14.0 ONLINE MENU: TRANSFER

Entering “T” for “Transfer” from the Online menu allows you to change the default path, view the contents of the default path, load application tasks onto the rack, and save application tasks from the rack. Sections 14.1-14.4 describe these options in more detail. See figure 14.1 for the Transfer menu.

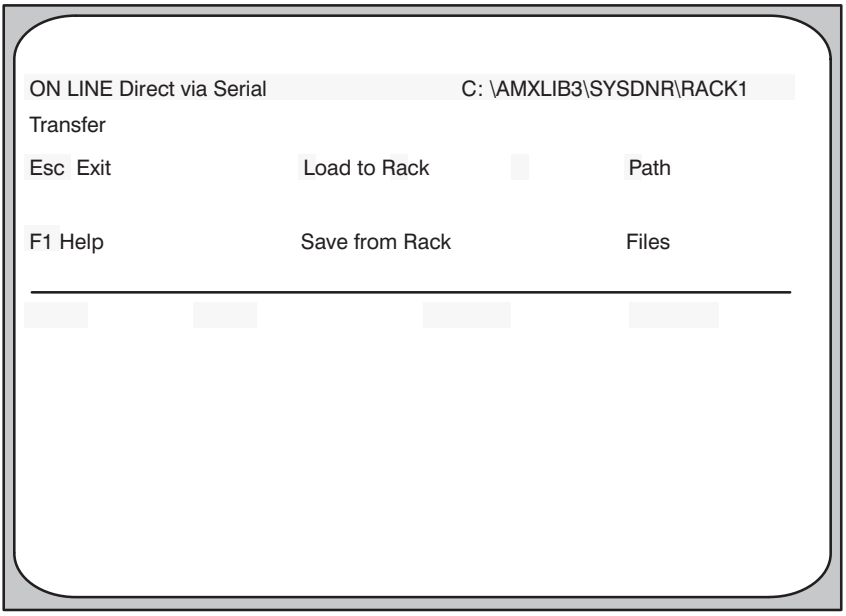

Figure 14.1 - Transfer Menu

14.1 Changing the Default Path

You can change the default DISK:\LIBRARY\SYSTEM\RACK, or path, by selecting “P” from the Transfer Menu. The default path is shown in the upper right hand corner of the screen. The current default determines the location to which you save tasks from an AutoMax Processor or UDC module and from which you load tasks to a Processor or UDC module.

Note carefully that your path must be the path in which the configuration and application task files for the rack to which you are connected are stored. If the path is incorrect, you may load the wrong configuration and application task files to the rack. What’s more, if you save back application tasks and configuration files, you will write over the configuration object file in the current path. You may also write over application tasks that have the same name. If you copy over the configuration file, you can generate it again because the configuration database is not overwritten.

14.2 Directory of the Default Path

Selecting “F” for “Files” from the Transfer menu displays the directory of the current default path. To change the default, see section 14.1.

14.3 Loading the Rack Configuration, Drive Parameters, and Tasks onto the Rack

The Load option from the Transfer menu allows you to load the rack configuration, drive parameters, and application tasks onto all AutoMax Processor and UDC modules in the rack and all Processor modules on the network(s) through the connection at the leftmost Processor module. BASIC and Control Block tasks must be compiled first. Drive parameter and configuration files must be generated first. Note that a maximum of 32 tasks can be loaded to an AutoMax rack. The keyswitch must be in the PROGRAM position and the password must be entered to load any tasks. All tasks will be loaded onto the Processor specified when the task was added to the rack in the Task Manager application. Utility tasks must be loaded separately even though they are added to the rack like other tasks. See 14.3.1 for more information.

After tasks are loaded onto the rack, they are installed by the operating system. This procedure involves verifying that all physical I/O points in the system are defined and consistent with the information in the configuration.

When you select “L” for “Load” from the Transfer menu, the screen will display the following choices:

- Normal Rack Configuration
- Debug Rack Configuration
- Every Parameter File
- Single Parameter File
- Tasks
- All

You have two options when loading the **rack configuration**. You can load the complete configuration (normal) or you can load a test configuration with all I/O mapped to memory (debug). The rack configuration must be loaded before any AutoMax tasks can be loaded to the rack.

