Join this space to participate.

Services (/spaces/4/services/services-home) ▸ Articles (/spaces/4/services/articles)

Public Space · Global Services (/spaces/1/global-services/global-services-home)

This content has expired.

Version 3

Akamai Request Tracer (ART)

Category: Imported Content Read time: 3 min
Word count: 873

Howard Zhang (/people/hazhang)
Published: 6/17/2022 6:37 AM
(https://askathena.akamai.com/people/hazhang)

0 204

Crm Ops
(https://askathena.akamai.com/people/crmops)
Updated: 2023-11-30
(https://askathena.akamai.com/people/crmops)

(https://ac-aloha.akamai.com/home/new/profile/6285928691662848/about
Lumapps Mig (https://ac-aloha.akamai.com/home/new/profile/6285928691662848/about
_lumapps_mig@akamai.com
Published on March 21, 2018
Originally written by Thomas Chan

Maintained by Howard Zhang(hazhang@akamai.com
From Greater China Professional Service Team)

> **TL;DR**
>
> **What is Akamai Request Tracer (ART)?**
>
> - One stop request trace from edge to origin for ANY (almost) Akamai Requests
> - Is a tool that every GSS folks need
> - Reduces troubleshooting efforts
> - Enhances services quality
> - With many more possibilities...
>
> Try it out now! ~~http://172.28.220.151/app/art/ (http://172.28.220.151/app/art/)~~
>
> Like it on Wizard (https://akamai.my.sales-force.com/apex/wizard-s2#/idea/087G0000000Qf42IAC)!

ART is now available on GSS Tools: https://tools.gss.akamai.com/art/ (https://tools.gss.akamai.com/art/)

- Have you ever spent hours constructing request headers, cookies in Cracker when you want to troubleshoot a request? How about POST requests and HTTP2 requests?
- Have you ever encountered a problem with an Akamai request during browser testing but is unable to reproduce in cracker?
- Have you ever found it tedious to have to enter all the request details (Ghost IP, CPCode, Time, etc.) in Fetch View Logs just to be able to get a few log lines for the request that you are debugging? To add to the frustration, we often could get these request details right for the first time so we wasted a lot of time and not getting the log lines that we wanted.
- Have you ever worked on a delivery configuration in which multiple customer origins are involved and wonder which origin a request is going to?
- Have you ever worked in a complex, multi-tree configuration (or packaged feature such as image converter or image managers) where a request is branched in to multiple child requests and you wanted to know what is going on under the hood?

If your answers to any of the above questions is yes, then Akamai Request Tracer, or ART, is probably for you.
Unlike any existing GSS tools (cracker and fetch view log, for example) where you have to do a lot of manual work by construct your own debugging request from scratch or to enter a log of tedious info about a request to start a debugging session, ART allows you to use whatever the favorite web browser you like and debug any (well, almost) Akamai request with nothing more than a few mouse clicks.
So how does it work? As a member of the GSS organization,

you are almost certain to have Akamai debug headers enabled in your web browser when browsing the web. What Akamai debug headers do is that they instruct our edge servers to return extra information about each request ,such as cache key, in a form of HTTP response headers back to the web browser.

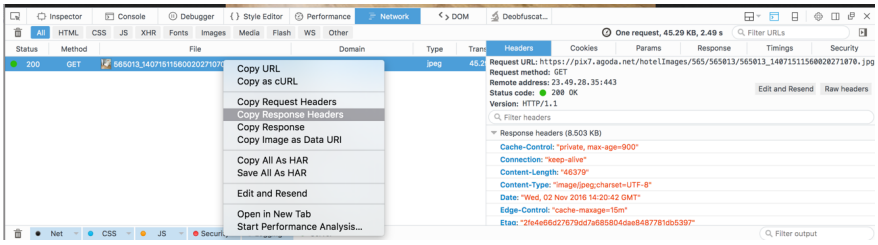
So what are those information so special? It turns out that, with only the information returned by the debug headers, we can already pinpoint and extract the exact few lines of log from one of our over 200,000 servers around the world! Here are the secret ingredients:

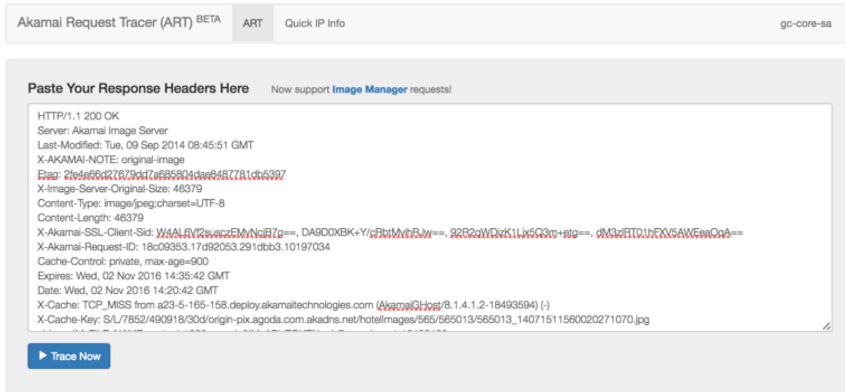
X-Cache - Gives you the GHOST IP in the form of "aXXX-***-***-***-***.deploy.akamaitechnologies.com"

