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CHAPTER 2

*Getting Started:  
Installation and Startup*

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  3. Startup
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  5. Selecting a Zone
  6. Logging-in and Password
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## Introduction

### Client / Server Environment

ERP2020™ is based on a client/server environment. The ERP2020 system uses 4D Inc.'s 4D relational database technology and works in PC and/or Macintosh cross-platform multi-user environment. The database is resident on a centralized server known as the ERP2020 Server and is accessed by all applicable clients on the network.

ERP2020 licenses consist of licenses for the 4D Server and clients, and licenses from Semilabs for the ERP2020 application, or "structure file." The 4D Server launches the ERP2020 structure file which in turn controls the applicable data file (database). The number of users allowed for simultaneous login is limited by the license restrictions for both the ERP2020 application and the 4D Server. "4D" and "4D Server" are registered trademarks and copyrighted software from 4D inc. The ERP2020 structure file is copyrighted by SEMI LABS Inc.

### Data Integrity

The ERP2020 System operates in a multi-user environment which features high level data integrity and *record locking* features. Only one user can modify a record at a time that a record is being modified by one user is claimed *locked* by that user and is not available for update to other users until that user has released the record. A record is released or unlocked as soon as the control is returned to the program menu.

### Security

The ERP2020 System employs high level security features. Access to the system is restricted by user names and passwords. Access is further restricted by user-rights and privileges to access the various modules.

## Installation

Before you begin working with the ERP2020 System,

- Check the contents of your ERP2020 Software Package
- Check that you have the necessary configuration of hardware to run the ERP2020 system.
- Make sure the version of the Operating System is compatible. (see OS requirements section)
- Read the Manual and the installation instructions.
- Check the installer diskettes or CD that comes with the ERP2020 Package.

**The ERP2020 Package contains the following items:**

- 4D Server with multi-user license
- ERP2020 application with Plug-ins
- This ERP2020 Manual & 4D Documentation
- CD Rom
- SemiLabs license agreement and registration card

### **Server Hardware & OS Requirements**

- RAM: 512 MB Error Correction (Minimum)
- HDD: 18GB, RAID V
- Processor: Pentium IV or equivalent
- Graphics: 800x600 (Minimum)
- Operating System: Windows NT/2000/2003/Mac OSX

### **Client Hardware & OS Requirements**

- RAM: 512MB (Minimum)
- HDD: 2 GB (Minimum)
- Processor: Pentium III,IV or equivalent.

- Graphics: 1024x768 (Minimum)
- OS: Windows NT/2000/XP Mac OS 9/X
- PDFWriter

#### **Printer**

- Ethernet network and/or local postscript printer
- PDF Writer

#### **Network Configuration / Hardware**

- Ethernet
- TCP/IP

## **Server Installation**

Server installation is normally handled by Semilabs as part of the implementation process.

## **Client Installation**

Clients are installed using the 4D CDROM supplied. Please refer to the 4D documentation supplied with the disk. ERP2020 uses a standard 4D client but the client must be the same version as the 4D Server.

## **Launching the System**

Launching the 4D client provides access to the 4D Server. After you launch the 4D client application, the screen shown in figure 2.1 on page 2.5 will appear. This screen lists all 4D servers that have been published within the intra-net. The user must select the file name and server within the intra-net or enter

the TCIP address of a server on the WAN or internet.

