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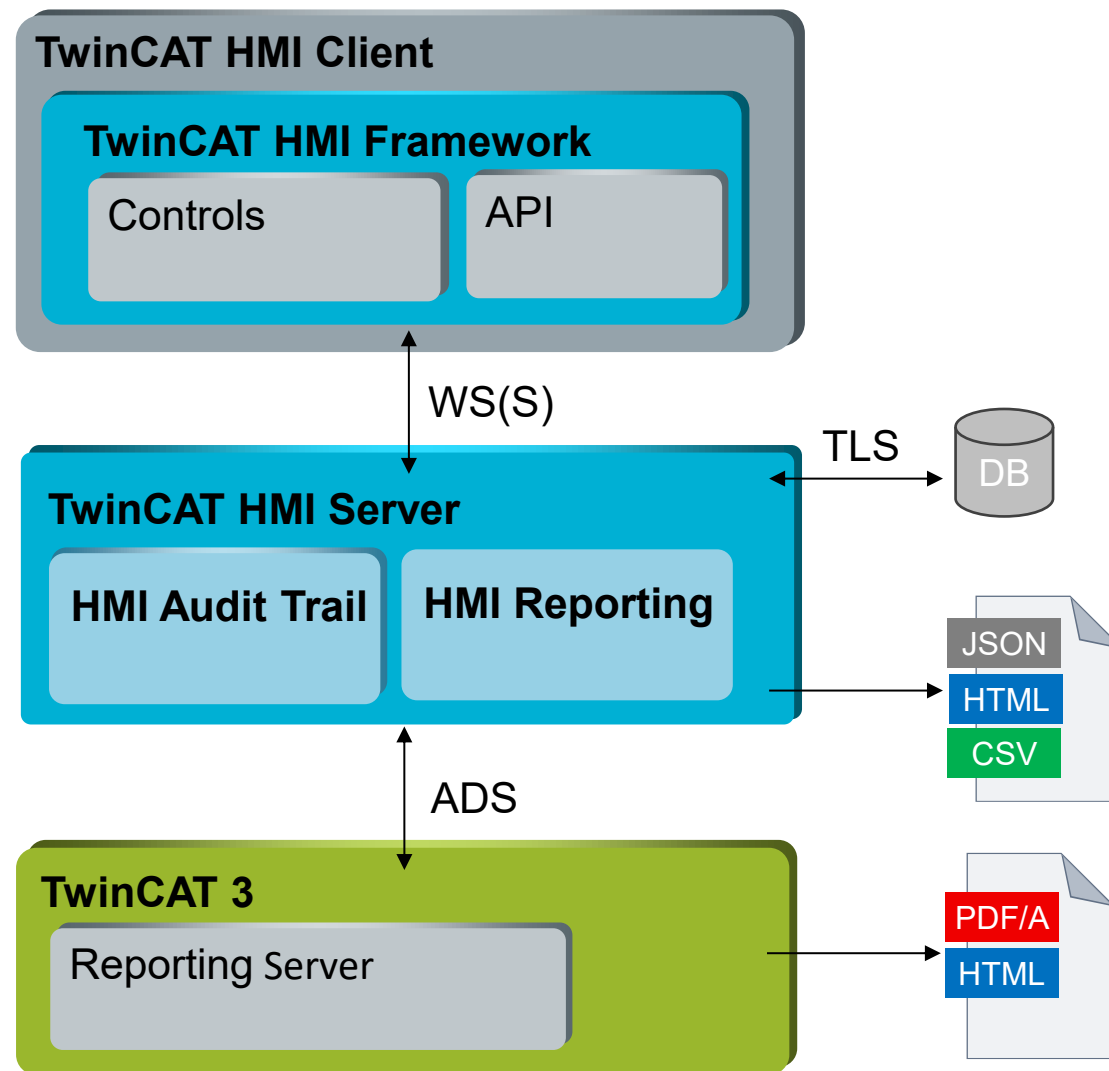
TF2400 TwinCAT 3 HMI Audit Trail



