

Jail Break: The Dual Booting Smartphone Using Linux

¹Himanshu Srivastava, ²Vineet Garg, ³Piyush Kumar

¹Dept. of Computer Science, BBDIT-GZB, India

^{2,3}Dept. of Computer Science, RKGIT-GZB, India

Abstract

Cell phone are getting indispensable and all and sundry measure up to it with computer. One can get an advantage when integrate them as solitary one which make the amalgamated constantly upgraded e-device. One stand we can try to reach the next better thing why don't user have and make it better. This paper puts forward the latest intelligence advancement thereby in the field of technology. The Proposed System is based upon the latest feature in the field of technology. As everybody knows that the Day to day life is being more computerized and the phenomenon which is created in this proposed System is totally to explore the Advancement of the Smart phones. In this Proposed System customers have the facility to use their smart phone just like The Laptop with different Operating System in built in it. So his best use of smart phone will be done by the users. It is also called the Jailbreak of the Smart phone. All of these phenomena generally are done by Linux or say the rearrangement of the coding of the smart phone operating system is being rearranged by Linux. So the proposed system in this paper shows that the android and Windows already have boot in one phone and just work like dual boot operating system as the Laptop have its competence.

Keywords

Linux, Operating System Jailbreak, Advancement, Computerized

I. Introduction

As per Introduction concern the Proposed system is being done by simple coding and simple configuration used by user, it is quite being friendly like windows mobile because in this proposed system user can have fun with their windows mobile with fully compatible to other Operating System at the eleventh hours. So if some one has the option to update at their own smart phone without purchasing new upgraded operating system so what is the harm? So the all customer need to full fill the basic requirement for applying the upgraded operating system like Android, Me ego, Bade etc. the Proposed system is implemented or say experimented on HTC 6900(Vogue) which is already a windows compatible mobile. In this system user simply install the boot file for the specific operating system like the Proposed system used Android and then install and make some small changes for make use it dual boot able Smart phone.

II. Existing System

All the Mobile phone Company totally produce their product on the bases of their single boot able Operating System and being made some upgrade only on their supportable software's which makes more use of only of their own Operating System.

A. Disadvantage

The Existing System has a disadvantage that if the users want to work on Some File Which can only be executable or say which only supports another extension file that only is specific for particular Operating System file then Smart phones with single operating System Defeat at this level. So this the basic Disadvantage of the existing system.

III. Proposed System

The proposed System is worked on the bases of all that parameter where the smart phone can simply work like a small laptop having dual boot able option in it. Here the smart phone simply Jailbreak it's own feature where all the regular feature of the smart phone works like as it is and the user can have the accessibility to use the dual operating system at the same time. So the full use of smart phone will be done. What the proposed system do, it takes a windows mobile cell phone and not only upgraded to the Google Android Operating System but Also make it so the users make it Dual Boot Between two Operating System. The basic purpose Behind this is that the use of Latest technology Having Old One Smart phone. The proposed System is just be implemented because Cell phone are getting moderated like mini Computer and each one is just better one as previous but seriously every body can't have the budget to effort constantly upgraded version.

A. Advantage

The Basic advantage of this proposed System is those users have compatibility with dual operating system without occupying another Smart phone, because more than one Operating System will be successfully run on a Single Mobile Cell phone.

IV. Design

As per Proposed System the design is being made very simple for the user which the user can have easily make it accessible at any movement and if the user want to make it manually boot able then proposed system already make it as per need of the user. The design is basically make on the behalf of that, the cell phone is windows mobile or the cell phone compatible for windows Operating system. The cell phone also compatible with Android Operating System, to check this feature the proposed System will tell this in its Explanation paragraph. The design System will tell all about its function which is used when windows operating system was running and after making it compatible with android operating System it will show the all System will work as like when Windows operating System was running. Basically the platform at which the windows operating system was working is just similar like the after upgrading it into android operating system but with enhancement in it. The key feature of the design System is as following:

1. No reliance on hardware buttons. This is a key design feature when running Android OS 3.0 on devices like a rooted Nook color.
2. Focus on task switching and background activity notification. The Design System is basically made for android operating System which may work as like secondary operating System for users. So on the behalf of that the design system is divided into four genuine parts, those are as follows:
 - Designing for accessibility.
 - Designing for responsiveness.
 - Designing for seamlessness.
 - for performance.

