

Lenovo & CSIR-IGIB accelerate cancer research through genetic analysis

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Partnership with India's leading genome sequencing research institute leverages Lenovo high-performance Genomics Optimization and Scalability Tool (GOAST) architecture



Lenovo, the global technology leader, is collaborating with the CSIR Institute of Genomics and Integrative Biology (CSIR-IGIB), New Delhi, in a unique partnership to advance cancer research by digging deeper into the genetic roots of disease.

This partnership uses Lenovo's high-performance Genomics Optimization and Scalability Tool (GOAST) architecture, featuring 2nd Gen Intel Xeon Scalable processors, to power through ultra-intensive genomic sequencing workloads and help researchers find insights faster.

Lenovo's GOAST is a high-performance computing (HPC) architecture engineered specifically for demanding genomics workloads that is a significant contributor to this initiative.

Working closely with Lenovo's high-performance computing services, CSIR-IGIB deployed a 28-node system—the largest GOAST installation in India to date. By leveraging an optimized architecture and efficient open-source software, GOAST offers GPU-level performance at CPU-level costs, making it an attractive proposition for a public sector body such as CSIR-IGIB.

CSIR-IGIB has seen a significant performance impact from the Lenovo GOAST system for both whole genome sequencing (WGS) and whole exome sequencing (WES) workflows.

"It is through institutions like IGIB that decisive advances in healthcare are being achieved – from treatments and vaccines for acute diseases, to strategies for managing and overcoming chronic conditions. We are glad to partner and provide crucial technical support to IGIB's new Center of Excellence. It is likely to become the largest site for GOAST in Asia Pacific," said Sinisa Nikolic, Director, HPC-AI, Infrastructure Solutions Group, Lenovo Asia Pacific.