ERP Software for GROWING Manufacturers
Expanding Your Potential

In today’s challenging business environment, global competition applies constant pressure on manufacturers to reduce costs and shorten production cycles. For companies who can deliver on the market’s demand for higher quality products made better, faster and cheaper than ever before, the potential for success is enormous.

Our Value Proposition

Enterprise-wide software is a must for companies planning to compete on a global scale, yet the cost and complexity of large systems is a burden that growing organizations often find hard to bear.

Expandable’s unique approach assures that expanding companies gain an affordable long-term business foundation without being buried under the weight of an unwieldy software implementation.

Our product is flexible enough to handle your most pressing business needs, powerful enough to sustain you as you grow, and is easy to use so your entire organization feels comfortable with the system right from the start.

Key Expandable Advantages:
- Rapid ROI
- Unbeatable price/performance ratio
- Fast and successful implementation
- Excellent customer support
- Low total cost of ownership
- Long-term deployment
- Secure, FIPS-compliant software
- Microsoft SQL solution
- FIPS compatible

The Expandable Difference

With a scalable ERP foundation backed by outstanding customer service and support programs, Expandable delivers a complete business solution that consistently supports emerging manufacturers growing to the billion dollar mark.

Because development, marketing, implementation and support of Expandable products is accomplished exclusively with direct employees of the company, Expandable is able to deliver economic advantages that other ERP vendors cannot provide.

Many ERP vendors charge as much or more for services as for the actual software, but Expandable’s direct model minimizes implementation expenses to keep the total investment affordable for growing companies.

By delivering an affordable integrated business foundation, Expandable makes a measurable difference in the ability of growing manufacturers to control business operations and build shareholder value.

Deployment Options:
1. Purchased and installed on-site
2. Cloud subscription
3. Subscription-based, on-site installation
4. Microsoft Azure Cloud subscription
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Inventory Control

**INVENTORY CONTROL** maintains part information and inventory balances, providing you more control over your purchased goods and materials.

Parts may be stored in single or multiple locations within one storeroom or multiple storerooms.

### MODULE FEATURES

#### Parts Master File Maintenance
- Variable part number length (up to 25 characters)
- Browse capability to find parts by number or by search name
- Substitute part number, preferred vendor
- ECN, pending ECN, drawing revision fields, drawing size
- Dates for: created, effectivity, original release, active, obsolete, last update
- Manufacturer/vendor part cross reference (maintained in Purchase Order)
- Customer part cross reference (maintained in Sales Order)
- Classification by commodity, product line and part class
- UPC and ITF Codes
- Lead times: vendor, receiving, kitting, manufacturing, shipping, planning, cumulative
- Order point, order quantity, and quantity for sales order processing
- Planner and buyer identification
- Flags: MRP, master scheduling, lot control, serial number
- Minimum sales quantity, maximum order quantity
- Stocking, buying and selling unit of measure conversion
- Variable decimal quantities (set by Part Identification)
- Part yield, shelf life, default storeroom
- Multiple user-defined fields and notes
- Attachments
  - Documents
  - Web addresses

#### Global Part Inquiry
- Drill down detail by sales order, purchase order, kits, jobs, stock, sales and purchase history, serial numbers, lots, routings
- Supply and demand summarized availability

#### Kit Issues to WIP
- Complete with one transaction
- Partial kit/partial return options
- Exceptions handling for shortages
- Automated lot and multi-location control
- Simplified kit returns
- Kit transfers (move entire kit to alternative WIP storeroom)

#### Kit Shortage Tracking
- By part, job, buyer
- Automated warning of shortages for any received part

#### Issue and Returns Entry
- Automatic inventory posting
- Kit shortage updating
- Support for expense issue ABC count days
- Snapshot of MTD and YTD quantities: beginning, receipts, issues, adjustments for each part/store-room
- Last activity dates: receipt, issue, on hand, physical, count sheet

#### Reorder Point Reporting
- By part and storeroom location

#### Backflush Issue
- No job or work order required
- Automatic inventory relief from WIP or main stores
- Variance calculations (option to override accounting)
- Issue configuration options
- Phantom BOM processing

#### Multiple Locations
- Multiple storerooms (up to 1,000)
- Automatic general ledger accounting by storeroom
- Approved storeroom for purchase
- MRP and MPS netting control by storeroom
- Stock status control
- Optional multi-location control
- Safety stock quantity by storeroom
- Cycle count days overrides
Inventory Control (continued)

Multiple Locations within a Storeroom
- Location field up to 16 alphanumeric characters
- Unlimited locations within a storeroom
- Password control by storeroom
- Stock status information available by storeroom, part, location
- Part quantities for current, on hand, book, physical
- Automatic date capture of last activity, receipt, issue, physical inventory, cycle count work sheet, last update
- Multiple location transfer
- Create new locations if not previously established

Stores Transfer and Adjustments
- Transfer of an individual part or a complete kit
- Ability to adjust on-hand stock quantity (automatic update to appropriate G/L account)

Value Distribution Reporting
- ABC code calculation based on user criteria
- Unit cost
- Lead time
- Percent usage
- Forecasted or actual YTD usage
- Option to update ABC code on parts master file

Daily/Monthly Transaction Reporting

General Ledger Transaction Creation and Tracking
- By department, account, job, batch number

Consignment Inventory
The optional CONSIGNMENT INVENTORY module tracks parts (lot controlled and serialized) consigned to a customer, sales representative or dealer site for later use/sale, as well as loaner and evaluation parts that could be returned or sold at some future date.

Serial Number Status
- In house inventory
- Consigned Inventory
- Loaner Inventory
- Evaluation Inventory

Stores Type
- In house inventory
- Consigned Inventory
- Loaner Inventory
- Evaluation Inventory

Sales Order Ship Type
- C-from stock to consignment

Inventory Accuracy
Accurate inventory counts prevent stock-outs, shortages and excess inventory, while improving inventory turns. Expandable provides two methods of physical counting – Complete Physical Inventory and Cycle Counting:

The Complete Physical (wall-to-wall) provides for the counting of all items using inventory tags:

Complete Physical Inventory (wall-to-wall)
- Storeroom lockout to prevent transactions during count

Inventory Tag Generation
- By stores code, stock location sequence, part sequence
- Bulk tags
- Control tag number sequence

Inventory Tag Updating
- Original count update
- Recount update

Inventory Tag Tracking
- By stores code, part, stock location, tag number
- Voided and missing tags

Inventory Tag Print
Inventory Tag Posting and Updating
Void Unused Bulk Tags

The Cycle Counting function provides for the systematic counting of parts throughout the year:

Cycle Counting
- Storeroom lockout to prevent transactions during count
- Selection criteria:
  - storeroom code
  - ABC code
  - number of parts to count
  - date of last count
  - include negative on hand
  - additional parts to count
- Count days determined by ABC code with individual override
- Book vs. physical analysis

Real-time Integration
- Multiple Location
- Lot Tracking
- Tag Inventory
- Purchasing
- Product Data Control
- Sales Order
- Sales and Booking Analysis
- General Ledger
- Multiple Company
- Foreign Currency
- Job Scheduling/Costing
- Shop Routing
- Materials Management (MRP)
- Master Scheduling
- Configuration Control
- Consignment Inventory
- Engineering Change

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Master Scheduling

MASTER SCHEDULING is key to effectively planning the manufacturing activities of your business. It provides versatile functions to help you create and maintain the company’s Master Production Schedule (MPS) for finished products and service parts.

Planning bills are supported to streamline and simplify your forecasting operations. The Master Schedule forecast can be automatically created from forecasted sales, quotations and actual demand (see Sales Order Management).

Forecasts can also be manually entered, uploaded from your favorite forecasting/modeling software or from a simple spreadsheet. Multiple versions of the forecast can be maintained for “what-if” simulation.

Available to promise, projected on hand and planned order releases for MPS parts is available during sales order entry as well as system-wide. Master Schedules may be automatically passed to the Materials Management function for use in Material Requirements Planning (MRP).

MODULE FEATURES

Sales Forecast Maintenance
• Create manually or automatically post from forecast status sales orders
• Planning bill
• Multiple versions
• Copy
• Spreadsheet upload

Demand Generation
• Automatically posted from sales orders
• Imploded to planning bill

Supply Generation
• Automatically posted from
• Inventory, Purchasing and Jobs
• Option to include RMAs as supply

Master Schedule Creation
• One or two level master schedule
• Options and models based on percentage of planning bill
• Utilizes demand and planning time fences
• Option to explode planning bills using planned percentages or actual demand
• Option to create available to promise file
• Calculates:
  o Available to promise
  o Projected availability
  o Suggested MPS orders

Automatic MRP Plan Creation
• Moves the Master Production Schedule to production

One-step MPS-MRP
• Workflow to execute multiple MPS and MRP functions

Comprehensive Bucketless MPS Reporting
• By part
• By planner
• Includes:
  o Forecast
  o Production forecast
  o Demand
  o MPS orders
  o Projected on hand
  o Available to promise
  o Exception messages

Real-time Integration
• Sales Orders
• Inventory Control
• Lot Tracking
• Product Data Control
• Job Scheduling/Costing
• Purchasing
• Materials Management (MRP)
Materials Management

**Materials Management** is the first step in the execution of your plan. It defines the actions to be taken, and when to take them for buyers, planners, expediters and production schedulers.

The action messages of Expandable’s “bucketless” Material Requirements Planning (MRP) reporting are your company’s time-phased call to action.

Material requirements are generated based on a production schedule from the Master Production Schedule (MPS) or may be manually created.

**Module Features**

**Production Plan Maintenance**
- Part demand by required dates
- Customer and user reference information
- Optionally created by Master
- Schedule Utility
- Load Sales Order demand directly into MRP Part Plan

**Material Requirements Generation**
- Include and exclude options:
  - Select on release date
  - Collect stock, open order status
  - Analysis of safety stock
  - Explode assemblies only
  - Calculate component requirements
  - Negative inventory
  - Safety stock
  - Expense items
  - Shortages from closed jobs
  - Purchase order requisitions, quotation, blankets
  - On-hold purchase orders and jobs
  - Lead time for phantoms
  - Use part lot size or exact quantity
  - Update part forecast in the Part Master File
  - Select on part plan source

**Planning Workbench**
- Place jobs and purchase orders directly from MRP run

**Material Requirements Reporting**
- Top level pegging
- Bucketless calculation with summarized or detailed reports
- Selection by:
  - Buyer
  - Vendor
  - Part
  - Planner
  - Date range
  - Action message(s)
- Detail shows:
  - Gross requirements
  - Open orders
  - Projected availability
  - Planned orders
  - Recommended release date
  - Pegging data
  - Parts user fields
- Action analysis:
  - Recommended orders
  - Recommended order re-scheduling
  - Order past due
  - No requirements
  - Optional vendor info

**Inquiries**
- Material Requirements
- Option to create PO line or job from inquiry
- Pegging
- Part plan

**Manufacturing Calendar Maintenance**
- Generation by year
- Work days vs. non-work days
- Plant shut-down date range

**Multi-run Planning**
- By plant
- Compare MRP runs
- Centralize purchasing

**Real-time Integration**
- Inventory Control
- Lot Tracking
- Purchasing
- Product Data Control
- Job Scheduling/Costing
- Master Scheduling
Lot Tracking

Expandable's extensive LOT TRACKING capacity provides the traceability of purchased or manufactured items from raw material receipt to a finished product's final destination.

Lot Tracking improves quality by monitoring expired lots, tracing defective materials back to vendors and to customers who were shipped defective product, and provides information to satisfy governmental reporting requirements for the pharmaceutical and medical instrumentation industries.

MODULE FEATURES

Lot Master File Maintenance
- Maintain both internal lot numbers and manufacturer's lot numbers for purchased items
- Search by storeroom, part, lot
- Maintain date created, expiration date, last activity date, retest date
- Lot status: active, completed, expired, hold, cancelled
- Internal lot numbers system generated or manually entered
- Multiple user-defined fields and notes
- Attachments
  - Documents
  - Web addresses

Parts Master File Maintenance
- Lot control designated by part
- Shelf life / expiration days

Lot Transaction Tracking
- Action date
- Action type:
  - purchase order receipt
  - issue (job, backflush, expense)
  - inventory adjustments
  - customer shipment
  - customer return
- Order/vendor/customer identification for each transaction
- Quantity processed
- Maintain lot information at the time of receipt, issue, transfer, shipment or RMA
  - QA information
  - Text messages
  - User-defined fields

Inquiries/Reporting
- Lot status
- Expiration status
- Detail transaction activity
- Where-used pegging
- Where-from pegging
- QC / MRB status

Real-time Integration
- Inventory Control
- Tag Inventory
- Purchasing
- Job Scheduling/Costing
- Sales Order
- Materials Management (MRP)
- Master Scheduling
Shop Routing

Detailed, accurate scheduling, costing and WIP tracking are achieved through the SHOP ROUTING system that provides routing master data, defining the sequence of operations required to manufacture a part.

**MODULE FEATURES**

**Work Centers**
- Labor only
- Machine only
- Both labor and machine
- Outside processing vendor operation

**Work Center Definitions**
- Description of work center
- Department
- Browse by work center or department
- Location
- Machines
- Class code
- Number of hours per day
- Efficiency factor
- Shifts
- Operational hours per day
- Labor efficiency factor
- Productivity percentage
- Standard labor rate
- Standard labor burden
- Queue hours per work center
- Reporting by work center or department

**Job Creation**
- Create jobs from MRP Inquiry

**Routing Maintenance**
- Standard routings (master routing)
- Alternate routings
- Routing copy capabilities
- Routing hours roll-up
- Operation data
- Indirect and direct labor
- Outside processing

**Operations Data**
- Operation code
- Work center
- Yield percent
- Queue hours
- Setup hours
  - Direct and indirect labor
  - Operation lead time
- Run hours
  - By labor and machine
- Move hours
- Lead time (Queue + Set-up + Greater of Labor/Machine Run + Move)

**Routing Cost Variance Analysis**
- Labor, material, outside processing, standards change, scrap
- Standard versus actual costs Report selection by part, job

**Routing Costing**
- Effective date control
- Operation added and cumulative costs:
  - Labor
  - Labor burden (factory overhead)
  - Materials
  - Outside processing burden (overhead)
- Work center control of:
  - Standard labor rate
  - Standard labor burden
  - Option to include yield and scrap

**Tooling Requirements**
- Browse capability by tool part ID or alpha search name
- Tool part ID
- Tool description
- Storage location
- Cost
- Expected life
- Tool status
- Drawing ID, drawing revision and ECN
- Responsible engineer
- Buyer and vendor
- Substitute tool
- Routing where used

**Reports and Inquiries**
- Routing master
- Routing-part cross reference
- Operational tooling list
- Work center load

**Real-time Integration**
- Inventory Control
- Purchasing
- Product Data Control
- Job Scheduling/Costing
- Materials Management (MRP)
Job Scheduling and Costing

**JOB SCHEDULING and COSTING** provides the features of both job costing and project accounting systems. It provides management with schedule tracking by responsible department.

