Executive Summary

Enterprises are continually evolving their IT landscape to be future ready. An integral part of this IT landscape is the management and upgrade of mission-critical workloads to provide high performance in terms of availability, resilience, security, and agility. Public cloud with its high performance and scalable infrastructure is becoming a natural choice for various core and peripheral workloads like Enterprise Resource Planning (ERP) and ancillary applications. Public cloud can give the much-needed agility, scalability, innovation, and real-time analytics that can enhance the expected outcomes of business applications.

When **Sify** engaged with its client, a leading steel sector organisation, the enterprise was evaluating public cloud services for accelerating its digital journey. The company had recently acquired another steel business and needed to carve out relevant historical data from the on-premise SAP landscape to a new SAP cloud environment. The aim was to achieve speed, scale, innovation, resiliency, and digital readiness for the future.

Sify assured these goals could be effectively met by migrating the carved-out data from the source suite on the HANA (SoH) system along with other surround systems like SAP Advanced Planning and Optimizer (APO), SAP Document Management System (DMS), and SAP Enterprise Portals (EP) to the **AWS** cloud, powered by **Intel's** latest generation processors.

[AWS and Intel](#) work closely to develop technologies optimized for specific workloads and the needs of customers across a variety of business applications. Key enterprise applications - such as SAP - benefit immensely from AWS and Intel technologies which help facilitate the fastest pace of innovation, the broadest and deepest functionality, the most secure computing environment, and proven operational expertise.

A data migration challenge with multiple business and compliance needs to address

This significant steel industry enterprise operates in 26 countries and has a commercial presence across 50 countries, with employees across the five continents. Its core business processes run on the SAP platform with a large number of users distributed in multiple departments and locations.

When the enterprise made this acquisition, it had only a small window to set up a new SAP system landscape and move key business-specific data from the newly acquired business. This was required to meet the statutory and governance requirements. The major concern was how to quickly build the new landscape in the cloud and perform this complex data carve-out and migration within just a few months.

About Sify

Sify Technologies, a Fortune 500 India company, is India's most comprehensive ICT services and solutions provider, offering capabilities around cloud, data center, networks, digital services, security, and systems integration. An AWS Partner Network (APN) Rising Star Partner of the Year 2019 for India, as part of its integrated cloud portfolio, Sify powered by AWS cloud and Intel processors, provides a single-window solution to help customers with their AWS readiness assessment, migration, connectivity, and cloud security. Operating one of India's largest MPLS networks, Sify owns and operates 10 data centres, connecting its network to 48 other data centres across India. Its network spans more than 3,100 points of presence covering more than 1,600 cities in India. With its Cloud@core portfolio of services, Sify is helping customers accelerate their digital transformation with greater agility, flexibility, and choice.

The key challenge was making a clear separation between data that may be transferred, as compared to data that cannot leave the acquired company for compliance related reasons, along with avoiding any impairment to the SAP systems during the carve-out. Post the migration the company also wanted to create a robust and future-ready technology landscape with freedom from fixing typical performance problems to enable greater focus on their core business.

**Investing in the AWS and Intel value proposition presented by Sify**

The enterprise decided to deploy a unified solution over the AWS Hyperscale Cloud - powered by Intel processors. The plan was to merge and create a standardized architecture for its entire SAP landscape of Suite on HANA (SoH), APO, DMS and Portals, so they could achieve a highly scalable, agile, and manageable outcome for its global applications.

After evaluating multiple cloud solutions and service providers, the enterprise chose Sify as its transformation partner, considering its rich experience in managing 400+ cloud customers with over 6 years experience in managing the SAP landscape.

The customer was assured by the industry leading capabilities of AWS and Intel for managing its SAP systems post acquisition, and for making them future-ready. In terms of migrating SAP to AWS powered by Intel, the business case was around optimising the SAP environment, running the SAP applications on the AWS platform to enable the business to become more agile, cost-effective, and secure as compared to running SAP on premises.

