



Recommended BellHawk Implementation Process

Introduction

This document provides an overview of the recommended implementation process for a BellHawk real-time operations tracking and management system.



Recommended Process

1. Appoint a project manager from within the client organization. This person will be responsible for acting as the liaison person between the BellHawk team and the client's operational and IT staff. The project manager will also be responsible for managing the testing of the system and communicating any issues that may arise to the BellHawk Systems' team.
2. Select an area of the plant to start in. This may be in receiving, production, or in finished products picking, packing and shipping. This should be the area where there is the greatest operational problem. Do not try to deploy a system plant-wide all at the same time as this is a recipe for almost certain failure.
3. Start with BellHawk running stand alone and then subsequently add data exchange with other systems.
4. Select the BellHawk modules needed to support the initial roll out and install these on a Windows Server. For simplicity, if feasible, start by using The BellHawk software on a subscription basis on a Windows Server managed by BellHawk Systems in the Cloud. The BellHawk website and database can easily be subsequently moved to the client's own server.
5. If on-site installation is required , then install BellHawk on a Windows Server in the client's plant, or at the client's data center This installation may be done by the client's IT staff or by BellHawk Systems' staff or a combination and typically takes 2 to 4 hours.
6. Setup one of each mobile computer, barcode scanner and printer, and other data collection devices to be used in a "training room pilot" installation along with a PC and an office printer and, if needed, a wireless access point. This will be used for testing the software.
7. Setup a test knowledge-base for BellHawk using Excel imports. This should include enough items, inventory locations, users, container types, work centers, operations, and other setup data to run through realistic operational scenarios. This typically takes a few hours to a couple of days. This may require assistance and guidance from the BellHawk Systems' support team.
8. The client's operations managers and supervisors then test the BellHawk system to see if it meets their needs. To do this they may need some training and support from the BellHawk System's team. Initially orders from another system will be manually entered into the BellHawk System to facilitate testing.

9. As they perform testing, the client's team will document issues where the system does not meet their needs. Fixing these issues may require adjustments to the BellHawk knowledge base or may require some customization to the software.
10. If customizations are required then BellHawk Systems will provide the client with a quotation for these customizations. If the investment in the changes makes business sense then BellHawk Systems will, after approval by the client, implement the changes.
11. The client's team will then continue testing, and possibly further modifications made, until the system performs the way they would like it to work. Then they will use the training room pilot system to train production workers and materials handlers in the affected departments. This may result in further adjustments to the system until it is working as required.
12. At this point in time, the system can be deployed to the production BellHawk server, using duplicate data entry or data exchange using Excel imports and exports. Usually, in preparation for deployment, clients will expand the BellHawk knowledge-base and order more equipment. They will also order and apply rack, tote, cart and other specialty barcode labels.
13. Usually BellHawk is deployed in parallel with whatever data collection method was previously being used, such as using paper forms, until users are happy with the results being obtained. During initial deployment some further adjustments may need to be made to the system. These are typically made on the test server and then deployed operationally once they have been tested.
14. If BellHawk is being used to print barcode labels as part of the production process then label formats will need to be setup in BarTender and the rules governing the use of these labels will need to be setup in BellHawk.
15. An automated data exchange interface can be implemented using one of the available external interfaces to BellHawk technology. This is typically done as a joint activity between the client's experts in the systems with which data is exchanged and the BellHawk Team. These interfaces typically take a few days to a few weeks to implement dependent on the number and complexity of data objects to be exchanged.
16. Testing of the interface(s) is typically done using a BellHawk test server and a test version of the external system. This enables operational use of BellHawk to continue while the automated data exchange interface is being developed and tested.
17. BellHawk comes with a standard set of reports and Excel exports but, inevitably, users will want custom reports. With BellHawk, users can develop their own reports (or modify standard reports) using the SQL Server Reporting Service (SSRS) which comes as part of SQL Server Standard edition. Alternately BellHawk Systems can develop custom reports and exports according to the needs of each client.
18. Once BellHawk is successfully up and running in one section of the plant, it can be expanded to other sections of the plant. Also capabilities such as scheduling, materials planning, and problem alerting can be added, as needed, by upgrading the license file to turn on additional modules.

Commentary

We recommend a very incremental approach to the implementation of a BellHawk system. This enables adjustments to be made along the way as the client organization learns how to use BellHawk to maximum effect in running their operations.

We recommend that clients start out by subscribing to the software on a quarterly basis, preferably using the software on a Server hosted by BellHawk, and buying the minimal of equipment needed for the training room pilot installation. This will enable our client's to find out whether BellHawk is right for their organization at a minimal cost before committing to a full deployment. It will also enable testing of the devices that it is planned to use to make sure that they are ergonomically correct for the proposed data collection functions to be performed.

We also recommend that clients purchase the services of BellHawk Systems staff members incrementally, in the form of pre-paid Support Services Bundles. This allows for maximum flexibility in project goals and the amount of support required and yet, at the same time, control by the clients over their expenditures.

While we encourage our clients to take a do-it-yourself approach to systems implementation, to minimize their cost, we also recognize that many of our clients have very limited resources both for initial deployment and on-going support of these operations management systems.

As such, the BellHawk Systems' team is available, whenever needed, to provide the services necessary to assist our clients to deploy these systems and to ensure the successful ongoing operation of these mission critical systems.