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THE USE OF GENYMOTION AT ANDROID DEVELOPMENT

Everyone who begins to study the development of applications for Android, immediately realized the impossibility of testing programs without a real device. This occurs because the official Android emulator has serious performance problems.

Genymotion is a Virtual Box-based solution that virtualizes, and does not emulate Android, increasing numbers of operations. This project grew out of the old Android VM, and in comparison with it, Genymotion has a new player design, installer and many more advantages.

There were solutions based on virtualization before Genymotion. But all that required a long setup and contained difficulties in the future work. In turn, Genymotion has a full set of tools for fast and high-quality work: a shell, more than 40 virtual devices and integration with Eclipse and Android Studio. For example, it is possible to run simultaneously four virtual machines with different versions of Android, and the application quickly opens each of them, that is very convenient. All of this works on Linux, Mac and Windows and has a stunning UI.

It has many advantages over other emulators and devices:
- Emulation of more than 40 Android devices.
- Access to all Android versions.
- Unlimited app installations.

If Android Monitor is started while Genymotion is running, there is opportunity to get full runtime diagnostics. This is the ideal way to determine the reasons why applications do not work.

- The ability to test the application with various charge levels and see how it handles those used cases.
- Emulation of the Internet through GPRS, Edge, 3G, 4G, etc.
- The GPS widget is used to develop and test easily the geolocation-based apps and also there is opportunity to save GPS settings to the next launch.

Of course, these are not all the positive features of the Genymotion, but those which initially attract a user.

As to the disadvantages, not all virtual machines work equally fast. For example, the Nexus 5 (Android 5.0) works for some reason slowly, but, for example, the Galaxy S3 (Android 4.1) runs at lightning speed.

Also Genymotion function is very wide-ranging, especially in the commercial version. But the developer also offers a free version, which can be downloaded from the developer's website after registration and promises that the emulator will be used only for personal purposes, educational or non-commercial programming.

If Genymotion is used for emulating applications, with the aim to profit from this application later, it has been already considered commercial use and requires the purchase of a full commercial version. In addition, for large and complex projects functionality will be needed that is not represented in the free version.

In the past, when the Android emulator was slower, Genymotion was the best emulator for all Android developers. But over time Genymotion has significantly

expanded from being just an emulator to a complete platform for advanced application development, testing and deployment. It is so fast that it is widely used in different spheres and its application is demanded extensively.

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THE IMPORTANCE OF CREATING CYBER POLICE

Nowadays the question of the protection of personal data in digital media raised especially sharply.

At the present stage of human development in the transition from industrial society to information one, the major social problem caused by negative factors of information is to prevent violations in the field of public relations information. In the scientific and popular literature such offenses received generalized definition of "computer crime" and "cybercrime".

Cybercrime is the latest social phenomenon that has been spreading around the world. Cybercrime refers to criminal offenses, mechanism of preparation, commission or concealment of which involves the use of computers (PCs), telecommunication systems, computer networks and telecommunications networks, as well as other criminal offenses committed with their use. Characteristic of cybercrime is that organized crime groups are increasingly seeking to use the Internet, new information and computer technologies to achieve their criminal goals.

It is difficult to overestimate the relevance of the issue of cybercrime to our country. In terms of external aggression in the Eastern and Southern Ukraine, open borders and a single world information space there is a potential threat spreading in Ukraine such dangerous phenomena as cyberextremism and cyberterrorism.

Nobody doubts that the system of the Ministry of Internal Affairs of Ukraine should be reformed. The goal is a rapid and qualitative reform of Ukraine Police units involved in combating cyber crimes and preparing skilled personnel, capable to ensure law and order in the area of information and telecommunication systems, to prevent and promptly detect hacker attacks on servers of government agencies, to provide security of government and department electronic records and databases functioning at the appropriate level.

The concept of creating the cyber police is to develop modern tools to improve the system of work of the National Police of Ukraine in general.

The purpose of the cyber police is the organization of effective counteraction to manifestations of cybercrime and meaningful impact on the operational situation in the area.

Functions of the central and regional offices of the cyber police will be the following: