

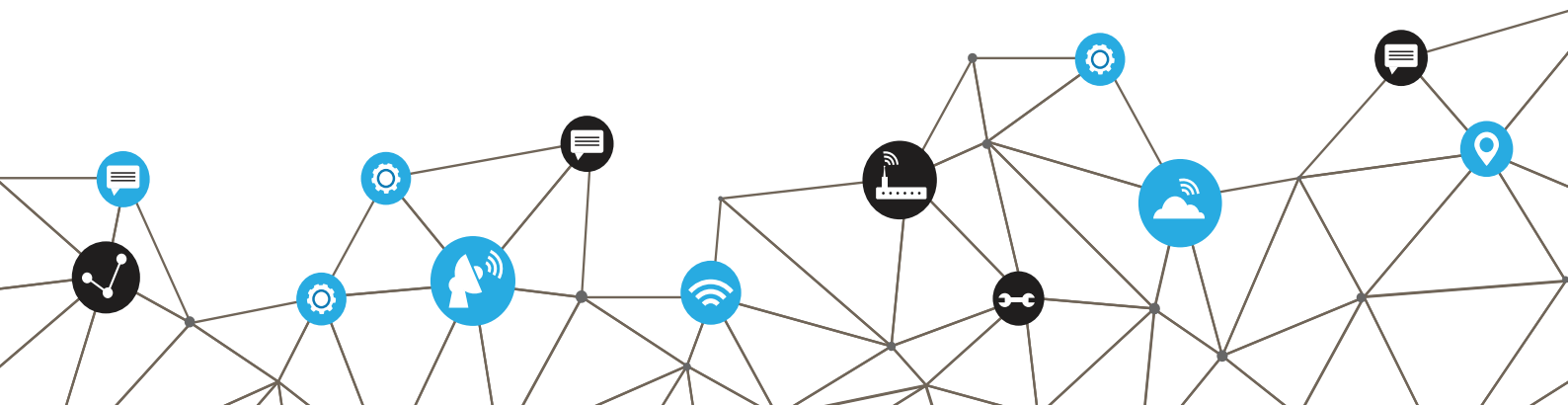


WORKSHOPS AND CONFERENCE 19 - 25 October 2019

*Conference Theme: Digital Somalia - Laying
the Foundations for the Next Economy*



SomNOG 4 Report





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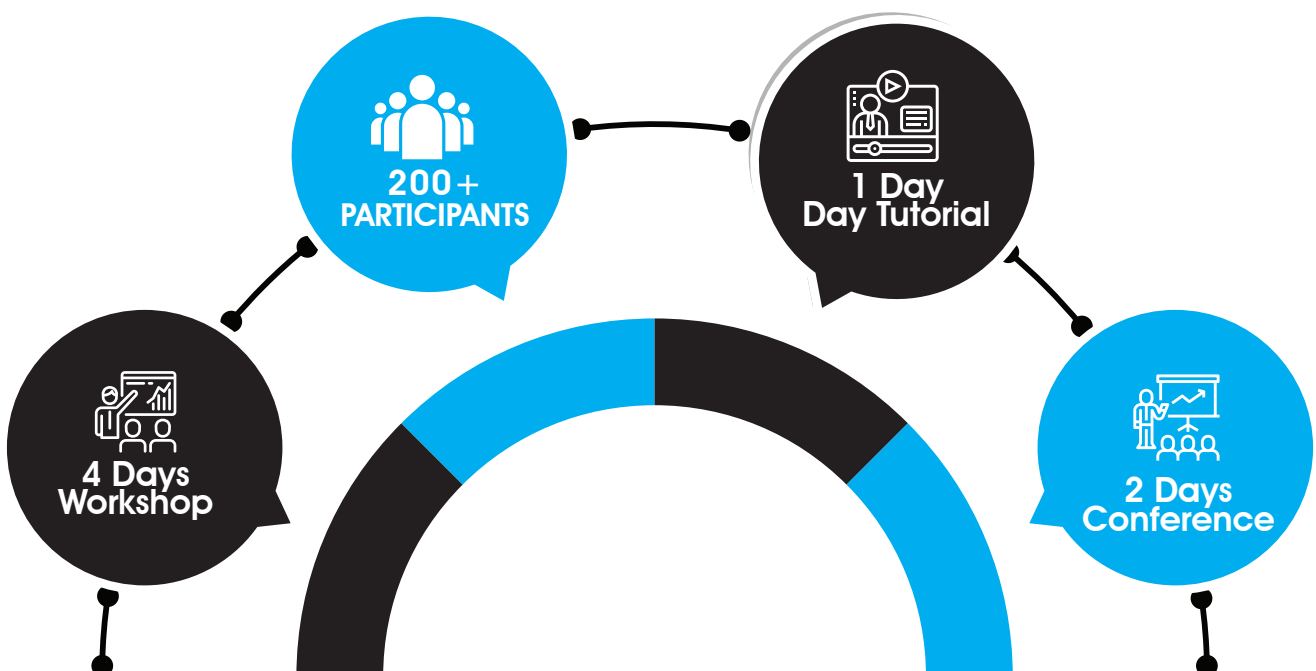


