



PPDM 3.9: Data Model Key Relationships

The PPDM Association is a not-for-profit society for data managers.

The PPDM Data Model is a relational model specification used by the Oil and Gas industry as the function for effective management and stewardship of data related to Upstream Exploration and Production.

PPDM 3.9 was built by industry subject matter experts who have worked cooperatively over 24 years to develop an open data specification that is practical and useful for companies of all sizes.



Professional Petroleum Data Management Association (“PPDM™”)

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THESE TERMS AND CONDITIONS SHALL SURVIVE THE TERMINATION AND/OR EXPIRY OF THE USER’S MEMBERSHIP IN THE PPDM™.

FOR PURPOSES OF PARAGRAPHS 4, 5, 6 AND 7 OF THESE TERMS AND CONDITIONS, THE TERM “USER” MAY INCLUDE, AS THE CASE MAY BE, ANY OR ALL OF THE USER, ITS DIRECTORS, OFFICERS, EMPLOYEES, AGENTS, AFFILIATED OR SUBSIDIARY BUSINESSES OR ANY THIRD-PARTIES TO WHOM THE USER HAS GIVEN ACCESS TO THE PRODUCTS AND SERVICES OF THE PPDM™.

FOR PURPOSES OF PARAGRAPHS 4, 5, 6 AND 7 OF THESE TERMS AND CONDITIONS, PPDM™ SHALL INCLUDE ANY OR ALL OF ITS DIRECTORS, OFFICERS, EMPLOYEES, AGENTS, CONTRACTORS OR OTHER INDIVIDUALS AFFILIATED WITH THE PPDM™, AS THE CASE MAY BE.

These Terms and Conditions are to be governed and interpreted under the laws of the Province of Alberta and the laws of Canada applicable therein, and any and all disputes arising out of these Terms and Conditions, their performance, breach, enforcement, existence or validity, any failure of the parties to reach agreement with respect to matters provided for in these Terms and Conditions and all matters of dispute relating to the rights and obligations of the parties, which cannot be amicably resolved, even if only one of the parties declares that there is a difference, will be referred to and finally settled by private and confidential binding arbitration held in Alberta and governed by Alberta law pursuant to the Alberta Arbitration Act if the User is a party created under the laws of Canada or any province or territory of Canada; or the Arbitration Rules of the United Nations Commission of International Trade Law (UNCITRAL) if the User is a party outside of Canada.

The following arbitration procedures shall apply, notwithstanding whether the arbitration is governed by the Alberta Arbitration Act or UNCITRAL:

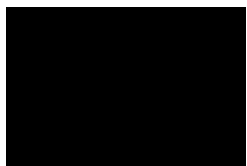
- the place of arbitration shall be Calgary, Alberta;
- the Arbitration tribunal shall consist of one (1) arbitrator;
- the Courts of the Province of Alberta shall be the appointing authority in accordance with UNCITRAL Rules;
- the language to be used in the arbitral proceedings shall be English;
- the Arbitrator shall be a person who is legally trained and who has experience in the information technology field in Canada and is independent of either party; and,
- the decision of the arbitration court shall be final and binding upon each of the parties.

Except as otherwise provided herein, all notices must be in writing to the PPDM™ at Bankers Hall, P.O. Box 22155, Calgary, Alberta, T2P 4J5 and to the User at the most recent address in the PPDM™’s records. Notices shall be deemed delivered three business days after posting in the Canadian postal system, or one business day if delivered via courier.

By using this documentation, you
are deemed to have accepted
these terms and conditions.



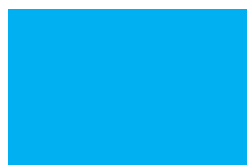
User Information



The following pages depict the most common relationships between subject areas in PPDM 3.9. The table for which relationships are shown is highlighted in black.



