THE ACCESS OF BIG-DATA SERVERS IN CRITICAL TRAFFIC CONDITIONS USING PRIORITY RESOLUTION PROTOCOL

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Abstract

The Big Data Server (BDS) is a software program / platform that is used to provide database services such as storing, processing and securing data. These database services are consumed by other software programs or components. Sometimes computer hardware, where the database runs, is also referred to as the database server. Therefore, the data server can be seen as a combination of software and hardware platform that runs the installed database and provides related services. Some the critical conditions, these servers are unable to access due to high traffic conditions. That time, these servers are too busy to process high priority information. The proposed model provides the better data management in high traffic conditions. Here the data server configuration details are ensured by the admin and the access information are provided only the know tasks. So, the data server traffic was reduced and the access time also minimized by the sequential task management.

Keywords:

Big Data Servers, Software Programs, Traffic Conditions, Data Management, Sequential Task

1. INTRODUCTION

The Internet, as you know, has nothing to do with all web pages and services. It a solid one and it is hosted on servers found. Also, just as you would never leave a precious item anywhere, you should not ignore where you host your web site. So, you need to know the best dedicated servers out there. There are many dedicated server providers, with many services and different fees. This makes the choice difficult, so you need to know all the details to choose the best one for your particular subject so that you can get the most out of it [10]. A server is a program dedicated to managing computer, device, or network resources. Servers are often referred to as dedicated because they do not perform any tasks other than their server tasks. There are many types of servers, including print servers, file servers, network servers, and database servers.

Theoretically, computers are considered servers whenever they share resources with client machines. Almost all personal computers are capable of serving as network servers. However, usually software/hardware dedicated computers have features and configurations for this task. For example, dedicated servers may have high-performance RAM, a fast processor, and many other high-capacity hard drives. Additionally, dedicated servers can be connected to unwanted power supply, multiple networks, and other servers. Such client features and configurations are essential as many client machines and client programs depend on them to operate efficiently, accurately, and reliably [9].

When you need space in the cloud to upload a webpage / service, one of the most frequently asked questions when choosing a hosting or hosting is the dedicated server (dedicated server). It is important to be clear about choosing the best company and web host service that will allow you to control your web space individually and with better control. The Dedicated servers are a very complete and exclusive option for individuals, individuals and companies looking for web hosting. For this reason, they have become one of the most sought-after methods today. Apparently, it may seem similar to a shared server, but no. In a shared server, the same server is shared with multiple customers [7].

In other words, those client sites all use the same hardware resources on the same computer. The Shared web servers may be good for some sites consuming some resources they are small. But if they grow or are very large, having a good web server is the best way. That is, the server or machine can only be dedicated to one account and enjoy all the resources [8]. Currently, the distinction between shared and dedicated servers is blurred by what VPS (virtual private server) does, using the same server for all clients, such as shared, but hosting each independent program on a virtual machine with a dedicated one. These types of services are very common today. They enable large data centers to share large machine centers with customers. So, everyone has their own virtual space, especially with resources such as vRAM, vCPU, virtual storage, virtual network interfaces. This allows you to expand the service and obtain additional resources if needed, without having to change the physics server [11].

In addition, they present another benefit, and if something happens in that VPS it will not affect the others. Although all clients use the same physical machine (server), resources with VPS are shared to obtain multiple virtual servers that work as an independent machine, allocating their resources, operating system, software, etc. Sometimes, some clients are skeptical that this is a dedicated hosting and a dedicated server. In fact, when one or another service is offered to you, they usually refer to the same thing and are used interchangeably.

Although, yes, we are strictly a dedicated server is a machine connected to the internet which can provide some kind of service to its customers. Instead, hosting refers to web hosting within a server. As the authors commented earlier, if multiple hosting is shared within that server, it can be hosted or dedicated via VPS. Currently, some services are more comprehensive than cloud computing, which can also provide hosting and other services

2. LITERATURE SURVEY

They are more expensive than shared hosting or VPS servers because they are dedicated. However, it is worth it because of the benefits they provide. If you manage a full server, you need to have adequate training [1]-[3]. Many cloud services generally perform basic maintenance and administration tasks for you. In general, if you want to be similar to a small website, blog or small traffic, you do not need to appoint a dedicated server. On the other hand, dedicated servers are the best option for service websites,

online stores and other sites with large capabilities This is also suitable for projects that may start small, but have a lot of growth forecast. It does not create long-term resource barriers. It may be interested in the control panel they provide or other features they provide, such as domain registration, email services, databases. A server is designed to process requests and deliver data to another computer on the Internet or a local network [4].

The word server refers to a web server that allows web browsers to access the web through a client, such as a web browser. However, different types of servers and file servers store data on a local network, such as a local one. Although special software that runs on specialized software acts as a server, the most common use of that term is when using large, high-powered machines to pull data over the Internet [5].

