

How-To Guide

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SAP Cloud for Customer

IP Whitelisting Guide for Integration traffic for Akamai IPA enabled tenants

Document History

Document Version	Description
1.0	First release of this guide

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1 Objective

Customer wants to whitelist IP address(es) of the SAP Cloud for Customer (C4C) tenant so that integration traffic can flow from customer's DMZ directly to the C4C tenant.

2 IP Whitelisting of C4C tenant if Akamai IPA is not enabled

If Akamai IP Acceleration is not enabled for this tenant, then it can be done by obtaining the IP address of the Web Dispatcher of the associated tenant.

Example: Find the Origin IP address of a tenant for which Akamai IPA has not been enabled.

```
SAPMac:~ PlatEngg$ dig my306762.crm.ondemand.com

; <<>> DiG 9.8.3-P1 <<>> my306762.crm.ondemand.com
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 19291
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 0

;; QUESTION SECTION:
;my306762.crm.ondemand.com. IN A

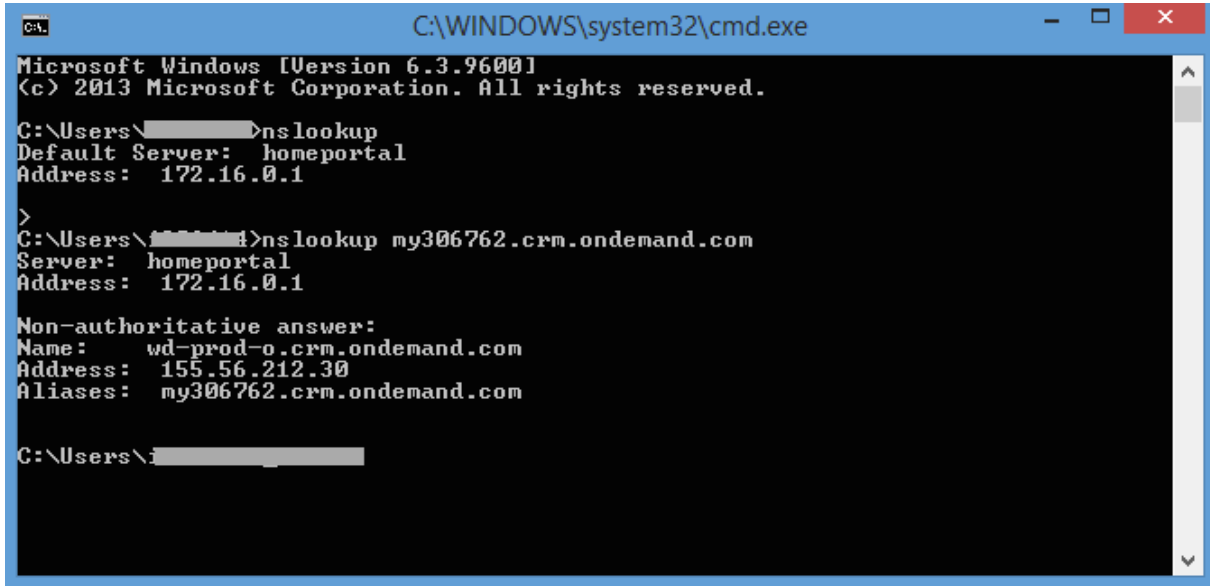
;; ANSWER SECTION:
my306762.crm.ondemand.com. 3600 IN CNAME wd-prod-o.crm.ondemand.com.
wd-prod-o.crm.ondemand.com. 3600 IN A 155.56.212.30

;; Query time: 329 msec
;; SERVER: 172.16.0.1#53(172.16.0.1)
;; WHEN: Fri Oct 16 14:43:29 2015
;; MSG SIZE rcvd: 83
```

Here the IP address is 155.56.212.30.

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On the PC the IP address can be obtained by running the command `C:\nslookup <tenant hostname>`



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\Users\>nslookup
Default Server: homeportal
Address: 172.16.0.1

>
C:\Users\>nslookup my306762.crm.ondemand.com
Server: homeportal
Address: 172.16.0.1

Non-authoritative answer:
Name: wd-prod-o.crm.ondemand.com
Address: 155.56.212.30
Aliases: my306762.crm.ondemand.com