Business relationships are shown in green. Darker colors show relationships that are more likely to be required, and lighter colors show relationships that may be less likely. This is intended to help illustrate potential connections, and is not intended to be exhaustive or representative of every implementation



Supporting relationships are shown in blue. Darker colors show relationships that are more likely to be required, and lighter colors show relationships that may be less likely. Note that relationships to most or even all of these may be required in an implementation, depending on what data you are using; this is an example only and is not exhaustive.



DISCLAIMER: The relationships represent some of the common relationships but is not intended to depict every relationship that could be needed by a user. We have mainly attempted to convey likely or important relationships.



Applications

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
Contracts	Ecozones	Fields	Fossils	Health, Safety and Environment
Instruments	Land Rights	Lithology	Notifications	Obligations
Paleontology	Partnerships and Interest Sets	Pools	Production Entities	Production Facilities
Production Lease Units	Production Reporting	Production Strings	Records, Product & Info Mgmt	Reporting Hierarchies
Reserves Reporting	Restrictions	Sample Analysis	Sample Management	Seismic
Spacing Units	Stratigraphic Field Stations	Stratigraphy	Support Facilities	Wells

Support Module Relationships

Additives	Areas	Business Associates	Coordinate Reference Systems	Data management
Entitlements	Equipment	Finances	Products and Substances	Projects
Rate Schedules	Source Document Bibliography	Spatial Locations	Spatial Parcels	SW Applications
Units of Measure	Volume Conversions	Work Orders		

Classification Systems

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
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PPDM 3.9 Subject Area Relationships

Consents

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
Contracts	Ecozones	Fields	Fossils	Health, Safety and Environment
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PPDM 3.9 Subject Area Relationships

Consultations

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
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Support Module Relationships

Additives	Areas	Business Associates	Coordinate Reference Systems	Data management
Entitlements	Equipment	Finances	Products and Substances	Projects
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PPDM 3.9 Subject Area Relationships

Contests

Business Module Relationships: Contests

Applications	Classification Systems	Consents	Consultations	Contests
Contracts	Ecozones	Fields	Fossils	Health, Safety and Environment
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Support Module Relationships

Additives	Areas	Business Associates	Coordinate Reference Systems	Data management
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PPDM 3.9 Subject Area Relationships

Contracts

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
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Support Module Relationships

Additives	Areas	Business Associates	Coordinate Reference Systems	Data management
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PPDM 3.9 Subject Area Relationships

Ecozones

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
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Support Module Relationships

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PPDM 3.9 Subject Area Relationships

Fields

Business Module Relationships: Fields

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Support Module Relationships

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PPDM 3.9 Subject Area Relationships

Fossils

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
Contracts	Ecozones	Fields	Fossils	Health, Safety and Environment
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Support Module Relationships

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Health, Safety and Environment (HSE)

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
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Support Module Relationships

Additives	Areas	Business Associates	Coordinate Reference Systems	Data management
Entitlements	Equipment	Finances	Products and Substances	Projects
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Units of Measure	Volume Conversions	Work Orders		

PPDM 3.9 Subject Area Relationships

Instruments

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
Contracts	Ecozones	Fields	Fossils	Health, Safety and Environment
Instruments	Land Rights	Lithology	Notifications	Obligations
Paleontology	Partnerships and Interest Sets	Pools	Production Entities	Production Facilities
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Support Module Relationships

Additives	Areas	Business Associates	Coordinate Reference Systems	Data management
Entitlements	Equipment	Finances	Products and Substances	Projects
Rate Schedules	Source Document Bibliography	Spatial Locations	Spatial Parcels	SW Applications
Units of Measure	Volume Conversions	Work Orders		

PPDM 3.9 Subject Area Relationships

Land Rights

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
Contracts	Ecozones	Fields	Fossils	Health, Safety and Environment
Instruments	Land Rights	Lithology	Notifications	Obligations
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PPDM 3.9 Subject Area Relationships

Lithology

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
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PPDM 3.9 Subject Area Relationships

Notifications

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
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PPDM 3.9 Subject Area Relationships

Obligations

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
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PPDM 3.9 Subject Area Relationships

