



# aDAPt

Pioneering Intelligent systems visibility at massive scale



# Contents

- About aDAPt ..... 3
- Global Visibility ..... 4
  - Global Inventory Visibility Benefits ..... 4
- Scalability..... 5
  - Massive Scale Example ..... 5
- aDAPt Engine - Microservices Architecture ..... 6
- Machine Learning Integrated ..... 8



## About aDAPt

aDAPt is a modular based framework designed to deliver purpose-built solutions to meet the system challenges which our customers face every day.

It's an engine for Information supply chain of Modern Era. It creates a digital bridge from transformations to innovations. With respect to your organization's requirement, aDAPt can extend the solutions to solve your IT, security and business challenges—with the option of deploy on-premises in the cloud or via a hybrid approach. aDAPt provides the solution across the entire Information Supply Chain. It collects the data from different domains it integrates the disparity of various information in to one scalable

platform.

At BFC, we believe that it is our responsibility to enable the organization's information supply chain by breaking down technology silos through infrastructure aggregation, simplifying IT management with a single and holistic user experience, and supporting informed decision making by delivering the right data to the right person at the right time. aDAPt, the platform that gives human touch to Digital Labour with embedded Machine Learning, Deep Learning and Artificial Intelligence.

# Global Visibility

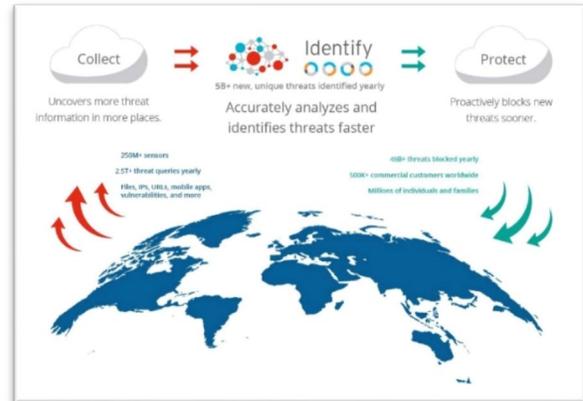
Most of the monitoring tools are managed locally and are not designed to provide strategic decision support capabilities. They don't provide a global view of inventory information across different locations and systems and are limited in their ability to provide access to inventory information outside of the four walls of the location where they're installed.

Gain a comprehensive view of your entire infrastructure addressing the challenges in global data visibility aDAPt engine provides a single comprehensive view of all your inventory information by aggregating inventory from your internal and external locations. You'll be able to see entire inventory available their current usage irrespective of the location and vendor diagnostic with a real time streaming. Provides visibility into global, multi-site Inventory through a single console.

Integrated Information Map application gives a real-time global visibility and insights across your entire infra; on-prem and in the cloud helps user to have a full control on his infrastructure. A centralized, granular view of data inventory

regardless

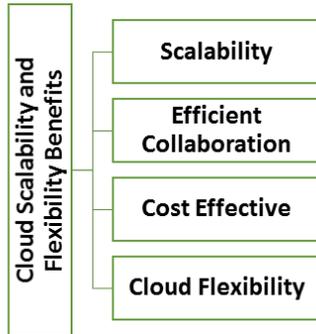
of platform or infrastructure diversity, Microsoft Azure, Google Cloud Platform Cloud Storage, AWS and many more on prem storage vendors.



## Global Inventory Visibility Benefits

- Improved inventory visibility and utilization across the globe.
- Single URL login with great insight for all your inventory.
- Monitors in real time which helps to capture the current usage.
- Provides holistic reporting for the entire environment.
- Centrally defines notification and alert settings.
- Provides a single console for managing the various vendors and platforms.

