

# Table of Contents

<b>Tomcat catalina.out.....</b>	<b>1</b>
Error.....	1
Warning or SEVERE or Failed.....	2
Normal operation messages.....	2
Explanation of message components.....	3

# Tomcat catalina.out

The `catalina.out` log records events and conditions that affect Tomcat's operation. The fields in this log are as follows:

- Application or resource that produced this log entry
- Timestamp of entry
- Tag for related entries -- Entries from the same operation will share the same tag
- Message detail

The following provides interpretations of some of the messages in the log.

## Error

### 1. Error while processing payload 0

1. `ORA-00904: invalid identifier`: This generally means a user error trying to read something that doesn't exist, nothing for operators to worry about.

```
FrontierProd 11/17/09 09:49:59.120 CET +0100 id=169212 Error while processing payload
java.lang.Exception: While querying "CMS_COND_21X_ALIGNMENT"."POOL_OR_MAPPING_ELEMENT"
    at oracle.jdbc.driver.DatabaseError.throwSQLException(DatabaseError.java:145)
    at oracle.jdbc.driver.T4CTTIoer.processError(T4CTTIoer.java:331)
```

2. `ClientAbortException`: This means the client dropped the connection, also a pretty common occurrence and nothing to worry about, most likely the client timed out. The cause for the timeout might be a problem but the abort exception isn't.

```
FrontierProd 10/30/09 05:46:49.925 CET +0100 id=9316185 Error while processing payload
ClientAbortException: java.net.SocketException: Broken pipe
    at org.apache.catalina.connector.OutputBuffer.realWriteBytes(OutputBuffer.java:450)
```

3. `ORA-00942: table or view does not exist`: This is also a user error, asking for a table that doesn't exist, usually nothing for operators to be concerned about

```
FrontierInt 11/09/09 17:04:25.121 CET +0100 id=793335 Error while processing payload
java.lang.Exception: While querying "CMS_COND_30X_HCAL"."POOL_OR_CLASS_VERSIONS": ORA-00942:
    at oracle.jdbc.driver.DatabaseError.throwSQLException(DatabaseError.java:145)
    at oracle.jdbc.driver.T4CTTIoer.processError(T4CTTIoer.java:331)
```

### 2. Error getting last-modified time | table not found in

- `CMS_FRONTIER_MODS.LAST_MODIFIED`: This usually means that the schema/username doesn't exist yet. Usually nothing for operators to worry about unless a user asks what it means.

```
FrontierInt 11/06/09 09:27:16.950 CET +0100 id=674587 Error getting last-modified time:
java.lang.Exception: CMS_COND_31X_GLOBALTAG.ALL_TABLES not found in CMS_FRONTIER_MODS.LAST_MODIFIED
    at gov.fnal.frontier.SQLTimes.getLastModified(SQLTimes.java:87)
```

### 3. Error initializing Frontier object

1. `X-frontier-id header missing`: Real frontier clients always insert `X-frontier-id` http header, so this means someone is using `wget` or something like that without adding that header. Operators don't need to be concerned unless there's a lot of them or a user asks what it means.

```
FrontierProd 10/20/09 23:00:54.513 CEST +0200 id=571056 servlet_version:3.18 start time:1258656000
FrontierProd 10/20/09 23:00:54.513 CEST +0200 id=571056 Error initializing Frontier object
java.lang.Exception: X-frontier-id header missing
    at gov.fnal.frontier.Frontier.logClientDesc(Frontier.java:260)
```

2. `no query`: This also means a user is not using a real frontier client, although they did know enough to put in `X-frontier-id`.

```
dwdtest 11/12/09 03:00:00.371 CET +0100 id=1 Error initializing Frontier object:
```

## DebugCatalinaOut < Frontier < TWiki

```
java.lang.Exception: no query
    at gov.fnal.frontier.Frontier.logClientDesc(Frontier.java:230)
```

4. Error acquiring database: **That's a database configuration error, ask DB Administrators.**

```
FrontierPrep 11/10/09 00:56:01.027 CET +0100 id=98557 Error acquiring database:
java.sql.SQLException: ORA-00257: archiver error. Connect internal only, until freed.
    at oracle.jdbc.driver.DatabaseError.throwSQLException(DatabaseError.java:145)
```

