

# ي ت ل ة فيض م ل ة ز ه ج أ ل ن ي ب LAN ل اص ت ا فلخ ا ه ب ة ص ا خ ل ا ة م ا ع ل ا IP ن ي و ا ن ع ن ع ث ح ب ت ASA

## ت ا ي و ت ح م ل ا

[ة م د ق م ل ا](#)

[ة ي س ا س أ ل ا ت ا ب ل ط ت م ل ا](#)

[ت ا ب ل ط ت م ل ا](#)

[ة م د خ ت س م ل ا ت ا ن و ك م ل ا](#)

[ا ه ب ة ص ا خ ل ا ة م ا ع ل ا IP ن ي و ا ن ع ن ع ث ح ب ت ي ت ل ا ة فيض م ل ا ة ز ه ج أ ل ا ن ي ب LAN ل اص ت ا : ة ل ك ش م ل ا  
ASA فلخ](#)

[م ت ي ا م ن ي ب ، ة ي ل خ ا د ل ا ASA ة ه ج ا و ب ر د ص م ل ا فيض م ل ل PC-A ز ا ه ج ل ي ص و ت م ت ي . 1 ل ا ث م  
DMZ ة ه ج ا و ب ة ه ج و ل ا فيض م ل ا ر ا ب ت خ ا م د ا خ ل ي ص و ت](#)

[. ن ر ا ق . ASA ل خ ا د ه س ف ن ل ا ي ل ا ت ط ب ر ن و ك ي ر ا ب ت خ ا م د ا خ و pc-a فيض م ة ه ج و ل ا و ر د ص م ل ا . 2 ل ا ث م](#)

[ASA ة ه ج ا و ب ن ي ل ص ت م ر ا ب ت خ ا ل ا م د ا خ و PC-A ن ي فيض م ة ه ج و ل ا و ر د ص م ل ا ن و ك ي . 3 ل ا ث م  
\(ت ا ق ب ط ل ا د د ع ت م ل و ح م و ا ه ج و م ن و ك ي د ق \) 3 ة ق ب ط ل ا ن م ر خ ا ز ا ه ج ف ل خ ن ك ل و ، ة ي ل خ ا د ل ا](#)

[ل ح ل ا](#)

[م ت ي ا م ن ي ب ، ة ي ل خ ا د ل ا ASA ة ه ج ا و ب ر د ص م ل ا فيض م ل ل PC-A ز ا ه ج ل ي ص و ت م ت ي . 1 ل ا ث م  
DMZ ة ه ج ا و ب ة ه ج و ل ا فيض م ل ا ر ا ب ت خ ا م د ا خ ل ي ص و ت](#)

[ن ي و ك ت ل ا](#)

[ا ه ج ا ل ص ا و ا ط ا خ ا ل ا ف ا ش ك ت س ا](#)

[. ن ر ا ق . ASA ل خ ا د ه س ف ن ل ا ي ل ا ت ط ب ر ن و ك ي ر ا ب ت خ ا م د ا خ و pc-a فيض م ة ه ج و ل ا و ر د ص م ل ا . 2 ل ا ث م](#)

[ن ي و ك ت ل ا](#)

[ا ه ج ا ل ص ا و ا ط ا خ ا ل ا ف ا ش ك ت س ا](#)

[ASA ة ه ج ا و ب ن ي ل ص ت م ر ا ب ت خ ا ل ا م د ا خ و PC-A ن ي فيض م ة ه ج و ل ا و ر د ص م ل ا ن و ك ي . 3 ل ا ث م  
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[ن ي و ك ت ل ا](#)

[ا ه ج ا ل ص ا و ا ط ا خ ا ل ا ف ا ش ك ت س ا](#)

[ة ل ص ت ا ذ ت ا م و ل ع م](#)

## ة م د ق م ل ا

ل اص ت ا ب ح ا م س ل ل ة ب و ل ط م ا ه ن ا ش ي ح ن م ة ف ل ت خ م ة ك ب ش ذ ي ف ن ت ت ا ي ل م ع د ن ت س م ل ا ا ذ ه ف ص ي  
ة م ا ع ل ا IP ن ي و ا ن ع ن ع ث ح ب ت ي ت ل ا ة فيض م ل ا ة ز ه ج أ ل ا ن ي ب (LAN) ة ي ل ح م ل ا ة ق ط ن م ل ا ة ك ب ش  
(ASA) في ك م ن ا م ا ز ا ه ج ف ل خ ا ه ب ة ص ا خ ل ا

## ة ي س ا س أ ل ا ت ا ب ل ط ت م ل ا

### ت ا ب ل ط ت م ل ا

ة ي ل ل ا ت ل ا ع ي ض ا و م ل ا ب ة ف ر ع م ك ي د ل ن و ك ت ن ا ب Cisco ي ص و ت

- Cisco ن م ىل عأو 8.3 رادصإل، nat ىسأسأل ASA نىوكت
- Cisco ن م ه دعب امو 8.2 رادصإل، nat ىسأسأل ASA نىوكت

## ةمدختس مالا تانوكملا

ةيلاللة ةيداملا تانوكملا وجماربال تارادصإل إىل دننتس مالا اذه يف ةدراول تامولعمل دننتست

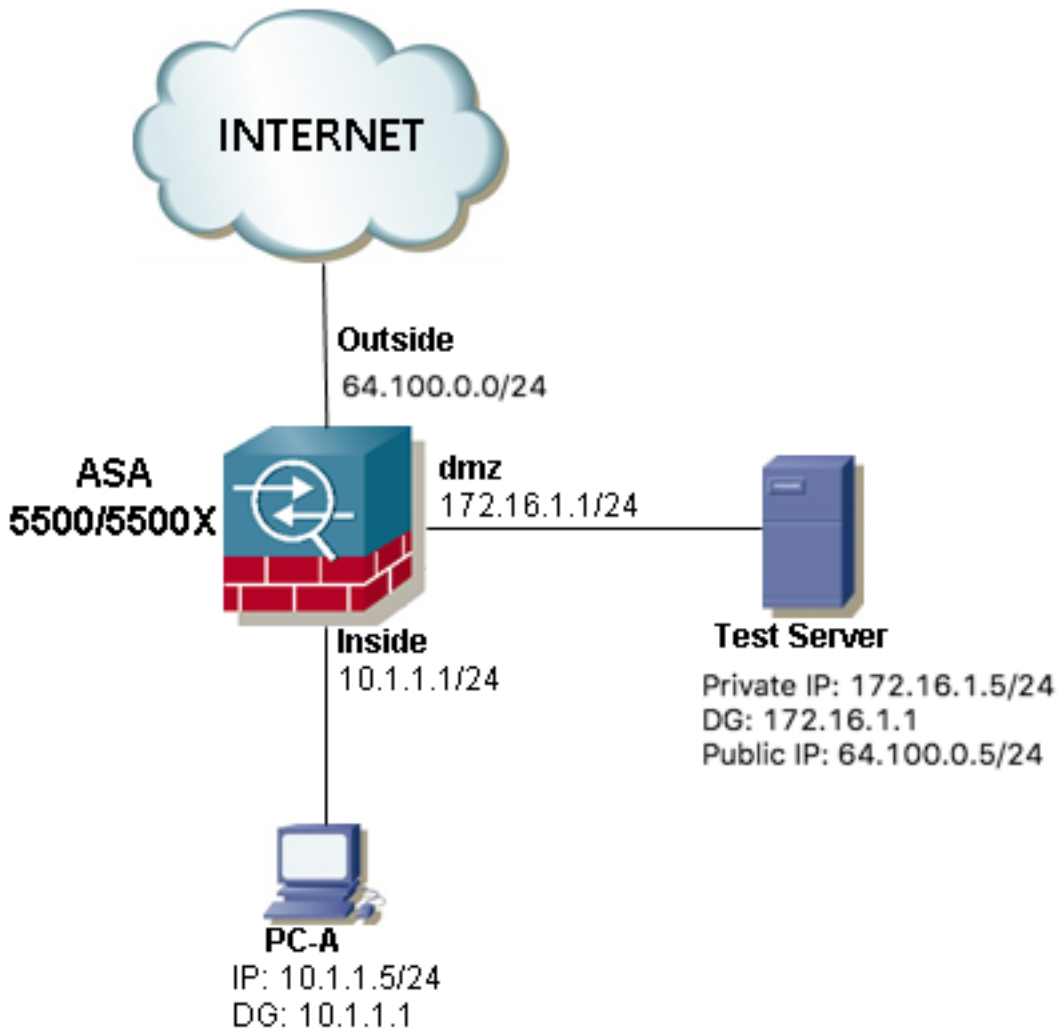
- ASA5500 و ASA5500-X ةلسلس
- Cisco ASA رادصإل او 8.3 رادصإل
- Cisco ASA رادصإل او 8.2 رادصإل

ةصاخ ةيلمعم ةئيب يف ةدوجوملا ةزهجال ن م دننتس مالا اذه يف ةدراول تامولعمل ءاشنإ م تناك اذإ. (ىضارتفا) حوسم نىوكتب دننتس مالا اذه يف ةمدختس مالا ةزهجال عىمجت أدب رمأ يال لم تحملا ريثأتلل كمهف ن م دكأتف، لىغشتلل دىق كتكبش

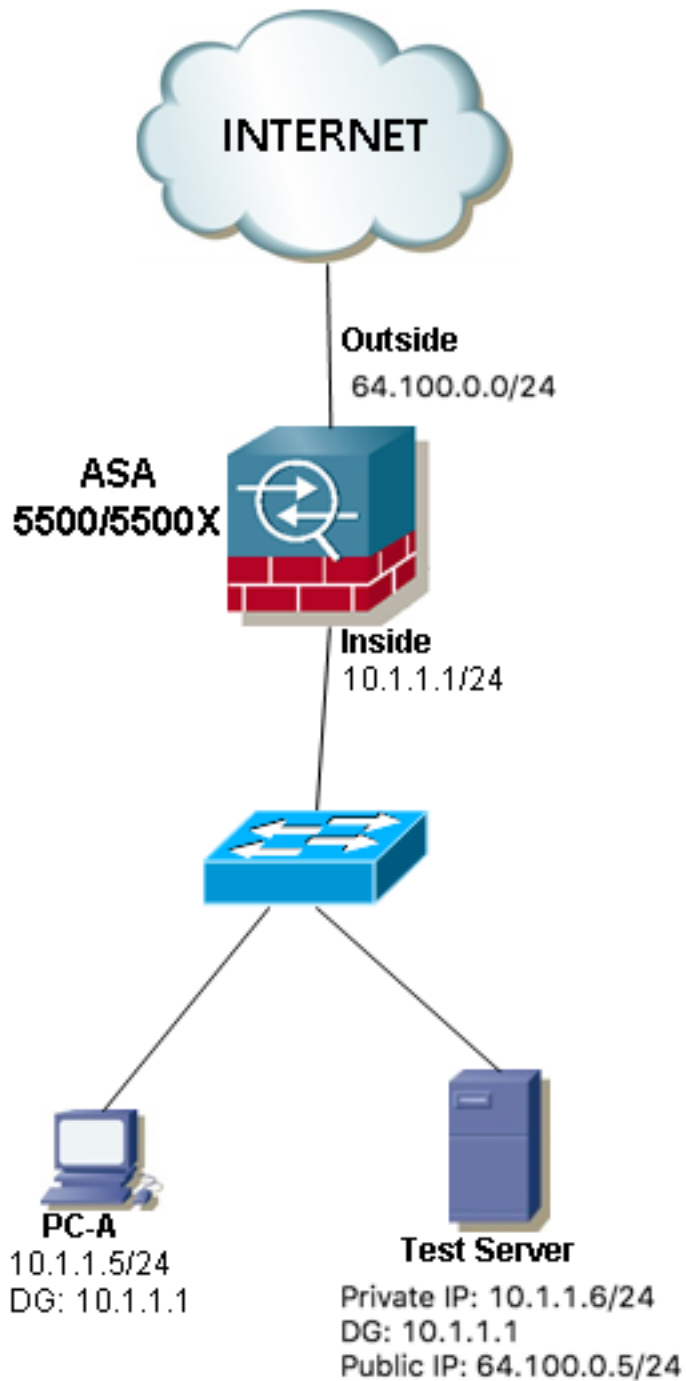
## ثحبت ىتلا ةفىضملا ةزهجال نىب LAN لاصتلا: ةلكشملا ASA فلخ اهب ةصاخلا ةماعلا IP نىوانع نع

هذه لاصتالا تابلطتم رهظت ططخملا ةلثمأ ةثالث ةيؤر كنكمى، ىلالتلا مسقلا يف اهب ةصاخلا ةماعلا IP نىوانع نع ثحبت ىتلا ةفىضملا ةزهجال نىب LAN لاصتلا حامسلا ل ASA فلخ

