



LAYER3CLOUD SERVICES

Flexibility and Agility

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Table of Contents

Copyright and Confidentiality	1
Introduction	3
Executive Summary	4
Features & Benefits of vServer	5
Features & Benefits of vDC	7
Features of Layer3cloud Disaster Recovery-as-a-Service(DRaas)	8
What makes Layer3cloud different from the rest?	9
Conclusion	9

Introduction

Building a facility to host your IT infrastructure requires significant capital and personnel. The demands on an organization for procurement, deployment and management can be a major obstacle to an unprepared organization. As a result, enterprises are seeking simple, reliable and economical ways to deploy their infrastructure. **Layer3Cloud** allows companies to discover the advantages of cloud services that help in growing their business.

This service is ideal for companies that want their sensitive data securely stored in a data center, but do not want the hassle of maintaining the facility and funding the construction.

This service can be offered in various packages- (i) Virtual Private Server (VPS) **vServer**: Layer3Cloud's VPS solution (ii) **Virtual Data Centre(vDc)** – Layer3Cloud's Virtual Data Centre Service that allows you provision, scale up and monitor as many VMs as required from a single interface. (iii) **L3C Disaster Recovery-as-a-Service(DRaaS)** - Layer3Cloud's Disaster Recovery Solution which guarantees easy and safe replication of your Virtual machines between availability zones.

Executive Summary

vServer

Layer3's VPS solution, vServer is a secure, efficient and tightly integrated virtual private server offering that provides you with flexible server resources that grow as your needs grow.

Our vServer bundles are easily customizable and allow you to scale up memory, disk and CPU resources on your vServer as your applications require.

Our web-based control panel gives you a secure direct access to your VPSs allowing you to completely control and manage your server. It also provides detailed statistics so you can easily view historical data about the server load and the network traffic.

vDC

A Virtual Datacenter is a pool of cloud infrastructure resources designed specifically for enterprise business needs. Those resources include compute, memory, storage, network, and bandwidth. Rather than physical servers, you now have virtual servers, and this provides the ability to be flexible and to scale up as needed. In essence, you can have as many virtual servers as you will ever need and without the need to invest in purchasing, provisioning, housing and maintaining a physical machine. Access to your virtual data center can be provided over the internet or a virtual private network (VPN).

L3C Disaster Recovery-as-a-Service (DRaaS)

Our DRaaS service (vCloud Availability) replicates virtual machines between Layer3cloud's Availability Zones. The recovery point objective (RPO) and Recovery Time Objective (RTO) are kept to the minimal. The recovery process just involves powering up and configuring the replicated machine, the time varies depending on the size and complexity of the machines and other configuration. However it should not exceed twelve (12) hours. In the event of an outage at the primary site, you can manually initiate a failover from the secondary site. After initiation, most of the failover process happens automatically.

Features & Benefits of vServer

- **Multiple OS:** Wide range of supported operating systems including; Ubuntu, CentOS, Debian, Fedora, Microsoft Windows Server 2008 and Microsoft Windows Server 2012.
- **Easy-to-use VPS Control Panel:** You can console into your VPS, reboot, suspend, rebuild your network, configure your firewall or re-install your VPS in a few clicks
- **Advanced security features:** Multiple levels of security and encapsulation with the use of firewalls, white-lists and an optional secure access session
- Industry standard SLAs
- **Add-Ons and additional features:** Additional configurable Microsoft applications including Microsoft Exchange, Microsoft SQL, Microsoft SharePoint...etc
- **Low Latency:** Solution housed in Nigerian data centers with multiple redundancy and low latency access
- **Unlimited Data Transfer:** You can transfer unlimited data to and from your VDC over Layer3's next generation IP network, unmatched by any other service provider.
- **Cost:** Costs are reduced substantially from operating a vServer as you no longer have the cost of buying the server, provisioning and servicing it.
- **Flexibility and Scalability:** You define the resources of your vServer capacity (CPU, RAM, Storage) and you can change the size of the virtual machine resources in your VDC at any time. Rapidly deploy additional resources (storage, memory, CPU) as needed
- **Data Protection and Disaster Recovery:** By storing data off-site, you are mitigating the risk of loss of data in the event of a critical incident affecting your business premises where you house your physical datacenter. In addition, the task of making back-ups is much simpler and faster too, and because the servers are virtual, they can be deployed with a few mouse clicks – in the event a virtual server is down, for whatever reason, another can be made live almost instantly.
- **Data Sovereignty Guarantee:** Layer3Cloud stores all customer data and back-up of this data securely within our data availability zone in Nigeria. All disaster recovery systems are also located within our availability zones in Nigeria unless requested by the customer.
- **Data Ownership Guarantee:** At all times, the "Customer Data" remains the exclusive property of the Customer.
- **ISO27001 Compliant:** Ensuring your data is secure is our top priority. Organizations are often concerned about co-habiting in a shared cloud environment. Layer3Cloud offers a comprehensive solution to meet the most

stringent security requirements that often exceeds internal organizational security models.

