



# Infor CloudSuite Industrial Solution Overview for IRIS

Release 10.x

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## Publication Information

Release: Infor CloudSuite Industrial 10.x

Publication Date: December 9, 2020

Document code: csbi\_10.x\_csi\_solution\_overview\_iris\_cl\_sl\_en-us

# Contents

<b>About this guide.....</b>	<b>5</b>
Related documents.....	5
Contacting Infor.....	5
<b>Chapter 1: Overview.....</b>	<b>6</b>
<b>Chapter 2: Core solution.....</b>	<b>7</b>
Applications.....	7
SyteLine.....	7
APS.....	8
Service.....	8
Quality.....	9
Payroll Interface.....	10
Industry Pack Process.....	10
Industry Pack Printing & Packaging.....	11
Industry Pack Molding.....	11
Industry Pack Automotive.....	12
Implementation Accelerator.....	13
Analytics.....	13
Birst.....	13
SyteLine Analytics for Birst.....	14
Infor OS.....	14
Using Infor OS with SyteLine.....	16
Mongoose.....	17
<b>Chapter 3: Common add-on applications.....</b>	<b>18</b>
Industry add-on applications.....	18
CPQ Enterprise Configurator.....	18
CPQ Enterprise Quoting.....	19

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Advanced Forecasting.....	20
SytePlan.....	22
Factory Track.....	22
Service Mobile.....	24
Localization Services.....	25
Horizontal add-on applications.....	26
CRM.....	26
Document Capture.....	27
<b>Chapter 4: Additional add-on applications.....</b>	<b>29</b>
EAM.....	29
Using EAM with SyteLine.....	29
Expense Management.....	30
Using Expense Management with SyteLine.....	31
Global Human Resources and Talent Management.....	32
Using Global HR with SyteLine.....	33
Rhythm for Commerce.....	33
Using Rhythm for Commerce with SyteLine.....	34
<b>Chapter 5: Extending the solution.....</b>	<b>35</b>
Extensibility tool overview.....	36
Personalizing.....	36
Tailoring.....	37
Extending.....	38
Extending analytics.....	38
Embedding.....	38
Integrating external applications.....	38

## About this guide

This document provides conceptual information for Infor SyteLine, including a summary of the applications in this solution and a description of the common add-on applications. It also includes information about configuration, personalization, and extension options.

## Related documents

To access related documentation, go to [docs.infor.com](https://docs.infor.com) and select the link for your solution.

## Contacting Infor

If you have questions about Infor products, go to Infor Concierge at <https://conciierge.infor.com/> and create a support incident.

The latest documentation is available from [docs.infor.com](https://docs.infor.com) or from the Infor Support Portal. To access documentation on the Infor Support Portal, select **Search > Browse Documentation**. We recommend that you check this portal periodically for updated documentation.

If you have comments about Infor documentation, contact [documentation@infor.com](mailto:documentation@infor.com).

# Chapter 1: Overview

This multi-tenant Infor CloudSuite Industrial solution is available through a subscription-based (SaaS) delivery model from Amazon Web Services (AWS). It includes core capabilities as well as optional or recommended add-on capabilities, all delivered in the cloud

This diagram shows the products that are available for this solution.

**CORE ANALYTICS**

- Birst
- SyteLine Analytics



**CORE APPLICATIONS**

- SyteLine
- APS
- Payroll Interface
- Quality Service
- Process Industry Pack
- Molding Industry Pack
- Automotive Industry Pack
- Printing & Packaging Industry Pack
- Implementation Accelerator



**INDUSTRY ADD-ONS**

- CPQ Enterprise Configurator
- CPQ Enterprise Quoting
- Forecasting
- SytePlan
- Factory Track
- Service Mobile
- Localization Services

**HORIZONTAL ADD-ONS**

- CRM CE

**ADDITIONAL ADD-ONS**

- EAM
- Expense Management
- Global HR and Talent Management
- Rhythm for Commerce

**CORE INFOR OS**

- Ming.ie
- Homepages
- ION
- Data Lake
- Document Management
- Mongoose



**HORIZONTAL ADD-ONS**

- Document Capture

## Chapter 2: Core solution

The core solution includes these applications that are used by companies in your industry.

### Applications

These core business capabilities are always included in this solution.

### SyteLine

Infor SyteLine provides comprehensive features that address your business and operational challenges. Workflows for these manufacturing methods can be tailored to your exact needs:

- Engineer-to-order (ETO)
- Make/configure-to-order (MTO/CTO)
- Make-to-stock (MTS)
- Repetitive
- Service management

SyteLine offers a highly flexible architecture with user-friendly navigation and forms, allowing companies to easily capture, track, and access vast amounts of valuable data. Day-to-day operational processes can be managed with speed and efficiency, including shop floor planning and scheduling. Companies can use the solution's built-in scalability to add users, products, production sites, or warehouses to adapt to changing business needs.

SyteLine is built and deployed on the Mongoose Framework, which allows you to extend and adapt the application without compromising the upgrade path. Extending forms, adding your own forms, extending the database schema and creating your own tables, extending IDOs (business logic objects) and creating your own IDOs are scenarios that are supported. This helps to significantly lower the total cost of ownership, since you can adapt the system to your business rather than adapting your business to the system.

## APS

APS is a powerful advanced planning solution that synchronizes the use of work centers, inventory, resources, and supply with customer orders.

The APS solution is designed specifically for manufacturing requirements—the need for processes to flow smoothly and without mistakes, unnecessary steps, wasted resources, or waiting downstream because upstream activities are late. APS provides seamless advanced planning capabilities, increasing your on-time performance and throughput while reducing inventory and operating costs.

## Using APS with SyteLine

APS offers these capabilities with SyteLine:

- Greater visibility in planning. You get a continuously visible plan for each order, so that every order is aware of the jobs and POs it needs, and every supply is aware of the demand it supports. You also gain new insight into your inventory and your resources (machines, operators, work centers, cell, and facility utilizations).
- “What-if” capabilities that let users determine the impact of decisions. For example, you can insert a high priority order into your current production plan, add overtime hours, or outsource specific components. The system instantly determines which customer orders will be affected and how delivery timeframes will change.
- Ability to freeze a schedule, or freeze a schedule with offset
- Demand predictions for jobs that are configured through CPQ
- Automatic enforcement of Get ATP (Available to Promise) or CTP (Capable to Promise)

## Service

A streamlined service process helps you deliver error-free responses to customer inquiries and quick completion of work orders. The Service module lets you schedule and dispatch technicians efficiently, provide them with access to accurate historical data, and make sure they have the appropriate parts and tools on hand.

Service is the ideal solution for companies that use work orders in any capacity within their business or want to manage extended warranties and sell contracts. This service management solution meets the specific needs of companies that manufacture, install, or service complex products.

## Using Service with SyteLine

The Service module with SyteLine offers these capabilities:

- Contact center: Call center employees can access detailed data from SyteLine about customers or items, for fast response to inquiries and work order creation.
- Labor and expense management: The Service module can be configured to track time and attendance of internal and sub-contracted resources, using SyteLine data. Company paid or employee paid purchases are reviewed and run through an approval process.



- **Item stock:** Visibility to truck stock optimization for technicians in the field plays a big role in optimizing and improving efficiency, increasing resolution rates and minimizing the cost of non-essential trips back to the warehouse. This stock can be tied to SyteLine item/warehouse data.
- **Preventative maintenance:** Employees can schedule routine maintenance for internal assets or customer owned assets in order to prevent unexpected downtimes, extend the lifecycle of equipment, and maximize warranty cost savings. This can be tied to SyteLine fixed asset data.
- **Analytics:** Integrated data, total visibility, and accurate tracking make it easy to analyze data down to the detail level. Flexible reporting aids in decision making, planning, and providing engineering with valuable information needed to adapt product or part designs.

