PGEE ADVANCED DATABASE AUDIT

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POSTGRESQL: ADVANCED DATABASE AUDIT

PGAudit is a popular Open Source auditing extension for PostgreSQL, designed to provide detailed logging and tracking of database activities. It allows administrators to monitor and record all changes made to the database, including SQL statements executed, data modifications, and system events.

"PostgreSQL compliance and security by professionals"

PGAudit plays a crucial role in ensuring database compliance with various regulatory requirements and industry standards.

KEY FEATURES OF OPEN SOURCE PGAUDIT FOR POSTGRESQL

FINE-GRAINED AUDITING
PGAudit provides detailed information about each database event, including the SQL statement executed, the user who performed the action, and the timestamp.

CONFIGURABLE LOGGING
Administrators can customize what events are logged and how they are recorded, allowing for flexibility in auditing and compliance requirements.

### INTEGRATION WITH POSTGRESQL'S BUILT-IN LOGGING
PGAudit integrates seamlessly with PostgreSQL's existing logging mechanisms, making it easy to incorporate into existing monitoring and auditing workflows.

BENEFITS OF USING PGAUDIT

IMPROVED SECURITY AND COMPLIANCE

By tracking all database activities, PGAudit helps organizations meet regulatory requirements and ensures that sensitive data is protected.
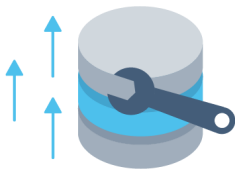
ENHANCED TROUBLESHOOTING AND DEBUGGING

With detailed logs of database events, administrators can quickly identify and resolve issues, reducing downtime and improving overall system reliability.
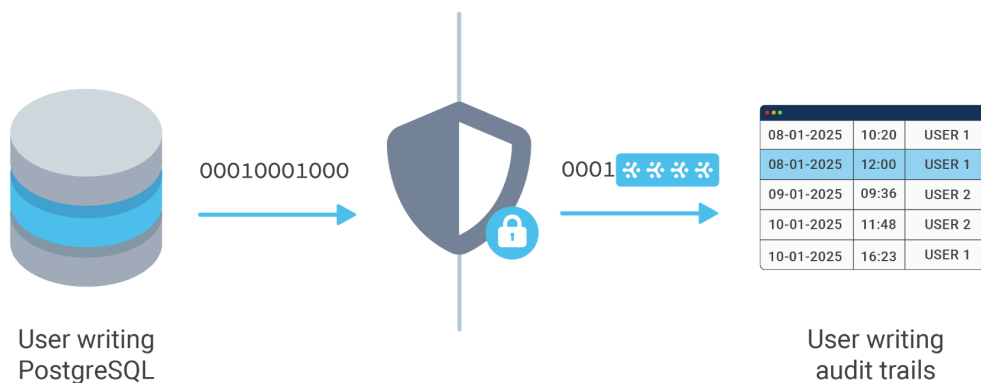
BETTER PERFORMANCE MONITORING

PGAudit's logging capabilities provide valuable insights into database performance, allowing administrators to optimize queries and improve system efficiency.

PGEE: ENTERPRISE GRADE AUDITING

CYBERTEC PostgreSQL Enterprise Edition offers functionality that exceeds what standard PGAudit can do, allowing for full database compliance satisfying the needs of a modern enterprise.

08-01-2025	10:20	USER 1
08-01-2025	12:00	USER 1
09-01-2025	09:36	USER 2
10-01-2025	11:48	USER 2
10-01-2025	16:23	USER 1

00010001000

User writing
PostgreSQL

User writing
audit trails

"Writing audit trails in different user contexts"

## REGULATORY REQUIREMENTS MET BY CYBERTEC ENTERPRISE PGAUDIT

With CYBERTEC Enterprise PostgreSQL (PGEE) and its enhanced audit extension, compliance with relevant standards will be greatly simplified:

