

Quassel IRC - Bug #304

Bulk insert (+ a few simple regexp improvements)

08/30/2008 03:24 AM - sph

Status:	Resolved	Start date:	
Priority:	High	Due date:	
Assignee:	EgS	% Done:	0%
Category:	Quassel Client	Estimated time:	0.00 hour
Target version:	0.3.1		
Version:	0.13.1	OS:	Any
Description			
This gives an enormous performance boost when requesting more backlog (ie. by scrolling up). The startup time remained pretty much the same for me though and I'm not sure why exactly.			
My C++ coding might still be a bit rusty, but I hope it saves some of your time at least. I think it's pretty clean :)			

History

#1 - 08/30/2008 11:07 AM - EgS

I love the concept, but it is sadly faulty... The problem is, that it's not possible to insert a bulk of messages of one buffer into the message model, by just taking that bunch and insert it where the first (or last) message of that bunch belongs.

The reason behind this: the message model is sorted by message Id and message Ids are unique for a whole core (not even only a user). So imagine 2 buffers A, B receiving messages:

Buffer A:

10:30 A: msgA1

10:35 A: msgA2

Buffer B:

10:32 B: msgB1

10:37 B: msgB2

That would result in msgIds:

1 -> msgA1

2 -> msgB1

3 -> msgA2

4 -> msgB2

So the way your patch handles the bulk inserts would destroy the order. This is at the time being not a visible issue, but is crucial for some future things like logically merged buffers or things similar to the chat monitor that show chat from a configured bunch of channels.

But I think it's definitely something we can work with, I have some Ideas to fix that order issue without going back to single inserts and also some tweaks.

Thanks for investigating!

#2 - 08/30/2008 11:07 PM - sph

The bulkinsert works properly now :)

Some benchmarks: <http://lithitux.org/~sphilips/quassel/benchmark.txt>

It won't make a difference until the code in qtumessageprocessor calls insertMessages() instead of insertMessage() (which I am doing in the benchmarks)

(New diff: bulkinsert2.diff)

#3 - 08/31/2008 02:09 AM - sph

Woops, small bug with huge impact:

In the foreach in function insertMessages(const QList<Message> &msglist):
idx += indexForId(msg.msgId()); // Wrong

Must be replaced by:

idx = indexForId(msg.msgId()); // Correct

No idea why I didn't spot that earlier :)

#4 - 08/31/2008 06:53 PM - sph

EgS: I've added the paint tweaks too again (chatview.diff and chatline.diff)

I can't really tell how effective they are as I haven't done any worthy measurements, it's more from reading the docs and googling.

#5 - 09/29/2008 12:07 AM - Sputnik

Incorporated meanwhile.

Files			
bulkininsert.diff	7.18 KB	08/30/2008	admin
bulkininsert2.diff	3.78 KB	08/30/2008	admin
chatview.diff	874 Bytes	08/31/2008	admin
chatline.diff	724 Bytes	08/31/2008	admin