Firmware Upgrade Process for BCPM(E)

First, it is often a good idea to confirm that you are able to communicate to the meter using some kind of software tool like a simple Modbus utility (such Modbus Tester, MBMaster, Modscan, or Modbus Poll etc.), ION Setup, or NetConfig as illustrated in the following screen shots:

(1) Scanning

a. For IP based connection (Modbus TCP)

₩ Veris NetConfiguration		
Device Clipboard Setup Help		
⊡ · Gateway 10.168.68.30 ⊡ · E3x ⊡ · 001: BCPME042S - 1	Please Wait Scanning for Veris Devices Cancel	
Address Range		
End 18		
Scanning Address 009		.:

b. For direct serial COM port RS-485 connection

Veris NetConfiguration								
Device Clipboard Setup Help								
E - Gateway 10.168.68.30 È - E3x È - 001: BCPME042S - 1	Addr	Class E3x	Model BCPME042S	Serial # 4E3B81D0	Firmware RS1.005/0S1.023	Location aPen I		
Address Hange Begin 1 - Scan End 16 - Scan								
						.::		

A

Veris NetConfiguration Image: Clipboard Setup Help 3 Serial Port COM3 Addr Class Model Serial # Firmware Location Image: Clipboard Setup Help 009 E 3x BCPMA084 4A36597D RS1.005/0S1.012 APEN L Image: O10: BCPMA084SSAMPLE 010 E 3x BCPMA084 4A36597D RS1.005/0S1.012 APEN L Image: O10: BCPMA084SSAMPLE 010 E 3x BCPMA084 4A36597D RS1.005/0S1.012 APEN L Image: O10: BCPMA084SSAMPLE 010 E 3x BCPMA084 4A36597D RS1.005/0S1.012 APEN L Image: O10: BCPMA084SSAMPLE 010 E 3x BCPMA084 4A36597D RS1.005/0S1.012 APEN L Image: O10: BCPMA084SSAMPLE 010 E 3x BCPMA084 4A36597D RS1.005/0S1.012 APEN L Image: O10: BCPMA084SSAMPLE 010 E 3x BCPMA084 4A36597D RS1.005/0S1.012 APEN L Image: O10: BCPMA084SSAMPLE 010 E 3x BCPMA084 4A36597D RS1.005/0S1.012 APEN L Image: O10: BCPMA084SSAMPLE 010 E 3x BCPMA084 4A36597D RS1.005/0S1.012 APEN L Image: O10: BCPMA084SSAMPLE 010 E 3x BCPMA084 4A36597D RS1.005/0S1.012 APEN L Image: O10: BCPMA084SSAMPLE 010 E 3x BCPMA084 4A36597D RS1.005/0S1.012 APEN L Image: O10: BCPMA084SSAMPLE 010 E 3x BCPMA084 4A36597D RS1.005/0S1.012 APEN L Image: O10: BCPMA084SSAMPLE Image: O10 E 3x BCPMA084 4A36597D RS1.005/0S1.012 APEN L Image: O10: BCPMA084SSAMPLE Image: O10 E 3x BCPMA084 4A36597D RS1.005/0S1.012 APEN L <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>								
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Addr Class Model Serial # Firmware Location ⇒ 009 E3x BCPMA084 4A36597D RS1.005/0S1.012 APEN L 009 E3x BCPMA084 4A36597D RS1.005/0S1.012 APEN L 010 E3x BCPMA084 4A36597D RS1.005/0S1.012 APEN L ddress Range egin 1 scan 16 scan	Device Clipboard Setup Help							
E3x 009 E3x BCPMA084 4A36597D RS1.005/0S1.012 APEN L Image: D10: BCPMA084SSAMPLE 010 E3x BCPMA084 4A36597D RS1.005/0S1.012 APEN L Image: D10: BCPMA084SSAMPLE 010 E3x BCPMA084 4A36597D RS1.005/0S1.012 APEN L Image: D10: BCPMA084SSAMPLE 010 E3x BCPMA084 4A36597D RS1.005/0S1.012 APEN L Image: D10: BCPMA084 Image: D10 Image	Serial Port CDM3		Addr	Class	Model	Serial #	Firmware	Location
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iddress Range egin 1 m Scan nd 16 m Scan			010	E3x	BCPMA084	4A36597D	RS1.005/0S1.012	APEN L
Ind The Scan								
ddress Range egin 1 ÷ Scan nd 16 ÷ Scan								
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If you confident that you can successfully communicate the meter and then note the IP address and ID and get a copy of the firmware upgrade file (.fw) so that you are ready for the next steps.