## Warning or SEVERE or Failed

1. DB acquire keepalive giving up: **This means that it took too long (typically more than 5 minutes) to acquire a connection. There can be a lot of different reasons, requires log analysis to find out the root cause.**

```
FrontierProd 11/11/09 20:41:34.170 CET +0100 id=906036-ka DB acquire sent keepalive 60
FrontierProd 11/11/09 20:41:34.170 CET +0100 id=906036-ka DB acquire keepalive giving up
```

2. SEVERE: **That means the server was too busy. Requires log analysis to find out the root cause.**

```
FrontierProd 11/11/09 20:41:37.451 CET +0100 id=906200-ka DB acquire sent keepalive 5
Nov 11, 2009 8:41:37 PM org.apache.tomcat.util.threads.ThreadPool logFull
SEVERE: All threads (150) are currently busy, waiting. Increase maxThreads (150) or check
FrontierProd 11/11/09 20:41:37.582 CET +0100 id=906109-ka DB acquire sent keepalive 51
```

3. Failed: **As long as tomcat has indeed stopped, it doesn't really matter.**

```
Nov 11, 2009 9:20:11 PM org.apache.catalina.core.AprLifecycleListener lifecycleEvent
INFO: Failed shutdown of Apache Portable Runtime
Nov 11, 2009 9:20:24 PM org.apache.catalina.core.AprLifecycleListener lifecycleEvent
```

4. Request for a non-existent file. **Missing file prevents checking if-modified-since time.**

```
smallfiles 07/31/22 05:52:30.869 CEST +0200 id=84 servlet_version:3.41 start threads:1 que
smallfiles 07/31/22 05:52:30.869 CEST +0200 id=84 if-modified-since: Sun, 24 Jul 2022 04:2
smallfiles 07/31/22 05:52:30.889 CEST +0200 id=84 Cannot read path /data/fileserve/smallfi
smallfiles 07/31/22 05:52:30.889 CEST +0200 id=84 Error getting cached last-modified time:
java.lang.Exception: Cannot read file slc6_amd64_gcc472/13TeV/madgraph/V5_2.2.1/dyelle101
smallfiles 07/31/22 05:52:30.889 CEST +0200 id=84 stop threads=1 msec=20
```

## Normal operation messages

1. Successful initialization of data source

```
not_set 06/14/22 18:27:11.433 CEST +0200 FrontierInit Initializing Frontier servlet version
Frontier 06/14/22 18:27:11.444 CEST +0200 FrontierInit max threads: 100
Frontier 06/14/22 18:27:11.444 CEST +0200 FrontierInit send stale if error: true
Frontier 06/14/22 18:27:11.444 CEST +0200 FrontierInit validate last-modified secs: 300
Frontier 06/14/22 18:27:11.444 CEST +0200 FrontierInit last-modified table name: CMS_FRONT
Frontier 06/14/22 18:27:11.444 CEST +0200 FrontierInit long hour: null, long secs: 21000
Frontier 06/14/22 18:27:11.444 CEST +0200 FrontierInit short hour: null, short secs: 21000
```

2. Successful query that reads from cache that is up-to-date.

```
PromptProd 08/11/22 00:02:00.348 CEST +0200 id=106754713 servlet_version:3.41 start thread
PromptProd 08/11/22 00:02:00.348 CEST +0200 id=106754713 if-modified-since: Wed, 10 Aug 20
PromptProd 08/11/22 00:02:00.348 CEST +0200 id=106754713 SQL [SELECT "TAG"."TIME_TYPE", "T
PromptProd 08/11/22 00:02:00.348 CEST +0200 id=106754713 using cached last-modified time o
PromptProd 08/11/22 00:02:00.348 CEST +0200 id=106754713 not modified (cached)
PromptProd 08/11/22 00:02:00.348 CEST +0200 id=106754713 stop threads=1 msec=0
```

