

xFOCE Configuration Domains

Platform

platform ID
name
description

Messaging

sds pri/sec addr:port
ps server addr:port
ps proxy?
gateway proxy

Syslog

segment size
segment count
detail

Streams

stream IDs
topic paths
processing rules
segment size

Sampling

supervisors
[name,period, timer]

Environment

xfhome
conf
arch
bin
logs
sysfiles (log, conf. json)

Services

type ID
instance ID
source ID
name
function
location

Power Managment
power policy
power on delay

Sampling
period msec
timeouts
sdel
retries
mode

Log
segment sz
segment count

Resources
io port
power port
other ports

Worker
name
supervisor
period

Properties
device specific options

Control

algorithm
parameters
constants

SNodes

srid
io_srid

Term IO

srid
speed
csize
par
stopb
device path

DIO

srid
dir, act, sig, init,
pulse_width

AIO

dir, [scale], [offset] [val]

SPI

speed, wlen

TCP/IP ports

5554	GW proxy
5560	SD primary
sdp+1	SD primary
sdp+2	SD primary
sdp+3	SD primary
5564	SD backup
sdb+1	SD backup
sdb+2	SD backup
sdb+3	SD backup
5569	PUB
5570	SUB

```

{
  "platform":{
    "name":"swFOCE-gw1",
    "platform_id":11000,
    "description": "gateway1"
  },
  "debug":[
    {"module":"ALL","level":"INFO"},
    {"module":"XF_CONFIG","level":"DEBUG"},
    {"module":"XF_GATEWAY","level":"DEBUG"},
    {"module":"XF_DREACTOR","level":"INFO"},
    {"module":"XF_SDCLIENT","level":"INFO"},
    {"module":"XF_PSSERVER","level":"INFO"},
    {"module":"XF_PROXSVR","level":"INFO"},
    {"module":"SYSGW","level":"INFO"},
    {"module":"XF_POW_AIO","level":"INFO"},
    {"module":"XF_AIO","level":"INFO"},
    {"module":"XF_AIO_BBAIO","level":"INFO"},
    {"module":"SYSSN","level":"INFO"},
    {"module":"SYSMEH","level":"INFO"},
    {"module":"SBE18S","level":"DEBUG"},
    {"module":"SBE52MP","level":"DEBUG"},
    {"module":"SATPAR","level":"INFO"},
    {"module":"ESWV","level":"INFO"},
    {"module":"BB232","level":"INFO"},
    {"module":"LOOP","level":"INFO"}
  ],
  "control":{
    "algorithm":"PID"
  },
  "messaging":{
    "sdat_enabled":"true",
    "pubsub_enabled":"true",
    "sdat_pri":{"host":"localhost", "port":5556},
    "sdat_sec":{"host":"localhost", "port":5560},
    "pub_port":5569,
    "sub_port":5570,
    "proxy_port":5554,
    "proxy_hport":5454,
    "pubsub_proxy":{"host":"TBD.shore.mbari.org","port":5678}
  },
  "syslog":{
    "seg_size":"2M",
    "seg_count":20,
    "detail":"DEBUG"
  },
  "sampling":{
    "sync_supervisor":{"id":"SYNC_SUPERVISOR", "name":"sync supervisor","period_sec":0,"period_msec":250,"timer":0},
