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A SURVEY ON CLOUD FOR SOFTPHONE INTEGRATION

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Abstract— *Software which is used to increase sales pipeline by prospecting at better times. Increase the leads conversion by training the sales team to dial with the right process. Process and Increase with CTI to see the current local time on leads, contacts and account without leaving leads information. Saves time and money. For organisation who called leads from all over the country and around the world, this app helps to prioritize the leads and prospects based on their local time to make sure and connect with the largest amount of clients or prospects. With this softphone, we can prioritize leads by time zone to call them at the right time. Optimize workflow for better sales efficiency. Easily find missing or invalid phone numbers.Based on some signals, the leads current position to speak to client should be tracked and depends on the current position of leads the conversation made easier.The signals give information like Do not call this lead now,Call this lead,It's a great time to call,Hurry ,call this lead right now,Time for calling lead is running out ,Itcoundn't prioritize the lead,missing or invalid phone number.*

Key words-*Voice Over InternerProtocol,cloudstorage,Telephony over the internet (softphone).*

I. INTRODUCTION

Softphone, a software program for making telephone calls using a general computer over the Internet, than using a hardware.The softphone can be installed on a piece of hardware such as a desktop, mobile device, or other computer and allows the leads to place and receive calls without requiring an actual telephone set. Softphone is designed to behave like a traditional telephone to maintain the environment to speak with the leads via a Internet. Voice over Internet Protocol is a methodology and group of technologies which is used for the delivery of voice communication over internet protocol (IP) networks, such as the internet. Instead of using Public Switched Telephone Network (PSTN), Internet Telephony is used to improve communication services over the internet.

The traditional digital telephony and the principal involved in originating VoIP telephone calls are similar with digitization of the analog voice signals and encoding. The digital information is packetized instead of transmitting over a circuit switched network and IP packets are transmitted over a packet switched network. Voice information is broken down into small pieces of data using the VoIP technology and transmit it to the final destination. Theseare reassembled in the phone calls we hear. Allowing users to call others in real time with voice technology there Skype became the VoIP king. The success of VoIP, Skype, and similar technology and products paved the way for the softphones we use today in business and at home. Softphones allow computers or smart devices to function as telephones.
VoIP solutions aimed at businesses have evolved into services that treat all communications such as phone calls and more—as discrete units that can all be delivered via any means and to any handset, including cellphones. VoIP allows both voice and data communications to be run over a single network, which can significantly reduce infrastructure costs. Salesforce Voice provides a way to provide numbers and make calls directly from leads. However, if you already have a telephony system in place, Open CTI is the way to go since it integrates to that existing system. Desktop CTI, also known as the CTI Toolkit, is the predecessor to Open CTI. Desktop CTI required adapters to be installed on each call center user's machine. With Open CTI, those user-side adapters are a thing of the past. Hence a system can be proposed as a VOIP based softphone integration.

It stores the clients information and details and stored it on cloud based on the storage information the telephony call should be processed.The scenario is depicted in the following figure 1.

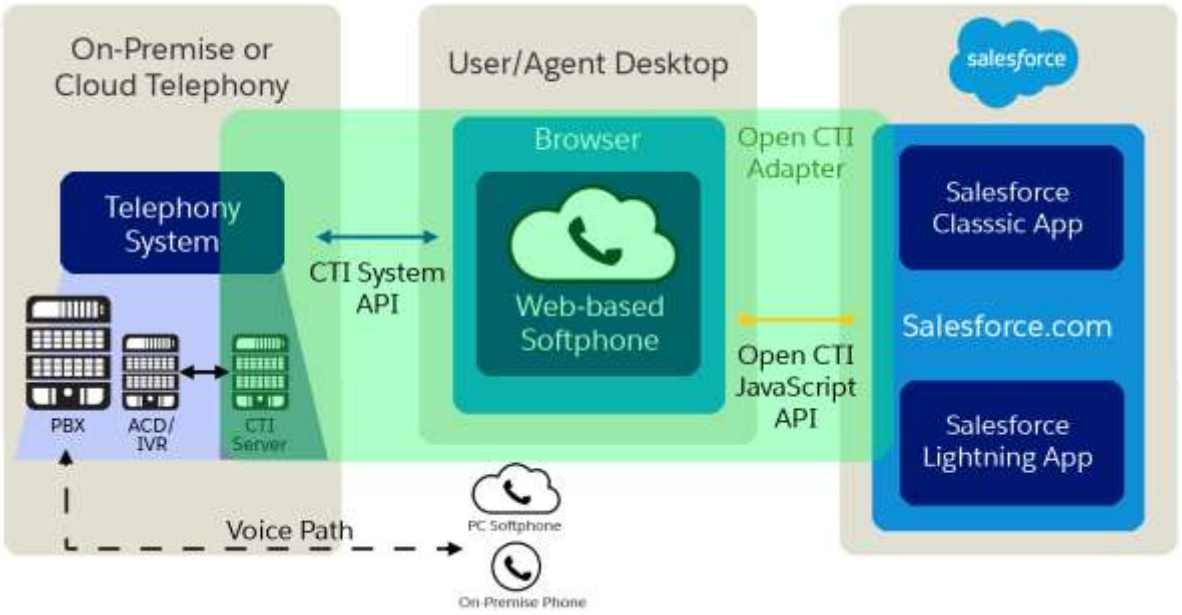


Figure 1:CTI connection to telephony system

The process which involved in the application maintains over all prioritization of leads process.The scenario is depicted in the following figure 2.

