



***factory*Insite[®] Software**

Labor and Process Management

Product Overview

FACTORY INSITE, INC., 246 S RIVER AVE SUITE 64, HOLLAND, MICHIGAN 49423 PHONE 800/400-2430

WEB SITE <http://www.factoryinsite.com> ELECTRONIC MAIL Sales@factoryinsite.com

DOCUMENT REVISED: 6 JUNE 2008

Contents

Focus of <i>factoryInsite</i> [®] Shop Floor Applications	3
Synergy Through Insite	3
Positioning of Labor and Process Management.....	5
Alongside Enterprise Resource Planning Systems	5
Within <i>factoryInsite</i> [®] Applications	5
Within Enterprise Applications	7
Architecture.....	9
Software Requirements for all <i>factoryInsite</i> [®] software	9
Platform, Client, and Network Architecture	9
Security	9
Database Support	10
Information Architecture	10
Reporting Interface.....	11
User Interface	13
Employee Level Entry Station.....	13
Management Level Menus	21
Information Prospector [™]	22
Reporting	28
Integration	31
HR/Payroll Interface	31
MRP/Scheduling Interface	31

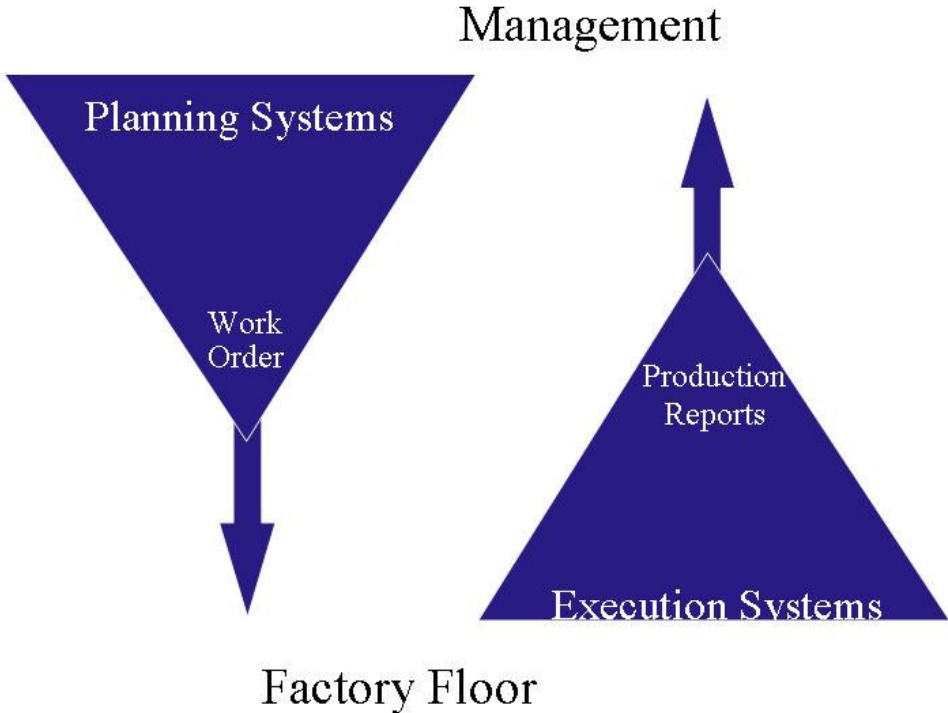
Focus of *factoryInsite*[®] Shop Floor Applications

To provide high quality factory floor data collection and analysis systems tailored so that employees can accurately determine and improve the efficiency of their manufacturing environment. - Mission Statement of Factory Insite, Inc.

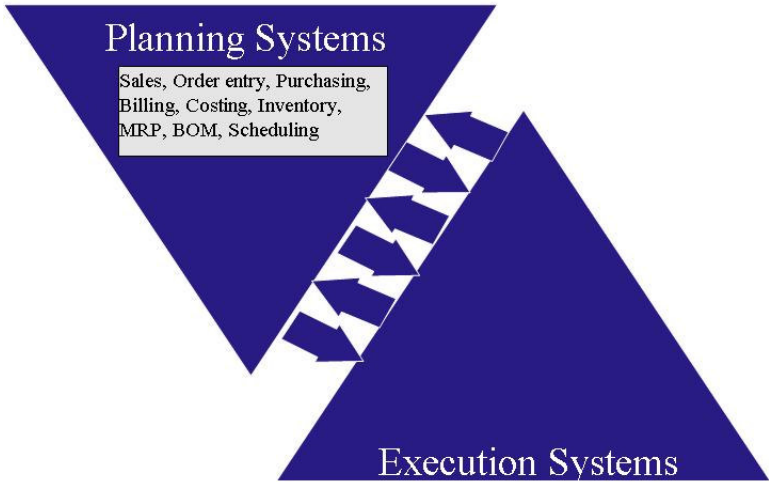
Synergy through Insite

Factory Insite, Inc. has a vision where our customers retain their uniqueness and are able to build upon what has made them successful in the marketplace. Our goal is to provide an integrated view of the operation to workers and supervisors so that they can react in a timely manner to slight changes in production that could result in the difference between profit and loss.

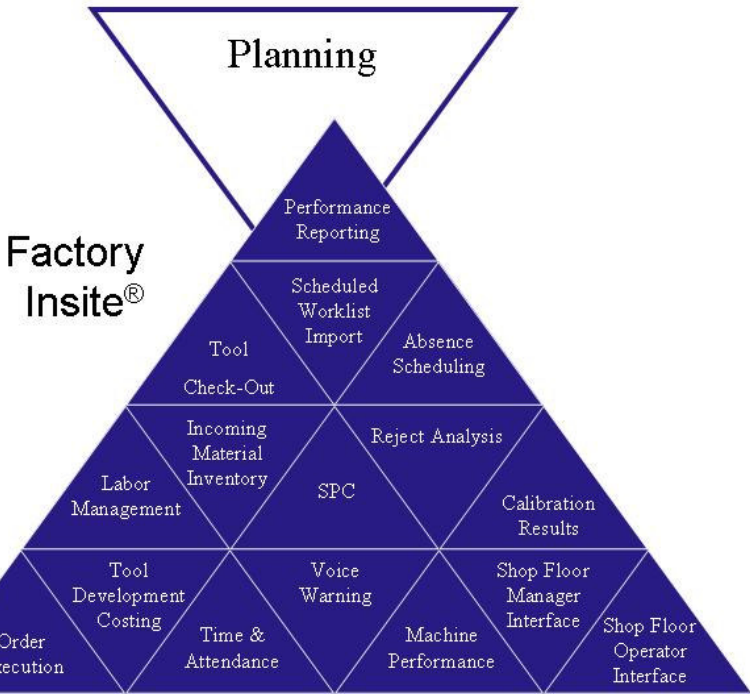
Factory Insite views the manufacturing enterprise as being comprised of Planning and Execution activities. Often these activities are not well integrated as shown below.



Our emphasis is on real-time data collection and presentation on the factory floor and the sharing of information collected with other systems. We call this vision *factoryInsite*[®]. A completely integrated manufacturing enterprise system would look like the diagram below.



With the integration of planning and execution systems, real meaning can be given to the data that planners use and the plan that is executed on the shop floor. Factory Insite has recognized this necessity and developed software systems to fill specific needs within the execution systems. Factory Insite also integrates existing or new software systems. The current family of *factoryInsite*[®] systems are shown below.



This summary focuses on the modules to manage labor and manufacturing processes.

Positioning of Labor and Process Management

Alongside Enterprise Resource Planning Systems

ERP systems are excellent solutions for automating enterprise functions such as finance, accounting, order entry, order fulfillment, manufacturing planning and scheduling, distribution, logistics, benefits administration, and payroll. What most ERP systems do not focus on is optimizing the available labor and manufacturing resources in real-time.

ERP systems gather information concerning employees, but not at the granularity needed for action. An ERP system might collect the total hours on a work order, but be unable to break it down by when the work was performed, individual employee performance, machine utilization, or net yield. A payroll/HR system may give after the fact reporting on overtime hours, but not prevent workers from logging unauthorized off shift work.

factoryInsite[®] labor and process management applications capture information at the source, validate it against ERP or other enterprise business process tools, and present the information required in real-time to management and workers.

