

Ready for What's Next: Analytics as a Service

ABSTRACT

Analytics as a Service solutions help data scientists, developers and business users get data analytics applications and projects up and running quickly, while avoiding the need for costly upfront technology investments. These on-demand solutions deliver all of the benefits of on-premises data analytics applications in a highly accessible, user-friendly environment.

February 2021

TABLE OF CONTENTS

ANYTHING AS A SERVICE	1
ANALYTICS AS A SERVICE	1
DELIVERING ANALYTICS AS A SERVICE AT CENTURYLINK.	2
MOVING FORWARD WITH DELL TECHNOLOGIES	3
KEY TAKEAWAYS	3

The information in this publication is provided “as is.” Dell Inc. makes no representations or warranties of any kind with respect to the information in this publication, and specifically disclaims implied warranties of merchantability or fitness for a particular purpose.

Use, copying and distribution of any software described in this publication require an applicable software license.

Copyright © 2021 Dell Inc. or its subsidiaries. All Rights Reserved. Dell, Dell Technologies, EMC and other trademarks are trademarks of Dell Inc. or its subsidiaries. Intel, Intel Logo are trademarks of Intel Corporation in the U.S. and/or other countries. Other trademarks may be the property of their respective owners.

Dell Technologies believes the information in this document is accurate as of its publication date. The information is subject to change without notice.

Published in the USA 2/21.

ANYTHING AS A SERVICE

With the rise of cloud data centers, countless “as a service” offerings have taken flight. Software applications, database platforms, compute infrastructure, data storage and more are now available in as-a-service packages. The diversity of these offerings has even led to an overarching abbreviation: XaaS, for Anything as a Service.

There are countless drivers for this trend. One is the rise of legions of remote workers using laptop computers and mobile communications devices. When everybody is working everywhere, it makes sense to deliver applications and their supporting IT resources via XaaS offerings. Another driver is the cost of procuring and managing complex infrastructure for modern workloads, such as machine learning and artificial intelligence. The as-a-service model allows IT organizations to shift technology spending from a capital expenditure to a pay-as-you-go operating expense, while easing the system management burdens on IT administrators.

Regardless of the drivers, XaaS offerings allow enterprises to offer a consistent IT experience wherever they run workloads, including on-premises, edge locations and public clouds.

ANALYTICS AS A SERVICE

Data analytics is now a strategic priority for all sizes of organizations across all industries. Yet deploying and managing analytics workloads can be a complex and time-intensive undertaking that requires extensive hardware and software integration and testing. To overcome these barriers and remove complexity, many IT organizations are looking to Analytics as a Service (AaaS) solutions that help data scientists, developers and business users get their analytics applications and projects up and running quickly.

In these deployments, the analytics applications and the huge datasets that come with them sit at the top of a solution stack that rests on a cloud foundation.

AI and Analytics as a Service

(Analytics applications)

Data Platform as a Service

(Analytics programming environment)

Data Fabric as a Service

(Data management, data aggregation)

Cloud Infrastructure

(Compute as a Service, Storage as a Service)

In this hierarchy, users interact with a subscription-based analytics platform to execute scripts and queries that data scientists or programmers developed for them. They also interact with the analytics platform to generate reports, visualizations, dashboards and more.

AaaS deployments deliver all of the benefits of on-premises data analytics applications in a highly accessible, user-friendly public cloud or hybrid cloud environment.

Dramatic growth for AaaS

The global Analytics as a Service market is expected to grow to more than \$12 billion by 2024, up from \$4.3 billion in 2019, according to a report by the research firm Markets and Markets. That equates to a compound annual growth rate of 23.2 percent during the forecast period.

In its report on the AaaS market, the firm notes, “The major growth factors of the AaaS market include the increasing awareness of IoT devices among organizations, the need to manage huge workloads with minimal infrastructure investments, and the adoption of big data analytics solutions for analyzing data which helps make faster business decisions.”

Source: Markets and Markets, “[Analytics as a Service Market](#),” February 2020.

DELIVERING ANALYTICS AS A SERVICE AT CENTURYLINK

CenturyLink® delivers analytics capabilities in its Lumen® Big Data as a Service (BDaaS) offering. This innovative as-a-service offering leverages the Cloudera® Hadoop® platform for distributed data storage, processing and analysis in a high performance computing environment.