These all design system will make work android smart phone conciliation.

V. Analysis

The Analysis function of the overall of the proposed system is say that the Accessibility of the cell phone after install dual boot option will enhance it accuracy regarding it's overall performance while only using Single Operating System such that Windows mobile Operating System. The Analysis is also be measured on the basis of that phenomena that called Performance, because the performance after installing secondary operating System such that Android will fully utilizes it's overall features. As day by day Android makes it upgrade and make more user friendly and also makes it many field beneficial such as business purpose, multimedia, gaming, software development etc. after installing android operating system in it there will be no more con-figural area to make it much better use as it is also previously available.

VI. Techniques and Algorithm Used

As per proposal requires some basic technique on the basis of that it would be make it so much easier to implement this proposal in practical way. There has some kind of algorithm according to which the overall performance of the smart phone will increase its composition and destroy the virtual phenomena that cell phone can't be dual boot. The best way by which the overall technique will govern is being following:



Fig. 1: A Sample Smart Phone

To find the smart phone is compatible with android operating systems is or not just go with Google, it means



Fig. 2: Google Search Compatibility for Android to Smartphone

A. Android Compatibility

The first and most important rule to be implemented it into this proposed system is that smart phone should be compatible with android operating System.

Open Google homepage and type smart phone model and then make a space then type Android. Here for this proposed System use Htc XV6900 (Vogue) and then after it make installation process for the vogue cell phone it will show user that the cell phone is compatible for the android operating system or not? If it is compatible then make some procedure give below.

B. Download the Content

The second step for downloading the operating system is being governed by the all basic phenomena which are main and necessary content for this proposed system.

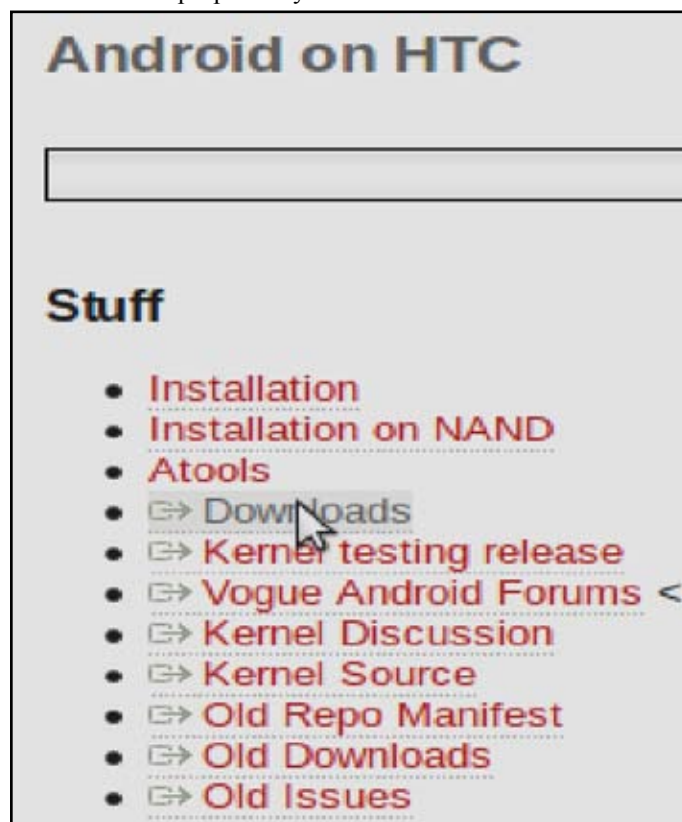


Fig. 3: Download Content Android to Smartphone

The base for this proposed system is say that is all about its operating System which has to be in supporting format. After all this the content has being redirected itself and shows the latest version for downloading the content. That is shown below:

