

Introduction to Mythic Beasts

Pete Stevens

Director. Mythic Beasts Ltd

Non Executive Director. London Internet Exchange

Guest lecturer for Part 2 Computer Science

Who are Mythic Beasts?

- Started 2000 after our founders graduated and wanted to keep access to university like services
 - Four from Clare College
 - One from St Johns
 - One from the other place (Lady Margaret Hall)
- Founded because we could offer better hosting services more cheaply than we could buy.

Ancient History

- We picked a silly name because we didn't want anyone to take us seriously – Mythic Beasts Ltd
- Friends kept hosting their personal + company services with us
- 2007 we ran out of spare time to run our hobby company, but had enough income to pay a salary
- We started taking it seriously and jumped to work full time

Fast forward 14 years

- .12 staff members
- .6 zones across Amsterdam, London, Cambridge and Fremont
- .Staff distributed across the UK and Ireland
- .Wide array of hosting services and customers from single page websites, to 1000+ core distributed compute clouds.

Managed Web Service

- Customers get
 - A dedicated virtual machine managed by UIS
 - Debian Stretch (end of life June 2022)
 - Automated management for website hosting
- Significant work required to upgrade to Buster (current Debian) and Bullseye (release due 2022).
 - Instead service going end of life end of 2021

Mythic Beasts Services

- Shared hosting
 - Unix account on a Debian Buster server (Bullseye later this year)
- Automatically set up for web/email hosting
- SSL automatic
- Raven authentication for SSL sites
 - Covers 90% of MWS
- No persistent processes (i.e. no WSGI)

Mythic Beasts Services

- Virtual servers

- Virtual server from 1GB to 256GB RAM, 1 to 16 cores, 10GB – 3840GB disks

- Debian / Ubuntu / CentOS

- Dedicated servers, colocation, domain names.

Management services

.3 levels

-None

.do it all yourself.

-Managed

.We take nightly backups

.24/7 monitoring of your site

.Security updates

Management services

- Managed applications (Wordpress, Nextcloud, Mattermost, Mediawiki, Indico etc)
- We also install and update your application as releases come out
- For Wordpress we scan for security issues in plugins and themes
- We fix your application if you break it

Shared Hosting

- Shared hosting account (ssh access, SSL, 15GB)
 - £65pa + VAT
 - Good for HTML, PHP, includes 5 MySQL databases
 - Supports self managed Wordpress
 - SSL configured through control panel
- Raven integration for SSL protected sites
 - Other account sizes are available

Virtual Servers

- Unmanaged virtual server
 - 1GB/1core/5GB SSD = £69pa
 - **4GB/2core/20GB SSD = £171pa**
 - 64GB/8core/320GB SSD = £1976pa
 - Disk and RAM/CPU are independent (8p/GB SSD)
- You need to do your own backups, monitoring and security updates.
- Install your own OS (bring your own ISO)

Virtual Servers

- Managed virtual server (+£250pa)
 - 1GB/1core/5GB SSD = £319pa
 - **4GB/2core/20GB SSD = £421pa**
 - 64GB/8core/320GB SSD = £2826pa
 - First 50G backup included, more is extra.
- We do your backups, monitoring and security updates.
 - Debian / Ubuntu supported

Managed servers



Mythic Beasts
@Mythic_Beasts



Exim security update not critical (no remote code), if you want us to read the security advisories for you.
mythic-beasts.com/sales/managed

11:57 am · 25 Dec 2016 · Twitter Web Client

||| View Tweet activity



Wordpress

- .Unmanaged on a shell account

 - £65pa

- .Managed by us on a shell account (up to 4 sites)

 - ~~-£350~~ £262.50pa (inc 24/7 monitoring + updates)

- .Managed by us on a virtual server (up to 8 sites)

 - £850pa (inc 24/7 monitoring, updates, install own software and supporting libraries)

What to buy?

- Simple HTML / PHP
 - Shared hosting £65pa
- Wordpress if you have your own ops team
 - Shared hosting £65pa
 - Virtual server £171
 - A 24/7 on-call rota needs 5+ people (we have 10)

What to buy

- Wordpress if you don't have a 24/7 ops team
 - Managed Wordpress £262.50pa
 - Managed Wordpress Business £850pa if you need your own server
- Python / WSGI based applications
 - Managed Virtual server £421pa

How to buy!

