

General

Who is behind FlexiScale?

- FlexiScale has been designed and is operated by XCalibre, a leading UK Hosting provider with a 10 year history in providing top class customer service and leading edge technical solutions.

What is FlexiScale?

- The highly acclaimed and leading compute Cloud offering Linux and Microsoft Windows Virtual Dedicated Servers on-demand on a pay-as-you-go basis.

Why would I want FlexiScale?

- You'd want it when you're looking for compute resources on a short-term basis or when you need a server immediately/today. If you're looking for a solution that can grow with your business and one that doesn't force you into a long-term commitment. If you're looking for a high-quality service with built-in high-availability that doesn't break the bank. FlexiScale offers an unequalled set of benefits that do apply for all these circumstances.

Who uses FlexiScale?

- Anyone can – it's that simple! Our customers include everything from famous football clubs to technology start-ups. To find out why they like FlexiScale, click [here](#) to read a few testimonials.

How do I get started with FlexiScale?

- Getting started is very easy and it only takes about 5 minutes. You create your own account, put in a minimum of £10 credit and off you go. Come on, try it, you won't be disappointed! Click [here](#) for the sign-up page.

Can I test FlexiScale?

- Of course. If you follow the instructions under the question "How do I get started with FlexiScale", you can test the product for as little as £10. This will provide you with enough credit to keep a Virtual Dedicated Server running for more than a week if you switch it off over night.

Is FlexiScale a Grid, a Utility or a Cloud? What does Utility Computing really mean?

- There is a lot of confusion out there as these terms are often used interchangeably. So what is FlexiScale? FlexiScale is a Utility pricing model because we charge on a pay-as-you-go basis, but as a service it is a Cloud and not a Grid.
We particularly liked a recent Cloud definition from CohesiveFT ...
<http://elasticserver.blogspot.com/2008/03/all-at-once-i-saw-crowd.html>. FlexiScale ticks every box for CohesiveFT's definition of a Cloud.

How many Virtual Dedicated Servers and TB's of storage can I request at once?

- We currently assign a /29 network to customers when they sign-up for a FlexiScale account which means you can provision immediately five Virtual Dedicated Servers. If you require more, please talk to our sales team on 0870 050 0080 and we can provide you with an extended IP range which will let you create more machines.
If you have a storage requirement that goes beyond the Virtual Disk sizes we offer as standard, please talk to our sales team on 0870 050 0080 and we'll be happy to fix you up.

What are the benefits of FlexiScale over a Dedicated Server?

- First of all, there is nothing wrong with Dedicated Servers and there are circumstances where 'bare metal' is still the best solution. However, Dedicated Servers are highly lacking in flexibility. So if you are looking for ...
 - A solution that can provision resources instantly (<1m)
 - A solution where you only pay for what you really use
 - A solution that does not lock you into a long-term contract (only 1h!!)
 - A solution that that can grow and shrink with your business
 - A solution that fixes itself should HW fail (FlexiScale does it in less than 5mins)In these situations FlexiScale is most definitely the answer for you.

Can FlexiScale fully replace a Dedicated Server?

- Absolutely! We have many customers that have replaced an entire multi-tier architecture sitting on dedicated servers and migrated everything onto FlexiScale. It is important to understand that once a FlexiScale server, either Linux or Microsoft Windows, is started, it appears exactly the same way as a 'bare metal' machine.

What virtualisation technology do you use?

- FlexiScale is based on a commercially support Xen implementation.

Will all my applications run un-modified?

- Principally yes. So far, we have not come across any application that would not run on top of a FlexiScale Windows or Linux server.

Can you support a hybrid environment – a mix of virtualised and dedicated servers?

- We have a number of customers that successfully run hybrid environments e.g. front end web servers with backend dedicated database servers.

How long has FlexiScale been in operation?

- FlexiScale was in Beta from June 2007 until being formally launched in October 2007 and had its v2 release in March 2008.

Infrastructure / Security / Resilience

Where is the FlexiScale infrastructure located?

- FlexiScale is hosted in a Data Centre in the South-East of England.

Is my data located in a secure and well protected Data Centre?

- Yes.

Are you offering multi-homed FlexiScale for increased availability?

- We are planning to expand FlexiScale into a European Data Centre in early 2009. Phase I will let customers choose their location, Phase II will allow customers to configure a primary and a backup location.

What happens if you detect a hardware node failing. Will you automatically re-start my VDS?

- Our entire FlexiScale environment is fully monitored. Should a physical server fail, we will detect that within seconds. Such a server will automatically be removed from the cluster configuration and VDSs that were running on this server will automatically be re-started on other servers. This process is fully automatic and transparent to the end-user.

How quickly will you recover from a HW failure?

- Should a physical FlexiScale server fail, we will re-start your Virtual Dedicated Server within ten minutes or less on another server.

