The future: Opera 3 SQL SE

New technology bringing power, security and reliability

Opera 3 SQL Server Edition is the latest addition to the Opera 3 family. Built on the solid foundation of Microsoft SQL Server, Opera 3 SQL SE gives you the familiar look and feel of Opera 3 with the added power, security and reliability of a SQL Server database.

An investment in Opera 3 SQL SE will protect your business as you move into the future. The design of Opera 3 SQL SE follows Microsoft best practice for modern client server applications and the technology on which it is built means that you are investing in a solution that will continually deliver intelligent additions to its functionality.

At Pegasus we have always believed that your investment in our products is an investment in your business. Here we explore some of the features and functionality that the new technology used in Opera 3 SQL SE can deliver.

Technical foundation

The technical foundation comprises

- Microsoft SQL Server: well-established technology providing secure storage and retrieval of data.
- Windows authentication uses the credentials of the Pegasus Opera Service or process to authorise secure access to the Opera 3 SQL SE data.
- Pegasus Opera Service creates the connection to Microsoft SQL Server using Windows authentication, providing a single account to access the data securely.
- Windows Communication Foundation (WCF) provides secure and reliable communication between the Opera workstations and the Opera 3 SQL SE server.
- Entity Framework manages database connections and objects to the Opera 3 SQL SE database to allow bespoke solutions to be developed.
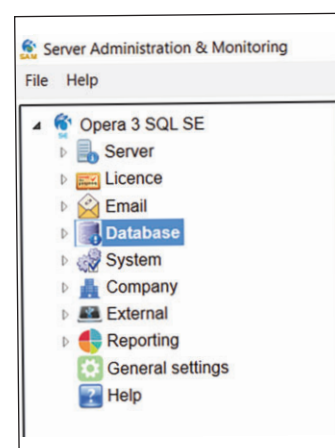
Data security

The security of company data is of vital importance, and this is why Opera 3 SQL SE uses Microsoft SQL Server to provide data storage. The Pegasus Opera Service is the secure method used to update the data, and it controls all the flow of data to and from the Microsoft SQL Server databases on behalf of the Opera 3 SQL SE users. This is the only method allowed to update the data and ensures both data security and integrity.

In addition, there is a secure Opera 3 SQL SE Windows File Repository for reports and files created within the application. These files can be saved securely on the server and can only be viewed by the people who have been given menu access to the Server Reports form in Opera 3 SQL SE.

Server Administration and Monitoring Console

The administration and monitoring of Opera 3 SQL SE are achieved by using a separate application that is installed at the same time as the Opera 3 SQL SE server software. The Server Administration and Monitoring application is a server-side application for configuring the Opera 3 SQL SE server software, entering licence and activation details, configuring email settings, creating company records, monitoring database details and managing bespoke applications. A central point for administering your Opera 3 SQL SE system.

Enhanced reporting security within Pegasus XRL

Reporting Roles has been introduced into Pegasus XRL for SE to provide an intermediary level of data access security. Reporting Roles allows the administrator to restrict Pegasus XRL users from accessing certain modules within Opera 3 SQL SE. Even though a user might have access to the Nominal Ledger, it is possible to restrict that user from using Pegasus XRL to access Nominal Ledger data files to create Excel spreadsheets.

In addition, future versions of Opera 3 SQL SE will also adopt the use of Reporting Roles to control access to the data. Reporting tools such as the Microsoft Visual Studio Report Designer, SQL Server Reporting Services or Infor Birst will respect the Reporting Roles to control who has access to what data.

Data health checker

There are strict database rules for data in Opera 3 SQL SE. These rules make sure that dates and values are recorded correctly and related database tables reconcile - for example invoice totals must equate with the sum of the invoice detail lines. The database 'health checker' in the Server Administration and Monitoring application completes these checks prior to the data migration from other editions of Opera 3. This ensures that the Opera 3 SQL SE system has valid data after migration.

Third party development

Pegasus Opera 3 SQL SE is designed with customisation in mind ,which means that developers can create Apps which can be simply deployed within Opera 3. If an App does not perform as required, it can simply be removed.

The new Developers Integration Toolkit makes creation and deployment of bespoke Apps within Opera 3 SQL SE a simple process.

Data intensive processes

Opera 3 SQL SE runs many heavy-duty, data-intensive processes (DIPs), from period ends in the ledgers to payroll update and batch processing, which can take a long time to complete. Although they are initiated from a workstation, the processing runs in the background, on the server side of the application. This minimises the impact on your IT network by reducing data traffic, and also means that the operator can move on to other activities within Opera 3 SQL SE. A notification message will be presented to the operator when the process is completed.

