



CERTIFIED PETROLEUM DATA ANALYST (CPDA) INFORMATION SESSION

ALEX ROSS, CPDA
SRA INFORMATION
TECHNOLOGY

INGRID KRISTEL
PROFESSIONAL PETROLEUM
DATA MANAGEMENT (PPDM)
ASSOCIATION

March 27th, 2018

AGENDA



Who is PPDM?

- How does the CPDA credential fit in?



What is the CPDA Credential?

- Why is it important?



What can I expect in the exam experience?

- The questions?
- The environment?



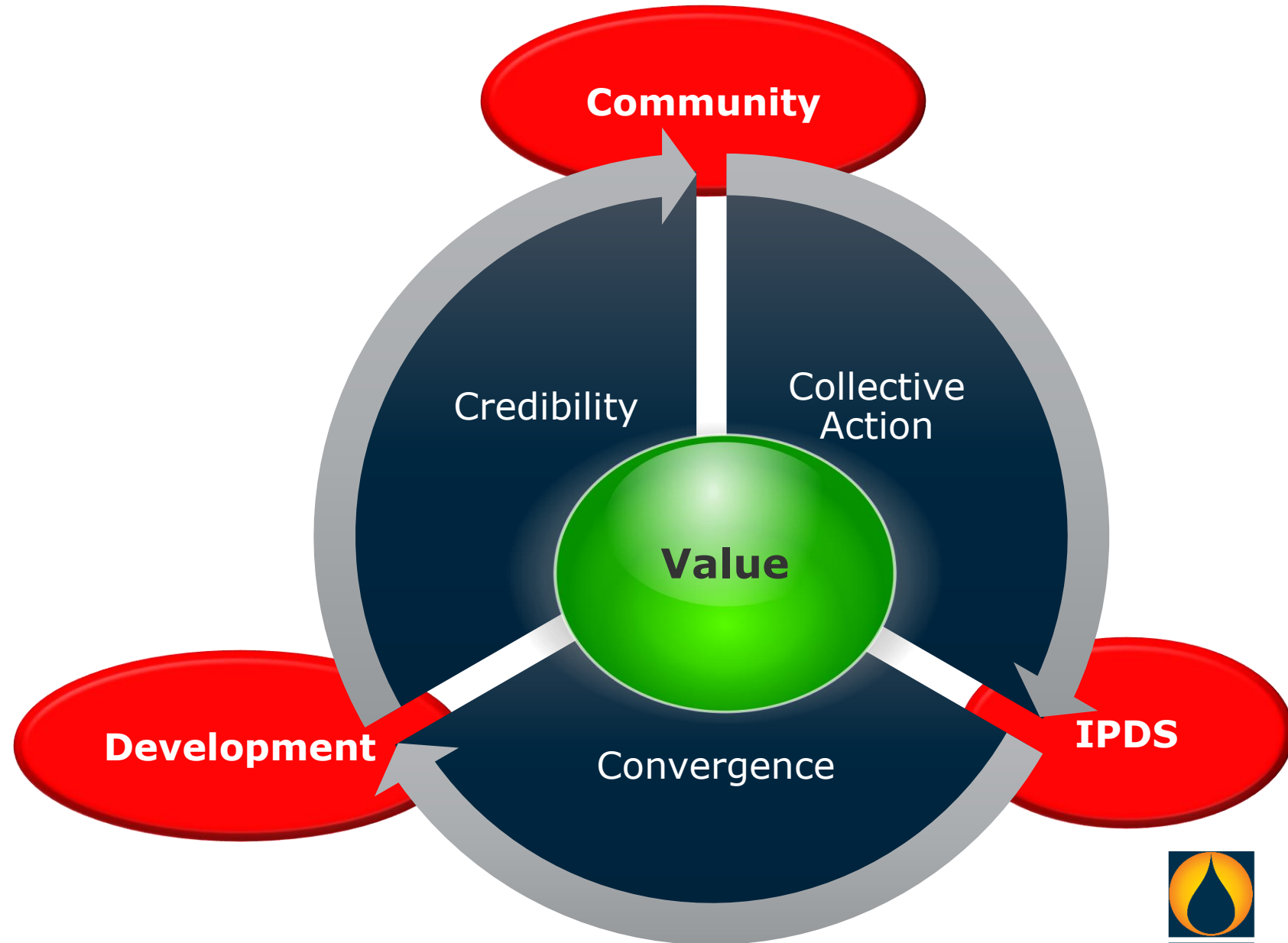
What happens next?

