

./CAF+kE_RVfV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QTkOtU86Ag@mail.gmail.com.mbx.txt
Tue Nov 12 15:15:09 2024 1

From mboxrd@z Thu Jan 1 00:00:00 1970
Return-Path: <users-return-57570-archive-asf-public=cust-asf.ponee.io@activemq.apache.org>
X-Original-To: archive-asf-public@cust-asf.ponee.io
Delivered-To: archive-asf-public@cust-asf.ponee.io
Received: from mxout1-he-de.apache.org (mxout1-he-de.apache.org [95.216.194.37])
by mx-eu-03.ponee.io (Postfix) with ESMTPS id 960803E724
for <archive-asf-public@cust-asf.ponee.io>; Wed, 23 Oct 2024 20:28:20 +0000 (UTC)
Received: from mail.apache.org (mailgw-he-de.apache.org [IPv6:2a01:4f8:c2c:d4aa::1])
(using TLSv1.3 with cipher TLS_AES_256_GCM_SHA384 (256/256 bits)
key-exchange X25519 server-signature RSA-PSS (4096 bits) server-digest SHA256)
(No client certificate requested)
by mxout1-he-de.apache.org (ASF Mail Server at mxout1-he-de.apache.org) with ESMTPS id 7A3B8661A5
for <archive-asf-public@cust-asf.ponee.io>; Wed, 23 Oct 2024 20:28:20 +0000 (UTC)
Received: (qmail 3817918 invoked by uid 998); 23 Oct 2024 20:28:19 -0000
Mailing-List: contact users-help@activemq.apache.org; run by ezmlm
Precedence: bulk
List-Help: <mailto:users-help@activemq.apache.org>
List-Unsubscribe: <mailto:users-unsubscribe@activemq.apache.org>
List-Post: <mailto:users@activemq.apache.org>
List-Id: <users.activemq.apache.org>
Reply-To: users@activemq.apache.org
Delivered-To: mailing list users@activemq.apache.org
Received: (qmail 3817901 invoked by uid 116); 23 Oct 2024 20:28:19 -0000
Received: from ec2-52-204-25-47.compute-1.amazonaws.com (HELO mailrelay1-ec2-va.apache.org) (52.204.25.47)
by apache.org (qpsmtpd/0.94) with ESMTP; Wed, 23 Oct 2024 20:28:19 +0000
Authentication-Results: apache.org; auth=none
Received: from mail-ed1-f51.google.com (mail-ed1-f51.google.com [209.85.208.51])
by mailrelay1-ec2-va.apache.org (ASF Mail Server at mailrelay1-ec2-va.apache.org) with ESMTPSA id AF0253F1F9
for <users@activemq.apache.org>; Wed, 23 Oct 2024 20:28:18 +0000 (UTC)
Received: by mail-ed1-f51.google.com with SMTP id 4fb4d7f45d1cf-5c937b5169cso338143a12.1
for <users@activemq.apache.org>; Wed, 23 Oct 2024 13:28:18 -0700 (PDT)
X-Gm-Message-State: AOJu0YyAvmc4Xjalwv2hJvMxHo4tbLOq+ZNUK2/swZ8+kLFV9XjtmB41
7ENG1Er8Q/ofkR3CCGUwXBVF3xcFQlTKNT5bD1FHiyJ99RNT07lvkYi4OyxD4GItcuvEjTKSrrE
2RdfYnB1MKX3VwcqVDZ/foWleoCo5AaYlqI6cVA==
X-Google-Smtp-Source: AGHT+IEm/szwFxz4XLQUmkzxdELvdDafT7gNTjBj06XPaKYKvmNSd1lgjgNMEYmGo
k34rjvZxY4zJwmcgeS2m8FEXMU=
X-Received: by 2002:a05:6402:3489:b0:5cb:7388:816a with SMTP id
4fb4d7f45d1cf-5cb8b4e295amr4138326a12.1.1729715297823; Wed, 23 Oct 2024
13:28:17 -0700 (PDT)
MIME-Version: 1.0
References: <5a6c796c-3717-4ef8-b850-f82f661d8da8@idfix.nl>
In-Reply-To: <5a6c796c-3717-4ef8-b850-f82f661d8da8@idfix.nl>
From: Justin Bertram <jbertram@apache.org>
Date: Wed, 23 Oct 2024 15:27:51 -0500
X-Gmail-Original-Message-ID: <CAF+kE=RVfV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QTkOtU86Ag@mail.gmail.com>
Message-ID: <CAF+kE=RVfV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QTkOtU86Ag@mail.gmail.com>
Subject: Re: Question regarding problems with JDBC persistence
To: users@activemq.apache.org
Content-Type: multipart/alternative; boundary="000000000000e3cff706252ab9f7"

--000000000000e3cff706252ab9f7
Content-Type: text/plain; charset="UTF-8"
Content-Transfer-Encoding: quoted-printable

This sounds similar to an issue involving duplicate IDs proliferating in

./CAF+kE_RVfV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QtkOtU86Ag@mail.gmail.com.mbx.txt
Tue Nov 12 15:15:09 2024 2

the journal. I can't find the specific Jira at the moment, but the issue was something like a huge build-up of duplicate ID records. Can you inspect the "userRecordType" for the offending rows?

Also, how are you sending your message exactly? Do you need duplicate detection?

Lastly, 2.16.0 is quite old at this point. There's been improvements to JDBC since then which you'd almost certainly benefit from (not to mention all the other bug-fixes and features). Are you open to upgrading?

Justin

On Wed, Oct 23, 2024 at 4:32=E2=80=AFAM Bisil <bisil@idfix.nl> wrote:

```
> Hello,
>
> Inside Wildfly 23.0.0 we are running ActiveMQ Artemis Message Broker
> 2.16.0 with JDBC persistence on SQLServer for ~25 message queues. In
> some production environments we have moderate-to-high message volumes
> and since processing can be relatively slow temporary message pileup is
> not uncommon.
>
> In one particular environment we are experiencing OutOfMemory issues
> during startup. There are about 60K messages in 2 of the queues while
> the message table contains over 350M records causing memory exhaustion
> during startup. Running in a controlled environment with ~60G heap
> startup succeeds and through JProfiler we observe that all message table
> records are selected and appear to be collected in memory. After that
> they are processed and discarded dropping memory usage down to a
> fraction of its peak. Using the JBoss CLI to inspect the queues then
> shows we have indeed 60K messages in 2 queues.
>
> Inspecting the contents of the message table we see limited counts of
> record types 13 (ADD_RECORD_TX) and 14 (UPDATE_RECORD_TX) roughly
> equivalent to the 60K message count. All remaining records are type 11
> (ADD_RECORD).
>
> When we removed all type 11 records restart was fast with limited memory
> load and we still see 60K messages in the 2 queues.
>
> In the past we have observed similar numbers and startup problems in
> other environments which lead us to truncate the AMQ persistence tables
> to be able to restart the server without an OutOfMemoryException. But we
> are looking for a way to prevent this situation from happening.
>
> So my questions are:
>
> - Is the large record count in the message table expected behavior?
>
> - Is there anything we can/should do to limit the number of records in
> the message table?
>
> - Is removing all type 11 records a valid workaround? If no, what would
> be the side-effect?
>
> Thanks for your help!
>
> Silvio
>
```

--000000000000e3cff706252ab9f7--

./CAF+kE_RVFV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QkOtU86Ag@mail.gmail.com.mbx.txt
Tue Nov 12 15:15:09 2024 3