Download DLF-3000 from a Schneider site – e.g. <u>http://www.schneider-</u>

electric.com/ww/en/download/document/DLF3000? downloadcenter WAR_downloadcenterRFportlet documentId=4646213& downloadcenter WAR_downloadcenterRFportlet_documentDetailsBackURL= %2Fww_en%2Fschneider%2Fdownloads%2Fresults%2F0%2F0%3Faui_3_4_0_1_170%3DDLF3000%26ke ywordForm%3DDLF3000

NOTE: The version of DLF-3000 used for this document is DLF-3000 v3_3 v2.exe .

The following screen shots illustrate every step of the process in DLF3000 from start to finish:

	etup Firr	nware							
F	Firmware	Available for Down	oad						
	FW۱	/er. 1.023: 25 Ma	, 2014 E	ocpm_ver_1.0	23 : BCM2				
								Add	/Update
									opulat
								Re	emove
	DLF-3	000 v3.300	[< Back	Next	>]	Canc	el	Help
.)	DLF-3	000 v3,300		< Back	Next	>	Cano	el	Help
.) .)	DLF-3	:000 v3.300	j	< Back	Next	>	Cano		Help
.) Cook	DLF-3 pen k jn:	000 v3.300 downloads		< Back	Next	>	Canc ×		Help
.) Look	DLF-3	3000 ∨3.300 downloads	[< Back	Next	>	Canc X		Help
.) Look	DLF-3 pen k.jn:	000 v3.300 downloads /_1.023.fw		< Back	Next	> ** === • Type FW	Canc × • •		Help
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.) Look	DLF-3 pen k.jn:	000 √3.300 downloads /_1.023.fw		< Back	Next	> → ===================================	Canc × • •		Help
.) Look Nam	DLF-3 pen k in: bcpm_rev	000 v3.300 downloads /_1.023.fw		< Back	Next	>	Canc ×		Help
.) Look Nam	DLF-3	000 v3.300 downloads /_1.023.fw		< Back	Next	> ** 111 • Type FW	Canc × • File		Help
.) Look Nam File <u>n</u>	DLF-3	000 v3.300 downloads /_1.023.fw	fw	< Back	Next	> ** ==== • Typ • FW	Canc × • • • • •		Help
.) Look Nam File <u>n</u>	DLF-3	000 √3.300 downloads /_1.023.fw bcpm_rev_1.023	fw	< Back	Next	>	Canc X File		Help

	Select System		
	Select a system to open:		
			New
			Delete
			System Import
	DLF-3000 v3.300	<back next=""> 0</back>	Cancel Help
(3)			
	New System	×	
	Enter New System Name:	ОК	
	BCPM_TowerC_Eth	Cancel	
<i></i>	,		
(4)			

	^{01,F} 3000 Setu	p Connections a	nd Devices						
	_ C	Communication Conr	ections Define	ed					
							Add		
							Configure	e	
							Delete		
		evices Defined:	Tupe:		Boute:				
		DEVICE.	Type.		Houle.	_	Add		
							Pouting		
							Houting		
							Delete	:	
		J							
		N E-3000 ∨3.30	10	/ Back	Nevts	1	ancel	He	
(5)				(Back	Hon. /				
	Add Com	nmunications Cor	nnection			×			
	Com	munications Connec	tion Name:	ВСРМ Т	owerC id1				
	Com	munications Connec	uon Name.		_				
	Com	munications Driver:		Modbus/	TCP Driver	•			
(6)			ontinue	Ca	ancel				
(6)							I		

