

寻找他们的在ASA后的公共IP地址的主机之间的LAN通信

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Introduction

本文描述不同的网络实施从要求允许主机之间的区域网(LAN)通信寻找他们的在可适应的安全工具(ASA)后的公共IP地址。

Prerequisites

Requirements

Cisco 建议您了解以下主题：

- Cisco基本的ASA NAT配置，版本8.3和以上。
- Cisco基本的ASA NAT配置，版本8.2和更老。

Components Used

本文档中的信息基于以下软件和硬件版本：

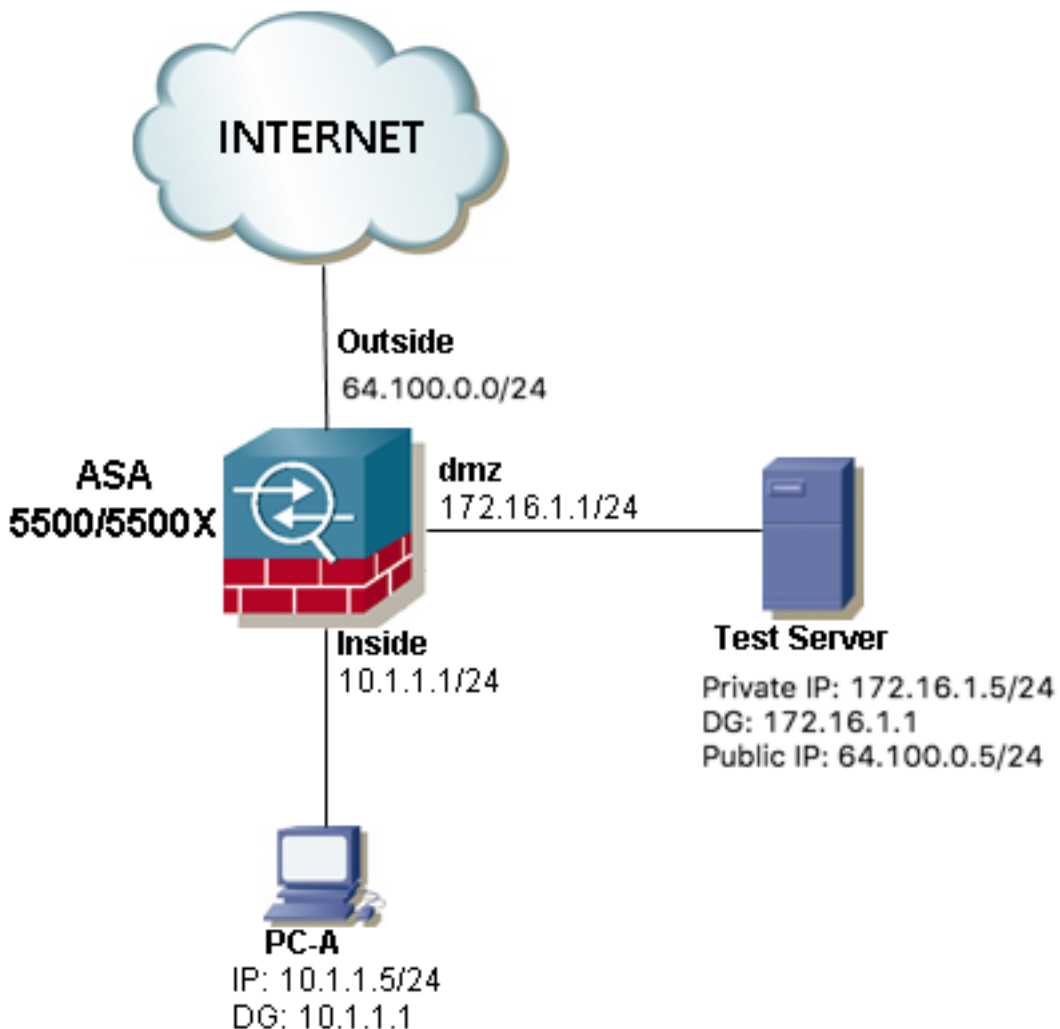
- ASA5500和ASA5500-X系列。
- Cisco ASA版本8.3和以上。
- Cisco ASA版本8.2和更老。

