

## Wt - Bug #3824

### Potential race in WMessageResourceBundle with WServer::setLocalizedStrings

02/25/2015 10:05 PM - Bruce Toll

<b>Status:</b>	New	<b>Start date:</b>	02/25/2015
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>		<b>% Done:</b>	0%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>			
<b>Description</b>			
<p>For static resources where WServer::setLocalizedStrings is provided a WMessageResourceBundle on which refresh() has not been called, it appears that multiple threads can attempt to initialize the WMessageResourceBundle simultaneously. This can result in a segfault.</p> <p>I noticed this with an earlier github version of Wt 3.3.3-25-g7023b38 when attempting to retrieve several static resources in parallel. I have attached a lightly edited backtrace demonstrating one failure path. I would have liked to provide a self-contained reproducible example, but hopefully this is sufficient.</p> <p>NOTE: A workaround that seems to help is to call refresh() on the WMessageResourceBundle before passing it to setLocalizedStrings, e.g.</p> <pre>auto message_bundle = new WMessageResourceBundle(); message_bundle-&gt;use(server.appRoot() + "report");  // prevent race condition on first use of message_bundle message_bundle-&gt;refresh(); server.setLocalizedStrings(message_bundle);</pre>			

#### History

##### #1 - 03/02/2015 01:49 PM - Koen Deforche

- Status changed from New to InProgress
- Assignee set to Benoit Daccache
- Target version set to 3.3.4

I believe you're right. We should make sure that use of a message resource bundle is thread-safe (which we didn't initially foresee), except for it's refresh(), and properly document this.

##### #2 - 03/06/2015 01:56 PM - Koen Deforche

- Status changed from InProgress to New
- Assignee deleted (Benoit Daccache)

To be solved together with [#3381](#) by changing WLocalizedString API to be stateless: having a new virtual function which takes the locale as parameter, and deprecating the old ones.

Koen

##### #3 - 03/06/2015 01:56 PM - Koen Deforche

- Target version deleted (3.3.4)

#### Files

backtrace_20150225c.txt	6.45 KB	02/25/2015	Bruce Toll
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