Within *factoryInsite*[®] Applications

The *factoryInsite*[®] applications that provide labor and process information are:

- Time and Attendance
- Tool Development Costing
- Labor Management
- Machine Performance
- Order Execution
- Scrap and Rework Reporting
- Absence Scheduling

The time and attendance module is a core application to the employee oriented data collection modules. It provides employee information, badge translation, supervisor security, and the dispatch code to invoke other *factoryInsite*[®] applications.

Time and Attendance also provides the structure for other applications to further sub-divide employee time. Time and Attendance provides the rules for shift windows and allocates employee time to Job identifiers. The combination of Job and Shift identifiers are provided to map to a pay rate.

Tool development costing assigns labor time within a Job identifier to operations for molds, dies, or other tooling built to produce parts. Tools have various attributes associated that describe their design and eventual use. For example, you can indicate a press size and a station number for a progressive die as well as the drawing and revision number.

The labor management application breaks down the attendance job identifier by Machine and order or lot. In addition, the labor management application identifies labor time as indirect, direct, setup, breakdown, or rework. Labor time can be analyzed by various categories and compared against the reported attendance hours.

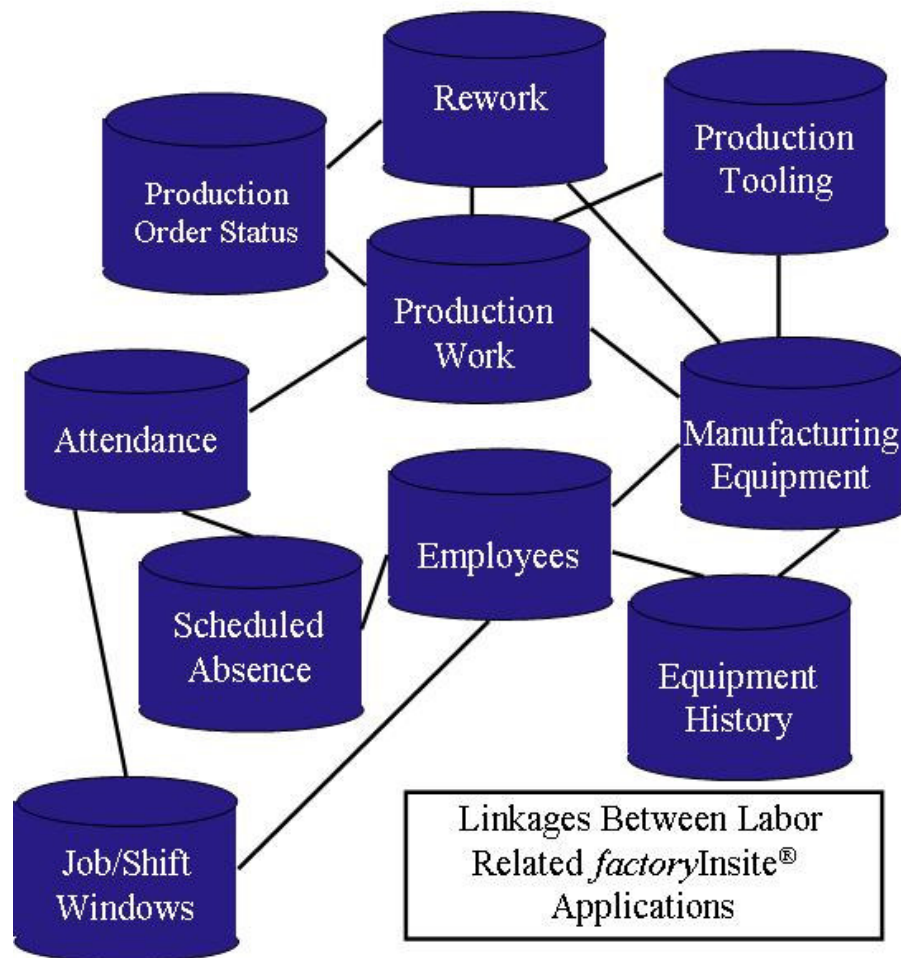
Machine Performance adds more detail to the manufacturing equipment in use. It tracks down time, in-use production time, repair time, machine idle time, and other categories. It allows operators and maintenance personnel to associate information with machine problems. Analysis (real-time and historical) of conformance to standard equipment throughput rates is also produced by this application.

Order Execution is available for systems linked with an Advanced Production Scheduling system using Work Orders and Routings. This application displays a worklist when an operator prepares to start work at a particular station. Orders or lots are tracked through a routing sequence and location status, estimated completion, and conformance to standards are available.

Scrap and rework tracking expand on the rework time logged by the labor tracking to allow information concerning defect and cause codes as well as the eventual disposition of the part.

Absence scheduling is a tool that allows supervisors to schedule absences in advance and monitor staffing levels. Absences are entered by starting day and number of hours and the absence is scheduled into time and attendance using the employee's job schedule. Employees can be pre-paid or post-paid for a vacation. Hours are sent to payroll.

A view of the internal linkages between the information maintained is shown below.



Within Enterprise Applications

As with all of the *factoryInsite*® modules, the focus of the labor oriented applications is to collect information in real-time, to provide validation of that information, to allow factory workers and supervisors access to the information in useful formats, and to provide a summary of the information to the planning systems.

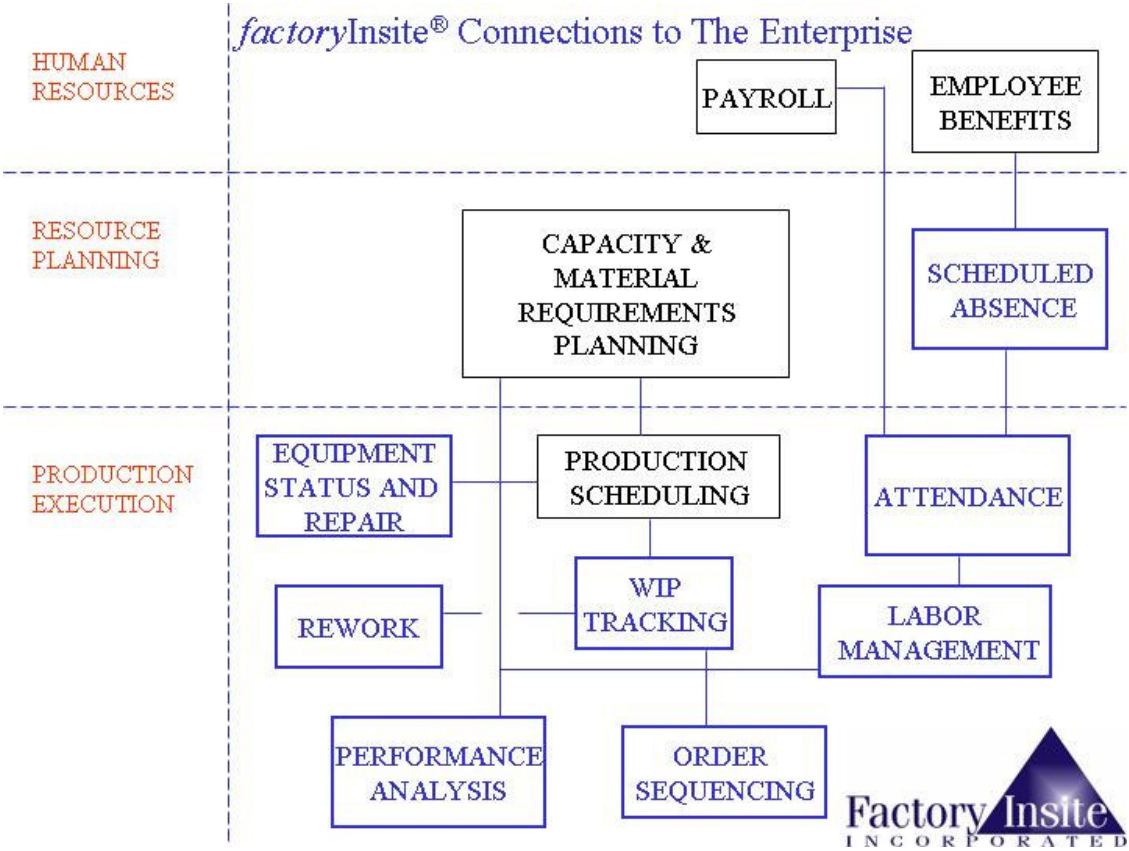
The time and attendance module and absence scheduling are intended to integrate closely with the enterprise's payroll system. They serve primarily to collect and validate information. The information can require supervisor approval before it is sent to payroll.

