

# EFFECTIVE SET OF SOFTWARE TOOLS FOR THE COMPUTER NETWORK MANAGEMENT

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Let the computer network based on Windows Server 2012 and Windows 10 Workstation operating systems is given. For computer networks with more than 200 nodes and corporate policies the questions of computer network management are really actual. The efficient network management appliances based on software modules are presented. These modules are based on Power Shell script language, and objects components in WMI\CIMv2\Win32 classes. There are thousands variables that we can monitor by use WMI\CIM technologies. No one needs to use all these variables. The selection of a sufficient number of monitoring variables is an open question. It is proposed *three types of simple software* modules based on Power Shell: *operational control units, test modules and report modules*. These types of units are considered for *specific areas: configuration, performance, failures, and events*. Each area can be considered for the *different components: physical, logical, information*. The final version of module will be as reconfiguration (recoding) of typical modules depend of area, components and aim of management. Changes could be done by administrator without attracting skilled programmers. As a result, we get a powerful and flexible set of modules that provides almost 80% solutions of all administrative tasks. General procedure: Choice of management area - Select the type of component - Select the type of module - Choice of variables CIM class. The result is an effective solution to the problem of monitoring network.