



IPV6 CHECKLIST/QUESTIONNAIRE FOR APPLICATION OWNERS

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1 Questionnaire

1.1 General Information

Please insert the application name and owner:

Application name	
Application owner	
Is there a major upgrade planned within the next 6–18 months?	Please describe the nature of and the motivation for the upgrade.

1.2 Application Overview

Please classify the application into one of the following categories:

Category	<input type="checkbox"/> Commercial off-the-shelf (COTS) application.
	Please provide vendor, product name and version.
	<input type="checkbox"/> COTS with some self-developed ¹ additions.
	Please provide details.
	<input type="checkbox"/> COTS with many self-developed additions.
	Please provide details.
<input type="checkbox"/> Fully self-developed application.	

¹ This includes both additions which are developed in-house or by a 3rd party (including the vendor itself if this was a custom development for \$COMPANY).

	Please provide the programming language used and, if you can, the year when the code implementing network-related functions was written.
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1.3 IP Addresses / Input

Please answer the following questions:

IP Addresses / Input	
Does the application have a GUI where a user can provide input (e.g. forms)?	Yes / No / I don't know
Are you aware of any fields (in a form) where a user can enter an IP address?	Yes / No / I don't know
Does the application support the CIDR notation for the subnet mask?	Yes / No / I don't know

1.4 Config Files

Please answer the following questions:

Config Files	
Does the application have config files?	Yes / No / I don't know
Do these config files contain parameters related to network functionality [e.g. the "listening" address or port?]	Yes / No / I don't know
Which delimiter is used within the config files containing parameters related to network functionality?	Yes / No / I don't know Please provide details.
Are you aware if there's any preference of the application regarding IPv4 or IPv6 ² ?	
	Please provide details.

² For an example see https://dev.liferay.com/discover/deployment/-/knowledge_base/7-0/choosing-ipv4-or-ipv6.



1.5 DNS

Please answer the following questions:

DNS	
When the application connects to other systems, are (exclusively) DNS names used for this?	Yes / No / I don't know
Put differently, does the application use so-called IPv4 literals to connect to other systems?	Yes / No / I don't know

1.6 Processing / Storage of IP Addresses

Please answer the following questions:

Processing / Storage of IP Addresses	
Does the application store IP addresses (e.g. in a database)?	Yes / No / I don't know
	If so, please provide details.
Does your application expose any APIs where there is an IP address format dependency?	Yes / No / I don't know
	If so, please provide details.
Does your application consume any APIs where there is an IP address format dependency?	Yes / No / I don't know
	If so, please provide details.



1.7 Misc

Please answer the following questions:

Miscellaneous	
Does the application perform any calls to determine IP address related information from the system it's running on?	Yes / No / I don't know
	If so, please provide details.
Does the application perform any parsing of IP addresses?	Yes / No / I don't know
	If so, please provide details.
Does the application need to get down into network layer issues? Does it use multicast or broadcast communication or does it have to worry about MTU discovery?	Yes / No / I don't know
	If so, please provide details.

1.8 Security

Please answer the following questions:

Security	
Is the access to the application restricted on the basis of IP addresses?	Yes / No / I don't know
	If so, please provide details.
Does the application perform any logging which includes IP addresses?	Yes / No / I don't know
	If so, please provide details. If possible please provide a sample log message containing an IP address.



1.9 Session State

Please answer the following questions:

Session State	
Does the application keep state of user sessions on the basis of IP addresses?	Yes / No / I don't know
	If so, please provide details.

1.10 JAVA Related

Please answer the following questions:

JAVA Related	
Have you ever heard of or touched the parameter "java.net.preferIPv4Stack"?	Yes / No / I don't know
	If so, please provide details.
Have you ever heard of or touched the parameter "java.net.preferIPv6Addresses"?	Yes / No / I don't know
	If so, please provide details.
See also: https://docs.oracle.com/javase/7/docs/api/java/net/doc-files/net-properties.html	



1.11 Cloud

Please answer the following questions:

Cloud	
Does your application include systems running in the cloud?	Yes / No / I don't know
	If so, please provide details.
Does your application include systems running within Docker containers?	Yes / No / I don't know
	If so, please provide details regarding the implementation.