

## Re-engineering of SDN Test Framework for a market leading OEM



### BUSINESS REQUIREMENTS



Client is on transition to Software defined centric model and has need to implement SDN test integration in the framework



No clear demarcation of test data and test logic in the integration framework making it rigid to develop test cases



Lack of interfaces and abstractions between functional blocks in client's existing framework



### OUR SOLUTIONS



Reengineered client's Test framework laying clear differentiation and layering of functionalities.



• Our SDN experts harnessed the potential of opensource tools and test cases to create test scripts for ODL and other SDN controllers  
• Developed utilities for topology creation, traffic generation, flow tables etc.



Developed accelerators as part of HM Pro Test Framework for:

- Mind Map to Manual Test Cases Auto Generation
- Python and Java based Test Scripts Auto Generation for Web Application using HM Pro Test Framework
- Auto generation of Code for REST interfaces (JSON) for updating / validation of RESTful Services.



### TOOLS/ TECHNOLOGIES



- ODL SDN Controller
- OFTEST
- OVS & Whitebox Switches



- YANG
- JSON, XML
- Java / Selenium
- Python / ROBOT Framework interfaces



Happiest Minds Pro-Test Accelerators :

- Model Based Test Generation
- Page Object Generator
- Script less Web Service Test Utility library
- Web Service Interface Code generator
- Remote Command Execution and Monitoring Utility library



### BUSINESS IMPACT



Segregation of framework development and test case generation freed bandwidth of Test Engineers accelerating faster delivery



Framework enhancement and extension made easier through clear abstraction and model based approach.



Continuous Test execution through integration of framework with utilities like Jenkins, Jira resulting in Agile testing

### About Happiest Minds Technologies

Happiest Minds, the Mindful IT Company, applies agile methodologies to enable digital transformation for enterprises and technology providers by delivering seamless customer experience, business efficiency and actionable insights. We leverage a spectrum of disruptive technologies such as: Big Data Analytics, AI & Cognitive Computing, Internet of Things, Cloud, Security, SDN-NFV, RPA, Blockchain, etc. Positioned as "Born Digital . Born Agile", our capabilities spans across product engineering, digital business solutions, infrastructure management and security services. We deliver these services across industry sectors such as retail, consumer packaged goods, edutech, e-commerce, banking, insurance, hi-tech, engineering R&D, manufacturing, automotive and travel/transportation/hospitality.

Headquartered in Bangalore, India; Happiest Minds has operations in the U.S., UK, The Netherlands, Australia and Middle East.

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