FGC
Ferrocarrils
de la Generalitat
de Catalunya

Serveis de manteniment de maquinari HP a FGC

Especificació tècnica

Àrea de Tecnologia Informàtica
Tecnologies de la Informació i les Comunicacions
Rev. 1.0 – Juny 2026

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Ferrocarrils de la Generalitat de Catalunya, c/ Vergós 44, 08017, Barcelona

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1. Introducció

Ferrocarrils de la Generalitat de Catalunya disposa als Centres de Processament de Dades de Sarrià i Rubí de diversos sistemes per donar serveis informàtics de l'àmbit Corporatiu, suportats sobre maquinari Hewlett Packard (HP): servidors, elements de connectivitat, unitats d'emmagatzemament, etc.

2. Objecte

L'objecte del present document és indicar la necessitat de contractar el manteniment d'aquest equipament HP des del 1/1/2027 fins el 31/12/2028.

3. Equipament a mantenir

L'equipament afectat per aquest servei de manteniment seran tots aquells equips HP que donen suport i són plataforma dels sistemes informàtics lligats a l'àmbit Corporatiu de FGC.

En concret aquest equipament és:

P/N	Descripció	Serial Number	Unitats
813198-B21	HPE BL460c G9 E5v4 10/20Gb FLB CTO Blade	CZ263502CK	1
813198-B21	HPE BL460c G9 E5v4 10/20Gb FLB CTO Blade	CZ263502CM	1
813198-B21	HPE BL460c G9 E5v4 10/20Gb FLB CTO Blade	CZ263502CL	1
819853-L21	HPE BL460c Gen9 E5 -2695v4 FIO Kit	-	3
P06011-B21	HPE Synergy 12000 CTO Frame 10x Fan	CZJ244053Q	1
P22139-B21	HPE SY480 Gen10+ Base CTO Cmpt Mdl	CZJ244053K	1
P22139-B21	HPE SY480 Gen10+ Base CTO Cmpt Mdl	CZJ244053J	1
872957-B21	HPE Synergy Composer2 Appliance	CNX23302TN	1
867796-B21	HPE VC SE 100Gb F32 Module	7C9M32003P	1
867793-B21	HPE Synergy 50Gb Interconnect Link Mod	7C9M3100T9	1
P06011-B21	HPE Synergy 12000 CTO Frame 10x Fan	CZJ244053R	1
867793-B21	HPE Synergy 50Gb Interconnect Link Mod	7C9M3100SH	1
867796-B21	HPE VC SE 100Gb F32 Module	7C9M320049	1

872957-B21	HPE Synergy Composer2 Appliance	CNX23302S7	1
P22139-B21	HPE SY480 Gen10+ Base CTO Cmpt Mdl	CZJ244053L	1
P22139-B21	HPE SY480 Gen10+ Base CTO Cmpt Mdl	CZJ244053M	1
819853-B21	HPE BL460c Gen9 E5-2695v4 Kit	TVZRCC4VX418L7	1
819853-B21	HPE BL460c Gen9 E5-2695v4 Kit	TVZRCC4VX418L5	1
819853-B21	HPE BL460c Gen9 E5-2695v4 Kit	TVZRCC4VX418L9	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418FP	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418EQ	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418FO	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418FQ	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418ER	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418ES	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418ET	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418EU	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418EV	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418EW	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418EX	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418EY	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418EZ	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418F0	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418FJ	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418FK	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418FL	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418FM	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418FN	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418FI	1

836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418GL	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418GK	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418GJ	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418GI	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418FR	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418GM	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418GN	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418GO	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418GP	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418GQ	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418GR	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418GS	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418GT	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418F3	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418F4	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418F5	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418F6	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418F7	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418F8	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418F9	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418FA	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418FB	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418FC	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418FD	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418FE	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418FF	1

