

> Efficiency Gains

> ROI

> Reusability



PERVASIVE  
Data Integrator™

# Saker ShopRite gains strategic business advantage through leveraging of data integration platform

Forefront with Pervasive advance Saker ShopRite's technology, allowing grocery chain to better compete in tough market

- B2B
- HR
- Data Quality
- Business Intelligence

***“Saker ShopRite focuses on high-volume and needs a lot of flexibility and ability to handle data diversity given what they have in their stores. When initially assessing the ShopRite project, we knew they wanted to use Pervasive Data Integrator. On other projects we have evaluated Scribe and others, but no one does as good a job as Pervasive. Informatica is totally overpriced, and Cast Iron lacks the flexibility needed... they can only handle simpler connections like mainstream databases.”***

—Anne Marie Berger  
Managing Partner, ForeFront

## Executive Summary

Saker ShopRite, operating 27 stores in the northeast with revenue of \$1 billion annually, is the largest member of the Wakefern ShopRite grocers' cooperative. The grocers' market is highly competitive and improved technology is a key to business survival. Competitive pressures, thinner margins, regulations, the need to capture and document existing processes and the desire to improve the shopper experience propelled Saker ShopRite to develop a B2B Exchange and an automated payroll system.

Data management expert ForeFront was called in to assist the small IT shop at Saker ShopRite. Recognizing that data integration and profiling would be keys to success, ForeFront called on Pervasive® Data Integrator™ to handle the integration needed for the projects.

## Challenge

### Phase 1

Saker ShopRite's small IT shop spent a tremendous amount of time assessing data quality and remediation—putting mainframe data into databases, examining and repairing data and then transforming and loading the data.

### About ShopRite and Saker ShopRite

Wakefern Food Corporation (ShopRite) is an East Coast grocery co-op. It is the largest retailer-owned cooperative in the U.S. and the largest employer in New Jersey. The cooperative is comprised of 43 members who individually own and operate supermarkets under the ShopRite banner. Today, more than 50,000 people are employed by Wakefern Food Corporation, the merchandising and distribution arm of the company, and over 200 ShopRite stores in New Jersey, New York, Connecticut, Pennsylvania, Maryland and Delaware.

Saker ShopRites, the largest ShopRite co-op member, operates 27 stores in the northeast with revenue of \$1 billion annually.

### About ForeFront

Fair Haven, NJ-based ForeFront is a recognized system integration company, with a focus of data management solutions, both on-premise and on-demand. From Cingular to the Rockefeller Group, the company engages with businesses and organizations across all sectors. The company partners with best-in-class technology providers.

ForeFront realized that faster, more reliable data integration with wide connectivity would be required.

### Phase 2

ForeFront also was tasked to assess alternatives for Saker ShopRite's automated payroll system. Saker ShopRite's mainframe environment

left much to be desired as the company dealt with COBOL/VSAM sequential files, old-fashioned line print-outs, the need for a clocking system replacement, inconsistent data, and no mainframe extensibility. The challenges also included the need to accelerate Kronos deployment to supermarkets, implement new HR business rules and greater accountability, and incorporate complex business rules.

Specific challenges that spoke to the need for Pervasive Data Integrator were:

- Variable data quality and an overall lack of solid exchange data infrastructure
- Manual data entry and corrections
- HR Business Rules with gaps and missing processes
- Security and privacy concerns

## Solution

ForeFront, in **Phase 1** of its work, conducted an assessment and created a strategic road map for the B2B Exchange Integration. The focus was on outsourcing back-office operations (where feasible) and extending legacy assets. Data to and from an IBM Mainframe would move into a new Epicor Enterprise ERP. Integration with Saker ShopRite's co-op, Wakefern Food Corporation, would be required for a number of feeds from the stores themselves.

During Phase 1, ForeFront assessed the project scope of the B2B network and determined fast, robust, reliable data integration was imperative in order to bring all data from various business areas over to the network. Pervasive Data Integrator was chosen for the task.

With project scope and data integration toolset chosen, **Phase 2** of the work—the payroll project—began. The payroll piece was completed in less than six months, with the integration piece being “by far the simplest,” according to Anne Marie Berger. The Mainframe process used to take 1-2 hours to run and involve “a couple of million transactions a week.” Now the process runs in 15 to 20 minutes with Pervasive Data Integrator running on a small Windows server.

With the business rules now simplified and easily available, Saker ShopRite's IT staff “can go in there and they can change it themselves, which is very substantive for them.” Berger notes: “It is actually about 20 different processes,

inputting data into the GL as well as sending it off to different vendors. We also track items such as compliance with union rules and also garnishments. It's quite complex in terms of processes.”

She adds, “It's been about three years since they started and there have been no hiccups yet. You put it up and you forget about it. It just runs. That was the first project we started with, and now we have got the other 15 under way. They are doing most of the data integration by themselves. They only call us in when they get a little worried about some complex scripts.” Payroll data would pass from Supermarket managers into the Co-op Exchange through ETL migration into PeopleSoft HR/Oracle for processing. The payroll data then traveled into an IBM legacy system and Epicor Enterprise that could produce custom business intelligence reports. Payroll covered 7,000+ employees and accounted for \$2 million per week.

