

Varavuth Numkanisorn, Acting SubLt. 2011: Detection of Feature Interaction in Home Network System with SPIN Model Checking by Adapting Grid Technology. Master of Engineering (Computer Engineering), Major Field: Computer Engineering, Department of Computer Engineering. Thesis Advisor: Mr. Pattara Leelaprute, Ph.D. 56 pages.

This research proposed the application of the grid technology in detecting feature interaction problems or conflicting problems between the services of Home Network System with SPIN model checking tool. During actual use of the Home Network System, when the number of the services and/or the number of users in the system increases, detection of feature interaction, which is the conflict between the functions of the services, would become more difficult and time-consuming, making it not possible to complete the task in real time. Therefore, this research proposes the application of Grid Technology, which is one of the parallel processing methods, to reduce the time and resources in detecting feature interaction so as to achieve faster and more exhaustive detection.

Student's signature

Thesis Advisor's signature

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