### Job Entry
- Automatic or manual job number assignment
- Stock orders
  - RMA
  - Production rework
- Repair orders
- Customer orders
- Multiple part orders
- Engineering projects
- Multiple operations within job/work order
- Job copy capability
- Link to sales order, RMA, purchase order, lot and master job
- Job, operation, standard comments
- Pending ECN warning message
- Default kit from and complete to storerooms
- Default WIP account with override
- Partial/complete quantity control
- Job hold with reason codes
- Priority code
- Multiple user-defined fields and notes
- Attachments
  - Documents
  - Web addresses

### Job Schedule Maintenance
- Scheduled and actual:
  - Release dates/quantities
  - Kit dates/quantities
  - Start dates/quantities
  - Complete dates/quantities
- Forward and backward re-scheduling

### Job Release
- Option to include scrap in kit quantity
- Create operations for jobs with routings
- Create kit records for configurations without BOM

### Shop Traveler
- Option to include materials and component references
- Option to include procedure descriptions and/or tools (if Shop Routing installed)

### Job Status Inquiry/Reporting
- By job
- By part
- By work center (with loading if Shop Routing installed)
- By priority code
- By WIP account
- Receipts, completions, returns, transfers, scrap

### Cost Detail Report

### Job Cost Variance Analysis
- Labor, material, outside processing, overhead
- Standard versus actual costs
- Report selection:
  - By job
  - By part, job
  - Summarized or detailed
- WIP Variance JV Creation
MODULE DESCRIPTION

Job Scheduling and Costing (continued)

Job History
• By job/work order
• By part

Kit File Editor for Custom Jobs
• Edit kit list for specific job without changing BOM

Kit Reporting
• Analysis with consolidation option
• Pull document
  o Option to print component references and job comments
  o Option to print available inventory by location and lot
• Shortage tracking
  o By job and component
  o Option to print component availability

Job Transaction Notes
• User-defined prompts for test, quality and status information
• Miscellaneous comments Entered at operations and job completion

Project Budgeting
• Multiple accounts and operating departments
• Variance analysis, budget to actual

Job Completions Entry
• Posted to inventory by storeroom
• Automatic shortage checking
• Transfer to another job
• Scrap reporting by operation, account, reason code
• Prompt for serial numbers, optional lot number
• Backflush by operation
• ECN Warning

Adjustments Entry and Journal Entry
with General Ledger Transaction Creation

Real-time Integration
• Inventory Control
• Multiple Location
• Shop Routing
• Materials Management (MRP)
• Master Scheduling
• Accounts Payable
• General Ledger
• Labor Distribution
• Foreign Currency
• Lot Tracking
• Purchasing
• Sales Order
• Configuration Control
• Engineering Change
• Purchase Requisition
Purchasing

PURCHASING optimizes buyer effectiveness by simplifying buying decisions, vendor analysis and purchase order (PO) creation. Expandable’s Purchasing function tracks POs from quotation and/or requisition, through placement with the vendors, receipt and/or inspection and final disposition of inventory. Inquiries display vendor status information including vendor master, POs, purchase history, AP invoice and AP checks.

**MODULE FEATURES**

**Purchase Order Entry Including**
- Automatic or manual purchase order number assignment
- Normal, blanket, blanket contracts
- Find vendor by number, alpha search name, zip code or phone number
- Review vendor comments
- Buy from, bill-to, drop ship-to vendor control
- Discount by line item and/or total order by purchase order line
- Sales/value added tax codes
- Requester
- Quality control inspection flags
- Storeroom
- Partial receipt control
- Early receipt flag
- Find manufacturer/vendor part number, quote price, QC status
- Automatic vendor part file generation option
- Three dates per line: requested, scheduled, revised
- Inventory and miscellaneous items
- Storeroom and expense purchases
- Order and line holds with reason codes
- Multiple order status: quotation, requisition, hold, open
- Line, order and standard comments
- Unit of measure conversion Pending ECN warning message
- Multiple user-defined fields and notes
- Attachments
  - Documents
  - Web addresses

**Blanket Release Entry**
- Contract release – control purchases by contract value and expiration date
- Blanket release – control purchases by part, total quantity, expiration date

**Change Order Processing**
- Addition of new lines
- Change terms, quantities, due dates, prices, descriptions, part, accounting, comments
- Cancel lines
- Order and line hold codes

**Purchase Order Copy Capability**
- New, changed, old purchase orders/quotations/requisitions
- Range of purchase orders/quotations/requisitions
- Range of buyers

**Inquiries**
- Selection by vendor ID/name
- By purchase order
- Order date range
- Option to include releases

**Blanket Order Reporting**
- By purchase order, vendor, vendor name
- Order date range
- Option to include releases

**Purchase Order Status Reporting**
- Selection by vendor ID/name
- Order
- Delivery date
- Part
- Purchase order

**Daily/Monthly Transaction Registers**
- Purchase Order, Quotation and Requisition Printing
- Range of buyers

**Use the Purchase Order Editor to enter POs into the system**
Purchasing (continued)

Receipts and Returns Entry
- Automatic shortage checking upon entry of receipt
- Early and partial receipts control
- Serial number and lot number prompting
- Receiving by line or part
- ECN Warning

Purchase Order Receipt Transaction Notes
- User-defined prompts for test, quality, status information
- Miscellaneous comments
- Prompted at purchase order receipt, QC acceptance or rejection

Aged Purchase Order Commitments Reporting
- User-controlled aging parameters
- By vendor account

Vendor Master File Maintenance
- Browse by vendor or buyer code
- Exception filters by percentage, dollars, quantity
- Default tax rates and resale identification fields
- SIC and NAICS code
- 1099 types
- FOB control
- Default carrier selection and freight payment terms
- Bank code and maximum payment
- Multiple buyer and AP department contacts, telephone, fax
- Default payment terms (including “days late”)
- Vendor status – approved, purchase order hold, check hold
- Default expense accounting
- Multiple user-defined fields and notes

Vendor Part File Maintenance
- Vendor part number
- Manufacturer’s name and part number
- Leadtime, lot size, unit of measure conversion
- Approval status, inspection required flag, inspection level for quality control
- Quoted price and quantity, last purchase order price, quantity, date
- Delivery lead time
- Generic vendor capability
- Multiple user-defined fields and notes
- Attachments
  - Documents
  - Web addresses

Purchase Price Variance Analysis
- Detailed history tracking by part, vendor, buyer
- Historical variances
  - Purchase order price vs. invoice price
  - Quantity received vs. invoice

Purchase Order History and Performance Reporting
- Detailed part history
- Vendor performance analysis
- Buyer performance analysis

General Ledger Transaction Creation
- By department, account, purchase order number

PO Creation
- Create purchase orders from MRP Inquiry

Real-time Integration
- Inventory Control
- Accounts Payable
- General Ledger
- Lot Tracking
- Job Scheduling/Costing
- Shop Routing
- Master Scheduling
- Materials Management (MRP)
- Multiple Company
- Foreign Currency
- Purchase Requisition
- Engineering Change
PO from SO Create Workbench

The PO FROM SO CREATE WORKBENCH provides the option to generate a Purchase Order directly from Sales Orders created in the Expandable system. A “Create PO” checkbox is added to the Sales Order Editor, allowing users to streamline the buying process by initiating a purchase order as part of the Sales Order entry process.

Streamline Supply Chain Flow

The PO from SO Create Workbench is especially advantageous for companies outsourcing elements of production to contract manufacturers who drop ship orders directly to the end customer. Using the workbench, a buyer is able to review the buy demands before the actual purchase orders are created. The buyer is able to select all or individual orders and create POs directly from the sales order that’s driving demand. The Workbench allows a buyer to complete the entire order and purchasing process without needing to re-enter information or open multiple application windows.

KEY BENEFITS

- Improve productivity by completing purchase orders and customer shipment data directly from the Sales Order entry screen.
- Streamline supply chain cycle by shipping product directly to the end customer through supply chain partners.
- Increase accuracy in purchasing

MODULE FEATURES

- Auto PO creation direct from SO
- Select all or individual orders
- Ship end product directly to customers
- Review buy demands by
  - Buyer ID
  - Preferred Vendor
  - SO ID
  - Part ID
  - Scheduled Ship Date
- Prompt to review changes tied to SO
  - PO Status
  - Drop Ship ID
  - PO Line Status
  - Revised Order Quantity
  - Stores Code

The PO from SO Create Workbench adds a “Create PO” option to the Sales Order Editor

Use the Workbench to review buy demands before actual purchase orders are created
e-Purchase Requisitions

The e-PURCHASE REQUISITIONS module provides authorized employees a convenient and efficient way to process requisitions.

Employees use the Web to enter, review, and approve/reject purchase requisitions for expense, capital and inventory purchases.

Once the requisition has been approved, the buyer uses the Expandable Workbench function to convert the requisition to a purchase order. Any time a requisition is amended, approved or rejected, the system automatically notifies key personnel.

All functions use Expandable security and licensing.

## Three Requisition Category Types
- Expense
- Capital
- Inventory

## Approval Routings
- Based on organizational hierarchy
- Optional finance reviewer
- Optional project manager reviewer
- Requisitions are routed to the next level until an approver has the required level for the amount being requested, per the company's Signature Authority Matrix

## Requisition Entry
- Item ID or Description
- Requested Delivery Date
- Quantity and Unit of Measure
- Optional Items
  - Price, Vendor
  - Expense Account
  - Job, Comments

## Other Essential Features
- Delegation of authority
- Skip levels approval to expedite
- Confidential requisitions
- Notes and attachments
- Email notifications

## KEY BENEFITS
- Save time in purchasing
- Reduce inefficient paper systems
- Increase purchase order accuracy
- Enhanced control and visibility during the requisition-to-receipt process

## SYSTEM REQUIREMENTS
- Expandable Version 9.5 or higher
- Web Server – IIS 7.5 or higher
- .NET Framework Version 4.72 of higher (for server)
- Chrome, Firefox or Edge
Labor Distribution

Expandable LABOR DISTRIBUTION controls employee information and handles collection of employee time charges and distribution of those charges to the proper account, job or project.

Provision is made for basic time collection and reporting via labor distribution reports by employee and account.

Labor Distribution supports multiple labor rates for standard costing. This information can be used to input to a separate payroll system.

MODULE FEATURES

**Employee File Maintenance**
- Name and address
- Vacation, sick and personal time accounting
- Vacation and sick time accrual rates
- Work type and work department
- Emergency contact information
- Personal data
- Review date
- Multiple user-defined fields and notes
- Attachments
  - Documents
  - Web addresses

**Employee Tracking**
- Employee ID
- Name
- Address
- Social Security number

**Batch Control Report**

**Labor Distribution**
- By home department
- By employee
- By batch

**Personal Time Status Tracking**

**Personnel Work Type Maintenance**
- Multiple skill classifications
- Maintenance of standard and new labor rates
- Maintenance of standard and new overhead percents
- Maintenance of burden overhead percents

**Time Charge Entry to Jobs and Projects**

**General Ledger Transaction Creation**
- By department
- By account
- By job ID
- By batch number

**Real-time Integration**
- Inventory Control
- Product Data Control
- Job Scheduling/Costing
- Shop Routing
- General Ledger
- Foreign Currency
- Multiple Company
Pack-Out Ship

The PACK-OUT-SHIP module provides the option of packing out orders, tracking packed items within packed boxes, generating packing slips with Box Labels and reviewing the pack-out before the shipment transaction hits the financial books.

**MODULE FEATURES**

The module features a Pack Master that links to a single sales order and allows only one active pack-out per sales order and one pack out per assigned Station.

Assigned to the Pack Master ID are a number of user-defined Box Masters that capture master data specific to the box(es) for that Pack Out. Each box editor has a grid entry for collecting and adjusting the items into and out of the box(es).

Optional comments are also supported along with Annotations and attachments to the Pack Out master and individual boxes.

Once a Pack-Out has been reviewed edited and finalized, the module allows for shipping the complete pack out and transacting the shipments in the system for invoicing.

A standard Box Pack-Out Label and Item Detail report is linked to the Pack-Out Master, allowing printing of the Pack-Out Box packing slip for inclusion in the packed box before sealing and shipping the order.

The optional Pack-Out Ship module works alongside the current Order to Cash process work flow.
Shop Floor Mobility

Expandable's MOBILE OPS application facilitates transactions entered directly from the shop floor. Connect to the Expandable database over your WiFi network using a phone, tablet or other wireless mobile device.

The system validates transactional data in real time using Expandable's core business rules and logic. Data can be scanned in using a Bluetooth bar code scanner, eliminating transcription errors and increasing productivity.

Data is instantly validated in the corresponding Expandable programs so that information generated from the shop floor can be accessed across the enterprise as soon as it's entered.

**MODULE FUNCTIONS**

**Stores Transfer**
- Part ID
- Lot ID or Serial Number
- From/To Stores Location
- Quantity

**Issues/Returns**
- Job ID
- Part ID
- Stores
- Lot ID or Serial Number
- Location
- Quantity

**WIP Completions/Scrap**
- Job ID
- Part ID
- Operation Code
- Stores
- Lot ID or Serial Number
- Quantity
- Reason
- Task

**Time Charge Entry**
- Job ID
- Operation Code
- Description
- Start Time
- Job In/Out
- Clock In/Out

**Inventory Stock Status**
- Part ID
- Stores
- On Hand Quantity

**PO Receipts Entry**
- PO ID
- PO Line Number
- Part ID
- Stores
- Lot ID or Serial Number (if applicable)
- Quantity

**Kit Issue**
- Job ID
- Job Description
- Part ID
- Operation Code
- Task Description
- Kit Stores
- Scheduled
- Kit Quantity
- Balance Due
- Issue Quantity

**Job Order Status**
- Job ID
- Part ID
- Lot ID
- SO ID
- Job Status

**MOBILE DEVICE REQUIREMENTS**

- Operating System: Android OS v4.2.2 or higher
- CPU: 1.2 GHz dual-core or higher
- Screen: 1280x800 or higher
- Memory: 1GB or higher

**EXPANDABLE REQUIREMENTS**

- Expandable v9.3 or higher
- WiFi connectivity to Expandable ERP
- Login consumes Expandable license
Surgical Kit

Expandable's SURGICAL KIT module simplifies the tasks associated with tracking kits and parts as they move from assembly, to the hospital, to the operating room, and after surgery.

With the surgical kit module, Expandable customers are able to meet regulatory requirements, reduce spoilage by better monitoring the expiration dates of product in the field, and improve customer service with complete visibility of devices available for consumption.

Each surgical kit created is unique and all kit activity is tracked by its individual Kit ID.

The scope of the surgical kit module covers the creation of a surgical kit based on an assembly's bill of materials, the consigned shipment of the surgical kit to an off-site location, and the tracking of the kit's inventory.

Inventory tracking can include serialized inventory and lot controlled components.

MODULE FEATURES

Versatile Functions
- Sell surgical kit components directly to customers
- Replenish surgical kit components
- Return surgical kit components to In-house storeroom
- Transfer consigned surgical kit components (or the entire kit) to another consigned surgical kit
- Audit and adjust surgical kit inventory
- Move the kit into surgery, tracking the number of times a kit is in surgery
- Consume inventory after it has been used in surgery
- Quarantine components after surgery
- Reserve a specific surgical kit

Backflush Kit Issue
This program creates surgical kits. The kit assembly's components are 'backflushed' out of inventory based on the assembly's bill of materials and converted into a serialized surgical kit assembly.

Reverse Backflush Kit Issue
This program reverses a non-consigned surgical kit. The program returns all kitted components to inventory and removes the surgical kit assembly from inventory, and deletes the surgical kit records.

