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Azure DevOps cloud Engineer



An experienced IT professional with 3.6 years of work experience as an Azure Cloud/DevOps engineer. Good knowledge in multi-cloud platforms like **Microsoft Azure, Amazon Web Services (AWS)**. Experience in provisioning resources to Infrastructure as code with tools like **Terraform, Cloud Formation**. Hands-on experience in containerization, orchestration tools like **Docker, Kubernetes**, Configuration management tools like **Ansible, Chef, Puppet**. Worked with **Continuous Integration** and **Continuous Delivery (CI/CD)** tools like **Jenkins** and **Azure DevOps**. Experienced in architecting, deploying Fault-Tolerant, Cost-Effective, Highly Available, and Secure Servers in **Azure** and **AWS** clouds.

PROFESSIONAL SUMMARY:

- Hands-on experience in provisioning **Microsoft Azure PaaS** services such as **Azure SQL DB, WebApp, Service Bus, Azure Functions, Logic Apps, AKS, Service fabric** using **Azure ARM templates** and **Azure DevOps CI/CD** pipelines.
- Expertise in **Azure** Development and worked on **Azure App Services, Azure storage, Azure Active Directory, Azure DNS, IAM (Identity and Access Management), Azure Synapse, Azure Databricks, Azure Functions, Azure SQL Database, Virtual Machines, Fabric Controller, Azure Search, Azure Service Principal** and **Notification Hub**.
- Designed and implemented automated test scripts using **Selenium WebDriver** in **Python** for web applications, resulting in a 50% reduction in testing time.
- Proficient in utilizing **Azure NPS** metrics and data to measure and evaluate customer satisfaction and loyalty towards **Microsoft Azure cloud** services.
- Integrated **Python** applications with databases (e.g., **MySQL, PostgreSQL, MongoDB**) using appropriate libraries or **ORM (Object-Relational Mapping)** tools for efficient data storage and retrieval.
- Experience in migrating on-premises applications to **Azure** and configured **VNETs** and **subnets** as per the project requirement also performed **PowerShell Scripting** to do **Patching, Imaging** and **Deployments** in **Azure**.
- Developing and maintaining automated **CI/CD pipelines** using tools like **Jenkins, GitLab CI/CD, or ServiceNow's own DevOps tools**. This involves configuring build, test, and deployment stages, integrating with **version control systems**, and ensuring proper test coverage and quality assurance processes.
- Integrated **Security scanning tools** such as **SonarQube** or **Azure Security Center** into **CI/CD pipelines**, identifying and addressing vulnerabilities early in the software development lifecycle.
- Experience in using **Nexus** and **Artifactory Repository** Managers for **Maven** builds and used **Maven** dependency management to deploy snapshot and release artifacts to **Nexus** to share artifacts across projects.
- Involved in Serverless services (**Azure Functions**) where I created and configured **HTTP Triggers** in the **Azure Functions** with Application **Insights** for monitoring and performing the load testing on the Applications using the **VSTS (Visual Studio Team Services)**.
- Experience deploying **Infrastructure as a Code (IAC)** using **Terraform** and **Git** Version Control. Built end to end **Jenkins CI/CD** Pipelines using **groovy** scripts to create **AWS** infrastructure containing **Terraform** code to retrieve code, compile applications, perform tests and push build artifacts to **Nexus**.
- Development level experience in **Microsoft Azure, ASP.NET, ASP, and C #.NET, Web Services, WCF, Web API, ADO.NET, JavaScript, jQuery, AngularJS, Bootstrap, PowerShell, CSS, HTML, UML, and XML**.
- Good knowledge of **ARM template** format (**Parameters, Variables, Functions, and Resources**). Implemented a complete automated build-release solution using a combination of technologies like **Maven, TFS, Jenkins**.
- Expertise in Microsoft Azure Cloud Services (**PaaS & IaaS**), **Application Insights, Document DB, Internet of Things (IoT), Azure Monitoring, Key Vault, Visual Studio Online (VSO)** and **SQL Azure**.
- Professional experience in Software Configuration Management (**Release and Build Engineering / Configuration**) on both **Linux/Unix** and Windows environments.

