Course : PowerAMC, designing a database

Practical course - 2d - 14h00 - Ref. AMC
Price : 1360 € E.T.

Pendant ce cours, vous découvrirez les fonctionnalités majeures de PowerAMC. Vous apprendrez à construire, formaliser et maintenir les modèles utilisés pour concevoir une base de données (modèle Orienté Objet - UML, modèle conceptuel et physique, dictionnaire...).

🎯 Teaching objectives

At the end of the training, the participant will be able to:

- ✓ Creating a data dictionary in PowerDesigner
- ✓ Implement and verify a conceptual data model in PowerDesigner
- ✓ Set transformation rules from conceptual to physical data model
- ✓ Generate the physical data model with PowerDesigner and analyze the results
- ✓ Reverse Engineering with PowerAMC

Intended audience
Database designers and administrators, analysts and developers.

Prerequisites
No special knowledge required.

Practical details
Hands-on work
Half of the practical work is divided between designing models (based on the case study) and representing them with PowerAMC.

Course schedule

1 Introduction

- Introducing PowerAMC.
- Main features.
- Interface and menus.

Hands-on work
Getting to grips with PowerAMC.

2 Data identification

- Learn how to create a data dictionary.
- Data description and controls.
- How do you define attributes?

Hands-on work
Analyze documents and identify data content. Enter selected attributes and associated rules into PowerDesigner.

3 Semantic data modeling

- The object-oriented model (MOO - UML class diagram).
- Identify classes, associations and constraints.
- How to create a model.
- Normalization: the role of normal forms in understanding data.
- The main concepts proposed by PowerDesigner.
- Proposed checks.
- Conceptual Data Model (CDM).
- Presentation of MCD concepts by analogy and difference with MOO.

Hands-on work
Build a class diagram from the data dictionary. Enter the result with PowerDesigner. Perform the suggested checks. Generate the MCD with PowerDesigner and analyze the result.

4 Physical data modeling

- Presentation of the rules for transforming a semantic model into a physical data model.
- The main optimization rules.
- How does PowerDesigner generate an MPD?
- Generation of the corresponding SQL scripts.

Hands-on work
Transformer le modèle sémantique en modèle physique. Générer le MPD avec PowerAMC et analyser le résultat.

5 Reverse Engineering

- Presentation.
- Reverse Engineering with PowerAmc.
- Functions for creating an MPD from an existing database.
- How do you generate a MOO or MCD from an existing MPD?

Hands-on work
Add new attributes to a database. Regenerate upstream models.

6 Conclusion

- Overview of PowerAMC's processing functions.
- Other diagrams.

Dates and locations

REMOTE CLASS
2026 : 26 Mar., 4 June, 17 Sep., 19 Nov.

PARIS LA DÉFENSE
2026 : 26 Mar., 4 June, 17 Sep., 19 Nov.