Continuous Certification Program

May 2020
The Need

• Traditional Product Certification is Broken
  • ONF Open Source development moves fast - oftentimes updates occur daily or multiple times per day
  • Written test plans are outdated when they are published, and therefore certification testing can’t keep pace with software releases

• Partial Solution
  • ONF builds automated test scripts that are constantly evolving in lock step with the code in the CI/CD era
  • But what about certification?
ONF Created a “Continuous Certification” Program

- Products indefinitely enter CI/CD pipeline for a specific project and are tested over and over - not one-time

- Live Jenkins dashboard shared publicly includes the status of all products against the master branch

- When each project cuts a release, all passing products are certified with that release and permanently documented

- In this way, both a real-time and a historical record of compatibility is established for each participating product
Participating Projects

• Each project TST decides if/when certification will be made available for a project taking into account
  • Sufficient infrastructure and CI/CD pipeline
  • Criteria that constitutes ‘certification’
    • The definition will evolve and grow more comprehensive as the CI/CD testbed evolves

• ONF projects that are part of the Continuous Certification Program initially:
Project / Product Matrix

- Each product is entered in a specific Project
- Different Projects can accept different categories of equipment

<table>
<thead>
<tr>
<th></th>
<th>Switches</th>
<th>Servers</th>
<th>OLT</th>
<th>ONU</th>
<th>GPU</th>
<th>Small Cell RU, DU, CU</th>
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<tbody>
<tr>
<td>SEBA / VOLTHA</td>
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- Software components will also be considered for certification
  - Project TST determines eligibility
Requirements to Join

• ONF Member-Only Program
  • Membership support funds this activity
  • There is a fee associated with submitting a product into the program and a nominal annual fee
  • Members receive a credit they can apply to products they submit for inclusion in the Continuous Certification Program based upon membership level
  • Participating companies provide hardware and get it working with the desired Project code base
  • Participating companies complete a template to have their products featured in ONF Marketplace along with certification status

<table>
<thead>
<tr>
<th>Member Category</th>
<th>Annual CC Prog Credit</th>
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<tr>
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<td>$5k - $1.5k</td>
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Consider Joining

For additional information and to inquire further, please visit:
https://wiki.opennetworking.org/display/COM/Continuous+Certification+Program