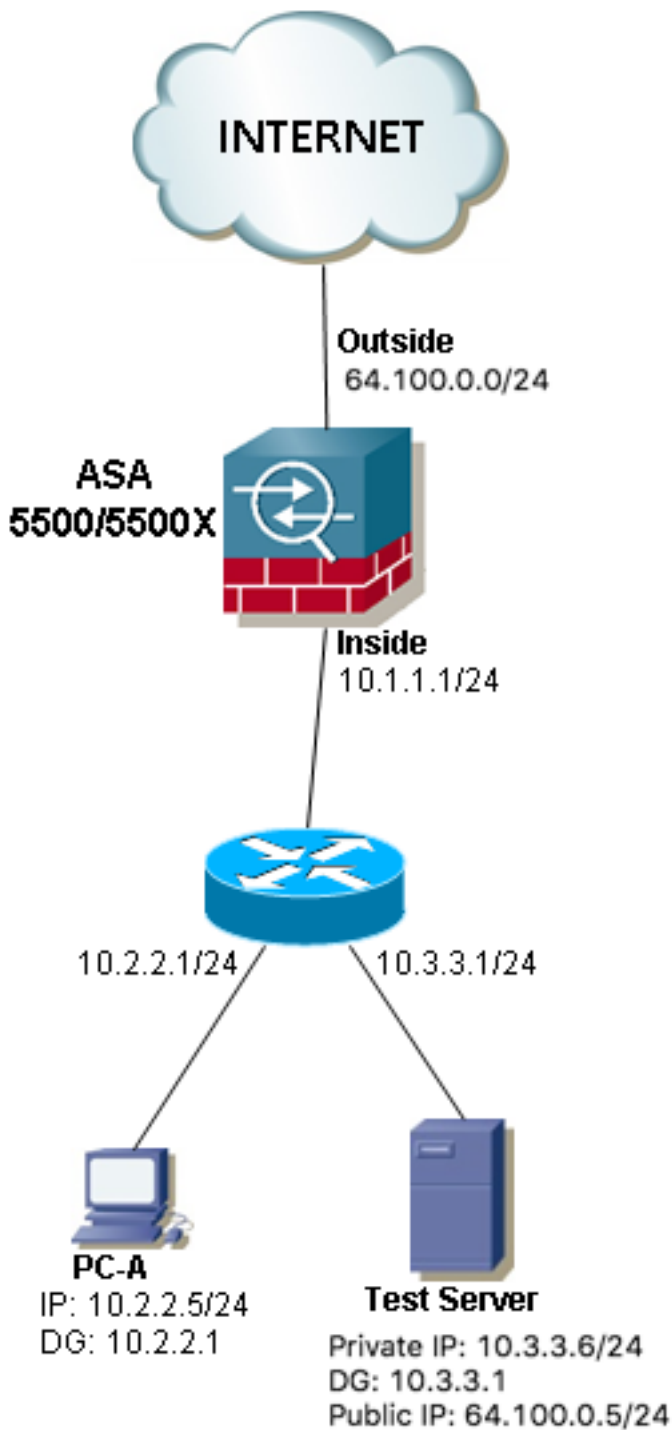
امن ىب، ةيلخاللا ASA ةهجاوب رصملا فىضملا ل PC-A زاها لىصوت م تي. 1 لاثم  
DMZ ةهجاوب ةهجال فىضملا رابتلخ مدخال لىصوت م تي



هسفن لى لى تطبر نوكي رابتخ | م داخو و pc-a في ضم ةه جولاو ردصم لى 2. لاثم نراق ASA لخاد.



ههجاوب نيلصتم رابتخالال م داخو PC-A نيفيضم ههجلوالاو ردصملا نوكي 3 لاثم  
 ددعتم لوحم واهجوم نوكي دق 3 عبقطالال نم رخأ زاهاج فلخ نكلو، ههجلخالال ASA  
 (تاقبطالال).



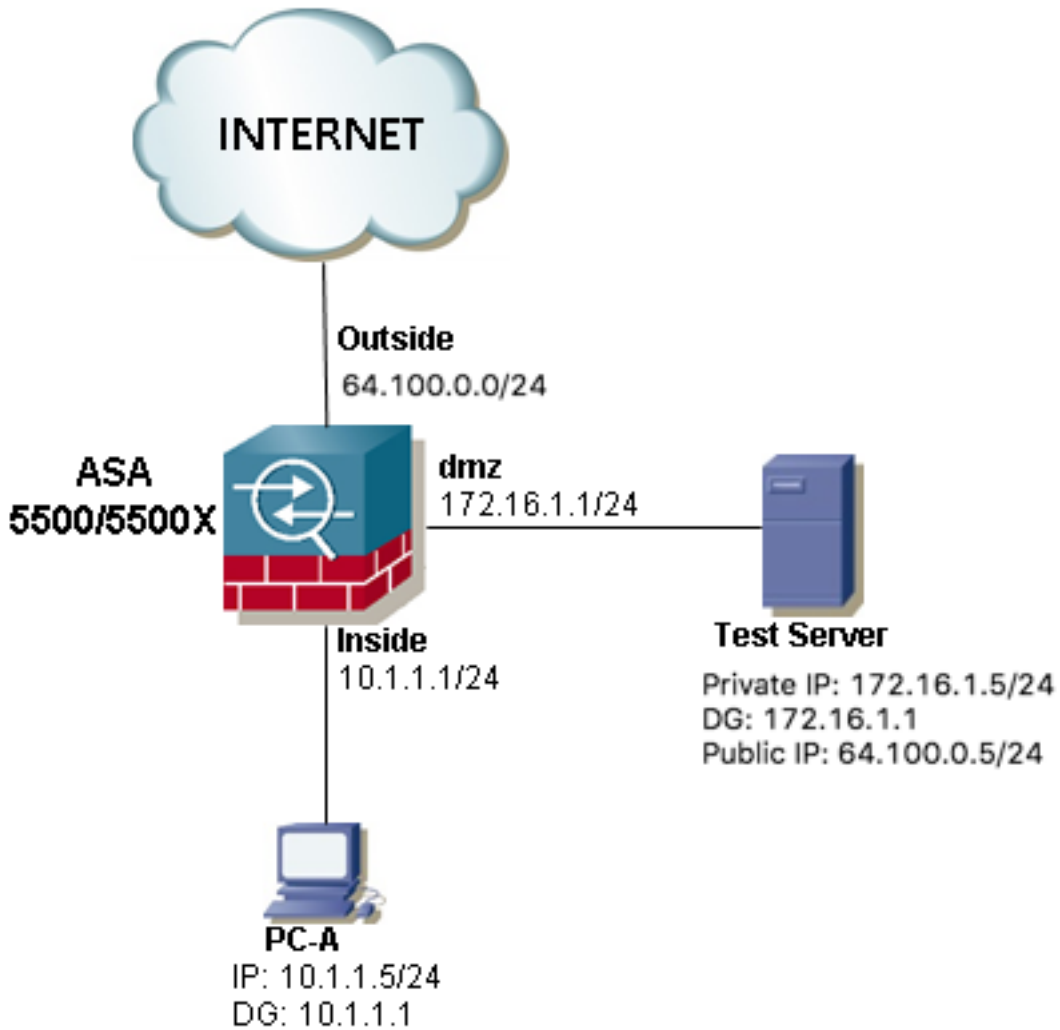
تتباث (NAT) ةكبش ناووع ةمجرت ىلع ةالثلا روصلا يف رابثخالا مداخ يوتحي :ةظحالم  
 ةهجالا ىلإ جراخلا نم هذه ةتباثلا NAT ةمجرت قيبطت متي و، ASA يف اهنيوكت مت  
 ماعلا IP ناووع مادختساب جراخلا نم لوصولاب رابثخالا مداخل خامسلل لسارملا ةيلخادلا  
 رابثخالا مداخل صاخلا يلخادلا IP ناووع ىلإ اذه ةمجرت مت مت، 64.100.0.5.

## لحلا

نم ال دب ip ماع ه ناووع عم لدان رابثخا ةياغلا غلبني نأ pc-A فيضم رصملا تحمس  
 مجرتي نأ ليكشت اندعاسي nat نيترم ل. ليكشت nat نيترم قبطي نأ جاتحت نحن، صاخلا  
 ل ASA. ربع رمي رورم ةكرحلا ام دنع طب رلا نم ناووع ةهجالا رصملا، ءاوس دح ىلع

طاطخم لك nat نيترم بولطملا نيوكتلا ليصافت انه

ام نيب ،ةي لخدلا ASA ةه جاوب ردصم لافي ضم ل ل PC-A زا ه ل لي صوت م تي . 1 ل اثم  
DMZ. ةه جاوب ةه جول لافي ضم ل ا راب تخ | م داخ ل لي صوت م تي



## ني وكتلا

ث دحل ا ل ا راد صل ا ل او ASA 8.3 ا راد صل ا ل nat ني ترم

```
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.

اه قوف ا مو 2 ASA 8. ا راد صل ا ل nat ني ترم

```
access-list IN-DMZ-INTERFACE extended permit ip host 10.1.1.5 host 64.100.0.5
static (inside,dmz) interface access-list IN-DMZ-INTERFACE
```

```
access-list DMZ-IN-INTERFACE extended permit ip host 172.16.1.5 host 172.16.1.1
static (dmz,inside) 64.100.0.5 access-list DMZ-IN-INTERFACE
```

## اهحال صاوا عااطخ الا فاشكت سا

### ثدح الا تارا دص ال او 8.3 رادص ال ا: Packet Tracer Output

```
ASA# packet-tracer input inside tcp 10.1.1.5 123 64.100.0.5 80
```

Phase: 1

Type: ACCESS-LIST

Subtype:

Result: ALLOW

Config:

Implicit Rule

Additional Information:

MAC Access list

Phase: 2

Type: UN-NAT

Subtype: static

Result: ALLOW

Config:

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

Additional Information:

NAT divert to egress interface dmz

Untranslate 64.100.0.5/80 to 172.16.1.5/80

Phase: 3

Type: NAT

Subtype:

Result: ALLOW

Config:

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

Additional Information:

Static translate 10.1.1.5/123 to 172.16.1.1/123

Phase: 4

Type: NAT

Subtype: per-session

Result: ALLOW

Config:

Additional Information:

Phase: 5

Type: IP-OPTIONS

Subtype:

Result: ALLOW

Config:

Additional Information:

Phase: 6

Type: NAT

Subtype: rpf-check

Result: ALLOW

Config:

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

Additional Information:

Phase: 7

Type: NAT

Subtype: per-session

Result: ALLOW

Config:

Additional Information:

Phase: 8

Type: IP-OPTIONS

Subtype:

Result: ALLOW

Config:

Additional Information:

Phase: 9

Type: FLOW-CREATION

Subtype:

Result: ALLOW

Config:

Additional Information:

New flow created with id 167632, packet dispatched to next module

Result:

input-interface: inside

input-status: up

input-line-status: up

output-interface: dmz

output-status: up

output-line-status: up

Action: allow

**Packet Tracer Output، مداردصإل او 8.2 رادصإل:**

```
ASA#packet-tracer input inside tcp 10.1.1.5 123 64.100.0.5 80
```

Phase: 1

Type: UN-NAT

Subtype: static

Result: ALLOW

Config:

```
static (dmz,inside) 64.100.0.5 access-list DMZ-IN-INTERFACE
```

```
match ip dmz host 172.16.1.5 inside host 172.16.1.1
```

```
static translation to 64.100.0.5
```

```
translate_hits = 0, untranslate_hits = 1
```

Additional Information:

NAT divert to egress interface dmz

Untranslate 64.100.0.5/0 to 172.16.1.5/0 using netmask 255.255.255.255

Phase: 2

Type: IP-OPTIONS

Subtype:

Result: ALLOW

Config:

Additional Information:

Phase: 3

Type: NAT

Subtype:

Result: ALLOW



Config:

```
static (inside,dmz) interface access-list IN-DMZ-INTERFACE
match ip inside host 10.1.1.5 dmz host 64.100.0.5
static translation to 172.16.1.1
translate_hits = 1, untranslate_hits = 0
```

Additional Information:

Static translate 10.1.1.5/0 to 172.16.1.1/0 using netmask 255.255.255.255

Phase: 4

Type: NAT

Subtype: host-limits

Result: ALLOW

Config:

```
static (inside,dmz) interface access-list IN-DMZ-INTERFACE
match ip inside host 10.1.1.5 dmz host 64.100.0.5
static translation to 172.16.1.1
translate_hits = 1, untranslate_hits = 0
```

Additional Information:

Phase: 5

Type: NAT

Subtype: rpf-check

Result: ALLOW

Config:

```
static (dmz,inside) 64.100.0.5 access-list DMZ-IN-INTERFACE
match ip dmz host 172.16.1.5 inside host 172.16.1.1
static translation to 64.100.0.5
translate_hits = 0, untranslate_hits = 1
```

Additional Information:

Phase: 6

Type: NAT

Subtype: host-limits

Result: ALLOW

Config:

```
static (dmz,inside) 64.100.0.5 access-list DMZ-IN-INTERFACE
match ip dmz host 172.16.1.5 inside host 172.16.1.1
static translation to 64.100.0.5
translate_hits = 0, untranslate_hits = 1
```

Additional Information:

Phase: 7

Type: IP-OPTIONS

Subtype:

Result: ALLOW

Config:

Additional Information:

Phase: 8

Type: FLOW-CREATION

Subtype:

Result: ALLOW

Config:

Additional Information:

New flow created with id 503, packet dispatched to next module

Result:

input-interface: inside

input-status: up

input-line-status: up

output-interface: dmz

output-status: up

output-line-status: up

Action: allow

## ةمزل طاقءل

```
ASA# sh cap
capture capin type raw-data interface inside [Capturing - 1300 bytes]
match ip host 10.1.1.5 host 64.100.0.5
capture capout type raw-data interface dmz [Capturing - 1300 bytes]
match ip host 172.16.1.1 host 172.16.1.5
```

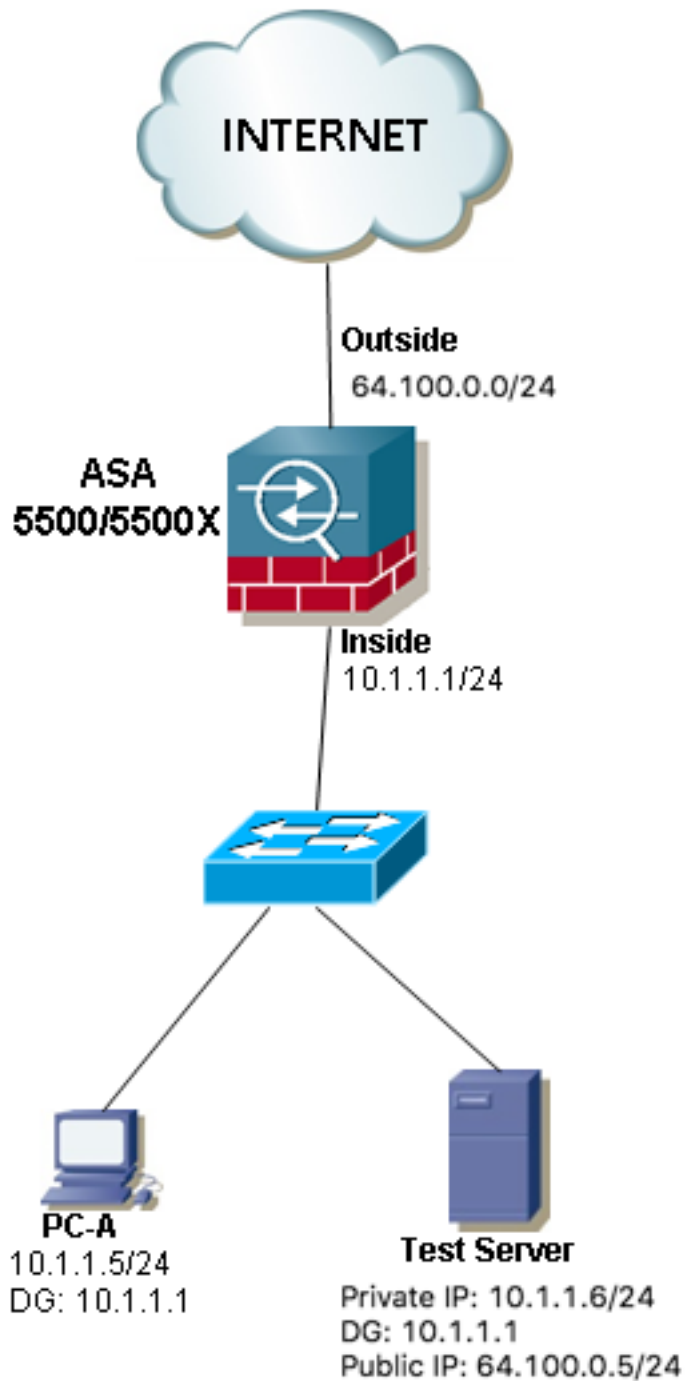
```
ASA# sh cap capin
```

```
10 packets captured
1: 12:36:28.245455 10.1.1.5 > 64.100.0.5: icmp: echo request
2: 12:36:28.269441 64.100.0.5 > 10.1.1.5: icmp: echo reply
3: 12:36:28.303451 10.1.1.5 > 64.100.0.5: icmp: echo request
4: 12:36:28.333692 64.100.0.5 > 10.1.1.5: icmp: echo reply
5: 12:36:28.372478 10.1.1.5 > 64.100.0.5: icmp: echo request
6: 12:36:28.395563 64.100.0.5 > 10.1.1.5: icmp: echo reply
7: 12:36:28.422402 10.1.1.5 > 64.100.0.5: icmp: echo request
8: 12:36:28.449241 64.100.0.5 > 10.1.1.5: icmp: echo reply
9: 12:36:28.481420 10.1.1.5 > 64.100.0.5: icmp: echo request
10: 12:36:28.507435 64.100.0.5 > 10.1.1.5: icmp: echo reply
10 packets shown
```

```
ASA1# sh cap capout
```

```
10 packets captured
1: 12:36:28.245730 172.16.1.1 > 172.16.1.5: icmp: echo request
2: 12:36:28.269395 172.16.1.5 > 172.16.1.1: icmp: echo reply
3: 12:36:28.303725 172.16.1.1 > 172.16.1.5: icmp: echo request
4: 12:36:28.333646 172.16.1.5 > 172.16.1.1: icmp: echo reply
5: 12:36:28.372737 172.16.1.1 > 172.16.1.5: icmp: echo request
6: 12:36:28.395533 172.16.1.5 > 172.16.1.1: icmp: echo reply
7: 12:36:28.422661 172.16.1.1 > 172.16.1.5: icmp: echo request
8: 12:36:28.449195 172.16.1.5 > 172.16.1.1: icmp: echo reply
9: 12:36:28.481695 172.16.1.1 > 172.16.1.5: icmp: echo request
10: 12:36:28.507404 172.16.1.5 > 172.16.1.1: icmp: echo reply
10 packets shown
```

هسفن لال ل تطبر نوكي رابتخ | مداخو pc-a في ضم ةهول او ردصم لال 2 ل لاثم  
نراق ASA ل لاد



## نېوكتالا

ثدحألا تارادصإلاو ASA 8.3 تارادصإلا nat نېترم

```
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.

اهقوف امو 2.8 ASA تارادصل nat ني ترم:

```
access-list IN-OUT-INTERFACE extended permit ip host 10.1.1.5 host 64.100.0.5
static (inside,inside) interface access-list IN-OUT-INTERFACE
```

```
access-list OUT-IN-INTERFACE extended permit ip host 10.1.1.6 host 10.1.1.1
static (inside,inside) 64.100.0.5 access-list OUT-IN-INTERFACE
```

ASA 10.1.1.5 نم ردصم لل IP ناو نعل NAT عمجرتل ةيسيسيئرلا ةينلا لثمتت: ةظحال م  
ىلع 10.1.1.6 فيضملا نم يتات يتلا دودرلا رابجا في 10.1.1.1 ةهجاو لل IP ناو نعل ل خاد  
نم ASA ني كم تلو لثامتملا ريغ هيجوتلا بنجتلا ةدشب بولطم اذهو، ASA ىلى ةدوعلا  
IP ناو نعل مجرتن مل اذا، ةمتمملا ةضملا ةزهجال نيبتا نايبلا رورم ةكرح ةجلا عم  
بب سب ةمتمملا رورملا ةكرح رظح ب ASA موقيسي سف، لاثملا اذه في انلعف امك ردصملا  
لثامتملا ريغ هيجوتلا.

