

State

```
+ void setSimmulationRunning  
    (bool simmulation_running)  
+ bool getSimmulationRunning()  
+ void setSimmulationInterval  
    MS(uint32_t interval)  
+ uint32_t getSimmulationIntervalMS()  
+ void setOutputCallback  
    (const std::function<  
        void(TickData)> callback)  
+ void resetSimmulation()  
+ void setGenerator(TypGeneratorta  
    type)  
+ TypGeneratorta getGenerator()  
+ void setGeneneratorAmplitude  
    (const double &amplitude)  
+ void setGeneneratorDutyCycle  
    (const double &duty_cycle)  
+ void setGeneneratorPeriod  
    MS(uint32_t period)  
+ void setGeneratorSkladowa  
    Stala(double skladowa_stala)  
+ uint8_t getGeneneratorPeriod  
    JumpMS()  
+ void setGeneratorUnitJump  
    TimeMS(uint32_t time)  
+ void resetGenerator()  
+ void setPIDProportional  
    (double k)  
+ void setPIDIntegration  
    (double T_i)  
+ void setPIDDerivative  
    (double T_d)  
+ void setPIDIntegrationType  
    (IntegType integration_type)  
+ void resetPIDIntegration()  
+ void resetPIDDerivative()  
+ void setARXCoefficients  
    (std::vector< double >  
     a, std::vector< double > b)  
+ const std::vector<  
    double > getARXCoefficientsA()  
+ const std::vector<  
    double > getARXCoefficientsB()  
+ void setARXTransportDelay  
    (uint16_t k)  
+ uint16_t getARXTransport  
    Delay()  
+ void setARXInputLimits  
    (double low, double high)  
+ const std::pair< double,  
    double > & getARXInputLimits()  
+ void setARXOutputLimits  
    (double low, double high)  
+ const std::pair< double,  
    double > & getARXOutputLimits()  
+ void setARXNoiseStandard  
    Deviation(double standard  
    _deviation)  
+ double getARXNoiseStandard  
    Deviation()  
+ void setARXLimitsEnabled  
    (bool enabled)  
+ void resetARX()  
+ void setSaveStateObject  
    (SaveStateInterface *object)  
+ void saveToFile(std  
    ::string path)  
+ void readFromFile(std  
    ::string path)  
+ const std::tuple< const  
    ARX *, const RegulatorPID  
    *, const TypGeneratorta,  
    const GeneratorSinusoida  
    *, const GeneratorProstokatny  
    * > getAppState()  
+ void tick()  
+ static State & getInstance()
```