3. Successful query to DB that is needed because cache was out-of-date.

```
FrontierProd 08/11/22 00:01:50.355 CEST +0200 id=277836590 servlet_version:3.41 start thre
FrontierProd 08/11/22 00:01:50.355 CEST +0200 id=277836590 if-modified-since: Wed, 10 Aug
FrontierProd 08/11/22 00:01:50.355 CEST +0200 id=277836590 SQL [SELECT DISTINCT MIN("IOV".
```

## DebugCatalinaOut < Frontier < TWiki

```
FrontierProd 08/11/22 00:01:50.355 CEST +0200 id=277836590 using cached last-modified time
FrontierProd 08/11/22 00:01:50.355 CEST +0200 id=277836590 modified at time: Wed, 10 Aug 2022
FrontierProd 08/11/22 00:01:50.355 CEST +0200 id=277836590 Acquiring DB connection lock
FrontierProd 08/11/22 00:01:50.355 CEST +0200 id=277836590 Acquiring DB connection
FrontierProd 08/11/22 00:01:50.477 CEST +0200 id=277836590 DB connection acquired active=1
FrontierProd 08/11/22 00:01:50.477 CEST +0200 id=277836590 Executing DB query
FrontierProd 08/11/22 00:01:50.478 CEST +0200 id=277836590 DB query finished msec=1
FrontierProd 08/11/22 00:01:50.478 CEST +0200 id=277836590 DB data transferred msec=0
FrontierProd 08/11/22 00:01:50.478 CEST +0200 id=277836590 rows=1, full size=42
FrontierProd 08/11/22 00:01:50.478 CEST +0200 id=277836590 DB connection released remaining=0
FrontierProd 08/11/22 00:01:50.478 CEST +0200 id=277836590 stop threads=2 msec=1152
```

### 4. Successful query that has to fetch last-modified time and finds up-to-date cache it can use.

```
PromptProd 08/13/22 00:05:51.812 CEST +0200 id=28764001 servlet_version:3.41 start threads=1
PromptProd 08/13/22 00:05:51.812 CEST +0200 id=28764001 if-modified-since: Fri, 12 Aug 2022
PromptProd 08/13/22 00:05:51.812 CEST +0200 id=28764001 SQL [SELECT "TAG"."TIME_TYPE", "TAG"."TAG_NAME"
PromptProd 08/13/22 00:05:51.812 CEST +0200 id=28764001 Acquiring DB connection lock
PromptProd 08/13/22 00:05:51.812 CEST +0200 id=28764001 Acquiring DB connection
PromptProd 08/13/22 00:05:51.812 CEST +0200 id=28764001 DB connection acquired active=1 msec=1
PromptProd 08/13/22 00:05:51.812 CEST +0200 id=28764001 getting last-modified time of CMS_CONDITIONS
PromptProd 08/13/22 00:05:51.814 CEST +0200 id=28764001 not modified
PromptProd 08/13/22 00:05:51.814 CEST +0200 id=28764001 DB connection released remaining=0
PromptProd 08/13/22 00:05:51.814 CEST +0200 id=28764001 stop threads=1 msec=2
```

### 5. Successful query that has to fetch last-modified time and finds cache out-of-date so it has to query the DB.

```
FrontierProd 08/13/22 00:01:41.023 CEST +0200 id=59902125 servlet_version:3.41 start threads=1
FrontierProd 08/13/22 00:01:41.023 CEST +0200 id=59902125 SQL [SELECT "PAYLOAD"."DATA", "PAYLOAD"."TAG_NAME"
FrontierProd 08/13/22 00:01:41.023 CEST +0200 id=59902125 Acquiring DB connection lock
FrontierProd 08/13/22 00:01:41.023 CEST +0200 id=59902125 Acquiring DB connection
FrontierProd 08/13/22 00:01:41.024 CEST +0200 id=59902125 DB connection acquired active=1 msec=1
FrontierProd 08/13/22 00:01:41.024 CEST +0200 id=59902125 getting last-modified time of CMS_CONDITIONS
FrontierProd 08/13/22 00:01:41.026 CEST +0200 id=59902125 last-modified time: Fri, 12 Aug 2022
FrontierProd 08/13/22 00:01:41.026 CEST +0200 id=59902125 Executing DB query
FrontierProd 08/13/22 00:01:41.027 CEST +0200 id=59902125 DB query finished msec=1
FrontierProd 08/13/22 00:01:41.027 CEST +0200 id=59902125 DB data transferred msec=0
FrontierProd 08/13/22 00:01:41.027 CEST +0200 id=59902125 rows=1, full size=455
FrontierProd 08/13/22 00:01:41.027 CEST +0200 id=59902125 DB connection released remaining=0
FrontierProd 08/13/22 00:01:41.027 CEST +0200 id=59902125 stop threads=1 msec=4
```