Surgical Kit Issue
This program allows the issuing or returning of surgical kit components into or out of a surgical kit after it has been created and prior to consignment.

Surgical Kit Workbench
The Surgical Kit Workbench program is used to handle most surgical kit transactions after being consigned to an off-site location. A user enters (or searches for) the Kit ID, then selects an action mode for processing.

Surgical Kit Editor
This program allows a user to reserve a kit prior to consignment and add notes or attachments to a surgical kit record. There are 16 user fields available for use.
Quality for Expandable ERP by uniPoint

uniPoint is a comprehensive quality management system (QMS) that integrates with Expandable ERP to establish a solid foundation for executing enterprise-wide governance, risk, and compliance strategies.

With a feature-rich, intuitive design, uniPoint delivers a complete blueprint for customer-focused quality management based on the fundamentals of Good Manufacturing Practices (GMP) derived from the ISO Standards for quality management systems.

Coupled with Expandable, uniPoint helps create standard operating procedures (SOPs) and a prescribed series of checks and balances to minimize the risks of nonconformance.

INTEGRATION POINTS
Integration pulls over 100 data points from your Expandable ERP database into uniPoint where you can satisfy a multitude of quality standards, such as ISO 9001, ISO 13485, ISO/TS 16949, AS9100 and FDA 21 CFR Part 11 & Part 820 compliance.

Customer
- Customer ID
- Account name
- Status

Supplier
- Vendor ID
- Vendor name
- Status

Employee
- Employee ID
- First name
- Last name
- Initial
- Status
- Title
- Email
- Department
- Hire date
- Birth date
- SoSec
- Notes

Customer, Supplier, Employee Address
- ID
- Contact
- Address 1
- Address 2
- City
- State
- Zip
- Phone
- Fax

Purchase Order
- PO ID
- Vendor ID

Purchase Order Line
- PO ID
- Order date
- PO line status
- Line number
- Part ID
- PO description
- Order quantity

Customer Contact
- Customer ID
- Customer contact
- Title
- Phone
- Fax
- Email

Supplier Contact
- Vendor ID
- Vendor contact
- Title
- Phone
- Fax
- Email

Sales Order Line
- SO ID
- Order date
- SO line status
- SO line number
- Part ID
- SO description
- Order quantity

Job
- Job ID
- Revision
- Status
- Customer ID
- Part ID
- Description
- SO ID
- Order date

Operation
- Operation code
- Description
- Revision
- Drawing

Item | Part | Material
- Part ID
- Part description
- Revision

Location
- Work center
- Description

Database
- Database version

Work Center
- Work center
- Description
Quality Events and Actions

Expandable’s optional QUALITY EVENTS and ACTIONS module is designed to provide quality-conscious manufacturers an across-the-board option for tracking and logging of quality issues that impact their direct business, their supply chain and customers.

Use the Quality Event tab to log the details of a quality event and assign one or more actions designed to contain, investigate, resolve, validate, prevent and close the event issue.

Whether the result is a simple quality process or more involved procedure like an eight disciplined quality resolution process, the Quality Event tab provides a method for designing and codifying corrective actions.

MODULE FEATURES

Events can be Categorized by General Event, Event Reason and Event Resolution with an associated Status and Prioritization, each with a user-defined label that’s validated with dictionary values.

The module’s simple user-defined structure allows the system to support a wide variety of defined events including RMA, Quality Inspection, MRB Finding, MFG Deviation, Customer Complaint, Non-Conformance, Personnel Event or others, depending on the quality assurance needs of the business.

Detailed data capture and query allows the quality manager to view quality events by any user-defined metric and create Pareto charts over those values to detect trends by product, process, customer, supplier, employee, reason or resolution.

Add notes or attachments and assign the Event and/or Action to a particular primary/alternate person or group to work the details.

Information in Events and Actions can be reviewed and analyzed to identify trends, measure results and gauge the effectiveness of actions.

Events can be directly linked to integrated ERP data for the “who, what, when and where” of a quality event.

Who:
- Customer for tracking customer driven events
- Supplier/Vendor for tracking supplier quality events
- Employee for tracking training or other internal events
- General Other user entered person

What:
- Sales Orders
- RMA
- Work/Rework/Job Orders
- Purchase Orders
- Inventory
- Product Quality Parameter Measurement
- General Other user entered process

Product:
- Part Master with any associated product traceability
- LOT ID
- Serial Number(s)

Likewise, the Action(s) attached to the Event can also be linked to the who, what, when and where the responsibilities lie for resolution of the action. Action records linked to an Event are summarized in the main event window grid for ease of outlining the actions taken toward closure of a quality event and so users can drill into the action details with a simple click of the mouse.
Quality Part Parameters

The optional QUALITY PART PARAMETERS module defines specification parameters (Min/Max/Ave) for parts, with the ability to define measurement instructions for common or like parameters. Users gain the ability to electronically capture multiple measurements against a product’s defined parameters with general in or out of min/max specification results and tolerances as compared to average typical specification.

The Quality Part Parameters module provides an engineering and/or production quality assurance organization electronic capture with the capability to pre-define a product’s specifications and instructions for measurement and then collect measured inspection data, process control measurements, process audit information, final inspection data, returned product evaluation and other critical product validation information.

MODULE FEATURES

The Parameter Measurement Instruction Editor (QPemi) allows the user to define instructions for taking accurate measurements of specified product parameters. Instructions can be classified by type/subtype, measurement device, effective date and end date. Detailed instructions for taking measurements are directly linked to specifications for inspectors, testers and quality control personnel to reference as measurements are taken over the course of a product’s life cycle.

The Part Parameter Specification and Link Editor (QPESL) allows the specification of parameters linked to a PART ID and also link to a Measurement Instruction for the user making the measurement to reference.

Users can specify any number of parameters for an individual Part ID in the Part Master table and define link specification parameters (Min/Max/Ave) with units of measure and parameter symbol for parts, including the ability to link pre-defined measurement instructions common to the parameter.

Parameters can be defined for any or all of the following quality areas of inspection as required:

- Source Inspection
- Incoming Inspection
- WIP Inspection
- Final Inspection
- Post-Pack Audit Inspection

The Part Measurement Capture Editor (QPEMC) provides the means to capture physical measurements of a product at any stage and as many times as required in a product’s lifecycle to track the performance history of the product as compared to its pre-defined parameter specifications.

Data capture allows for three standard measurements per parameter with performance calculations along with three general observation fields.

All Part Parameter editors (QPemi, QPESL and QPEMC) allow for ample variety of user-defined fields, date fields and flags providing additional flexibility in specification, instructions, measurement data collection and reporting metrics. User fields can be configured to support free text entry or locked to a pre-defined dictionary pull down menu selection to ensure consistency of data entry for reporting purposes and performance data analysis or as required indicating additional product stage measurements.
General Ledger

Expandable GENERAL LEDGER collects the current and historical information required to analyze and control a company's financial activities, provides functions to enter and control journal vouchers, prepares budgets and creates detail transaction and balance sheet reports.

General Ledger integrates with all other Expandable modules and features Excel-based financial reporting using BizInsight from Biznet Software.

MODULE FEATURES

Budgeting
- Online entry
- Multiple budget versions
- Budget file maintenance
- Budget copy capability
- Budget comparisons

Online Journal Entries
- Running balance totals
- Manual journals
- Recurring/standard journals
- Skeleton/template journals
- Automatic reversing option
- Scrolling review capability
- Automatic GL transaction collection
- Batch balancing and reporting
- Prior period entries
- Prior years entries
- Future period entries
- Multiple user-defined fields and notes
- Attachments
  - Documents
  - Web addresses

Ledger Balances
- Controlled by fiscal years
- Supports 12 or 13 fiscal periods
- Controlled by user-defined types such as:
  - Financial data (required)
  - Statistical data (headcount, units produced)

Posting/Closing Cycles
- Current period
- Multiple period
- Prior period
- Prior year

Chart of Accounts Maintenance
- Types (assets, liability, equity, sales, expense)
- Account structure broken into three sections for better control: company, department and natural account number
- Status (active, inactive)
- Copy capability
- Alphanumeric or numeric account numbers
- Multiple Company
- Foreign currency
- Multiple user-defined fields and notes
- Attachments
  - Documents
  - Web addresses

Trial Balance Reporting General Ledger History
- Retention under user control
- Historical reporting
- Accessible to customized financial reporting

Account Summary Reporting
- Collects subsidiary ledger transactions:
  - Accounts payable
  - Accounts receivable
  - Inventory
  - Purchasing
  - Job costing
  - Labor
- Calculates current fiscal status for selected accounts (e.g. cash)

Bank Reconciliation

Expandable BANK RECONCILIATION ensures financial reports are accurate and up-to-date by managing all bank-related information, including payments, deposits, credit card transactions and bank fees. Information from bank statements is entered and reconciled to the corresponding cash General Ledger account.

Display Outstanding Items
- Checks
- Deposits
- Miscellaneous Charges
- Journal Voucher transactions

Reconcile by Individual Check, Range of Checks or All Checks

Record from Bank Statement
- Statement Date
- Ending Balance
- Interest Income
- Bank Charges

Reconcile Transactions from Multiple Banking Institutions

Finish Later

Currency Code
MODULE DESCRIPTION

Legal Contracts

Expandable’s LEGAL CONTRACTS module provides finance, legal and customer support personnel with a central repository for all legal agreements.

The Legal Contracts Editor captures the terms and conditions of contracts electronically and manages those contracts in a paperless environment. Contract details can include contact information, contract length and the contract value.

Use the dictionary editor to create up to nine unique Contract Types (T1 through T9).

MODULE FEATURES

Main Contract Tab

- Contract ID – system-assigned agreement record identifier
- Contract With:
  - C – Customer
  - E – Employee
  - G – General
  - O – Other
  - P – Product
  - V – Vendor
- Contract Type:
  - NDA – Non Disclosure Agreement
  - S – Service
  - W – Warranty
  - CNF – Confidentiality
  - SA – Stock Agreement
- Contract Sub Type:
  - STD – Standard
  - C – Custom
- Contract Status
  - Active
  - Authorized
  - Expired
  - Executed
  - New
  - Unsigned
  - Cancelled
  - Start date
  - End date
  - Renewal Date
  - Customer ID
  - Customer Name

Finance Tab

- Vendor ID
- Vendor Name
- Employee ID
- Employee Name
- Auto Renew
- Contact ID
- Primary Contact Email
- Primary Contact Phone
- Renewal Term
- Parent Contract ID
- Contract No.
- Descriptions

Legal Tab

- Initial Term Begin
- Initial Term End
- Curr Term Begin
- Curr Term End
- Legal Notes
- User fields
- 16 alpha-numeric
- 6 numeric
- 5 date fields
- 5 one-character user flags

Legal contracts can include non-disclosure agreements (NDAs), service contracts, warranties, confidential information and stock agreements.

Tab security is provided allowing for separation of the contract into three primary roles where required:
- Main Contract
- Finance
- Legal
Foreign Currency

Expandable **FOREIGN CURRENCY** provides complete control of currency exchange rates, currency by trading partner and currency rate fluctuation gains and losses, realized and unrealized.

Foreign Currency maintains the exchange rate information to allow purchase order, accounts payable invoice, sales order and accounts receivable invoice financial values to be tracked in both the currency of the supplier or customer and in local currency. Realized currency gain and loss values are calculated at the time of payment generation in Expandable Accounts Payable and payment application in Expandable Accounts Receivable.

**MODULE FEATURES**

**Currency Code Maintenance**
- Supports ISO International Standard 4217
- Two money symbol fields
- Rounding factor control
- Conversion unit of measure to support inflationary currencies

**Currency Exchange Rate Maintenance**
- By effective date

**Multiple Banks Supported**
- By currency
- Unique GL accounts by bank

**General Ledger Accounts**
- By currency
- Re-valuation method and accounting

**Customer Pricing**
- Two methods supported:
  - User-defined price books for foreign currencies
  - System-generated conversion factors for calculating appropriate foreign currency prices
- Automatic conversion of local currency prices to currency on sales orders and purchase orders
- Maintain and print price lists in individual currencies

**Vendor Part Cross-references Maintained with Foreign Currency Prices**

**Extensive Reporting**
- Currency code selection

**Ledger Balances**
- By local or base currency financial reporting in either local or base currency

**Bank Service Charge Entry**
- Accounts payable hand check entry
- Accounts payable stop payment entry
- Accounts payable cleared checks entry
- Accounts receivable remittance entry

**Automatic Month End Revaluation**
- General ledger accounts
  - Gain/loss calculation with optional reversal
- Accounts payable vouchers
  - Unrealized gain/loss calculation with optional reversal
- Accounts receivable invoices
  - Unrealized gain/loss calculation with optional reversal
- Unapplied checks
- Report only option without updates

**Journal Voucher Control**
- Amounts in foreign, local and base currencies
- General JV entry
- Recurring/standard journals
- Skeleton/template journals
- Automatic reversing option

**Value Added Tax**

**Tax Code Maintenance**
- Alpha/numeric three digit codes
- Effective date control
- VAT description to 24 characters
- VAT rate up to 99.9999 percent
- Default VAT department and account number

**VAT Effective Date Logic for Correct Rate**
- Purchase order entry and maintenance
- Sales order entry and maintenance
- Accounts payable and accounts receivable entry
Accounts Payable

Expandable ACCOUNTS PAYABLE provides control over cash disbursements and related accounting functions. Information is collected on vendor invoices, discounts and expense distributions and provides prepayment information, writes checks and generates related reports.

Accounts Payable provides four-way matching between invoices, purchase order receipts and standard cost, eliminating manual efforts, reducing errors and providing more effective management control of purchase price variances.

Multiple distributions are supported. Invoice information is posted to Purchase Order history.

### MODULE FEATURES

#### Invoice Entry
- Browse to find vendor by number, alpha search name, buyer, telephone, zip code, etc.
- Jump to vendor or voucher file (zoom capability) while entering an invoice
- Invoice types: purchase order or non-purchase order, credit memo and debit memo
- Online duplicate invoice checking
- Four-way matching between invoice, purchase order receipts and standard cost
- Discounts and due dates automatically calculated
- Expense distribution, including:
  - Automatic default distributions based on PO
  - Multiple distributions (up to 499 per invoice line) across companies (if Multiple Company installed)
  - General ledger account validation
  - Job/project validation and distribution
- Automatic multilevel sales tax calculations
- Automatic VAT calculations
- Automatic hold option
- Pay per terms, special or next check run
- Link to open receipts report

#### Cash Management
- Cash disbursements forecasting (user-defined aging periods)
- By due date or invoice date
- Detailed or summary option
- By vendor or vendor name
- Current or end of fiscal period
- Prepayment review and control
- Vendor and/or invoice hold flags
- Partial payment/retention control
- Term discount control
- Take discount on gross invoice amount
- Take discount only on merchandise amount
- Always take discount
- Days late feature (always take discount so many days after discount date)

#### Check Reconciliation
- By range of check numbers or individual
- Report voided checks
- Report uncleared checks

#### General Ledger Transaction Creation
- By department
- By account
- By job
- By voucher or batch number
- By batch

#### Purchasing Data Control
- Variance reporting from four-way matching
- Received not invoiced and returned not credited reporting
- Expense accrual reporting

#### Computerized Checks
- Multiple bank control
- Maximum check amount
- Selected by vendor, due date, discount due date, specials
- Trial payment register
- Check print restart capability
- Check registers
- Void check processing

#### Manual Checks
- Handwritten check entry
- Reverse and void processing

#### Batch Control Registers
- Batch control (both original entry and adjustments)
- Invoice by vendor or voucher
- Purchase variance with exception filters

#### Real-time Integration
- Purchasing
- Job Scheduling/Costing
- Multiple Company
- General Ledger
- Foreign Currency
Accounts Receivable

Expandable ACCOUNTS RECEIVABLE facilitates control of customer accounts from invoicing through cash application and credit memo processing. Online account inquiry is available for rapid customer credit checking and account analysis.

