

## CLUDERA PROFESSIONAL SERVICES & TRAINING

### Cloudera Professional Services

Cloudera Professional Services offer a wide range of technical services to accelerate customer's time to value when working with all form factors of Cloudera's Data Platform. Cloudera's experienced solution consultants and architects combine their deep knowledge of the Cloudera stack with enterprise architecture and cloud native engineering capabilities either in a "hands off" consulting capacity or "hands on keys" working within a customer team. Services provided by Cloudera's professional services consultants and architects include but are not limited to:

- Cloudera Cluster Health Checks
- CDH or HDP to CDP Migrations
- CDP Deployment Planning and Architecture
- CDP Deployment Execution
- Data Hub Architecture and Deployment
- Data Engineering Architecture and Deployment
- DataFlow and Streaming Architecture and Deployment
- Cloudera Machine Learning Consultancy Architecture and Deployment
- Data Warehousing Architecture and Deployment
- Cloudera Operational DB Architecture and Deployment
- Cluster Optimisation (Performance and Tuning)
- Cluster Security
- Onboarding new Use Cases
- Assistance with specific challenges
- Strategic Hybrid Data Cloud Architecture

When working with Cloudera Professional Services, customers benefit not only from the time and experience of the individual consultant or consultants working with them but also from the wider depth of experience and capability of the whole Cloudera organisation.

Cloudera's Professional Services wish to add value only where customers require it and so place a strong emphasis on knowledge transfer, mentoring and documentation so that customers who wish to upskill their own teams over the course of an engagement are able to achieve that goal and become more self-sufficient over time.

## Professional Services Engagement: Time and Material Services

Services may be procured on a Time & Material basis, and consumed either onsite or through remote services.

For onsite service consumption, the minimum purchase block is 40 hours, (8hrs x 5 days), and thereafter in increments of 5 days/40 hours. Lead time required is 20 days.

For remotely delivered service consumption, the minimum purchase block is 20 hours, and thereafter in increments of 1day/8 hours. Lead time required is 10 days.

The following roles are available:

| Title                     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Senior Solution Architect | Senior Solutions Architects are not just experts in Cloudera software, but also experts on one or more ecosystem products. They have a deep understanding of how to work with customers, and can translate “big picture” business requirements into a complete Cloudera architecture, including ingestion of many data sources, ETL processing, data access and consumption, as well as custom analytics. Senior Solutions Architects build on the expertise required for Solutions Architects by having many years of experience leading projects and engagements of teams of varying sizes and types. Additionally, Senior Solutions Architects have experience in a management capacity, such as leading Solutions Consultants and Architects and assisting with staffing decisions. Senior Solutions Architects think strategically and are able to communicate effectively at all levels across your organisation. |
| Solution Architect        | Solutions Architects are experts on Cloudera software, have a deep understanding on how the components work, and can convey this knowledge clearly and deeply. Solutions Architects are able to drive technical customer conversations, understand customer requirements, either explicit or inferred, and transfer that knowledge into a technical plan of action. Solutions Architects have an instructor-level competency with core Cloudera both from development and administration perspectives. Solutions Architects have a deep understanding of Cloudera Manager capabilities and are able to install, configure, and tune a Cloudera cluster in a variety of different configuration settings, such as leveraging local repositories, external databases and external security integration.                                                                                                                   |

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| Solution Consultant                | Solutions Consultants have solid technical skills in programming, general system administration, problem solving and troubleshooting, databases, networking, and other related skills. Solutions Consultants are familiar with common concepts that are vital to understanding how Cloudera works. Solutions Consultants are able to install, configure, and tune a new Cloudera cluster with typical settings. Additionally, Solution Consultants will often be paired up with Solutions Architects on customer engagements to get a deeper understanding of the Cloudera technical concepts and have the experience and practical expertise to apply to the Customer's use case and business requirements.                                                                                                                                                                                                                                    |
| Services Delivery Manager          | <p>The Service Delivery Manager will work with Customer to ensure that the Cloudera team is well aligned with Customer expectations and requirements. Service Delivery Managers will work with the customer to:</p> <ul style="list-style-type: none"> <li>• Ensure Cloudera has a continuing understanding of Customer's internal resources, production expectations and schedule.</li> <li>• Ensure both Customer and Cloudera are well aligned with initial plans, requirements gathering and scoping, Cloudera resource allocation and consulting deployment timeline.</li> <li>• Manage the ongoing engagement, providing regular reporting and updates</li> <li>• Work with the Account Team and relevant Product/Engineering teams to ensure customer is enjoying the full benefit of the Cloudera organisation</li> <li>• Forecast requirements, and initiate corrective actions and/or change orders if and when necessary.</li> </ul> |
| Resident Solution Architect GOLD   | Annual contract for a Resident Architect, 480 hours (120 hours/quarter) of RSA time and 24 hours of SDM time are included. Annual RSA hours purchased are divided equally across four 3-month "contract quarters". All hours for a particular contract quarter can only be consumed within that contract quarter.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Resident Solution Architect SILVER | 12-month contract for a Resident Solution Architect, 320 hours (80 hours/quarter) of RSA time and 16 hours of SDM time are included. Annual RSA hours purchased are divided equally across four 3-month "contract quarters". All hours for a particular contract quarter can only be consumed within that contract quarter.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

# Cloudera Training

Cloudera Training ensures data professionals have access to the most comprehensive selection of Data Scientist, Analyst, Data Engineering, Data Architect, Developer and Administrator courses.