## Quality

The Quality module integrates best-in-class quality control processes into the ERP functions you already use to run your manufacturing operation. It supports quality activities related to receiving, manufacturing, shipping, and returns.

Quality includes support for quality incidents, change management, responses to audit findings, machine and maintenance issues, safety, training, and opportunities for continuous improvements. With Quality, you can make specific reviews mandatory and require that those reviews get addressed as a precondition to closing a change-management report.

## Using Quality with SyteLine

The Quality module with SyteLine offers these capabilities:

- **Supplier management:** Beginning with a review of the supplier facilities and an approval process, the Quality module helps track vendor communications and quality control (QC) status. The receiving process of this module includes material handling, safety alerts, printing tags, assigning unique tracking numbers, and putting material in a QC holding area pending disposition.

QC inspects and assigns the material to inventory for production or tracks non-conforming material to its final disposition. It also provides integrated Vendor RMA support, including links with accounting. The Quality module automatically calculates vendor product quality and delivery performance to help you build strong supplier relationships.

- **Tracking job quality:** Tracking quality requirements during production often becomes a chore, what with the need to record the disposition of materials at multiple inspection points, track sign-offs, capture test results, record defects, and track items requiring rework or repair. The Quality module streamlines your entire process.

Many situations require you to track and inspect manufactured items piece-by-piece, according to serial number or tag number. The Quality module supports all SyteLine production methods—jobs, production schedules, and just-in-time (JIT). It also allows you to enter all details while in a job, including disposition, non-conformance tracking, cost of quality, test results, defects, and failures.

In addition, the Quality module reports the cost of scrap including labor, material, and overhead. You can identify defective raw material at the point of use rather than at receipt, which helps you report the issue promptly. When you mark items as defective during manufacturing, Quality lets you track each nonconforming item and capture the associated costs of quality. In addition, when

a job requires you to send material outside for processing, Quality prints paperwork to attach to the product when it leaves your facility and when it returns again.

- Meeting customer requirements: Customers may require you to ship paperwork with each product to confirm that you have designed, manufactured, or inspected the product to meet regulatory or customer requirements. The Quality module improves your work process by identifying which items require such confirmation and ensuring that these items are routed through QC prior to shipping. You can record inspection results, print necessary paperwork and then tag the product as accepted and ready to ship.

If your customers return the product, Quality works with the SyteLine RMA module to direct that product to QC for receipt, inspection, disposition, and non-conformance tracking. The Customer Complaint Reporting (CCR) function helps you respond to feedback from your customers, assign responsibility, track your internal review and corrective action, and measure customer satisfaction.

## Payroll Interface

Managing your most critical asset, people, is typically the biggest expense for a company and its most important investment. To maximize the return on this investment, you might choose to integrate your ERP data with a global, comprehensive payroll system that acts as an informational bridge between operational accounting, general ledger, and finance.

With the Payroll Interface, you can easily transfer employee data updates from SyteLine to an external global payroll system. The payroll system and the Payroll Interface work together to streamline the payroll process, reducing administrative costs, improving employee satisfaction and minimizing compliance risks.

## Industry Pack Process

Industry Pack Process is used to support process manufacturing, for example, using formulas to blend materials that can then be packaged in multiple ways.

## Using Industry Pack Process with SyteLine

This industry pack, when used with SyteLine, includes lot and serial traceability, inventory location management, integrated quality management, and advanced planning and scheduling to perform these specialized manufacturing tasks:

- Create bills of material for a product batch that is then used to fill multiple container sizes.
- Take advantage of SyteLine manufacturing process flexibility to bring together independently managed material formulations and operational routings into a manufacturing specification.
- See all the SyteLine jobs that were created per the manufacturing specifications, including the formulation job and the multiple fill jobs for various packaging sizes.
- Fully trace SyteLine lots affected by a recall all the way back to the raw material vendor and forward to all the customers that received those lots.

## Industry Pack Printing & Packaging

Industry Pack Printing & Packaging provides a comprehensive ERP solution with specific functionality for printing and packaging, enabling you to streamline how you manage the entire printing and packaging lifecycle.

Through a clearer view of your entire business, you can more easily determine current efficiency, as well as opportunities for new efficiencies and organic business growth. With Industry Pack Printing & Packaging, you can perform these tasks:

- Better quote new jobs so you win the business at a profit.
- Keep your people, equipment, and material resources aligned with demand.
- Minimize inventory costs without risking shortages.
- Make sure configured orders are accurate and feasible for production.
- Adapt quickly to new threats and new opportunities.

## Using Industry Pack Printing & Packaging with SyteLine

Industry Pack Printing & Packaging with SyteLine offers these capabilities:

- You can estimate the price of a print job based on factors such as weight of the paper, dimensions, number of sections, etc. All of these factors can be included when you use the Printing Estimating Workbench form to build a SyteLine routing and bill of material for an estimate print job.
- You can create custom formulas and tailor the estimate job for each customer. When the estimate job is ready, you can copy it to a job where it is scheduled for production.
- After you create an estimate job for the quotation, you can display the cost roll-up using the formula calculations. You can then compare this price to the original print quote estimate.
- You can analyze material usage and estimate the quantity of materials used for printing, such as ink and oil, based on the Print Quote Price calculations
- You can quickly calculate the paper consumed by operations on a printing estimate job.
- You can determine operation setup time and run time for your resources, based on the Print Quote requirements. These values are used on the Estimate Job Operations form.
- You can process batch productions by creating job material transactions, and you can generate unposted job transactions.

## Industry Pack Molding

With the comprehensive manufacturing capabilities of Industry Pack Molding, you can better manage production and reduce resource conflicts.

## Using Industry Pack Molding with SyteLine

Industry Pack Molding with SyteLine offers these capabilities:

- Tooling: You can define, manage, and maintain individual tools or groups of tools to achieve optimal availability and productivity. Tools can include carriers, fixtures, cavities, and other tooling items.
- Co-jobs: When a group of jobs share at least one operation, you can set up co-jobs to eliminate resource conflicts so that you get the best throughput for all jobs.
- Estimating using co-jobs: Creating co-jobs that share tooling can ensure that costing information used for quoting a job is more accurate.
- Alternate BOMs: With alternate BOMs, you can designate alternate resources, materials, or labor to achieve the best overall production plan.

## Industry Pack Automotive

Industry Pack Automotive includes the tools you need to streamline how you manage your contracts, billing, and more.

With functions that are specifically tailored to the unique requirements of the automotive industry, you can perform these tasks:

- Retroactive billing, which you can use to manage previously filled invoices and orders that are considered complete but need to be invoiced in relation to a new pricing agreement. You can also take action on late shipments where invoice adjustments are made on invoiced products.
- Document the risk and the resulting outcome of FMEA to help ensure that a procedure implemented to reduce risk is not removed due to undue circumstance.
- Maintain and coordinate compliance with the unique requirements of quality programs, including new product development, internal/external audits, internal/external certification, APQP plans, and production part approval processes (PPAPs).
- Manage containers in accordance with automotive industry requirements by defining physical dimension and capacity and recording certain codes and markings necessary for compliance with specific provisions of ISO 6346.