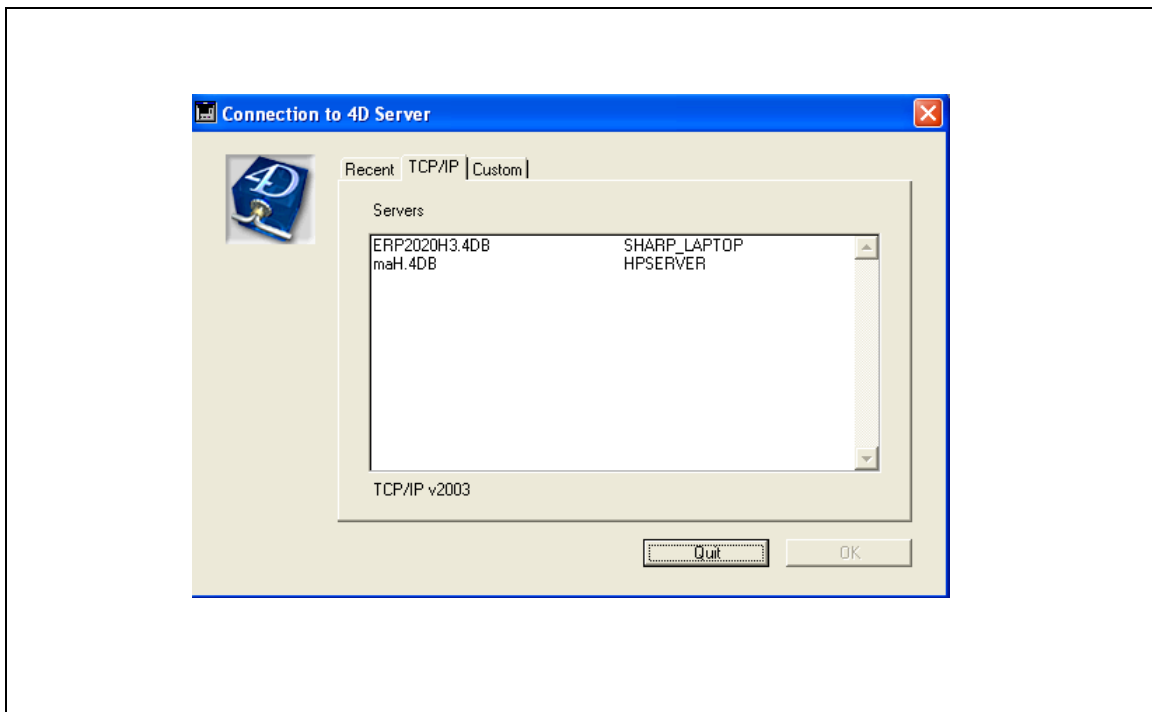


FIGURE 2.1

The ERP2020 System is a highly secure system. You must have a login user name and password in order to be able to use the ERP2020 System. Note that there are two types of user categories:

1. Administrator
2. User/s (created by the Administrator with limited access to the ERP2020 system)

Once you have selected the appropriate file and server, a Log-in/Password dialog will appear as shown

on figure 2.2 on page 2.6. Enter the user applicable username and password.

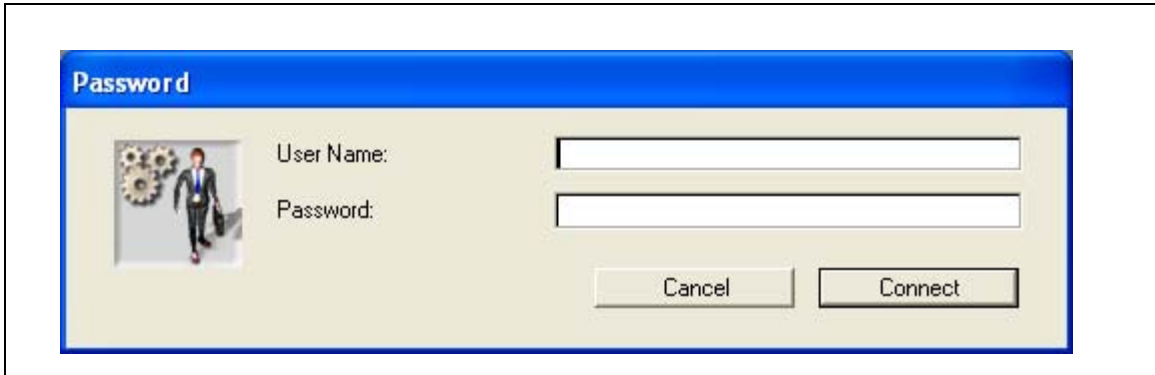


FIGURE 2.2

Upon successful entry of the password, during the initial log-in, the user will be presented with client configuration dialog. This dialog prompts the user to select a division, a physical site at which the division is located, and other client-specific information. This dialog is shown in figure 2.3 on page 2.6.

