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IDENTIFICATION OF SELF ROUTING SYSTEM IN WIRLESS ENVIRONMENT

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Abstract - A self-routing on-chip non jamming network that can realize any unicast and multicast connection requests between n cores. The enhanced routes are elected from the neighborhood forwarding algorithm to transmit the packets from source to the destination. Each group having the same data transmission occurred then found the route path based on the metrics. we analyze best Route for data transfer to the destination in any network or group. Source sends dummy packets to analyze the best available route that connect the destination using the hybrid algorithm. It analyses Size, price, quantity, Battery level to transfer the packets to the destination under the parental & child nodes relationship. Based on the nodes energetic behavior Self Overthrowing system is implemented

1. INTRODUCTION

Thinning feature sizes in electronic circuits together with recent research in on-chip systems will likely pave the way for housing and networking several thousands of bases inside a single chip during the next period.

On-chip networks have thus been a focus of intense research, resulting in a number of small scale on-chip network styles and prototypes. However, the field is far from being settled, and some of the key ideas from earlier research on interconnection networks are revisited to overcome the challenges of designing such on-chip network systems.

A number of recognized performance metrics such as end-to end package interruption, quality of service, buffer space, chip area, and power consumption as well as required properties such as scalability, deadlock avoidance, and ease of routing have been used to evaluate the possibility and prone presentation of a variety of on-chip network style proposals.

So remote, the band, spidergon, mesh, torus, fat-trees, folded Close networks, and flattened butterfly networks have been topologies of interest in on-chip network research.

Direct networks such as rings, meshes and torus topologies are ideal for 2-D VLSI layout, while they are prone to deadlocks unless certain time consuming deadlock prevention systems are employed.

They are also known to have large diameters and small bisection widths that point to increased packet delay and crowding. Indirect multicore topologies such as flattened butterfly and folded Clos networks have been proposed to reduce packet delay and congestion within a feasible chip space. Fat-trees are another applicant dynasty of networks for on-chip networking.

They have been widely planned due to a result in that states that a widespread fat-tree,1 occupying a given volume can deliver any connection request2 between its n cores in time Q(t lg3 n) if any other network occupying the same volume can deliver the same request in time t. While this result establishes that fat trees can simulate other networks, Q(lg3 n) factor can be significant for large n. The lg3 n term in the time complexity of the routing algorithm was reduced to lg2 n in using a randomized on-line algorithm. They have been widely studied due to a result takes that a universal fat-tree,1 occupying a given volume can deliver any connection request2 between its n cores in time Q(t lg3 n) if any other network occupying the same volume can deliver the same request in time t. While this result establishes that flatters can simulate other networks, Q(lg3 n) factor can be significant for large n. The lg3 n term in the time complexity of the routing algorithm was reduced to lg2 n in using a randomized on-line algorithm. They have been widely learned due to a result in that states that a universal fat-tree,1 occupying a given volume can deliver any connection request2 between its n cores in time Q(t lg3 n) if any other network occupying the same volume can deliver the same request in time t. While this result establishes that fat trees can replicate other networks, Q(lg3 n) factor can be significant for large n.

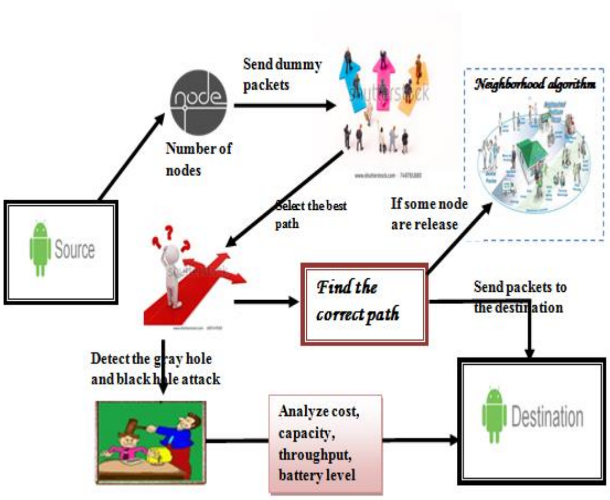
The lg3 n term in the time complexity of the routing algorithm was reduced to lg2 n in using a randomized on-line algorithm. They reveal the possible tradeoffs between the area and energy consumption of an on-chip network versus its performance with respect to the usual metrics. However, folding or flattening network topologies degrades their interconnection capabilities that are often overlooked, and it is not obvious if performance predictions could hold beyond the small number of cores used in these simulation studies.

2. EXISITING SYSTEM

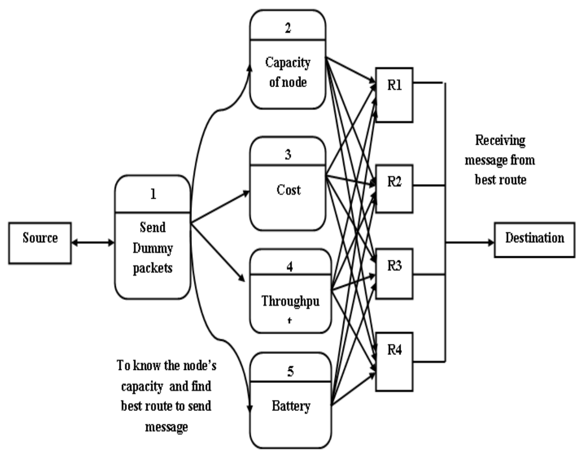
A number of established performance metrics such as end-to end packet delay, quality of service, buffer space, chip area, and power consumption as well as desirable properties such as scalability, deadlock avoidance, and ease of routing have been used to evaluate the feasibility and likely performance of a variety of on-chip network architecture proposals.

