COMPUT-ABILITY, INC.

JIM - Job Information Manager

JIM
User Manual

JOB INFORMATION MANAGER

User Manual

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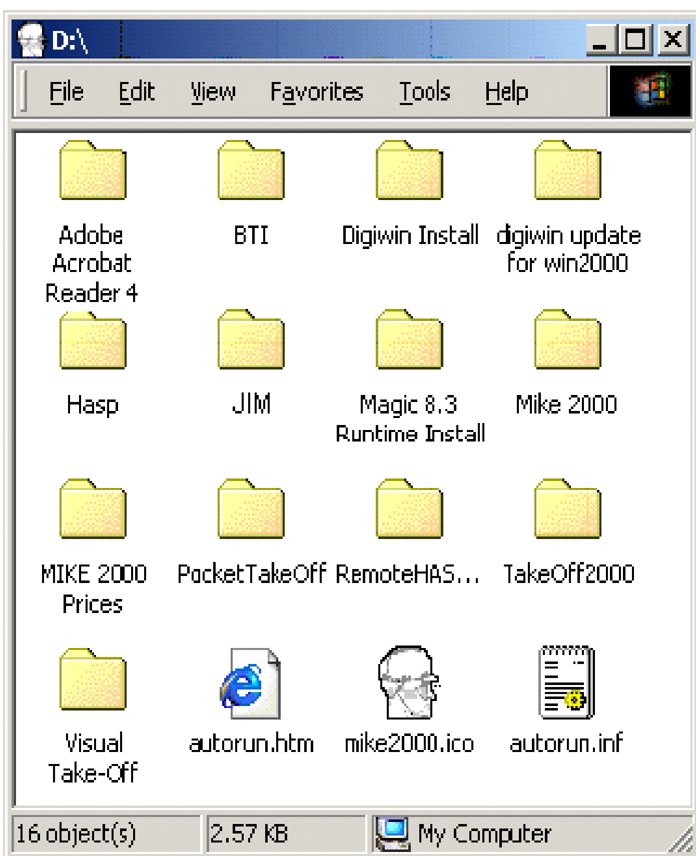
Chapter 1

Installing JIM

Do Not connect the HASP until installation is finished.

To install and run JIM, your computer must meet the following minimum requirements: a PC compatible computer running Windows 98® or higher, a CD ROM drive and at least 20meg of space on your c: drive, (you may need more hard drive space as you begin to added jobs) and a USB port for use with the HASP. (A parallel HASP is available from Comput-Ability, Inc., if your computer has no USB port.) Also, you will need a minimum screen resolution of 1024 x 768.

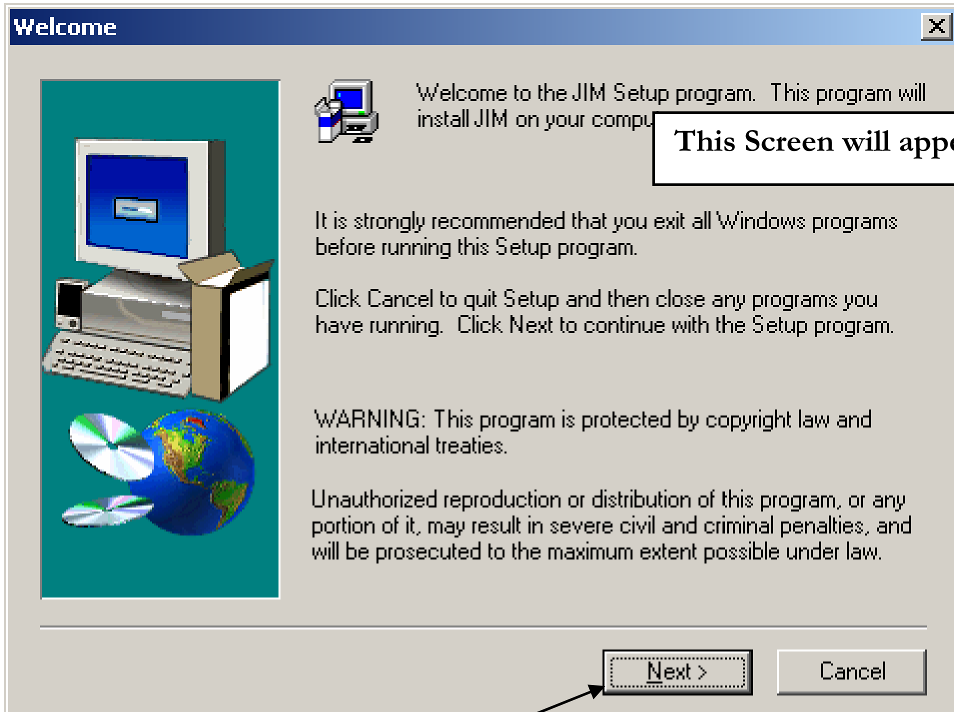


When you insert your CD into the computer, it will automatically run on most computers. Select the "Browse CD" option on the screen that opened. If your computer did not automatically open this window, browse the CD with "My Computer". You should see many files and directories on your Comput-Ability CD. Open the "JIM" directory, and run "Setup".

*NOTE:

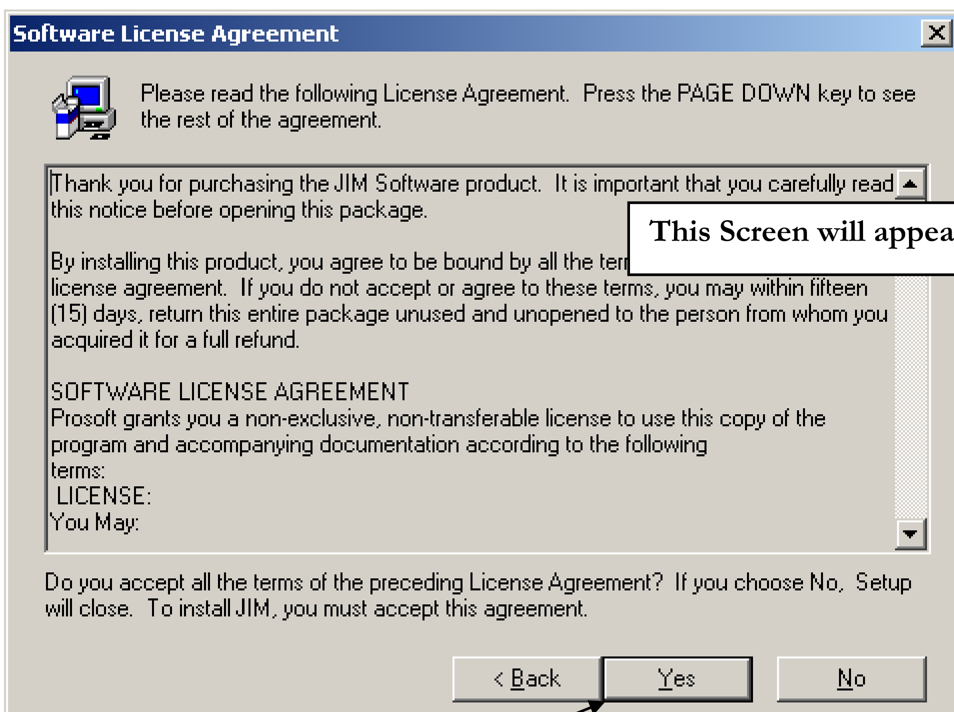
Your CD may have different files and/or directories than the image in this document.

