

MIND Helped **Crystal Crop** Attain Business Agility and Flexibility with an Optimized SAP Environment and Migration to AWS



Client Overview

Crystal Crop Protection Limited (CCPL) is an R&D based crop protection manufacturing and marketing company. It is an Agro-Chemical MNC and was established with the noble cause of serving Indian Agriculture with headquarters in New Delhi and overseas presence in Singapore, Australia, and South Africa. CCPL is a 34-year-old company engaged with eight facilities in the manufacturing, formulation, and marketing of agrichemical products – Insecticides, Fungicides, Herbicides, Plant Growth Regulators/Micronutrients and two R&D facilities for Crops and Seeds.

Over the years, CCPL has evolved as a market leader in the growing agro-chemical industry segment.

Business Challenges

CCPL was using SAP ECC 6 and faced the below challenges that impacted their business functions and the efficiency of their resources.

- 1 Lack of IT Hardware capacity planning, including Capex investment and multilevel approvals
- 2 Lack of support and an inappropriate cloud pricing
- 3 Frequent downtime due to storage issues, further impacting the business operations
- 4 Time-consuming and expensive QA refresh
- 5 Unsupported and outdated DB/OS version
- 6 Increased business risk due to lack of proper backup and recovery policy

Our Solution

CCPL partnered with MIND to address the challenges they were facing. Thereafter, MIND SAP team studied and discussed the customer's business processes, aligned the SAP modules accordingly, and took a three-phased transformation approach. Based on the findings, MIND's paradigm for the SAP implementation on AWS included the following alterations in their existing architecture: The complete flow of the solution's functioning consisted of the below steps:

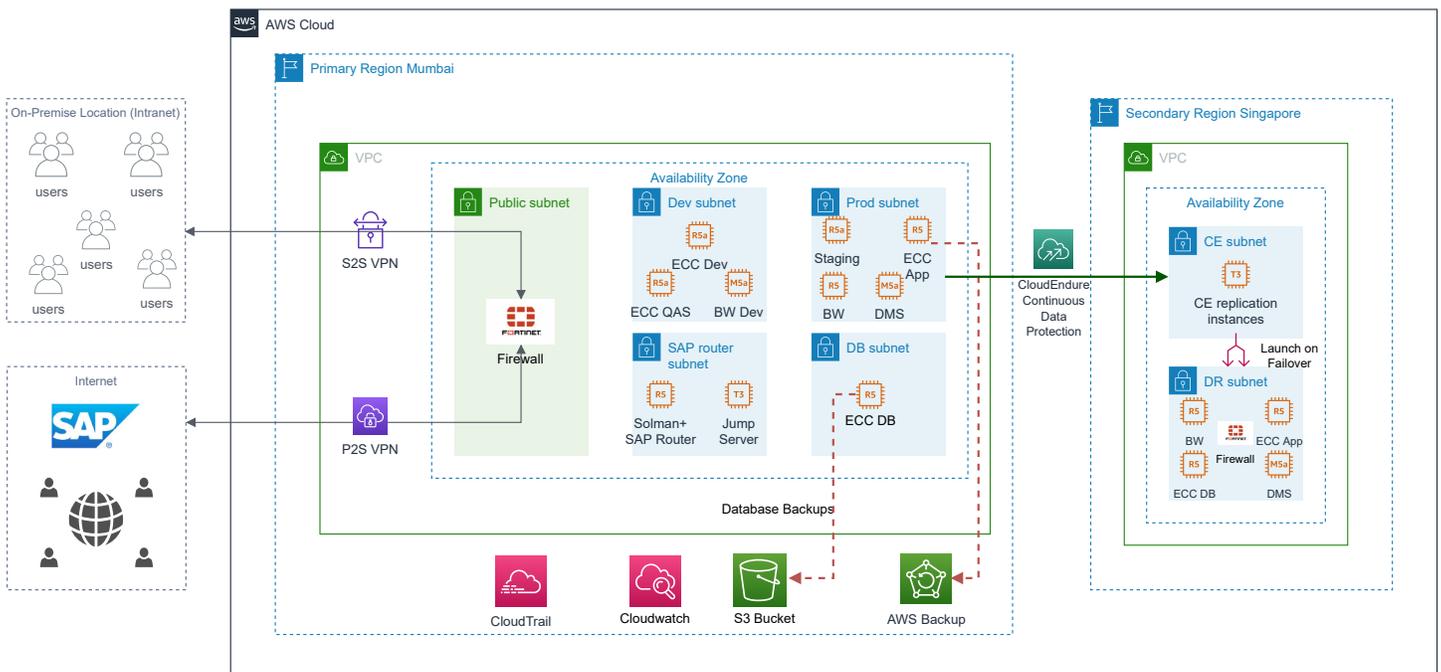
- MIND proposed migrating workloads on AWS to get options for Saving Plan, RI's and Spot instances pricing