    "xfsys_supervisor":{"id":"XFSYS_SUPERVISOR", "name":"xfsys supervisor","period_sec":4,"period_msec":0,"timer":1},
    "control_supervisor":{"id":"CONTROL_SUPERVISOR", "name":"control supervisor","period_sec":1,"period_msec":0,"timer":2}
  },

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"streams":[
  {"dtype":"sysgw","instance":0,"stream_id":101,"flags":"LOG|PUB",
   "post_topic":"-", "pub_topic":"/data/sysgw.0/stat"},
  {"dtype":"sysn","instance":0,"stream_id":101,"flags":"LOG|PUB",
   "post_topic":"-", "pub_topic":"/data/sysn.0/stat"},
  {"dtype":"sysmeh","instance":0,"stream_id":101,"flags":"LOG|PUB",
   "post_topic":"-", "pub_topic":"/data/sysmeh.0/stat"},

  {"dtype":"sbe18s","instance":0,"stream_id":101,"flags":"LOG|PUB",
   "post_topic":"-", "pub_topic":"/data/ph.0/stat"},
  {"dtype":"sbe18s","instance":1,"stream_id":101,"flags":"LOG|PUB",
   "post_topic":"-", "pub_topic":"/data/ph.1/stat"},
  {"dtype":"sbe18s","instance":2,"stream_id":101,"flags":"LOG|PUB",
   "post_topic":"-", "pub_topic":"/data/ph.2/stat"},
  {"dtype":"sbe18s","instance":3,"stream_id":101,"flags":"LOG|PUB",
   "post_topic":"-", "pub_topic":"/data/ph.3/stat"},

  {"dtype":"sbe52mp","instance":0, "stream_id":101,"flags":"LOG|PARSE",
   "post_topic":"-", "pub_topic":"/data/sbe52mp.0/ctdo"},
  {"dtype":"sbe52mp","instance":0, "stream_id":103,"flags":"PUB|POST",
   "post_topic":"/sdata/tref", "ttl":120, "pub_topic":"/data/sbe52mp.0/tref"},

  {"dtype":"sbe52mp","instance":1,"stream_id":101,"flags":"LOG|PUB",
   "post_topic":"-", "pub_topic":"/data/sbe52mp.1/stat"},

  {"dtype":"satpar","instance":0,"stream_id":101,"flags":"LOG|PUB",
   "post_topic":"-", "pub_topic":"/data/satpar.0/stat"},
  {"dtype":"satpar","instance":1,"stream_id":101,"flags":"LOG|PUB",
   "post_topic":"-", "pub_topic":"/data/satpar.1/stat"},

  {"dtype":"thruster", "instance":0, "stream_id":101,"flags":"LOG|PARSE",
   "post_topic":"-", "pub_topic":"/data/thruster.0/stat"},
  {"dtype":"thruster", "instance":0, "stream_id":102,"flags":"POST|PUB",
   "post_topic":"/sdata/dcy", "ttl":5, "pub_topic":"/data/thruster.0/dcy"},

  {"dtype":"eswv","instance":0,"stream_id":101,"flags":"LOG|PARSE",
   "post_topic":"-", "pub_topic":"/data/eswv.0/stat"},
  {"dtype":"eswv","instance":0,"stream_id":102,"flags":"PUB|POST",
   "post_topic":"/sdata/esw0-v0", "pub_topic":"/data/eswv.0/v0pos"},
  {"dtype":"eswv","instance":0,"stream_id":103,"flags":"PUB|POST",
   "post_topic":"/sdata/esw0-v1", "pub_topic":"/data/eswv.0/v1pos"},

  {"dtype":"eswv","instance":1,"stream_id":101,"flags":"LOG|PARSE",
   "post_topic":"-", "pub_topic":"/data/eswv.1/stat"},