Somali Network Operator’s Group (SomNOG) is a non-profit group that aims to provide an open forum for any interested member from the Internet community to develop technical capacities, share experiences and collaborate on developing expertise and competency through trainings and research in networking and Internet technologies. SomNOG is a non-profit organization that is run by volunteers who contribute to the growing eco-system of Internet service providers and consumers by building relevant technology expertise. The platform provided by the organization enables a culture of knowledge-sharing and collaboration. Participation in SomNOG’s activities is open to anyone interested in sharing their experiences and technical knowledge or learning from others. SomNOG’s moto is “Towards a better Internet, through effective collaboration.”

SomNOG4 is the 4th Annual conference organized by Somali Network Operators Group. The fourth event for SomNOG4 was two-day conference accompanied by 4 days of workshops. The workshop was hosted by the Somali National University from 19 - 22 October, 2019, and the conference took place at Green Paradise Hotel, Mogadishu. SomNOG4 brought together more than 170 participants from local operators, policy makers, Internet Service providers, regulators, universities’ administrators, and students in addition to other individuals interested in Internet community in Somalia. The meeting discussed different topics such as critical infrastructure development, skills and capacity development, policies and innovation.

The report consists of three main sections focusing on the workshop activities, the conference and the overall outcomes of these events. It also includes a summary income and expenditure statement for the event to ensure the transparency of SomNOG’s activities and develop the trust and support of the current and future sponsors.

1.1.0 SOMNOG4 IN NUMBERS



2.0.1 WORKSHOPS

Two concurrent workshops for the network infrastructure and systems administration tracks were organized. This workshop was a 4-day hands-on training that focused on developing the participants' skills related to Internet technologies.

2.0.1.1 NETWORK INFRASTRUCTURE WORKSHOP

The network infrastructure track imparted with the participants the necessary skills to design, implement and operate medium to large scale network infrastructure. The instructors of this workshop were:

- Ahmed Dahir (SomaliREN)
- Abdikarim Abdullahi (Dalkom)
- Ibar Osman (SomaliREN)
- Hibo Abdi (SomaliREN)
- Abdullahi Guled (MPTT)

It was attended by technical staff who are now operating small, medium or large-scale multi-connectivity provider organizations, network engineers fresh graduate engineers. The workshop covered IP addressing, layer 2 protocols, routing and forwarding basics, routing protocols (OSPF, BGP basics, NAT/PAT)



2.0.1.2 SYSTEM AND SERVICES WORKSHOP

This workshop was a hands-on training which run for four days, participants learned the skills needed for the configuration and operation of internet services on Linux systems. It was attended by technical staff who are now providing Internet Services, or those who will be involved in the establishment and/or provisioning of basic Internet Services.

The Instructors of this workshop were:

- Abdullahi Bihi Hussein (SomaliREN)
- Abdifatah Ali Mohamud (Asal Solutions)
- Mohamed Ali Ahmed (SomaliREN)
- Ismail Mumin Abdi (Tabarak ICT)

The workshop covered topics including Introduction to Linux basics, like getting familiar with the CLI and text editing, file permissions, DNS concepts and configurations, LDAP, Virtualizations, monitoring tools and others.



2.0.1.3 CLOSING CEREMONY FOR THE WORKSHOP

The four day workshop was concluded on the 22nd of October with a closing and certificate awarding ceremony by Director General, Ministry of Post, Telecommunications and Technology, Mr Abdiaziz Duwane. He encouraged SomNOG community to continue the good work and pledged the ministry's support. The DG awarded the participants the completion certificates.