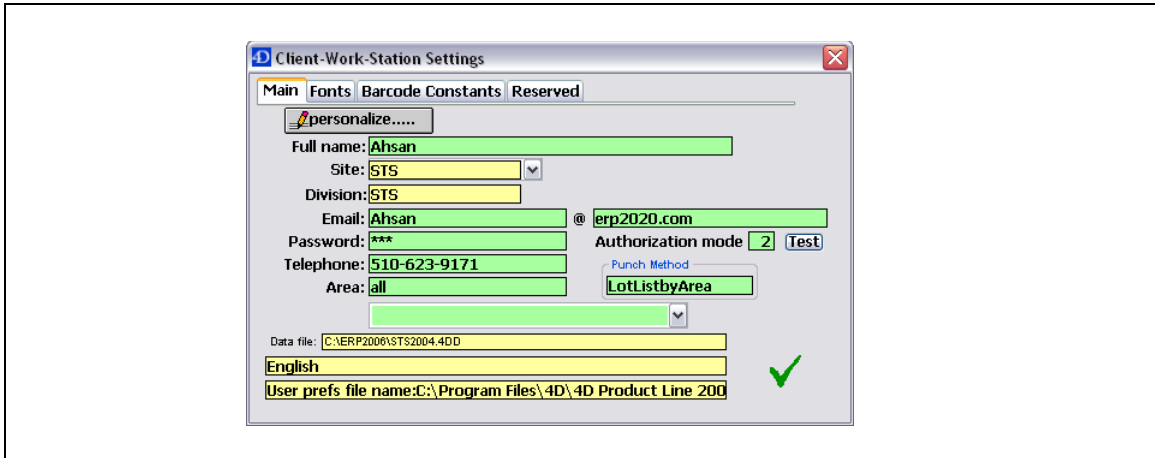


FIGURE 2.3

The divisions (and their physical sites) are defined in the House Keeping record by the ERP2020 administrator. All Sites/Divisions defined in the House Keeping Record are displayed here (via a drop-down list). The Site and Division names are separated by a "/". The user must select the appropriate

Site/Division combination from the drop-down box..

Note that a division can be physically co-located with another so that multiple divisions may share the same physical site. Most ERP2020 data is segregated by divisions, however, divisions at the same physical-site can share some administrative functions.

Other Client-Configuration (station-specific) parameters are discussed below:

Full name	Name as it will appear on some ERP2020 communications
Email	Email-prefix and the domain-name are concatenated to produce the user's email address. This address is used as the "from" address in ERP2020 email communications.
Password	If the email-server being used by the ERP2020 requires SMTP authentication then the user must also enter the password to be used for authentication.
Authorization Mode	The value of this variable should be between 0 and 3, and it signifies the authorization (authentication) mode used by the email server.
Test'	This button allows the user to test the email authentication by send an email to one's own account (account specified in the dialog)
Telephone	Will appear on some ERP2020 communications
Area	This and the following field will determine what mode of data-entry will be used when starting (punching-in) and completing (punching-out) a traveler step. To update the correct traveler, the user can either use the keyboard to enter the lot-number associated with the traveler (bar-code scanning being just a key-board extension) or selecting a lot from a Lot-List Window. Each station can belong to an "Area" in the manufacturing line. If a station is configured to a specific area then it changes the default action during the lot punch-in and punch-out processes whereby the station will be presented only with the list of lots that are presently residing in their particular area, instead of a list of all lots waiting to be punched-in or out. To limit punch-in and punch-out lot-list to the Client Specific Area the "use" option should be set to "LotListbyArea"
Use	Defines which option to use for punch-in and punch-out data entry. The 'LotListbyArea" method will allow the user to select a lot from a

list. The “scanner” option will allow the user to simply scan the lot-number from the printed traveler. See figure 2.4 on page 2.8

