Scrutiny on the Cloud Mobile Convergence with the Analogous Application Support with Business Strategies

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Abstract—In the computing paradigm the networking infrastructure provides the elasticity as the major concern when the computing resources utilizes the storage, power and utilization requires the broader sensed network in terms of cloud mobile application. The mobile computing at the one end serves the resource utilization as the major task performing and that facilitated with the cloud to enrich the storage and sharing services via internet. The mobile cloud solutions to the task that provide application support to the business strategies. Here in this paper it describes about the analogous application support of different vendors and supporting capabilities are enlightened.

Keywords: cloud computing, mobile computing, mobile cloud convergence, application support, business solutions, cloud mobile vendor support.

I. INTRODUCTION

In the featured based computing shift towards the cloud is the raise in feel of sharing via network on the strategy of computing intensively. There are different services of cloud provides the business suit to provide the flexible use of organizing and management technologies to perform or run the business efficiently.

Private clouds are facilitated with the IT flexibility, efficiency, and cost savings. To furthermore maximize the benefits by building the private cloud with advanced storage and data management technologies from Net App.

In the computing region around the universal access to the cloud which benefits are provided to the enterprise wide of all types and sizes that are transformed the private cloud computing towards the centralized data management using Net App. A service delivery model which offers an IT infrastructure to its internal customers from a service catalog, automate processes, meter usage, greater show back or chargeback models, and deliver services for greater improvement in the aspect of cost savings, utilization, efficiencies.

II. CLOUD AND MOBILE COMPUTING WITH BENEFITS ON THE BUSINESS PERSPECTIVE

Mobile cloud computing is convergence with each other where the mobile devices that uses the facilitation of cloud services. The cloud existence can be evaluated when the task and the data are kept on the inter-connected network or either on individual devices, providing on demand services access to the data.

The Process of computing means that applications are run on a remote server and then sent to the user. The advanced improvement in mobile browsers that enable the features of apple and Google over the recent years the issue regarding it is the every mobile should have the suitable browser. This means the developers will have a much wider marketing sense and they can bypass the restrictions created by mobile operating systems.

Mobile cloud computing convergence plays the role of craze gives the way to the new advanced technology development for the mobile network providers. Nowadays there are many mobile operators such as Vodafone, Orange and Verizon have started to offer cloud computing services for companies.

III. MOBILE CLOUD APPLICATION SUPPORT

Mobile and cloud are the paradigm shift in the computing environment. Mobile applications are a rapidly developing segment of the global mobile market place. Some of them consist of software that runs on a mobile device and perform certain tasks for the user of the mobile phone. In the survey

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has undergone of the world mobile application market. As reported by World Mobile Applications Market, about 7 billion (free and paid) application downloads were made globally in 2009 alone from both native and third-party application stores, generating revenues of $3.9 billion in the same year. The global mobile application market is expected to be worth $24.4 billion in 2015, growing at a CAGR of 64% from 2009 to 2015. Apple is a typical example for the explosion of mobile applications. Apple with a whopping more than 4 billion downloads to date commanded more than 90% of the application market share in 2009. The success of Apple’s App Store has not only established the scalability of mobile applications, but has also shown that the best of these offer the potential to generate enormous revenues.

IV. CLOUD VENDORS SUPPORTED APPLICATION

Here the cloud vendor acts as the Zencloud which is one of the leading competitor among the cloud vendors it supports the application tactics that how the managing tasks taken place with mobile cloud existence.

Zencloud delivers the same secure, comprehensive, enterprise-grade mobile device management come to expect from Zenprise, but from the cloud.

Zencloud is used to:

- Begin running in a matter of minutes; provision devices and set policies in a few simple steps
- Make it drop-dead simple for users to self-enroll, easing the burden on them and IT
- Choose the deployment options can be chosen among several such as public, private, hybrid mobile cloud that fits the user requirements.
- Get an enterprise-grade mobile cloud management system with scalable, highly available, global, redundant system certified with federal cloud facilities which is backed by world-class services and support.
- Feel free uptime service of 100 percent SLA’s.

V. MOBILE VENDOR SUPPORTED APPLICATION

A. ANDROID APPLICATION

The android application development C2DM has been officially deprecated as of June 26, 2012. This means that C2DM has stopped accepting new users and quota requests. No new features will be added to C2DM. However, apps using C2DM will continue to work. Existing C2DM developers are encouraged to migrate to the new version of C2DM, called Google Cloud Messaging for Android (GCM). See the C2DM-to-GCM Migration document for more information. Developers must use GCM for new development.

