



### About Customer: HEALTHY MOTHER

The Sanctum (healthy-mother.com) are a Premium Natural Birth Center, based in Hyderabad, India. Since 2007 they have been the preferred choice of mothers and families to welcome their babies into this world. They are India's most sought-after destination for women who want a Natural Birth, away from unnecessary medical interventions and yet give birth in a safe environment.

They are the pioneers of the Midwifery Model of Care in India, which is holistic, respectful of mother's wishes, Natural Birth focused, and provides for Continuity of Care for mother and baby. The Midwifery Model of Care is an increasingly preferred option for empowered women who want to take control of their childbirth, and be a partner in the decision-making process during her pregnancy, labor, birth and post-partum care for her baby and post birth wellness for herself.

The company is co-founded by Dr Vijaya Krishnan, who is the pioneer in introducing Autonomous Midwifery in India. Dr Vijaya is a passionate advocate for the rights of women to make informed choices about their own birth. Since founding of the company, she has caught more than 1000 babies in every kind of situation – First time low risk women, Women with complicated needs, VBACs (Vaginal Birth after Previous Cesarean), VBA2C (Vaginal Birth After Two Cesareans), Breech Babies. She has been a Thought Leader and relentless Campaigner for positive change in birth practices prevalent in the medical system.

### Customer Challenge

**HEALTHY MOTHER** was hosting and managing its multiple applications such as customized ERP for field operatives and Accounting Software, for their diversified business on the On-Premises. Healthy Mother was looking to shift the complete on-premises infrastructure to cloud, with the intension to:

- Manage the infrastructure remotely
- Gain better observability of the infrastructure
- Automated IT operations to reduce their administrative works on Infrastructure management.
- Security of the infrastructure & data.
- Centrally manage the infrastructure at scale
- Highly Available and Elastic Infrastructure with Cost Optimized and Pay as you go model.

To address these requirements and Challenges, Healthy Mother engaged with Cloud Workmates to implement the application infrastructure on the AWS Cloud to mitigate all the challenges they had.

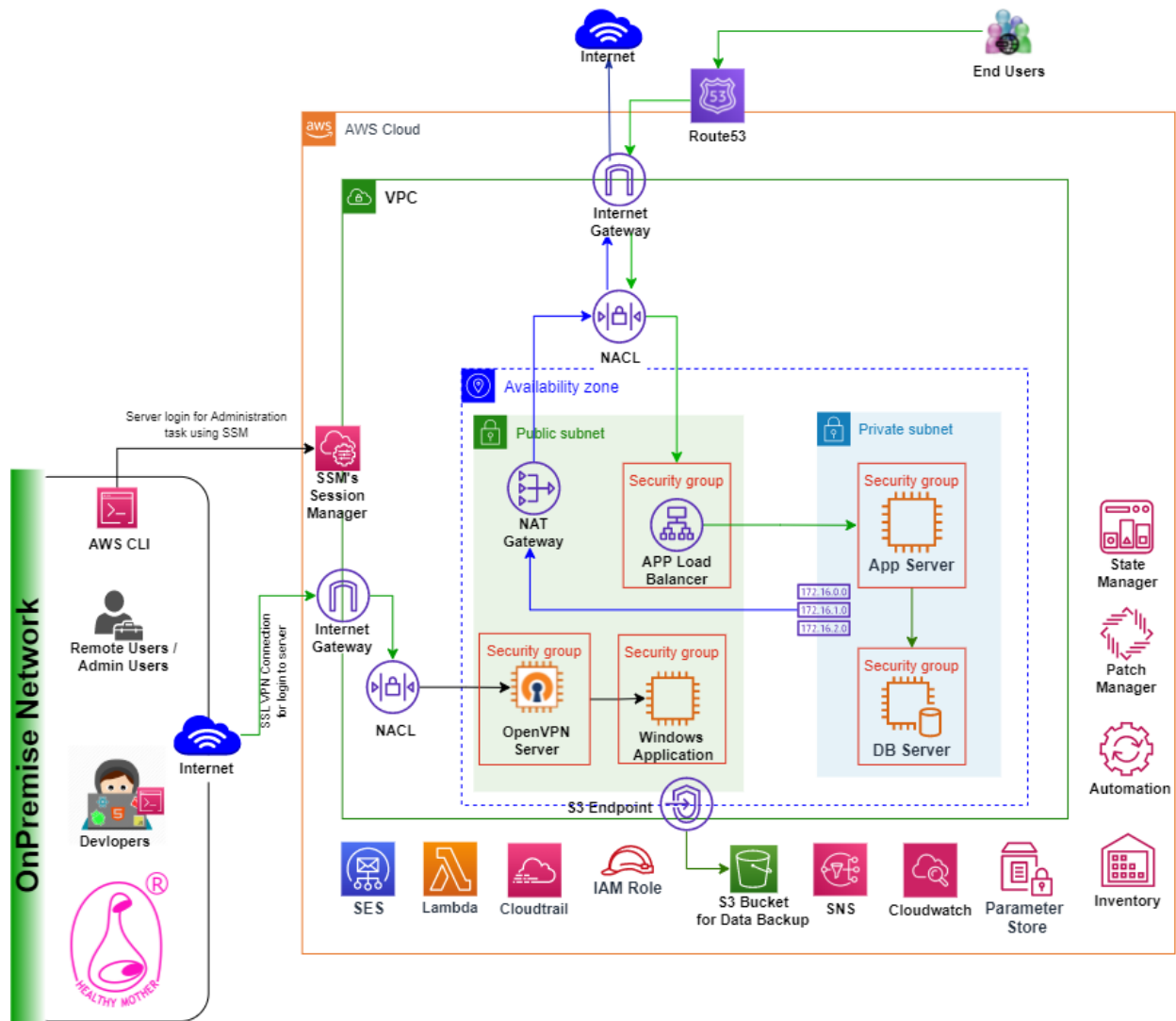
### Core2Cloud Workmates Solution Approach