### 6. Query that returns no rows. It is up to the user to interpret the result.

```
PromptProd 08/12/22 00:05:02.103 CEST +0200 id=107308651 servlet_version:3.41 start threads=1
PromptProd 08/12/22 00:05:02.103 CEST +0200 id=107308651 if-modified-since: Thu, 11 Aug 2022
PromptProd 08/12/22 00:05:02.103 CEST +0200 id=107308651 SQL [SELECT "cms_conditions_PAYLOAD"."TAG_NAME"
FROM (SELECT cms_conditions."PAYLOAD".hash AS "cms_conditions_PAYLOAD_h_1"
FROM cms_conditions."PAYLOAD"
WHERE cms_conditions."PAYLOAD".hash LIKE ?)
WHERE ROWNUM <= ? :ecaldcstowerstatus_online%:2]
PromptProd 08/12/22 00:05:02.103 CEST +0200 id=107308651 Acquiring DB connection lock
PromptProd 08/12/22 00:05:02.103 CEST +0200 id=107308651 Acquiring DB connection
PromptProd 08/12/22 00:05:02.103 CEST +0200 id=107308651 DB connection acquired active=1 msec=1
PromptProd 08/12/22 00:05:02.103 CEST +0200 id=107308651 Executing DB query
PromptProd 08/12/22 00:05:02.104 CEST +0200 id=107308651 DB query finished msec=1
PromptProd 08/12/22 00:05:02.104 CEST +0200 id=107308651 DB data transferred msec=0
PromptProd 08/12/22 00:05:02.104 CEST +0200 id=107308651 rows=0, full size=41
PromptProd 08/12/22 00:05:02.104 CEST +0200 id=107308651 empty response, setting max age a
PromptProd 08/12/22 00:05:02.104 CEST +0200 id=107308651 DB connection released remaining=0
PromptProd 08/12/22 00:05:02.104 CEST +0200 id=107308651 stop threads=1 msec=1
```

## Explanation of message components

The "start" message for a request, that begins with `servlet_version` has its most useful information in these three sections:

1. `frontier-id`, which is composed of several fields:
  1. CMSSW version or WMAgent ID string
  2. Frontier client API version number
  3. Frontier process ID
  4. User ID, both string and number, for request
  5. Distinguished Name of user or user name string
2. `via` is a standard HTTP header that shows protocol and proxy information in a comma-separated list, with each element of the list having this format:
  1. Protocol version number
  2. Public proxy URL and port number
  3. Frontier-Squid version string for proxy
3. `x-forwarded-for` is a standard HTTP header that shows the IP addresses of:
  1. The client
  2. First proxy
  3. Second or final proxy, if any

Explanation of some non-intuitive fields:

1. `threads`: The number of servlet threads performing parallel requests at that time
2. `active`: The current number of active parallel DB connections when connection acquired
3. `remaining`: The remaining number of active parallel DB connections when a connection finishes
4. `DB connection acquired_msecs`: The number of milliseconds it took to acquire the DB connection lock and DB connection
5. `DB query finished_msecs`: The number of milliseconds it took to execute the DB query
6. `DB data transferred_msecs`: The number of milliseconds it took to transfer query data after execution
7. `rows`: The number of database rows returned from the query
8. `full_size`: The number of uncompressed bytes returned from the query
9. `stop_msecs`: The total number of milliseconds that the request took

-- CarlVuosalo - 2022-08-10

---

This topic: Frontier > DebugCatalinaOut

Topic revision: r8 - 2022-08-16 - DaveDykstra



Copyright &© 2008-2022 by the contributing authors. All material on this collaboration platform is the property of the contributing authors.

or Ideas, requests, problems regarding TWiki? use Discourse or Send feedback