

(54) Title of the invention : IMPACT OF LORAWAN ON PERFORMANCE OF CLOUD-BASED IOT PLATFORMS AND FOG COMPUTING

(51) International classification :H04L0067100000, H04L0067120000, H04W0004700000, G06F0009500000, H04W0004380000

(86) International Application No :NA
 Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
 Filing Date :NA

(62) Divisional to Application Number :NA
 Filing Date :NA

(71)Name of Applicant :
1)DR R PALSON KENNEDY
 Address of Applicant :PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, PERI INSTITUTE OF TECHNOLOGY, MANNIVAKKAM, CHENNAI, 48. -----
2)Dr. V. MADHUKAR
3)Mrs N.RAMADEVI
4)Mr. KSHITIZ SAXENA
5)Ms. SHUBHANGI SHARMA
6)Dr. BRAMAH HAZELA
7)Mr. T. AMAR KIRAN
8)Dr.SURESH AKKOLE
9)Ms. PUTTA HEMALATHA
10)Dr.P.ANUSHA
 Name of Applicant : NA
 Address of Applicant : NA

(72)Name of Inventor :
1)DR R PALSON KENNEDY
 Address of Applicant :PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, PERI INSTITUTE OF TECHNOLOGY, MANNIVAKKAM, CHENNAI, 48. -----
2)Dr. V. MADHUKAR
 Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, CHAITANYA (DEEMED TO BE UNIVERSITY), KRISHANPURA, HANAMKONDA WARANGAL -506001, TELANGANA STATE -----
3)Mrs N.RAMADEVI
 Address of Applicant :ASSOCIATE PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, SANTHIRAM ENGINEERING COLLEGE NH-40, NANDYAL, 518501. -----
4)Mr. KSHITIZ SAXENA
 Address of Applicant :ASSOCIATE PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, BHARAT INSTITUTE OF TECHNOLOGY, MEERUT BYPASS ROAD, PARTAPUR, MEERUT, 250103. -----
5)Ms. SHUBHANGI SHARMA
 Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, BHARAT INSTITUTE OF TECHNOLOGY, MEERUT BYPASS ROAD, PARTAPUR, MEERUT, 250103. -----
6)Dr. BRAMAH HAZELA
 Address of Applicant :ASSISTANT PROFESSOR, AMITY SCHOOL OF ENGINEERING & TECHNOLOGY, AMITY UNIVERSITY UTTAR PRADESH, LUCKNOW CAMPUS -----
7)Mr. T. AMAR KIRAN
 Address of Applicant :ASSOCIATE PROFESSOR, DEPARTMENT OF EEE, GODAVARI INSTITUTE OF ENGINEERING AND TECHNOLOGY, RAJAHMUNDRY - 533296, ANDHRA PRADESH, INDIA -----
8)Dr.SURESH AKKOLE
 Address of Applicant :PROFESSOR AND HEAD OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT, S G BALEKUNDRI INSTITUTE OF TECHNOLOGY BELAGAVI KARNATAKA, 590010. -----
9)Ms. PUTTA HEMALATHA
 Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF INFORMATION TECHNOLOGY, BHARDWAJ BLOCK-1, INSTITUTE OF AERONAUTICAL ENGINEERING DUNDIGAL - 500043, HYDERABAD, TELANGANA -----
10)Dr.P.ANUSHA
 Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF SOFTWARE ENGINEERING, PERIYAR MANIMMAI INSTITUTE OF SCIENCE AND TECHNOLOGY, PERIYAR NAGAR, VALLAM , THANJAVUR, 613403. -----
 -

(57) Abstract :

In this invention, a novel method of integrating fog computing with LoRaWAN based Cloud IoT - platforms is presented. Fog computing by definition is distributed cloud computing where the computing happens closer to where the data is generated. The purpose of fog computing is to exploit the advantage of cloud computing with the benefits of computing the data close to where it is generated. In the proposed LoRaWAN model, the LPWAN sensors collect data from the environment and send them to LoRa gateways. The LoRa gateways are intern connected to the fog computing unit. In the conventional system, the LoRa gateways are directly connected to the network server. In the novel system presented here the fog computing unit is connected to the network server. The network server is connected to the application server. As in conventional system, the cloud IoT services are executed in these group of application servers.

No. of Pages : 7 No. of Claims : 5