Most computer networks handle specialized tasks on one or more servers. As a rule, a large network - the amount of data it connects to or moves to customers - often plays the role of multiple servers, each dedicated to a specific purpose. Strictly speaking, server is software that handles a specific task [6]. However, the most powerful piece of hardware that supports this software is called a server because the server software integrates hundreds or thousands of clients and requires more hardware than the average consumer purchases.

3. PROPOSED METHOD

The proposed big data server access algorithm (BDSAA) computers often have special operating systems that are not found on personal computers. Some operating systems are available in server and desktop versions and use similar interfaces. However, the increase in the reliability of server hardware and operating systems has blurred the differences between desktop and server operating systems. A server often has special features and capabilities that allow multiple computers and hardware / software systems to operate in a unique network environment that relies solely on one or more server systems, including:

- Ability to update hardware and software with or without a restart.
- Improved backup capability for frequent backup of important data.
- Improved networking performance.
- Automatic (invisible to the user) data transfer between devices.
- High security for resources, data and memory security.

You can get more data and statistics about your customers. This will allow them to know exactly what they need, make better decisions or how to improve your marketing plan. Digitalization also greatly simplifies the organization of a business. You can manage your online business with many software tools that automate many processes such as e-commerce platforms and affiliate applications. Suitable for changes, thanks to real-time data collection. This ability to act in advance is essential in times of uncertainty or in situations like this crisis.

It allows for decentralization of work, and also facilitates teleporting. Sometimes it avoids running from local, so a website can save the establishment rent, electricity bills, water, furniture, and so on. It also has an impact on prices, which can become very competitive by not including those costs in the profit margin. It Achieve more of your business. Before you could only reach the citizens closest to your business, now you can reach the whole world. This will enhance the image of your company and with the most satisfying customer services you have. It reducing more agile, bureaucratic processes shown in Fig.1.

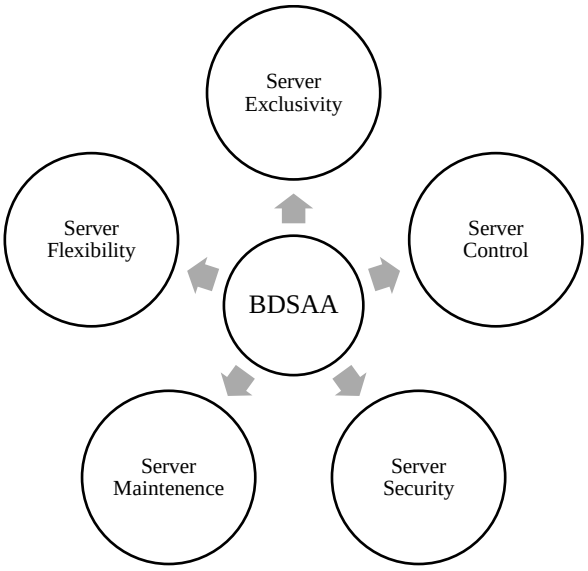

Fig.1. Proposed BDSAA focused modules

- **Server Exclusivity:** You do not have to share resources; the machine is completely dedicated to you. It offers independence, scaling and high performance.
- **Server Control:** You can manage the server as you wish.
- **Server Security:** By not sharing resources with other programs, you may face some threats.
- **Server Maintenance:** Dedicated servers have simple maintenance because shared servers, or VPS, are a bit more complex.
- **Server Flexibility:** With so many versatile, numerous sites and content managers, you can dedicate the space and resources you really need. You can even choose the server operating system with more freedom

Web servers display pages in web browsers and run applications. The browser is now connected to the server, a web server that hosts this page, any images you view, etc. The client program, in this case, is a browser like Internet Explorer, Chrome, Firefox, Opera, Safari., Etc.

All types of web servers are used in addition to providing simple text and images such as uploading and tracking files online through the cloud storage service or online backup services.

- **Email Servers**: Email servers make sending and receiving email messages easy. If you have an email client on your computer, the software connects your messages with your IMAP or POP email server, and the SMTP server connects to an SMTP server to send messages from the email server.
- **FTP Server**: FTP servers help move files through file transfer protocol tools. FTP servers are accessed remotely via the FTP client program.
- **ID Server**: Authorized servers support login and security roles for authorized users. Hundreds of different types of server support computer networks. In addition to the

common carbon types, home users often use online gaming servers, chat servers, audio streaming services, etc.

4. RESULTS AND DISCUSSION

The proposed big data server access algorithm (BDSAA) was compared with the existing Privacy-preserving public auditing (PPPA), big data interoperability framework (BDIF), Metadata schema for data-aware multi-cloud computing (MSDM) and the portable automated deployment and management (PADM). A server is nothing more than a high-capacity computer. So, when you go to choose dedicated servers, you should look at the same technical features when you buy a computer:

4.1 BIG DATA PROCESSING MANAGEMENT

Servers typically have multiple microprocessors, i.e., multiple core brains. Performance depends on the operating system and software hosted on the server. Therefore, it is important that they perform better. In the case of a VPS, this would be a VCPU, i.e., a virtual CPU.

