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Modern Problems of Information Safety in the Internet. Mobile Botnets

Botnet is a set of devices with the software named as a bot started in the mode latent from the user, allowing them to function as the uniform network or some interconnected networks, and also to carry out various actions using their resources. Botnets came into existence about 10 years ago and experts warn about the danger they could bring. At present this theme is insufficiently investigated despite of an obvious urgency of the problem.

To understand the main principles of botnet construction mechanisms of generation of sequences of pseudo-casual domains, scalabilities and managements have been investigated. Research gave the possibility to reveal such following tendencies of botnet development as : speed increase in distribution , in terms of consequence of infection process automation; rapid development of botnet-technologies on the basis of mobile devices using such operational systems as Android, Windows Mobile, Symbian and having access to Internet, significant complication of nocuous programs as a result of toughening by the anti-virus companies of a barrier to penetration of threats into system.

The special urgency is represented at present with the bot-networks constructed on the basis of mobile devices. Their distinctive features can be mentioned as following: quickly varying IP-address; low speed of connection; an opportunity of reception of commands on GSM network; absence of the control of the traffic by the owner; storage of the personal data in phone; bells and SMS sending; definition of a site by GSM or GPS. It is not necessary to leave without attention economic aspect of the given problem. The basic ways of reception of the different sort of benefits with the help of botnets: DDoS-attacks; a spam / searching spam; gathering of the confidential information; installation of advertising and nocuous programs; click-frauds; passwords selection. Within the framework of the given research attempt of practical creation of a bot - network has been undertaken on the basis of mobile phones on platform of Symbian Series 60 using technology of Bluetooth, as the basic way of distribution. Already at a stage of the project there are revealed hardware and program restrictions. At using of platform Symbian Series 60 bot-program has no opportunity of independent initialization during the set moment of time, without the help of the user. If it is used Bluetooth for distribution of bot problems with authorization and an insufficient cover zone are possible.

It is necessary to note that not only cyber criminals but also the state structures can be interested in the construction of botnets to struggle against criminality and terrorism. Their application restricts not only nocuous use, but also it could be used as the distributed computing system while solving scientific problems.