+33 (0)1 48 10 09 46
formation@ambient-it.net
140 Avenue Jean Lolive 93500 Pantin - France

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Looker LookML training

2 days (14 hours)

Presentation

Master Looker and LookML in their expert dimension thanks to this comprehensive training, designed to secure and enhance data within the Looker platform. The course begins with an exploration of the fundamentals of Looker and its interface: Explores navigation, dashboard creation, dynamic filters and best visualization practices. You'll get to grips with all the tools you need to explore your data effectively. You'll then learn how to design robust, scalable LookML models, structuring your model and view files, and defining high-performance dimensions, measures, joins and derived queries. The logic of collaborative development with Git and fine-tuned permissions management will also be covered. Modules dedicated to security, performance, report planning and automation via the Looker API will enable you to industrialize your deployments and optimize the use of the platform on a large scale. As with all our training courses, this one will be presented with the latest Looker updates.

Objectives

- Understand Looker's architecture, its semantic modeling logic and the use of the LookML language.
- Model, join, transform and secure data sources in a LookML project
- master the creation of visualizations, interactive dashboards and analytical alerts in the Looker interface
- Be able to manage permissions, data security (row-level access) and performance performance
- Industrialize LookML development via Git, automate workflows with the Looker API, and supervise report usage.

Target audience

- BI developers
- Data analysts

Prerequisites

- Knowledge of data modeling
- Knowledge of collaborative workflows

Looker LookML training program

Introduction to Looker

- Typical use cases: BI, reporting, ad hoc exploration
- Looker vs. other BI tools
- Explore, View, Model, LookML, Dashboard
- Difference between Looker front-end and LookML back-end
- Introduction to Looker architecture

Getting to grips with the Looker user interface

- Exploring a data source
- Saving looks and creating dashboards
- Filtering, pivoting, aggregating, sorting
- Available chart types
- Customizing visualizations
- Add interactivity: filters, dynamic links
- Add visual blocks
- Global filter settings
- Layout and sharing

LookML basics

- .model, .view, .dashboard files
- Looker project hierarchy
- Dependencies and directory structures
- Dimensions, measures and types
- sql, label, group_label, description
- Reuse with includes and extends
- Database connection
- Explores declaration
- Setting default joins and filters

View construction in LookML

- Dimension types: string, number, date
- Custom SQL expressions
- Formatting and display options
- Standard aggregations
- Custom measures with sql
- Conditional measures and linked filters
- Use of timeframes
- Special cases: fiscal weeks, UTC/local
- Time comparison: MoM, YoY

Joins and advanced modeling

- Joint types: left_outer, inner, full_outer
- Using sql_on and relationship
- Best practices for avoiding aggregation errors
- Modeling strategy
- Pre-aggregation via PDT
- Security filters on joins
- Creating temporary materialized views
- SQL syntax in derived_table
- Optimization via persist_for or datagroup_trigger

Security and access management

- User types
- Access control to projects, models and explorations
- Admin panel permissions management
- Implementation via access_filter
- Conditional user filters
- Use cases: regional data, commercial data

Collaborative development and Git

- Repository initialization
- Using branches
- Publishing workflows
- Code review and validation
- Conflict resolution
- Deployment in a production environment

Best practices and performance

- Naming conventions
- Structuring views and models
- Code reuse
- Wise use of dimensions/measurements
- Avoiding the pitfalls of large joins
- PDT and datagroup optimization

Monitoring, alerts and automation

- Usage and performance logs
- Analysis of slow queries
- Alerts on rendering or exploration errors
- Creation of conditional alerts
- Report scheduling
- Send by e-mail, webhook, Slack...

Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced IT technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the forthcoming training course, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical training: 60% hands-on, 40% theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Certification

A certificate will be awarded to each trainee who has completed the entire course.