Paleontology

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
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Partnerships and Interest Sets

Business Module Relationships

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Support Module Relationships

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PPDM 3.9 Subject Area Relationships

Pools

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
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PPDM 3.9 Subject Area Relationships

Production Entities (PDEN)

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
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Support Module Relationships

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PPDM 3.9 Subject Area Relationships

Production Facilities

Business Module Relationships: Prod Facilities

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Support Module Relationships

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PPDM 3.9 Subject Area Relationships

Production Lease Units

Business Module Relationships: Prod Lease Units

Applications	Classification Systems	Consents	Consultations	Contests
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Production Reporting

Business Module Relationships

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PPDM 3.9 Subject Area Relationships

Production Strings

Business Module Relationships: Production Strings

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Records, Products and Information Management

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
Contracts	Ecozones	Fields	Fossils	Health, Safety and Environment
Instruments	Land Rights	Lithology	Notifications	Obligations
Paleontology	Partnerships and Interest Sets	Pools	Production Entities	Production Facilities
Production Lease Units	Production Reporting	Production Strings	Records, Product & Info Mgmt	Reporting Hierarchies
Reserves Reporting	Restrictions	Sample Analysis	Sample Management	Seismic
Spacing Units	Stratigraphic Field Stations	Stratigraphy	Support Facilities	Wells

Support Module Relationships

Additives	Areas	Business Associates	Coordinate Reference Systems	Data management
Entitlements	Equipment	Finances	Products and Substances	Projects
Rate Schedules	Source Document Bibliography	Spatial Locations	Spatial Parcels	SW Applications
Units of Measure	Volume Conversions	Work Orders		

Reporting Hierarchies

Business Module Relationships: Report Hierarchies

Applications	Classification Systems	Consents	Consultations	Contests
Contracts	Ecozones	Fields	Fossils	Health, Safety and Environment
Instruments	Land Rights	Lithology	Notifications	Obligations
Paleontology	Partnerships and Interest Sets	Pools	Production Entities	Production Facilities
Production Lease Units	Production Reporting	Production Strings	Records, Product & Info Mgmt	Reporting Hierarchies
Reserves Reporting	Restrictions	Sample Analysis	Sample Management	Seismic
Spacing Units	Stratigraphic Field Stations	Stratigraphy	Support Facilities	Wells

Support Module Relationships

Additives	Areas	Business Associates	Coordinate Reference Systems	Data management
Entitlements	Equipment	Finances	Products and Substances	Projects
Rate Schedules	Source Document Bibliography	Spatial Locations	Spatial Parcels	SW Applications
Units of Measure	Volume Conversions	Work Orders		

Reserves Reporting

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
Contracts	Ecozones	Fields	Fossils	Health, Safety and Environment
Instruments	Land Rights	Lithology	Notifications	Obligations
Paleontology	Partnerships and Interest Sets	Pools	Production Entities	Production Facilities
Production Lease Units	Production Reporting	Production Strings	Records, Product & Info Mgmt	Reporting Hierarchies
Reserves Reporting	Restrictions	Sample Analysis	Sample Management	Seismic
Spacing Units	Stratigraphic Field Stations	Stratigraphy	Support Facilities	Wells

Support Module Relationships

Additives	Areas	Business Associates	Coordinate Reference Systems	Data management
Entitlements	Equipment	Finances	Products and Substances	Projects
Rate Schedules	Source Document Bibliography	Spatial Locations	Spatial Parcels	SW Applications
Units of Measure	Volume Conversions	Work Orders		

PPDM 3.9 Subject Area Relationships

Restrictions

Business Module Relationships: Restrictions

Applications	Classification Systems	Consents	Consultations	Contests
Contracts	Ecozones	Fields	Fossils	Health, Safety and Environment
Instruments	Land Rights	Lithology	Notifications	Obligations
Paleontology	Partnerships and Interest Sets	Pools	Production Entities	Production Facilities
Production Lease Units	Production Reporting	Production Strings	Records, Product & Info Mgmt	Reporting Hierarchies
Reserves Reporting	Restrictions	Sample Analysis	Sample Management	Seismic
Spacing Units	Stratigraphic Field Stations	Stratigraphy	Support Facilities	Wells

