

The thesis studies possibilities of communication among programs (that process measured quantities) and measuring devices used for testing of patients in an exercise lab. The existing technique is based on direct interconnection of concrete pair of device and program, which makes parallel connection of more devices and programs impossible. So the goal was to create the integration tool which all devices can connect to. His job is to manage and process a communication among devices during the measurement. The program attendant can easily set the form of interconnection which allows creating various examination scenarios. The program will be prepared for integration of devices from various manufacturers. As a result it contributes to simplification and efficiency improvement of examination technique of diagnostics of patients in an exercise lab.