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Federation-management of future internet

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ABSTRACT

Internet is collection of network today internet is very important and very useful to every people. Because today every work is complete through internet and so management of future internet it is most important. in future internet we use particular mobile wireless network and extra ordinary technology in this context - a changing business environment for telecommunications and the internet and the opportunities to provide future internet services. Technical perspective the limitations of the current internet technology are outlined. The research activities that address the challenge of Future internet research are introduced under three main lines: future internet architecture and Network technologies, Spectrum-efficient access to future networks and converged infrastructures in support of future networks. Examples for first promising approaches to significantly change the principles of the internet architecture and protocols are presented.

Keywords:

Internet, Wi-Fi (Wireless Fidelity), Explicit Control Protocol (XCP), transmission control Protocol (TCP) , Vehicular and transport network

II. INTRODUCTION

Management it is manage all types of internet fustian many type of manage in world everything and every plan is use by internet and start of internet is server of collection of information .[7] it is collection to all type of information .today most important we use internet every sides application travel lines electric and other ways. The current internet that was designed in the 1970s to support communication between computing systems for communities of expert users. [8] It was not designed to cope with the wide variety, and the ever growing number of networked and mobile users and applications, business models, edge devices, networks and environments that it has now to support. Its structural limitations are increasingly being recognized world-wide.[4,5]

1.Past of internet- eighteen months ago, the emergence of the internet of things was still considered with a certain degree of skepticism. These days are gone. A series of announcements, from the acquisition of nest labs by Google for $3.2 billion to Samsung sear and health-related wearable's to the development of smart home features into apple's iOS, have made an increasingly.[12,13]

2. Technology of future internet- the constant growth of the internet for several. Years resulted in a significant increase of the amount of energy required to operate the entire work device which

may be working all days long. This huge energy consumption has become problematic, since the world environmental condition are becoming more and more unpredictable due to the emission of GHGs to the atmosphere this leads to the need of finding good energy saving solutions, not only to reduce environment damages but also to reduce to the associated costs . These hence, significant research work in the future networking issues can prevent the achievement of a better performance area has been propose solutions which focus on bringing for some communication technologies, such as fiber optics energy awareness to the underlying network infrastructure, and radio transmissions [6]. As a consequence of the that currently component effective energy saving measures. this aforementioned problems, new solutions and even different paper aims to present a comprehensive survey of the main paradigms being researched to mitigate them will bioenergy saving techniques presented on the literature, and surveyed .

3. NIRA - The New Internet Routing Architecture (NIRA) was designed to allow users the possibility to choose their own domain-level routes. A domain-level route is characterized as the domains that the packet needs to pass until it reaches its destination, differing from router-level route which is described as the routers that forward the packet to the destination. Also, it avoids use of a global link-state protocol by configuring link-state messages to be propagated within a provider hierarchy.

The publish-subscribe internetworking routing paradigm (PSIRP) approach uses the publish-subscribe paradigm, whose architecture is based in the information and not in the network nodes. This way the receivers have full control of the information that they want to consume Most publish-subscribe architectures are composed of three major components, which are: publish ers, subscribers and routing nodes (brokers).

The publishers are responsible for feeding the network with information to be consumed, i.e. publications. The subscribers are the consumers of information by expressing their interest on some published items using subscription messages. The brokers are responsible for forwarding the data between the publishers service availability. With the increase of data traffic and new and the subscribers by matching the interests of the subscribers with the information published. So the brokers or rendezvous points (RPs) have the responsibility to route, forward and allowing the delivery of data from publishers to subscribers. Using this kind of architecture the publishers and subscribers do not need to be aware of the existence of each other.