Technical Skills:

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| Cloud Technologies | Azure, AWS, Google Cloud Platform (GCP). |
| Containerization | Docker, Docker Swarm, Kubernetes. |
| CI/CD Tools | Jenkins, Azure DevOps, GitHub Actions, Git Lab pipelines. |
| Configuration Management Tools | Ansible, Chef, Puppet. |
| Version Control Tools | GIT, GitLab, Bitbucket, SVN, TFS. |
| Scripting Languages | Python, Ruby, JSON, YAML, Bash, PowerShell, Groovy. |
| Monitoring Tools | App Dynamics, Cloud Watch, Splunk, Azure Monitor. |
| Virtualization Technologies | VMware, Vagrant. |
| Operating Systems | Ubuntu, RedHat Linux, Windows. |
| Databases | MySQL, Mongo dBs, Oracle dB, Azure SQL Database. |
| Web Servers | Nginx. |
| Build Tools | Maven, Ant, Gradle. |
| Bug Tracking Tools | JIRA, Azure DevOps |
| Repository Management | J Frog, Nexus, Artifactory. |

EDUCATION:

- Master in Management Information Systems, Temple University - Philadelphia, PA 2020 - 2021
- Bachelor in Supply Chain Management, Temple University - Philadelphia, PA 2014 - 2017

PROFESSIONAL EXPERIENCE:

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| Client: Microsoft | Canada |
| Role: Azure DevOps Engineer | June 2022 - Present |

Responsibilities:

- Designed, implemented, and managed storage solutions in alignment with **High Availability (HA)** and **Disaster Recovery (DR)** requirements for the enterprise hosting environment. Implemented robust backup strategies to ensure data integrity and availability.
- Built an application environment to operate at high availability in different Azure regions by using **CDN (Cloud Delivery Network)**, **Azure App services**, **Azure Traffic Manager**, **App Services-Web Apps**, **Azure Active Directory**, **Azure DNS**, **Azure Storage Queues**, **Azure Functions**, **IAM (Identity and Access Management)**, **Cognitive Services**, **Azure Search**, **Azure Synapse**, **Azure Databricks**, **Storage Blobs**, **Redis cache**, and **Azure SQL Database**.
- Configured and managed **IAM solutions**, ensuring secure and granular access controls using **Azure Active Directory** and **AWS Identity and Access Management**.
- Successfully adjusted applications for proper functioning in the **Azure cloud environment**. Ensured seamless migration by addressing compatibility issues and optimizing configurations.
- Designed and implemented **Azure Databricks** and **Azure Data Factory** pipelines to orchestrate seamless data ingestion and transformation, streamlining system integration processes and ensuring efficient data workflows.
- Integrated **Azure Machine Learning** into applications, leveraging **Azure Custom Vision** for specialized image recognition tasks, resulting in improved accuracy and adaptability in content analysis.
- Configured **Azure DNS** for efficient name resolution and management of domain names. Implemented **Azure Traffic Manager** to distribute user traffic across multiple regions, improving application availability and responsiveness.
- Integrated and configured **Azure Application Insights** to gain valuable insights into application performance, user behavior, and error tracking. Utilized **Application Insights** data to make data-driven decisions and optimize application performance.
- Set-up a continuous build process in **Visual Studio Team Services** to automatically build on new check-in of code then deploy that new build to the **Azure Web application** set-up and install **Hosted Exchange** and **Office 365 Suite**.

- Designed and developed standalone data migration applications to retrieve and populate data from **Azure Table BLOB** storage to on premise **SQL Server** instances and Used **Python API** for uploading all the agent logs into **Azure blob storage**, Managed internal deployments of monitoring and alarm services.
- Implemented **Azure Automation** to streamline routine operational tasks, ensuring efficiency and consistency in resource management. Automated deployment, configuration, and **scaling processes** using **Azure Automation Runbooks**.
- Proficient in provisioning **Azure resources**, including **Compute**, **Network**, and **Service Fabric**, from various providers. Demonstrated expertise in utilizing **ARM templates** to automate the deployment of resources, ensuring consistency and reliability.
- Implemented security best practices within **ARM templates** to enforce compliance with organizational **security policies**. Regularly reviewed and updated configurations to address emerging security threats and vulnerabilities.
- Integrated **Docker** and **Kubernetes** into **CI/CD** pipelines for automated testing, building, and deployment of containerized applications. Collaborated with development and operations teams to ensure smooth integration of container-based workflows.
- Orchestrated the migration of project management tools from **Jira** to **Azure DevOps Boards**, ensuring data integrity and team collaboration. Facilitated the transition of source code repositories from **GitHub** to **Azure DevOps**, optimizing version control and **CI/CD pipelines**.
- Implemented **IaC** principles for managing infrastructure configurations during migrations, using **Azure ARM** templates and/or **terraform**. Automated the provisioning of resources and configurations to ensure consistency across environments.
- Created **Web Apps** on an **Azure portal** for deploying web applications using **VSTS pipelines**. Implemented **Terraform** templates to deploy the resources in **Azure**.
- Expertise in working with **Terraform** key features such as **Infrastructure as a code**, execution plans, **resource graphs**, change automation and created infrastructure in a coded manner using **Terraform**.
- Created **terraform templates** for provisioning **virtual networks**, **VM Scale sets**, **Load balancers** and NAT rules and used **terraform** graph to visualize execution plan using the graph command. Used **Terraform** to deploy the infrastructure necessary to create development, test, and production environments for software development.
- Worked with **Python** libraries and frameworks like **NumPy**, **Pandas**, **Matplotlib**, and **SciPy** for data analysis, visualization, and scientific computing.
- Implemented serverless computing on **AWS** using **AWS Lambda**, leveraging **Azure** services like Event Grid or **Logic Apps** for event-driven architectures.
- Implemented **Terraform** code versioning and collaboration using source control systems like **Git** or **Azure DevOps**, enabling efficient collaboration and change management.