From mboxrd@z Thu Jan 1 00:00:00 1970
Return-Path: <users-return-57589-archive-asf-public=cust-asf.ponee.io@activemq.apache.org>
X-Original-To: archive-asf-public@cust-asf.ponee.io
Delivered-To: archive-asf-public@cust-asf.ponee.io
Received: from mxout1-ec2-va.apache.org (mxout1-ec2-va.apache.org [3.227.148.255])
by mx-eu-03.ponee.io (Postfix) with ESMTPS id 1CD2E3E680
for <archive-asf-public@cust-asf.ponee.io>; Mon, 28 Oct 2024 07:54:11 +0000 (UTC)
C)
Received: from mail.apache.org (mailgw-he-de.apache.org [116.203.246.181])
(using TLSv1.3 with cipher TLS_AES_256_GCM_SHA384 (256/256 bits))
(No client certificate requested)
by mxout1-ec2-va.apache.org (ASF Mail Server at mxout1-ec2-va.apache.org) with
ESMTPS id 4D7FF42E3F
for <archive-asf-public@cust-asf.ponee.io>; Mon, 28 Oct 2024 07:53:59 +0000 (UTC)
C)
Received: (qmail 576863 invoked by uid 998); 28 Oct 2024 07:53:57 -0000
Mailing-List: contact users-help@activemq.apache.org; run by ezmlm
Precedence: bulk
List-Help: <mailto:users-help@activemq.apache.org>
List-Unsubscribe: <mailto:users-unsubscribe@activemq.apache.org>
List-Post: <mailto:users@activemq.apache.org>
List-Id: <users.activemq.apache.org>
Reply-To: users@activemq.apache.org
Delivered-To: mailing list users@activemq.apache.org
Received: (qmail 576832 invoked by uid 116); 28 Oct 2024 07:53:56 -0000
Received: from spamproc1-he-fi.apache.org (HELO spamproc1-he-fi.apache.org) (95.217.134.168)
by apache.org (qpsmtpd/0.94) with ESMTP; Mon, 28 Oct 2024 07:53:56 +0000
Authentication-Results: apache.org; auth=none
Received: from localhost (localhost [127.0.0.1])
by spamproc1-he-fi.apache.org (ASF Mail Server at spamproc1-he-fi.apache.org) with ESMTP id 5445BC2344
for <users@activemq.apache.org>; Mon, 28 Oct 2024 07:53:56 +0000 (UTC)
X-Virus-Scanned: Debian amavisd-new at spamproc1-he-fi.apache.org
X-Spam-Flag: NO
X-Spam-Score: 0.201
X-Spam-Level:
X-Spam-Status: No, score=0.201 tagged_above=-999 required=6.31
tests=[HTML_MESSAGE=0.2, RCVD_IN_VALIDITY_RPBL_BLOCKED=0.001, RCVD_IN_VALIDITY_SAFE_BLOCKED=0.001, SPF_PASS=-0.001]
autolearn=disabled
Received: from mx1-ec2-va.apache.org ([116.203.227.195])
by localhost (spamproc1-he-fi.apache.org [95.217.134.168]) (amavisd-new, port 10024)
with ESMTP id W1cGwwZCKJOf for <users@activemq.apache.org>;
Mon, 28 Oct 2024 07:53:55 +0000 (UTC)
Received-SPF: Pass (mailfrom) identity=mailfrom; client-ip=136.144.238.65; helo=jambo4.jambo-mobile.com; envelope-from=bisil@idfix.nl; receiver=<UNKNOWN>
Received: from jambo4.jambo-mobile.com (jambo4.jambo-mobile.com [136.144.238.65])
by mx1-ec2-va.apache.org (ASF Mail Server at mx1-ec2-va.apache.org) with ESMTPS id B16F9BFDF3
for <users@activemq.apache.org>; Mon, 28 Oct 2024 07:53:53 +0000 (UTC)
Received: from [192.168.1.106] (86-95-102-82.fixed.kpn.net [86.95.102.82])
(using TLSv1.3 with cipher TLS_AES_128_GCM_SHA256 (128/128 bits)
key-exchange X25519 server-signature RSA-PSS (2048 bits) server-digest SHA256)
(No client certificate requested)
by jambo4.jambo-mobile.com (Postfix) with ESMTPSA id 2BA456C0AFC
for <users@activemq.apache.org>; Mon, 28 Oct 2024 08:53:47 +0100 (CET)
Content-Type: multipart/alternative;
boundary="-----WR5bcGL0i2NJkSkJtTZRt63"
Message-ID: <08acc429-acaf-4e0d-943e-aedle7effc01@idfix.nl>
Date: Mon, 28 Oct 2024 08:53:46 +0100

./CAF+kE_RVFV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QTKOtU86Ag@mail.gmail.com.mbx.txt
Tue Nov 12 15:15:09 2024 4

MIME-Version: 1.0
User-Agent: Mozilla Thunderbird
Subject: Re: Question regarding problems with JDBC persistence
To: users@activemq.apache.org
References: <5a6c796c-3717-4ef8-b850-f82f661d8da8@idfix.nl>
<CAF+kE=RVFV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QTKOtU86Ag@mail.gmail.com>
Content-Language: en-US
From: Bisil <bisil@idfix.nl>
In-Reply-To: <CAF+kE=RVFV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QTKOtU86Ag@mail.gmail.com>

-----WR5bcGL0i2NJJKSkJtTZRt63
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: 8bit

Thanks for the reply Justin.

After restoring the database in its original state I ran counts on
recordType/userRecordType and got this:

```
recordType userRecordType  count (*)
11 36 376143458
11 34 290102
13 45 63893
14 32 63893
18 255 22941
17 255 228
14 33 2
```

The messages are posted through JMS from inside the same Wildfly
instance that runs ActiveMQ. Message handling is done by MDBs that run
inside the same JVM. We do have some clustered Wildfly setups although
most are standalone.

We know we are running an old version. Upgrading Wildfly is on our
roadmap but that may take quite some time. We investigated upgrading
ActiveMQ separately but ran into too many issues and gave up on that idea.

Silvio

On 23-10-2024 22:27, Justin Bertram wrote:

> This sounds similar to an issue involving duplicate IDs proliferating in
> the journal. I can't find the specific Jira at the moment, but the issue
> was something like a huge build-up of duplicate ID records. Can you inspect
> the "userRecordType" for the offending rows?
>
> Also, how are you sending your message exactly? Do you need duplicate
> detection?
>
> Lastly, 2.16.0 is quite old at this point. There's been improvements to
> JDBC since then which you'd almost certainly benefit from (not to mention
> all the other bug-fixes and features). Are you open to upgrading?
>
>

./CAF+kE_RVFV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QkOtU86Ag@mail.gmail.com.mbx.txt
Tue Nov 12 15:15:09 2024 5

> Justin
>
> On Wed, Oct 23, 2024 at 4:32â\200`AM Bisil<bisil@idfix.nl> wrote:
>
>> Hello,
>>
>> Inside Wildfly 23.0.0 we are running ActiveMQ Artemis Message Broker
>> 2.16.0 with JDBC persistence on SQLServer for ~25 message queues. In
>> some production environments we have moderate-to-high message volumes
>> and since processing can be relatively slow temporary message pileup is
>> not uncommon.
>>
>> In one particular environment we are experiencing OutOfMemory issues
>> during startup. There are about 60K messages in 2 of the queues while
>> the message table contains over 350M records causing memory exhaustion
>> during startup. Running in a controlled environment with ~60G heap
>> startup succeeds and through JProfiler we observe that all message table
>> records are selected and appear to be collected in memory. After that
>> they are processed and discarded dropping memory usage down to a
>> fraction of its peak. Using the JBoss CLI to inspect the queues then
>> shows we have indeed 60K messages in 2 queues.
>>
>> Inspecting the contents of the message table we see limited counts of
>> record types 13 (ADD_RECORD_TX) and 14 (UPDATE_RECORD_TX) roughly
>> equivalent to the 60K message count. All remaining records are type 11
>> (ADD_RECORD).
>>
>> When we removed all type 11 records restart was fast with limited memory
>> load and we still see 60K messages in the 2 queues.
>>
>> In the past we have observed similar numbers and startup problems in
>> other environments which lead us to truncate the AMQ persistence tables
>> to be able to restart the server without an OutOfMemoryException. But we
>> are looking for a way to prevent this situation from happening.
>>
>> So my questions are:
>>
>> - Is the large record count in the message table expected behavior?
>>
>> - Is there anything we can/should do to limit the number of records in
>> the message table?
>>
>> - Is removing all type 11 records a valid workaround? If no, what would
>> be the side-effect?
>>
>> Thanks for your help!
>>
>> Silvio
>>