Aged accounts receivable reporting with user definable aging columns aids collection. Cash application has split check capability to apply amounts to one or more accounts. Unauthorized deductions may be automatically invoiced back to the customer.

MODULE FEATURES

Invoicing and Credit Memo Processing
- Automatic posting from Sales Order
- Option to invoice all shipments for a sales order
- Option to invoice all shipments for certain order classes based upon customer flag
- Non-shipment related invoice/memo generation
- Term discounts on net merchandise or gross amount
- Due dates automatically calculated
- RMA restocking charges
- Expense distribution, including:
  - Automatic distributions based on SO
  - Multiple distributions
  - Multiple company distributions
  - General ledger account validation
- Entry of prepaid check ID or credit card information
- Multiple user-defined fields and notes

Invoice and Memo Printing
- Customized print format available
- New or old invoices/memos
- Range of invoices/memos
- Range of salesman, order takers, invoice originators
- Option to print serial numbers and lot numbers
- Line, invoice and standard comments

Credit Card Processing
- Bankcard advice printing
- Integrated programs available for online authorization and clearing house transactions

Batch Control Registers
- Includes complete general ledger distribution

Invoice Registers
- By Invoice, Customer or Customer PO
- Detail or summary data

Recurring Invoices
- Begin and ending fiscal month control
Accounts Receivable (continued)

**Invoice File Maintenance Editor**
- Change prices, due dates, terms, hold status, cancel invoice

**Sales Order Data Control Reporting**
- Shipped not invoiced and returned not credited
- RMA status

**Credit Management Capabilities**
- Customer account inquiry
- Aged accounts receivable reporting (user-defined aging periods)
  - By due date or invoice date
  - Detailed or summary option
  - By customer ID, customer name
  - Current or end of fiscal period
- Automatic credit hold flag update based on:
  - Credit limit criteria
  - Aging deterioration criteria
  - Both aging and credit limit criteria

**Finance Charge Calculation**
- User control of percentage rate and minimum charge
- Controllable by customer

**Statement Generation**
- Customized print format available
- Aged by due date or invoice date
- Selected or all customers

**Flag to Bypass Customer Statement Cash Application**
- Multiple bank control
- Miscellaneous cash (non-AR related) distribution
- Reconciling application with miscellaneous write-off
- Browse to find customer by number or alpha search name
- Split check cash application capability
- Parent check applied to multiple sold-to accounts
- Check correction capability
- Credit memo write-off of application discrepancies
- Deduction charge back with comments and automatic invoicing
- Discount monitoring with grace days feature
- Partial payment control
- Check reversal if cash misapplied

**Cash Management and Control**
- Deposit slip printing with ABA number
- Unapplied cash control
- Batch balance control including complete general ledger distribution
- Cash forecasting (user aging selection)
- Supports “remit-to” address for lock box processing

**General Ledger Transaction Tracking**
- By department
- By account
- Batch
- Invoice number

**Real-time Integration**
- Sales Order
- General Ledger
- Multiple Company
- Foreign Currency
Multiple Company

Expandable MULTIPLE COMPANY maintains the information required to control multiple company financial activities and provides functions to enter and control inter-company journal vouchers and create multiple company financial comparisons.

The Expandable Multiple Company system is closely integrated with the General Ledger function.

**MODULE FEATURES**

**Company Parameter Maintenance**
- Key financial system parameters for each company
- Default department/account numbers
- Overrides system-wide manufacturing/financial parameters

**Inter-company Journal Vouchers**
- Manual Journal Voucher entry
- Recurring/standard journals
- Automatic reversing option
- Skeleton/template journals

**Impact on Other Systems**
- General Ledger account editing includes company + department + account

**General Ledger**
- Chart of accounts for each company
- Financial reporting for one or a group of companies

**Accounts Payable**
- Vouchers controlled by company
- Distributions to one or many companies on one voucher with automatic offsetting inter-company entries
- Automatic inter-company transfers

**Sales Orders**
- Customer master carries customer's default company, sales department, sales account
- Company control for each Sales Order detail line

**Accounts Receivable**
- Invoice controlled by company
- Invoice distributions to one or many companies
- Automatic inter-company transfers
- Inventory Control
- Company control by storeroom

**Purchasing**
- Vendor master carries vendor's default company, expense department, expense account
- Company control for each
- Purchase Order detail line

**Job Scheduling/Costing**
- Company control via storeroom

The GL CONSOLIDATION utility consolidates financial data from multiple databases and different currencies. The utility consolidates data to a separate database or into your primary Expandable database.

Set attributes for subsidiaries using the Multiple Company Parameter Editor
Tax Service Integration – Avalara AvaTax

Expandable’s integration to AVALARA AVATAX eliminates the complexity of determining taxes across multiple jurisdictions by automatically calculating the final sales tax amount on each invoice.

With Avalara’s comprehensive cloud-based sales tax calculation engine, Expandable users can more accurately manage various tax rates and remain up-to-date on increasingly complicated tax regulations.

MODULE FEATURES

Eliminate Table-based Tax Calculations

Referring to and maintaining tax tables for multiple jurisdictions can be an error-prone process, especially in precincts where tax rates may vary by city and county.

AvaTax is Avalara’s industry-leading Software as a Service (SaaS) real-time sales tax solution that delivers accurate, real-time sales and use tax calculation.

Integration with Expandable provides customers the option of eliminating tedious tax table maintenance in favor of automated tax rate calculations that improve compliance and efficiency.

Real-time Tax Rate Calculations

- Accurate tax rates automatically applied to each transaction
- Current rates and rules calculated instantly
- Full statutory compliance
- Built-in address verification
- On-demand reporting

Sales Tax Service Integration

1. Tax Address Validation
2. Sales Tax Services
   - Sales Order (uncommitted taxes)
   - AR Invoicing (committed taxes)
3. Sales Tax Service integration supports:
   - Product Tax: Avalara product service codes part and product line level
   - Customer Exemptions: Avalara tax usage type or tax exemption number
   - Global customers: Avalara Tax service VAT codes

Integration Points

The Expandable integration to AvaTax includes address validation for the following Expandable master editors:

- Customer Master
- Vendor Master
- Employee Master
- Stores Master
- Company Editor

Integration to AvaTax includes address validation for the Customer Master Editor.
Revenue Recognition for Service Agreements

Expandable’s *REVENUE RECOGNITION* module records and manages accounting entries for service agreements related to subscriptions and warranties.

**TWO TYPES OF SERVICE AGREEMENTS**

Prepaid Subscription Revenue: Where a company invoices their customers, for an upfront payment, for the right to use a product or to obtain services over a specific period of time. The duration of the subscription period is typically twelve months.

Prepaid Warranty Subscription Revenue: This is a special type of subscription revenue in that the service is tied to a specific product/serial number combination and therefore this information must be captured.

**MODULE FEATURES**

*Revenue Recognition Service Agreement Editor*

Revenue Recognition Service Agreements can be viewed and edited in the service agreement editor which also shows the JV adjustments by agreement, forecasted monthly amounts for the agreement to be recognized over time, recognition process approval or disapproval. An ample number of user fields are also available for the agreement.

*Revenue Recognition Reports*

Reports delivered with the Revenue Recognition module provide information to aid in analysis, audits and forecasts.

- Deferred Balances Report
- Deferred Quarterly Balances Report
- Not Approved Report
- Prepaid Service Adjustments Report
- Recognized Quarterly Balances Report
- Recognized Revenue Balances Report
- Prepaid Service Revenue Rolloff Report
- Revenue Recognition Skipped Invoices Report
- Revenue Recognition Summary Report

Create Service Agreements Utility

The Create Service Agreement utility creates revenue recognition agreements from Invoices created for subscription or warranty parts.

Recognize Revenue Utility

The Recognize Revenue Utility is run at month end as part of the month end close process to realize revenue pertaining to the current fiscal period. It also re-calculates the long and short term deferred balances for the ending month.

Monthly Detail Utility

The Revenue Recognition Create Agreement Monthly Detail is run to resolve service agreements that are created without corresponding fiscal calendar records. After required fiscal period records are added, this utility is run to move revenue dollars from the Revenue Recognition Clearing account to the appropriate long and short term deferred revenue accounts.
Fixed Asset Management

Expandable and the people of Real Asset Management (RAM) have teamed up to provide Expandable customers an interface to Asset4000, the fixed asset accounting software that manages asset lifecycle and depreciation.

RAM’s fixed asset accounting system helps organizations maintain compliance with accounting guidelines and tax rules by enabling them to effectively control, track, and record each change that occurs during an asset’s lifetime.

The software encompasses depreciation processing and forecasting, lease accounting, capital expenditure control, and asset tracking.

MODULE FUNCTIONS

**Asset Details**
- Configurable user defined fields
- Detailed financial information
- No limit on number of accounting books for internal and tax record keeping

**Asset Details Tabs**
- Display each accounting event that has taken place over the asset’s life
- Parent/Child relationship links two or more assets together, giving users the option to assign remaining life of parent to child asset or link disposition and transfer events to parent/child.

**Asset Events**
- Dispose of an asset with an audited event
- Transfer an asset with an audited event
- Change value of an asset with an audited event
- Change the life of an asset with an audited event

**Period Asset Costs**
- View Depreciation Calculation on a period by period basis

**Asset Split**
- Split an asset into unlimited child assets by quantity, percentage or value

**Reporting**
- Run Reports that show all events, including Acquisitions, Dispositions, Revaluations/Cost Adjustments, Relifes and Transfers
- Fixed Asset Balance Sheet, Depreciation reports, Audit reports and many more
- Easily customizable user created reports
- Exportable to Excel, CSV, PDF, and as an email attachment

**US Tax Compliance**
- Annual Federal and State Tax Rules Updates
- Bonus Depreciation Auto or Manual Methods
- Section 179 Allowances
- 40% Mid Quarter Check Utility
- Luxury Automobile Limits
- Tax Reporting (F4562, F4797) Worksheets or Direct to IRS Forms

**REQUIREMENTS**
- Expandable v9.4 or higher
Financial Reporting with Expandable Insights

Expandable's financial reporting option combines the familiarity of Excel with the power of live transactional data directly from Expandable ERP to deliver easy-to-create financial statements that can be customized to meet the unique requirements of your organization.

Built on the powerful Spreadsheet Server platform from insightsoftware Inc., Expandable Insights allows for deeper analysis of data by providing users the ability to drill down into transactional details to investigate the sources of any outliers.

With pre-built data sets and templates for the most common reports, the average user can create boardroom-quality financial reports using Excel's native tools to craft compelling charts and layouts with illuminating colors, fonts and formatting.

MODULE FEATURES

Real-time Reporting, Analytics, and Planning
Expandable Insights delivers a single platform where you can understand what has happened in the past, keep track of what is going on now, and plan the future your company wants to realize.

Start in Excel Stay in Excel
The platform allows end users to start and end their day in the familiar environment of their favorite office tool. Use deep drill down capabilities to understand details of how various business components affect the bottom line.

Empower Business Users
Designed by accountants with self-service in mind, Expandable Insights allows users to build reports and analytics without a heavy reliance on IT resources.

Real-time Data Connectivity
Expandable Insights is a real-time solution integrated with Expandable ERP so you know what is happening now – not the last time someone in IT ran a batch job.

Quick Installation and ROI
Quick to install, learn, create and publish content so that you can realize value as soon as possible.

Automate Report Distribution
Use the Distribution Manager to share your real-time financial reports with key personnel including a wide audience of non-finance consumers.

Send easy-to-use, up-to-date, interactive visualizations that include complete drill-down capabilities.

Enable department managers to gain a better understanding of project status and commitments, as well as view their actual vs. budget information side-by-side.

Set up your delivery schedules and recipient lists in advance and have reports automatically distributed.

Ready-to-use Templates
To jump start your financial reporting, Expandable Insights delivers a number of pre-packaged templates and reports based on a standard Expandable chart of accounts.

Included is pre-configured balance sheet and income statement account type classifications that can easily be modified or built upon to meet your exact financial reporting needs.

Gain immediate results with pre-built templates for generating the most common financial reports:
- Income Statement
- Balance Sheet
- Cash Flow Statement
- Expense Analysis
- Budget vs. Actual

Templates are easily modified so you can customize reports with your own branding imagery, data requirements and account classifications.

All financial report templates follow the same GL Account structure, making it easy for your finance and accounting team to understand and follow consistent fundamental logic when building and customizing reports.
Module Description

Standard and Ad-hoc Reporting

Query By Example (QBE)

Authored by Expandable Software, Inc., QUERY BY EXAMPLE (QBE) is an unparalleled ad-hoc search and report tool that provides every user the ability to easily find information in Expandable using the same familiar screen used to add or modify data.

Features

Query From All Editor Screens, Including:
- Sales Order entry
- PO Entry
- BOM Editor
- Accounts Receivable
- Accounts Payable
- Purchasing
- Master Scheduling
- Inventory Control
- Parts Master
- Lot Master
- GL Chart of Accounts
- JV Editor
- Multi-currency Master
- Budget Editor

Over 80 Editors Available for Query

Query on Any Field

Simultaneously Search Using Any Combination of Criteria in from one to all Data Fields

Search Criteria
- Equals
- Not equals
- Greater than
- Less than
- List of values
- Between
- Wildcards
  - starts with
  - contains

Export Results to:
- Spreadsheet
- Text
- Email
- Print
- Fax

Gain precise inquiry results by using QBE to select multiple criteria in any or all fields

Output results to spreadsheet or other vehicles

With Expandable's QBE feature, the average user can easily create targeted searches and analyze information without the need for a report writer, inquiry tool or IT person to write search criteria.
Standard and Ad-hoc Reporting (cont.)

Crystal Reports™

Expandable brings industry-standard reporting and decision support to the manufacturing floor with Crystal Reports from Business Objects™.

To satisfy the wide-ranging needs of most operations, over 250 pre-written reports are included with each Expandable implementation.

**Over 250 standard reports**
- Accessible from pull-down menu in any Expandable screen
- Encompassing all facets of enterprise reporting

**Automated formatting**
- Sub reports
- Conditional
- Summary
- Cross-tab
- Form
- Drill down
- OLAP
- Top N
- Multiple details
- Mailing labels

**Interactive design elements**
- Charts
- Drill-downs
- Alerting
- Parameter prompts
- Hyperlinks
- Geographic mapping
- Field highlighting
- Running totals
- Top N
- Bottom N
- Sorting

**Export reports to:**
- Spreadsheet
- Text
- Email
- Fax

For mission-specific reporting, Crystal Reports includes powerful software wizards that help both novice and average users quickly develop highly-interactive custom reports enhanced by logos, pictures and three-dimensional charts.