Tool development costing provides trusted labor time information for productivity analysis and to utilize in job estimating for future similar jobs.

Labor Management related applications can be tightly integrated with resource planning and scheduling systems to provide real-time feedback. The assembly tracking information gathered can provide status information for Customer Relationship Management systems. The measured labor time can be compared against payroll reports for costing and against production output standards for productivity. Actual equipment production rates and utilization are also available for planning.

Scrap and Rework reporting collects valuable information to feed into enterprise quality systems. Net yield can be analyzed for employees, machines, work centers, Work Orders, or part numbers.

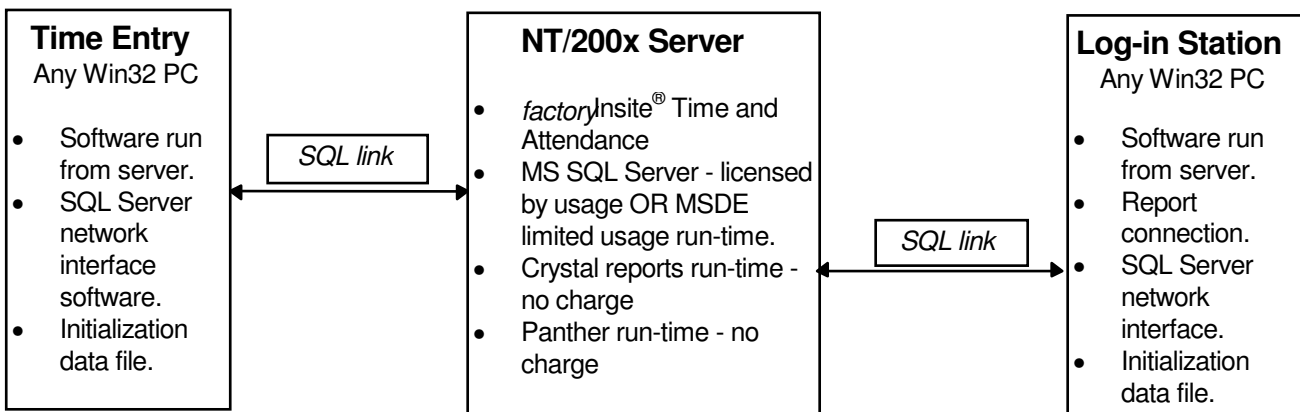
The chart below shows some of the functional connections to other applications. Components in black are enterprise software modules.



Architecture

Software Requirements for all *factoryInsite*[®] software

The *factoryInsite*[®] software family is implemented utilizing a combination of technologies. This includes Microsoft SQLServer database, Prolifics Panther, and Crystal reports. For small installations, all of these can be utilized in a no-charge run-time version. The diagram below shows the three different configurations of systems that are utilized by the *factoryInsite*[®] software.



Platform, Client, and Network Architecture

The Windows[®] version of the *factoryInsite*[®] software supports any network architecture that is supported by Windows[®] Servers. This allows a wide variety of off-the-shelf client devices (PCs, X-Windows, Browsers, PC terminals).

The supported user interface is the Windows[®] GUI accessed via a PC or Windows Terminal Server. A web server interface will be available in a future release.

Security

Five classes of privileges are defined as listed below.

- System Administrator - Has total control over all computer functions.
- Manager - Can authorize other users, perform software/data updates.

- Supervisor - Can modify operating parameters and data entered by others.
- User - Can enter information and view pre-defined reports.
- Guest - Can view un-restricted information.

System access follows two different authentication models. Administrators and Managers must be authenticated with a username and password before gaining access to any functions. Supervisors and Users may access functions through the time entry station interface. Users are only required to enter their badge identification, which is generally encoded on an ID card using bar code, magnetic strip, or other non-human readable media. Supervisors must additionally enter a Supervisor Access Number (SAN) to perform any function that affects other employees.

A two level mapping identifies employees. Information is kept internally by an employee (or clock) number. The employee number is usually assigned by the payroll or Human Resources package. The badge identification is used externally by the employee as an authentication string. Badge identification strings are mapped to employee numbers and can be reassigned periodically for security purposes.

Security is enforced when accessing menu items, navigation using Information Prospector™, and individual fields on entry screens.

Database Support

The software has been developed and tested with Microsoft SQL Server as the back end database. We will support any of the SQL Server configurations that are valid.

The software has been developed with a 2/3-tier development method that allows the use of almost any database in common use. If there is sufficient interest in utilizing other than SQL Server, we will test and certify the software on other databases. Native database drivers are available for:

- DB2
- Informix
- Ingres
- Interbase
- Oracle
- Sybase

In addition to these databases, most databases with an ODBC driver can be supported.

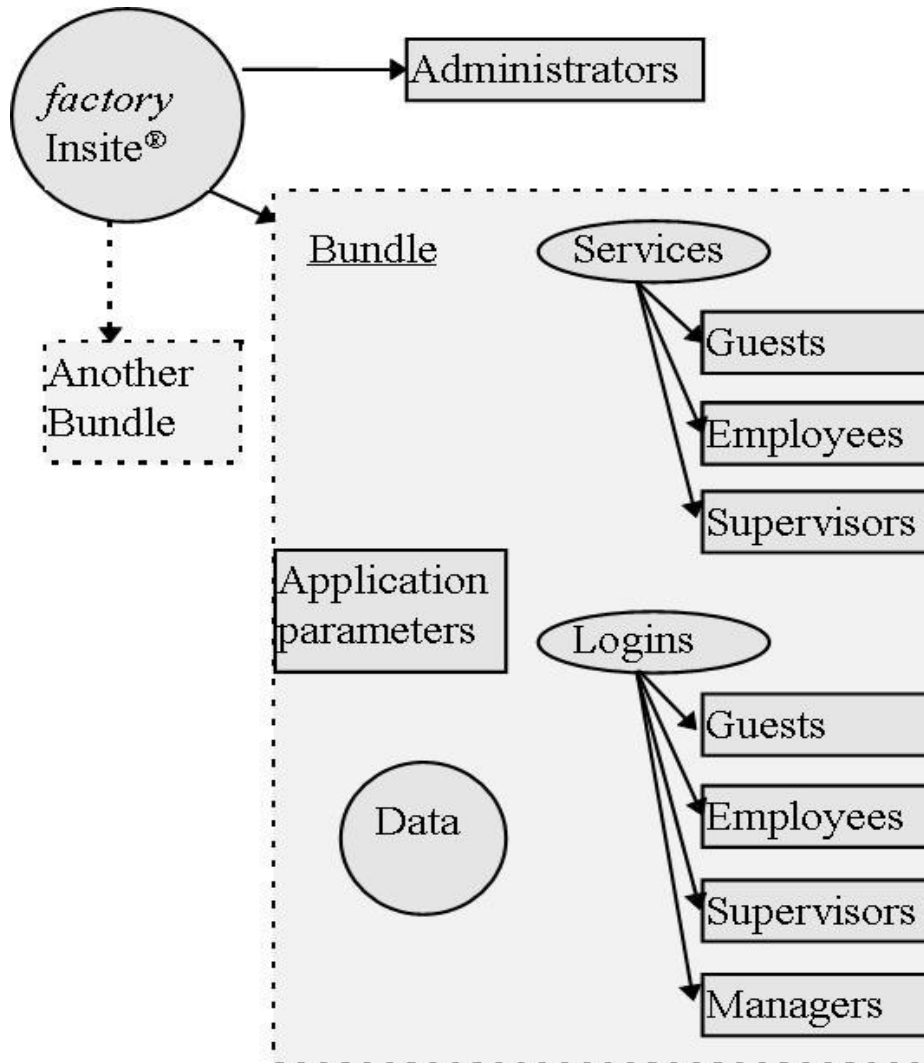
Information Architecture

The information architecture reference model for *factoryInsite*® is currently being called the "Bundle" architecture. Major goals of this model are:

- Allow services (which are accessed by the entry stations or the login station) on the network that offer any combination of the licensed *factoryInsite*® applications.
- Allow different databases to reside on the same computer system.
- Centralize administrative functions and allow administration of all entities from one view.

