Ship2.Com

Web and Workflow for Transportation & Logistics

Ship2.com is web and workflow for transportation and logistics enterprises requiring the integration of shipment transactions and associated document image administration, presentation and communication.

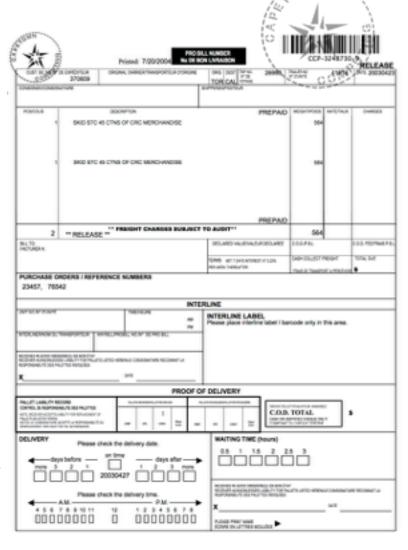
We set out to create a cooperation based online presence in support of your business offering that would be the platform for the distribution of all important transaction information, the supportive and relevant document supporting that information, workflow scheduling and planning, status tracking and reporting for all operational areas and a solid system for billing.

A collection of web enabled, desktop and server applications provide the essential support for the busy business relationships and fulfillment of work flow requirements where customers and business partners are the cornerstone relationships in contact with the your companies system every day.

Integrating the shipment and the shipment consolidation transactions into a real time and web enabled presence for your customers, business partners, agents, consignee, shippers and your people.

shIP2 creates a very structured and methodical workflow that interconnects your disconnected players into a single success oriented steam for process workflow, relationship management, digital media and digital document management, demand reporting, dashboard analysis, forms production, planning, project management. We also provide automated events such as electronic billing and market communications.

The perfect compliment to your market presence that gives your business the next step in professionalism, paperless initiative or a planned expansion.



Providing your business with an active vehicle to automate the important first impression of your vision with an online support system that makes the difference in your customer decision making, and your ability to persuade your market space.

The shIP2 system has the ability to reduce paper flows across an operation spanning large distances, provide real-time and near-time information to those in different locations.

Reducing paper flow in quantity and time to destination, be it the time it takes to route it to a head office or hub or third party. Flexibility and partner interaction for cooperative efforts is is important for a growing concern in this Industry.

When we set to work on the shIP2 system we wanted to encapsulate the

experience and knowledge levels we had achieved working in the industry.

Maritime-Ontario operations where we implemented web and workflow in a 25K shipment/month environment. Interfacing M-O customers with their document imaging activities as well as consignee, shipper and third party interfaces at the 100M/yr level.

Dylex/Biway operations where we implemented the system that managed the logistics and transport of a 1.2b retail value flow across 330+ locations and many third party workflow interactions such as J.D. Smith and Sons, National Logistics Services (NLS), Maritime-Ontario Freight Lines (M-O), Mowat Express, United Parcel Service (UPS) and Purolator.

TheOrder

We wanted shIP2 to be able to address new elements in your supply chain model and items which are actionable are usually where those things start, perhaps initially viewed as problems they are indeed where the seeds of new and unique opportunity lie. With the ability to do more with a transaction than what the line of business applications permit, shIP2 allows you to create a case and expand upon it as a workflow item.

This means you can create cases with business documents, photos, data files, notes, work effort, cost items, streaming media. Anything and everything digital to manage unexpected elements of the supply chain, that could indeed be the new piece of your supply chain model.

The system provides a great deal of flexibility and extensibility with a simple, straight forward post and contributive friendly responsive environment that is additive in nature, like a stack of plates, easy to add to. With the ability to scope at the client, resource, resource/client limiting assignment or ownership/administrative level.

Image++

Image++ provides the digital document and media library that interfaces with the work flow. Media classes, document types and publishing controls for the system are provided and bound to the workflow and global search capabilities of the system as well as the outbound/inbound communications that are digital in nature such as e-mail attachments and facsimiles.