Microsoft ODBC functionality enables unlimited custom and ad-hoc reports that incorporate information from other databases or applications.

**Standard Inquiries**

Equipped with more than 100 Standard Inquiries covering the entire system, Expandable users gain instant access to information through easy-to-use-pre-built views.

Each inquiry provides as many as six alternative search criteria to locate important data. With the powerful drill-down function, users enjoy the option to simply click on data to explore underlying elements.

Hundreds of pre-built queries come with Expandable
Report Manager

The REPORT MANAGER integrates custom and standard reporting within Expandable, where user rights to access and execute reports are maintained by system security.

With a practical menu tree layout and interactive settings editors, Report Manager simplifies custom reporting by providing an easy-to-use framework for navigating through and running reports.

Expandable standard reports can be copied, then modified to individual specifications, making it easy to create efficient custom reports that deliver exact information. Adjust and save default settings and prompts on pre-existing reports to streamline execution.

Custom reports are conveniently stored along with standard reports, and are executed whether or not Crystal Reports is loaded on individual desktops.

MODULE FEATURES

- Add a custom report template (created by Crystal) to the Expandable standard reports menu
- Create Selection Criteria and Questions tabs, the same as Expandable standard reports, with defaults for all questions
- Insert a custom report into an existing Report Group (Accounts Payable, Inventory Control, etc.) or create a new Custom Group (Shop Floor Reports, Month End Reports, etc.)
- Control execution of custom reports through the Expandable Security System
- Duplicate existing Expandable reports for customization, or modify standard reports and their corresponding prompts or defaults
- Change defaults for existing questions on the Questions tab

Organize your custom and standard reports in one easy-to-access location
**Expandable Analytics**

*EXPANDABLE ANALYTICS* is a highly interactive business analysis tool that combines drag-and-drop simplicity with the power of pivot tables to present Expandable data in meaningful views for management examination and analysis.

Using simple tree-like navigation, pre-built business analytic functions are grouped into four major business categories with relevant data elements ready to be arranged into multi-dimensional analysis views.

With an extremely intuitive drag and drop interface, Expandable Analytics provides the ability to slice and dice information easily and efficiently across multiple product lines, regions, date ranges, customers, vendors and more.

## MODULE FEATURES

### Pre-built Business Analysis Functions

Pivot Grids are available for primary business functions and grouped under four major categories:

- **Sales**
  - Billing History
  - Booking History
  - Backlog
  - Sales Orders
- **Finance**
  - AR Aging
  - AP Aging
  - AR Invoices
  - GL Detail
  - GL Actual vs Plan
  - AP Open Receipts
- **Quality**
  - RMA Analysis
  - Vendor Performance
  - Serial Number Analysis
- **Manufacturing**
  - Purchase History
  - Purchase Orders
  - Stock Status
  - Job Status
  - Inventory Activity

### Visualize your Expandable transaction data using an array of charts, graphs and layouts

- **Customize Using Data Filters**
  
  Gain visibility and insight into the information specific to your business by applying filters that customize data views to isolate your key data elements.

  Custom views can be saved upon exit and restored in subsequent sessions.

- **Eliminate Static Reports**
  
  Just one interactive view can replace dozens of canned reports while providing interactive drill-down capabilities to easily access source detail.

- **Drill Down to Underlying Data**
  
  Double-click on any data cell to access source data in a grid containing detail for that cell.

- **Export to Multiple Formats**
  
  Sort underlying data by any column and print or export data to various formats, including email, spreadsheet, PDF, HTML and more.

- **Complete Pivot Table Control**
  
  Convert hard-to-read and difficult-to-dissect datasets into compact, summarized reports with easy-to-use pivot grid controls.

  Easily change a report's visual layout to examine data from multiple perspectives to gain clear understanding of how various business components effect your bottom line.
**Expandable Intellicast Dashboards**

Expandable Intellicast consolidates live Expandable data into interactive charts and graphs that present key business information in easy-to-digest dashboards for analysis or distribution. Dashboards, using live Expandable data which are capable of being combined, can be created with a graphical design toolkit to highlight the key components of your company's success. Flexible drilldowns provide easy access to core data elements where users can analyze the source of any anomalies, accelerate month-end closing, and gain insight for strategic decision-making.

**MODULE FEATURES**

**Easy-to-Use Dashboards**

Users can begin using informative and interactive dashboards, with minimum training, upon deployment by using the included pre-built datasets.

If additional dashboards are created, either by your Expandable Intellicast Designer or by Expandable's Professional Services organization, and deployed, those dashboards will become instantly available to the users authorized to view those dashboards.

**Executive Dashboard**

Expandable Intellicast ships with a series of pre-built metrics:

- Top 10 Bookings and Billings
  - Total $ by Customer
  - By Product Line
  - By Part ID Description
  - By Sales Region
  - By Sales Rep

- Backlog
- A/R Balances by Customer
- Production Shortages
- Return to Vendor
- Vendor Payments

**Key Performance Indicators:**

- Book to Bill Ratio
- Days Sales Outstanding
- Inventory Turns
- Debt to Equity
- Return on Equity

**Income Statement Trends ($ and %):**

- Revenue
- Gross Margin
- Operating Expenses
- Operating Income
- Net Income
- EBITDA

**SYSTEM REQUIREMENTS**

- Expandable Insights installed
- 64-bit Windows Server to design and develop dashboards

**Share Key Information**

Automatically distribute updated interactive web reports and dashboards, so personnel all across the enterprise can drill-down into the data that helps them analyze their department's performance and manage commitments. Information can be consumed on mobile, desktop, online and offline.

**Save Time**

Eliminate static spreadsheets and the associated time-consuming data extraction and validation required to create periodic updates.
Expandable Alerts

**EXPANDABLE ALERTS** is a versatile productivity tool that monitors your data and systems to identify and act on critical, time-sensitive business events.

Expandable Alerts saves thousands of dollars in lost revenue and hundreds of hours in lost productivity by helping identify and prevent fires before they start. As events occur, Expandable Alerts keeps your operation running smoothly by simultaneously:

- sending out alert messages
- dynamically updating databases
- scheduling and delivering reports
- executing pre-defined tasks

**MODULE FEATURES**

*Distribute Forms Electronically*

Eliminate printed forms by turning your distributed documents to electronic format for email or fax.

Expandable Alerts transforms your accounting statements into electronic messages that can be sent directly from Expandable II to customers and business partners.

Expandable Alerts saves you time and energy by eliminating the need to produce forms, stuff and address envelopes, and purchase postage.

*Automate these common documents:*

- AR Invoices
- Account Statements
- Shipment Notifications
- Sales Order and PO Confirmations
- Sales Order and PO Change Confirmations
- Engineering Change Orders/Notices

*Schedule Regular Reports*

In addition to alerts messaging, Expandable Alerts provides the ability to schedule and generate frequently needed reports such as:

- Daily Bookings
- Weekly receivables reports
- Daily credit hold updates
- Monthly reconciliation reports

Expandable Alerts’ integration with Crystal Reports enables you to create pre-determined schedules and recipients for reports that you produce on a recurring basis.

Expandable Alerts distributes these reports via mail, fax, PDA, FTP, and the web.

*Eliminate Common Problems:*

- Missed Forecasts
- Late Shipments
- Dropped Leads
- Stock Shortages
- Overdue Invoices
- Past Due Receipts
- Customer Service Deadlines

Expandable Alerts also saves your organization time and materials by automating repetitive processes and initiating timely delivery of important business information.

Whether it's delivering email notifications and updates to customers and supply chain partners, or monitoring the status of your data to alert management of exceptions, Expandable Alerts is a proactive tool that ensures your management, customers and supply chain partners never have to say “If only we had known.”
Configuration Control

Expandable CONFIGURATION CONTROL is used by companies who manufacture standard assemble-to-order products with customer-selected features and options. Configuration Control provides faster, mistake-proof quoting and order entry while eliminating the engineering overhead involved in maintaining hundreds or thousands of custom bills of material.

Configuration Control has standard and unique product configurations, allowing you to sum up the costs of their components, set configuration prices, review configuration gross margins and check availability of configuration options.

Features and options for a product are predefined, allowing sales representatives and customer service personnel to enter accurate, timely quotes and sales orders without the need for engineering to review each item.

Configuration Rules can be defined for including or excluding options based on other options selected for inclusion in a configuration. Each rule includes an Informational, Warning or Stop Message that is displayed when the rule is executed and an inclusion or exclusion exception is found.

MODULE FEATURES

Configuration Definition
- Construct standard product configurations
  - Select from predefined features and options
  - Copy and edit existing products
  - Configure new products
  - Product pricing and cost computed
  - Review and edit configuration
  - Review price and costing of configurations
- Integrated with sales order entry
  - View and sell a standard product configuration
  - Construct a saleable unique product configuration
  - Option to display available to promise (ATP) at all levels
  - Option to rollup standard cost for complete configuration
- Product price file interface
- Gross margin analysis
- Integrated user-defined comments on configuration
- Effectivity date control
- Feature status codes
  - Pre-release, approved, on hold or canceled

Rules Table
- Option ID
- Comparison Option
- Comparison Rule
  - Exclude
  - Include
  - Include From List
  - No Rule
- Message Type
  - Stop
  - Warning
  - Inform
- Message Text
  - User defined

Configuration Purge

Model/Features Definition
- User controlled display sequence
- Control minimum and/or maximum quantity requirements
- Effectivity date control
- Feature status codes
  - Pre-release, approved, on hold or canceled
- Interface to parts master
- Interface to model and feature comments

Feature/Options Definition
- User controlled display sequence
- Control minimum and/or maximum quantity requirements
- Effective date control
- Default option pricing
- Option type print control
- Print on sales order with price, with-out price or do not print
- Pick type options
  - Define option at shipping or kitting (backflush)
  - Kitting storeroom
  - Deliver to operation when complete
  - Scrap factor
  - Lead time offset
- Option status
  - Pre-release, approved, on hold or canceled
- Option can be another configuration
- Interface to parts master
- Interface to feature and option
- Comments file

Real-time Integration
- Inventory Control
- Product Data Control
- Job Scheduling/Costing
- Master Scheduling
- Sales Order
- Foreign Currency

Reporting/Inquiries
- Feature/Options
- Options where-used
- Product configurations

Available to Promise

Create Planning Bill for the Model/Option for MPS Planning Purposes

Capability to Copy the Configuration to the Bill of Materials
## MODULE DESCRIPTION

### Sales Order Management

Expandable’s **SALES ORDER MANAGEMENT** system controls all phases of customer order processing including quotations, forecasts, committed orders, available to promise, shipments and return authorizations.

Real-time automatic credit checking at both order entry and shipment time ensure proper credit control. Multi-level pricing allows the pricing structure to be established at the customer and/or part level.

#### MODULE FEATURES

**Customer Order Entry**
- Automatic or manual Sales Order number assignment with up to 998 lines
- Browse to find customer by number, alpha search name, phone number, city, zip code
- Bill-to, sold-to and ship-to customer structure
- Automatically process one time bill-to/ship-to customers
- Review customer notes and comments
- Credit checking at order entry and shipment time
- Both line and order discounts
- Tax and VAT codes by line
- FOB, carrier, freight payer, shipping notes
- Available to promise display
- Product price and customer part file integration
- Schedule shipments from stock or directly from a manufacturing job
- Part and non-part items, unit of measure (UOM) conversions
- Multiple order types, including:
  - Normal
  - One-time
  - RMA
- Multiple order classifications table under user control (e.g. transfer, distributor, overseas, sample)
- Multiple order status, including:
  - Forecast
  - Quotation
  - Hold
  - Open
- Sales/COGS account default by product line or order classification
- Line, order and standard comments
- Partial shipment flag, order and line hold with reason codes
- Pending ECN warning
- Sales order review/edit capability
- Entry of prepaid check deposits or bank card info
- Multiple user-defined fields and notes
- Attachments
  - Documents
  - Web addresses

**Change Order Processing**
- Addition of new lines
- Change terms, quantity, ship dates, prices, descriptions, part, comments and accounting distribution

**Sales Order Printing**
- Print on standard form or customized format
- New, changed and old sales orders and quotations
- Range of sales orders, sales man and order takers
- Option to print sales orders on hold
- Line, order and standard comments

Serial numbers are tracked for both shipping and customer returns. Sales history is maintained by customer and part number. Sales Order integrates with Configuration Control to create unique product configurations at order entry time.

Inquiries display customer status information including customer master, sales order, sales history, AR invoice, AR check, serial number and job data.

Enter new customer orders using the Sales Order Editor

**RMA Processing**
- Exchange/cross shipment
- Replacement
- Repair/return
- Automated creation of shipment sales order and rework job
- Expected serial number tracking

**Sales Order Status Reporting**
- Selection by sales order, customer name, part, order date, scheduled ship date

**Scheduled Shipments Tracking**
- By customer, part, order class, stores code, shipped date
Sales Order Management (continued)

**Serial Number Tracking**
- Purchase order receiving
- Job completion
- Sales order shipping
- RMA returns
- Backflush kit issue
- Component Serial Number to Assembly Serial Number cross reference
- Detail transaction history
- Multiple user-defined fields and notes

**Attachments**
- Documents
- Web addresses

**Shipments/Return Entry**
- Option to ship complete (all lines or by date range)
- Lot number, serial number entry and tracking
- Early and partial shipments control
- Automated kitting of backflush operation when shipping from job
- Ship by line or part
- Pending ECN warning

**Parts Availability Analysis**
- From master schedule ATP or real-time calculation

**Customer Master File Maintenance**
- Both customer number and alpha search name
- Sales tax and VAT codes, default terms of sale
- Resale ID, default pricing table
- Default carrier and FOB for control of title passage
- Salesman, region, SIC, NAICS, customer classification, credit manager, freight bill-to fields
- Subject to service charge, percent and dollar minimum
- Multiple selling and accounts receivable contacts, phone and fax fields
- Flag to automatically place sales orders on hold for credit release
- Bank code and currency code
- Serial number required flag
- Credit limit, rating, DUNS rating and date
- Customer status flags
  - Approved
  - Credit limit hold
  - Past due hold
  - Special hold
  - No sales orders
  - Inactive
- Multiple user-defined fields and notes

**Attachments**
- Documents
- Web addresses

**Daily/Monthly Transaction Registers**

**Customer Part File Maintenance**
- Sales approval status
- Lead time, order quantity, unit of measure conversion
- Serial number required
- Quote price and quantity
- Last sales order price, quantity and date
- Customer, customer part and part
- Multiple user-defined fields and notes

**Attachments**
- Documents
- Web addresses
Sales Order Management (continued)

Sales and Booking Analysis

Expandable’s SALES AND BOOKING ANALYSIS files are useful for generating sales and commission reports by sales rep, region, product line, currency, etc.

Crystal Reports provides users the ability to access these files and sort and print data for specific user needs, for example, bookings by product line.

Sales Analysis

- Tracking by:
  - Customer
  - Part
  - Sales order class
  - Product line
  - Year/month
  - Region
  - Salesman
  - Sales Account

Inquiries

- Customer Bookings:
  - Customer
  - Part
  - Product Line
  - Salesman
  - Year/month

Booking Analysis

- Tracking by:
  - Customer
  - Part
  - Salesman
  - Year/month
  - Region
  - Real-time Integration
- Accounts Receivable
- Sales Order
- Inventory Control

Sales History

- Customer
- Customer PO
- Part
- Salesman

Volume Pricing

The VOLUME PRICING module provides pricing (discounts) based on sales volume from a designated time period.

The Volume Pricing Editor maintains special pricing for parts sold through the Sales Order Editor to customers with a particular Customer Master table Class Code. Prices are controlled by Part ID, Class Code, a beginning fiscal year/month, and an ending fiscal year/month.

Product Pricing File

- User-defined tables of pricing for individual parts, customers, promotions, overseas, etc.
- Quantity break or percent-off pricing
- Define by effective dates, foreign currency
- Price override approval in sales order entry

Volume Pricing data includes:

- Begin Month
- Begin Year
- End Month
- End Year
- Sales Range
  - Month
  - Quarter
  - Semi-annual
  - Annual
- Five levels of sales volume
- Unit Price

Real-time Integration

- Accounts Receivable
- Inventory Control
- Lot Tracking
- Configuration Control
- Multiple Location
- Job Scheduling/Costing
- General Ledger
- Multiple Company
- Foreign Currency
- Master Scheduling
- Engineering Change

Track customer purchases using the Customer Bookings inquiry
Credit Card Validation

Expandable’s interface to Paragon Payment Solutions provides secure, PCI compliant credit card processing during the order entry process.

Through integration with Paragon Payment Solutions, as an order is placed in Expandable, the interface validates the charge, delivers an authorization code, and initiates a two-part “book and ship” transaction, reserving the credit charge until the order is shipped.

When the order is shipped, the system sends a message through the validation interface to bill the order, and the system completes the credit card transaction once funds are wired from the processing center.

MODULE DESCRIPTION

Expandable's interface to Paragon Payment Solutions provides secure, PCI compliant credit card processing during the order entry process.

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When the order is shipped, the system sends a message through the validation interface to bill the order, and the system completes the credit card transaction once funds are wired from the processing center.

MODULE FEATURES

The Credit Card Validation interface integrates Expandable with the complete credit card processing solution from Paragon Payment Solutions so you can accept and manage all payments directly through Expandable ERP.

Running “CC Verify” in the Sales Order Editor (SOEOE), AR Invoice Entry (ARTIE), AR Invoice Editor (APEIM) or AR Credit Card Settlement utility (ARUCCS) causes the following data exchange with Expandable and the Credit Card Service.

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VALIDATION PROCESS

1. Expandable collects and sends the following data to Paragon Payment Solutions:
   - Credit Card number
   - Card holder name
   - Address
   - Zip Code
   - Card security number
   - Expiration Date
   - Sales Order ID
   - Charge Amount

2. In return, Paragon Payment Solutions sends back data elements to Expandable when processing Credit Card transactions:
   - Transaction Result
   - Transaction Response Code
   - Authorization Code
   - Trout ID/Trout Number
   - CVV Code => processing message
   - AVS Code => processing message
   - Error Code => processing error message

3. Expandable then encrypts and saves these data elements for later processing by the AR Credit Card Settlement utility (ARUCCS) program:
   - Authorization Code
   - Trout ID/Trout Number
   - Card security number
EXPANDABLE ERP INTEGRATION FOR SALESFORCE CRM connects your Expandable ERP business infrastructure with the world’s leading customer relationship management (CRM) product for a 360 degree view of customer activity across the entire enterprise.

With bi-directional integration between Expandable and Salesforce CRM your organization will enjoy a complete front and back office solution providing visibility and control of the customer management process from customer acquisition through product delivery and support.

FEAT URES AND BENEFITS

Bi-directional integration between Expandable ERP and Salesforce CRM:

- Customer Master
  - Open
  - New Customer
  - Changed Customer
- Customer History
  - Payments
  - Payment History
- Customer Activity
  - Last Order
  - YTD Totals
- Invoices
  - Open/Closed Invoices
- Sales Orders
  - Order Status
  - Order History
- Serial Numbers
  - New Items
  - Changed Items

View sales orders, invoices, account activity and assets in Salesforce CRM. Update customer master information directly through Salesforce CRM. Access the full range of Salesforce CRM reporting tools and dashboards displaying both Expandable and Salesforce CRM data.

Choose Your Integration Touchpoints

1. Customer Base Information Package
   - Expandable Customer Master to Salesforce Account Master
   - Customer Activity and Sales History included in package

2. Sales Order and Invoice Package
   - Expandable Sales Order Master/Detail and Invoice Master/Detail made available through custom objects linked to end-customer accounts

3. Serial Part Package
   - Expandable Serial Parts shipped to customers are recorded in the Salesforce asset object providing a view of serial products the end-customer purchased and linkage to service cases

4. Expandable Customer Insert Package
   - Salesforce Account transferred to Expandable Customer Master
   - Customer inserted “On-Hold” in Expandable
   - Requires (SF01) to be in place

5. Expandable Parts Master and Customer Price Lists
   - Expandable Selling Parts and Price List data synchronization with Salesforce Products and Price Books keep products and pricing for sales opportunities aligned with Expandable

6. Opportunity to Sales Order
   - Salesforce Opportunity w/Products converted, validated and inserted into the Expandable ERP for order fulfillment complete with opportunity handling options Close-Win, No Action etc.
     o Requires packages 1, 2, 4 and 5 to be in place
     o Order on hold for fulfillment review

7. Order to Sales Order
   - Salesforce Order with Products converted, validated and inserted into Expandable ERP for order fulfillment
     o Requires packages 1, 2, 4 and 5 to be in place
     o Order on hold for fulfillment review

View your Expandable data using Salesforce CRM tabs, reports and dashboards.
Expandable CRM

With an efficient set of customer management features, EXPANDABLE CRM provides structure to sales and support while delivering management visibility of sales-related interaction.

Expandable’s CRM module is an affordable alternative to more complex CRM systems and comes integrated with Expandable ERP to unify your company’s sales and support effort.

SALES AND MARKETING FUNCTIONS

Sales Force Automation
- Account management (customers and prospects)
- Contact management
- Opportunity management (Forecasted/Un-forecasted)
- Task management

Key User Features
- Grid exposed columns and filters are saved to a user’s profile on his or her computer
- Most grids can be exported to Excel or PDF format
- Single Contact can be linked to many Accounts

Integration with Expandable ERP
Real-time views of customer:
- Customer Master information
- Sales Orders
- Invoices
- Serial Numbers
- Shipping Transactions

Outlook Email Integration
Provides the ability to insert an email into one or more matching CRM Accounts and Contacts either at the time of email creation or after the fact (requires an additional web service and an Outlook plug-in to be installed into a user’s Outlook Client).

Administrative Features
- Account Merging
- Account, Contact (or both) importing from an Excel spreadsheet
- Required Fields
- View/Edit or Read-Only security
- Pick list Configuration
- User fields can be renamed and converted into pick lists

Customer to CRM Account Import Integration
- Provides a one-time import of a Customer’s ID, Name, and Address from Expandable ERP into an Expandable CRM Account

CRM Account to Expandable ERP Customer Push Integration
- Provides a one-time export of a CRM Account to a Customer into Expandable ERP

Data Access Security
- Follows Expandable ERP User Security for login access
- Administered within Expandable ERP
- User Defined Sales Groups
- Sales Region
- Market Vertical
- Product Line
- Business Function
- Read Only or Read/Write
  - By Group
  - By Owner
  - By individual salesman

Opportunity Detail
- Type
- Status
- Stage
- Forecast Amount
- Forecast Close Date
- Probability %
- Forecast Reporting
- Reason
- Actual Amount
- Actual Close Date
- Description
- Attachments
- History
- User defined fields

History Details
- Accounts
- Contacts
- Opportunities
- Tasks

The Account Detail screen captures key information about an account and features dozens of user-defined labels to store extended details.
Expandable CRM  CUSTOMER SUPPORT MODULE

The CUSTOMER SUPPORT module provides a foundation for delivering outstanding customer service and support through detailed case management and complete visibility of the resolution process.

An intuitive interface enables customer-facing individuals to be responsive to customer issues by creating, viewing and tracking communications related to service issues.

With immediate access to key customer data including service history, product details and support tickets, sales and service representatives can maximize customer loyalty by providing immediate, informed service and support.

CUSTOMER SUPPORT FUNCTIONS

Support Ticket Detail
- Ticket Body Description
- Ticket Reason Codes
- Ticket Resolution Codes
- Attachments
- User defined fields (10)
- Numeric user fields
- Date/time user fields
- Ticket subject
- Customer ID
- Part ID
- Customer Part ID
- Serial Number
- Lot ID
- Ticket Origin
- Ticket Priority
- Ticket Status
- Due Date
- Assigned To, Date Assigned

Support Access Security
- Group creation and Support User assignment to a Group
- Administratively Setup in Expandable ERP Dictionary Editor for Table Values for CRM_SALES_GROUP

Support Ticket Integration to Expandable ERP
- Part ID
- Customer Part ID
- Serial Number
- Lot ID
- Warranty information

Support Ticket Tracking
Track Ticket Reasons and Sub-Reasons, Categories and Sub-Categories, and Resolution Categories and Sub-Categories

SYSTEM REQUIREMENTS

Client
- CPU: Intel Core 2 Duo processor or later
- RAM: 4GB or higher
- Windows 8 / Windows 10
- Outlook Version: If Outlook Integration is desired, Expandable CRM will integrate to Outlook (32 and 64 bit) 2010, 2013 and 2016

Server
- CPU: Intel Core 2 Duo processor or later
- RAM: 4GB or higher
- MS SQL Server (Standard/Enterprise Edition) 2014, or 2016
- Expandable 9.4.0 or higher
Quick Sales Order Entry

The QUICK SALES ORDER ENTRY program is designed to simplify order entry by collapsing the three editor windows into a single overlay editor that resembles a sales order report. The overlay editor accommodates quick entry for high volume and/or simplified order entry.

The Quick Sales Order Entry module uses the same standard security rights as other Expandable ERP program.

MODULE FEATURES

Optimize the Flow of SO Entry

Format your Sales Order entry to match the layout of a customer PO

- Header
- Line Detail
  - Enter details using Data Entry Grid
- Comments
- Summary

Use either the standard Sales Order Editor or the Quick Sales Order Entry program.

A single GUI Window captures the order Master Header, Line Detail and Comments
PRODUCT DATA CONTROL provides an organized structure for the documentation and maintenance of current and historical configurations on all assemblies in the manufacturing process. Bills of Material are identified as engineering controlled, released to production or both.

Product Data Control

Expandable’s unique Data Exception Reporting enhances Bill of Material accuracy. Product Data Control goes beyond the norm by incorporating material planning reports that address component availability (can I build it?). The standard costing system supports the development of new standard costs and the review of their impact on inventory before updating current standard cost.

MODULE FEATURES

Bill of Material Maintenance

- Unlimited annotation of component reference designators
- Browse by assembly or component
- Single level bill display while entering/changing bill of material

Planning Bills of Material

Bill Copy Capability

- Copy entire bill of material, specific type or effective date
- Option to include component references

Bill of Material Viewer

- Drag and drop parts and assemblies from Parts List window onto any component or assembly in BOM View window
- Easily generate BOM from scratch using drag and drop
- Delete selected component(s) or assemblies from a BOM
- Edit BOM with a double click on the component line
- Produce single level cost roll up report from within BOM viewer for estimating and what-if scenarios

Product Structure Provides

- Single level BOM (costed option)
- Indented BOM (costed option)
- Where-used, single level
- Where-used, indented with cumulative lead times
- Option to update cumulative lead time on parts master file

Engineering Data

- Drawing item number
- Annotate component references for revision level and ECN
- Effectivity start and stop dates, serial numbers

Component Availability and Shortage List

- Summarized components requirements
- Netted against on-hand inventory, WIP, purchase orders, receipts, kits
- Option to report projected shortages only
- Can process multiple assemblies with a priority control code
- Option to explode buy parts

Manufacturing Data

- Quantity required up to 6 decimal places
- Default kitting storeroom and deliver to operation
- Lead time offset
- Scrap factor

Identify components that make up your top level assemblies using the Bill of Materials Viewer

Expandable Software, Inc.  |  900 Lafayette St., Ste 400  |  Santa Clara, CA 95050  |  (408) 261-7880  |  www.expandable.com
Product Data Control (continued)

**Product Costing**
- Build new standards (cost fields to 6 decimals)
- Current vs. new costed stock status reporting
- Roll-up standard costs, all or single assembly
  - option to include scrap and/or yield
  - roll-up configurations with no bill
- Re-valuation of inventory and cost variance analysis for GL booking

**Data Exception Audit Reporting**
- Zero cost part, zero lead time part
- Inactive, obsolete or pre-released part in BOM
- Inactive or obsolete part with stock on hand
- Make part with no BOM, buy part with BOM
- Part status “P” on part master (pre-release)
- Buy part with no where-used
- Multi-location is yes, no multiple location records
- Planning lead time greater than cumulative lead time
- Multi-location is no, multiple location records exist
- No new standards record
- MRP flag should be changed
- Planning BOM with stock
- Planning BOM with parent
- Planning bill component with no parent
- Planning bill component with invalid parent
- Planning bill component with many parents
- Negative lot on hand
- Lot control is yes, no lot records
- Lot control is no, lot records exist
- No activity in six months

**Real-time Integration**
- Inventory Control
- Purchasing
- Job Scheduling/Costing
- Shop Routing
- Materials Management (MRP)
- Master Scheduling

View, edit and make mass changes to your BOMs using the Bill of Material Browser.
**Engineering Change Management**

*ENGINEERING CHANGE MANAGEMENT* supports the planning and tracking of all phases of the engineering change process from the time a change request is originated, through approvals, to final release and implementation. A perpetual history is maintained of the entire engineering change process.

Real-time access is provided to inventory, purchase order status, sales order status, work-in-process and transaction history, giving visibility of critical data that enables informed approval decisions.

**MODULE FEATURES**

**ECN Entry**
- Automatic or manual number assignment
- **ECN Status**:
  - Requested
  - Awaiting approval
  - Released
  - On Hold
  - Cancelled
- Originator, Change Analyst, Type, Reason, Costs, Savings
- Unlimited Description and Reason Text
- Dates for:
  - Originated
  - Released
  - Effective
- Approval Tracking
  - Approver
  - Required
  - Status
    - Pending
    - Approved
    - Rejected
  - Due Date
  - Date Reviewed
  - Date Approved
- Approved By
- Affected Parts Tracking
  - Current Revision
  - New Revision
- Multiple user-defined fields
- Attachments
  - Drawings
  - Documents
  - Web addresses

**Approval Groups**
- Assign approvers to a group
- Specify whether approval is required
- Predefine approval lead time
- Email addresses

![Record the characteristics of engineering change orders using the ECN Editor](image)

In summary, **Engineering Change Management** provides a comprehensive solution for managing and approving engineering changes, ensuring that all stages from request to implementation are tracked and recorded. Approvers can be assigned to groups or departments, and approvals can be staged based on predefined lead times. The module supports linking drawings, documents, and manufacturing procedures to each change notice, facilitating informed decisions and efficient management of engineering changes.
PLM Integration Adapter

Expandable’s PLM INTEGRATION ADAPTER creates a synchronized data link between the Expandable ERP system and third-party product lifecycle management (PLM) packages.

