

GamCo Managed Dedicated Virtual Hosting

Business growth in the number of users, application and data has left many organisations with sprawling servers, storage and supporting infrastructure crammed into Data Centres. All this hardware is typically running at around 20% utilisation but the power and space it consumes have left many organisations with little or no room to support ongoing IT expansions.

Many organisations tend to increase compute density which is not a solution: today's hot, power-hungry systems are fast approaching 20 kilowatts per cabinet, which few Data Centres can support. With this level of compute density, it is extremely challenging to keep Data Centres running optimally and cool.

Most Data Centres are inefficient – not just from a performance point of view, but from an ecological and economic perspective.

GamCo's approach to solving the problem of server sprawl combines the most energy-efficient systems on the market with outstanding virtualisation technologies that pool Data Centre resources onto fewer systems for greater utilisation. Better utilisation and far more eco-efficient systems deliver quick wins in power and cooling – all without massive and costly projects.

Our Managed Virtual Hosting solutions and services are proven to offer fast ROI and savings of up to millions of RANDS each year.

Our client's will enjoy up to 90% reduction in server sprawl, with utilisation boosted up to 80% Improvements in compute capacity and scalability and up to 99,99% uptime for better customer service and accelerated time to market for new services

GamCo uses the same framework to solve resource and power issues. Our solutions focus on energy efficiency at every level, from individual Data Centre components to the entire network. From initial assessment of your computer footprint's energy efficiency to design and implementation of your new architecture, we are focused on making your greening project a seamless success. Once you are up and running, GamCo continues to manage and monitor your infrastructure and further advise you on how to maintain optimal energy efficiency and performance.

GamCo will support your green goals by building and architecting eco-responsibility into all our processes.

Managed Virtual Hosting solutions refer to a hosting solution where each client has their own separate and dedicated host within our virtualised infrastructure. These hosting solutions include providing for complex hosting utilities utilising VMWare technology, ensuring increasing processor efficiency, addressing the skyrocketing energy costs, offering protection against disaster, ensuring hardware availability, comprehensive server and application monitoring, backups, SAN storage and 24X7X365 support.

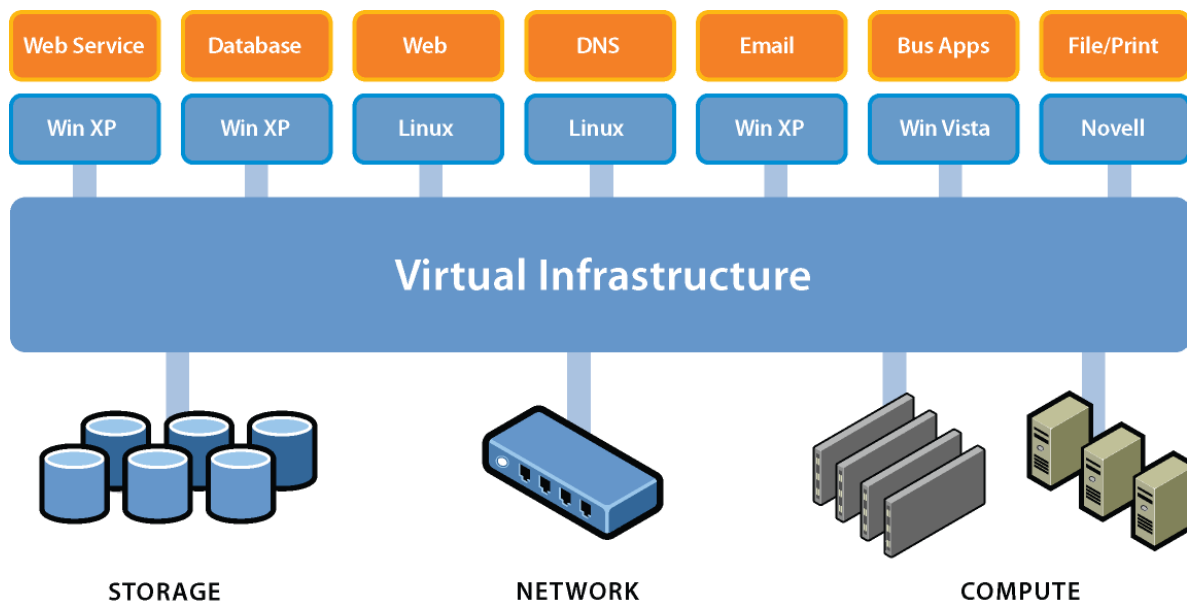
Managed Virtual Hosting solutions can be tailored for clients with a future growth view thus consolidating all required computer utilities within the same redundant virtual infrastructure. All applications deployed in Vodacom's Virtual hosting infrastructure is monitored 24/7 to ensure hardware availability.