If you want to use the test configuration with AutoMax and UDC tasks, you must select the “All” option (described below) to load the drive parameters, AutoMax tasks, and UDC tasks. Then return to the Transfer menu and select Load “Debug Rack Configuration” to load the test configuration to the rack.

You also have two options when loading the **drive parameters** to the UDC module(s). You can load the drive parameters to a UDC module in a specific slot in the rack, or to all UDC modules in the rack. The drive parameters must be loaded before the UDC tasks are loaded. Note that drive parameters cannot be loaded to a UDC module if UDC tasks are running on the target UDC module. You must stop the UDC tasks for the target UDC module before you can load the drive parameters.

Drive parameters are maintained through a power cycle. If changes to the PMI D/A port parameters are made online, these parameters will revert to those saved in memory after power is cycled. To make changes to the drive parameters permanent, you must change the parameters using the Rack Configurator and then re-load them. See the appropriate DPS Configuration and Programming instruction manual for more information.

If you select **Tasks**, the screen will display a list of all the AutoMax and UDC application tasks for the rack. The task files listed on the screen are either AutoMax Ladder Logic tasks, which do not need to be compiled, or the object code files that were created when you compiled AutoMax BASIC and Control Block tasks or UDC Control Block tasks. Select the task you want to load from the list. A log file will automatically be created that will list any errors that occurred while the task was being loaded. The log file will have the same name as the task, and the extension .LOG. Remember that you must load the rack configuration before you can load any AutoMax tasks to the rack. You must load the rack configuration and the drive parameters before loading UDC tasks to the UDC module.

It is permissible to load tasks onto a rack that is currently running tasks. If the task is new, i.e., has a unique name, you can load the task without stopping tasks already running. The AutoMax Executive will prompt for the slot and priority of the task. Note that a CRITICAL task cannot be loaded until all tasks currently in RUN are stopped.

If you wish to load a task with the same name as one currently running in the rack, you must stop the task before you will be permitted to load the new task. Note that any task you load will not go into RUN unless you put it into RUN.

If you wish to load a UDC task for a drive that does not have a task running, you can load the task without stopping the one curently running on the UDC module.

If you wish to load a new UDC task for a drive that already has a task running, you must stop the one currently running on the UDC module before you will be permitted to load the new UDC task.

If you select **All**, the normal rack configuration, the drive parameters for all the UDCs in the rack, all the AutoMax application tasks (except utility tasks), and all UDC tasks will be loaded automatically. The current rack configuration and drive parameters (if any) will be written over. Any application tasks currently on the AutoMax Processors or UDC modules whose names are the same as the ones being loaded will be written over.

/LOG and /MEM Options

If you select normal rack configuration, debug rack configuration, or all, you will have the option to also generate .LOG and .MEM files. The /LOG option creates a file that contains a log of any errors that occurred while tasks were being loaded. The .LOG file will have the same name as the configuration file, with the extension .LOG.

If you select the /MEM option, you are disabling the utility that loads tasks at higher speed. This option frees up six (6) bytes of Processor memory per common symbol used.

14.3.1 Utility Tasks

Tasks designated as utility tasks when added to the rack are usually used for testing purposes and not for application control. Utility tasks can only be loaded into AutoMax Processor modules. They cannot be loaded onto UDC modules.

The object code file for such tasks can be loaded onto the rack just like the object code for other tasks. Utility tasks must be loaded individually.

To load a utility task, enter the name of the task at the filename prompt. You will then be prompted for the slot number of the Processor on which the task is to be loaded (0-4), and the task priority (4-11). Note that this information was already entered when the task was added. It is required here as well.

14.4 Saving Tasks from the Rack

You can save tasks from any AutoMax Processor or UDC module in the network to the default path through the single connection at the leftmost Processor. You must obtain task access for the tasks you want to save from the rack.

Entering “S” for Save at the Transfer menu brings up a list of tasks that may be saved from the rack. This list contains all tasks in the rack, whether they are running or stopped, including utility tasks. Tasks can be saved either individually by entering the task name, or all (all tasks listed on the screen) at one time by entering the name of the rack configuration file and the /All option described in section 14.4.1.

