

How Are Mainframes Still Better Than Cloud?

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Abstract: This article presents a summary of the Mainframes which are breathing new life in business within the wake of a new computing commonly termed as Cloud Computing in which colossal clusters of remote servers are arranged & structured in a circuitry in such a way so as to permit centralized data storage and online approach to computer services or resources. It discusses varied potential advantages of Mainframes over the Cloud significantly in terms of processing power, storage and security. It argues that given somewhat slower growth projection, the Cloud will reach a declining phase, posing security issues and inflexible environment but the Mainframes will still stand the test of time since the asserted advantages are far more copious than its drawbacks could be overlooked. It also bounces off the wherewithal benefactors of using mainframes prominently in terms of its pursuance on the businesses and adduces out notions & validations that make it a prime platform for fleckless & unerring computing.

Keywords: colossal, circuitry, copious, pursuance, adduces

I. Introduction

85% of all the mainframe catalogs and programs are written in COBOL. More than 70% of the data wafting & gliding over the internet is banked and hoarded in mainframe only. Security, scalability, reliability, availability and serviceability are some of the boons of mainframe thus making it valuable for organizations that require high availability and bulletproof disaster recovery. Despite of all these strengths, Mainframes being expensive pose the biggest challenge.

Although it's expensive, large corporate will not give up using their mainframes since the erstwhile & former asserted advantages are far more copious than its drawbacks could be overlooked.

II. What Is A Mainframe?

Mainframes, breathing new life into business, are just electronic brains foot holding abundant applications and input output devices to nurse jillions of end users at the very same instance. Being the chief & salient data warehouse, mainframes are allied and thereupon associated to the clients using terminals. Mainframes are used by the most affluent & prosperous companies in pursuance of anchoring their databases & information retrieval and undertakings & agreements that crave for more shield & authenticity. The dexterity of accumulating & stockpiling huge amounts of data as well as eminent processing speed & throughput serve as one of the blessings of mainframe servers.

III. Boons Of Using Mainframes

The mainframe is the fundamental module of many commercial enterprises that are the soul and crux of the worldwide economy. Organizations that crave for authenticity, steadfastness, inviolability, subjection and shield depend upon IBM z Series Mainframe that is shielded by the Resource Access Control Facility (RACF).

The main advantages of using mainframes are:

- II.I High speed as compared to the amount of data.
- II.II Plentiful operating systems can be run which grants enterprises to run multiple concourses, errands and conventions with high speed, security and authenticity.
- II.III Enterprises can run their sessions for prolonged span of time with zero down time.
- II.IV Worthy of managing immense volumes of data.
- II.V Foot holding jillions of transactions per second.

IV. What Is Cloud Computing?

Cloud computing relies on allocating the resources to accomplish adherence and economies of scale in order to maximize the effectiveness of the shared resources. Being a broader concept of converged infrastructure and shared services, Cloud computing is used to describe a large agglomeration of objects. The aim of cloud computing is to permit users to seize advantages from all of these technologies, lacking the demand for deep vision concerning or expertise alongside every single one of them.

V. Strengths Of Cloud Computing

Since the cloud applications are not installed on each system, it is quite easy to maintain them. Consequently, these can be approached from varied places. The overall productivity of the tasks increases since the several users can work on the alike data simultaneously, rather than staying for it to be saved and emailed. Time could be saved as data does not demand to be re-entered after fields are matched, nor do users demand to mount request multimedia upgrades to their computer. Security can enhance due to centralization of data, increased security-focused resources, etc., but concerns can persist concerning defeat of manipulation above precise sensitive data, and the lack of protection for stored kernels. Protection is frequently as good as or larger than supplementary established arrangements, in portion because providers are able to dedicate resources to resolving protection subjects that countless clients cannot afford to tackle.

