

```

# this file specifies options which apply globally to several programs, and all
services

# having these options in one place avoids repeated ini file changes.
# it sits at a well-known place ($EMC2_HOME//etc/linuxcnc/machinekit.ini), thus
# is accessible to all programs.

[MACHINEKIT]

# ----- Unique UUID of a Machinekit instance -----
# All network-accessible services of a running Machinekit instance are
# identified by a unique id; see 'man uuidgen'
# Clients browsing zeroconf for services belonging to a particular instance
# use this MKUUID value as a unique key.
#
# All MKUUID's must be different, so if there are several Machinekit instances
# running on a LAN, there might be collisions
# hence, change this UUID by using the output of 'uuidgen':
MKUUID=a42c8c6b-4025-4f83-ba28-dad21114744a

# ----- enabling remote operation -----

# enable remote service access - defaults to local; set to 1 for enabling remote
operation
#
# REMOTE=1 means: zeroMQ sockets will use TCP as specified below for address and
port
# REMOTE=0 means: zeroMQ will use IPC sockets in
RUNDIR/<rtapi_instance>.<service>.<uuid>
#
REMOTE=0

# ----- network setup -----
# only relevant when using TCP, not needed in local case (REMOTE=0)

# If REMOTE=0, services are bound to Unix IPC sockets, meaning the service cannot
# be reached from outside the current host.

# ----- TCP Port selection -----
#
# unless port numbers are explicitly specified, the default is to use the
# next free port number ('ephemeral port').
#
# To bind the group status (STP) to a specific port number, use this form:
#GROUP_STATUS_PORT=6200

# port for remote component status protocol
#RCOMP_STATUS_PORT=6201

# port for remote command interaction
#COMMAND_PORT=6202

# port for rtapi msgd log service
#LOG_PORT=6203 # specific port number

# ----- interface and protocol selection -----
#
# binding zeroMQ sockets and mDNS announcements are conceptually separate,

```

```

# but of course better add up.
# the default is to bind on in6addr_any (ipv4 and mapped ipv6 on Linux).
# see the zeromq docs - zmq_tcp(7) and the ZMQ_IPV6 option.
#
# The binding algorithm is as follows:
#
# Bind any addresses or interfaces in the BIND_IPV4 list (none if empty).
# if a port number was explicitly specified above, use that port
# else bind as ephemeral port, retrieve that assigned port number, and use
# that port in subsequent bind operations.
#
# if the BIND_IPV6 list is not empty, set the zeromq ZMQ_IPV6 socket option,
# then, for each interface/address in BIND_IPV6:
#   if a port number was already assigned (eg by explicit port number setting or
#   through an ephemeral binding of an IPv4 interface/address, use that.
#   bind the current interface/address
#
# default binding spec is equivalent to:
#BIND_IPV4=
#BIND_IPV6=*

# mDNS announcement - protocol selection:
#ANNOUNCE_IPV4=0 and ANNOUNCE_IPV6=0: suppress any Avahi announcements.
#ANNOUNCE_IPV4=1 and ANNOUNCE_IPV6=0: use AVAHI_PROTO_INET
#ANNOUNCE_IPV4=1 and ANNOUNCE_IPV6=1: use AVAHI_PROTO_UNSPEC
#ANNOUNCE_IPV4=0 and ANNOUNCE_IPV6=1: use AVAHI_PROTO_INET6

#defaults are:
#ANNOUNCE_IPV4=1
#ANNOUNCE_IPV6=1

```