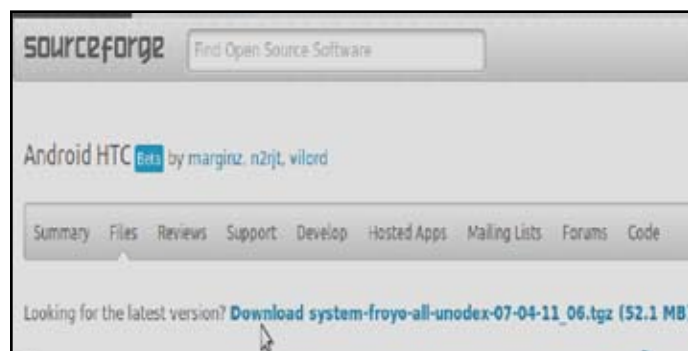


Fig. 4: Download Content Android File

All the content is available at Souceforge website.

VII. Steps and Procedure

The overall procedures are as simple as I would be used after installing feature in it. The main steps for installation is began after downloading the operating system in user desktop or laptop. The following steps and procedure are listed below:

A. Crating a Zip File

In the first step the user has to create a zip file in its own laptop or system which he/she used. Now after making zip file open that zip file and select add option in it and add the path of that downloaded operating system which is downloaded for android operating system.

B. Unzipping File

In the second step, unzip that zip folder in the micro SD card if have other wise user don't have the micro SD then unzip it into Phone memory. The zipped file which is created in the system will unzip in the user micro SD card.

C. Installation in Smart Phone

After unzipping the file in micro SD card put it back into smart phone and this should create a folder called ANDBOOT of the root of micro SD card when the entire field copied to the card.

On the phone do the following steps:

1. Go to Start>file explorer and navigate to the and boot folder to micro SD card.
2. Go to select and run haret.exe then click run.

D. Installation

Now after all this kind of stuffed to be fully executed without any error the user find out the Linux began to be loaded on the cell phone after clicking run button.

While loading Linux press and hold the D pad button mentioned on smart phone until see the Welcome notation on the phone.

Now choose the following:

1. Install System

Then Phone ask you between two options then select "yes" and then after it will again ask user to select between two then user have to be selected "yes".



Fig. 5: Installing Android System to Smartphone

2. This will install android operating System in user SD card and want to overwrite in user current phone Settings.

3. After while users come back to the menu, then choose Quit and wait for android to load.

4. After doing this the entire feature will work as like before it was working.

5. If the user want to come back to the Windows then reboot the phone.

VIII. Disadvantage

The drawback or say the negative point of this procedure is that if user reboot the smart phone the phone boot back to the Windows operating system And then if you Want to make it Android Operating System the Again Run Haret.exe, So this is the major drawback of this proposed system rest all the functionality will work as like previous when windows was working.

IX. Dual Booting

The main advantage of dual booting is that it is one of the main best feature which make a cell phone as like a system by which user make it very simple and attractive look and by doing this phenomena the phone gets it's best feature to make dual booting.

This feature is calling GEN.Y, this is the main and logical reason behind this to make it dual boot able.



Fig 6: Clip of Dual OS in Smartphone After Installing Gen.y Dualboot

This program will give the freedom to the user by which inner face he wants to make use it, or simply say create an option to dual boot between the two operating System which is chosen by user.

A. Installing Procedure

To install this feature in the cell phone inner faces do the following steps in the user cell phone.

1. Go the Gen.Y DualBOOT.Cab and download it into user cell phone root Directory which the previously mentioned that is Andboot Folder.

