

Future Magic SIM

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Abstract: Now each and every mobile have the SIM. Because SIM is Vitol role of the mobile world without sim ,we can not activate the mobile.so it is dead . The SIM is converted each and every generation change its size and its performance. Before mini(physical) SIM, micro SIM, and then nano SIM . Then it is changed as eSIM and iSIM for mobile operation. First of all need WI-FI, Hotspot. Bluetooth...etc because it is based on its situation. These are all based by internet, network soul of communication . that is also called mobile data. If not mobile data (network for mobile) can not access , text, message(e-mail), whatsapp, facebook, Instagram, linkedin...etc...apps(application) can operate by the mobile data.but need mobile data for download the appsand execute the apps. In future no need to the mobile data because we wil use eSIM(embedded SIM) or iSIM (integrated SIM. That is embedded with satellite.like as GPS. This is the Magic SIM Or SIM less mobile and also no need NETWORK in future.

Key words: SIM, eSIM, iSIM, GPS,WI-FI

INTRODUCTION

We will discuss about eSIM and iSIM both are same .eSIM (embedded subscribe identity modules)then iSIM(integrated subscribe identity modules)because it has the future in mobile world and human communication .Internet has an interrupt in between the communication's directly connect to the satellite then its performance also increase without network. This process also increases gradually in six countries. India also included in this project. Now eSIM or iSIM future is embedded.it means link between devices. Which is no need to separate operating system. Because it is once activated. Then it will be continue like as GPS(global positioning system.)

In physical SIM tower and location for continue with internet(network). An iSIM is type of eSIM when as integrated uicc(universal integrated circuit card).with an server element is manufacturer in to a system-on0chip(soc) or system -in-package(sip).which then become integrated in to a cellular iot modules.

eSIM emerged as ground breaking solution.it is innovative. Chip allowed over-the-

air(OTA).provisioning eliminating the necessity for physical SIM card replacement of online carrier or upgrading network technology.

Varies types of eSIM technologies.

1.consumer eSIM- tailor for individual user.

2.M2M/IoT eSIM-Remote desire action configuration and management with on iot eco system.which council connecting sector and machinery.

3.eICC-embedded integrated universal circuit card hardware component of an eSIM eIUCC are embedded circuit card that is securely stored and merged multiple SIM prefer.

4.Multible -IMSI(integrated mobile subscribe identity).eSIM enabled to IOT converted suitable dynamic between multiple IMSC associated with different mobile network

1.cosumer removable SIM

2. Global platform (GP) eSIM

3. GSMA-complaint eSIM.

OTA- over-the-air refer to wireless communication of information ,which cellular network are mobile network that provide internet access to device also know as wireless network OTA-is used to seemed information to IoT device and for TV and radio broad cost. OTA can be limited by range and interference and reception quality can be affected by topography , distance from transmission tracks and material in construction.

Cellular network-

Use cell phone tower to transmit the signal and allow the mobile direction to connect the internet. Cellular network are provided by he telecommunication companies and required the data plan attached to o the device .cellular network offer wider coverage and better mobility.

Then WI-FI and they are less likely to be affected by interference other devices. eSIM technology is ideal for IoT(internet of things) and m2m(machine-to-machine) communication seam Lessing integrated in to version IoT devices.

Web of things(wot) seek to counter the fraction of IoT by using and extending existing, standardized web technology by providing standard metadata and other re-usable technology building blocks.W3C(wot) enable easy integration across IoT platform and application domains.

WoT sub set of the IoT and is built software standard such as REST ,HTTP and URI's to allow the device to interact with and other.

World-wide-web consortium interoperability.

Why need WoT(web of things).

It was greater over comes to limitation of IoT. The IoT becomes complex when the number of devices connected together increases different IoT standard and protocol incompatible with each others,this increase the complexity when the number of connected device increases.

IoT data exchanges by sharing IP address it has not ensure that the device understand it .WoT comes In HTTP comes in universal protocol for transferring data . It allow sharing the data in various function including images, text, sound, and others formats connecting physical world make over the world wide web .both technology serve the same purpose of enabling connectivity.

Saily-is a prepaid data plan with an eSIM only services . it work along side your phone convert SIM normal calling and texting capabilities. Remain unattached. saily provide the mobile data services globally for international travels or global travelers.

Cellular vs eSIM-

Main difference between and cellular network and eSIM that a cellular network is typically associated with the physical sim card. While and eSIM is embedded is to device hardware. An eSIM is electronic SIM is a reprogrammable chip. That is embedded in to device mother board,eSIM can be programmed remotely so then is no need swap out physical card (SIM).

Advantages- eSIM/iSIM

Flexibility Allow to tower to switch between carrier and plan without change the SIM card.device compatibility- used across the mutable device including smart phone , tablet, and smart watches.

Coverage-eSIM offer great flexibility in less coverage, allowing uses to switch the different carriers networks if one carriers networks in a certain area.

Security- eSIM better suited for WI-FI, hotspot, due to enhanced security.

Cost saving- eSIM can provide the cost saving travelling internationally.

eSIM supported – apple, iPhone and android also. Many country is also included India.

SIM variation- SIM also called form factors from physical sim to electronic and embedded . that has differentiate each and every generation .generation are called 1g,2g,3g,4g,5g. that generation differ with performance of sim. Mini SIM, like as ATM card(1ff),then 2ff,(micro) and then 3ff and 4ff are nano . now MFF2-eSIM/iSIM that SIM embedded with into device the form factors increased the performance in SIM revaluation.

CONCLUSION

Only iPhone(Internet phone) used in eSIM / iSIM for without network now increase gradually in mobile also supported to the android phone. That is also called 5g network. Now provided to public with out and without network also used in prepaid like as no need cell tower and this is not used in base station. It is used only over-the – air(OTA).Cell phone are provided by the satellite if want anything from the device. No interferences data transformation of other devises .Because it is used broadcast to the communication and transfer the data from one place to another place which used travelled by globally not state ,country beyond the country. It is possible to use with out interferences. Any interferences to communicate like as other SIM devices.Mini,Micro,Nano,it is based tower base station but not in eSIM/iSIMof the mobile because it is SIMless or magic sim in future(M2M) machine- to – machine embedded SIM or electronic sim/ integrated SIM in the mobile world.

Now India directed to variant hardware and SIM communication between satellite to device or device

to device by BSNL currently used to public. It comes to public also.

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