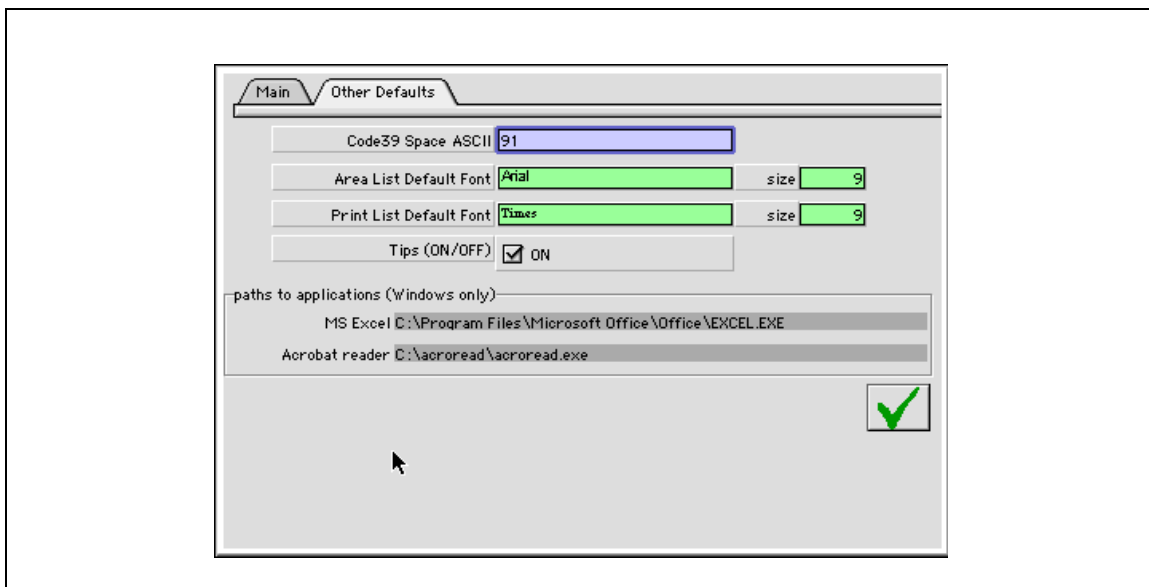


FIGURE 2.4

#### Code39 Space ASCII

Code39 barcode fonts require that the “space character” (ascii code 32) be replaced with a different ascii character. The replacement character depends upon the font and the barcode-coding being used. This is a Windows (Visual Basic & other Development-Environments) issue. When a bar-code string is being printed, spaces will be changed to this character. In Code39 the substitution character is typically one of ASCII 91 or ASCII 248 (decimal) while in Code128 the substitution character is typically ASCII-code 194. Note, this setting (as all other settings discussed here) applies only to the local client stations and is NOT data-base wide.

#### AreaList Default Font

Defines the user’s preference of font for all Spread-Sheets in the data-base that use the “Area List” plug-in.

Print List Default Font	Defines the user's preference of font to be used in those reports that use the "Print List" plug-in. Note that all reports do not use this plug-in.
Tips (ON/OFF)	Most ERP2020 objects have a help "tip" associated with them. The user can access this tip by momentarily parking the mouse on an object. Experienced users may want to suppress the appearance of "tips".
MS Excel Path	The user defines the absolute path to their local Excel application. If this path is entered then ERP2020 will automatically open any Excel-compliant exports in Excel.
Acrobat Reader	The user defines the absolute path to their local Adobe Acrobat Reader application. If this path is correct then the ERP2020 will automatically open all PDF documents using the Acrobat Reader.

## Upgrading



Periodically Semilabs will make available upgrades and maintenance releases to the ERP2020. When upgrading an ERP2020 application (Structure file) the administrator needs to perform some routine tasks both before and after launching the upgrade. Beyond the routine cautionary backups to be made the user must get ready to transfer some resources that are stored in the current (Old) Structure file to the new Structure file (upgrade). Specifically the Users and Groups information, Lists information, and Logo, must be transferred from the **old** Structure to the **new**. Starting with revision 2004.3 most of the resource-transfer process has been automated.

### Using the existing setup

- 1) Transfer the Users and Groups to an external file. See “Operations with the OLD Structure (before the upgrade)” on page 2.11. This is only required in the 2003 version only (including the first revision upgrade from 2003 to 2004)
- 2) Save current Lists in the data-file. See “Operations with the OLD Structure (before the upgrade)” on page 2.11.
- 3) Bring-down the Server and perform a backup of the root folder. This folder contains the Structure File, the Data-file, the plug-ins (Win4DX folder), and the WebPageERP folder.

### Using the New Structure:

- 4) Copy the new structure in the root folder and remove the old-one. See “Operations with the NEW Structure (after the upgrade, using the same data-file)” on page 2.12.
- 5) Replace the old WIN4DX folder in the root folder with the new one if one has been provided.
- 6) Launch the New Structure and select the data-file. (The data-file always remains the same). Keep the shift-key pressed so that a fresh full backup and a new log-file can be created.
- 7) Perform the backup and synchronize the mirror. See “Step by Step Process to setup a Mirror.” on page 23.39.
- 8) Login via a Client as administrator (new structure does not require a password to login) and load the Users and Groups information saved after performing step 1 above. This is only required in the 2003

version only (including the first revision upgrade from 2003 to 2004. See “Operations with the NEW Structure (after the upgrade, using the same data-file)” on page 2.12.

9) Restore lists from data-base into new structure. See “Operations with the NEW Structure (after the upgrade, using the same data-file)” on page 2.12.

10) Restore logo into new structure. See “Updating company Logo in New Structure.” on page 2.12.