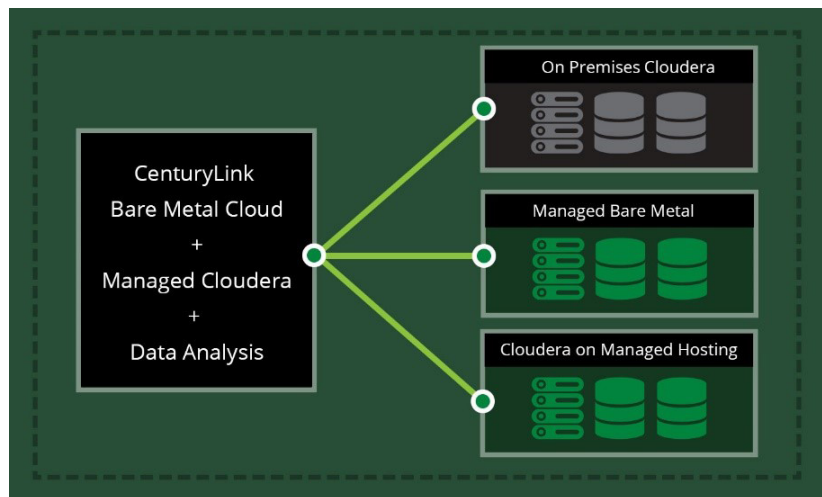


Figure 1. The CenturyLink Big Data as a Service solution.

CenturyLink’s BDaaS solution provides potentially unlimited resources, while simplifying management with the assistance of a dedicated team of data science experts and a Managed Cloudera Hadoop platform. This solution, which includes data processing, storage and management components, is deployed on bare metal cloud servers to provide a flexible, efficient and scalable environment for data analytics, all delivered via CenturyLink’s secure network and infrastructure.

In a complementary as-a-service solution, the telecommunications company delivers CenturyLink Private Cloud on VMware Cloud Foundation and a Dell Technologies stack. This offering provides a complete software-defined data center solution that combines Dell EMC PowerEdge servers with VMware Cloud Foundation software in a fully automated and fully managed service.

A booming market for data analytics

The global big data analytics market is estimated to grow 4.5 times, to more than \$68 billion, by 2025, up from around \$15 billion in 2019, according to a Frost & Sullivan analysis. That equates to a robust compound annual growth rate of 28.9 percent, the firm says.

Source: Frost & Sullivan, "[Global Big Data Analytics Market to Grow 4.5 Times by 2025, Powered by Data Security Requirements](#)," August 31, 2020.



The case for hybrid cloud

When it comes to a computing environment for high performance data analytics, the answer is often hybrid cloud. A hybrid approach allows an organization to keep data close to the processing while reducing public cloud data transfer rates.

At the same time, a hybrid model allows an organization to easily start a data analytics journey in a public cloud and later move to a private cloud as data volumes and workloads grow in size.

For a deeper dive into this topic, see the Forrester study, "[Hybrid Cloud: A Smart Choice For AI And HPC](#)."

MOVING FORWARD WITH DELL TECHNOLOGIES

As part of its commitment to XaaS offerings, Dell Technologies is in the process of rolling out as-a-service consumption-based models for the company's broad portfolio of servers, storage, networking, hyperconverged infrastructure and end-user computing solutions.

This company-wide effort includes Project APEX, which will unify Dell Technologies' as-a-service and cloud strategies, technology offerings, and go-to-market efforts. The result of this effort will give businesses a consistent as-a-service experience wherever they run workloads, including on-premises, edge locations and public clouds.

These as-a-service offerings can include [Dell EMC Ready Solutions for Data Analytics](#), which can be deployed in on-premises data centers or hybrid cloud environments. These offerings encompass a portfolio of engineered, integrated and validated systems for big data analytics. Consisting of high-performance Dell EMC infrastructure, Ready Solutions for Data Analytics have been designed to simplify deployment and operation of data analytics projects, while delivering optimized performance and scalability.

KEY TAKEAWAYS

Analytics as a Service solutions help data scientists, developers and business users bring analytics applications and projects online quickly, while avoiding the need for costly upfront technology investments. These on-demand solutions deliver all of the benefits of on-premises data analytics applications in a highly accessible, user-friendly environment.

Organizations on the path to AaaS solutions can look to Dell Technologies for ready access to proven hardware and software solutions, backed by the services and the expertise to bring it all together in a hybrid cloud environment.

For a deeper dive, explore Dell Technologies Project APEX, Dell Technologies on Demand and Dell Technologies Cloud at delltechnologies.com/cloud and delltechnologies.com/analytics.

To learn more, explore [Lumen Big Data as a Service](#) built on Dell Technologies