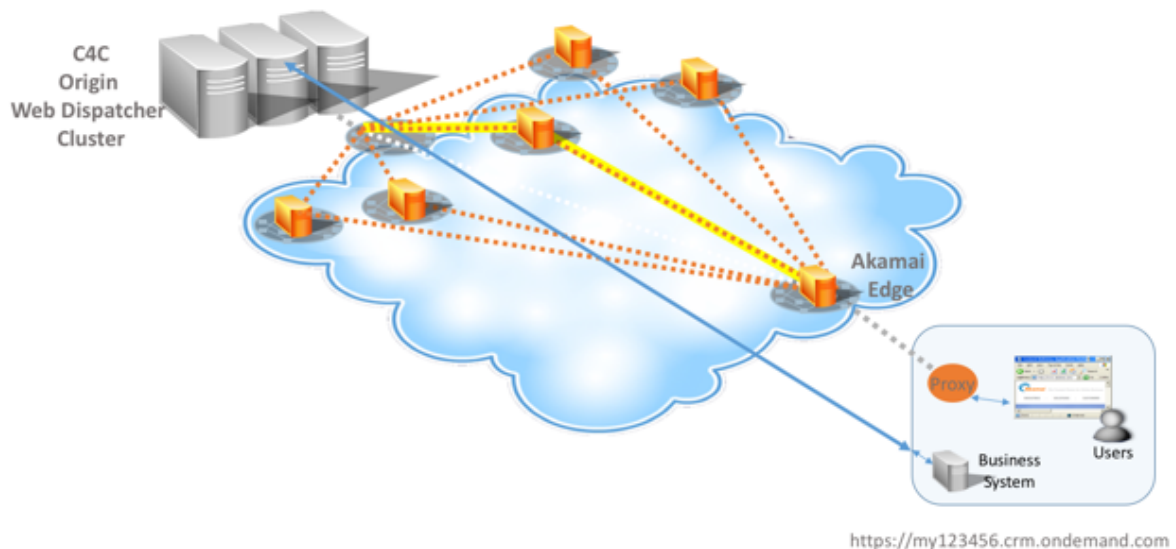
C:\Users\>
```

In case the tenant is Akamai IPA enabled please read on to the following section.

3 IP Whitelisting where the SAP Cloud for Customer is enabled for Akamai IPA

If Akamai IPA is enabled for a customer, the IP obtained by DNS lookup will give the nearest edge server's IP address, instead of the IP address of the Origin (web dispatcher cluster) as discussed in section 1. This edge server's IP will therefore also change from time to time. Assuming IP whitelisting requirement is needed for integration traffic (and not end user traffic) then following approach will allow the IP address to be whitelisted.

In the simple diagram below, we can see that for this Akamai IPA enabled tenant, the user traffic is routed through a geographically close Akamai Edge Server. As internet conditions changes, the customer's traffic could be routed via another edge server and therefore a different IP address. In this case, if the customer whitelists the IP address of the edge server, then because this IP address can change, the integration will fail following the change (and we don't have a range from Akamai either or the range could be hundreds and thousands of IP addresses). Besides this edge server can be used to serve other Akamai customers as well.



Therefore, in this case, where customer wants to IP whitelist C4C IP, they would have to override DNS resolution in the outbound business system or integration system. Also here we assume that for user traffic will flow normally via an outbound proxy to the nearest edge server and no DNS overrides are needed.

3.1 IP Whitelisting via DNS override

In the outbound business system talking to the C4C tenant, an entry in the hosts file needs to be made, representing the C4C host name to the origin's IP (WD). This will override the DNS lookup.

Example (Linux): Here the IP address for my123456.crm.ondemand.com is overridden by 155.56.209.25 which is the IP address of the web dispatcher cluster.

```
GNU nano 2.2.6      File: hosts      Modified
127.0.0.1 localhost
my123456.crm.ondemand.com 155.56.209.25
# The following lines are desirable for IPv6 capable hosts
::1 ip6-localhost ip6-loopback
fe00::0 ip6-localnet
ff00::0 ip6-mcastprefix
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters
ff02::3 ip6-allhosts
```

By default, Akamai is enabled for C4C production tenants. If we run either the “dig” or “nslookup” commands, we would get the IP of Akamai’s edge server closest to the customer (based on DNS lookup). Therefore, please contact Cloud Operations team to get the IP address of the web dispatcher serving the particular tenant of interest.

Note: Disabling Akamai will have negative impact for end users, especially, when they have users geographically located away from the continent of the data center.

A large, artistic photograph of dandelion seeds floating against a teal background. The seeds are shown in various stages of dispersal, with some fully formed and others just beginning to release their seed heads. The lighting is soft, creating a gentle, ethereal atmosphere.

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