Data Capture + BI Transformation

Bright**Source**

Convert Multiple Data Streams into a Flexible, Real-Time, Base of Information

Our enterprise class ETL tools allow you to Accept Any Data Feed, In Any Format, Any Time, Any Way. Data quality is ensured by Advanced Filtering and Exception Handling Routines that flag, reject, or replace possibly erroneous values. And you can monitor the system from anywhere with Automatic Status Notifications that can be distributed via fax and e-mail or viewed on a Web dashboard.

Robust data quality control systems monitor for irregularities and notify you through email, fax and web display. You can even convert data from handwritten forms into a source for transactions such as selling shares, or send automated text messages or voice messages that require a PIN for confirmation.

CHARLES RIVER COMMUNICATIONS

A valued vendor in the financial community since 1978.

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Address:	331 East 50th Street
	New York, NY 10022

New York, NY   St. Johns, Canada
Trumbull, CT   Bangalore, India
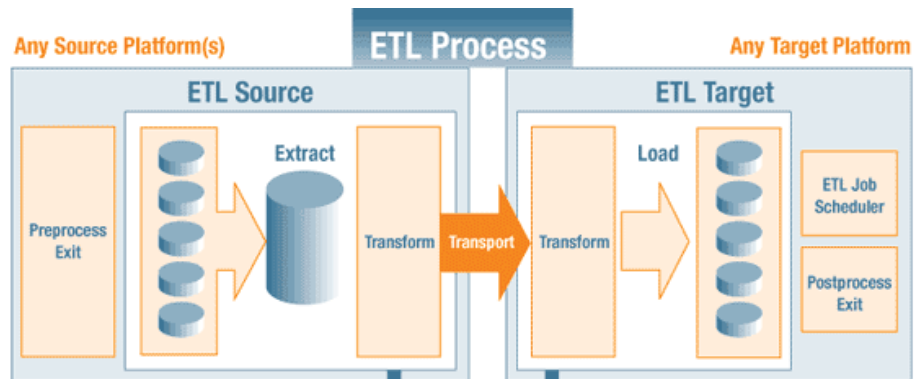
Key Features

Boost Efficiency & Accuracy: Retire inefficient, error-prone manual data compilation processes. Automated data import routines check for updates from their sources constantly.

- Your data stays as current as your sources with no lag due to human intervention.
- Enhance the timeliness, accuracy and quality of your market intelligence and internal monitoring.
- Eliminate data entry errors with powerful exception handling.
- Eliminate error escalation lag with automatic status notifications.

Maximize Your IT ROI: CRC's software is available as a hosted solution.

- Free your computers and IT staff from data mining chores and reinvest them in your core business.

Seamless System Integration: No need to break the bank migrating all your applications to a single platform so they can work together.

- Open code means easy integration with your current systems.
- Or use the suite of natively supported CRC BI, archiving, and messaging applications.

Main Benefits

Advanced input scheduling, connectivity, and routing options allow you to receive feed files via:

- E-mail, fax, SFTP, VPN, local directory

Sophisticated parsing and transformation engine reads data in any number format or string configuration from any file format including:

- XLS, CSV, TXT, XML, SWIFT, FIX, EDI
- Standard and custom forms used by your business (e.g. I-9, W-4, expense form, time sheet, etc.)

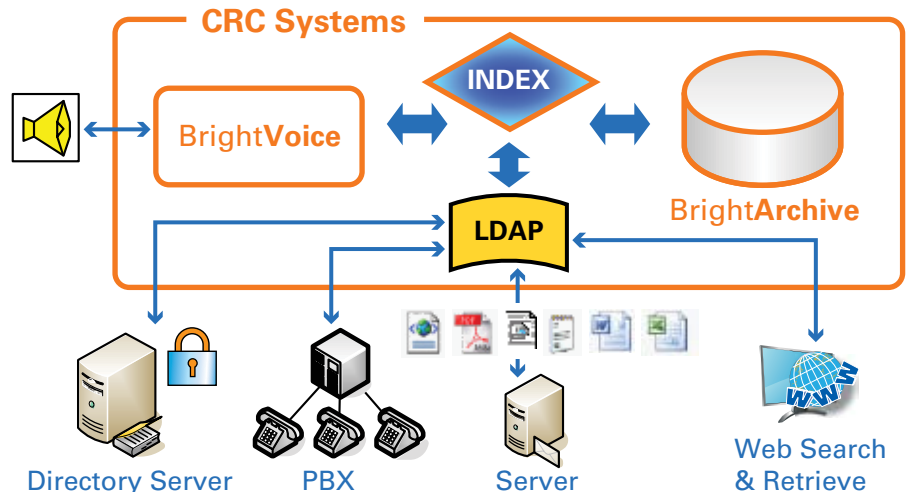**Speedy Custom Configuration by CRC's ETL experts.**

Voice Recordings + Electronic Documents & Data Files

Bright**Archive**

SEC/SOX Audit-Compliant Audio Records of Every Meeting and Call at Your Fingertips… Anywhere, Any Time.