Some of these DIPs are best completed outside office hours. In Opera 3 SQL SE, these tasks can be scheduled to run out of hours to avoid disruption and potential clashes with other processes being run in the system.

Another advantage of running a DIP on the server is there is the choice to run it without a report, which significantly speeds up processing. These reports can then be generated at a later time.

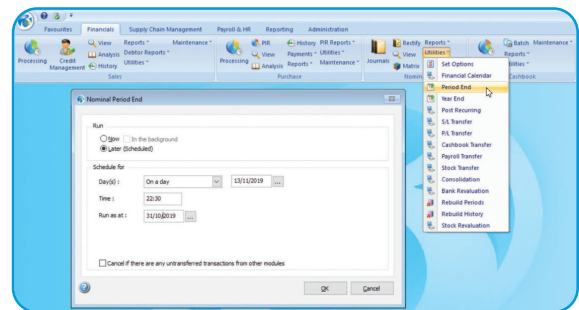## List of data intensive processes

Sales Ledger
- **Period End:** Closes the accounting period in the Sales Ledger and completes associated tasks in readiness for the next period

Purchase Ledger
- **Period End:** Closes the accounting period in the Purchase Ledger and completes associated tasks in readiness for the next period

Nominal Ledger
- **Period End:** Closes the accounting period in the Nominal Ledger and completes associated tasks in

readiness for the next period

- **Sales Ledger Transfer:** Posts invoices, credit notes, receipts, refunds and adjustments to the Nominal Ledger from the Sales Ledger
- **Purchase Transfer:** Posts invoices, credit notes, receipts, refunds and adjustments to the Nominal Ledger from the Purchase Ledger
- **Cashbook Transfer:** Posts receipts and payments to the Nominal Ledger from the Cashbook
- **Stock Transfer:** Posts stock transaction movements to the Nominal Ledger from Stock
- **Rebuild Periods:** Recalculates the Nominal Account balances for each period in the current financial year, and future financial years if the Open Period Accounting feature is used
- **Rebuild History:** Rebuilds the history files associated with the Nominal Ledger
- **Year End:** Closes the accounting year in the Nominal Ledger in readiness for the next financial year
- **Consolidation:** Consolidates Nominal Ledgers in other companies into a main Nominal Ledger

Cashbook
- **Database Reorganise:** Removes postings marked for deletion, reconciled transactions and completed recurring postings.

Invoicing
- **Database Reorganise:** Removes documents marked for deletion and documents that have been completed

Sales Order Processing
- **Database Reorganise:** Removes documents marked for deletion and documents that have been completed

Purchase Order Processing
- **Database Reorganise:** Removes documents marked for deletion and documents that have been completed

Stock Control
- **Period End:** Closes the accounting period in Stock and completes associated tasks in readiness for the next period

System Manager
- **VAT Tidy:** Removes fully committed VAT transactions that have been included on the VAT Return for a tax period

Opera 3 SQL SE: reasons to upgrade

- Future-proofed with ongoing development, defined roadmap and new functionality.
- Built on the latest 64bit Microsoft .NET framework technologies, using C# as the programming language and SQL Server.
- Designed following Microsoft's best practice for modern 'client-server' applications.
- Data security: only the Pegasus Opera Service can access the data.
- Central Server & Administration Console for administering, monitoring and maintaining the Opera 3 SQL SE system.
- Scheduling of many operations such as Payroll Update, Purchase Period End, Sales to Nominal Transfer, etc.

- Data intensive processes run on the server side of the application reducing network load. They can be scheduled to run outside office hours or they can be run now, but in the background.
- New Developer Integration Toolkit allows for the creation and deployment of bespoke as Apps.
- New Pegasus XRL provides additional levels of security via the introduction of Reporting Roles.
- Smaller implementations can run on Microsoft SQL Server Express (which is free of charge).
- Store reports securely on the server so that they can only be retrieved from within Opera 3 SQL SE.
- Can be integrated with third party applications such as Infor Birst for dashboards or Infor CloudSuite Industrial for manufacturing.
- Simple wizard-driven installation of both server and the client workstation software.
- Migration and Health Check tools to simplify upgrades of the data from Opera 3, including PDF files such as invoices, statements and remittance advices, as well as customised report designs.
- The Update Data Structure option, used in Opera 3 to reorganise and re-index the data after a software upgrade, is no longer required because of the use of SQL Server, saving significant time when performing an upgrade.