**Sai Krishna Manne**

**Security Director**

**Phone: (516) 784 7275**

**Email:** [**skmanne@icloud.com**](mailto:skmanne@icloud.com)

**PROFESSIONAL SUMMARY:**

Over 16 years of experience managing/leading Engineering teams, architecting solutions in public, private, hybrid Clouds with iaas, paas, saas models. Implementing strong design-by-security models, Implementing Governance, and guard rails policies, improving security postures of a product/org, Managing Roadmaps, Tech Debts, Reference Models, Design Patterns for on-premises and multi-cloud deployments.

**EDUCATION & TRAINING:**

* Bachelor’s Degree in Electronics and Instrumentation, JNTU (April 2006)
* Master’s Degree in Software Engineering, Stratford (Aug 2008)
* Oracle certified professional OCP (2011)
* VMware Certified Professional VCP4 (2010)
* RedHat certified engineer RHCE4 (2006)
* AWS Solution Architect Associate (2016)

**TECHNICAL SKILLSET:**

|  |  |
| --- | --- |
| **Operating Systems** | RHEL, Amazon Linux, UNIX, OEL, Windows Server |
| **Automation** | Scripting in BASH, KSH, Python, Ansible, Ruby, Cloud-Formation, Terra-Form  Jenkins, GitHub, Puppet, Ansible, Prometheus |
| **Programming** | Python, Java, JS, BASH, KSH, YAML, JSON, Groovy. |
| **Database** | SQL, MYSQL, Oracle DB, IBM DB2 lite, Dynamo DB, Mongo DB, PostgreSQL, Cassandra, Denodo. |
| **Networking** | SNMP, SMTP, TCP/IP, IPX/SPX, NetBEUI, OSPF, BGP, IGRP, EIGRP, PPP, SLIP, UUCP, X.25, LAN, WAN, PCNFS, ARP/RARP, FTP/TFTP, RIP, DHCP, DNS, NIS, NIS+. |
| **MiddleWare** | Node JS, AWS API Gateway, Apache, WebLogic, Tomcat, WebSphere, EKS, ECS, Docker, Kubernetes. |
| **Security** | Nessus, Nmap, Snort, CyberArk EPV, CyberArk AIM, AAM, Oracle IAM suite, ForgeRock IAM, Centrify, Ping Federate, SAML, OAUTH, ADFS,  Suite, Checkpoint, iptables, SAST, SCA, DAST, TWISTLOCK. |
| **Cloud** | Amazon AWS, S3, EB, VPC, ELB, AMI, RDS, Elastic Bean Stack, Lambda, Step-Functions, Cloud Formation, GCP APIGEE, GCP Compute. |
| **DATA Analytics** | Apache Hadoop, Ambari, Zook, Kafka, Spark, Scala, SAS GRID, R-Studio, R, Shiny Server, Spectrum Conductor, Dremio, PySpark, SageMaker |

**ACCOMPLISHMENTS:**

* Resolved InfoSec Problem by Designing a Secure API Call Based Automation Tech Capability eliminating SSH connections using AWS SSM and serverless Cloud Native services.
* Modernized Data Virtualization Platform by improving Automation, Security, SSO, Integrations and migrating to a newer and more stable version.
* Contributed to Design, Build and Automation of Highly available and Auto Scalable Enterprise API Gateway with Apigee OPDK in private cloud and management services in control plane.
* Successfully Lead a Team of 20 to Migrate Production Data Center with over 3000 physicals to virtual from Client’s old to new data centers while gaining 300% more computational and throughput performance.
* Designed SSO Environment Architecture and deployed 2 factor authentication and PIV card Logins.
* Contributed to Designing and deploying Disaster Recovery Site with Active-Active High Availability SSO environments to secure Client’s trademarks and patents consumers.
* Engineered a solution for the Client to convert their physical infrastructure to Virtual using VMWare, Xen, Sparc Virtualization technologies.
* Designed, Configured, Migrated on-prem legacy application from bare metal compute to Kubernetes Cluster in Cloud.

