Abstract

In the current scenario, the use of digital technologies in education are limited. Due to the limited IT infrastructure, most of the schools and colleges are lagging behind to acquire the new IT solutions. This limitation forces them to reuse their infrastructure for multiple activities. Most of the activities happening in the education field are manual with involvement of extra manpower to manage it. With these limitations, every year different students need different softwares to be operated for implementing the practical sessions. They have to constantly be updated to the latest version of softwares or retain a particular version that the teacher or curriculum requires. The system administrators have to manually configure softwares on each and every machine present which is cumbersome. The objective of this research work is to propose a system that can make this tedious process automated where the changes made in one machine is reflected in all the other machines present in the network with the help of DevOps tools. This approach would overcome all the existing challenges by providing new opportunities in the education sector. The IT automation provided by DevOps is the use of
software to make repeatable instructions and processes to exchange or reduce human interaction with IT systems. The advantage of this approach is that; it is time saving, can be deployed over lesser resources and the entire system would be automated.

References

2. https://www.jenkins.io/

Index Terms

Computer Science
Information Sciences

Keywords

DevOps, CI/CD, Jenkins, Ansible, Infrastructure as Code