2.1.0 CONFERENCE

2.1.1 DAY 1

The SomNOG-4 conference started on 24th October at Green Paradise Hotel, Mogadishu. Eng Ahmed Dahir Siyad, SomNOG chairman welcomed all guests and appreciated the support of the sponsors and contributors to the community in conducting workshops and conference annually. Eng Mohamed Adil, steering committee member, presented the NOG update, explaining history, present and future of SomNOG. Adil stated that great milestone has been achieved so far and at the same time a lot of things are be done in the coming future.

Ministry of Post, Telecommunications and Technology, Eng Abdi Ashur Hassan, joined to officially kick off the conference. The minister appreciated the effort taken by volunteers to develop the ICT community, and how the SomNOG volunteers maintained their effort for the fourth time. He talked about the importance of this kind of forum and their role in developing the telecommunications and technology of the country. The Minister urged the SomNOG community to contribute their ideas and comments to the policies and regulations prepared by the ministry and the National Communications Authority. The Minister promised that the ministry will provide constant support to the forum of the network professionals.

Then, Rector of Benadir University and Deputy of Somali Research and Education Network SomaliREN, Dr Mohamud Mohamed Bidey addressed the participants explaining the role of SomaliREN in developing the skills of your engineers in Somalia. SomaliREN hosts SomNOG and contributes financially and technically to events.

The first session was allocated to small talks by the sponsors of SomNOG-4. Mr Muhidin Hassan Osobow, marketing manager of Hormuud Telecom delivered the SomNOG-4 silver speech. Mr Muhidin reiterated Hormuud support to SomNOG events. SomNOG-4 media sponsor, Deero Advert delivered its speech by Deeq Ibrahim (CEO). Deero Advert helped SomNOG community designing posters and other designs

This report presents the proceedings and outcome of SomNOG4 event comprising of the workshop and the conference. It includes recommendations for improving the processes and operational aspects of the upcoming SomNOG4 event while presenting some of the lessons learned throughout the planning, execution and evaluation of the event.

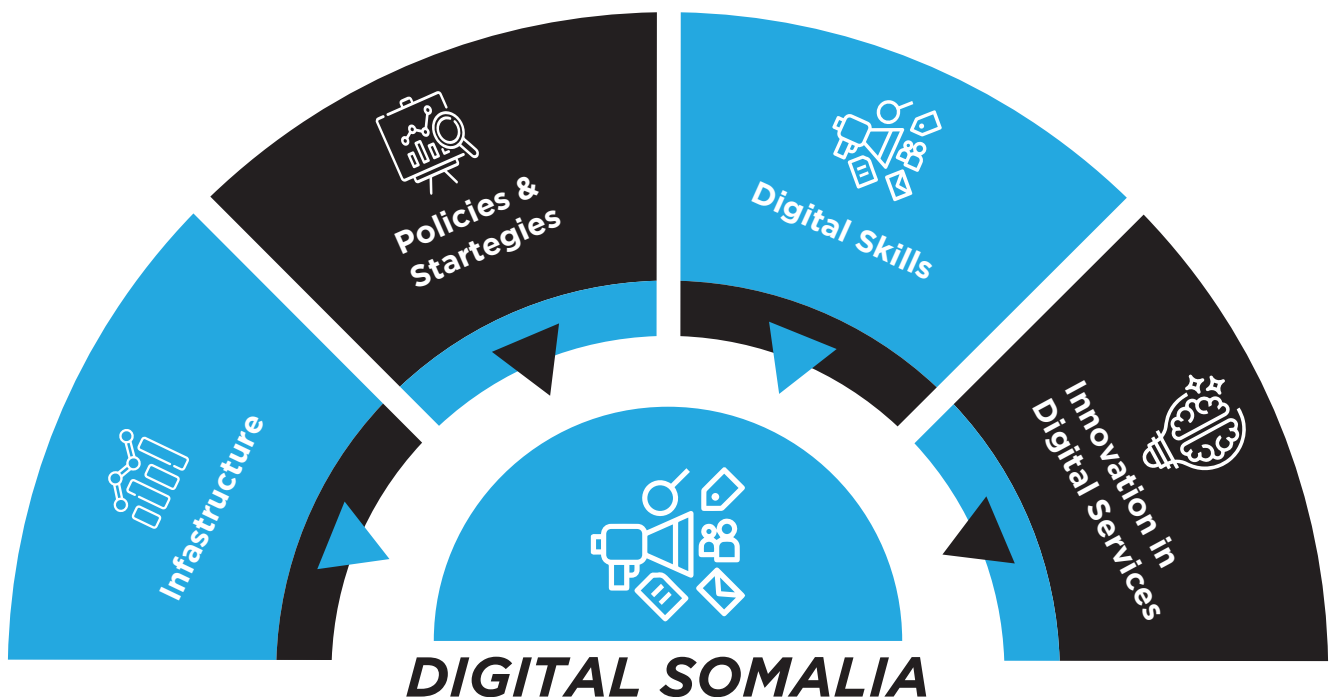
The conference theme was: Digital Somalia - Laying The Foundations for The Next Economy. The conference was organized into four sessions in which sub-themes was examined and discussed.