-----WR5bcGL0i2NJkSkJtTZRt63--
From mboxrd@z Thu Jan 1 00:00:00 1970
Return-Path: <users-return-57591-archive-asf-public=cust-asf.ponee.io@activemq.apache.org>
X-Original-To: archive-asf-public@cust-asf.ponee.io
Delivered-To: archive-asf-public@cust-asf.ponee.io
Received: from mxout1-ec2-va.apache.org (mxout1-ec2-va.apache.org [3.227.148.255])
by mx-eu-03.ponee.io (Postfix) with ESMTPS id B46DC3E6E9
for <archive-asf-public@cust-asf.ponee.io>; Mon, 28 Oct 2024 14:05:47 +0000 (UTC)
C)
Received: from mail.apache.org (mailgw-he-de.apache.org [116.203.246.181])
(using TLSv1.3 with cipher TLS_AES_256_GCM_SHA384 (256/256 bits))
(No client certificate requested)

./CAF+kE_RVFV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QTkOtU86Ag@mail.gmail.com.mbx.txt
Tue Nov 12 15:15:09 2024 6

by mxout1-ec2-va.apache.org (ASF Mail Server at mxout1-ec2-va.apache.org) with
ESMTPS id 6187843261
for <archive-asf-public@cust-asf.ponee.io>; Mon, 28 Oct 2024 14:05:25 +0000 (UTC)
Received: (qmail 1493724 invoked by uid 998); 28 Oct 2024 14:05:23 -0000
Mailing-List: contact users-help@activemq.apache.org; run by ezmlm
Precedence: bulk
List-Help: <mailto:users-help@activemq.apache.org>
List-Unsubscribe: <mailto:users-unsubscribe@activemq.apache.org>
List-Post: <mailto:users@activemq.apache.org>
List-Id: <users.activemq.apache.org>
Reply-To: users@activemq.apache.org
Delivered-To: mailing list users@activemq.apache.org
Received: (qmail 1493702 invoked by uid 116); 28 Oct 2024 14:05:23 -0000
Received: from ec2-52-204-25-47.compute-1.amazonaws.com (HELO mailrelay1-ec2-va.apache.org) (52.204.25.47)
by apache.org (qpsmtpd/0.94) with ESMTP; Mon, 28 Oct 2024 14:05:23 +0000
Authentication-Results: apache.org; auth=none
Received: from mail-ej1-f51.google.com (mail-ej1-f51.google.com [209.85.218.51])
by mailrelay1-ec2-va.apache.org (ASF Mail Server at mailrelay1-ec2-va.apache.org) with ESMTPSA id BE3C03F1C0
for <users@activemq.apache.org>; Mon, 28 Oct 2024 14:05:22 +0000 (UTC)
Received: by mail-ej1-f51.google.com with SMTP id a640c23a62f3a-a9932aa108cso650891566b.2
for <users@activemq.apache.org>; Mon, 28 Oct 2024 07:05:22 -0700 (PDT)
X-Gm-Message-State: AOJu0YxStzIIme3L15mgZbuHc+oA5mD5CZxBfJ04ZUPJ2SncZaGB0LMi
Fand6ZqJ23z6KL6CBEn8KUFOXfeEP3t3NYOxMpXpqL5RsF4UmniaSnpg7rBksTi/YiM5lkakqiz
MnEQW77JsJf7LnER+NKfGSlbdwm9frVWr7WPH5A==
X-Google-Smtp-Source: AGHT+IF+NiSI4zvi9lj6svV/wUvyIkmaVqAK6Z/oRbW8MacV2jyUadfyR8mSgfs1l
SPw9c0Jk0wI2yd5qH08p4C7mAs=
X-Received: by 2002:a17:907:1c12:b0:a99:7177:3f6a with SMTP id
a640c23a62f3a-a9de62f4b79mr831783766b.63.1730124321813; Mon, 28 Oct 2024
07:05:21 -0700 (PDT)
MIME-Version: 1.0
References: <5a6c796c-3717-4ef8-b850-f82f661d8da8@idfix.nl>
<CAF+kE=RVFV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QTkOtU86Ag@mail.gmail.com> <08acc429-acaf-4e0d-943e-aed1e7effc01@idfix.nl>
In-Reply-To: <08acc429-acaf-4e0d-943e-aed1e7effc01@idfix.nl>
From: Justin Bertram <jbertram@apache.org>
Date: Mon, 28 Oct 2024 09:04:55 -0500
X-Gmail-Original-Message-ID: <CAF+kE=QM5u=icW7+diJOK9=8J1f0EOJXWZMEDboZu30TL-sFjg@mail.gmail.com>
Message-ID: <CAF+kE=QM5u=icW7+diJOK9=8J1f0EOJXWZMEDboZu30TL-sFjg@mail.gmail.com>
Subject: Re: Question regarding problems with JDBC persistence
To: users@activemq.apache.org
Content-Type: multipart/alternative; boundary="0000000000009eaa8e062589f563"

--0000000000009eaa8e062589f563
Content-Type: text/plain; charset="UTF-8"
Content-Transfer-Encoding: quoted-printable

Based on the information you provided I can say that the problem isn't what I originally expected. Here's how the data breaks down per record type:

- Add (11)
 - Set scheduled delivery time (36): 376,143,458
 - Update delivery count (34): 290,102
- Add Transactional (13)
 - Add message (45): 63,893
- Update Transactional (14)
 - Add reference (32) 63,893
 - Acknowledge reference (33) 2
- Prepare (17): 228

./CAF+kE_RVfV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QtkOtU86Ag@mail.gmail.com.mbx.txt
Tue Nov 12 15:15:09 2024 7

- Commit (18): 22,941

So it looks like you're using a lot of scheduled messages, either directly or indirectly (e.g. via redelivery delay), and the records related to the delivery schedule are accumulating. If you stop the broker and run the "journal compact" command does the number of records in the database drop?

Out of curiosity, is there a specific reason you're using JDBC vs. the traditional file-based journal on local disk?

Justin

On Mon, Oct 28, 2024 at 2:56=E2=80=AFAM Bisil <bisil@idfix.nl> wrote:

> Thanks for the reply Justin.

>

> After restoring the database in its original state I ran counts on
> recordType/userRecordType and got this:

>

> recordType userRecordType count(*)

>

> 11 36 376143458

>

> 11 34 290102

>

> 13 45 63893

>

> 14 32 63893

>

> 18 255 22941

>

> 17 255 228

>

> 14 33 2

>

>

>

> The messages are posted through JMS from inside the same Wildfly
> instance that runs ActiveMQ. Message handling is done by MDBs that run
> inside the same JVM. We do have some clustered Wildfly setups although
> most are standalone.

>

> We know we are running an old version. Upgrading Wildfly is on our
> roadmap but that may take quite some time. We investigated upgrading
> ActiveMQ separately but ran into too many issues and gave up on that idea=

.

>

> Silvio

>

>

> On 23-10-2024 22:27, Justin Bertram wrote:

> > This sounds similar to an issue involving duplicate IDs proliferating i=
n

> > the journal. I can't find the specific Jira at the moment, but the issu=
e

> > was something like a huge build-up of duplicate ID records. Can you
> inspect

> > the "userRecordType" for the offending rows?

