security monitoring which it either sells or licenses to private and public sector clients. The company has over 100 clients. Example public sector clients include Public Safety Canada, Department of Foreign Affairs Canada, Defence R&D Canada, Treasury Board and NATO. Private Sector clients include Verizon, Telus, Juniper, Hitachi and General Dynamics. Solana Networks is a holder of Top Secret Facility Security Clearance from the Government of Canada and NATO security clearance.

Solana Networks is a trusted provider of custom cyber security solutions. For example, Solana partnered with General Dynamics to develop ARMOUR – Automated Cyber Defense System for Canadian Defense. The decision support system leverage Solana's Route Analytic and Network Mapping technology. In another project with Public Safety Canada, Solana developed a security monitoring and discovery solution for SCADA networks.

The company maintains an active cyber security research program. Over the last few years, the company has co-funded more than 5 different research projects with Canadian Universities to conduct advanced research in the area of cyber security and networking. Solana team members have published more than 50 technical papers in international conferences and are holders of 23 granted US patents in the area of IP networking and security.

Products and Services

Solana's **SmartFlow** is a traffic anomaly detection based network security monitoring tool. SmartFlow uses patented machine learning techniques to detect zero-day cyber threats. In comparison with signature-based network security monitoring tools, SmartFlow can uncover previously unknown threats as well as threat actors who operate "low" and "slow". SmartFlow also detects threats/attacks even if

the threat actors are encrypted. In addition, Solana Networks has recently extended its anomaly threat detection to cover Industrial Control Systems or SCADA networks.

Solana's **SmartHawk** is an automated topology discovery and mapping product. The product discovers the accurate network topology for very large layer-2 and layer-3 networks in real time. In addition, the product provides visibility into route dynamics, network changes and traffic utilization. Beside network monitoring applications SmartHawk has become an integral part of an automated cyber defence tools. The product can be integrated with cyber decision support system, cyber situational awareness system, cyber risk analytics etc.

Solana's **SparrowIQ** is a network traffic and performance monitoring solution powered by a deep packet inspection engine designed for Managed Service Providers and SMBs. The solution is able to assess an organization's cybersecurity posture by determining the applications in use and the associated exposure. The tool can detect if users are communicating with blacklisted machines on the internet and their geo-location. SparrowIQ can also measure the real-time performance of key network paths used for business critical purposes allowing achievement of the best QoE for company staff.

Services

- Develop custom cyber security and network monitoring solution
- Research & Studies into next generation cyber security and network technologies

Core Competencies:

Expertise in :

- Cyber Security and Network Monitoring
- Network Protocols and architectures
- Anomaly detection and machine learning
- Complex systems including Linux Kernel, protocol stack, distributed systems

Current foreign representation: None in Netherlands or Europe at present

- Company subsidiary, joint venture or affiliated company (identify)
- Distributor or agent (identify)
- Licensing arrangements (identify)
- Other (explain)

Relationships: Solana is seeking the following:

- X Vendors or System Integrators
- X Internet Service providers
- Investment in the company
- To invest in other companies
- X Licensing opportunities (in or out)
- Other (explain)

Meeting interest: Solana would like to meet with the following:

- X Meet with companies for collaborations, projects and synergies
- X Meet with government authorities
- X Meet with universities and research centers

Primary contact information:

Name: Dr. Bis Nandy, CTO,

Email: bnandy@solananetworks.com

Office: 01-613.596.2557 x 602

Company office address:

215-301 Moodie Drive

Nepean, ON

CANADA K2H 9C4

www.solananetworks.com

<http://sparrowiq.com>

Alternate contact info:

Name: Mr. Nabil Seddigh, President

Email : nseddigh@solananetworks.com

Office: +1-613.596.2557 x601