More importantly, Sify assured the migration of existing instances from on-prem to AWS with near-zero downtime. Sify also guaranteed avoidance of impairments of the SAP systems during the data carve-out.

"Carving sensitive data and migration of mission critical workloads to AWS environment powered by Intel, delivered strong performance improvements to the SAP systems with more effective utilization of data by way of real time analytics, in-memory computing, ease of access, security and the entire user experience." – Ravi Maguluri, CTO Cloud & Digital Services, Sify Technologies Ltd.
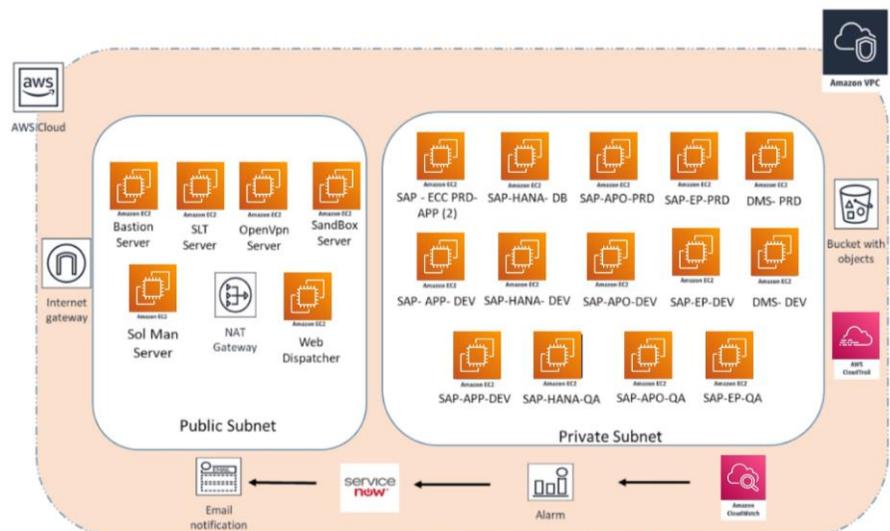
The AWS and Intel solution detail and approach as provided and managed by Sify

For its client, Sify created a private and a public subnet: the private subnet connected mission critical workloads, while the public subnet connected internet facing workloads. Sify built the SAP Sandbox in the public subnet and performed a selective data carve-out from the source system. The data was uploaded in the target AWS environment after two cycles of end-to-end scenario testing and the integration with APO, DMS, EP and other external interfaces was also established in this timeframe.

Sify delivered site to site VPN connectivity with AWS cloud platforms running on Intel's latest generation Xeon scalable processors. Intel's Advanced Vector Extensions 512 (Intel AVX-512) helps to process identical operations across multiple data elements, which takes performance to new levels for mission critical workloads. To summarize for SAP systems, it implies accelerated performance with AVX-512 platforms with an enhanced security framework via AWS resources launched in a logically isolated virtual network.

Significant outcomes and value delivered by Sify Technologies, AWS and Intel

Sify continuously focuses on delivering high performance, availability, security, and cost optimization leading to a high-ROI focused value to its valued steel industry enterprise client.

Sify delivered the AWS infrastructure powered by Intel, connectivity, plus the SAP data carve-out, migration and integration under a single Service Level Agreement (SLA) along with infrastructure managed services and SAP Basis administration for next 12 months.

The level of detailed customizations and functions played a critical role while migrating the mission critical workloads and applications, as customizations were related to the organization's complex business processes. During the entire migration, Sify ensured complete data consistency with an error free data carve-out.

In doing so, Sify ensured minimal business impact with reduced timelines for the entire migration covering all integrations. Sify acted as a true One-Stop solution provider in the entire journey to a smooth cloud migration with management and monitoring of the hosted powerful Intel and AWS Cloud footprint.

About the Customer

This enterprise customer is the world's second-most geographically diversified steel producer. Their operations scale from mining to manufacturing and marketing of finished products. It offers hot and cold rolled coils and sheets, galvanized sheets, tubes, wire rods, construction rebars and bearings.