Does FlexiScale run over a redundant network?

- Yes. All network connections are redundant. Additionally, we have multiple IP-transits into the public internet that protect you from one of our suppliers having an outage.

Can you cope with a sudden increase in Network traffic?

- Yes. We physically provide a peak network capacity that is several times over our average network load. To keep abreast of FlexiScale growth, we monitor general bandwidth requirements and peaks on an ongoing basis and use this information to increase capacity accordingly.

Do you have experience in dealing with Denial of Service (DoS) attacks?

- Yes. As a hosting provider with a 10 year pedigree, we have plenty of experience of dealing with instances of DoS attacks against our customers.

How secure is FlexiScale?

- FlexiScale is very secure. Every customer has their own VLAN, Virtual Dedicated Servers are separated from each other by a commercially supported and highly maintained Xen implementation and the customer data is stored in a Tier 1 top-quality Storage Backend.

Can I request my own VLAN?

- Every customer automatically gets their own VLAN. This is a standard functionality of the platform.

What happens to my data when an instance terminates or stops?

- FlexiScale's storage model is persistent. Our physical servers do not store any customer data on their local disks, everything comes from a centralised storage back-end. When a VDS stops or even aborts, all our data is safely retained and will be fully available the next time your instance boots up again.

Do you provide an SLA?

- Yes. We offer 99.99% uptime.

Is FlexiScale PCI compliant?

- Not yet. We are currently working towards full PCI compliance.

Boot images

What boot image formats does FlexiScale support?

- FlexiScale uses standard ISO boot images to boot-strap VDSs. In future, we will be supporting images in the newly standardised Open Virtual Format (OVF).

What OSs can I get as Golden images directly from FlexiScale?

- Microsoft Windows Standard Server 2003 (32/64-bit)
- CentOS 4 (32-bit)
- CentOS 5 (32/64-bit)
- Debian 4.0 etch (32/64-bit)
- Ubuntu 6.06 LTS (32-bit)
- Ubuntu 8.04 LTS (32-bit)

Do I have to change the OS to make it run in FlexiScale?

- No, there are no OS changes required to the core OS. For optimum network performance and available cloud management functions, we require each VM to install optimised network drivers (VSTools).

What applications will FlexiScale support?

- Any applications that run on the above operating systems. If you have concerns about the suitability of FlexiScale for a very specific type of application, please feel free to talk to our support or sales team on 0870 050 0080.

Can I create my own boot images? Do I need any special tools to do so?

- Yes you can as long as you understand how to build ISO boot images. Since this is a common and well understood industry standard, you will not require any special or proprietary tools to do so.

What things do I need to consider if I want to build my own boot images?

- All you need to remember is that you will have to install VSTools. That is really all that is required besides the standard process of creating ISOs.

Where can I get the source code for VSTools?

- Please contact our support team and we can provide you with the latest drivers for Linux or Windows.

How can I upload my own Golden images?

- We will be supporting this functionality in Q3 2008. In the meantime, you can contact our support team and they will upload new images for you. Such images can be made available in your own private

account and whenever you create a new VDS, you can select from the FlexiScale standard Golden images and your own ones.

Once I have created a VDS, will you be maintaining my OS patch level?

- No. FlexiScale is currently only offered as an unmanaged product and OS patching is therefore a customer's responsibility. We intend to offer a fully managed product in Q3 2008.

Can I configure automatic OS patching

- Our experience shows that things work pretty well with Microsoft Windows Server 2003. However, we do not recommend using automatic updates for Linux. The manual, controlled approach is much safer.

Can I change my Linux Kernel version?

- Yes you can. However, we advise you to contact our support team and we will provide you with a step by step guideline to ensure a successful upgrade.

Can you take snapshots of an existing server?

- We can do this for you, please contact our support team. As of Q3 2008, customers will be able to do it themselves via the Control Panel.

Do you support Golden image cloning?

- We can do this for you, please contact our support team. As of Q3 2008, customers will be able to do it themselves via the Control Panel.

Do you provide Golden images with fully configured LAMP or IIS setups?

- No, this is currently not offered. However, should you want to create your own Golden image once you have successfully configured your own stack, see answers above about creating your own creating/uploading your own Golden images.

Performance / VDS specification

What performance can I expect of my VDS?

- We are currently working hard to provide our customers with a more accurate description of the actual performance of a VDS. For a number of reasons, this is rather difficult in a virtualised environment (see Forum post which explains why in more detail). However, a VDS with a single CPU should in general perform at the level of a single-core mid-range Xeon while a VDS with four CPUs should keep up with a dual-core mid-range Xeon.

How does it compare to physical hardware?

- Once a FlexiScale VDS is fully booted up, only somebody with a deeper understanding of underlying hardware will be able to tell that this server is actually running virtualised. A FlexiScale VDS is a high-quality product that compares very favourably against 'bare metal'. Click [here](#) to get more information.

