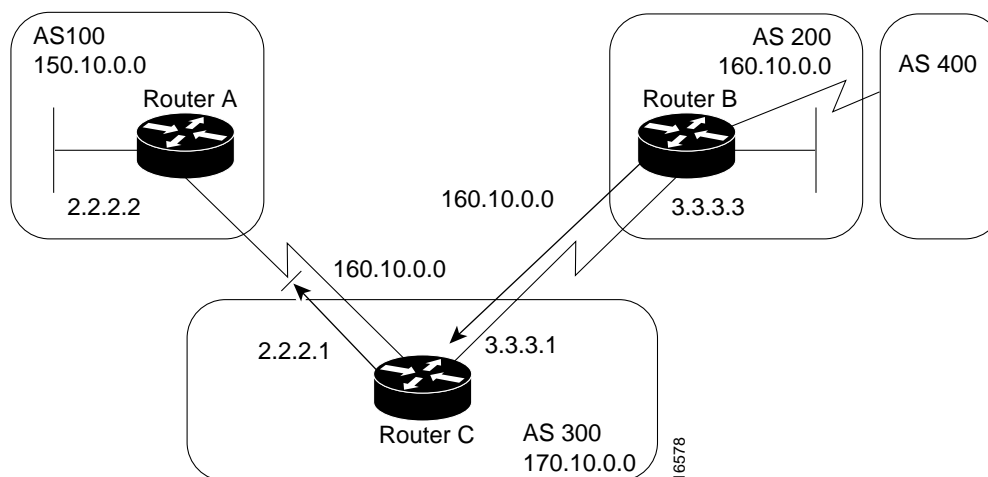


Figure 3-33 AS_path filtering.



```
!Router C
neighbor 3.3.3.3 remote-as 200
neighbor 2.2.2.2 remote-as 100
neighbor 2.2.2.2 filter-list 1 out
!
ip as-path access-list 1 deny ^200$
ip as-path access-list 1 permit .*
```

In this example, access list 1 denies any update whose AS_path attribute starts with 200 (as specified by ^) and ends with 200 (as specified by \$). Because Router B sends updates about 160.10.0.0 whose AS_path attributes start with 200 and end with 200, such updates will match the access list and will be denied. By specifying that the update must also end with 200, the access list permits updates from AS 400 (whose AS_path attribute is 200, 400). If the access list specified ^200 as the regular expression, updates from AS 400 would be denied.

In the second access-list statement, the period (.) symbol means any character, and the asterisk (*) symbol means a repetition of that character. Together, .* matches any value of the AS_path attribute, which in effect permits any update that has not been denied by the previous access-list statement. If you want to verify that your regular expressions work as intended, use the following EXEC command:

```
show ip bgp regexp regular-expression
```

The router displays all of the paths that match the specified regular expression.

Route Map Filtering

The **neighbor route-map** router configuration command can be used to apply a route map to incoming and outgoing routes. The network shown in Figure 3-34 demonstrates using route maps to filter BGP updates.