



LFN Mentorship Project Presentation

August 2020

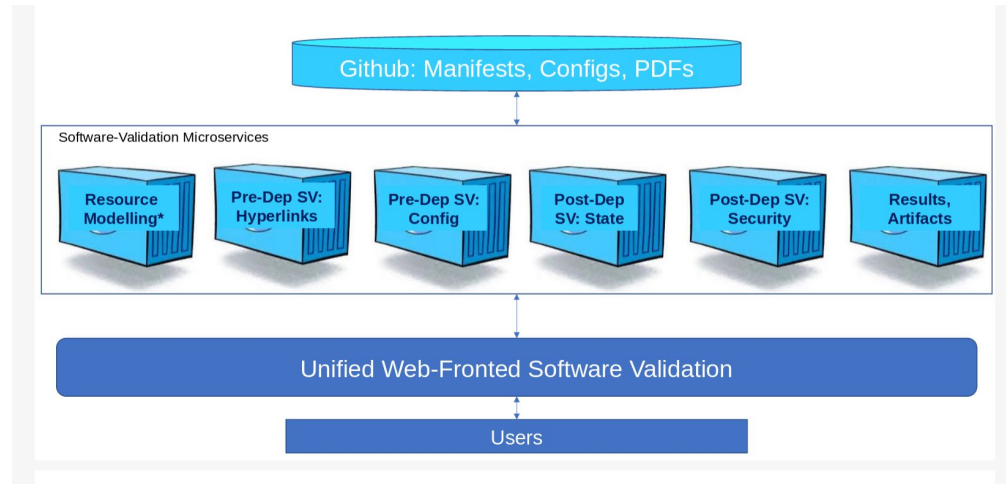
SDV: Pre-Deployment Software Validation

› Introduction

- › **Name:** Ashwin Nayak U
- › **Location:** Mangaluru, Karnataka, India
- › **University:** National Institute of Technology Karnataka, Surathkal
- › **Mentor(s):** Sridhar Rao
- › **LFN Project:** SDV: Pre-Deployment Software Validation

SDV: Pre-Deployment Software Validation

- › **Project Description:** Cloud software validation is an upcoming project consisting of many microservices which all together form a single software validation solution.



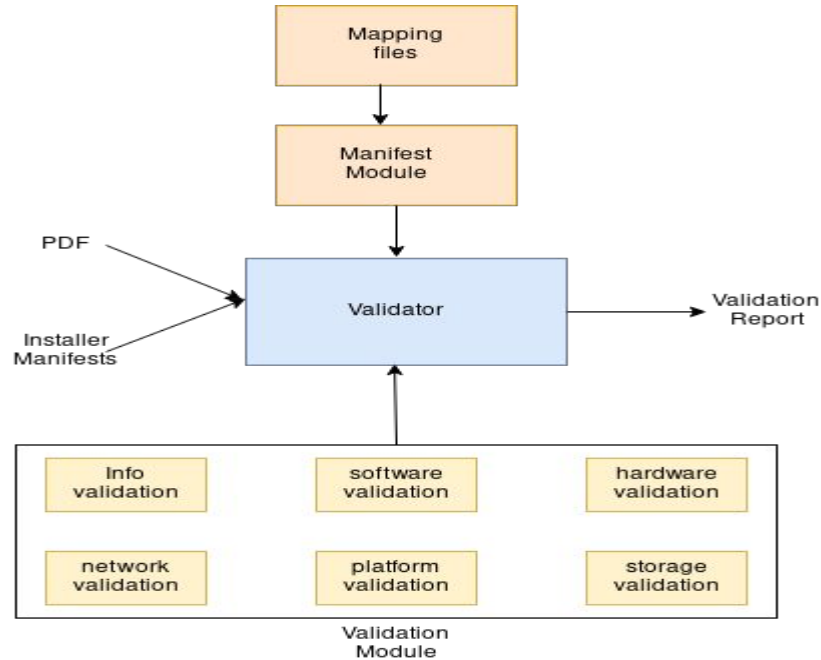
SDV: Pre-Deployment Software Validation

- › **Project Description:**
- › PDF(POD Descriptor File) is a standard, cloud-agnostic descriptor file meant to be used by Vendors/DC admins to describe the target Cloud Environment/Lab.
- › My work at this internship aims to develop this PDF file further, add more details and develop some toolings around PDF to make it easier to consume by the end-user.
- › The final process will involve validating PDF against installer manifests. The target installers being airship and TripleO.

SDV: Pre-Deployment Software Validation

- **Project Objectives:** In summary, the objectives of this project are:
 - Obj 1: Develop the PDF file further, add more details and develop some tooling around PDF to make it easier to consume by the end-user.
 - Obj 2: Validate the existing PDF with manifests.

SDV: Pre-Deployment Software Validation



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- › **Project Deliverables:**

- › Deliverable 1: Tooling around PDF: extrapolation
- › Deliverable 2: Validation code of PDF against installer manifests
- › Deliverable 3: Dockerfile and rest-api interaction for the above

Link to patch: [link](#)

SDV: Pre-Deployment Software Validation

- › **Project Execution & Accomplishments:**
- › First time working with an open source org.
- › Networked with professionals/team members.
- › Presented my work at LFN Developers & Testing Forum conference
- › Completed with both extrapolation and validation module.
- › Documentation: done!
- › Code still in review (yet to be merged)

SDV: Pre-Deployment Software Validation

- › **Recommendations for future work:**
- › Currently the only installer manifests supported are of airship, want to extend it to tripleO.
- › Work on the UI.

SDV: Pre-Deployment Software Validation

- **Insights Gained:**
 - Learning experience: Learnt a lot about containerized cloud tools(airship, tripleO), clean way of writing code, different technologies(docker, tornado) etc.
 - Helpful community!
 - Networking!: Got to know a lot of people!

A background graphic featuring a network of glowing blue lines connecting various yellow circular nodes, set against a dark blue gradient background.

THANK YOU!

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