  {"dtype":"eswv","instance":1,"stream_id":102,"flags":"PUB|POST",
   "post_topic":"/sdata/esw1-v0", "pub_topic":"/data/eswv.1/v0pos"},
  {"dtype":"eswv","instance":1,"stream_id":103,"flags":"PUB|POST",
   "post_topic":"/sdata/esw1-v1", "pub_topic":"/data/eswv.1/v1pos"},

  {"dtype":"DEVICE","instance":-1,"stream_id":99,"flags":"LOG|PUB",
   "post_topic":"-", "pub_topic":"/alarm"},
  {"dtype":"DEVICE","instance":-1,"stream_id":0,"flags":"LOG|PUB",
   "post_topic":"-", "pub_topic":"/smeta"},
  {"dtype":"DEVICE","instance":-1,"stream_id":1,"flags":"LOG|PUB",
   "post_topic":"-", "pub_topic":"/sprops"},
  {"dtype":"DEVICE","instance":-1,"stream_id":2,"flags":"LOG|PUB",
   "post_topic":"-", "pub_topic":"/dprops"},
  {"dtype":"DEVICE","instance":-1,"stream_id":3,"flags":"LOG|PUB",
   "post_topic":"-", "pub_topic":"/dmeta"}
]

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1,

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"service":{
  "dtype":"sysgw",
  "instance":0,
  "source_id":1839,
  "name":"sysgw1",
  "function":"gateway",
  "location":"g1",
  "power":{"policy":"POWER_NEVER","pon_delay_msec":0},
  "sampling":{"sdel":0, "retries":3,"tmout_msec":0},
  "log":{"seg_size":"10M","seg_count":"500"},
  "resources":[
    {"rtype":"POW","index":0,"srid":"POW_SNODE0"},
    {"rtype":"POW","index":1,"srid":"POW_SNODE1"},
    {"rtype":"POW","index":2,"srid":"POW_SNODE2"},
    {"rtype":"POW","index":3,"srid":"POW_SNODE3"},
    {"rtype":"DIO","index":0,"srid":"DIO2"},
    {"rtype":"DIO","index":1,"srid":"DIO5"},
    {"rtype":"DIO","index":2,"srid":"DIO6"},
    {"rtype":"DIO","index":3,"srid":"DIO16"},
    {"rtype":"AIO","index":0,"srid":"AIO4"},
    {"rtype":"AIO","index":1,"srid":"AIO5"},
    {"rtype":"SPI","index":0,"srid":"SPI10"},
    {"rtype":"SPI","index":1,"srid":"SPI11"}
  ],
  "workers":[
    {"name":"sysgw1_sampler", "supervisor":"SYNC_SUPERVISOR", "period_msec":"30000",
    "op_id":"GETD","index":0,"opts":"flags=DRV_LOG_DATA|DRV_LOG_ERR,dtype=0"}
  ]
},

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"service":{
  "dtype":"sysssn",
  "instance":0,
  "source_id":1842,
  "name":"sysssn1",
  "function":"snode_monitor",
  "location":"g1",
  "power":{"policy":"POWER_NEVER","pon_delay_msec":0},
  "sampling":{"sdel":0, "retries":3,"tmout_msec":0},
  "log":{"seg_size":"10M","seg_count":"500"},
  "resources":[
    {"rtype":"IO","index":0,"srid":"IO_SNODE0"},
    {"rtype":"IO","index":1,"srid":"IO_SNODE1"},
    {"rtype":"IO","index":2,"srid":"IO_SNODE2"},
    {"rtype":"IO","index":3,"srid":"IO_SNODE3"}
  ],
  "properties":{
