Redistributing

- Domain Loop
  - Problem
    - Bad route caused by AD
    - OSPF-RIP
    - more than 3 protocols
  - Default AD
    - connected 0
    - static 1
    - Eigrp Summary 5
    - eBGP 20
    - EIGRP internal 90
    - OSPF 110
    - IS-IS 115
    - RIP 120
    - ODR 160
    - EIGRP Ext 170
    - iBGP 200
    - Unreachable 255
    - config
      - (router) distance #Ad [#ip-adv-router #WC] [#acl]
      - RIP
        - only 1 Value
        - (router) distance #
      - OSPF
        - different values posible
        - prefers internals over E1
        - prefers E1 over E2
        - (router) distance ospf [external #] [intra.area #] [inter-area #]
      - ISIS
        - only one AD value
      - BGP
        - (router) distance bgp #external #internal #loal
        - needs session reset
- protocols
  - ospf
    - any route, including local interfaces
    - defaults
      - Type 2
      - from BGP: Metric 1
      - other: Metrixc 20
    - use [subnets]
    - forwarding address
      - set next-hop ip if on a shared, ospf-enabled subnet
  - BGP
    - all eBGP routes
    - use [external] for iBGP routes
    - defaults
      - origin incomplete
      - MED= IGP Metric
      - weight 32768
    - ospf external not imported by default
  - isis
    - any route, no local interfaces
    - default metric: 0
      - also on ISIS to ISIS
    - Layer 2
  - not transitive
  - only use routes in RIB
    - only if source matches
- config
  - (router) redistribute #proto #as [metric #] [metric-type #] [match #] [tag #] [route-map #] [subnets]
    - metric
      - OSPF
        - default
          - metric #int
          - BGP=1
          - OSPF=source-metric
          - other=20
      - EIGRP
        - metric #BW #Delay #reliability #load #mtu
        - all metric components have to be set
          - except EIGRP2EIGRP
      - (router) default-metric #metric
    - tag #int
      - 32bit integer value
    - metric-type 1 | 2
      - ospf only
      - external 1
        - allways prefered
        - costs addup as T3
      - external 2
        - default
          - metric stays unchanged
          - decide on metric first
    - subnets
      - ospf only
      - redistribute subnets
      - needded for classless