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. 如果您的网络实际，请保证您了解所有命令的潜在影响。

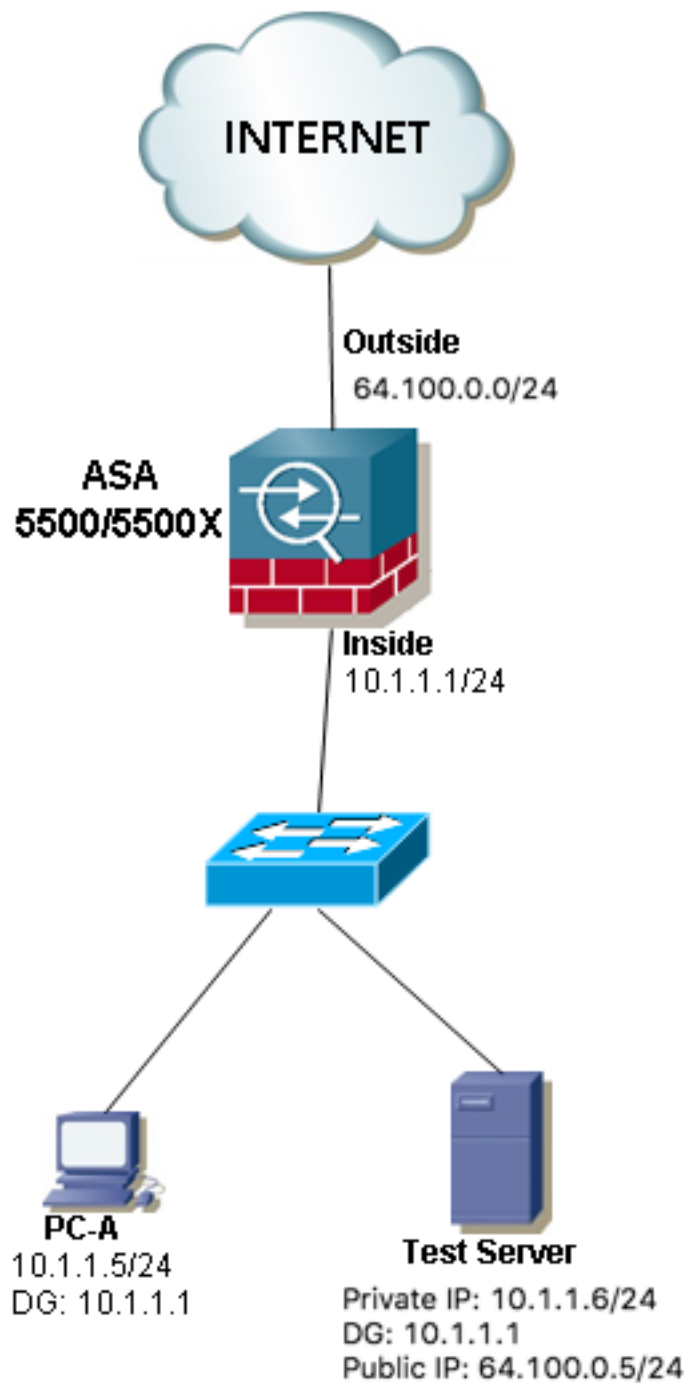
问题：寻找他们的在ASA后的公共IP地址的主机之间的LAN通信