Image++ provides an easy, integrated way to add digital media and documents to the work flow and bind them with the system so that teams, management staff, customer and vendor communications are integrated.

Communications for the enterprise managed at the event item level for both inbound and outbound tracking that is integrated with the workflow system and is intended to in addition to existing communications architecture or on an independent basis. This is a simple and ideal environment for departmental and divisional use as well as providing access to communications and relationships from a web enabled interface.

The media library and all the system information is entirely housed within a single database repository. The ability to search the entire database for relevant information and media proves for many powerful business and organizational applications such as a digital library and media reference database, customer service and transaction support reference database, digital document turnaround, standardized company communications, resource and time based billing, electronic billing and billing support, payables vouchers, claims, audit, research and development, project and team management and chronology related activities.

The system supports the injection of business related documents under a well defined class of document organization and can accommodate a large volume of documents inbound via email, facsimile and other manual injection sources (such as scanners) for global injection into a centralized management and workflow environment.

Cases/Events appear as posted with status and time stamp, organized within a division/location and project structure at the top enterprise level and repeated under the customer or third party scope creating a symmetrical and consistent environment for all users and overall reporting purposes. Management and status reporting is provided via simple post and forward notation as a way to review current items and submit new instructions, directions, corrections and relevant supportive materials in the same interface used by your enterprise team resources or peers.

The system provides for useful registration of partners (client, human resource, third party), document turnaround with version and e-mail integration, a time and rating interface for the service based billing and an interface for adding external system transactions, invoices and other supportive documents. The system provides dynamic reporting for users of the system whereby reports are generated and presented immediately and are booked into the system workflow where required for timing and billing purposes.





The Case Report

The case report, in real time, the foundation of the billing package available online, on the desktop and on the fly in various formats.



Case List

The additive list of workflow performed by your company, searchable by complete contents.



Case E-Mail interface

E-mail for inbound/outbound communications with the ability to add/track/post attachments.

OfOperations

The system is comprised of a collection of web and workflow applications for the support of business relationships and fulfillment of work flow requirements of a transportation enterprise. Customers and business partners are the cornerstone relationships in contact with the system. The primary objectives are;

- Integration of the shipment workflow operations and data consumption requirements of customers, business partners and related internal resources.
- The acquisition, processing and delivery of business transaction document images that are used in the day to day operation of the business.

The external interfaces of the system are based upon commonly available mediums; web, internet (e-mail and XML) and fax communications, promoting global availability, efficiency and ease of use.

Web Interfaces

The system employs web interfaces as a means to interconnect customers and business partners to the workflow of the commercial enterprise.

The web site provides access to the system for shipment transaction search, display of information, production of reports and source documents. Shipment workflow documents captured through the enterprises document imaging system are integrated into the web interface providing the necessary supportive information and document image access in a seamless single interface to the user.

The system provides for a central corporate database repository which gleans shipment data from the billing and administrative system and the document imaging system into a cohesive unit in support of the overall web and workflow system providing a top layer of all business transacted and links to underlying workflow activities.

BUSINESS TO CONSUMER (B2C) CUSTOMER WEB INTERFACE

The web site provides an easy to use and highly available interface for customers to access their accounts and review the status of shipments.

Customer sign on is provided via a customer sign on screen using an account identifier or e-mail address (User Identification) and a password. The customer is presented a window into the overall system with appropriate functions in support of their ability to search and view their shipment workflow with the added ability to sort the shipment results by various data criteria. Customer's account(s) are linked to their User Identification within the system itself through a system user maintenance application that is part of the web and workflow system.

Shipments are presented in a list format with the ability to drill down into a given shipment transaction in order to view general information and links to transaction documents that are present within the imaging system. The documents displayed are generally, but not limited to, Proof of Delivery (POD) and Bill of Lading (BOL) documents. Document classifications or types are a definable component of the overall system.

