



Lembar Kerja Peserta Didik

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NIS : 12209161
Rombel : TJKT XII-3
Materi : AWS Elastic Compute Cloud (EC2)

A. Hasil Konfigurasi

No	Konfigurasi	Screenshot Hasil Konfigurasi
Create EC2 Instance		
1	Name & Tag set : srv-web_namaXXXX <i>XXXX-4 digit akhir nomor NIS</i> Contoh : srv-web_abdul8080	<p>Name and tags Info</p> <p>Name</p> <p><input type="text" value="srv-web_Dzakwan9161"/> Add additional tags</p>
2	AMI / OS Instance Ubuntu 22.04 atau Debian12 *Pilih salah satu	<p>▼ Application and OS Images (Amazon Machine Image) Info</p> <p>An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below</p> <p><input type="text" value="Search our full catalog including 1000s of application and OS images"/></p> <p>Quick Start</p> <p></p> <p>Amazon Machine Image (AMI)</p> <p>Debian 12 (HVM), SSD Volume Type Free tier eligible</p> <p>ami-00402f0bd4996822 (64-bit (x86)) / ami-0248a5a860febde32 (64-bit (Arm)) Virtualization: hvm ENA enabled: true Root device type: ebs</p> <p>Description Debian 12 (HVM), EBS General Purpose (SSD) Volume Type. Community developed free GNU/Linux distribution. https://www.debian.org/</p> <p>Architecture AMI ID 64-bit (x86) ami-00402f0bd4996822 Verified provider</p>
3	Instance Type t2.micro	<p>▼ Instance type Info Get advice</p> <p>Instance type</p> <p>t2.micro Free tier eligible</p> <p>Family: t2 1 vCPU 1 GiB Memory Current generation: true On-Demand Windows base pricing: 0.0162 USD per Hour On-Demand SUSE base pricing: 0.0116 USD per Hour On-Demand RHEL base pricing: 0.026 USD per Hour On-Demand Linux base pricing: 0.0116 USD per Hour</p> <p>Additional costs apply for AMIs with pre-installed software</p> <p><input checked="" type="checkbox"/> All generations</p> <p>Compare instance types</p>



4	Key-pair Pilih : Vockey	<p>▼ Key pair (login) Info</p> <p>You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.</p> <p>Key pair name - required</p> <p>vockey</p> <p>Create new key pair</p>																								
5	Network Settings: <i>Create Security Group</i>	<p>▼ Network settings Info</p> <p>VPC - required Info</p> <p>vpc-04c8ac22bfa3c8ddb (default) 172.31.0.0/16</p> <p>Subnet Info</p> <p>No preference</p> <p>Create new subnet</p> <p>Auto-assign public IP Info</p> <p>Enable</p> <p>Additional charges apply when outside of free tier allowance</p> <p>Firewall (security groups) Info</p> <p>A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.</p> <p><input checked="" type="radio"/> Create security group <input type="radio"/> Select existing security group</p> <p>Security group name - required</p> <p>SG-WebServer</p> <p>This security group will be added to all network interfaces. The name can't be edited after the security group is created. Max length is 255 characters. Valid characters: a-z, A-Z, 0-9, spaces, and _-:/()+=;&{}!\$*</p> <p>Description - required Info</p> <p>Open Prot SSH dan Web</p>																								
	Network Settings: <i>Inbound Rules (open port 22 dan 80)</i>	<p>Inbound Security Group Rules</p> <p>▼ Security group rule 1 (TCP, 22, 0.0.0.0/0) Remove</p> <table><tr><td>Type Info</td><td>Protocol Info</td><td>Port range Info</td></tr><tr><td>ssh</td><td>TCP</td><td>22</td></tr><tr><td>Source type Info</td><td>Source Info</td><td>Description - optional Info</td></tr><tr><td>Anywhere</td><td><input type="text"/> Add CIDR, prefix list or security e.g. SSH for admin desktop</td><td>0.0.0.0/0 X</td></tr></table> <p>▼ Security group rule 2 (TCP, 80, 0.0.0.0/0) Remove</p> <table><tr><td>Type Info</td><td>Protocol Info</td><td>Port range Info</td></tr><tr><td>HTTP</td><td>TCP</td><td>80</td></tr><tr><td>Source type Info</td><td>Source Info</td><td>Description - optional Info</td></tr><tr><td>Anywhere</td><td><input type="text"/> Add CIDR, prefix list or security e.g. SSH for admin desktop</td><td>0.0.0.0/0 X</td></tr></table>	Type Info	Protocol Info	Port range Info	ssh	TCP	22	Source type Info	Source Info	Description - optional Info	Anywhere	<input type="text"/> Add CIDR, prefix list or security e.g. SSH for admin desktop	0.0.0.0/0 X	Type Info	Protocol Info	Port range Info	HTTP	TCP	80	Source type Info	Source Info	Description - optional Info	Anywhere	<input type="text"/> Add CIDR, prefix list or security e.g. SSH for admin desktop	0.0.0.0/0 X
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YAYASAN PRAWITAMA SMK WIKRAMA BOGOR