The Explicit Control Protocol (XCP) is a window-based protocol, like transmission control Protocol (TCP) and Stream Control Transmission Protocol (SCTP), which implements congestion control at the end points of a connection, offering high end-to-end through put. The TCP protocol is commonly used in the current internet for congestion control, but it is not capable of offering high through put since it is inversely proportional to the packet drop rate. for this reason, it is needed a new congestion control internet level this can be done by changing the network protocol that can provide better performance than TCP in conventional environments and that can still be efficient, fair, network loads. and stable when the communication delay increases the internet architecture needs to be greatly enhanced to allow the emergence of new services and applications. The reviewed proposals try to outcome the major concerns about the current Internet architecture.[3] In table I it is presented a summary of the issues addressed by each proposal.

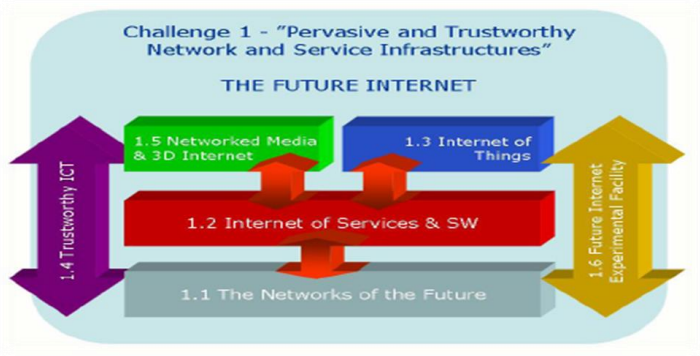
Table – future internet proposals comparison.

Proposal	Clean Slate	Congestion	Mobility	Routing	Scalability	Security
4WARD	√	√	√	√	√	√
ANA	√	X	√	√	√	√
FARA	X	X	√	√	X	X
NIRA	X	X	X	√	X	X
PSIRP	√	√	√	√	√	√
XCP	X	√	X	X	X	X

3. PROGRAMME ON FUTURE NETWORKS

The future internet programmer easy and simple method for every people. Every people simply use the internet. The planned activities under the heading "The Network of the Future" can be seen as the basis for future network infrastructure foundations enabling future Internet services and applications that are complementary funded under the headings "Internet of Services", the "Internet of Things", and the “Media Internet". in addition horizontal activities like "trustworthy ICT" and "Future Internet Experimental Facility" are complementary parts of the programmer (see Figure 2). together with the ongoing activities under work programmed 2019-2020 the total funding for Future internet research lies in the order of 800M , roughly half of which is allocated to research on future networks. the ongoing research activities and the target outcome of future projects are structured under the following three major lines the second important infrastructure foundation that comes before the last mile or meter, are ultra-high-capacity optical transport and access networks. they are expected to be based on state-of-the-art photonics with transparent core-access integration, optical flow and packet transport, dynamic wavelength allocation and end-to-end service delivery capability. they should overcome the limitations of segmentation between access, metro and core networks and domains, enable lower cost optical access and address the need for energy efficiency. integrated projects are expected to address also a network control plane supporting flexible management capability of multi-domain and multi-operator contexts with end-to-end carrier grad e performance. Another objective is converged service capability across heterogeneous access. Concepts should be developed that go beyond incremental steps in service platforms. what is needed are breakthrough technologies and architectures for seamless ubiquitous broadband services, integrating wired and wireless, fixed and mobile technologies in hybrid access networks, including hybrid-satellite networks. These enable generic support for service portability and continuity across composite networks through the service-network interface, with ubiquitous [9]

Figure- future internet a federing themes



4. FIRST APPROACHES TO FUTURE INTERNET DESIGN

Research of future internet architectures and technologies has already started. Both industry driven integrated projects generating critical mass and focused projects concentrating on specific idea have been launched in the first phase of FP7. project portfolio is structured in the three clusters future internet, radio access and spectrum and converged and optical network. (see figure4) In the following examples for the first promising approaches to significantly change the principal of the internet architecture and protocols and present.[10]

