

Vimal Daga

Chief Technical Officer (CTO) – LinuxWorld Informatics Pvt Ltd

Professional Experience & Certifications:

I Professional Experience

During this period, has been engaged with various corporate clients on different domains and has been involved in imparting corporate Training programs and Consultancy for various technologies that covers the following:

A. Cloud Computing Technologies – Deployment, Testing & Security

- Design, build, maintain and operate one of the largest open stack based cloud deployments with all the component, Nova, Glance, Swift, Horizon, Keystone, Neutron, Cinder, Heat, Ceilometer, Trove, Sahara, Ironic, Zaqr, Manila, Designate, Barbican, Searchlight, Magnum, aodh, cloudkitty, congress, freezer, mistral, monasca-api, monasca-log-api, murano, panko, senlin, solum, tacker, vitrage, Watcher
- Capacity management, and provisioning. Maintaining and troubleshooting
- Setup and manage a multi-node Openstack environment with docker implement and provision with Devops tools
- Designs, builds, and manages enterprise Redhat RHOSP and Helion OpenStack (HOS) Cloud environments. That involve creating capacity collection and monitoring capabilities, upgrade projects, customer consultations, operations, and design enhancements
- Have worked as an Openstack Consultant and also has strong knowledge of SDN, database design, networking and storage.
- Managing and Configuring Virtualization Technologies Over the **Hypervisor Xen, KVM, EXSi**
- Works and and Managed Full **RedHat Virtualization Technology** Product RHEVM, with complete migration and datacenter Configuration
- Works on Virtualization Products Like **VirtualBox, VMware Workstation, Virt-Manager**
- Develop Over own Virtualization Frontend Over **KVM using Python API**
- Fully Configure and Manage **Amazon AWS** Cloud for Huge Topology
- Implement Data Virtualization (DaaS) to application data using Delphix , to captures and stores a copy of production application data, including ongoing changes
- Use Delphix to delivers virtual copies for application development, reporting, troubleshooting
- Set Each and Every Amazon AWS Products like **EC2, VPC, ELB, S3, Glacier, EMR, DynamoDB, EBS,RDS, IAM**, many more
- Works at Architect Level on **OpenStack Cloud** and Configure for Public and Private Architect
- Managing and Implementing Each Stack of Openstack like **Nova, Cinder, Glance, Keystone, Horizon, Qpid, Swift, Neutron/Quantum**
- Setup Multi Node Environment of **OpenStack Over VLAN, GRE tunnel**
- Configure Distributed Cloud Storage using **GlusterFS** filesystem
- Deploy our OWN cloud and Architect each Service by own code using Python like **SaaS, Staas, Naas, Paas, laas**
- **Cloud PaaS – RedHat OpenShift & Google App Engine**

- **Cloud IaaS – RedHat OpenStack, AWS, Microsoft Azure & Google Compute Engine**
- Managing and Configuring Message Queue in distributed application using **Apache Qpid, RabbitMQ, Apache AMQ, Amazon SQS**
- Setup Advanced Message Queuing Protocol (**AMQP**) for Middleware interoperability

B. Sr AWS Cloud Principal Consultant, Integrator, Architect and Corporate Trainer

- Automating and improving infrastructure, using Chef / Opsworks for configuration management in AWS
- Configure Event driven architecture using Lambda service
- Implement scalable and microservices over Elastic beanstalk
- Integrate Redis from Elasticache with onboarding apps
- Implement Amazon Web Services (AWS) extensively , having managed services and applications in a large AWS cross-account environment leveraging IAM and federated SSO and integrating with PingFederate / Ping Access and Oracle OIM
- Configure Infrastructure as Code using Cloud formation with AWS services including IAM, Virtual Private Cloud, Config, Cloud watch, etc..
- Tuning and Scaling Service with alerting, monitoring and make it optimize uptime.
- Managed AWS services with SDK and Create Multitier stack integrated with SQS and Configuration management and automation experience with Ansible, Python, and Boto
- Experience with databases such as Oracle, Mysql, Postgres, DynamoDB and Redshift
- Security background and experience with DDOS mitigation and IDPS
- Experience managing Hardware Security Modules (CloudHSM, Safenet Luna SA, etc)
- Production experience with Docker and Implemented through ECS services
- Strong Experience with All the AWS components like EC2, ELB, Auto Scaling, launch Configurations, S3, Glacier, Lifecycle rules for storage, VPC, Route 53, Cloud watch, Cloud Trial, RedShift, Volume and Snapshot management, SNS, IAM and Roles.
- Architect of public and private Workload and integrate onboarding application with Openstack and cloud platforms (AWS)
- Experience in Migrating S/W components to AWS.
- Creating snapshots and amazon machine images (AMIs).
- Setup VPCs in AWS with private VPN integration
- Application deployment and data migration on AWS.
- Configuring Route 53 and DNS failover.
- Configure Code pipeline service and integrate with code commit and Automation and continuous integration processes with Jenkins & Team city.
- Code repository management, code merge and quality checks with various tools.
- Redesigned infrastructure for high availability using multiple AWS availability zones.
- Development, Acceptance, Integration, and Production AWS Endpoints.
- AWS Cloud watch to monitor environment.
- Developed and maintained automated infrastructure using puppet and AWS to migrate existing applications.
- Implement Complete pipeline on DevOps, Cloud Computing, Virtualization and Storage technologies with aptitude for solving Operations challenges
- Proficient in IT environment with a focus on DevOps and Automation projects. Designed and