Our AWS certified solution Architects understood their application, dependencies and infra in detailed and provided a detailed approach to migrate the infra with minimal down time. The application architecture for the AWS cloud was designed with the right balance of AWS services to reduce operational overhead while keeping the costs low. Most of

the undifferentiated activities on the cloud was automated, thus reducing the overall time and risk in deployment of new services. The key aspects of the solution design included:

- Workmates had suggested a highly scalable and secured solution for their application which needs to be hosted on AWS. The Workmates hosted their complete workload on Amazon Elastic Compute Cloud (Amazon EC2) providing secure, resizable compute capacity in the cloud.
- ERP application server was mapped under ELB we enabled the SSL certificate and used Route 53 for DNS.
- The Accounting Software application was based on Windows Server operating system as per application compliance.
- This too was hosted on the public subnet but is only accessible by the local IP via the SSL VPN. No Elastic IP is maintained.
- Backup policies were implemented using AMI & Snapshots. All the Infra & DB backups are stored in S3. Backups & Recovery were automated using scripts.
- Open VPN server and web server placed in Public subnet and their mission critical ERP and accounting application was placed in private subnet.
- All systems monitoring is done using AWS CloudWatch. AWS CloudTrail is used for recording API calls to AWS, the logs are kept for 90 days.
- AWS Config setup for Continuous Monitoring, assessment and change management for the AWS resource's configurations.
- DB environment variables are mapped to AWS SSM ParameterStore SecureString Value and was encrypted using AWS Key Management Service.
- SSM Patch Manager configured to scan EC2 instances and report compliance on a schedule, install available patches on a schedule, and patch or scan instances on demand.
- SSM Session Manager was implemented to provide One-click access to instances from the console and CLI, and reducing need to manage bastion hosts or SSH keys.
- SSM inventory was configured to collect and store metadata about applications, Windows drivers & registries, AWS service's agents, and OS version to query respective data and quickly determine which instances are running the software and configurations required by the software policy, and if any instances need to be updated.
- State Manager was configured to automatically Schedule scripts for Installation, configurations and upgradation, of various software against EC2 instances.

## **Solution Architecture**



## Results and Benefits

Workmates has successfully migrated their workloads on AWS environment while meeting all security & high availability guidelines as per the stated compliance directives. The following are some of the key benefits to the customer

- Migration of application to AWS cloud using various native AWS services and thereby eliminating the on-premises hardware dependency. Now, users able to connect from anywhere using secure connectivity.
- With AWS Systems Manager Inventory, we have been able to improve visibility into the inventory of our AWS environment. Now, with one click customer has visibility over AWS resources that are being consumed by the development and application teams across the organization.
- Automated Patch management With Systems Manager, has dramatically reduced the time that administrators spend on software updates. With Systems Manager, engineering teams and customers have gain peace of mind.
- With State Manager, customers now can easily define software configuration, apply against a target set of instances, and then find out if the target fleet is in the expected state and the configurations are applied

consistently to all the instances in the group. Which helped the Customer to focus on other important aspects on their business rather than working on configurations drifts.

- Enhanced monitoring and alerting capability from the Amazon CloudWatch will notify the team on any production issues so they can mitigate it immediately.
- The automated deployment of the AWS stack using CloudFormation has freed developers of infrastructure administration and scaling tasks.
- Highly available, Secure, and scalable infrastructure made possible by using the different services of AWS.
- Application performance increased compared to the on-premises, AWS infra was found 2x faster.
- The overall security posture on the cloud is improved using cloud native security features like encryption, private networks and continuous compliance was achieved using AWS Config, AWS SSM.

## About Workmates



Workmates core2cloud Solution Pvt. Ltd is an AWS Advance consulting partner and Leading Cloud Management Company in Eastern India. Workmates Core2cloud is a cloud managed services company focused on AWS services, the fastest growing AWS Advanced Consulting Partner in India. We focus on Managed services, DevOps, Cloud Migration and Implementation of various value-added services on the cloud including but not limited to Cyber Security and Analytics. Our skills cut across various workloads like Microsoft, SAP, Media Solutions, E-commerce, Analytics, IOT, Machine Learning, VR, AR etc. Our VR services are transforming many businesses.

Our Vibrant team of 100% certified resources brings the edge to customers for an End to End AWS partner, committed towards quality and supporting their business on a 24X7 basis.