    "adc00":{"name":"chan 0","cal":"lin", "units":"Ibus (A)", "k0":0.000092, "k1":0.0, "k2":0.0},
    "adc01":{"name":"chan 1","cal":"lin", "units":"Vbus (V)", "k0":0.000732, "k1":0.0, "k2":0.0},
    "adc02":{"name":"chan 2","cal":"lin", "units":"I port 0 (A)", "k0":0.000031, "k1":0.0, "k2":0.0},
    "adc03":{"name":"chan 3","cal":"lin", "units":"I port 1 (A)", "k0":0.000031, "k1":0.0, "k2":0.0},
    "adc04":{"name":"chan 4","cal":"lin", "units":"I port 2 (A)", "k0":0.000031, "k1":0.0, "k2":0.0},
    "adc05":{"name":"chan 5","cal":"lin", "units":"I port 3 (A)", "k0":0.000092, "k1":0.0, "k2":0.0},
    "adc06":{"name":"chan 6","cal":"lin", "units":"I 4-20mA (mA)", "k0":0.000279, "k1":4.0, "k2":0.0},
    "adc07":{"name":"chan 7","cal":"raw", "units":"adc counts", "k0":0.000046, "k1":0.0, "k2":0.0},
    "adc10":{"name":"chan 0","cal":"lin", "units":"Ibus (A)", "k0":0.000092, "k1":0.0, "k2":0.0},
    "adc11":{"name":"chan 1","cal":"lin", "units":"Vbus (V)", "k0":0.000732, "k1":0.0, "k2":0.0},
    "adc12":{"name":"chan 2","cal":"lin", "units":"I port 0 (A)", "k0":0.000031, "k1":0.0, "k2":0.0},
    "adc13":{"name":"chan 3","cal":"lin", "units":"I port 1 (A)", "k0":0.000031, "k1":0.0, "k2":0.0},
    "adc14":{"name":"chan 4","cal":"lin", "units":"I port 2 (A)", "k0":0.000031, "k1":0.0, "k2":0.0},
    "adc15":{"name":"chan 5","cal":"lin", "units":"I port 3 (A)", "k0":0.000092, "k1":0.0, "k2":0.0},
    "adc16":{"name":"chan 6","cal":"lin", "units":"I 4-20mA (mA)", "k0":0.000279, "k1":4.0, "k2":0.0},
    "adc17":{"name":"chan 7","cal":"raw", "units":"adc counts", "k0":0.000046, "k1":0.0, "k2":0.0},
    "adc20":{"name":"chan 0","cal":"lin", "units":"Ibus (A)", "k0":0.000092, "k1":0.0, "k2":0.0},
    "adc21":{"name":"chan 1","cal":"lin", "units":"Vbus (V)", "k0":0.000732, "k1":0.0, "k2":0.0},
    "adc22":{"name":"chan 2","cal":"lin", "units":"I port 0 (A)", "k0":0.000031, "k1":0.0, "k2":0.0},
    "adc23":{"name":"chan 3","cal":"lin", "units":"I port 1 (A)", "k0":0.000031, "k1":0.0, "k2":0.0},
    "adc24":{"name":"chan 4","cal":"lin", "units":"I port 2 (A)", "k0":0.000031, "k1":0.0, "k2":0.0},
    "adc25":{"name":"chan 5","cal":"lin", "units":"I port 3 (A)", "k0":0.000092, "k1":0.0, "k2":0.0},
    "adc26":{"name":"chan 6","cal":"lin", "units":"I 4-20mA (mA)", "k0":0.000279, "k1":4.0, "k2":0.0},
    "adc27":{"name":"chan 7","cal":"raw", "units":"adc counts", "k0":0.000046, "k1":0.0, "k2":0.0},
    "adc30":{"name":"chan 0","cal":"lin", "units":"Ibus (A)", "k0":0.000092, "k1":0.0, "k2":0.0},
    "adc31":{"name":"chan 1","cal":"lin", "units":"Vbus (V)", "k0":0.000732, "k1":0.0, "k2":0.0},

