

## **Networks, Wireless Sensors, Data Integrity Service Models and a Variety of Dynamic Routing in Case of Delay**

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### **ABSTRACT:**

Applications run on the same wireless sensor network (WSN) platform in general service (QoS) requirements are unique characteristics. There are two basic requirements for low delay and high data integrity. However, in most cases, these two requirements can not be satisfied at the same time. In this paper, based on the concept of physical effort, we have to resolve this dispute IDDR, dynamic multi-path routing algorithm, suggest. By building potential in the field of virtual hybrid, ODDR about pelvic through different routes accuracy of sensitive information for security applications, as well as the sensitive end-to-end delay for the delay in the reduction of the weight of each package is allocated to improve the quality of the applications in accordance with the requirements of different service packets, and separation techniques. Zabunov using motion technique, we demonstrated that IDDR unstable. Simulation results show IDDR delay the integration of different data and service providers.

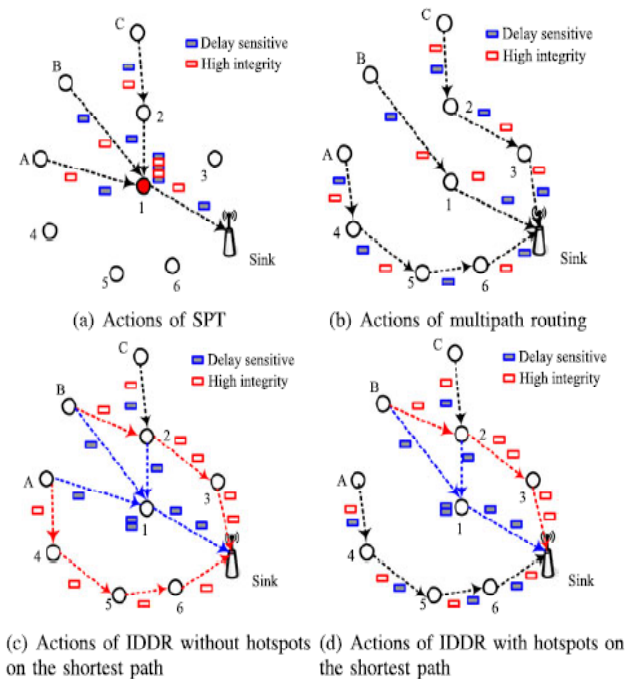
### **I.INTRODUCTION:**

Large end-to-end innovation and resources to them by way of reservation has loads of traditional networking protocols from the quality of service of the proposed allocation. Therefore, they are not suitable for WSNs with limited resources. WSNs, especially some of the policies have been designed to provide quality services for the service. Adaptation and Clearance System (AFS) to control the behavior of the credibility of the importance of working to determine the orientation of the package. LIEMPO the perceived quality of the tracks, the tracks according to the rate of injection is controlled by the ways of actively monitor the quality of the network traffic during the operation, which uses a dynamic approach to road maintenance. It is estimated that the buffer capacity and the active tracks and adjust the rate of the traffic of the service and does not consider the effects of the rate of active nodes.

The reason for this is the busiest and the largest end-to-end delay and delay-sensitive packages will lead to a number of high-security packets loss. Delay sensitive packets occupied bandwidth and storage is limited, and the deterioration of the high integrity of the dots. A high level of safety is more sensitive to delay travel packages to persuade the banks to increase the delay, before the hops, the shortest routes packages interrupted. Packages with a high level of security also queuing delay, delay-sensitive package which increases the shops, occupied. This work, also one of the high-reliability applications, network congestion and improve the safety and smooth end-to-end delay, aims to reduce the time delay. We have a variety of physical and guidance integrity and delay (IDDR) algorithm, called the new guidance on the design of the structure, discipline, the ability to borrow the concept of the potential field. Improve the accuracy of high-security applications: IDDR to provide the following functions. The basic idea of possible drowsiness and / or the shortest route under a load of tracks stored in the buffer space to find a lot of dropped packets is high.

