The BANG protocol

Abstract

The BANG protocol is to enable peers to share the load of a program.

The protocol tries to be mostly stateless, but some messages can only be sent if the connection is in a certain state. At the very least each message is an unsigned 4 byte header. Each header should signify something and possibly have some information attached to it. Lengths should also be 4 unsigned bytes.

3 Headers

All headers are four unsigned bytes long. They start each message.

• BANG HELLO

Level 0 \overline{M} essage

Can be responded to by a following BANG HELLO or BANG VERSION MISMATCH. Second BANG HELLO puts the protocol into a level 1 state.

• BANG DEBUG MESSAGE

Level 1 $\overline{\text{M}}$ essage

No response needed, prints out a message on the remote end.

• BANG SEND MODULE

Level 2 Message

Sent after a BANG REQUEST MODULE

• BANG REQUEST MODULE

Level 1 Message

Sent after a BANG_WANT_MODULE or sent independently.

• BANG WANT MODULE

- BANG_MISMATCH_VERSION BANG_BYE

4 Flowcharts

Here are the flowcharts on how each message should be followed.

