

# Michael Heironimus

heironimus@gmail.com

314-348-6362

<https://www.linkedin.com/in/mkheironimus>

## Key Skills

### Automation / Infrastructure-as-Code

- Terraform for AWS
- Python/boto3 for AWS
- AWS CloudFormation
- Scripting in Bourne/Korn shell, Python, PowerShell
- Version control with git, Subversion (svn)

### Platforms

- Amazon Web Services, focusing on EC2, S3, Route 53, Lambda, IAM
- Red Hat Enterprise Linux, Ubuntu Server, Windows Server
- Containers using Docker on Linux and AWS ECS/Fargate
- AMI builds with Packer

### Cloud Security

- AWS IAM policy creation and analysis
- AWS Organizations service control policy (SCP) configurations
- AWS EC2 Security Group configuration
- SSL-protected services

### Networking

- AWS VPC networking
- AWS Transit Gateway
- HTTP load balancing and proxying
- DNS integration and management

## Work Experience

---

Cloud Engineer (consultant)	TEKsystems	Mar 2021 - present
-----------------------------	------------	--------------------

AWS infrastructure platform engineer for internal hosting environments.

- Built multiple AWS landing zones to allow creation of isolated environments.
- Enabled creation and maintenance of hundreds of multi-region tenant accounts by designing reusable, modular build tooling in Terraform.
- Ensured security and compliance requirements were enforced in self-service tenant environments using IAM policies, Service Control Policies (SCPs), and event-driven Python remediation code.
- Documented Terraform state management operations required to support recovery from errors or manual modifications.
- Analyzed policies and CloudTrail events to resolve access issues blocking project implementations.

Cloud Engineer	DataServ	Apr 2019 - Feb 2021
AWS SME for cloud migration project using multiple AWS services, including EC2, S3, RDS, and ECS/Fargate.		

- Planned and ran internal training sessions with the system administration team on both general AWS technologies and the specific implementations of them to allow self-sufficient operation of the environment.
- Set direction for cloud implementations by defining and documenting standards.
- Documented new and existing cloud environments by creating architecture diagrams.
- Simplified network routing and security controls by defining a standard IP subnet strategy for new environments.
- Wrote CloudFormation templates to ensure consistent builds across environments for new systems.

Senior Consultant (Director level)      Mastercard      Dec 2017 - Apr 2019  
Cloud technology SME, focusing on Akamai, private cloud, and monitoring.

- Wrote internal whitepaper on current industry approaches for cloud-native application architectures.
- Improved operational effectiveness by building relationships across development, operations, and monitoring teams to enable more open communication.
- Partnered with application support teams and Akamai contacts to enable integration of Akamai web security products.

Cloud Operations Architect	2nd Watch	May 2017 - Nov 2017
Amazon Web Services managed operations architect.		

- Created diagrams and documentation for existing customer-built environments.
- Engaged with clients in planning and design sessions.
- Supported client infrastructure by updating CloudFormation and Terraform.
- Partnered with support teams as escalation point and knowledge resource.

Cloud Automation Engineer      GTC Systems / CrowdStrike   July 2016 - Mar 2017  
DevOps Engineer in AWS/Chef/Ubuntu environment.

- Automated ongoing maintenance tasks by writing scripts in Python, Ruby, and bash.
- Provided internal Chef expertise. Updated cookbooks and configuration data for new requirements. Trained developers to use Chef for self-service tasks. Advised on potential approaches for high availability in Chef Server.
- Configured Graphite monitoring infrastructure. Replaced hand-built standalone components with scalable, Chef-managed configurations.

---

Cloud Engineer (consultant)      Levi, Ray, and Shoup      June 2015 - July 2016  
Cloud and infrastructure automation engineer.

- Automated golden image builds by writing Chef cookbooks to apply DISA STIG security policies and install standard required infrastructure services.
- Ensured Chef cookbook quality by writing test suites in Test Kitchen and ServerSpec, using a mixture of Docker images and VMs.
- Designed and documented Chef infrastructure running in AWS environments using external Postgres in RDS.
- Advised clients on best use of AWS technologies.

---

Cloud Engineer (consultant)      Programmer Resources Intl      Mar 2015 - June 2015  
Cloud engineer supporting AWS-based web application environments.

- Updated Python/Puppet automation framework for new requirements and bug fixes.
- Scoped technical work for requested tool enhancements. Wrote stories in Jira with identified tasks.

---

Senior Consultant (Director level)      Mastercard      May 2014 - Mar 2015  
Technical lead for application infrastructure/operations team.

- Resolved outstanding audit points by working with multiple teams to migrate to HSM-protected encryption keys for application data.
- Drove improvement of application disaster recovery procedures.
- Coordinated transition of reporting support from development team to operations team.
- Advised on PCI certification remediation plan for reporting application.

---

Consultant      iBridge Solutions      Apr 2012 - May 2014  
Technical lead for new reporting application implementation.

- Resolved outstanding performance issues prior to production deployment by partnering with development lead to create new architecture capable of scaling to tens of thousands of reports per day.
- Moved reporting system from external administration to internal team. Documented installation, configuration, and problem analysis procedures. Built training plans for support transition.
- Guided application through PCI certification process as technical owner.