Support Module Relationships

Additives	Areas	Business Associates	Coordinate Reference Systems	Data management
Entitlements	Equipment	Finances	Products and Substances	Projects
Rate Schedules	Source Document Bibliography	Spatial Locations	Spatial Parcels	SW Applications
Units of Measure	Volume Conversions	Work Orders		

PPDM 3.9 Subject Area Relationships

Sample Analysis

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
Contracts	Ecozones	Fields	Fossils	Health, Safety and Environment
Instruments	Land Rights	Lithology	Notifications	Obligations
Paleontology	Partnerships and Interest Sets	Pools	Production Entities	Production Facilities
Production Lease Units	Production Reporting	Production Strings	Records, Product & Info Mgmt	Reporting Hierarchies
Reserves Reporting	Restrictions	Sample Analysis	Sample Management	Seismic
Spacing Units	Stratigraphic Field Stations	Stratigraphy	Support Facilities	Wells

Support Module Relationships

Additives	Areas	Business Associates	Coordinate Reference Systems	Data management
Entitlements	Equipment	Finances	Products and Substances	Projects
Rate Schedules	Source Document Bibliography	Spatial Locations	Spatial Parcels	SW Applications
Units of Measure	Volume Conversions	Work Orders		

Sample Management

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
Contracts	Ecozones	Fields	Fossils	Health, Safety and Environment
Instruments	Land Rights	Lithology	Notifications	Obligations
Paleontology	Partnerships and Interest Sets	Pools	Production Entities	Production Facilities
Production Lease Units	Production Reporting	Production Strings	Records, Product & Info Mgmt	Reporting Hierarchies
Reserves Reporting	Restrictions	Sample Analysis	Sample Management	Seismic
Spacing Units	Stratigraphic Field Stations	Stratigraphy	Support Facilities	Wells

Support Module Relationships

Additives	Areas	Business Associates	Coordinate Reference Systems	Data management
Entitlements	Equipment	Finances	Products and Substances	Projects
Rate Schedules	Source Document Bibliography	Spatial Locations	Spatial Parcels	SW Applications
Units of Measure	Volume Conversions	Work Orders		

PPDM 3.9 Subject Area Relationships

Seismic

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
Contracts	Ecozones	Fields	Fossils	Health, Safety and Environment
Instruments	Land Rights	Lithology	Notifications	Obligations
Paleontology	Partnerships and Interest Sets	Pools	Production Entities	Production Facilities
Production Lease Units	Production Reporting	Production Strings	Records, Product & Info Mgmt	Reporting Hierarchies
Reserves Reporting	Restrictions	Sample Analysis	Sample Management	Seismic
Spacing Units	Stratigraphic Field Stations	Stratigraphy	Support Facilities	Wells

Support Module Relationships

Additives	Areas	Business Associates	Coordinate Reference Systems	Data management
Entitlements	Equipment	Finances	Products and Substances	Projects
Rate Schedules	Source Document Bibliography	Spatial Locations	Spatial Parcels	SW Applications
Units of Measure	Volume Conversions	Work Orders		

PPDM 3.9 Subject Area Relationships

Spacing Units

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
Contracts	Ecozones	Fields	Fossils	Health, Safety and Environment
Instruments	Land Rights	Lithology	Notifications	Obligations
Paleontology	Partnerships and Interest Sets	Pools	Production Entities	Production Facilities
Production Lease Units	Production Reporting	Production Strings	Records, Product & Info Mgmt	Reporting Hierarchies
Reserves Reporting	Restrictions	Sample Analysis	Sample Management	Seismic
Spacing Units	Stratigraphic Field Stations	Stratigraphy	Support Facilities	Wells