- What communication do I receive?
- How do I maintain my certification?



THE PPDM VISION

The Professional Petroleum Data Management Association (PPDM) is the not for profit, global society that enables the development of professional data managers, engages them in community, and endorses a collection of International Petroleum Data Standards across the oil and gas industry.



PROBLEM, SOLUTION, ADOPTION

Certification demonstrates that an individual possess the required knowledge, experience, and skill to bring success to data management projects.

Candidate

- Granted a declaration of competence in the profession
- Professional development opportunities
- Recognition
- Increased mobility
- Potential for promotion established?
- Increased profile in a competitive job market

Organization

- Competency benchmark established
- Common language and practice increase work efficiency and quality of service
- Internationally recognized standards of competences, ethics and practices
- Development measurement tool for career laddering



CERTIFIED PETROLEUM DATA ANALYST

It's all about establishing competency!

- The CPDA credential is awarded based on a combination of criteria that measure DM knowledge, incl:
 - Education and Experience
 - Examination (Test Based)
- Establishes a **standard of excellence** in Petroleum DM for data analysts based on:
 - Education
 - Experience (3-5 yrs.)
- Governance and decision-making are the responsibility of the Petroleum DM Certification Committee (PDMCC)
 - Independence from the PPDM Association ensures autonomy
 - Comprised of a global body of SMEs
 - Administer, evaluate, maintain the credential program.



ELIGIBILITY

It's all about establishing competency!

- Minimum 5 years of combined relevant education and experience
- Demonstrate
 - DM Training, Education, and/or Skill Enhancement.
 - Direct experience in a petroleum related data management role or; Work Experience that provides a foundation for petroleum data analysis
 - Established by reference.
 - Variety of backgrounds acceptable.
 - E.G. Technical, analytical, numerical or scientific backgrounds.
- Credential developed recognizing that there is no substitute for “hands on” experience.



CPDA APTITUDE – CURRICULUM DRIVEN

Knowledge

- ✓ Knowledge of data management practices specific to geotechnical data.
- ✓ Project management experience
- ✓ Oil and Gas industry experience
- ✓ Experience with Oil and Gas Upstream technical applications
- ✓ Experience with GIS data management and mapping projects.
- ✓ Database experience and familiarity with commonly used database languages.
- ✓ Linux/Unix and Windows OS and scripting experience

Skill

- ✓ Good organizational skills and attention to detail
- ✓ Ability to quickly learn, implement, and effectively support new software products
- ✓ Exceptional customer service skills
- ✓ Problem solving skills

Attitude

- ✓ Ability to effectively communicate with management and technical staff
- ✓ A team player



DEMONSTRATED COMPETENCY IN 8 AREAS



Assessment

- Certification means that your knowledge of 8 essential areas in petroleum data analysis has been evaluated/established.
- Each competency contains a set of behavioural indicators that are observable and measurable. These indicators are referenced in the exam questions.



CPDA COMPETENCIES

Data Governance

- Timely maintenance of data to ensure compliance with organizational standards and practices.
- Support and participate in defining best practices for data consistency.

Data Analysis

- Identify data sources and appropriate systems of record.
- Validate data for loading to corporate applications.
- Ensure capturing of metadata consistent with Data Governance practices.
- Understanding of relational database design, management, and terminology.

Quality Management

- Implement Quality Assurance processes to ensure data consistency, completeness, accuracy, coherence and relevance.
- Recognize and resolve data anomalies revealed in Quality Assurance processes.
- Perform data audits as required.

Data Security

- Ensure that data management is consistent with corporate security policies.

CPDA COMPETENCIES

Spatial Data

- Ensure appropriate data is available for Geographic Information Systems (GIS) attributes.
- Ensure that spatial data is referenced with appropriate co-ordinate reference system and datum.
- Understand the basic differences between co-ordinate reference systems and how to transform between them.

