

Industry-specific

QAD SOLUTIONS

Manufacturing Applications

Installation Guide The Planner



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PLANNER INSTALLATION OVERVIEW

Please be sure that you read and fully understand the items discussed in this chapter. Any point that is not clear should be discussed with your consultant at installation time.

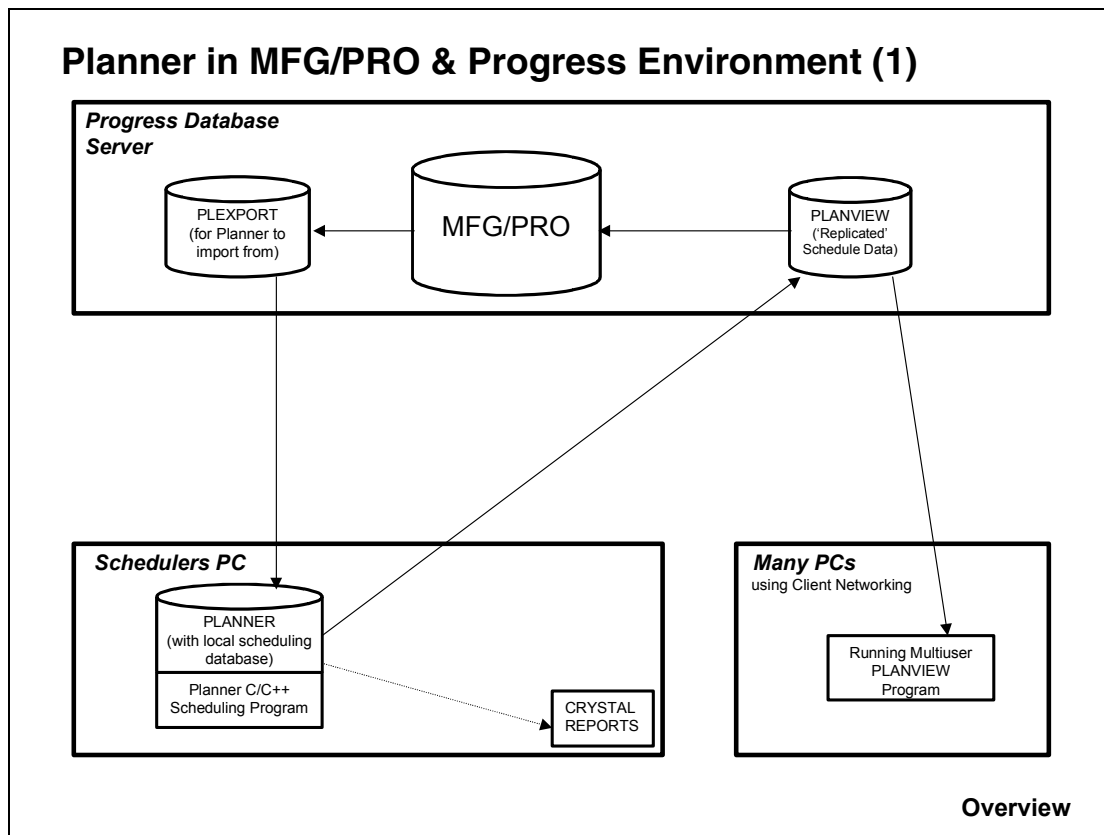
Environment Setup

The Planner software system is made up of a number of components.

- The Scheduling component, often referred to as “The Planner”, short for “The Planner Scheduler” includes the main Planner scheduling window, with its subsidiary Resource ‘Planning’ Board where most scheduling is carried out, and the internal Interfaces for importing to and exporting from The Planner.

All scheduling is carried out at a powerful PC, with the programs and data normally stored on the local drive. Only one machine generally has access to this software, with one person doing the scheduling. If multiple schedulers are to be used (and can be used) then each scheduler would have a complete Planner Scheduler installation on his/her PC.

- The MFG/PRO Interface Programs and databases can be installed in a number of ways depending on the network environment. The options available are covered further in this section. **MFG/PRO must be at least version 7.4f to extract Work Orders**, and at least 8.5d to interface with Repetitive MFG/PRO.
- The MultiUser component is also a separate component to the Scheduler. It reads schedule information output from The Planner when “Distribute the Current Plan” has been run by the person using The Planner Scheduler. This component, like the MFG/PRO Interfaces, utilises a Progress database, and can similarly be installed in a variety of ways depending on the environment. The options available are covered further in this section.



Many users with suitable PCs on a network may access the planning data with MultiUser, distributed by the person(s) doing the scheduling when they “Distribute the Plan”. These users are not able to make changes to the plan, but they have access to all plan information, including operation details and all notes from the plan.

Considerable scope is available to arrange the information each user requires. For example, one user may wish to see a “planning board” with all work into the future; another may wish to have a list of jobs to run at their machine, yet another may wish to have a list of all jobs scheduled to be completed after their required date. These views are easily set up, and can be run from a single icon bar, tailored for each user login.

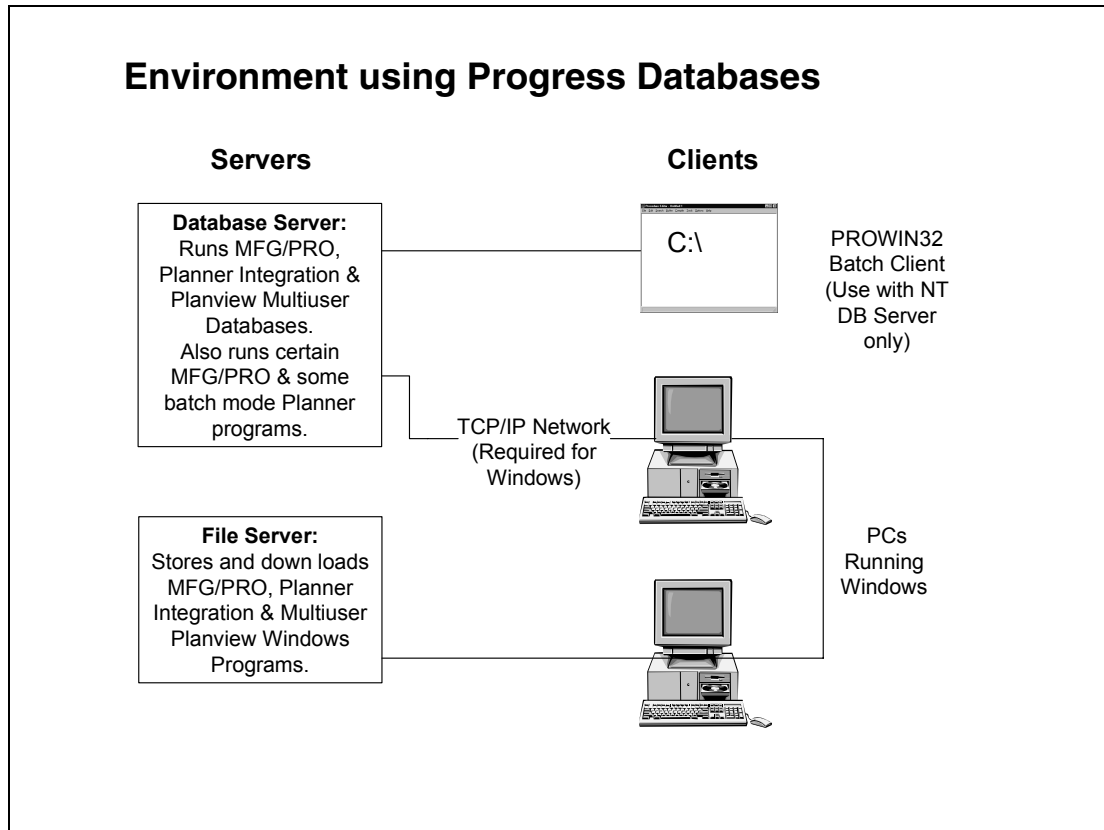
Whenever the person scheduling “Distributes a new Plan”, all other “Multiusers” are notified that a new plan is available, and can choose to refresh their view.

A report writer, for example Crystal Reports, can look at the same “Distributed Plan” information that is viewed with the MultiUser component.

Generally the person scheduling will run any necessary reports, but with networked versions of Crystal Reports, others on the network may also carry out reporting functions.

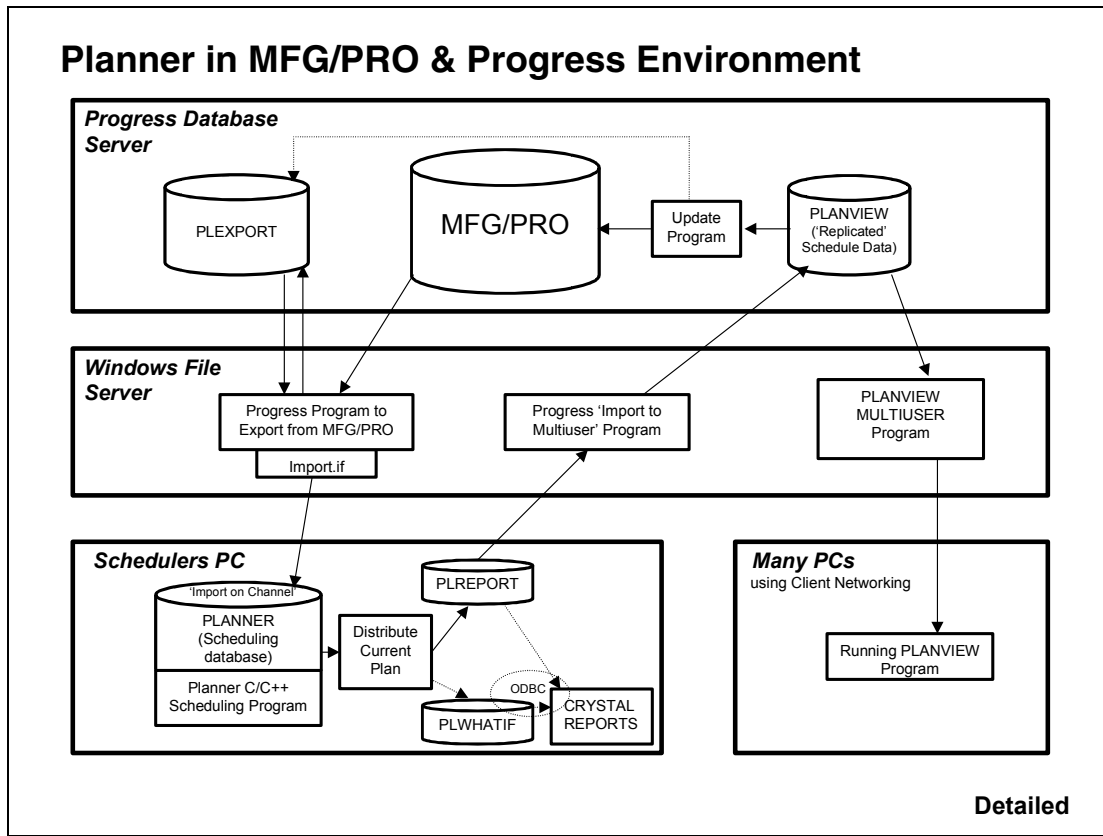
Installation Options using Progress Databases

- for MFG/PRO Interfaces and Multiuser



The Interfaces and MultiUser clients are both Progress v8.2/8.3/9.1 clients.

- These Windows 98/NT4/2000 applications, run locally utilising Progress v8.2/8.3/9.1 client networking. Unix equivalents of some components are also provided.
- However both access any v7, v8 or v9.1 database server on either NT or Unix.



The Windows applications can be installed either on each client, or on a file server. Some tasks are better run on the server, in the background, e.g.

- MFG/PRO Export - normally run from Windows, but can be run as a unix job. See page [43](#) for discussion of issues Windows vs Unix. The MFG/PRO Interface Utility must be run from windows. See figure "MFG/PRO to Planner Export Detail"
- Import to MultiUser - must be run from Windows. See figure "Planner Scheduler to Planview Detail".
- Update MFG/PRO - is generally run from the same environment as MFG/PRO. With NT though, the automated CIM Load only works for Character Clients. It cannot be run from a GUI client. See figure "Updating MFG/PRO Detail" and page [31](#).
- Multiple Client PCs will run the Multiuser Planview(ing) program to access the latest plan that has been distributed and imported to the Planview database. See figure "Planview Detail".

Install Options Detailed in this Guide

Process/DB	Environment	
MFG/PRO Application Server	Unix	NT*
MFG/PRO DB Server	Unix	NT*
Plexport and Planview DB Server	Unix	NT*
MFG/PRO Export	Unix or Windows**	Windows**
MFG/PRO Interface Utility	Windows**	Windows**
MultiUser Import	Windows**	Windows**
Planview	Windows**	Windows**
Update MFG/PRO	Unix	NT*
For Details	<u>Unix Install</u> see page 26	<u>NT Install</u> see page 48

NT* = server is NT4 or Windows 2000

Windows** = Client is W98SE, NT4, Windows 2000 or XP Pro.

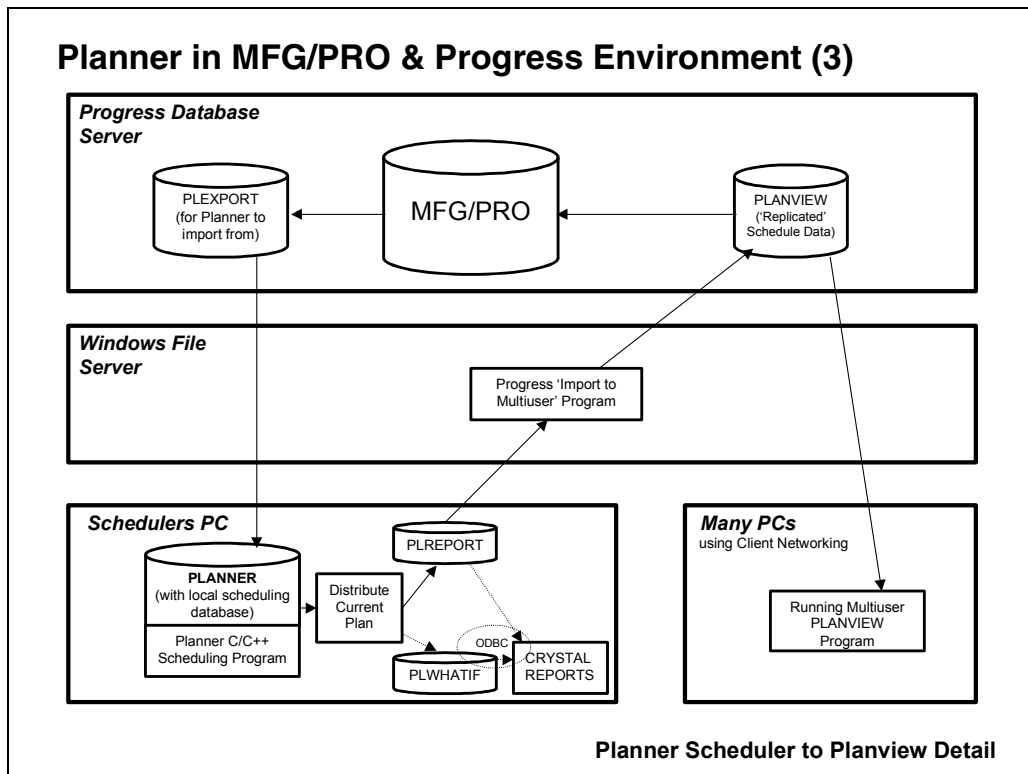
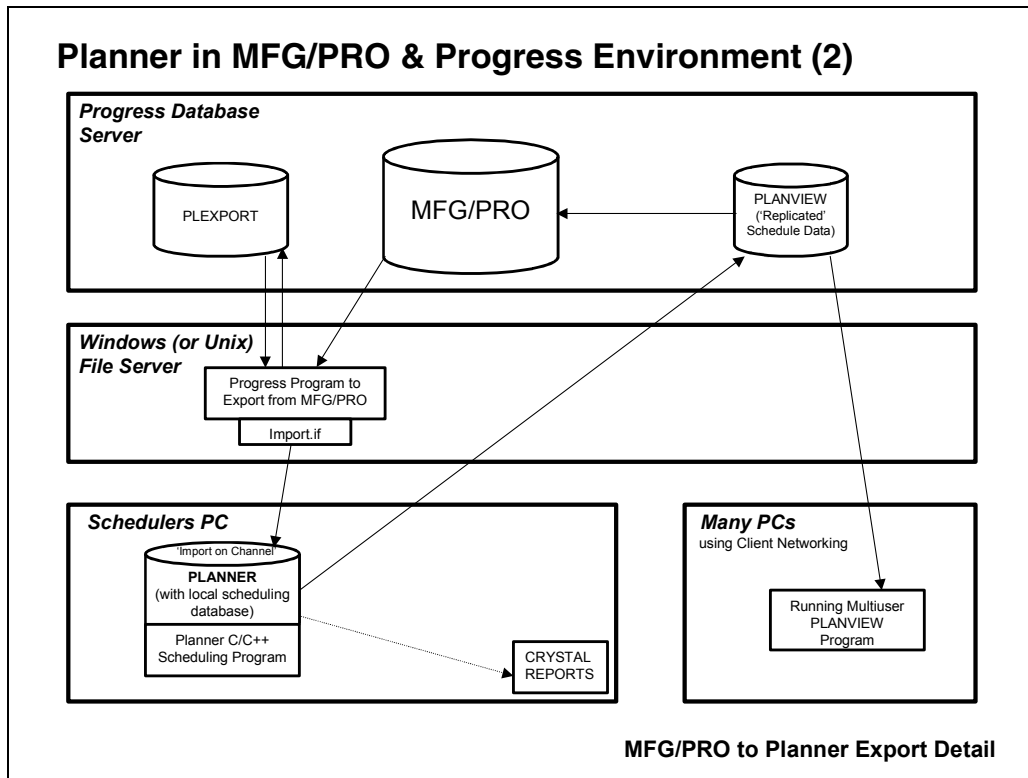
Two other variations to these methods,