- Facilitate easy integration of new *factoryInsite*[®] applications and other software.

A “bundle” defines an entry station interface with authorized supervisors, employees, guests and a login interface with authorized managers, supervisors, employees, and guests. The “bundle” also defines various parameters; such as default natural language (English, German, etc.), shift windows, number of workstations allowed, etc. Below is a pictorial representation.



Reporting Interface

The *factoryInsite*[®] software incorporates Business Object’s Crystal Reports product. Reports can be modified or additional reports can be created with the optional development package.

Even with the reports provided you can publish reports to a variety of familiar formats, including:

- XML

- PDF
- HTML
- Excel
- RTF
- Word
- Text
- CSV
- ODBC
- Record-style

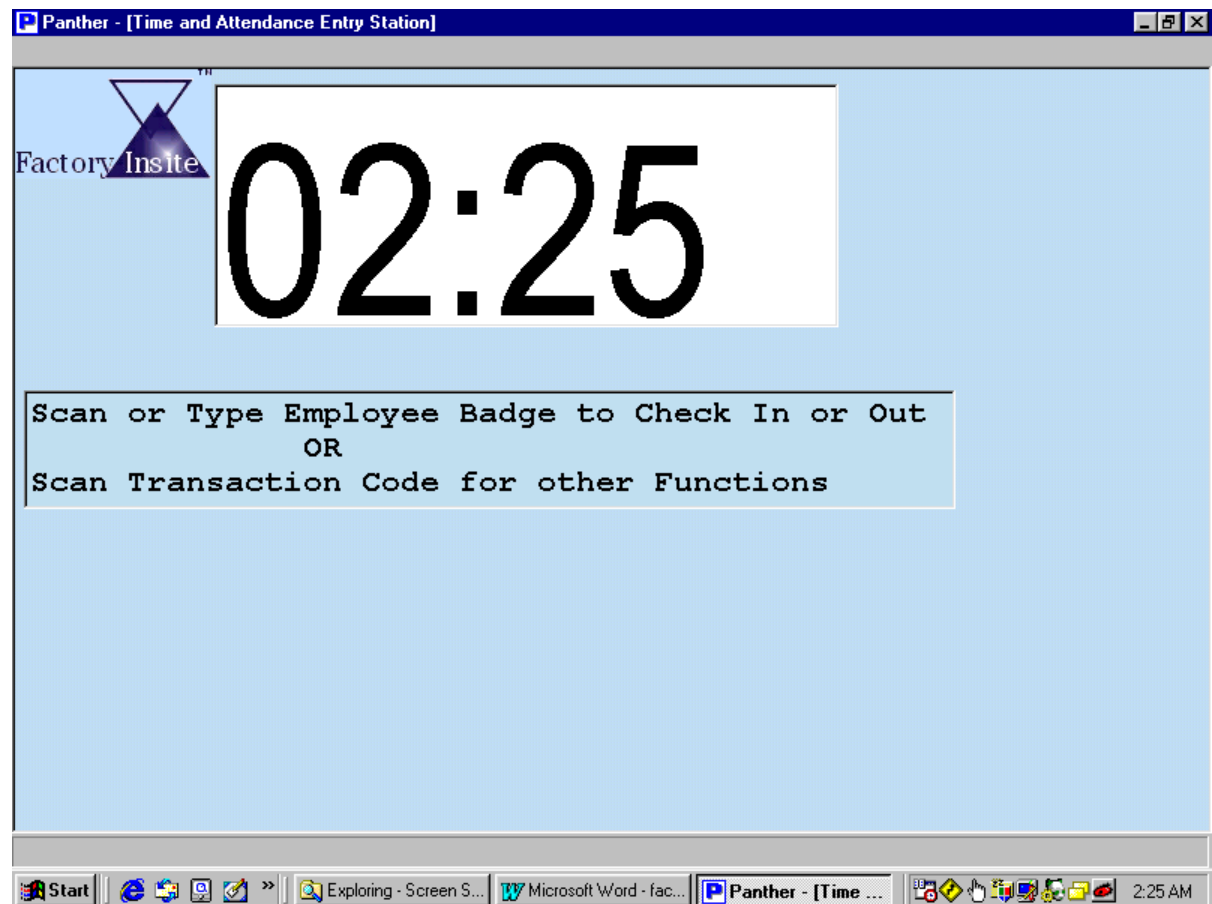
This allows you to use reports as an interface to further process data using such tools as spreadsheets. You select the information of interest and export the report contents to a data file or even another database using the ODBC interface.

User Interface

There are two main styles of user interfaces to the *factoryInsite*[®] software modules. The entry station interface uses transaction codes and employee badges to invoke entry. This is intended for the main shop floor interface. The menu system requires a username and password login and invokes applications through a menu or the Information Prospector[™].

Employee Level Entry Station

The entry station can run on any display device and is the window of all *factoryInsite*[®] applications to the employee. Scanning or entering the employee badge ID checks the employee in or out of their default job. Other software is invoked from this screen to allow functions like job start/stop, rework information, etc. An idle screen looks like:

