CHAPTER 9

CONCLUSION

9.1 Discussion of the Research Results of the Thesis

With the quantitative result obtained, it could be concluded the overall performance of the proposed middleware was found better than REMMOC architecture and with the qualitative approach it was found to be efficient than the already existing message oriented middleware with CAR protocol. The performance of interoperability of multiple protocols at the middleware was found to be more efficient than using a single context aware routing protocol.

The entire work deals with the design of the reflective dynamic context aware middleware at the middleware layer which is designed as a new layer between transport and the routing layer. The middleware provides seamless interoperability and helps in the retrieval of service seamlessly from multiple heterogeneous smart spaces.

Peer heads located at the transport layer helps in providing matching services to the user. Smart spaces are designed in the transport layer and peer rests in the smart spaces of the transport layer. All the peers have the capability to move across smart spaces. Only the header peers remains constant. Smart spaces that rest on different service discovery protocol are interoperated at the middleware layer by the underlying protocols.
The interoperability between the service discovery and routing protocol is done with the cross layer which helps in the reduction of time for routing and service selection. The proposed work could be studied with other existing service discovery and routing protocol and their performance could be analyzed.

9.2 Scope for Further Work

The proposed work could also be extended to bind interoperability across heterogeneous middleware platforms. Other service discovery and routing protocols of mobile, adhoc and pervasive spaces could also be made to interoperate. The system could be applied to any applications across heterogeneous environments. The performance study of other service discovery and routing protocols could be done across smart spaces. The proposed architecture could also be extended to web services.