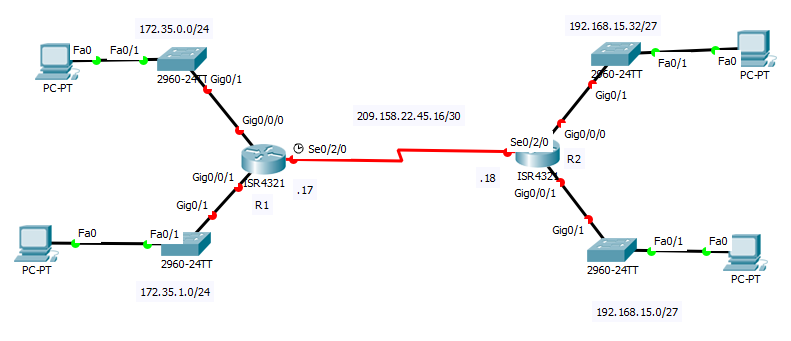
Static Routing Practice Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Section\_\_\_\_\_\_\_\_\_\_\_\_\_\_



209.158.22.16/30

How many networks are in the diagram? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

When deciding what routes to create, think about what the router knows and what the router needs to know.

For R1, what are the directly connected routes (networks)?

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

For R1, what networks does it not know?

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

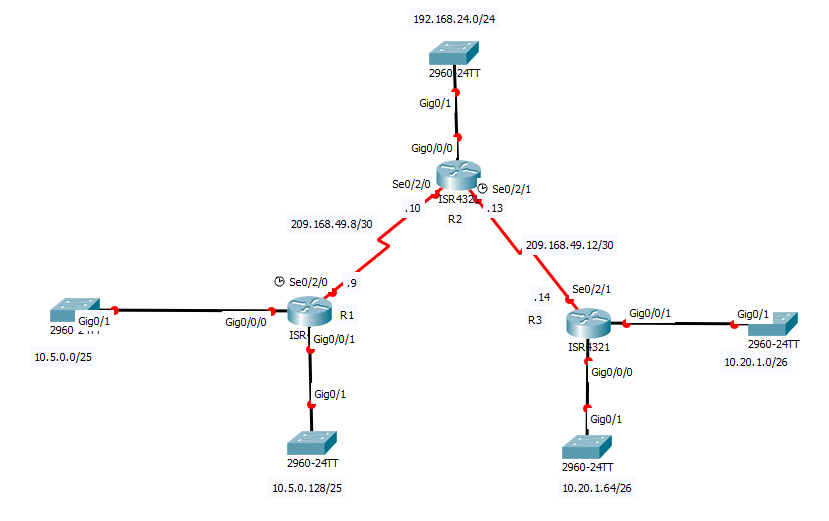
To create static routes, you need to think about what routes, the router does NOT know. Write **recursive** static routes to allow for full connectivity. Each router will need two routes.

R1(config)#\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

R1(config)#\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

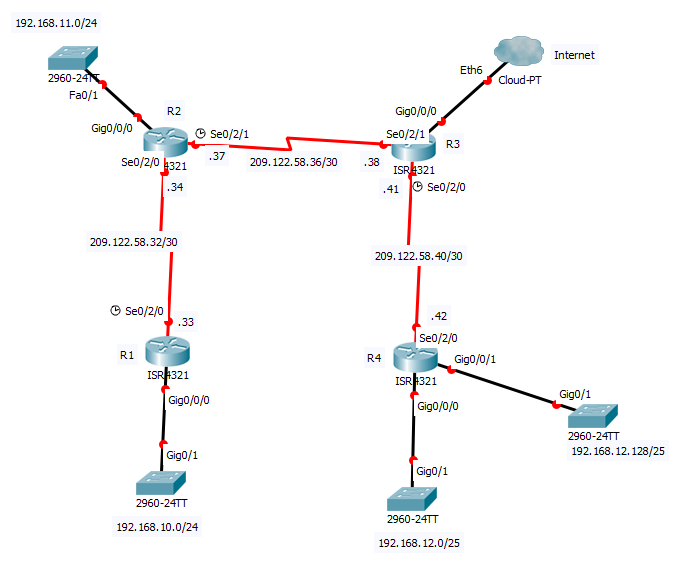
R2(config)#\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

