



process automation and data migration made easy

Customer Challenges

- Lack of data & application integration
- Disparate systems /multiple PC's on the desktop
- Redundant data entry tasks
- Labor intensive processes
- Manual form processing
- Bi-directional data movement/migration
- Manual network processes



Functional Capabilities

- Pre-built library of tasks
- GUI based
- Event logging
- Error handling
- Built-in script support
- Event based triggers
- User based triggers
- Native terminal emulation
- File management
- Database automation
- Email automation
- ERP automation
- Active directory support
- Multi-machine execution
- Runtime support
- Secure FTP & HTTP
- Timer (benchmark testing)
- Custom schedules
- Script editor
- System monitoring
- Data access & transformation
- Modular task creation
- WMI support
- Automated problem resolution
- Automated report generation
- Batch processing

The Challenge

Regardless of size, many organizations face similar challenges; departments do not operate as cohesive units, operational systems are not linked and critical applications are not integrated. Other market dynamics such as corporate restructuring, mergers, acquisitions or even organic growth have left the IT environment with disparate systems, inconsistent processes and different data structures and data formats. These issues can impact your organization's bottom line and your ability to respond to your customers in a quick and efficient manner.

Your key business processes can be high-level and strategic in nature, or they can be targeted and tactical. They can cut across organizational boundaries or they can focus in functional areas such as the IT department. As organizations seek out ways to reduce costs and improve efficiency, they constantly fall short due to the complexities of automating tasks using various scripts, batch files, macros and other executables. Without an automation platform that provides an easy to use end-to-end solution, the automation of IT and business processes becomes difficult to implement and very costly to maintain.

The Solution

Integrated within the CTH Technologies' Business Solutions Management Suite (BSMS) offering, is our Business Process Automation Module, ProcessCARE, which focuses on automating workflow processes and provides comprehensive data migration capabilities. Our solution enables organizations to design, execute, monitor and continuously improve business processes that span organizational boundaries and computer networks. Our software leverages existing IT assets and applications to accelerate information flows, reduce operational errors, eliminate redundant data entry tasks and costly delays in processing. Additionally, ProcessCARE can perform single and multi-directional data migration between any source and target destination.

Workflow & Process Automation

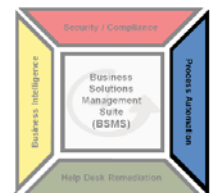
- Eliminate redundant data entry
- Automate data entry/movement
- Software application testing
- IT & end-user task automation
- Mimic an "electronic employee"

Data Migration

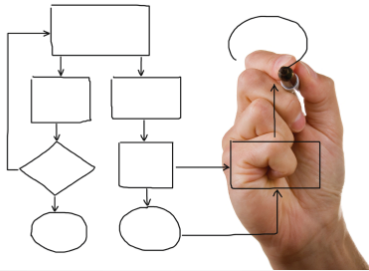
- Move data seamlessly
- Connect disparate databases/applications
- ETL (Extract, Transform & Load) database consolidation
- Scalable to any size migration
- Ease of use, does not require complex coding

The ProcessCARE module is an extremely flexible automation development platform which can be configured to streamline and automate any business or IT process such as:

- Data access and transformation
- Job scheduling software
- Application integration & migration
- Batch processing
- System monitoring and automated problem resolution
- ODBC/OLE database queries and transactions
- Automated software testing



