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# **flokinet-014 - The BGP lab - overview**

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## Connecting

SSH to the netlab server:

```
$ ssh flokilab.nanocat.net
```

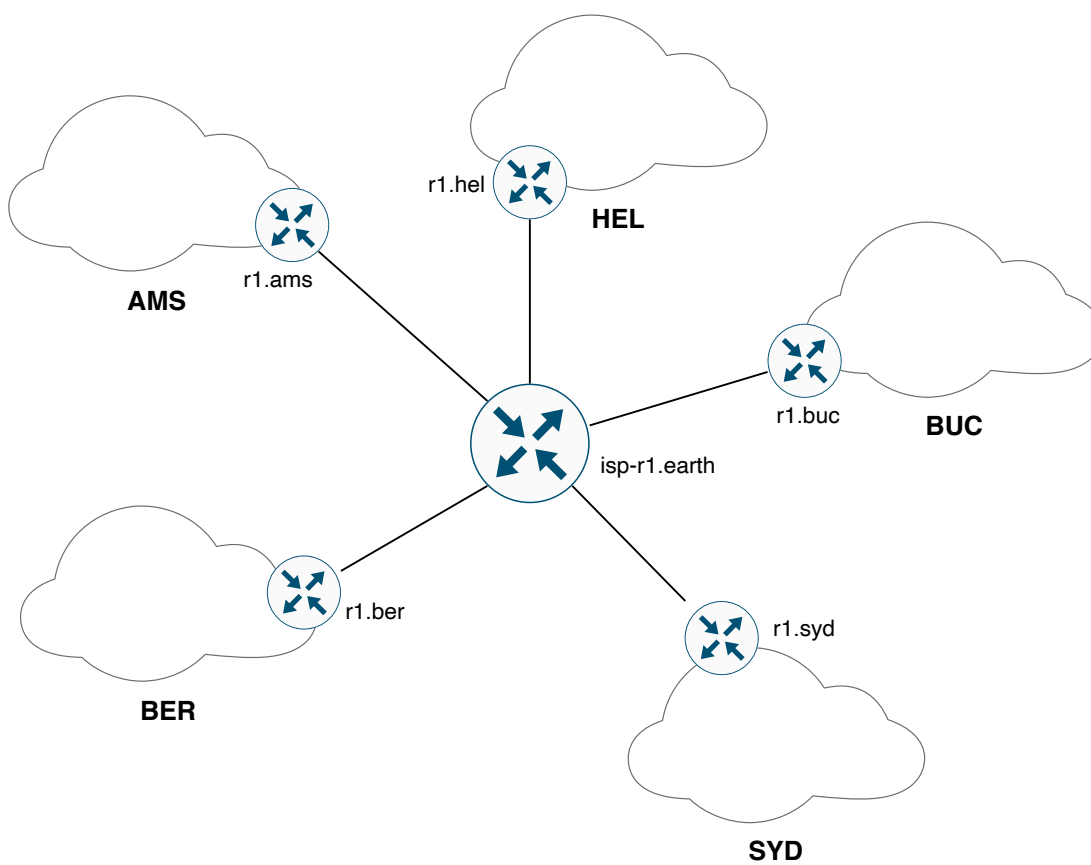
List the running containerlab devices:

```
$ list-devices
```