- Shipment Search
- Shipment List Display with sort criteria
- Shipment Delivery Status Information and Pro-bill association
- Bill of Lading (BOL) document association
- Proof of Delivery (POD) Document, signature and delivery information
- Cross referencing of information in the administrative system

BUSINESS TO BUSINESS (B2B) BUSINESS PARTNER WEB INTERFACE

Business partners are separate business entities performing value added services and delivery terminal functions for the enterprise where the enterprise cannot otherwise perform these functions for themselves. Typically this occurs in distant markets where a presence is required or in cases where there is a specialization that the enterprise does not posses. Irrespective of the business reasons, the relationship dictates that these parties have access to a deeper view of the system and expanded document production capabilities in support of their responsibilities within the value chain.

Business partners sign on to the system via a business partner sign on screen using an e-mail address (User Identification) and a password. The user is presented a window into the system with appropriate functions in support of their ability to search and view their shipment work flow and the added capabilities commensurate



Customer Interface

Using a selection criteria to filter transactions down to a manageable selection which then drills down into transaction detail and the document images supporting them

with their service performance requirements within the overall enterprise.

- Shipment Search
- Shipment List Display with sort criteria
- Shipment Delivery Status Information and Pro-bill association
- Bill of Lading (BOL) document association
- Proof of Delivery (POD) Document, signature and delivery information
- Cross referencing of information in the administrative system
- Trip Search (Shipment/Shipment Consolidation)
- Trip Detailed Printing (a.k.a. worksheet)
- Trip Summary Printing (shipment list only)
- Proof of delivery (POD) document printing
- Proof of delivery (POD) document printing in trip batch format
- Access to the administrative components of the system via the web for the update of shipment information

CUSTOMER SERVICE REPRESENTATIVE (CSR) WEB INTERFACE

Customer Service Representatives (CSR) are staff which respond to customer service requests and have access to the customer web interface with an administrative User Identification that allows them to view all account shipments.

OfWorkflow

This provides them with a fast and easy method to retrieve source documents and communicate them to the customer.

The sign on method and overall process is commensurate with that of the customer web interface with the ability to glean data from the entire data and document repository with no restriction as is the case with the customer interface.

The printing capabilities in this area of the system are used to promote the freedom to move and work shipments independent of the paperwork which may lag somewhere behind the physical process. The web interface and the overall functionality provides a means by which business partners can plan ahead of the physical workflow.

CONSIGNEE AND SHIPPER WEB INTERFACE

Consignee (shipment destination party) and/or Shipper (shipment source or intermediary source) are permitted access to the system utilizing a house holding structure whereby consignee/shipper name and address information is provided in their account setup and used as a filter or template over the entire shipment database facilitating a discrete view of shipments and their consolidations in a time sensitive manner (trip tracking). The user is also provided the ability to self administer a list of locations specific to their needs which allows for further localized sub sets of the data as per their business needs.

Consignee/Shipper access is provided through the customer sign on screen via an account



CONSIGNEE/SHIPPER

Web portal for arms length partners with a focus on freight and freight consolidation inbound.

identifier or e-mail address (User Identification) and a password.

Functionality provided the consignee/shipper;

- Shipment Search
- Shipment List Display with sort criteria
- Shipment Delivery Status Information and Pro-bill association
- Bill of Lading (BOL) document association
- Proof of Delivery (POD) Document, signature and delivery information
- Cross referencing of information in the administrative system
- Trip Search (Shipment/Shipment Consolidation)
- Trip Detailed Printing (a.k.a. worksheet)
- Trip Summary Printing (shipment list only)
- Proof of delivery (POD) document printing
- Proof of delivery (POD) document printing in trip batch format
- Most recent trips
- User locations maintenance and selection for search isolation

WORKFLOW APPLICATIONS

The system workflow applications provide for data flow interfaces for external data acquisition and processing as well as external delivery of processed information. This includes data harvested from external systems (TOKENIMPORT), data from business partners and internal resources at various locales (IMAGE++/RDOC) and automated data communications (MAILSEND). System and user maintenance is also provided via a support application (WEB-MANAGEMENT).