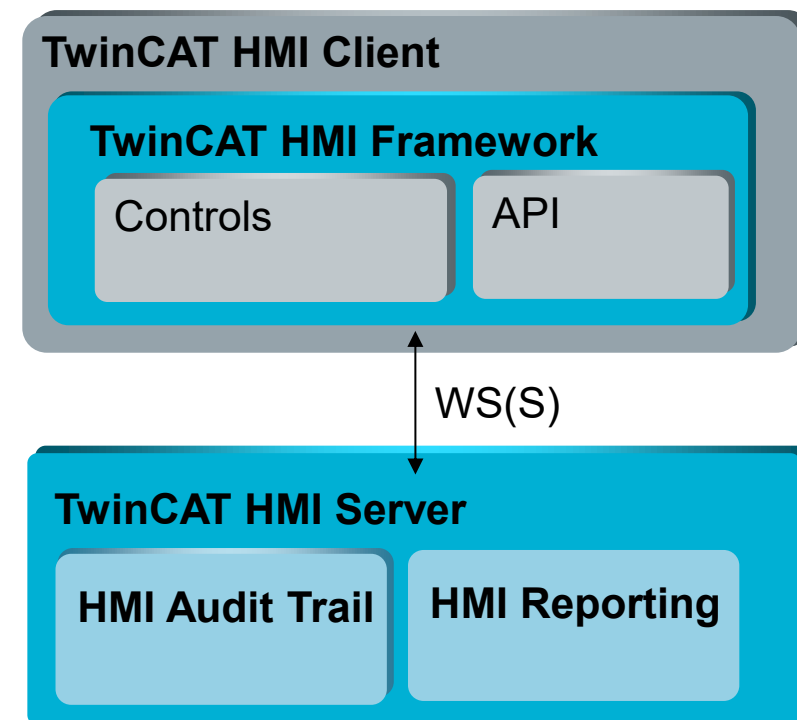
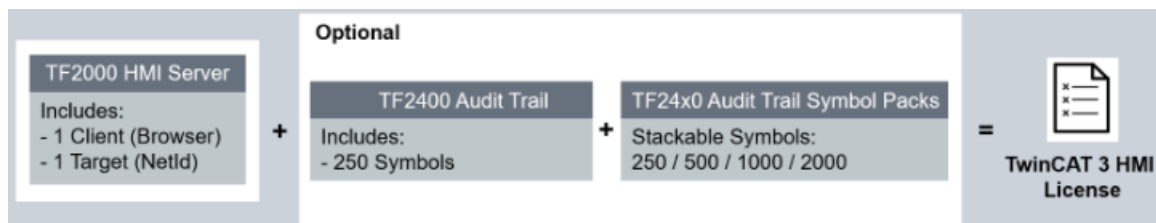
- 定义
 - 按时间顺序记录用户交互和系统事件,并保存至数据库
- 行业
 - 医药、包装等需要质量管理的行业
- 规章条例 / 指导方针
 - FDA 21 CFR Part 11
 - GAMP
 - GMP



- 记录
 - HMI 变量
 - HMI 事件
- 电子签名
 - 双重认证
 - 用户签名
- 扩展用户管理
 - 密码规则
 - 密码期限
- 导出



- 产品功能包括:
 - 电子签名
 - HMI 事件记录
 - 250 个变量追踪
- 审计跟踪变量的数量可扩展
- 授权包可叠加



TC3 HMI Audit Trail Symbols Pack	TF2410	TF2420	TF2430	TF2440
Additional Audit Trail Symbols	250	500	1000	2000