Figure 2:leads maintenance

II. LITERATURE WORK

As a part of literature survey, some applications are investigated that offer softphone for sales development. Intoday's world soft phones play an important role for efficiency in time and accuracy. Some of aservices for efficiency purpose are as follows

***Infonetics: Wireless LAN market up12% in 2Q13*, 2016. [Online].**
Available:http://www.infonetics.com/pr/2013/2Q13-Wireless-LAN-Market-Highlights.asp. It proposes the idea of improving the capacity of VoWLAN by using Full Duplex (FD) Communications. An analytical model of FD Medium Access Control protocol for VoWLANs is developed and its capacity is observed. To show the effects of different voice over IP (VoIP), FD communications and data connections on the VoIP capacity, extensive simulations are applied in this approach.

D. Hole and F. Tobagi, "Capacity of an IEEE 802.11b wireless LANsupporting VoIP," In *Proc. IEEE ICC,* June 2004, pp. 196-201.The concept evaluates the capacity of an IEEE 802.11b network in a wide range of scenarios carrying voice calls that includes varying delay constraints, channel conditions and voice call quality requirements. G.711 and G.729 voice encoding schemes and a range of voice packet sizes are considered. It shows how channel conditions and voice quality requirements affect the capacity.

S. Shin and H. Schulzrinne, "Measurement and Analysis of the VoIPCapacity in IEEE 802.11 WLAN," *IEEE Trans. Mobile Comp.*, vol. 8, no.9, pp. 1265-1279, Sept. 2009.The capacity for VoIP traffic in IEEE 802.11b wireless testbed is measured and compared with theoretical capacity. An estimation of capacity with 20ms packetization and consisting of 38 calls for VBR VoIP traffic with 0.39.

E. Myakotnykh, R. Thompson, "Adaptive Speech Quality Management in Voice-over-Ip Communications", *Fifth Advanced International Conference on Telecommunications (AICT)*, May 24-28 2009. It proposes an idea of dynamic change of speech encoding parameters to manage the quality of VoIP communication in real time in case of degeneration due to congestion in the network. This investigates the effect of compression variation and voice payload size on VoIP quality under various network conditions

R. Doost-Mohammady, M. Naderi, and K. Chowdhury, "PerformanceAnalysis of CSMA/CA based Medium Access in Full Duplex WirelessCommunications," *IEEE Trans. Mobile Comp.*, vol. 15, no. 6, pp. 1457-1470, June 2016. A Markov chain based approach is followed which results in closed form expressions of throughput for both the access point and the clients for new class of networks. Classical hidden terminal problem is mitigated through full duplex. Analytical models developed are verified through packet-level simulations. Benefits varying network configuration parameters such as client density, hidden terminals and contention window size.

K. Stoeckigt and H. Vu, "VoIP Capacity–Analysis, Improvements, andLimits in IEEE 802.11 Wireless LAN," *IEEE Trans. Veh. Technol.*, vol.59, no. 9, pp. 4553-4563, Nov. 2010.Now a Days Everyone is busy in leading their life very effectively in all aspects and unable to answer some of the calls which is very important. At that situation wireless voice over internet protocol(VOIP) is one of the new emerging communication technology where we can use instead of mobile phones for communication. This will work only under wireless area network. Recent studies says that IEEE802.11 is a limited. Instead of IEEE 802.11 there is a another protocol called so-called transmission opportunity (TXOP) parameter extract from the medium access protocol (MAC) will gives the effective use of VOIP. The implications of the TXOP parameter in terms of the maximum number of calls the IEEE 802.11 network can be significantly improved. The number of voice calls obtained can be buffered by using Access Point(AP). If the use access point at the optimal buffer size where the maximum voice capacity is achieved, but further increasing the buffer beyond this value will not result in an increased voice capacity. After successful findings the use of TXOP develops the number of voice calls.