BrightArchive provides a single access point for voice recordings and supporting materials including e-mails, faxes, electronic office documents, and more. The archive is fully compliant with SEC and SOX standards, and its powerful, Web-browser based search and retrieval engine means fast document discovery for legal audits and trials.

The Voice Recording + Documents Edition includes a feature rich call logging system with live call monitoring, manual and automatic recording, and comprehensive indexing. High quality digital recordings of important meetings, calls and voicemails can be archived and linked to relevant files, so that communications can be reviewed in their original contexts.

CRC Systems — BrightVoice — INDEX — BrightArchive — LDAP

Directory Server   PBX   Server   Web Search & Retrieve

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Key Features

Feature rich call recording
- Support for software-based PBX systems including Asterisk
- Manual and automatic start/stop recording
- Live call monitoring
- Automatic indexing by caller, time stamp, and more

Single access point for archived voice recordings and documents
- E-mail, fax, word processing, spreadsheet, portable document
- Data file (SWIFT, FIX, XML, EDI, etc)
- Standard and custom forms used by your business (e.g. I-9, W-4, expense form, time sheet, contact card, etc.)

Powerful, Web-based search and retrieval engine lets you locate and access recordings and documents with nothing but a Web browser
- Metadata power search
- Single entry field (Google-style) search
- Sort, narrow, and search within results

Sophisticated rules-based message routing and retention automatically moves recordings and documents through a workflow.

Main Benefits

Universal regulatory compliance: CRC's archiving products are fully compliant to all major regulatory standards including:
- SEC, SOX, HIPAA

Speedy document discovery for legal audits thanks to the robust indexing, search and retrieval engine.

Increased responsiveness to your company's and customers' business needs with easy access to recordings of:
- voicemails, department meetings, management conferences, candidate interviews, client consultations

E-mail & Fax + Documents

Bright**Archive**

Quick, Easy Retrieval of E-mails and Other Business Documents Is Now a Reality

Recent legislation limits the amount of time businesses are given to collect and submit e-mails and other electronic documents for legal audits and trials. Maintain your peace of mind with CRC's fully compliant e-mail and document archive. Comprehensive Auto-Indexing and Powerful Search and Retrieval Capabilities make it easy to find the documents you need, and a Globally Accessible Web Browser-Based Interface means your files are available wherever you go. You can also expand the archive to Store Voice Recordings, Faxes, and Other Communications, as well as a wide variety of data files, including SWIFT, FIX and XML. Best of all, our premium archiving solutions are Fully Compliant with SEC, SOX, and HIPAA Audit Standards.

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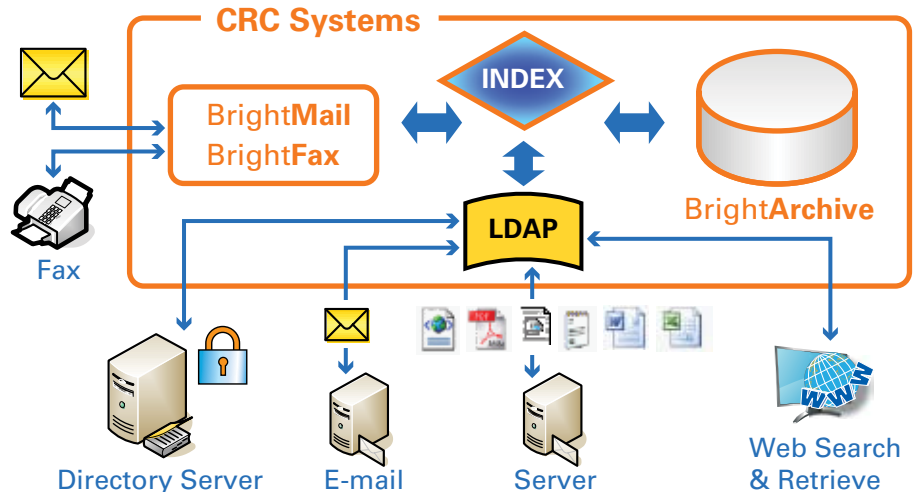
Key Features

Comprehensive automatic indexing of messages and attachments by:
- Sender name, e-mail address, fax number
- Message thread, size, time stamp
- Attachment type, author, creation date
- Automatic, content-based, keyword extraction with OCR

Advanced format-specific indexing of a variety of media and file types:
- E-mail, fax, voice recording, image, video, portable document
- Word processing, spreadsheet, and slide presentation
- SWIFT, FIX, EDI, XML
- Standard and custom forms used by your business (e.g. I-9, W-4, expense form, time sheet, etc.)

