

# Script controla fan - decimal/hexadecimal

Link: <https://forum.proxmox.com/threads/ipmi-tool-error-after-v8-upgrade.129334/page-2>

Bash:

```
#!/bin/bash

# Fancontrol v1.1 2022-09-15 15:42

# Define variables

MAX_FAN=90
MIN_FAN=20
HIGH_TEMP=37
LOW_TEMP=35
SPEED_STEP=10
IDRAC_IP=10.0.0.1
IPMI_USER=fancontrol
IPMI_PASSWORD=yoursupercomplexpassword

# Define Functions

ENABLE_FAN ()
{
    ipmitool -I lanplus -H $IDRAC_IP -U $IPMI_USER -P $IPMI_PASSWORD raw 0x30 0x30 0x01 0x00 > /dev/null 2>&1
}

GET_TEMP ()
{
    ipmitool -I lanplus -H $IDRAC_IP -U $IPMI_USER -P $IPMI_PASSWORD sensor reading "Exhaust Temp"|sed 's/[^0-9]//g'
}
```

```

SET_FAN ()
{
    ipmitool -I lanplus -H $IDRAC_IP -U $IPMI_USER -P $IPMI_PASSWORD raw 0x30 0x30 0x02 0xff $FAN_SETTING >
/dev/null 2>&1
}

# File to save the last fan speed

[ -f fan_speed.last ] || echo $MIN_FAN > fan_speed.last

FAN_SPEED=$(<fan_speed.last)

#-----

CURRENT_TEMP=$(GET_TEMP)          # get the current temperature

if (($CURRENT_TEMP > $HIGH_TEMP)) ; then
    FAN_SPEED=$(expr $FAN_SPEED + $SPEED_STEP)
    if (($FAN_SPEED > $MAX_FAN)) ; then
        FAN_SPEED=$MAX_FAN
    fi
fi

if (($CURRENT_TEMP < $LOW_TEMP)) ; then
    FAN_SPEED=$(expr $FAN_SPEED - $SPEED_STEP)
    if (($FAN_SPEED < $MIN_FAN)) ; then
        FAN_SPEED=$MIN_FAN
    fi
fi

FAN_SETTING=$(printf "0x"%x\n' $FAN_SPEED)
ENABLE_FAN
SET_FAN

logger -t FanControl "Current Temperature" $CURRENT_TEMP"C" "Fans at" $FAN_SPEED""
echo $FAN_SPEED > fan_speed.last

exit 0

```

Informações adicionais:

Launch a command prompt on the server and navigate to the directory above. Then run the following commands, substituting the ip address (-H), username (-U), and password (-P) of your iDRAC:

```
To enable remote fan control: ipmitool -I lanplus -H 192.168.1.240 -U root -P calvin raw 0x30 0x30 0x01 0x00

To set the fan to 20%: ipmitool -I lanplus -H 192.168.1.240 -U root -P calvin raw 0x30 0x30 0x02 0xff 0x14

To set the fan to 25%: ipmitool -I lanplus -H 192.168.1.240 -U root -P calvin raw 0x30 0x30 0x02 0xff 0x19

To set the fan to 30%: ipmitool -I lanplus -H 192.168.1.240 -U root -P calvin raw 0x30 0x30 0x02 0xff 0x1e

To set the fan to 35%: ipmitool -I lanplus -H 192.168.1.240 -U root -P calvin raw 0x30 0x30 0x02 0xff 0x23

To set the fan to 40%: ipmitool -I lanplus -H 192.168.1.240 -U root -P calvin raw 0x30 0x30 0x02 0xff 0x28

To set the fan to 45%: ipmitool -I lanplus -H 192.168.1.240 -U root -P calvin raw 0x30 0x30 0x02 0xff 0x2D

To set the fan to 50%: ipmitool -I lanplus -H 192.168.1.240 -U root -P calvin raw 0x30 0x30 0x02 0xff 0x32
```

TABELA CONVERSÃO DECIMAL PARA HEXADECIMAL

# Decimal-hexadecimal-binary conversion table

Dec	Hex	Bin	Dec	Hex	Bin	Dec	Hex	Bin	Dec	Hex	Bin
0	0	000	64	40	010	128	80	100	192	c0	110
		000			000			000			000
		00			00			00			00

1	1	000 000 01	65	41	010 000 01	129	81	100 000 01	193	c1	110 000 01
2	2	000 000 10	66	42	010 000 10	130	82	100 000 10	194	c2	110 000 10
3	3	000 000 11	67	43	010 000 11	131	83	100 000 11	195	c3	110 000 11
4	4	000 001 00	68	44	010 001 00	132	84	100 001 00	196	c4	110 001 00
5	5	000 001 01	69	45	010 001 01	133	85	100 001 01	197	c5	110 001 01
6	6	000 001 10	70	46	010 001 10	134	86	100 001 10	198	c6	110 001 10
7	7	000 001 11	71	47	010 001 11	135	87	100 001 11	199	c7	110 001 11
8	8	000 010 00	72	48	010 010 00	136	88	100 010 00	200	c8	110 010 00
9	9	000 010 01	73	49	010 010 01	137	89	100 010 01	201	c9	110 010 01
10	a	000 010 10	74	4a	010 010 10	138	8a	100 010 10	202	ca	110 010 10
11	b	000 010 11	75	4b	010 010 11	139	8b	100 010 11	203	cb	110 010 11
12	c	000 011 00	76	4c	010 011 00	140	8c	100 011 00	204	cc	110 011 00
13	d	000 011 01	77	4d	010 011 01	141	8d	100 011 01	205	cd	110 011 01