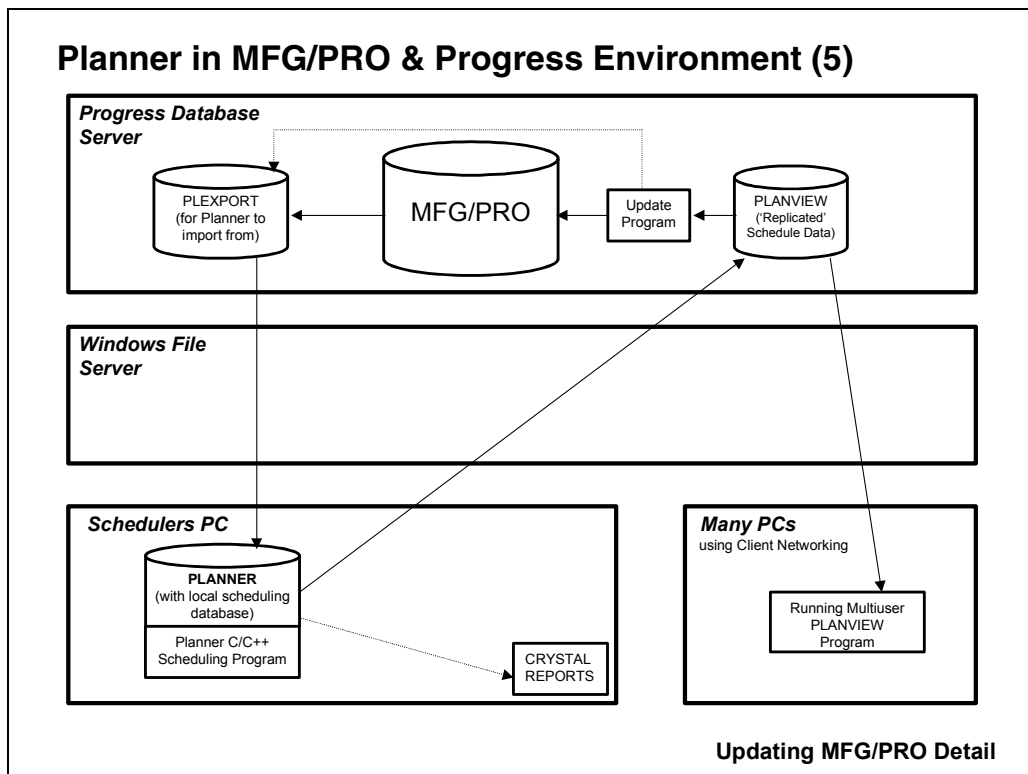
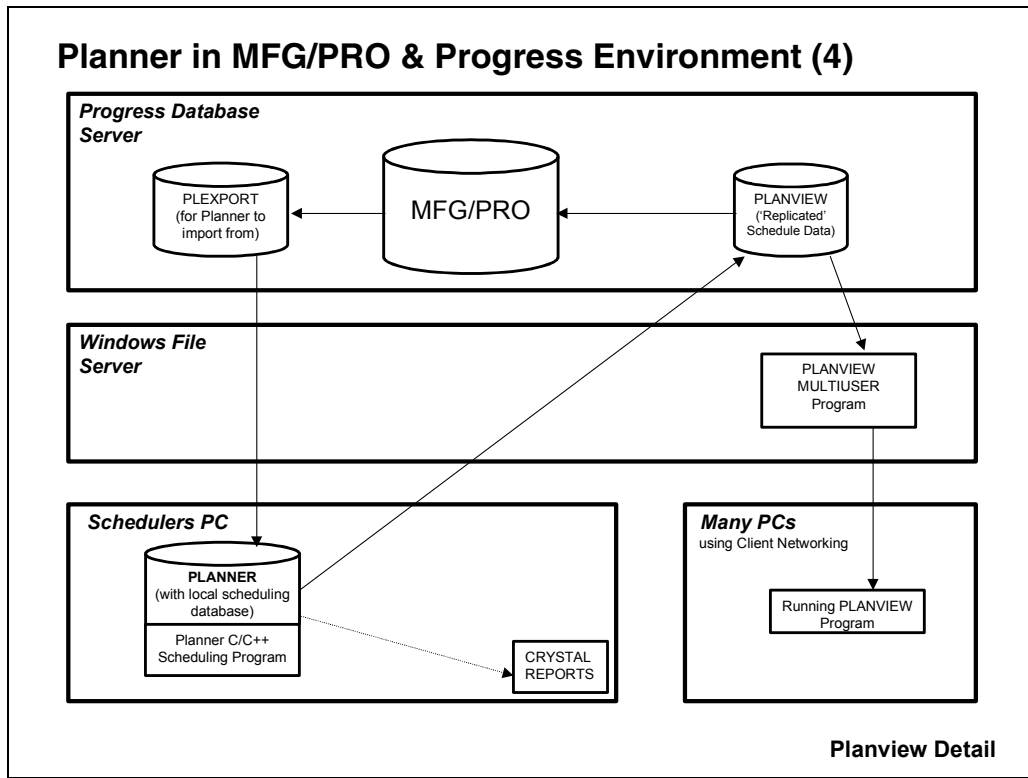
- ‘**Planner with Remote MFG**’, page [86](#), and
- ‘**Laptop / Standalone PC Demo Install**’, page [96](#), are covered in less detail.

All installations allow the splitting of scheduling workload between a number of schedulers, who may or may not be at the same location. Please see the Interfaces Section of the Manual, ‘Work Split’, for the issues that must be considered.

Interface and Planview Processes

The following diagrams may help to determine what installation configuration is appropriate for a particular networking arrangement





Skills Required

The Planner Scheduler is a windows application located on a PC. Normal PC software installation skills are required.

The MFG/PRO Interfaces and Multiuser modules are more difficult to install than the Planner Scheduler as a number of decisions regarding the environments to be used are necessary. Technical knowledge is required of the NT and Unix (if appropriate) environments, as not all of the installation procedure can be automated due to the variability of environments.

The MFG/PRO Installation guide states that its intended audience is for "The MFG/PRO System Administrator who manages the MFG/PRO database and is **familiar with the UNIX environment, networking, PROGRESS, and Microsoft Windows**". The same general skills are required to perform a Planner Multiuser unix database installation.

Specifically the Person Installing must:

1. Have enough knowledge of UNIX to be able to change directories, read Text Files, & be able to edit Configuration/Script Files.
2. Know how to (and have permission to - typically root only) add Progress TCP Service entries to the /etc/services file.
3. Know where the Planner Multiuser application & databases are to be installed.
4. Know where the MFG/PRO application is installed.
5. Know the full name and path of the MFG/PRO database.
6. Know the full name and path of the MFG/PRO client multiuser start-up script (Typically client.Xxxxx eg Client.Production, client.Demonstration)
7. Know the version and installation location of Progress being used by MFG/PRO.
8. Know the full MFG/PRO Propath.
9. Have some knowledge of the UNIX cron function, in order to be able to automate database start-up and shut-down.
10. Know how to use the AT command, (and ProControl if using NT DBs) on an NT server.

PLANNER SCHEDULER INSTALLATION

System Requirements

1. A fast Pentium PC –faster the better

It is recommended that a 'current, middle of the range' machine should be used. In 2003, that is a PC with a Pentium III or 4 processing chip, running at 1.5 – 2 GHz.

The Planner will not run on old computers. Version 3.x, with its many advanced features, is a very powerful product, requiring as much processing power as possible for the Scheduler.

Planview users may be able to use slower chip machines depending upon their information requirements, and current Progress GUI requirements.

2. Minimum 100MB of available Hard Disk Space

Remember that PCs down to the last 100MB of free disk run much slower.

Allow at least 100 MB for the scheduler and a number of plans.

If installing MultiUser typically 50 to 100MB is required.

Crystal Reports requires around 150MB of space for a full install.

3. Minimum 128 Megabytes RAM

Running other applications concurrently with Planner requires more memory than Planner itself uses, eg with MSWord, Excel, Outlook on Windows XP, a minimum of 512MB is likely to be required to give acceptable performance. Small plans on W98 may be able to be used with 128MB of Ram.

4. Display System – 19” displaying 1024x768 at 75Mhz

A minimum of a 19” monitor, combined with a video card able to display 64K colours, at 75Mhz, with a minimum of 1024 x 768 resolution is required. This normally requires at least 4MB memory on the video card

Planview users may be able to use a smaller monitor depending upon their information requirements.

5. Operating System – Windows 98/2000/XP or NT 4.0

The Planner requires Microsoft Windows 98 (Second Edition), NT4SP6a+, 2000 or XP.

NT4.0 SP6a requires installation of Office 2000, or IE5+, or MDAC2.1+ if a reporting tool such as Crystal Reports will be used.

If Scheduling more than a few hundred operations, the more stable NT/2000/XP environment should be used.

6. Tape or Diskette Drive for Data Backup

It is strongly recommended that you make regular backup copies of your plans (i.e. all the data and index files). Re-keying all the jobs can be a time-consuming task! This is performed using the backup utility provided with the programs (see the Utilities Appendix), or another dedicated backup utility program.

Do not be confused with the terminology: although ***The Planner*** can save unlimited copies of the database to the hard disk, backup is a different procedure performed externally to the Planner software, storing the data on external media such as floppy disks or tapes.

7. CD Drive

The Planner is distributed on CD, so it is necessary to have a local CD Drive, or access to one on the network.

First Time Installation

It is assumed that the person performing the installation has a working knowledge of the Windows environment being used. It is beyond the scope of this documentation to provide these skills. A basic explanation will be given when necessary, but the Windows Help/Manual should be consulted for further information.

Installing The Planner

- 1 Insert **The Planner** CD in the appropriate drive.
- 2 The Installation routine should start itself. If the CD does not start the install for any reason, 'Add/Remove Programs' from the Control Panel may be used to run the install.exe program on the CD.

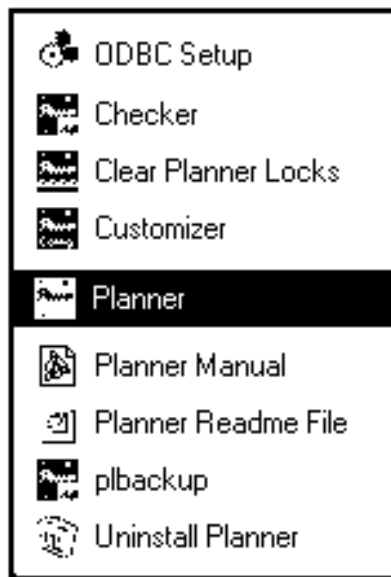


- 2 Press the **[Install Planner Scheduler]** button.
- 3 Follow the directions on the screen to set up The Planner Scheduler. A "typical" install is safest, unless you are sure you know exactly which parts you wish to install.

- 2 You will be asked to accept the license conditions, and must do so to continue the installation.
- 3 Once the Planner Scheduler has completed installation, you should also install Adobe Acrobat Reader, which can be used free of charge, and is needed to read the manual which will have been installed for you. Once Acrobat reader is installed, the “Planner Manual” entry in the main Planner Menu will work.

For Windows NT, 2000 and XP you must install The Planner with a user logon that has administrator access as *The Planner* installs a device driver, and without this level of access installation will fail.

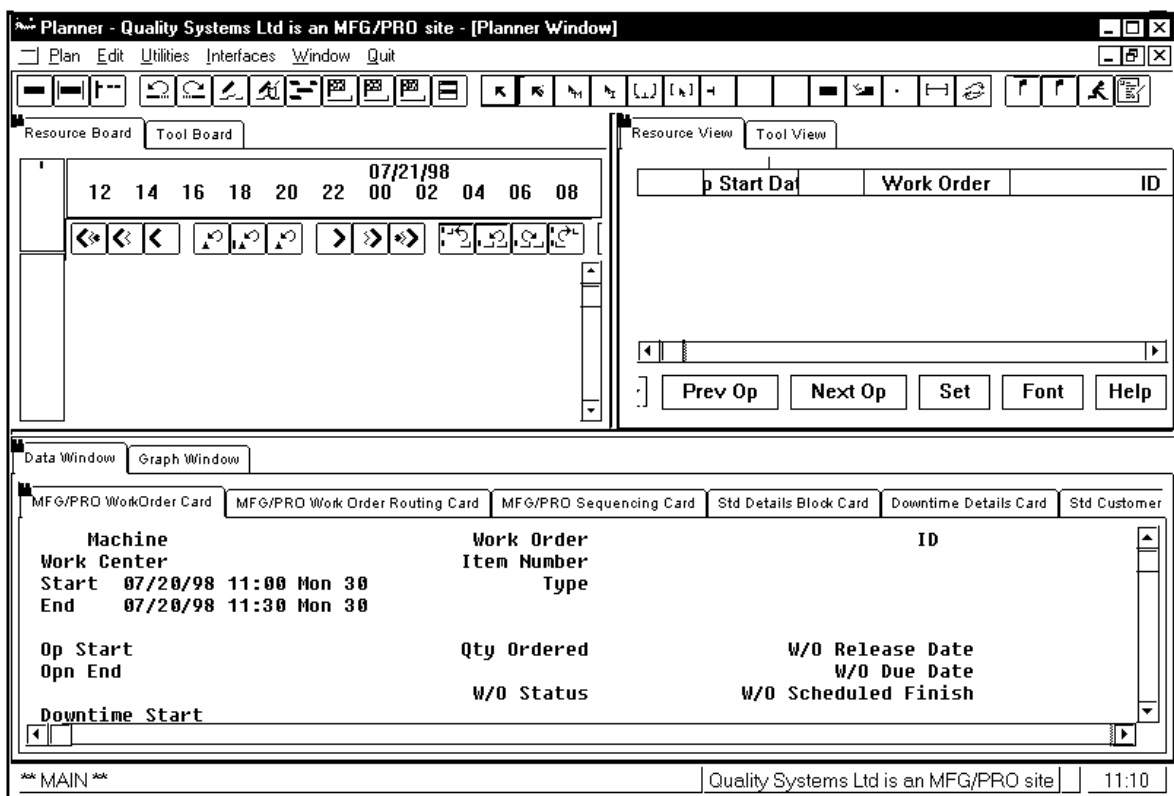
The installation routine will set up a new Start Menu Program folder named ***Planner Scheduler***. This menu is your main access to The Planner and its related programs.



Starting the Planner for the First Time

1. From the Windows Start menu, select Planner Scheduler, then select Planner.
2. Login with the user name/password admin/secret. Username/password changes are carried out in the customizer. See the customizer section of the manual on how to ensure security of the scheduler system.

You will find that when you first start your **Planner**, you have a main window with 3 other windows within it. Maximise the main Planner window.



To alter the display arrangement, from the Utilities menu select the Display Configuration option, then press the **[Windows Layout]** button. If only using 1024x 768 resolution, then using the window display settings shown below may be most convenient. The will give the Resource Planning Board window uppermost with the Data Window below it, and other windows available from the tabs.

Window Layout					
	Window Panes				
	Top Left	Top Right	Middle	Bottom	None
Resource Board	☒	☐	☐	☐	
Tool Board	☒	☐	☐	☐	☐
Resource View	☒	☐	☐	☐	☐
Tool View	☒	☐	☐	☐	☐
Data Window	☐	☐	☒	☐	☐
Graph Window	☐	☐	☒	☐	☐
Ok Cancel Help					

Wondering what to do now?

This is a good time to go over the scheduling issues you are faced with, sorting out your Objectives, and with your Planner Implementation Consultant determining how to set up **The Planner** to reach those objectives. A list of some of the issues that must be considered can be found in the Appendix entitled 'Implementation of The Planner'

Quick Start Sample Data

To use some sample data provided, close The Planner, then use Explorer to copy the files from 34mfgdata.pdb directory on the CD to Install Drive\Planner Install Directory\Database\Plan, replacing all the existing files. Select all the files in ...Plan, and use 'properties' to **remove the read only flag from them**.

When you next start The Planner the Work Orders will be found on the Board.

Press **[F1]** for context sensitive help at any time.

Refer to Customizing and Getting Started sections of the manual for more details.

Upgrading from Earlier Versions

If you are upgrading from earlier versions the installation routine can be slightly different than that for a new installation.

From versions 3.2x

If all configuration changes and existing data are to be used, then carry out a full check on the existing databases before upgrading to 3.43. Make a copy of the whole of the 3.2x install directory in case of problems. Close all other applications, and carry out a Planner Scheduler install into the existing version 3.2x install directory. All configuration data will be upgraded to 3.43 format, except interface specs.

Any export transactions from MFG/PRO remaining in the import.if file must be imported to the Scheduler AND applied before upgrading the Planner Scheduler or Planner Interfaces/Multiuser to v3.43

The Scheduler's interface specifications changed with v3.4, to receive data into the additional fields provided with this version. If it is desired to populate these new fields with additional data from MFG/PRO, then see 'Upgrading Interface Specs' below.

If a number of schedulers receive work from the one MFG/PRO database, check out "Upgrading with Multiple Schedulers on one MFG/PRO DB" page [94](#).

From version 3.3

Plans from version 3.3 are not able to copied and used directly with v3.43. Changes have been made to the size of some fields, and some new ones have also been added. Details can be found in the appendix of the Manual.

When installing v3.43 over the top of a version 3.3 install, all Plan data, and customiser /configuration data, except interface specs, is upgraded by the install routine.

The Scheduler's interface specifications changed with v3.4, to receive data into the additional fields provided with this version. If it is desired to populate these new fields with additional data from MFG/PRO, then see 'Upgrading Interface Specs' below.

If all configuration changes and existing data are to be used, then carry out a full check on the existing databases before upgrading to 3.43. Make a copy of the whole of the 3.3 install directory in case of problems. Close all other applications, and carry out a Planner Scheduler install into the existing version 3.3 install directory.

Any export transactions from MFG/PRO remaining in the import.if file must be imported to the Scheduler AND applied before upgrading the Planner Scheduler or Planner Interfaces/Multiuser to v3.43

From version 3.4 / 3.41 / 3.42

Plans from version 3.40, 3.41 and 3.42 can be copied and used directly with v3.43.

But to upgrade an installation, install v3.43 over the top of a version 3.40/3.41/3.42 install, and all customiser / configuration data, except interface specs, will be upgraded by the install routine.

Carry out a full check on the existing plan, configuration and registry databases, and make a copy of the whole of the 3.4x install directory before proceeding to upgrade to 3.43.

Close all other applications, and carry out a Planner Scheduler install into the existing version 3.4/3.41/3.42 install directory.

Upgrading Scheduler Interface Specs

If it is desired to populate the Machine Description, and/or Operation Spare Txt3 to6 fields (introduced in v3.4) with data from MFG/PRO, or from a

sequencing field in the Plexport Interface database, then Interface Specifications from installs earlier than v3.40 should be updated.

If no changes have been made to the standard 3.2/3.3 interface specifications in the Customiser then

1. Copy 34PLINTER.SPC from the Planner 3.43 CD\Utilities directory, to (each) schedulers \The Planner install directory. Rename the file PLINTER.SPC.
2. Run the Customiser, and from Interface menu, run "Load Interface Specs" for (each) scheduler. A successful load should be reported.

If changes have been made to the standard Interface specifications, say for use with a 3rd party shop floor data collection system, then either

1. Load the new specs as above, then repeat the previous changes made, or
2. Once the scheduler is upgraded to 3.43, Edit the Interface Specifications being used as follows:
 - Specs 43 & 45; Edit and Add Opn Spare txt3 to 6 fields **at the end** of all other existing fields
 - Specs 46 & 48, Edit and Add Resource Description **at the end** of all existing fields.

Note:

When a Planner Scheduler version is upgraded by installing a newer version into the same directory (i.e 'install over the top of'), any completely new Interface specifications are added during the upgrade. But any changes to existing Interface Specifications are not applied.

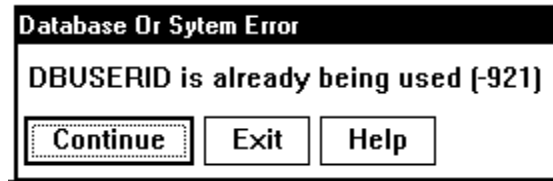
This is because a user may have had existing Scheduler Interface specifications customised themselves to cope with changes they have made to the Manufacturing System- Planner Scheduler export routines. Hence overwriting these changes is not part of the Upgrade procedure.

What to Do if The Planner Scheduler Fails to Start

The most likely probability in a failure to start situation is a conflict in the configuration of your computer and ***The Planner***.

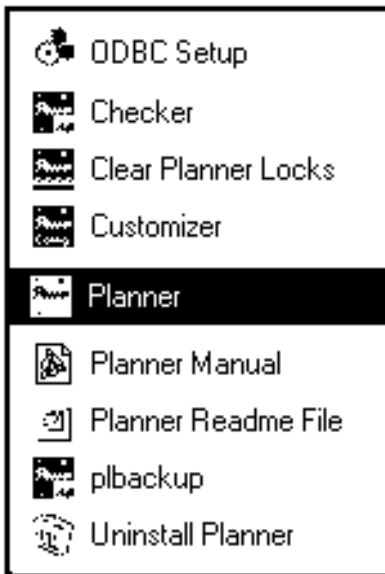
- Before going any further, check that your computer has the minimum specification as set out earlier in System Requirements. If any of the requirements are not met, this is the most likely cause of your problem.
- If you have chosen to carry out a “custom” install, you may have left out some necessary components, and you should reinstall choosing a “typical” install, which should ensure that all components are taken from the distribution media.
- The above particularly applies to the setup of ODBC for reporting. The Planner requires MDAC2.1 or later. If you chose to not setup an ODBC datasource, and you later want to use say Crystal Reports, you will need to establish the datasource manually.
- Check disk space on your machine. How much do you have left?
- Did you receive any error messages during the install?
- Has your computer been infected with a virus, which is now causing problems? If you do not have an up to date virus checker have one installed. Or at least have your system scanned for any viruses.
- Sometimes there is simply not enough RAM available to run the system. Check that the minimum specified earlier in System Requirements is installed on the machine.
- Display Problems – if you have difficulty seeing parts of some windows, or all of a display field, check that you have your display set to at least 1024x768, with small fonts. If your system will not operate at this resolution, or your monitor is too small to view with these settings, you will need to upgrade. See ‘The Planner System Requirements’ at the start of this section.

