



PROFESSIONAL PETROLEUM  
DATA MANAGEMENT ASSOCIATION

## Introduction to Compliance Specifications

### Overview

When we look at Compliance Specifications we are looking at the PPDM Compliant designation rating. This rating is only given to a product that utilizes a Production Release of the Model. The PPDM Board decides which Releases are supported at any time for Compliance.

This introduction is going to take you through a brief summary of what Compliance Specifications there are and how they work.

### Topics

- [Topic 1: What are Compliance Specifications](#)
- [Topic 2: Compliance Rating Definition](#)
- [Topic 3: Software and Assessment](#)



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## Topic 1: What are Compliance Specifications?

### Introduction

Let's take a look at what Compliance Specifications are. To do this we will need to have a general understanding of a few definitions and common terms.

#### Definition

The term "Compliance" defines a level of conformance between a database or software product and the published PPDM standards.

Gold, or structural compliance measures the conformity of a product (software, data) to the technical relational DDL provided for a PPDM data model.

#### Status

The current gold compliance certification process has been approved by the board of directors and is currently in use. Several applications have been certified as gold compliant.

### 1.3. Certification Mark



Structural compliance is referred to as "gold compliance"

The certification mark has been registered in Canada and the US; the process is in final stages of approval. Use of the certification mark in Canada and the US has been forwarded to our legal counsel.

### Compliance General Characteristics

- Compliance is verified only for conformance to a PPDM Version as defined by the published Data Definition Language specifications. This can only be applied to software which contains PPDM model definitions and references. Generic software tools (e.g. browser) which may access a PPDM defined database but do not contain PPDM model definitions or references, cannot be measured for Compliance PPDM Association reserves all copyright to the term "PPDM-Compliant". The Association also reserves the right to enhance or modify the definition, characteristics or process of "PPDM-Compliance".
- The procedure to obtain a Compliance rating is defined in the PPDM Compliance Process Document. It will involve a self-assessment by submitting organization and a verification by the PPDM organization.
- When a Compliance Rating is verified and granted, the Rating will be publicized by the PPDM organization.

[Back to top](#)



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## Topic 2: Compliance Rating Definition

### Introduction

Let's take a look at what the compliance rating definition means, this will provide perspective on the rationale for having this rating.

- The term "PPDM Compliant" should not be used in a general yes or no sense or as a simple percentage.
- The Compliance Rating Code applies to a specific product.
- The product must therefore be uniquely defined by:  
**Stating the vendor name, the product name and the product version number.**

It may also be necessary for the vendor to supply potential customers with additional information, such as the appropriate database management system or operating system environment.

### The Code contains:

1. **PPDM Version number.**
2. **Product scope:** total number of tables (or views) implemented or referenced within the product, including tables that are beyond the PPDM Footprint.
3. **Footprint name and size:** Name of footprint published by PPDM, number of tables (or views) within the product that map to PPDM table definitions. (see *PPDM Compliance Technical Specifications*, Page 1.)
4. **Table congruence:** number of product tables in the Footprint that exactly match PPDM definitions.
5. **Compliance Level:** Gold (table-based) or Silver (view-based).
6. **Congruence measurement** (Gold Level only): a percentage indicator of the average level of compliance for all non-compliant tables within the Footprint. For a fully compliant product, this number is automatically set to 100%.

For more details visit: [PPDM Compliance Technical Specifications](#).

The concept of the Footprint is central to the Compliance rating. The product may include functional scope or table structures that are beyond PPDM's definitions, or it may employ a different model for part of the PPDM functionality. These choices are entirely in the domain of the product vendor. PPDM Compliance is measured only for the Footprint identified by the vendor. The exception is that the vendor must include in the Footprint any table whose name matches a table anywhere in the PPDM DDL.



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## Levels of Compliance

### Gold Level

Gold Level Compliance is determined for software that implements the PPDM Table definitions. Table-Based Compliance offers the possibility (but no guarantee) of multiple software applications having update interoperability on the database. Referential integrity is maintained between tables with PPDM defined constraints. Unique Identification of each row of a table is maintained within the table structures by primary key unique index constraints defined by PPDM.

### Silver Level

Silver Level Compliance is determined for software that employs database Views to mirror or represent PPDM tables. These views may not be updateable via the database system. Referential integrity between views is not guaranteed. The base tables for these views may be in any legacy schema, including older PPDM versions and other relational models.

[Back to top](#)



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## Topic 3: Software and Assessment

### Introduction

Now that we have an idea of what it means to be PPDM Compliant let's learn how that happens.

### 4 Steps to Assessing Compliance

#### Step 1: Compliance Questionnaire

- Complete and submit the [Compliance Questionnaire](#).
- The assessment can begin once the questionnaire has been submitted.

Please submit the form to (preferred method):

Email: [it\\_support@ppdm.org](mailto:it_support@ppdm.org)

Other methods to submit the form:

Fax: 1 403-660-0540  
Mailing Address: PPDM Association  
Bankers Hall, PO Box 22155  
Calgary, Alberta, Canada  
T2P 4J5

#### Step 2: Underlying Technology

- Database and version supported - Oracle, MS SQL Server, MySQL, etc. and its respective version.
- Operating System supported - Microsoft Windows XP, Vista, 7, Linux, OSX, etc.
- Other as appropriate - any other technology involved, browsers, tablet, smartphone, etc.

#### Step 3: Compliance Type

- **Gold:** connects directly to the tables and columns in a physical PPDM database via SQL
- **Silver:** connects to a PPDM database by views or other connecting technology

#### Step 4: Product Compliance Details

- Version of PPDM supported (3.8, 3.7, 3.7.1, etc)
- Footprint of modules referenced by software (Seismic, Wells, Areas, etc.)
- Product Scope: amount of tables or views used by the product, includes tables outside of the PPDM schema
- Listing of Primary keys that are disabled or modified
- Listing of columns modified
- Listing of tables dropped from PPDM schema
- Listing of additional tables and columns that affect the Primary Key of existing PPDM tables
- Listing of additional tables and columns that create mandatory relationships in PPDM tables



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Based on these details a percentage measurement is created that states how PPDM compliant the software is. If the questionnaire is not filled out correctly or not enough detail is given, PPDM will contact the person that filled out the form to ask:

- More questions.
- Get them to clarify or redo the questionnaire.
- If PPDM is still not satisfied with the questionnaire details (things are still unclear) PPDM may ask for a demo of the software and to see the actual code that interacts with the database.

### **Example of how percentage measurement is derived**

**Example:** Vendor, Product, Version: CRC V3.4 - 25:Wells: 10:7 Gold 70%

**Vendor:** The company requesting the Compliance rating

**Product:** The name of the vendor's software being evaluated

**Version:** Version of the software being evaluated

**CRC:** Compliance Rating Code

1. The example specifies the software (including the exact version of the product) which has been assigned a Compliance Rating Code.
2. The CRC has been determined with reference to the production version PPDM 3.4.
3. The product uses a total of 25 tables in a relational database.
4. The product's PPDM Footprint is named "Wells" and has 10 tables.
5. Within the Footprint, 7 tables are exact matches (or do not conflict as defined).
6. The Compliance type is Gold Level (Table-Based).
7. The level of Compliance is 70% ( $7/10=70\%$ ).

[Back to top](#)