在下个部分，您能参见显示此通信需求允许主机之间的LAN通信寻找他们的在ASA后的公共IP地址的三个结构示例。

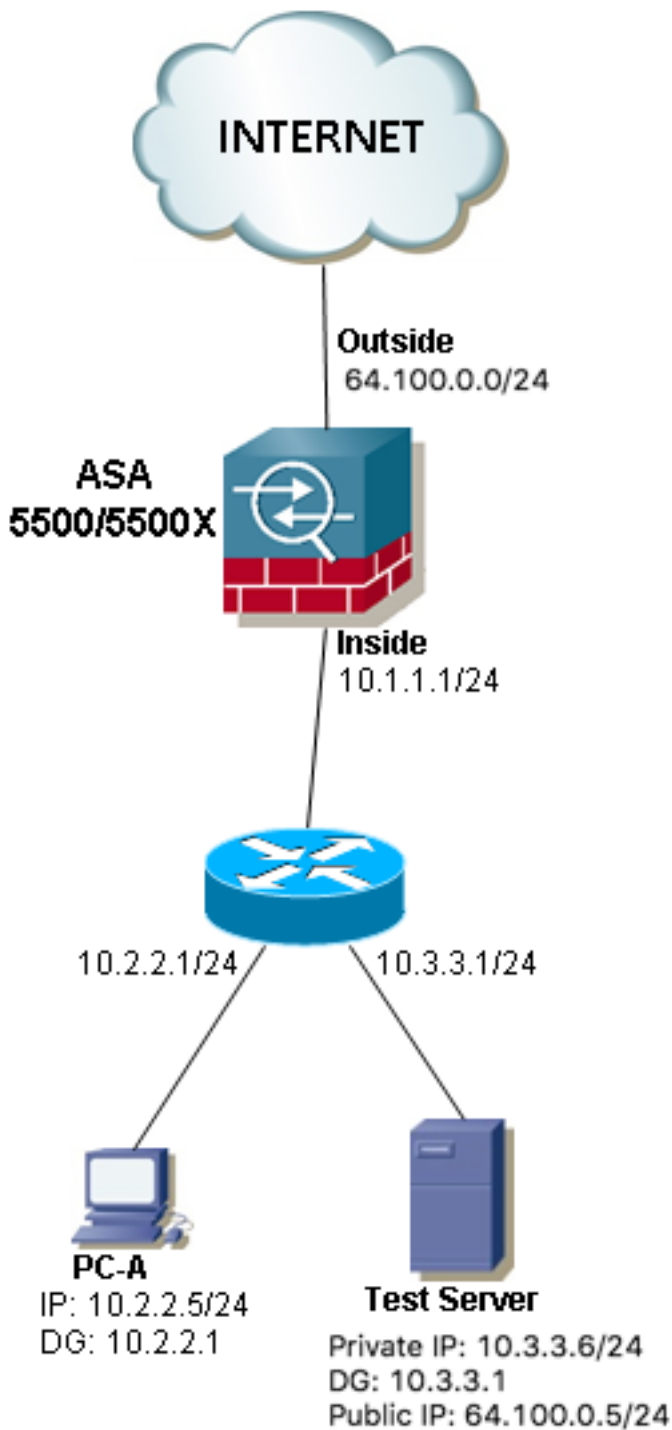
示例1。而目的地主机测试服务器被连接到DMZ接口，源主机PC-A被连接到内部的ASA接口。