	Communications Connection - ModBus/TCP	×
	Communications Connection Name: BCPM_TowerC_id1	
	IP Address: 10.168.68.30	
	Timeout: 20 🔹 seconds Attempts: 2 🔹	
(7)	OK Cancel Help	
(*)	Setup Connections and Devices	
	Communication Connections Defined	
	BCPM_TowerC_id1 Modbus/TCP Driver	Add
		Configure
	Devices Defined:	
	Device: Type: Route:	
		Add
		Routing
		Delete
(8)	DLF-3000 v3.300 < Back Next > Can	cel Help

	Add Device 🔀
	Device Name: BCPM_TowerC_id1_device
1	Device Type:
	Connection Name: BCPM_TowerC_id1
	OK Cancel
9) 1	ModBus/TCP Device Route
	Comm Connection Name: BCPM_TowerC_id1
	Device Address:
	Protocol: Modbus
	<u>QK</u> <u>Cancel</u> <u>H</u> elp
TO) -	

Setup Connections and Devices	_
Communication Connections Defined	
BCPM_TowerC_id1 Modbus/TCP Driver	Add
	Configure
	Delete
Devices Defined:	
BCPM_TowerC_id1 BCM2 1 / Modbus / BCF	2
	Add
	Routing
	Delete
DLF-3000 ∨3.300 < Back Next >	Cancel Hel

Device/Firmware Association	n	
Downloadable Device Types in System	BCM2	
Download Candidate Devices	Download Target Devices:	
BCPM_TowerC_id1	device	
	Firmware to	
	25 Mar, 2014 bcpm_ver_1.023	
DLF-3000 ∨3.300	< Back Next > Cancel	Help



<u><i>DLF</i></u> Не	alth Checl	k					
	Broade	Device:	[Firmware B	Health Statu	8.	
	1	BCPM_TowerC_id1_de	vice	T IIIIWdie Th	- Hodiki Staka		
	1						
					Health Ch	neck	
	DLF-300)0 v3.300	< Back	. Next	> C	ancel	Help

<mark>////</mark> H	ealth Chec	k			_ 🗆 🗙
	Broadc	Device:	Firmware R	Health Status:	
	[¹	BCPM_1owerC_id1_device	1.023	Passed	
	I				
				Line Mr. Charach	
				Health Lheck	
			1		
	DLF-300)0 ∨3.300 < Bac	sk <mark>Next</mark>	> Cancel	Help

	Download Firmware	X
	Firmer Under Serve	
	Firmware Opdate Group	
	ID Connection Firmware Status	
	T BCPM_TowerC_IdT BCpm_ver_1.u Queued	
	Total Time Elapsed: 00:00:00	
	Group Device List	
	Device Status	
	BCPM_TowerC_id1_device Estimated Time Remaining: 00:00:00	
(15)	DLF-3000 v3.300 < Back Download Cancel Help	
(13)	DLF3000 Warning: Relays on PowerLogic Metering Devices will be de-engergized if selected for download and will remain in this mode until a successful download is completed. Press OK to commence the download.	
(16)	OK Cancel	

ID Connection	Firmware	Status
1 BCPM_TowerC_id1	bcpm_ver_1.0	Active
Total Time Flansed: 00:00:05		
Group Device List		
Device Statu	s	
BCPM_TowerC_id1_device Ente	ring Download Mode	
J		
Estimated Time Remaining: 00:00:00)	

<i>DLF</i> 3000	ownload Firmware			
	Firmware Update Group			
	ID Connection	Firmware	Status	
	1 BCPM_TowerC_Eth	bcpm_ver_1.0	Complete (Passed)	
	Total Time Flansed: 00:12:33			
	Group Device List			
	Device Status	and Decomber of		
	BCPM_Towerc_id1 Succes	srui Download		
	1			
	Estimated Time Remaining: 00:00:00			
—				,
	DLF-3000 v3.300	< Back Reque	eue Finished	Help
(18)	_			
(19) Proce	ess completed so press "Finished"	' to end the sessio	n with the software.	