implemented automated installations using Open source tools. Experience in Deploying, maintaining and integrating services on Cloud Platform [AWS]

- Setup all AWS services with AWS CLI & APIs and integrate with Mobile Apps
- Experience in creating and updating Puppet Master & modules and pushing them to puppet agents.
- Hands-On Experience in building Continuous delivery environments using Jenkins, Git/GitHub, and Collaboration tools, AWS Cloud formation and Puppet
- Implementing Splunk Cluster on AWS and Experienced in monitoring health checks using AWS Route 53, CA Wily, Splunk & SiteScope

C. Analytics, Application & Business Intelligence Tools

- Experience on the concurrent, transactional, persistent Java platform, which is the backend supporting structured and unstructured big data indexing, time series analytics, event correlation, real-time streaming, and event based alerting in AppDynamics
- Managing and Monitoring various metrics to analyze performance of application hosted on PaaS platform using Appdynamics for microservices
- Monitor multi-tier architecture using AppDynamics Platform deployed on Cloud
- Monitoring slow queries and finding bottlenecks
- Install App Agent & Machine agent
- Complex Application monitoring in Appdynamics
- Create Application Dashboard and manage Transaction Snapshot / Scorecard and Diagnostic session
- Codelevel issue report and Monitor and Analyze
- Configuring Dashboards and Charting Data and Alert Log / Troubleshooting
- Creating and Managing Reports and Portal Administration
- Account Details and User Management in appdynamics
- Hands on experience on implementing web SSO solution using Ping Access & Ping Federation products from PingIdentity
- Consult to Drive and lead IAM Security projects for the organization
- Subject Matter Expert in MFA / SSO / Ping Federate / SAML / OAuth 2.0 / OpenID Connect(OIDC)
- Managed Corporate Ping Federate Environment for SAML partnerships and Federation SSO with third party applications
- More Than 4 years' experience in Splunk Enterprise. Deploying large data analytics architectures for customers mainly in the Banking section, Governments and Security companies. Consult and Solutions to Over 30 Splunk projects and over 40 Corporate Batch Trained
- Integrating Splunk with Arcsight and Splunk for Security and Risk Analysis including Information Asset Management and SIEM.
- Architecture design and implementation of Splunk solution
- Platform optimization
- Design and implement indexers and search heads Clusters (+migrations)
- Implementing distributed Splunk and ES
- Configuring Splunk heavy forwarders to receive logs using push or pull
- Writing complex correlation searches for data analysis and notable events
- Writing optimized searches for realtime and historical data analysis
- Writing custom apps for field extractions and data normalization

- Developing and deploying customized configuration apps for distributed Splunk
- Writing field extractions for desired fields out of proprietary application data
- Creating reports and correlated alerts for stake holders about application behavior and anomalies
- Data aggregation and summarization by summary indexing and acceleration
- Writing transaction searches and data normalization
- Integrating Splunk with AD servers for ldap authentications or SAML PING FEDERATE, DBs for enrichments, Hadoop servers for parallel processing using Hadoop Connect
- Upgrading stand-alone Splunk to distributed Splunk implementation
- Writing custom inputs, props and transforms to have correct event-breaks, field extractions and transformations
- Strategizing and writing custom configurations for data routing and selective indexing for the location wise forwarders
- Developing interactive dashboards, reports and optimized search queries for users
- Implement Data Virtualization (DaaS) to application data using Delphix , to captures and stores a copy of production application data, including ongoing changes
- Use Delphix to delivers virtual copies for application development, reporting, troubleshooting
- Implement Ping Identity's PingFederate Single Sign On (SSO) solution for centralized management and audit of user program access. Users simply log on to a PingFederate portal, then access a pre-selected list of applications without need to re-authenticate.
- PingFederate, Security, Oauth 2.0, e-business security, SAML, Social Login, Identity providers - Google, Facebook, Digidentity, SSO, Expert opinions, Security scans, Federated Identity & Access management, Cloud Identity
- Deep experience with Continuous Integration systems, Source Code Management systems, Build systems, Build validation systems using Tableau & BIRST
- Building a high-performance backend to a web-based analytics tool using Tableau & BIRST.