This Screen will appear:

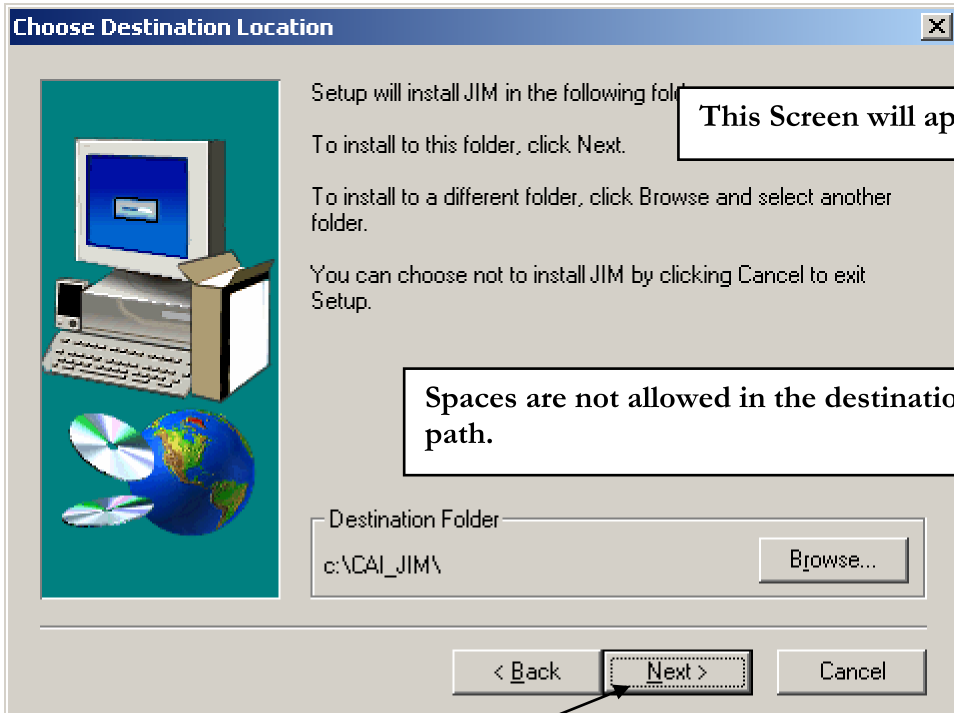


Click on the Next button.

This Screen will appear:



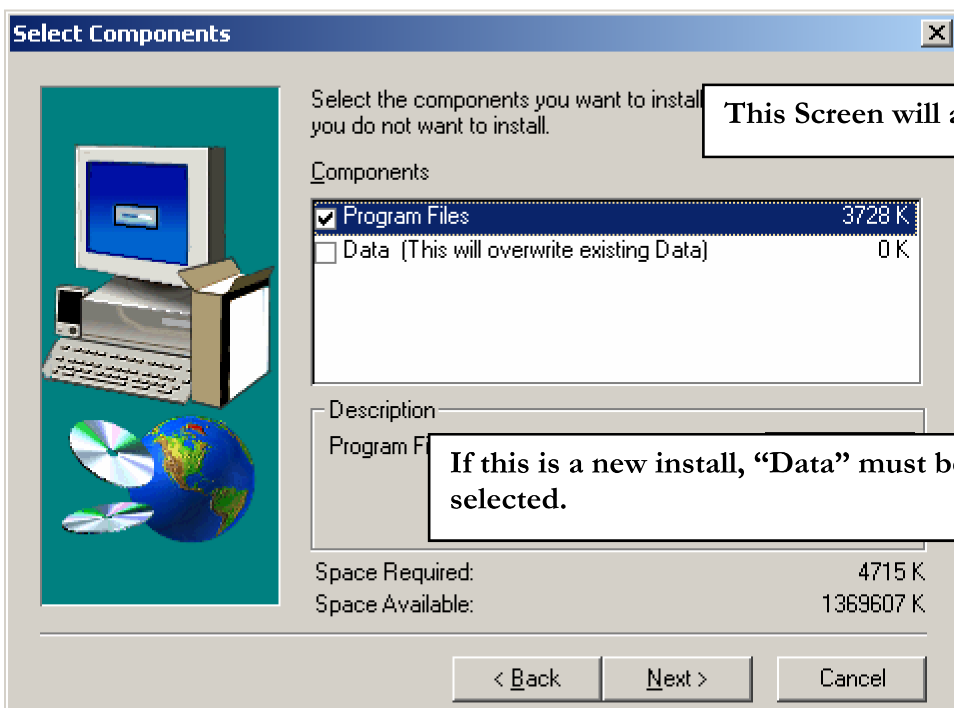
Click on the Yes button, to accept the software license.



This Screen will appear:

Spaces are not allowed in the destination path.

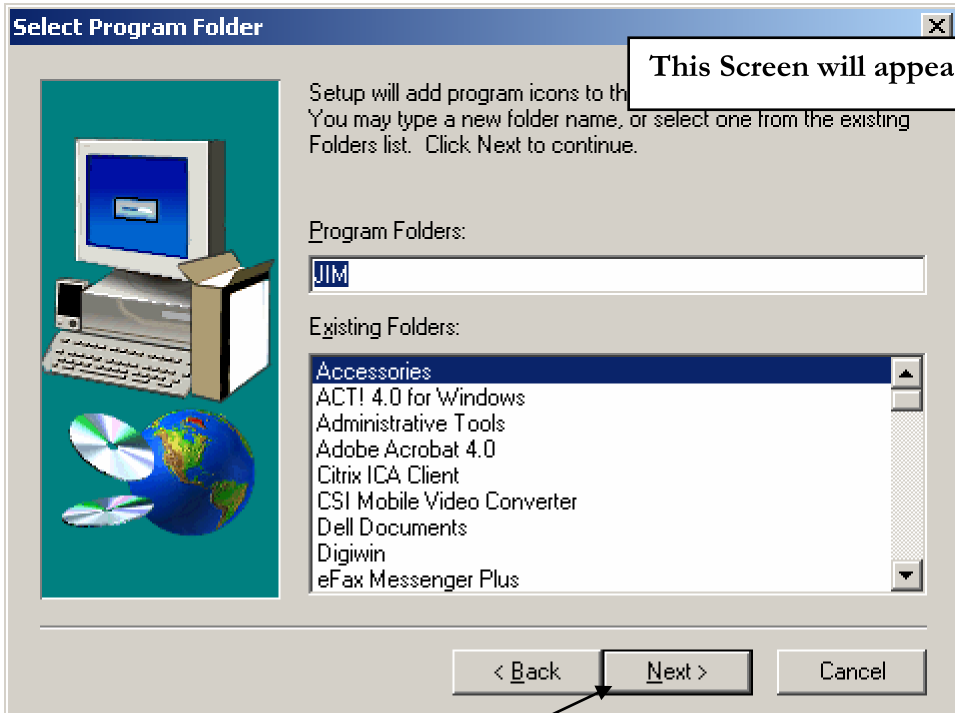
Click on the <u>Next</u> button.



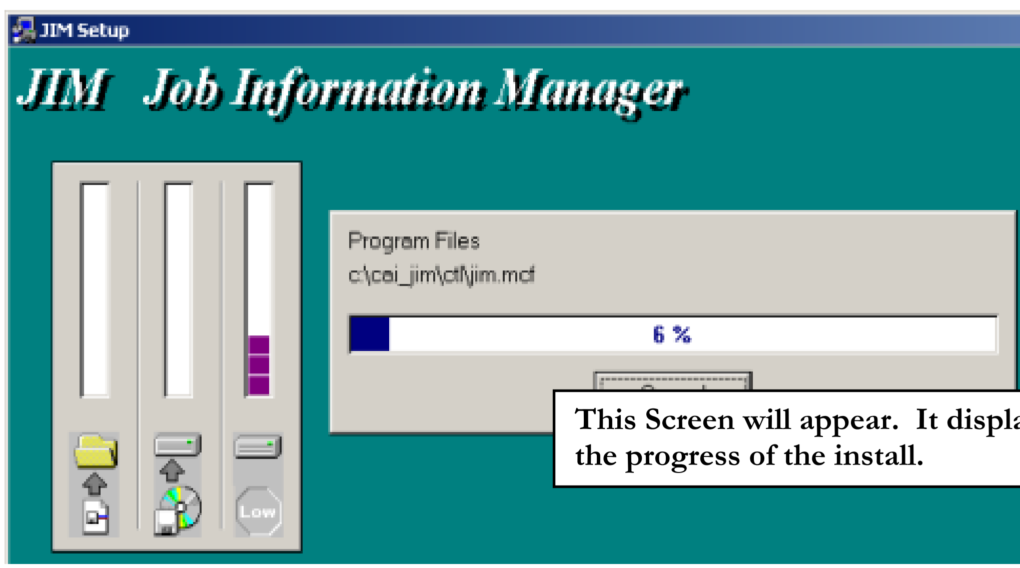
This Screen will appear:

If this is a new install, "Data" must be selected.