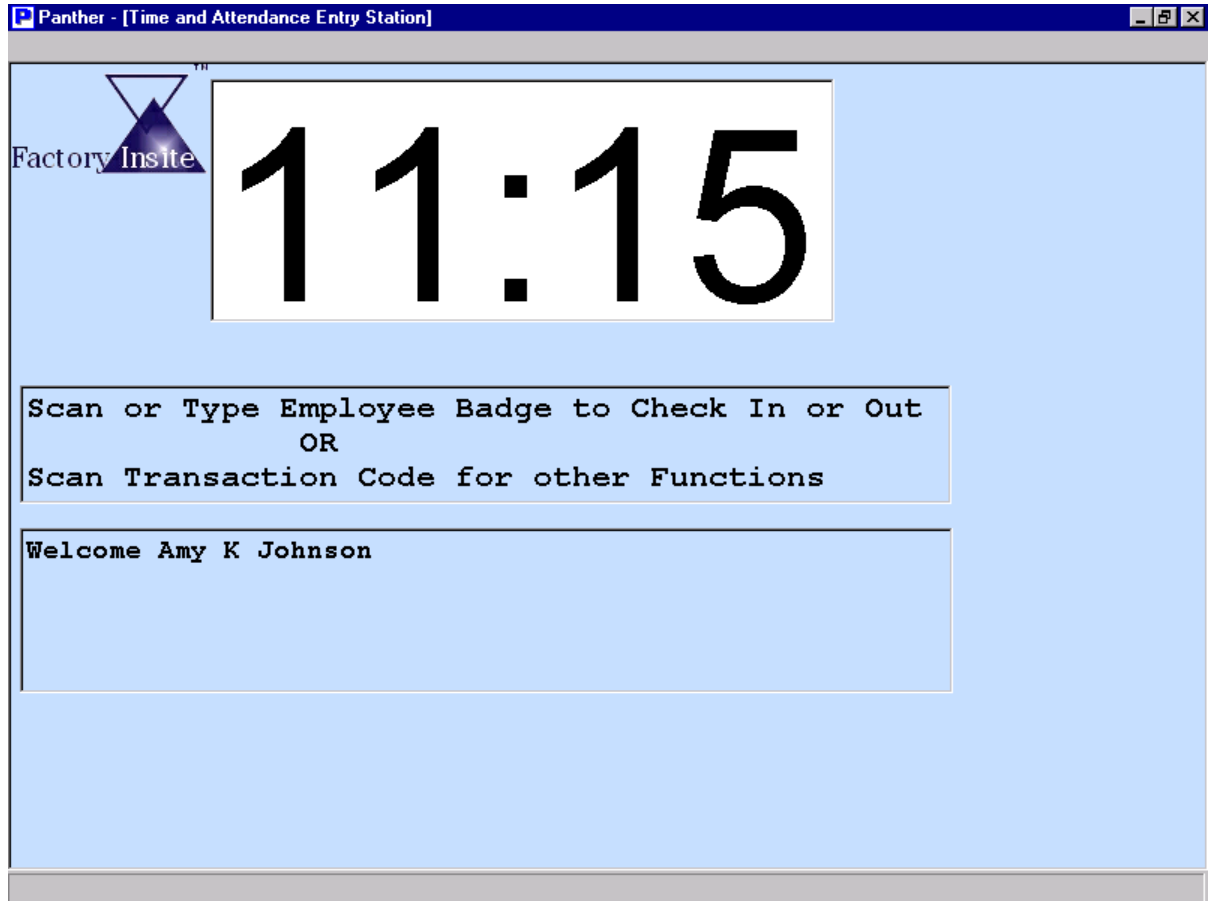


This screen walks the operator through each operation by displaying instructional messages based on the user entry. Depending on the operation being performed, additional screens may be invoked to allow entry of necessary information.

For the examples in this chapter we are going to follow Amy K Johnson through part of her workday. She has a bar coded employee badge as shown below and each workstation in her factory has a bar code reader (BCR) and a sheet of transaction codes. She can invoke any *factoryInsite*® function by pointing her BCR at the appropriate transaction code and then her employee badge.



Status messages are displayed in a separate area as is shown below with the welcome message. This message is generated when Amy checks-in by bar coding just her badge. In this case check-in was automatic to Amy's default Job-ID, but she can specify another Job-ID as authorized by management. In addition, an automatic check-in is performed if a transaction requiring paid work-time is entered (such as direct labor entry).



Entering detailed labor is a highly configurable operation. Part of the value of our tailorable approach comes from being able to associate additional information with the defined entities. Direct labor assigns time to manufacturing equipment, employees, and job or products produced. In the following example screens we are showing our electronic worklist interface which lists Work Order (WO) and Routing Sequence in priority order. This requires a scheduling system. The simpler case of the product being identified only by a part number or lot number can also be handled. In fact these methods can be mixed.

The first employee operation is to assign their labor to a particular piece of manufacturing equipment. This becomes the default for any machine-oriented labor that follows. Only valid manufacturing equipment is allowed as entry. Equipment can be selected as an individual transaction, or it can be specified when a labor transaction requiring equipment is entered. The screen below shows Amy selecting the equipment.

Start Equipment

Factory Insite

Employee Name: Amy K Johnson

Equipment_Lid: PB2

Equipment Start Time: 19-May-2003 11:14

Equipment Stop Time:

F4 - Start F10 - Cancel

The terminology manufacturing equipment does not necessarily need to correspond to machinery. Identifiers can be associated with inspection stations or assembly workbenches.

Start labor transactions can be omitted to reduce the number of entries. If this is done, the start time used is the last time of the previous activity. If start transactions are not used, you will not be able to see work until something is reported.

The start direct labor entry shown below requires a work order. The WO and Routing Sequences displayed are in priority order for the work center with which the equipment is associated. Only WO sequences that are valid for the operation are allowed.

The application picks up the manufacturing equipment ID automatically because Amy is associated with that piece of equipment. If Amy were responsible for multiple pieces of manufacturing equipment, she could pick from a pull down list of equipment. Amy is now associated with the manufacturing equipment and the particular WO.

This now provides the following information that can be used by manufacturing supervisors, production scheduling personnel, and customer service.

- The part number/WO on which Amy is working and the time started.
- What manufacturing equipment PB2 is doing and the time started.
- The processing start time of the WO or lot at the work center.
- The operation being performed on the part.

	Work Order #	Seq. #
1	00813788788	010
2	00878389459	120
3	00837487588	030
4	00982934778	010

After the work is completed, good and scrap quantities are required. The good quantity defaults to the number reported on a previous step or the quantities scheduled and scrap defaults to zero. This is one example of the “entry by exception” method of our products; if the expected event occurred then you only need to confirm it.

If the scrap and rework tracking application is installed, entering a non-zero number for pieces scrapped invokes another screen requiring defect code and potentially a cause code.

Amy has produced 32 good pieces and scrapped 3 pieces, so she enters the quantities in the appropriate areas and pushes the F4 button on the keyboard or the screen.

Stop Direct Labor

Factory Insite

Employee Name: Amy K. Johnson

Equipment ID: PB2

Labor Start Time: 19-May-2003 11:14

Labor Stop Time: 19-May-2003 11:51

Work Order #: 00813788788

Seq. #: 010

Pieces Good: 32

Pieces Scrapped: 3

F4 - Start

F10 - Cancel

After this entry, the additional information available can tell you the following.

- The quantity of the part now available for moving to the next operation.
- The rate of processing by the particular machine and operator and the comparison to any established standards for this operation.
- The net yield (good vs. scrap) of this particular operation on the machine by the operator.
- The time at which this material was available to move to the next operation.

In our example here, Amy is going to rework the scrap immediately and she enters the start rework transaction shown below.

The start of rework is identical to the start of direct labor because it is a manufacturing step associated with equipment. The WO Routing Sequences displayed have a scrap count greater than zero.

If Amy did not enter the start rework transaction, the time of the start would be the stop time of the previous direct labor.

Factory Insite

Employee Name: Amy K. Johnson

Equipment ID: PB2

Labor Start Time: 19-May-2003 11:51

Labor Stop Time:

	Work Order #	Seq. #
1	00813788788	010
2	00226346518	050
3		
4		

F4 - Start

F10 - Cancel

When Amy finishes reworking the parts she is able to recover 2 pieces. If the scrap and rework application were used, she would enter disposition and possibly more information concerning the defect cause. It might be required for a quality inspector to approve this operation, depending on your business practices.

After Amy reports the recovery of the 2 pieces, the total part count for any following steps is 34.

