

# NAT Verification – show ip nat translation

```
R1#sh ip nat translation
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Pro	Inside global	Inside local	Outside local	Outside global
icmp	203.0.113.3:1	10.0.1.10:1	203.0.113.20:1	203.0.113.20:1
tcp	203.0.113.3:80	10.0.1.10:80	203.0.113.20:45849	203.0.113.20:45849
---	203.0.113.3	10.0.1.10	---	---

# NAT Definitions



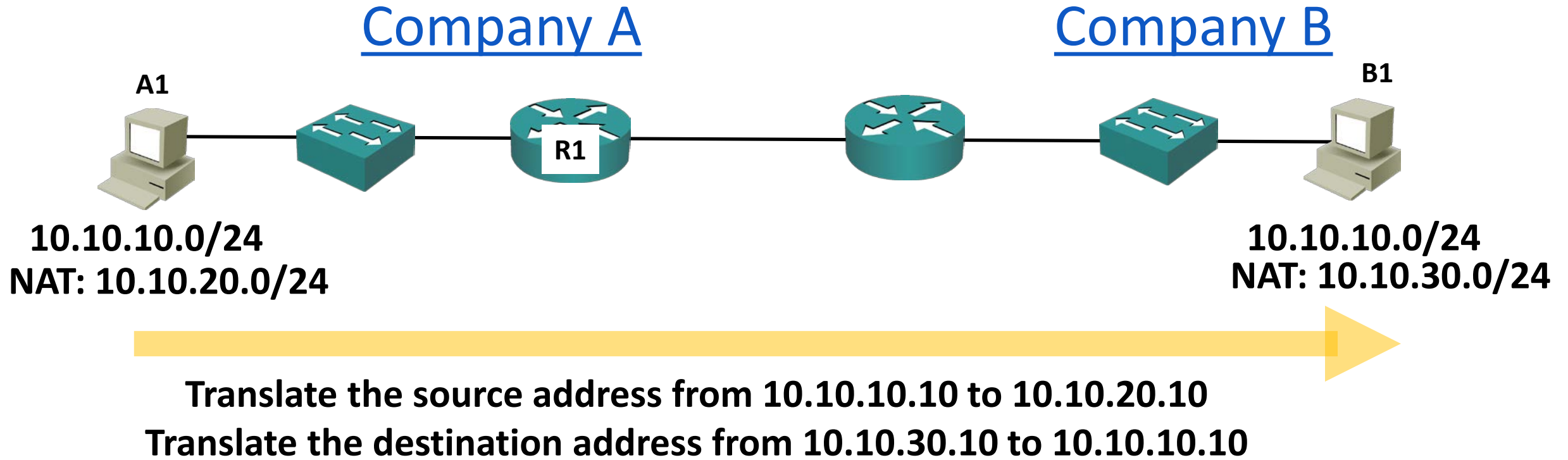
- **Inside local address**—The IP address actually configured on the inside host's Operating System.
- **Inside global address**— The NAT'd address of the inside host as it will be reached by the outside network.
- **Outside local address**—The IP address of the outside host as it appears to the inside network.
- **Outside global address**—The IP address assigned to the host on the outside network by the host's owner.

# Outside Local vs Outside Global



- Router R1 in our example knows one address to reach the outside host (203.0.113.20) and does not translate that address.
- For one way NAT, the Outside Local and Outside Global addresses will be reported as being the same.

# Two Way NAT

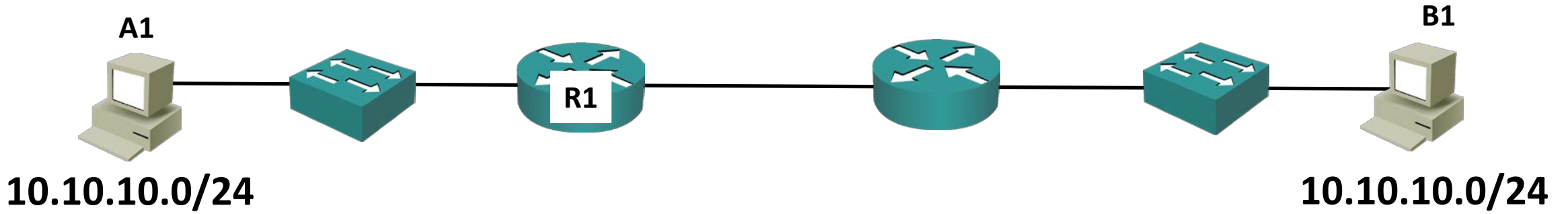


# Two Way NAT



Company A

Company B



**Inside Local  
Source IP  
10.10.10.10**

**Inside Global  
Source IP  
10.10.20.10**

**Outside Local  
Destination IP  
10.10.30.10**

**Outside Global  
Destination IP  
10.10.10.10**