> >

> > Also, how are you sending your message exactly? Do you need duplicate
> > detection?

> >

./CAF+kE_RVFV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QtkOtU86Ag@mail.gmail.com.mbx.txt
Tue Nov 12 15:15:09 2024 8

> > Lastly, 2.16.0 is quite old at this point. There's been improvements to
> > JDBC since then which you'd almost certainly benefit from (not to menti=
on
> > all the other bug-fixes and features). Are you open to upgrading?
> >
> >
> > Justin
> >
> > On Wed, Oct 23, 2024 at 4:32=E2=80=AFAM Bisil<bisil@idfix.nl> wrote:
> >
> >> Hello,
> >>
> >> Inside Wildfly 23.0.0 we are running ActiveMQ Artemis Message Broker
> >> 2.16.0 with JDBC persistence on SQLServer for ~25 message queues. In
> >> some production environments we have moderate-to-high message volumes
> >> and since processing can be relatively slow temporary message pileup i=
s
> >> not uncommon.
> >>
> >> In one particular environment we are experiencing OutOfMemory issues
> >> during startup. There are about 60K messages in 2 of the queues while
> >> the message table contains over 350M records causing memory exhaustion
> >> during startup. Running in a controlled environment with ~60G heap
> >> startup succeeds and through JProfiler we observe that all message tab=
le
> >> records are selected and appear to be collected in memory. After that
> >> they are processed and discarded dropping memory usage down to a
> >> fraction of its peak. Using the JBoss CLI to inspect the queues then
> >> shows we have indeed 60K messages in 2 queues.
> >>
> >> Inspecting the contents of the message table we see limited counts of
> >> record types 13 (ADD_RECORD_TX) and 14 (UPDATE_RECORD_TX) roughly
> >> equivalent to the 60K message count. All remaining records are type 11
> >> (ADD_RECORD).
> >>
> >> When we removed all type 11 records restart was fast with limited memo=
ry
> >> load and we still see 60K messages in the 2 queues.
> >>
> >> In the past we have observed similar numbers and startup problems in
> >> other environments which lead us to truncate the AMQ persistence table=
s
> >> to be able to restart the server without an OutOfMemoryException. But =
we
> >> are looking for a way to prevent this situation from happening.
> >>
> >> So my questions are:
> >>
> >> - Is the large record count in the message table expected behavior?
> >>
> >> - Is there anything we can/should do to limit the number of records in
> >> the message table?
> >>
> >> - Is removing all type 11 records a valid workaround? If no, what woul=
d
> >> be the side-effect?
> >>
> >> Thanks for your help!
> >>
> >> Silvio
> >>
>

./CAF+kE_RVFV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QkOtU86Ag@mail.gmail.com.mbx.txt
Tue Nov 12 15:15:09 2024 9

--00000000000009eaa8e062589f563--

From mboxrd@z Thu Jan 1 00:00:00 1970

Return-Path: <users-return-57593-archive-asf-public=cust-asf.ponee.io@activemq.apache.org>

X-Original-To: archive-asf-public@cust-asf.ponee.io

Delivered-To: archive-asf-public@cust-asf.ponee.io

Received: from mxout1-he-de.apache.org (mxout1-he-de.apache.org [95.216.194.37])

by mx-eu-03.ponee.io (Postfix) with ESMTPS id 704AA3E6B5

for <archive-asf-public@cust-asf.ponee.io>; Tue, 29 Oct 2024 13:06:02 +0000 (UTC)

Received: from mail.apache.org (mailgw-he-de.apache.org [IPv6:2a01:4f8:c2c:d4aa::1])
(using TLSv1.3 with cipher TLS_AES_256_GCM_SHA384 (256/256 bits)

key-exchange X25519 server-signature RSA-PSS (4096 bits) server-digest SHA256)

(No client certificate requested)

by mxout1-he-de.apache.org (ASF Mail Server at mxout1-he-de.apache.org) with ESMTPS id A44A365000

for <archive-asf-public@cust-asf.ponee.io>; Tue, 29 Oct 2024 13:04:42 +0000 (UTC)

C)

Received: (qmail 4188348 invoked by uid 998); 29 Oct 2024 13:04:41 -0000

Mailing-List: contact users-help@activemq.apache.org; run by ezmlm

Precedence: bulk

List-Help: <mailto:users-help@activemq.apache.org>

List-Unsubscribe: <mailto:users-unsubscribe@activemq.apache.org>

List-Post: <mailto:users@activemq.apache.org>

List-Id: <users.activemq.apache.org>

Reply-To: users@activemq.apache.org

Delivered-To: mailing list users@activemq.apache.org

Received: (qmail 4188316 invoked by uid 116); 29 Oct 2024 13:04:39 -0000

Received: from spamproc1-he-de.apache.org (HELO spamproc1-he-de.apache.org) (116.203.196.100)

by apache.org (qpsmtpd/0.94) with ESMTP; Tue, 29 Oct 2024 13:04:39 +0000

Authentication-Results: apache.org; auth=none

Received: from localhost (localhost [127.0.0.1])

by spamproc1-he-de.apache.org (ASF Mail Server at spamproc1-he-de.apache.org) with ESMTP id 8597E20022A

for <users@activemq.apache.org>; Tue, 29 Oct 2024 13:04:39 +0000 (UTC)

X-Virus-Scanned: Debian amavisd-new at spamproc1-he-de.apache.org

X-Spam-Flag: NO

X-Spam-Score: 0.202

X-Spam-Level:

X-Spam-Status: No, score=0.202 tagged_above=-999 required=6.31

tests=[HTML_MESSAGE=0.2, RCVD_IN_DNSWL_BLOCKED=0.001,

RCVD_IN_VALIDITY_RPBL_BLOCKED=0.001,

RCVD_IN_VALIDITY_SAFE_BLOCKED=0.001, SPF_PASS=-0.001]

autolearn=disabled

Received: from mx1-ec2-va.apache.org ([116.203.227.195])

by localhost (spamproc1-he-de.apache.org [116.203.196.100]) (amavisd-new, port 10024)

with ESMTP id PIud_9ASpw8f for <users@activemq.apache.org>;

Tue, 29 Oct 2024 13:04:38 +0000 (UTC)

Received-SPF: Pass (mailfrom) identity=mailfrom; client-ip=136.144.238.65; helo=jambo4.jambo-mobile.com; envelope-from=bisil@idfix.nl; receiver=<UNKNOWN>

Received: from jambo4.jambo-mobile.com (jambo4.jambo-mobile.com [136.144.238.65])

by mx1-ec2-va.apache.org (ASF Mail Server at mx1-ec2-va.apache.org) with ESMTPS id 87F98BFB46

for <users@activemq.apache.org>; Tue, 29 Oct 2024 13:04:37 +0000 (UTC)

Received: from [192.168.1.106] (86-95-102-82.fixed.kpn.net [86.95.102.82])

(using TLSv1.3 with cipher TLS_AES_128_GCM_SHA256 (128/128 bits)

key-exchange X25519 server-signature RSA-PSS (2048 bits) server-digest SHA256)

(No client certificate requested)

by jambo4.jambo-mobile.com (Postfix) with ESMTPSA id D0BA36C0685

for <users@activemq.apache.org>; Tue, 29 Oct 2024 14:04:30 +0100 (CET)

Content-Type: multipart/alternative;

./CAF+kE_RVfV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QTKOtU86Ag@mail.gmail.com.mbx.txt
Tue Nov 12 15:15:09 2024 10

boundary="-----CBmZ30XvHIWNb9KIPKUJkrXO"
Message-ID: <9565d5b5-5d75-4d30-a0f1-908fef0fd026@idfix.nl>
Date: Tue, 29 Oct 2024 14:04:30 +0100
MIME-Version: 1.0
User-Agent: Mozilla Thunderbird
Subject: Re: Question regarding problems with JDBC persistence
To: users@activemq.apache.org
References: <5a6c796c-3717-4ef8-b850-f82f661d8da8@idfix.nl>
<CAF+kE=RVfV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QTKOtU86Ag@mail.gmail.com>
<08acc429-acaf-4e0d-943e-aed1e7effc01@idfix.nl>
<CAF+kE=QM5u=icW7+diJOK9=8J1f0EOJXWZMEDboZu30TL-sFjg@mail.gmail.com>
Content-Language: en-US
From: Bisil <bisil@idfix.nl>
In-Reply-To: <CAF+kE=QM5u=icW7+diJOK9=8J1f0EOJXWZMEDboZu30TL-sFjg@mail.gmail.com>

-----CBmZ30XvHIWNb9KIPKUJkrXO
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: 7bit

Hi Justin,

Thanks again for your valuable insights.