Therefore, the first task of this lethargy and / or under-loaded is to find the songs, then after the second work efficiently stored packets for transmission. IDDR depth1 and to find ways of untapped potential in the field of a designed according to the queue length information. And a short length of waiting it sends packets to the requirements of a high security level. Hip-hop is called the implicit price controls caching system to make it more efficient package design. Reduce end-to-end delay, delay-sensitive applications. The delay refers to the degree of sensitivity for each application weight, is assigned. Carried out in accordance with the values of the slope of the weight of the packets with the local potential to build dynamic fields, IDDR packets with the largest weight to choose the shortest routes. In addition, IDDR also delay for delay sensitive packets priority queue employs a further decline in the queue. IDDR removes the nature of the conflict between high security and low delay:

the shortest loop must travel to reach the basin as soon as possible to temporarily delay the more hops, more delay sensitive packets, end-to-end along the beams suffer a high level of safety on the roads, loaded with packages. Aabunov using the theory of motion, we demonstrated that IDDR unstable. Moreover, TOSSIM performed on stage in a series of simulations, the results prove the feasibility of such a plan and the ability of IDDR.



**FIG 1:SYSTEM ARCHITECTURE**

## I.RELATED WORK:

### A.PROVIDING REAL-TIME SERVICE:

The sense of speed and the speed of the exploitation of the RAP missed deadlines approach [7] It is proposed to set up a table to reduce the ratio. However, it should be a global communications network topology. The deadline is implicit in the early first (EDF), mainly in real time [8] in the medium access control protocol used to provide the service. It is implicit rather than relying on the preferences of many other protocols will be used to control the packets. Geo-speed feedback control and do not know will not be shipping a new combination of quality service delivery across the network to maintain the desired speed [9]. [10] in the world of real performance information to encourage two hip neighborhood policy guidance proposed gradient. And the decision of the pelvis and a number of hops from the source of the information-hop took on the guidance.

### B.PROVIDING RELIABILITY SERVICE:

Adaptation and Clearance System (AFS) the importance of reliability [11] to control the behavior of working to determine the orientation of the package. Tracks ReInforM countries [12] The concept of the package is used to dynamically control the number of the required reliability. However, AFS and each ReInforM need to know the nature of the World Wide Web. LIEMPO [13] In this way the network dynamically routes are active during the operation, management mechanism is used to monitor the quality of the tracks o perceived quality, which controls the rate of traffic on the tracks injection. However, it is estimated that the active tracks and adjust the rate of the traffic service and active nodes, the rate does not consider the effects of the ability to buffer.

### C.PROVIDING REAL-TIME AND RELIABILITY SERVICES:

Speed MMSPEED efficient service and ensure the quality of service extends the probabilistic [6]. It uses the same approach delay speed to meet the needs of different types of traffic, redundant paths to ensure that durability. These are priorities that provide access to reliable multicast packets and deliver multiple neighborhood is modifying the function of the MAC layer. However, network congestion, such as all-source agreement is still some time constant for the temporary storage containers, some other mechanisms, in addition to taking the multipaths broadcast packets to the sink. This is not only credibility but also the delay of delay sensitive packets. Energy efficiency and service of multi-protocol routing paths (EQSR) on the basis of quality [14], the data transfer process, which introduces data redundancy XOR-based forward correction (FEC) mechanism light weight, improves reliability by using.

Moreover, in order to meet a number of late applications, EQSR requirements of the model in real-time, non-real-time, to manage the traffic queue employees. Dara [15], reliability, delay, and the rest is energy. Complex and difficult: but it only divides into two sections and applications. Two kinds of different applications node groups in the neighborhood, and it was calculated by the same function that sends packets to the next stage, all of the same category. Obviously, WSNs applications is not enough for the two categories.

D. Djenouri and Balasingham latency, reliability and energy [16] It is proposed to LOCALMOR. He keeps the packets to their needs for the next three queues. Carry out LOCALMOR To bear a lot of overhead for each of the secondary basin and the pelvis, the reliability of the data transfer time-sensitive application needs. What's more, it combines outstanding services to classroom management and guidance system. At a time when most of the design without the overhead and delay the integrity of the data in the same WSN routing protocol that provides excellent service to a very difficult problem. The main contribution of this paper, using only local information and dynamic routing to effectively serve a variety of high integrity and delay, IDDR a new algorithm based on the design for the future is to take the concept from the field of physics.