- Ask any questions you have by email to sales@mythic-beasts.com
- Set up an account at [-https://www.mythic-beasts.com/customer](https://www.mythic-beasts.com/customer)
- Tell us the customer number and send us a purchase order to sales@mythic-beasts.com

How to buy

- ~~• Wait several months whilst accounting departments sort out credit terms, references and argue about tiny irrelevant details.~~
- Account approved!
- We'll include a link in the reply with the PO to place the order online.
- Depending on the service, it'll be available immediately (automated provisioning), or shortly (managed services).

How to buy (shared hosting)

Shell account

Add the shell access option to turn your hosting account into a shell account, giving you the full power and convenience of the Linux command-line.

Pay monthly
Billed monthly in advance

Pay quarterly
Billed quarterly in advance

Pay yearly
Billed yearly in advance

| | Price | Disk | Monthly Bandwidth ⓘ | Databases |
|------------|---|-------|---------------------|-----------|
| Email only | <input type="radio"/> £16.67 | 2GB | 25GB | |
| Web 25 | <input type="radio"/> £25.00 | 5GB | 100GB | 1 |
| Web 35 | <input type="radio"/> £35.00 | 10GB | 150GB | 2 |
| Web 50 | <input checked="" type="radio"/> £50.00 | 15GB | 250GB | 5 |
| Web 70 | <input type="radio"/> £70.00 | 25GB | 350GB | 5 |
| Web 100 | <input type="radio"/> £100.00 | 40GB | 500GB | 10 |
| Web 150 | <input type="radio"/> £150.00 | 100GB | 600GB | 10 |
| Web 200 | <input type="radio"/> £200.00 | 150GB | 750GB | 20 |
| Web 300 | <input type="radio"/> £300.00 | 250GB | 1TB | 20 |
| Web 400 | <input type="radio"/> £400.00 | 400GB | 1.5TB | 20 |

Shell account Shell Access [+ £15.00]

Shell access allows you to run commands directly on the server by connecting with **ssh**

Raven authentication support Raven Authentication [+ 0]

This will set up your hosting account on a server with support for Raven authentication

£65.00 per year and no setup

Continue

Show price inclusive of UK VAT?

Hosting account

fentiger:pete

Type: Hosting, Web 25 [5GB disk, 100G/month]
Username: pete
Server: fentiger.mythic-beasts.com

[Change hosting account password](#) / [Upgrade](#)

Hosted domains

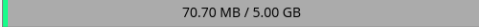
fentiger.saxonroad.uk [Email addresses](#) / [Email settings](#) / [...](#)
[https://fentiger.saxonroad.uk/](#) [Web settings](#) / [...](#)

[+ Add domains or sub-domains](#) / [Email domain groups](#) / [Autoresponders](#)

File upload

To upload files, use SFTP or SCP with the following details. FTP is also supported, but is not recommended.

Host: fentiger.mythic-beasts.com
Username: pete
Password: Your hosting account password
Web space directory: www/website-name

Disk usage:  70.70 MB / 5.00 GB

[Disk usage breakdown](#)

Shell access

Your account includes shell (SSH) access. You can connect via SSH to:

Host: fentiger.mythic-beasts.com
Username: pete
Password: Your hosting account password

Databases

| Name | Type | Web admin |
|------|--------------------|---|
| pete | MariaDB (fentiger) | phpMyAdmin details set password |


Hosting Account

Configure hosting for domain

Select a domain to add to your `fantiger:pete` hosting account. The hosting account will be configured to host web and email for your domain.

Domain

If you want to add a domain that is not shown, please see the [add new domains](#) section below.

If you want to add web hosting to a domain that is already associated with a hosting account, use the [add web site hosting](#) option  menu for the domain on the [hosting account page](#).

Configure hosting

Add sub-domains

Configure web and email hosting for a hostname within one of your domains.

DNS entries for the sub-domain will be added automatically if DNS for the domain is managed with Mythic Beasts.

Sub-domain

. hashing.beer

Enter the hostname and select a domain. If the domain you want is not shown, please see the [add new domains](#) section below.

Add sub-domain

Add new domains

The lists above contains domains that you have registered with Mythic Beasts. To configure other domains, or to add sub-domains of domains that are not shown above, you should either:

- [Transfer the domain](#) registration to Mythic Beasts; or
- Add the domain as a [third party domain](#).