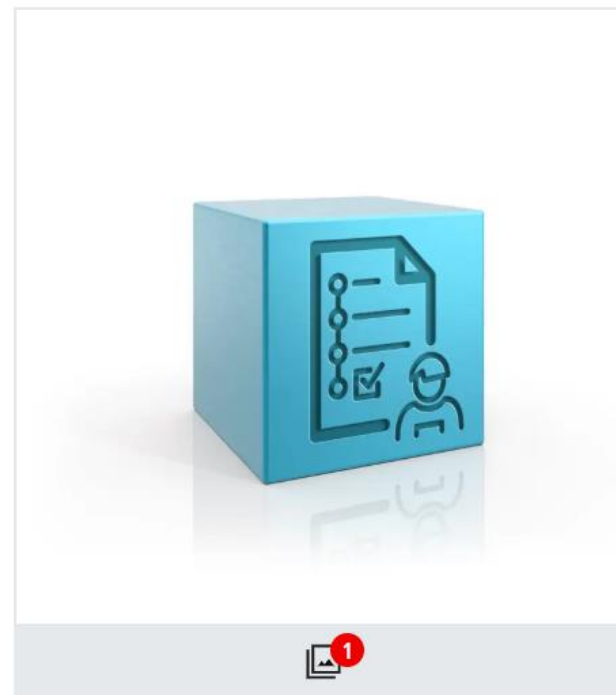
TF2400 | TwinCAT 3 HMI Audit Trail



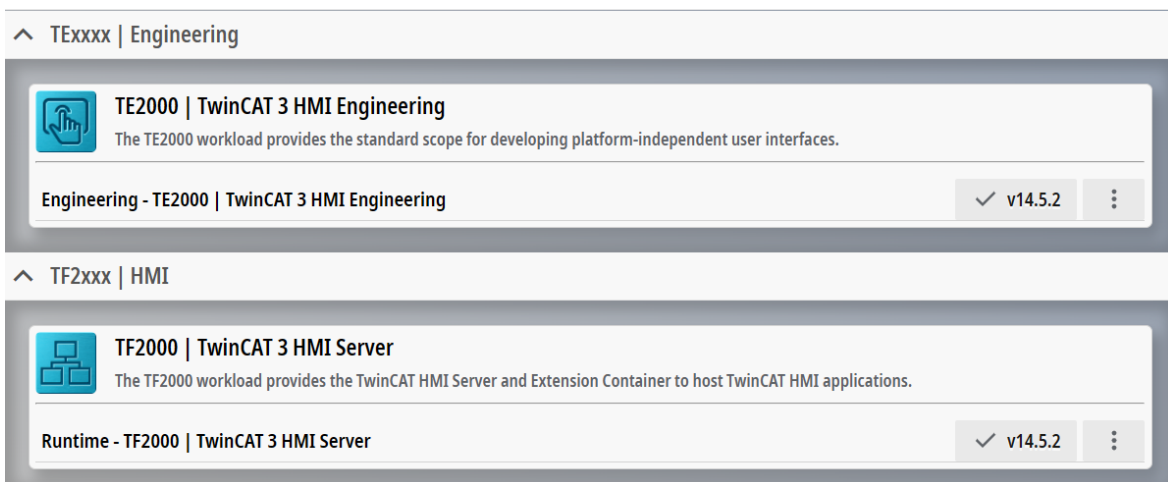
TF2400 [TwinCAT](#) 3 HMI Audit Trail 扩展包可安全记录 HMI 操作员和系统事件的更改，以便能够按时间顺序追溯。这些记录存储在数据库中，可以生成为 PDF 报告或以不同格式（JSON、HTML、CSV）导出。电子签名允许用户以更高权限重新进行身份验证。该产品可根据 FDA 21 CFR 第 11 部分、GAMP 和 GMP 的规定开发应用程序。

除了生成 PDF 报告和电子签名外，TF2400 还包括 250 个审计追踪符号，可使用 [TF24x0](#) TwinCAT 3 HMI Audit Trail 符号包进行扩展。

