



 Android Public Tracker

243257372




   When the domain name of private DNS ends with ".local", the conversion to the IP address fails in some Android OS version.


+1

8

Hotlists (5)

Mark as Duplicate





Comments (11)

Dependencies

Duplicates (0)

Blocking (0)

Resources (9)

Obsolete


Bug

P3

+ Add Hotlist


[AOSP] assigned

adexe s nau

 STATUS UPDATE

No update yet.

Edit

 DESCRIPTION

ci...@gmail.com created issue [#1](#)

Due to the continuing issue reported in Issue ID 238922568, we are republishing this with additional answers to your questions.

- Steps to reproduce the problem (including sample code if appropriate).
1. Configure a network environment that includes private DNS that ends the domain name with ".local".
  2. Set the host name of the device(PC, printer, etc.) to communicate with.
  3. Communicate from the Android device to the device in 2. using the DNS name.
- \* We tried to communicate with using getaddrinfo().
- [https://linuxjm.osdn.jp/html/LDP\\_man-pages/man3/getaddrinfo.3.html](https://linuxjm.osdn.jp/html/LDP_man-pages/man3/getaddrinfo.3.html)

- What happened.
- EAI\_NODATA (the specified network host exists, but no network address is defined) is returned as the result of getaddrinfo().

- What you think the correct behavior should be.
- 0(success) is returned as a result of getaddrinfo().

- Is this a security related issue? Yes/No
- Yes

- devices the problem appears on (model and Android OS version).
- (OS that is expected to work)
- Android 11 + Security Update 2021/10/1
- Android 11 + Security Update 2021/10/1
- Android 12 + Security Update 2021/11/5
- Android 13 Beta3.3 + Security Update 2022/6/5

- (OS that does not work as expected)
- Android 12 + Security Update 2022/3/5
- Android 12 + Security Update 2022/4/5
- Android 12 + Security Update 2022/7/5
- Android 13 DP1 + Security Update 2022/3/5

- Please also run "adb bugreport" and archive the output.
- We have attached the one obtained by reproducing the phenomenon on an Android 12 device.
- [https://drive.google.com/drive/folders/1TBBL3iqZcQ6\\_yDs64NaUzyKRkKhV8RtH?usp=sharing](https://drive.google.com/drive/folders/1TBBL3iqZcQ6_yDs64NaUzyKRkKhV8RtH?usp=sharing)

When communicating with the device, it is easy to assume an environment where the domain name of the private DNS ends in ".local".

In fact, the following inquiries to the Issue Tracker and Help page have occurred.

<https://support.google.com/pixelphone/thread/139593141/local-dns-resolution-suddenly-stopped-working?hl=en>


<https://issuetracker.google.com/issues/36916949>


<https://issuetracker.google.com/issues/140786115>

On the other hand, there is no clear answer about the permanent countermeasures for the problem, and the behavior of the phenomenon mentioned in this Issue Tracker has changed in Android

- Based on the above, please answer the following questions.
1. Did Android 13 Beta3.3 make a deliberate fix to this issue?
  2. If 1. is Yes, will the modification of 1. be applied to OS less than Android 13 by security update or something?
  3. If 1. is No, please consider how to deal with this problem.

- note
- When using Chrome on an Android 12 device + Security Update 2022/3/5 that reproduces the phenomenon and trying to connect by the DNS name(<http://hostname.aaa.bbb.ccc.ddd.local/>), the
- \* The connection will be successful on an Android device that does not reproduce the phenomenon.

 Mentioned issues (2)

 Links (5)

 Mentioned issues (2)

- P3 Not recognizing hostnames on local domain ["https://issuetracker.google.com/36916949"](https://issuetracker.google.com/36916949)
- P3 Add .local mDNS resolving to Android ["https://issuetracker.google.com/140786115"](https://issuetracker.google.com/140786115)

 Links (5)

- " [https://linuxjm.osdn.jp/html/LDP\\_man-pages/man3/getadd...](https://linuxjm.osdn.jp/html/LDP_man-pages/man3/getadd...)
- "[https://drive.google.com/drive/folders/1TBBL3iqZcQ6\\_yDs64NaUzyKRkKh...](https://drive.google.com/drive/folders/1TBBL3iqZcQ6_yDs64NaUzyKRkKh...)"
- "<https://support.google.com/pixelphone/thread/139593141/local-dns-resolution-suddenly-...>"

"... Chrome on an Android 12 device + Security Update 2022/3/5 that reproduces the phenomenon and trying to connect by the DNS name( <http://hostname.aaa.bbb.ccc.ddd.local/> ), the error "DNS\_PI"  
"<https://drive.google.com/file/d/1ZX80j67SY2WEyizLVY1NTsQoNjv9d-Nl...> "

## COMMENTS



**ci...@gmail.com** <ci...@gmail.com> [#2](#)

We have uploaded a sample project (DnsSample.zip) to the link below, so please check it.  
[https://drive.google.com/drive/folders/1TBBL3iqZcQ6\\_yDs64NaUzyKRkKhV8RtH?usp=sharing](https://drive.google.com/drive/folders/1TBBL3iqZcQ6_yDs64NaUzyKRkKhV8RtH?usp=sharing)

Follow the procedure below to check the operation.