This Screen will appear:



Click on the <u>Next</u> button.



This Screen will appear. It displays the progress of the install.

Note: You need to restart your computer before JIM will run correctly.

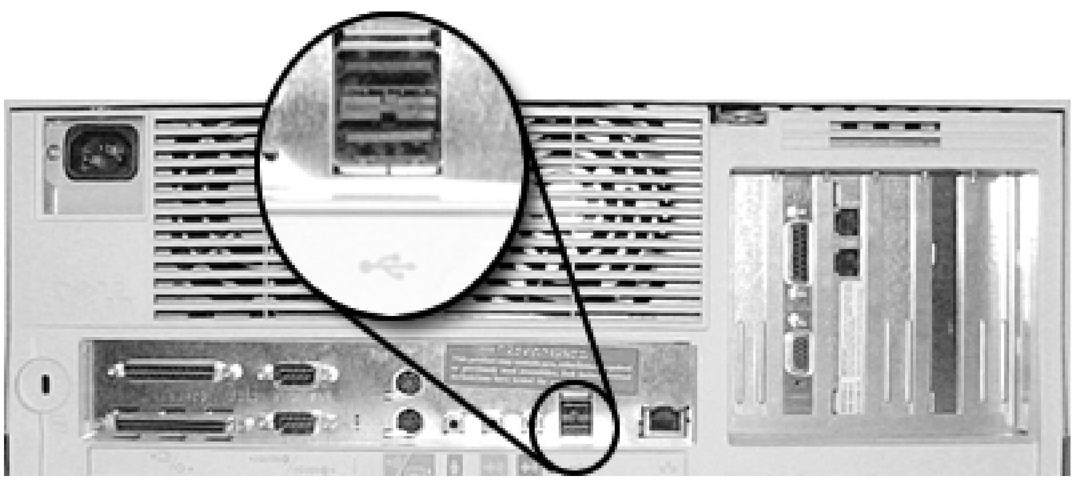
Connecting the USB Hasp

Do not connect the HASP until you have installed the software. Failing to do so will cause the incorrect driver for the HASP to be installed. If you connected the HASP, you will need to contact Comput-Ability, Inc. for instructions to correct the install.

The HASP uses the USB port on your computer. If you do not have a USB port, a parallel HASP is available from Comput-Ability, Inc. However, a USB HASP is much easer to install and to move from computer to computer. This is useful if you need to take your HASP when working at home. If you don't have a USB port and you would like one, there are several expansion cards available that you can purchase that insert into your desktop computer. You will also need Windows 98® or higher. Windows 95® has limited support for USB, and will not work with the HASP. Also if you run Windows NT®, you will need Windows 2000® or higher. There is no support for USB in the earlier versions of NT.

Locate your USB Hasp that was provided to you by Comput-Ability, Inc.

It will look like the image shown here. If there is a tag or other marker indicating that you should install the driver first, you can remove it at this point. Locate the USB port on your computer. It may be located in different places on your computer, depending on what make and model you have. It is usually located on the back.



Once you have located the USB port, simply plug in the HASP. The software will do the rest. It will detect the HASP and install the correct driver software.

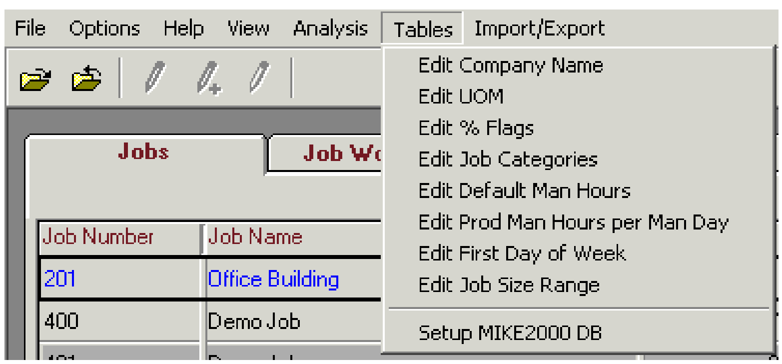
TIP There are USB keyboards and other USB devices available. They can provide an easer location to access a USB port. This is useful if you need to move the HASP frequently.

Chapter 2

Using JIM

This chapter will cover all basic functions of JIM.

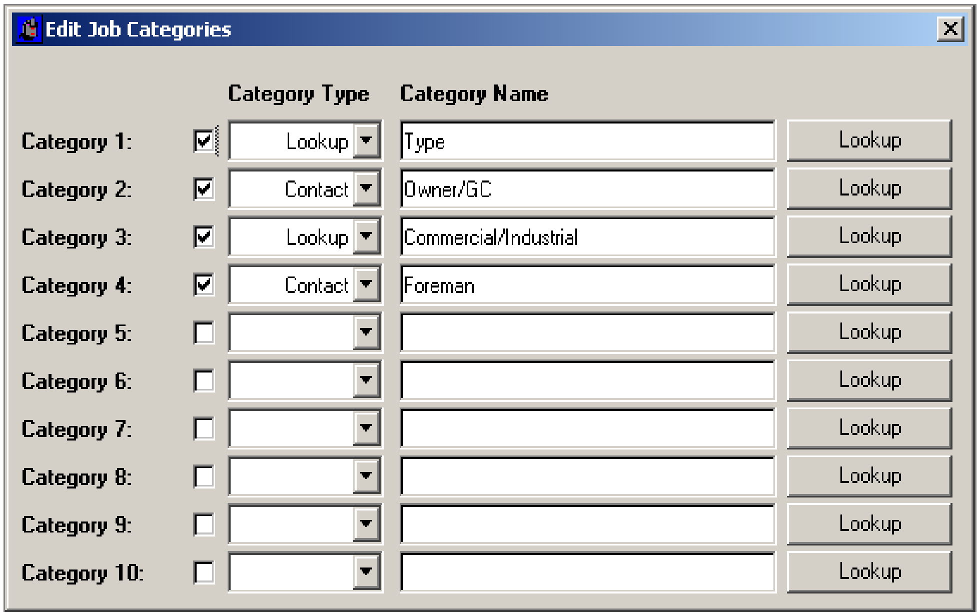
Before you start to use JIM, there are a few configurations that need to be made. You need to set up your company name, how you want to categories your jobs and various other information that will determine how JIM will operate.



The configuration options are under the "Tables" menu. The first option, "Edit Company Name", will allow you set up your company name. This name will appear on the top of all reports. "Edit UOM" will allow you to set up all the valid units of measure. Only valid a UOM can be used in a job.

When your productivity becomes too high or too low, it will appear in red. To set the level at which to flag your productivities, use the "Edit % Flags" option. This will allow you to set the upper and lower threshold.

"Job categories" allows you to track and compare jobs by their category. These categories are completely customizable by the user. There are two fundamental category types available, look up and contacts. Look up categories are simply a list of related groupings. For example, you may have "Type" as a look up category. And in that look up, you would set up "Office, Chemical Plant, School, and Jail". There is no limit to the number of items you have in you list.



Contact categories allow you to set up a list and include contact information. These categories are useful for tracking the owner, GC, foreman, or any other individuals you would like to track a job by.

JIM has a scheduling system built in. It can aid in crew size planning, and work load scheduling. For this function to work correctly, JIM needs to know how many hours your crew works each day of the week. "Default Man Hours" will allow you to set this up. These settings can be overridden in a job, if need be.

