

```
R1:ISP_1
conf t
int e0/0
ip add 11.1.1.1 255.0.0.0
no sh
int lo0
ip add 10.0.0.1 255.0.0.0
exit
```

```
Router bgp 100
neig 11.1.1.2 remote-as 200
exit
```

```
R2:CE connected to ISP-1
conf t
int e0/0
ip add 11.1.1.2 255.0.0.0
no sh
int e0/1
ip add 13.1.1.2 255.0.0.0
no sh
int lo0
ip add 12.1.1.2 255.0.0.0
exit
```

R2:CE connected to ISP-1

```
Router bgp 200
neig 11.1.1.1 remote-as 200
exit
```

R2: Changes the ASN number from ASN 200 to ASN 600 it is also connected another isp ISP-2 with the new ASN

```
R3:
conf t
int e0/0
ip add 13.1.1.3 255.0.0.0
no sh
int lo0
ip add 30.0.0.1 255.0.0.0
exit
```

```
router bgp 300
neig 13.1.1.2 remote-as 600
net 30.0.0.0
exit
```

R2: Makes the changes ,it wants to connected new ISP with new ASN and keep connectivity with ISP-1 with old ASN, ISP-1 needs some time to make config changes in its side.

1.LOCAL -AS

```
no router bgp 200
router bgp 600
neig 13.1.1.3 remote-as 300
neig 11.1.1.1 local-as 200
exit
```

2.NO-PREPEND

R3 the new isp-2 receives updates from R2 with old asn number in its aspath list to remove the old asn from aspath list

```
R2:
router bgp 600
neig 13.1.1.3 remote-as 300
neig 11.1.1.1 local-as 200 no-prepend
exit
```

3.REPLACE-AS

R1 isp-1 receives updates from R2 with old asn number/new asn in its aspath list to remove the new asn from aspath list

```
R2:
router bgp 600
neig 13.1.1.3 remote-as 300
neig 11.1.1.1 local-as 200 no-prepend replace-as
exit
```

4.DUAL-AS

R2 is configured with dual-as option to facilitate the old ISP to change the config any time

```
router bgp 600
neig 13.1.1.3 remote-as 300
neig 11.1.1.1 local-as 200 no-prepend replace-as Dual-AS
exit
```

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5.Allowas IN

R1: CE head office AS 100--- Connected to (ISP R2)-----R3:Branch office As 100

Allowas in command relaxes the ebgp loop prevention rule and allows updates to be accepted when the aspath list has receiving router's own ASN.

```
R1:
router bgp 100
neig 11.1.1.2 remote-as 600
neig 11.1.1.2 allowas in
exit
```

```
R3:
router bgp 100
neig 13.1.1.2 remote-as 600
```

```
neig 13.1.1.2 allowas in
exit
```

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6.Remove private-As

R1CE-AS 65100-----R2 ISP 100-----R3 ISP 200

CE router R1 uses ASN 65100 (private AS) when connecting with its ISP 200 but iSP when it forwards the CE updates to the isp's it will strip the private-AS

```
R1:
router bgp 65100
neig 11.1.1.2 remote-as 100
exit
```

```
R2: ISp
router bgp 100
neig 11.1.1.1 remote-as 65100
neig 13.1.1.3 remote-as 200
neig 13.1.1.3 Remove private-As
```

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