

Mobile Peer-to-Peer in the Cellular Web Network

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Abstract— This paper proposes a Mobile peer to peer in cellular Web network. The new ideas has been how P2P would suit for cellular networks. Mobile Peer-to-Peer (MP2P) presents technical, business and legal challenges. The 2G cellular networks can support for android and windows phone application. But the 3G, 4G and WLAN networks are also providing mobile P2P connection. It is expected for the MP2P design and also the most popular applications will different particularly from the present, secure network solutions. And how to use the and how it will support mobile networks.

I. INTRODUCTION

Mobile Peer-to-Peer in cellular networks is a file sharing and communication between the two or more cells which is the connected by the internet. Here the main barriers are attacked and mixtures to problems are given. Some of the cells operators consider mobile Peer-to-Peer facilities as a risk that can expose the current moneymaking business and should be battled by all means. For example Skype Internet Telephony it is the online communication and the Paytm is the money transfer application. A mobile is always with you and it is very personal device which is having your contact, So that the mobile P2P is very secure more than your PC. Those enablers can be resourcefully utilized in the MP2P applications. The most critical challenges are presented. The typical P2P traffic characteristics are presented as a background for the 3G and 4G performance evaluation.

The latter part of the section enlarges the positive edge mobile networks can bring on top of the mobile P2P connection. The networks have something new to provide to the features to the such the devices. The new mobile P2P architecture that would optimally meet the requirements presented by the networks. The leading idea is that the secure network should offer a mobile proxy for each mobile phone which connecting to the mobile P2P networks. Most of the existing applications have a strong network too, but strong mobile P2P features can be added to support the unique inkling.

A completely original mobileP2P application operating the proposed architecture is described in detail.

II. REQUIREMENT

The mobile P2P has not been measured up till now a success story on the mobile area, and there are a lot of good reasons for the negative estimation. The most fences are listed in this section.

A. Challenges

1) Traffic volumes

The Mobile Peer-to-Peer networking is a superior data sharing technology compared to the rational client-server model. The secure networks already over 80 percent of the circulation contains of mobile P2P

networks, and in the access networks portion is even higher. In traffic volumes this means daily a few transfer of MB data like video, voice, gaming and multimedia data per user.

2) Pricing

The 2G,3G and 4G networks are designed to carry mainly voice and data follows as a secondary service.

The data charging scheme commonly used, is one of the major obstacles to mobile P2P networks services attractive extensive. There are three kind mobile P2P service examples given with bandwidth and size requests are scheduled in the table.

Table. 1: For Data Distribution

Content	Bandwidth	100 MB	1GB
MP3 audio	128 kb/s	100 min	1000 min
MPEG4 video	1 Mb/s	13 min	130 min
MPEG2 video	5 Mb/s	3 min	27 min

3) Technology

The mobile phones have also other restrictions. Their state and location vary fast that degrades the performance of the mobile P2P protocols. The battery technology against the existing CPU speed, is improving fairly slowly, and without a major breakthrough, cellular device cannot meet the needs described above. The 3G and 4G bandwidth will be limited for a long time. In local area networks, service level with the maximum speed of 5 Mb/s can be acceptable, but in the wide area networks, the characteristic speed drops to the level of 384 kb/s.

4) Security

The mobile P2P as such expresses a wide selection of security anxieties for the people using them. it is just the opposite. There without going to the details of the network security. It is clear that already the content security in the form of copyright destruction is a huge challenge. The internet way with mostly unlawful content cannot glide on the cellular side, because operators cannot take the risk of unlawful content being stored and shared by their systems. The content protection with Digital Rights Management must be solved it. The confidentiality should be highlighted. Mobile P2P networks provide mammoth amount of user data that could risk the privacy in the wrong hands.

5) Connectivity

The connectivity has been the block cause they have wanted to completely control the traffic. Without the direct link between the terminuses a mobile P2P communication cannot be applied. The 3G calibration is heavily requiring Session Initiation Protocol based IP address. There change of the position requires all the mobiles are directly addressable from anyplace in the Internet.

III. ARCHITECTURE

The architecture of the mobile peer to peer network is required. There are two major types of the P2P Mobile

Proxy and Web Services concepts.

A. Mobile Proxy

The vibrant nature of the mobile network. Mobile Proxy can be measured as a virtual peer connected to the P2P network, and it can completely represent the cellular towards the secure and other mobile P2P knobs even in the situation when the portable is out of coverage or lacking battery current.

B. WEB Services

The peer to peer web services are having the different problems. The first one allows an effective method to share data in one area.

IV. APPLICATIONS

A. Open innovation

The somewhat inadvertent invention of the Short Messaging System (SMS), not a lot has happened. The traditional service machinery on the telecom systems has been based on the Intelligent Networks that create very much from the operator centric opinion. The Internet things have been totally different and the open innovation has always been the top feature. It is clear that the Telecom communication world must learn from the Internet and leave the old constraints. The WLAN and direct internet connection are in the Internet. The mobile Technology will meet the same purpose like the one happened to the cable phones. The security concerns should not be ignored, and here the user familiarity becomes respected. Here the internet lacks such as spam and viruses must be motionless already before the air edge, and here the Mobile Proxy concept offers a good solution platform. Mobile API conditions must be easy to instrument and Easily downloadable.

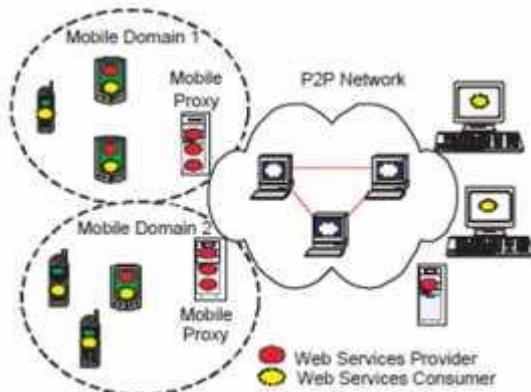


Fig.1: Open innovation

B. Service examples

The example of the services of the peer to peer network is fairly common that a achievement section from one field is repeated. The fundamental of P2P thoughts that is completely maximizing the possible mobiles can offer. The services are

quiet running on top of outmoded client-server architecture but mobile P2P could easily improve. There have been negotiations on going whether a Web Server could be installed or not only on the mobile. This service

has created a huge of database of the services and fascinations located inside the mobile. First try to find the information from the adjacent social network. The metadata for the encyclopedia programs, a reliable social network could be created.

C. Business opportunities

Today the amount of data traffic and income is still on a very high level, and at the same time, the mobile networks are having a lot of unemployed data size. To increasing the data traffic would be virtually create any new costs but just earning options. The Mobile Proxy solution would significantly save the air capacity, and even high volume mobile P2P applications could be supported with minimal other outlays.

The air company mileage assembly systems might show one way to manage with the increased traffic. If the class limit is surpassed or dropped short, the user is respectively upgraded or downgraded, to the better corresponding class. The Mobile Proxy would allow an agent service where operator could utilize AdSense type of business model by taking the commission of the chargeable digital content shared. Here the advertising opportunities is also.

V. CONCLUSIONS

Mobile peer to peer cell networking is good opportunity for the mobile users to solve the many problems. Mobile Proxy architecture to be the task tracted. We can communicate with too many person at a time from anywhere anytime by using mobile peer to peer application. There many option to increase the web business and make easy to communication, money transfer etc.

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