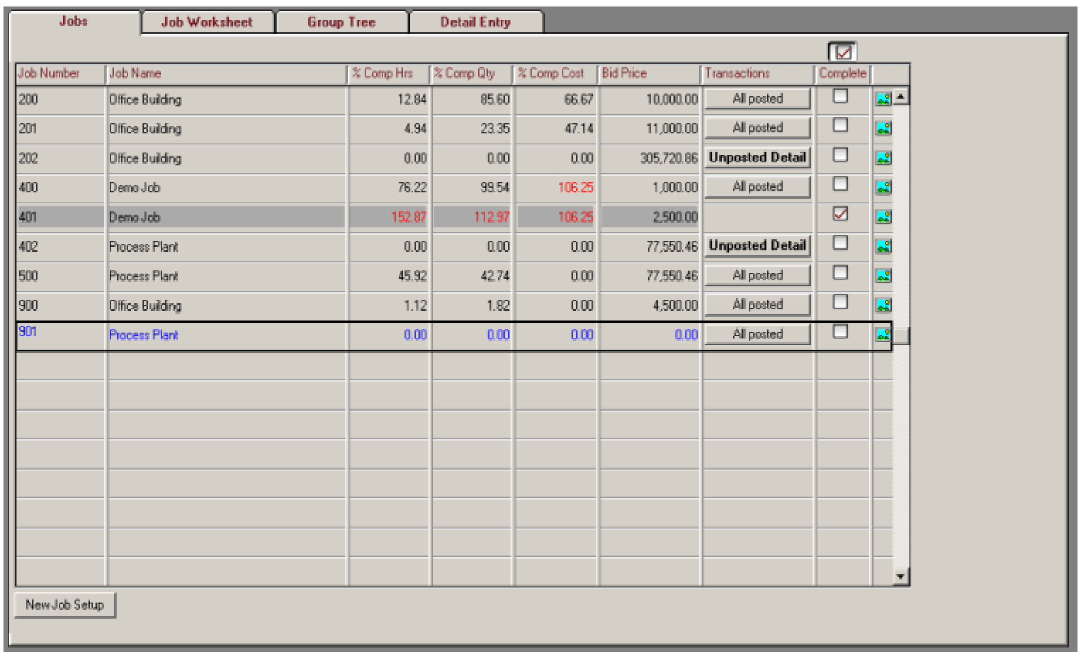
JIM can report the Productivity in either Qty/Hour or Qty/Day. "Man hours per Man day" will allow you to set this option.

The "First Day of The Week" option allows you to tell JIM which day of the week you start on. This is used in the scheduling report to create week totals.

JIM will analyze jobs by their size, to help you determine what jobs are the best for your business. "Job Size Range" allow you to determine how the job ranges are reported.

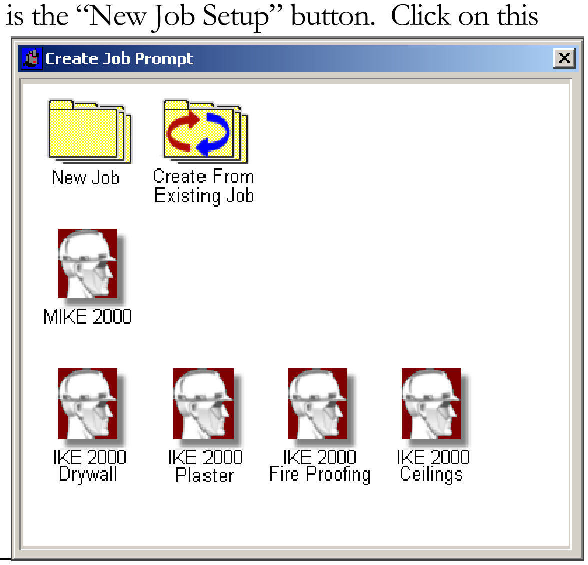
Creating Jobs

The main interface for JIM is a tab screen. This screen was designed to give you easy access to every piece of a job, with only a few clicks. The first tab, "Jobs", will display all the jobs in JIM and give you summary information about those jobs. You also use this tab to create a new job. We will discuss all the features of this screen. But first we need to learn how to create a job.



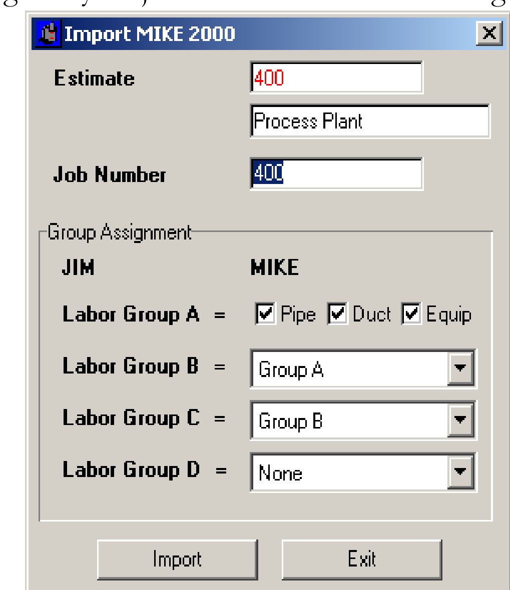
On the bottom of the Jobs tab, is the "New Job Setup" button. Click on this button to open the job setup screen.

There are several options available when setting up a job. "New Job" will create a blank job. You will have to setup all of the estimated quantities, hours, and cost. "Create From Existing Job" will copy a job in its entirety, except for the actual quantities. All the other options are for creating a job based on an estimate. JIM will interface with any

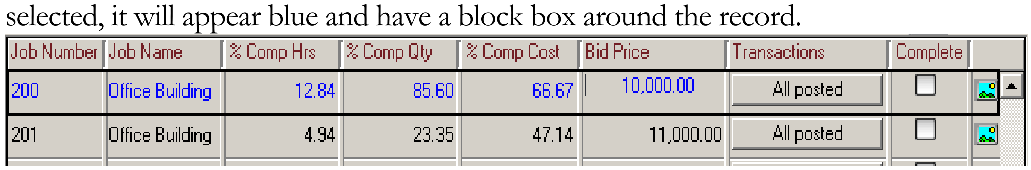


Comput-Ability, Inc. estimating system. In this manual we will select the MIKE 2000 icon. This will set up a job according to a bid in MIKE. This technique is the same with all Comput-Ability, Inc. estimating systems. By clicking on the MIKE 2000 icon, the bid import screen will appear. JIM needs to know how you want to see your bid information formatted. First select the estimate to import. You can zoom on this field to select the estimate from MIKE. Next JIM needs to know the job number to create. Job numbers in JIM can be up to ten characters of letters and numbers. The last step is to set up the labor groups. Labor groups will be discussed in more detail when we talk about the "Group Tree". Labor groups is the way JIM categories your job information. When setting up a new job, you need to decide how you want to see your information. If you trace your bids by system, then you would probably select "System" for "Labor Group B". In most situations, four labor groups are too many. It will just complicate the job. In the graphic shown here, Labor Group D is not used. When we get to the Group Tree, the groups will only be three levels deep. This will start to make more sense when we use the labor groups later in this manual. When you have the import setup the way you need it, click the "Import" button. A "please Wait" screen will come up. The time that it takes to complete this process will depend on your computers performance, and the size of the estimate in MIKE. Once the import is complete, JIM will return to the Create Job screen. If you have no other jobs to import, click the "x" in the upper left corner to close the window. This will return you to the main tab screen, with the job selected that you just created.


MIKE 2000



The "Jobs" tab will now display your new job, plus all the previous jobs you have setup. This tab is used to select the job you want to work on. When a job is selected, it will appear blue and have a block box around the record.

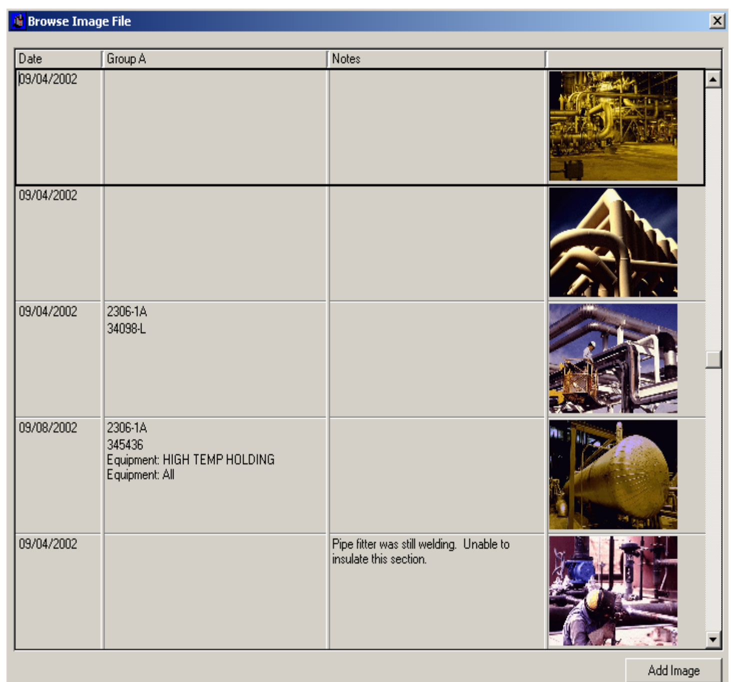


Job Number	Job Name	% Comp Hrs	% Comp Qty	% Comp Cost	Bid Price	Transactions	Complete
200	Office Building	12.84	85.60	66.67	10,000.00	All posted	☐
201	Office Building	4.94	23.35	47.14	11,000.00	All posted	☐

This screen provides summary information about the job. Percent complete for hours, quantity, and costs, as well as the bid price are displayed here. This is also were you will post the actual hour and quantity transactions you have entered. If the "Transactions" button reads "All posted" then that job has no un-posted detail. If there is detail to post, the button will read "Unposted Detail" in bold lettering. To post the detail, simply click the button. You can only change detail records that have not been posted. If you post information in error, you will need to post an additional transaction that will correct that mistake.