## اهحالص او ءاطخال فاشكتسا

ثدخال تارادصل او 8.3 رادصل ال، Packet Tracer Output:

```
ASA# packet-tracer input inside tcp 10.1.1.5 123 64.100.0.5 80
```

Phase: 1

Type: UN-NAT

Subtype: static

Result: ALLOW

Config:

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

Additional Information:

NAT divert to egress interface inside

Untranslate 64.100.0.5/80 to 10.1.1.6/80

Phase: 2

Type: NAT

Subtype:

Result: ALLOW

Config:

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

Additional Information:

Static translate 10.1.1.5/123 to 10.1.1.1/123

Phase: 3

Type: ACCESS-LIST

Subtype:

Result: ALLOW

Config:

Implicit Rule

Additional Information:

Phase: 4

Type: NAT

Subtype: per-session

Result: ALLOW  
Config:  
Additional Information:

Phase: 5  
Type: IP-OPTIONS  
Subtype:  
Result: ALLOW  
Config:  
Additional Information:

Phase: 6  
Type: NAT  
Subtype: rpf-check  
Result: ALLOW  
Config:  
nat (inside,inside) source static obj-10.1.1.5 interface destination static obj-64.100.0.5 obj-10.1.1.6  
Additional Information:

Phase: 7  
Type: NAT  
Subtype: per-session  
Result: ALLOW  
Config:  
Additional Information:

Phase: 8  
Type: IP-OPTIONS  
Subtype:  
Result: ALLOW  
Config:  
Additional Information:

Phase: 9  
Type: FLOW-CREATION  
Subtype:  
Result: ALLOW  
Config:  
Additional Information:  
New flow created with id 167839, packet dispatched to next module

Result:  
input-interface: inside  
input-status: up  
input-line-status: up  
output-interface: inside  
output-status: up  
output-line-status: up  
Action: allow

## مدقأال تارادصإل او 8.2 رادصإل، Packet Tracer Output:

```
ASA# packet-tracer input inside tcp 10.1.1.5 123 64.100.0.5 80
```

Phase: 1  
Type: UN-NAT  
Subtype: static  
Result: ALLOW  
Config:  
static (inside,inside) 64.100.0.5 access-list OUT-IN-INTERFACE  
match ip inside host 10.1.1.6 inside host 10.1.1.1  
static translation to 64.100.0.5

translate\_hits = 0, untranslate\_hits = 1  
Additional Information:  
NAT divert to egress interface inside  
Untranslate 64.100.0.5/0 to 10.1.1.6/0 using netmask 255.255.255.255

Phase: 2  
Type: ACCESS-LIST  
Subtype:  
Result: ALLOW  
Config:  
Implicit Rule  
Additional Information:

Phase: 3  
Type: IP-OPTIONS  
Subtype:  
Result: ALLOW  
Config:  
Additional Information:

Phase: 4  
Type: NAT  
Subtype:  
Result: ALLOW  
Config:  
static (inside,inside) interface access-list IN-OUT-INTERFACE  
match ip inside host 10.1.1.5 inside host 64.100.0.5  
static translation to 10.1.1.1  
translate\_hits = 1, untranslate\_hits = 0  
Additional Information:  
Static translate 10.1.1.5/0 to 10.1.1.1/0 using netmask 255.255.255.255

Phase: 5  
Type: NAT  
Subtype: host-limits  
Result: ALLOW  
Config:  
static (inside,inside) interface access-list IN-OUT-INTERFACE  
match ip inside host 10.1.1.5 inside host 64.100.0.5  
static translation to 10.1.1.1  
translate\_hits = 1, untranslate\_hits = 0  
Additional Information:

Phase: 6  
Type: NAT  
Subtype: rpf-check  
Result: ALLOW  
Config:  
static (inside,inside) 64.100.0.5 access-list OUT-IN-INTERFACE  
match ip inside host 10.1.1.6 inside host 10.1.1.1  
static translation to 64.100.0.5  
translate\_hits = 0, untranslate\_hits = 1  
Additional Information:

Phase: 7  
Type: NAT  
Subtype: host-limits  
Result: ALLOW  
Config:  
static (inside,inside) 64.100.0.5 access-list OUT-IN-INTERFACE  
match ip inside host 10.1.1.6 inside host 10.1.1.1  
static translation to 64.100.0.5  
translate\_hits = 0, untranslate\_hits = 1  
Additional Information:

Phase: 8  
Type: IP-OPTIONS  
Subtype:  
Result: ALLOW  
Config:  
Additional Information:

Phase: 9  
Type: FLOW-CREATION  
Subtype:  
Result: ALLOW  
Config:  
Additional Information:  
New flow created with id 727, packet dispatched to next module

Result:  
input-interface: inside  
input-status: up  
input-line-status: up  
output-interface: inside  
output-status: up  
output-line-status: up  
Action: allow

## ةمزلحلا طاقئلا

```
ASA# sh cap
capture capin type raw-data interface inside [Capturing - 1300 bytes]
match ip host 10.1.1.5 host 64.100.0.5
capture capout type raw-data interface inside [Capturing - 1300 bytes]
match ip host 10.1.1.1 host 10.1.1.6
```