Table.1. Comparison of big data processing management

Server Security Instructions	PPA	BDIF	MSDM	PADM	BDSAA
100	63.50	70.01	72.54	79.91	90.29
200	62.21	69.26	67.92	76.51	90.19
300	62.46	69.29	67.92	76.87	90.12
400	62.59	70.11	68.39	78.06	90.08
500	62.51	70.20	68.59	77.93	90.04

4.2 BIG DATA MEMORY MANAGEMENT

Important memory is also important, and everything depends on the agility of moving it. With a slow memory, high delay or low capacity, the CPU cannot do wonders. Since not all customers need the same thing, the amount needed depends a lot on each particular thing.

Table.2. Comparison of memory management

Server Security Instructions	PPA	BDIF	MSDM	PADM	BDSAA
100	62.64	68.95	69.21	76.59	90.30
200	62.14	68.95	68.12	76.33	90.19
300	61.39	68.12	66.98	75.76	90.13
400	61.39	68.85	67.34	76.90	90.08
500	62.44	69.96	68.87	77.92	90.04

4.3 BIG DATA STORAGE MANAGEMENT

Hard drive is another essential part. Some dedicated servers still use magnetic disks (HDDs), which are slower but generally more capable. Others have begun to use solid state hard disks (SSDs) at high speeds. In general, since they use RAID systems, you do not have to worry about reliability in any case. This means that unwanted settings can be replaced without losing data if a disk fails.

Table.3. Comparison of Storage management

Server Security Instructions	PPA	BDIF	MSDM	PADM	BDSAA
100	70.93	60.42	93.72	75.43	92.30
200	72.59	66.28	86.88	81.61	92.19
300	73.04	65.14	85.59	83.10	92.13
400	68.35	66.28	83.45	86.34	92.08
500	67.96	67.16	85.02	85.62	92.04

4.4 BIG DATA OPERATING SYSTEM MANAGEMENT

This could be a Windows server or some GNU / Linux distribution. On rare occasions you may find other Unix-like systems such as Solaris, * PSD. Due to its robustness, security and stability, Linux dominates many, with minimal maintenance and administrative requirements.

Table.4. Comparison of operating system management

Server Security Instructions	PPA	BDIF	MSDM	PADM	BDSAA
100	66.99	64.88	78.47	76.01	93.30
200	67.70	67.64	78.68	79.05	93.19
300	67.63	66.66	77.42	79.59	93.13
400	65.02	67.58	76.23	81.89	93.08
500	65.29	68.58	77.81	81.95	93.04

4.5 BIG DATA TRANSFER MANAGEMENT

Specifies the amount of data that can be transferred across the networking lines of these servers. This is something that providers usually limit to certain services, or they are unlimited in the more expensive ones. In any case, it should adjust what you need for the visits or transfers you are going to make.

Table.5. Comparison of data transfer management

Server Security Instructions	PPA	BDIF	MSDM	PADM	BDSAA
100	74.13	76.28	64.59	77.58	92.12
200	75.80	77.41	67.52	78.84	94.59
300	77.75	77.76	69.06	80.73	95.39
400	79.74	79.71	71.09	81.93	96.59
500	82.32	80.48	71.99	73.49	97.23

4.6 BIG DATA CLUSTER MANAGEMENT

Widely used within the computer network by making extensive use of the computer package. Typically, a cluster combines resources of two or more computer devices that can

function separately for some common purpose (often a workstation or server device).

Table.6. Comparison of data transfer management

Server Security Instructions	PPA	BDIF	MSDM	PADM	BDSAA
100	75.72	70.21	65.84	76.94	93.29
200	77.35	71.95	67.42	78.36	94.58
300	77.83	74.29	69.62	79.62	95.59
400	79.12	75.10	71.25	81.61	96.48
500	81.23	77.39	72.39	84.08	96.85

A web server farm is a set of networked web servers, each of which operates conceptually on the same site that accesses the content. However, purists discuss the technical classification of a server form as a cluster, depending on the hardware and software configuration details.

5. CONCLUSIONS

The Servers are just software, because people can run servers at home and only have access to devices connected to their home network. Some of the network-aware hard drives use network-connected storage protocols that allow access to a set of partitions on a network. The popular Plex Media Server supports digital media consumption on TV and entertainment devices regardless of whether the media files are cloud or a local PC. Most servers spend a lot of time shutting down, but instead run 24/7. However, servers sometimes go down deliberately for scheduled maintenance, which is why some websites and services report scheduled unemployment or scheduled maintenance to users. May accidentally land on servers such as a DTOS attack.

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