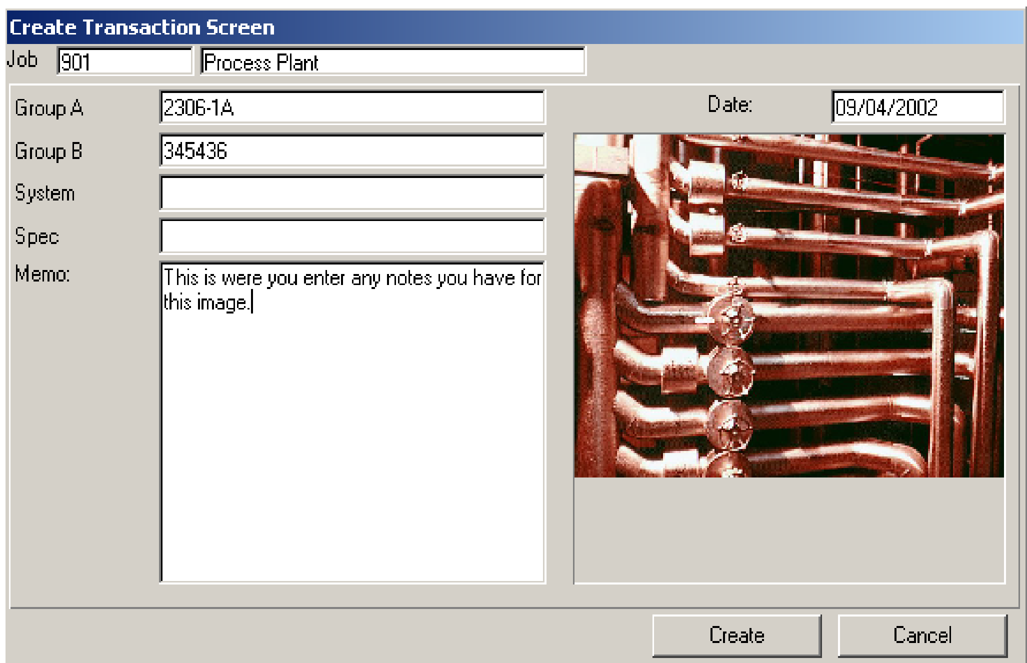
The "Complete" check box will denote the jobs open/close status. The button above this column will allow you to change the view of jobs displayed. You can use this button to hide or display closed jobs.

The picture button will allow you to attach a digital images to the job. You can attach them at the job level, or to a specific labor group. Clicking on this button will display all the images you have attached to this job. If you have no images yet, JIM will open the "Add Image" window first. We will discuss this window shortly. As you can see in the graphic shown, an image has a date that you specify when you add it to the project. Also, an image can be attached to a labor group, such as the third and forth images in this example. You also have the ability to enter notes about that image. This screen is intended to give a list of all the images. To do this, this image has to be displayed as a small icon. JIM has the ability to interface with most windows imaging software, including Microsoft Internet Explorer and Kodak Imaging for Windows. Both of these software packages are included on most computers by the manufacturer. To setup your favorite imaging software, for both display and editing, select the "Edit Image Viewer" under the tables menu.



To open an image in the external viewer, double click on the image you wish to see. If the "Image Viewer" is set up correctly, it will open and display that image. You can also setup image editors as the viewer, if you choose. This will allow you to retouch or edit the image. JIM will automatically use the updated image once you save it in the editing software.

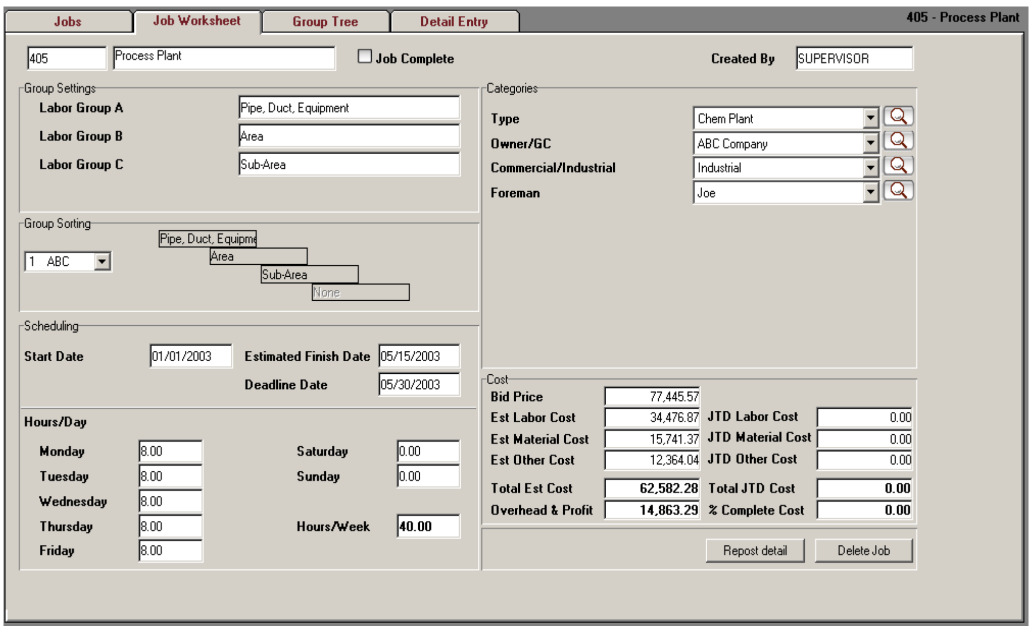
There are two ways to add images to JIM. In the "Browse Image" screen, there is an "Add Image" button. Also images can be added on the transaction screen. Both methods work very similar to each other. We well discuss the transaction screen later in the manual.



The add image screen will allow you to select the labor groups, if you want to attach to any? The graphic shown above only has two of the labor groups used, Group A and Group B. The memo text box allows you to enter any notes you may want to keep with an image. The date defaults to today, but it can be changed to any date you require. You can zoom on all date fields in JIM. This will display a calendar from which you can choose a date. When you land on the image, ether by clicking or tabbing, a window will open automatically. This window will allow you to browse your computers drives to find the image. JIM links to the images and does not make a copy. If you move, delete, or change the image, this will affect JIM's ability to display it correctly. Once you have the image setup correctly, click the "Create" button.

Job Worksheet

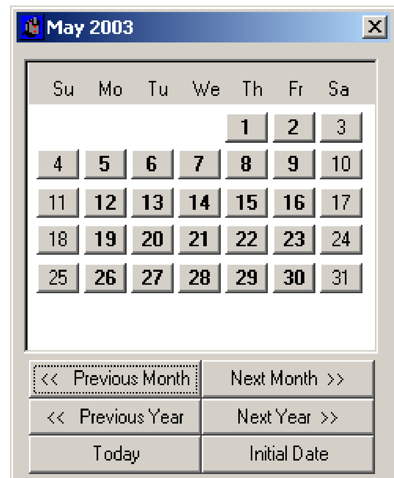
The job worksheet is where you setup basic job information. Most of the information in this tab will already be setup in our job, because we imported from MIKE estimating. If you create a blank job, you will need to setup this information manually.