示例2。来源和目的地主机PC-A和测试服务器被连接到同样里面ASA接口。



示例3。来源和目的地主机PC-A和测试服务器被连接到内部的ASA接口，但是在另一第3层设备(它后可能是路由器或一台多层交换机)。



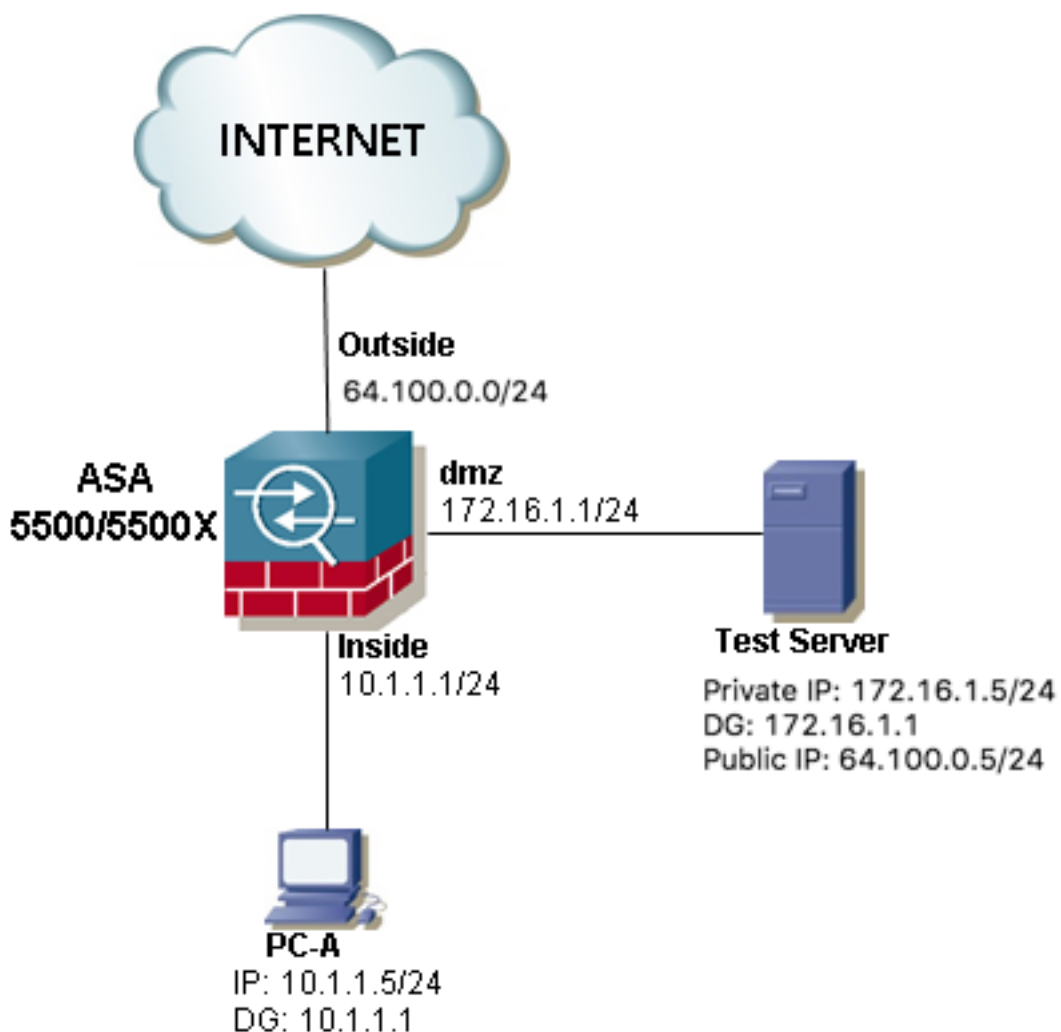
Note:在三个镜像的**测试服务器**有(NAT)被配置的一个静态网络地址转换在ASA，此静态NAT转换从自对应的内部界面的外面适用为了允许**测试服务器**是可及的从与公共IP地址64.100.0.5的外面，然后这被转换为**测试Inside Server**专用IP地址。

解决方案

为了允许源主机PC-A到达目的地请测试服务器用其公共IP地址而不是专用一个，我们需要两次运用NAT配置。当数据流穿过ASA时，NAT配置两次帮助我们转换两个，来源和信息包的目的地IP地址。

这里对于每拓扑是必需的两次nat配置的详细资料：

示例1。而目的地主机测试服务器被连接到DMZ接口，源主机PC-A被连接到内部的ASA接口。



配置

两次ASA版本8.3和以上的NAT：

```
object network obj-10.1.1.5  
host 10.1.1.5
```

```
object network obj-172.16.1.5  
host 172.16.1.5
```

```
object network obj-64.100.0.5  
host 64.100.0.5
```

```
nat (inside,dmz) source static obj-10.1.1.5 interface destination static obj-64.100.0.5 obj-  
172.16.1.5
```

NOTE: After this NAT is applied in the ASA you will receive a warning message as the following:

WARNING: All traffic destined to the IP address of the outside interface is being redirected.
WARNING: Users may not be able to access any service enabled on the outside interface.