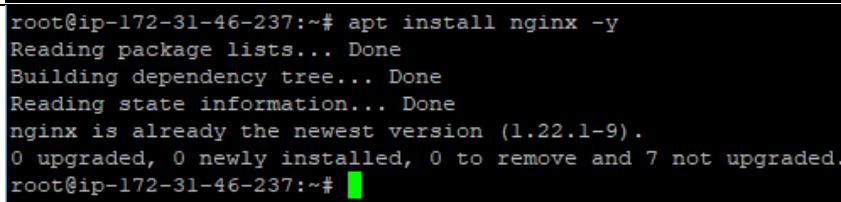
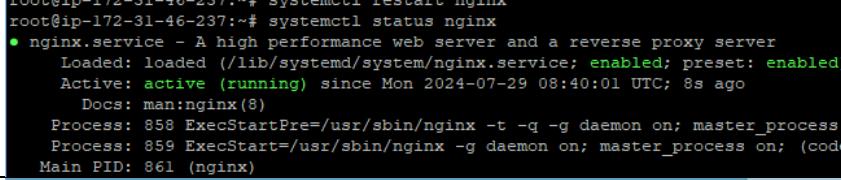
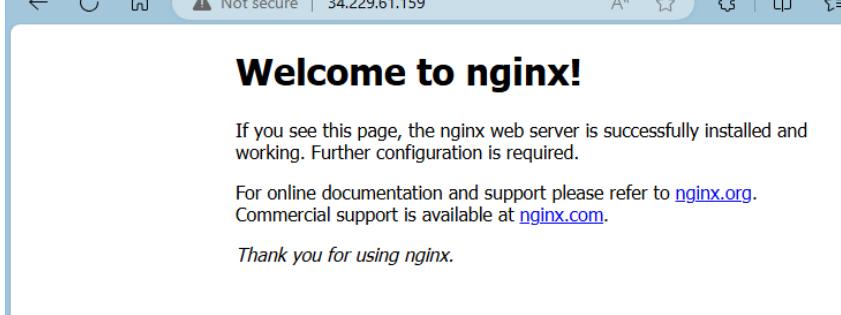
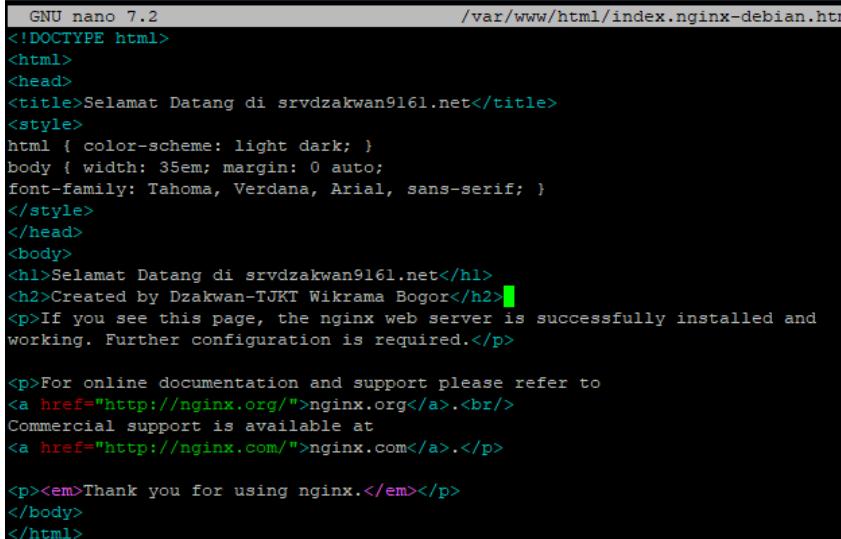
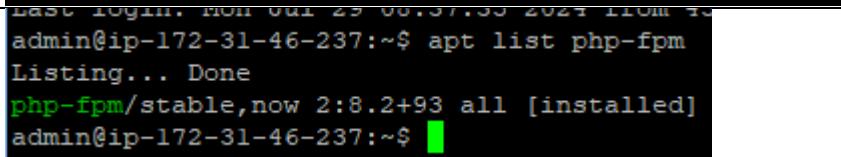
Jl. Raya Wangun Kel. Sindangsari Kota Bogor