# Scalability



aDAPt provides everything you need to conduct real-time forensics and log management for all your IT data—without performing complex installations or upgrades, and without the need to manage and scale any hardware or storage. With fully elastic scalability, aDAPt is a fit for any size deployment. aDAPt Engine has a capability to dramatically speed up its ability to derive value from tremendous quantities of machine data. aDAPt platform could scale easily to handle this growth, providing predictable performance and cost even with the ingestion of hundreds of GB of log per day. aDAPt also proved itself to be a flexible platform that can easily ingest data from various Storage and cloud platforms.

Customers depend on aDAPt to make real-time decisions and power their businesses. That means that we process hundreds of petabytes of data across tens of millions of queries daily - all without breaking a sweat. Our service was built, from the ground up in the cloud, to solve the data-rich problems of tomorrow. Our multi-tenant architecture guarantees service-levels while also allowing our customers to take advantage of available capacity when they need it most.

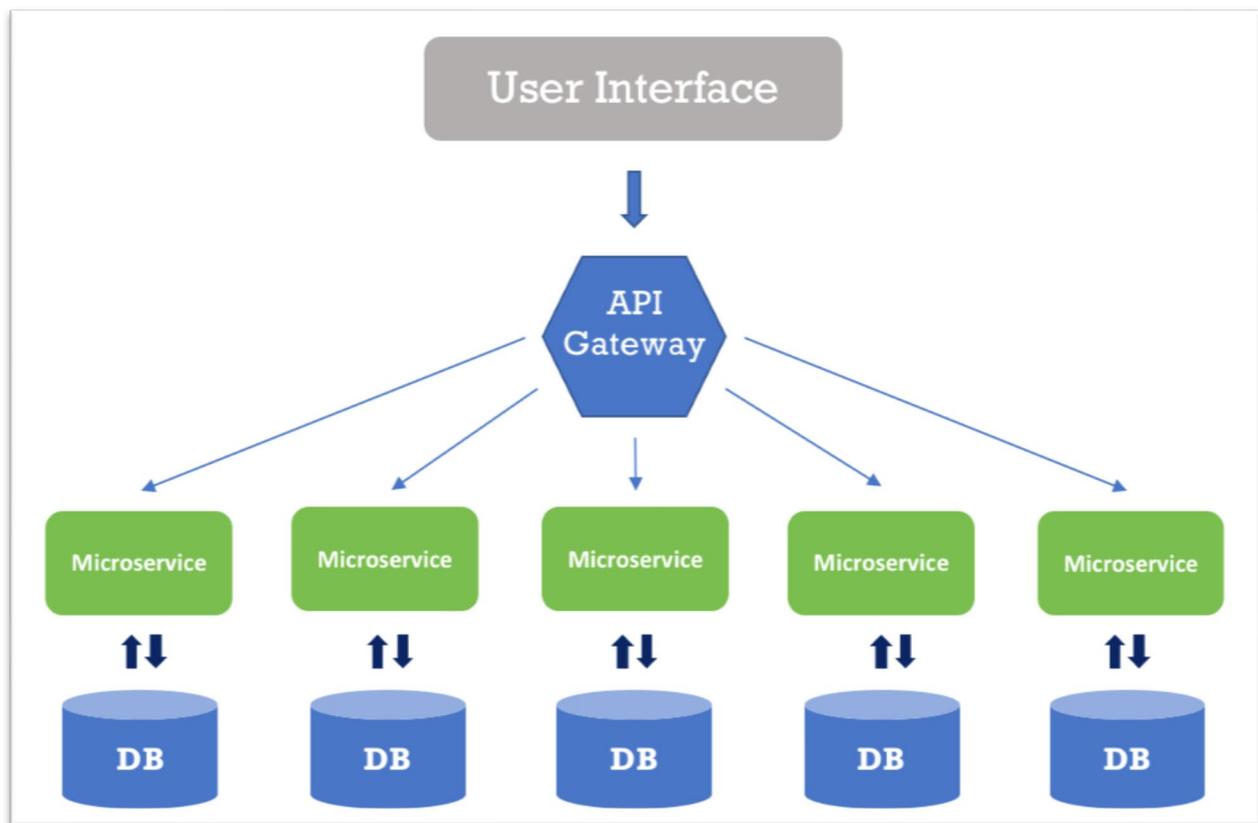
## Massive Scale Example

- Systems: 2000+
- Average components per system: 6000 +
- Collection interval per system: 60 Sec
- Metrics per component per system: 100 +
- Total records per min: 12,000,000
- Total records per day: 17,280,000,000
- Records in 90 days: 1,555,200,000,000