- If you get the message below, you may be trying to log on a second time. Or you may have crashed The Planner, in which case run "Clear Planner Locks" from the main Planner menu.



- If you crashed out for some reason it is also a good idea to check the database to make sure that the crash did not cause/worsen data corruption. This can be done using the "Checker" option, Start/Programs/Planner Scheduler/Checker. Carry out both Physical and Logical checks of your plan.
- If you cannot login to Planner, maybe after a crash, and 'Clear Planner Locks does not help, then delete all .taf and all .log files from the main planner scheduler directory ...\Program Files\The Planner\ then try logging on again.

Start The Planner Menu



Planner

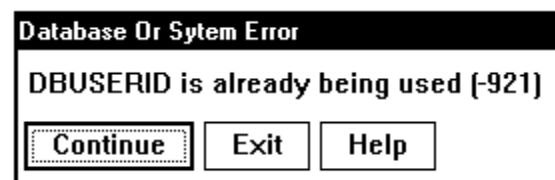
When you select the Planner option, you will be taken to the Main Planning Window, ready to commence work in the main program. See the "Getting Started" Section of the manual for what to do next.

Customizer

This is where **all** customization is performed. Selecting this option actually starts another program in which many options are provided for customizing, including field names, system messages, menus, scrollers, settings, and scrollers. See the Customizing Section for details on using this program.

Clear Planner Locks

If you have crashed out of The Planner, or your system was halted while running The Planner, locks must be cleared before you can restart The Planner. If you do not clear the locks and attempt to re-run The Planner or Customizer you will receive the following message



Planner Readme File

This is the latest information concerning the release of the software you have installed. Information contained in this file generally was not available to be included in this manual.

Planner Manual

If Adobe Acrobat Reader was installed earlier, then this option opens the manual for this version of Planner.

Checker

This is a utility to ensure that your plan and configuration data has both physical and logical integrity. See the Database Utilities appendix of the manual for full details.

PIBackup

This utility is used to quickly backup a selection of files to other drives. See Database Utilities appendix of the manual for full details.

ODBC Setups for Multiuser and Whatif

The setup for reporting with ODBC on the \PIreport and \PIwhatif directories may be switched using these options. See Report Writer section of the manual for full details.

UNIX INSTALL

Prerequisites to Installation

1. Version 7.4f or later of MFG/PRO must be installed on a Unix server. If Interfacing to Repetitive, MFG/PRO must be 8.5d or later.
2. Progress 8.2/8.3/9.1 Client networking must be installed on each client PC to be used (including the NT server if it is to be used to run administrative and/or batch tasks). If using 9.1a Databases see page [84](#).
3. Each client PC must be setup so that it can access the Database Server machine by name, i.e The Hosts file must be setup for the server machine.

Steps for Installing Progress Components

There are four main parts to the installation:

1. Installation of the Databases and some Interface Applications on the MFG/PRO–Progress Unix server
 - using the install script provided in the \Unix directory of the CD. See page [28](#).
2. Installation of the Windows Applications on the NT server (generally)
 - Using one of the InstallShield Application options reached from 'Multiuser & Integration'. See page [38](#).
3. Installation of necessary components on each client.
 - Using one of the InstallShield Client options reached from 'Multiuser & Integration'. See page [38](#)
4. Configure MFG/PRO Interfaces, Planview and Planner Scheduler according to installation and requirements. Planner Scheduler(s) must be installed at some point before this setup procedure. See page [15](#).

Pre-Installation WorkSheet for Unix DB Install

Before starting the install ensure that the prerequisites listed above are met, and that the information in the worksheet below is available.

MFG/PRO Database • Location • Host Name • Service Name • TCP port • DB Name, e.g. mfg.db	
MFG/PRO Application Information (for Updating MFG/PRO DB) • Where MFG/PRO Unix applications are, and • MFG/PRO Character Client startup	
Progress DBs Version DLC Location	
MFG/PRO – Planner Interface & Multiuser Databases Location to install to • Host Name Service Entries needed on DB server for • Plexport.db • Planview.db	Default is /qad/planner/db (unix) brplexpt 2831/tcp brplanvw 2931/tcp
MFG/PRO – Planner Interface & Multiuser Applications • Location to install to • GUI Progress Version 8.2/8.3/9.1 • GUI Progress DLC Location	

Unix Database Install

The Plexport and Planview databases should be established before installing the windows applications.

1. FTP (binary mode) the files from the unix directory of the Planner Install CD to a temporary directory on the UNIX server.
2. Log on as root and change directory into the temporary directory.
3. Ensure that the installation script files are executable. (ie `chmod 755 *`)
4. Type `./install` to run the installation script. The script will prompt for the required information such as directory to install into, Progress location, MFG/PRO location.

The script will:

1. Create a new directory with the installed planner files
2. Create new empty databases in a db sub-directory
3. Compile the Load programs in the `./ut` subdirectory using the Progress Application Compiler, see page [29](#))
4. Load the database definitions into the new databases.
5. Compile the MFG/PRO Unix Export and Update programs.
6. Tailor scripts for startup, shut-down & update to MFG/PRO.
 - The startup scripts are `plvwstrt` and `plexstrt`. The shut-down scripts are `plvwshut` and `plexshut`.
 - The MFG/PRO update script is `plupdate`. Check out **Customising MFG/PRO Update** on page [31](#).
 - The MFG/PRO export script is `plexbtch`, but is not always used as its equivalent is often run from windows. See page [43](#) for discussion

The script will not:

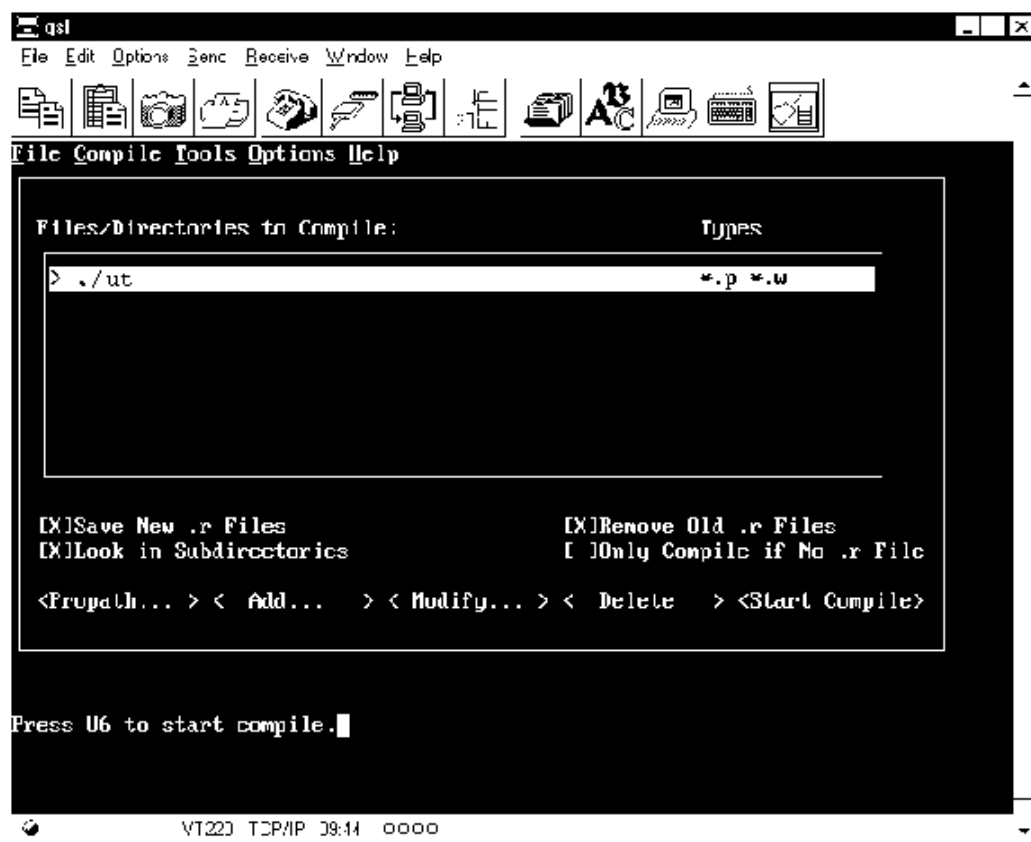
1. Create or modify service entries in the `/etc/services` file.
2. Customise the MFG/PRO Batch Client Input Files (see page [31](#))
3. Create cron entries for running the startup, shut-down or update scripts.
4. Make the modified `client.MFGPRO` startup work – if the original MFG/PRO startup script prompted for during the install does not work itself, the copied and modified `client.MFGPRO` script most certainly will not! If in doubt test and modify the script as necessary.
5. Copy the correct files for earlier versions, see “Earlier MFG/PRO Version Specific Files” page [46](#).

Progress Application Compiler

Load Program Compile

During the install process, the install script opens the Progress Application Compiler to compile the load programs that have already been placed in the `./ut` directory.

All environment variables are set by the install script, but the directory to compile needs entering.



Steps:

1. TAB to the Modify button, and press ENTER to select.
2. Enter `./ut` as the *File or Directory name* to compile.
3. TAB to the OK button, and press ENTER.
4. TAB to the Start Compile button, and press ENTER.
5. A compilation log is displayed to the screen & to the file `compile.log`.
6. Select OK from the Compiler Results when the compilation has finished.
7. Choose File, Exit from the menu-bar. (Use F3 key or ESC-M in UNIX, ALT key in Windows).

Unix Application Compile

At a later part of the unix install, the install script compiles all the encrypted source application programs against the versions of Progress and MFG/PRO being used.

If at any later stage it is necessary to re-compile the encrypted source (eg after upgrading versions of Progress and/or MFG/PRO) then the compile script in the PlannerInstallDirectory may be used, from the prompt simply run `./compile`

If the version of Progress being used is less than 8.2, the programs for running the exports from MFG/PRO will not compile. In this case the MFG/PRO exports can only be run using the Windows applications. See page [52](#) for the issues.

Customizing the MFG/PRO Update

As the MFG/PRO database is run under UNIX, then the MFG/PRO Update process is best also being run under UNIX. Automated running of the process is started from cron. During testing and/or piloting a new installation it may be worthwhile to also have a menu entry to run the update.

The MFG/PRO Update is a four step process for work orders, with similar steps used for the Repetitive interface update.

When you execute the Update, it:

1. Creates ASCII CIM input files called plupdate.cim (and plupadv.cim for repetitive update) in the "log directory" specified in the Update MFG/PRO section of the Interface.
2. Runs MFG/PRO in batch mode and Loads the CIM file(s).
3. Determines what Group IDs were assigned by MFG/PRO in step 2, and creates an input file to process these group ids.
4. Processes CIM file by again running MFG/PRO in batch mode and using the input file created in step 3.

(By default these 4 steps are run for work orders and then immediately again for repetitive work)

At the end of this process, with the data updated in MFG/PRO, a log file of the screen outputs called mfgupd.out, (and mfgadv.out with repetitive) is produced. The standard MFG/PRO CIM report functions can also be used to check for any errors. Using the CIM reports within MFG/PRO, the data that has been loaded and/or processed can be examined in detail.

It is the user's responsibility to occasionally check & purge the loaded CIM data using the standard CIM report functions.

During installation the following files are created:

Under UNIX:

plupdate

plupdate.ini – used by the compile, plupdate and plexbtch processes.

compile

compile.pf - to be used when Progress DB version (e.g. 7.3) is different to the Progress the programs are to be compiled with (e.g. 8.2)

setenv

pluncim.inp , (and pluncm2.inp for repetitive)

pllodcm.inp , (and pllodcm2.inp for repetitive)

MFG/PRO Batch files plruncim.inp and pllodcim.inp

The last two files listed, plruncim.inp and pllodcim.inp (and plruncm2.inp, pllodcm2.inp for repetitive) are standard MFG/PRO Batch Client Input Files, and will require editing

They reside in the Planner Multiuser Database installation directory.

Userid password

- If MFG/PRO 36.3.24 (mgurpmmmt.p) has been set up with security option B, then the 'userid password' line must be edited. Security option P does not require a userid, just the password.
- If using other than US English, some changes to these files may be necessary. Alternatively have the update process call up a US user client (using your date format).
- The CIM input file is expecting standard 16.1 (wowomt.p) and 16.13.13 (woopmt.p) data entry windows.

File

- As client.MFGPRO for Updates is run from the UnixPlannerInstallDir the default entry ./plupdate.cim (or ./plupdadv.cim for repetitive) is sufficient, as long as the 'log directory' set in Interface Utility, Update MFG/PRO is left empty.

Further details are in your MFG/PRO Installation and Configuration Guide.

pllodcim.inp (Batch Input file to perform step 2 of update detailed above).

```

/*****
userid password
mgbdlld.p
FILE ./plupdate.cim
.
.
.
.
Y
*****.

```

plruncim.inp: (The Batch input file TEMPLATE used by step 3 of update detailed above. Actual input file created is called plprocim.inp)

```

/*****
userid password
mgbdpro.p
- - NO 0 NO -
plruncim

```

```
.
.
.
.
Y
*****/
```

Checking that client.MFGPRO script runs

The client.MFGPRO script that is called by plupdate is almost the same as that provided when prompted during running the Planner unix install. A copy of that script to run MFG/PRO is made during the install, named client.MFGPRO, placed in the *<plannerinstalldir>*, and has a \$1 placed at its end, so that parameters may be called.

Ensuring that this script runs, and is able to run the CIM updating is the step that causes most difficulties with having the update work.

It is recommended that

1. A check is made to ensure that client.MFG/PRO actually runs an MFG/PRO session.
2. If the client.MFGPRO script changes to another directory, then edit the script and change that line, so that it runs from *<plannerinstalldir>*, where all log files will then be placed, as expected.

e.g. as in standard client.production

cd # change to home directory

change the line to be

cd /<plannerinstalldir> # change to planner home directory

where */<plannerinstalldir>* is the directory path to where Planner is installed on unix.

3. Verify that the newly edited client.MFG/PRO script still runs an MFG/PRO session.

Plupdate.ini

The plupdate.ini file contains the information necessary to connect the plupdate process to the planner and MFG/PRO databases. If correct parameters were entered during installation, then this file should not require editing. The file is of the format:

```
[Settings]
MFGPRODB=mfgdemo
MFGPROCS=-H hostname -S servicename -N TCP -ld qaddb
PLANVWDB=/qad/planner/db/planview.db
PLANVWCS=-H hostname -S servicename -N TCP -ld planner
PLEXPTDB=/qad/planner/db/plexport.db
PLEXPTCS=-H hostname -S servicename -N TCP -ld plexport
PROPATH=/qad/planner
```

Where the settings parameters are:

MFGPRODB = MFGPRO Database Name

MFGPROCS = MFGPRO Database Connection Parameter String (Any Progress Connect Parameters)

PLANVWDB = PLANVIEW Database Name

PLANVWCS = PLANVIEW Database Connection Parameter String

PLEXPTDB = PLEXPOR (Export from MFGPRO) Database Name

PLEXPTCS = PLEXPOR Database Connection Parameter String

PROPATH = PLANNER Install Path plus Path to MFG/PRO client programs.
(now used for Unix only)

The Progress executable to use when running plupdate should be the same executable as that used to run MFG/PRO. The path to the progress executable is set in the setenv file under UNIX.

With Unix, where the Progress version being used to run MFG/PRO is different from the Progress version used to run the PLANNER databases, you need to perform the additional steps:

1. Using the Progress Application Compiler (Refer Instructions) compile the ut (utility) directory.
2. Define the progress executable in the compile and plupdate scripts as the same progress executable used to run MFG/PRO.
3. Run compile in order to re-compile the MFG/PRO Update programs under the MFG/PRO version of progress.

Running the Updates to MFG/PRO

Do not run Updates to MFG/PRO until all steps in the Setup Checklists, page [67](#), have been completed.

On Unix there is only 1 script to run the update, 'plupdate'.

Plupdate

Processing is done in 2 parts; First for Work Orders, then for Repetitive.

To not do just one, put a '#' at the beginning of all lines in the section not to be done or create a new script.

Processing is:

Start of script: Unix Lock

Part 1 Work Orders:

- Lock & Create W/O CIM, Load it, Group it, Process it, Unlock.

Part 2 Repetitive:

- Lock & Create Repetitive CIM, Load it, Group it, Process it, End it, Unlock.

End of script: Unix Unlock

For any new script created remember to always include the start and end parts of the original plupdate script.

A typical plupdate script is shown below. All variables for a particular installation will have been populated during the install, based upon the prompted responses.

```
+++++
#!/bin/sh
#Set environment variables
. /data7/planview/planv34/setenv

#####
# Script to update MFG/PRO from Multi-user Planview  #
# 2 Parts: Part 1 Normal MFG/PRO Work Order Update  #
#           Part 2 Adv Rep Update                    #
#####

# Check only one update running at a time
if [ -f plupdate.lck ]
then exit
fi

# Create the lock file
```

```
echo "update to MFG/PRO in Process" > plupdate.lck

#####
# Part 1 - Normal Work Order Update to MFG/PRO      #
#####

# Create the CIM File
./client.MFGPRO "-b -p ./planner/mfg/p-mfgupd.p -h 8";

# Load the CIM input file
./client.MFGPRO "-b -p planner/mfg/p-runcim.p -param pllodcim";

# Detemine which Group IDs we just loaded and create an input
# file (plprocim.inp) which will process those Group IDs
$DLC/bin/mpro -b -p planner/mfg/p-crtcim.p >> ./mfgupd.out

# Run the Process CIM function for those Group IDs
./client.MFGPRO "-b -p planner/mfg/p-runcim.p -param plprocim";

# Clear the Update Lock
./client.MFGPRO "-b -p ./planner/mfg/p-mfgunl.p -h 8";

#####
# Part 2 - Adv Rep Update to MFG/PRO                #
#####

# Create the CIM File
./client.MFGPRO "-b -p ./planner/mfg/p-mfgadv.p -h 8";

# Load the CIM input file
./client.MFGPRO "-b -p planner/mfg/p-runcm2.p -param pllodcm2";

# Detemine which Group IDs we just loaded and create an input
# file (plprocm2.inp) which will process those Group IDs
$DLC/bin/mpro -b -p planner/mfg/p-crtc2.p >> ./mfgadv.out

# Run the Process CIM function for those Group IDs
./client.MFGPRO "-b -b -p planner/mfg/p-runcm2.p -param plprocm2";

# Run the End of Adv Rep Processing
./client.MFGPRO "-b -p ./planner/mfg/p-advend.p -h 8";

# Clear the Update Lock
./client.MFGPRO "-b -p ./planner/mfg/p-mfgunl.p -h 8";

#####
# End of Job Tidy Up                                #
#####

# Remove the lock file
rm ./plupdate.lck
```

+++++

Cron Running Plupdate

The plupdate (and plexbtch) script will need editing if run from Cron, rather than being run from the planner install directory using the command prompt. A cd to the planner install directory should be inserted after the setenv line.

Install of Windows Application Components

Please Note:

- NT server means a server running NT4 or Windows 2000
- Windows Client means a PC running Windows 98SE, NT4, Windows 2000 or XP Pro.

Where are the Windows Applications to be installed?

On NT File Server

- do Network Application Server install to the NT File Server
- do Network Application Client install on the NT Server, to create shortcuts for administrative and batch tasks carried out at the server.
- do Network Application Client install on all Windows Clients.

OR on each Windows PC

- do Application Client Install on all windows clients (only recommended when piloting or if only one scheduler installation is involved)

If no NT Server exists, e.g. Novell is used, the applications may be installed on the Novell File Server, then Network Application Client installs are carried out on all clients, and perhaps to a Windows PC Client dedicated to the tasks of exporting from MFG/PRO and importing to Multiuser.