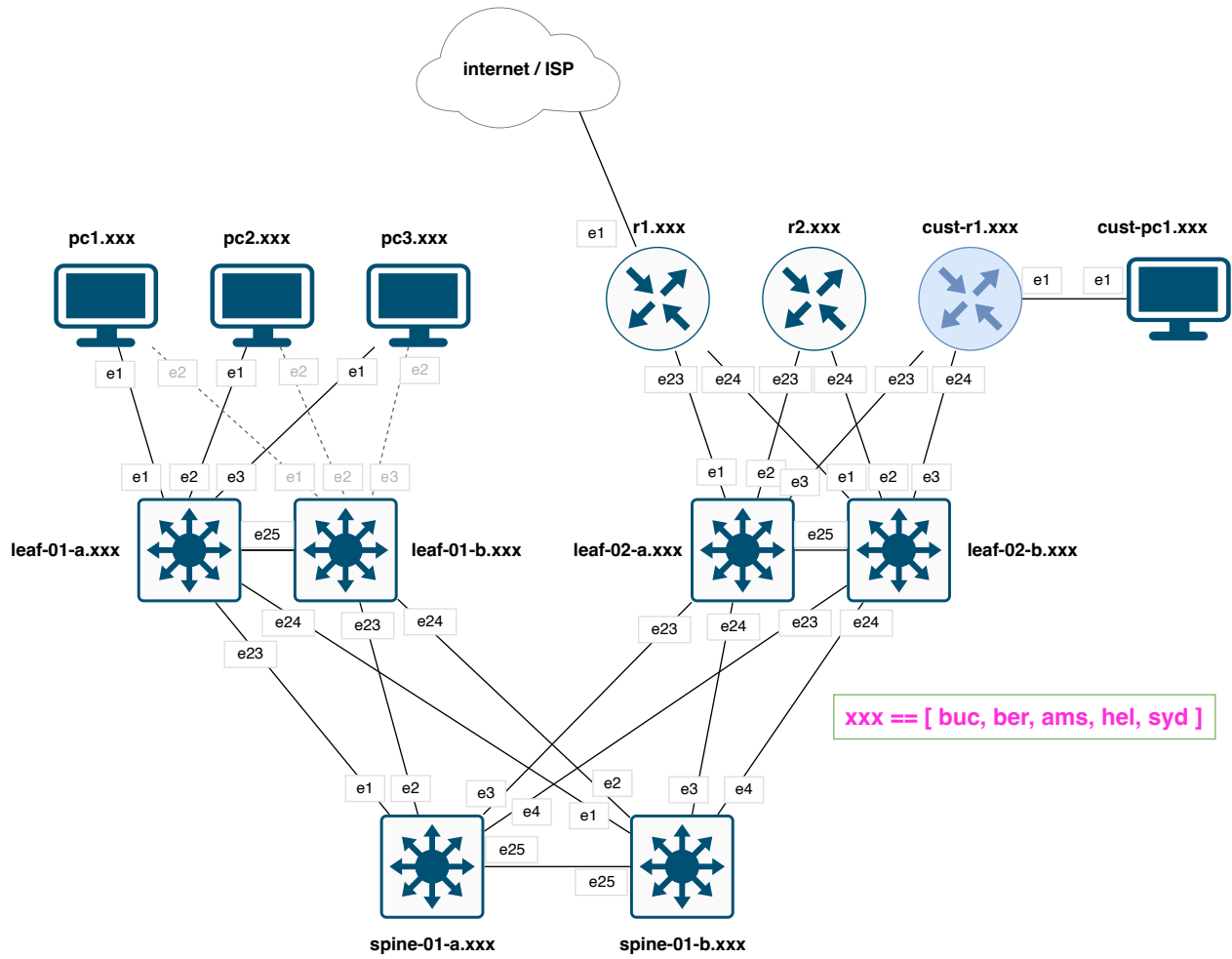
Connect to a device:

```
$ connect device-name
```