```

```

"service":{
  "dtype":"sysmeh",
  "instance":0,
  "source_id":1844,
  "name":"sysmeh1",
  "function":"meh",
  "location":"meh1",
  "power":{"policy":"POWER_NEVER","pon_delay_msec":0},
  "sampling":{"sdel":0, "retries":3,"tmout_msec":0},
  "log":{"seg_size":"10M","seg_count":"500"},
  "resources":[
    {"rtype":"IO","index":0,"srid":"IO_PTY0"}
  ],
  "properties":{
    "init":"0002",
    "adc0":{"name":"chan 0","cal":"lin", "units":"MC_1", "k0":0.0196078, "k1":0.0, "k2":0.0},
    "adc1":{"name":"chan 1","cal":"lin", "units":"MC_2", "k0":0.0196078, "k1":0.0, "k2":0.0},
    "adc2":{"name":"chan 2","cal":"lin", "units":"Temp (C)", "k0":0.0196078, "k1":0.0, "k2":0.0},
    "adc3":{"name":"chan 3","cal":"lin", "units":"RH (%)", "k0":0.0196078, "k1":0.0, "k2":0.0},
    "adc4":{"name":"chan 4","cal":"lin", "units":"H2O_1", "k0":0.0196078, "k1":0.0, "k2":0.0},
    "adc5":{"name":"chan 5","cal":"lin", "units":"H2O_2", "k0":0.0196078, "k1":0.0, "k2":0.0},
    "adc6":{"name":"chan 6","cal":"lin", "units":"NC", "k0":0.0196078, "k1":0.0, "k2":0.0},
    "adc7":{"name":"chan 7","cal":"lin", "units":"NC", "k0":0.0196078, "k1":0.0, "k2":0.0}
  },
  "workers":[
    {"name":"sysmeh1_sampler", "supervisor":"SYNC_SUPERVISOR", "period_msec":"60000",
    "op_id":"GETD","index":0,"opts":{"flags=DRV_LOG_DATA|DRV_LOG_ERR,dtype=0"}}
  ]
},

"service":{
  "dtype":"sbe18s",
  "instance":0,
  "source_id":1813,
  "name":"ph10",
  "function":"ph",
  "location":"glu2o",
  "power":{"policy":"POWER_ALWAYS","pon_delay_msec":0},
  "sampling":{"sdel":0, "retries":3,"tmout_msec":5000},
  "log":{"seg_size":"10M","seg_count":"500"},
  "resources":[
    {"rtype":"IO","index":0,"srid":"IO_SNPOR00"},
    {"rtype":"POW","index":0,"srid":"POW_SNPOR00"}
  ],
  "properties":{
    "cal_k":1.984214e-4, "cal_slo":4.1260, "cal_off":2.7396, "cal_cor":-0.1394, "ofmt":1, "drain_msec":"5",
    "tref":"/sdata/tref"
  },
  "workers":[
    {"name":"ph10_sampler", "supervisor":"SYNC_SUPERVISOR", "period_msec":"60000",
    "op_id":"GETD","index":0,"opts":{"flags=DRV_LOG_DATA|DRV_LOG_ERR,dtype=0"}}
  ]
},

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"service":{
  "dtype":"sbe18s",
  "instance":1,
  "source_id":1812,
  "name":"ph11",
  "function":"ph",
  "location":"glu2i",
  "power":{"policy":"POWER_ALWAYS","pon_delay_msec":0},
  "sampling":{"sdel":0, "retries":3,"tmout_msec":5000},
  "log":{"seg_size":"10M","seg_count":"500"},
  "resources":[
    {"rtype":"IO","index":0,"srid":"IO_SNPORT01"},
    {"rtype":"POW","index":0,"srid":"POW_SNPORT01"}
  ],
  "properties":{
    "cal_k":1.984214e-4,"cal_slo":3.4734, "cal_off":2.6639, "cal_cor":0.0287, "ofmt":1, "drain_msec":"5",
    "tref":"/sdata/tref"
  },
  "workers":[
    {"name":"ph11_sampler", "supervisor":"SYNC_SUPERVISOR", "period_msec":"60000",
    "op_id":"GETD","index":0,"opts":"flags=DRV_LOG_DATA|DRV_LOG_ERR,dtype=0"}
  ]
},

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```

"service":{
  "dtype":"sbe52mp",
  "instance":0,
  "source_id":1642,
  "name":"ctdo10",
  "function":"ctdo",
  "location":"glu2",
  "power":{"policy":"POWER_ALWAYS","pon_delay_msec":0},
  "sampling":{"sdel":0, "retries":3,"tmout_msec":15000},
  "log":{"seg_size":"10M","seg_count":"-1"},