workflow and process automation

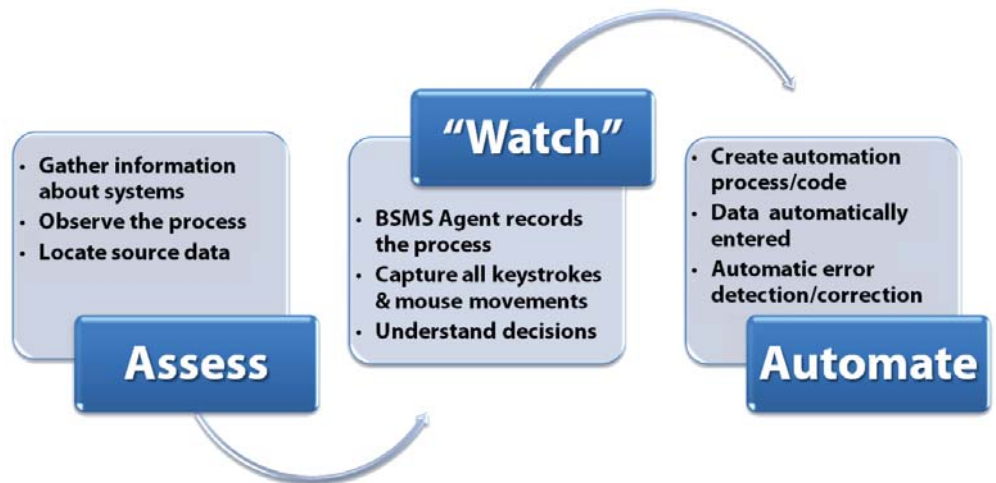


Automating the Process

ProcessCARE incorporates a Workflow Automation tool which enables organizations to capture their business processes, ensuring that forms and documents are created, reviewed, approved and published according to company policy and procedures. The workflow defines the path or route a document or e-Form must take and each step in the workflow path defines the task, participants and rules that govern how the workflow will advance or transition to the next step. The ProcessCARE solution offers complete and easy to use functionality to manage any business process from start to finish. It allows business analysts to document processes and rules and automate them to make them more efficient.

With a little programming knowledge, users can start creating scripts to automate their daily tasks by using ProcessCARE's record feature. ProcessCARE uses its own XML-like scripting language to create or modify a script. These scripts can easily be recorded and then fine tuned by an employee with limited programming knowledge, but who has experience with the target application and business rules that ProcessCARE is automating.

The Task Building Process



With ProcessCARE you create 80 - 90% of a script by using the applications the way they are currently used. ProcessCARE automatically records what you do in a way similar to building an Excel macro. When you are done, the script is then edited to add data source information, timing, etc., if necessary. You define what happens on an error letting ProcessCARE fix or skip bad records. Then ProcessCARE can finish loading the data and give you a log of the data problems that need resolution. When you deploy the script, ProcessCARE moves your data from source to target quickly and cleanly.

What are the key benefits of the Workflow Automation capability?

- Automate repetitive tasks across applications
- Simulate the actions of a user with a recorded script and apply any appropriate business rules not captured during the record (“Watch”) process. The tool can automate a variety of IT and end user tasks including form completion, order mechanization, web crawling and regression testing
- Eliminates Errors and Miscommunications: Ensures process consistency, eliminating errors and productivity problems due to lost or mishandled requests
- Provides organizations with the tools to automate the tedious activities of generating and distributing reports
- Provides automated file replication, data backup and disaster recovery
- Helps document complex business rules

Success Stories

Over 15,000 insurance brokers use ProcessCARE to automate policy and claims inquiries and filling in quote request on-line forms. We reduced their time to process five competitive quotes from 45 minutes to less than 5 minutes!

- Applied Systems

A full analysis of the text from medical journals provides rich content but it is difficult to obtain, organize and analyze. This situation is further worsened by various journals utilizing different formats. CTH designed an automatic system using ProcessCARE which connects, downloads and pre-processes the full-text articles from multiple journal sites.

“No other application gave us the flexibility and ease of use that ProcessCARE provided. We are saving several hundred man hours every month and more importantly, our researchers now have greater access and visibility into the latest groundbreaking research.”

- Dr. Eric Bremer
Children’s Memorial Hospital

data migration



Sauk Prairie Hospital migrated over 200,000 records with 25 different record types into a new application using ProcessCARE saving 2 months of conversion time and over \$250,000 in consulting fees.

“A high level of technical expertise is not required. I would compare ProcessCARE to the beginners NPR report writing. I don’t have a programming background and have completed over 100 scripts to date.”

- Christine Adler
Sauk Prairie Hospital

Running in a Grid environment

ProcessCARE runs as a Windows service in a grid environment and can drive Microsoft Internet Explorer and most other applications to perform web crawling and data extraction without interacting with the Windows desktop.

The grid software determines which PC’s on the grid network are idle or not being utilized to full capacity and launches ProcessCARE with command line parameters to run a specific task as a service. All data written by the task and any status information is returned back to the grid server for viewing.

The Data Migration Challenge

Maintaining data across multiple systems is a constant challenge for IT professionals today. Migrating data for an application conversion or upgrade is often the most significant part of the implementation. Whether it is a major conversion or a minor maintenance task, moving data cleanly can be a major headache. Your challenges include:

- Source data cannot be exported or accessed directly
- Data is in documents rather than structured tables
- Application vendors prohibit direct database access
- Business rules are complex and not well documented
- Expertise in SQL and programming is required
- Data volumes make integrity validation difficult

ProcessCARE solves the problem of data transfer without complex coding or SQL—so it is quick and easy. ProcessCARE extracts data from almost any file format or “scrapes” the data from a Windows or Browser application screen. Next, it automatically enters data into the target application through its existing GUI, without requiring access to the database or code and without knowing how the underlying data looks. ProcessCARE simply enters the data through the application GUI using the same keystrokes and mouse-clicks as a user.

