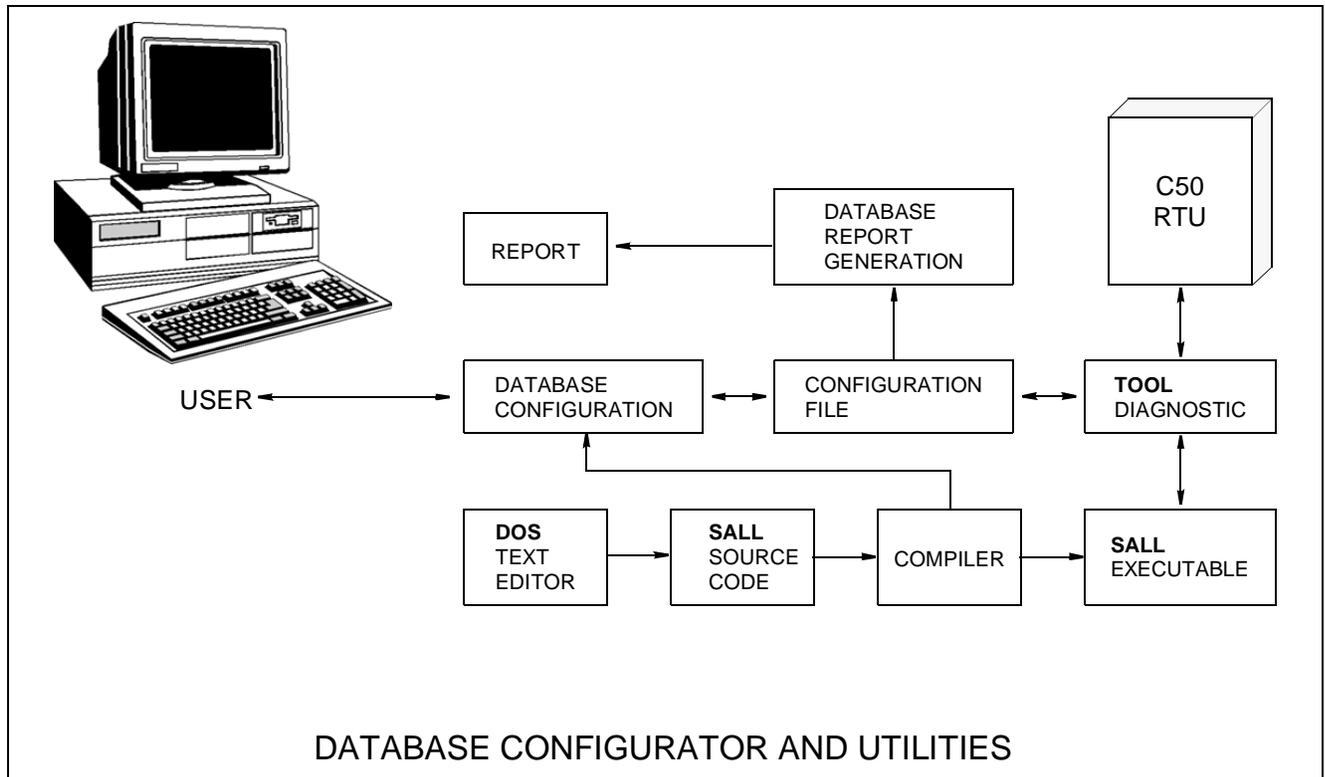


I/A Series[®] Software

Remote Terminal Unit (RTU)

C50CFG Configurator Program



The C50CFG (Configurator) is an off-line utility which allows you to fully configure all field I/O and communications assignments of the C50 RTU. The C50CFG runs on any IBM compatible PC/AT with at least 4 MB of RAM and allows you to perform general data entry, editing and validity checking with an off-line database.

The C50CFG generates an RTU configuration definition for all I/O communications and calculation points and loads it into the C50's Flashcard memory. When the RTU is on-line, all input modules are polled for data, which is processed according to the configuration definition and is used to update the RTU database. The distributed processing architecture of the RTU ensures that these updates are done efficiently even at times of high I/O or communications activity, and regardless of the size of the RTU.