X-Akamai-Request-ID - Gives you the request ID needed to filter the log lines from that GHOST

Date - Optionally gives you the request time to narrow down the filtering process to speed things up

Once we have the edge log lines extracted, we know whether a request is served from cache, going forward to parent or hitting the origin directly. We can then trace the request on parent ghosts until we reach the origin to fetch all the log lines along the way without any manual effort.



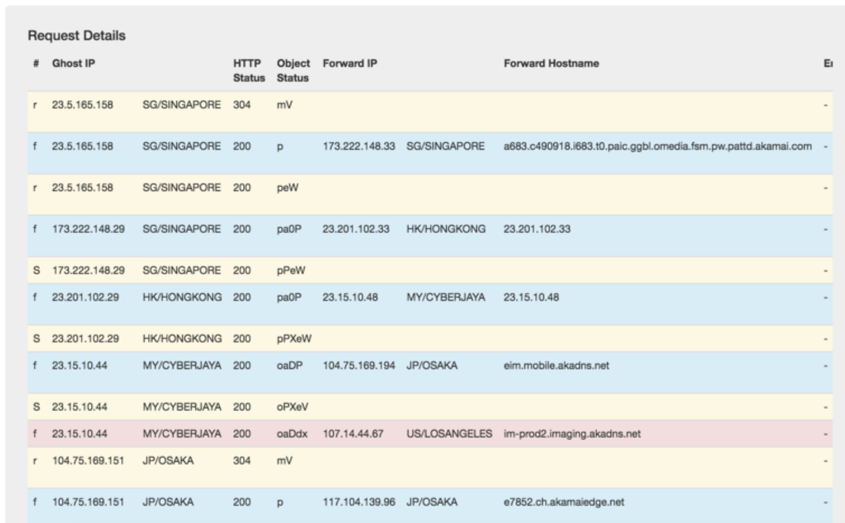


Akamai Request Tracer (ART) BETA | ART | Quick IP Info | gc-core-sa

Paste Your Response Headers Here Now support **Image Manager** requests!

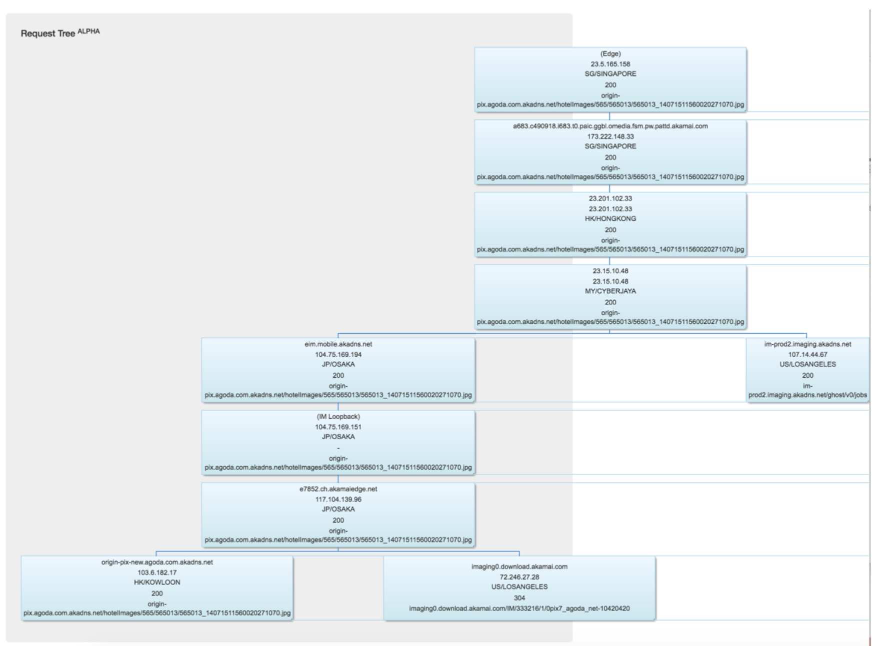
```
HTTP/1.1 200 OK
Server: Akamai Image Server
Last-Modified: Tue, 09 Sep 2014 08:45:51 GMT
X-AKAMAI-NOTE: original-image
Etag: 2fe4e66d27679dd7a685804dae8487781db5397
X-Image-Server-Original-Size: 46379
Content-Type: image/jpeg;charset=UTF-8
Content-Length: 46379
X-Akamai-SSL-Client-Sid: W4AL6Vf2susczEMvNciB7g==, DA9D0XBK+Y/cRbtMvihBJw==, 92R2qWDizK1Lix5Q3m+etg==, dM3zlRT01hFXV5AWEeaOqA==
X-Akamai-Request-ID: 18c09353.17d92053.291dbb3.10197034
Cache-Control: private, max-age=900
Expires: Wed, 02 Nov 2016 14:35:42 GMT
Date: Wed, 02 Nov 2016 14:20:42 GMT
X-Cache: TCP_MISS from a23-5-165-158.deploy.akamaitechnologies.com (AkamaiGHost/8.1.4.1.2-18493594) (-)
X-Cache-Key: S/L/7852/490918/30d/origin-pix.agoda.com.akadns.net/hotelImages/565/565013/565013_14071511560020271070.jpg
```