Android Cloud to Device Messaging (C2DM) is a service that helps developers sends data from servers to their applications on Android devices. The service provides a simple, lightweight mechanism that servers can use to tell mobile applications to contact the server directly, to fetch updated application or user data. The C2DM service handles all aspects of queuing of messages and delivery to the target application running on the target device.

B. ANDROID APPLICATION DEVELOPMENT

Android application development is becoming a rage all around the globe. As a result of which, companies are looking for app developers in android so that they can leverage their business ideas on the latest technology. The use of Android-powered Smartphone’s is booming with hundreds and thousands of Android apps already developed. The Android mobile phone market is growing at an impressive rate with new handsets being released all the time. Industry experts believe the boom owes much to the popularity of the open-source nature of the OS.

Advantages of Android platform

- GSM, EDGE, CDMA, Bluetooth, Wi-Fi, EV-DO and UMTS technologies to send/receive data across mobile networks.
- Comprehensive libraries for 2D and 3D graphics.
- A wide range of libraries for image, audio and video files.
- Features of Video camera, Touch screen, GPS, accelerometer and magnetometer.
- Interprocess communication (IPC) message passing.
- P2P using Google Talk.
- SQLite for data storage.
- Export and signing app for publishing.

C. WINDOWS 7 APPLICATION

The early application of windows 7 has the listing such as Twitter, Seesmic, Flixster, OpenTable, Yelp, IMDB, LastFM, Iheartradio, Slacker, Netflix and many more.

Here are some of the application based on windows 7 are:

- Shazam – one of the best client model user interface works for unlimited storage for multimedia effects.
- Iheartradio – It is streaming internet radio US style, with 750 stations from across United States of America, organized by city or genre, plus some celebrity channels.
- Foursquare – Well designed comprehensive Windows Phone 7 version of a familiar app.
- Adobe Reader – application opens PDF file format from web pages and email attachments. Zooming and navigational modes are represented.
- Twitter – Seesmic has similar features with this twitter has predictive text.
eBay - The eBay client looks simple but it's crammed with features the payable option made with PayPal.

YouTube - With no Flash, the YouTube application is a vital stopgap. A click to a YouTube video on the web and it will play in this.

Messenger – The windows Live IM client phone to get messages and notification from other application. Send and receive graphics emotions as in the PC.

Cardstar – it is loyalty card which yields time to type the numbers into this application and retrieved when usage is required.

Flickr Manager – there are much facebook integration in windows phone 7 where only Flickr images from friends can link up to their accounts to windows live. Uploading and downloading are facilitated with it.

VI. MOBILE CLOUD VENDOR APPLICATION

A. ZENPRISE MOBILE MANAGER

Zenprise mobile cloud vendor is the leader in secure mobile device management.

Zenprise provides the most innovative structured and secure mobile device management solution, backed by the best customer service. They are trying to focus on next generation MDM. This means making mobile apps “business-ready” and keeping mobile content secure, and the application support each other, while harmonizing IT needs and the user experience. Zenprise makes it easy for users to put mobile to work.

B. BYOD

The abbreviation is Bring Your Own Device (BYOD) phenomenon it is started when smart phones and tablets with robust capabilities and convenient form factors became ubiquitous among consumers. These devices supports with their touch-screen interfaces and powerful processors which are allowed employees to connect them to work to be more productive on the go.

With the Consumerization of IT trends and technologies, employees are bringing their personal smart phones and tablets to work and asking to give them access to the corporate network. iPads, iPhones, Androids and BlackBerry’s are coming to a workplace nowadays to enhance the fashion phenomenon. Employees want their email, contacts, and calendar on their devices, and are increasingly asking for access to their business applications too so as to feel the comfort among device utilization.

VII. APPLICATION WIDE STORAGE SERVICES

A. CLOUD STORAGE SERVICES

A cloud storage service is a business that maintains and manages its customers' data and makes that data accessible over a network, usually the Internet. Most services are based on a utility storage model.

A public cloud storage service is usually suitable for unstructured data that is not subject to constant change. The infrastructure usually consists of inexpensive storage nodes attached to commodity drives. Data is stored on multiple nodes for redundancy and accessed through Internet protocols, typically Representational State Transfer (REST). Public cloud storage service providers include Amazon, AT&T, Iron Mountain, Microsoft, Nirvanix and Rackspace.