两次ASA版本8.2的NAT和更老：

```
object network obj-10.1.1.5
host 10.1.1.5
```

```
object network obj-172.16.1.5
host 172.16.1.5
```

```
object network obj-64.100.0.5
host 64.100.0.5
```

```
nat (inside,dmz) source static obj-10.1.1.5 interface destination static obj-64.100.0.5 obj-172.16.1.5
```

NOTE: After this NAT is applied in the ASA you will receive a warning message as the following:

WARNING: All traffic destined to the IP address of the outside interface is being redirected.
WARNING: Users may not be able to access any service enabled on the outside interface.

Troubleshoot

信息包跟踪程序输出版本8.3和以上 :

```
object network obj-10.1.1.5
host 10.1.1.5
```

```
object network obj-172.16.1.5
host 172.16.1.5
```

```
object network obj-64.100.0.5
host 64.100.0.5
```

```
nat (inside,dmz) source static obj-10.1.1.5 interface destination static obj-64.100.0.5 obj-172.16.1.5
```

NOTE: After this NAT is applied in the ASA you will receive a warning message as the following:

WARNING: All traffic destined to the IP address of the outside interface is being redirected.
WARNING: Users may not be able to access any service enabled on the outside interface.

信息包跟踪程序输出版本8.2和更老 :

```
object network obj-10.1.1.5
host 10.1.1.5
```

```
object network obj-172.16.1.5
host 172.16.1.5
```

```
object network obj-64.100.0.5
host 64.100.0.5
```

```
nat (inside,dmz) source static obj-10.1.1.5 interface destination static obj-64.100.0.5 obj-172.16.1.5
```

NOTE: After this NAT is applied in the ASA you will receive a warning message as the following:

WARNING: All traffic destined to the IP address of the outside interface is being redirected.
WARNING: Users may not be able to access any service enabled on the outside interface.

信息包获取 :

```
object network obj-10.1.1.5
host 10.1.1.5
```

```
object network obj-172.16.1.5
host 172.16.1.5
```

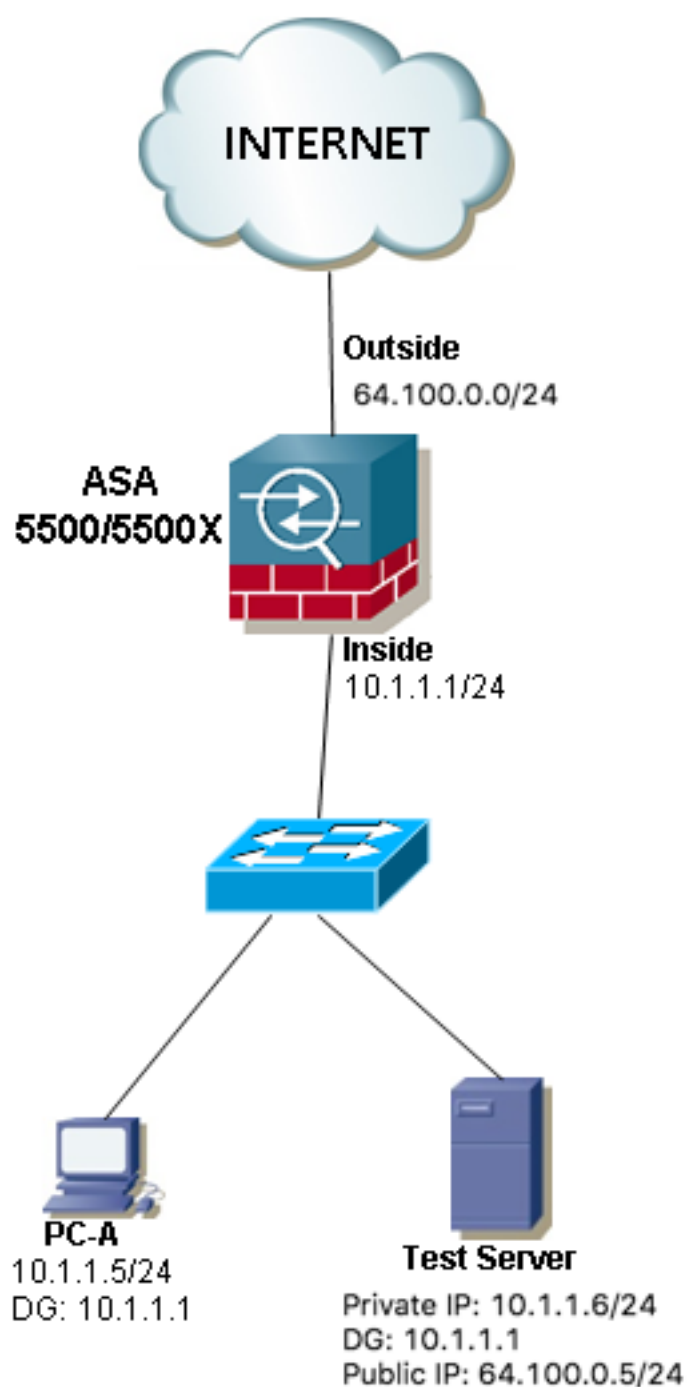
```
object network obj-64.100.0.5
host 64.100.0.5
```

```
nat (inside,dmz) source static obj-10.1.1.5 interface destination static obj-64.100.0.5 obj-172.16.1.5
```