11) Run update data-file procedure. This will update the data-file with any changes required by the new upgrade.

12) If a 4D-4D replication is also installed then perform the upgrade on the Slave Server also.

13) If new fields have been added or field definitions have been modified in the new Structure then make the appropriate changes in the MYSQL data-base (If the MYSQL replication is installed).

### **Operations with the OLD Structure (before the upgrade)**

1) Save the users and groups to a local (external) file outside the data-base (called MYFILE.ug for reference). The users and groups can be saved in a local file, via the HOUSEKEEPING menu bar, menu EDIT ACCESS, menu item MANAGE USERS and GROUPS. In the dialog that appears, the administrator may save the users and groups via the PASSWORDS menu, and menu-item SAVE GROUPS. Through this process the administrator saves all users and groups created by the administrator. This is only required in the 2003 version only (including the first revision upgrade from 2003 to 2004

2) Save the users and groups into the ERP2020 data-file (DATA.4DD). This is done via the HOUSEKEEPING menu bar, menu EDIT ACCESS, menu item SAVE USERSGROUPS IN DATA FILE. This step saves all the users and groups in the data-file irrespective of who the creator was (Administrator or Designer). This step does not save the passwords. This is only required in the 2003 version only (including the first revision upgrade from 2003 to 2004

3) Save the Lists via the HOUSEKEEPING menu-bar, LIST menu, and menu-item LIST MANAGEMENT. Lists are then saved into the data-file by clicking the “Save all lists” button.

## Operations with the **NEW** Structure (after the upgrade, using the same data-file)

- 1) Start the Server with the **NEW** structure and the same data-file. For ERP2020 versions after and including 2004.3, the users and groups are automatically loaded from the data-file when the administrator first launches the Client. The administrator must however redefine the password for the administrator's account. Steps 2 through 4 are not required.
- 2) For ERP2020 versions prior to 2004.3, or during the **first** revision upgrade from 2003 to 2004, login as Administrator and load the external users and groups file (MYFILE.ug) that contains the users and groups information. This is done via the HOUSEKEEPING menu bar, menu EDIT ACCESS, menu item MANAGE USERS and GROUPS. In the dialog that appears the administrator may load the users and groups via the PASSWORDS menu, menu-item LOAD GROUPS. This operation restores all the users and groups created by the administrator along with the passwords.
- 3) For ERP2020 versions prior to 2004.3, or during the **first** revision upgrade from 2003 to 2004, load the users and groups information stored in the data file. This is done via the HOUSEKEEPING menu bar, menu EDIT ACCESS, menu item LOAD USERSGROUPS FM DATA FILE. This process recreates all users and groups created by the designer. It does NOT recreate the old passwords. During this process a dialog allows the administrator to selectively add the users.
- 4) For ERP2020 versions prior to 2004.3, restore the Lists into the new Structure file via HOUSEKEEPING menu-bar, LIST menu, menu- item LIST MANAGEMENT. Actual restoration takes place when the "Restore all Lists" button is clicked.

## Updating company Logo in New Structure.

For ERP2020 versions after and including 2004.3, the logo is automatically updated when a structure upgrade is made. In prior versions only the logo is updated manually via Housekeeping menu-bar, Pictures menu, menu-item Get Logo from Pictures.

## Transferring Users /Groups and Lists:



The ERP2020 structure file contains users and groups that control access to various modules and menus of the system. A given user may belong to one or several groups. Conversely, a given group may contain single or multiple users. The users that comprise a group are termed as the group's membership. Users and groups may be created both by the Designer and the Administrator. The users and groups created by the administrator are shaded when displayed in the users and groups dialog form. In addition, their ID numbers are always negative. The users and groups created by the Designer have a positive ID number and are not shaded. The designer cannot access users and groups created by the administrator. The administrator cannot directly modify users and groups created by the designer but can re-arrange the group memberships. It also follows that the administrator cannot modify the passwords of designer-created users. The designer-created users' passwords may be changed by specifically logging in as the user (whose password is to be changed) and then individually changing them via the HOUSEKEEPING menu-bar, menu EDIT ACCESS, and menu CHANGE USER PASSWORD.

Each new structure upgrade requires the user to transfer the passwords from the old structure file to the new one. This is a multi-step process as discussed above.



**Notes:**

1. If the \*.4DB/\*.4DC and “\*.RSR” are being copied from a CD:- Deselect the Read- only Check box in the Properties of the all the included files.