Your PLM system maintains control of the Engineering Change Order (ECO) process, electronically communicating change requirements for fast review and approval before transferring approved changes into Expandable.

Integration provides enterprise-wide access to the most current engineering data, delivering real-time visibility of product data changes, vendor status and associated documents.

**MODULE FEATURES**

**Auto or Manual Processing**

Changes to Expandable data fields are processed in one of three user-defined modes:

- automatic
- manual single file
- manual batch file

In automatic mode, the adapter monitors a watch folder for new files to process. When a change arrives, the program reads the file, verifies the data, and uploads to Expandable, making changes available in real time.

In manual mode, uploads are initiated by the user in either individual or batch file selections.

Security settings for access to the release process are recorded in the Expandable Rights Editor.

**Bill of Materials**

- Assembly ID
- Component ID
- Drawing Item Code
- Required Quantity
- Start Date
- End Date
- Notes
- Reference Designators

**Vendor Part**

- Part ID
- Manufacturer’s Name
- Manufacturer’s Part ID
- Vendor ID
- Vendor Part ID
- Buy Status

**Item Master**

- Part ID
- Type
- Description
- Unit of Measure
- Rev. Level
- ECN Number
- Effectivity Date
- Pending ECN
- Preferred Vendor
- Eight User Definable fields
- Weight
- Volume
- Substitute Part ID
- Product Line, Status
- Part Class
- Standard Cost
- Lead Time
Web Services APIs

Expandable’s RESTful Web Services APIs support integration to external applications that require creation of system validated records to query the Expandable database records and create ERP system transactions.

APIs cover the major functional areas in a manufacturing environment:
- Sales and Service
- Purchasing
- Accounting and Finance
- Inventory and Production
- Product Management

API FEATURES

Expandable Web Services are deployed with a software development kit (SDK) that includes on-line developer documentation, requirements, accepted JSON data parameters, response details, error codes and validation test utility for each service that allow the testing and validation of installation and serve as a development tool to test JSON data structures complete with return error codes and return data results.

RESTful Web Services allow simple HTTP/HTTPS client/server service requests to underlying Expandable business logic for valid record insertion/update and record query filtering.

Application Programming Language Independence supports C, C++, C#, Java, JavaScript, Perl, Python and other languages providing a wide set of programming platform options to the application designer.

Industry Standards

Standard JSON name/value pair data structures (typical: object constructs, array constructs, etc.) for application data exchanges allow the designer to leverage industry standard off the shelf parsers compatible with the designers coding language.

Security

The APIs include Business Logic Security Services for application session login/logout and session controls for secure data exchange to and from the web services while maintaining the administrator’s control over ERP access.

Data Query

Flexible and powerful data query with same filtering capabilities of Expandable’s proprietary core ERP Query by Example (QBE): “IN”, “BETWEEN”, “=”, “<>”, “<”, “>”, “<=”, “>=”, etc. as an integral part of the JSON data value passed as a filter definition.

REQUIREMENTS

Expandable ERP Release 9.3.0 and forward with appropriate Web Service BLS Feature Key Licensed
Microsoft Windows OS 7, 8, 8.1 or Microsoft Windows Server 2008, 2008R2, 2012, 2012R2
Microsoft IIS 7.0 or later
Microsoft .NET Framework 4.5
MODULE DESCRIPTION

System APIs

API Version, Get
Returns the API Version.

Auth Token, Get
Authenticates the supplied Expandable credentials and returns an Authentication Token.

Data Sources, Get
Returns a list of the available Data Sources.

Server Time, Get
Returns the current Server Time.

Accounting APIs

Accounting APIs provide access to Expandable’s AP Vouchering business logic and transaction creation so that Expandable users can interface directly to vendor or expense management applications for non-PO invoicing and AP vouchering to allow the Expandable AP function to make payment of those supplier or employee expenses.

Accounts Payable

AP Check Update, Run
Runs AP Check Update using the supplied run data.

AP Invoice Entry, Create
Creates a new AP Invoice Entry transaction using the supplied data and returns the details of the transaction.

AP Invoice Entry, Query
Queries existing AP Invoices using the provided criteria and returns a list of found AP Invoices.

Accounts Receivable

AR Invoice Entry, Create
Creates a new AR Invoice Entry transaction using the supplied data and returns the details of the transaction.

AR Invoice Entry, Invoice All
Creates multiple AR Invoice Entry transactions using the supplied Auto Invoice criteria and returns the details of the transactions.

AR Invoice Entry, Query
Queries existing AR Invoices using the provided criteria and returns a list of found AR Invoices.

AR Remittance Entry, Create
Creates a new AR Remittance Entry transaction using the supplied data and returns the details of the transaction.

General Ledger

GL Account, Create
Creates a new GL Account using the supplied data and returns the details of the created GL Account.

GL Account, Update
Updates an existing GL Account using the supplied data and returns the details of the updated GL Account.

GL Account, Query
Queries existing GL Accounts using the provided criteria and returns a list of found GL Accounts.
Inventory APIs

Inventory-related APIs provide access to Expandable’s Stores Transfer and Issues Entry business logic and transactions so Expandable users can create transactions through warehouse management, kanban or other external inventory management applications.

**Inventory Control**

**Adjustments Entry, Create**
Creates a new Adjustments Entry transaction using the supplied data and returns the details of the transaction.

**Backflush Kit Issue, Create**
Creates a new Backflush Kit Issue transaction using the supplied data and returns the details of the transaction.

**Issues Entry, Create**
Creates a new Issues Entry transaction using the supplied data and returns the details of the transaction.

**Part, Create**
Creates a new Part using the supplied data and returns the details of the created Part.

**Part, Update**
Updates an existing Part using the supplied data and returns the details of the updated Part.

**Part, Query**
Queries existing Parts using the provided criteria and returns a list of found Parts.

**Physical Count Entry, Create**
Creates a new Physical Count Entry transaction using the supplied data and returns the details of the transaction.

**Stock Status, Create**
Creates a new Stock Status using the supplied data and returns the details of the created Stock Status.

**Stock Status, Update**
Updates an existing Stock Status using the supplied data and returns the details of the updated Stock Status.

**Stock Status, Query**
Queries existing Stock Statuses using the provided criteria and returns a list of found Stock Statuses.

**Stores Transfer, Create**
Creates a new Stores Transfer transaction using the supplied data and returns the details of the transaction.

**Job Control**

**Serial Number Cross Reference, Create**
Creates a new Serial Number Cross Reference using the supplied data and returns the details of the created Serial Number Cross Reference.

**Serial Number Cross Reference, Update**
Updates an existing Serial Number Cross Reference using the supplied data and returns the details of the updated Serial Number Cross Reference.

**Serial Number Cross Reference, Query**
Queries existing Serial Number Cross References using the provided criteria and returns a list of found Serial Number Cross References.

**WIP Completions Entry, Create**
Creates a new WIP Completions Entry transaction using the supplied data and returns the details of the transaction.
Inventory APIs (continued)

Lot Control
Lot, Create
Creates a new Lot using the supplied data and returns the details of the created Lot.

Lot, Update
Updates an existing Lot using the supplied data and returns the details of the updated Lot.

Lot, Query
Queries existing Lots using the provided criteria and returns a list of found Lots.

Multiple Location
Multiple Location, Create
Creates a new Multiple Location using the supplied data and returns the details of the created Multiple Location.

Multiple Location, Update
Updates an existing Multiple Location using the supplied data and returns the details of the updated Multiple Location.

Multiple Location, Query
Queries existing Multiple Locations using the provided criteria and returns a list of found Multiple Locations.

Product Management APIs
Product management APIs provide access to Expandable’s bill of materials business logic and records so that Expandable users can manage product data in Expandable using external PLM, CAD or other engineering development or product management applications.

Product Data
Bill of Material, Create
Creates a new Bill of Material Component using the supplied data and returns the details of the created Bill of Material Component.

Bill of Material, Update
Updates an existing Bill of Material Component using the supplied data and returns the details of the updated Bill of Material Component.

Bill of Material, Query
Queries existing Bill of Material Components using the provided criteria and returns a list of found Bill of Material Components.

Purchasing APIs
APIs related to POs provide access to Expandable’s Vendor Master, Vendor Contact and Order Entry business logic and records so that Expandable users can send RFQs and place orders from vendor and supplier system interfaces and applications.

Purchase Order
Purchase Order, Create
Creates a new Purchase Order using the supplied data and returns the details of the created Purchase Order.

Purchase Order, Update
Updates an existing Purchase Order using the supplied data and returns the details of the updated Purchase Order.

Purchase Order, Query
Queries existing Purchase Orders using the provided criteria and returns a list of found Purchase Orders.
Purchasing APIs (continued)

**PO Receipts Entry, Create**
Creates a new PO Receipts Entry transaction using the supplied data and returns the details of the transaction.

**Receipt Transaction, Query**
Queries existing Receipt Transactions using the provided criteria and returns a list of found Receipt Transactions.

**Vendor, Create**
Creates a new Vendor using the supplied data and returns the details of the created Vendor.

**Vendor, Update**
Updates an existing Vendor using the supplied data and returns the details of the updated Vendor.

**Vendor, Query**
Queries existing Vendors using the provided criteria and returns a list of found Vendors.

**Vendor Contact, Create**
Creates a new Vendor Contact using the supplied data and returns the details of the created Vendor Contact.

**Vendor Contact, Update**
Updates an existing Vendor Contact using the supplied data and returns the details of the updated Vendor Contact.

**Vendor Contact, Query**
Queries existing Vendor Contacts using the provided criteria and returns a list of found Vendor Contacts.

**Vendor Part, Create**
Creates a new Vendor Part using the supplied data and returns the details of the created Vendor Part.

**Vendor Part, Update**
Updates an existing Vendor Part using the supplied data and returns the details of the updated Vendor Part.

**Vendor Part, Query**
Queries existing Vendor Parts using the provided criteria and returns a list of found Vendor Parts.

Sales and Service APIs

Sales APIs provide access to Expandable's Customer Master, Sales Order, Customer Part, Credit Card, Customer Contact, Shipments Entry and Product Price business logic and records so that the system can accept orders and payments placed through external applications from new customers, existing customers and customers with updated account and/or contact information.

**Sales Order**

**Customer, Create**
Creates a new Customer using the supplied data and returns the details of the created Customer.

**Customer, Update**
Updates an existing Customer using the supplied data and returns the details of the updated Customer.

**Customer, Query**
Queries existing Customers using the provided criteria and returns a list of found Customers.
Sales and Service APIs (continued)

Customer Contact, Create
Creates a new Customer Contact using the supplied data and returns the details of the created Customer Contact.

Customer Contact, Update
Updates an existing Customer Contact using the supplied data and returns the details of the updated Customer Contact.

Customer Contact, Query
Queries existing Customer Contacts using the provided criteria and returns a list of found Customer Contacts.

Customer Part, Create
Creates a new Customer Part using the supplied data and returns the details of the created Customer Part.

Customer Part, Update
Updates an existing Customer Part using the supplied data and returns the details of the updated Customer Part.

Customer Part, Query
Queries existing Customer Parts using the provided criteria and returns a list of found Customer Parts.

Product Price, Create
Creates a new Product Price using the supplied data and returns the details of the created Product Price.

Product Price, Update
Updates an existing Product Price using the supplied data and returns the details of the updated Product Price.

Product Price, Query
Queries existing Product Prices using the provided criteria and returns a list of found Product Prices.

Sales Order, Create
Creates a new Sales Order using the supplied data and returns the details of the created Sales Order.

Sales Order, Update
Updates an existing Sales Order using the supplied data and returns the details of the updated Sales Order.

Sales Order, Query
Queries existing Sales Orders using the provided criteria and returns a list of found Sales Orders.

Serial Number, Create
Creates a new Serial Number using the supplied data and returns the details of the created Serial Number.

Serial Number, Update
Updates an existing Serial Number using the supplied data and returns the details of the updated Serial Number.

Serial Number, Query
Queries existing Serial Numbers using the provided criteria and returns a list of found Serial Numbers.

Shipments Entry, Create
Creates a new Shipments Entry transaction using the supplied data and returns the details of the transaction.

Shipments Transaction, Query
Queries existing Shipment Transactions using the provided criteria and returns a list of found Shipment Transactions.
Electronic Data Interchange (EDI)

Expandable’s ELECTRONIC DATA INTERCHANGE module provides import and export capabilities for data rich translation and mapping into standard EDI documents.

To support the broad range of EDI options between two business partners, Expandable provides comprehensive export data sets and a minimum import data set in flat file formats transmitted via SFTP to an EDI translation, mapping and delivery provider.

The Value Added Network service provider or custom translation and delivery application takes the data required by the target trading partner and maps the data per user specifications and delivers them securely to the end trading partner.

File transfers are supported with Secure FTP (SFTP) from Expandable to SFTP Server(s). Each trading partner is supported by their own unique FTP setup and credentials, trading data and production/test mode of delivery within the Expandable Customer Master linking to EDT Partner SFTP server.

Expandable’s Electronic Data Transmission module provides a comprehensive set of import and export options transmitted via SFTP for EDI translation, mapping and delivery.

MODULE FEATURES

Expandable EDI Core Module
Expandable’s core EDI module supports from one to as many trading partners as required, providing all the necessary SFTP set up for data imports and exports for each trading partner.

Additional system set up utilities are included, allowing for EDI activity and error reporting and email notifications. Specific import and export flat file documents are added as required based on the information exchange supported by the businesses trading partner data requirements. Optional import and export data as required.

Sales Order Exports and Sales Order Changes
Sales Order Export sends a complete order data set with over 370 individual master and detail data fields. All or part of these fields can be mapped into an EDI purchase order acknowledgement meeting any trading partner’s data requirements for acknowledgement of their order placement. Unique tab delimited data files are delivered to the “IN” box of your trading partners SFTP site for sales orders that have been set up and confirmed (OPEN status after review and confirmation) for conversion to the trading partner’s order acknowledgement EDI format requirements.

Purchase Order Imports and PO Changes
Allows the importing of a minimum number of data fields from a flat TAB delimited file translated from a formal EDI Purchase Order Request. EDT PO Import also supports a number of optional fields that are echoed back to your trading partner through out the electronic exchange of order to invoice process. Unique tab delimited data files are retrieved from the “OUT” box of your trading partners SFTP site and imported into Expandable as an on HOLD Sales Order allow for operations review. The import can be configured to accommodate drop shipments.
Electronic Data Transmission (continued)

MODULE FEATURES (continued)

**Sales Order Shipment Transactions Export**
EDT Order Shipments Export exports completed Order Shipment Data supporting EDI Shipment Notification with over 190 individual shipment transaction data fields. All or part of these fields can be mapped back into an EDI Shipment Notification as required by the Trading Partner. Unique tab delimited data files are delivered to the “IN” box of your trading partners SFTP site for conversion to Order Shipments meeting the Trading Partner’s Shipment Notice EDI format requirements.

**Invoice Export**
EDT Invoice Export exports complete Invoice Data supporting EDI Invoices with over 370 individual invoice data fields. All or part of these fields can be mapped back into an EDI Invoice as required by the Trading Partner. Unique tab delimited data files are delivered to the “IN” box of your trading partners SFTP site for conversion to Invoices meeting the Trading Partner’s Invoice EDI format requirements.