How quickly does a VDS boot up?

- It takes between 20s and 50s to boot a VDS.

What kind of hardware do you use to run VDSs?

- We use high-end x86 type of hardware to host FlexiScale VDSs.

How much contended are your physical servers?

- In principle, we use low contention compared to many cheap VPS products out in the market as FlexiScale is a high-quality product. However, there are no set limits on how many VDSs a single physical server can run. This has to do with our dynamic cluster management software that re-configures our Cloud in real-time and will manage individual server contention based on the actual workload of each VDS. This is far superior to a statically set contention factor that does not take external factors into account.

How much bandwidth in/out of a physical server do you provide?

- More than all combined VDSs should ever require.

Can I have multiple CPUs?

- Yes you can. These virtual CPUs will be presented to the host OS as physical CPUs. Please have a look at our pricing model which shows that with increasing amount of memory, we will automatically assign multiple CPUs to your VDS.

How much memory do you offer as a maximum?

- We offer a range from 0.5 Gb to max. 8.0 Gb of RAM.

Billing

How does the FlexiScale charge model work?

- FlexiScale is based on a native pay-as-you-go charge model. Customers will only be charged for what they really use. Apart from the initial £10 credit we ask you to put into your account, we will not force you to buy a minimum amount of credits over specific periods.

What do you bill for?

- FlexiScale bills for five different things:
 - Virtual Dedicated Server Instance hour
 - OS licensing (does not apply to a Linux VDS)
 - Data Storage
 - Data Transfers
 - Optional Services

What is the minimum contract commitment?

- None. There is no minimum contract period. The minimum billing period is 1h.

Is there a sign-up cost?

- No. We ask you to put a minimum of £10 credit into your account when you set-up your environment. This is not a sign-up fee but becomes part of your initial credit balance.

How often do you debit my FlexiScale credit account?

- The FlexiScale billing engine will debit your account on an hourly basis.

Where can I find my billing details of my FlexiScale account?

- If you login into the Control Panel (<https://cp.flexiscale.com>), you will find details in the 'Billing' section.

Will you warn me before I run out of credits?

- Yes. The default warning level is £5 but you can configure a threshold that is more suitable for you. Once you hit the threshold, you will be sent a daily warning. To avoid even running the risk of being shutdown, we highly recommend that you configure automatic top-ups (see below).

What happens if I am running out of FlexiScale credits?

- After a number of warnings (see above), we will automatically shutdown your VDS. If this happens, we will still keep your data for some time. All you need to do is top-up your account and you can start your VDS again.

How can I top-up my FlexiScale account credit?

- Go to the FlexiScale section of the Control Panel and look for 'Purchase Credit'. The process is self-explanatory. Should you prefer to get somebody to help you with the process, please call our accounts department.

I want to avoid having my VDS shutdown due to lack of credits, so can I set automatic top-ups?

- Yes, you can. Please contact your account manager or sales and they will set it up for you.

Why is it important that you keep your card details up-to-date.

- In order to fully rely on the automatic top-ups, it is essential that your credit card details are kept up-to-date at any given time. Please talk to our accounts department if you have questions.

Instead of using credit card based top-ups, would it be possible to be sent a monthly invoice?

- Yes. Please contact our sales team and we can set it up for you.

What happens if I stop my VDS?

- CPU billing immediately stops as do bandwidth charges. However, it is important to remember that storage costs will never stop because we have to retain your data regardless if your VDS is running or not. If you want all charges related to a VDS to stop, you will have to delete the virtual disk associated to the VDS.

How long can I put a VDS to 'sleep' before you delete my data?

- As long as you have enough credit in your account to cover the monthly storage costs, you will keep your data forever. However, if you run out of credit and don't respond to our reminders to top-up your FlexiScale account, we reserve the right to eventually delete your VDS and the associated data.

Why is a Windows VDS more expensive than a Linux one?

- Linux is an OpenSource OS and therefore does not require customers to pay for licensing. This is not the case for Microsoft Windows Server. FlexiScale takes care of the OS licensing of Microsoft Windows Server and allows the customer to license on an hourly basis.

Can I license Windows myself?

- No. However, if you would like to discuss your special circumstances with us, please contact sales.

My VDS has a 20Gb disk attached but I only store 2Gb of data, so what am I charged for?

- You will only be charged for your actual data storage which means for 2Gb only.

Control Panel

How can I access the FlexiScale Control Panel?

- You can access the FlexiScale Control Panel on <https://cp.flexiscale.com>.

What does the Control Panel let me control?

- The current version lets you do a number of actions:
 - Create / delete a VDS
 - Start / stop a VDS
 - Increase / decrease memory
 - Increase / decrease CPUs
- Shortly you will be able to manage IPs and disks.