## Using Industry Pack Automotive with SyteLine

Industry Pack Automotive with SyteLine offers these capabilities:

- Matching delivery notices to invoices: You can match a payment to an invoice during SyteLine accounts receivable (AR) payment distribution. This is helpful for situations when a customer does not reference their invoice when making a payment.
- Contracts: Use the customer and vendor master contract forms to create and manage a contractual agreement regarding SyteLine customer and vendor order lines and releases.
- Time of day stamps: Projected date fields on customer order lines and purchase order lines can include a time of day stamp, for use in highly repetitive manufacturing with just-in-time models that require multiple shipments a day for a particular part.
- Overall Equipment Effectiveness (OEE): This key metric defines the efficiency of a piece of equipment and can be viewed on the SyteLine Resources form.

## Implementation Accelerator

The Implementation Accelerator is a preconfigured solution targeted at small- to medium-sized industrial companies. This Implementation Accelerator solution provides a foundation that covers a company's core needs and processes. It also is the basis for future growth and improvements.

Using this accelerator reduces and streamlines the steps required to implement this solution. It helps you to save time and money, and takes the guesswork out of deploying SyteLine. The result is an affordable solution that can meet today's requirements and potential for tomorrow. It also provides the possibility for a faster ROI and time-to-benefit that is measured in weeks instead of months or years.

The Implementation Accelerator with SyteLine includes these business transactions:

- Quote to Cash
- Demand to Build
- Hire to Retire
- Lead to Order
- Inspect to Correct
- Financial Plan to Report
- Procure to Pay
- Service to Cash
- Plan to Inventory
- Service Contract to Cash
- Design to Release
- Project to Profit

In addition, the Application Configuration set is provided. This is a collection of spreadsheets where you can enter legacy master data that can then be imported into SyteLine.

## Analytics

These core analytics are always included for this solution.

## Birst

Infor Birst is a cloud-based business intelligence platform. Organizations can achieve a new level of insight and decision making by connecting centralized and decentralized teams and applications. As part of this solution, Infor provides business users a business intelligence experience with these capabilities and features powered by Birst:

- Coordination with Infor OS and Data Lake to present data insights in the context of user and business process flows
- Interactive and responsive dashboards with drag-and-drop creation, drill-anywhere, and filtering capabilities

- A guided ad hoc experience that allows users to quickly filter, sort, and include multiple measure and attribute selections
- Powerful operational reporting for advanced report creation on core transactional tables
- Anywhere analytics on mobile

## SyteLine Analytics for Birst

SyteLine Analytics captures data, using Birst tools, to help measure activities, monitor trends, and evaluate processes.

You can use this preconfigured content, tailored for SyteLine, to make better business decisions and business process improvements. Dashboards provide a self-service, convenient interface for business users of all types. You can use dashboards to see important trends in your processes. You can see transactions from a summary level and break it into details.

The preconfigured content does not actually include any Birst components but is a Birst space with content that any Birst user with SyteLine access can leverage.

Each of the Analytics domains provides rich data models containing many metrics and attributes, accessible via the Birst subject areas. Analytics also provides example dashboards, reports and KPIs derived from the rich subject area of each domain, to either be used directly or copied, depending on customers' specific requirements. These are the available domains:

- Finance includes analysis of ledger, financial income, A/R, A/P and bank accounts.
- Sales includes analysis of sales and product contribution, sales forecasts, bookings, and sales leads.

## Infor OS

Infor OS is a technology platform that supports fully integrated, industry-specific solution suites with mobile-first design, a consumer-inspired user experience, and science-driven analytics.

It leverages the convergence of information, analytics, cloud computing, mobility, and social business.

This platform includes these products:

- Infor Ming.le
- ION
- ION Grid
- Document Management
- Data Lake

## Infor Ming.le

Infor Ming.le is a web-based application framework that provides a common user interface for Infor applications, third-party applications, and in-house developed applications integrated through ION. It is a centralized platform for social collaboration, business process improvement, and contextual analytics.

Infor Ming.le provides drill-back capability so that users can navigate across the applications to track transactions, the transfer of data, and report updates. Additionally, Infor Ming.le provides an infrastructure for sharing content with context applications.

Infor Ming.le uses homepages, configurable by users to organize information and activities at a high level to focus on critical areas of concern.

Within Infor Ming.le, you can use ION API, a managed API layer across all applicable Infor and non-Infor APIs, allowing existing APIs to be presented in a standardized, managed, and controllable way.

Infor Ming.le uses Infor Federation Services for centralized authentication.

Infor Ming.le is available as a mobile app, supported by iOS, Android™, and Windows Mobile operating systems.

## ION

ION is a business process management platform that integrates applications, people, and business processes.

The ION platform converts data into the common language of standardized XML to enable disparate business systems such as Infor products, third-party applications, and in-house developed applications to share information.

ION simplifies the connectivity and data sharing across the connected applications. It enables users to configure a routed infrastructure, set up workflows, and design and activate business event monitors and manage tasks and alerts.

## Document Management

Document Management is an integration platform that enables you to take advantage of document solutions already in use within your organization.

Document Management is used to integrate your documents with your business processes and to provide a central repository for them. Soft links are used, based on document metadata, to provide integration between your documents and your ERP solution. You can view a document from within the context of your application or click a document link to retrieve the document from the central repository.

Document Management supports the entire lifecycle of your business documents, from input through storage, retrieval, and sharing.

## Data Lake

Data Lake is a data repository that provides high-volume, scalable object storage for real-time data from across your enterprise systems, disparate applications, people, and Internet of Things infrastructure.

Using ION to connect your data sources, Infor applications move content into Data Lake and use other consuming applications to query and navigate for content related to specific business cases.

## Using Infor OS with SyteLine

SyteLine provides solution-specific capabilities for Infor OS.

### SyteLine homepages and widgets

SyteLine provides these predefined homepages:

- Controller
- Customer Service
- Executive
- Inventory Control
- Production Planner
- Project Manager
- Purchasing
- Quality Control
- Salesperson and Sales Manager
- System Administrator

Each homepage contains preconfigured widgets with metrics and KPIs appropriate for each role. Some widgets provide drillback to a specific SyteLine form for details.

You can also create your own homepages in Infor OS and add multiple instances of the "CloudSuiteIndustrial" widget. You can then configure each instance of the widget to display different information. For example, on your custom homepage, you can add widgets to display dashboard information such as Vendor Lookup, PO Requisition Line by Status, and Item Availability.

### Document Management and Related Documents

SyteLine includes IDM workflows that can send documents such as purchase orders and customer orders to the Document Management app for storage. Then, when users view a vendor or customer record in SyteLine, links to the appropriate documents are shown in the Related Documents context app.

Users can also manually add and tag documents in the Related Documents context app so that they are associated with the currently displayed record in SyteLine. Then whenever that record is displayed, links to those documents are shown.

### ION

Data flows are preconfigured in ION Desk between SyteLine and other provisioned applications, so the appropriate data can automatically be sent between the applications when the flows are activated.

### User Management roles

SyteLine roles, also known as groups, are already included in the User Management area, so you can add users in Infor OS and assign the appropriate SyteLine roles there.



## Data Lake

SyteLine sends master and transactional data, as well as table schemas, to the Data Lake. The data can then be consumed by other applications such as Birst.

You can see the SyteLine schema in the Data Lake. However, not all of the data from SyteLine is available in the Data Lake. Only the dataset (list of tables) that is defined in the DATALAKE replication category in SyteLine is available for use through the Data Lake by other applications. This list of tables in this replication category is predefined by Infor.

