Topologies

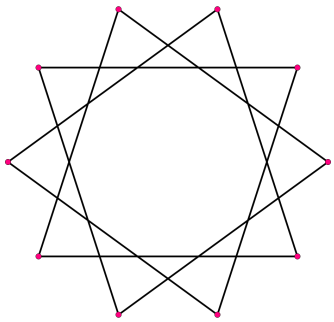
Double Chain

A double chain has two lines of Drones connected with each other, and each i-th Drone in a line is connected to the i-th Drone in the other line, as in the following ascii diagram.

```
--o1--o1--o1--o1--oX--
  |   |   |   |   |
--o1--oX--oX--o1--o1--
```

Star (Decagram)

A star has all Drones arranged in a circle. Then, connect each Drone to its 3rd follower. (In a 5 pointed star you connect each point to its 2nd follower, for this 10-pointed star, you connect it to the 3rd).



Butterfly

A Butterfly topology is a kind of connection inherited from circuits used to implement the fast fourier transform. With only 10 nodes, this topology follows the ascii diagram below:

```
o   o   o   o
| X |   | X |
o   o   o   o
  \   X   /
    o - o
```

Tree

A tree topology has four layers: 1 node, 2 nodes, 3 nodes and 4 nodes. Each node from one layer is connected to all nodes from the neighbouring layers.

```
L1                          D1.1
L2                  D2.1            D2.2
L3          D3.1            D3.2            D3.3
L4  D4.1            D4.2            D4.3            D4.4
```

Taking the above schematic, with the four layers L1, L2, L3, L4, and the ten Drones, consider that D1.1 is connected to D2.1 and D2.2, and D3.2 is connected to D2.1, D2.2, D4.1, D4.2, D4.3, and D4.4.

Sub-Net Forms

Sub-nets are shaped-sub-networks that get interconnected. Given that we are working with 10 nodes, two sub-nets come to mind:

- You can have two five-pointed stars that form two sub-networks, where each sub-network has 2 nodes connected to 2 other nodes of the other subnetwork.
- You can have two triangles and one square of interconnected nodes, each forming a sub-network, and then have 2 nodes of each sub-networks connected to 2 nodes of one other subnetwork, as tentatively depicted in the ascii diagram below: