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IMPLEMENTATION OF OVERALL EQUIPMENT EFFECTIVENESS MEASURE FOR ROBOTIC PROCESS AUTOMATION VIRTUAL MACHINES

Abstract:

Nowadays one of the leading business process automation technologies is Robotic Process Automation (RPA). This type of software develops the action list by recording the activities of a user who performs them directly in the application's graphical user interface (GUI). The automation is performed by entering the GUI and following the preprepared list of actions. Such approach requires that RPA software runs on a computer configured the same way as it is for a human user. Very often for that purpose are used Virtual Machines set in cloud. In a usual licencing model one RPA software licence is connected with one machine. As an access to business applications via GUI is time-consuming in comparison to access via e.g. application programming interface (API) a certain amount of time has to be booked to perform all planned activities. This paper describes the implementation of Overall Equipment Effectiveness (OEE) measure, known from manufacturing industry, for a pool of virtual machines used for RPA. The common issue is to balance the business requirements: performing processes in certain time and doing it with a low cost. To goal is to ensure the best licenses utilization. OEE identifies the running time that is truly productive. Its components: availability, performance and quality, together with losses identification, are described from a perspective of Virtual Machines used for RPA.

Keywords:

RPA, OEE, TPM, Overall Equipment Effectiveness, Robotic Process Automation