- Recommended professionally managed service support and monthly billing option to gain client's confidence
- MIND suggested the option of dynamically adding storage as per the requirement to resolve the downtime issue.
- Initiated customizable QA instances on AWS
- MIND recommended an updated DB/OS version to meet the compliance requirement
- AWS Backup for EC2 and RDS Instances as per RPO and RTO was proposed along with periodic backup and DR approach as per defined policy

AWS services used

- Amazon CloudWatch
- Amazon GuardDuty
- Amazon System Manager
- Amazon S3
- Amazon Lambda
- Amazon Backup
- Amazon SNS
- Amazon SES
- Amazon EFS

Solution Architecture



A Quick View of how AWS Services helped build the Solution:

- **AWS Systems Manager to schedule server activities**

With AWS Systems Manager, the CCPL team was able to view operational data from multiple AWS services and schedule operational tasks across AWS resources, i.e., stopping and restarting an EC2 instance and SAP-based services.

- **AWS GuardDuty to Monitor & Alert for malicious activities**

MIND implemented the AWS security service- GuardDuty to help CCPL monitor and receive alerts for any malicious activity and make informed decisions proactively.

- **AWS CloudWatch to Monitor & alert for the health of the workload**

MIND implemented the AWS monitoring service- CloudWatch to help CCPL monitor and receive alerts for CPU, RAM, and DISK utilization and get an overview of the workload health.

- **Reduced manual intervention and user-friendly AWS cloud environment**

AWS provided an easy and user-friendly environment that enabled quick switching to a development instance in AWS. Also, no manual intervention is required, which otherwise is a tedious task.

- **Maintaining backup and DR approach as per defined policy**

With AWS backup service, CCPL was able to centralize and automate the backup of their application and database as per the defined policy.

- **AWS Autoscaling and Systems Manager Automation to build scaling plans and manage instance states**

With AWS systems manager automation and Autoscaling, MIND helped CPPL automate the responses to demand fluctuations and build automation to configure and manage instances and AWS resources.

Benefits



Seamless application functioning without emphasizing immediate Capex investment



Higher uptime and enhanced performance due to optimized cost and SLA based support



Increased scalability and flexibility, leading to higher uptime with optimized cost



Minimized time, effort & cost with QA on the cloud



Performance improvement and compliance due to DB/OS version upgrades, which ensured the security patches and bug fixes



Time and effort-saving with Backup and Restore

About The Partner

MotherSumi INfotech & Designs Ltd. is a global technology company that offers a consulting-led approach with an integrated portfolio of industry-leading solutions that encompass the entire enterprise value chain. Our technology-driven products and services are built on two decades of innovation, with a future focussed management philosophy, a strong culture of invention and co-innovation, and a relentless focus on customer-centricity.

An SEI CMMI Level 5 company, MIND has delivered best-in-class services to over 200 customers in 41+ global locations across all continents. MIND is a division of MotherSumi Group, one of the largest manufacturers of components for the automotive and transport industries worldwide with 135,000 employees across the globe. Our name itself signifies a relationship of deep trust that of a mother and child. Trust is sacrosanct in all relationships at MotherSumi while working towards our vision of being a globally preferred solutions provider. To know more visit www.mind-infotech.com