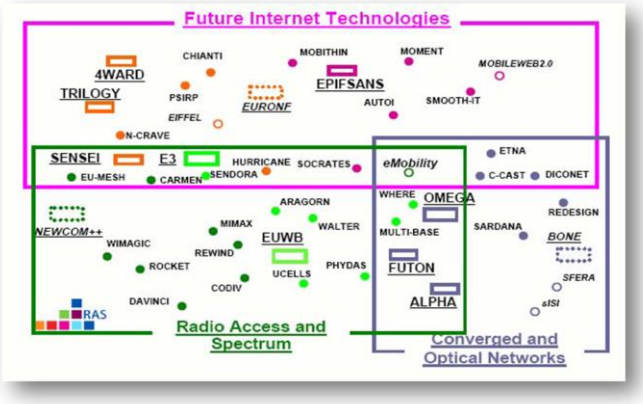


Fig. 4: Future Networks Project Portfolio and Clustering

5. Vehicular and transport network of future- The future network of transport is given suitable and comfortable vehicular to use and help mankind. Vehicle communications are becoming increasingly popular, propelled by navigation safety requirements and by the investments of car manufacturers and Public Trans-port authorities. The essential vehicle grid components (radios, Access Points, spectrum,standards,etc)

[a]. . Routing in the vehicular grid in general, the vehicle grid will support many routing options simultaneously, the selection depending on the name/address map scheme. The prominent scheme, especially to remote destinations, will be geo-routing. Yet geo-routing in vehicular grids poses research challenges. The first issue is vulnerability to "dead end" traps. Vehicle grids are full of such traps. The recovery must be done with time consuming graph plane- rization followed by ‘‘perimeter routing’’. One open re-search issue is to investigate schemes that prevent/ recover from traps more efficiently than planarization.

option is to use landmark assisted geo-routing (Geo- Lanmar). we can detect if geo-routing leads to a trap by comparing the "Euclidian" distance/direction (i.e., the direction "as the crow flies") with the GeoLanmar adver- tised distance/direction . if the GeoLanmar distance is substantially higher, there is a good probability of a dead end and the landmark path is chosen. this scheme how- ever carries the overhead of periodic GeoLanmar advertis- ing. an option without planarization nor advertising overhead is Geo-Cross, where planarization is NOT per- formed before perimeter routing . Rather, loops are al- lowed to occur, and are efficiently detected a posteriori during the routing process. the above protocols forward packets efficiently when the underlying network is fully connected. however, the dynamic nature of vehicular network, such as vehicle den-sity, traffic pattern, and radio obstacles can create tempo- rary disconnections and networks partitions. To overcome these problems, disruption and delay tolerant geographic routing solutions such as GeoDTN+Nav must be used . As the name indicates, GeoDTN+Nav is a delay tolerant extension of geographic routing that exploits the on-board navigator. GeoDTN+Nav first determines when the network has become partitioned (this is inferred when geo-routing has switched from greedy to perimeter mode and the packet has travelled an unusually large number of hops). with a partitioned network, packet routing is processed in DTN mode (i.e., carry and forward). Delivery latency is improved in GeoDTN+Nav by using passing vehi- cles' Virtual Navigation Information (e.g., intended destina- tion, direction, trace of the route covered so far, future [15]