Upgrade via COM port RS-485

	Firmware Available for Dow	nload		
	FW Ver. 1.023: 25 M	ar, 2014 bcpm_ver_1.023	: BCM2	Add/Update
				Remove
-				
(



Setup Connections and Devices	;	
Communication Connections De	fined	
com1_bcpm_serial	Serial Driver	Add
3		Configure
1		
		Delete
Devices Defined:		
Device: Type	: Route:	
BCPM_id9 BCM	2 9 / Modbus / com	1
•		Add
d l		Routing
1		Delete
i		
DLF-3000 \3.300	< Back Next >	Cancel Help
(3)		
Communications Connection - Seria	1	23
Communications Connection Name	e: com1_bcpm_serial	
Communications Wiring: PowerLogic	/ModBus/JBus (4-Wire)	_
Parity		
C Even 💿 None	Using Serial Port: Modem	COM1 -
	Baud Bater	9600 -
Attempts: 2	bada nate.	
Timeout: 5000 ms	Network Address (0 - 99); 30 📑	
,	· · · ,	
	ancel Test Port	Help
(4)		

20	Setup Connections and Devices	
	Communication Connections Defined	
	com1_bcpm_serial Serial Driver	Add
		Configure
		Delete
	Devices Defined:	
	Device: Type: Route: BCPM id9 BCM2 9 / Modbus / com	
		Add
		Routing
		Delete
-		
	DLF-3000 v3,300 < Back Next >	Cancel Help
(5)		
S S		
	Connection Name: com1_bcpm_serial	
	Protocol: Modbus	
	Phone #	
	Rt1 Rt2 Rt3 Rt4 Rt5 Rt6 Rt7 Rt8	
	OK Cancel Help	
(6) 🛌		

Device/Firmware Association	
Downloadable Device Types in System	BCM2
Download Candidate Devices	Download Target Devices: >> >>
	Firmware to 25 Mar, 2014 bcpm_ver_1.023
DLF-3000 v3.300	< Back Next > Cancel Help



DL/F 3000	Download Firmware				\Leftrightarrow		x
	Firmware Update Group						
	ID Connection	Firmwa	are	Status			
	1 com1_bcpm_serial	bcpm	_ver_1.0	Queued			
	Total Time Elapsed: 00:00:00 Group Device List Device BCPM_id9	Status					
-	Estimated Time Remaining: 00 DLF-3000 v3.300	0:00:00	Downl	oad	Cancel	He	lp
(9)							
DLF	3000 Warning: Relays on P if selected for downlo download is complet	owerLogic Meterin aad and will remain ed. Press OK to co	ng Devices n in this m ommence f	will be de ode until a the downle DK	-engergize successfi bad. Can	ed ul	
(10)]	

Firmwa					
ID	are Update Group				
	Connection		Firmware	Status	
1	com1_bcpm_serial		bcpm_ver_1.0	Active: 1.9%	
Total	Time Elapsed: 00:00:52				
Devic	e	Status			
ВСРМ	_id9	Downloadir	ng		
Estima	ated Time Remaining: 00):52:04			
DLF	-3000 \sigma3.300	<	Back Stor	>	He

Appendix

Possible errors:

Error 606 which corresponds to "device not responding" according to the guide in FA232730. This has been associated with the use of virtual COM ports in place of real hardware ports. Root cause of this is unknown.

<i>р, </i>	alth Check	¢						
	Broadc	Device:		Firmware R	Healt	n Status:		
	1	BCPM_TowerD_id9			Devic	e Error = 606		
					He	alth Check		
				1	1			
	DLF-300	0 \(\negar{3},300)	< Back	: Nex	t>	Cancel	He	elp

4	<mark>X/F</mark> He	ealth Check	-	-				\Leftrightarrow		x
		Device:			Firmware R	Health	Status:			
		BCPM_id9			Think die Ti	Canno	t go online	: Driver connec	ct error	
		•							•	
							He	ealth Check		
		DLF-3000) v3.300		< Back		Vext >	Cancel	He	elp
L										

Cannot go online: Driver connect error.

This error appears to occur when the COM port is in use by another application. Resolution: close down other applications that may be using the COM port and then try again. Double instances of DLF-3000 will also cause this.