The dataset is initially populated into the Data Lake during configuration. Later, when users update data on a SyteLine form that has an underlying table included in the replication category, the data is replicated to the Data Lake. The data is then available for use by applications that access the Data Lake.

## Mongoose

Mongoose is an innovative technology platform that lets you easily design and deploy applications. You can also use Mongoose to enhance and extend your core enterprise solution.

SyteLine is built on the Mongoose framework, so it can take full advantage of all the extensibility features, DataView reporting tools, the Application Event System, and many other special features that Mongoose provides.

## Chapter 3: Common add-on applications

To extend your solution with more advanced capabilities, you can include these optional applications. These applications might incur usage-based pricing.

### Industry add-on applications

Industry add-ons are additional applications that are frequently requested by customers in your industry and can deliver significant value.

### CPQ Enterprise Configurator

CPQ Enterprise Configurator enables the handling of configured products or services, and supports most types of user or product.

CPQ Enterprise Configurator includes these features:

- A product, sales, pricing, and process configurator that integrates with your web, mobile, enterprise, desktop, and laptop systems. You can capture and share all the knowledge about your customizable products on any device.
- Product modeling, which makes selection and configuration of complex products intuitive and error-free. The rules, constraints, and associated data in product models are processed based on inputs from the user interface or other applications.
- Deployment of the configurator for a specific function or across all available applications and computing platforms.
- Selection, configuration, and pricing of products by your sales people and customers, while ensuring that only valid combinations of features, options, and dimensions are created, quoted, and ordered.

### Using CPQ Enterprise Configurator with SyteLine

Customers or dealers can use the guided technology in the CPQ Enterprise Configurator to generate information to use for an order. The order is sent to SyteLine, where it can be fulfilled through standard processing.

CPQ Enterprise Configurator with SyteLine offers these capabilities:

- Decision tree using configurable product components:  
CPQ's wizard-like interface walks users through a guided selection of components of a SyteLine configurable product. Guided selection helps customers customize their purchase, yet ensures that they order only valid combinations of features, options, dimensions, color, or price.
- Models with rulesets:  
The controls and options for the decision tree are predefined in behind-the-scenes product models that have specific rulesets. These rulesets control the display of information and the behavior of data, and provide valid combinations of features, options, dimensions, color, or price. The rulesets are developed to interact with SyteLine configurable products.
- Access from within the ERP:  
Your customer service representatives (CSRs) or inside-sales personnel can access the Configurator from within SyteLine order entry forms. During order entry, when the CSR enters a configurable item number into the **Item** field, the Configurator window opens. Your CSR or inside-sale personnel uses the Configurator window to select from the product options available for the configurable item. When the CSR completes the configuration, SyteLine retrieves, validates, and processes the returned data. If valid product data is retrieved, the order line is generated. Your CSR can then complete the order using their standard workflow.
- Order maintenance:  
After the order is placed in SyteLine, the order can be maintained and processed as a regular customer order.

## CPQ Enterprise Quoting

CPQ Enterprise Quoting guides salespeople to available items and configurable product features, options, and dimensions, while ensuring that configurations represent valid offerings.

Product visualization helps sales reps quickly confirm their products, features, and option selections during configuration.

Dynamic pricing instantly produces a configuration-specific list price, dealer cost, and quoted selling price.

Your company has a single point of control for sharing product, customer, and order information with all back-office manufacturing and business systems, including collaborative demand and supply chain systems. As a result, customers can be sure that everyone in the value chain is working with the most up-to-date information.

The solution is easy to use, and customers can quickly tailor the quoting and selling experience to match their market and unique needs. Detailed reporting and analytics provide sales managers with increased visibility into the performance of their direct and dealer sales organizations.

## Using CPQ Enterprise Quoting with SyteLine

Enterprise Quoting with SyteLine offers these capabilities:

- Orders created from quotes in Enterprise Quoting:  
Dealers use Enterprise Quoting to create a quote for one or more items with a potential customer. When an item is added to the quote, a ruleset updates the list price in Enterprise Quoting with the sales price from SyteLine. The price does not include tax or add-ons.  
When the customer approves the quote, the dealer converts the quote to an order. A sales order is then automatically created in SyteLine with all of the supporting detail and bill of materials. The order can be maintained and processed as a regular order. After the order is created in SyteLine, all further maintenance of the order must occur in SyteLine.  
Dealers are limited to a single SyteLine warehouse.
- Orders created in SyteLine:  
When a sales order is created in SyteLine, a document ID in Enterprise Quoting is linked to the sales order in SyteLine. This Enterprise Quoting number can be used, for example, when a customer service representative (CSR) is helping a customer who calls with a question about an Enterprise Quoting order number. The CSR searches for that Enterprise Quoting document ID number and can access the linked sales order inquiry to see details about the SyteLine sales order and associated Enterprise Quoting number.  
Change orders are not supported when Enterprise Quoting is used with SyteLine.
- Quotes for configured items:  
Dealers can access the web-based configurator from Enterprise Quoting and create a quote for configured items. The configured item is used to create a SyteLine sales order with the supporting bill of materials from the configuration. The sales order can be maintained like any other order originating from CPQ configurator.
- Linked purchase orders:  
If a customer specifies a customer purchase order (PO) number, the dealer can enter that number in the Enterprise Quoting interface. That customer PO number is mapped to the SyteLine sales order.

## Advanced Forecasting

Advanced Forecasting, a third-party application, maintains an efficient operation and healthy bottom line by implementing an automated and organized approach to forecasting. This approach ensures that you can determine that the right amounts of raw materials and components are at the right place and at the right time, in order to best meet customer demand. Forecasting integrates with SyteLine to help you quickly calculate more accurate forecasts and optimal safety-stock levels.

Forecasting is a comprehensive set of tools that calculates and manages the demand forecasts that drive material planning using statistical models and collaborative processes. A variety of analysis and monitoring tools can help you determine product and market trends and managing inventory levels.

Multiple statistical models are available to use in projecting demand including Moving Average, Horizontal (Exponential Smoothing), Lumpy, Trend, Seasonal, Trend Seasonal and Holt Winters.

### Using Forecasting with SytePlan for sales and operations planning

Forecasting can be a component of a sales and operations planning (S&OP) process to set goals and manage attainment of those goals, aligning company activities to balance supply and demand. The optional SytePlan third-party application can work with the Forecasting application to create annual sales/operations plans, manage supply chains, control inventory, and manage backlog and on-time performance. After a forecasting process has been implemented with the Forecasting application, the process can be expanded into a complete S&OP process with the SytePlan application.

## Using Advanced Forecasting with SyteLine

Use Forecasting with SyteLine to automate the calculation of forecasts and other inventory drivers such as safety stock, and alert users when actual demand varies from the plan. Forecasting automates these business processes, using data from SyteLine:

- **Collecting data:** Collect historical sales of products or usage of components in both units and dollars.
- **Calculating forecasts:** Use historical demand and various algorithms with what-if analysis. Forecasts can be generated collaboratively with multiple data points like customer input, salesperson input, manager input, etc. The integrated solution also supports combined forecasting methods, for example, when part of demand is forecast by statistics and part by imported customer data. Calculated forecasts can be adjusted with overrides at the item level or multipliers at the item or group level before being posted to the SyteLine MRP/APS planning system.

Forecasting calculates optimum safety stock levels, reorder points, and order minimums and updates the MRP/APS planning system. It automatically updates the planning system with new forecasts, including any adjustments.

Forecasting allows the planning system to consume forecasts when customer orders are entered, or will take over the consumption process to allow for usage-based consumption or planning BOM consumption. This allows for either sellable item or components to be forecasted, and the consumption is automatic.