14	e	000 011 10	78	4e	010 011 10	142	8e	100 011 10	206	ce	110 011 10
15	f	000 011 11	79	4f	010 011 11	143	8f	100 011 11	207	cf	110 011 11
16	10	000 100 00	80	50	010 100 00	144	90	100 100 00	208	d0	110 100 00
17	11	000 100 01	81	51	010 100 01	145	91	100 100 01	209	d1	110 100 01
18	12	000 100 10	82	52	010 100 10	146	92	100 100 10	210	d2	110 100 10
19	13	000 100 11	83	53	010 100 11	147	93	100 100 11	211	d3	110 100 11
20	14	000 101 00	84	54	010 101 00	148	94	100 101 00	212	d4	110 101 00
21	15	000 101 01	85	55	010 101 01	149	95	100 101 01	213	d5	110 101 01
22	16	000 101 10	86	56	010 101 10	150	96	100 101 10	214	d6	110 101 10
23	17	000 101 11	87	57	010 101 11	151	97	100 101 11	215	d7	110 101 11
24	18	000 110 00	88	58	010 110 00	152	98	100 110 00	216	d8	110 110 00
25	19	000 110 01	89	59	010 110 01	153	99	100 110 01	217	d9	110 110 01
26	1a	000 110 10	90	5a	010 110 10	154	9a	100 110 10	218	da	110 110 10

27	1b	000 110 11	91	5b	010 110 11	155	9b	100 110 11	219	db	110 110 11
28	1c	000 111 00	92	5c	010 111 00	156	9c	100 111 00	220	dc	110 111 00
29	1d	000 111 01	93	5d	010 111 01	157	9d	100 111 01	221	dd	110 111 01
30	1e	000 111 10	94	5e	010 111 10	158	9e	100 111 10	222	de	110 111 10
31	1f	000 111 11	95	5f	010 111 11	159	9f	100 111 11	223	df	110 111 11
32	20	001 000 00	96	60	011 000 00	160	a0	101 000 00	224	e0	111 000 00
33	21	001 000 01	97	61	011 000 01	161	a1	101 000 01	225	e1	111 000 01
34	22	001 000 10	98	62	011 000 10	162	a2	101 000 10	226	e2	111 000 10
35	23	001 000 11	99	63	011 000 11	163	a3	101 000 11	227	e3	111 000 11
36	24	001 001 00	100	64	011 001 00	164	a4	101 001 00	228	e4	111 001 00
37	25	001 001 01	101	65	011 001 01	165	a5	101 001 01	229	e5	111 001 01
38	26	001 001 10	102	66	011 001 10	166	a6	101 001 10	230	e6	111 001 10
39	27	001 001 11	103	67	011 001 11	167	a7	101 001 11	231	e7	111 001 11

40	28	001 010 00	104	68	011 010 00	168	a8	101 010 00	232	e8	111 010 00
41	29	001 010 01	105	69	011 010 01	169	a9	101 010 01	233	e9	111 010 01
42	2a	001 010 10	106	6a	011 010 10	170	aa	101 010 10	234	ea	111 010 10
43	2b	001 010 11	107	6b	011 010 11	171	ab	101 010 11	235	eb	111 010 11
44	2c	001 011 00	108	6c	011 011 00	172	ac	101 011 00	236	ec	111 011 00
45	2d	001 011 01	109	6d	011 011 01	173	ad	101 011 01	237	ed	111 011 01
46	2e	001 011 10	110	6e	011 011 10	174	ae	101 011 10	238	ee	111 011 10
47	2f	001 011 11	111	6f	011 011 11	175	af	101 011 11	239	ef	111 011 11
48	30	001 100 00	112	70	011 100 00	176	b0	101 100 00	240	f0	111 100 00
49	31	001 100 01	113	71	011 100 01	177	b1	101 100 01	241	f1	111 100 01
50	32	001 100 10	114	72	011 100 10	178	b2	101 100 10	242	f2	111 100 10
51	33	001 100 11	115	73	011 100 11	179	b3	101 100 11	243	f3	111 100 11
52	34	001 101 00	116	74	011 101 00	180	b4	101 101 00	244	f4	111 101 00

53	35	001 101 01	117	75	011 101 01	181	b5	101 101 01	245	f5	111 101 01
54	36	001 101 10	118	76	011 101 10	182	b6	101 101 10	246	f6	111 101 10
55	37	001 101 11	119	77	011 101 11	183	b7	101 101 11	247	f7	111 101 11
56	38	001 110 00	120	78	011 110 00	184	b8	101 110 00	248	f8	111 110 00
57	39	001 110 01	121	79	011 110 01	185	b9	101 110 01	249	f9	111 110 01
58	3a	001 110 10	122	7a	011 110 10	186	ba	101 110 10	250	fa	111 110 10
59	3b	001 110 11	123	7b	011 110 11	187	bb	101 110 11	251	fb	111 110 11
60	3c	001 111 00	124	7c	011 111 00	188	bc	101 111 00	252	fc	111 111 00
61	3d	001 111 01	125	7d	011 111 01	189	bd	101 111 01	253	fd	111 111 01
62	3e	001 111 10	126	7e	011 111 10	190	be	101 111 10	254	fe	111 111 10
63	3f	001 111 11	127	7f	011 111 11	191	bf	101 111 11	255	ff	111 111 11