To give an idea of some of the complexities on the Phase 2 payroll project, the additional load that ForeFront was bringing over and outsourcing had about 150 different business rules depending a number of criteria such as which union the person belonged to, whether they were meatpackers or cheese people or if they had worked for them 10 times in the last two years and then quit. In the end, 20+ processes and 150+ business rules were implemented. One average process typically contains over 100 business rules, 50 steps, 20 maps and 20 stored procedures and around 100 calculations. The architecture is RiFL-based.

## Benefits

**No data loss.** Saker ShopRite has gained automated payroll processing without losing data set control.

**Usability.** Saker ShopRite IT personnel who are adding new data sources are mainframe oriented and they all picked up the Pervasive tool easily and have put it to work.

**Flexibility.** Pervasive Data Integrator works with a wide range of applications—example: COBOL to custom applications.

**Reusability.** Reusable tools and rules create a self-sufficient team at Saker ShopRite as they move to implementation of other applications/functions within the B2B Exchange.

**BI.** Management gains new visibility on information.

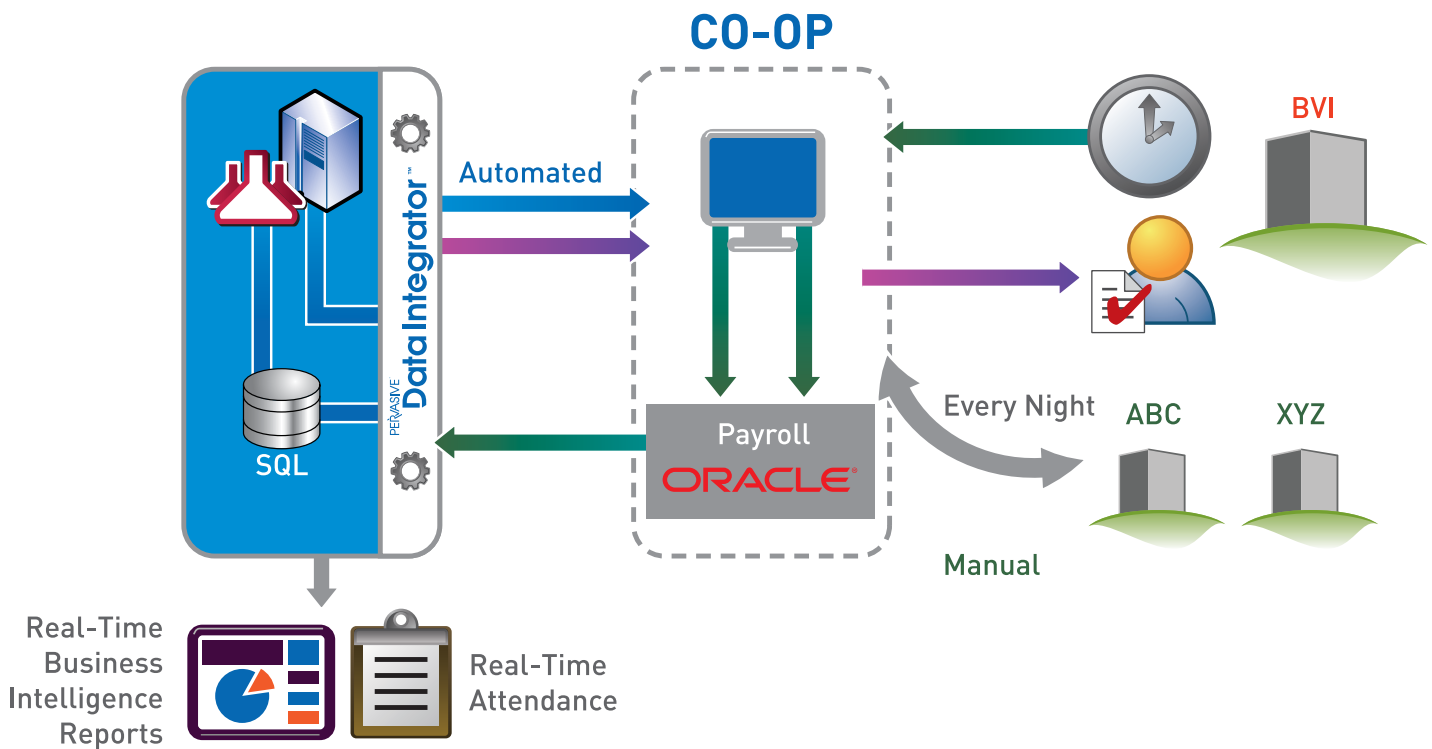
### Conclusion

The grocers' market will remain highly competitive and ForeFront, using Pervasive integration and data profiling, is helping to ensure Saker ShopRite's business survival. ForeFront's use of Pervasive integration and data profiling has offered data cohesiveness that translates to better opportunities to maximize business results.