The upper left portion of this screen displays the job number and name. Once a job is created, its number can never be changed. The name can be changed at any time. The "Job Complete" check box allows you to mark a job complete. You must have all the detail posted and all the labor groups closed before JIM will allow you to close a job. We will cover labor groups and how to close them when we talk about the "Group Tree".

In the Group Settings section, you can rename group titles. Also if this job was set up as a blank job, not an imported bid, this is where you would setup the groups you wanted to use. The Group Sorting section allows you to change the way you see your job data. This example is sorted Group A, B, then C. The sort can be changed at any time. Simply click the drop down, and then select the sort you are interested in.

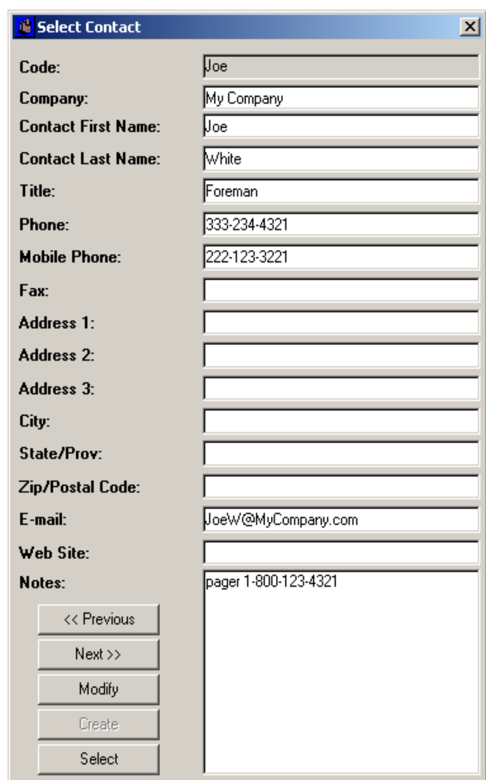
JIM has a scheduling system built it. The Scheduling section of this screen allows you to set up a few basic options. There are three date settings, Start, Finish,



and Deadline. Like all date fields in JIM, you can zoom on this field to select a date from the calendar.

Also in this section is the hours/day. You can have a different number of hours for any day of the week. These are default hours for this job, and can be overridden in each labor group if needed. This is used for calculating the crew size needed to complete a given labor group in a specific date range. Scheduling will be covered in more detail in the Group Tree and the Reporting section.

JIM has the ability to setup user security. If you are using security, JIM will record every change to a job and who made the change. The "Created By" field displays what user created this job. If you are not using security, this field will be empty.



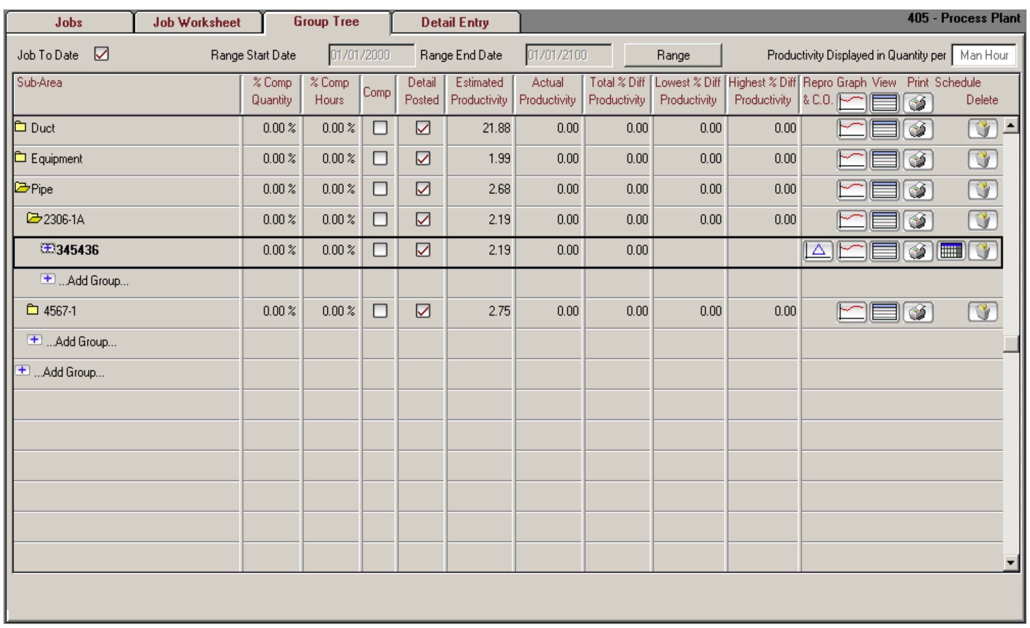
JIM has the ability to classify jobs by up to ten different categories. Earlier in this manual, we talked about setting up these categories. The Category section of this screen is where you select the appropriate category for this job. These categories are completely customizable, and you can add to the list in this screen. To select a category, click the drop down box and select the correct one. For more information about that category or to add to that category, click the magnifying glass button.  This will open a window that allows you to see more information, if you are working with a contact category. Also you can make changes here, or add a new selection to the list. When we cover the job analysis section later in this manual, you will see how to compare jobs based on these categories. This will give you information about your job history. This will tell you what jobs you have done well on, and what jobs you have not.

The section in the lower right of the Job Worksheet is where you manage the cost. JIM does not manage transactions for your job cost. But you can enter the estimated and actual values here. This will give you a percent complete for cost, and help you see how your job is progressing as compared to hours and quantities.

The “Repost Detail” button should only be used if you are having a problem with your job. This button will clear all of your quantities and repost all the transaction detail. The “Delete Job” button will delete the job from JIM. Once you have deleted a job, it can not be undeleted. The only way you can recover it, is if you exported the job before it was deleted.

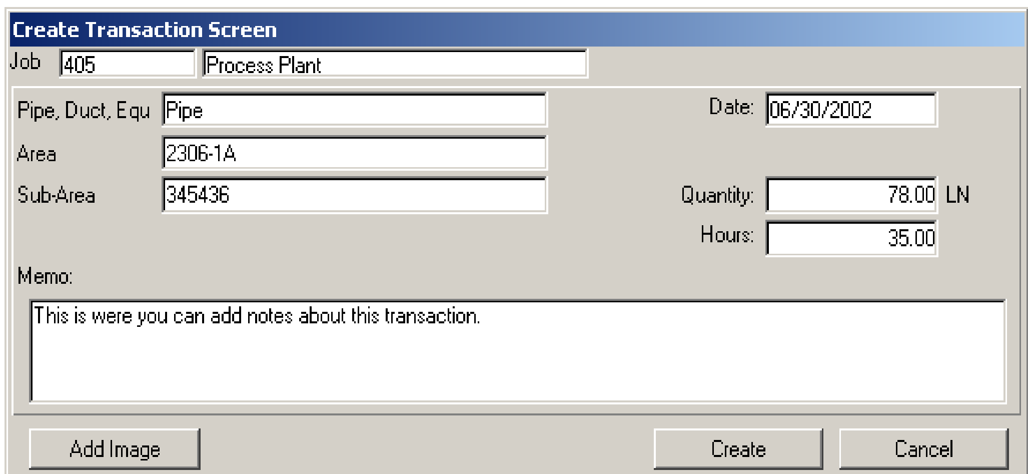
Using the Group Tree

The Group Tree is where you do most of the data entry and reporting. It works similarly to other windows programs that use this technique. The Group Tree displays the hierarchy of your labor groups, and gives you the ability to drill down thru the groups to find the section you are looking for.



The default view for this screen is “Job To Date”. This displays all of the labor group information for the entire history of the job. However, any date range can be selected. Click on the “Range” button. A window will open that allows you to change the date range.

To navigate the labor tree, click on the folder next to a labor group. This will open that group to show all the labor sub-groups included. You can continue to drill down into sub-groups until you have reached the last level. In the example here, we have three groups setup. "Pipe" is open and has the sub-groups 2306-1A and 4567-1. Sub-group 2306-1A is open and has sub-group 345436 included. The bottom groups do not have a folder icon. This is because there are not sub-groups to drill into. Instead they have a button with a + symbol. This is used to create a transaction of actual hours and quantity. Click this button to open the create transaction screen.