The workflow applications work in conjunction with the web applications in order to provide a seamless flow of information in both directions.

The objective of the workflow applications are to provide an automated means to move information throughout the enterprise and present that information flow in a communicative window that is useful to the parties involved in the exchange.

TOKENIMPORT

The TOKENIMPORT application provides the means by which shipment transaction source data is injected into the system database. This is driven by a token data exchange interface which processes shipment data using a discrete

one token per shipment transaction interface (See Shipment Token). A token is a data file representing a single shipment transaction that is triggered by an update event in the billing and administrative system for the enterprise. The token is processed and used to update the web and workflow system in real time (or near real time) fashion. The application operates in a service mode whereby it is running at all times and should it fail at any point it will restart and pick up where it left off. The application uses an FTP protocol for movement of tokens from the source system to the web and workflow system and processes them as they are acquired.

The following are the circumstances whereby a token is generated for a given shipment; shipment creation, shipment release, shipment trip(s) (consolidation, movement, equipment assignment), Bill of Lading document (BOL) posting, Proof of Delivery document (POD) posting, Delivery Data Entry (DEL), Dock Control Sheet document (DOC) posting, Shipment Rebilling (REBILL), and any update of the shipment information will trigger the production of a token.

The process occurs in real time. A real time data stream provides for distinct advantages to the overall web and workflow process because information is presented on an as is available basis and appears to be directly linked to the billing and administrative system of the enterprise. This create a more robust environment which allows for real time reporting and display of information which would otherwise be less useful as the timing would lag too far behind the physical and administrative processes of the enterprise.

Another benefit is the self healing nature of the overall process. Problematic data is removed from the data stream and narrowed down to the shipment level due to the nature of the process and permits the overall process to continue, while the problem token/data are diverted for treatment.



TOKENIMPORT

Inbound transactions from line of business applications running in concert with the web and workflow interfacing transactions.

OfWorkflow...

This provides them with a fast and easy method to retrieve source documents and communicate them to the customer. In many cases future tokens correct prior problem tokens. In the event of a system failure on either side of the processing equation the system will bring itself back into line upon re-commencement.

The data stream is a one way channel for the movement of data into the web and workflow system. Additional channels have also been developed as a result of the initial shipment data channel. The data channels supported are;

- Data Token representing shipment and carriage data (as described above).
- Financial Shipment Tokens; representing shipment information duplicated on a per consolidation (trip) basis. This is further subdivided into an invoiced and non-invoiced sub set providing a true image of the consolidation and invoicing workflow.
- Rebill Tokens; representing shipment information where modifications have been made to the account to which a shipment is billed.

IMAGE++/RDOC SERVER GATEWAY

The IMAGE++/RDOC workflow application provides a centralized gateway for remote document transactions to enter the system and the means to manage the relationship with the sending party. This provides for improved reporting times over manual document movement and an organized communication process for both the source and destination of the document image.



IMAGE++/RDOC SERVER

Inbound document images and media via an e-mail/or fax or other communications method queen and injected into the workflow.

The IMAGE++/RDOC (Remote Document Image) application provides for an e-mail interface and a fax interface for remote locations to report document images for processing in the enterprise imaging system and further update of the web and workflow system. The documents are batched by document type and communicated via e-mail, fax and fax to e-mail, to the appropriate phone number of e-mail address for the document type at issue. The application accepts the digital image file for processing based upon the channel it is received in, processes the information and returns an acceptance number to the sending party as configured by their configuration information in the system.

The system supports generic fax, e-mail attachments and fax to e-mail devices.

CLIENT DESKTOP

The client application provides for operator access to the document image queue as processed by the server gateway (described above). The operator is provided with the ability to launch the document image batch for processing in the document imaging system, change the document type where necessary or process the document image batch multiple times in cases where more than one document type is required. The operator activities will also dictate when the document image batch will be removed from the queue.

