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FarCOM™ Mobile Objects over DCOM

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FarCOM Overview

FarCOM is a DCOM based middleware, enhancing the current DCOM model with mobile COM components. FarCOM gives the D/COM programmer the tools to create distributed, mobile, self-persistent COM objects using an easy, intuitive and familiar methods.

FarCOM is being developed as a final research project in the Software Lab, Electrical Engineering faculty, Israeli Technion. FarCOM is an NT based project, but we also research for its applicability to run on CE machines, supporting DCOM.

FarCOM follows a project called FarGo, which was submitted as a doctorate project by Dr. Holder Ophir, and Dr. Ben-Shaul Issy as his guide. The FarGo project created a framework for creating mobile components using Java. FarCOM uses the same terminology that FarGo uses, and uses a similar model for objects mobility. The design and implementation, however, had to be altered in order to fit the C++ and D/COM environment. FarCOM manages to prove that what was possible using Java, and *seemed to be impossible using C++*, was made possible using the D/COM model, and some fancy programming techniques. Further more, we have came to conclusion that this project can be extended to support features that are not available in FarGo, like source code transport, message queuing, and Core Helper Objects.

FarCOM's mobile components have the ability to move between machines. This movement is completely transparent to the users of the object. This means that users can work with an object whether it is local or remote, without knowing its exact location, and not knowing whether the object has traveled while using it. In addition, the programmers that create the mobile objects need to put very little effort in programming the object, or making an already existing object a mobile one.