

**Nihara Patil**  
**MW200508**

## **Abstract**

Service Discovery in Wireless Mesh Networks

By

Nihara Patil

*Wireless Mesh networks have received a lot of attention lately. They offer the flexibility of wireless access, combined with a high coverage area; they also offer communication between heterogeneous domains. Wireless mesh networks (WMNs) consist of mesh routers and mesh clients, where mesh routers have minimal mobility and form the backbone of WMNs. They provide network access for both mesh and conventional clients. The integration of WMNs with other networks such as the Internet, cellular, IEEE 802.11, IEEE 802.15, IEEE 802.16, sensor networks, etc., can be accomplished through the gateway and bridging functions in the mesh routers.*

*For accessing services which don't lie in the same domain as the user, it must be able to interface and co-ordinate with its surroundings domains without the user's intervention. For this to happen, the service discovery protocol must be able to discover remote resources and use them. Thus, service discovery is the ability to discover the services in the same domain and the neighboring domains without explicit user direction. The method of Service Discovery in Wireless Mesh Networks will be slightly different than in fixed networks and in mobile ad-hoc networks.*

*In self-organized mobile networks, the need to know identifiers in order to establish connections is a burden to the users. The focus can be shifted from the nodes to the services they provide. Service discovery enables simple browsing and location of services available in the network and can offer support to the creation and advertisement of user communities.*