This session focused on the critical infrastructure and how it can support the digital transformation of the country. Mr Liban Abdulkadir, from NCA, gave a talk on analysis of current state of ICT in Somalia. He provided data that shows very low internet penetration in Somalia comparing to the region, reasons like lack of network infrastructure, facility sharing could cause the low penetration of the internet. Another reason presented is the high cost of accessing the internet because of unwillingness of network operators to peer each other and collaborate.

Eng Adil from Dalkom discussed an innovative approach for broadband Infrastructure deployment. The presentation discussed the evolution of internet infrastructure both locally and globally up to the anticipated technology of 5G. Mr. Adil also addressed the need for regulations and standardization of the internet infrastructure in Somalia.

Finally, the presentation touched the background of the fiber optic cable system that links Somalia to the world. It was followed by presentation by Eng Yasir Mohamud from Amtel talked about Virtualization and Cloud Computing, The presentation explained the trending need for virtualization and cloud technologies in the world as well as in Somalia to minimize the expenses incurred in building the infrastructure of a company/institution. Mr. Yasir also discussed the types of virtualization and cloud services that are available and their benefits and challenges. It was followed by Eng Fahd Batayneh, from ICANN, who joined SomNOG4 remotely. He talked about the security, stability and resiliency of the DNS infrastructure.





2.1.2 DAY 2

Day two of SomNOG4 conference with presentation of a research on Human Capital Study conducted by Heritage Institute for Policy Studies (HIPS). Dr Uwais Abdullahi from the Heritage Institute for Policy Studies (HIPS) highlighted the key findings of the research which was the lack of proper skills needed for development of the ICT sector. It is followed by a discussion on Internet Governance delivered by Abdifatah Hassan from Digital Shelter. Eng Ali Afey summarized the key focus areas of the National ICT policy and Strategy developed by Ministry of Post, Telecommunications & Technology. It was followed by a discussion on factors affecting the adoption of ICT in agrobusiness in Somalia, delivered by Mr Hussein Osman, from SIMAD university. The session ended with a panel discussion where participated asked questions and suggested their ideas.

The final session of the day started with Mr Abdullahi from Iftin who delivered the findings of IT and Engineering graduates statistics from the local universities study commissioning by Iftin Foundation. The findings indicated that the universities are producing less number than is needed to drive the development of the sector. Then Mr Mohamud Harbi from Open knowledge Somalia delivered presentation on open access to knowledge in Somalia where he emphasized the role of open access in the digital transformation of the society.

The session continued with a keynote speech by Eng Abdiwahab from Jamhuuriya University who discussed on service delivery and good governance and Eng Eng Abdirizak from Jamhuuriya University who talked about Data Driven Decision Making. The session ended with a presentation on Protecting the DNS infrastructure; Eng Liban highlighted the vulnerability of DNS services used in Somalia and shared alternative solutions to defending DNS infrastructure.





2.1.3 CLOSING CEREMONY

The fourth Annual SomNOG conference has come to its final session. General Manager of National Communications Authority (NCA) congratulated the SomNOG community for the organizing the event. Mr Abdi highlighted the importance of building a better infrastructure for the development of the ICT sector.

3.0.0 HIGHLIGHTS FROM THE EVENT

- Importance of developing the ICT Infrastructure in Somalia especially the national back bone and consumer end technologies
- The conference highlighted the lack of capacity & needed skills for infrastructure development
- Lack of Infrastructure sharing and collaboration between the network operators remains a key issue
- Low Internet penetration rate in Somalia was highlighted due to lack of Infrastructure and high costs, and it is a key impediment in the digital transformation required for the next economy.



