- Northstar
  - Current 1.0 REST API
    - Topology
      - List of topologies
      - List of elements
      - PCEP status
      - BGP-LS status
    - Node
      - Get all Nodes
      - Create Node
      - Search Node
      - Get single Node details
      - Update Node
      - Delete Node
      - Get Node event history
    - Link
      - Get all Links
      - Create Link
      - Search Link
      - Get single Link
      - Update Link
      - Delete Link
      - Get Link event history
    - TE-LSPs
      - Get all LSPs
      - Create LSP
      - Search LSP
      - Get single LSP
      - Update LSP
      - Delete LSP
      - Get LSP event history
  - Use Cases
    - Non-essential config push
      - From embedded orchestrator
        - OSPF hostnames
          - For every node in the NS topology
            - Update Node
              - Name attribute (string)
        - Admin group names
          - For every link in the NS topology
            - Update Link
              - TEcolor attribute (bits) per end
        - PCE templates
          - NETCONF/PyEz towards the network
            - Gather LSP template regexps
              - For new TE-LSP in the NS topology
                - Create LSP
                  - Just allow Name attribute (string) matching regexp
              - For existing TE-LSP in the NS topology
                - Update LSP
                  - Just allow Name attribute (string) matching regexp / registered lspIndex
      - From embedded orchestrator / other controller
        - Multi-layer mapping info (SRLG, delay, metric, etc.)
          - For every link in the NS topology
            - Update Link
              - Metric attribute (integer) per end
              - TEcolor attribute (bits) per end
              - TEmetric attribute (integer) per end
              - Delay attribute (integer) per end
    - Essential config push
      - From router
        - PCE template names
          - NETCONF
            - Local LSP template regexp
              - For new TE-LSP in the NS topology
                - Create LSP
                  - Just allow Name attribute (string) matching regexp
              - For existing TE-LSP in the NS topology
                - Update LSP
                  - Just allow Name attribute (string) matching regexp / registered lspIndex
        - Multi-layer mapping info (SRLG)
          - NETCONF
            - For every link in the NS topology
              - Update Link
                - Metric attribute (integer) per end
                - TEcolor attribute (bits) per end
                - TEmetric attribute (integer) per end
                - Delay attribute (integer) per end
    - Statistics
      - LSP stats/ RPM stats/ MIBs
        - From embedded orchestrator
          - NETCONF/PyEz towards the network
            - Visualize locally?
              - ???
        - From router
          - Op/Event-scripts
            - Visualize locally?
              - ???
    - Live modification requests
      - From router
        - Change TE-metric after event
          - Event-scripts
            - For single link in the NS topology
              - Update Link
                - Metric attribute (integer) per end
                - TEmetric attribute (integer) per end
        - Update link info after event
          - Event-scripts
            - For single link in the NS topology
              - Update Link
                - TEmetric attribute (integer) per end
                - TEcolor attribute (bits) per end
                - Delay attribute (integer) per end
                - Metric attribute (integer) per end
        - Trigger TE-LSP optimization after event
          - Event-scripts
            - For single LSP in the NS topology
              - Update LSP
                - bandwidth attribute (string)
                - setupPriority attribute (integer)
                - holdingPriority attribute (integer)
        - Create new TE-LSP after event
          - Event-scripts
            - For single LSP in the NS topology or primary and secondary LSP
              - Create LSP
                - bandwidth attribute (string)
                - "to:address" attribute (string)
                - setupPriority attribute (integer)
                - holdingPriority attribute (integer)
                - ERO objects
                - Strict/Loose hops
  - Services
    - Greenfield projects (Northstar as part of Plan/Build/Operate)
    - Multi layer controller integration
    - Northstar deployment
    - Network Optimization assessment
    - Northstar validation testing
    - Northstar OSS integration
    - Resident engineering