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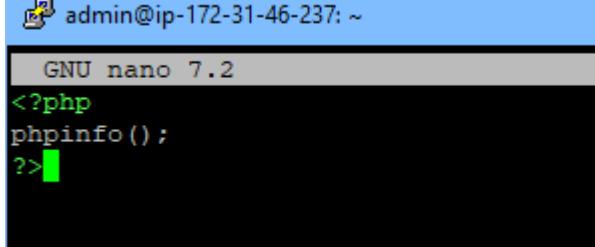
6	Storage	<p>▼ Configure storage Info</p> <p>Advanced</p> <p>1x <input type="text" value="8"/> GiB <input type="text" value="gp3"/> Root volume (Not encrypted)</p> <p>X</p> <p>Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage</p> <p>Add new volume</p> <p>G</p> <p>Click refresh to view backup information The tags that you assign determine whether the instance will be backed up by any Data Lifecycle Manager policies.</p> <p>0 x File systems Edit</p>																
7	Summary	<p>▼ Summary</p> <p>Number of instances Info</p> <p>1</p> <p>Software Image (AMI) Debian 12 (20240702-1796) ami-00402f0bdf4996822</p> <p>Virtual server type (instance type) t2.micro</p> <p>Firewall (security group) New security group</p> <p>Storage (volumes) 1 volume(s) - 8 GiB</p> <p>X</p> <p>Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 750 hours of public IPv4 address usage per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and 100 GB of bandwidth to the internet.</p> <p>Cancel Launch instance</p> <p>Review commands</p>																
8	Tampilan EC2 ketika berhasil di Luncurkan	<p>▼ Instance summary Info</p> <table><tr><td>Instance ID</td><td>Public IPv4 address</td></tr><tr><td>i-0ca5b7f5ed9b4052e (srv-web_Dzakwan9161)</td><td>34.229.61.159 open address</td></tr><tr><td>Private IPv4 addresses</td><td>IPv6 address</td></tr><tr><td>172.31.46.237</td><td>-</td></tr><tr><td>Instance state</td><td>Public IPv4 DNS</td></tr><tr><td>Running</td><td>ec2-34-229-61-159.compute-1.amazonaws.com open address</td></tr><tr><td>Hostname type</td><td>Private IP DNS name (IPv4 only)</td></tr><tr><td>IP name: ip-172-31-46-237.ec2.internal</td><td>ip-172-31-46-237.ec2.internal</td></tr></table>	Instance ID	Public IPv4 address	i-0ca5b7f5ed9b4052e (srv-web_Dzakwan9161)	34.229.61.159 open address	Private IPv4 addresses	IPv6 address	172.31.46.237	-	Instance state	Public IPv4 DNS	Running	ec2-34-229-61-159.compute-1.amazonaws.com open address	Hostname type	Private IP DNS name (IPv4 only)	IP name: ip-172-31-46-237.ec2.internal	ip-172-31-46-237.ec2.internal
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Remote dan Install NGINX



