Using the fictitious serial number technique to use an Internet connection without a SIM card

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Research Summary:

When using traditional internet routers, we are restricted to the geographical area in which the router is placed, and the internet cannot be used in case the router is forgotten somewhere. Building an electronic system that allows the use of an Internet service installed on a data chip without its presence using E sim technology so that the user can use the Internet on a data chip anywhere through the serial number of the chip. Mobile chips use cloud communication technology and link Internet chips to any ordinary phone by entering the serial number of the chip to run the Internet services provided for the basic chip on any phone. Extracting its serial number and then building an application on smartphones that makes a virtual data chip to be run as if it were a data chip In the second stage of the study, the use of the application is tested to obtain the Internet services available on the chip for which the serial number was extracted. Determining the efficiency of the communication resulting from this method compared to traditional communication. The results of the study show that measuring the communication speed that the communication speed is less than the chip speed by about 21% of the original speed, which is an acceptable percentage and proves the validity of the hypothesis that was imposed in this study.

the problem:

When using traditional internet routers, we are restricted to the geographical area in which the router is placed, and the internet cannot be used in case the router is forgotten somewhere.

Hypothesis:

We assume that we can build an electronic system that allows the use of an Internet service installed on a data chip without its presence through the use of E sim technology so that the user can use the Internet on a data chip anywhere through the serial number.

Target:

The study aims to build an electronic system that enables us to convert ordinary SIM cards into mobile SIMs using cloud communication technology and linking Internet SIMs to any ordinary phone by entering the serial number of the SIM to operate the Internet services provided for the basic SIM on any phone.

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procedures:

In this study, the research procedures are carried out in several stages. In the first stage, an internet chip is selected, and its serial number is extracted. Then an application is built on smartphones that make a virtual data chip be run as if it were a normal data chip. In the second stage of the study, an experiment was conducted. Use the application to get online services available on the chip whose serial number was extracted.

In the last stage, the communication speed is measured in traditional communication and communication using the application that was programmed in this study and based on it, the efficiency of communication resulting from this method is determined and compared with traditional communication

Figure 1 : procedures

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Project Mechanism:

Data:

Name of Instance		Sim-heuristic with robustness "Best". (B2)			Sim-Randomised IG with robustness "Best" (B4)			% E. T. Cost Improvements B2—B4
		F. Cost	E. V. Cost	E. T. Cost	F. Cost	E. V. Cost	E. T. Cost	
1	A-n32-k5	787.1	201.2	**988.3**	797.45	193.76	991.21	0.29
2	A-n33-k5	662.1	156.1	**818.3**	676.10	145	821.10	0.34
3	A-n33-k6	742.7	164.6	**907.3**	742.69	171.46	914.15	0.76
4	A-n37-k5	672.5	119.9	**792.5**	672.47	134.43	806.90	1.82
5	A-n38-k5	734.2	166.5	**900.7**	745.96	157.65	903.60	0.32
6	A-n39-k6	833.2	182.9	**1016.1**	836	187.42	1023.42	0.72
7	A-n45-k6	949.6	245.7	**1195.3**	977.01	220.37	1197.95	0.22
8	A-n45-k7	1154.4	351.9	**1506.4**	1153.87	360.65	1514.52	0.54
9	A-n55-k9	1074.5	330.3	**1404.7**	1084.29	324.21	1408.51	0.27
10	A-n60-k9	1363.6	435.4	**1798.9**	1363.58	462.52	1826.11	1.51
11	A-n61-k9	1048.3	277.1	**1325.5**	1050.65	283.24	1333.90	0.63
12	A-n63-k9	1632.7	564.7	**2197.4**	1635.58	579.97	2215.55	0.83
13	A-n65-k9	1187.3	356.8	**1544.0**	1190.30	369.26	1559.57	1.01
14	A-n80-k10	1791.9	572.6	**2364.5**	1785.65	598.70	2384.36	0.84
15	B-n31-k5	676.1	183.0	**859.1**	688.26	174.73	862.99	0.45
16	B-n35-k5	958.9	290.5	**1249.3**	958.89	300.54	1259.44	0.81
17	B-n39-k5	553.2	147.1	**700.2**	553.66	149.03	702.68	0.35
18	B-n41-k6	837.9	261.7	**1099.6**	896.51	215.56	1112.07	1.13
19	B-n45-k5	753.9	165.4	**919.4**	761.92	159.42	921.34	0.21
20	B-n50-k7	744.2	213.7	**957.9**	744.34	217.33	961.67	0.39
21	B-n52-k7	756.7	200.3	**957.0**	766.06	191.47	957.53	0.06
22	B-n56-k7	716.4	201.6	**917.9**	727.64	214.40	942.03	2.63
23	B-n57-k9	1604.9	595.0	**2199.9**	1607.26	613	2220.26	0.93
24	B-n64-k9	869.3	309.3	**1178.6**	868.31	312.56	1180.87	0.19
25	B-n67-k10	1041.1	358.4	**1399.5**	1087.38	333.71	1421.08	1.54
26	B-n68-k9	1300.2	453.7	**1753.9**	1301.14	479.24	1780.39	1.51
27	B-n78-k10	1244.4	408.9	**1653.3**	1260.6	417.33	1677.93	1.49

Table 1: Data

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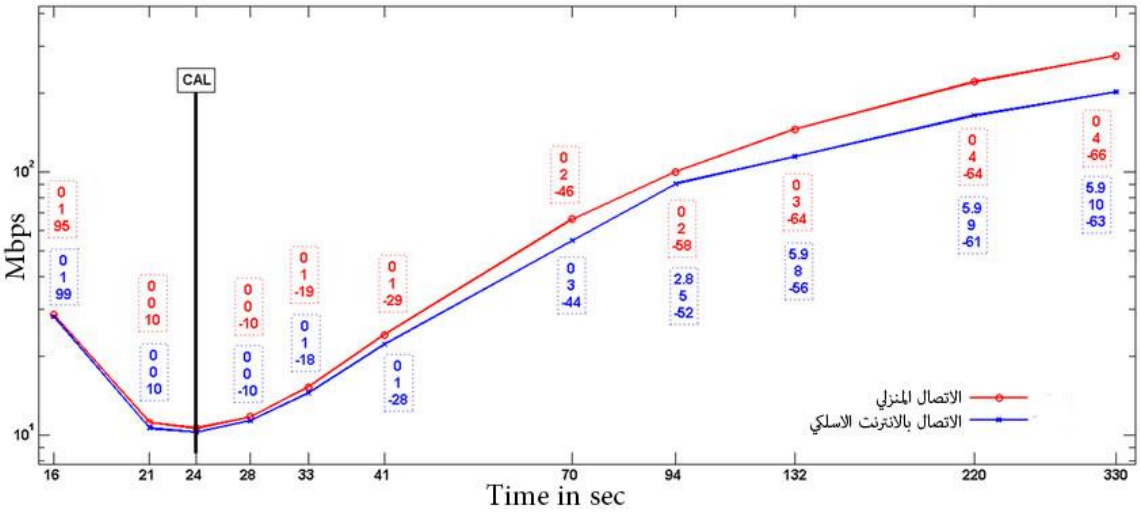

Figure 2: Mbps

Conclusion:

The results of the study show that through the method used in this study, we can use a communication chip installed inside a router far from us by making an application that simulates the work of the router and uses the serial number of the communication chip. The results of measuring the communication speed show that the communication speed is less than the speed of the chip by about 21% of the original speed, which is an acceptable ratio and proves the validity of the hypothesis that was imposed in this study

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