R2(config)#\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



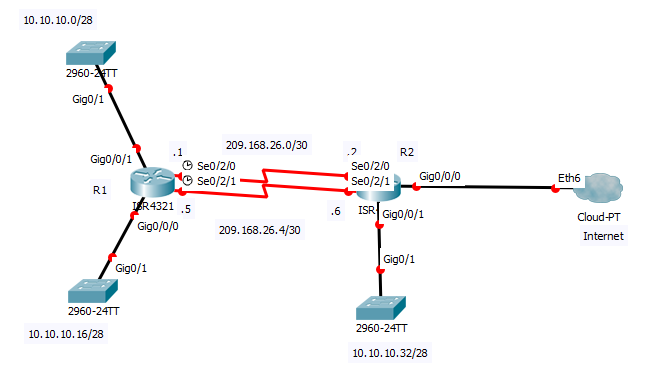
Write **directly connected** static routes to ensure full connectivity. Think about what networks the routers need to know. All routers need 4 routes.

|  |  |
| --- | --- |
| R1 |  |
|  |
|  |
|  |
| R2 |  |
|  |
|  |
|  |
| R3 |  |
|  |
|  |
|  |



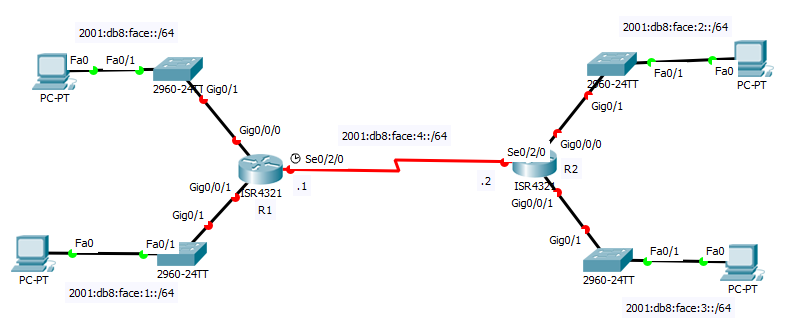
Enable full connectivity. Use recursive static routes for the internal networks. Include a directly connected default static route on all routers. R1 and R3 need six routes. R2 and R4 need 5 routes.

|  |  |
| --- | --- |
| R1 |  |
|  |
|  |
|  |
|  |
|  |
| R2 |  |
|  |
|  |
|  |
|  |
| R3 |  |
|  |
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|  |
|  |
| R4 |  |
|  |
|  |
|  |
|  |



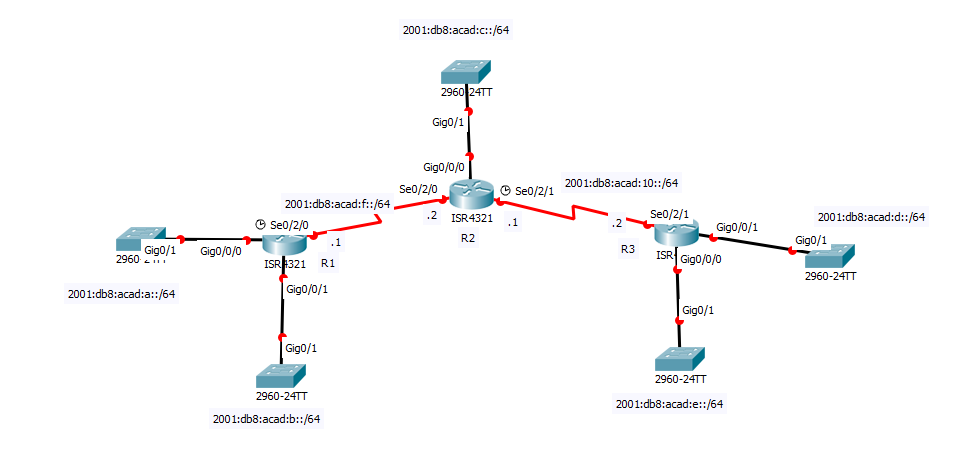
Write **fully specified static routes for the internal networks** to ensure connectivity. S0/2/1 will be the floating route with an administrative distance of 10. Write **directly connected default static routes** for the path to the internet. Use S0/2/1 as the backup route with an administrative distance of 10. R1 needs 4 routes and R2 needs 5 routes.