A private cloud storage service is more suitable for actively used data and for data that an organization needs more control over. Storage is on a dedicated infrastructure within the data center, which helps ensure security and performance. One example of a private cloud storage offering is the Hitachi Data Systems Cloud Service for Private File Tiering.

Some enterprise users opt for a hybrid cloud storage model, storing unstructured data with a public cloud provider but storing actively used and structured data with a private cloud provider.

B. UTILITY STORAGE

Utility storage is a service model in which a provider makes storage capacity available to an individual, an organization or a business unit on a pay-per-use basis.

The utility model is sometimes called metered services or storage on demand.

As in the utility computing model, the purpose of utility storage is to use resources efficiently and reduce costs. A use-based pay structure can be much more cost-effective for an enterprise than it would be for them to purchase, manage and maintain an infrastructure that meets peak requirements, which may be far beyond what’s needed normally.

There are three basic models of utility storage:

- On demand. Vendors install storage systems configured with more capacity than is needed; users "turn on" additional capacity as required and are billed for the additional usage.
- Internal utility. In this scenario, an IT department pools its storage resources and adds the components necessary to internally administer the storage as an on-demand service to the company's business units.
- Off site. Storage service providers (SSPs) provide off-site storage facilities, typically based on a lease arrangement with service level agreements (SLAs) that guarantee quality of service (QoS). Many companies use SSPs for off-site backup; increasingly, SSPs are also being used to replace or augment onsite data storage. See: storage as a service (SaaS)

C. PERSONAL CLOUD STORAGE

Personal cloud storage (PCS) is an online web service that provides server space for individuals to store data, photos, videos and other files. Many service providers offer a limited amount of personal cloud storage space for free, hoping that once the customer feels comfortable with the service, he will purchase additional space to back up or archive other files.
To facilitate the transfer of data, a PCS provides the customer with a simple web interface. Once the files are uploaded to the provider’s servers, they can be accessed through a web portal at any time from any Internet-connected device.

The cloud storage can provide the way where the user can able to register to get the cloud storage avail at many online storage servers.

The strategies of cloud can be shared via sharing and non-sharing where the personalized cloud can be evaluated from this. The cloud can use the virtualized elasticity to extend the use of its services.

VIII. COMPARISON BETWEEN THE ANDROID AND WINDOWS 7 OPERATING SYSTEM

<table>
<thead>
<tr>
<th>In comparison based on</th>
<th>Android</th>
<th>Windows 7</th>
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<tbody>
<tr>
<td>Gadget</td>
<td>Provide to its user, more specifically mobile users.</td>
<td>Windows does not have the wide range of the Google gadgets</td>
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<tr>
<td>Pricing</td>
<td>Is expensive because of the additional feature and compatibility with almost every hardware and software application brands</td>
<td>Not much more expensive compatible with more application support</td>
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<tr>
<td>Support</td>
<td>Android offers the large range of applications and smart phone application to its users.</td>
<td>Provides personal space management and other application support</td>
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<tr>
<td>Major focus</td>
<td>Focuses on strangler’s holder by the windows to diversify its use</td>
<td>The personal computer space and monitoring</td>
</tr>
<tr>
<td>Computing power</td>
<td>The largest computing capability with totally graphical user interfaces to its users with diverse application purposes</td>
<td>Support largest computing power and compatible with graphical user interface and cross directional platform support.</td>
</tr>
<tr>
<td>Mobile technology</td>
<td>Android has simplified the internal coding which makes it</td>
<td>Windows are one of the quick operating systems that offer reliable</td>
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quick fates than the windows. speed and execution setting to its users.

Compatibility

More flexible and offers all operating system capabilities

Flexible but less featured

CONCLUSION

The mobile cloud explores the different user compatible solution to produce the user friendly package and application development support. In this paper it concludes with the different cloud vendor solution based on mobile technology. Obviously the application development in an android with its featured works represented to carry over the task behind the computing mobile devices. The mobile vendor application support is discussed and its facilitation based on mobile device compatible is concentrated. Application based on the storage services with mobile cloud environment is separately focused on each storage perspective. Finally the comparison between android and windows operating system for mobile cloud solution and its drastic features are discussed and explored with some solution for development application based on the scrutiny.

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