9	Remote SSH menggunakan Putty	 <pre>admin@ip-172-31-46-237:~\$ Using username "admin". Authenticating with public key "imported-openssh-key" Linux ip-172-31-46-237 6.1.0-22-cloud-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.94-1 (2024-06-21) x86_64 The programs included with the Debian GNU/Linux system are free software; the exact distribution terms for each program are described in the individual files in /usr/share/doc/*copyright. Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent permitted by applicable law. admin@ip-172-31-46-237:~\$ </pre>
10	Install web server NGINX	 <pre>root@ip-172-31-46-237:~# apt install nginx -y Reading package lists... Done Building dependency tree... Done Reading state information... Done nginx is already the newest version (1.22.1-9). 0 upgraded, 0 newly installed, 0 to remove and 7 not upgraded. root@ip-172-31-46-237:~# </pre>
11	Restart dan cek status NGINX	 <pre>root@ip-172-31-46-237:~# systemctl restart nginx root@ip-172-31-46-237:~# systemctl status nginx ● nginx.service - A high performance web server and a reverse proxy server Loaded: loaded (/lib/systemd/system/nginx.service; enabled; preset: enabled) Active: active (running) since Mon 2024-07-29 08:40:01 UTC; 8s ago Docs: man:nginx(8) Process: 858 ExecStartPre=/usr/sbin/nginx -t -q -g daemon on; master_process o Process: 859 ExecStart=/usr/sbin/nginx -g daemon on; master_process on; (code= Main PID: 861 (nginx)</pre>
12	Tampilan default NGINX	 <p>Not secure 34.229.61.159</p> <h1>Welcome to nginx!</h1> <p>If you see this page, the nginx web server is successfully installed and working. Further configuration is required.</p> <p>For online documentation and support please refer to nginx.org. Commercial support is available at nginx.com.</p> <p>Thank you for using nginx.</p>
13	Edit tampilan default web	 <pre>GNU nano 7.2 /var/www/html/index.nginx-debian.html <!DOCTYPE html> <html> <head> <title>Selamat Datang di srvdzakwan9161.net</title> <style> html { color-scheme: light dark; } body { width: 35em; margin: 0 auto; font-family: Tahoma, Verdana, Arial, sans-serif; } </style> </head> <body> <h1>Selamat Datang di srvdzakwan9161.net</h1> <h2>Created by Dzakwan-TJKT Wikrama Bogor</h2> <p>If you see this page, the nginx web server is successfully installed and working. Further configuration is required.</p> <p>For online documentation and support please refer to nginx.org.
 Commercial support is available at nginx.com.</p> <p>Thank you for using nginx.</p> </body> </html></pre>
14	Install package php-fpm	 <pre>Last login: Mon Jul 23 08:37:33 2024 from 127.0.0.1 admin@ip-172-31-46-237:~\$ apt list php-fpm Listing... Done php-fpm/stable,now 2:8.2+93 all [installed] admin@ip-172-31-46-237:~\$ </pre>



15	Buat tampilan info php.	 <pre>GNU nano 7.2 <?php phpinfo(); ?></pre>
16	Konfigurasi VirtualHost NGINX	<pre># Add index.php to the list if you are using PHP index index.html index.htm index.nginx-debian.html index.php; server_name _; location / { # First attempt to serve request as file, then # as directory, then fall back to displaying a 404. try_files \$uri \$uri/ =404; } # pass PHP scripts to FastCGI server # location ~ \.php\$ { include snippets/fastcgi-php.conf; # With php-fpm (or other unix sockets): fastcgi_pass unix:/run/php/php8.2-fpm.sock; # With php-cgi (or other tcp sockets): # fastcgi_pass 127.0.0.1:9000; }</pre>
17	Clone website statis dan simpan di direktori web1	<pre>root@ip-172-31-46-237:~# git clone https://github.com/bedimcode/responsive-portfolio-website-Alexa.git /var/www/html/web1/ Cloning into '/var/www/html/web1'... remote: Enumerating objects: 50, done. remote: Total 50 (delta 0), reused 0 (delta 0), pack-reused 50 Receiving objects: 100% (50/50), 473.31 KiB 18.20 MiB/s, done. Resolving deltas: 100% (5/5), done. root@ip-172-31-46-237:~# cat /var/www/html/web1/ cat: /var/www/html/web1/: Is a directory root@ip-172-31-46-237:~# ls /var/www/html/web1/ README.md 'Text Portfolio Alexa.txt' assets index.html preview.png root@ip-172-31-46-237:~#</pre>
18	Restart dan cek status NGINX	<pre>root@ip-172-31-46-237:~# systemctl restart nginx root@ip-172-31-46-237:~# systemctl status nginx ● nginx.service - A high performance web server and a reverse proxy server Loaded: loaded (/lib/systemd/system/nginx.service; enabled; preset: enabled) Active: active (running) since Mon 2024-07-29 09:00:43 UTC; 7s ago Docs: man:nginx(8) Process: 7236 ExecStartPre=/usr/sbin/nginx -t -q -g daemon on; master_process Process: 7238 ExecStart=/usr/sbin/nginx -g daemon on; master_process on; (code Main PID: 7240 (nginx) Tasks: 0 (limit: 1327)</pre>