NOTE: After this NAT is applied in the ASA you will receive a warning message as the following:

WARNING: All traffic destined to the IP address of the outside interface is being redirected.
WARNING: Users may not be able to access any service enabled on the outside interface.

示例2。来源和目的地主机PC-A和测试服务器被连接到同样里面ASA接口。



配置

两次ASA版本8.3和以上的NAT：

```
object network obj-10.1.1.5  
host 10.1.1.5
```

```
object network obj-10.1.1.6  
host 10.1.1.6
```

```
object network obj-64.100.0.5  
host 64.100.0.5
```

```
nat (inside,inside) source static obj-10.1.1.5 interface destination static obj-64.100.0.5 obj-  
10.1.1.6
```

NOTE: After this NAT is applied in the ASA you will receive a warning message as the following:

```
WARNING: All traffic destined to the IP address of the outside interface is being redirected.  
WARNING: Users may not be able to access any service enabled on the outside interface.
```

两次ASA版本8.2的NAT和更老：

```
object network obj-10.1.1.5  
host 10.1.1.5
```

```
object network obj-10.1.1.6  
host 10.1.1.6
```

```
object network obj-64.100.0.5  
host 64.100.0.5
```

```
nat (inside,inside) source static obj-10.1.1.5 interface destination static obj-64.100.0.5 obj-  
10.1.1.6
```

NOTE: After this NAT is applied in the ASA you will receive a warning message as the following:

```
WARNING: All traffic destined to the IP address of the outside interface is being redirected.  
WARNING: Users may not be able to access any service enabled on the outside interface.
```

Note:NAT转换的主要目的IP原地址的从10.1.1.5到ASA IP地址10.1.1.1的内部接口，将强制来自主机10.1.1.6返回到ASA的回复，这高度要求为了避免不对称路由和允许ASA处理所有感兴趣的主机之间的数据流，如果我们不转换IP原地址，如我们在本例中执行，然后ASA将阻塞感兴趣数据流由于不对称路由。

Troubleshoot

信息包跟踪程序输出版本8.3和以上：

```
object network obj-10.1.1.5  
host 10.1.1.5
```

```
object network obj-10.1.1.6  
host 10.1.1.6
```

```
object network obj-64.100.0.5
```



```
host 64.100.0.5
```

```
nat (inside,inside) source static obj-10.1.1.5 interface destination static obj-64.100.0.5 obj-10.1.1.6
```

NOTE: After this NAT is applied in the ASA you will receive a warning message as the following:

WARNING: All traffic destined to the IP address of the outside interface is being redirected.
WARNING: Users may not be able to access any service enabled on the outside interface.