**Purchase Order Exports and PO Changes**
EDT Purchase Export exports complete Purchase Order Data supporting EDI Purchase Orders with over 340 individual invoice data fields. All or part of these fields can be mapped back into an EDI Purchase Order as required by the Trading Partner. Unique tab delimited data files are delivered to the “IN” box of your trading partners SFTP site for conversion to Purchase Orders meeting the Trading Partner’s Purchase Order EDI format requirements.

**Non-PO Invoice Import**
EDT Non-PO Invoice Import allows the user to import Non-PO related Invoices into the AP Vouchering system for payment. This functionality is particularly useful in application that generate expense related data that requires the Accounts Payable team to payout. Unique tab delimited data files are imported with detail into the AP Voucher Header and Voucher Detail from systems such as an Expense Management System.

**SYSTEM REQUIREMENTS**

**Expandable ERP**
- Expandable Release 9.1.0 or higher (with .NET API)
- Matching version Expandable Sales Order API

**Server Side**
- Windows Server 2003 – Supporting Task Scheduling
- SQL 2008, SQL 2008R2

**Client Side**
- Windows XP SP2 or Windows 7
- Internet Explorer 9 or higher (Activity HTML Reporting)
- Adobe Reader (for documentation)

**Partner VAN FTP Server Requirements**
- Trading Partner SFTP Server Credentials
- Passive Mode FTP Operation
- IN/OUT and TESTIN/TESTOUT Structured File Folders
**Electronic Data Transmission – NACHA File Export**

Expandable’s NACHA FILE EXPORT application for Automated Clearing House (ACH) transactions collects check payments for vendors that are set up for domestic ACH (Payment Method = DAC) and groups them by Bank Code to be paid and organizes the payment information into the NACHA Organization’s standard NACHA file format for ACH transactions.

Data is extracted from Expandable ERP and transmitted to your banking institution in a secure data stream with SSL encryption using Expandable EDT SFTP (Secure File Transfer Protocol) definitions.

**MODULE FEATURE**

**Supported ACH Standard Entry Classes**
- CCD – Business/Company Payment
- PPD – Individual/Person Payment
- CTX – Corporate Trade Exchange

**ACH Transactions**
- 22 – Deposit destined for a checking account
- 32 – Deposit destined for a savings account

**Vendor’s Banking Setup**
- Bank routing number
- Bank account (encrypted in database for security)
- Bank account type: (CHECKING, SAVINGS)
- NACHA cross reference to check and Pay to Vendor ID

**Payer’s Bank Setup**
- Bank routing number
- Bank account (encrypted in database for security)
- Bank account type: (CHECKING, SAVINGS)
- Payer’s company ACH identification and origin ID
- ACH file modification by bank (supports multiple files in a day)
- ACH file naming prefix/suffix by bank
- ACH file transmission specified by bank or group of banks (with optional file PGP encryption)

The banking institution will have all the NACHA Entry Detail Records to make deposits directly into your vendor/suppliers banking routing/account in the amount Accounts Payable indicated for the check payment.

The Entry Detail will also contain information to cross reference the transaction back to the Expandable Vendor and Check data detail.

**SYSTEM DATA**

- **Bank Code**
- **Vendor Master**
- **Company Details**
- **AP Check**
- **AP Check Register**
- **AP / Batch**

**FINANCIAL INSTITUTION**

- **Payment File**
  - **SFTP**

**VENDOR**

- **Deposit**

Streamline the payment process directly from Expandable ERP with secure, NACHA-compliant transactions that deposit safely into your vendor’s account.

**EXPANDABLE REQUIREMENTS**

**Expandable ERP**
- Expandable Release 9.3.0 or higher

**Optional PGP File Encryption**
- GPG4WIN version 2.2.4 or higher
  - GnuPG component
  - Kleopatra component
Audit Log

Expandable’s AUDIT LOG module creates an audit trail of changes made to the database by automatically recording all additions, modifications, or deletions to any selected table and column in Expandable.

The Audit Log module helps assure database integrity and security, and is an important component for maintaining compliance with regulatory agencies requiring audit trails.

The Audit Log module identifies what data was changed, which individual made the change, and when they did it, regardless of the application used to change the data.

Changes are captured in a History Table that logs the exact data that was modified, including before and after images of the data. The history table can be queried, printed, exported, or extracted and archived.

MODULE FEATURES

Audit Log Manager

Define the events you want to capture using the Audit Log Manager that creates and saves SQL Server triggers that track your audit events in the Expandable database.

Information from each captured event is stored in a history table, including before and after images of updated data:

- Operator ID and Name
- Time and date of the audit event
- Program name and table name, with the key field(s) referenced
- Workstation from which the user triggered the audit event
- Change Type (Insert, Update, or Delete)

Audit Log Viewer

With the Audit Report function, the history table can be queried, with the results printed and/or exported to HTML or XML.

Data Parameters

- Table Name
- Machine Name
- Program Name
- Date Last Updated
- Operator ID
- Time Last Updated
- First Name
- Last Name
- Middle Initial
- Change Type
  - Insert
  - Update
  - Delete

Define specific events to capture using the Audit Log Manager

View or print changes, and/or export to HTML and XML.
Advanced Security

The **ADVANCED SECURITY** module builds upon Expandable’s internal system security to provide extended capabilities that meet the special requirements of customers operating under guidelines set forth by regulatory agencies.

Whether or not password encryption is turned on, the Advanced Security Module provides an option to track attempts by unauthorized users to log into the Expandable application.

Attempts by authorized users of Expandable that try to run modules within the Expandable application for which they do not have security rights are also logged.

The Advanced Security module allows the System Administrator to temporarily suspend a user (e.g. deem the person inactive/locked out).

### MODULE FEATURES

The Advanced Security module includes functions required for 21CFR Part 11 compliance:

- Password expiration
- User password history tracking
- Password re-use checking
- Unauthorized login tracking
- Password suspension

Adjust security parameters using the System Settings Editor
MODULE DESCRIPTION

Form Flow Designer

The FORM FLOW DESIGNER is used to customize the Expandable editor screens so that workflow can be tailored to match the unique business processes of your organization. Whether you want to standardize forms across all users and departments or allow each user the option to customize their own work area, the Form Flow Designer offers your organization the flexibility to match the Expandable screens to the way in which you manage information.

Individual users can streamline their Expandable screens by rearranging the order and size of data elements so that transactions flow smoothly from one field to the next. Users can also remove non-essential items from data entry screens and consolidate key fields from multiple editor tabs onto a single tab so that data elements are consistent with the order in which they access and transact information. Data field labels can be renamed and the font sizes and colors modified to illustrate the relative importance of individual data elements.

**MODULE FEATURES**

- **Create Custom Layouts of Data Elements in Expandable Editors**
  - Cut and paste data fields between editor tabs
    - create larger boxes to gain better visibility of key data fields
    - expand the length of boxes to accommodate longer information strings
  - Re-label data elements in Expandable editors
    - change field name captions to match your unique business vocabulary
  - Customize editor screens to streamline data transactions
    - highlight key data elements with bold and/or colored text
    - group data elements using like font styles and text sizes
    - highlight the data that’s most important to your business
  - Re-arrange data elements on data entry screens to highlight key fields and streamline process flow

- **Set Optimum Tab Order Assignments**
  - Modify the path the cursor follows as you step from field-to-field using the Tab key
  - bypass low volume data elements to streamline high-volume transaction entry

Re-arrange data elements on data entry screens to highlight key fields and streamline process flow
Labor Time Collection

Expandable’s LABOR TIME COLLECTION system streamlines the capture of employee utilization data to provide visibility of labor distribution and promote efficient production.

The system provides employee Clock In/Clock Out scanning via ID badge barcode or keyboard entry, and captures deployment information as workers sign in and out of specific Jobs.

User-definable Reason Codes help manage exceptions, and workers can input the number of pieces completed during the time spent on a Job. Employees are allowed to log into multiple Jobs at one time.

The administrative function allows a manager to clock an employee in or out at the proper time or end work on a job they forgot to enter.

MODULE BENEFITS

Track Labor Costs
Gain visibility of actual labor associated with specific Job ID's.

Reduce Steps
Scan directly into the system, eliminating re-entry of hand-written logs.

Track Productivity
Collect information for reporting on labor distribution and production.

Data Collection
Use labor information to produce reports and analysis on how labor costs impact profitability.

Reduce Paperwork
Eliminate hand-written logs and the handling costs associated with routing and maintaining physical records.

Improve Accuracy
Barcode scanning eliminates errors associated with re-entering hand-written logs, and reduces the need to estimate time spent working on specific Jobs.

Monitor and Post Activity
View labor and Job activity using the Status screen, and post time charges to the Job and Labor tables in Expandable through the Export and Post button on the Job Detail toolbar.

SYSTEM REQUIREMENTS

- Expandable ERP Client installed
- Expandable Time Charge Upload Utility
- Expandable Bar Code Module (optional)
- MS Data Access Components v2.6+
- Bar Code scanner capable of reading Code 39 (optional)
Shipping Interface

The Expandable SHIPPING INTERFACE streamlines the shipping process by delivering faster package handling, reducing errors, and automating the capture and distribution of critical shipment information.

The two-way interface simplifies the sharing of essential data between Expandable and the shipping systems of major package carriers that offer ODBC connectivity, including UPS and FedEx.

**Ship By Sales Order ID**

When shipping, users scan or enter a Sales Order number into the carrier's system, and the interface imports the corresponding "Ship To" data from Expandable, then populates the address fields in the carrier's shipping system.

**Capture Critical Shipment Information**

After shipping, an Expandable utility imports information from the carrier's system, including tracking number, freight charge, service type, weight, and number of cartons, to populate Expandable.

If the Expandable Customer Contact file contains an email address for the "Ship To" contact, some carriers will automatically generate an email message to the recipient notifying them of the shipment.

**Shipment Details**
- Tracking number
- Ship date
- Freight charge
- Number of cartons
- Service type

**Customer Ship-to Data**

Expandable Shipping System

FedEx, UPS and other carriers
Bar Codes

Expandable’s BAR CODES module provides the ability to automate data collection, helping to streamline data entry and improve data accuracy.

Any field used to enter data in Expandable can be input via bar code scan with the addition of a standard bar code reader.

Bar Codes supports automated data collection of inventory transactions, from receiving through shipping, as well as shop floor WIP tracking and labor collection.

Bar Codes can also be used to print identification labels for parts and serial numbers for both purchased and manufactured parts.

Labels can be printed to place on items for shipment.

MODULE FEATURES

Standard Source Documents
- Purchase order receiver
- Shop traveler
- Kit list
- Sales order pick list shipping documents

Data Entry Functions Supported
- Receipts into quality control inspection area
- Receipts into storeroom/warehouse
- Kit issue
- Miscellaneous issues and returns
- Inventory to WIP transfer
- Customer shipments
- Labor time card entry

Custom Forms Printing
- Access any Expandable data
- Customized documents to individual requirements

Data Collection Reading Devices
- Light pens
- Wedge readers
- Hand held laser readers/scanners
- Hand held beam readers
- Fixed readers
Upload Utilities

Expandable's UPLOAD UTILITIES streamline input for data-intensive transaction entry by providing for the posting of transactional information from third party software products and other sources to the Expandable database. Existing internal transaction editing and posting functionality is used to complete the process.

The utilities come with a set of pre-defined macros for the corresponding Expandable update transaction screens. Each macro defines a transaction normally entered through the computer keyboard or scanning device. Transaction input is passed in delimited files.

INDIVIDUAL UPLOADS

SO Shipments
- Posts shipping transactions via Shipment/Returns Entry

PO Receipts
- Posts receipt transactions via Receipts Entry

Time Charge
- Posts time card transactions via Time Charge Entry

WIP Transactions
- Posts job and operation completion transactions via WIP completion Entry

Price List
- Uploads new price information from Excel into Sales Order Price List module

GL Budget
- Posts budget amounts from a tab delimited file via General Ledger Budget Editor

Journal Voucher
- Creates General Ledger Journal Vouchers from files in fixed ASCII, comma delimited or ADP format

Tax Rate
- Imports tax rates from a flat file provided by Avalara or Taxware

MPS Sales Forecast
- Uploads Master Schedule into Master Production Schedule (MPS) from Excel spreadsheet

Part Plan
- Provides the ability to enter production requirements directly to a pre-defined Excel spreadsheet for upload into the Part Plan File

Part Master
- Posts parts listed from a flat file to the Inventory Control Part Master

Customer Part
- Posts Customer Part Cross References to the Sales Order Customer Parts

Vendor Part
- Posts Vendor Part Cross References to the Purchase Order Vendor Parts

Bill of Material
- Posts Bill of Material (BOM) to the Product Data Control Data Bill of Material

Serial Number Cross Reference
- Posts assembly-component serial number cross-references from a tab delimited or Unicode text file as if the Serial Number Cross Reference Editor function posted the cross-references

Sales Order
- Loads Sales Orders from a tab delimited or Unicode text file

Remittance Entry
- Writes customer checks to the AR Check table and Check Register table

Requester-Approver
- Loads Requestors-Approvers Records from a tab delimited or Unicode text file via the Requestors-Approvers Editor

Requisition Routing
- Loads Requisition Routing Records from a tab delimited or Unicode text file via the Requisition Routing Editor

Alternate Approver
- Loads Alternate Approvers Records from a tab delimited or Unicode text file via the Alternate Approvers Editor

Alternate Buyer
- Loads Alternate Buyers Records from a tab delimited or Unicode text file via the Alternate Buyers Editor

Employee Master
- Loads Employee Master Records from a tab delimited or Unicode text file via the Employee Master Editor
Multi Language

Expandable's optional MULTI LANGUAGE module supports a number of User Interface Language Options that have been Machine Translated to specific language reference libraries accessed by the system based on the individual user’s local language setting.

The module currently supports five machine translated languages:
- Spanish
- French
- German
- Chinese (PRC – Simplified)
- Japanese

The development architecture supports any worldwide language that can be translated into a language-specific resource file accessed by the system user interface.

Local user language definition is as simple as changing the short IETF language tag defined in the local users registry.

When licensed, the Multi-Language module provides language modification across: Field Entry Labels, Functional Action Button Labels/Hints and system messages (information/warning/error messages).

The user login window will always be presented in the language specified in the local user registry. When Expandable ERP loads, the GUI components will reflect the preferred language.

Product Standard Language (default base architecture):
- EN = English

Out of Box Languages, Machine Translated, GUI Reference Libraries:
- CHS = Chinese (PRC – Simplified)
  ESIMRPLanguage.CHS.dll
- DE = German
  ESIMRPLanguage.DE.dll
- ES = Spanish
  ESIMRPLanguage.ES.dll
- FR = French
  ESIMRPLanguage.FR.dll
- JP = Japanese
  ESIMRPLanguage.JP.dll

Data Entry
Application Data Entry Fields and SQL Data Types where the data is ultimately stored support all languages under a Unicode double-byte character/symbol encoding. This allows system data entry supporting the user’s text data string entry in their native language regardless of GUI Language selected for the application and is independent of the Multi-Language GUI features.

System Administration
Data values defined by the administrator for drop down selection, default settings and such that are setup in the application dictionary are separate from the GUI and can define text value strings in any language for data entry, consistency of reporting and record searches.