Factory Insite

Employee Name: Amy K. Johnson

Equipment ID: PB2

Labor Start Time: 19-May-2003 11:51

Labor Stop Time: 19-May-2003 13:32

Work Order #: 00813788788

Seq. #: 010

Pieces Good: 2

Pieces Scrapped: 1

Total Scrap Available: 3

F4 - Start

F10 - Cancel

We now have the additional information that

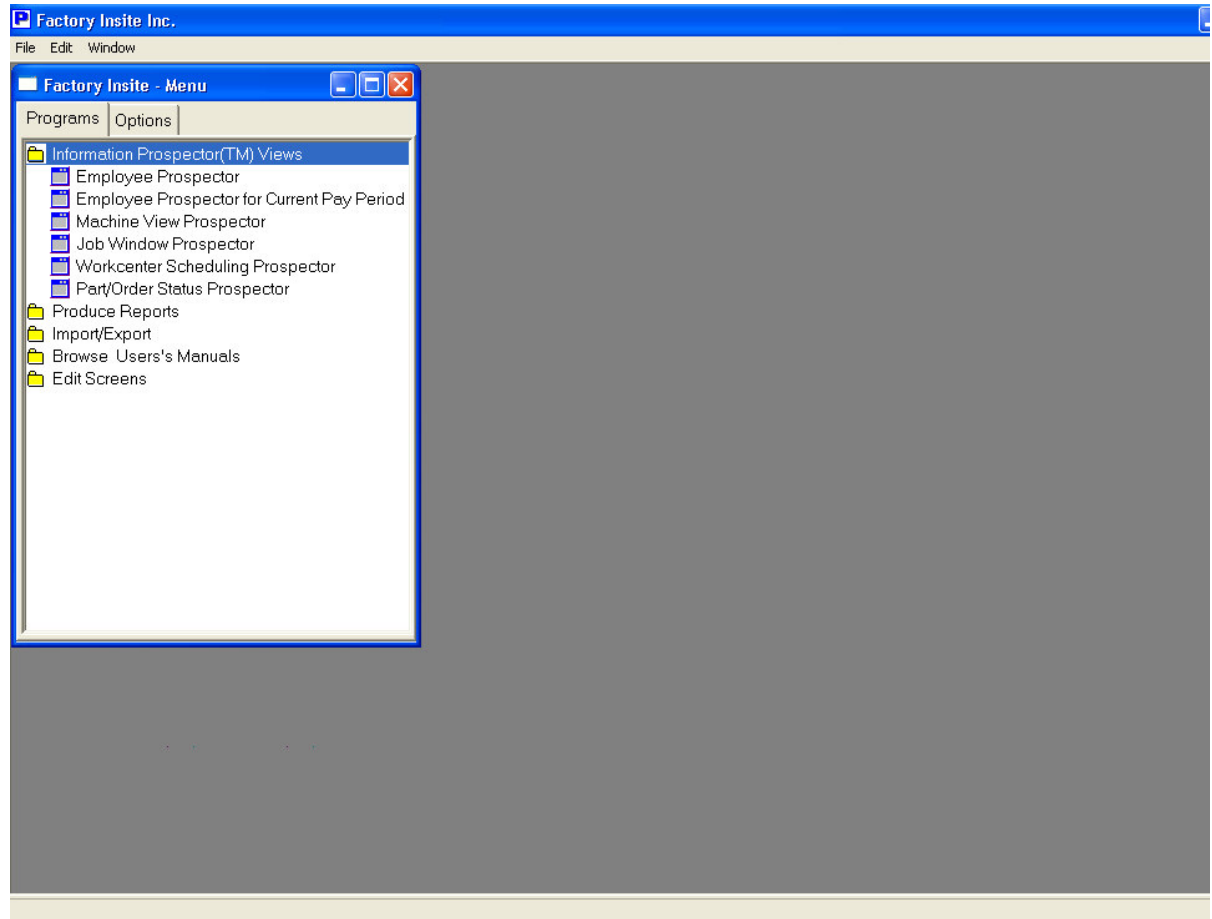
- Amy was able to increase the yield by 2 parts.
- Amy spent 101 minutes reworking the 2 parts.
- 34 parts are now available, but 1 part has been scrapped and may need to be replaced.

We are done following Amy through a representative sample of employee level functions. We will now take a look at the interface available to a management level employee.

Management Level Menus

The menu system supports both keyboard navigation and pointing device use. The keyboard arrow keys can be used to navigate. A pointing device such as a mouse, trackball, or even a touch screen terminal can be used.

Menu screens are constructed on the fly and what is displayed is based on the preferred language of the user, the *factoryInsite*[®] applications enabled for the bundle, the profile associated with the user and the security access granted to the user.

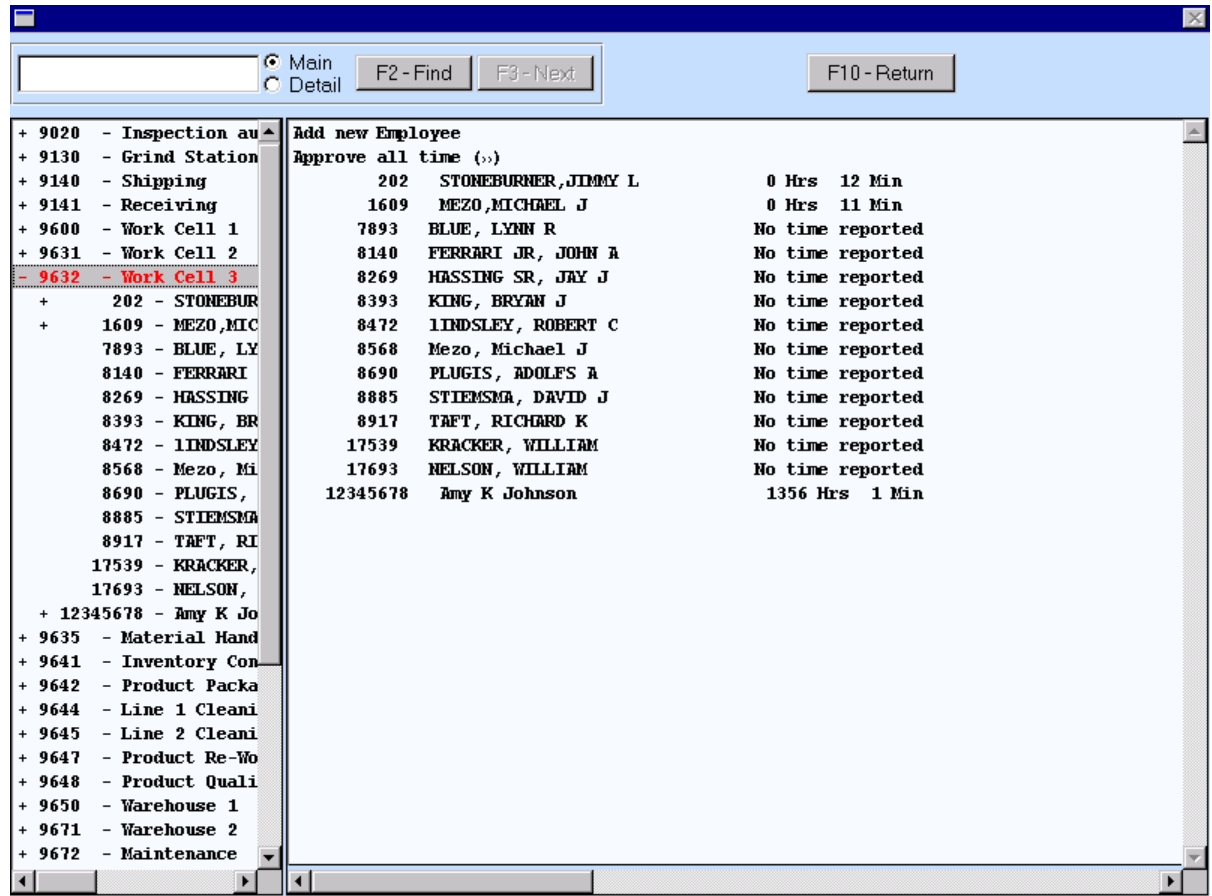


Additional, customer supplied, menu entries can be added easily. Windows executables commands, and even DLL entry points and ActiveX modules can be invoked from the menu.

Information Prospector™

factoryInsite® on Windows® introduces a new technology user interface. The name for this technology is **Information Prospector™**.

The Information Prospector™ allows navigation through related information and modification of any information that you can view (as long as you have authorization). For example, the screen shot below shows department numbers on the left pane with employee numbers indented underneath. The right pane shows employees with the current pay period time summary.



We have selected Amy's department and can see a summary of each employee's hours for the current pay period. If the hours are as expected, the department supervisor can click on the "Approve all time" and all hours for the department will be approved for transfer to payroll. The actual transfer into payroll can be automatically scheduled or manually transferred by a management level employee.

Clicking on the "Add new Employee" line will allow you to add a new employee to the department. Clicking on any of the employee lines will allow you to modify the characteristics associated with that employee.

Clicking on an employee number in the left pane brings up the view shown below. The dates with time recorded are shown below the selected employee number on the left pane. The detailed attendance time for each shift is shown on the right pane.