836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418FG	1
836220-B21	HPE 16GB 2Rx4 PC4-2400T-R Kit	RFANPC4XW418FH	1
700764-B21	HP FlexFabric 20Gb 2P 650FLB FIO Adptr	PDBLC0AQ93623U	1
700764-B21	HP FlexFabric 20Gb 2P 650FLB FIO Adptr	PDBLC0AQ93622X	1
700764-B21	HP FlexFabric 20Gb 2P 650FLB FIO Adptr	PDBLC0AQ936240	1
710608-B21	HP QMH2672 16Gb FC HBA	-	3
700139-B21	HP 32GBmicroSDMainstream Flash Media Kit	-	3
E5Y34A	HP OV 3yr 24x7 Supp Phys 1 Svr Lic	-	3
E5Y34A	HP OV 3yr 24x7 Supp Phys 1 Svr Lic	-	3
813198-B21	HPE BL460c G9 E5v4 10/20Gb FLB CTO Blade	CZ27110294	1
819853-L21	HPE BL460c Gen9 E5 -2695v4 FIO Kit	-	1
819853-B21	HPE BL460c Gen9 E5-2695v4 Kit	TVZRCC4VX695IG	1
805358-B21	HPE 64GB 4Rx4 PC4-2400T-L Kit	RFANUC4XC692WB	1
805358-B21	HPE 64GB 4Rx4 PC4-2400T-L Kit	RFANUC4XC692WI	1
805358-B21	HPE 64GB 4Rx4 PC4-2400T-L Kit	RFANUC4XC692WJ	1
805358-B21	HPE 64GB 4Rx4 PC4-2400T-L Kit	RFANUC4XC692WL	1
805358-B21	HPE 64GB 4Rx4 PC4-2400T-L Kit	RFANUC4XC692WM	1
805358-B21	HPE 64GB 4Rx4 PC4-2400T-L Kit	RFANUC4XC692WN	1
805358-B21	HPE 64GB 4Rx4 PC4-2400T-L Kit	RFANUC4XC695JL	1
805358-B21	HPE 64GB 4Rx4 PC4-2400T-L Kit	RFANUC4XC695JM	1
700066-B21	HP FlexFabric 20Gb 2P 630FLB FIO Adptr	-	1
710608-B21	HP QMH2672 16Gb FC HBA	-	1
846497-B21	HPE Dual 120GB RI-1 M.2 BL Enblmnt Kit	-	1
E5Y34A	HP OV 3yr 24x7 Supp Phys 1 Svr Lic	-	1
E5Y34A	HP OV 3yr 24x7 Supp Phys 1 Svr Lic	-	1
727021-B21	HP BL460c Gen9 10Gb/20Gb FLB CTO Blade	CZ25330563	1
727003-L21	HP BL460c Gen9 E5-2695v3 FIO Kit	TEDKF4LVX9C1HM	1

727003-B21	HP BL460c Gen9 E5-2695v3 Kit	TEDKF4LVX9C1HL	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C152	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C153	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C154	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C155	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C156	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C157	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C158	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C159	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C15A	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C15B	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C15C	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C15D	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C15E	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C15F	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C15G	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C151	1
700764-B21	HP FlexFabric 20Gb 2P 650FLB FIO Adptr	PDBLC0AU38Y347	1
651281-B21	HP QMH2572 8Gb FC HBA	PCREE0AST7QZZX	1
726116-B21	HP 8GB Micro sd EM Flash Media Kit	TW75310F2J	1
727021-B21	HP BL460c Gen9 10Gb/20Gb FLB CTO Blade	CZ25330564	1
727021-B21	HP BL460c Gen9 10Gb/20Gb FLB CTO Blade	CZ25330565	1
727003-L21	HP BL460c Gen9 E5-2695v3 FIO Kit	TEDKF4LVX9C1HJ	1
727003-L21	HP BL460c Gen9 E5-2695v3 FIO Kit	TEDKF4LVX9C1HH	1
727003-B21	HP BL460c Gen9 E5-2695v3 Kit	TEDKF4LVX9C1HK	1
727003-B21	HP BL460c Gen9 E5-2695v3 Kit	TEDKF4LVX9C1HI	1

726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14B	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14C	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14D	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14E	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14F	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14G	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14H	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14I	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C15H	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C15I	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C15J	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C15K	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C15L	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C15M	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C15O	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C15N	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14J	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14K	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14L	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14M	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14N	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14O	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14P	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14Q	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14R	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14S	1