**WORK EXPERIENCE**:

**Fannie Mae, Reston, VA C:\Users\Manne\Desktop\fannie_mae_logo.gif**

**EA Director**  **Nov 2017 – Present**

**RESPONSIBILITIES:**

* Led shared services team of over 70 including Enterprise Architects, Cloud Architects, Business Architects, Developers, DevOps, BI Engineers in **Digital Transformation Project** that includes modernization, migration of financial applications and their integrations to multi-Tenant cloud platforms.
* Deployed IAM Solution using Ping IDP, Microsoft AD, Azure AD, Sailpoint IAG, CyberArk for PAM, AWS IAM, Secrets Manager Integrations, SSO using Ping federate, Oauth, SAML, ADFS.
* Triaging Resolutions including negotiating, persuading others, facilitating meetings, and resolving conflicts and high severity issues.
* Participate in Architecture Review Board meetings providing guidance to application teams and product owners in all stages of the SDLC.
* Performed Governance checks and integrated the Application Release pipelines with SAST, DAST, pen-testing, vulnerability scans for twist-lock for security compliance.
* Ensuring Security-by-design is achieved for those applications that are being built in cloud environments like AWS, Azure, GCP, also ensuring minimum customization to preserve the SAAS security standards for products like Salesforce, Divvy Cloud and ARIS cloud.
* Identify Security Gaps in ARB meetings in several layers of an application/product like data layers, infrastructure layer, application layer, web layer, network layer and suggest industries best practices and proven standards and build technology reference models on a case-by-case scenario.
* Collaborate and perform security testing, reporting, and auditing using tools like burp-suite, OWASP, service now, CMDB, kinesis, Splunk.
* Work with cross-functional teams like Cloud COE, Data Governance, Product Management to discuss the requirements, resolve dependencies and deliverables and paving a way to the engineers and developers to build the applications.
* Participate in annual Gartner and infosec conferences to understand and study the latest vulnerabilities, threats and remediations, industry best practices.
* Performed analysis on vulnerabilities, threats, suggested remediations and worked with vendors and product owners to negotiate policy exceptions and assess risk involved.
* Implemented in building a governance portal where compliance risks are tracked, notified, and generating reports.  
  Worked on Roadmaps, KPIs, Tech Debts, reference models, conducted cross functional team meetings to resolve dependencies, managed Agile Scrum meetings to calculate the LOE and timelines o deliverables.
* Setup monthly status and quarterly **PI Planning** meetings with Directors, VP in EA org to discuss and address the immediate compliance issues, challenges identified in review meetings and demo enterprise level Solutions and **Tech Capabilities** Built.

**ENVIRONMENT:** AWS, Ping Identity, Oauth, SAML, OKTA, CyberArk, SailPoint,Azure, GCP, SalesForce, ArisCloud, Jenkins, Bitbucket, UCD, JFrog, Nexus, Confluence, Jira, Tableau, TOGAF, HOPEX, MEGA, Lambda, State-machines, EC2, ECS, RDS, EDL.

**Anadarko Petroleum Part Time Project**

**Application Security Manager** **Oct 2018 – July 2019**

**RESPONSIBILITIES:**

* Advised management and stake holders on securing the environment logins to Denodo using **Kerberos**, **SPNEGO**, basic **auth**, **OAUTH** setup, Configured SSO logins using Kerberos, AD, **SPNEGO**, Basic Auth, **LDAP** for **Denodo** and its client tools using Oracle and SQL connectors.
* Implemented Identity and Access management solution using Azure AD, **Cyberark**, **Sailpoint** iiq, Ping Federate for internal users to SSO into the applications without credentials.
* Advised Team and peers in troubleshooting and setting up API environments in **GCP** using **APIGEE** **SAAS** and helped onboard the **APIs**. Worked with GCP vendor team to setup APIGEE SAAS.
* Introduced Ansible 2.72 for the first time in the enterprise and did setup **WinRM**, SSH based Ansible **Tower** to serve both Windows and Linux Remote hosts.
* Advised Stake holders and Product owners on several Security aspects around the Data Virtualization environments like configuring the **SSO**, securing its connections, encrypting the data at rest, automating the Daily repeatable tasks using **Ansible**.

**ENVIRONMENT:** Ansible, Denodo, Zeppelin, Docker, Oracle, SQL Connectors, AD, Kerberos, AWS, PowerShell, Python, APIGEE, LDAP, CMDB, My-Services, Windows Servers, RedHat Linux, WinRM, SSH, SSO. AWS services, GCP compute, Azure AD.

**Ex-Im Bank, Washington, DC** 

**Cloud Security Manager** **Apr 2016 – Nov 2017**

**RESPONSIBILITIES:**

* Managed a Team of 12 including backend, ui developers, admin, testers, and scrum master to modernize **C3** application from legacy mainframe to Java and Angular deployed in AWS **Compute**.
* ISAM, ISIM, IBM Unified Directory, Actice Directory, Sailpoint IAG, Ping Federate, Azure AD, LDAP, IBM DB2, Oracle, MDM, Governance, Identity, Security.
* Designed highly available and scalable infrastructure in **AWS** cloud by using various AWS services like **EC2**, **VPC, Auto scaling, ELB, RDS, Route53**.
* Advised **Leadership** and **Stakeholders** on re-purposing existing licenses in the **C3 modernization** project reducing Licensing costs by 1.5million Annually.

