Test Automation in Embedded Systems: Meeting the challenge

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Abstract text Test Automation practices enable development teams to minimize repetitive and cumbersome testing activities, leading to greater awareness of code changes and shorter development cycles. Automating testing typically requires initial effort but will ultimately result in greater productivity gains and improved overall software quality. Learning to utilize automated testing is crucial in reaping the full benefits of any modern-age development practice, such as Continuous Integration (CI) or Continuous Delivery (CD), or in striving towards a better DevOps culture. Many different types of test automation activities exist today but we face a considerable challenge when dealing with embedded systems and their inherent low-level nature.

This talk will explore some of the common challenges faced when implementing automated testing in embedded systems and how modern technology can help overcome these. We will then look at how modern CI/CD infrastructures have developed to better support Test Automation as part of the software development lifecycle.