  "resources":[
    {"rtype":"IO","index":0,"srid":"IO_SNPORT02"},
    {"rtype":"POW","index":0,"srid":"POW_SNPORT02"},
    {"rtype":"POW","index":1,"srid":"POW_SNPORT03"}
  ],
  "properties":{"ipspeed":"on","xppow":"always", "sdel":20000, "wrdel":2100},
  "workers":[
    {"name":"sbe52mp_10_sampler", "super":"SYNC_SUPERVISOR", "period_msec":"60000",
    "op_id":"GETD","index":0,"opts":"flags=DRV_LOG_DATA|DRV_LOG_ERR,dtype=0"}
  ]
},

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//,{"name":"sbe52mp10_pump", "super":"SYNC_SUPERVISOR", "period_msec":"90000",
//"op_id":"ACT","index":0,"opts":"pump=fast"}
]
},

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"service":{
  "dtype":"sbe18s",
  "instance":2,
  "source_id":1818,
  "name":"ph12",
  "function":"ph",
  "location":"glu1o",
  "power":{"policy":"POWER_ALWAYS","pon_delay_msec":0},
  "sampling":{"sdel":0, "retries":3,"tmout_msec":5000},
  "log":{"seg_size":"10M","seg_count":"500"},
  "resources":[
    {"rtype":"IO","index":0,"srid":"IO_SNPORT10"},
    {"rtype":"POW","index":0,"srid":"POW_SNPORT10"}
  ],
  "properties":{
    "cal_k":1.984214e-4,"cal_slo":4.3691, "cal_off":2.6027, "cal_cor":-0.0235, "ofmt":1, "drain_msec":"5",
    "tref":"/sdata/tref"
  },
  "workers":[
    {"name":"ph12_sampler", "supervisor":"SYNC_SUPERVISOR", "period_msec":"60000",
    "op_id":"GETD","index":0,"opts":"flags=DRV_LOG_DATA|DRV_LOG_ERR,dtype=0"}
  ]
},

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```

"service":{
  "dtype":"sbe18s",
  "instance":3,
  "source_id":1817,
  "name":"ph13",
  "function":"ph",
  "location":"glu1i",
  "power":{"policy":"POWER_ALWAYS","pon_delay_msec":0},
  "sampling":{"sdel":0, "retries":3,"tmout_msec":5000},
  "log":{"seg_size":"10M","seg_count":"500"},
  "resources":[
    {"rtype":"IO","index":0,"srid":"IO_SNPOR11"},
    {"rtype":"POW","index":0,"srid":"POW_SNPOR11"}
  ],
  "properties":{
    "cal_k":1.984214e-4,"cal_slo":4.2542, "cal_off":2.5881, "cal_cor":-0.0075, "ofmt":1, "drain_msec":"5",
    "tref":"/sdata/tref"
  },
  "workers":[
    {"name":"ph13_sampler", "supervisor":"SYNC_SUPERVISOR", "period_msec":"60000",
    "op_id":"GETD","index":0,"opts":"flags=DRV_LOG_DATA|DRV_LOG_ERR,dtype=0"}
  ]
},

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```

"service":{
  "dtype":"sbe52mp",
  "instance":1,
  "source_id":1733,
  "name":"ctdol1",
  "function":"ctdo",
  "location":"glu1",
  "power":{"policy":"POWER_ALWAYS","pon_delay_msec":0},
  "sampling":{"sdel":0, "retries":3,"tmout_msec":15000},
  "log":{"seg_size":"10M","seg_count":"-1"},
  "resources":[
    {"rtype":"IO","index":0,"srid":"IO_SNPOR12"},
    {"rtype":"POW","index":0,"srid":"POW_SNPOR12"},
    {"rtype":"POW","index":1,"srid":"POW_SNPOR13"}
  ],
  "properties":{"ipspeed":"on","xppow":"always", "sdel":20000, "wrdel":2100},
  "workers":[
    {"name":"sbe52mp_1_sampler", "super":"SYNC_SUPERVISOR", "period_msec":"60000",
    "op_id":"GETD","index":0,"opts":"flags=DRV_LOG_DATA|DRV_LOG_ERR,dtype=0"}
  ],
  //,{"name":"sbe52mp_1_pump", "super":"SYNC_SUPERVISOR", "period_msec":"90000",
  //,"op_id":"ACT","index":0,"opts":"pump=fast"}
}
},

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```

"service":{
  "dtype":"satpar",
  "instance":0,