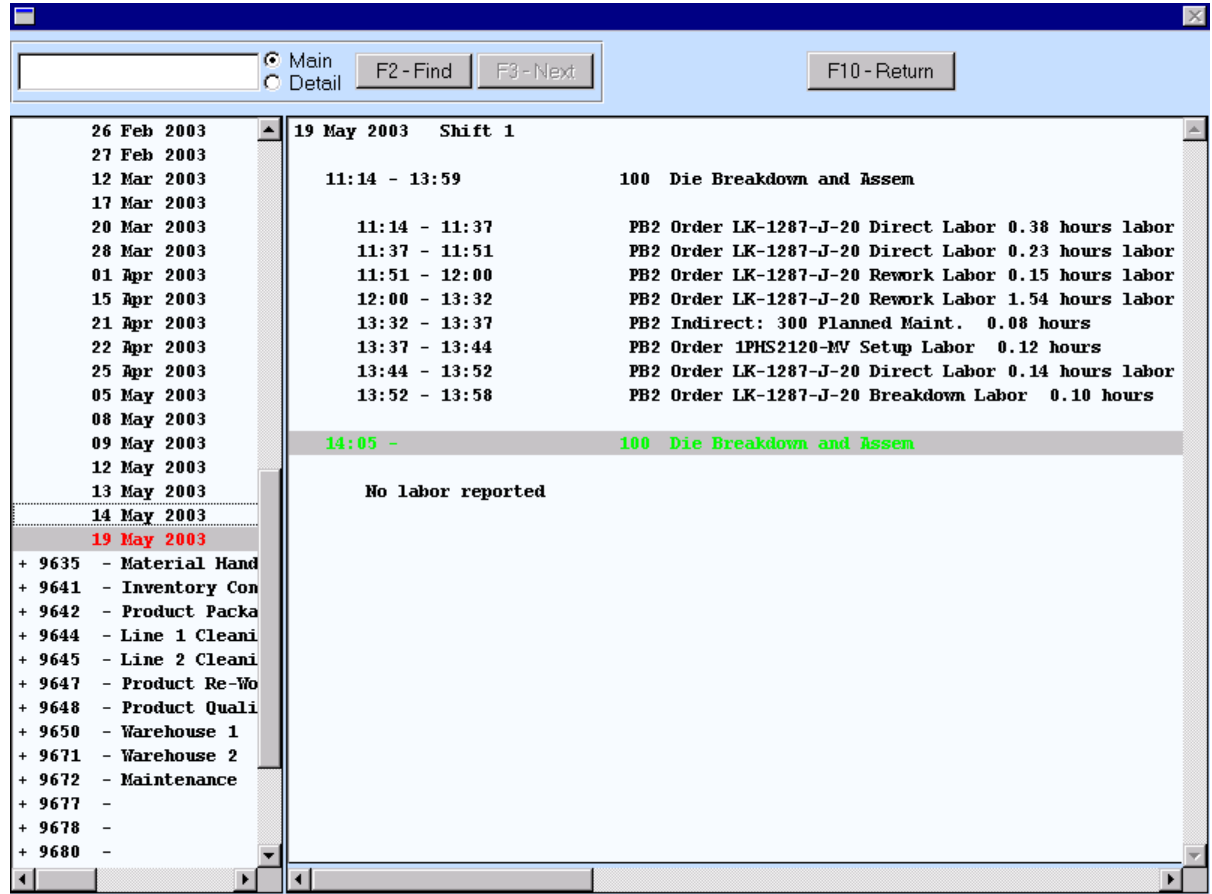
Employee	Date	Shift	Time Range	Job Code	Description	
+ 12345678 - Amy K Jo	18 Oct 2002			100	Die Breakdown and Assem	
	21 Oct 2002			100	Die Breakdown and Assem	
	22 Oct 2002			100	Die Breakdown and Assem	
	20 Dec 2002			100	Die Breakdown and Assem	
	03 Jan 2003			100	Die Breakdown and Assem	
	05 Feb 2003			100	Die Breakdown and Assem	
	06 Feb 2003			100	Die Breakdown and Assem	
	11 Feb 2003			100	Die Breakdown and Assem	
	14 Feb 2003			100	Die Breakdown and Assem	
	17 Feb 2003			100	Die Breakdown and Assem	
		21 Apr 2003	Shift 1	10:48 - 16:07	100	Die Breakdown and Assem
		22 Apr 2003	Shift 1	15:40 - 16:59	100	Die Breakdown and Assem
		25 Apr 2003	Shift 1	09:40 - 15:56	100	Die Breakdown and Assem
		02 May 2003		10:45 - 17:42	100	Die Breakdown and Assem
		05 May 2003	Shift 1	13:31 - 13:58	100	Die Breakdown and Assem
				13:58 - 14:00	300	Planned Maint.
				14:00 - 14:03	200	Drill Press 1
			14:03 - 14:05	200	Drill Press 1	
			14:05 - 14:14	300	Planned Maint.	
			14:14 - 14:14	200	Drill Press 1	
			14:14 - 14:15	300	Planned Maint.	
			14:15 - 17:56	200	Drill Press 1	
	08 May 2003	Shift 1	08:00 - 10:45	100	Die Breakdown and Assem	
			10:45 - 11:50	100	Die Breakdown and Assem	
	09 May 2003	Shift 1	10:42 - 14:27	100	Die Breakdown and Assem	
			14:48 - 16:52	100	Die Breakdown and Assem	
	12 May 2003	Shift 1	16:34 - 11:44	100	Die Breakdown and Assem	
	13 May 2003	Shift 1	11:46 - 17:19	100	Die Breakdown and Assem	
	14 May 2003	Shift 1	11:52 - 11:14	100	Die Breakdown and Assem	
	19 May 2003	Shift 1	11:14 - 13:59	100	Die Breakdown and Assem	
			14:05 -	100	Die Breakdown and Assem	

Clicking on the date/shift line allows entry of new time while clicking on the time range allows modifying or copying the attendance information.

All of the time for this particular employee can be approved for payroll by the supervisor.

Since Amy has not signed out for the day, there is not a stop time associated with Job 100 and it is highlighted in green to make it visible.

Selecting the date on the left pane brings up the labor detail recorded within the attendance job. At this point in time we see that Amy is not working on an order.



There is additional information that can be viewed using the scroll bar at the bottom of the right pane. This information includes part counts.

Clicking on the attendance or labor detail lines allows you to modify the information. To manually enter detail, you can click on the "Add new Labor" line.

The Information Prospector™ interface is used to present a wide variety of hierarchical information for viewing and modification. The main views allow you to drill down on information pertaining to:

- Department and employee labor management information.
- Workcenter and equipment performance and status information.
- Scheduling performance information.
- Order or part number status information.

As another example, the following screen shows the overall status of each workcenter. The status with regards to the schedule is summarized and the actual work waiting at the work center is shown along with the schedule estimates of completion.

The screenshot shows a software window titled "Factory Insite - Work Center Schedule Information Prospector". The window has a menu bar with "Main" and "Detail" options, and buttons for "F2 - Find", "F3 - Next", and "F10 - Return". On the left side, there is a tree view showing a hierarchy of work centers: "1 - Center Cell", "12345 - Delphi Fabr", "2 - Volvo Pre-f", "3 - Workcenter", and "Grinder - Not Defined". The main area displays a table with the following data:

Work Center ID	Status	Total Hours Scheduled	Work Orders Waiting	Estimated Hours Waiting
1	Behind	21.778	2	17.778
12345	No work Scheduled	0	0	0
2	Behind	15.000	1	1.000
3	Behind	3.750	0	0

This gives a quick view of any problem areas and allows managers to be pro-active in addressing scheduling constraints.

Drilling down into a workcenter, you can view the queue of work orders available along with WO performance so far. This gives the next quick check on performance.

The screenshot shows a software window titled "Factory Insite - Work Center Schedule Information Prospector". It features a menu bar with "Main" and "Detail" options, and buttons for "F2 - Find", "F3 - Next", and "F10 - Return". The main area is divided into two panes. The left pane shows a tree view of work centers, including "Center Cell", "Delphi Fabr", "Volvo Pre-f", "Workcenter", and "Grinder - Not Defined". The right pane displays a table with the following data:

Available Work Order ID	Estimated Time	Work Order Total Time	% of Schedule Time	Running on Equipment ID	Equipment Elapsed Time
1426781344	1.000	6.015	601.48 %		
1426781344	1.000	2.139	213.92 %		
6789	10.278	1.099	10.69 %		
2345	7.500				
9999999999	2.000				

If you spot a particular WO that seems to be out of line, you can drill down into the work order to see the status through each sequence.