Options for Windows Application Install

Network Application Server Install

For installing the application files on to the NT Server.

The values used during the network application server install are applied to the Clients when these are later installed, for instance with multiple clients of Planview.

Network Application Client Install

For installing the client files on the client, when the client will access the application on the server.

If an NT server is to be used to run any of the Progress applications such as "MFG/PRO Interface Utility" , "MFG/PRO Export", "Import to Multiuser" ,

perhaps scheduled with the 'at' command, or manually, a client install will also have to be carried out on it, to provide the necessary shortcuts, .pfs, inis, etc.

If the Client Installs are carried out after a network application server install, all the various values entered during the server installation will be applied as defaults for the clients, saving time.

The only files typically installed on the clients are the .PFs, .INI's and Graphics OCXs.

Some PC Clients running early versions of W95, or NT4 without any service packs added, do not allow some of the OCX's to register during the install. These are required for the Planview system. Installing service packs, or Internet Explorer followed by a reinstall of Planner Multiuser at the client PC is necessary to have the OCXs registered.

Application Client Install

For installing all the applications and all other necessary files on each client, if no file server is to be used to store the applications on. It is essentially the same as carrying out both a Network Application Server and a Network Application Client Install on to the same PC.

Only one compiled set of the Progress programs for MFG/PRO Export, Update and Planview, is now provided.

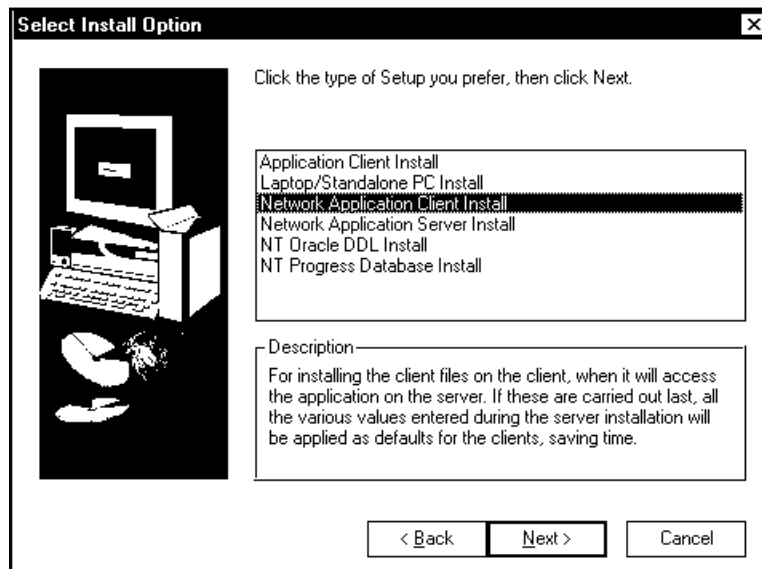
For Planner v3.43 this is for MFG/PRO eB with v9.1d Progress

When interfacing to other versions of MFG/PRO-Progress, after installation the Interface and Planview programs must be recompiled against the MFG/PRO-Progress versions being used.

A client install must be carried out at the PC storing the applications, so that necessary control files are available for the compile. Then the shortcut on the client "Compile Interface-Planview Programs" can be used to do this.

Installation Steps

1. The Unix Plexport and Planview databases will already have been installed.
2. Install the “MultiUser & Integration” Applications, then ‘Clients’ installs. Any machines to be used to access the MultiUser viewing system will also require client installs, as outlined below.
3. You must ensure that the necessary QAD licenses are held to continue installation without infringing copyrights on the software.



4. Select the Application option determined earlier.

Components to install:

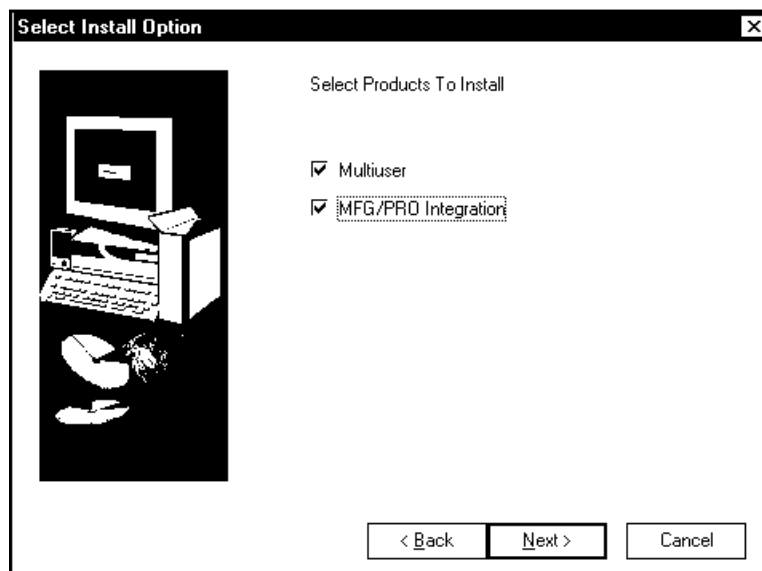
Both MultiUser and MFG/PRO Integration should normally be selected for a ‘Network Application Server Install’ to the NT server.

On the NT server also select both MultiUser and MFG/PRO Integration for the ‘Network Application Client Install’. This gives the administrator person shortcuts to all components.

For most clients, just requiring the Plan Viewing system, select MultiUser only, which provides menu option shortcuts for PlanView only.

During piloting of Planner it is often convenient to have carried out a full 'Network Application Client Install' on the PC being used for scheduling, i.e. both MultiUser and MFG/PRO Integration, so that the people piloting can have ready access to all components. This allows configuration changes to be made to the interfaces without trooping off to the server room each time.

When carrying out these client installs, remember that with MFG/PRO Unix systems, the Updates to MFG/PRO are carried out on unix, so no shortcuts for the equivalent windows programs are needed on any of the clients.



5. Proceed with the installation, using the information gathered prior to installation outlined on page [27](#).
6. Check that only those menu options necessary for each client are available.

Client Startup Parameters

During a 'Network Application Server' install, broker names and their TCP port numbers are prompted for.

During subsequent Network Client installs these values are used to create

- the startup files plexport.pf, planview.pf, and plupdate.ini
- entries for these services in the client's services file, if the entries do not already exist.

- The defaults used are:

brplanvw	2931/tcp
brplexpt	2831/tcp
brmfgdb	2581/tcp

If service names/port numbers other than those given when prompted are required, then the above client files and service entries will need modifying to suit.

Before running the initial MFG/PRO Export

Once the Windows applications for the Interfaces and Planview are installed, refer to the Program Setup Checklist, page [67](#) before continuing.

Please Note:

Before attempting to run the "MFG/PRO Export" option from the Planner Multiuser menu option;

- The programs must have been re-compiled if not using MFG/PRO eB-Progress 9.1d
- the Option "MFG/PRO Interface Utility" must be run and the tasks listed in 'Program Setup Checklist' completed:

Compile the Windows Applications after Install

From version 3.4 only one set of compiled code is provided.

1. If interfacing to other than MFG/PRO eB with Progress 9.1d, then the Progress windows applications must be re-compiled after installation. A shortcut on the Start / Programs / Planner Multiuser menu is provided to do this.
2. If interfacing to any version earlier than eB, before compiling see **Earlier Version MFG/PRO specific files**, page [46](#).

3. Select the "Compile Interface-Planview Programs" option from the Planner Multiuser Start menu. This runs the file compile.bat, with the compile taking approximately 7 to 15 minutes to complete.
4. If running the compile from a PC remote to the Planner Multiuser windows applications, then ensure a client install has been carried out at the PC with the applications before compiling. (a correct plupdate.ini for that PC is required)
5. As a check, the .r files, in \Planner Multiuser\planner, planner\export, planner\plexport\mfg, \Planner Multiuser\custom, custom\mfg, \Planner Multiuser\wi and planner\mfg directories, should all show your current system date/time of compiling, when viewed with Windows Explorer.
6. If wanting to just recompile one or a few programs, the compile.bat file may be edited, (placing the file name, or filenames separated by a pipe symbol, inside the quotes) so that just that/those programs are compiled. For example:
..... p-compil.p -param "**p-advend.p|p-export.p**" > compile.err

CRC errors will be reported when trying to run the Export/Import/Planview programs with versions of MFG/PRO other than eB, unless the compile is carried out first.

If any errors are reported to the screen, check the compile.log file in the \Planner Multiuser install directory.

The parameters you gave during install may have been incorrect;

- DLC directory must be correct in compile.bat
- Database name for MFG/PRO must be correct in plupdate.ini
- Check the Clients services file – are the new entries correct?

MFG/PRO Export –Windows or Unix?

Even when MFG/PRO and Plexport and Planview databases are on Unix, often the "MFG/PRO Export" will be run under Windows, probably automated using the NT 'at' command, (or the task scheduler in Control Panel on W2K or XP).

In this environment it can also be run on demand, using the 'MFG/PRO Export' shortcut provided during installation of the Windows Integration and Multiuser applications. This is sometimes desirable during the setup and

testing phases prior to going live, but also if a new export is required at short notice when live.

The other main reason for running "MFG/PRO Export" from windows, is that the import.if file created is readily accessible by the scheduler, as the scheduling PC can easily 'see' the windows directory where the file is placed.

The MFG/PRO Interface Utility must be run from windows.

If the MFG/PRO database is very large, or if find triggers have been added to MFG/PRO and affect the export routines, it may be imperative to run the MFG/PRO Export on Unix.

PLEASE NOTE: The MFG/PRO Export procedure requires Progress version 8.2/8.3 or 9.1 to run, even if run under Unix.

Running the Export Procedure on a Unix system

The setup script will have been created at the time of the Unix install of the Plexport and Planview databases, and the MFG/PRO Update programs. The programs will have been compiled at the same time as the MFG/PRO Update programs. (The unix plexbtch/plexport script and programs are just not used when MFG/PRO export is run from Windows.)

If the Export procedure is run under Unix, the creation of the import.if file of exported data to be imported into The Planner Scheduler is generally still run under windows. A shortcut to do this, "Create import.if" is provided during a windows client install, when 'All Options on Menu' is selected, and may be used as the basis for an AT batch file entry.

This splits running the Export processes in two parts; the processor and disk intensive extract from MFG/PRO on Unix, and the text file creation from Plexport under windows, where the file is required. This overcomes issues with making this file available to the Planner Scheduler PC for Importing.

Setting Up to Run MFG/PRO Export on Unix

Ensure that the Plexport/Planview databases are installed and running on Unix; and that 'Planner Multiuser & Integration' application and client installs have been carried out on a Windows Server or PC. (If using an earlier version than MFG/PRO eB, then see page [46](#) now.)

From a Windows Client

1. Run the 'MFG/PRO Interface Utility' option from the Planner MultiUser Start/Programs menu. (If this has not been run before, it will take several minutes to complete)

2. Turn OFF the "Create Import.if" checkbox in the opening MFG/PRO Interface Utility window. Export MFG/PRO must be left turned ON - unless don't want any exporting from MFG/PRO
3. Select any other Interface settings required

From a Unix session

4. From a unix command prompt, change to the PlannerInstall directory. The script plexbtch that runs the UNIX "MFG/PRO Export" Procedure will be in this directory. Run plexbtch then check the logfile plex000x.log for errors.
5. The plexbtch (and plupdate) scripts will need editing if run from Cron, rather than being run from the PlannerInstall directory using the command prompt. A cd to the planner install directory should be inserted after the setenv line
6. When finished, the export from MFG/PRO will only have populated the Plexport database. As the MFG/PRO Interface Utility setting "Create Import.if" is turned off, no import.if file will yet have been created.

From a Windows Client

7. Run the "Create import.if" shortcut option from the Planner MultiUser Start/Programs menu. This will create the import.if in windows, by default in the \Planner Multiuser application Install directory.
8. The launch procedure started by the "Create import.if" shortcut is p-import.p. If for any reason no shortcut has been provided, copy the one for MFGPRO Interface Utility, rename it, and edit properties, and make target to run p-import.p (rather than w-exputl.w), all other settings the same

Creation of import.if on Unix

If a product that makes a Unix partition available to Windows, such as Samba or SCO VisionFS is available, then Planner Schedulers may be setup to 'Import on Channel' directly from Unix. It will be necessary to:

- Have "Create Import.if" checkbox turned ON in the opening MFG/PRO Interface Utility window,
- Establish a mapping to the respective UnixPlannerInstallDir/imptx for each Planner Scheduler PC,
- Use Planner Scheduler's Customiser to create an 'Import Channel' that points at the Unix dir instead of to a Windows one.

MFG/PRO Export & Database Trigger Issues

If extra find triggers have been added, that will affect the extraction of information from MFG/PRO, then special treatment is required.

1. If using character MFG/PRO with applications on Unix, compile the export programs against the modified database, and then ensure that these programs are run from where the applications/triggers are, i.e Unix.
2. If MFG/PRO applications are on Windows NT server, compile the export programs against the modified database - wherever it is. The MFG/PRO export routines run from Windows still, with the propath allowing the finding of triggers on the NT server.

Database Aliases and Triggers

An empty procedure is run at MFG/PRO Export startup (CUSTOM \ P-PLXCUS.P) which can be modified to set alternate database aliases and to define trigger variables where a customized set of Database triggers have been setup.

The PROPATH for the Export utility (defined in plexport.ini) must also be modified to include the MFG/PRO PROPATH if trigger code is to be executed.

Encrypted Source

The Encrypted source for the entire Export, Update and Planview procedures is installed (from v3.4 on).

Un-encrypted source, when made available, is in the directory under \SRC on the CD.

Earlier MFG/PRO Version Specific Files

If the MFG/PRO export is being run using the Unix export programs, the procedure below must be carried out on the Unix machine. With v3.43 InstallShield Windows Application installs, you are prompted for the MFG/PRO version being interfaced to, and the copying procedure below is carried out for you. However if an incorrect answer is given, the procedure below must then also be carried out manually.

If you are integrated to any version of MFG/PRO other than eB or eB2, then compiling under unix will fail as some include files are MFG/PRO version specific.

You must copy these export programs from either the 74f or 85plus subdirectory, as appropriate, to the directory above; e.g. from planner/export/mfg/74f to planner/export/mfg.

The **i-exlnd1.i**, **i-exlnd2.i**, **i-ophist.i**, **p-excimp.p** and **p-expart.p** files from these 7.4f/85plus sub-directories will replace the ones for MFG/PRO eB, and are used when compiling and interfaced to MFG/PRO.

If the eBplus versions of these files have not been replaced before the compile, they will fail the compile, and show as errors in compile.log. They will then have to be moved and the compile re-run.

If at any stage the version of MFG/PRO is upgraded, the include files from the appropriate (new) version directory should be copied to \planner\export\mfg.

NT INSTALL

Please Note:

- NT server means a server running NT4 or Windows 2000
- Windows Client means a PC running Windows 98SE, NT4, Windows 2000 or XP Pro.

Prerequisites to Installation

1. Version 7.4f or later of MFG/PRO must be installed on an NT server. If Interfacing to Repetitive MFG/PRO must be 8.5d or later.
2. Progress 8.2/8.3 or 9.1 Client networking must be installed on each client PC to be used (including the NT server if it is to be used to run administrative and/or batch tasks). If using 9.1a Databases see page [84](#).
3. Each client PC must be setup so that it can access the Database Server machine by name, i.e The Hosts file must be setup for the server machine, or DNS server.

Steps for Installing Progress Components

There are four main parts to the installation:

1. Installation of the Progress Databases on the MFG/PRO–Progress NT server
2. Installation of the MFG/PRO Interface and Planview Windows Applications on the NT server
3. Installation of the necessary components on each Client PC.
4. Configure MFG/PRO Interfaces, Planview and Planner Scheduler according to installation and requirements. Planner Scheduler(s) must be installed at some point before this setup procedure. See page [15](#)

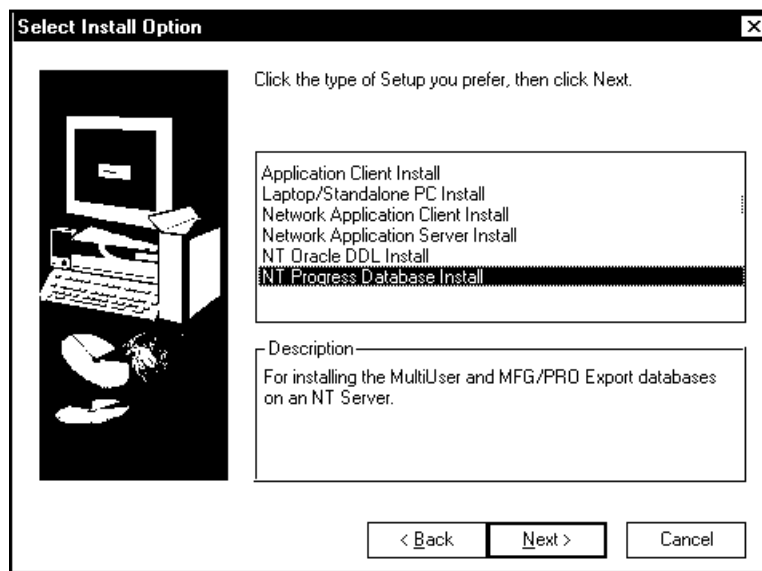
The Installation of the databases and applications uses InstallShield, which prompts for all necessary requirements

Pre-Installation WorkSheet for NT Progress Install

MFG/PRO Database • Location • Host Name • Service Name • TCP port • DB Name, e.g. mfg.db					
MFG/PRO Application Information (for Updating MFG/PRO DB) • Character Client Progress ini file name and location • Character Client Startup (.pf) file name and location					
Progress DBs Version DLC Location					
MFG/PRO – Planner Interface & Multiuser Databases Location to install to • Host Name Service Entries needed on DB server for • Plexport.db • Planview.db	Default is c:\Program Files\Planner Multiuser <table> <tr> <td>brplexpt</td> <td>2831/tcp</td> </tr> <tr> <td>brplanvw</td> <td>2931/tcp</td> </tr> </table>	brplexpt	2831/tcp	brplanvw	2931/tcp
brplexpt	2831/tcp				
brplanvw	2931/tcp				
MFG/PRO – Planner Interface & Multiuser Applications • Location to install to • GUI Progress Version 8.2/8.3/9.1 • GUI Progress DLC Location					

NT Database Install

1. Start the Install program and select the 'Install MultiUser & Integration' option to start the InstallShield setup routine.
2. Select both MultiUser and MFG/PRO Integration, then
3. Select NT Progress Database Install.



Answer all the prompts with the information gathered earlier as outlined in 'Pre-Installation WorkSheet' on page [49](#).

The script will:

1. Create a new directory where prompted
2. Create new planner databases in this directory

The script will not:

1. Create or modify service entries in the services file.
2. Create the progress database server entries in Procontrol.
3. Customise the MFG/PRO Batch Client Input Files (see page [57](#))
4. Create at/schedule entries for running the startup, shut-down or other scripts.

After installing the NT Database component you need to perform the following steps:

1. Edit the services file on the NT server and ensure that the following services are set up:

brplanvw	2931/tcp
brplexpt	2831/tcp

Alternative names and numbers may of course be used – with these noted down for use during the application install.

(On NT the services file is usually located under :
C:\WINNT\SYSTEM32\DRIVERS\ETC\SERVICES)

2. Use the Progress utility Procontrol to setup a database server process for each of the installed databases (planview & plexport). Refer to your Progress System Administration manuals for detailed instructions.
3. Ensure that the startup and shut-down of the new databases is handled appropriately for the environment.
4. Ensure that in the setup parameters you specify the appropriate -S servicename, e.g.
 - S brplanvw for the planview database, and
 - S brplexpt for the plexport database.
5. Beware Procontrol does not always handle long working directory names. With NT4 it may be necessary to use Planne~1, etc rather than placing the directory in quotes.
6. The plexport database entry of -L 9000 parameter needed earlier than v3.3 should no longer be needed, allowing use of the default.

