

Snapt | Best Practices

The aim of this guide is to help you get the best possible experience and performance from your Snapt instance. Below, we give you advice and tips for getting the most out of your infrastructure and Snapt configuration.

Infrastructure

- Snapt provides various installation options, ranging from ISO for bare metal and bundles for existing servers, but we highly recommend that you use the preconfigured virtual machine templates available for your hypervisors instead.

Cloud/virtualisation technology facilitates mobility and modernisation of your infrastructure, allowing you to mitigate basic risks to a large extent. One such example is reducing downtime by leveraging high availability (HA) configurations.

For more information on why virtual is often better than physical environments, please refer to our [whitepaper](#).

- While Snapt can run on any hypervisor, it should be noted that some perform significantly better than others, as indicated in our [KB article](#) and the table below.

Hypervisor	Requests Per Second	Throughput
Native OS	80,000	1gb+
VMWare	60,000	1gb+
Xen	50,000	1gb+
KVM	40,000	1gb+
Hyper V	20,000	1gb+

Take these statistics into consideration when deploying new infrastructure intended for Snapt, or when more than one hypervisor is available.

- When deploying Snapt as a single instance, it can be provisioned directly on a public IP address.

However, when a redundant configuration of more than one Snapt instance is deployed, it is recommended to place these behind a firewall, such as the

Edge Gateway for VMware VDC customers.

This will allow simpler management of firewall configurations, protecting your instances from unwanted traffic by managing them from one place.

- Ensure the Network Interface Card (NIC) assigned to your Snapt VM(s) on your hypervisor is/are the correct type for optimal performance, such as the E1000 NICs available on VMware. Otherwise, your network may become your bottleneck as other NICs typically have a maximum throughput of 100Mbps.
- Utilise appropriate monitoring tools for your infrastructure, such as those provided by your hypervisor, hosting provider and IT department in addition to the alerting options within Snapt.

Snapt configuration

- Whilst on-the-fly compression of your web content using the Accelerator can provide a significant boost in performance of your web application, it is important to note that some content such as videos may not benefit as much as text, for example. Compressing these types of content may result in higher than necessary CPU utilisation on your Snapt instance, thereby outweighing the potential benefit.
- You should ensure the correct content is cached when using the Accelerator. Consider setting a "never cache" option for staging areas or frequently edited internal environments. Similarly, ensure that static content is appropriately cached, as this will result in fewer requests to your web servers/load balancer, facilitating more traffic with less load.