CSR SUPPORT FUNCTIONS

Customer server representatives are provided with additional data update and reporting capabilities within the framework of the IMAGE++/RDOC client desktop application. The user is provided with the following capabilities in support of the customer service representative efforts to report activities to the customer in an integrated environment.

- Shipment data information update (i.e. delivery date and time)
- Document image class exception reporting (BOL, POD)
- Account Invoice Statement printing
- POD printing
- Invoice printing

IMAGE++/RDOC WEB INTERFACE

The web interface provides for a subset of the client desktop application via a web page developed interface. The capabilities are limited to document image batch file processing and management of the queue in general.

MAILSEND

The MAILSEND application provides periodic reporting of workflow and document transaction images to customer accounts in an effort to spread the benefit of the system out to the receiving parties. The process is defined using the IMAGE++/RDOC interface whereby controls are put in place for the transmissions to occur, what information and document image classes are to be transferred and scheduling information (with a backdating capability) on a per customer account basis.

This automates the process of information reporting to the customer using an outbound email reporting method where a manual ongoing process would normally take place.

The MAILSEND application prepares and sends out the e-mail using an SMTP server as dictated by the configuration information for the application.



MAILSEND

Automated e-mail and xml communications of important transaction data and document images.

The Symbols

Symbology through the use of standards and barcodes enables the automation of flows and information capture when done properly and with a well thought out scheme.

You can work the rule and work the exceptions or automated the rule and work the exceptions and we prefer the later. So when we put the final touches down on shIP2 we wanted to streamline the document flow by not only creating the important transaction barcode on documents but include the document type and a company designation.

CCB-324870-9, CCP-324870-9 using a short company code and standard check digit transaction code. Using SSC-18 would provide for long encoding which could also be used, in either case the purpose is to distinguish a code that is a) belonging to the company and b) the document type for automated image to carriage transaction association. Bill of Lading and Proof of delivery in the above two examples



The purpose of which is to automatically bind documents to transactions at the appearance of the barcode.

(00) Application Identifier always 00 for SSC-18

1 Package type
0, case or carton, 1, pallet, 2, larger than pallet, 3, undefined container, 4, internally defines, 5-9 future

0012345 Manufacturer/Company ID
3218730 Unique Transaction Number

The final sequence provides the SCC 9 digit code (Unique Shipment Container Code) which travels the transaction number through the workflow and back to the original in a 99 piece

Piece Count

count limit.

Capturing information such as signature and relevant performance and cost information can be accomplished though predictive base line data along with before and after decision boxes to derive delivery date, time, wait time, and other relative information with signature area for a streamlined workflow that overlaps with



source documents such as BOL, POD, Dock Control and other workflow documents in use at your enterprise.

MAINTENANCE APPLICATIONS WEB MAINTENANCE

The WebMaintenance application provides the system administrator with user definition/maintenance and the management of dynamic areas of the website where ongoing changes are required without the need of programming or technical resources.

Dynamic areas of the website are pre-programmed with access to the web objects with the web and workflow system. The WebMaintenance application provides an easy to use access point where a word processing style interface is employed for the task of updating the web site news, jobs, events, locales and contact information.

The WebMaintenance application also provides a user access report which provides the ability to track the performance of registered users and anonymous users as they interact with the system over time. Management can see the

effectiveness and use of the web site with this reporting option.

ANALYSIS APPLICATIONS DASHBOARD

The Dashboard application provides a web enabled summary of the shipment consolidation and movement activities of the enterprise with the ability to drill down into more specific areas of the business activity for a top and low level view of the ongoing activities. A dynamic display is provided which mirrors a summary report with the ability to explode the data at a high level down to the origin transactions and actual document images allowing for the result and cause to be displayed in an integrated interface.

The Dashboard is provided in a web interface which bears the likeness of a wide format columnar report, with the added ability of dynamic sorting and filtering for the analytical and management user.