You have three other options when saving tasks from the rack: /Tunable, /Include, and /Log. These options, as well as /All, are described below in more detail.

Note that you can only save tasks from the rack if you elected to make them reconstructible when you compiled the task originally. Ladder Logic tasks are always reconstructible. Note carefully that your path must be the path in which the configuration and application task files for the rack to which you are connected are stored. Otherwise, it is possible to write over files in the current path. If your path is incorrect, any task you save back from the Processor cannot be used until you add it to the rack using the Task Manager.

14.4.1 Save Option: /All

You can save all the reconstructible tasks in the rack, including utility tasks, using the /All option. Enter the name of the configuration task (_CONF.CNF) at the filename prompt and then /All at the option prompt.

14.4.2 Save Option: /Tunable

You can save only the tunable variable values in a particular task using the /Tunable option. Enter the name of the task at the filename prompt and /Tunable at the option prompt. The list of values will be saved to the default path with the same filename as the task, but with the extension .TUN. If you specify the /All option as well as the /Tunable option, the tunable values will be written to separate .TUN files. You can view or edit a .TUN file using the text editor. The task does not need to be reconstructible to save tunable variables.

14.4.3 Save Option: /Include

You can save only the tunable variable values in a particular task using the /Include option. Enter the name of the task at the filename prompt and /Include at the option prompt. The list of values will be saved to the default path with the same filename as the task, but with the extension .INC. If you specify the /All option as well as the /Include option, the tunable values will be written to separate .INC files. You can view or edit a .INC file using the text editor. The task does not need to be reconstructible to save tunable values using this option. Note, however, that the .INC file being created will contain only the tunable variable values. If a .INC file with the same name already exists on the personal computer, it will be written over. If the original .INC file contained information other than tunable variable values, this information will be lost.

14.4.4 Save Option: /Log

The /Log option is used to generate a log file of any errors that occurred while tasks were being saved from the AutoMax Processor or UDC module. If you enter the configuration file name at the filename prompt and specify the /All option as well as the /Log option, the log file will have the same name as the configuration file, but with the extension .LOG. If you entered a specific filename at the prompt, then the .LOG file will have the same name as that file, and the extension .LOG. You can view or edit a .LOG file using the text editor.

14.5 Recovering a Rack

The procedure that follows describes how to recover the configuration information and tasks for a rack from the AutoMax Processor(s). It is possible that the configuration information and tasks on the AutoMax Processor(s) could be different than the information on your personal computer. This situation could occur if the rack configuration was changed using another programming terminal, and then the changes were not copied to the original system, section, and rack. In this case, the latest rack configuration and task information would exist only on the AutoMax Processors in the rack. This should not normally occur.

Note that the rack to be recovered will be treated the same as an AutoMax V2 rack that is being imported. This means that you will lose the module data, but recover the variable mapping. Before beginning, read sections 5.3.12 through 5.3.12.6. These sections describe how to import an AutoMax V2 rack, which is the second part of the rack recovery procedure. Note that this procedure will recover

the rack configuration and the tasks only if they were designated as reconstructible. If the rack configuration was not designated as reconstructible, it cannot be recovered. Also, only reconstructible tasks will be saved back to the personal computer.

Step 1. Start at the DOS prompt in the root directory. Use the DOS MAKE DIRECTORY command to create a system and rack subdirectory, e.g., <DRIVE>:<SYSTEM_NAME>\<RACK_NAME>.

Step 2. Access the AutoMax Programming Executive.

Step 3. Go online and then access the Transfer menu.

Step 4. Select Path from the Transfer menu. Change the path to the system\rack subdirectory you created in step 1.

Step 5. Select Save from the Transfer menu. Use the Save All option described in 14.4.1 to save the rack configuration and all the reconstructible tasks to the system\rack subdirectory you created in step 1.

Step 6. Return to the System Configurator. Use the Remove command to delete the AutoMax rack you are recovering. You will re-create the rack in the next step.

Step 7. Use the Import Rack procedure described in section 5.3.12.6 to re-create the rack. When you are prompted for the source directory path, enter the system\rack path you created in step 1.