  "source_id":1824,
  "name":"par10",
  "function":"par",
  "location":"gl1s2p0",
  "power":{"policy":"POWER_ALWAYS","pon_delay_msec":0},
  "sampling":{"sdel":0, "retries":3,"tmout_msec":5000},
  "log":{"seg_size":"10M","seg_count":"500"},
  "resources":[
    {"rtype":"IO","index":0,"srid":"IO_SNPOR20"},
    {"rtype":"POW","index":0,"srid":"POW_SNPOR20"}
  ],
  "workers":[
    {"name":"par10_sampler", "supervisor":"SYNC_SUPERVISOR", "period_msec":"60000",
    "op_id":"GETD","index":0,"opts":"flags=DRV_LOG_DATA|DRV_LOG_ERR,dtype=0"}
  ]
},

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```

"service":{
  "dtype":"satpar",
  "instance":1,
  "source_id":1851,
  "name":"par11",
  "function":"par",
  "location":"g1s2p1",
  "power":{"policy":"POWER_ALWAYS","pon_delay_msec":0},
  "sampling":{"sdel":0, "retries":3,"tmout_msec":5000},
  "log":{"seg_size":"10M","seg_count":"500"},
  "resources":[
    {"rtype":"IO","index":0,"srid":"IO_SNPORT21"},
    {"rtype":"POW","index":0,"srid":"POW_SNPORT21"}
  ],

"workers":[
  {"name":"par11_sampler", "supervisor":"SYNC_SUPERVISOR", "period_msec":"60000",
  "op_id":"GETD","index":0,"opts":"flags=DRV_LOG_DATA|DRV_LOG_ERR,dtype=0"}
]
},

"service":{
  "dtype":"thruster",
  "instance":0,
  "source_id":1814,
  "name":"thruster10",
  "function":"flow_thruster",
  "location":"g1",
  "power":{"policy":"POWER_NEVER","pon_delay_msec":0},
  "sampling":{"sdel":0, "retries":3,"tmout_msec":8000},
  "log":{"seg_size":"10M","seg_count":"500"},
  "resources":[
    {"rtype":"IO","index":0,"srid":"IO_PTY1"}
  ],

"workers":[
  {"name":"thruster10_sampler", "supervisor":"SYNC_SUPERVISOR", "period_msec":"60000",
  "op_id":"GETD","index":0,"opts":"flags=DRV_LOG_DATA|DRV_LOG_ERR,dtype=0"}
]
},

"service":{
  "dtype":"eswv",
  "instance":0,
  "source_id":1846,
  "name":"eswv10",
  "function":"esw_vcon",
  "location":"g1",
  "power":{"policy":"POWER_ALWAYS","pon_delay_msec":0},
  "sampling":{"sdel":0, "retries":3,"tmout_msec":0},
  "log":{"seg_size":"10M","seg_count":"500"},
  "resources":[
    {"rtype":"IO","index":0,"srid":"IO_SNPORT30"},
    {"rtype":"POW","index":0,"srid":"POW_SNPORT30"}
  ],

"workers":[
  {"name":"eswv10_sampler", "supervisor":"SYNC_SUPERVISOR", "period_msec":"60000",
  "op_id":"GETD","index":0,"opts":"flags=DRV_LOG_DATA|DRV_LOG_ERR,dtype=0"}
]
},

"snodes":[
  {"srid":"IO_SNODE0","io_srid":"IO_TTY1"},
  {"srid":"IO_SNODE1","io_srid":"IO_TTY2"},
  {"srid":"IO_SNODE2","io_srid":"IO_TTY4"},
  {"srid":"IO_SNODE3","io_srid":"IO_TTY5"}
],

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"io":[
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  {"srid":"IO_SNPORT01","speed":38400,"csize":8,"par":"N","stopb":1},
  {"srid":"IO_SNPORT02","speed":9600,"csize":8,"par":"N","stopb":1},
  {"srid":"IO_SNPORT10","speed":38400,"csize":8,"par":"N","stopb":1},
  {"srid":"IO_SNPORT11","speed":38400,"csize":8,"par":"N","stopb":1},
  {"srid":"IO_SNPORT12","speed":9600,"csize":8,"par":"N","stopb":1},
  {"srid":"IO_SNPORT20","speed":19200,"csize":8,"par":"N","stopb":1},
  {"srid":"IO_SNPORT21","speed":19200,"csize":8,"par":"N","stopb":1},
  {"srid":"IO_SNPORT22","speed":19200,"csize":8,"par":"N","stopb":1},
  {"srid":"IO_SNPORT30","speed":9600,"csize":8,"par":"N","stopb":1},
