

Creating a Server for Web Hosting at Home

In my case, I will create a server for a relatively medium load, such as "blog website" or "landing page" web servers.

For a simpler option, you can create a server from your PC, but I will build the infrastructure from new components.

Server for Web Hosting at home:

- Server Dell Precision T3420 (Xeon E3-1240 V5, RAM 32GB DDR4, RAID 2x 960GB SATA SSD, 240W PSU) - 660\$

https://www.amazon.com/Dell-Precision-T3420-3420-SFF/dp/B08ZDV739B/ref=sr_1_2?keywords=server+E3-1240+v5&qid=1670614262&sr=8-2

Switch and Ethernet:

- an internet connection that can handle large volumes of internet traffic (download and upload). The ideal option is to connect our switch to at least two internet providers (ISP) with PON technology and a static IP address. (20\$ per month)
- Gigabit Ethernet Switch (20\$)

<https://telemart.ua/ua/products/tp-link-ls1008g/>

- UPS Generator - BLUETTI EB3A Portable Power Station | 600W 268Wh (325\$ + delivery = 350\$)

<https://www.bluettipower.com/products/bluetti-eb3a-portable-power-station>

- Gasoline power generator Wiking FY950 720 W (450\$)

<https://epicentrk.ua/ua/shop/mpgc-generator-potuzhnosti-yelektrogenerator-wiking-fy950-720-vt-1ed67335-773c-6f2c-9656-43519075c390.html>

- a domain name (10\$ per year)
- electricity for the server $250W = 186kWh/month$. $* 1.44 \text{ uah} * 12m / 40.1 = 80\$$ per year
- fuel consumption $1 \text{ kW/h} - 1 \text{ l}$.
 $1 \text{ day} - 24 \text{ l} * \text{UAH } 51.5 / 40.1 = \31 per day

name	equipment cost	per year	per day
Server Dell Precision T3420	660\$		
ISP		20\$	
Gigabit Ethernet Switch	20\$		
UPS Generator - BLUETTI EB3A	350\$		
Gasoline power generator	450\$		
domain name		10\$	
electricity		80\$	
fuel (for the generator)			31\$ per day
total	1480\$	110\$ per year	31\$ per day

Azure pricing calculator

Service category	Service type	Region	Description	Part number(s)	Estimated monthly cost
Compute	Virtual Machine Scale Sets	West Europe	1 A4m v2 (4 vCPUs, 32 GB RAM) x 730 Hours (Pay as you go), Linux, (Pay as you go)	AAA-33339	\$189.80
Networking	Load Balancer	West Europe	Standard Tier: 5 Rules, 1,000 GB Data Processed	AAA-21854, AAA-21856	\$23.25
Databases	Azure Database for MySQL	West Europe	Single Server Deployment, General Purpose Tier, 1 Gen 5 (2 vCore) x 730 Hours, 256 GB Storage with ZRS redundancy, 250 GB Additional Backup storage - LRS redundancy	AAJ-83778, AAA-90497, AAA-90126, AAA-90304	\$216.93
Storage	Storage Accounts	West Europe	Premium Block Blob Storage, Flat Namespace, LRS Redundancy, Hot Access Tier, 1,000 GB Capacity - Pay as you go, 10 x 10,000 Write operations, 10 x 10,000 List and Create Container Operations, 10 x 10,000 Read operations, 1 x 10,000 Other operations. 1,000 GB Data Retrieval, 1,000 GB Data Write	AAD-56173, AAD-56276, AAD-56226, AAD-56274, AAD-56270	\$195.90
Support		Free level	Support	0	\$0.00
			Licensing Program	Microsoft Online Services Agreement	
			Total	625.87642	\$0.00