We do use indirect scheduled messages intensively since we have
redelivery-delay=1000, redelivery-multiplier=2, redelivery-attempts=9
settings for the majority of queues. We also use
message-counter-history-day-limit=10 for all queues if that is at all
significant.

We have not tried explicit compacting the journal yet and since the
AMQ-related tables on production environments that ran into this
situation were truncated to get things back up we can not do this right now.
I was under the impression that Artemis also compacts the journal during
startup. If that is true could we not simply try restarting the Wildfly
server if we see large journal volumes to check if that makes a
difference, or is that not the same? If so, could you elaborate a bit
since I know how to stop/start the broker from the JBoss CLI but have no
knowledge about an explicit journal compaction command.

We use JDBC persistence for a couple of reasons. Having the journal
inside the database makes it easier for us to keep things in sync with
backups/restores which we also use heavily for trouble shooting. In
addition to that using file based persistence comes with additional
costs in our cloud environments.

Silvio

On 28-10-2024 15:04, Justin Bertram wrote:

> Based on the information you provided I can say that the problem isn't what
> I originally expected. Here's how the data breaks down per record type:
>
> - Add (11)
> - Set scheduled delivery time (36): 376,143,458
> - Update delivery count (34): 290,102
> - Add Transactional (13)
> - Add message (45): 63,893
> - Update Transactional (14)
> - Add reference (32) 63,893
> - Acknowledge reference (33) 2
> - Prepare (17): 228
> - Commit (18): 22,941
>

./CAF+kE_RVfV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QTKOtU86Ag@mail.gmail.com.mbx.txt
Tue Nov 12 15:15:09 2024 11

> So it looks like you're using a lot of scheduled messages, either directly
> or indirectly (e.g. via redelivery delay), and the records related to the
> delivery schedule are accumulating. If you stop the broker and run the
> "journal compact" command does the number of records in the database drop?
>

> Out of curiosity, is there a specific reason you're using JDBC vs. the
> traditional file-based journal on local disk?
>

> Justin
>
>

-----CBmZ30XvHIWNb9KIPKUJkrXO--

From mboxrd@z Thu Jan 1 00:00:00 1970

Return-Path: <users-return-57594-archive-asf-public=cust-asf.ponee.io@activemq.apache.org>

X-Original-To: archive-asf-public@cust-asf.ponee.io

Delivered-To: archive-asf-public@cust-asf.ponee.io

Received: from mxout1-ec2-va.apache.org (mxout1-ec2-va.apache.org [3.227.148.255])

by mx-eu-03.ponee.io (Postfix) with ESMTPS id F0E063E6A3

for <archive-asf-public@cust-asf.ponee.io>; Tue, 29 Oct 2024 15:55:35 +0000 (UTC)

C)

Received: from mail.apache.org (mailgw-he-de.apache.org [116.203.246.181])

(using TLSv1.3 with cipher TLS_AES_256_GCM_SHA384 (256/256 bits))

(No client certificate requested)

by mxout1-ec2-va.apache.org (ASF Mail Server at mxout1-ec2-va.apache.org) with

ESMTPS id B599545FDF

for <archive-asf-public@cust-asf.ponee.io>; Tue, 29 Oct 2024 15:54:26 +0000 (UTC)

C)

Received: (qmail 538013 invoked by uid 998); 29 Oct 2024 15:54:24 -0000

Mailing-List: contact users-help@activemq.apache.org; run by ezmlm

Precedence: bulk

List-Help: <mailto:users-help@activemq.apache.org>

List-Unsubscribe: <mailto:users-unsubscribe@activemq.apache.org>

List-Post: <mailto:users@activemq.apache.org>

List-Id: <users.activemq.apache.org>

Reply-To: users@activemq.apache.org

Delivered-To: mailing list users@activemq.apache.org

Received: (qmail 537996 invoked by uid 116); 29 Oct 2024 15:54:24 -0000

Received: from ec2-52-204-25-47.compute-1.amazonaws.com (HELO mailrelay1-ec2-va.apache.org) (52.204.25.47)

by apache.org (qpsmtpd/0.94) with ESMTP; Tue, 29 Oct 2024 15:54:24 +0000

Authentication-Results: apache.org; auth=none

Received: from mail-ed1-f44.google.com (mail-ed1-f44.google.com [209.85.208.44])

by mailrelay1-ec2-va.apache.org (ASF Mail Server at mailrelay1-ec2-va.apache.org) with ESMTPSA id 39246402DA

for <users@activemq.apache.org>; Tue, 29 Oct 2024 15:54:24 +0000 (UTC)

Received: by mail-ed1-f44.google.com with SMTP id 4fb4d7f45d1cf-5c984352742so6289663a12.1

for <users@activemq.apache.org>; Tue, 29 Oct 2024 08:54:24 -0700 (PDT)

X-Gm-Message-State: AOJu0YwzHFxfExX06HxuZNMr2FRbbwRXMwvF638VddJpi0HbblAqUTXh
piJnzKk6kkErjHpmKXKJHfAnHixeGe4Jre6Rt2/431rkyQ9UWFEHJbSqtV+WqlF+AHkU/OZLGrt
kg8xCZpkZNfThGF/S1D386NvIYRTaI1CLf2ECFA==

X-Google-Smtp-Source: AGHT+IH5YqnmJaRqnPrly8DQ/c4AsDaZTsGx1taeEXXfViVrORiPSgN1S3cLIGeXS
HScArt3isuQt4DrZxZHXS64oTk=

X-Received: by 2002:a05:6402:42c4:b0:5c5:cd4b:5c4d with SMTP id

4fb4d7f45d1cf-5cbbf891a4emr11622241a12.8.1730217263280; Tue, 29 Oct 2024

08:54:23 -0700 (PDT)

MIME-Version: 1.0

References: <5a6c796c-3717-4ef8-b850-f82f661d8da8@idfix.nl>

<CAF+kE=RVfV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QTKOtU86Ag@mail.gmail.com>

<08acc429-acaf-4e0d-943e-aedle7effc01@idfix.nl> <CAF+kE=QM5u=icW7+diJOK9=8J1f0EOJXWZME
dboZu30TL-sFjg@mail.gmail.com>

./CAF+kE_RVFV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QTKOtU86Ag@mail.gmail.com.mbx.txt
Tue Nov 12 15:15:09 2024 12

<9565d5b5-5d75-4d30-a0f1-908fef0fd026@idfix.nl>
In-Reply-To: <9565d5b5-5d75-4d30-a0f1-908fef0fd026@idfix.nl>
From: Justin Bertram <jbertram@apache.org>
Date: Tue, 29 Oct 2024 10:53:56 -0500
X-Gmail-Original-Message-ID: <CAF+kE=TqKdq_qk5f=Ltw6VOiK71JOA26Nsu3CMhgb_z7jYdgw@mail.gmail.com>
Message-ID: <CAF+kE=TqKdq_qk5f=Ltw6VOiK71JOA26Nsu3CMhgb_z7jYdgw@mail.gmail.com>
Subject: Re: Question regarding problems with JDBC persistence
To: users@activemq.apache.org
Content-Type: multipart/alternative; boundary="0000000000005cdac706259f9917"

--0000000000005cdac706259f9917
Content-Type: text/plain; charset="UTF-8"
Content-Transfer-Encoding: quoted-printable

> We do use indirect scheduled messages intensively since we have
redelivery-delay=3D1000, redelivery-multiplier=3D2, redelivery-attempts=3D9
settings for the majority of queues.

