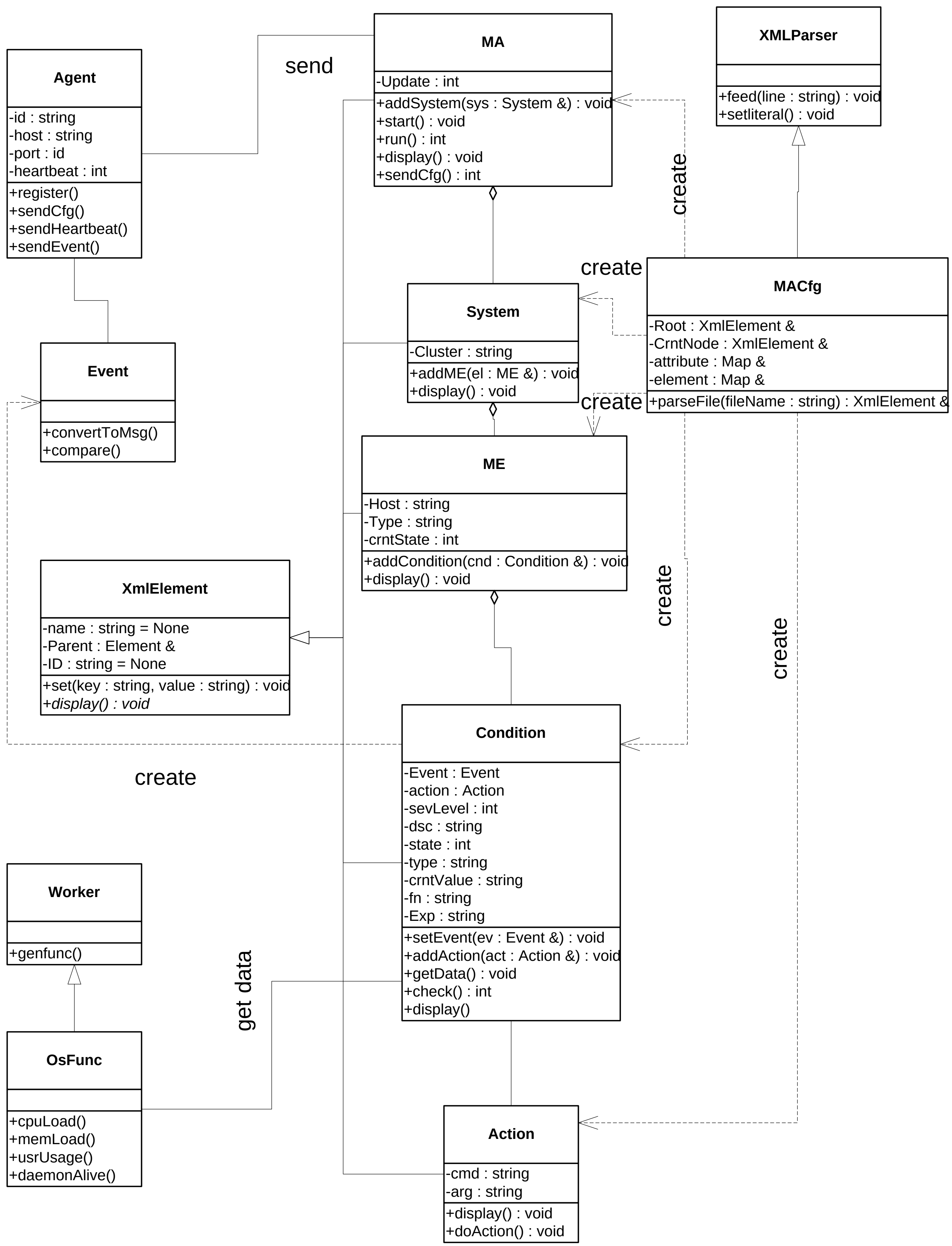
Logical View

Monitoring Agent Class Diagarm



XML Structure for Monitoring Agent

- MA-config
  - Update
  - ID
  - Ncs
    - host
    - port
    - heartbeat
  - System
    - ID
    - Cluster
    - Monitored-element
      - ID
      - Host
      - Type
      - Condition
        - sevLevel
        - Type
        - Name
        - State
        - fn
          - name
          - arg
        - apply
          - and
          - reln
            - lt
            - ci
            - cn
          - reln
        - Action
          - ID
          - Exec
            - name
            - argument
      - Condition
        - operator
        - value
        - sevLevel
        - State
    - Monitored-element

Standard Monitoring Agent DTD file

```
<!ELEMENT ma config (ID,Update,Ncs,System*)>
<!ELEMENT Ncs EMPTY>
<!ATTLIST Ncs
        port            NMTOCKEN        '9998'
        host            NMTOCKEN        'fcstst1.fnal.gov'
        heartbeat       NMTOCKEN        '100' >
<!ELEMENT System (ID,Cluster,Monitored-element*)>
<!ELEMENT Monitored-element (ID,Host,Type,Condition*)>
<!ELEMENT Condition (State,Type?,Name?,Action,fn,apply)>
<!ATTLIST Condition
        sevLevel      (0,1,2,3,4,5)   "0" >
<!ELEMENT fn EMPTY>
<!ATTLIST fn
        name            CDATA         #REQUIRED
        arg             CDATA         #IMPLIED>
<!ELEMENT  apply (and?|or?,reln*)>
<!ELEMENT or EMPTY>
<!ELEMENT and EMPTY>
<!ELEMENT reln (lt?|leq?|gt?|geq?|eq?|neq?|in?|notin?,ci,cn)>
<!ELEMENT lt EMPTY>
<!ELEMENT leq EMPTY>
<!ELEMENT gt EMPTY>
<!ELEMENT geq EMPTY>
<!ELEMENT eq EMPTY>
<!ELEMENT neq EMPTY>
<!ELEMENT in EMPTY>
<!ELEMENT notin EMPTY>
<!ELEMENT ci (#PCDATA)>
<!ATTLIST ci
        type    (int,real)       "real" >
<!ELEMENT cn (#PCDATA)>
<!ATTLIST cn
        type    (int,real)       "real" >

<!ELEMENT Action(ID,Exec)>
<!ELEMENT Exec   EMPTY>
<!ATTLIST exec
        name  CDATA         #REQUIRED
        argument      CDATA         #IMPLIED>
<!ELEMENT ID (#PCDATA)>
<!ELEMENT Host (#PCDATA)>
<!ELEMENT Type (#PCDATA)>
<!ELEMENT State  (#PCDATA)>
<!ELEMENT Name  (#PCDATA)>
```