The Dashboard provides a top level window on the workflow activities of the enterprise which changes as the workflow takes place.

AndLogical

Below is a summary of the functionality provided the Dashboard user;

- Sort the summary results via any supported and displayed data criteria as a means to get to the point of view required.
- Establish and execute rules defined by the user which are translated into system query language as a means to further slice through the data and create reporting subsets
- Follow transactions as they move from one workflow stage to another
- Drill down from a summary line to the detailed transactions which support it and further down to the transaction document images that support the detail
- Divide the information utilizing a financial period calendar specific to the needs of the business enterprise.

The Dashboard application is a constantly changing entity that moves along with the day to day activities of the business so as to provide more than an analysis report but an analytical tool which shows the workflow movement as it occurs



DASHBOARD

Business analysis and review with linkage to document workflow and images from a high level rule based and filter capable view to a drill down transaction and source document presentation.

Outcomes

ENEFIT

Automate the flow of shipments from your day to day system to a web enabled workflow and tracking system for your customers, alliance partners and customer service resources

Automate the flow of document images and associated digital media for shipment bill of lading, proof of delivery and other operational documents into the day to day workflow from all locations

Create a professional and organized open web access environment

Organize your document and digital media into a centralized and highly accessible database with a powerful global search capability

Access your business or organization from anywhere in the world

Convert conversation into actionable items

Create a paper trail in a paper free system

Resources and third parties can contribute to the business with ease of accessibility and freedom

Control and track electronic conversations between your business and your business relationships with e-mail, facsimile, documents and other media connections

Make due diligence and corporate governance a consistent daily experience

Establish and maintain focus in your environment and scope your business relationships

Convert resource items into business activities

Establish a research and development chronology

Provide exemplary customer service and vendor relations

Find and acquire the information you need when you need it

Move freely from one business channel to another

Effect and communicate change in a fast paced environment with a systematic methodology

Promote a forward momentum through web and workflow for a growing and busy workgroup

Web and Workflow Management	Division, Department and Project Architecture
Business Relationship Management	Relationship Contact Management
Customer Relationship Management	Web Content Management
Resource, Time and Project Management	Customer Self Management
Document and Media Management Library	Standardized Outbound Communications
Communications Logging and Standards	Standardized Document Turnaround
Chronological Reporting and Billing	Web and Desktop enabled
Electronic Billing	Client/Server Centralized Database
Automated document and media image injection from remote and localized sources	Division, Department and Project Architecture
Post and Forward Notation	Relationship Contact Management

-EATURES

OfMice

The application architecture provides for service and digital delivery, digital media and information library development, presentation, procurement, fulfillment and work flow combined to form a simple step by step process in a high demand and transaction based environment that permits the use of the system for enterprises with a single or many locations.

The database is client/server architecture developed in a Microsoft SQL Server environment and is also adaptable to other database platforms such as Oracle. The desktop and web applications are founded upon the is Microsoft Windows .NET development environment with compatibility across the spectrum of web browser applications.

Reports and Forms are provided in both a web and desktop delivery architecture. Additional report and form objects can be developed and integrated into the system as required. The Remote Agent provides the ability to house additional report and form items for integration with the system and delivery to the most demanding and far reaching organizational environments using the internet and encrypted XML technologies.

The operating environment requires a server based architecture that can house a database and internet information server service or a multiple server based architecture that segments the database from the web application server(s). The system supports a component object model interface that allows for server banks and multiple location service and server architectures.

andPersons

Token based transaction processing allows for a tight integration with your day to day transaction based systems. The application architecture supports large numbers of real time transactions in a self sustained and self corrective environment that promotes free systems use on either the online or business transaction system side.

Adding transaction based support for customers, customer service representatives, business partners and vendors is easily accomplished through web portal expansion and integration with the existing architecture for web content management, billing, electronic billing delivery, automated mail and XML communications and document imaging support.