Powerful search and retrieval capabilities through globally accessible Web interface:
- Metadata power search
- Single entry field (Google-style) search
- Sort, narrow, and search within results

Sophisticated rules-based message routing and retention automatically moves documents through a workflow.

Main Benefits

Universal Regulatory Compliance: CRC's archiving products are fully compliant to the standards set by all major regulating organizations including SEC, SOX, and HIPAA.

Seamless System Integration: No need to break the bank migrating all your applications to a single platform so they can work together.
- Native support for major messaging platforms including Microsoft Exchange and Lotus Notes
- Plug into any CRC BI, archiving, and messaging applications

Data Extracts + Report Generation

Bright**Reports**

Streamline Your Marketing, Analysis, and Data Transfer Tasks with Custom Database Extracts

CRC's open source export engine allows you to quickly configure and create any database extract your business might need. Keep clients and prospects up-to-date on your products with Visually Compelling Graphical Reports that always reflect the most current data. Pass data to your partners' databases with Database Exports in Any Format. Reports can be generated from anywhere through a Powerful Web Interface. Better yet, plug the Extract Manager into CRC's hosted Data Capture and Content Distribution modules and watch your IT costs plummet.

Departmental Databases

Equities

Fixed Income

International Funds

Report Generation

1. ETL Process
2. Analytical Calculations
3. Graph Construction
4. Layout & Formatting

Destination Directory

TXT   DOC
CSV   XLS
HTML   XML
TIFF   PDF

Key Features

Build Visibility and Business Relationships: Fast, easy, wizard-driven extract & report creation lets you easily share data with partners, clients, and prospects. CRC's reporting tools have been used to produce:
- Investment product marketing documents including performance graphs
- Internal sales performance reports
- Web pages that display daily NAV information
- Customized database-readable reports on investment performance data for large institutional investors

Get the Big Picture: Unite data from sales, marketing, finance, HR, and more for a complete, multi-departmental view of your business.

Global Access to Your Reports: Generate any report from anywhere in the world with nothing but a Web browser.

Main Benefits

Advanced analytical and graphical tools are built into the system allowing you include statistical calculations, charts and graphs in your reports.

Flexible output options let you configure extracts in formats including:
- XLS, CSV, PDF, TXT, XML, HTML, SWIFT, FIX, EDI

Broad data source support including relational, OLAP and XML-based data structures.

Ready integration with CRC's Data Capture and Content Distribution module supercharge your workflow by automating not only the creation of the report, but also the gathering of the data that goes into it and delivery via e-mail, fax or FTP.

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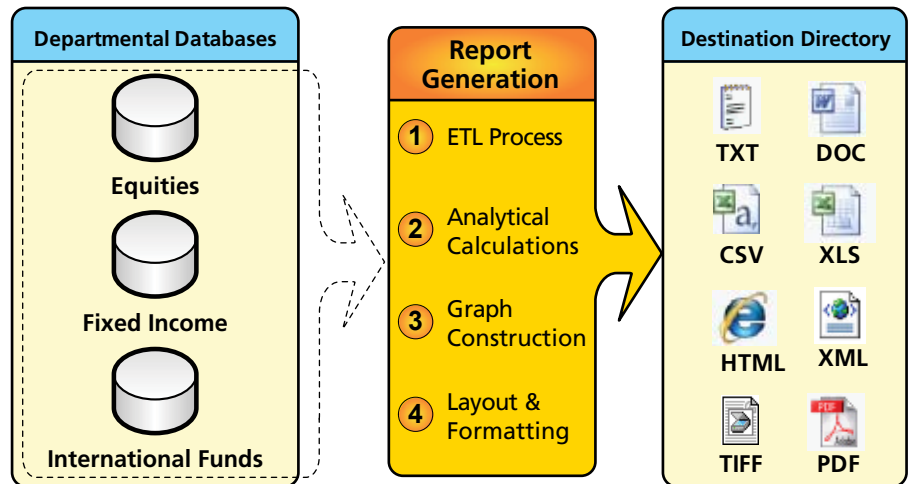Address: 331 East 50th Street
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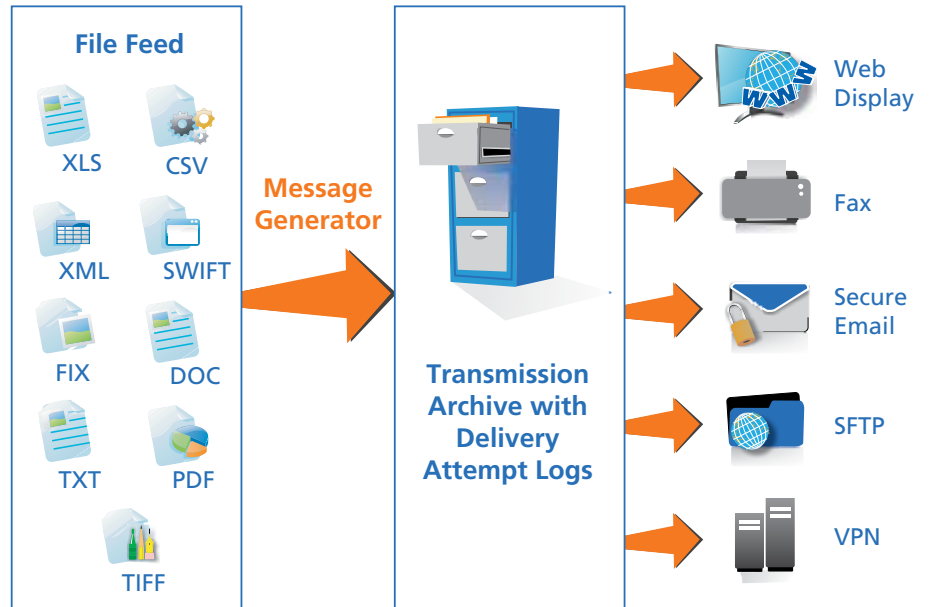Trumbull, CT   Bangalore, India