Support Module Relationships

Additives	Areas	Business Associates	Coordinate Reference Systems	Data management
Entitlements	Equipment	Finances	Products and Substances	Projects
Rate Schedules	Source Document Bibliography	Spatial Locations	Spatial Parcels	SW Applications
Units of Measure	Volume Conversions	Work Orders		

Stratigraphic Field Stations

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
Contracts	Ecozones	Fields	Fossils	Health, Safety and Environment
Instruments	Land Rights	Lithology	Notifications	Obligations
Paleontology	Partnerships and Interest Sets	Pools	Production Entities	Production Facilities
Production Lease Units	Production Reporting	Production Strings	Records, Product & Info Mgmt	Reporting Hierarchies
Reserves Reporting	Restrictions	Sample Analysis	Sample Management	Seismic
Spacing Units	Stratigraphic Field Stations	Stratigraphy	Support Facilities	Wells

Support Module Relationships

Additives	Areas	Business Associates	Coordinate Reference Systems	Data management
Entitlements	Equipment	Finances	Products and Substances	Projects
Rate Schedules	Source Document Bibliography	Spatial Locations	Spatial Parcels	SW Applications
Units of Measure	Volume Conversions	Work Orders		

PPDM 3.9 Subject Area Relationships

Stratigraphy

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
Contracts	Ecozones	Fields	Fossils	Health, Safety and Environment
Instruments	Land Rights	Lithology	Notifications	Obligations
Paleontology	Partnerships and Interest Sets	Pools	Production Entities	Production Facilities
Production Lease Units	Production Reporting	Production Strings	Records, Product & Info Mgmt	Reporting Hierarchies
Reserves Reporting	Restrictions	Sample Analysis	Sample Management	Seismic
Spacing Units	Stratigraphic Field Stations	Stratigraphy	Support Facilities	Wells

Support Module Relationships

Additives	Areas	Business Associates	Coordinate Reference Systems	Data management
Entitlements	Equipment	Finances	Products and Substances	Projects
Rate Schedules	Source Document Bibliography	Spatial Locations	Spatial Parcels	SW Applications
Units of Measure	Volume Conversions	Work Orders		

PPDM 3.9 Subject Area Relationships

Support Facilities

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
Contracts	Ecozones	Fields	Fossils	Health, Safety and Environment
Instruments	Land Rights	Lithology	Notifications	Obligations
Paleontology	Partnerships and Interest Sets	Pools	Production Entities	Production Facilities
Production Lease Units	Production Reporting	Production Strings	Records, Product & Info Mgmt	Reporting Hierarchies
Reserves Reporting	Restrictions	Sample Analysis	Sample Management	Seismic
Spacing Units	Stratigraphic Field Stations	Stratigraphy	Support Facilities	Wells

Support Module Relationships

Additives	Areas	Business Associates	Coordinate Reference Systems	Data management
Entitlements	Equipment	Finances	Products and Substances	Projects
Rate Schedules	Source Document Bibliography	Spatial Locations	Spatial Parcels	SW Applications
Units of Measure	Volume Conversions	Work Orders		

PPDM 3.9 Subject Area Relationships

Wells

Business Module Relationships

Applications	Classification Systems	Consents	Consultations	Contests
Contracts	Ecozones	Fields	Fossils	Health, Safety and Environment
Instruments	Land Rights	Lithology	Notifications	Obligations
Paleontology	Partnerships and Interest Sets	Pools	Production Entities	Production Facilities
Production Lease Units	Production Reporting	Production Strings	Records, Product & Info Mgmt	Reporting Hierarchies
Reserves Reporting	Restrictions	Sample Analysis	Sample Management	Seismic
Spacing Units	Stratigraphic Field Stations	Stratigraphy	Support Facilities	Wells

Support Module Relationships

Additives	Areas	Business Associates	Coordinate Reference Systems	Data management
Entitlements	Equipment	Finances	Products and Substances	Projects
Rate Schedules	Source Document Bibliography	Spatial Locations	Spatial Parcels	SW Applications
Units of Measure	Volume Conversions	Work Orders		