The Dashboard application provides an executive and management view of the business at a high level performance perspective, with the ability to drill down to the specifics of line and period items into the day to day operational and transaction support information and supportive documents and media images in Image++.

NDUSTRIES

Transportation and Logistics

Warehousing and Distribution

Product Development and Distribution

Merchandising Enterprises

Operational Centers for Large Enterprises



Image++ Management

Provides a desktop Image++ management capability in addition to the web interface for injection of all media types and classes.

NTERFACES

PatchWork.Plus Web Interface

PatchWork.Plus Desktop

PatchWork.Plus Image++/Remote Document Server

PatchWork.Plus Image++ Client Desktop and Assignment

PatchWork.Plus Electronic Billing Interface

PatchWork.Plus Remote Agent

PatchWork.Plus Web Management Interface

PatchWork.Plus Token Based Transaction
Processor

PatchWork.Plus Mail and XML Server

PatchWork.Plus Dashboard Business Analysis

Customer Shipment Web Interface

Business/Alliance Partner Web Interface

Consignee and Shipper Web Interface

Customer Service Shipment Web Interface

Shipment Track and Trace Web Interface

Shipment Form Document Production







CUSTOMER/THIRD PARTY/ RESOURCE WEB INTERFACE

Web portal for customers, resources and third party user access to the PatchWork.Plus system

WEB INTERFACE CASE DISPLAY

Web access to case editing and display functions, Image++, customer and resource notes, report production, communications and resource time allotments.

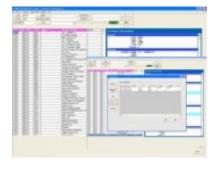
DASHBOARD

Business analysis and periodic review with linkage to document workflow and images from a high level functional rule based and user customizable interface.



CASE E-MAIL INTERFACE

Web electronic mail interface for inbound and outbound communications with ability to track attachments in/out and resend capabilities.



WEBMANAGEMENT

Define and manage web content such as news, events, positions, etc.



IMAGE++/RDOC SERVER

Inbound document images and media via an e-mail and/or fax or other communications method, queued and injected into the workflow.



USER PROFILE

Control the presentation and options at the user level with My Profile.



INBOUND COMMUNICATIONS GALLERY

Inbound communications gallery for case assignment and workflow booking creating a communication to work translation and automation if required or desirable.



E-COMMERCE CUSTOMER MANAGEMENT

Allow your customer accounts a window into the business and their business forms in a paperless environment.



DESKTOP SYSTEM

Provides a desktop access method to the case management and Image++ functions of the system in addition to the web user interface.



IMAGE++ MANAGEMENT

Provides a desktop Image++ management capability in addition to the web interface for injection of all media types and classes.



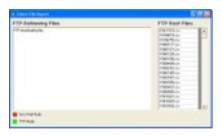
REMOTE AGENT PROCESS AND PRINT

Automated Print Job Design and Production in a local and remote environment providing print job processing and network access to physical printing devices that would not be available otherwise.



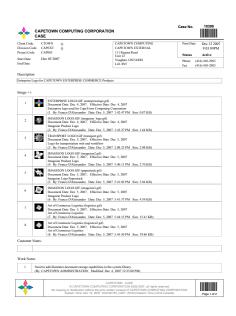
MAILSEND

Automated mail and XML communications program module



TOKENIMPORT

Inbound transactions from operational day to day systems/Art of Commerce $^{TM}\,$





CASE REPORTING

Case reporting is done in real time and encapsulates all information at the point in time that it is produced, online or on the desktop. Case Reports are used as the foundation of the billing package.

BILLING PACKAGE PRODUCTION

Billing package production with summary by period, by day, by case, case reports all bundled together to support project and time reporting and electronic billing in a customizable format.

The billing package provides daily, project and event based views of the workflow.