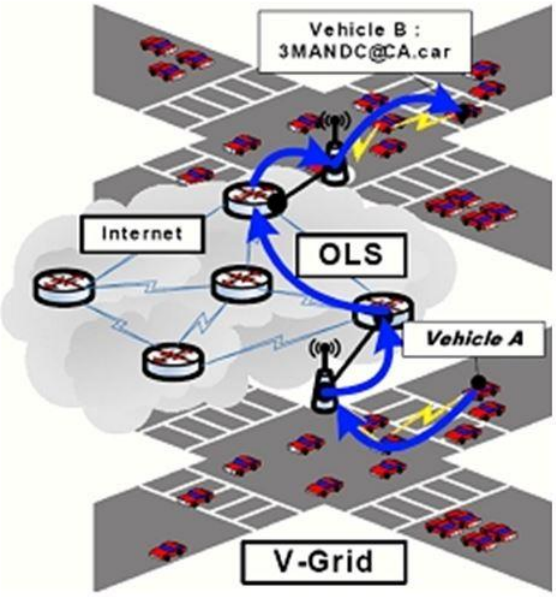


FIG 5. Routing the overlay

III. CONCLUSION

This paper has addressed "federation – management of future internet and this topic is focused all type of manage internet like technology of internet, NIRA-new internet routing architecture, program of future network, first approach to future internet design, vehicular and transport network of future, this is the most topic of manage future internet and most we all are use every time and every wok in internet. The future internet is discussion of transport routing mobiles and technologies development and step by step completing the program. Internet is most focus is new program and implement and new implement benefits is suitable and easily use for his old version so upgrade is better of every version.so its effect and use internet of future because the modern age is use very simplify and easily lower timing implement . In this paper all point in based of future concepts and help of clear make future intent technologies.

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REFERENCES

[1] Sasu Tarkoma et al., "The Publish/Subscribe Internet Routing Paradigm (PSIRP): designing the Future Internet Architecture", in: "Towards the Future Internet – a European Research Perspective", IOS Press, 2009

[2] M. Baldi and Y. Ofek. "Time for a 'Greener' Internet," presented at the several international R&D teams for Siemens, and as Chief Engineer1International workshop on green communications represented Siemens Networks on IPTV standardization foruns. He(GreenComm'09), in conjunction with the IEEE International collaborated on the creation of the interdisciplinary Institute for human conference on communications, June 2009

[3] Kahn, R. guest ed., Uncapher, K., van Trees, H., assoc. guest eds. special Issue on Packet Communication Networks. *Proceedings of the IEEE 66*, 11(Nov. 1978).

[4] Anja feldmann, "Internet Clean-Slate Design: What and why?", editorial note submitted to CCR, June 2007, http://ccr.sigcomm.org/online/?q=node/229

[5] Louise Burness et al., "The Trilogy Architecture for the Future Internet", in: "Towards the Future Internet – a European Research Perspective", IOS Press, 2009

[6] G. Tselentis, *towards the future Internet* , pp. 91-101. IOS Press, 2009.

[7] M. Baldi and Y. Ofek. "Time for a 'Greener' Internet," presented at the several international R&D teams for Siemens, and as chief Engineer1 International Workshop on Green Communications strepresented Siemens Networks on IPTV Standardization foruns.

[8] Y. Zhang and T. Henderson. "An implementation and experimental more than 90 scientific publications in *Proc. 24th Annual Joint* Proceedings IEEE, vol. 2, pp. 1037-1048. INFOCOM 2005

[9] *European Commission, Directorate-General Information Society and Media,{Peter.Stuckmann|Rainer.Zimmermann*

[10] **Jon Postel** (postel@isi.edu) is the director of the Computer networks division of the Information Sciences Institute of the University of Southern California

[11] C. Gkantsidis, J.Miller, P Rodriguez, Anatomy of a P2P content distribution system with network coding, in: international workshop on Peer-to-Peer Systems (IPTPS'06), Santa Barbara,

[12] C. Gkantsidis, P. Rodriguez, Network coding for large scale content distribution, in: IEEE INFOCOM, Miami, March 2005.

[13] H. Mellah and B. Sansò, "Review of facts, data and proposals for a is a co-founder and associate member at Beta-i entrepreneurship association, greener internet," *ICST Broadnets* , 2009. having mentored dozens of start-up projects, and he was a co-organizer

[14] B. Hull, V. Bychkovsky, K.Chen, M. Goraczko, A. Miu, E.Shih, Y.Zhang, H. Balakrishnan, S. Madden, CarTel: a distributed mobile sensor computing system, in: Proceedings of ACM SenSys, 2006.

[15] Vehicular networks and the future of the mobile internet Mario Gerla ⇑, Leonard Kleinrock Computer Science Dept. UCLA, 405 Hilgard Ave, Los angeles California 90024, USA

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