

Projekt-ID. SDG-M8

Synthetic Data Generator (SDG) – Governance, Compliance and Auditability Layer

Version: 2.0

Status: 100/100 Validiert

Executive Summary

The Governance, Compliance and Auditability Layer ensures that the Synthetic Data Generator (SDG) operates in a fully compliant, transparent, and auditable manner. It integrates regulatory, operational, and ethical standards into all data generation and validation processes, enforcing strict accountability across all system activities.

Scope and Objective

This document outlines the governance structures, compliance mechanisms, and auditability controls embedded within the SDG. It ensures full transparency, regulatory adherence, and continuous audit readiness.

Technical Background

Compliance and governance are core architectural principles of the MaxOne and TBYD frameworks. The SDG incorporates:

- Embedded compliance checks at every operational stage
- Continuous event logging and audit trail generation
- Policy-driven operation enforcement
- Full alignment with GDPR, ISO 27001, and MaxReg frameworks

Core Components

- Policy Enforcement Engine: Applies regulatory and internal rules in real time.
- Audit Log Engine: Captures all critical operations and validation events.
- Compliance Validation Module: Verifies adherence to applicable standards.
- Regulatory Reporting Interface: Enables export of compliance and audit reports for external review.

Interfaces and Integration Points

Governance components interact with:

- MaxAudit: Core audit logging and validation management.
- MaxReg: Regulatory compliance enforcement.
- MaxControl: Policy updates and operational rule adjustments.

Validation and Testing Criteria

Governance validation checkpoints include:

- Continuous Audit Log Integrity Verification
- Real-time Policy Compliance Checks
- GDPR/ISO 27001 Compliance Certifications
- External Reporting and Regulatory Review Readiness

Compliance and Auditability

The Governance, Compliance and Auditability Layer ensures full adherence to:

- GDPR / DSGVO and CCPA standards
- ISO 27001 Information Security Management requirements
- TBYD 100/100 Validation Processes
- MaxOne audit and compliance integration principles