I assume you're referring to redelivery-delay-multiplier and
max-delivery-attempts here.

> We also use message-counter-history-day-limit=3D10 for all queues if that
is at all significant.

I don't think that is relevant here.

> We have not tried explicit compacting the journal yet...

I had a look through the JDBC code and I see now that compaction is a red
herring. The normal file-based journal is append-only which is why it
requires occasional compaction. However, JDBC is not append-only. Records
are removed during normal processing, including the
set-scheduled-delivery-time records that are accumulating in your database.
I tested this with both 2.16.0 and 2.38.0 (i.e. the latest) and I didn't
see any accumulation. As soon as the message associated with the
set-scheduled-delivery-time records was acknowledged all those records were
cleaned up.

In any case, I don't believe that WildFly even supports the "data compact"
command so it would almost certainly be a head-ache to execute it.

To be clear, I typically only recommend folks use the embedded broker in
WildFly for the most trivial use-cases. As soon as complexity increases
it's usually good to have a standalone broker which can be managed (e.g.
upgraded, restarted, etc.) separately.

> I was under the impression that Artemis also compacts the journal during
startup.

Despite the fact that compaction doesn't appear to be related here I just
wanted to say that I don't believe the broker always compacts the journal
at startup. What gave you that impression?

Ultimately I'm not sure what's going on here. I'd need to be able to
reproduce the problem myself for further investigation. Do you have a way
to reproduce this problem?

Justin

On Tue, Oct 29, 2024 at 8:05=E2=80=AFAM Bisil <bisil@idfix.nl> wrote:

> Hi Justin,
>
> Thanks again for your valuable insights.
>
> We do use indirect scheduled messages intensively since we have
> redelivery-delay=3D1000, redelivery-multiplier=3D2, redelivery-attempts=
=3D9
> settings for the majority of queues. We also use
> message-counter-history-day-limit=3D10 for all queues if that is at all
> significant.
>
> We have not tried explicit compacting the journal yet and since the
> AMQ-related tables on production environments that ran into this
> situation were truncated to get things back up we can not do this right
> now.
> I was under the impression that Artemis also compacts the journal during
> startup. If that is true could we not simply try restarting the Wildfly
> server if we see large journal volumes to check if that makes a
> difference, or is that not the same? If so, could you elaborate a bit
> since I know how to stop/start the broker from the JBoss CLI but have no
> knowledge about an explicit journal compaction command.
>
> We use JDBC persistence for a couple of reasons. Having the journal
> inside the database makes it easier for us to keep things in sync with
> backups/restores which we also use heavily for trouble shooting. In
> addition to that using file based persistence comes with additional
> costs in our cloud environments.
>
> Silvio
>
>
> On 28-10-2024 15:04, Justin Bertram wrote:
> > Based on the information you provided I can say that the problem isn't
> what
> > I originally expected. Here's how the data breaks down per record type:
> >
> > - Add (11)
> > - Set scheduled delivery time (36): 376,143,458
> > - Update delivery count (34): 290,102
> > - Add Transactional (13)
> > - Add message (45): 63,893
> > - Update Transactional (14)
> > - Add reference (32) 63,893
> > - Acknowledge reference (33) 2
> > - Prepare (17): 228
> > - Commit (18): 22,941
> >
> > So it looks like you're using a lot of scheduled messages, either
> directly
> > or indirectly (e.g. via redelivery delay), and the records related to t=
he
> > delivery schedule are accumulating. If you stop the broker and run the
> > "journal compact" command does the number of records in the database
> drop?
> >
> > Out of curiosity, is there a specific reason you're using JDBC vs. the
> > traditional file-based journal on local disk?
> >
> >
> > Justin
> >
> >

./CAF+kE_RVFV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QtkOtU86Ag@mail.gmail.com.mbx.txt
Tue Nov 12 15:15:09 2024 14

--00000000000005cdac706259f9917--

From mboxrd@z Thu Jan 1 00:00:00 1970

Return-Path: <users-return-57595-archive-asf-public=cust-asf.ponee.io@activemq.apache.org>

X-Original-To: archive-asf-public@cust-asf.ponee.io

Delivered-To: archive-asf-public@cust-asf.ponee.io

Received: from mxout1-he-de.apache.org (mxout1-he-de.apache.org [95.216.194.37])

by mx-eu-03.ponee.io (Postfix) with ESMTPS id 93D5D3F486

for <archive-asf-public@cust-asf.ponee.io>; Thu, 31 Oct 2024 10:00:59 +0000 (UTC)

Received: from mail.apache.org (mailgw-he-de.apache.org [IPv6:2a01:4f8:c2c:d4aa::1])

(using TLSv1.3 with cipher TLS_AES_256_GCM_SHA384 (256/256 bits)

key-exchange X25519 server-signature RSA-PSS (4096 bits) server-digest SHA256)

(No client certificate requested)

by mxout1-he-de.apache.org (ASF Mail Server at mxout1-he-de.apache.org) with ESMTPS id 5B075665E3

for <archive-asf-public@cust-asf.ponee.io>; Thu, 31 Oct 2024 09:59:53 +0000 (UTC)

Received: (qmail 1168215 invoked by uid 998); 31 Oct 2024 09:59:52 -0000

Mailing-List: contact users-help@activemq.apache.org; run by ezmlm

Precedence: bulk

List-Help: <mailto:users-help@activemq.apache.org>

List-Unsubscribe: <mailto:users-unsubscribe@activemq.apache.org>

List-Post: <mailto:users@activemq.apache.org>

List-Id: <users.activemq.apache.org>

Reply-To: users@activemq.apache.org

Delivered-To: mailing list users@activemq.apache.org

Received: (qmail 1168190 invoked by uid 116); 31 Oct 2024 09:59:51 -0000

Received: from spamproc1-he-fi.apache.org (HELO spamproc1-he-fi.apache.org) (95.217.134.168)

by apache.org (qpsmtpd/0.94) with ESMTP; Thu, 31 Oct 2024 09:59:51 +0000

Authentication-Results: apache.org; auth=none

Received: from localhost (localhost [127.0.0.1])

by spamproc1-he-fi.apache.org (ASF Mail Server at spamproc1-he-fi.apache.org) with ESMTP id 3F155C2389

for <users@activemq.apache.org>; Thu, 31 Oct 2024 09:59:51 +0000 (UTC)

X-Virus-Scanned: Debian amavisd-new at spamproc1-he-fi.apache.org

X-Spam-Flag: NO

X-Spam-Score: -0.905

X-Spam-Level:

X-Spam-Status: No, score=-0.905 tagged_above=-999 required=6.31

tests=[DKIM_SIGNED=0.1, DKIM_VALID=-0.1, DKIM_VALID_AU=-0.1,

DKIM_VALID_EF=-0.1, HTML_MESSAGE=0.2, RCVD_IN_MSPIKE_H2=-0.906,

RCVD_IN_VALIDITY_RPBL_BLOCKED=0.001,

RCVD_IN_VALIDITY_SAFE_BLOCKED=0.001, SPF_PASS=-0.001]

autolearn=disabled

Authentication-Results: spamproc1-he-fi.apache.org (amavisd-new);

dkim=pass (2048-bit key) header.d=gmail.com

Received: from mx1-ec2-va.apache.org ([116.203.227.195])

by localhost (spamproc1-he-fi.apache.org [95.217.134.168]) (amavisd-new, port 10024)

with ESMTP id jRgJlYpQupso for <users@activemq.apache.org>;