Hosting account

Website fentiger.saxonroad.uk

Logging

- Default setting
Use the default setting: logging is enabled till 22nd June 2018, and will be disabled after that. (This change is being made to comply with GDPR.)
- Enable logging
Write *access* and *error* logs for this site under my home directory so they are available to me.
- Disable logging
Web server logs will not be accessible to me.

Behaviour

- Standalone site
A normal website, serving the content uploaded to the appropriate directory on our host.
- Redirect to another site on this account
Redirects to
Redirect to another website on this account. The URL displayed in browsers will update to show the target of the redirect.
- Redirect to any URL
Redirects to
Redirect to any other website. The URL displayed in browsers will update to show the target of the redirect.

- Redirect to any URL

Redirects to

Redirect to any other website. The URL displayed in browsers will update to show the target of the redirect.

- Alias

Alias of

Serve the same content as the target website, but preserving the original name in the URL bar.

- Disabled

Stop hosting this website altogether.

Security

- Disable TLS

Only `http:` URLs will work.

- Enable TLS

Generate and maintain a TLS certificate for this site. Both `http:` and `https:` URLs will work.

- Enable TLS and redirect to `https:`

All `http:` URLs will redirect to the corresponding `https:` URL.

- Enable TLS, redirect to `https:` and enable HSTS

HTTP Strict Transport Security (HSTS) tells browsers to only use `https:` for this site for 14 days from the most recent visit. This makes it harder for attackers to impersonate your site without a valid certificate, but also makes it difficult for you to disable TLS in the future. It is recommended that you only select this option once you are confident that TLS is working correctly for your site.

Save changes

Cancel

Domains

- External domains

- Buy through us <https://www.mythic-beasts.com/domains>

- Transfer to us

- Use our third party service

- .cam.ac.uk subdomains

- Use our third party service

Domains

Add domain

Use this form to add a domain that is registered with another domain registrar to your Mythic Beasts account *without transferring the registration to us*. This will allow you to configure Mythic Beasts services for the domain, such as web and email hosting, DNS, or our v4 to v6 proxy.

Before adding the domain, we need to verify that you own the domain, and we provide three different ways to do this.

If you want to transfer a domain registration to Mythic Beasts, please use the [domain transfer](#) process.

Domain name

Enter just the domain name (e.g. example.com, not www.example.com)

Verification method

Email

Receive an email sent to an address at your domain

DNS

Create a DNS record containing a special code within your domain

Web

Upload a file to a specific path in your website

Manual

Submit your domain to our support team for review

Add domain

3rd party domains and subdomains

DNS : challenge at `_mythic-beasts-challenge.mythic-beasts.cam.ac.uk`

-Email : reply to a mail at postmaster@mythic-beasts.cam.ac.uk

-Web : upload challenge to <http://mythic-beasts.cam.ac.uk/.well-known/mythic-beasts-challenge>

-Manual : Ask us to approve it for you by checking with UIS

Raven

- Raven protect – restrict access to your site to just cam.ac.uk logged in users
- Register your site at metadata.raven.cam.ac.uk
- Copy XML from our magic URL
- Add .htaccess rules to protect your site