4.0.0 PARTICIPANTS

The event had about 170 participants encompassing the different ICT communities in Somalia. There was participation from the operators, regulator, ministries, commercial enterprises, universities and others.



The largest expense was the cost of the venue and refreshment expenses. SomNOG has reduced the cost by organizing the workshops in Somali National University which provided its facilities as the host of the year.

This year main sponsor was the Internet Society as a Gold Sponsor of SomNOG-4, also local operators have provided sponsorships to SomNOG activities this year. Below is the summarized Financial report of SomNOG4. Detailed Report is attached.

CASH SPONSORS

Internet Society	Gold Sponsor	\$5000
SOMCAST	Silver Sponsor	\$2500
Somali Optical Network	Silver Sponsor	\$2500
HORMUUD TELECOM	Silver Sponsor	\$2000

SUPPORTING ORGANIZATIONS

SomaliREN	Silver Sponsor and Technical Contribution	\$2500
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MEDIA PARTNER

Deero Advert		
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WORKSHOP FEE

Workshop Registration	\$40/Participant	\$670
Sub-total		\$15,170
Total Income		\$15,170
Less: Total Expenses		\$13,089.5
Surplus (Deficit)		\$2,080.5

On behalf of SomNOG community we would like to extend our sincere thanks to our generous sponsors, which without them SomNOG-4 could not be held successfully, and we wish to continue our partnership with them in the future SomNOG events.

Gold Sponsor



Event Organizers



Silver Sponsor



Media Partner



Workshop Host



DAY 1
Session I : Opening

#	Time	Topic	Facilitator
01	8:00 - 9:00	Registration	
02	9:00 - 9:10	Dua & Welcoming Participants	
03	9:10 - 9:20	Welcoming Statement	Ahmed Dahir Siyad , SomNOG Chair
04	9:20 - 9:30	NOG update	Mohamed Adil , Dalkom Somalia
05	9:30 - 9:50	Official Opening	H.E. Abdi Anshur Hassan Minister of Post, Telecommunications & Technology
06	9:50 - 10:00	Gold Sponsor Remarks	Victor Ndonnang , Internet Society
07	10:00 - 10:10	Technical Sponsor Speech	Dr. Mohamud Mohamed Bidey, Deputy Chair, SomaliREN
08	10:10 - 10:20	Silver Sponsor Remarks II	Somcast
09	10:20 - 10:25	Silver Sponsor Remarks III	Abdirahman Jaahweyn, Somali Optical Network
10	10:25 - 10:30	Silver Sponsor Remarks V	Muhudiin Hassan Osobow , Marketing Manager, Hormuud Telecom
11	10:30 - 10:35	Workshop host of the year	Prof. Mohamed Ahmed Jim'ale Rector, Somali National University

DAY 1

12	10:30 - 10:40	Media Partner Remarks	Mohamed Ibrahim Abdirahman Deero Advert
13	10:40 - 11:00	Coffee Break	All participants
14	11:00 - 11:30	Keynote Speaker I	Abdulkadir Kadle SomNET
15	11:30 - 12:30	Session I: Critical infrastructure for a digitally-transformed society Session Chair: Eng Abdullahi Hassan ISP Manager, Hormuud Telecom	
16	12:30 - 14:00	Lunch and Prayers	
17	14:30 - 14:45	Analysis of current states of ICT in Somalia	Liban Abdulkadir , SomNOG
18	14:45 - 15:00	Security, Stability and Resiliency of the DNS Infrastructure	Fahd Batayneh Stakeholder Engagement, Senior Manager, Middle east, ICANN
19	15:00 - 15:15	History of the Digital Transformation	Abdullahi Bihi Hussein CEO, SomaliREN
20	15:15 - 15:30	Virtualization and Cloud Computing	Yasir Mohamud Karar Head of Cloud and Networks, Amtel
21		Innovative Approach for broadband infrastructure deployment	Mohamed Adil , Dalkom Somalia
22	15:30 - 16:00	Prayer and Networking Break	
23	15:15 - 15:30	Closing Day One	