This screen displays on the left what job and labor groups this transaction will post to. The date field allows you to enter the date for this data. This should be the date when the work was done or completed. This date is used to show labor trends. If the date is incorrect, then the trend analysis graph will not be able to calculate correctly.

The Quantity field is where the actual quantity complete for this date is entered. In this example, the quantity needs to be entered in lineal feet. If the job was metric, then lineal meters would need to be entered. Do not enter the total complete, just the additional quantity complete. JIM will add this quantity to what was already posted to this labor group. Then enter the man hours that were needed to complete this quantity. From this JIM will calculate the percent complete for quantity and hours, as well as productivity.

The memo box can be used to include any notes you may have about this transaction. Also JIM will allow you to attach an image here. It works exactly the same as in the "Jobs" tab, which was covered earlier in this manual. The only difference is that JIM will automatically attach it to the same labor groups as the detail transaction.

When you are done entering the transaction, click the "Create" button. This will not add the quantity to the job, but it will create a transaction to be posted. If you need to correct anything with this transaction, you can use the "Detail Entry" tab. This tab shows you all the un-posted detail, and allows you to enter detail. This tab will be covered later in this manual. To post the detail transactions, click the "Post Detail" button in the "Jobs" tab. Once you post the transactions, you will not be able to change or delete them. To make corrections, an additional transaction will need to be entered that offsets the error.

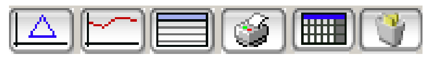
Sub-Area	% Comp Quantity	% Comp Hours	Comp	Detail Posted	Estimated Productivity	Actual Productivity	Total % Diff Productivity
Pipe	10.89 %	13.09 %	☐	☑	2.68	2.23	-16.79
2306-1A	100.00 %	98.40 %	☐	☑	2.19	2.23	1.83
345436	100.00 %	98.40 %	☐	☑	2.19	2.23	1.83

Once the transactions have been posted, the Group Tree will report this new data. In this example, labor group 345436's quantity is 100% complete. And the hours are 98.4% complete. The percent complete is based on the estimated values that were imported from MIKE.

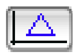
Now that we have finished work on this labor group, in this case sub-area 345436, we should mark it as complete. This will prevent you from posting detail to labor groups that are complete. It will also remove it from the scheduling reports. To do this, click on the check box just to the left of % Comp Hours. If you click on the "Comp" check box in the Pipe labor group, all the sub-groups will be marked as complete. We still have other groups to complete in Pipe. In this case we should click on the "Comp" check box in the 345436 labor group, to mark only that group as complete.

Next to the "Comp" check box, you will find the "Detail Posted" check box. This box will only be checked if all the detail for this labor group has been posted. You will not be able to close a labor group if you have any un-posted transactions.

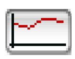
Estimated Productivity is calculated from the values imported from MIKE. We will cover shortly how to revise the estimated quantities. The Actual Productivity is calculated from all the detail transactions that have been posted. The Total % Diff Productivity will show you how the actual productivity is compared to the estimated. This example has a red -16.79 in the Pipe labor group. You can set up limits for percent difference. Whenever the percentage is outside of that limit, it displays in red.



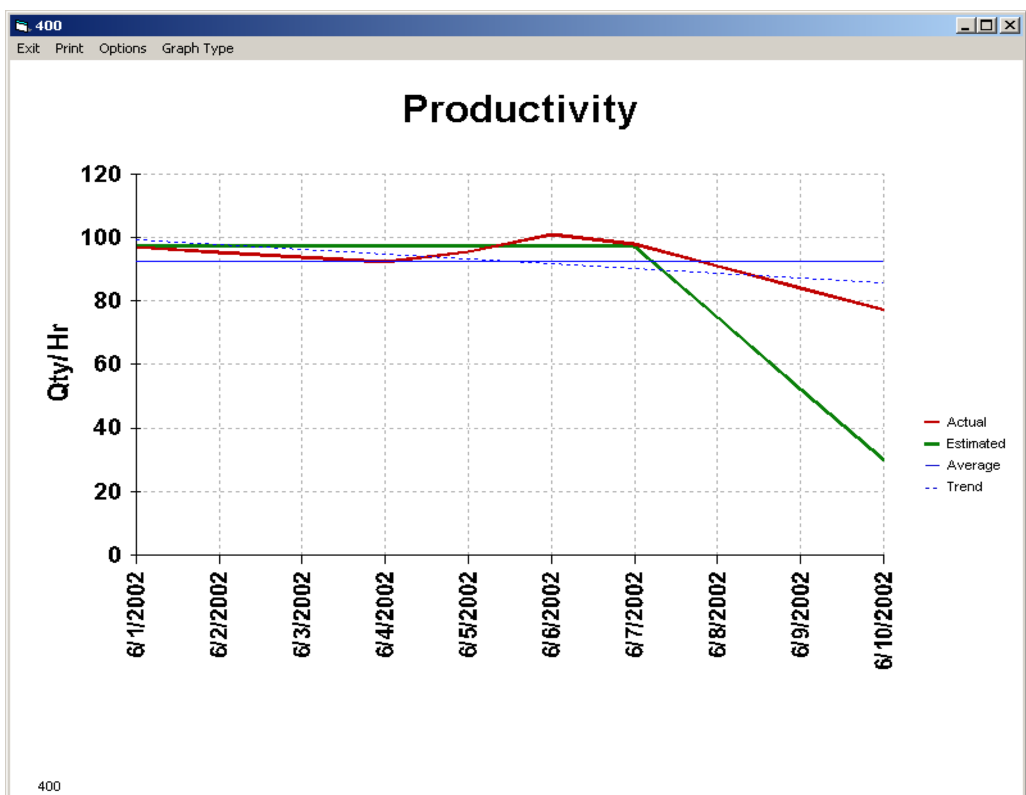
The right portion of this screen has several buttons. These buttons are used to report or update various parts of that labor group, and any sub-groups. The buttons at the top, will report all the labor groups. This is used to range on the particular labor group you are interested in.



The button with the delta symbol is used for reprojections, change orders, and corrections. Clicking on this button will open the Change Transaction screen. This works similarly to the Actual Transaction screen that was covered earlier. The values for quantity and hours are what the new values will be. They replace the existing values, not add to them, like the detail transactions. Also the changes are made immediately, and do not require you to post the detail.

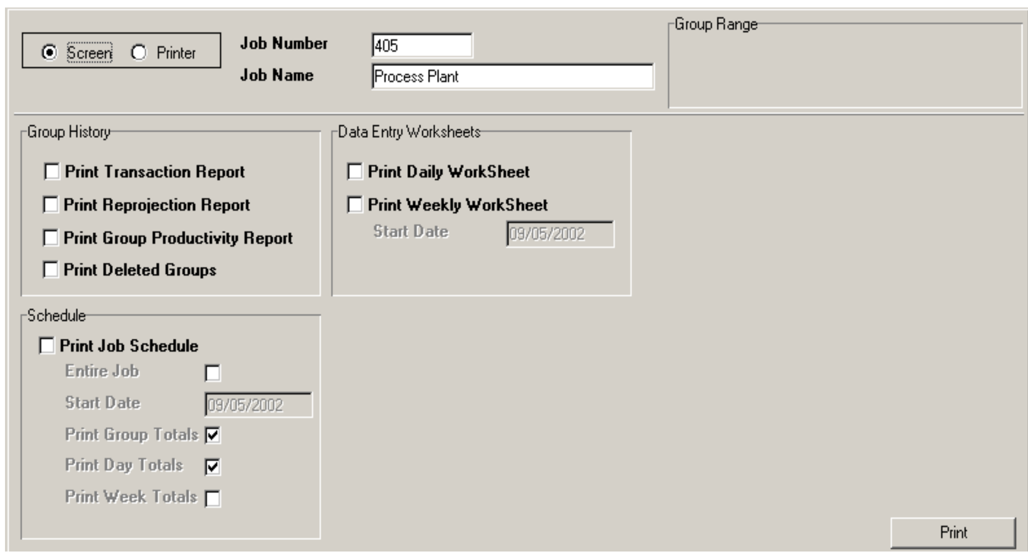


The graph button will open a graph with all the detail entered for that group and any sub-groups. There are several options in the graph. You can display an average line or trend line. Also line, bar, and area graphs are available in 2d and 3d. You can also print the graphs to your default printer.