信息包跟踪程序输出版本8.2和更老：

```
object network obj-10.1.1.5  
host 10.1.1.5
```

```
object network obj-10.1.1.6  
host 10.1.1.6
```

```
object network obj-64.100.0.5  
host 64.100.0.5
```

```
nat (inside,inside) source static obj-10.1.1.5 interface destination static obj-64.100.0.5 obj-10.1.1.6
```

NOTE: After this NAT is applied in the ASA you will receive a warning message as the following:

WARNING: All traffic destined to the IP address of the outside interface is being redirected.
WARNING: Users may not be able to access any service enabled on the outside interface.

信息包获取：

```
object network obj-10.1.1.5  
host 10.1.1.5
```

```
object network obj-10.1.1.6  
host 10.1.1.6
```

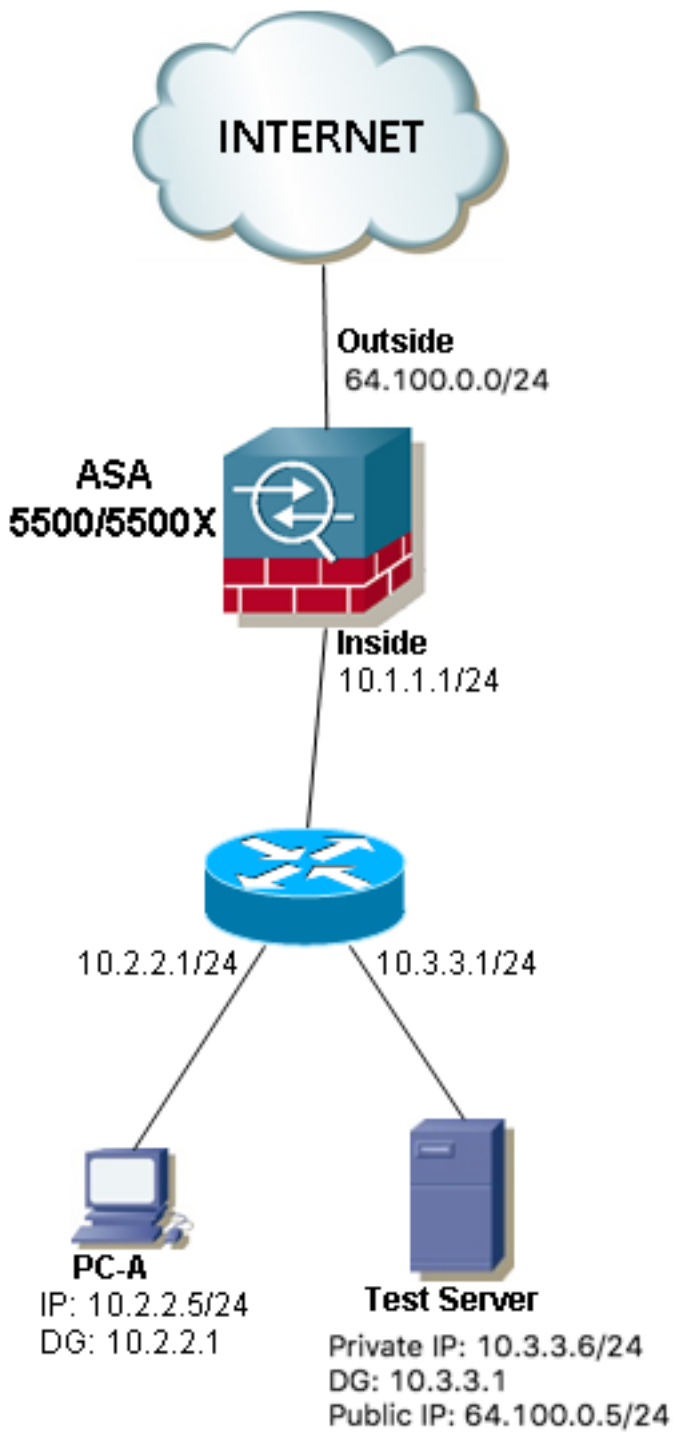
```
object network obj-64.100.0.5  
host 64.100.0.5
```

```
nat (inside,inside) source static obj-10.1.1.5 interface destination static obj-64.100.0.5 obj-10.1.1.6
```

NOTE: After this NAT is applied in the ASA you will receive a warning message as the following:

WARNING: All traffic destined to the IP address of the outside interface is being redirected.
WARNING: Users may not be able to access any service enabled on the outside interface.

