



Cisco Data Intelligence Platform

Solution

Data scientists are constantly searching for new techniques and methodologies to unlock the value of big data. They want to distill this data further to identify additional insights that can transform productivity and provide business differentiation.

Artificial Intelligence/Machine Learning (AI/ML) can deliver the results sought by data scientists to further their data exploration. Data lakes have historically been data-intensive workloads, while AI/ML workloads demand increased compute power to operate on the same data set.

Data scientists need to be able to work on both a data lake and an AI/ML platform without worrying about the underlying infrastructure. This creates a challenge for IT administrators, who need to accommodate traditional data lakes analytics while also catering to AI/ML workloads, growing their infrastructure to cloud scale, and reducing the TCO without affecting use.

The Cisco Data Intelligence Platform (CDIP) is a cloud-scale architecture that brings together big data, AI/compute farms, and storage tiers to work together as a single entity while also being able to scale independently to address the IT issues in the modern data center.

Benefits

- Perform extremely fast data ingestion and data engineering at the data-lake level
- Use various types of AI frameworks and compute types (including GPU, CPU, and FPGA) to work on the data for advanced analytics with an AI compute farm
- Gradually retire data that has been worked on to a storage-dense system with a lower cost-per terabyte ratio for better TCO, thanks to storage tiering
- Seamlessly scale the architecture to thousands of nodes with a single pane of glass management using Cisco Application Centric Infrastructure (Cisco ACI™) and Cisco Intersight™

What it does

The Cisco Data Intelligence Platform brings a fully scalable infrastructure with centralized management and a fully supported software stack (in partnership with industry leaders) to each of the three independently scalable components of an IT architecture: The data lake, AI/ML technologies, and object stores.

AI compute farm

In the Cisco Data Intelligence Platform, the AI computing farm supports computation-intensive workloads in a multitenant containerized environment in a Kubernetes cluster.

Hadoop data lake

The data lake in the Cisco Data Intelligence Platform is designed with servers that support high I/O and network bandwidth with little or no network over subscription to help prevent bottlenecks even when the network is scaled out to thousands of servers.

Data anywhere

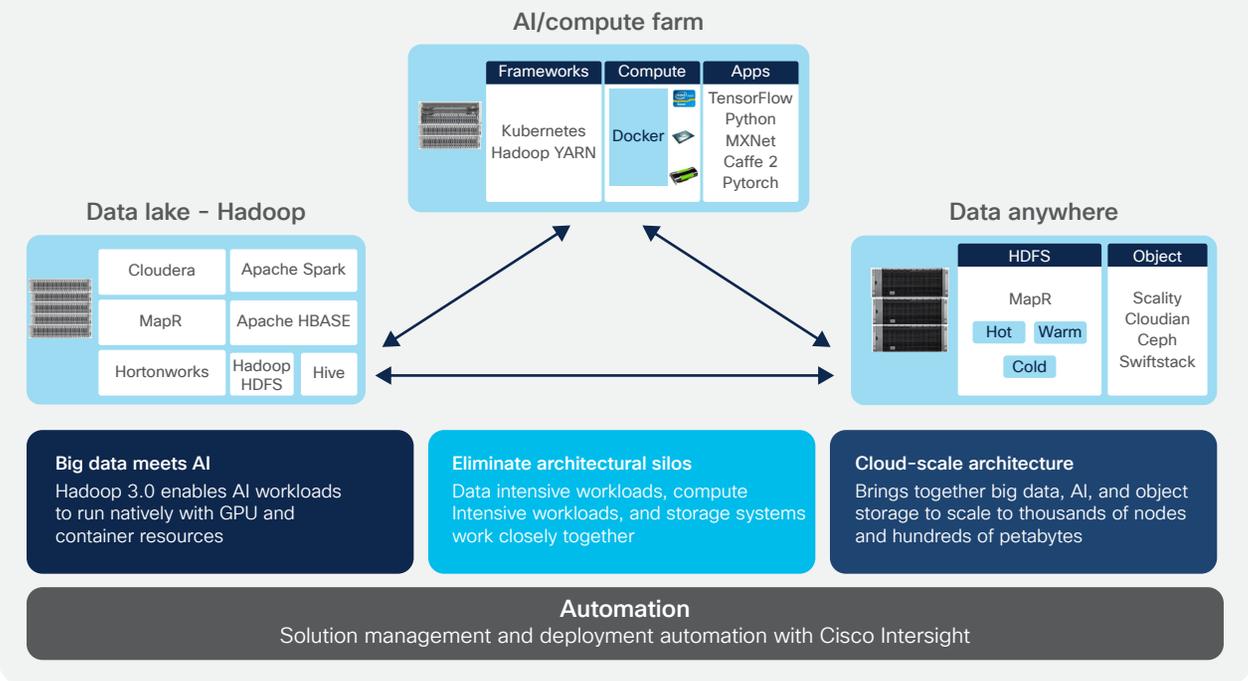
As enterprises collect increasing volumes of cold, warm, and hot data, they have a growing need to retire data to a more cost-effective storage with lower operating cost. Cisco UCS® servers offer solutions that address hot, warm, and cold data needs.

Scaling

CDIP can start from a single rack and scale to thousands of nodes with a single pane of glass management with Cisco Intersight and Cisco ACI. If you've already deployed a big data solution, now is the time to modernize your infrastructure with newer configurations with cascade lake processors and NVMe drives for better TCO.

Cisco Data Intelligence Platform (CDIP)

Unlock intelligence, performance, and simplicity at scale for large data sets



Find out more about Cisco Data Intelligence Platform

Read the solution [overview](#).