## II.SYSTEM PREMELIRIES:

### A.DESIGN OF POTENTIAL FIELDS:

Guidance on the design possibilities of traditional wired networks model [17] based on. However, because of the heavy government spending that do not attract the attention of a large range of management. It is the traditional networks in which multiple destinations arbitrary distribution of actual field for each party is very expensive to build. In contrast, depending on the power of the routing algorithm, is very much in favor of the WSNs a movement pattern. In some applications and environments, it may be located more than one sink. However, WSNs are usually one of them in a centralized database will need to deal not only for the transfer of data sampling. Therefore, in this work, we have high security requirements and the delayed multiple dynamic routing algorithm that finds all necessary means to sink packages the allocation of its kind to build a unique virtual potential field. After that, it depends on the energy routing algorithm for WSNs is described in a sink. It is easy to extend the algorithm to work with multiple banks in WSNs. Section 3.4.3, we will provide the details of this extension. Possible form field in the form of a bowl is shown in Fig. 2, we can show the whole network in a field of gravity. It is like a drop of water found on the package, and can go up and down along the surface of the pot. In this way, the potential of the field is determined by the strength of the package. The standard potential for the formation of the field at time t, which is the fifth seeding pot to the surface of the opportunity to have a value assigned. Let the fifth group of neighbors in time t. P- node fifth in the pelvis to the consideration of the package, and 2 w p will be sent to a neighbor.

### B.HYBRID POTENTIAL FIELD:

We construct a virtual hybrid potential on the basis of the depth and queue length potential fields defined above. The two independent fields are linearly combined together:

$$V_v^m(t) = \alpha V_v^d(t) + V_v^q(t) \text{ where } V_v^m(t)$$

is the potential of the mixed field at node v,

and  $\alpha > 0$ . Then the mixed force from node v

to one of its neighbor  $w \in \Omega_v(t)$

$$F_{v \rightarrow w}^m(t) = (Q_v(t) + \alpha D_v(t)) - (Q_w(t) + \alpha D_w(t)).$$

Note that if  $\alpha = 0$ , then only the queue potential field works, which cannot ensure that the packets generated by sensors will be transmitted to the sink at last. Hence we let  $\alpha > 0$ . In the next two subsections, we will illustrate how the potential field and steepest gradient method improve fidelity and decrease delay.

### III.EXPERIMENTAL EVALUATION:

As long as the external and internal access rate as the last segment of the network capacity has proven to be stable IDDR. In this section, we aitar high security and can provide differentiated data services, using experiments will assess whether the delay.

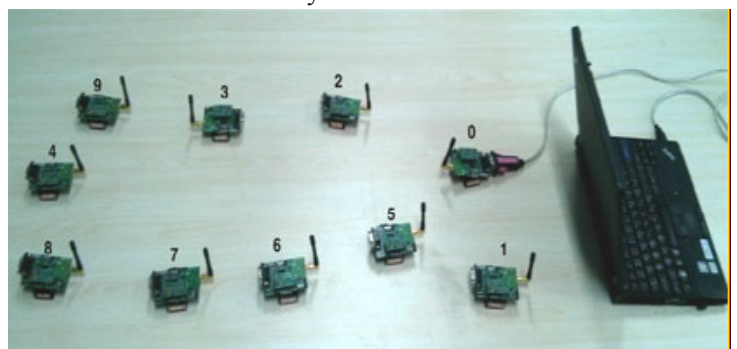


FIG 2: Testbed. Node 4 and 8 generate packets with weight of 200 and 0, respectively. Node 1 is used for clock synchronization. Node 9 generates background traffic along the shorter path. The others are intermediate nodes.

### IV.CONCLUSION:

In this paper, multiple dynamic routing algorithm WSN service requirements at the same time, high-resolution data and low delay, two different quality end-to-end,

on the basis of the effort to meet the proposed IDDR physics concept. ODDR stable algorithm using motion Zabunov to prove the theory. Moreover, TOSSIM small tests on the experimental results and the simulation results IDDR significantly higher security applications to improve productivity and end-to-end delays of spatially and temporally complex applications with different applications, reduce the delay to prove that the dispersal of the various packages. It is the only local information, which is easier to implement, required because the ODDR also provides better scalability. In addition, it is an acceptable burden IDDR information.

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