

Secured Service-Oriented Nodes Discovery and Route Determination in Mobile Ad-Hoc Network (NYP ID: 0141)

Technology

Secured communications in Mobile Ad hoc Networks (MANET)

Type of IP and status

Patent. Singapore Patent No. 2011047560.

Overview

Current MANET technologies focus on network layer (i.e. IP-based) implementations and use complex and bulky routing protocol in route determination. In contrast, this method uses information across layers such as security parameter(s), services pre-selected by the users and information of previous/recent neighbour MANET nodes to enhance routing intelligence that led to greater resilient and fast convergence on the optimum network topology. This enables service awareness, highly secured node discovery and route determination method for applications in wireless mobile ad hoc networks.

Till date, no commercial MANET products can be found even though there are many military products on MANET platform. The routing techniques deployed in these available products are complex and bulky, and are not suitable for small mobile devices.

Potential Applications

The method can be applied in securing MANET services for small portable devices in the area of defense, disaster recovery and any other commercial MANET applications.

Advantages

- This method is fast and highly secured
- It is computationally light-weight which enables implementation on small portable mobile devices

Technology & Licensing Enquiries

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