aDAPt is built to scale horizontally as the data explodes

Our microservices-based solution instantly scales each component of the architecture to meet customer demand. This means that our service will never lock you out or slow you down - no matter how much data you send or how many people use it. aDAPt delivered a massive increase in the resources for users' real time and ad-hoc searches and dashboards. Search concurrency is no longer an issue and users enjoy consistent search performance

# aDAPt Engine - Microservices Architecture



## What's So Good About Microservices Architecture?

Microservices are also known as the microservices architecture. It is an architectural style, an approach to software development in which a product is built as a suite of modular services; small, independently versioned, and scalable customer-focused services with specific business goals. As they are independently deployable and scalable, allowing for different services to be written in different programming languages and can also be managed by different teams.

aDAPt architecture is built in such way that entire product is broken down into smaller, more

independent modules. Responsible for highly defined and discrete tasks, these individual modules communicate with each other through simple, universally accessible APIs. This gives the product a feasibility that each component is developed separately, and the application is then simply the sum of its constituent components. Each service runs a unique process and usually manages its own database which allows each service to be deployed, rebuilt, redeployed and managed independently without compromising the integrity of an application.

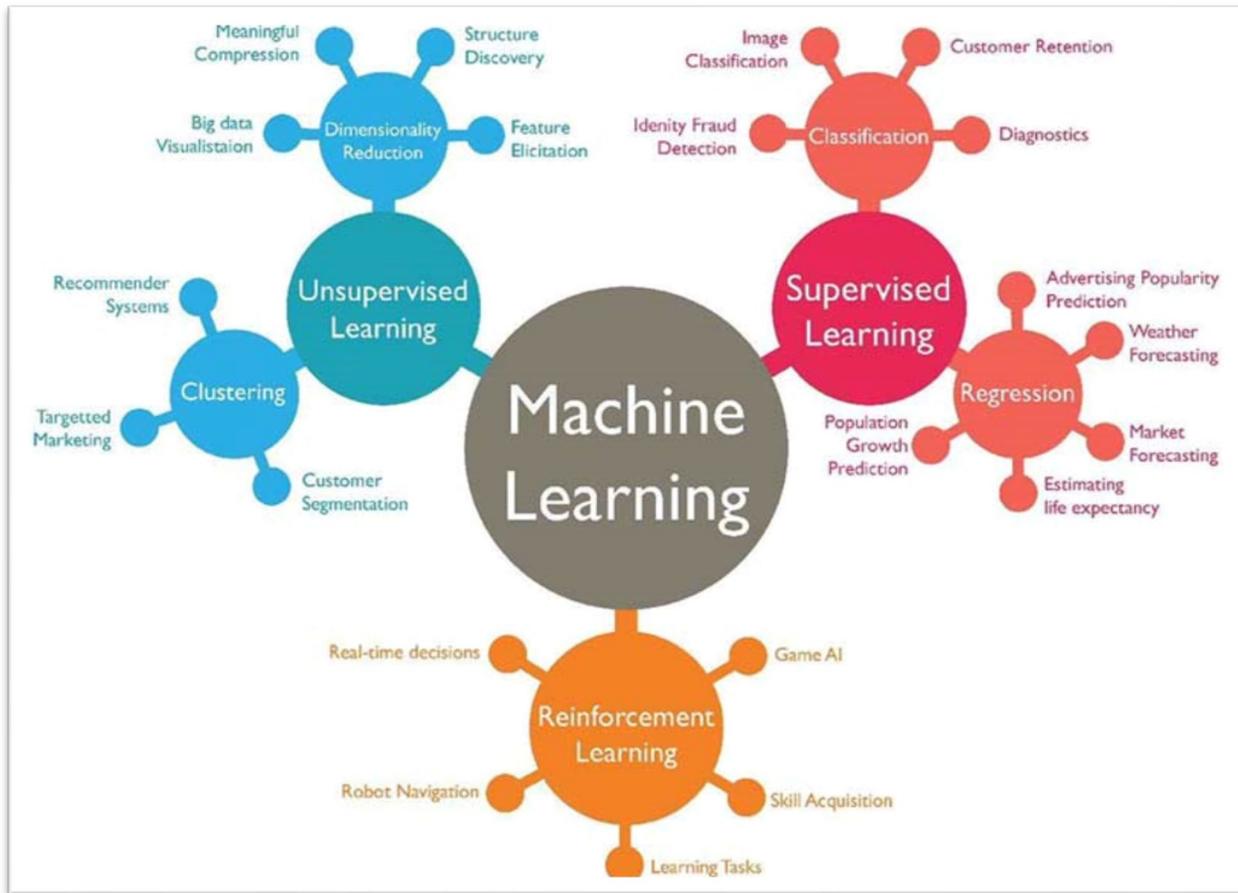
In aDAPt, Containers are designed to be pared down to the minimal viable pieces needed to run whatever the one thing the container is designed to do, rather than packing multiple functions into the same machine. The ease of development that Docker provides helps make possible rapid development and testing. Using containers and microservices