Example of Planview Server Process:

Edit of planview on QSLNT

General DB Writers Environment

Identifiers: ☐ AutoStart

Executable Name:

Working Directory:

Physical DB-Name:

Startup Parameters:

Install of Windows Application Components

Where are the Windows Applications to be installed?

On NT File Server

- do Network Application Server install to the NT File Server
- do Network Application Client install on the NT Server, to create shortcuts for administrative and batch tasks carried out at the server.
- do Network Application Client install on all Windows Clients

OR on each Windows PC

- do Application Client Install on all windows clients (only recommended when piloting or if only one scheduler installation is involved)

Options for Windows Application Install

Network Application Server Install

For installing the application files on to the NT Server.

The values used during the network application server install are applied to the Clients when these are later installed, for instance with multiple clients of Planview.

Network Application Client Install

For installing the client files on the client, when the client will access the application on the server.

If an NT server is to be used to run any of the Progress applications such as "MFG/PRO Interface Utility" , "MFG/PRO Export", "Import to Multiuser" , perhaps scheduled with the at command, or manually, a client install will also have to be carried out on it, to provide the necessary shortcuts, .pfs, inis, etc.

If the Client Installs are carried out after the network application server install, all the various values entered during the server installation will be applied as defaults for the clients, saving time.

The only files typically installed on the clients are the .PFs, .INI's and Graphics OCXs.

Some PC Clients running early versions of W95, or NT4 without any service packs added, do not allow some of the OCX's to register during the install.

These are required for the Planview system. Installing service packs, or Internet Explorer followed by a reinstall of Planner Multiuser at the client PC is necessary to have the OCXs registered.

Application Client Install

For installing all the applications and all other necessary files on each client, if no file server is to be used to store the applications on. It is essentially the same as carrying out both a Network Application Server and a Network Application Client Install on to the same PC.

Only one compiled set of the Progress programs for MFG/PRO Export, Update and Planview, is now provided.

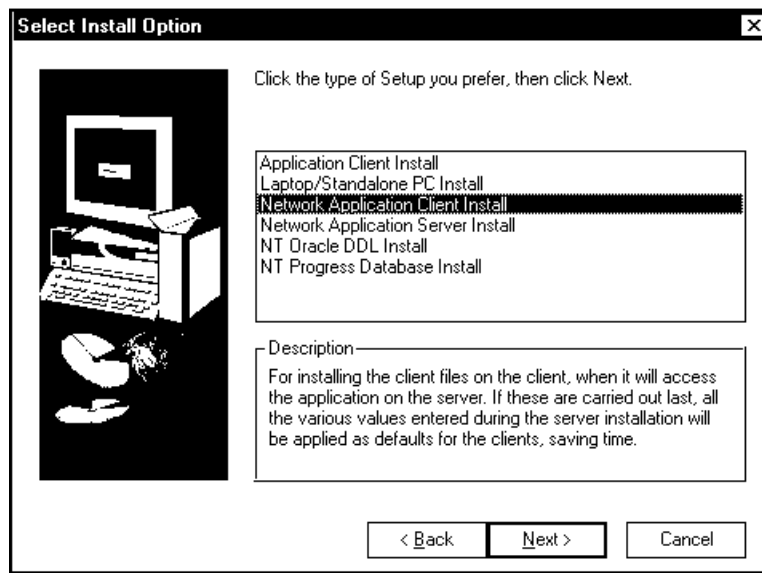
For Planner v3.43 this is for MFG/PRO eB with v9.1d Progress

When interfacing to other versions of MFG/PRO-Progress, after installation the Interface and Planview programs must be recompiled against the MFG/PRO-Progress versions being used.

A client install must be carried out at the PC storing the applications, so that necessary control files are available for the compile. Then the shortcut on the client "Compile Interface-Planview Programs" can be used to do this.

Installation Steps

1. The Plexport and Planview databases will already have been installed on the NT Server.
2. Install the "MultiUser & Integration" Applications, then 'Client' installs. Any machines to be used to access the MultiUser viewing system will also require client installs, as outlined below.
3. You must ensure that the necessary QAD licenses are held to continue installation without infringing copyrights on the software.
4. Select the Application option determined earlier.



Components to install:

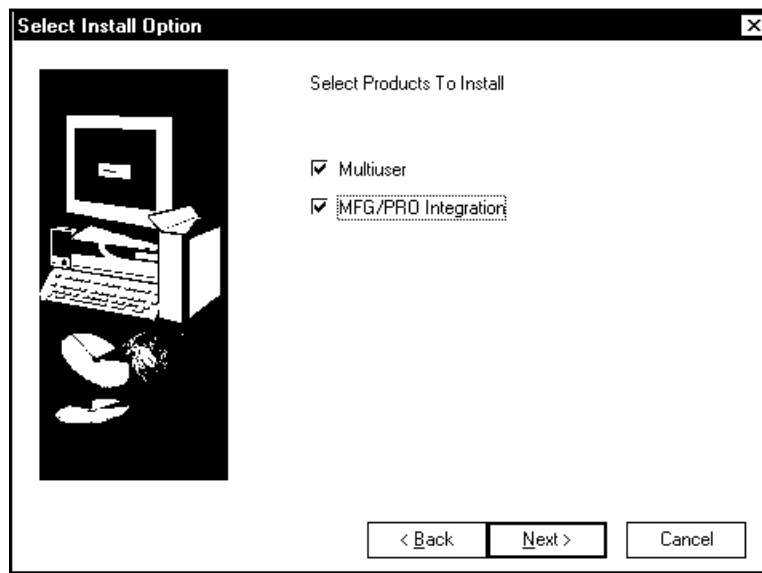
Both MultiUser and MFG/PRO Integration should normally be selected for a 'Network Application Server Install' to the NT server.

On the NT server also select both MultiUser and MFG/PRO Integration for the 'Network Application Client Install'. This gives the administrator person shortcuts to all components.

For most clients, just requiring the Plan Viewing system, select MultiUser only, which provides menu option shortcuts for PlanView only.

During piloting of Planner it is often convenient to have carried out a full 'Network Application Client Install' on the PC being used for scheduling, i.e. both MultiUser and MFG/PRO Integration, so that the people piloting can have ready access to all components. This allows configuration changes to be made to the interfaces without trooping off to the server room each time.

The PC to be used to carry out the 'Updates to MFG/PRO' should be one that also has the Integration programs installed on it. This would normally be the NT Server PC. This ensures that all directory addressing established during the Client Install on this machine is correct. If necessary they may be checked in `plupdate.ini`.



5. Proceed with the installation, using the information gathered prior to installation outlined on page [49](#).
6. Check that only those menu options necessary for each client are available.

Client Startup Parameters

During a 'Network Application Server' install, broker names and their TCP port numbers are prompted for.

During subsequent 'Network Client' installs these values are used to create

- the startup files plexport.pf, planview.pf, and plupdate.ini
- entries for these services in the client's services file, if the entries do not already exist.
- The defaults used are:

brplanvw	2931/tcp
brplexpt	2831/tcp
brmfddb	2581/tcp

If service names/port numbers other than those given when prompted are required, then the above client files and service entries will need modifying to suit.

Customizing the NT MFG/PRO Update

With MFG/PRO run under Windows NT, the MFG/PRO Update process will also be run under Windows. But note that the Automated CIM Load only works for Character Client. It cannot be run using a GUI client.

If the MFG/PRO startup script prompted for during the install does not work itself, the update to MFGPRO which uses this script most certainly will not! If in doubt test and modify the script as necessary.

The MFG/PRO Update is a four step process for work orders, with similar steps used for the Repetitive interface update.

When you execute the Update, it:

1. Creates ASCII CIM input files called plupdate.cim (and plupadv.cim for repetitive update) in the "log directory" specified in the Update MFG/PRO section of the Interface.
2. Runs MFG/PRO in batch mode and Loads the CIM file(s).
3. Determines what Group IDs were assigned by MFG/PRO in step 2, and creates an input file to process these group ids.
4. Processes CIM file by again running MFG/PRO in batch mode and using the input file created in step 3.

(By default these 4 steps are run for work orders and then immediately again for repetitive work)

At the end of this process, with the data updated in MFG/PRO, a log file of the screen outputs called mfgupd.out, (and mfgadv.out with repetitive) is produced. The standard MFG/PRO CIM report functions can also be used to check for any errors. Using the CIM reports within MFG/PRO, the data that has been loaded and/or processed can be examined in detail.

It is the user's responsibility to occasionally check & purge the loaded CIM data using the standard CIM report functions.

During installation the following files are created:

Under Windows:

Plupdate.bat,

Plupdate.ini

pluncim.inp , (and pluncm2.inp for repetitive)

pllodcm.inp , (and pllodcm2.inp for repetitive)

MFG/PRO Batch files plruncim.inp and pllodcim.inp

The last two files listed for each environment, plruncim.inp and pllodcim.inp (and plruncm2.inp, pllodcm2.inp for repetitive) are standard MFG/PRO Batch Client Input Files, and will require editing

They reside in the Planner Multiuser Database installation directory.

Userid password

- If MFG/PRO 36.3.24 (mgurpmmmt.p) has been set up with security option B, then the 'userid password' line must be edited. Security option P does not require a userid, just the password.
- If using other than US English, some changes to these files may be necessary. Alternatively have the update process call up a US user client (using your date format).
- The CIM input file is expecting standard 16.1 (wowomt.p) and 16.13.13 (woopmt.p) data entry windows.

File

- This must be edited so the path is the same as the 'log directory' set in MFG/PRO Interface Utility, Update MFG/PRO. The full path, filename and extension must not exceed 24 characters for MFG/PRO to load the file successfully. The directory must also exist.

Further details are in your MFG/PRO Installation and Configuration Guide.

pllodcim.inp (Batch Input file to perform step 2 of update detailed above).

```

/*****
userid password
mgbdlld.p
FILE C:\cim\plupdate.cim
.
.
.
.
Y
*****.

```

```
plruncim.inp: (The Batch input file TEMPLATE used by step 3
of update detailed above. Actual input file created is called
plprocim.inp)
/*****
userid password
mgbdp.p
- - NO 0 NO -
plruncim
.
.
.
.
Y
*****/
```

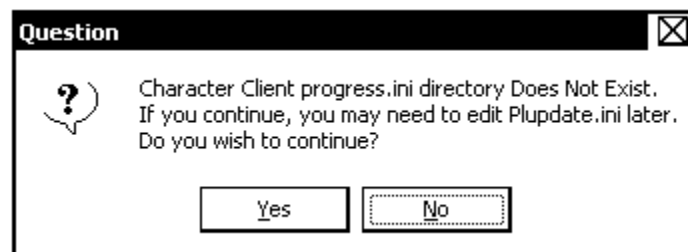
Checking that NT Character Client runs

Ensuring that the NT Character Client runs, and is therefore able to run the CIM updating to MFG/PRO in batch is the step that causes most difficulties with getting the update to work.

The plupdate.ini settings that are used by plupdate.bat are those provided when prompted during running the Planner Multiuser install.

The defaults of paths and file names for .ini and .pf offered by InstallShield are c:\mfgntsvr\batch, progress.bch and batch.pf, which in many cases are not correct.

If at the time of installation the defaults were accepted, even if they were not correct, as would have been pointed out by messages similar to that below, then the plupdate.ini must be edited with the correct Character Client startup parameters.



The whereabouts and names given for the Character Client Progress.ini and Startup (.pf) files will be shown in the plupdate.ini lines LOADCIM, PROCIM (for WOs) and ADVLDCIM, ADVPRCIM (for Repetitive).

If the MFG/PRO .ini and .pf startup parameters used in plupdate.ini will not themselves run an MFG/PRO session, the update to MFGPRO which uses them most certainly will not!

To check that the settings in plupdate.ini actually run MFG/PRO Char Client:

1. Copy the LOADCIM line from the plupdate.ini
2. Paste into a new text file called checkmfg.bat
3. Remove LOADCIM= from the start of the line
4. Remove -pf <PlannerMultiuserDir>\plupdate.pf -b -p planner\mfg\p-runcim.p -param pllodcim from the end of the line.
5. You should now be left with just the
 - full path to _progress.exe space
 - iname space
 - full path to Char Client .ini space
 - pf space
 - full path to Char Client .pf
6. Save the file
7. Run checkmfg.bat
8. If it does not run an MFG/PRO session, then modify the .ini and .pf until it does so.

Beware: Windows batch files do not handle long directory names, sometimes even when the directory is placed in double quotes. If trouble is experienced it is safest to use the correct shortened version, e.g. C:\Progra~1\Planne~1 etc.

Plupdate.ini

The plupdate.ini file contains the information necessary to connect the plupdate process to the Planner and MFG/PRO databases, and to provide the parameters for each of the update steps.

All the settings lines below are created by the install program, based upon the answers given to prompts during the application and update client installs.

The file is of the format:

```
[Settings]
MFGPRODB=mfgdemo.db
MFGPROCS=-H hostname -S servicename -N TCP -ld mfg
PLANVWDB=planview.db
PLANVWCS=-H hostname -N TCP -S brplanvw -ld planner
PLEXPTDB=plexport.db
PLEXPTCS=-H hostname -N TCP -S brplexpt -ld plexport
CREATCIM=P:\DLC\bin\prowin32.exe -ininame C:\PLANNE~1\PLUPDATE.INI -pf C:\PLANNE~1\PLUPDATE.PF -b -p planner\mfg\p-mfgupd.p
LOADCIM=P:\DLC\bin\_progres.exe -pf c:\mfgntsvr\batch\batch.pf -ininame c:\mfgntsvr\batch\progress.bch -pf C:\PLANNE~1\PLUPDATE.PF -b -p planner\mfg\p-runcim.p -param pllodcm
GROUPCM=P:\DLC\bin\prowin32.exe -ininame C:\PLANNE~1\PLUPDATE.INI -pf C:\PLANNE~1\PLUPDATE.PF -b -p planner\mfg\p-crtcim.p
PROCSCIM=P:\DLC\bin\_progres -pf c:\mfgntsvr\batch\batch.pf -ininame c:\mfgntsvr\batch\progress.bch -pf C:\PLANNE~1\PLUPDATE.PF -b -p planner\mfg\p-runcim.p -param plprocim
ADVCRCIM=P:\DLC\bin\prowin32.exe -ininame C:\PLANNE~1\PLUPDATE.INI -pf C:\PLANNE~1\PLUPDATE.PF -b -p planner\mfg\p-mfgadv.p
ADVLDICIM=P:\DLC\bin\_progres -pf c:\mfgntsvr\batch\batch.pf -ininame c:\mfgntsvr\batch\progress.bch -pf C:\PLANNE~1\PLUPDATE.PF -b -p planner\mfg\p-runcm2.p -param pllodcm2
ADVGPCIM=P:\DLC\bin\prowin32.exe -ininame C:\PLANNE~1\PLUPDATE.INI -pf C:\PLANNE~1\PLUPDATE.PF -b -p planner\mfg\p-crtcm2.p
ADVPRCIM=P:\DLC\bin\_progres -pf c:\mfgntsvr\batch\batch.pf -ininame c:\mfgntsvr\batch\progress.bch -pf C:\PLANNE~1\PLUPDATE.PF -b -p planner\mfg\p-runcm2.p -param plproc2
ADVENCIM=P:\DLC\bin\prowin32.exe -pf c:\mfgntsvr\batch\batch.pf -ininame C:\PLANNE~1\PLUPDATE.INI -pf C:\PLANNE~1\PLUPDATE.PF -b -p planner\mfg\p-mfgend.p
UPDTUNLK=P:\DLC\bin\prowin32.exe -ininame C:\PLANNE~1\PLUPDATE.INI -b -p planner\mfg\p-mfgunl.p
```

Where the settings parameters are:

MFGPRODB = MFGPRO Database Name

MFGPROCS = MFGPRO Database Connection Parameter String (Any Progress Connect Parameters)

PLANVWDB = PLANVIEW Database Name

PLANVWCS = PLANVIEW Database Connection Parameter String

PLEXPTDB = PLEXPOT (Export from MFGPRO) Database Name

PLEXPTCS = MFGPRO Database Connection Parameter String

CREATCIM & ADVCRCIM = configuration and environment variables for creating the CIM input files

LOADCIM & ADVLDCIM = configuration and environment variables to run MFG/PRO Character Client and Load CIM input files.

GROUPCIM & ADVGPCIM = configuration and environment variables to determine Group IDs assigned by MFG/PRO during load, and to create input file to process these groups.

PROCSCIM & ADVPRCIM = configuration and environment variables to run MFG/PRO Character Client and process the CIM groups.

ADVENCIM = configuration and environment variables to run the end of the repetitive update.

UPDTUNLK= configuration and environment variables to clear the update lock.

The Progress executable to use when running MFG/PRO from plupdate should be the same executable as that used to run the MFG/PRO client being used. The path to the progress executable is set in plupdate.bat under Windows.

If the MFG/PRO client startup files, (e.g batch.pf and progress.bch) are not normally used, ensure that they are set up appropriately.

Running the Updates to MFG/PRO

Do not run Updates to MFG/PRO until all steps in the Setup Checklists, page [67](#), have been completed.

With NT/Windows:

Four batch files are provided for the update processing; but usually only 1 will be required. All the variables for a particular installation will have been populated during the install, based upon the prompted responses.

plupdate.bat

This is the normal Update procedure to use that does all the update processing in one go.

It has 3 update options, of which 2 are normally remarked out. Only ever use these combinations:

SAU	on its own
STD	on its own
STD & ADV	in that order only
ADV	on its own

The options are:

STD - Only create and process the CIM for Work Orders

ADV - Only create and process the CIM for Repetitive work

SAU - Create and process both the W/O and Repetitive CIM's

plupdcim.bat

Only creates W/O and Repetitive CIM files, but does not process them.

- Uses the CIM option.
- CIM's must be manually applied (processed) and the plupaend.bat and plunlock.bat procedures must be run after the CIMs are applied.

plupaend.bat

Does Repetitive Update 'End' processing that must be done after the Repetitive CIM is processed applied.

- Uses the END option.

plunlock.bat

Does the Update 'Unlock', that must be done after the plupaend.bat.

May need to be used by itself if the CIM processing fails.

- Uses the UNL option.

Update Batch File Options

All the above batch files call the same Progress procedure, but pass it a different parameter on the end of the line.

These options are:

- CIM Only creates the CIM files for both WorkOrders and Repetitive.
 - Lock, Create W/O CIM, Unlock, Lock, Create REP cim.
 - Must manually apply the CIM's then run the END and UNL options.

- STD Only Work Order CIM processing.
 - Lock, Create W/O CIM, Load it, Group it, Process it, Unlock.

- ADV Only Repetitive CIM processing.
 - Lock, Create REP CIM, Load it, Group it, Process it, End it, Unlock.

- SAU Both Work Order and Repetitive CIM processing. [default option]
 - Lock, Create W/O cim, Load it, Group it, Process it, Unlock, Lock, Create REP CIM, Load it, Group it, Process it, End it, Unlock.

- END End REP CIM after Manual apply of REP CIM.
 - End the Repetitive CIM processing.

- UNL Unlock after Manual apply of CIM's.
 - Unlock.

Before running the initial MFG/PRO Export

Once the Windows applications for the Interfaces and Planview are installed, refer to the Program Setup Checklist, page [67](#) before continuing.

Please Note:

Before attempting to run the "MFG/PRO Export" option from the Planner Multiuser menu option;

- The programs must have been re-compiled if not using MFG/PRO eB-Progress 9.1d
- the Option "MFG/PRO Interface Utility" must be run and the tasks listed in 'Program Setup Checklist' completed:

Compile the Windows Applications after Install

From version 3.4 only one set of compiled code is provided.

