Station_Informal 16-05-2012

```
class_chart STATION
      indexing
        author: "Nikolaj Aaes (niaa@itu.dk) & Nicolai Skovvart (nbsk@itu.dk)"
3
      explanation "A station is a client-machine that communicates with its
    manager, and provides a graphical user interface for voters to use when
    requesting a ballot. A station can also be the manager. A manager
    manages the various stations, and handles synchronization of the data.
    It also has elevated rights compared to a station, and can for example
    manually mark a voter as having been handed a ballot (in case he lost
    his voter card, or the like)."
5
    query
      "what is my address?", "who is the manager?",
6
7
      "Is there enough active stations in the group to continue operations?",
8
      "What is the status of the election?",
9
      "Who are my peers?"
10
      "How can I manipulate my database?",
11
      "How can I communicate with my group?",
12
      "How can I encrypt messages?",
13
      "How can I log messages?",
14
      "How can the user interact with me?",
15
      "Am I the manager?",
16
      "What is the master password?",
17
      "Is this station active?",
18
      "What machines on the network respond that they have the digital
19
    voter list software running?",
      "Is this string the masterpassword?",
20
      "Can I have a new Station that is the manager?",
21
      "Can I have a new Station?"
22
    command
23
      "This station is now the manager!"
24
      "This is how you encrypt messages!",
25
      "This is how you log messages!", "The master password is this!",
26
27
      "The system is compromised, notify everyone and shut down the
28
    election!",
      "Exchange public keys with this machine!",
29
      "Start listening to other stations!"
30
      "Stop listening to other stations!",
31
      "Start the election!",
32
      "Add this station to the group!",
33
      "Remove this station from the group!",
34
      "Start election of a new manager!",
35
      "Elect a new manager!"
36
      "Request a ballot for this voter!",
37
      "This voter received a ballot!",
38
      "Revoke this ballot!",
39
      "Tell the group to remove this station as a peer!",
40
      "Make this station the new manager!"
41
      "Announce to all stations that the election has started!",
42
      "Announce to all stations that the election has ended!"
43
      "Announce to all that they should revoke this update!"
44
45
    constraint
      "The master password must not be set to null, and the master password
46
    must not be changed once it's set."
      "All addresses must be well-formed, that is, not null.",
47
      "When exchanging public keys with a station, the station must be
    active.",
      "You can not start or stop listening unless you're in the opposite
49
      "You can not start or end an election unless you're in the opposite
    state.",
```

Station_Informal 16-05-2012

"You can not add or remove a peer unless it's either not in or in the peer-list.",

- "The manager must not be active when attempting to elect a new manager.",
- "You can not request a ballot for a voter that has already received a ballot, or who can not be found in the database.",
- "You can not revoke a ballot for a voter that has not received ab allot, or who can not be found in the database.",
- "To announce the adding or removing of peers, to announce that a ballot has been received or revoked, to announce the start or end the election or to promote a new manager, you must be the manager.",
- "The address must never be null, nor must the Peer-list."
- 57 end