Forecasting supports the use of planning bills of material (PBOMs) including consumption algorithms to eliminate the manual process of adjusting planning BOM forecasts for actual sales.

You can calculate forecasts at the warehouse or customer level.

- **Analyzing data:** Analyze forecasts, sales, bookings, or usage of materials by unit and dollar volume and compare forecasts to historical trends and to actual demand. Information is presented graphically by groupings, including product, family, commodity, planner, and user-defined.

Forecasting keeps a history of forecasts and tracks forecasting variances by item.

Forecasting supports both fiscal and calendar year forecasting and reporting.

- **Adapting the forecast:** Adjust the forecast for specific market factors such as promotions, competitive situations, and new opportunities. These adjustments can be made at the various group levels or at the item level.
- **Calculating optimum inventory levels:** Calculate optimum safety stock, order size, and re-order points, factoring in average usage, variability, lead time, and desired service level. .
- **Performing top-down forecasting:** For configure-to-order products, use planning bills to calculate or specify a single forecast for a group of items and then consume that forecast when members of the group are sold. For common components but with unlimited end-item possibilities, the solution

enables customers to forecast the components, rather than the end items, and consume the forecast when the components are used.

## SytePlan

The collection of workbenches, queries, graphs, and reports in SytePlan can streamline your sales and operations planning process. It also makes planning an integral part of SyteLine.

SytePlan, a third-party product, enhances your ability to perform these tasks:

- Develop a top-down plan for sales and margin in dollars and units, by product group, customer type, and salesperson for single or multiple locations.
- Integrate your multi-dimensional sales plan with your material planning and demand forecasting process.
- Compare plans to forecasts, shipments, backlog, or WIP, and identify supply issues.
- Project sales and inventory through month-end.
- Analyze rough-cut capacity needs, on-time performance, and inventory turns.
- Track changes in your forecast over time and compare that to actual sales.
- Analyze margin by customer, salesperson, product, or territory.
- Create workforce, headcount, and labor force plans.
- Organize and assign the tasks required to implement your S&OP process.

## Using SytePlan with SyteLine

SytePlan with SyteLine offers these capabilities:

- SyteLine tells your company what jobs and POs are needed to fill demand. Using this information, SytePlan tells your company whether you will make your revenue and inventory plans, why you have failed to make them in the past, and how you can make them in the future. SytePlan provides a big-picture perspective of dollars and units of various product groupings and lets you drill down to identify root causes and corrective actions.
- SytePlan provides a variety of tools that are integrated with SyteLine data to support the S&OP process. The tools are broken down into the phases of sales and operations planning.

## Factory Track

Factory Track is a comprehensive production automation solution designed specifically for the manufacturing industry.

Manufacturers can use Factory Track to manage inventory, track labor, and automate time and attendance operations. The solution is built on Mongoose, so you can easily enhance and extend its features. Factory Track includes these modules:

- The Shop Floor module is a work center automation solution that provides paperless manufacturing capabilities. Shop Floor delivers a kiosk-based solution that can be accessed by multiple production floor operators to track labor, report job operations, and track work-in-progress and finished goods.
- The Warehouse Mobility module delivers a real-time inventory management solution with barcode support for ease of use. Using Warehouse Mobility, manufacturers can automate various inventory operations, such as receiving, material movement, cycle counting, and issuing of material.
- The Time Track module is a comprehensive time and attendance application. Because nearly every manufacturer has specific attendance and labor rules, Time Track provides a configurable solution that allows organizations to set up rules concerning attendance and labor, such as shift duration, labor management, absence management, and timesheet tracking.

## Using Factory Track with SyteLine

By providing immediate time and attendance information with labor reporting, work center support, and inventory management to SyteLine, Factory Track eliminates the lag that comes from filling out paper forms, reading printouts, and entering data into a database.

Factory Track with SyteLine offers these capabilities.

### Inventory and production management

Factory Track modules retrieve data from SyteLine as needed and update SyteLine in real-time to keep track of material usage of material or to record job progress:

- Operators can retrieve drawings or notes for a specific item, operation, or job. They can also request replenishment of material via Kanban. For work centers producing Kanbans, production can be recorded while filling Kanban requests. For repetitive environments, production schedule reporting capabilities are also available.
- Using an attached barcode scanner, operators can scan items, lots, serial numbers, and other production data as needed for transaction and inventory purposes. The system can be configured to send output to a barcode printing program for most transactions. Lost or ruined labels can easily be reprinted with the reprint transaction. Factory Track has a standard integration to the BarTender third-party application.

These devices can link shop employees to SyteLine in real time, allowing them to act on current information and priorities without the need for paper printouts. This also provides an up-to-date status in the ERP for many material activities, such as picking or shipping customer orders, goods received at the dock, and floor replenishment.

- Factory Track can record pieces completed and scrapped during jobs, and pass that information to SyteLine.
- Device screens can be designed to fit the intended task and concentrate on specific shop floor needs, so that the full ERP forms are not needed.

### Tracking time and attendance and labor hours per operation

In Factory Track, labor reporting from the shop floor is integrated with SyteLine HR and job data:

- In the work centers, touch-screen devices display web pages where users can start or stop labor and machine transactions.

- An operator can work on several jobs simultaneously using the work set feature. A team of operators can work on a single job or multiple jobs using the teams feature.
- Machine usage can either be automatically integrated with labor or manually recorded as a standalone function.
- With the Factory Track time and attendance and labor reporting features, employees can clock in, time their daily activities, record lunches and breaks, and clock out. This data is available for supervisor review and approval. Commonly requested features such as vacation and holiday handling, excused and unexcused absence processing, and overtime determination rules, are included. The data can be wholly or partially integrated back to SyteLine to record actual hours per operation. An extract of the data can then be transmitted to a payroll system.
- Different rules can be applied for different circumstances, or different modes applied to different employee groups. Rather than using a clock-in and clock-out scheme, some employees might report their time using a simple time sheet mode, either to general tasks or to activities defined in SyteLine; for example, engineers working on specific tasks or projects.

### Tracking exceptions

Factory Track, when used with SyteLine, can also operate as an exception system:

- The system can be configured to correct minor discrepancies and to alert supervisors to unexpected occurrences.
- Supervisors are visually cued to correct, accept, or report problems when established tolerances are exceeded.

## Service Mobile

The online mobile service includes forms designed to be run by service technicians on a mobile device that is connected to the back office using the web client. Android and iOS devices are supported.

Field technicians have immediate access to information concerning unit history, appointment details, and repair instructions. Service Mobile minimizes the time spent on service order resolution and billing processes, improving overall operational efficiencies throughout the service delivery life cycle.

Service Mobile acts as a delivery mechanism especially designed for mobile field technicians who require access to centrally stored customer, service order, scheduling, and resolution data.

## Using Service Mobile with SyteLine

Service Mobile users can view some SyteLine information from mobile devices:

- Dispatched appointments:

Service Mobile users can view information for all appointments assigned to them. Users can select a service order appointment and view header and line detail. They can view and add service order operations as well as material, labor and miscellaneous transactions that use SyteLine data. They can view a summary of planned work and obtain a signature.

If the appointment reference is an incident, users can add reason or resolution notes.