1. If interfacing to other than MFG/PRO eB with Progress 9.1d, then the Progress windows applications must be re-compiled after installation. A shortcut on the Start / Programs / Planner Multiuser menu is provided to do this.
2. If interfacing to any version earlier than eB, before compiling see **Earlier Version MFG/PRO specific files**, page [46](#).
3. Select the "Compile Interface-Planview Programs" option from the Planner Mutliuser Start menu. This runs the file compile.bat, with the compile taking approximately 7 to 15 minutes to complete.
4. If running the compile from a PC remote to the Planner Multiuser windows applications, then ensure a client install has been carried out at the PC with the applications before compiling. (a correct plupdate.ini for that PC is required)
5. As a check, the .r files, in \Planner Multiuser\planner, planner\export, planner\plexport\mfg, \Planner Multiuser\custom, custom\mfg, \Planner Multiuser\wi and planner\mfg directories, should all show your current system date/time of compiling, when viewed with Windows Explorer.

6. If wanting to just recompile one or a few programs, the compile.bat file may be edited, (placing the file name, or filenames separated by a pipe symbol, inside the quotes) so that just that/those programs are compiled. For example

```
..... p-compile.p -param "p-advend.p|p-export.p" > compile.err
```

CRC errors will be reported when trying to run the Export/Update/Planview programs with versions of MFG/PRO earlier or later than eB01, unless the compile is carried out first.

If any errors are reported to the screen, check the compile.log file in the \Planner Multiuser install directory.

The parameters you gave during install may have been incorrect;

- DLC directory must be correct in compile.bat
- Database name for MFG/PRO must be correct in plupdate.ini

Encrypted Source

The Encrypted source for the entire Export, Update and Planview procedures is installed (from v3.4 on).

Un-encrypted source, when made available, is in the directory under \SRC on the CD.

PROGRAM SETUP CHECKLIST

Before going further the following components must have been Installed (and compiled if appropriate):

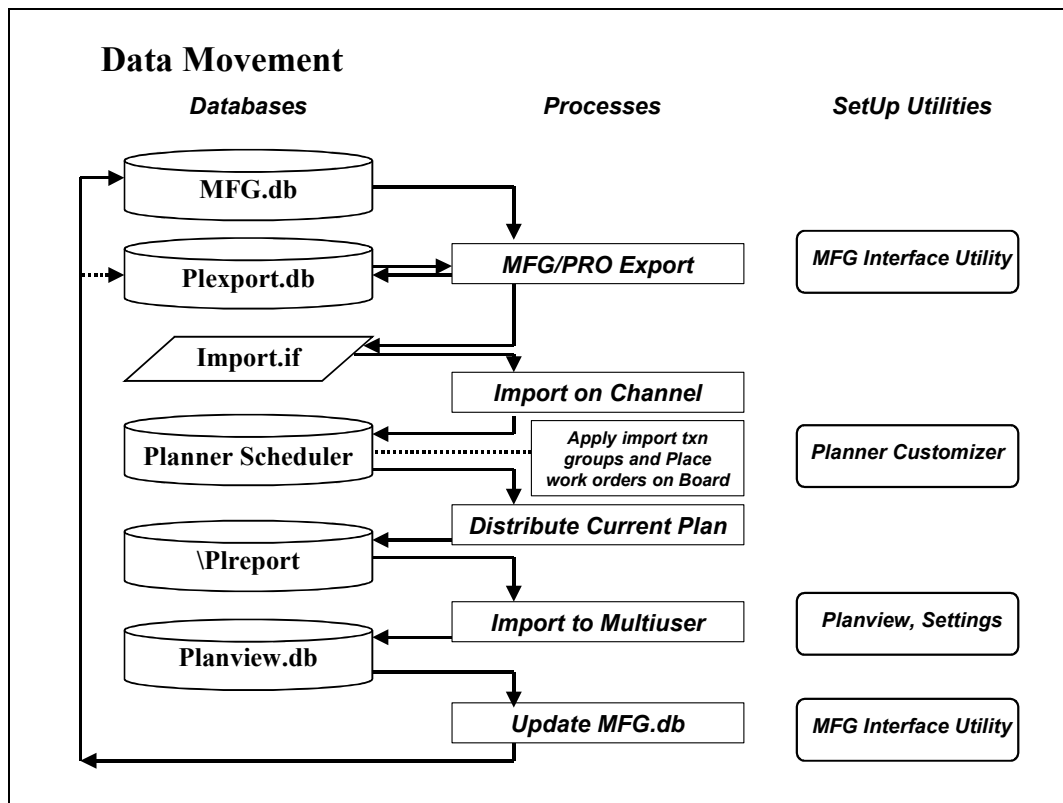
- The Planner Scheduler
- Plexport and Planview Databases
- MFG/PRO Interface Programs (for Export from and Update to MFG/PRO)
- Planview Programs ('Multiuser')

Ensure that Plexport, Planview and MFG Databases are all running.

Now the various utilities shown in the figure below are used to set up the Planner the way in which it is to be used.

This section summarises the sequence of setup steps that are necessary, with the details provided in the relevant part of the manual.

MFG/PRO Interface Utility, and Planview may be run from any client using the administrator login; but the Customizer must be run from the Scheduling PC, or from each Scheduling PC if more than one scheduler is to be used



A. MFG/PRO Interface Setup

Full details on the various setup parameters are in the Interfaces Section of the User Manual.

Before attempting to run the "MFG/PRO Export" option from the Planner Multiuser menu option;

- The programs must have been re-compiled if not using MFG/PRO eB - Progress 9.1
- the Option "MFG/PRO Interface Utility" must be run and the tasks listed below completed:

Task	Completed
1. Use Global settings first to;	
• Determine what type and status of work is to be scheduled	
• Set how partial completions and completed operations, and work orders, are to be handled	
• Map any scheduling information needed in addition to the default Work Order and Route info such as ID, W/O, Item Number, Machine, Setup, Run,	
• How are planned orders / parts made repetitively to be handled?	
2. Setup more than one scheduler if required,	
3. Create splits of work amongst schedulers if necessary, eg by site, or by part criteria	
• Does the global mapping need to be altered for different schedulers?	
4. Turn on Update to MFG/PRO,	
• Select Log directory, if it is to be other than the default	
• Select options required for Work Orders and routes	
5. Repetitive Interface - Unless very familiar with Planner Installs leave this OFF until all aspects of Export, Import to Multiuser and Update are proven to work using a small number of Work Orders)	
6. Turn on Repetitive Interface if required.	
• Globally, or for selected Work Splits	
• Map additional data required for Repetitive work	
• Check settings in Update MFG/PRO window	
7. Planner Scheduler Setup (C below) must also be carried out before attempting to 'import on channel' work from MFG/PRO.	

B. Multiuser - Planview Setup

Full details on the various setup parameters are in the Multiuser Section of the User Manual.

Before attempting to 'distribute current plan' from the Planner Scheduler to Planview and further, a number of settings must be established by logging on to "Planview" as administrator. They are all accessed from the system settings window.

Task	Completed
1. System Parameters, to	
• Establish rules for Process notes system, if it is to be used,	
2. Site/Scheduler maintenance must be run to	
• Create a line entry for each Scheduler being used.	
• Create a Scheduler file for each scheduler who will be distributing their plan to Planview, and probably MFG/PRO. Each file must be created in or moved to the Scheduler's main directory on their PC.	
3. User Maintenance can be used now, or later, to create additional 'Read Only' users for Planview.	
4. Planner Scheduler Setup (C below) must also be carried out before attempting to distribute any plan to Planview.	

(Settings for 'Update to MFG/PRO' used to be carried out in Planview, but from version 3.4 they are established in the MFG/PRO Interface Utility)

C. Planner Scheduler Setup

A number of tasks must be carried out using The Scheduler's utility, the Customizer. These will have to be carried out at each scheduler, if work is split amongst more than one.

Task	Completed
1. Name of Scheduler/Site file name created in B above must be entered in Edit Initialization switches window. If not in root Planner scheduler directory, also need path	
2. Create/edit Interface channel to location where 'MFG/PRO Export' leaves import.if files for this scheduler	
3. Run Planner Scheduler, File menu, Properties, Edit Plan Description; to create suitable name to be seen in Planview.	
4. Using the Customizer to rename field titles, customize scrollers, menus, etc can be carried out at any time without affecting the data or the functioning of planner when the planner scheduler is restarted.	

Required Updates to MFG/PRO

When scheduling MFG/PRO Work Orders only, the interfacing of Planner Scheduler does not mandate that 'Work Order Updates' be made to MFG/PRO. However the usefulness of the Planner Scheduler is obviously reduced if updates are not made on a regular basis.

When Scheduling Repetitive Work in Planner, using the Repetitive Interfaces, it is mandatory that Updates to MFG/PRO are carried out, and that they are successful. This is because MFG/PRO Repetitive Schedule records must be both created and deleted for proper functioning.

For full details refer to 'Updating Repetitive Schedules' in the Interfaces section of the manual.

Testing Updates to MFG/PRO

The CIM procedures used for 'Updating MFG/PRO' have been available for a long time, but need to be setup exactly to function properly.

Even people very familiar with setting up CIM procedures recommend the steps listed be followed to ensure a quick installation and test.

1. Complete the Setup of Interfaces Utility, Planview, and Planner Scheduler as outlined in the checklists above.
 - Do not turn on Repetitive Interfaces yet, even if they will be used.
 - Turn on Update of Work Order Due Date and Release Date even if these will not be used later.
2. Run MFG/PRO, and ensure database to be used contains at least one Standard Work Order, of Status R, with a route.
3. Run the MFG/PRO Export.
4. Run the Scheduler, and
5. Import on Channel, and apply the Add Txns,
6. Place just a small number of Work Orders on the Planning Board
7. Distribute Current Plan
8. Import to Multiuser, and check in Planview that this has been successful, with the Work Orders being listed.
9. Run the "Update MFG/PRO"
10. Run MFG/PRO and check that the Due and Release Dates of the Work Orders placed on the Planning Board are Scheduled Start and Scheduled Finish dates respectively.

If for any reason the “Update MFG/PRO” CIM create/load/process routine does not seem to have worked, then check the plupdate script for Unix, or the Plupdate.ini and .bat with Windows NT. Most problems in automating the CIM process revolve around having the MFG/PRO batch client successfully start, and accept the parameters in the plupdate script..

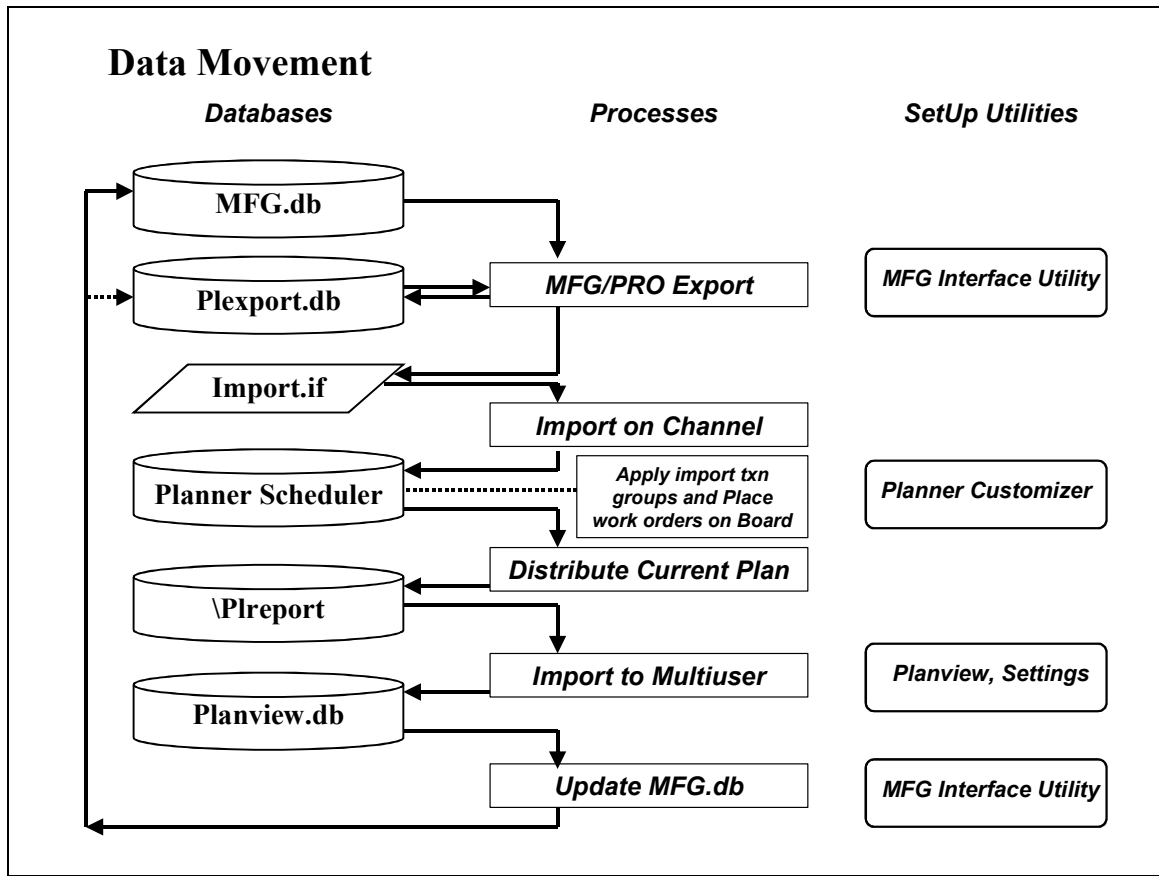
If no obvious problem is found, also check the CIM and log files, see [81](#). Also check that the ‘Update logging directory’ set in the Interface Utility, Update MFG/PRO window exists. This must be the same directory as shown in the pllodcim.inp (and pllodcm2.inp if using repetitive).

The update procedure checks to see if the current Planview data has previously been extracted to be sent to MFG/PRO, before starting to update MFG/PRO from the Planview database. So even if the last CIM processing by MFG/PRO failed for some reason, Planview records will show that it was extracted for sending. To be able to re-run a failed MFG/PRO update, the Plan must again be distributed from Planner Scheduler, then Imported to Planner MultiUser (to Planview.db), and only then re-run the update. That is steps 7 to 10 must be rerun.

Once the Update procedure is known to be functioning correctly, the Repetitive Interface may be turned on in the MFG/PRO Interface Utility, if required.

D. The Processes

Once all setups are completed, run the processes in top to bottom order as shown in the earlier 'Data Movement' slide, repeated below.



Automating Interfaces

As mentioned earlier some tasks are better run on the server, in the background, e.g.

- MFG/PRO Export - is run from Windows or Unix. See page [43](#) for discussion of present issues.
- MultiUser Import - must be run from Windows.
- MFG/PRO Update - is generally run from the same environment as MFG/PRO. With NT though, the automated CIM Load only works for Character Clients. It cannot be run from a GUI client. See page [57](#).

To run the interface programs automatically, a number of options are possible:

On an NT server have the 'at' command start the respective procedures at predetermined days/times.

With Windows 2000 and XP the 'Scheduled Tasks' wizard in control panel allows much easier setup and running of any shortcut.

The MFG/PRO Update when run from Unix (and MFG/PRO Export if run from Unix) require their respective scripts, plupdate and plexbtch, to be called from cron.

The AT Command

Sample batch files, runat.bat and runschd.bat, that may be modified to suit, are copied from the distribution CD to the \Planner Multiuser install directory during installation.

Runat.bat is to setup 'at' to schedule the runs of runschd.bat, daily from 7am to 5pm. Run this only once, as once an "at" job has been setup, "NT" remembers it even after a Re-Boot.

To see what jobs are scheduled with the "at" command, at a command prompt, type "at" with no switches or parameters. To terminate a schedule item, type "at" followed by the job number then "/delete" (e.g. "at 13 /delete").

Runsched.bat in turn starts the 'MFG/PRO Export' routine, by including the starting directory and target contents from the 'MFG/PRO Export' shortcut.

Correct permissions must be available for the AT command to function on the server. For NT servers with domains, this may entail extending to domain rights.

Note:

From v3.43, the "Import to Multiuser" routine also carries out a purge of older plans that are not being viewed. Previously this was carried out by a Planview client immediately after connection, sometimes resulting in a delay before the current plans could be viewed.

To stop a run of "Import to Multiuser" carrying out a purge, edit the shortcut that runs it so that the target ends

*-p planner\P-impsgo.p instead of
-p planner\P-impsgo.p -param -purge*

Distributing the Current Plan to the File Server

When the 'Distribute Current Plan' option is run from the interfaces menu of the Planner Scheduler, all the current schedule data, plus some additional data derived during the process is written to the \The Planner\database\plreport directory.

This is the data that is accessed by a scheduler's report writer, normally via ODBC. This is also the data that is transferred by 'Imported to Multiuser' to the Progress 'Planview' database for use with the Planview program.

Typically 'Import to Multiuser' is run by the NT server using the AT command. To avoid having to access the Scheduling PC to get \plreport data, it is possible to copy the \plreport data to the server at the time of "Distributing Current Plan".

Copying the \Plreport data

Two additions to Planner scheduler introduced with v3.2 have simplified the implementation of the above procedure.

1. 'Distribute Current Plan' from the interface menu within Planner Scheduler will now run a batch file "expfin.bat" in the planner scheduler install directory after the 'Distribute Current Plan' is finished. The Planner scheduler is locked out while the batch file is run. Expfin.bat must be created, and can include any functions necessary to run after distributing a plan. (expfin.bat is only run on 'standard'/'multiuser' plan distribute, with expfin2.bat being run after a 'what-if' plan distribute)
2. The program repcp.exe, copies the Planner Reporting database, (\plreport*.*) from 1 location to another. It is run from a configuration file repcp.cfg . These files are supplied on the distribution CD in the \Utility directory.

The main reason for using repcp to copy the reporting database, is that it has both a locking and a notification system that the Planview system understands.

The format for repcp.cfg is:

Line 1: Source Directory (normally plreport). The directory MUST end with a '\'. e.g. C:\program files\the planner\database\plreport\

Line 2: Destination Directory. The directory MUST end with a '\'. e.g. P:\Scheduler1000\

Line 3: Use Lock File. ('Y' to use lock files, anyelse is No.)

Line 4: Create loaddata file. ('Y' to create, anyelse is No.)

Worked Example using 2 Schedulers

As an example, 2 Planner Schedulers are being used, with their work split by planner-buyer code.

- Both Network Application Server and Client installs have been made on the NT Server, in C:\Applications\Planner Multiuser

- Runs of 'MFG/PRO Export' places new work for both Schedulers in F:\Applications\Planner Multiuser\Impt1, and F:\Applications\Planner Multiuser\Impt2 respectively.
- Both Scheduler PCs are mapped to the NT Server C drive, as F Drive.
- The 'Import to Multiuser' process will also normally run from this NT Server.

1. Use Notepad to create a file named expfin.bat , with contents similar to below.

+++++

@echo off

echo.

`Echo Copying the plan to the NT Server for Planview, please wait

Repcp

pause

exit

+++++

2. Copy this file to the Planner Scheduler Install directory of each Scheduler PC, where it will then run automatically after every 'Distribute Current Plan'.

3. Create two new directories on the NT server, to copy each Schedulers \plreport files to. F:\Applications\Planner Multiuser\DistPI1, and F:\Applications\Planner Multiuser\DistPI2 respectively will do.

4. Copy repcp.exe and repcp.cfg from the \Utility directory of the Planner CD, to the Planner Scheduler Install directory of each Scheduler PC.

5. Use Notepad to edit the repcp.cfg on Scheduler1's PC as below. Use the shortened form of directory name.

+++++

C:\Progra~1\ThePla~1\database\plreport\

F:\Applic~1\Planne~1\DistPI1\

Y

Y

+++++

6. Repeat for Scheduler2, with the destination directory this time being DistPI2, i.e. F:\Applic~1\Planne~1\DistPI2\

7. Test out for each Schedulers PC by double clicking on the relevant expfin.bat file, or running Planner and choosing 'Distribute Current Plan' from the Interface menu. Check that the files from Scheduler1 are in DistPI1, and Scheduler2 are in \DistPI2
8. Edit out the 'pause' line from each of the expfin.bat files once all is working
9. When setting up Planview, the import directories will now be C:\Applications\Planner Multiuser\DistPI1 and \DistPI2, i.e locally on the NT Servers own drive.