E&P Life Cycle

- Basic understanding of workflows and terminology of the E&P lifecycle of a well.

Master Data Management

- Support and comply with established master data management processes.

Communication

- Ability to clearly understand data issues and communicate them with relevant business and technical representatives within the organization.
- Build and maintain trusted relationships with both internal and external data suppliers and consumers.

DATA ANALYSIS



Competency Name:

Data Analysis

Competency Definition:

Analyze data and oversee the maintenance of data stores and data-related solutions.

Competency Indicators:

Identify appropriate sources of raw data:

- National and regulatory data repositories
- Internal managed and unmanaged data stores
- Data vendors
- Service companies
- Joint venture partners

Investigate new sources of data from vendors and regulators. Describe physical and digital data. Describe data domains (e.g., well, seismic, production, land), including units of measure. Explain how data from different domains is used by an organization. Describe major elements of the data retention policy and schedule as applied to data. Describe the mapping of data across data stores, including:

- Data rules
- Translation of data
- Transformation of data
- Basic data workflow

Examine and describe the data workflow for all types of data (i.e., structured, unstructured, and semi-structured).

Cross-correlate data between different domains and data stores to ensure accuracy, consistency, and coherence.

- Create necessary reports to identify missing data, duplicates, anomalies, and availability.
- Build queries and filters to find physical and digital data items.
- Provide the correct coordinate reference system (CRS) when loading data with location information.
- Validate geospatial data precision.
- Describe processes for data loading.
- Ensure that loaded data adheres to the approved standards.
- Solve basic workflow problems with close supervision.
- Take ownership for metadata (i.e., data about data) management.
- Ensure that the metadata is loaded to document data context, quality, and provenance.
- Use receipt-tracking systems to ensure consistency.
- Provide status information about requests to management and clients.

Document data movement procedures between data stores. Adhere to internal naming standards. Explain archiving in the data management process. Follow retention standards for data.

Ensure that the history of data transformations is captured as it goes through the data lifecycle. Explain backup and recovery procedures in an organization.

Resources:

Mosley, M., Brackett, M., & Earley, S. (Eds.). (2009). *The DAMA guide to the data management body of knowledge (DAMA-DMBOK Guide)*. Bradley Beach, NJ: Technics Publications.

Pascual, M. S. (2011). *Standard GIS data: A look at accuracy, precision, and types of errors*. Retrieved from <http://www.gislounge.com/gis-data-a-look-at-accuracy-precision-and-types-of-errors/>

Srivastava, R. N. (2008). *Spatial data quality: An introduction*. Retrieved from <http://www.gislounge.com/spatial-data-quality-an-introduction>

EXAM CERTIFICATION

“Certification of the Certification”

- **Psychometric Analysis**

- Ensures that the exam is free from bias
- Certification performed by Yardstick

- **NCCA**

- The Institute for Credentialing Excellence (ICE) established the NCCA in 1987
- Created Standards for the Accreditation of Programs

- **Accreditation** – ensures the Credential has met the standards necessary to demonstrate that certificate holders possess competency, authority, or credibility in the subject matter area.

- PPDM strictly adheres to the NCCA guidelines
- Application requires demonstration of success over several years (in process)



WHAT TO EXPECT?

Number of Scored Questions	Experimental (Unscored) Questions	Total Examination Questions	Allotted Exam Time	Average Time per Question
180	20	200	4 Hours	72 Seconds

- Computer based “proctored” exam
 - Quiet, private location with no additional aides (books, tablets, cell phone, etc.)
- Observed real time via webcam. Dialogue captured in a log.
 - By Proctor
- 360 degree view of the room by webcam before the exam commences



QUESTIONS

Sample Question Only

In a joint operating agreement, which of the following describes an operator?

- A) It has the largest percentage share.
- B) It performed the original exploration.
- C) It is in charge of the day-to-day operations.
- D) It owns the lease or license.



QUESTIONS

Sample Question Only

In a joint operating agreement, which of the following describes an operator?