- **Call center incidents:**  
Service Mobile users can view information for all incidents assigned to them, grouped by day. Users can select an incident, add tasks performed against the incident, and provide reason or resolution notes for the incident.
- **Assigned service orders:**  
Service Mobile users can view information for all service orders assigned to them, grouped by day. Estimate service orders are included in the overall total service order count for the user. Users can add material, labor or miscellaneous transactions (using SyteLine data) to the service order, as well as add service order lines and operations. They can view a summary of planned work and obtain a signature from the customer.
- **Credit cards:**  
If applicable, technicians can use the Credit Card Interface to receive credit card payment from the customer.

## Localization Services

Localization Services work with Infor OS to extend the footprint of the core ERP. A global localization platform is available that is updated in response to changes in countries' legal or cultural requirements.

These types of proprietary formats are addressed:

- Electronic submissions, which are processed in Localization Services Platform (LSP)
- Electronic messages (GEMS), which are processed in ION

## Using Localization Services with SyteLine

Localization Services with SyteLine offers these capabilities.

### LSP

LSP features help customers meet the local regulatory, statutory, and cultural requirements of a country.

LSP uses ERP data and stored business rules to create submissions. Depending on the type of function, the data can be automatically transformed to proprietary formats or manually prepared for reporting within the service. With manual preparation, users can confirm what is sent to the external agency prior to submission. The submission is then tracked and logged for audit purposes, with responses returned to the ERP as required.

LSP can produce these types of files, using SyteLine data:

- e-Auditing provides a set of electronic submissions that allow auditing information to be collated, checked, and sent to the requesting government or accounting organization.
- e-Invoicing provides a set of electronic submissions that are used to create electronic sales invoices that can be sent directly to customers.

## GEMS

GEMS is a black box solution within ION that automatically transforms SyteLine data into a proprietary message. LSP is not used.

GEMS can produce these file types for use with SyteLine:

- Banking includes a set of electronic messages that enables supplier payments and direct debits to be created for banks and other financial institutions, such as clearing houses, according to the standard of an organization, government, or financial institution.
- Trade statistics provides a set of electronic messages for regulatory reporting of commerce and goods movements across country borders, such as Intrastat for Europe.
- Supplier invoices
- Tax reports

## Horizontal add-on applications

Horizontal add-ons are applications that deliver additional value across industries.

## CRM

CRM delivers a complete view of customers, contacts, transactions, and products by integrating disparate systems and data sources into a single view. CRM is the hub to manage and track customer interactions across teams.

CRM equips teams with the information needed to provide a consistent customer experience at any point during the customer journey:

- Sales managers use customer experience data to teach sales staff how to be better at building relationships. Customer history data can also be used to predict forecasts and pipeline.
- Sales representatives view complete information about customer interactions across all departments to forge closer customer relationships and gain valuable insights into the account receivables that can affect commissions.
- Marketing managers gain insights into the products that have high tickets/returns, and avoid promoting them. They know which customers have outstanding invoices and use this information to create better campaign list segmentations.
- Service/support representatives get instant access to sales orders and return details to rapidly resolve customer calls. They can confirm ship-to, bill-to, and pay-from details to ensure proper deliveries. Use CRM and ERP data to address receivable and invoice issues.

## Using CRM with SyteLine

CRM with SyteLine offers these capabilities.

### Creating orders and returns in either application

Sales orders and quotes (estimates) can be created in either application, but SyteLine is the system of record for the transactions. This process is used:

- When you create a quote in CRM, a corresponding estimate is created in SyteLine. You can convert the quote to a sales order in CRM and then promote it, creating a corresponding customer order in SyteLine.
- When you create an estimate in SyteLine, a corresponding quote is created in CRM. When an estimate originating in SyteLine is copied to a customer order, a CRM sales order is generated for the corresponding quote.
- When you create a sales order or quote in CRM and promote it to SyteLine, then SyteLine determines the pricing based on either Customer Contract Pricing or the default pricing for a contract. SyteLine then sends the pricing to CRM for the order or quote.
- When you create a customer return (RMA) in SyteLine, a mirroring return is created in CRM.

### Creating customers and prospects in either application

Customers and prospects can be created in either application. This process is used:

- If you create or update a Customer type account in CRM, a corresponding customer number and default bank code are assigned in SyteLine. If a currency is not passed, SyteLine assigns the domestic currency to the customer. The original account record in CRM is updated. SyteLine also creates a Ship-To record for the customer and returns that information to CRM.
- If you create or update a customer in SyteLine, a corresponding customer and roles are created in CRM.
- If you update a customer Ship To address in CRM, the appropriate Customer Ship To entry is updated in SyteLine.
- In SyteLine, a prospect can be associated with estimates (quotes) but not with customer orders. So if a sales order is generated from a quote for a prospect in CRM, SyteLine first promotes the prospect to a customer, before the customer order is created. All existing SyteLine documents that were associated with the prospect are automatically associated with the newly created customer record.

### Maintaining master data

Master data is handled as noted here:

- Contacts can be created in either application.
- Billing terms, product codes, and territories are populated in SyteLine and duplicated in CRM.
- When you add a warehouse in SyteLine, location information is sent to CRM for use in bi-directional quotes and sales orders.
- When you add a salesperson in SyteLine, an ERP Persons record is created in CRM.

## Document Capture

Document Capture enables you to convert a high volume of unstructured document data from multiple formats into structured information by using machine learning and analytics.

The automated conversion of document data categorizes each document by type and captures and stores relevant data for each document, providing greater efficiency, productivity, and a more detailed analysis of your business processes within enterprise resource planning (ERP) solutions.

## Using Document Capture with SyteLine

If you use Document Management with Document Capture (using Ephesoft), you can scan any document, or upload electronic document files, and store them in Document Management along with their key metadata. For example, you can scan a SyteLine customer order that contains a signature, and based on the template setup, Ephesoft can send that document and its metadata to Document Management, where it can be matched with the original customer order.

For supplier invoices, Document Capture with SyteLine offers additional capabilities. When you run a predefined batch instance to scan or upload the supplier invoice document into Ephesoft, these processes occur automatically:

- The supplier invoice document is stored in Document Management, and information about the invoice is sent to SyteLine.
- SyteLine automatically creates a voucher associated with the original purchase order and ties it to the supplier invoice information that it received. The quantities on the vendor invoice must already have been received in SyteLine; otherwise, the invoice is rejected.
- SyteLine sends the voucher information to Document Management, where it is associated with the supplier invoice.

You can then open certain SyteLine forms, select a vendor or PO record, and use the Related Information widget to view the associated supplier invoice or voucher.

## Chapter 4: Additional add-on applications

Additional add-ons are differentiating applications that add value but generally should be considered only after initial implementation. These applications might incur usage-based pricing.

### EAM

EAM is a configurable asset management solution.

EAM enables you to improve capital asset management in ways that increase reliability, enhance predictive maintenance, ensure regulatory compliance, reduce energy usage, and support sustainability initiatives.

EAM provides you with flexibility to focus on the specialized industry requirements that can turn your company's asset management into a competitive advantage.

You can use EAM to perform these tasks:

- **Maintenance:** Schedule preventive maintenance and assign resources.
- **Uptime:** Determine where and why your capital assets might fail, and plan alternatives.
- **Reliability and risk management:** Predict equipment reliability problems to prevent them from happening.
- **Inventory and warranty:** Reduce inventory and purchasing costs, and collect on warranty-related claims.
- **Strategic planning:** Manage your assets to meet corporate performance goals.

### Using EAM with SyteLine

EAM with SyteLine offers these capabilities.

#### Handling purchase requisitions

In EAM, a user creates these types of purchase requisitions:

- Requests for MRO material replenishment are sent to SyteLine for processing.
- Requests for direct MRO material purchases, that is, materials used directly on maintenance jobs instead of MRO inventory replenishment, are sent to SyteLine for processing.