D. Elasticsearch Architect and Implementation Specialist, Logstash and Kibana Implementation Specialist.

- Installation, configuration and maintenance of Elasticsearch Linux server based system and network applications.
- Worked on Azure/AWS Cloud for setting up ES Cluster for API's.
- Fixing Bugs related to ES.
- Writing ES Query for Development.
- Optimizing the performance of Elastic Search server.
- Preparation of ES Settings and Mapping for Elastic Search Indices.
- Bulk loading data Using Curl commands.
- Upgrading & Maintenance of ES cluster.
- Worked in shell scripts for automatic bulk load.
- Built high-throughput and fault-tolerant river to pre-compute and pipe MongoDB, and RabbitMQ data into Elasticsearch
- Built a tool which simplifies the creation of complex nested Elasticsearch queries
- Transformed data from Apache Spark into a schema optimized for complex analytics in Elasticsearch
- Refactored experimental tools written by previous developers into a standardized technology stack, and generalized libraries wherever possible

E. DevOps & Containers Automation Technologies:

- Integrate and provide consulting with large client base to devops chef tools for build design to testing tools with BDD and TDD approach like serverspec, chefspec, inspec, rspec, foodcritic, rubocop, berkshelf integrate with test kitchen with driver base of ec2, vagrant, docker
- Implement chef using planned cookbook, roles, environment and by creating custom resource (LWRP2), library with encrypted and data bag vault
- Deploy Ansible devops tools with ansible container and tower and write playbook for cassandra, bigdata hadoop and spark infrastructure.
- Tuned ansible play with facts and resources and create custom fact and resource module
- Build large infrastructure with Puppet devops tools with dynamic node classifier with ENC
- Implement Puppet Hiera and create custom facts and modules and optimized classes and manifest file
- Have experience with managing Micro Services implementing using Docker
- Microservices Spring boot/Spring cloud, Dropwizard
- Expertise in Java/ J2EE, Microservices , Spring Boot, Spring Cloud, EJB, terms of designing and implementing systems.
- Model and build scalable Microservices components/ APIs
- Model object for no sql DB
- Model and build integration flows on various API development platform
- Perform pair programming
- Build test scripts for Microservices components
- Decompose an existing monolithic into Microservices architecture
- Created Microservices architecture for new development
- Define, develop and manage API lifecycle or PaaS
- Define, develop components compliant with Microservices architecture patterns
- Define and model cloud based persistence storage
- Integrate with cloud based storage, on-prem applications / integration layer
- Define, develop runtime models for Microservices architecture
- Define, develop highly scalable deployment model for Microservices
- Implement Microservices on Docker Containerized environment
- Implement system deployment & management systems (Chef/Puppet/Ansible/Salt)
- Implement complete workflow with Devops developer tools – GIT/svn/perforce/AWS codecommit, CodeHub, Bamboo, Jira, Artifactory/ nexus sonatype, Grunt, Gulp with Java and other build tools - Gradle, Ant, Maven, Rake
- Integrate CI/CD pipeline using Bamboo/Jenkins/Hudson/teamcity according to client needs that complete code workflow management with AWS codepipeline / Gitlab with CI – continuous inspection server sonarqube
- Implement workflow management with automate dollar universe
- Integrate Monitoring and reporting tools for e.g. Nagios, New Relic with devops automate workflow and artifact and apps business transition monitoring with APM tools appdynamics
- Implementing WebServers and LoadBalancers Apache HTTP Server, Apache Traffic Server, Nginx, HAProxy with Jboss/tomcat and integrate elastic search,logstash and kibana stack (ELK)

F. ServiceNow

- Worked and consultant ITSM - ServiceNow
- Expert understanding of ServiceNow development and administration
- Expert configuration and customization of all aspects of ServiceNow - Workflow, UI, CMS, PA etc.
- Development of required integration components - HTML, CSS, XML, JavaScript/AJAX, Web services, SOAP, REST API, email, Mid Server etc.
- Experience in supporting delivery of successful technology transformations and adoption of new practices.
- Creating updates
- Testing and implementing those update sets into production
- Administering and configuring the ServiceNow tool
- Developing enhancements to the tool
- Service-Now Administration and cloud training
- Creating workflows
- Modifying out of the box scripts
- Creating new catalogue items
- Managing and developing Service Level Agreements (SLA) in ServiceNow instance