  {"srid":"IO_SNPORT31","speed":9600,"csize":8,"par":"N","stopb":1},
  {"srid":"IO_SNPORT32","speed":9600,"csize":8,"par":"N","stopb":1},
  {"srid":"IO_TTY1","speed":115200,"csize":8,"par":"N","stopb":1,"path":"/dev/tty01"},
  {"srid":"IO_TTY2","speed":115200,"csize":8,"par":"N","stopb":1,"path":"/dev/tty02"},
  {"srid":"IO_TTY4","speed":115200,"csize":8,"par":"N","stopb":1,"path":"/dev/tty04"},
  {"srid":"IO_TTY5","speed":115200,"csize":8,"par":"N","stopb":1,"path":"/dev/tty05"},
  {"srid":"IO_PTY0","speed":115200,"csize":8,"par":"N","stopb":1,"path":"/dev/ttyME00"},
  {"srid":"IO_PTY1","speed":9600,"csize":8,"par":"N","stopb":1,"path":"/dev/ttyME01"}
],

"dio":[
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  {"srid":"DI02","dir":"0","act":"H","sig":"S","init":"L"},
  {"srid":"DI03","dir":"0","act":"H","sig":"S","init":"L"},
  {"srid":"DI04","dir":"0","act":"H","sig":"PL","init":"H","pw_msec":100},
  {"srid":"DI05","dir":"0","act":"H","sig":"S","init":"L"},
  {"srid":"DI06","dir":"I","act":"H","sig":"S","init":"N"},
  {"srid":"DI07","dir":"0","act":"H","sig":"PL","init":"H","pw_msec":100},
  {"srid":"DI08","dir":"0","act":"H","sig":"PL","init":"H","pw_msec":100},
  {"srid":"DI09","dir":"0","act":"H","sig":"PL","init":"H","pw_msec":100},
  {"srid":"DI010","dir":"0","act":"H","sig":"PL","init":"H","pw_msec":100},
  {"srid":"DI011","dir":"0","act":"H","sig":"PL","init":"H","pw_msec":100},
  {"srid":"DI012","dir":"0","act":"H","sig":"PL","init":"H","pw_msec":100},
  {"srid":"DI013","dir":"0","act":"H","sig":"S","init":"H"},
  {"srid":"DI014","dir":"0","act":"H","sig":"PL","init":"L","pw_msec":100},
  {"srid":"DI015","dir":"0","act":"H","sig":"S","init":"H"},
  {"srid":"DI016","dir":"I","act":"H","sig":"S","init":"N"},
  {"srid":"DI017","dir":"0","act":"H","sig":"S","init":"H"},
  {"srid":"DI018","dir":"I","act":"H","sig":"S","init":"N"},
  {"srid":"DI019","dir":"I","act":"H","sig":"S","init":"N"},
  {"srid":"DI020","dir":"I","act":"H","sig":"S","init":"N"},
  {"srid":"DI021","dir":"I","act":"H","sig":"S","init":"N"},
  {"srid":"DI022","dir":"I","act":"H","sig":"S","init":"N"}
],

"aio":[
  {"srid":"AI00","dir":"I","scale":1.0,"offset":0,"samples":10},
  {"srid":"AI01","dir":"I","scale":1.0,"offset":0,"samples":10},
  {"srid":"AI02","dir":"I","scale":1.0,"offset":0,"samples":10},
  {"srid":"AI03","dir":"I","scale":1.0,"offset":0,"samples":10},
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  {"srid":"AI05","dir":"I","scale":1.0,"offset":0,"samples":10},
  {"srid":"AI06","dir":"I","scale":1.0,"offset":0,"samples":10},
  {"srid":"AI07","dir":"I","scale":1.0,"offset":0,"samples":10}
],

"pow":[
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  {"srid":"POW_SNODE1","on_srid":"DI09","off_srid":"DI010","state_srid":"DI020","read_srid":"AI01"},
  {"srid":"POW_SNODE2","on_srid":"DI014","off_srid":"DI04","state_srid":"DI021","read_srid":"AI02"},
  {"srid":"POW_SNODE3","on_srid":"DI08","off_srid":"DI07","state_srid":"DI022","read_srid":"AI03"}
],

"spi":[
  {"srid":"SPI10","mode":"DFL","speed":240000,"wlen":8,"delay":0,"cschg":"N"},
  {"srid":"SPI11","mode":"DFL","speed":240000,"wlen":8,"delay":0,"cschg":"N"}
]
}

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