Thu, 31 Oct 2024 09:59:50 +0000 (UTC)

Received-SPF: Pass (mailfrom) identity=mailfrom; client-ip=209.85.208.52; helo=mail-ed1-f52.google.com; envelope-from=clebert.suconic@gmail.com; receiver=<UNKNOWN>

Received: from mail-ed1-f52.google.com (mail-ed1-f52.google.com [209.85.208.52])

by mx1-ec2-va.apache.org (ASF Mail Server at mx1-ec2-va.apache.org) with ESMTPS id C1A6EBFE03

for <users@activemq.apache.org>; Thu, 31 Oct 2024 09:59:49 +0000 (UTC)

Received: by mail-ed1-f52.google.com with SMTP id 4fb4d7f45d1cf-5c937b5169csol208268a12.1

for <users@activemq.apache.org>; Thu, 31 Oct 2024 02:59:49 -0700 (PDT)

./CAF+kE_RVfV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QTkOtU86Ag@mail.gmail.com.mbx.txt
Tue Nov 12 15:15:09 2024 15

DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed;
d=gmail.com; s=20230601; t=1730368783; x=1730973583; darn=activemq.apache.org;
h=to:subject:message-id:date:from:in-reply-to:references:mime-version
:from:to:cc:subject:date:message-id:reply-to;
bh=KcSwPGN7xS+KSkhlcl2KUokQg9pqxwKtZgOU+3nE0XU=;
b=a/ilLXMkhvMSNyg9E2Ma4ew0Mk4bwhoFcS1KNSIOMekJJru+QdJiUxv7zMj6nFqmj
d/zfq4LgA+0ZHV56dS5AR3IVc/jbfhGhBGYi08JFaR1KfliNAPdDbNYiq7mC/XfCKBTv
SM8ldGLL70+e4VN6Ss2MhYt5q2zKA4Cjv6vEg0LNjWffm3QX4J4VZpTF5xXUiblpdmdS
M08E4bV3LJZoVuUor5LjjzrCjzOBjRVSBeBx+RhnGBcxQYSprcRy0cZUTfuzsRPa5Y7s
c7AYQ3mLGMsH6DdjstgaOjXHCEwLWjwIolaioFCFT1KlMPfOjYpozTpXBiHmlGUcBOG
lQlg==

X-Google-DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed;
d=le100.net; s=20230601; t=1730368783; x=1730973583;
h=to:subject:message-id:date:from:in-reply-to:references:mime-version
:x-gm-message-state:from:to:cc:subject:date:message-id:reply-to;
bh=KcSwPGN7xS+KSkhlcl2KUokQg9pqxwKtZgOU+3nE0XU=;
b=rC8Hydc3ennyqIiGntrua38Il8GGSnBaCVkBYO/TU0B2NsAI17tzhvGQlg6t2pR/2
3GtLXa69pmwEJzjaHVMYl+vIHDBHVMHjBS1oGNqJpZWpno8njlitSHdaoz5td3Mn9yR3
gfgq8O7++zoYpXItyfZmiolD1BGEYw12pl/HCPWKxGrwmcfcCpQTSbjIaG07iQtqxZ/y+
nDn6bvolsHmb7XRSSAK2rpSlWZUkE4v35PycFFL217svKOp0uUml1LLZ2LyW7Oz/8Z
kheeeCzKDjOyt0eIFjT6l++x+hw1GC0JuavlvM+onZ7D8D7s9uMKa516reGFPAREdRf
DLcw==

X-Gm-Message-State: AOJu0YwrXpnMHCB08OeUmDVck+uRPOs/ak2H/+ylTYZBcyS815g/0Zy5
ga6Kh14ZmBdYWel/qdey965UD0kTD4pvjEMCCew+DPzTHRO+1B1iEQWcdGzd+dLmpqRj/9kOxMk
QUdbfRkSIkS13qTezAN231kx468sgxg==

X-Google-Smtp-Source: AGHT+IHHWehbxWGwGaYffH/EDCZ0TU4Fm3dDjAHTBrUIxnYiB4h7JdwPWrrKtQdC5
J2FU0mdSNqxW8IG2LvMgYJpgSA=

X-Received: by 2002:a05:6402:440e:b0:5cb:6715:3498 with SMTP id
4fb4d7f45d1cf-5ceabee80f2mr2243298a12.3.1730368781517; Thu, 31 Oct 2024
02:59:41 -0700 (PDT)

MIME-Version: 1.0

References: <5a6c796c-3717-4ef8-b850-f82f661d8da8@idfix.nl> <CAF+kE=RVfV2p1qBq-tfMJU7_g
5dZ+by9GeGVs1C7QTkOtU86Ag@mail.gmail.com>

In-Reply-To: <CAF+kE=RVfV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QTkOtU86Ag@mail.gmail.com>

From: Clebert Suconic <clebert.suconic@gmail.com>

Date: Thu, 31 Oct 2024 05:59:29 -0400

Message-ID: <CAKF+bspaGfFwx6bYGBdjZPu_2hZV9ejSVxneK2_nmfXcJ0CTKA@mail.gmail.com>

Subject: Re: Question regarding problems with JDBC persistence

To: users@activemq.apache.org

Content-Type: multipart/alternative; boundary="00000000000008d944f0625c2e0cb"

--00000000000008d944f0625c2e0cb

Content-Type: text/plain; charset="UTF-8"

Content-Transfer-Encoding: quoted-printable

I remember an old issue where rescheduling deliveries were updated over and over.

As of the latest version as far as I remember I only update it once.

If you have an infinite redelivery without DLQ you might get into that situation.

It would be difficult for me to find the exact JIRA now. But I will try to look for it and will post it here if I find it.

Clebert Suconic

On Wed, Oct 23, 2024 at 4:28=E2=80=AFPM Justin Bertram <jbertram@apache.org>
> wrote:

> This sounds similar to an issue involving duplicate IDs proliferating in

./CAF+kE_RVFV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QtkOtU86Ag@mail.gmail.com.mbx.txt
Tue Nov 12 15:15:09 2024 16

> the journal. I can't find the specific Jira at the moment, but the issue
> was something like a huge build-up of duplicate ID records. Can you inspe=
ct
> the "userRecordType" for the offending rows?
>
> Also, how are you sending your message exactly? Do you need duplicate
> detection?
>
> Lastly, 2.16.0 is quite old at this point. There's been improvements to
> JDBC since then which you'd almost certainly benefit from (not to mention
> all the other bug-fixes and features). Are you open to upgrading?
>
>
> Justin
>
> On Wed, Oct 23, 2024 at 4:32=E2=80=AFAM Bisil <bisil@idfix.nl> wrote:
>
> > Hello,
> >
> > Inside Wildfly 23.0.0 we are running ActiveMQ Artemis Message Broker
> > 2.16.0 with JDBC persistence on SQLServer for ~25 message queues. In
> > some production environments we have moderate-to-high message volumes
> > and since processing can be relatively slow temporary message pileup is
> > not uncommon.
> >
> > In one particular environment we are experiencing OutOfMemory issues
> > during startup. There are about 60K messages in 2 of the queues while
> > the message table contains over 350M records causing memory exhaustion
> > during startup. Running in a controlled environment with ~60G heap
> > startup succeeds and through JProfiler we observe that all message tabl=
e
> > records are selected and appear to be collected in memory. After that
> > they are processed and discarded dropping memory usage down to a
> > fraction of its peak. Using the JBoss CLI to inspect the queues then
> > shows we have indeed 60K messages in 2 queues.
> >
> > Inspecting the contents of the message table we see limited counts of
> > record types 13 (ADD_RECORD_TX) and 14 (UPDATE_RECORD_TX) roughly
> > equivalent to the 60K message count. All remaining records are type 11
> > (ADD_RECORD).
> >
> > When we removed all type 11 records restart was fast with limited memor=
y
> > load and we still see 60K messages in the 2 queues.
> >
> > In the past we have observed similar numbers and startup problems in
> > other environments which lead us to truncate the AMQ persistence tables
> > to be able to restart the server without an OutOfMemoryException. But w=
e
> > are looking for a way to prevent this situation from happening.
> >
> > So my questions are:
> >
> > - Is the large record count in the message table expected behavior?
> >
> > - Is there anything we can/should do to limit the number of records in
> > the message table?
> >
> > - Is removing all type 11 records a valid workaround? If no, what would
> > be the side-effect?
> >
> > Thanks for your help!
> >