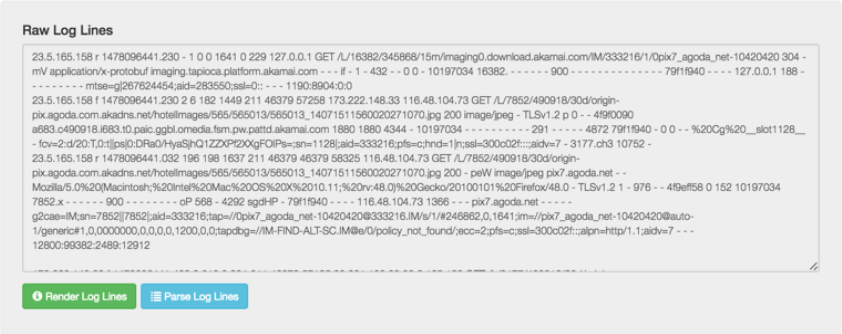
▶ Trace Now



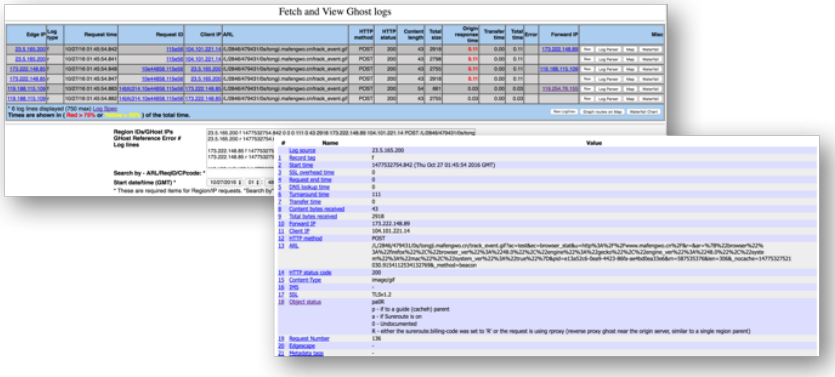
Request Details

#	Ghost IP		HTTP Status	Object Status	Forward IP		Forward Hostname	E
r	23.5.165.158	SG/SINGAPORE	304	mV				-
f	23.5.165.158	SG/SINGAPORE	200	p	173.222.148.33	SG/SINGAPORE	a683.c490918.i683.t0.paic.ggbl.omedia.fsm.pw.pattd.akamai.com	-
r	23.5.165.158	SG/SINGAPORE	200	peW				-
f	173.222.148.29	SG/SINGAPORE	200	pa0P	23.201.102.33	HK/HONGKONG	23.201.102.33	-
S	173.222.148.29	SG/SINGAPORE	200	pPeW				-
f	23.201.102.29	HK/HONGKONG	200	pa0P	23.15.10.48	MY/CYBERJAYA	23.15.10.48	-
S	23.201.102.29	HK/HONGKONG	200	pPXeW				-
f	23.15.10.44	MY/CYBERJAYA	200	oaDP	104.75.169.194	JP/OSAKA	eim.mobile.akadns.net	-
S	23.15.10.44	MY/CYBERJAYA	200	oPXeV				-
f	23.15.10.44	MY/CYBERJAYA	200	oaDdx	107.14.44.67	US/LOSANGELES	im-prod2.imaging.akadns.net	-
r	104.75.169.151	JP/OSAKA	304	mV				-
f	104.75.169.151	JP/OSAKA	200	p	117.104.139.96	JP/OSAKA	e7852.ch.akamaiedge.net	-