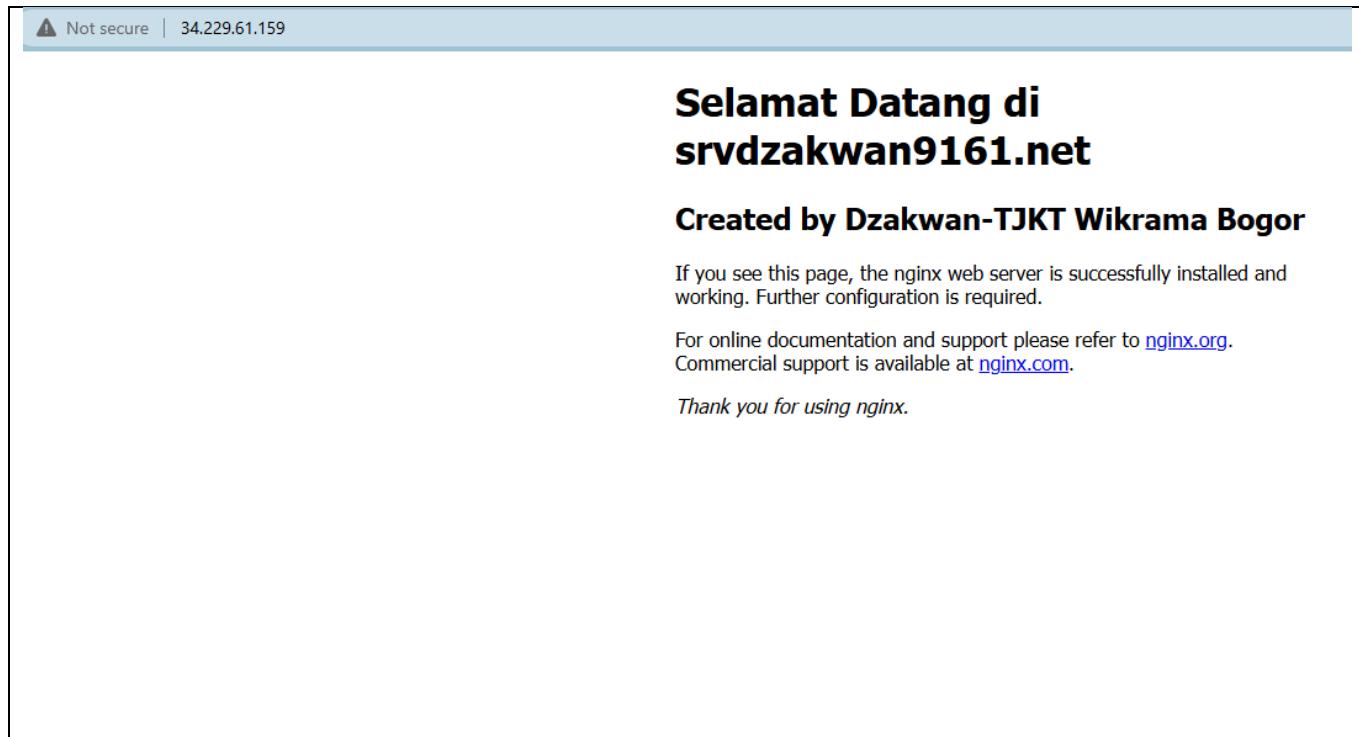


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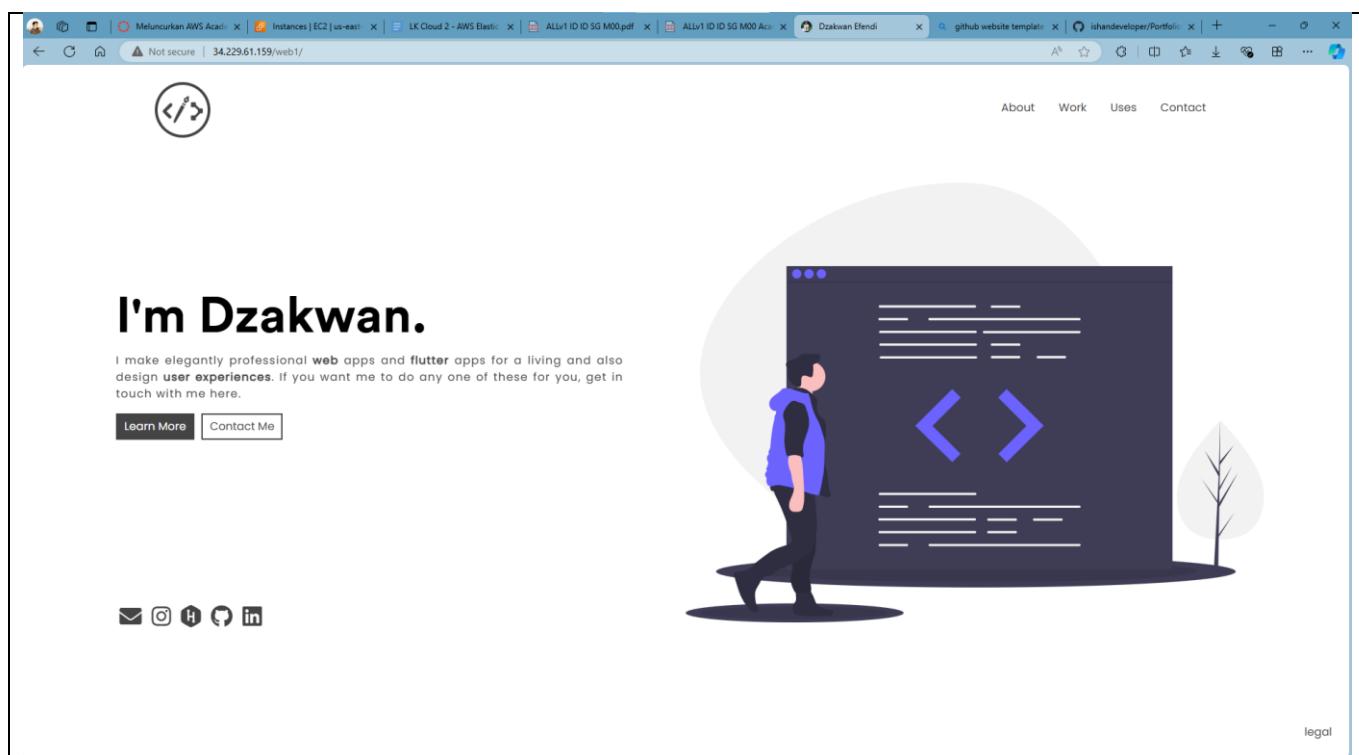
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B. Hasil Ujicoba

Screenshot 1 – Tampilan Default Web NGINX setelah di ubah.



Screenshot 2 – Tampilan Web Static. Search : http://ip-public-atau-dns/static1





Screenshot 3 – Tampilan Info PHP.

The screenshot shows a web browser displaying the PHP Version 8.2.20 information page. The page has a blue header bar with the text "PHP Version 8.2.20" and a "php" logo. Below the header is a table containing detailed PHP configuration information. At the bottom of the page, there is a note about the Zend Engine and a "zend engine" logo.