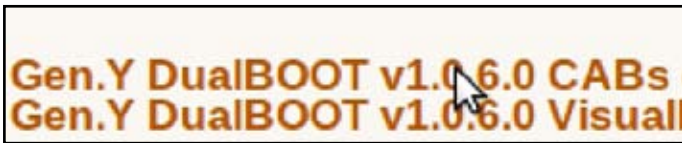


Fig. 7: Download Content of Gen.Y DualBOOT for Smartphone

2. Then after click the GenBoot file and make sure the user has to install it to the device.

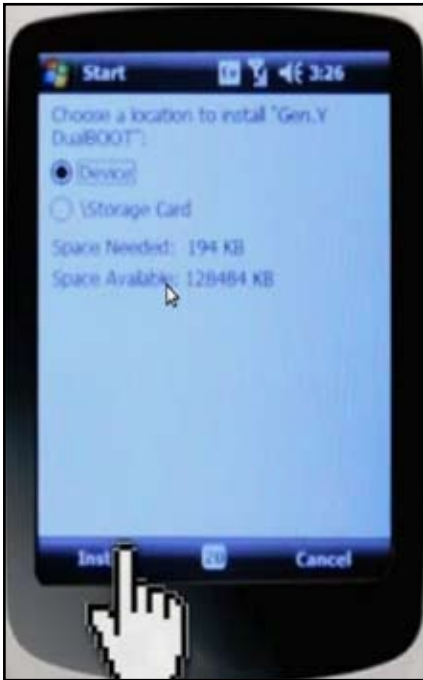


Fig. 8: Compulsory Step for Android to Support Dual BOOT

3. Then run Android Boot Fix folder mention on the Andboot folder which is the root folder of the SD card.

4. After all lastly change the name default text file to startup.

5. Now restarts the phone then user find the screen of something similar like this.



Fig. 9: View on Mobile for Dual Booting For Android and Windows

X. Advantage

The main Advantage of this feature is those users have the choice to select among one of them that in which operating system the user wants to work out. Secondary their looks like a system which has the ability to do the all work related to all that stuff which the user want to make it executed form. The entire phenomenon is totally free without purchasing the up gradation in it.

XI. Maintenance

The maintenance of this proposed system is all about the phenomena on the basis of which user have to do nothing, the proposed system is made for simple use and higher performance. So the maintenance of this proposed system is very low and if user wants to have in it more feature so user has to make it more updated from through Internet.

XII. Conclusion

The main feature by which this proposed system made it useable that is the phenomenon of dual boot. This could make the user the feel of that he is not working on a cell phone but work on laptop or say desktop. There is no harm to make it use able in day to day life.

XIII. Future Work

The use of this proposed system in the future work is that it has to be working in the field of the business as well as for developing the program and such kind of phenomenon.

References

- [1] Google home page, [Online] Available: <http://www.google.co.in>
- [2] Android on Htc, [Online] Available: <http://sourceforge.net/apps/trac/androidhtc/>
- [3] Download the Android O.S., [Online] Available: <http://sourceforge.net/projects/androidhtc/files/>
- [4] Android phone picture, [Online] Available: http://www.google.com/imgres?imgurl=http://www.itechnews.net/wp-content/uploads/2009/02/htc-magic-the-g2-android-phone-for-vodafone.jpg&imgrefurl=http://www.itechnews.net/2009/02/17/htc-magic-the-g2-android-phone-for-vodafone/&h=490&w=430&sz=50&tbnid=OM2iApPaeP5w6M:&tbnh=130&tbnw=114&prev=/search%3Fq%3Dandroid%2Bphone%2Bpics%26tbn%3Disch%26tbo%3D&zoom=1&q=android+phone+pics&usq=__TbmNx1D-2axcunyKa2mIcQxilk=&sa=X&ei=2ynRTYfJBceZrAfVuLXCCg&ved=0CCUQ9QEwBQ
- [5] Dual boot android gen.Y Dual Boot, [Online] Available: <http://forum.xda-developers.com/showthread.php?t=623792>
- [6] Download the GEN.Y DUALBOOT, [Online] Available: <http://forum.xda-developers.com/attachment.php?attachmentid=299122&d=1269552359>
- [7] Dual Boot For Brief Introduction, [Online] Available: http://en.wikipedia.org/wiki/Dual_boot
- [8] Latest Research on technologies, [Online] Available: <http://www.intomobile.com/category/research/>



Himanshu Srivastava received his bachelor degree in Computer Science. He is working under many research fields i.e. Android, IOS, Utility and Minecraft games. His passion is in Internet Security.



Vinit Garg received his B.Tech. degree in CS from UPTU, the M.Tech. degree in CSE from C-DAC Noida/ GGSIP University Delhi. He has working as assistant professor in department of computer science, BBDIT, Ghaziabad (U.P.) India.