 **产品状态:** 正常供应

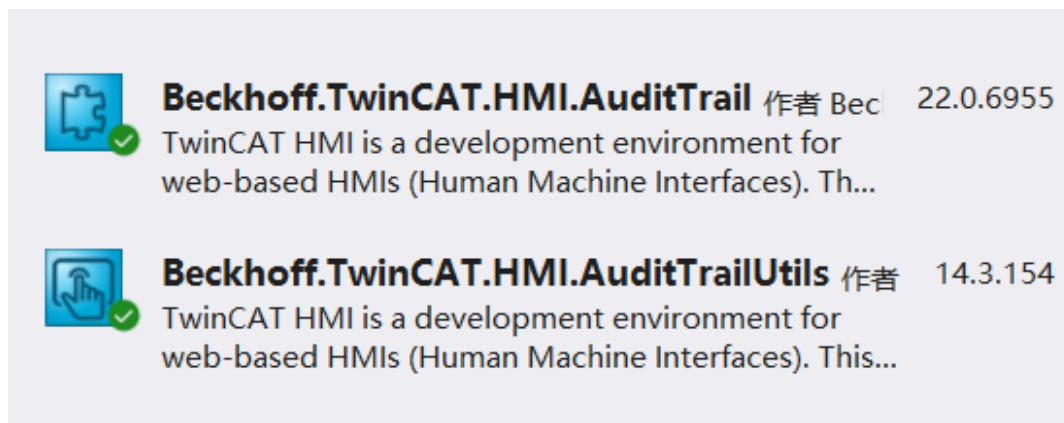


Workloads:

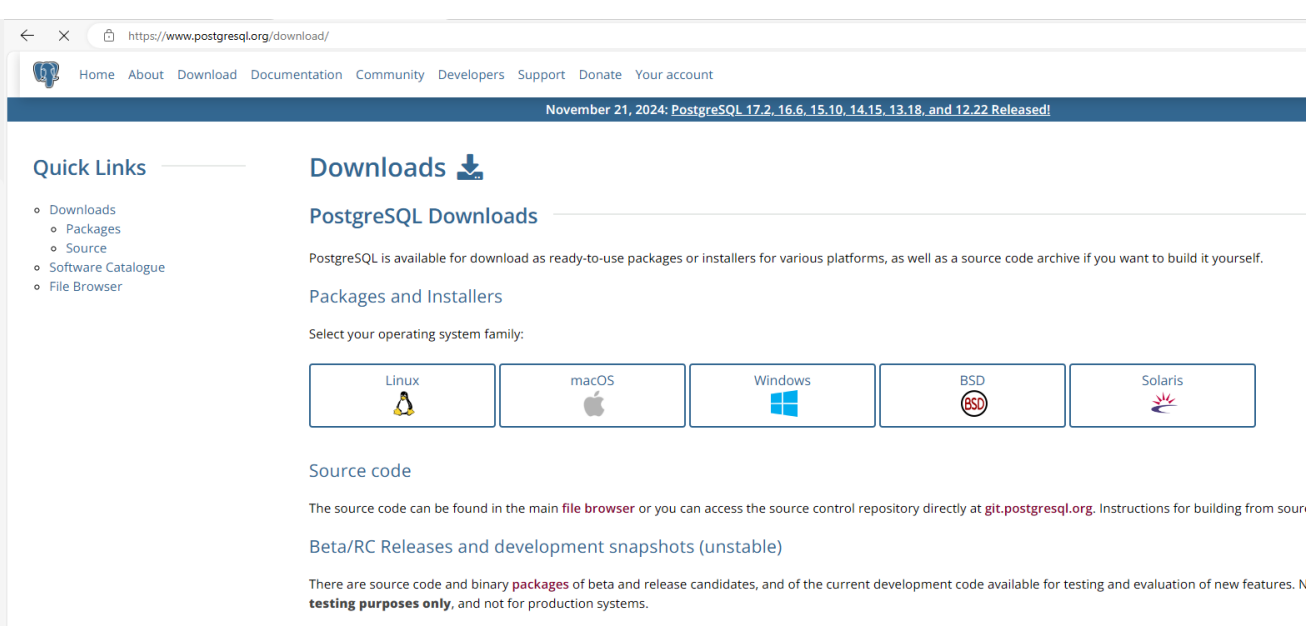


Nuget Packages:

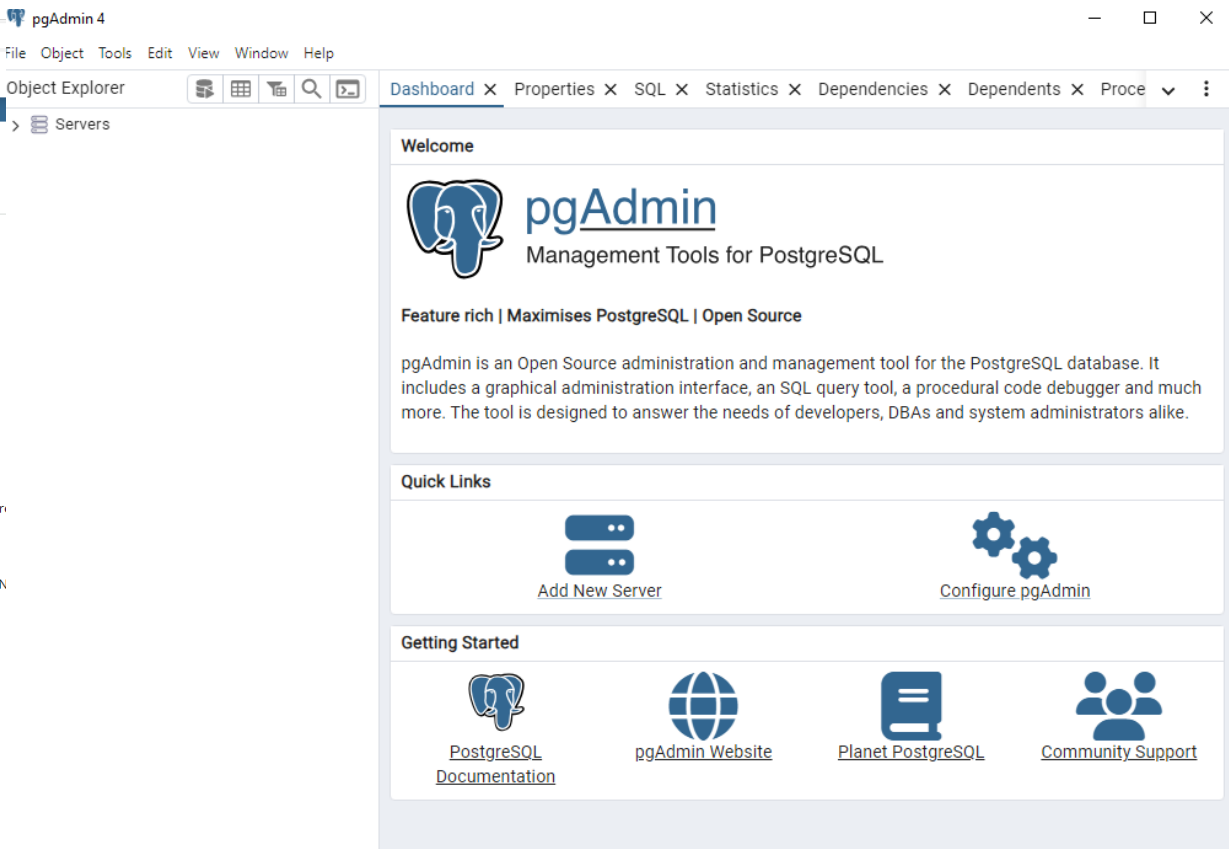
- Beckhoff.TwinCAT.HMI.AuditTrail
- Beckhoff.TwinCAT.HMI.AuditTrailUtils



■ 安装 PostgreSQL



■ pgAdmin 官方的图形界面管理工具



■ TcHmiAuditTrail 与PostgreSQL数据库配置连接

The image displays the configuration interface for the TcHmiAuditTrail component in TwinCAT 3 HMI. On the left, a tree view shows the project structure: Servers (1) > PostgreSQL 16 > Databases (2) > AuditTrailDB. A large double-headed arrow points from this tree to the configuration window on the right. The configuration window has a left sidebar with a list of components: ADS, TcHmiAuditTrail (selected), TcHmiLua, TcHmiReporting, TcHmiSQLiteLogger, TcHmiSrv, TcHmiUserManagement, and Log. The main area shows the 'Database Settings' tab for the 'Current database connection'. It includes fields for Host (localhost), Port (5432), Database name (AuditTrailDB), Username (postgres), Password (masked), and Server connection timeout (10). There are also checkboxes for 'Username' and 'Password'. At the bottom, there are fields for 'Maximum number of database entries' (15000) and 'Limit for the hint of the remaining database entries' (10). The footer shows package and product versions.