System	Linux ip-172-31-46-237 6.1.0-22-cloud-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.94-1 (2024-06-21) x86_64
Build Date	Jun 17 2024 13:33:14
Build System	Linux
Server API	FPM/FastCGI
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc/php/8.2/fpm
Loaded Configuration File	/etc/php/8.2/fpm/php.ini
Scan this dir for additional .ini files	/etc/php/8.2/fpm/conf.d
Additional .ini files parsed	/etc/php/8.2/fpm/conf.d/10-opcache.ini, /etc/php/8.2/fpm/conf.d/10-pdo.ini, /etc/php/8.2/fpm/conf.d/20-calculator.ini, /etc/php/8.2/fpm/conf.d/20-cgi.ini, /etc/php/8.2/fpm/conf.d/20-exit.ini, /etc/php/8.2/fpm/conf.d/20-fil.ini, /etc/php/8.2/fpm/conf.d/20-mysqlnd.ini, /etc/php/8.2/fpm/conf.d/20-pdo.ini, /etc/php/8.2/fpm/conf.d/20-pecl.ini, /etc/php/8.2/fpm/conf.d/20-iconv.ini, /etc/php/8.2/fpm/conf.d/20-phar.ini, /etc/php/8.2/fpm/conf.d/20-postini.ini, /etc/php/8.2/fpm/conf.d/20-readline.ini, /etc/php/8.2/fpm/conf.d/20-shmop.ini, /etc/php/8.2/fpm/conf.d/20-sockets.ini, /etc/php/8.2/fpm/conf.d/20-sysvmsg.ini, /etc/php/8.2/fpm/conf.d/20-sysvsem.ini, /etc/php/8.2/fpm/conf.d/20-sysvshm.ini, /etc/php/8.2/fpm/conf.d/20-tokenizer.ini
PHP API	20220829
PHP Extension	20220829
Zend Extension	420220829
Zend Extension Build	API420220829.NTS
PHP Extension Build	API420220829.NTS
Debug Build	no
Thread Safety	disabled
Zend Signal Handling	enabled
Zend Memory Manager	enabled
Zend Multibyte Support	disabled
Zend Max Execution Timers	disabled
IPv6 Support	enabled
DTrace Support	available, disabled
Registered PHP Streams	https, ftps, compress_zlib, php, file, glob, data, http, ftp, phar
Registered Stream Socket Transports	tcp, udp, unix, udg, ssl, tls, tlsv1.0, tlsv1.1, tlsv1.2, tlsv1.3
Registered Stream Filters	zlib*, string.rot13, string.toupper, string.tolower, convert*, consumed, dechunk, convert.iconv*

This program makes use of the Zend Scripting Language Engine:
Zend Engine v4.2.20, Copyright (c) Zend Technologies
with Zend OPcache v8.2.20, Copyright (c), by Zend Technologies

zend engine

C. Clean Up Lab

1. Terminate Instance EC2.

The screenshot shows the AWS Lambda console with a modal dialog titled "Terminate instance?". The dialog contains a warning message about terminating EBS-backed instances and losing storage on local drives. Below the message is a question asking if the user is sure they want to terminate the instances. The main area shows a table of instances with their names, instance IDs, and termination protection status (Disabled). At the bottom, there are "Cancel" and "Terminate" buttons, and a summary table of selected instances.

Instance ID	Termination protection
i-0ca5b7f5ed9b4052e (srv-web_Dzakwan9161)	Disabled

To confirm that you want to terminate the instances, choose the terminate button below. Instances with termination protection enabled will not be terminated. Terminating the instance cannot be undone.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zon
<input checked="" type="checkbox"/> srv-web_Dzak...	i-0ca5b7f5ed9b4052e	Terminated	t2.micro	Initializing	View alarms +	us-east-1d



2. Stop / End Lab Learner Labs.

The screenshot shows the AWS Academy Learner Lab interface. At the top, there's a navigation bar with the path: ALLv1ID-ID-LTI13-8... > Modules > AWS Academy Learn... > Meluncurkan AWS Academy Learner Lab. To the right of the path are buttons for "Start Lab" and a timer set at "00:00". Below the navigation is a sidebar with links: Home, Modules (selected), Discussions, and Grades. The main area features a terminal window titled "AWS" with the command "eee_l_3403067@runweb129983:~\$". To the right of the terminal is a "Learn" sidebar containing a list of topics: Environment (Environment), Access the AW (Access the AW), Region restric (Region restric), Service usage (Service usage), Using the term (Using the term), Running AWS (Running AWS), Using the AWS (Using the AWS), Preserving you (Preserving you), Accessing EC2 (Accessing EC2), SSH Access to (SSH Access to), SSH Access fr (SSH Access fr), and SSH Access fr (SSH Access fr). Below the "Learn" sidebar is another section titled "Environn" (likely a typo for "Environment") with the text: "This Learner L ad-hoc explor; This environr timer runs to (and resources will be retain".

😊 Selamat Menggerjakan 😊