Machine M

Central Controller Manager (CCM)

Resource Manager M

Resource Storage M

Command-
/Stateinterface
imports of
SCMs

*Assigne by
CCM*

Controller A

Loaned
Command-
/Stateinterfaces

Export via ROS 2 Service

Machine 1

Sub-Controller Manager 1 (SCM 1)

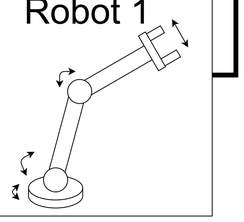
Resource Manager 1

Resource Storage 1

Command-
/Stateinterfaces

System 1

Robot 1



Export

*Exported by
SCM 1*

Driver for
Robot 1

Machine N

Sub-Controller Manager N (SCM N)

*Exported by
SCM N*

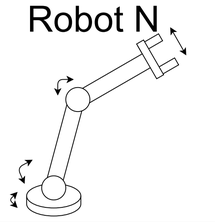
Resource Manager N

Resource Storage N

Command-
/Stateinterfaces

System N

Robot N



Export

Controller B

Loaned
Command-
/Stateinterfaces

*Assigne by
SCM N*

Driver for
Robot N