Cloudera Training is available in public classrooms in 50 cities around the world as well as customer-specific private classes. Cloudera has trained more than 50,000 people and [certified](#) more than 12,000 people since 2009.

Cloudera offers courses through a variety of means:

- Instructor-led, in-person classroom based training
- Instructor-led, virtual classes that participants can join remotely
- [On demand](#), a video training option where participants can learn, at their own pace, from content created and curated by senior instructors in a virtual setting, without incurring travel costs or time away from the office
- Bespoke curriculum-based training packages tailored directly to your requirements

All class formats use a cloud-hosted lab environment to give a consistent and hands-on training experience.

## Instructor-Led Courses

| Course Overview                                                                                                                           | Role                                     | Days  |
|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-------|
| <a href="#">Data Scientist Training</a>                                                                                                   | Data Scientist, Developer, Analyst       | 4-day |
| <a href="#">Data Analyst Training</a>                                                                                                     | Analyst                                  | 4-day |
| <a href="#">Cloudera Administrator Training: CDP Private Cloud Base</a>                                                                   | Administrator                            | 4-day |
| <a href="#">CDP Data Governance with SDX: Implementing regulatory Compliance on the Cloudera Data Platform</a>                            | Administrator, Data Steward              | 2-day |
| <a href="#">Cloudera Data Platform: Security Administration for CDP Private Cloud BaseHDP Operations: Apache Hadoop Security Training</a> | Administrator                            | 3-day |
| <a href="#">Cloudera Data Platform: Designing Edge to AI Applications on Hybrid Data Cloud</a>                                            | Developer, Engineer, architects, analyst | 4-day |
| <a href="#">Cloudera Training for Apache Kafka</a>                                                                                        | Developer, Engineer, Administrator       | 3-day |

|                                                                                      |                                     |       |
|--------------------------------------------------------------------------------------|-------------------------------------|-------|
| <a href="#">Cloudera Data Flow: Flow Management with Apache NiFi</a>                 | Engineer, Developer, Administrators | 3-day |
| <a href="#">Cloudera Data Engineering: Developing Applications with Apache Spark</a> | Engineer, Developer                 | 4-day |

## OnDemand Training

The [Cloudera OnDemand Training Library](#) provides access to a number of OnDemand classes on a 1-year for a subscription basis. 100 hours of lab access are included in the offering. The courses are relevant to a variety of data roles including administrator, developer, analyst and data scientist. A small sample of OnDemand courses are listed below

| Course Overview                                                                         | Role                                                             |
|-----------------------------------------------------------------------------------------|------------------------------------------------------------------|
| <a href="#">Cloudera Essentials for CDP</a> (FREE)                                      | Administrator, Developer, Analyst, Data Scientist, Data Engineer |
| <a href="#">AWS Fundamentals for CDP Public Cloud</a> (FREE)                            | Administrator, Developer, Architect, Data Engineer               |
| <a href="#">CDP Private Cloud Fundamentals</a> (FREE)                                   |                                                                  |
| <a href="#">Deploy and Scale Cloudera Enterprise on Microsoft Azure Training</a> (FREE) | Administrator                                                    |
| <a href="#">Cloudera Security Training</a>                                              | Administrator                                                    |
| <a href="#">CDP for CDH Users</a> (FREE)                                                | Developer                                                        |
| <a href="#">CDP for HDP Users</a> (FREE)                                                | Developer                                                        |
| <a href="#">Just enough Scala</a>                                                       | Developer                                                        |
| <a href="#">Just enough Git</a>                                                         | Developer, Data Scientist                                        |
| <a href="#">Just Enough Python</a>                                                      | Developer                                                        |
| Apache HBase Training                                                                   | Developer                                                        |
| <a href="#">Cloudera Search Training</a>                                                | Developer, Data Engineer                                         |
| <a href="#">Intro. To Cloudera Data Warehouse</a> (FREE)                                | Developer, Analyst                                               |
| <a href="#">CDP Data Visualization Training</a>                                         | Analyst, Data Scientist                                          |

|                                                                  |                |
|------------------------------------------------------------------|----------------|
| <a href="#">Cloudera Data Science Workbench</a>                  | Data Scientist |
| <a href="#">Introduction to Cloudera Machine Learning</a> (FREE) | Data Scientist |
| <a href="#">CDP Cloudera Machine Learning</a>                    | Data Scientist |

The OnDemand subscription begins on the date your account is activated. While the subscription is active, you will have unlimited access to all the course training materials within the OnDemand library which includes recorded course lectures and demonstrations, assessment components, and hands-on exercise instructions. You will also receive a set number of runtime hours, to access the online hands-on exercise environment accessible through a web browser, based on your subscription.