- A) It has the largest percentage share.
- B) It performed the original exploration.
- C) It is in charge of the day-to-day operations.**
- D) It owns the lease or license.



QUESTIONS

Sample Question Only

A data analyst runs a query on a project to assess the quality of marker picks. She finds a few wells with markers that are either above or below the well depth. What is the first step that she should take to resolve this data issue?

- A) Flag each marker pick for update to a new pick depth.
- B) Check the total depth of the wells.
- C) Change the marker pick to a new depth above the total depth.
- D) Contact the source of the marker picks.

QUESTIONS

Sample Question Only

A data analyst runs a query on a project to assess the quality of marker picks. She finds a few wells with markers that are either above or below the well depth. What is the first step that she should take to resolve this data issue?

- A) Flag each marker pick for update to a new pick depth.
- B) Check the total depth of the wells.**
- C) Change the marker pick to a new depth above the total depth.
- D) Contact the source of the marker picks.

QUESTIONS

Sample Question Only

Which of the following is an accurate sequence of dates for a well?

- A) Permit date, spud date, rig release date, and completion date
- B) Spud date, permit date, rig release date, and completion date
- C) Spud date, permit date, completion date, and rig release date
- D) Spud date, rig release date, completion date, and permit date



QUESTIONS

Sample Question Only

Which of the following is an accurate sequence of dates for a well?

- A) Permit date, spud date, rig release date, and completion date**
- B) Spud date, permit date, rig release date, and completion date
- C) Spud date, permit date, completion date, and rig release date
- D) Spud date, rig release date, completion date, and permit date



FIND INFORMATION - HOW TO APPLY

Professional Petroleum Data Management Association

Sign Out | Riyaz | Cart | Sponsorship | News | Careers | Wiki | Contact Us

Keyword Search [Go]

HOME ABOUT US MEMBERSHIP TRAINING EVENTS STANDARDS **CERTIFICATION** WORK GROUPS COMMITTEES PUBLICATIONS

Home » Certification

Share this page [Social Media Icons]

Upcoming CPDA Exams
May 10, 2017
> March 29, 2017 - Application Deadline

November 8, 2017
> September 27, 2017 - Application Deadline

Certification

The Certified Petroleum Data Analyst (CPDA) examination is now open for registration!

The PPDM Association is pleased to welcome our first CPDA graduates as innovators and leaders in the data management community.

Are you interested in demonstrating your skills and becoming a Certified Petroleum Data Analyst? The deadline to register for the May 10th Exam is March 29th 2017.

[Learn more >](#)

Register now

Quick Links

- Certification Handbook
- Application Form
- How to Prepare?
- CMR Form
- PPDM Online Credentials Registry
- Meet your Certification Committee

Did you read "Voluntarily Taking an Exam? Am I Crazy? Insights on Becoming a CPDA"

Congratulations to the new CPDAs from the November 2016 Exam

2017 CPDA Exam Dates Announced

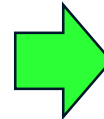
CPDA mentioned in Foundations "Same But Different"

Wondering what CPDA's think of the program? "CPDAs Highly Recommend Certification Programs"

Certified Petroleum Data Analyst

In order to meet the petroleum industry's need for recognition of the unique competencies of data management professionals, PPDM Association has established the global Certified Petroleum Data Analyst (CPDA) certification exam.

The CPDA designation is a globally recognized achievement, unique to the petroleum data management industry. Certification demonstrates to employers, clients, and colleagues that a CPDA professional possesses the experience and skills to navigate the unique challenges of data management.



Application for Certification

Certified Petroleum Data Analyst (CPDA)

Personal Information

Last name:	Prefix: Select Prefix
First name:	Middle name:
Preferred name:	
Your name will appear on your certificate as <First name> <Last name>	
Are you a member of PPDM? <input type="radio"/> Yes <input type="radio"/> No	If YES, under what name is the membership listed?
eMail address:	Company name:
Mailing address:	

Education

To reach the required sum of education and experience, you may need to demonstrate your training, education, and skill enhancement, directly or indirectly related to the petroleum and/or data analyst profession. Data Analysts can come from a variety of backgrounds (for example, a technical, analytical, numerical, or scientific background). If you feel that your education and training has provided a foundation for petroleum data analysis, please list it here.