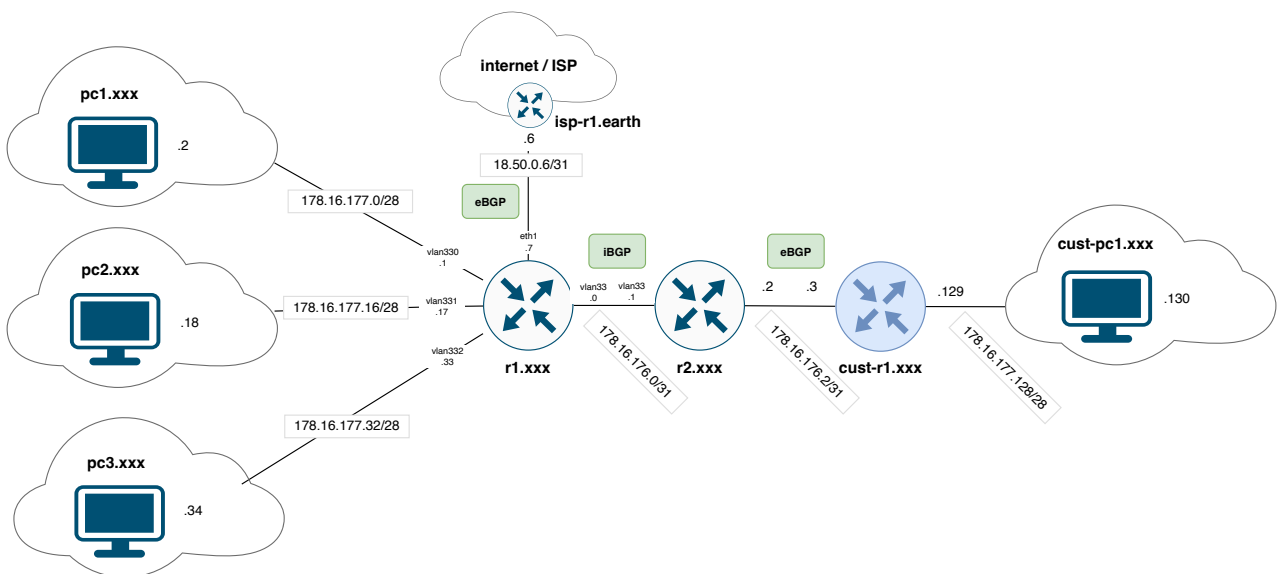
## Diagram: Global



### Diagram: Site



### Diagram: Logical



## Overall goal

- All PCs can talk to each other, in all sites
- MLAG is configured on the spine switches
- MLAG is configured on leaf-02

## Lab Checklist

ASN and Prefix allocation spreadsheet

### MLAG on the spines

- [Configure MLAG]({{< relref "flokinet-013" >}})
  - Configure an MLAG session between spine-01-a and spine-01-b
  - Configure an MLAG LACP interface on spine-01-a (po1) and spine-01-b (po1) for leaf-01-a
  - Configure an MLAG LACP interface on spine-01-a (po2) and spine-01-b (po2) for leaf-01-b
  - Configure an MLAG LACP interface on spine-01-a (po3) and spine-01-b (po3) for leaf-02-a
  - Configure an MLAG LACP interface on spine-01-a (po4) and spine-01-b (po4) for leaf-02-b
  - Configure an LACP interface on leaf-01-a (po23) -> spine-01-a / spine-01-b
  - Configure an LACP interface on leaf-01-b (po23) -> spine-01-a / spine-01-b
  - Configure an LACP interface on leaf-02-a (po23) -> spine-01-a / spine-01-b
  - Configure an LACP interface on leaf-02-b (po23) -> spine-01-a / spine-01-b

### MLAG on leaf-02

- [Configure MLAG]({{< relref "flokinet-013" >}})
  - Configure an MLAG session between leaf-02-a and leaf-02-b
  - Configure an MLAG LACP interface on leaf-02-a (po1) and leaf-02-b (po1) for r1
  - Configure an MLAG LACP interface on leaf-02-a (po2) and leaf-02-b (po2) for r2
  - Configure an LACP interface on r1 (po23) -> leaf-02-a / leaf-02-b
  - Configure an LACP interface on r2 (po23) -> leaf-02-a / leaf-02-b

### VLANs

- [Configure VLANs]({{< relref "flokinet-004" >}})
  - leaf-01-a and leaf-01-b:
    - \* Create your VLANs
    - \* Configure your VLAN access ports
    - \* Configure your VLAN trunk ports
  - leaf-02-a and leaf-02-b:
    - \* Create your VLANs
    - \* Configure your VLAN access ports

- \* Configure your VLAN trunk ports
- spine-01-a and spine-01-b:
  - \* Create your VLANs
  - \* Configure your VLAN trunk ports

### Layer 3 interfaces

- [Configure Layer 3 VLAN interfaces]({{< relref "flokinet-005" >}})
  - r1:
    - \* Create your VLANs
    - \* Configure your trunk ports
    - \* Create your VLAN interfaces

### BGP

- [Configure BGP]({{< relref "flokinet-012" >}})
  - r1:
    - \* Configure your BGP session to the ISP router

### Bonus

- Configure a new VLAN and /31 between r1 and r2
- Create a new iBGP session between r1 and r2
- Configure a new VLAN and /31 between r2 and cust-r1
- Allocate a new subnet for cust-r1/cust-pc1 and configure
- Configure an eBGP session between r2 and cust-r1
- Traceroute between cust-pc1 and all other PCs