726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14T	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14U	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14V	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14W	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14X	1
726719-B21	HP 16GB 2Rx4 PC4-2133P-R Kit	REBAH4LXC9C14Y	1
700764-B21	HP FlexFabric 20Gb 2P 650FLB FIO Adptr	PDBLC0AU38Y34E	1
700764-B21	HP FlexFabric 20Gb 2P 650FLB FIO Adptr	PDBLC0AU38Y343	1
651281-B21	HP QMH2572 8Gb FC HBA	PCREE0AST7Q0FR	1
651281-B21	HP QMH2572 8Gb FC HBA	PCREE0AST7Q016	1
726116-B21	HP 8GB Micro sd EM Flash Media Kit	TW75310EVC	1
726116-B21	HP 8GB Micro sd EM Flash Media Kit	TW75310EV9	1
H0JD4AC	HPE TS Support Credits 90	-	1
HPE-EOSL-R8-STOR	AJ820A - HP B-series 8/12c BladeSystem S	CN8036A05J	1
HPE-EOSL-R8-STOR	AJ820A - HP B-series 8/12c BladeSystem S	CN8036A06V	1
HPE-EOSL-7G-NETW	J9726A - Aruba 2920 24G Switch	SG42FLW0QS	1
HPE-EOSL-7G-NETW	J9726A - Aruba 2920 24G Switch	SG42FLW0R1	1
HPE-EOSL-96-ISS	751465-B21 - HP VC 16Gb 24-Port FC Modul	1CG708002F	1
HPE-EOSL-96-ISS	751465-B21 - HP VC 16Gb 24-Port FC Modul	1CG7090025	1
HPE-EOSL-96-ISS	751465-B21 - HP VC 16Gb 24-Port FC Modul	1CG716001P	1
HPE-EOSL-96-ISS	751465-B21 - HP VC 16Gb 24-Port FC Modul	1CG716001W	1
403320-B22	HP BLc7000 1 PH 2 PSU 4 Fan Trl ICE Kit	GB8850BX1W	1
412142-B21	HP BLc7000 Encl Mgmt Module Option	O98BMP4034	1
406740-B21	HP BLc 1Gb Enet Pass Thru Mod Opt Kit	TWT848V0EG	1
406740-B21	HP BLc 1Gb Enet Pass Thru Mod Opt Kit	TWT848V0YD	1
406740-B21	HP BLc 1Gb Enet Pass Thru Mod Opt Kit	TWT848V0H1	1
406740-B21	HP BLc 1Gb Enet Pass Thru Mod Opt Kit	TWT848V02L	1
406740-B21	HP BLc 1Gb Enet Pass Thru Mod Opt Kit	TWT848V10J	1

406740-B21	HP BLc 1Gb Enet Pass Thru Mod Opt Kit	TWT848V0EK	1
412140-B21	HP BLc Encl Single Fan Option	-	1
412138-B21	HP 2250W Ht Plg Pwr Supply Kit	5A22B0EHLV021N	1
412138-B21	HP 2250W Ht Plg Pwr Supply Kit	5A22B0EHLV92GM	1
412138-B21	HP 2250W Ht Plg Pwr Supply Kit	5A22B0FHLWF23S	1
412138-B21	HP 2250W Ht Plg Pwr Supply Kit	5A22B0FHLWF24E	1
412138-B21	HP 2250W Ht Plg Pwr Supply Kit	5A22B0FHLWM0ZY	1
412138-B21	HP 2250W Ht Plg Pwr Supply Kit	5A22B0FHLWM0ZZ	1
638526-B21	HP BLc VC Flex-10/10D Module Opt	7C934300C9	1
638526-B21	HP BLc VC Flex-10/10D Module Opt	7C934300CA	1
638526-B21	HP BLc VC Flex-10/10D Module Opt	7C934300FD	1
638526-B21	HP BLc VC Flex-10/10D Module Opt	7C934300FG	1
681844-B21	HP BLc7000 CTO 3 IN LCD Plat Enclosure	CZ37202J83	1
681844-B21	HP BLc7000 CTO 3 IN LCD Plat Enclosure	CZ37202F5L	1
681844-B21	HP BLc7000 CTO 3 IN LCD Plat Enclosure	CZ37202J83	1
456204-B21	HP BLc7000 DDR2 Encl Mgmt Option	OB6BCP0392	1
456204-B21	HP BLc7000 DDR2 Encl Mgmt Option	OB73CP2880	1
E5Y35AAE	HP OV 3yr 24x7 Supp Flex E-LTU	n/a	
863442-B21	HPE BL460c Gen10 10Gb/20Gb FLB CTO Blade	CZ282605Z4	1
863442-B21	HPE BL460c Gen10 10Gb/20Gb FLB CTO Blade	CZ29120H0J	1
E5Y35AAE	HP OV 3yr 24x7 Supp Flex E-LTU	n/a	
863442-B21	HPE BL460c Gen10 10Gb/20Gb FLB CTO Blade	CZ28500C39	1
E5Y35AAE	HP OV 3yr 24x7 Supp Flex E-LTU	n/a	

4. Acords de Nivell de Servei

Suport reactiu hardware

- Cobertura horària 24/7
- Temps de resposta in-situ (Barcelona i Rubí): 4h
- Peces i materials nous o funcionalment equivalents inclosos

Suport reactiu software

- Cobertura horària 24/7
- Temps de resposta en remot: 2h
- Suport col·laboratiu per a software d'altres fabricants inclòs

Serveis proactius

- Assessorament tècnic i operacional: 90 crèdits
- Els serveis proactius que s'acordin realitzar es prestaran sobre els equips anteriorment llistats