**ENVIRONMENT:** GIT, Ansible, Puppet, Mercurial, Jenkins, JSON, Tomcat, Apache, Python, JIRA, Docker, Maven, Nexus, Nagios, RedHat Linux, Ubuntu, CentOS, Linux, JAVA, AWS EC2, ELB, SQS, S3, Cloud Formation Templates, RDS, Cloud Watch.

**USPTO, Alexandria, VA** 

**RBAC Architect** **Oct 2015 – Apr 2016**

**RESPONSIBILITIES:**

* Advised stakeholders and leadership on implementing a MFA authentication for the USPTO patent registration application,
* Designed Infrastructure with Oracle Middleware suite and implemented high availability across 2 data centers in active-active mode.
* Engineered solution to Automate Directory backups, Improved the Security posture of IAM environments, automated deployments using Jenkins and shell scripts.

**ENVIRONMENT:** Oracle Middleware 11g, OAM, OAAM, OIM, OUD, OID, MFA, Oracle DB 11g, RedHat 6.x, WebLogic 11g, Puppet, Shell Scripting, SSL, TLS, SSO, Microsoft AD.

**Fannie Mae/IBM, Reston, VA C:\Users\Manne\Desktop\fannie_mae_logo.gif**

**Lead Systems Engineer** **Sep 2013 – Oct 2015**

**RESPONSIBILITIES**:

* Led engineering team in migrations, patching, automations, high availability, DR, security, documentation, training, capacity planning, task assignments etc.
* Advised **Common securitization** project where several app and **DB** servers using **oracle tx db** cloning and **EOD** end od day clone and backup setups for over **1000** lower environment servers.
* Coordinated with Oracle Engineering team to performance tune Linux, Solaris kernels to fine tune and support **Oracle** and **Sybase DB** during **p2v** migrations.
* Installed **Data Analytics** tools like **R studio** and **Shiny** server on MATLAB **GRID** servers and configured web services and tested user accounts and connectivity. configured IBM SAS **GRID** master servers and joined **Submit** hosts and **Compute** hosts to the master and executed test jobs for smoke test.

**ENVIRONMENT:** RHEL, Solaris, WebSphere, Autosys, NetBackup, Tripwire, SSM, EPM, VMware ESXI, VCS, VxVm, ZFS, LVM, EMC, LPFC, HITACHI, LDAP, AD, SAS, Puppet, Hadoop.

**Cisco, Remote A picture containing text, dishware, tableware

Description automatically generated**

**DNS Specialist**  **Jun 2012– Sep 2013**

**RESPONSIBILITIES:**

* Engineered Virtual DNS environments to Support Mobility Network Traffic across several regions in US & implement 4G LTE network protocols. Built environments to test QPS software which is the management software for Mobile Networks like LTE, VoLTE for a major Product Client.
* Analyzed several types of DNS mobility records such as **MME**, **NAPTR**, **A**, **SOA**, **MX**, **NRI**, **RAC**.**LAC** in a DNS environment where 1.4 million queries per second is processed on a Mobile Network.
* Advised DNS **testing** team on **LTE, 4G, 3G, 2G** mobile network testing using AT&T mobile devices to ensure voice and data are properly routed.
* Led efforts like **Rehome** testing, **LTE** traffic moves, **Mega** mobility maintenance windows, **SGSN** gateway changes, **nri** changes, **DNS** cleanups etc.

**ENVIRONMENT:** RHEL, VMWare, QPS, BIND9, Mobility Network Protocols, Mobility DNS records.

**Capital Group Companies, SAT, TX  **

**Information Security Engineer** **Dec 2010 – Jun 2012**

**RESPONSIBILITIES:**

* Implemented **BTE (Break the Envelope**) that enables one time elevate normal user’s access to higher **privileges** to troubleshoot application related issues in Production environment.
* Worked on **LAMP (Linux, Apache, MySQL , Perl, Php)** to develop internal domain websites called [http://cgweb](http://cgweb/) and [http://getz](http://getz/) to share info within the company’s domain.
* Provisioning and migrating user, application-level access to newly built, migrated servers using Centrify

**Direct Control**, **Direct Audit**, **Direct Authorize** modules.

**ENVIRONMENT**: Perl, Python, Centrify-suite, Sudo, AD, LDAP, KSH, BASH, RHEL, HP-UX, Windows.

**THOMSON REUTERS, ROC, NY image001**

**Senior Engineer Jan 2008 – Dec 2010**

**RESPONSIBILITIES:**

* Did Capacity Planning and Migrated over 2000 physical servers to virtual servers to reduce data center power consumption costs.
* Developed shell scripts to profile a physical server and copy the configuration to virtual server during cutover.
* Developed a distributed python script that allows to execute shell scripts on multiple target nodes.

**ENVIRONMENT:** RHEL, AIX, HP-UX, SUSE, Solaris, VMWare, Websphere, MQM, Python, BASH, Service Manager, Oracle, Tomcat.