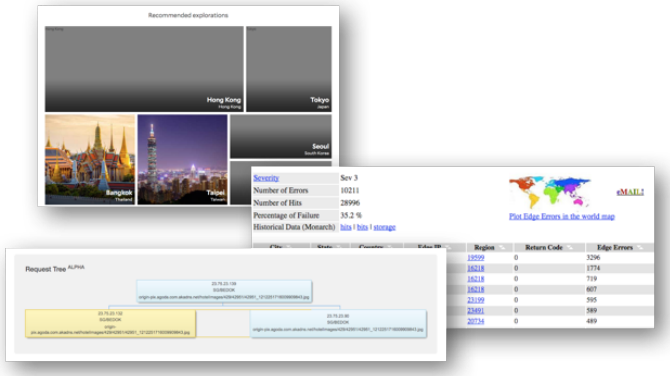


The end result is that with a simple copy and paste of the entire HTTP response header from your web browser and paste it in ART, ART is already able to give you the entire request tree from edge to parent to origin.
It works with existing tools as well

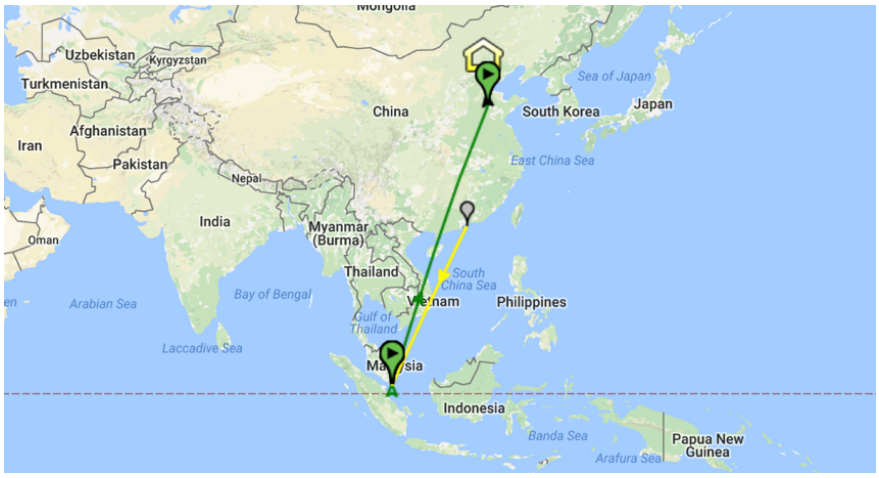


What this enable us is to quickly troubleshoot any Akamai request during any normal browsing session:

- Witness a broken element on the page? Open the developer toolbar and copy and paste the response header to ART to know why a request fails.
    - This is real case ART helped to solve!

- 

- Have a complex POST request that doesn't work right after login? Use ART. Why reconstruct the complex request from scratch again when the browser has already done it for you?
- Wonder a complex multi-origin strategy is implemented properly (wonder how could it fail? (https://ac.akamai.com/groups/gc-service-delivery/blog/2016/04/06/edgescape-and-property-manager)) ? Use ART. It shows you exactly which origin a request is going to.
- Want to know where the multi-tier TD parents are located? Use ART. It gives you every parent details in seconds.
- Want to show your customer how SureRoute works to accelerate their dynamic request in realtime? Use ART. It shows you the entire SR path with just a few clicks.



With ART, we enable GSS people to get in-depth details of every request quickly and without hurdles. It is not that without ART we couldn't trace a request, but the time and efforts being saved by using ART encourages people to explore new ways to make use of the powerful and intelligent platform that Akamai has to provide. It also saves a lot of our valuable times troubleshooting issues that may only appears in real world browsing session. Imagine without ART, the same debugging session could extend from minutes to hours just because the manual effort to recreate and tracing the requests. With the time we saved, GSS people could have created a lot more values to our customer and take Akamai to another level.

Enhance Service Quality. Reduce Service Incidents.

- Professional services uses ACT for automated regression testing
  - Focus on Edge response only
- ART could assists browser tests
- Confirms configuration changes are expected along the path
  - Multi-Origin Setup
  - Complex Multi-Tree Requests
  - Site-Failover
  - Packaged Product (Image Manager)
- Easier to use. More willing to use. More testing. Less incidents.

Usage Stats: http://statcounter.com/p11422400/?guest=1 (http://statcounter.com/p11422400/?guest=1)

- Solutions Engineering/Pre-Sales (https://ac-

aloha.akamai.com/home/all-resources?filters=metadata_5515455684935680)

- Global Services (GS) (https://ac-aloha.akamai.com/home/all-resources?filters=metadata_5597657844154368)

Follow

Comments (no comments yet)

Oldest to newest

Add a new comment

File Edit Insert View Format Table Tools

Write a comment...

P

Add Comment