|  |  |
| --- | --- |
| R1 |  |
|  |
|  |
|  |
| R2 |  |
|  |
|  |
|  |
|  |



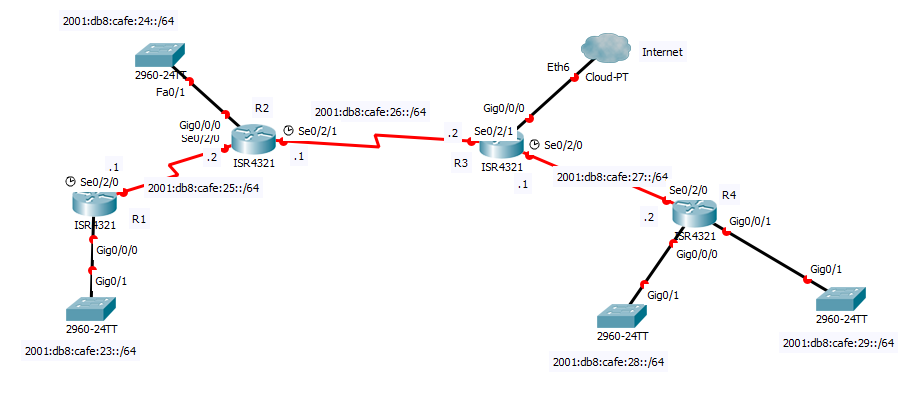
IPv6 is no different. Again, think of what each router knows and what each router needs to know. Write **recursive static routes** to ensure full-connectivity. Each router needs two static routes.

|  |  |
| --- | --- |
| R1 |  |
|  |
| R2 |  |
|  |



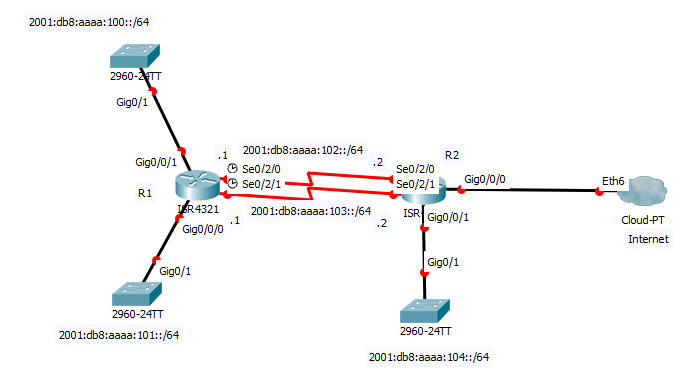
Write **directly connected static routes** to ensure full connectivity. Think about what networks the routers need to know. All routers need 4 routes.

|  |  |
| --- | --- |
| R1 |  |
|  |
|  |
|  |
| R2 |  |
|  |
|  |
|  |
| R3 |  |
|  |
|  |
|  |



Enable full connectivity. Use **recursive static routes for the internal networks**. Include a **directly connected default static route** on all routers. R1 and R3 need six routes. R2 and R4 need 5 routes.

|  |  |
| --- | --- |
| R1 |  |
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| R2 |  |
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| R3 |  |
|  |
|  |
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|  |
| R4 |  |
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Write **fully specified static routes for the internal networks** to ensure connectivity. S0/2/1 will be the floating route with an administrative distance of 10. Write **directly connected default static routes** **for the path to the internet.** Use S0/2/1 as the backup route with an administrative distance of 10. R1 needs 4 routes and R2 needs 5 routes.

|  |  |
| --- | --- |
| R1 |  |
|  |
|  |
|  |
| R2 |  |
|  |
|  |
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