

## Configure NLB affinity

Each member in an NLB cluster receives all incoming requests. NLB uses a fully distributed algorithm to determine which member processes the request; all other members discard the request. This method of load balancing is more efficient than using traditional load balancing devices, because filtering unwanted requests is faster than routing them.

### Client Affinity

NLB offers three types of client affinity to minimize response time to clients and provide generic support for preserving session state. Each affinity specifies a different method for distributing client requests. In Application Center, the New Cluster Wizard sets affinity to Single by default. Later, you can use the *cluster Properties* dialog box to modify the affinity. The following table describes the three types of affinity.

Affinity	Description
None	Multiple requests from the same client can access any member; useful for clusters that do not store session state information on individual members.
Single	Multiple requests from the same client must access the same member; useful for clusters within an intranet.
Class C	Multiple requests from the same TCP/IP Class C address range must access the same member; useful for clusters on the Internet.

### No Affinity

With No affinity, NLB does not associate clients with a particular member. Every client request can be load balanced to any member. This affinity provides the best performance but might disrupt clients with established sessions, because subsequent requests might be load balanced to other members where the session information does not exist.

### Single Affinity

In Single affinity, NLB associates clients with particular members by using the client's IP address. Thus, requests coming from the same client IP address always reach the same member. This affinity provides the best support for clients that use sessions on an intranet. These clients cannot use No affinity because their sessions could be disrupted. Additionally, these clients cannot use Class C affinity because intranet clients typically have IP addresses within a narrow range. It is likely that this range is so narrow that all clients on an intranet have the same Class C address, which means that one member might process all of the requests while other members remain idle.

### Class C Affinity

With Class C affinity, NLB associates clients with particular members by using the Class C portion of the client's IP address. Thus, clients coming from the same Class C address range always access the same member. This affinity provides the best performance for clusters serving the Internet.

**Note** It is not efficient for Internet clients to use Single affinity because, in Single affinity, NLB load balances each client by the client's entire IP address, which can span a broad range. By using Class C affinity, NLB associates clients with only the same Class C portion of the IP address with

## To modify affinity

1. In the Application Center snap-in, right-click the cluster on which to modify affinity, and then on the pop-up menu, click **Properties**.
  2. Click the **General** tab.
  3. Under **Load balancing**, in the **NLB client affinity** box, click the appropriate affinity setting, and then click **OK**.
- particular members. Therefore, you essentially reduce the range of IP addresses by which NLB load balances clients.