To display all the transactions that have been entered, click on the button that looks like a data table. This will open a screen that lists all of the detail from that group and all sub-groups.

To print a report, click the printer button. This will open a screen that will give you several reporting options.

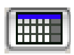


All reports can go to the screen or the printer. This option is located in the upper left corner of this window. The job and the labor group range are also shown. In this example there is no group range, so the entire job will be reported.

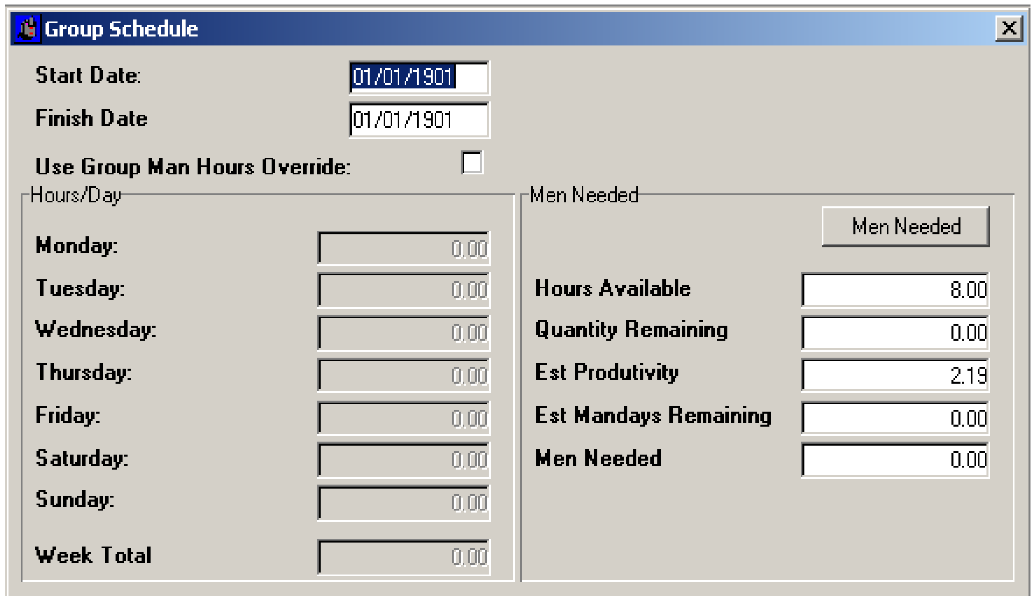
In the Group History section, there are four reports available. The Transaction and Reprojection reports will report all the detail transaction. The Group Productivity report will print a report that is very similar to what you saw in the Group tree. The Deleted Groups report will report all the groups that were deleted and who deleted them.

The scheduling report will generate a report that has manpower needed per day. This report also shows what the productivity needs to be for that day, as well as the total quantity needed to be completed in order to stay on schedule.

The last section is the worksheets. These reports will print a worksheet that can be given to the supervisor. They provide space to write in actually quantities and hours. The data then can be entered into JIM from these worksheets. Once you have selected all the reports you want to run, click the "Print" button.



The scheduling button allows you to set up a schedule for a particular labor group. Clicking this button will open the scheduling window.



The first two fields allow you to enter the start date and end date. These are required fields. JIM will evenly distribute the work load over the date range you provide here. If this labor group has a different hour per day then the rest of the job, you can use the Man Hour Override. This will allow you to setup how many hours your crew will work for each day of the week.

The right portion of the screen will show you how JIM has calculated the manpower needed. As your date range becomes larger, the manpower per day required will decrease.

The last button in the Group Tree is for deleting labor groups. This will delete the group and any sub-groups, including all detail transaction for both actual quantities and reprojections. There is no undeleting option in JIM. You will not be able to recover this information, unless you have exported the job first.

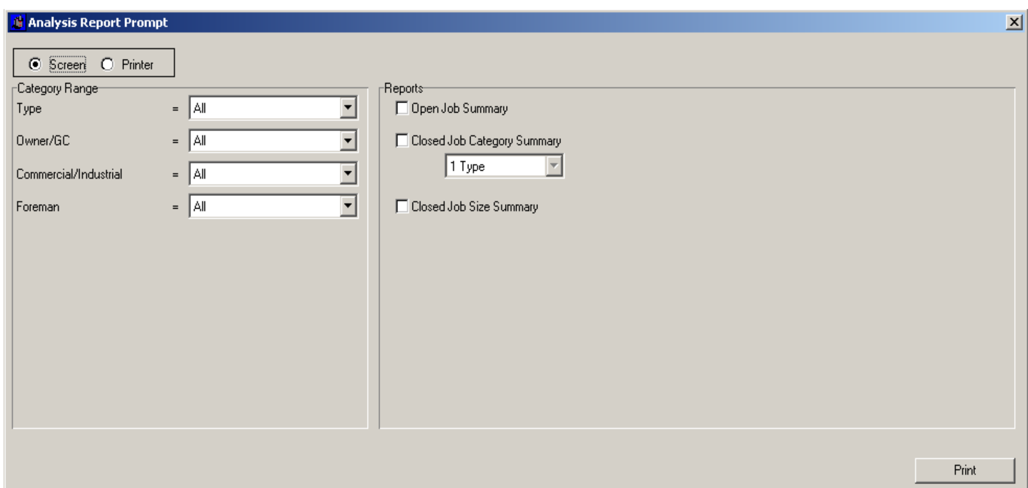
Chapter 3

Data Analysis and backup

This section will cover how to analyze job history and how to backup your data.

Job Analysis Reports

Select the Analysis option from the drop down menu. This will open the Job Analysis report window.

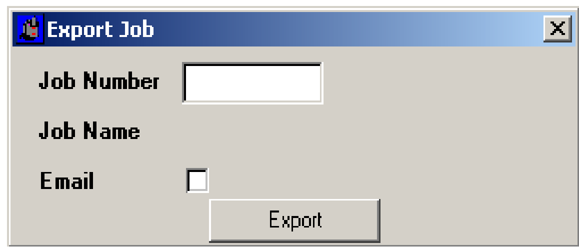


Just like the labor group reports, the report can print to the screen or the printer. The job categories can be used to select a range to report on. For example, you could print reports for just industrial jobs.

Currently JIM has three analysis reports. Open Job Summary will print a summary level report for all open jobs. This is a useful way of looking at all the jobs you currently have active.

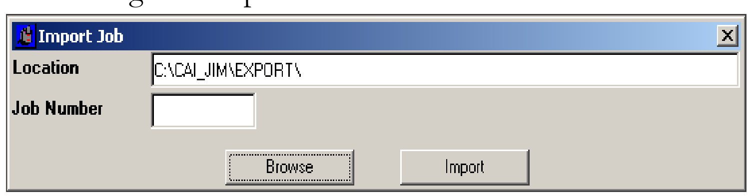
The two remaining reports analyze closed jobs. The Job Category report will give you a comparison of closed jobs based on category. This will help you determine what type of jobs you perform the best and worst on. The Job Size Summary will compare jobs based on job bid price. This will show you how your company performs on jobs of various size.

Backing up Jobs and Emailing Jobs



To export a job, select the "Export Job" from the Import/Export drop down menu. This will open the Export job window. Enter the job number to be exported. If you want to email this job, select the "Email" option. Then click the "Export" button. This will create a folder on your C: drive and place the job in that folder. If you selected email, JIM will open a new email and attach the exported job. This feature will not work with all email clients.

To import a job, select "Import Job" from the Import/Export drop down menu. Enter the location or browse to the location where the exported job is stored. Next give JIM a job number to assign the import to. It does not have to be the same number that was exported. Then click the import button.



Backing up the database

It is always a good idea to back up your data as often as possible. Before you can backup JIM, you must have JIM closed. There are several techniques used today to backup data. Whatever techniques you use is fine. On your C: drive, JIM is located in the "CAI_JIM" folder by default. In this folder you will find the "Data" folder. This folder contains all of your JIM data, and should be backed up regularly. Also if you have exported any job, they are located in the "Export" folder. You may want to backup this folder as well.