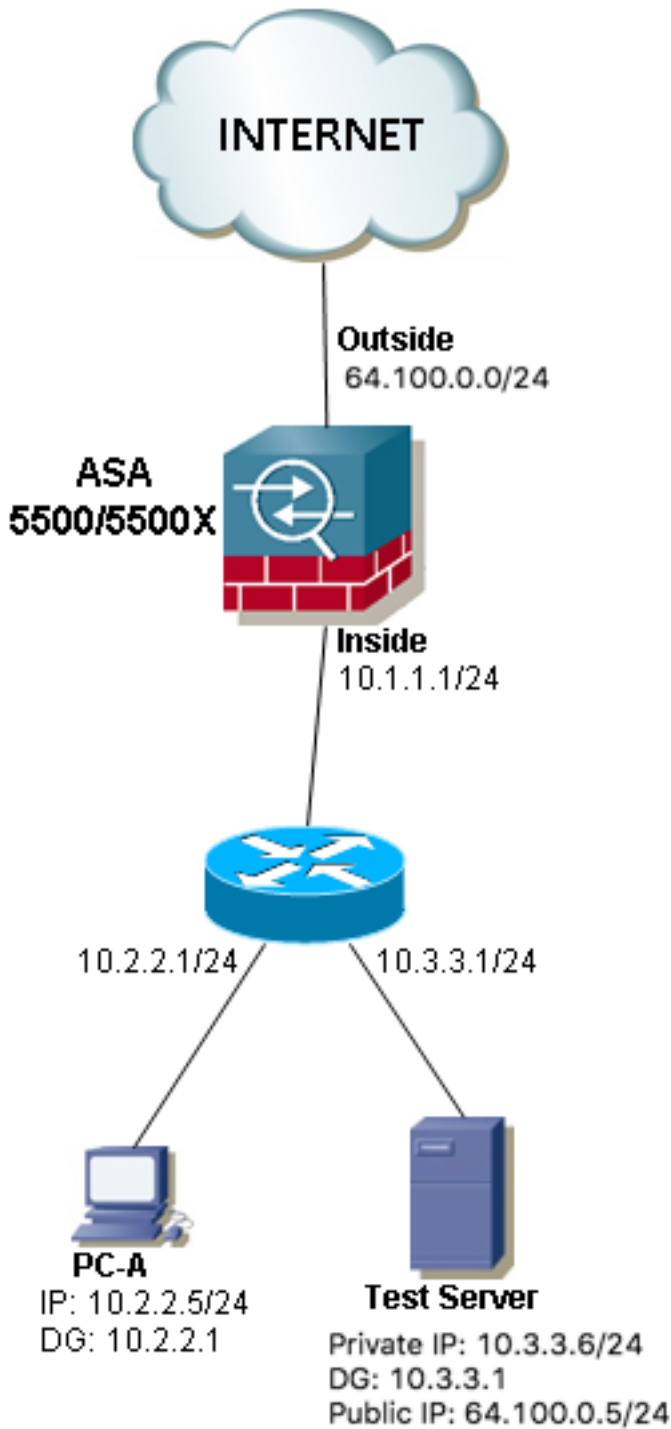
```
ASA# sh cap capin
```

```
10 packets captured
1: 12:50:39.304748 10.1.1.5 > 64.100.0.5: icmp: echo request
2: 12:50:39.335431 64.100.0.5 > 10.1.1.5: icmp: echo reply
3: 12:50:39.368389 10.1.1.5 > 64.100.0.5: icmp: echo request
4: 12:50:39.389368 64.100.0.5 > 10.1.1.5: icmp: echo reply
5: 12:50:39.398432 10.1.1.5 > 64.100.0.5: icmp: echo request
6: 12:50:39.418176 64.100.0.5 > 10.1.1.5: icmp: echo reply
7: 12:50:39.419732 10.1.1.5 > 64.100.0.5: icmp: echo request
8: 12:50:39.425103 64.100.0.5 > 10.1.1.5: icmp: echo reply
9: 12:50:39.434395 10.1.1.5 > 64.100.0.5: icmp: echo request
10: 12:50:39.438423 64.100.0.5 > 10.1.1.5: icmp: echo reply
10 packets shown
```

```
ASA2# sh cap capout
```

```
10 packets captured
1: 12:50:39.305282 10.1.1.1 > 10.1.1.6: icmp: echo request
2: 12:50:39.335386 10.1.1.6 > 10.1.1.1: icmp: echo reply
3: 12:50:39.368663 10.1.1.1 > 10.1.1.6: icmp: echo request
4: 12:50:39.389307 10.1.1.6 > 10.1.1.1: icmp: echo reply
5: 12:50:39.398706 10.1.1.1 > 10.1.1.6: icmp: echo request
6: 12:50:39.418130 10.1.1.6 > 10.1.1.1: icmp: echo reply
7: 12:50:39.419762 10.1.1.1 > 10.1.1.6: icmp: echo request
8: 12:50:39.425072 10.1.1.6 > 10.1.1.1: icmp: echo reply
9: 12:50:39.434669 10.1.1.1 > 10.1.1.6: icmp: echo request
10: 12:50:39.438392 10.1.1.6 > 10.1.1.1: icmp: echo reply
10 packets shown
```

ههجاوب نيلصتم رابتخالال م داخو PC-A نيفيضم ههجولواو ردصملا نوكي 3 لاثم  
ددعتم لوحم واهجوم نوكي دق) 3 قبطالال نم رخأ زاهج فلخ نكلو، هيلخالال ASA  
(تاقبطلال).



## نوكتالا

ثدخالال تارادصلال او ASA 8.3 تارادصلال nat نيترم

```
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.

اهقوق امو 2. ASA 8. اتارادصل ال nat نيترم

```
access-list IN-OUT-INTERFACE extended permit ip host 10.2.2.5 host 64.100.0.5  
static (inside,inside) interface access-list IN-OUT-INTERFACE
```

```
access-list OUT-IN-INTERFACE extended permit ip host 10.3.3.6 host 10.1.1.1  
static (inside,inside) 64.100.0.5 access-list OUT-IN-INTERFACE
```

ي ال 10.1.1.5 نم ردصم لل IP ناو نعل NAT مچرتل ةسيئرل ةينل لثمتت: **ةظالم**  
فيضم ال نم ةدراول دودرل ةداع| ضرف ي (10.1.1.1) ةهجالل IP ناو نعل لخد ASA ناو نعل  
ASA حامس للاو لثامتمل ريغ هيچوتل بنجتل ةدشب بولطم اذهو، ASA ال 10.1.1.6  
IP ناو نعل مچرتن مل اذ، ةمتهم ال ةفيضم ال ةزهجال ني ب تانايب ال رورم ةكرح ةجال عم ب  
بب سب ةمتهم ال رورم ال ةكرح رظح ASA موقيسي ف، لاثم ال اذه ي انل عف امك ردصم ال  
لثامتمل ريغ هيچوتل.

## اهجالصل او عاطخال فاشكتسا

ثدخال تارادصل ال او 8.3 رادصل ال، Packet Tracer Output:

```
ASA# packet-tracer input inside tcp 10.2.2.5 123 64.100.0.5 80
```

Phase: 1

Type: UN-NAT

Subtype: static

Result: ALLOW

Config:

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

Additional Information:

NAT divert to egress interface inside

Untranslate 64.100.0.5/80 to 10.3.3.6/80

Phase: 2

Type: NAT

Subtype:

Result: ALLOW

Config:

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

Additional Information:

Static translate 10.2.2.5/123 to 10.1.1.1/123

Phase: 3

Type: ACCESS-LIST

Subtype:

```
Result: ALLOW
Config:
Implicit Rule
Additional Information:

Phase: 4
Type: NAT
Subtype: per-session
Result: ALLOW
Config:
Additional Information:

Phase: 5
Type: IP-OPTIONS
Subtype:
Result: ALLOW
Config:
Additional Information:

Phase: 6
Type: NAT
Subtype: rpf-check
Result: ALLOW
Config:
nat (inside,inside) source static obj-10.2.2.5 interface destination static obj-64.100.0.5 obj-
10.3.3.6
Additional Information:

Phase: 7
Type: NAT
Subtype: per-session
Result: ALLOW
Config:
Additional Information:

Phase: 8
Type: IP-OPTIONS
Subtype:
Result: ALLOW
Config:
Additional Information:

Phase: 9
Type: FLOW-CREATION
Subtype:
Result: ALLOW
Config:
Additional Information:
New flow created with id 167945, packet dispatched to next module

Result:
input-interface: inside
input-status: up
input-line-status: up
output-interface: inside
output-status: up
output-line-status: up
Action: allow
Packet Tracer Output، مرقأا ااراءصإا او 8.2 راءصإا:
```