FEATURES

- Allows for RTU configuration, data entry, data editing and full validity checking, including on-line help.
- Used to configure stand-alone RTU's, or OptoNet networks of multiple RTU's.
- Menu driven package with connections to other C50 utilities.
- Supports creation of calculation tasks, generation of configuration reports, and RTU on-line diagnostics.
- All I/O points are identified by a user-assigned name, not by arcane index numbers.
- Two configurations can be loaded into Flashcard memory, allowing testing of new configurations.

Editing RTU Configurations

You can use the C50CFG program to edit all information in the RTU configuration (see Figure 1). The selection starts at the most general level — called the Site — and moves down through more specific information within the Site. At each level you can create, modify, or delete objects.

Whenever you create a new upper level object, it is immediately opened so that lower level components can be created. For example, after creating a Card File, you are prompted to specify a card within the file. Pressing the [Esc] key or selecting the Cancel button at any time cancels the current selection and returns you to the next higher level in the hierarchy.

Deleting an object deletes all components of that object. For example, if you delete a card file, all modules within the file, all I/O points, communication ports, scan lists, and control requests are also deleted.

File Transfer

The *File Transfer* menu contains all items associated with generating an RTU configuration and transferring the files to and from an RTU.

The *Generate CFG* option generates the RTU file for use in the C50 and includes SALL task information if appropriate.

The *CFG Report* option generates a report of the RTU configuration produced by the *Generate CFG* option.

The *View Report* option allows you to examine the report file. You can specify the particular program to be used as the file viewer, by selecting *Configurator Setup* from the Utilities menu.

The *Edit SALL Program* option allows a SALL program to be created or altered. SALL program files have a .SAL extension.

The *Compile SALL* option allows a SALL program to be compiled. The process creates two files:

- An executable file with a .BIN extension that is ready to be loaded to the C50
- A data definition file with an .H extension that is used by C50CFG to validate the SALL program

The *TOOL* program allows for the writing and reading of instructions to the .CFG and .BIN files located on the flashcard.

Main Menu And Submenu Options		
Menu	Submenu Option	Action
Edit RTU Configurations		All RTU configuration data entry
File Transfer	Generation CFG	Create an RTU configuration (.CFG file)
	CFG Report	Generate a configuration report (.RFP file)
	View Report	View a report file (or any text file)
	Edit SALL Program	Edit a SALL program (.SAL file)
	Compile SALL	Compile a SALL program (.BIN file)
	TOOL	Activate the diagnostic program TOOL
Utilities	Backup RTU	Create a backup of all data for one RTU
	Restore RTU	Restore an RTU backup
	Delete RTU	Remove an RTU from the database
	Load CFG File	Import an RTU configuration file (.CFG file)
	Compress Tables	Minimize disk space used by database
	DOS Shell	Temporarily exit to DOS
	Configurator Setup	Alter C50CFG options and operating mode
	About	Display C50CFG version and part number
Exit	Close Configurator	Return to DOS