./CAF+kE_RVFV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QkOtU86Ag@mail.gmail.com.mbx.txt
Tue Nov 12 15:15:09 2024 17

> > Silvio
> >
>

--00000000000008d944f0625c2e0cb--
From mboxrd@z Thu Jan 1 00:00:00 1970
Return-Path: <users-return-57566-archive-asf-public=cust-asf.ponee.io@activemq.apache.org>
X-Original-To: archive-asf-public@cust-asf.ponee.io
Delivered-To: archive-asf-public@cust-asf.ponee.io
Received: from mxout1-ec2-va.apache.org (mxout1-ec2-va.apache.org [3.227.148.255])
by mx-eu-03.ponee.io (Postfix) with ESMTPS id B83013E680
for <archive-asf-public@cust-asf.ponee.io>; Wed, 23 Oct 2024 09:32:10 +0000 (UTC)
C)
Received: from mail.apache.org (mailgw-he-de.apache.org [116.203.246.181])
(using TLSv1.3 with cipher TLS_AES_256_GCM_SHA384 (256/256 bits))
(No client certificate requested)
by mxout1-ec2-va.apache.org (ASF Mail Server at mxout1-ec2-va.apache.org) with
ESMTPS id C565D4D131
for <archive-asf-public@cust-asf.ponee.io>; Wed, 23 Oct 2024 09:32:09 +0000 (UTC)
C)
Received: (qmail 2503298 invoked by uid 998); 23 Oct 2024 09:32:08 -0000
Mailing-List: contact users-help@activemq.apache.org; run by ezmlm
Precedence: bulk
List-Help: <mailto:users-help@activemq.apache.org>
List-Unsubscribe: <mailto:users-unsubscribe@activemq.apache.org>
List-Post: <mailto:users@activemq.apache.org>
List-Id: <users.activemq.apache.org>
Reply-To: users@activemq.apache.org
Delivered-To: mailing list users@activemq.apache.org
Received: (qmail 2503214 invoked by uid 116); 23 Oct 2024 09:32:06 -0000
Received: from spamproc1-he-fi.apache.org (HELO spamproc1-he-fi.apache.org) (95.217.134.168)
by apache.org (qpsmtpd/0.94) with ESMTTP; Wed, 23 Oct 2024 09:32:06 +0000
Authentication-Results: apache.org; auth=none
Received: from localhost (localhost [127.0.0.1])
by spamproc1-he-fi.apache.org (ASF Mail Server at spamproc1-he-fi.apache.org) with
ESMTTP id C0CA9C22DC
for <users@activemq.apache.org>; Wed, 23 Oct 2024 09:32:06 +0000 (UTC)
X-Virus-Scanned: Debian amavisd-new at spamproc1-he-fi.apache.org
X-Spam-Flag: NO
X-Spam-Score: 0.201
X-Spam-Level:
X-Spam-Status: No, score=0.201 tagged_above=-999 required=6.31
tests=[HTML_MESSAGE=0.2, RCVD_IN_VALIDITY_RPBL_BLOCKED=0.001,
RCVD_IN_VALIDITY_SAFE_BLOCKED=0.001, SPF_PASS=-0.001]
autolearn=disabled
Received: from mx1-he-de.apache.org ([116.203.227.195])
by localhost (spamproc1-he-fi.apache.org [95.217.134.168]) (amavisd-new, port 10024)
with ESMTTP id GXsZ79VwHanl for <users@activemq.apache.org>;
Wed, 23 Oct 2024 09:32:05 +0000 (UTC)
Received-SPF: Pass (mailfrom) identity=mailfrom; client-ip=136.144.238.65; helo=jambo4.jambo-mobile.com; envelope-from=bisil@idfix.nl; receiver=<UNKNOWN>
Received: from jambo4.jambo-mobile.com (jambo4.jambo-mobile.com [136.144.238.65])
by mx1-he-de.apache.org (ASF Mail Server at mx1-he-de.apache.org) with ESMTPS id
D01DF816C9
for <users@activemq.apache.org>; Wed, 23 Oct 2024 09:32:05 +0000 (UTC)
Received: from [192.168.1.106] (86-95-102-82.fixed.kpn.net [86.95.102.82])
(using TLSv1.3 with cipher TLS_AES_128_GCM_SHA256 (128/128 bits)
key-exchange X25519 server-signature RSA-PSS (2048 bits) server-digest SHA256)
(No client certificate requested)
by jambo4.jambo-mobile.com (Postfix) with ESMTPSA id 260926C0152

./CAF+kE_RVFV2p1qBq-tfMJU7_g5dZ+by9GeGVs1C7QTKOtU86Ag@mail.gmail.com.mbx.txt
Tue Nov 12 15:15:09 2024 18

for <users@activemq.apache.org>; Wed, 23 Oct 2024 11:32:05 +0200 (CEST)
Content-Type: multipart/alternative;
boundary="-----YzUlPTE15gNZ2DCWOWswCX0F"
Message-ID: <5a6c796c-3717-4ef8-b850-f82f661d8da8@idfix.nl>
Date: Wed, 23 Oct 2024 11:32:04 +0200
MIME-Version: 1.0
User-Agent: Mozilla Thunderbird
To: "users@activemq.apache.org" <users@activemq.apache.org>
Content-Language: en-US
From: Bisil <bisil@idfix.nl>
Subject: Question regarding problems with JDBC persistence

-----YzUlPTE15gNZ2DCWOWswCX0F
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: 7bit

Hello,

Inside Wildfly 23.0.0 we are running ActiveMQ Artemis Message Broker 2.16.0 with JDBC persistence on SQLServer for ~25 message queues. In some production environments we have moderate-to-high message volumes and since processing can be relatively slow temporary message pileup is not uncommon.

In one particular environment we are experiencing OutOfMemory issues during startup. There are about 60K messages in 2 of the queues while the message table contains over 350M records causing memory exhaustion during startup. Running in a controlled environment with ~60G heap startup succeeds and through JProfiler we observe that all message table records are selected and appear to be collected in memory. After that they are processed and discarded dropping memory usage down to a fraction of its peak. Using the JBoss CLI to inspect the queues then shows we have indeed 60K messages in 2 queues.

Inspecting the contents of the message table we see limited counts of record types 13 (ADD_RECORD_TX) and 14 (UPDATE_RECORD_TX) roughly equivalent to the 60K message count. All remaining records are type 11 (ADD_RECORD).

When we removed all type 11 records restart was fast with limited memory load and we still see 60K messages in the 2 queues.

In the past we have observed similar numbers and startup problems in other environments which lead us to truncate the AMQ persistence tables to be able to restart the server without an OutOfMemoryException. But we are looking for a way to prevent this situation from happening.

So my questions are:

- Is the large record count in the message table expected behavior?
- Is there anything we can/should do to limit the number of records in the message table?
- Is removing all type 11 records a valid workaround? If no, what would be the side-effect?

Thanks for your help!

Silvio

-----YzUlPTE15gNZ2DCWOWswCX0F--