Achievement

Nemiya Thomas Rookwood

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ACHIEVEMENT I

During a two month contract with Nottingham College.

Aim:

- Support the college set up 500+ (DFE) Department for education laptops'.

Tasks:

- Configure BIOS for network boot, PXEboot over IPv4 and (MSCCM) Microsoft System Centre Configuration Manager to Install Windows 10 Build 1909.
- Change device name and set domain.
- Transfer laptop into correct (OU) organisational unit within Active Directory.
- Update group policy to install software, plugins and security updates.
- Ensure laptop registers with Sophos Anti-virus and Microsoft 365 is installed.
- Create naming convention for local user accounts and Add as local user.
- Register IT policies with laptop asset and serial numbers.
- Install, configure and print labels with P-touch 9700 PC printer and label laptops with local user credentials and asset number.
- Physically pack and stack machines.
- Additionally Image laptops with Chrome book Enterprise Edition Cloud Ready and Register with Google Admin Console.
- Log laptop Assets Number, Make, Model, Serial Number, Username and Password within a shared Microsoft Excel Spreadsheet.

Result:

- 500+ DFE Laptops Complete.

ACHIEVEMENT II

(AWS) Amazon Web Services Certified Cloud Practitioner.

Aim:

- Amazon Certified Cloud Practitioner in Amazon Web Services, with a valid certificate from July 2021 to July 2024.

Tasks:

- Attend Primed Talent AWS/restart training.
- Explain the value of the AWS Cloud.
- Understand AWS shared responsibility.
- Understand security best practises.
- Understand AWS cloud costs, economics and billing.
- Describe and position core AWS services.
- Identify AWS services for common use cases.
- Navigate AWS environment.
- Pass a Pearson VUE online exam.

Result:

- AWS Certified Cloud Practitioner (CLF-C01)

ACHIEVEMENT III

Since 2018 I spend out of work hours building solutions with Industry technologies.

Aim:

- Maintain and provision a (LEMP) Linux, Nginx, MySQL, PHP stack and WordPress website in (LXC) Linux Containers on Amazon EC2 instance.

Tasks:

- Create a Domain Name on Namecheap.com.
- Create an A and CNAME record.
- Navigate the (AWS) Amazon Web Services Management Console.
- Create an Amazon EC2 instance.
- Choose an Ubuntu operating system.
- Choose an Instance type; CPU, Memory and (£) Budget.
- Choose a Storage type; Size and Type.
- Configure name (tag), network CIDR range (ipv4), security groups (ports).
- Create a new (RSA) keypair.
- Add IPV4 to A record on Namecheap.com.
- (SSH) Secure Shell into Amazon EC2 instance.
- Update and upgrade (APT) Linux package manager.
- Install LXC and (LXD) Linux Container Daemon.
- Launch a container with Ubuntu Linux and name container.
- Configure the container ipv4 address.
- Push website repository to container.
- Add PHP repository to (APT) Linux package manager.
- Update and upgrade the container Linux package manager.
- Install Nginx, PHP, MySQL, WordPress, LetsEncrypt and plugins.
- Unzip WordPress and plugins.
- Copy files to corresponding folders.
- Configure Nginx, MySQL and (SSH) Secure Shell configuration file.
- Create a Database using SQL.
- Restart services.
- Maintain LetsEncrypt license renewal and operating system updates.

Result:

- A website accessible via the internet.

ACHIEVEMENT IV

Since 2018 I spend out of work hours building solutions with Industry technologies.

Aim:

- Maintain and provision a Authentication server, in Linux Alpine using (LXC) Linux Containers on Linode.

Tasks:

- Utilize GDscript and Busybox Ash to create client and server application code.
- Utilize (TCP) Transmission Control Protocol and (UDP) User Datagram Protocol for application to communicate with Amazon EC2 instance.
- Create a function that recognises client connection using GDscript.
- Create a function that authenticates client access using GDscript.
- Write code to create files and folders using Busybox Ash.
- Write code to concatenate using Busybox Ash.
- Write code to query database using (SQL) structured query language.
- Instance an Ubuntu Linode.
- Update and upgrade the operating system with Linux package manager.
- Configure IP tables to accept incoming and outgoing connection to port.
- Install LXC and (LXD) Linux Container Daemon.
- Launch a container with Ubuntu Linux and name container.
- Install MySQL.
- Create a database and table.
- Navigate to root.
- Launch a container with Alpine Linux and name container.
- Install plugins.
- Push application repository to the container.
- Execute application.

Result:

- Authentication server to accept or decline client.

ACHIEVEMENT V

Since 2018 I spend out of work hours building solutions with Industry technologies.

Aim:

- Visually monitor, navigate, and investigate, system operations, system performance and potential issues in real-time over the web.

Tasks:

- Instance Amazon EC2 Instance.
- Update and upgrade.
- Add user “Monitor”.
- Install Docker.
- Deploy Dockerfile.
- Create a Docker network.
- Pull Fluentd image.
- Run MongoDB, Elasticsearch, Graylog, Fluentd container images.
- Configure environment variables.
- Connect the containers to the network.
- Disconnect from default network.
- Link containers.
- Create folder for log files.
- Name log files.
- Parse regular expressions.
- Send log files to monitor server.

Result:

- A (URI) uniform resource identifier with Graylog web interface.