Solution Features and Benefits

- Unlimited bandwidth – servers hosted on a high speed data backbone
- 24x7 Monitoring and Support
- Backup and Recovery
- Hardware Failover & Software Failover
- Hardware and application monitoring
- Reporting and usage stats
- Dedicated firewalling to secure your applications
- Proactive reporting and management
- Storage and Data backup
- State of the art hosting facility
- Large converged network
- Comprehensive Services
- Cost Effective and Highly customizable
- State-of-the-art internet hosting environment
- Fully secure internet Data Centre
- Skilled and competent support
- Stability and guaranteed uptime
- Cost savings
- Full range of services

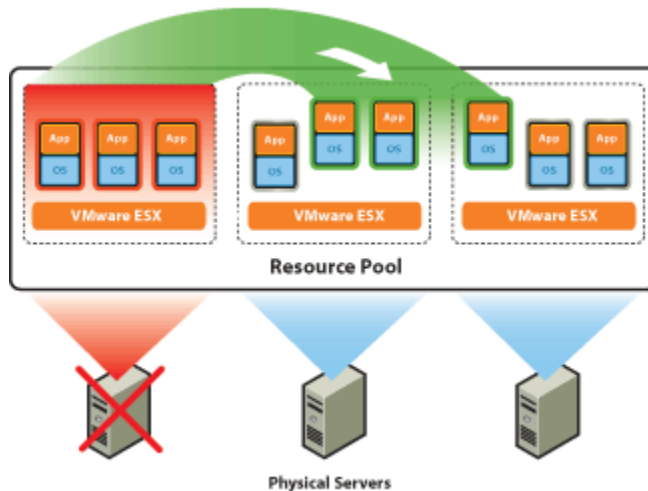
How Does Managed Virtual Hosting Work?

Managed Virtual Hosting solutions cater for the deployment of Virtual Machines into GamCo' hosting space within a robust and redundant data centre. The hosting environment can be connected to either the hosting network to serve internet hosting traffic to the Internet or to the client's Multi Protocol Label Switch network.



Hardware Failover – High Availability

VMware HA is a feature-rich product that continuously monitors all physical servers in a resource pool and restarts virtual machines affected by server failure.



- Monitors and detects virtual machines for “guest OS” failures and automatically starts virtual machines after user-specified intervals.
- Detects server failures automatically, using a “heartbeat” on servers.
- Restarts virtual machines almost instantly without human intervention on a different physical server within the same resource pool.
- Continuously monitors and chooses the optimal physical servers within a resource pool on which to restart virtual machines.

Managed Virtual Hosting Solution

This solution option has been designed to take customers to the next level of service excellence. Customers have the ability to utilise GamCo owned servers depending on the requirements of the application being hosted. Solution includes the deployment of web services or other applications on GamCo’s Virtual Hosting server infrastructure.

Clients wishing to utilise this solution option specify the required server specification and operating system to run their services on GamCo’s robust and redundant hosting network. This allows you to avoid

the costs associated with physical servers and maintaining your server in-house, hardware procurement and maintenance.

Solution options include a standard Virtual Server with a choice of Windows, Linux, Solaris operating system. Upgrading the Virtual Server can be done with add-ons on CPU, memory and hard disk space. It is thus suitable for SMME-type customers who do not want to purchase hardware outright and who still need a high-power server. Monitoring and support are included.

Pricing

The associated costs for the Managed Virtual Hosting solution follow in the below table. All costs exclude VAT.

| Hosting Site | Units | Description | Non-Recurring | Monthly Recurring | Above Threshold Rate |
|--------------|-------|-------------------------------|---------------|-------------------|----------------------|
| Midrand | 1000 | Hosting Bandwidth (MB) | - | 155.00 | R0.155 Per Meg |
| | 1 | Resource Pool | 1,000.00 | 0.00 | |
| | 1 | Xeon 1 GHz CPU | - | 275.00 | |
| | 1 | Xeon 512MHz CPU | - | 175.00 | |
| | 1 | Xeon 256MHz CPU | - | 95.00 | |
| | 1 | 1 GB memory | - | 225.00 | |
| | 1 | 512MB Memory | - | 150.00 | |
| | 1 | 1 GB HDD | - | 2.00 | |
| | 1 | MS Win Server 2003 Ent | - | 350.00 | |
| | 1 | Linux Operating Systems | - | 0.00 | |
| | 1 | Backup License per Pool | - | 120.00 | |
| | 1 | Backup Disk Space per 1GB | - | 15.70 | |
| | 1 | Shared Firewall and IPS/Pool | - | 180.00 | |
| | 1 | Monthly Security Audits | - | 500.00 | |
| | 1 | Security Patch Implementation | - | 500.00 | |
| | | TOTAL | 1,000.00 | n/a | |

** Linux and Solaris Operating Systems are included at no cost.

Please note that the pricing above is for 12/24 month contracts.

Please note that we can also do an assessment of your current environment in order to get the correct utilization of these servers, as most servers use less than 20% of the actual resources.