- **PCI-DSS (Payment Card Industry Data Security Standard):** Requires organizations to maintain detailed logs of all database activities related to payment card data.
- **HIPAA (Health Insurance Portability and Accountability Act):** Mandates that healthcare organizations maintain accurate and detailed records of all access and modifications to protected health information (PHI).
- **GDPR (General Data Protection Regulation):** Requires organizations to maintain records of all processing activities, including access and modifications to personal data.
- **SOX (Sarbanes-Oxley Act):** Mandates that publicly traded companies maintain accurate and detailed financial records, including logs of all database activities related to financial data.
- **FSCA (Financial Sector Conduct Authority):** African financial regulations recently introduced to secure the banking industry.
- **COBIT (Control Objectives for Information and Related Technology):** A framework for IT governance and management that requires detailed logging and auditing of database activities.
- **NIST Cybersecurity Framework (National Institute of Standards and Technology):** A framework for managing cybersecurity risk that recommends implementing audit logs to detect and respond to security incidents.
- **ISO 27001 (International Organization for Standardization 27001):** A standard for information security management systems that mandates the implementation of audit trails and logging mechanisms.
- **FFIEC (Federal Financial Institutions Examination Council) Guidelines**: Requires financial institutions to maintain detailed logs of all database activities related to sensitive customer data.
- **GLBA (Gramm-Leach-Bliley Act):** Mandates that financial institutions protect sensitive customer data, including maintaining accurate and detailed records of all access and modifications to that data.

For more information about additional standards and compliance regulations, please feel free to reach out to us.

SCALEFIELD SECURE: MANAGING AUDIT LOGS AT SCALE

Scalefield Secure is an extension for CYBERTEC Scalefield that allows you to handle audit logs for PGEE, PostgreSQL, and Oracle at scale, while maintaining both compliance and security.
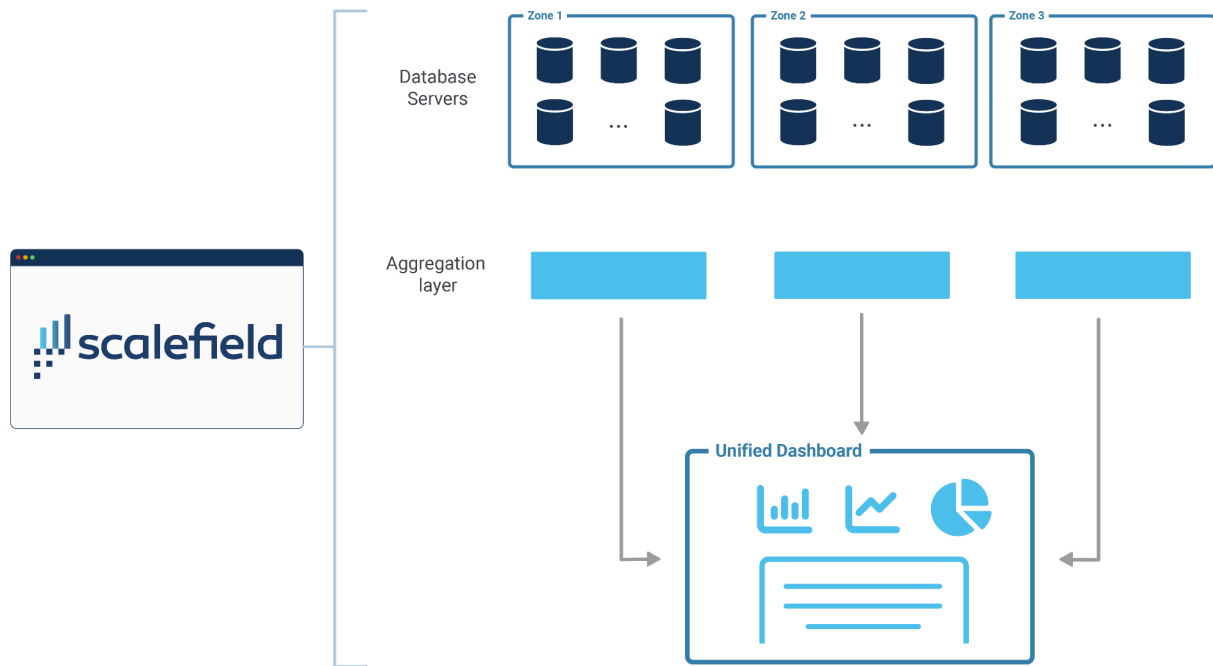
For more details, check out the **Scalefield Secure product information**.

If you need further information

For more information, or if you have any questions about our range of products, tools and services, contact us. There's no obligation—send us an inquiry via email or give us a call.

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VERSION HISTORY

Version	Effective Date	Description	Author	Reviewed By	Approved By
1.1	2025-02-26	Preparation of this paper including all graphics.	Hans-Jürgen Schönig	Patricia Horvath	Cornelia Biacsics
1.2	2025-02-28	Cover & Table of Content	Leonie Berndt	Scarlett Riggs	Scarlett Riggs