Left Panel (Tree View):

- Servers (1)
 - PostgreSQL 16
 - Databases (2)
 - AuditTrailDB**
- Casts
- Catalogs
- Event Triggers
- Extensions (1)
 - plpgsql
- Foreign Data Wrappers
- Languages
- Publications
- Schemas
- Subscriptions

Right Panel (Configuration Window):

ADS

- TcHmiAuditTrail**
- TcHmiLua
- TcHmiReporting
- TcHmiSQLiteLogger
- TcHmiSrv
- TcHmiUserManagement
- Log

Publish Configuration: default [Manage Configurations...](#)

General **Database Settings** Audit Trail Database Diagnostics

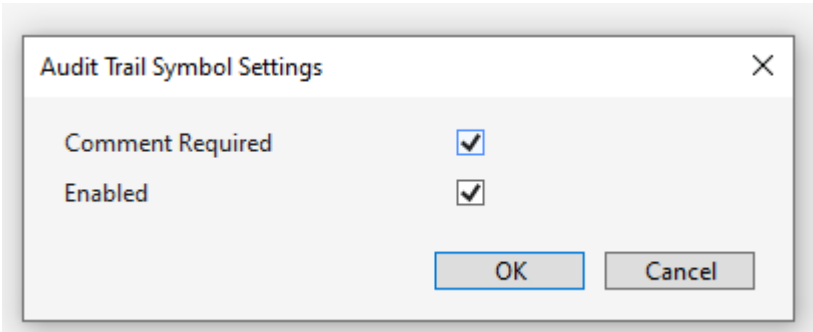
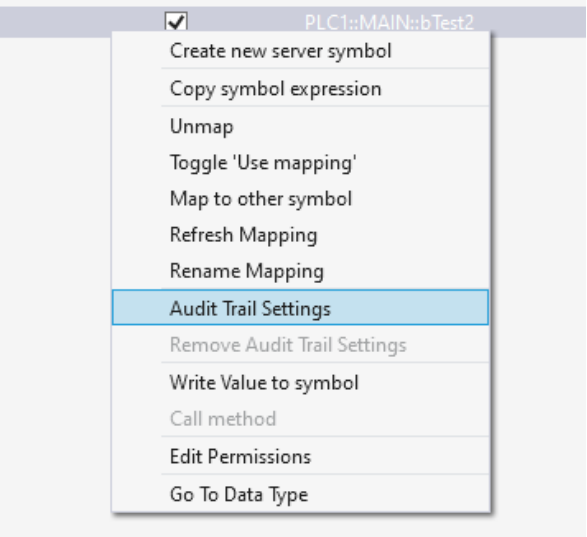
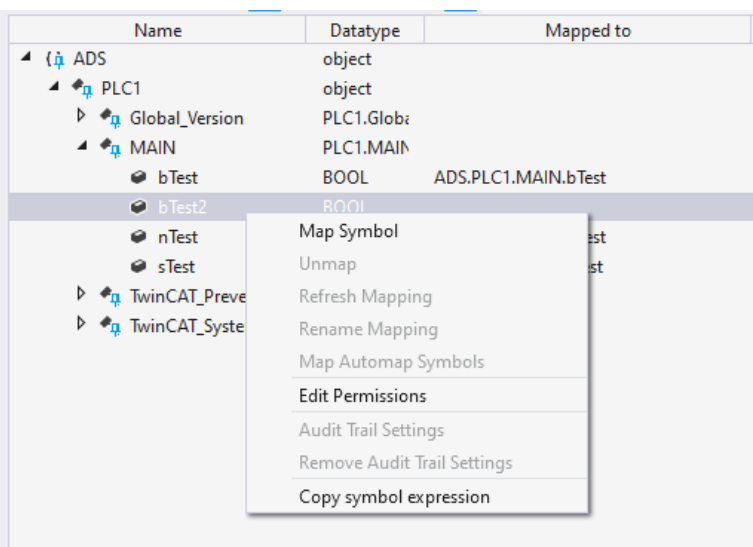
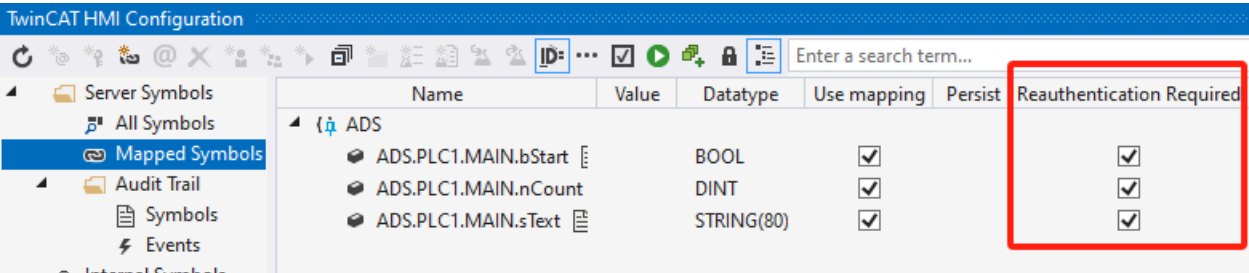
Current database connection