G. BigData – Data Analysis Platform

- Setup Complete **Big Data Hadoop** Technology of Multi Node Cluster
- Manage Each and Every Component of big data for distributed storage **HDFS**, distributed computing **MapReduce** , Distributed Scheduling **YARN**
- Works on Big Data Hadoop Related Framework like **PIG, HIVE, HBase, Oozie, Zookeeper, Flume, Sqoop, Splunk** many more
- Developed **Own Web Application** to implement big data hadoop infrastructure at one click with YARN Resource Manager & Managed Hadoop 2 Resource Manager Using Mesos
- Deployed Many Processing Engine and Apps Over **Spark Framework**
- Worked on Real Streaming Processing on **Storm API** and integrated with **Kafka MQ**
- Developed lot of business logics on **Scala** Platform using **Spark API**
- Graph Database and Processing with **Hadoop/Giraph, Spark/GraphX, Neo4j**
- Implement **Neo4j** system and cluster
- **Neo4j embedded** in Java/python application and integrate with RestAPI
- Analytic with **Cypher** query language
- Machine Learning using **Mahout**
- Experience implementing and validating machine learning (ML) solutions on real-world applications mainly for IT & ITes Industry.
- Main interests are optimization approaches to machine learning and data mining, with emphasis in kernel methods
- Worked and Deployed **NoSQL** and Cluster Based database System like **HBase, Cassandra, couch-base, DynamoDB, Maria DB** to manage unstructured or Semi–structured data
- Develop Data Analysis and Mining Project using **R & SAS programming**
- Cloud Based data analysis tools – **Amazon EMR**

H. Web Application Technologies – Development, Security & PenTesting

- Developed Groovy, Grails, and HTML/JavaScript Web Apps for multiple companies in industries as varied as Telecom & IT.
- Have Done Altova MAPFORCE for XML creations and generate dynamic code using map force
- Working with flat and other file format and mapping with database in MapForce
- Experience in web application development, maintaining security of web applications, performing security auditing on web applications and resources.
- Developing lot of internal CGI based and Network Based tools using Python Language
- Build E-commerce Apps using PHP and Other CMS Framework like Wordpress, Joomla.
- Audit and Testing Web Bugs and Analyse Security Vulnerability like SQL-Injection, XSS, CSRF, Cookie Manipulation, Buffer Overflow, Many more in Web Application.
- Worked on Web Technologies like **HTML4/5, CSS2/3, HTML-DOM, DHTML,XML, JQuery,Ajax,JavaScript.**
- Expertise in RDBMS technology like MySQL, Sqlite
- Having good Exposure in performing Web Application Penetration testing on web applications manually and using some tools.
- **Penetration Testing** Risk Management Network Security Code Audits, Malware Analysis
- **Vulnerability Assessment** Business Continuity Forensic Investigation Exploit Development
- Specialized experience in Information Assurance and security program management, risk management, network and systems penetration testing and vulnerability assessment
- Proficient in the testing and analysis of benchmarking the application against industry standards such as **OWASP ASVS, Top 10 and SAN**
- In-depth knowledge of System Administration over Any Web Application Framework and Platform including securing the platform. Experience on **IDS/IPS** like Snort, OSSEC and implementation of **VPN tunnels over IPsec**. Experience in implementing and managing IPsec tunnels across different production network
- Application security assessment of numerous web applications and mobile applications using Professional Burp Suite, Acunetix,etc.
- Risk Assessment of different vendors and vendor's applications, Security incident analysis and reporting for multiple Clients. Documentation and Review of various information security policies and procedures. Develop documents for offering of assessment services. Conduct the functional and business logic testing in the security testing estimator.
- Integrating Web services Architecture API using **SOAP and REST** to parse web data
- Configure Web Server Like **Apache Tomcat, Apache HTTPD, nginx** with SSL, Proxy, Authentication Support and Tuned or Optimized for Performance and Load Analysis
- Implement Infrastructure Monitoring tools like **Nagios** and Tuned Some internal SNMP Feature for Extra Support and Connect to External API for Reporting

I. RedHat & Linux Based Technologies

- Configured & Implemented RedHat Satellite & OpenSource SpaceWalk
- Configured Satellite with Katello, Candlepin, Foreman, Pulp & Automated through Puppet Modules
- Upgraded & Migrated from RedHat Satellite 5 to Satellite 6
- Integration of RedHat Satellite with other tools namely Dockers, Nexus Sonatype & created customized channels with real implementation use cases.