Do I need to reboot a VDS after changing parameters?

- Yes. Changes will take place after a VDS reboot. This can be done immediately or delayed until a more convenient time.

API

Is there an API to control and manage FlexiScale?

- Yes. FlexiScale can be controlled via a Control Panel and an API.

Where do I find the API's documentation?

- <https://api.flexiscale.com>

Am I charged for the use of the API?

- No. The use of the API is just another way of controlling your infrastructure.

What standards does the FlexiScale API follow?

- Our API presents a SOAP/XML Web Service interface.

There is functionality in the Control Panel that I can't find in the API, why?

- We strive to keep the API capabilities in synch with the Control Panel and minimise the lag as much as possible, but we will always release new functionality in the Control Panel first. If you have a very specific requirement, please talk to our sales department.

IP Networking

Does FlexiScale provide fully static IP addresses?

- Yes. All addresses used in FlexiScale are static, we don't make use of things like NAT.

How many IP addresses do I get assigned?

- Every new customer is automatically assigned a /29 network which gives you five usable IP addresses. Should you require more, we can quite simply assign more blocks to you.

How long can I keep my static IP addresses?

- Fundamentally, we do not take any IP addresses away from customers. As long as you are one of our customers, they are yours. However, if a customer has stopped his VDSs for a very long time, we reserve the right to re-use his IP block for another customer. This has solely to do with the fact that IP blocks are a scarce commodity these days and RIPE will put pressure on us if they feel we are 'wasting' too many blocks.

Are my IP addresses on a shared LAN? Can I have a VLAN for myself?

- All FlexiScale traffic is run through a shared LAN, but we provide each customer with their own VLAN which provides them with their own Virtual network..

Are all the IP addresses publicly routable?

- Yes, as long as you assign addresses from the IP blocks we assigned to you. If you set-up networks with private addresses to create a private network between multiple FlexiScale VDSs, those addresses won't be routed.

Can I use multiple IPs on one VDS?

- Yes.

Am I charged for traffic between my VDSs?

- No, this traffic is free.

Am I charged for traffic inside your network?

- No, should you set-up a hybrid configuration with bare metal dedicated servers and FlexiScale, we will not charge you for traffic that flows between these two worlds.

Questions about Storage

Do you store any of my data on the hardware my VDS runs on?

- No. The physical servers hosting the VDSs do not store any customer data.

How do you store my data? How is it protected?

- All customer data comes from a high-end redundant storage back-end and is fully protected.

Can your storage back-end cope with I/O intensive applications like MySQL or other databases?

- Yes. The storage architecture was designed to support heavy applications like databases.

Can I mount the same disks on multiple servers simultaneously?

- This is not possible with the standard virtual disks we provision with each FlexiScale VDS. The reasons for this are not related to FlexiScale but rather with filesystem data integrity if more than one server can r/w to the same disk. However, if you wish to share data between servers, you can either NFS-mount between your own servers which takes care of proper file-locking or we can offer NFS shares on the same high-end storage back-end.

I am going to run out of storage space on a VDS, what can I do:

- You can either extend the virtual disk size (coming soon) OR
- You can mount a second virtual disk OR
- You can request a NFS mount that can easily be extended dynamically

Can I shrink the size of a virtual disk?

- No, you cannot. However, since we only charge for what you really use inside your virtual disk, there is actually no valid reason to shrink a disk.

Do you backup my data? Can I request a data restore?

- We backup data at the storage back-end level. The purpose of this backup is cover for human error by XCalibre (the company that operates FlexiScale) or to protect from an 'act of god'. However, it will not provide customers with the ability to request a data restore of an individual Virtual Disk or even a specific file. Data backup is each customer's responsibility. We will shortly offer advanced backups based on Snapshot technology.

What is the best way to import large amounts of data onto FlexiScale?

- It really depends how much data we are talking about. In instances where the amount is simply too large to upload via the public internet, you can send us a USB or network attachable storage device and we can locally upload the data into your VDS. We will charge you an admin fee for this, but the actual upload (per Gb charge) will not apply because the upload happens within the FlexiScale environment which is free.

Questions about Support

What support options do you provide for FlexiScale?

- Please have a look at <http://www.flexiscale.com/support.html> for more information.

Will you help me install or configure my 3rd party application?

- We always try to help customers as much as we can. However, we can not guarantee that we have enough internal know-how to assist you with your application. Please contact our sales department and discuss your needs with them. More often than not, we have found a way to assist our clients.

Where is your support team based?

- Our support team and all our support engineers are based in the UK and fully employed by XCalibre Communications, the company behind FlexiScale. We are very proud of our customer service and have no intention to outsource it.

Can I purchase additional out-of-remit support?

- Yes. Please contact our sales department and discuss your requirements with them. As a general rule, the earlier you tell us, the better we can plan and ensure that you will be given the best possible support.