Please see here for the current list of available training courses; <https://www.cloudera.com/about/training/courses.html>

## Description of data team roles

Below are descriptions of some commonly occurring roles within modern data teams. It should be noted that the names and scopes of these roles may differ from one organisation to the next, depending on their context and requirements. These role descriptions are used here primarily as a guide to the types of data-related activities that our courses can help your data teams to deliver.

- Administrator**  
 The administrator role is responsible for platform operations. Typical tasks for this role include installing, upgrading, monitoring, and securing the systems running Cloudera software.
- Developer**  
 The Developer role is responsible for building business applications on the platform. This will involve using command-line tools as well as writing code to integrate with specific platform components such as Apache Spark, Apache Kafka etc.
- Data Engineer**  
 The Data Engineer role has a considerable overlap with that of the Developer in terms of skills and tools, but has a different focus. Data engineers design, create, and maintain the data pipelines that provide the platform with the data that other roles require to fulfil their objectives. Their work traditionally includes typical extract-transform-load (ETL) batch jobs, but increasingly also involves the management of real-time data gathered from streaming sources.

- **Data Steward**

The Data Steward role has oversight of policies related to data quality and regulatory compliance. These include policies related to data provenance, lineage, and access control. Data Stewards tend to have a business background, rather than a deeply technical one, so they typically work with administrators and other roles to ensure policy implementation.

- **Data Analyst**

The Data Analyst is responsible for finding value from the company's data, typically through conducting data warehouse queries and generating reports, forecasts, dashboards and other data deliverables used to support business decisions.

- **Data Scientist**

The Data Scientist role combines a scientific approach and proficiency in mathematics (especially statistics) with skills in software engineering, in order to extract value from data. Although there is some overlap with the Data Analyst role in terms of skills and tools, a data scientist will also have advanced experience with machine learning and is much more likely to develop custom software as part of their work.

## Certification

Cloudera provides industry recognised certification and has certified over 12,000 people since 2009.

| Certification                          | Description                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CDP Data Developer                     | This certification demonstrates skills and knowledge required to create applications and data pipelines in Cloudera Data Platform. These skills are necessary for the creation of optimized data sets for a variety of workloads. This certificate is relevant to both developer and data engineering roles.                                                                                   |
| CDP Generalist                         | Holders of this certification have demonstrated general, broad knowledge of the Cloudera CDP platform. Unlike other CDP Certification Program role-based exams, this exam is applicable to multiple roles. Whether an experienced professional, or just starting an enterprise data career, this exam allows candidates to demonstrate their broad understanding of the Cloudera CDP platform. |
| CDP Administrator - Private Cloud Base | Individuals who earn this certification have demonstrated the skills and knowledge required to successfully manage and maintain the Cloudera Data Platform - Private Cloud Base. These include the skills to install and configure CDP Private Cloud Base, connect and manage data sources, manage users, monitor and troubleshoot the                                                         |

|  |                                                                                                                              |
|--|------------------------------------------------------------------------------------------------------------------------------|
|  | platform, and manage data security and governance. This certification is relevant to role-holders tasked with overseeing the |
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# Training Credits

Cloudera offers training credits, which can be purchased in advance and used for any OnDemand, private or public course. These are best suited to customers who recognise the need for training, but aren't completely certain which courses they will end up enrolling in and when. Each training credit can be applied to the sale price of any of Cloudera's training offerings. There are minimum purchase quantities for training credits. Training credits are valid for 1 year from the date of purchase. The Cloudera training team will be able to provide advice on which courses are most appropriate given a customer's specific context.

# Resources

Cloudera Pricing

<https://www.cloudera.com/products/pricing.html>

Cloudera features and pricing

<https://www.cloudera.com/products/pricing/product-features.html>

Cloudera Reference Architectures

<https://www.cloudera.com/documentation/other/reference-architecture.html>

Version Compatibility

[https://www.cloudera.com/documentation/enterprise/release-notes/topics/rn\\_consolidated\\_pcm.html](https://www.cloudera.com/documentation/enterprise/release-notes/topics/rn_consolidated_pcm.html)

Getting Support

[https://www.cloudera.com/documentation/enterprise/latest/topics/cdh\\_ig\\_support.html](https://www.cloudera.com/documentation/enterprise/latest/topics/cdh_ig_support.html)