1. Configure a network environment that includes private DNS that ends the domain name with ".local".
2. Set the host name of the device(PC, printer, etc.) to communicate with.
3. Change the plnAddress defined in dns-jni.c of the sample project to specify the device set in 2.
4. Build the project and install it on your Android device.
5. Press the button displayed on the launched screen.
6. The result of calling getaddrinfo () is displayed in Toast.

- What you think the correct behavior should be.

0(success) is returned as a result of getaddrinfo().

- What happened.

On some Android OS, EAI\_NODATA(the specified network host exists, but no network address is defined) is returned as the result of getaddrinfo().



**ci...@gmail.com** <ci...@gmail.com> [#3](#)

*Comment has been deleted.*

Message last modified on Aug 22, 2022 11:07AM



**ci...@gmail.com** <ci...@gmail.com> [#4](#)

Below is the answer to question #5 of issue ID 238922568.

>Can you elaborate detailed environment setup?

Please be specific about what settings need to be told to you.

>What kind of packets do you expect to reach other devices (PCs, printers, etc.), unicast DNS or multicast DNS (port 5353)?

As mentioned in the sample project, port 161 is used and unicast is assumed.

>Is there still a problem when private DNS is turned off?

Yes.

>Can you also provide network traffic log, aka tcpdump?

Sorry, but it's difficult to provide.

>Please run test on the latest update.

We have confirmed that the issue does not occur with Pixel 6 Pro + 13.0.0 (TP1A.220624.021, Aug 2022).

>Try to run test on userdebug build Android device if you can have one. User build device prints very limited DNS logs.

Sorry, but it is difficult to check the operation in the above environment.

\* In addition, we believe that even if this operation check is performed, it will not affect the improvement of the Android OS that is actually released.



**ci...@gmail.com** <ci...@gmail.com> [#5](#)

*Comment has been deleted.*

Message last modified on Aug 22, 2022 11:11AM



**ra...@google.com** <ra...@google.com>

*Assigned to su...@google.com.*



**su...@google.com** <su...@google.com> [#6](#)

Please provide the following additional information:

Screen record of the issue, for clarity

Please capture screen record or video of the issue using the following steps:

adb shell screenrecord /sdcard/video.mp4

Subsequently use the following command to pull the recorded file:

adb pull /sdcard/video.mp4

Note: Please upload the files to google drive and share the folder to android-bugreport@google.com, then share the link here.



**ci...@gmail.com** <ci...@gmail.com> [#7](#)

We uploaded a video when the phenomenon occurs with Android 12 + Security Update 2022/3/5.

Please check.

\* Operation is confirmed using the sample project described in #2.

<https://drive.google.com/file/d/1ZX80j67SY2WEyizLVY1NTsQoNjv9d-NI/view?usp=sharing>

0-27 seconds

Behavior that occurs when the private DNS setting is set to "Automatic".

27 seconds~

Behavior that occurs when the private DNS setting is set to "Off".



**su...@google.com** <su...@google.com> [#8](#)

We've shared this with our product and engineering teams and will continue to provide updates as more information becomes available.



**su...@google.com** <su...@google.com> [#9](#)

Status: Won't Fix (Obsolete)

Please run the test on the latest update. We have confirmed that the issue does not occur with the Pixel 6 Pro + 13.0.0 (TP1A.220624.021, Aug 2022).



**ci...@gmail.com** <ci...@gmail.com> [#10](#)

We have confirmed that it works better that after Android 13 Beta3.3.

We are asking about the following points, but unfortunately the comments above do not answer.

we post the question once again, so please check it.

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On the other hand, there is no clear answer about the permanent countermeasures for the problem, and the behavior of the phenomenon mentioned in this Issue Tracker has changed in Andr

Based on the above, please answer the following questions.

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2. If 1. is Yes, will the modification of 1. be applied to OS less than Android 13 by security update or something?
3. If 1. is No, please consider how to deal with this problem.



**ci...@gmail.com** <ci...@gmail.com> [#11](#)

Please answer the question in #10.