

Ruby - Bug #8125

lost-tuple bug and fix for Rinda::TupleSpaceProxy.take

03/20/2013 02:21 AM - vjoel (Joel VanderWerf)

<div>Status:Closed</div> <div>Priority:Normal</div> <div>Assignee:drbrain (Eric Hodel)</div> <div>Target version:</div> <div>ruby -v:ruby 2.0.0p0 (2013-02-24) [x86_64-linux]</div>	<div>Backport:</div>
<div>Description</div> <div>=begin</div> <div>Rinda::TupleSpaceProxy prevents tuple loss during #take by exposing a "port" object on the client that the remote side (the tuplespace server) pushes to, instead of relying on the method return value. Pushing to the port fails if the process that called #take has exited, so the tuple will not be deleted from the tuplespace server.</div> <div>However, if the process has not exited, and the thread that called #take was interrupted, the port still exists and accepts push requests (in the main drb thread). In this case the tuple is deleted on the server and not available on the client.</div> <div>This is frequently a problem when using irb and manually interrupting take calls. It would also be a problem when using timeouts.</div> <div>A concise reproduction of the problem is in the attached thread-int.rb.</div> <div>The bug can be fixed by the patch below, which replaces the port array with a custom object that rejects pushes if the call stack has been unwound.</div> <div>Note that this patch combines naturally with the faster take patch in <a href="#">#8119</a>.</div> <div>diff --git a/lib/rinda/rinda.rb b/lib/rinda/rinda.rb index 18e284a..057c61a 100644 --- a/lib/rinda/rinda.rb +++ b/lib/rinda/rinda.rb @@ -206,6 +206,23 @@ module Rinda # TupleSpaceProxy allows a remote Tuplespace to appear as local.</div> <div>class TupleSpaceProxy</div> <div>• class Port</div> <div>• [REDACTED]</div> <div>• [REDACTED]</div> <div>• [REDACTED]</div> <div>• [REDACTED]</div> <div>• [REDACTED]</div> <div>• [REDACTED]</div> <div>• [REDACTED]</div> <div>• [REDACTED]</div> <div>• [REDACTED]</div> <div>• [REDACTED]</div> <div>• [REDACTED]</div> <div>• [REDACTED]</div>	

- end

## Creates a new TupleSpaceProxy to wrap +ts+.

```
@@ -222,6 +239,19 @@ module Rinda
end
```

```
##
```

- **Safely takes +tuple+ from the proxied TupleSpace. See TupleSpace#take.**
- **Ensures that an interrupted thread will not become a lasting cause**
- **of further data loss.**

```
• def take_safely(tuple, sec=nil, &block)
```

```
• [REDACTED]
```

```
• [REDACTED]
```

```
• [REDACTED]
```

```
• ensure
```

```
• [REDACTED]
```

```
• end
```

- **Takes +tuple+ from the proxied TupleSpace. See TupleSpace#take.**

```
def take(tuple, sec=nil, &block)
```

```
=end
```

### Associated revisions

Revision ebca3dd3c3fbc903511122078df910362347b5fa - 03/23/2013 06:34 PM - drbrain (Eric Hodel)

- lib/rinda/rinda.rb: Fixed loss of tuple when remote is alive but the call stack was unwound. Patch by Joel VanderWerf. [ruby-trunk - Bug #8125]
- \* test/rinda/test\_rinda.rb: Test for the above.

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@39890 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision ebca3dd3 - 03/23/2013 06:34 PM - drbrain (Eric Hodel)

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### History

#1 - 03/20/2013 07:50 AM - hsb (Hiroshi SHIBATA)

- Assignee set to seki (Masatoshi Seki)

**#2 - 03/23/2013 04:21 PM - drbrain (Eric Hodel)**

- File *rinda.rb.8215.patch* added
- Status changed from Open to Assigned

I think the safe take should be the default take.

I updated your patch and converted thread-int.rb into a test.

**#3 - 03/23/2013 04:26 PM - drbrain (Eric Hodel)**

- File *rinda.rb.8215.2.patch* added

Here is an updated patch that matches the rinda style and removes a leftover p

**#4 - 03/23/2013 04:37 PM - drbrain (Eric Hodel)**

- File *rinda.rb.8215.3.patch* added

Oops, I forgot to run all the tests, this fixes the remaining tests by restoring an accidentally deleted line.

**#5 - 03/23/2013 07:16 PM - seki (Masatoshi Seki)**

- Assignee changed from *seki (Masatoshi Seki)* to *drbrain (Eric Hodel)*

please commit it!

**#6 - 03/24/2013 03:34 AM - drbrain (Eric Hodel)**

- Status changed from Assigned to Closed
- % Done changed from 0 to 100

This issue was solved with changeset r39890.  
Joel, thank you for reporting this issue.  
Your contribution to Ruby is greatly appreciated.  
May Ruby be with you.

- 
- lib/rinda/rinda.rb: Fixed loss of tuple when remote is alive but the call stack was unwound. Patch by Joel VanderWerf.  
[ruby-trunk - Bug [#8125](#)]
    - test/rinda/test\_rinda.rb: Test for the above.

**Files**

thread-int.rb	1.1 KB	03/20/2013	vjoel (Joel VanderWerf)
rinda.rb.8215.patch	2.84 KB	03/23/2013	drbrain (Eric Hodel)
rinda.rb.8215.2.patch	2.84 KB	03/23/2013	drbrain (Eric Hodel)
rinda.rb.8215.3.patch	2.91 KB	03/23/2013	drbrain (Eric Hodel)