



Service Bulletin SB0065

Date: June 2004
From: Capstone Technical Support
Subject: Software Release of CRMS v4.41

Affected

All Model C30 and C60 MicroTurbine users of Capstone CRMS software.

Summary

CRMS v4.41 software replaces CRMS v4.34 (CHP Application) and CRMS 4.25 (Global) and will support new features introduced in C60 (v4.25) and C30 (v5.01) MicroTurbine system software. New PM Programmer v2.09 must be uploaded in combination with this version of CRMS software.

Improvements for CRMS v4.41 are as follows:

Version 4.41 Updates

1. Added analog inputs and modified relay outputs function on the User Interface Board Settings Panel to be compatible with the ICHP feature used in the Capstone PowerServer. Analog inputs and relay output functionality is described in the ICHP Technical Reference Manual (410043).
2. Modified Fault Input section of the User Connection Bay MicroTurbine Setting Panel to allow **Active Open/Close** settings for version 4.98 and higher versions (Model C30), and v3.95 and higher versions (Model C60). The **Active Open/Close** toggle switches are unavailable for all older code versions. In addition, added **Active Open/Active Close** setting for fault signal polarity inputs on the PowerServer User Interface Board Settings Panel.
3. Modified software upload logic to prevent loading wrong software. CRMS will upload only the corresponding controller type software. When no hardware type is detected, CRMS will allow uploading only the controller type software selected by the operator.
4. Changed all name references as follows: "**Model 330**" to "**C30**", and "**Model C60**" to "**C60**".
5. Modified the CHP Control Panel and corresponding functions to make it compatible with Capstone PowerServer (CPS) operation. Prevented opening CHP Control Panel for CPS code versions lower than v2.20 that do not support CHP operation. In case a CPS code version is detected that does not support the CHP version, the following popup message will appear: "**This version does not support CHP application.**"
6. Implemented new control commands and parameters for auto-charge and time before next charge in the Battery Management Control Panel.

7. Corrected existing conflicts between how PMs were programmed and the C30 HEV software. New logic will elevate controller password only for systems utilizing C30 HEV software.
8. Communication with the CPS controller should be established only through the Control Panel located on the MultiPac Display window. In the case of establishing communication with CPS or opening the User Interface Board Settings Panel from other than the MultiPac Control Panel, the program displays the following warning message: **“Communication to the Power Server should be established through the Control Panel located on the MultiPac Display Window.”**
9. Modified the corresponding PM Write and PM Read CRMS functions that allow selection of the batch file from the PM support file, based on both part number and device name information. This change allows the ability to read different PM devices with identical part numbers.
10. Added PM part number selection logic. Displays only those part numbers applicable for the current controller. Added System Type selection ring to the PM Write Panel.
11. Changed PM Write cancellation logic by removing the popup nuisance message **“Unable to start PM Writing. The Program must be in UPLOAD IDLE state.”** that appears after canceling a PM Write operation.
12. Corrects display of wrong device serial numbers on the PM Write Panel after initiation of the Change Manufacturer location operation.
13. Added the following new faults for BCT/BCM intra-device fault detection logic: **“PM Checksum Error”**(12025) and **“Battery Low Voltage”** (12028).
14. While changing the manufacturer locations, the popup message has been changed to a more generic form to **“While placing cursor in a DOS window, Please hit ‘ENTER’ key until DOS window disappears”**.
15. Improves the way the updates occur on the strip chart for parameter data values when parameter names are changed on the strip chart. This scenario occurs only when the MicroTurbine pull-down menu is selected from the MultiPac Display Control Panel.
16. Restricted number of available modem connection dial attempts to seven (7). Otherwise, the timeout happens after 600 seconds of continued redialing attempts.
17. Improved Command Ring callback function logic. Command Ring function managed recalling and resending previously sent commands from the Command Line Panel. All sent commands and command responses are shown in ‘Send Message’ and Response Message’ sections of the Command Line Panel displays.
18. Renamed browser panel title for the File Manager Panel from **‘Select Codeset Directory’** to **‘Select Data File Directory’**.
19. Corrected the way the program handles values greater than 100 for **‘Total No Units’** on the Site Configuration Panel.
20. Arranged modifier keys and underscore letters for menu bar items, located on the Windows menu bar. See Table 1.

Table 1. Modifier Keys

Menu	Item Name	Modifier Key
<u>F</u> ile	<u>O</u> pen	Ctrl + O
	<u>P</u> rint Window	Ctrl + P
	<u>E</u> xit	Ctrl + X
<u>S</u> ettings	S <u>e</u> t <u>P</u> assword	Shift + Ctrl + A
	<u>D</u> ebug Commands	Shift + Ctrl + D
	<u>G</u> eneral Display	Shift + Ctrl + G
	<u>M</u> y Display	Shift + Ctrl + M
	<u>S</u> ite Configuration	Shift + Ctrl + S
	Software <u>U</u> pload	Shift + Ctrl + U
	PM <u>W</u> rite	Shift + Ctrl + W
	PM <u>R</u> ead	Shift + Ctrl + R
	<u>F</u> ile Manager	Shift + Ctrl + F
	<u>W</u> indow	MicroTurbine Display
MultiPac Display		Ctrl + F2
MicroTurbine Data1		Ctrl + F3
MicroTurbine Data1		Ctrl + F4
<u>V</u> iew	MicroTurbine Control <u>P</u> anel	Shift + Ctrl + P
	Global <u>C</u> hart	Shift + Ctrl + C
	<u>T</u> imers	Shift + Ctrl + T
	<u>E</u> mail Settings	Shift + Ctrl + E
<u>A</u> bout	<u>V</u> ersion	Shift + Ctrl + V
	Registration <u>I</u> nformation	Shift + Ctrl + I

CRMS Installation

During the installation process, **setup.exe** will check for an existing CRMS application. If an existing CRMS application is detected, then **setup.exe** will **uninstall** the existing CRMS application, and a second run of the **setup.exe** program will be required to install the new CRMS. CRMS software normally resides in the **c:\capstone** directory (unless you specified a different directory during install).

NOTE	To prevent conflicts with any previous CRMS versions, it is recommended that the original CRMS \Setup folder be deleted. However, if the older version of the \Setup folder is deleted, previously retained panel settings will be lost.
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Responsibility

It is the responsibility of Capstone to provide description of software changes contained within this document to Authorized Service Providers.

It is the responsibility of Capstone to make CRMS software v4.41 and PM Programmer v2.09 available to Authorized Service Providers for the resolution of issues relating to field MicroTurbine systems.

It is the responsibility of the Authorized Service Provider to obtain the CRMS v4.41 and PM 2.09 software zip files from the Members Only section of the Capstone website.

Capstone Technical Support

If you have additional questions, please contact:

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