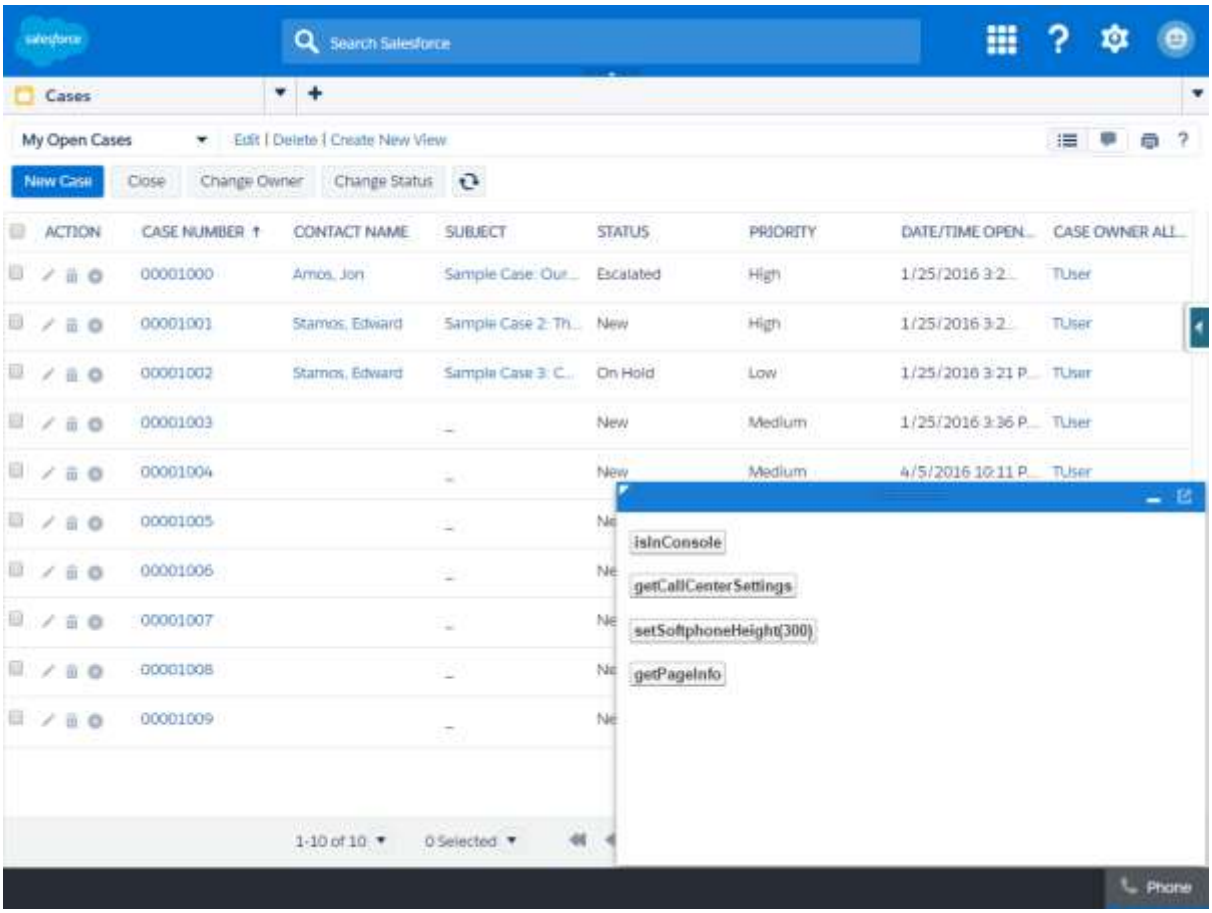
M. RahmanSiddique, J. Kamruzzaman, and M. Hossain, "An AnalyticalApproach for Voice Capacity Estimation Over WiFi Network Using ITUTE-Model," *IEEE Trans. Multimedia*, vol. 16, no. 2, pp. 360-372, Feb.2014. Wireless network provides the impact on the perceived quality of voice services. Monitoring the Quality of service in the computer network during the voice data transmission to check whether proper voice service quality to the end user especially in the wireless network. There is the another service called Quality of Experience (QoE) is used to check the metrics and methods for quality evaluation from the end users view. The main aim of QOE is to estimate the voice over internet protocols in the wireless networking. The quality of the voice can be estimated based on the characteristics of the wireless network and the location of wireless client.

M. Jain, J. Choi, T. Kim, D. Bharadia, S. Seth, K. Srinivasan, P. Levis,S. Katti, and P. Sinha, "Practicla, Real-time, Full duplex Woreless," In*Proc. ACM MobiCom*, Sept. 2011, pp. 301-312. This paper deals with the duplex radio design using signal inversion and adaptive cancellation. A balanced /unbalanced

transformer used by the Signal Inversion. When it comes to theory there is no limitations for bandwidth or power and when it comes to practical there will be some limitations for bandwidth or power. In practical, Signal inversion deletes a bandwidth of 45db from 40MHz bandwidth. By combining Signal Inversion cancellation and Digital Domain cancellation, can reduce 75db of 10MHz Orthogonal Frequency- Division Multiplexing (OFDM) Signal.

III. SUMMARY OF SURVEY

The application are compared based on criteria's like cloud access on contacts and accounts listbased,notification, Voice Over Internet Protocol, non pritorized call management and leads summary contcts. Majority of the process use cloud for accessing leads information and VOIP for voice call over internet. It also provides the non prioritize leads information and that maintance makes the process in easy and great level of optimization in sales management. This makes the better experience with the leads environment and provide a easy access on reps.



Sets the icon for the softphone item in the utility bar. Returns true if the function is successfully executed, and false when thereis a failure. This method is available in API version 38.0 or later,
the softphone icon in the utility bar.

IV. CONCLUSION

This paper describes on cloud for softphone integration with CTI that is designed with recent improvements in cloud and softphone for leads conversation. VoIP is sensitive to the increased access latency. Extensive simulation results have been carried out to validate the analytical models.

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