



CDP Journey : HDP Migration

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Agenda

1. CDP Refresher
2. GTM context And Questions
3. Logistics for Workshop
4. Workshop
 - a. Upgrading Ambari
 - i. Pre-upgrade checklist
 - ii. Upgrade Ambari 2.x/3.x to 7.1.0
 - iii. Post-upgrade checklist
 - b. Migrating Ambari/HDP cluster to CM/CDP Dc Cluster
 - i. Upgrade HDP 2.x/3.x to 7.1.0
5. Next Steps

CLOUDERA

THE ENTERPRISE DATA CLOUD COMPANY

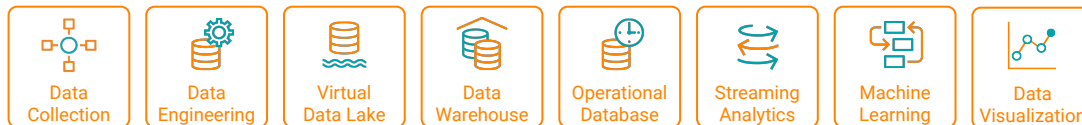
A HYBRID DATA CLOUD **AND** ANALYTICS FOR THE DATA LIFECYCLE

Storage & compute separation
Containers
SDX

Delivered as data
architectures for key
workload patterns

Real-time
Batch
Structured
Unstructured

**Data
Sources**



SDX

Cloudera Data Platform

Analysts
Engineers
Scientists
Developers

**Data
Users**

March 2021: Customer adoption well underway!

March 2021

300+

**Active Customers
on CDP**

15%+

Of our customer base has
begun their move to CDP

>\$60M

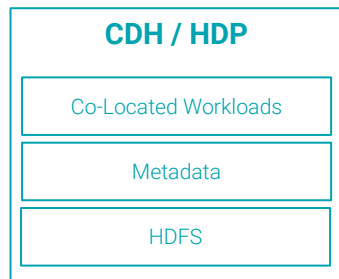
ARR from CDP

120%

Net Expansion Rate from
customers migrated to CDP

Getting to CDP Private Cloud

Modernize In Place



1. Upgrade cluster on the same hardware, w/o moving data
2. Optimize governance model using new SDX controls
3. Deploy new workloads on PvC Experiences whenever possible
4. Optimize compute by offloading workloads to PvC Experiences over time
5. Optimize storage by shifting data to Ozone

CDP Private Cloud

Private Cloud Experiences

MANAGEMENT CONSOLE DATA CATALOG REPLICATION MANAGER WORKLOAD MANAGER



DF



DE



DW



OD



ML

SDX

Private Cloud Base

Co-Located Workloads

Metadata

HDFS

Ozone

CDP Private Cloud Base Roadmap

	7.1.6 (Mar '21)	7.1.7 (Q2 '21) Long Term Support Release	7.x (Q4 '21)
General enhancements & upgrade blockers	<ul style="list-style-type: none"> • Accumulo support • Kafka-only clusters • Phoenix transactions support • RHEL 7.9 • MySQL 8 • PostgreSQL12 • CDS 3.0 	<ul style="list-style-type: none"> • In-place upgrade with Isilon • In-place upgrade in FIPS mode • CVE remediations & security fixes • Kafka topic lineage via Atlas • RHEL/CENTOS 8.2 • Ubuntu 20 • MariaDB 10.3, 10.4 • Oracle 19c (19.9) • Oracle 11 JDK 	<ul style="list-style-type: none"> • Improved rolling upgrades • Improved high availability • Add'l OS support (Ubuntu 20, SLES 15, ...) • Add'l DB support (MariaDB 10.5, ...) • Add'l HSM support
CDH-specific upgrade blockers	<ul style="list-style-type: none"> • Rollback for CDH 5 upgrades • Ranger audit filters improvements • YARN compatibility enhancements (pt 1) 	<ul style="list-style-type: none"> • In-place upgrade from CDH 6.1 - 6.3 • Rollback for CDH 6 upgrades • YARN compatibility enhancements (pt 2) • HDFS Audit improvements with Ranger • Impala row filtering via Ranger 	
HDP-specific upgrade blockers	<ul style="list-style-type: none"> • In-place upgrade from HDP 3.1 • Ambari to CM Migration • Rollbacks for HDP 2 upgrades • Hive compatibility enhancements 	<ul style="list-style-type: none"> • Rollbacks for HDP 3 upgrades • Replication Manager - Knox Integration • Sidecar migration from HDP (via HMS Mirror Tool) 	

Upgrade Process

The background of the slide features several broad, diagonal stripes in various shades of gray, creating a modern, geometric pattern that extends from the bottom right towards the top left.

HDP 2.x/3.x Migration to CDP-Dc

High Level Steps

1. Two Phases Of Upgrade
2. Phase 1
 - a. Upgrade Ambari to latest version
 - b. Upgrade HDP to latest version using Ambari
3. Phase 2
 - a. Get the blueprint for running cluster
 - b. Convert blueprint to CM Deployment Template
 - c. Validate the template

Ambari Upgrade To 7.1.x

High Level Steps

- CDP-Dc Runtime for all services
- Provides Upgrade path
- Independent Upgrade possible for Cluster vs Ambari.



HDP Upgrade To 7.1.x

High Level Steps

- No Rolling upgrades
- Express upgrade with downtime
- Config changes not automatic
- Check services on Return
- Ambari Metrics, SmartSense and Ambari Infra require manual upgrade



Workshop



Logistics

1. Claim your Cluster
 - a. Link for spreadsheet on Zoom chat
 - b.
2. Workshop details
 - a. Link on Zoom chat
3. Communication
 - a. Use specific breakout rooms

Next Steps

What To Do

1. [CDP Upgrade and Migrations Paths | CDP Private Cloud](#)
2. AM2CM Tool :
<https://archive.cloudera.com/am2cm/1.x/am2cm-1.1.0.0-107.tar.gz>
3. venky@cloudera.com

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