PRODUCT EXPLORER AND **MERCHANDISE MANAGEMENT**

Define your product in a structure that matches your business, your strategy and your hierarchy



IMAGE++ MANAGEMENT, IMAGE, RTF **DOCUMENTS AND STREAMING OBJECTS**

Expand the information for your product by adding digital media to your product development and presentation via the web or the desktop.



SALES ORDER

An integrated order entry and management environment for telesales, remote sales, web sales and EDI order management and entry.



PURCHASE/TRANSFER ORDER

Control the inventory requirements and movement of your inventory in multiple location stores and structure.



E-COMMERCE STORE & BUSINESS PRODUCT PUBLISHING

Deliver your products and Image++ media to the web customer, customer sign on accounts, yours sales representatives and your business



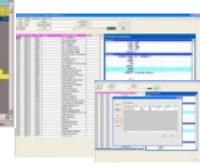
E-COMMERCE CUSTOMER MANAGEMENT

Allow your customer accounts a window into your business and their business forms in a paperless environment.



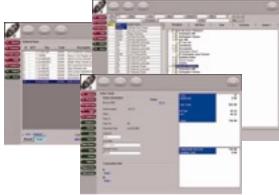
INVENTORY AND CHAIN AUTOMATED REPLENISHMENT

Automate your inventory replenishment and planning using min and max, demand and seasonal/ period fluctuations.



WEBMANAGEMENT

Define and manage web content such as news, events, positions, etc.



CE RETAIL INTERFACE

A Retail Store Check out interface to the Art of Commerce System.







OPERATIONAL CENTER MANAGEMENT RECEIVING AND FULFILLMENT

Inventory Warehouse and Store management in an unlimited number of locations with Receiving and Put-a-way functions, Inventory allotment, Picking, Packing and Shipping. Both in paper based and wireless environments.

INVENTORY COUNTING PAPER FREE PAPER BASED

Paper based and Wireless Inventory counting, inventory adjustment and valuation automation.

WIRELESS OPERATIONAL CENTER PICKING AND RECEIVING

Wireless Receiving, Inventory Count and Picking operations via a hand held web enabled interface





WIRELESS STORE FUNCTIONS

Inventory quantity and location inquiry via a hand held interface.

REPORTING AND FORMS

Customizable reporting of business reports and forms via Crystal Reports designed reports.

E-COMMERCE FORMS

Production of forms via the web for customer and representative delivery in multiple output formats, PDF, TIFF, etc.



EDI/INBOUND

EDI Order processing and crosscheck integrated into the sales order environment



EDI/OUTBOUND

EDI Advanced Ship Notice Management for order fulfillment and integration with the Inventory Warehouse Picking and Packing environment.



REMOTE AGENT PROCESS AND PRINT

Automated Print Job Design and Production in a local and remote environment providing print job processing and network access to physical printing devices that would not be available otherwise.







CUSTOMER WEB INTERFACE

Web portal for customer account access to transactions and supportive document images.

CUSTOMER SERVICE REPRESENTATIVE WEB INTERFACE

Web portal for customer service representatives in support of transactions, support documents and operational information cohesion.

BUSINESS/ALLIANCE PARTNER WEB INTERFACE

Web portal for third party company access to transactions relevant to their service responsibilities and freight consolidations inbound.



CONSIGNEE/SHIPPER WEB INTERFACE

ships with a focus on non-account based service

destinations and information on freight and freight

Web portal for arms length operational relation-

For Authority Team First Authority Team Fi

TOKENIMPORT

Inbound transactions from operational day to day system



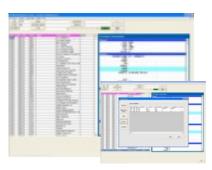
IMAGE++/RDOC SERVER

Inbound document images via e-mail and fax, queued and injected into the workflow.



MAILSEND

Automated mail and XML communications program module



WEBMANAGEMENT

Define and manage web content such as news, events, positions, etc.



DASHBOARD

Business analysis and periodic review with linkage to document workflow and images from a high level functional rule based interface.