- Requests for external services needed for performing maintenance jobs are handled by EAM.

When SyteLine receives a purchase requisition from EAM, it creates a requisition tied to the original EAM requisition and acknowledges it with a response. Purchase orders are then created in SyteLine. EAM users can specify preferred suppliers for their purchase requests; however, SyteLine buyers finalize the supplier for a purchase order.

### **Handling purchase orders**

When the buyer in SyteLine generates and prints a purchase order, a message is sent to EAM. If the PO is related to a purchase request that originated from EAM, a mirroring purchase order is created in EAM.

### **Shipping and receiving**

When shipments arrive, users receive them into SyteLine against the purchase order. SyteLine publishes a message for each receiving transaction. EAM receives the relevant messages and creates corresponding receiving transactions in EAM. These receiving transactions complete the purchasing requirements initiated from EAM.

### **Maintaining master data**

SyteLine owns master data such as billing terms (payment terms), vendors and vendor bank information that are used in both applications. When shared data is added or updated in SyteLine, a message is sent to EAM.

EAM uses the vendor data to build a supplier list that is synchronized with SyteLine.

EAM manages the maintenance, repair, and operations (MRO) inventory.

Inventory is not shared between SyteLine and EAM.

The standard use of EAM with SyteLine assumes that all MRO materials are expenses after they are purchased, regardless of the type of material or whether they are stocked or non-stocked.

### **Handling financials**

SyteLine handles all financial functions such as accounts payable and general ledger entries.

## **Expense Management**

Expense Management is a flexible, easily configurable solution that provides spending control, reporting, and analysis of employee expenses.

Employee-initiated expenses can be managed through Expense Management mobile and cloud features. You can automate expense-related business processing by using social collaboration tools. With Expense Management, you can enforce policy compliance, cut administrative costs, and reduce the risk of accidental errors and intentional fraud.

When Expense Management is used with SyteLine, these Expense Management business processes are supported:

- Expense Reports (ER)
- Timesheets (TS)

## Using Expense Management with SyteLine

Expense Management with SyteLine offers these capabilities.

### Sharing information

Employees and payroll records must be defined in SyteLine. When the employee record is sent to Expense Management, the necessary user records are created there, ensuring that the names match in both systems. However, some employee data needed by Expense Management is not sent from SyteLine and so must be maintained manually or imported from another HR system. That data includes employee default currency, location, cost center, groups, approvers, and permissions.

Transactional data from SyteLine service orders, job orders, and projects is sent to Expense Management, where it is used in expense reports and timesheets.

Codes that are used in both systems must be created and maintained only in SyteLine, and are then sent to Expense Management. These codes include departments (cost centers in Expense Management), external expense types, payment types, project cost codes, and absence reason codes. Any required additional configuration of the codes is performed automatically when the codes are received in Expense Management; for example, payment types from SyteLine are always set to the reimbursement payment method in Expense Management.

### Managing the expense reimbursement process

The creation and approval of expense reports, and all post-payment recordkeeping about the reports, is handled through Expense Management. SyteLine handles the payment processing and accounting functions.

When messages that contain Expense Management expense reports are received in SyteLine, the reports can be processed either through the SyteLine Accounts Payable module or through the Payroll module. This is determined by a parameter setting.

If you choose payroll reimbursement processing, the expenses are paid through payroll payments to the employee:

- After a user creates an expense report in Expense Management, a specified activity (for example, a manager approving the report) generates a message that is sent to SyteLine. The activity that sends this message is configurable in Expense Management based on your requirements.
- When the message is received in SyteLine, if the status value in the message is set to Approved, SyteLine creates a payroll record.
- When a SyteLine user runs the Print/Post Payroll Checks utility, the expense check is printed. This process triggers a remittance advice message that is transmitted to Expense Management. Expense

Management processes the message and notifies the person who submitted the report that the check was generated.

If you choose accounts payable (AP) reimbursement processing, the expenses are paid through a vendor record that is linked to the employee record:

- Any employee ID that is expected to create expense reports must be associated with a vendor record in SyteLine.
- An expense report is approved in Expense Management and a message is sent to SyteLine.
- When the message is received in SyteLine, an A/P voucher is automatically created for the associated vendor. Each expense report line creates a voucher distribution. If a line is marked as Itemized, multiple voucher distributions are created. Lines marked as Personal, Cash Advance, or Company Credit Card are ignored. Additionally, these processes are triggered:
  - For expense report lines associated with a job order, a job material record is created or updated, and a job material transaction is posted.
  - For expense report lines associated with a project order, the voucher distribution record is populated with project number, task number, and cost code information.
  - For expense report lines associated with a service order, a service order transaction (miscellaneous) is created and posted. The line's payment type is saved as the SyteLine service order transaction's payment type.
- A SyteLine user posts the vouchers and creates payments associated with the vouchers.
- A SyteLine user posts the expense payment, which triggers a remittance advice message that is transmitted to Expense Management. Expense Management processes the message and notifies the person who submitted the report that the payment was processed.

### Creating and managing employee timesheets

The creation and approval of employee timesheets is handled in Expense Management. All rates and costs are maintained in SyteLine.

The Expense Management projects used in the timesheets are based on project and transaction type information that is defined and sent from SyteLine. The project hours from the timesheets are then incorporated into the associated SyteLine projects, job labor transactions (including indirect labor hours and absence hours), or service orders.

## Global Human Resources and Talent Management

Global Human Resources and Talent Management is often the application you use for your organization and employee system of record resource data.

Using the Global HR application, you define structure, employees, and jobs for comprehensive personnel administration.

When used with SyteLine, these Global HR modules are supported:

- Administrator (resource, skills, competencies, and credentials)
- Absence management (leave type, plan type, time off request, and leave of absence)



## Using Global HR with SyteLine

Global HR with SyteLine offers these capabilities:

- Lists of employee skill codes, credential/license codes, and absence/leave types are maintained in Global HR and passed to SyteLine for use in ERP processes. Do not use SyteLine forms to modify or delete codes that are provided by Global HR.
- Basic information about each employee such as employee ID, name and address is maintained in Global HR and passed to SyteLine for use in ERP processes.
- Time off requests and approvals are created and updated in Global HR and passed to SyteLine for use in ERP processes.

When Global HR causes an employee to be added in SyteLine, or the External HR Status for the employee is updated, a SyteLine user is notified through a workflow. That user can then update any SyteLine-specific information for the employee as needed.

## Rhythm for Commerce

Rhythm for Commerce is an engagement platform that provides the tools you need to create a customer-facing website.

Your website is tightly integrated with the products in Rhythm for Commerce and your ERP. Using APIs and web services, information that is displayed on your website is read directly from your databases. When your customer places an order, the order is sent from your website to your ERP for fulfillment in realtime.

Rhythm for Commerce contains these applications:

- **Rhythm for Commerce: Business Center:** Use this application to arrange products into catalogs, create campaigns and promotions, and manage the customers who access your website. You also use Business Center to manage search settings, such as boosting rules, to use with Elasticsearch.
- **Product Information Management:** Use this application to enrich information about the products that you sell on your website, and automatically enrich product content on your sites. You can use Product Information Management to upload digital assets such as manuals, sell sheets, and specifications. You also use this application to specify the product attributes that your customers can use to locate products.
- **Rhythm Portal:** Rhythm Portal is a website portal and a content management system. Use Rhythm Portal to create website pages, configure the Rhythm for Commerce and Rhythm Portal widgets on the pages, and manage your website's static content.
- **Elasticsearch:** Elasticsearch is the search engine of your website. When your customers search your website, Elasticsearch returns results that are based on settings that you specify in Business Center.