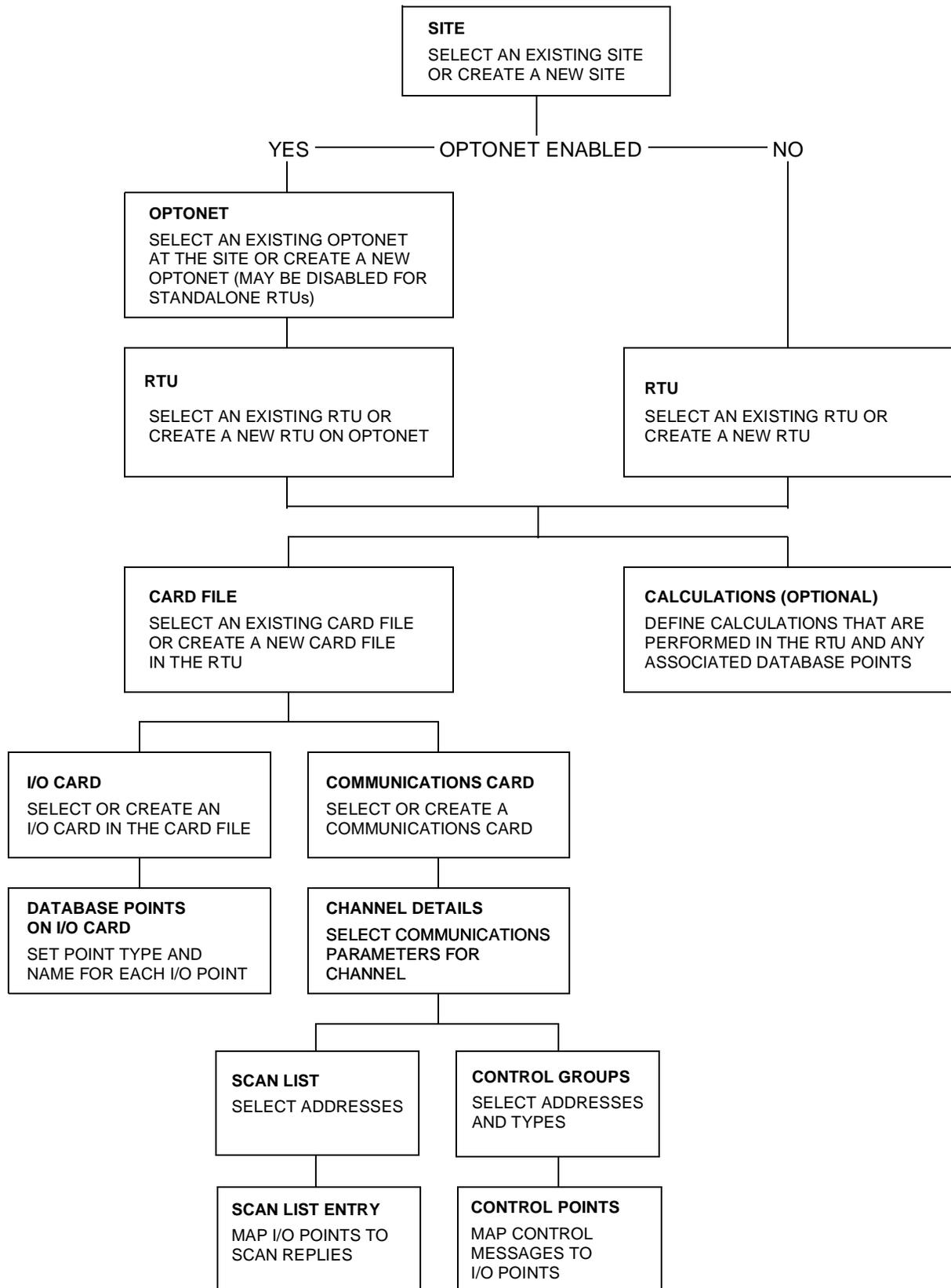


Figure 1. C50CFG Database Hierarchy

File Names and Types

C50CFG uses or generates the following files.

File Name and Suffix	Function
.CFG	Configuration file
.RPT	Configuration report file
.SAL	SALL logic source-code file
.H	Header file generated by SALL
.BIN	SALL logic executable file

Calculation Tasks

The C50CFG (Configurator) program performs many tasks, which include the following:

- Enables the RTU to perform calculations (SALL tasks) by linking the calculation source files (.SAL) to the configuration file (.CFG).
- Verifies the existence of database points necessary to perform calculations.
- Activates the C50 diagnostic program called TOOL, that downloads the calculations executable file (.BIN) to Flashcard memory.
- Allows access to a text editor that allows you to edit .SAL files.

Utilities

The **Backup RTU** option copies all information associated with a single RTU's configuration to a set of text files in a single designated directory.

The **Restore RTU** option validates and reloads the RTU configuration files that have been previously saved with the Backup RTU option.

The **Delete RTU** option removes all information about a single RTU from the Configuration. Configuration information for a deleted RTU is recovered by restoring the files saved with the Backup RTU option, or by loading an RTU configuration file.

The **Load CFG File** option allows the configuration information for an existing C50 RTU to be loaded into the configurator by reading the RTU's configuration file.

The **Compress Tables** option validates all data in the RTU configuration tables and minimizes the size of the files containing the information.

The **DOS Shell** option temporarily suspends C50CFG operation and runs a DOS command shell, allowing any DOS command to be executed.

The **Configurator Setup** option allows you to change system user details and operating characteristics.

Exit

To exit the application, select the **Exit/ Close Configurator** option. This is a two level menu to reduce the likelihood of accidentally closing the configurator.

ORDERING INFORMATION	
Part Number	Description
1101050	C50 Configuration
1101035	Paradox Runtime*
1101030	Turbo C++Compiler

NOTE

* Paradox Runtime should be supplied with 1101050.

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