- **High Availability:** Layer3Cloud is built with high availability as our primary goal. Each component of the Layer3Cloud platform has been designed with redundancy in mind. We have redundancy at all levels including power, compute hosts, SAN storage, network, and bandwidth.
- **Other features and benefits include;**
 - Service Level Guarantee of 99%.
 - Email & Phone Support.
 - Support availability of 24X7.
 - Scale Resources Up/Down with your VDC at will.
 - Ability to provision custom-sized VMs.
 - Access to Layer3Cloud knowledge base.
 - Payment can be made in NGN or USD.

Features & Benefits of vDC

The vDC shares some features of the vServer and more.

- **Cost:** Costs are reduced substantially from operating a VDC as you no longer have the cost of buying the servers, provisioning and servicing them. However, there are other costs you will save on, as in-house IT team will no longer be required to service your in-house data center.
- **Flexibility:** You define the resources of your VDC capacity (CPU, RAM, Storage) and you can change the size of the virtual machine resources in your VDC at any time.
- **Build and move quickly:** Layer3's VDC allows you to build and move on extremely quickly, much faster than operating physical machines. Creating a new virtual server, deploying business applications, or creating new ones is a lot easier and faster too.
- **Multiple Datacenters:** Your VDC can span across our different datacenters allowing you more flexibility to deploy the load close to your office locations as well as allowing you to create redundancy schemas when needed.
- **Unlimited Data Transfer:** You can transfer unlimited data to and from your VDC over Layer3's next generation IP network, unmatched by any other service provider.
- **Multiple OS:** We offer several operational systems. Additionally, you can bring your own template or ISO.
- **Advanced Networking and Security Features:** Included as part of our offering are Firewall and Load balancing services, VPN access, Console access, VLAN and VPC networks, Port-forwarding. We also provide the option of connecting your environment to a dedicated MPLS.
- **Data Protection and Disaster Recovery:** By storing data off-site, you are mitigating the risk of loss of data in the event of a critical incident affecting your business premises where you house your physical datacenter. In addition, the task of making back-ups is much simpler and faster too, and because the servers are virtual, they can be deployed with a few mouse clicks – in the event a virtual server is down, for whatever reason, another can be made live almost instantly.
- **Energy Savings:** Running a datacenter eats up a lot of power, not to mention the cost of cooling. You will be saving a great deal of money on your power bills.
- **Data Sovereignty Guarantee:** Layer3Cloud stores all customer data and back-up of this data securely within our data availability zone in Nigeria. All disaster recovery systems are also located within our availability zones in Nigeria unless requested by the customer.

- **Data Ownership Guarantee:** At all times, the “Customer Data” remains the exclusive property of the Customer.
- **ISO27001 Compliant:** Ensuring your data is secure is our top priority. Organizations are often concerned about co-habiting in a shared cloud environment. Layer3Cloud offers a comprehensive solution to meet the most stringent security requirements that often exceeds internal organizational security models.

Features of Layer3cloud Disaster Recovery-as-a-Service(DRaaS)

Layer3Cloud’s DRaaS is a Flexible off-premises, cloud-based disaster recovery to cloud and between clouds.

DR testing: Backups and DR can be worthless if organizations don’t perform regular validation to ensure they’ll work right when needed. Reduce risk with fast, clean simulated DR testing in minutes that enables regularly scheduled testing required for proper DR planning and validation without impacting your ongoing DR activity... or your IT staff.

Speed & Simplicity: It’s easy to get started with zero capital investment, short time to being protected, and no new skills required. The ability to add business resilience without increasing your skills gaps overcomes one of the biggest hurdles in adopting new technologies.

Improve Business Continuity: Disaster recovery is an important part of your business continuity plan. Cloud-based DRaaS provides safety from disasters that may impair your applications and infrastructure.

Lower TCO: Streamline DR processes by reducing cost as well as overhead. Benefit from a subscription-based, competitively priced solution designed with core features to minimize costs. Managed DR reduces complexity and overhead by having a trusted partner own core DR operational work as well as make sense of regulatory and compliance mandates.

What makes Layer3cloud different from the rest?



You can easily re-adjust resource allocations within your environment at any time. Other providers may offer the same combination of components, but they don't allow you to reconfigure the resources after they have been allocated the way Layer3Cloud does.



Customers that use Layer3Cloud have the ability to move workloads from their VMware vSphere-based virtualized or private cloud environment to the VMware Powered Cloud Provider Platform and back again. This allows customers to achieve flexibility and security, while enabling increased IT agility. With Layer3Cloud, your VDC can be hosted in Abuja or Lagos allowing you more flexibility to create redundancy schemas when needed.



With Layer3Cloud VDC, you can manage all your datacenter needs from a single screen with a self-service experience. Through the self-service portal, virtual servers can be created, operating systems can be set up, controlled, console access can be made, and application-specific network configurations can be established. In addition, you can create self-service firewall and load balancer rules. Virtual firewall and virtual load balancing are included in the service.

Conclusion

By using cloud as a business asset, **organisations** are transforming their enterprise at high speed. This transformation— which took place slowly at first—is accelerating and is now targeting central applications and core systems. Through new approaches such as Virtual Data Center everything is now subject to change and improvement.

Layer3Cloud is designed with the focus to meet your organisation's cloud needs of agility, increased flexibility, efficiency and cost savings.