NOVA buffer manager for SDC portable DAQ

Thechnical manual

Masaharu NOMACHI

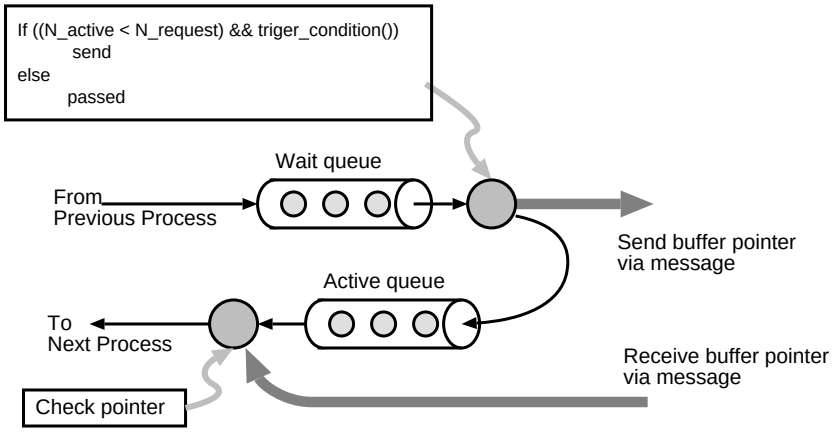
National Laboraroty for High Energy Physics (KEK)

Y. TAKEUCHI

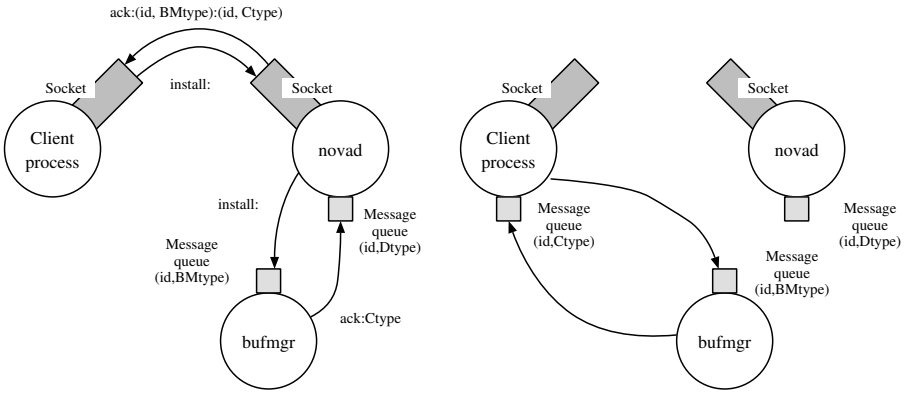
Tokyo Inst. of Tech.

Introduction

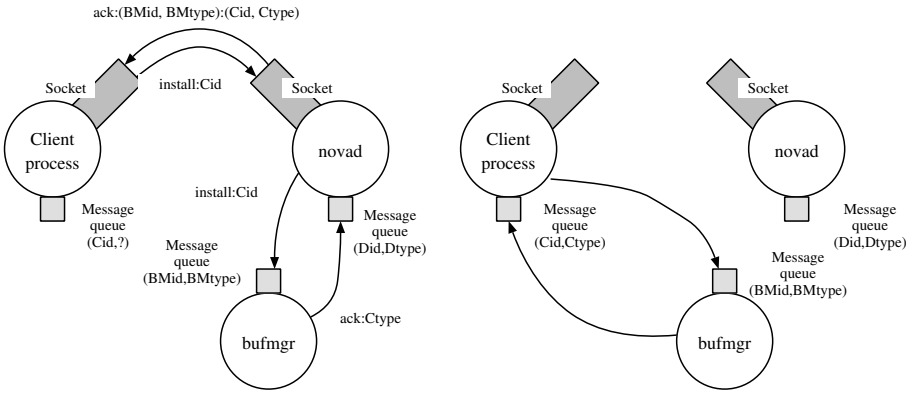
Buffer queues



Message queues



Common message queue



Individual message queues

Protocol

Message from nova daemon (server) to buffer manager

text	Send when
install:"pid":"pri":"req":"Cid"	install
dump:	dump the data base for debug
remove:"pid":"novaid"	client exit

Message from buffer manager to nova daemon

text	Send when
ack:"pid":"novaid":("Cid","Ctype")	client install done
error:"pid":0:"message"	something wrong

Socket message from client to nova daemon

text	Send when
install:"pid":"pri":"req":"Cid"	Install the producer
dump:	dump the data base

Socket message from nova daemon to client

text	Send when
ack:"pid":"novaid":"shmid": ("Cid","Ctype"):("BMid","BMtype"):	Client is installed
error:"pid":0:0:"message"	Error on install

Message from buffer manager to client process

text	Send when
ready:"pid":"offset":"size"	buffer ready
error:"pid":"error code":"message"	somethin wrong

Message from client process to buffer manager

text	Send when
done:"pid":"novaid":"offset":"significancy"	buffer return
request:"pid":"novaid":"request"	request buffer