together enhances cloud capabilities. Microservices are scalable and reusable, while containers supply efficient resources. Both microservices and containers can work independently, but it has become clear that merging them has improved runtime frequency, cloud-hosting policies and cloud tools.

## **Benefits of aDAPt Engine having a Microservices Architecture:**

- Better fault isolation; if one microservice fails, the others will continue to work.
- Code for different services can be written in different languages.
- Easy integration and automatic deployment; using open-source continuous integration tools such as Jenkins, Work very well with containers, such as Docker.
- The microservice architecture enables continuous delivery.
- Scalability and reusability, as well as efficiency. Easy to scale and integrate with third-party services.
- Components can be spread across multiple servers or even multiple data centers.
- Microservices simplify security monitoring because the various parts of an app are isolated. Issue on microservice can be resolved without affecting other areas of the project.

# Machine Learning Integrated



Machine Learning is seen as a subset of Artificial Intelligence which further helps with learning which would add a flavor to aDAPt Engine. aDAPt Engine focuses on fetching the data and use that data to learn from it by itself, instead of being programmed to do the same.

We have committed to run aDAPt Engine on a Supervised learning Algorithm which gives an accurate output and makes the product much powerful identifying and predict anomalies in real-

time with outlier detection. Artificial Intelligence has been incorporated in the making of “Anomaly Detection” here which will be used to analyses the different metrics that come into the picture when using cloud platforms. If the CPU Usage goes over the normal rate or if a lot more memory is being used up, the quality and performance of the system can be very different. Which is why this model would ensure that it is constantly learning and looking out for any unusual signs and provides an accurate data from all its learnings.

## **MACHINE LEARNING/ARTIFICIAL INTELLIGENCE KEYS:**

- Eliminate humans Error
- Automated Analysis of mass data
- Detect system critical Anomalies
- Automatically Model the complexity of the Real World
- Orient Problems Faster to pinpoint the Root cause
- Forecast-and prepare for – the Future
- Get UP, Running and Finding Answers with Guided Paths
- Achieve More Productivity through automated digital labor
- Act on Discrepancies in Real-time data through outlier detection
- Improve Customer Satisfaction with predictive and prescriptive Maintenance