- Write **SELinux custom policy** for enterprise level application with their daemon type transition, port binding, boolean to control security feature
- Manage and configure **MLS and MCS using SELinux** for high security driven platform for enterprise
- Worked on **docker container MCS separation by svirt** and enabled customize enforcing type of different container
- Managing Linux System Administrator Task like Performance Tuning, Kernel Re- compiling, MBR and GPT parameter tuning, Format understanding like ext2/ext3/ext3/xf, Partition managing like swap, raid,lvm, runlevel till rhel6 version and Systemd management from RHEL7,many more
- Configuring **Linux Server on RHEL** server like telnet, openssh, ftp/sftp/ftps, http/https, samba, nfs, dns,dhcp, nis,smtp sendmail, smtp postfix, ldap,ntp, tftp, many more
- Implement and **Test Security on Linux** System like SELinux, Firewall – Iptables / FirewallD, ACL, Implement Kerberos Server and AAA server – TACACS/ Radius

J. Programing Languages

- Has Done High-End Automation scripting in **Bash, Perl & Ruby**
- Worked on other languages namely **Python, PHP, Java Script, Scala, Go**

II Professional Certifications

- Chef Certified Developer
- RedHat Certified Architect (RHCA) – Level 9
- RedHat Certified Instructor (RHCI)
- RedHat Certified Enterprise Deployment & Systems Management (RH401)
- RedHat Certificate of Expertise in Performance Tuning (RH442 – RHEL7)
- RedHat Certified Satellite Administrator
- RedHat Certified in Containerized Application Development (RH276)
- RedHat Certified in Contanier Administration (RH270)
- RedHat Certified Expertise in Ansible Automation (DO407)
- Red Hat Certified on OpenStack Cloud (CL210)
- Red Hat Certified on Cloud Storage – Glusterfs (RH236)
- Red Hat Certified on Virtualization –RHCVA
- OpenShift Enterprise Administration (DO280)
- Linux Foundation Certified Engineer (LFCE)
- Cloudera Certified Training on Big Data Hadoop –CCA4
- Amazon – AWS Certified Solutions Architect
- Amazon – AWS Certified Developer
- Amazon – AWS Certified SysOps Administrator
- Certified Ethical Hacker – EC-Council (CEH)
- Certified Ethical Hacking Instructor (CEI)
- EC-Council Certified Security Analyst (ECSA)
- Red Hat Certified System Administrator (RHCSA)
- Red Hat Certified Engineer (RHCE)
- Red Hat Certified Security Specialist (RHCSS)
- Red Hat Certified Network & Security Specialist (RHS333)
- Red Hat Certified on Directory Services (RHS423)
- Red Hat Certified on SELinux Policy Administrator (RHS429)
- Cisco Certified Network Associate (CCNA – R&S and Security)
- Cisco Certified Network Professional (CCNP – R&S and Security)

- Cisco Certified Systems Instructor (CCSI)
- PHP Certified Developer
- Python Certified Developer

Knowing him better on Personal Front:

Vimal has always had a knack for seeing what others don't yet see. Back in 2003, when no one was fretting about the potential of Linux in entire of Rajasthan, Vimal had the foresight to start a company with INR 15000 that would eventually grow into LinuxWorld – one of the India's leading organization and first in state of Rajasthan working dedicatedly on Linux, Security & Open Source.

Stemming from his mission of Linux Training & Development, Vimal established his feet in about 90% of the engineering colleges in India, personally conducting workshop on BigData, Cloud Computing, Security & Linux. He transformed the limited awareness of Linux then, into the process of continuous learning by unveiling the potential a Security Specialist has in any technology-driven organization. After guiding the company into Educational institutes, Vimal introduced training programs for Corporate in Rajasthan and later PAN India for an accepted fact that technology evolves continuously and thus continuous learning needs to be incorporated not just in students but also the corporeity's.

Abundant knowledge and skills, continuous learning philosophy, training exposure, experience of having worked in different environments has helped him emerge as a challenging leader in any demanding situations.

Vimal has never been afraid to try on different hats. When he was pursuing his Bachelors in Engineering and MTech, he developed his proficiency in churning out columns on SELinux, OpenLDAP, UDEV-Device Management and many more for 'LINUX For You' magazine. He practices photography as his hobby and tours some of the exotic places round the globe every year in order to keep him going in life with no less motivation and curiosity.

At 33, Vimal is filled with aspirations to achieve and enable every individual sharing a relationship with LinuxWorld to write success stories of their achievements professionally. In his words, **"We have only started a fresh, and there is a plenty of world out there for us."**

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