Content Distribution

Bright**Send**

Get the Right Message to the Right Place at the Right Time

Enterprises have a mix of message sources such as legacy systems, email, and applications. Tracking a delivery failure and sending the message or failure notification using alternative methods is not usually done timely. Large investments in LDAP-based directory services such as Active Directory are often underutilized.

CRC's BrightSend takes advantage of an enterprise's existing authentication systems and ensures security, auditability and flexibility in delivery options. Delivery options can be dynamic, rule- or workflow-based.

File Feed
XLS   CSV
XML   SWIFT
FIX   DOC
TXT   PDF
TIFF

Message Generator

Transmission Archive with Delivery Attempt Logs

Web Display
Fax
Secure Email
SFTP
VPN

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Key Advantages

Unified, web-based message management interface
- Provides a single access point for managing:
- Message routing distribution lists and exception handling rules
- Event-triggered notifications
- Online archive – scheduled and sent transmissions with attachments and delivery attempt logs

Support for a wide variety of delivery channels including:
- Email address, fax number, SMS, voice mailbox, FTP folder, VPN directory, web display
- Save time with events-based automation by associating distribution lists with system events such as report generation or error triggers.
- Event-based error notification when items such as forms are faxed or scanned incompletely.
- Guarantee compliance with all industry-standard audit regulations, including SEC and Sarbanes-Oxley (SOX) rules.
- Be confident that your messages are received with configurable success and failure notices that keep you posted on the delivery status of your messages. If they don't get through the first time, configurable routing rules try alternatives.
- BrightSend solutions can be implemented in less than 10 days if hosted.

Bright**Support**

24x7 Help Desk Services for all BrightArchive Modules + Specialized Support for Mobile Device Networks

Comprehensive Help Desk and Consulting Services from BrightSupport

CRC offers comprehensive, 24x7 help desk services for all BrightArchive components, including BrightSource, Bright-Archive, BrightReports, and BrightSend. Mobile device net-work support packages are also available.

When you leave systems like archiving, messaging and mobile communications to us, your IT resources can concentrate on other core needs.

BrightSupport is change management made easy. Our specialists keep your system op-erations and upgrades running smoothly. Support engineers are available 24x7 by phone, IM and e-mail for end-user support, with live training sessions available on request.

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Service Package Highlights

BrightArchive End-User Help Desk Services
- Account setup
- Exception management setup
- Search and retrieval options
- Report configurations
- Training

BrightArchive Advanced Technical Support and Consulting
- Application integration
- Customization and development of new features
- System training
- Import configurations
- Extract configurations

Mobile Device End-User Help Desk Services
- User setup and connectivity and remote device configuration
- Mobile device troubleshooting for Blackberry, Treo, and Motorola Q products
- Application support for mobile trading and financial data platforms including: eSpeed Wireless, Bloomberg Anywhere, Quotestream Wireless, Reuters Wireless Systems

Mobile Device Network Advanced Technical Support and Consulting
- Network architecture and implementation
- Hardware and software provisioning and maintenance
- Application customization, integration and monitoring