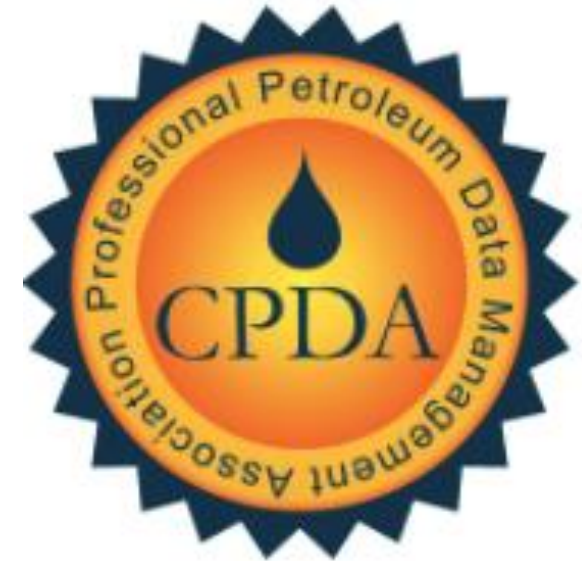
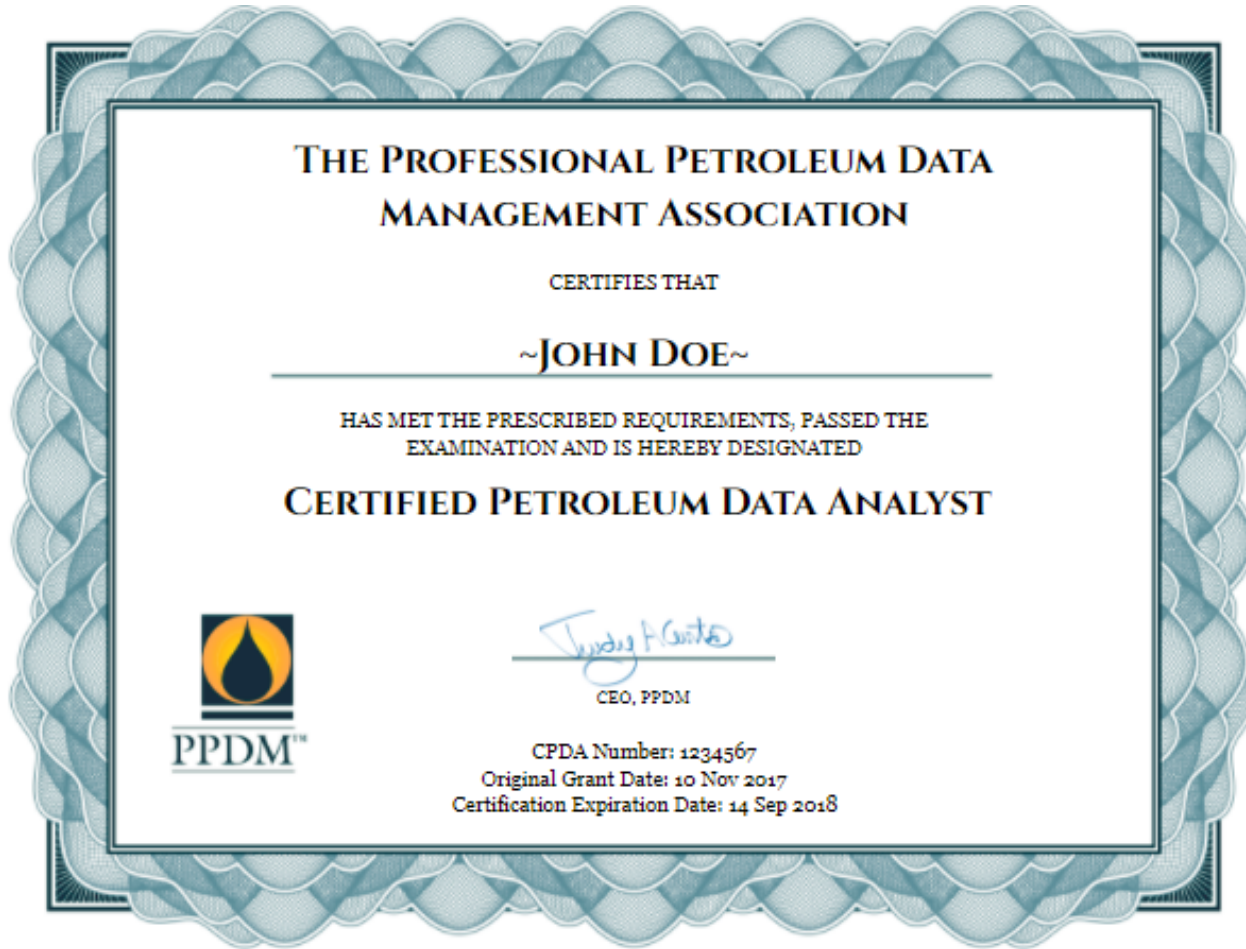
Name of Educational Institution / Provider:		
City:	Province / State:	Country:
Education program type (or global equivalent): Select Education Program Type		