VI. Disadvantages Of Cloud Computing

- Cloud computing makes your tiny company reliant on the reliability of your Internet connection. After it's offline, you're offline. If your internet ability suffers from recurrent outages or sluggish speeds cloud computing could not be suitable for your business. And even the most reliable cloud computing ability providers tolerate server outages nowadays and once more.
- Cloud computing can also be referred to as Internet computing. So you ought to not be employing cloud computing requests that involve employing or storing data that you are not cozy possessing on the Internet. Instituted cloud computing vendors have gone to outstanding lengths to advance the believed that they have the latest, most urbane data protection arrangements probable as they desire your company and comprehend that data protection is a large concern.
- Be prudent after you're selecting a cloud computing vendor that you're not locking your company into employing their proprietary requests or formats. You can't insert a document crafted in one more request into a Google Docs spreadsheet, for instance. Additionally make sure that you can add and deduct cloud computing users as vital as your company grows or contracts.

VII. Why Are Mainframes Different?

Mainframes cater to the needs of large transaction volumes, large amounts of data and an exorbitantly & markedly reliable, inviolable, authentic and secured system. They've been outlined & fashioned in such a way to foot hold the most cynical applications of a business, in conjunction with banking, inventorying management and airline reservations. Despite of the fact that mainframe and its hardware is very costly, mainframes will continue to serve as the leading edge in the market of Information Technology because there is no alliance with mainframes when it comes to super fast read-write computing power and the most secure network structure. Although dedicated staff and management environment is needed to run the system, still it has proved to be an impressive & salient chronicle of immutability & endurance.

VIII. Conclusion

Mainframes will continue breathing new life into business as they have done till yet because large corporate will not give up using their mainframes since the erstwhile & former asserted advantages are far more copious that its drawbacks could be overlooked.

Acknowledgment

The author would love to acknowledge our professors and friends for imparting helpful comments. The standard disclaimer applies.

References

- [1]. History of IBM mainframe operating systems. (n.d.). Retrieved April 24, 2014, from wikipedia: http://en.wikipedia.org/wiki/History_of_IBM_mainframe_operating_systems
- [2]. Mainframe - Advantages and Disadvantages. (n.d.). Retrieved April 24, 2014, from biznik: <http://biznik.com/members/rakesh-s/articles/mainframe-advantages-and-disadvantages>
- [3]. Mainframe architecture. (n.d.). Retrieved April 24, 2014, from ibm: http://www01.ibm.com/support/knowledgecenter/zosbasics/com.ibm.zos.zmainframe/zconc_evolvevarch.htm
- [4]. Mainframe computer. (n.d.). Retrieved April 24, 2014, from wikipedia: http://en.wikipedia.org/wiki/Mainframe_computer
- [5]. Mainframe strengths. (n.d.). Retrieved April 24, 2014, from ibm: http://www01.ibm.com/support/knowledgecenter/zosbasics/com.ibm.zos.zmainframe/zconc_RAS.htm
- [6]. Mainframe strengths. (n.d.). Retrieved April 24, 2014, from ibm: http://www-01.ibm.com/support/knowledgecenter/zosbasics/com.ibm.zos.zmainframe/zconc_security.htm
- [7]. What is a mainframe? It's a style of computing. (n.d.). Retrieved April 24, 2014, from ibm: http://www01.ibm.com/support/knowledgecenter/zosbasics/com.ibm.zos.zmainframe/zconc_whatismainframe.htm
- [8]. Who uses mainframes and why do they do it? (n.d.). Retrieved April 24, 2014, from ibm: http://www-01.ibm.com/support/knowledgecenter/zosbasics/com.ibm.zos.zmainframe/zconc_whoismf.htm
- [9]. "Cloud Computing." wikipedia.org. 23 December 2014 <http://en.wikipedia.org/wiki/Cloud_computing>.
- [10]. "5 Disadvantages of Cloud Computing." sbinfoCanada.about.com. 23 December 2014 <<http://sbinfoCanada.about.com/od/itmanagement/a/Cloud-Computing-Disadvantages.htm>>.