Bi-Directional or One-way Data Movement

File to Screen or Screen to File



Ability to read data from a flat file or ODBC database and re-map it into one or more target screens or being able to read data from one or more screens and write data into a flat (csv, txt, or xml) file or ODBC database

Screen to Screen



Ability to read data from any source screen and re-map it into one or more target screens

File to File



Ability to read data from a flat file or ODBC database and write data into another flat file or ODBC database

Paper to Screen or File

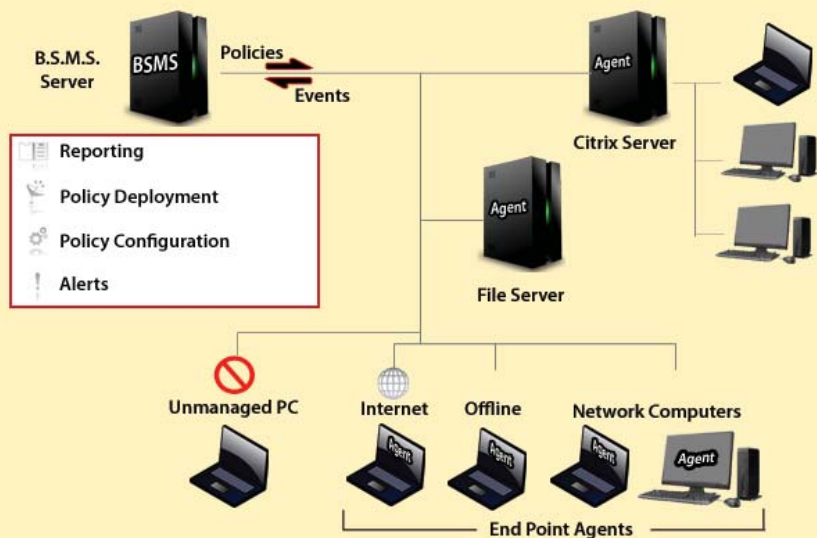


Ability to read data from a TIFF or MDI file, (i.e., OCR scanned paper or fax) and re-map it into one or more target screens, flat file, or ODBC database



ProcessCARE™ Capture And Record Events

B·S·M·S Architecture



Agent

The B·S·M·S Agent is installed on any desktop/laptop or server

- Very small footprint (20mb hard drive space)
- Pulls down policies and pushes up events
- Hardened, tamper proof, can run in "stealth" mode on the host system

Server

The B·S·M·S Server is a Web-based application server and console that is the command center.

- Manages and monitors all B·S·M·S agents
- Captures, aggregates and stores all user activities
- Manages data security policies
- Scalable architecture for any enterprise

- Centralized Management -



ProcessCARE Technical Features

Screen Scraping

- Mainframe Emulators
 - 3270/5250/HLLAPI
 - Attachmate, Rumba, IBM Client Access, PC Workstation Passport, TN3270
- Windows based applications
 - .NET, Visual Basic, Visual C, Delphi, PowerBuilder
- Web browsers
- Microsoft Office
 - Outlook, Excel, Word, Access, Forms

Database

- Read databases with ODBC connections
- SQL Commands
- Connect/Disconnect
- Exec
- Exec Direct
- Fetch
- Add ODBC Driver
- Prepare

Language

- XML Based
- VBScript
- Java Script

File Reads

- Read any file type for raw text (i.e. txt, dat, csv, ini, xml, html, xhtml, tif or mdi)
- PDF Support
- Acrobat Forms
- Windows Registry
- Clipboard

WMI

- Ability to access any WMI functions
- Query any Window's Object
- Update any Window's Object Properties
- Commands
 - Execute, Query, Write

Automation of Tasks

- Logon/Logoff
- At a given time (i.e. 1:00PM)
- User Controlled (by menu or hotkey)
- Every x minutes

About CTH Technologies, Inc.

CTH Technologies now offers a unified Business Solutions Management platform that secures, simplifies and automates IT processes. It also improves decision making, provides performance analytics and integrates data workflows across all technology platforms. Security remains the lead focal point within our solution suite offering. Our technology provides Enterprise Information Protection solutions that enable sensitive customer, patient or company data to move securely within large enterprises or small businesses, greatly increasing collaboration, enabling business processes and meeting regulatory compliance requirements.