EXAM RESULTS

- Your exam results will be delivered to you by email 4-6 weeks after exam completion.
- Raw scores will not be released to candidates. You will be notified whether you have been successful or unsuccessful.
- If you are successful, you can expect to receive your digital certificate and badge via email, along with further information from PPDM about maintaining your designation.
- Those candidates scoring 80% or higher will be recognized as having passed the exam “With Distinction” and this will appear on both their certificate and badge.
- Should you be unsuccessful on your exam, you will be given a breakdown of the competency areas where you can focus your study/experience for future exam attempts. PPDM will send this to you within 4-6 weeks. You will be permitted to sit the next scheduled exam session if space is available.



CERTIFICATE & BADGE!



CREDENTIAL MAINTENANCE

Valid for 3 years!

- Maintenance required:
 - Show evidence of professional development (PDUs)
 - Annual renewal fees (cover maintenance of the accreditation program and the governance process)
- 90 hours of professional development within the 3 year term.
 - These do not have to be equally distributed.
- References supporting PDU submission.



PROFESSIONAL DEVELOPMENT UNITS (PDU)

CRITERIA FOR PROFESSIONAL DEVELOPMENT Units (PDUs)

The required 90 hours of professional development over each 3 year term (minimum of 15 hours per yearly cycle) must be related to petroleum data management, and will be evaluated on the following weighting:

- **Group A: Education- 60 hours**

Learning opportunities that allow you to expand and enhance your technical, leadership, or strategic and business management skills

- Registered/ Academic Courses
- Attending Industry Events
- Training
- Self-Directed Learning

