Smuxi - Feature # 546: Cursor-based frontend/backend communication / dynamic backscroll

Status:	New	Priority:	Normal
Author:	Christopher Halse Rogers	Category:	Frontend GNOME
Created:	11/09/2010	Assigned to:	Mirco Bauer
Updated:	02/22/2020	Due date:	
Complexity:	High		
Subject:	Cursor-based frontend/backend communication / dynamic backscroll		
Description:	It seems that, currently, the Smuxi frontend maintains a copy of a lot of the backend's IRC state, and needs to synchronise these on server connect. This results in connecting to the backend taking a significant period of time (for me, around a minute) and consuming a significant amount of memory (again for me, Smuxi is eating >500MiB RSS). It seems that both of these problems could be resolved by not sharing this state between the frontend and the backend, and instead having a cursor-based interface between the frontend & backend. Then the frontend would only need to get the most recent page of text from the backend on connect, which should speed up that process. It would also reduce frontend memory usage, as the frontend would need to store less state. Finally, it would allow the removal of the non-obvious distinction between â€œbuffer linesâ€• and â€œengine buffer linesâ€•, and would make adding â€œunlimitedâ€• as an option more feasible.		

History

01/05/2011 03:33 PM - Mirco Bauer

With regards to the memory usage you are seeing my Smuxi never uses more than ~50MB on X86 with 1000 buffer lines. I suspect GTK+ or the theme plays a role here.

01/19/2014 11:03 PM - Mirco Bauer

- Category changed from Common to Frontend GNOME

The engine already DOES provide the needed APIs to dynamically load chunks of messages but the frontend is just fetching the last XXX and that's it.

05/30/2015 10:04 AM - Mirco Bauer

Mirco Bauer wrote:

> The engine already DOES provide the needed APIs to dynamically load chunks of messages but the frontend is just fetching the last XXX and that's it.

I have to amend this statement. The IMessageBuffer API [0] does not allow to fetch the last 100 messages and then the next 100 message of that, this has to be addressed first before the feature can be implemented in the frontend.

 [0]: https://github.com/meebey/smuxi/blob/master/src/Engine/MessageBuffers/IMessageBuffer.cs#L28

05/30/2015 10:04 AM - Mirco Bauer

- Subject changed from Cursor-based frontend/backend communication to Cursor-based frontend/backend communication / dynamic backscroll

02/22/2020 05:03 PM - Mirco Bauer

I started a prototype in a git branch to change the MessageBuffer API, to use timestamp+counter instead of naive/non-reliable index offset to identify and fetch a specific range of messages:

https://github.com/meebey/smuxi/compare/experiments/message_buffer_timestamps