Messaging Files

Whenever 'Distribute Current Plan' is run, the existing data in \plreport is deleted, then the new data is added. An empty 'notification' file, **loaddata**, is placed in the \plreport directory to show that a new plan is available for transferal to Planview. The loaddata file is deleted once the transfer has been completed, and 'Import to Multiuser' will not attempt to transfer data again until a new loaddata file - with a new plan - exists.

Another empty file, **repw** is used by both the 'Distribute Current Plan' and 'Import to Multiuser' programs as a locking/messaging system. Both programs create repw when they run, and delete it when they have finished running. Both programs before starting to run, also check for the existence of repw, and if it exists they wait for the other program to finish. If either 'Distribute Current Plan' or 'Import to Multiuser' programs fail for any reason, the repw file may have to be manually deleted.

Planview over a WAN

If a remote location requires to view plans from another location, the performance of the Progress GUI Planview system may require more bandwidth for reasonable performance than can be justified.

An alternative is to copy the \plreport directory from each Planner Scheduler to each remote location, and to then import this data into the Progress Planview database at each Planview location. Once the Plan from a remote location is in a local Planview database, local users of the Multiuser Planviewing system will have good performance over their own LAN.

Again the expfin.bat and repcp files can be used to accomplish this.

Worked Example of Copying Plan to Two Locations.

In this example the \plreport files are to be copied to a local NT server, and also to a remote, on WAN, NT server. The files will be used by Planview at both locations, with updating to MFG/PRO also taking place at one of the locations.

1. On the Scheduler PC, map both the location of the Local and the Remote NT servers.
2. Use Notepad to create a file named expfin.bat , with contents similar to below.

+++++

@echo off

REM This file is edited and placed in the Planner Scheduler install directory.

REM It runs after every 'Distribute Current Plan' run.

echo.

echo.

Echo Copying the plan to a REMOTE NT Server for Planview, please wait

copy remoteNT.cfg repcp.cfg /Y

repcp

echo.

echo.

Echo Copying the plan to the LOCAL NT Server for Planview, please wait

copy localNT.cfg repcp.cfg /Y

repcp

exit

+++++

3. Copy this file to the Planner Scheduler Install directory, where it will then run automatically after every 'Distribute Current Plan'.
4. Copy repcp.exe and repcp.cfg from the \utility dir of the planner CD to the Planner Scheduler Install directory
5. Make 2 copies of repcp.cfg, renamed to remoteNT.cfg and localNT.cfg
6. Use Notepad to edit remote.cfg similar to that below. Use the shortened form of directory names

+++++

C:\Progra~1\ThePla~1\database\plreport\

R:\RemoteNT\Applc~1\Planne~1\DistPl1

Y

Y

+++++

7. Use Notepad to edit local.cfg similar to that below.

```
+++++  
C:\Progra~1\ThePla~1\database\plreport\  
L:\LocalNT\Applc~1\Planne~1\DistP1\  
Y  
Y  
+++++
```

Now when expfin.bat is run -or "Distribute Current Plan" is run from the scheduler, 2 copies of the Schedulers \plerport directory will be made, first to the remote NT Server, then to the Local NT Server, using the standard Planner messaging files loaddata and repw.lk

MFG/PRO wow Trigger (for Repetitive Interfacing)

If interfacing to the repetitive area of MFG/PRO, then check out the Planner Manual, Interfaces Section, "Delays in Export of Planned WOs (for Repetitive)" before continuing.

If it has been decided to utilise the wow trigger to avoid any delays in export of Planned WOs made repetitively, then changes have to be made to the wow trigger.

If no earlier changes have been made to the standard wow.r supplied with MFG/PRO, then an appropriate compiled wow.r must be copied to the MFG/PRO triggers directory

1. After an Installing the Interface programs and running 'Compile Interface-Planview' on Windows/NT, (or the Install on Unix which includes the compile) the InstallDirectory\src\triggers directory will contain compiled wow trigger code for all versions of MFG/PRO, and for each wo_chr0X spare field option for that version.
 - If wo_chr01 is being used, then use wow-01.r
 - If wo_chr02 is being used, then use wow-02.r, etc
2. Determine that no actions by users can access MFG/PRO Work Orders.
3. Copy the appropriate dot.r file to the MFGPRO Triggers Installation directory. Rename the existing wow.r , and then rename the new one from wow-0x.r to wow.r

4. As well as copying the trigger code, the 'Rep Trigger Installed' switch and the 'Use field for MRP Time' lookup must be setup in the opening MFG/PRO Integration Utility window. Their use is described in the Interfaces Section of the Planner Manual.

If the standard wow trigger has been modified earlier, perhaps for other additions to the installation of MFG/PRO, then it will need to be further changed for Planner. Check the Planner distribution CD, directory \src\trigger, and locate the relevant unencrypted wow source. Use the parts marked for Planner Interfacing to add to the already modified trigger, and then recompile.

Standard Repetitive, MRP and Consume Backwards

If interfacing to MFG/PRO Repetitive, and standard Repetitive is being used then settings in the Repetitive Control File will require adjusting to ensure MRP does not ignore supply scheduled in the near past, but not yet supplied.

The Planner interfaces will be expecting MRP to take into account work scheduled in the near past as still being scheduled supply when calculating requirements, as happens with Advanced Repetitive.

The setting for Consume Backward in 18.24 Repetitive Control File can be altered to allow this to happen. MRP treats open orders before today (up to the value of Consume Back) as supply. But whatever the value of Consume Back, MRP goes back only as far as the Start of Week

What to do if the Program Fails to Start

For The Planner Scheduler.

Refer to “What to Do if the Program Fails to Start” in the earlier section Planner Scheduler Installation [22](#).

For Interface & Planview Modules.

The most common reason for these components failing to run are:

- **Progress Components not correctly installed on PC**
 1. The Progress components supplied with MFG/PRO demo are not correctly set up, maybe they have been altered from the default install.
 2. Insufficient rights are available to alter system setup when installing on a PC with Windows NT/2000, e.g. to register .OCXs in system32
 3. Some early versions of 95/NT4 do not allow registration of OCXs.
 4. The following OCXs must be installed and registered: Graph32.ocx; pstimer.ocx, csspin32.ocx, cscomb32.ocx, mscal.ocx. If they are not, choose Run from the Start menu, and key in 'regsvr32 Graph32.ocx', 'enter', and similar for each OCX.
- CRC errors are reported, as a version of MFG/PRO different to the current version is being used. Compile using the windows shortcut provided, (or the unix script if appropriate).
- Check database details, dlc and other paths in the following files. The files should all be in the Planner Multiuser Client install directory, e.g. C:\Program Files\Planner Multiuser

Plexport.pf	Plexport.ini	
Planview.pf	Planview.ini	
Plupdate.pf	Plupdate.ini	Plupdate.bat
- Check the logfiles in the installation directory (eg \Planner Multiuser for windows):
 - Plex0001.log - for MFG/PRO Interface Utility & MFG/PRO Export
 - Import.out - for Import to Multiuser Scheduled
 - Mfgupd.out and Mfgadv.out - for MFG/PRO Update procedures
 - Err0001.log and Era0001.log (in Planview specified log dir) for CIM file creation
 - Mfgend.out and Advend.out – for after CIM processing
 - Mfgunl.out – for Interface unlock after completion of Update steps

Shortcut	.pf	.ini	Application Log	Other
Compile Interface & Planview Programs	Compile.pf only for extra databases	Plupdate.ini	Compile.log	
MFG/PRO Interface Utility MFG/PRO Export	Plexport.pf “	Plexport.ini “	Plex000x.log	
Import to Multiuser Planview	Planview.pf “	Planview.ini “	Import.out	
Update MFG/PRO	Plupdate.pf	Plupdate.ini	Err & Era000x.log Mfgadv & Mfgout.log	Plupdate. bat

- Locks are placed when some processes occur, to prevent conflicts with other processes. Listed below are some that are encountered, that after a laptop crash, are often left locking things up:

Process	Locking	Evidence	Causes	Solution
MFG/PRO Export (Create Import.if Text File)	Import.lk	a. MFG/PRO Export not adding new work to existing import.if file, when known changes have been made in MFG/PRO b. 'Create Import.if' shortcut finishes immediately after starting.	The create import.if part of 'MFG/PRO Export' failed before complete.	1. Ensure that no 'MFG/PRO Export' or 'Create Import.if' session is running. 2. Ensure that no scheduler is importing form their \imptx dir c. Delete the import.lk file
Import on Channel	Import.lk, Export.lk	Message "Error opening Import file" received	Previous import on channel failed before complete.	1. Ensure that no 'MFG/PRO Export' or 'Create Import.if' session is running. 2. Delete the import.lk and export.lk file
Distribute Current Plan	Repw.lnk	Distribute Current Plan finishes immediately after starting.	a. Previous 'Dist Current Plan' failed before complete b. Previous 'Import to Muser' failed before complete	1. Ensure that no 'Import to Muser' session is running 2. Delete the repw file from the \plreport dir

Process	Locking	Evidence	Causes	Solution
Import to Muser	Repw.lnk	Import to Muser finishes immediately after starting	a. Previous 'Dist Current Plan' failed before complete b. Previous 'Import to Muser' failed before complete	1. Ensure that no 'Import to Muser' session is running 2. Delete the repw file from the \plreport dir
Update MFG/PRO	Plupdate.lck	a. Update MFG/PRO finishes immediately after starting b. Message 'Update MFG/PRO is running' when try to run MFG/PRO Export, or Interface Utility	a. Previous Update MFG/PRO failed to complete	1. Ensure that no Update MFG/PRO is running 2. Check if CIM files created. If not GoTo 5. 3. Check if CIM Loaded and Processed. If not Load & Process. 4. Check mfgend & advend.out to see if run since CIM processing. If not, run 'After CIM Processing' i.e plupaend.bat 5. Run 'Unlock interface' i.e plunlock.bat

Progress Clients and Number Format

Facts:

The Client PC being used for "Import to Planner Multiuser" must have Regional Settings set to support the Progress Number Format being used.

Client PCs with most English Regional settings (US, UK, Australian, etc) - must not use the Progress -E parameter from \dlc\startup.pf that is the default for some alternative language Progress installs, such as English (International) and French.

When the -E parameter is used, any period in the data exported from the (English Region) Scheduling PC is taken by Progress to be a thousands separator, instead of the intended decimal separator. So the Scheduler must have a regional setting to support the 'crossed over' separators of -E.

Symptoms:

If all Planner setups are correct, and 'Import to Multiuser' appears to function correctly, but no data can be seen in Planview, then check that the \dlc\startup.pf does not include the -E parameter, if any English Regional setting is being used on the PC.

Periods in the data exported from the Scheduling PC may have been taken to be thousands separators, instead of the intended decimal separators

If the contents of time fields in planview.db table mreslist are examined, (lstim, lfintim) and found to have values 100000 greater than they should, and will not display in the allotted 5 digit space, then a mismatch in regional settings and Progress Number format may be the cause.

Progress 9.1a Databases

If using Progress 9.1a Planview and Plexport Databases on NT or Unix, any 9.1b clients used will require Progress 9.1b Patch 20 to be applied. Using a 9.1b client with earlier patches to compile Planner's Progress components will fail, as will attempting to run some Planview programs.

Control File Use

The use of control files varies slightly between Unix and Windows. Below is a summary of their use in each environment:

When run from Windows:

Control File	Process				
	Compile	MFG/PRO Interface Utility	MFG/PRO Export	Planview	Update MFG/PRO
plexport.pf		√	√		
plexport.ini		√	√		
planview.pf				√	
planview.ini				√	
plupdate.pf					√

plupdate.ini	√				√
compile.pf	√				

When run from Unix:

Control File	Process		
	Compile	MFG/PRO Export (plexbtch)	Update MFG/PRO (plupdate)
plexport.pf		√	
setenv	√	√	√
plupdate.ini	√	√	√
compile.pf	√		

PLANNER & REMOTE MFG/PRO DATABASE

One MFG/PRO Database, Multiple Locations

The system described in Planview over a WAN, page [77](#), can also be utilised when one central MFG/PRO database is being used for a number of MFG/PRO sites, some of which may be located remotely from the main database/server. In this case it is also necessary to have a local Progress Database at each of the remote locations, for Planview users to access locally. These remote databases may be NT server based, even though the main central MFG/PRO, Plexport and Planview databases may be Unix based. Additional Progress licenses may be required.

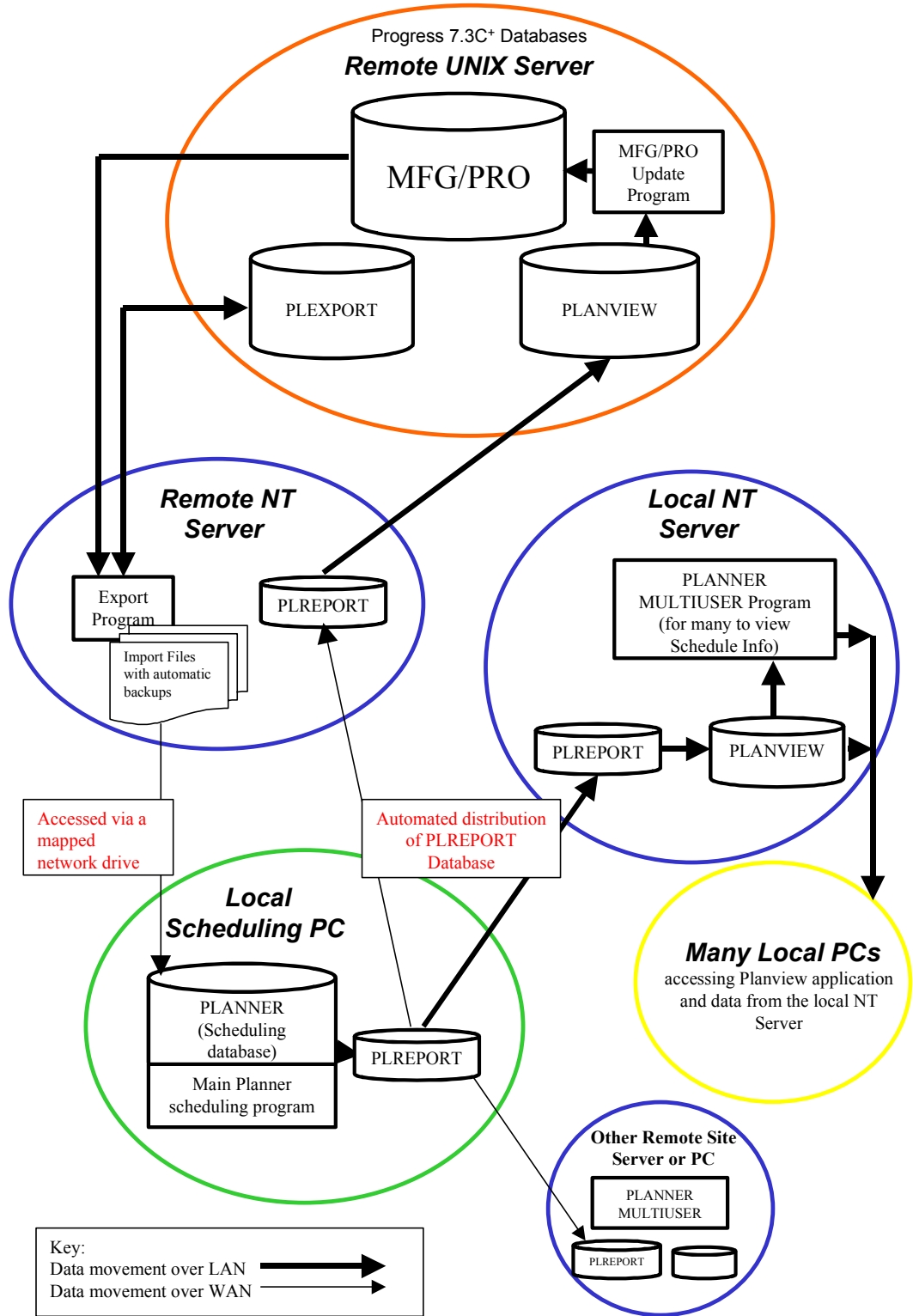
Having some Planner Schedulers remote from the central MFG/PRO Database/Server will not affect where 'MFG/PRO export' and 'Update MFG/PRO' are run from. Both routines will be run at the central location on the Unix or NT server as required.

However remote locations will need to collect new & changed work from, and copy their current plans to the central location over the WAN. The key point is that no windows applications will run over the WAN.

Use the Planner Scheduler's Customizer to create a new 'Interface Channel', which is the name of the directory where the import.if file is to be found. The directory may be a mapped drive on a WAN. Refer to the 'MFG/PRO-Planner Interfaces' section of the manual for more details.

Use the 'Copying the \Plreport Data' instructions on page [75](#) to copy plans to other locations over the WAN.

Planner with Remote MFG/PRO



UPGRADING MFG/PRO INTERFACES AND MULTIUSER TO v3.43

Any export transactions from MFG/PRO remaining in the import.if file must be imported to the Scheduler AND applied before upgrading the Planner Scheduler or Planner Interfaces/Multiuser to v3.43

The upgrading is carried out in two parts. First the existing Plexport and Planview database schemas are updated, then the applications are updated.

Before Starting the Upgrade to v3.43

- If upgrading from v3.2x or earlier see page [92](#), "Making Work Split Sequence Numbers Unique" first.
- If upgrading the Progress versions of your databases also, then carry out that procedure on the Plexport and Planview Databases first, before updating these Planner Database schemas to v3.43. See page [91](#) for other steps required.
- **Ensure you have imported ALL import.if files into *The Planner*.** If Plexport supplies data to more than one scheduler, then ensure all schedulers import all existing import.if files.
- The DB Upgrade routines expect the databases for plexport and planview to be in the original installation locations. These databases must be in the original location before proceeding with the upgrade.
- **Take Backup copies of all Planner applications, and both the Plexport and Planview databases.** You may wish to copy back the following files from the location they were backed up to, rather than re-edit the generic ones installed during the upgrade.
 - Plupdate – contains script information for starting MFG/PRO for CIM Updating

- Pllodcm.inp and plruncim.inp – contain batch user, output device and other information particular to creating, loading and processing the Plupdate.cim file. Also Pllodcm2.inp and plruncm2.inp – used for updates to Repetitive MFG/PRO using plupadv.cim

Other Information

Immediately after installing (and recompiling if necessary) the Version 3.43 Upgrade, the **MFG/PRO Interface Utility** must be run. This will setup new features in this version and do any modifications to the existing data that may be required as a result of the Upgrade. **DO NOT TRY TO RUN AN EXPORT UNTIL THIS HAS BEEN DONE !!!**

Update to MFG/PRO – if upgrading from earlier than v3.4, settings will need re-establishing while running the MFG/PRO Interface Utility, by pressing the [Update to MFG/PRO] button. The settings are now stored in Plexport.db, and are accessed in a more secure way with this utility, rather than with Planview.

Some **Shortcut names** were renamed after v3.3, so some duplicates from updating the same group may be deleted. The changes are:

MFG/PRO Export Utility	is NOW	MFG/PRO Interface Utility
MFG/PRO Export Scheduled	is NOW	MFG/PRO Export
Compile (update only) Programs	is NOW	Compile Interface-Planview

Progress Unix Databases

Close down both Plexport and Planview databases, ensure you have a backup of the databases, and ensure that they will not be restarted during the period of upgrade.

FTP the contents of the Unix directory of the Planner CD to a temporary directory on the unix machine. Run the install script as for a new installation. Enter the existing Planner Multiuser directory when prompted for the directory to install into. The script will then remind you to shut down and back up the databases, before asking you whether to continue. When upgrading from a prior version, the script will:

1. Compile the Utility programs using the Progress Application Compiler. (See Using the **Progress Application Compiler**)
2. Dump the Data from the Planview and Plexport databases
3. Move the old databases into an olddb sub-directory

4. Create new empty databases in the db sub-directory
5. Load the new database definitions into the new databases
6. Compile the MFG/PRO Update programs (also compiles unix export programs if Progress >8.2 – in case they are required)
7. Load the old data into the new databases
8. Tailor scripts for startup, shutdown, & update to MFG/PRO.