- **Group B: Giving Back to the Profession- 30 hours**

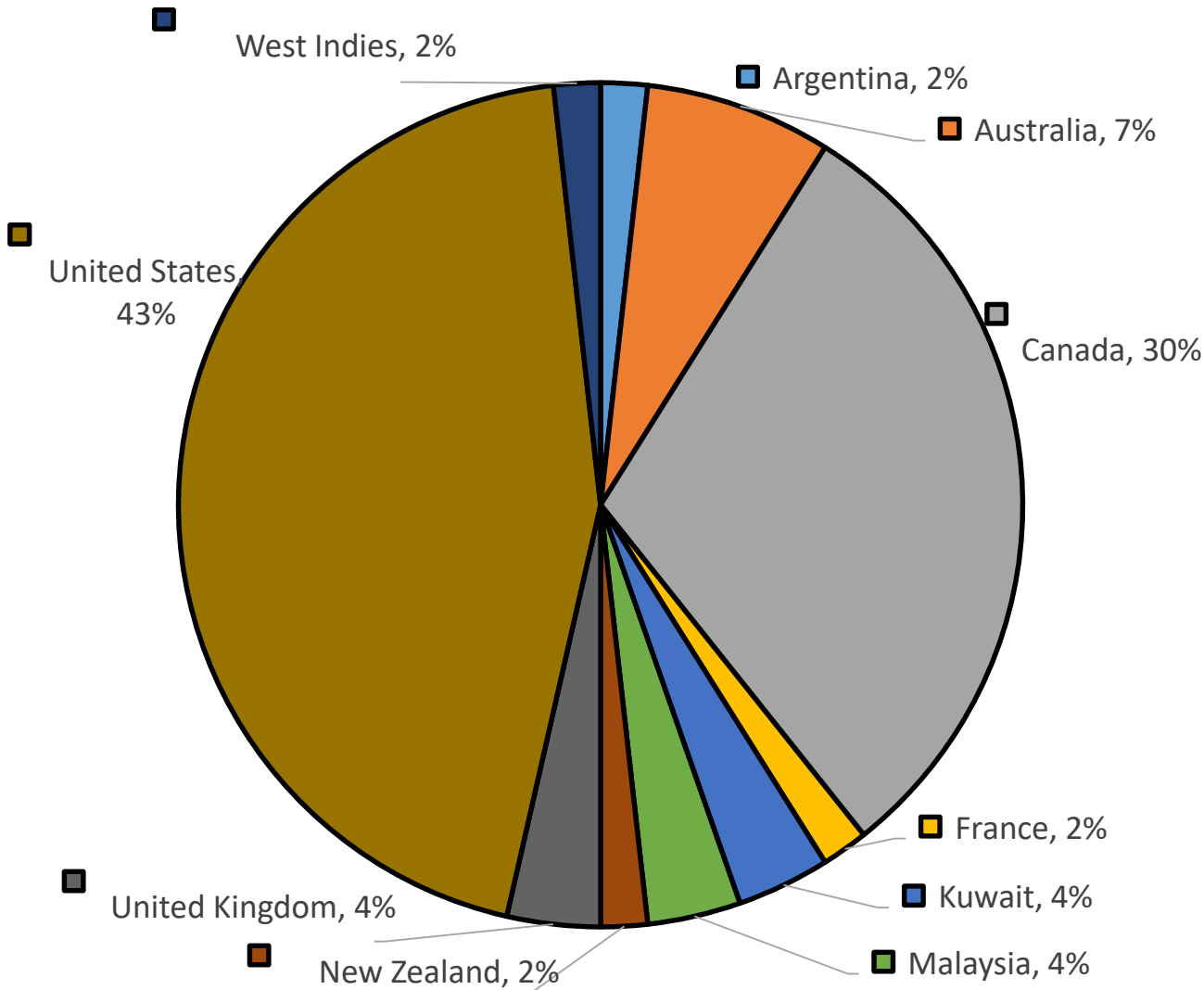
Activities that enable you to share and utilize your knowledge and skills to contribute to and help build the profession.

- Create Content
- Give a Presentation
- Share Knowledge
- Volunteer
- Work as a Practitioner



CPDA COMMUNITY WORLDWIDE

Global Concentration of CPDA's



CPDA Experience (months)

	Educational	Work	Combined
Most	132	351	405
Average	54	158	211
Least	0	38	65

REMINDER: The certification exam was established as a standard of excellence in data management for data analysts who have 3 to 5 years of experience in the petroleum industry

The average tenure of the actual candidate exceeds that by more than 200%



FOR INFORMATION:

2018 CPDA Exam Dates

June 6th

November 14th

- www.ppdm.org
- Detailed process for the CPDA experience can be found in the [Certification Handbook](#).
- CPDA support and inquiries are managed through the office of the Registrar at +1 (403) 660-7817 or certification@ppdm.org.
- All other inquiries can be directed to Ingrid Kristel at +1 (587) 390-0187 or kristeli@ppdm.org.
- Alex Ross, CPDA and Chair of the PDMCC may be contacted at alexross@fastmail.fm.



A photograph of an oil rig at sunset. The rig is silhouetted against a bright orange and yellow sky with scattered clouds. The rig's structure is tall and complex, with a central derrick. In the background, there are low mountains and some industrial buildings with lights on. The overall scene is a mix of industrial and natural elements.

THANK YOU

PDMCC
PROFESSIONAL PETROLEUM DATA
MANAGEMENT (PPDM) ASSOCIATION

CERTIFICATION@PPDM.ORG
VISIT PPDM.ORG