Collusion occur, Time delay for packet transmission, Failure of packets may be occurred, Misbehavior node to be presented, Link or route path failure to be represented.

3. ARCHITECTURE DIAGRAM



4. DATA FLOW DIAGRAM



A data flow diagram (DFD) is a graphical representation of the "flow" of data through an information_system, modeling its process aspects.

A DFD is often used as a preliminary step to create an overview of the system, which can later be elaborated.

DFDs can also be used for the visualization of data processing (structured design).

A DFD shows what kind of information will be input to and output from the system, where the data will come from and go to, and where the data will be stored.

It does not show information about the timing of process or information about whether processes will operate in sequence or in parallel.

5. PROPOSED SYSTEM

A self-routing on-chip non blocking network that can realize any unicast and multicast connection requests between n cores. This network is based on a multi-root binary- tree network topology whose roots serve as cores.

It is shown that this network can be operated using a simple neighborhood forwarding algorithm based on route path elected. With pipelining, it offers to produce packet flow rates up to the maximum physical capacity of its links as the routing time amounts to the metrics for cost, throughput, energy and capacity of the packet status of each nodes from the group formation. Optimal and minimum cost route path elected, saving energy at less time and put into the active mode, Alternate path selection even misroute may be occurred, Network lifetime improved, Dynamic path route elected based on self-routing mechanism.

A. NETWORK CONNECTION

The number of mobile sensor nodes availability for comprise the energy and batter life consumed in the network. Multi scope of sensor nodes connect to neighbor route selection based on optimal path discovered under the neighborhood forwarding algorithm to be designed and those network monitoring to the mobile sensor nodes. Then each mobile node is in the network connects with optimal path selection to reduce the cost of transmission nodes and quality of link connection to be established based on coverage network area.

B. MULTICAST ROUTE SELECTION

While traversing the packets of data to the multiple destinations from the source node then optimal route path identified and maximize the network lifetime. So, minimizing the cost of path from each group of network till to reach destination using DSDV can be established. Here if same packets are sending again into the same region or same or multi path occurred then that sensor node will act as the maximum throughput of less hop count of sensor nodes connection to be maintained.

C. ENERGY AND COST COMPRIMISING

The sensor node presents to specific group of network and those sensor nodes only sharing the information between these groups along that particular route selected network situated. Then each network communicates to nearest network for getting the unavailable energy node details.

A group of nodes maintaining number of mobile nodes when some of the sensor nodes are asking to move another group of network. If any one of the node of energy transmission are not available from the group of nodes, then that network will searching to the nearest QOS of path selection and it networks collect those energy transmission node details from there based on Cost and Throughput with Capacity.

Those selected nodes are acting as Head node to keeping it and send to asked sensor nodes acts as sub node with route path selection to reach the destination location. Then Head and sub nodes are acts as sensor node relations are established and then packet transmission with less energy efficient with save battery lifetime till to reach the destination.

D. SENSOR NODES RELATION IN THE NETWORK

The network identifies only head sensor node details to get the information and that head sensor nodes are collected and sharing their details into the sub nodes sensor network. And also repetition of packet is received to the network then it puts into unique ID for each packet to multi scope of sharing to the sensor nodes.

Then those ID is used to handle head and sub nodes sensor nodes. If same ID packets are sharing, then it follows to reserve battery lifetime consumed under TTL (Time to Live) procedure based on selected optimal route path traversing from the specified network chosen. So, that network comprises between efficient energy sensor nodes to fetch and retrieval of packets sharing in quick and secure way.

E. SECURE PACKET TRANSMISSION

The packet loss or path disconnected occurs by any misuse sensor to be presented and it is detected to put it into the inactive status from that particular network can be surrounded. Now it can auction of data aggregated of route path of ID based chosen DSDV techniques and also each packet transmission is too fast approach and improves the packet delivery ratio and jitter time consumption from the mobile sensor nodes. Reduce the end to end time delay consumption and improve the network lifetime performance. Also we will show the harvesting energy and battery lifetime increases along with sensor time consumption to be reduced.

F. PERFORMANCE ANALYSIS

These are analyzed under the network performance of the graph with it parameters like throughput, packet delivery ratio, end-end delay (latency), network lifetime, actor and sensor average data aggregation, time consumption and jitter.

6. CONCLUSION

Thus the project concludes that Report is transferred from source to destination in secure way Every node will know about neighbor's capacity.

One possibility is to use wiring schemes that permit replicates to connect to more than one replicate within clusters. This can potentially reduce the number of clusters while it will also likely increase the complexity of realizing connection requests.

7. REFERENCES

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