Raven protect

Shibboleth Metadata administration site

New registration

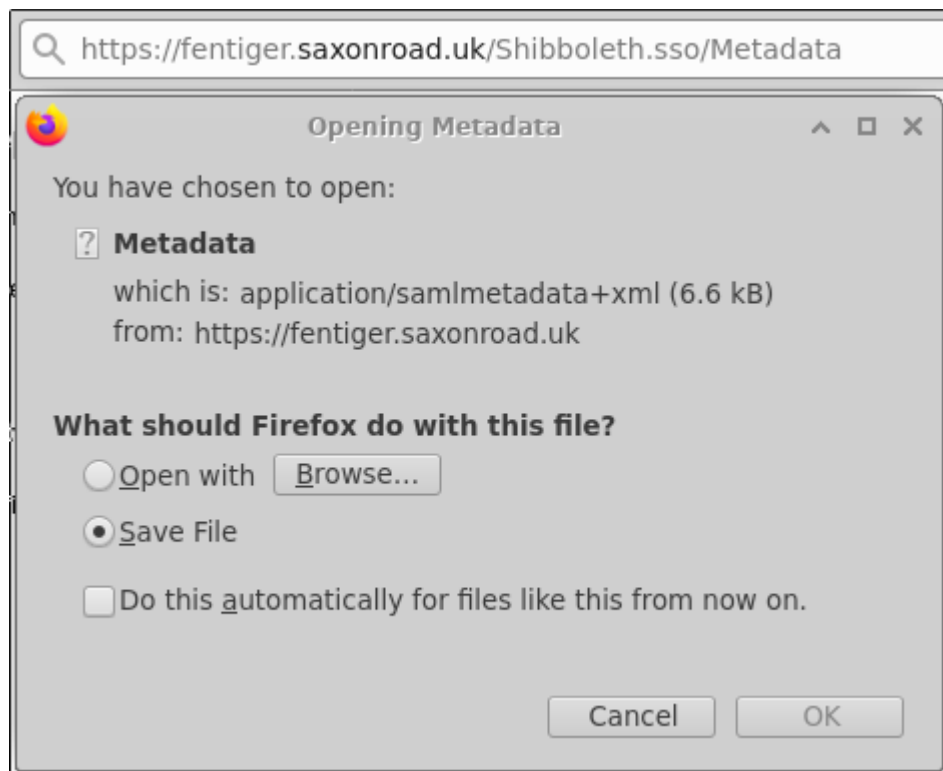
A short name for this registration (e.g. St Botolph's main site):

Description of the registered site (e.g. The main web site for St Botolph's College):

The SAML metadata XML describing the site:

Please fill out this field.

Raven protect



Raven protect



Home / University of Cambridge / Shibboleth Metadata administration site / Show metadata fentiger.saxonroad

Shibboleth Metadata administration site

fentiger.saxonroad

Registration name:

fentiger.saxonroad

Registration description:

Test

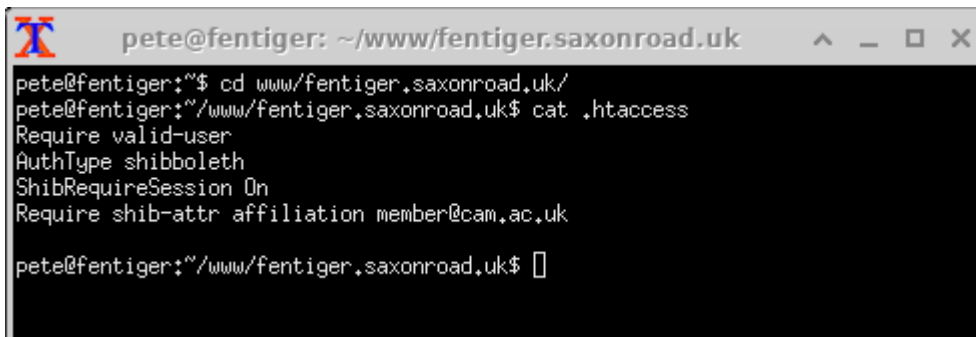
SAML Metadata:

```
<md:EntityDescriptor xmlns:md="urn:oasis:names:tc:SAML:2.0:metadata" ID="_7ce9607b6bd29cbc1585b267681e7f30be252e30" entityID="fentiger.saxonroad.uk">
```

```
  <md:Extensions xmlns:alg="urn:oasis:names:tc:SAML:metadata:alg:support">
    <alg:DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha512"/>
    <alg:DigestMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#sha384"/>
    <alg:DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256"/>
```

Raven protect

- Add .htaccess rules for directory and all subdirectories



```
pete@fentiger: ~/www/fentiger.saxonroad.uk
pete@fentiger:~$ cd www/fentiger.saxonroad.uk/
pete@fentiger:~/www/fentiger.saxonroad.uk$ cat .htaccess
Require valid-user
AuthType shibboleth
ShibRequireSession On
Require shib-attr affiliation member@cam.ac.uk

pete@fentiger:~/www/fentiger.saxonroad.uk$
```

Raven

- Virtual server

- If managed we can set up Raven protection in the same way for you

- Like our shared hosting service, only for SSL (free of charge via Let's Encrypt)

- If not managed, <https://docs.raven.cam.ac.uk/en/latest/>

Questions?

• sales@mythic-beasts.com / support@mythic-beasts.com

• See what we're up to

- https://twitter.com/Mythic_Beasts

- <https://www.mythic-beasts.com/blog/>