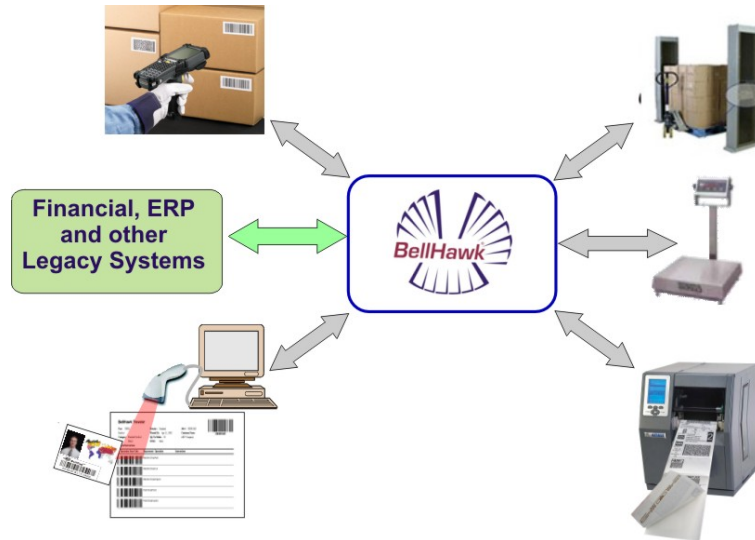




BellHawk ERP and Accounting System Integration Issues



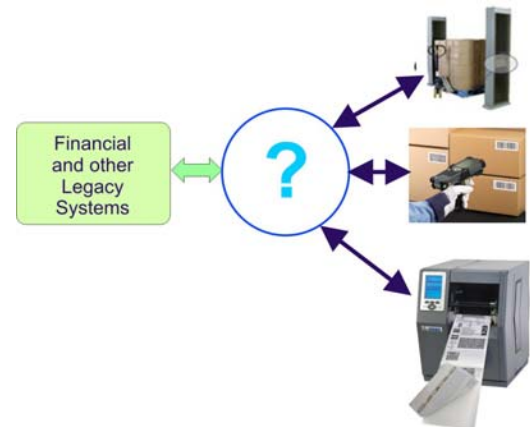
Introduction

BellHawk can be run stand-alone to collect and process inventory and work-in-process data. In this configuration BellHawk can provide detailed real-time information about the status of inventory and production operations for managers, supervisors and customer service people. It can also collect all the data needs for producing operational reports that managers need to run their operations as well as collecting traceability data for defect management.

While a stand-alone BellHawk system can provide tremendous value for many industrial organizations, its value can be enhanced by integrating BellHawk with other systems, such as front-office ERP and accounting systems. BellHawk, in many ways fills the gap between these front-office systems and the barcode and wireless mobile data collection devices used to collect inventory and work-in-process tracking data.

Most accounting and ERP systems do carry-out some operational data collection functions. This is typically as simple as tracking quantities of aggregate inventory in stock or tracking job status based on manual keyboard input.

But it is important to recognize that a substantial layer of software is required to translate between the transactional world of barcode scanning and the front-office business sales and business management processes. BellHawk fills the gap between the data collection devices and the operations management functions provided by the front-office systems.



Most accounting and ERP systems vendors want to provide a common body of code that can be sold and supported across many vertical market segments. It is typically not economical for these vendors to offer in-depth support for industrial data collection, especially with the rapid changes that are occurring in industrial barcode and wireless mobile computing devices. BellHawk fills this gap.

Standard Interfaces

We often get the request "I want to buy an inexpensive inventory and/or production tracking system that is integrated with my Podunk Release 5.4 (substitute ERP name and version as appropriate) system and where I can go visit at least a dozen sites at which this has been operating successfully for several years." Our standard reply is to wish our prospective clients good luck in achieving this goal because we know that, in most cases, it is unachievable.

There are over 300 ERP systems in regular use in the USA, with each one having a number of different versions and variants being used. Many of these ERP systems have been highly customized to meet the specific operations management needs of their users. With one or two notable and expensive exceptions, it was apparently not economically feasible for the vendors of these ERP systems to develop a full-suite of data collection software for their ERP systems; otherwise they would have already done so. It is also, in most cases, not economical for third party organizations to develop, sell and maintain such add-on products for specific ERP or accounting systems.

BellHawk System's approach for most of these ERP systems is to use a standard body of barcode inventory and work-in-process tracking data collection software and then to rapidly implement a situation-specific business process interface to each ERP or accounting system instance using its Bell-Connector™ toolset.

We recognize that this may not meet all the desires of our prospective clients because:

1. It uses a separate database for data collection and does not directly use the ERP system's database in which to deposit the data collected from the barcode and RFID devices.
2. The operations management software does not function as an integrated whole, with all the operations management screens appearing within the ERP system.

As with most things in life, there is an economic trade-off. It is certainly possible to customize an ERP system to integrate barcode data collection functions, including the device interfaces. But then it becomes very expensive and difficult to migrate those changes with each new release of the ERP system. It is certainly not economically feasible for companies such as BellHawk Systems to provide production and inventory tracking customizations for the thousands of ERP system variants out there. Hence BellHawk Systems' approach of providing inexpensive barcode tracking data capture software that is in use by many organizations and then of rapidly creating interfaces as needed.

Benefits of the BellHawk Approach

By having a separate data collection system, with its own separate database, the following advantages are gained:

1. The barcode tracking data collection system can be run on a separate server and can keep operating even when the ERP system goes down.
2. Data collected in the data collection system can be reviewed and corrected if necessary before being imported into the ERP or accounting system
3. During initial implementation, a new BellHawk barcode data collection application can be operated in parallel with existing ERP operations until everyone is fully trained. Then the data exchange between the systems can be turned on and any business process issues resolved incrementally.
4. The ability of BellHawk Systems to apply its standard barcode data collection software modules and data collection device interfaces across a broad range of different ERP and accounting systems. This results in the following subsidiary benefits:
 - a. More reliable software due to bugs being found and fixed in with the operation of many different BellHawk applications in many organizations.
 - b. Lower prices as the cost of developing the BellHawk software modules is spread over a wider customer base.
 - c. A larger user group providing ideas as to how to improve the BellHawk software.

ERP Interface History

Some of the ERP and accounting systems to which BellHawk has been interfaced include:

<ul style="list-style-type: none"> • QuickBooks • Sage AccPac Advantage • Sage Pro Series • Oracle Manufacturing • Lilly Visual Manufacturing • MAS90/200 • Macola • BPICS • MAPICS • Microsoft Dynamics 	<ul style="list-style-type: none"> • Fourth Shift • PeopleSoft • ProCom • PSI • ManMan • Site Line • Computer Associates • Encore • Made2Manage • Dak-Easy
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For More Information

For more details, please see www.BellHawk.com , contact Sales@BellHawk.com or call 1-508-865-8070 and press "1" for sales.