示例3。来源和目的地主机PC-A和测试服务器被连接到内部的ASA接口，但是在另一第3层设备(它后可能是路由器或一台多层交换机)。



配置

两次ASA版本8.3和以上的NAT：

```
object network obj-10.2.2.5
host 10.2.2.5
```

```
object network obj-10.3.3.6
host 10.3.3.6
```

```
object network obj-64.100.0.5
host 64.100.0.5
```

```
nat (inside,inside) source static obj-10.2.2.5 interface destination static obj-64.100.0.5 obj-
```

10.3.3.6

NOTE: After this NAT is applied in the ASA you will receive a warning message as the following:

WARNING: All traffic destined to the IP address of the outside interface is being redirected.
WARNING: Users may not be able to access any service enabled on the outside interface.

两次ASA版本8.2的NAT和更老 :

```
object network obj-10.2.2.5  
host 10.2.2.5
```

```
object network obj-10.3.3.6  
host 10.3.3.6
```

```
object network obj-64.100.0.5  
host 64.100.0.5
```

```
nat (inside,inside) source static obj-10.2.2.5 interface destination static obj-64.100.0.5 obj-  
10.3.3.6
```

NOTE: After this NAT is applied in the ASA you will receive a warning message as the following:

WARNING: All traffic destined to the IP address of the outside interface is being redirected.
WARNING: Users may not be able to access any service enabled on the outside interface.

Note: NAT转换的主要目的IP原地址的从10.1.1.5到ASA内部接口IP地址(10.1.1.1)将强制来自主机10.1.1.6返回到ASA的回复，这高度要求为了避免不对称路由和允许ASA处理所有感兴趣的主机之间的数据流，如果我们不转换IP原地址，如我们在本例中执行，然后ASA将阻塞感兴趣数据流由于不对称路由。

Troubleshoot

信息包跟踪程序输出版本8.3和以上 :

```
object network obj-10.2.2.5  
host 10.2.2.5
```

```
object network obj-10.3.3.6  
host 10.3.3.6
```

```
object network obj-64.100.0.5  
host 64.100.0.5
```

```
nat (inside,inside) source static obj-10.2.2.5 interface destination static obj-64.100.0.5 obj-  
10.3.3.6
```

NOTE: After this NAT is applied in the ASA you will receive a warning message as the following:

WARNING: All traffic destined to the IP address of the outside interface is being redirected.
WARNING: Users may not be able to access any service enabled on the outside interface.

信息包跟踪程序输出版本8.2和更老 :

```
object network obj-10.2.2.5  
host 10.2.2.5
```

```
object network obj-10.3.3.6
```

```
host 10.3.3.6
```

```
object network obj-64.100.0.5  
host 64.100.0.5
```

```
nat (inside,inside) source static obj-10.2.2.5 interface destination static obj-64.100.0.5 obj-  
10.3.3.6
```

NOTE: After this NAT is applied in the ASA you will receive a warning message as the following:

WARNING: All traffic destined to the IP address of the outside interface is being redirected.

WARNING: Users may not be able to access any service enabled on the outside interface.

信息包获取：

```
object network obj-10.2.2.5  
host 10.2.2.5
```

```
object network obj-10.3.3.6  
host 10.3.3.6
```

```
object network obj-64.100.0.5  
host 64.100.0.5
```

```
nat (inside,inside) source static obj-10.2.2.5 interface destination static obj-64.100.0.5 obj-  
10.3.3.6
```

NOTE: After this NAT is applied in the ASA you will receive a warning message as the following:

WARNING: All traffic destined to the IP address of the outside interface is being redirected.

WARNING: Users may not be able to access any service enabled on the outside interface.

Related Information

- [ASA 8.3配置指南：前提对于两次NAT](#)
- [ASA 8.4配置指南：DNS和NAT](#)
- [对8.3 NAT配置示例的ASA Pre-8.3](#)