```
ASA# packet-tracer input inside tcp 10.2.2.5 123 64.100.0.5 80
```

Phase: 1  
Type: UN-NAT  
Subtype: static  
Result: ALLOW  
Config:  
static (inside,inside) 64.100.0.5 access-list OUT-IN-INTERFACE  
match ip inside host 10.3.3.6 inside host 10.1.1.1  
static translation to 64.100.0.5  
translate\_hits = 0, untranslate\_hits = 1  
Additional Information:  
NAT divert to egress interface inside  
Untranslate 64.100.0.5/0 to 10.3.3.6/0 using netmask 255.255.255.255

Phase: 2  
Type: ACCESS-LIST  
Subtype:  
Result: ALLOW  
Config:  
Implicit Rule  
Additional Information:

Phase: 3  
Type: IP-OPTIONS  
Subtype:  
Result: ALLOW  
Config:  
Additional Information:

Phase: 4  
Type: NAT  
Subtype:  
Result: ALLOW  
Config:  
static (inside,inside) interface access-list IN-OUT-INTERFACE  
match ip inside host 10.2.2.5 inside host 64.100.0.5  
static translation to 10.1.1.1  
translate\_hits = 1, untranslate\_hits = 0  
Additional Information:  
Static translate 10.2.2.5/0 to 10.1.1.1/0 using netmask 255.255.255.255

Phase: 5  
Type: NAT  
Subtype: host-limits  
Result: ALLOW  
Config:  
static (inside,inside) interface access-list IN-OUT-INTERFACE  
match ip inside host 10.2.2.5 inside host 64.100.0.5  
static translation to 10.1.1.1  
translate\_hits = 1, untranslate\_hits = 0  
Additional Information:

Phase: 6  
Type: NAT  
Subtype: rpf-check  
Result: ALLOW  
Config:  
static (inside,inside) 64.100.0.5 access-list OUT-IN-INTERFACE  
match ip inside host 10.3.3.6 inside host 10.1.1.1  
static translation to 64.100.0.5  
translate\_hits = 0, untranslate\_hits = 1  
Additional Information:

Phase: 7  
Type: NAT

Subtype: host-limits  
Result: ALLOW  
Config:  
static (inside,inside) 64.100.0.5 access-list OUT-IN-INTERFACE  
match ip inside host 10.3.3.6 inside host 10.1.1.1  
static translation to 64.100.0.5  
translate\_hits = 0, untranslate\_hits = 1  
Additional Information:

Phase: 8  
Type: IP-OPTIONS  
Subtype:  
Result: ALLOW  
Config:  
Additional Information:

Phase: 9  
Type: FLOW-CREATION  
Subtype:  
Result: ALLOW  
Config:  
Additional Information:  
New flow created with id 908, packet dispatched to next module

Result:  
input-interface: inside  
input-status: up  
input-line-status: up  
output-interface: inside  
output-status: up  
output-line-status: up  
Action: allow

## ةمزلحلا طاقئلا

```
ASA# sh cap
capture capin type raw-data interface inside [Capturing - 1300 bytes]
match ip host 10.2.2.5 host 64.100.0.5
capture capout type raw-data interface inside [Capturing - 1300 bytes]
match ip host 10.1.1.1 host 10.3.3.6
```

```
ASA# sh cap capin
```

```
10 packets captured
1: 13:06:09.302047 10.2.2.5 > 64.100.0.5: icmp: echo request
2: 13:06:09.315276 64.100.0.5 > 10.2.2.5: icmp: echo reply
3: 13:06:09.342221 10.2.2.5 > 64.100.0.5: icmp: echo request
4: 13:06:09.381266 64.100.0.5 > 10.2.2.5: icmp: echo reply
5: 13:06:09.421227 10.2.2.5 > 64.100.0.5: icmp: echo request
6: 13:06:09.459204 64.100.0.5 > 10.2.2.5: icmp: echo reply
7: 13:06:09.494939 10.2.2.5 > 64.100.0.5: icmp: echo request
8: 13:06:09.534258 64.100.0.5 > 10.2.2.5: icmp: echo reply
9: 13:06:09.564210 10.2.2.5 > 64.100.0.5: icmp: echo request
10: 13:06:09.593261 64.100.0.5 > 10.2.2.5: icmp: echo reply
10 packets shown
```

```
ASA# sh cap capout
```

```
10 packets captured
1: 13:06:09.302367 10.1.1.1 > 10.3.3.6: icmp: echo request
2: 13:06:09.315230 10.3.3.6 > 10.1.1.1: icmp: echo reply
3: 13:06:09.342526 10.1.1.1 > 10.3.3.6: icmp: echo request
4: 13:06:09.381221 10.3.3.6 > 10.1.1.1: icmp: echo reply
```

```
5: 13:06:09.421517 10.1.1.1 > 10.3.3.6: icmp: echo request
6: 13:06:09.459174 10.3.3.6 > 10.1.1.1: icmp: echo reply
7: 13:06:09.495244 10.1.1.1 > 10.3.3.6: icmp: echo request
8: 13:06:09.534213 10.3.3.6 > 10.1.1.1: icmp: echo reply
9: 13:06:09.564500 10.1.1.1 > 10.3.3.6: icmp: echo request
10: 13:06:09.593215 10.3.3.6 > 10.1.1.1: icmp: echo reply
10 packets shown
```

## قصة تاذا تامولعم

- [NAT فعضل لى ساساً بلطتم ASA 8.3: نىوكت لىلد](#)
- [ASA 8.4: DNS و NAT نىوكت لىلد](#)
- [ASA 8.3 لىل 8.3 لبق ام نىوكت قةلثم](#)

ةمچرتل هذه ل و ح

ةلأل تاي نقتل ن م ة و مچ م ادخت ساب دن تسم ل ا ذه Cisco ت مچرت  
م ل ا ل ا ا ن ا ع مچ ي ف ن ي م دخت س م ل ل م عد ي و ت ح م م ي دقت ل ة ي ر ش ب ل و  
ا م ك ة ق ي ق د ن و ك ت ن ل ة ي ل ا ة مچرت ل ض ف ا ن ا ة ظ ح ا ل م ي ج ر ي . ة ص ا خ ل ا م ه ت غ ل ب  
Cisco ي ل خ ت . ف ر ت ح م مچرت م ا ه م د ق ي ي ت ل ا ة ي ف ا ر ت ح ا ل ا ة مچرت ل ا ع م ل ا ح ل ا و ه  
ي ل ا ا م ا د ع و ج ر ل ا ب ي ص و ت و ت ا مچرت ل ا هذه ة ق د ن ع ا ه ت ي ل و ئ س م Cisco  
Systems ( ر ف و ت م ط ب ا ر ل ا ) ي ل ص ا ل ا ي ز ي ل ج ن ا ل ا دن ت س م ل ا