Factory Insite - Work Center Schedule Information Prospector

Main Detail F2 - Find F3 - Next F10 - Return

Sequence	Scheduled Date	Actual Completion	% Rate to Standard	% Time to Standard
010	15 Sep 2003	19 Sep 2003 16:10:28	180 %	55 %
020	16 Sep 2003	26 Sep 2003 13:32:13	22 %	497 %
030	17 Sep 2003	Not Started		

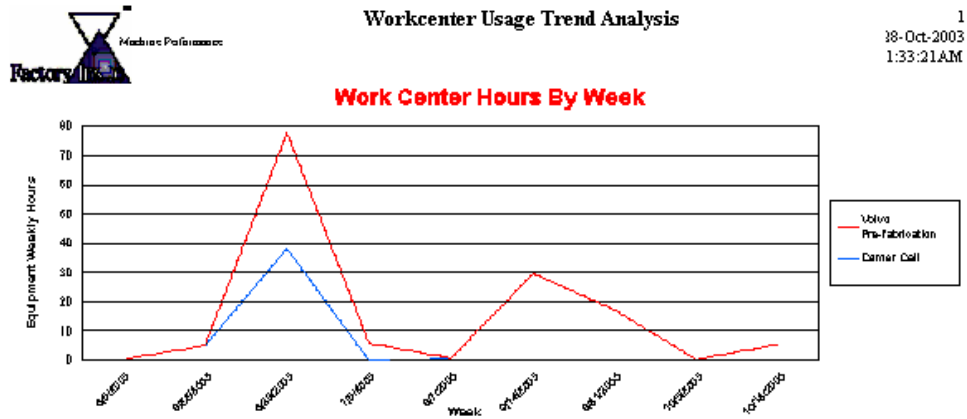
Center Cell
 1426781344
 1426781345
 2345
 6789
 9999999999
 12345 - Delphi Fabr
 + 2 - Volvo Pre-f
 + 3 - Workcenter
 + Grinder - Not Defined

The Information Prospector™ technology gives you a powerful diagnostic tool that uses the real-time information being collected. Of course there are many analysis reports to track the historical database and provide improvement analysis.

Reporting

Because of the standards embodied in the design of the *factoryInsite*® product, many different reporting tools can be utilized by customers. For example, application information can be accessed directly from Excel using Microsoft Data Query.

factoryInsite® includes the Crystal Reports® product to deploy the supplied reports. Crystal Reports® is capable of graphing and plotting as well as text only reports. For instance, the following trend analysis report shows a comparison between workcenter usages over a period of 9 weeks.



		6/8/2003	6/22/2003	6/29/2003	7/6/2003	9/7/2003	9/14/2003	9/21/2003	10/5/2003	10/12/200	Total
Center Cell	PB2	0.00	0.00	38.23	0.05	0.88	29.83	15.69	0.13	5.34	90.16
	PB3	0.00	0.00	0.00	0.00	0.00	0.00	1.76	0.00	0.00	1.76
	PS1	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
	PS2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PS3	0.00	4.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.81
	Total	0.11	4.81	38.23	0.05	0.88	29.83	17.45	0.13	5.34	96.84
Volvo Pre-fabricati on	LH1	0.00	0.00	39.71	5.76	0.00	0.00	0.00	0.00	0.00	45.47
	Total	0.00	0.00	39.71	5.76	0.00	0.00	0.00	0.00	0.00	45.47
Total		0.11	4.81	77.95	5.81	0.88	29.83	17.45	0.13	5.34	142.31

An example of a typical textual report is shown below. This report shows the user defined windows for job/shift combinations. The times in red are disallowed times and blank times are undefined.



Job Identification Report

1
30-Dec-2005
16:01:37

Job Identification	Shift	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Default job								
Code for Pay Rate								
1		0:00 0:00	7:00 16:10	7:00 16:10	7:00 16:10	7:00 16:10	7:00 16:10	0:00 0:00
2		0:00 0:00	16:10 22:30	16:10 22:30	16:10 22:30	16:10 22:30	16:10 22:30	0:00 0:00
3		0:00 0:00	22:30 7:00	22:30 7:00	22:30 7:00	22:30 7:00	22:30 7:00	0:00 0:00

100 Die Breakdown and Assem	Code for Pay Rate	<i>Detailed Labor Allowed</i>							
1	0:00 0:00	7:00 15:00	7:00 15:00	7:00 15:00	7:00 15:00	7:00 15:00	7:00 15:00	0:00 0:00	
2	0:00 0:00	15:00 23:00	15:00 23:00	15:00 23:00	15:00 23:00	15:00 23:00	15:00 23:00	13:00 17:00	
3	0:00 22:00	22:00 7:00	22:30 7:00	22:30 7:00	22:30 7:00	22:30 7:00	22:30 7:00	0:00 0:00	
A	20:00 4:00	20:00 4:00	20:00 4:00	20:00 4:00	20:00 4:00	20:00 4:00	20:00 4:00	20:00 4:00	
B	20:00 4:00	20:00 4:00	20:00 4:00	20:00 4:00	20:00 4:00	20:00 4:00	20:00 4:00	20:00 4:00	
C	0:00 0:00	7:00 16:00		7:00 16:00			7:00 16:00		
D	20:00 4:30	20:00 4:00	20:00 4:00	0:00 0:00	20:00 4:00	20:00 4:00	20:00 4:00	20:00 4:00	

151 Approved Leave Time	Code for Pay Rate	<i>NON Work Code, Supervisor Code</i>							

200 Vacation	Code for Pay Rate	<i>NON Work Code, Prepayment Allowed</i>							
1	0:00 12:00	7:00 14:30	12:00 22:10	5:20 12:50	7:00 14:30	7:00 14:30	6:40 14:10		
2	0:00 0:00	16:10 22:30	15:00 22:30	16:10 22:30	16:10 22:30	16:10 22:30	0:00 0:00		
3	0:00 23:00	23:00 8:00	23:00 8:00	23:00 7:00	23:00 7:00	23:00 7:00	23:00 7:00		
4	7:00 22:00	7:00 22:00	7:00 22:00	7:00 22:00	7:00 22:00	7:00 22:00	7:00 22:00		
P								0:00 0:00	
Q		7:00 16:00							
W	0:00 0:00	8:00 16:00	0:00 0:00	8:00 16:00	8:00 16:00	8:00 16:00	0:00 18:00		
Z		7:00 15:00		7:00 15:00		7:00 15:00			

300 Planned Maint.	Code for Pay Rate	<i>Detailed Labor Allowed</i>							
1	0:00 0:00	7:00 14:30	7:00 14:20	7:00 14:30	7:00 14:30	7:00 14:30	7:00 12:00		
2	0:00 0:00	14:30 22:30	14:20 22:30	14:30 22:30	14:30 22:30	14:30 22:30	13:00 17:00		
3	0:00 0:00	22:30 7:00	22:30 7:00	22:30 7:00	22:30 7:00	22:30 7:00	0:00 0:00		
4	10:00 15:00								

421 System Maint	Code for Pay Rate								

Time in red is disallowed.

Integration

HR/Payroll Interface

The Windows version of Time and Attendance supports over 250 payroll/HR systems utilizing Integrated Design's TimeBank™ technology. This interface is installed at over 13,000 sites. Business rules can be defined to validity check the payroll information before transfer. These rules are applied after the supervisor has approved the time and released it to payroll.

The information that is available for payroll is: Employee name and ID, type of hours (regular or overtime), hours spent, Job ID, Shift ID, and start/stop times/dates.

A linkage from the payroll/HR employee database is also available to ensure that the time and attendance data is synchronized with personnel changes.

MRP/Scheduling Interface

Linking the *factoryInsite*® applications to the scheduling interface can either be done by importing and exporting files of information or by creating a real-time connection between the applications. A typical usage is to use real-time lookup for validating part number and order or lot number information and to report the labor back for scheduling runs during the day.

Information available for scheduling applications includes: activity start/stop times and dates, employee ID, shift ID, Order/Routing (or other identification), labor type (direct, indirect, setup, etc.), quantity scheduled, quantity processed (good, scrap, partial), manufacturing equipment ID, activity elapsed hours (clock time), allocated employee time, and labor code for indirect work.