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| Client - Digital Technology Leadership Internship | Shanghai, China |
| Role: DevOps Engineer | NOV 2021 – MAY 2022 |

Responsibilities:

- Experience in Amazon Cloud Services (**AWS**) and its features (**AWS EC2**, **VPC**, **EBS**, **AMI**, **APIs**, **Route 53**, **snapshots**, **Auto scaling**, **Cloud Formation**, **Lambda**, **SES**, **SQS**, **SNS**, **RDS**, **ELB**, **EBS**, **Cloud Watch**, **S3** etc.) and managing Private Cloud and Hybrid cloud configurations, patterns, and practices in **Windows Azure** and **SQL Azure**.
- Working for **DevOps** Platform team responsible for specialization areas related to **Chef** for Cloud Automation. Configured and utilized **AWS Lambda**, a serverless computing service, to run **Python** scripts that implement the shutdown schedule for servers.
- Design, install, administer, and optimize hybrid cloud components to ensure business continuity (i.e., **Azure AD**, **ADFS**, **SSO** & **VPN Gateways**).
- Extensively involved in infrastructure as code, execution plans, resource graph and change automation using **Terraform**. Managed **AWS** infrastructure as code using **Terraform**.
- Worked on **Agile DevOps** team using **Linux**, **Docker**, **Jenkins**, **cloud IaaS** and **Java EE**, **Tomcat**, **Nginx**, **Glassfish** and **WebSphere**, **GitLab**, **CI-CD** automation processes. Developed **Python** code to extract information from XML files using DOM Modules.
- Experienced in Implementing automated infrastructure provisioning and configuration management using tools like **Ansible**, **Puppet**, or **Chef** to ensure consistent and scalable deployment of resources on **GCP**.
- Experience with installation and configuration of **Docker** environment including **Docker registry hub** for managing different **Docker images** and deployment of applications inside the software containers.
- Experience in Converting existing **AWS** Infrastructure to Serverless architecture (**AWS Lambda**, **Kinesis**), deploying via **Terraform** and **AWS Cloud Formation** templates.

- Used **Python**, to supplement automation provided by **Ansible** and **Terraform** for tasks such as encrypting **EBS** volumes backing AMIs and scheduling **Lambda** functions for routine **AWS** tasks.
- Performed automation smoke testing after deployment using **PowerShell** and **Bash** scripting. Wrote **ANT** and **MAVEN** Scripts to automate the build process.
- Azure **PaaS** Solutions like **Azure Web Apps**, **Web Roles**, **Worker Roles**, **SQL Azure**, and **Azure Storage**.
- Experience in configuring **Azure web apps**, **Azure App services**, **Azure Application insights**, **Azure Application gateway**, **Azure DNS**, **Azure Traffic manager**, **Azure Network Watcher**, Implementing **Azure Site Recovery**, **Azure Backup** and **Azure Automation**.
- Administered **Jenkins**, Proposed and implemented branching strategy suitable for **Agile/scrum** development in a Fast-Paced Engineering Environment.
- Created **AWS Cloud Formation** templates to create custom sized **VPC**, **subnets**, **EC2** instances, **ELB**, **security groups**. Worked on tagging standard for proper identification and ownership of **EC2** instance and other **AWS** Services like **Cloud Front**, **Cloud Watch**, **RDS**, **S3**, **Route53**, **SNS**, **SQS**, **Cloud Trail** Experience in Windows