Day 2

1	08:30 - 09:00	Preparations	All Participants
<p>Skills and human capital as the foundations for a digital economy Session Chair: City University of Mogadishu/HIPS</p>			
2	09:00 - 09:15	Highlights of the Human capital study	Heritage Institute of Policy studies
3	09:15 - 09:30	IT and Engineering graduates statistics	Abdullahi Bihi Hussein CEO, SomaliREN
4	09:30 - 09:45	Accessing data, and information openly in Somalia	
5	09:45 - 10:00		
6	10:00 - 10:45	Panel Discussion	
7	10:45 - 11:00	Coffee Break	All Participants
<p>Effective policy-making and the role of partnerships in building our digital economy</p>			
8	11:00 - 11:15	What can Somalia learn from other African countries on internet governance?	Abdifatah Hassan Ali Digital Shelter
9	11:15 - 11:30		
10	11:30 - 11:45		
11	11:45 - 12:00		
12	12:00 - 12:45	Panel Discussion	
13	12:45 - 14:00	Prayer and Lunch	
<p>Innovation and new service delivery models in the public and private sector Session Chair: Abdiwah A. Elmi</p>			
8	14:00 - 14:15	Service delivery and good governance: Theories and empirical evidence	Abdiwahab A. Elmi VP R&D, Jamhuriya University
9	14:15 - 14:30	Factors affecting the adoption of ICT in agribusiness in Somalia	Husein Abdikarim Osman Director of Admissions, SIMAD University
10	14:30 - 14:45	Data-driven decision making	Abdirazak Warsame Abdulle VP Academics, JUST
11	15:00 - 15:45	Panel Discussion	
12	15:45 - 16:15	Prayer and Health Break	
12	16:15 - 16:45	Closing Session	



SEM NOG 4

Somali Network Operators Group

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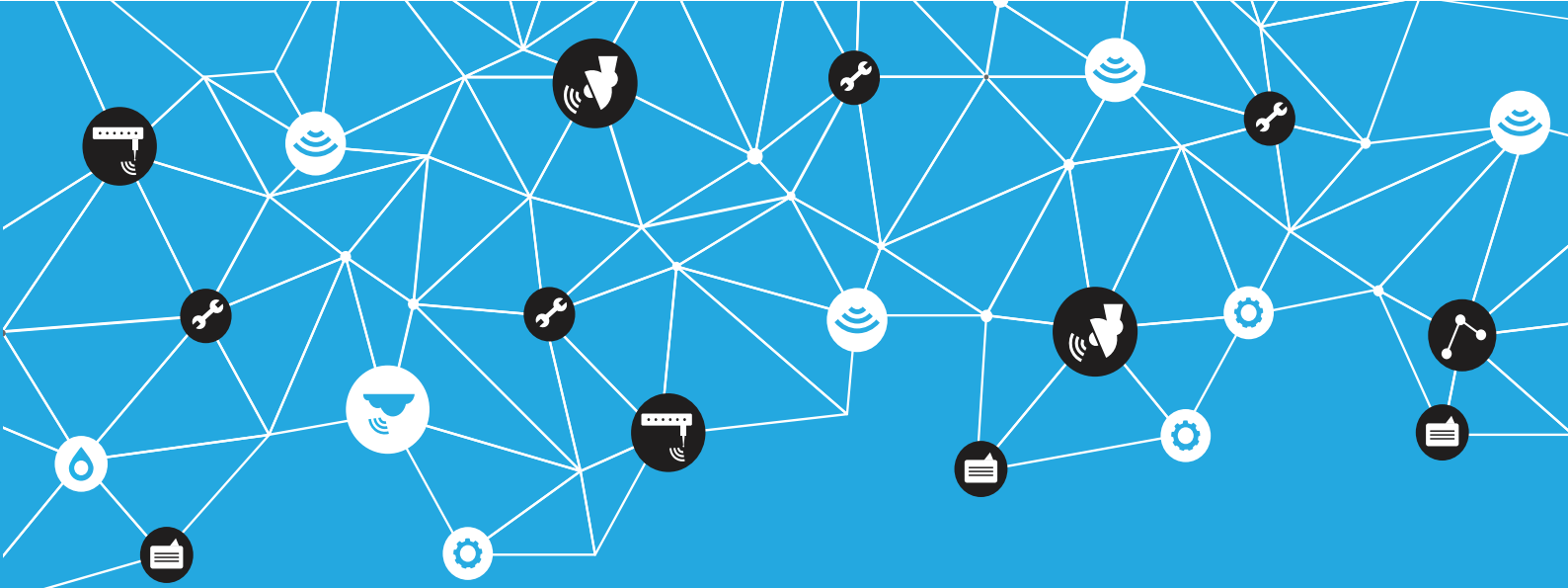


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