### Next Steps

There are some 15 projects associated with the B2B hub, with ForeFront and Saker ShopRite staff having moved on to G/L and A/P projects. Initially 32 applications will be moved from the Mainframe; some 60 total are now planned to be moved. Remaining mainframe applications are custom applications for A/R, bad check collections, pricing, etc. COBOL, VSAM are involved.

## Automated B2B Exchange



## Comprehensive Connectivity

Pervasive enables “out-of-the-box” connectivity to thousands of on-premises and SaaS applications, databases, file formats, structured and unstructured/non-relational data, message buses, EDI networks and industry-standard protocols through Pervasive’s adapter library.

### File

Access Alpha Four ASCII (Delimited) ASCII (Delimited) Join ASCII (Fixed) ASCII (Unstructured) Clarion	Clipper CLF Webserver DataEase DataFlex DJ Document Schemas DJ Log File Data dBASE	Dialog DIF Enable Excel Folio Flat File Foxbase FoxPro	LDIF Lotus 1-2-3 Lotus Notes Lotus Notes Structured Text Lotus Works Mac ASCII Delimited Magic PC	MAILERS+4 (dBASE) Microsoft Word (Mail Merge) Paradox (IDAPI) Quattro Pro Windows Rich Text Format (RTF) Unicode (Delimited) Unicode (Fixed)	WordPerfect (Mail Merge) Wordstar (Mail Merge) WordPerfect Visual FoxPro Visual dBASE
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### Database

Oracle OracleMultimode Oracle Direct Path Oracle SQL Loader Pervasive.SQL Pervasive.SQL Multimode PostgreSQL Btrieve CA dB-Fast	C-ISAM Cloudscape CWM DB2 UDB DB2 UDB Multimode DB2 Loader DB2 UDB Mass Insert eXcelon Hitachi Hi-RDB	IDAPI Informix DB Loader Informix (ODBC) Informix Online DS Informix/SE Ingres Interbase JDBC MUMPS	MySQL NonStop SQL/MX ODBC 3.5 ODBC 3.5 Mass Insert ODBC 3.5 Multimode RBase Red Brick Scalable SQL SQLBase	SQL Script Microsoft SQL Server Microsoft SQL Server BCP Microsoft SQL Server Mass Insert Microsoft SQL Server Multimode Sybase ASE Sybase ASE Mass Insert	Sybase ASE Multimode Sybase ASE BCP Sybase SQL Anywhere Teradata (Fastload) Velocis Watcom SQL
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### Application

AccountMate ADABAS (NatQuery) Apache CLF Champion Acct. CYMA Acct. Exact Synergy Exact Globe GoldMine	Great Plains DOS Great Plains UNIX/Mac Navision Financials Macola Acct. Market Force Microsoft Dynamics AX Microsoft Dynamics CRM Microsoft Dynamics GP	Microsoft IIS ELF NetSuite Oracle Applications Oracle Siebel CRM On Demand PayChex DJF Peachtree Acct. Personal Librarian	Pivotal CRM Platinum Acct. QuickBooks RealWorld Acct. RightNow CRM Suite Sage 50 Accounts Sage Act! Sage CRM SalesLogix	Sage MAS 90/200 Sales Ally Salesforce SAP BAPI, IDoc, EAA SAS SBT Acct. Solomon Acct. SPLUS	SPSS Statistica SYSTAT USMARC
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### Technology

BizTalk XML DataRush Email Email Attachments Erwin	File Folder Queue (FFQ) File Transfer Builder FTP HTTP/S HTML	JMS LDAP Microsoft MQ Websphere MQ Oracle AQ	Oracle BPEL Progress Sonic ESB, MLLP, FIX REST	Salesforce CRM Outbound Message Service Siebel EAI SGML SOAP	TCP/IP URL/URI XML XML Schema, DTD, XDR XSLT Transformer
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### Legacy Data

ACUCOBOL ACUCOBOL-GT BAF Binary	Binary Line Sequential COBOL 01 COBOL Copybook COBOL Flat File	C-tree Fujitsu COBOL ISAM Micro Focus COBOL	QSAM Sequential Binary Tape Drive Sequential VSAM	Variable Sequential (MVS) Variable Sequential (Record-V UniKix) Variable Sequential	(SyncSort) Variable Sequential (User Defined)
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### B2B

ACORD EDI (EDIFACT) EDI (X12)	FIX HCFA 1500-NSF HIPAA	HL7 HR-XML MIB	NCPDP NSF SWIFT	Text (Delimited – EDI) Text (Delimited – EDIFACT) Text (Delimited – HL7)	TRADACOM UB92-NSF
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For a complete and up-to-date list of Pervasive connectivity options, visit: [http://www.pervasivedataintegration.com/data\\_connectors](http://www.pervasivedataintegration.com/data_connectors)

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## About Pervasive Software

Pervasive Software provides agile data integration software that speeds the flow of data between applications and between organizations. Our robust technology addresses SaaS, SOA and traditional integration modes and allows customers to re-use the same software for integration scenarios that span data warehouses, real-time application integration and data exchange with trading partners.

## Contact Us

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