Progress NT Databases

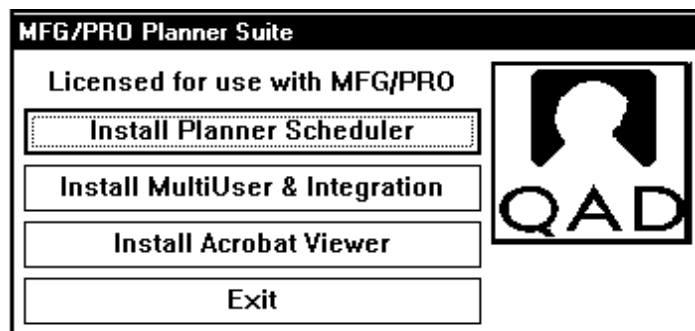
Close down both Plexport and Planview databases, and ensure that they will not be restarted during the period of upgrade.

Run the 'Install Multiuser and Integration' option from the CD, and choose the 'NT Database Install'.

Enter the existing Planner Multiuser directory when prompted for the directory to install into. InstallShield will then remind you to shut down and back up the databases, before asking you whether to continue. When upgrading from a prior version, InstallShield will:

1. Copy all the DB upgrade utilities into the install directory.
2. Dump the Data from the Planview and Plexport databases
3. Move the old databases into a backup sub-directory
4. Create new Planner Multiuser databases
5. Load the old data into the new databases

Windows Application Upgrades



Once the databases have been upgraded, and a backup copy of the whole of the \Planner Mutliuser application directory has been made, run the 'Install Multiuser and Integration' option from the CD, and choose the 'Network

Application Server Install' or Application Client Install depending on where you have your applications residing.

The existing applications will be replaced with the v3.43 ones.

Only one compiled set of the Progress programs; used for MFG/PRO Export, Update and Planview, is now provided.

For Planner v3.43 this is for MFG/PRO eB with v9.1d Progress

For interfacing to other versions of MFG/PRO-Progress, the Interface and Planview programs must be recompiled against the MFG/PRO-Progress versions being used.

A client install must be carried out at the PC storing the applications, so that necessary control files are available for the compile.

If upgrading from v3.40 or earlier, Client installs will also be required on each client, as some of the configuration files residing on the clients will have changed with this version

Progress Version Number Upgrades

If the Plexport and Planview databases have been upgraded to a later Progress version number, then carry out the following steps **before carrying out a Unix or NT Database Upgrade**.

1. Edit the dumpdata.bat and dumpload.ini files (dumpdata and setenv on Unix) so that correct new DLCs are specified. These files are in the PlannerDBInstallDirectory.
2. Copy p-dumpvw.p and p-dumpex.p to prvdmpvw.p and prvdmpex.p respectively (note p- becomes prv, and dump becomes dmp). These files are in the PlannerDBInstallDirectory\Planner directory.
3. Delete the following .r 's from the PlannerDBInstallDirectory\Planner directory – leaving their .p's only:
 - p-datadl.r
 - p-dpex31.r
 - p-dpvw31.r
 - p-loadex.r
 - p-loadvw.r
 - p-dumpvw.r
 - p-dumpex.r
 - prvdmpvw.r and prvdmpex.r (if they exist)

4. Delete the file w-status.r file from the Windows PlannerAppsInstallDir \Planner, leaving the .p only.

Customised Part, Work Order and Operation Exports

If changes have been made to any of the 'empty' custom export programs, then these customisations will need checking against the new empty custom programs, and if necessary changes made to suit the new environment.

The routines are all in \PlannerInstallDir\custom\mfg, and are

- p-cusprt.p
- p-cuswo.p
- p-cusro.p
- p-cuswr.p

During the upgrade the \custom directory contents will have been moved to \custom.old, and the new empty procedures installed into \custom\mfg.

Once the programs are checked and modified, they must be recompiled whether or not other programs require recompiling for your MFG/PRO-Progress version.

Laptop Install Upgrades

The whole contents of the \Planner Multiuser directory are simply replaced with the v3.43 files and databases. No upgrade of existing data in Plexport or Planview Progress databases takes place.

Before running the first new export, start MFG/PRO Interface Utility to 'initialize' the Plexport database. Also run the upgraded Planner Scheduler to create an empty main database from the customiser, using Startup, Create New Plan.

Before carrying out an 'Import to Multiuser', Planview should be started once to 'initialize' its new database.

Making Work Split Sequence Numbers Unique

If 'MFG/PRO Interface Utility' is set up to Split Work from the one MFG/PRO database to more than one scheduler, then **EACH WORK SPLIT MUST HAVE A UNIQUE SEQUENCE NUMBER BEFORE UPGRADING.**

From Version 3.3 of The Planner, each Work Split was required to have its own unique split order sequence number, to determine the order in which the splitting of work will be carried out.

This requirement was not mandatory with version 3.2b and earlier versions.

So if upgrading from 3.2b or earlier versions, Work Split Sequence Numbers must now be made unique before carrying out an upgrade to v3.3 or later. The procedure is outlined below

To check on current work splits in v3.2x, run MFG/PRO Export Utility from the Windows Planner Multiuser program menu. Choose the **[Settings]**, then **[Work Split]** buttons.

In the first figure below, the work was split by item type in v3.2x, but the split order sequence numbers are not unique. The second figure shows the corrected data, ready for upgrading.

Send To Scheduler	Sequence	From Site	To Site	From Part Type	To Part Type	From Product Line	To Product
0	0	ZZZZZZ	ZZZZZZ				
1	0		ZZZZZZ	AUTO	AUTO		
2	0		ZZZZZZ	BITS	BITS		
1	1		ZZZZZZ	ELEC	ELEC		

The new split order sequence ensures that Scheduler 0s work is processed first (no work, unless have a site ZZZZZZZ), then Scheduler 1s work; auto part types first, then elec; and finally Scheduler 2s work.

Send To Scheduler	Sequence	From Site	To Site	From Part Type	To Part Type	From Product Line	To Product
	0	0	ZZZZZZ	ZZZZZZ			
	1	10		ZZZZZZ AUTO	AUTO		
	1	20		ZZZZZZ ELEC	ELEC		
	2	30		ZZZZZZ BITS	BITS		

To change a line, we first must add a duplicate line, then delete the original line.

For example:

1. Highlight Scheduler 2, sequence 0 as shown in the figure above,
2. Press the **[Add]** button,
3. Change the sequence to 30,
4. Press **[Save]** button,
5. Again highlight Scheduler 2, sequence 0,
6. Press the **[Delete]** button.

Now only one line exists again for Scheduler 2, with the correct work split sequence number.

Upgrading with Multiple Schedulers on one MFG/PRO DB

Upgrading from v3.4 / 3.41 /3.42

Before upgrading the Interfaces/Planview applications and databases, have all schedulers import all work exported from MFG/PORO up to that time.

The schedulers can be upgraded from 3.4/3.41/3.42 to 3.43 before, during or after the interfaces are upgraded, as their input requirements and output formats have not changed between 3.4, 3.41, 3.42 and 3.43.

Upgrading from v3.2x / 3.3

The procedure below to carry out the upgrade of a whole 3.2x/3.3 system, allows schedulers to continue using upgraded scheduler software with 3.2x or 3.3 Interfaces/Planview system. This means the schedulers can be upgraded prior to the interface/planview system being closed down, and hence shortens the period of system closure. The steps should be carried out in the order shown:

A:

1. Upgrade all Schedulers to 3.43 - approx 1/2 hr per scheduler, including data checks and backupcopies
2. If using 3.2x MFG/Pro Export/Planview - Then turn OFF (for the meantime) 'use passes for Opn lookup' in each Scheduler's Customiser
3. Carry on using rest of present system as normal, but with new v3.43 schedulers

B:

1. Stop all automatic export/imports of data from MFG/PRO-Planner, and shutdown Progress DBs (warn Planview users system will be down for 1-3 hours, shop floor may need paper schedules for this period)
2. All schedulers to clear all new/changed work waiting - i.e import on channel from MFG/PRO

C:

1. Upgrade of Plexport and Planview DBs (on Unix or NT)
2. Upgrade of Interface and Planview applications (on Windows NT) and concurrently
1. All Schedulers to Apply all transactions, so Hold List/Bins are EMPTY
2. If previously tuned off, now Turn ON 'use passes for Opn lookup' in each Scheduler's Customiser
3. Copy 34PLINTER.SPC from the Planner 3.43 CD\Utilities directory, to each schedulers \The Planner install directory. Rename the file PLINTER.SPC.
4. Run the customiser, Interface menu, Load Interface Specs for each scheduler.

D:

1. Check that all Schedulers hold bins are empty, and 'use passes for Opn lookup' ON
2. Restart Progress DBs, and automated processes
3. Import new/changed work from the period the system was closed down

PLANNER LAPTOP INSTALL & SETUP

These instructions are for persons wishing to have a live copy of all software, including a working demonstration copy of MFG/PRO, on a standalone PC. This will enable the movement of data between MFG/PRO and Planner, and vice versa. The outline covers all the setup required to obtain a live system, without explanation.

For full details please refer to the manual, which is available on the CD, and on your Windows Planner start menu once the Planner Scheduler is installed.

The PC should be a PII 300+, have 64+MB Ram, 100 MB free disk for Planner Modules themselves. Display is best at 1024x768, with 16 bit color, just useable at 800x600.

To:

- Install all modules of The Planner for MFG/PRO
- Setup to pass work order and routing data from MFG/PRO to Planner, and Update MFG/PRO Work Orders with information derived in Planner Scheduler
- Setup to pass Repetitive Schedule data and Planned WOs to Planner, and to Update MFG/PRO Repetitive Schedules with information derived in Planner Scheduler.

Install and Setup in the order listed below, i.e. A then B, then C...etc.

A. Installation

1. Install Demonstration version of MFG/PRO GUI eB, or alternatively use a Character version of the QAD Demo.
 - Check that the demo works. If necessary obtain new registration codes from QAD.
2. Install Planner Scheduler
3. Install Planner Interfaces and MultiUser – Laptop/Standalone PC Install
 - Be sure to select correct MFG/PRO Demo **Db** directory - they vary with versions of QAD Demo
 - The **DLC** directory defaults to the selected MFG/PRO Demo directory, but may be changed to a complete local DLC of the same release.

- Note that the MFG/PRO database directory and name can be found in the PROGRESS “PF” file for your MFG/PRO installation, and the required PROPATH variable can be found in the “PROGRESS.SVG.”
4. Install Adobe Acrobat Reader

B. Compiling the Interface & PlanView Programs

Only one compiled set of the Progress programs; used for MFG/PRO Export, Update and Planview, is now provided.

For Planner v3.43 this is for MFG/PRO eB with v9.1 Progress

For interfacing to other versions of MFG/PRO-Progress, after installation the Interface and Planview programs must be recompiled against the MFG/PRO-Progress versions being used.

Once all the installations are complete;

1. Start Menu, Programs, Planner MultiUser, run “Compile Interface-Planview Programs”, which runs the file compile.bat, with the compile taking a few minutes to complete.
2. As a check, the .r files, in \Planner Multiuser\planner, planner\plexport and planner\mfg directories, should show your current system date/time of compiling, when viewed with Windows Explorer.
3. CRC errors will be reported while running the Export/Update/Planview programs with versions of MFG/PRO earlier or later than 9.0, unless the compile is carried out first.
4. If any errors are reported to the screen, check the compile.log file in the \Planner Multiuser install directory.
5. The parameters you gave during install may have been incorrect;
 - DLC directory must be correct in compile.bat
 - Database directory for MFG/PRO must be correct in plupdate.ini

C. MultiUser Planview Setup

1. Start Menu, Programs, Planner MultiUser, run PlanView option, default login/password – admin/secret
2. File Menu, System Settings, Site/Scheduler Maintenance;
 - Create Scheduler/Site File – e.g. mysite.sit, in C:\Program Files\The Planner (the main planner directory).
 - Check 'Default site' row, Import Directory - e.g. c:\Program Files\The Planner\database\plreport\ (the planner reporting database) MUST have \ at end of path.
 - If both the 'Planner Multiuser' and 'The Planner' (Scheduler) install directories are off the same directory, then the default entry dotdot\The Planner\Database\plreport\ can be used.
 - Save & exit, then **exit settings**
3. Exit PlanView.

D. Planner Scheduler Setup

1. Start Menu, Programs, Planner Scheduler, Run Customizer, login/password defaults are admin/secret
2. In Customizer; select Startup, Customize Switches, Edit Initialization Switches
 - Enter scheduler/site file name, saved earlier in PlanView setup e.g. mysite.sit, OK. Make sure to include the "sit" extension.
3. In Customizer still; select Interfaces, Customize Interface Channels, search button
4. Highlight 'Scheduler 0 Default Import Dir', Edit and Check
 - Channel Dir e.g. dotdot\Planner Multiuser\ (If both the 'Planner Multiuser' and 'The Planner' (Scheduler) install directories are off the same directory this is OK, else enter full path)
 - Text files, OK
 - Select Yes on "Save Changes to Interface Channel Record ?"
 - Close window, and exit Customizer

E. MFG/PRO Export Setup

- Compiled 'MFG/PRO Export' code provided with Planner v3.43 is only for MFG/PRO eB – Progress v9.1
- If using different MFG/PRO-Progress versions than this, you will need to compile as set out in B. above, before continuing further.

1. Start Menu, Programs, Planner MultiUser, run “MFG/PRO Interface Utility” option, default password – secret
2. Press the ‘Update MFG/PRO’ button and
 - Turn ON Update to MFG/PRO
 - Enter **Log Directory**, make this short eg C:\CIM\, (also used to place CIM load files in, and MFG/PRO only allows 25 characters for the Path\Directory\CIM Filename.extension). Must finish in a backslash, \
 - **Check** that the log directory entered above actually exists, or create it.
 - Select something to Update from ‘Work Orders’, e.g. Update WO Due date and Update WO Release date; Save and Exit
3. Check other settings available, and modify defaults if required.
4. Press Global settings button, and check the default settings.

**If you require to schedule ‘repetitive work’ Continue;
Else exit from the MFG/PRO Interface Utility.**

To Use Planner to Schedule Repetitive Work

1. From Global settings, check ON ‘Status from’ “P” for any Planned Work Orders to come to Planner Scheduler from MFG/PRO
2. Still from Global settings, Interface Maintenance – press ‘Advanced Repetitive Interface’ button.
3. Turn ON ‘Send Repetitive’
4. Turn ON ‘Limit (Planned) Orders by WO Release Date’
5. Enter Values for the two horizons, eg 10 and 90 days respectively
6. Save and Exit
7. Exit from the MFG/PRO Integration Utility.

F. Exporting Data from MFG/PRO into Planner

1. Start Menu, Programs, Planner MultiUser, run MFG/PRO Export. This may take a little while, as this is the first export. This process would normally run in the background, on the server.
2. When export is completed, Start Menu, Planner Scheduler, run Planner, default login/password is admin/secret.
3. When Planner Scheduler opens, maximise main window.
 - Interfaces menu, Import on Channel, highlight ‘Scheduler 0 Default Import Dir ..\Planner Multiuser\’ and press select button. Close window.

- Interfaces menu, Hold Bin List by Group, Select, press Apply button. Close window.
- 4. All work orders from MFG/PRO are now in The Planner 'Bin' area, waiting to be placed on the machines now shown on the 'Board'.

NOTE: If using the MFG/PRO mfgdemo data, only a small number of work orders can be placed on the board, as the default rate of 1 has been used, giving centuries of work for some machines!

5. Plan menu, Place, Place/Remove menu, Place W/O at Pointer.
 - Highlight, a W/O and press Select button.
 - Select any of Place Types
 - Repeat for half a dozen W/Os
 - Close 'Place W/O at Pointer' selection window.
 - If using repetitive, also place ALL jobs prefixed PL- on the board
6. The selected work orders should now be displayed on the Board.
7. Interfaces Menu, 'Distribute Current Plan', **MultiUser Plan ON**, OK

G. Importing the Schedule/Plan into Planview

1. Start Menu, Programs, Planner MultiUser, run "Import to MultiUser". This may take a little while, as this is the first import. This process would normally run in the background, on the NT server.
2. When the process is completed, Start Menu, Programs, Planner MultiUser, PlanView, login/password admin/secret
3. Press the KPI Views button, select late jobs and view. If you have used the mfgdemo data you'll have a few shown, by percentage 100% late! Close KPI
4. Press the 'This Week' board display button. You should see some of the work placed on the schedulers planning board here.
5. Select the GoTo menu, Work Order, double click on a work order.
6. Close all windows and exit Planview

H. Updating MFG/PRO with the Schedule

Using GUI version of Demo

1. This process would normally run in the background, on the server, with the program periodically checking for changes to the 'distributed plan' from the scheduler, and updating MFG/PRO as established during the setup. As CIM load is used, Laptops running MFG/PRO GUI only will need to

manually load the CIM file, as only character mode MFG/PRO supports automated CIM Loads.

2. Start Menu, Programs, Planner MultiUser, run **“Update MFG/PRO Step1-Create CIM”**.
3. Run MFG/PRO, run MGBDLD.P (36.15.1, CIM Data Load in GUI Demo),
 - Input = File,
 - Filename = e.g. C:\cim\plupdate.cim, (plupdate.cim will be in the Log Directory, specified earlier on page [99](#))
 - F2 or Enter to run.
 - Repeat for filename C:\plupdadv.cim if using repetitive,
 - When completed close CIM Data Load window.
4. Run MGBDPRO.P (36.15.2, CIM Data Load Process in GUI Demo), F2 to Process.
 - Ensure output is to Printer, (or to an name, e.g. Pl, to get a log file pl.prn in mfgpro demo directory) NOT window, else processing does not take place.
 - Processing is taking place if the menu options, at the top of the window, cycle from black to grey to black.)

Once CIM processing has completed

5. Start Menu, Programs, Planner MultiUser, run **“Update MFG/PRO Step2-After CIM Processing”**, and finally
6. Start Menu, Programs, Planner MultiUser, run **“Update MFG/PRO Step3-Unlock Interface”**.

Updating to a Character version of MFG/PRO Demo

If are using a Char version of MFG/PRO, AND you checked the Character box ON during install, you will have installed an automated “Update MFG/PRO” routine on your laptop. However some editing is required before this will work.

1. **Edit the MFG Demo Dir \Parms\Progress.chr file** by copying the DLC, Propath and Probuild paths from [WinChar Startup] up to [Startup], e.g. DLC=D:\Program Files\QAD\MFGPRO 9.0 Char US Demo\DLC
2. Edit the batch client control files pllodcm.inp & pllodcm2.inp with the correct cim directory (same as the log dir from page [99](#)). These files are in the Planner Multiuser install directory. **Check that the CIM directory exists.**
3. The default ‘printer’ output in the batch client control files plruncim & plruncm2.inp will normally allow the process to run, but if problems are encountered and no printer is present, this entry can be changed to receive other output, e.g file

4. If your Character Client and Progress startup names have been changed from the defaults used with MFG/PRO demo, or if you have moved the MFG/PRO Demo \parms directory then you will need to edit the plupdate.ini to reflect your changes.
5. Then run Start Menu, Programs, Planner MultiUser, run **“Update MFG/PRO”** - without any suffix

If the above changes are not made for a character demo, the CIM file(s) will still be created, but errors will be obtained when the background CIM loading and processing tries to run, for first standard then for repetitive work.

But the CIM files can be loaded and processed manually as for a GUI demo, (but using the appropriate .bat files, as no shortcuts are provided for the 'stepped update' previously outlined for GUI Updates.

I. Check MFG/PRO Updated

Run Mfg/PRO, wowomt.p, (16.1, Work Order Maintenance) to check that the due/release dates of the work orders scheduled in the Planner have been altered as expected. Any irregularities may be noted in the files mfgupd.out / Mfgadv.out (in the Planner Multiuser Install directory), or Err0001.log / Era0001.log (found in the log directory specified earlier on page [99](#).)

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