PostgreSQL database settings
Can be set for specific remote configuration.

- Host: localhost
- Port: 5432
- Database name: AuditTrailDB
- Username: postgres ☒
- Password: ☒
- Server connection timeout: 10
- Maximum number of database entries: 15000
- Limit for the hint of the remaining database entries: 10

Package version: 22.0.6418, Product version: 14.2.102.0, Config version: 1.0.1.9

- 1. 选择并映射变量
- 2. 对已映射的变量进行“ Audit Trail Settings”
- 3. Audit Trail 变量列表



Name	Enabled	Comment Required
ADS		
ADS.PLC1.MAIN.bTest	☒	☒
ADS.PLC1.MAIN.bTest2	☒	☒
ADS.PLC1.MAIN.nTest	☒	☐
ADS.PLC1.MAIN.sTest	☒	☐

■ 支持添加系统事件，符合筛选条件的事件将加入Audit Trail Events

Domian:

- ✓ ADS
- ✓ EventLogger
- ✓ Alarm
- ✓ UserManagement
- ...

Filter

+ - [E] /E

	And/Or	Path	Operator	Value
		contextDomain	==	

Load initial configuration

ADS

TcHmiAuditTrail

TcHmiEventLogger

TcHmiLua

TcHmiReporting

TcHmiSqliteLogger

TcHmiSrv

TcHmiUserManagement

- Server Symbols
 - All Symbols
 - Mapped Symbols
 - Audit Trail
 - Symbols
 - Events**
- Internal Symbols
- Localizations
- Themed Resources
- System Keyboard
- Data types
- Global Events
- Functions
- Users and Groups
 - Users
 - Groups
- Client Certificates
- Action Templates

Name	Enabled
< create new event filter >	
auditTrailDatabaseReset	✓
auditTrailErrorMessage	✓
authFailed	✓
customAuditTrailLogEntry	✓
login	✓
logout	✓

Add Event Filter

Name:

➕ Add clause
✖ Delete clause
📁 Group clause
📁 Ungroup clause

	And/Or	Path	Operator	
▶		domain	==	ADS

	Timestamp	ID	Name	Old Value	New Value	Username
1	2024-11-22T08:30:19.2983306Z	10	LOGIN_LOG			TcHmiUserManagement::__SystemAdministrator
2	2024-11-22T08:30:13.6536479Z	9	AUTH_FAILED			TcHmiUserManagement::__SystemGuest
3	2024-11-22T08:30:11.7516685Z	8	AUTH_FAILED			TcHmiUserManagement::__SystemGuest
4	2024-11-22T08:30:08.7364657Z	7	LOGOUT_LOG			TcHmiUserManagement::__SystemAdministrator
5	2024-11-22T08:29:59.4395686Z	6	LOGIN_LOG			TcHmiUserManagement::__SystemAdministrator

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谢谢!