In addition, Document Management is used to store key business documents, such as order acknowledgments, invoices, and delivery notes. When your customers visit your website, they can download the documents that are associated with their orders.

Optionally, you can use these products with Rhythm for Commerce:

- CPQ Enterprise Configurator: Use this product to set up configurable products to sell on your website.
- CenPOS. Use this product to process credit card transactions.

## Using Rhythm for Commerce with SyteLine

Rhythm for Commerce with SyteLine provides the tools and the data that you need to create a website that your customers use to place orders.

SyteLine is the system of record for master data about customers (including shipping and billing information), items, codes, and locations. It shares this information with Rhythm for Commerce.

While customers are using the Rhythm-generated web site to place an order or view information about an order, this information is available in real-time:

- Price information when items are displayed in the product catalog and the shopping basket. The prices provided by SyteLine can be scenario-specific, meaning that prices particular to a customer (group), currency, or quantity can be supplied.
- Information on the order header level price values, including gross and net totals, discounts, and taxes/charges with textual labels or descriptions of each discount and charge.

The computation of order totals displayed in Rhythm for Commerce is based solely on rules and configurations defined in SyteLine.

- Item availability information on each warehouse, depending on the requested quantity and required date of delivery. A request can be made either on the default warehouse or on all warehouses.
- Item quantity availability information on each warehouse, depending on the requested item and warehouse.

After the customer order is completed, Rhythm for Commerce sends the sales order information to SyteLine, where it is used to create a customer order and an invoice. Invoice and shipment information are sent to Rhythm so the customer can view updates.

## Chapter 5: Extending the solution

Administrators can extend your solution by using extensibility options. You use these options to add or modify core application functionality.

Without direct access to the application database, source code, underlying system objects, or servers hosting the application, you can use extensibility options to change user interfaces, data models, business logic, reports, analytics, and integration points. These extensibility options use a shared set of computing resources and provide full upgradability, manageability, and isolation throughout the application lifecycle.

This table shows the types of extensibility options that are available for this solution:

Type	Description	Examples
Personalize	Modify the look, feel, and flow of an application.	Themes, labels, titles, navigation, accessibility, help, and branding
Tailor	Modify elements in an application.	New fields on existing user interfaces (UI), layouts, objects, functions, properties, default values
Extend	Add new application functionality, including new logic, screens, or data. Use extensibility data elements for creating reports.	New UI elements and new non-UI elements, including tables and business objects
Embed	Use the external logic, screens, or screen widgets from an external application.	Tax engines, computational libraries, maps, and widgets
Integrate	Connect to external logic and screens from an external application	Manufacturing execution systems, web sales portals, maps, and widgets

## Extensibility tool overview

SyteLine modules and applications are built on Mongoose. You use Mongoose to configure and personalize this solution.

This table provides an overview of the ways in which this solution can be extended:

Feature	Audience
Extend any portion of any screen, including adding new tabs, fields, validation logic, and enablement logic. Embed controls written in any web technology.	Customer administrator
Define actions that are triggered when a business object that an order, or item, is added, deleted, or modified.	Customer administrator
Create new relationships to other IDOs in the base product, add new calculated fields and new tables, then publish their properties on the IDO.	Customer administrator
Create completely new functionality (new tables, IDOs, screens) in the base application.	Customer administrator
Add workflow, automation, and other process-level changes without writing code.	Customer administrator
Create forms for use as standalone web pages, including for mobile devices	Customer administrator
Personalize the screens and display options	End-user

## Personalizing

These options are used to modify the look, feel, and flow of an application. Users must be granted permissions to access these features.

You can use the Mongoose framework to personalize the application in these ways:

- Enable configurations for the automotive, printing and packaging, molding and forming, and processing industries.
- Use My Folder to create a custom list of forms.
- Set the number of rows to be retrieved by a query or a list.
- Resize all forms, and decide if your user preferences are automatically saved.
- Show or hide the menu bar, diagnostics, tool bar and status bar.
- Show or hide each column, and change its sequence.
- Drag columns on workbench forms to change the sequence.

There is no impact to other tenants with regard to functionality, stability and performance. User personalizations do not impact upgrades to new application release. However, the personalizations

might be impacted by the upgrade, for example, when screens have been redesigned. There are no activities required by the Infor Cloud team to upgrade User Personalizations. All data associated with user personalizations are retained during an upgrade.

Customer administrators can use the Mongoose framework to personalize the application in these ways:

- Change the default values, layout, visibility, enabled, mandatory state, label text (including translations), colors of fields on screens at a user, group, or site level.
- Create named, reusable filters for use in common queries, and change the default filtering for screens.
- Extend the client side and server side logic of the application, typically without writing code, although you can also add code used in client and server processing.
- Add new fields, or add entire new tables, IDOs, and screens.
- Embed HTML5 controls in the screens, and embed screens you create in on-premise web pages.

There is no impact to other tenants with regard functionality, stability and performance. Customer administration personalizations does not impact upgrade to new application release. However, the personalizations might be impacted by the upgrade, for example, when screens have been redesigned. To minimize risk of conflicting customer administration personalizations, best practices have been defined by Infor Development. There are no activities required by the Infor Cloud team to upgrade customer administration personalizations. All data associated with customer administration personalizations are included in the upgrade.

## Tailoring

Tailoring options are used to add or modify elements in an application, for example, making changes to screen layouts, objects, functions, properties, and default values.

SyteLine includes these tailoring options through Mongoose:

- Define module parameters for each major module to establish defaults, or enable specific functionality. For example, in the Accounts Receivable module, you can specify a system-wide customer prefix, default surcharge factor, or default minimum finance charge.
- Meet regulatory compliance issues for each country where you have operations through the use of localizations.
- Set the workstation logon as default login.
- Select the language to use.

There is no administrative impact to other tenants, with regard to functionality, stability, and performance. Tailoring does not impact upgrading to new application releases, and can be performed through the web client or a smart client. There are no activities required by the Infor Cloud team to upgrade Configurations. Data that is associated with configurations are retained during an upgrade.

## Extending

Use the built-in Mongoose framework features to create new functionality, including screens, logic, and data.

### Extending analytics

You can use Birst tools to extend the preconfigured analytics.

## Embedding

These options are used to consume external logic, screens, or screen widgets from an external application.

## Integrating external applications

External applications are not integrated as part of the solution. These applications include other Infor applications, third-party applications, or software that you have developed.

This solution provides options for external applications to access data, update data, and execute logic in applications that are in the solution. Examples of executing logic are changing a status or inserting an order. Additional configuration is required to integrate external applications by using one of these options:

- ION
- Infor Ming.le
- Web services and other Mongoose methods

This table shows how this solution can be extended to integrate with non-Infor products.

Integration scenario	Methods
From external applications to SyteLine	Synchronous from external applications, by SOAP Webservice, REST Service, .NET Class, documented XML schema. Asynchronous from external applications, by ION or IDO Request XML over HTTP.
From SyteLine to external applications	Synchronous, by adding .Net code as an IDO extension class, and a call from SyteLine to external application web services. Asynchronous, by ION or IDO Request XML over HTTP.

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Integration scenario	Methods
User Interface	<p>Infor Ming.le provides UI-level integration with other applications hosted in Infor Ming.le.</p> <p>Any Mongoose form can be hosted in other web pages with the correct URL.</p> <p>Mongoose forms can host other web content in several ways.</p>

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