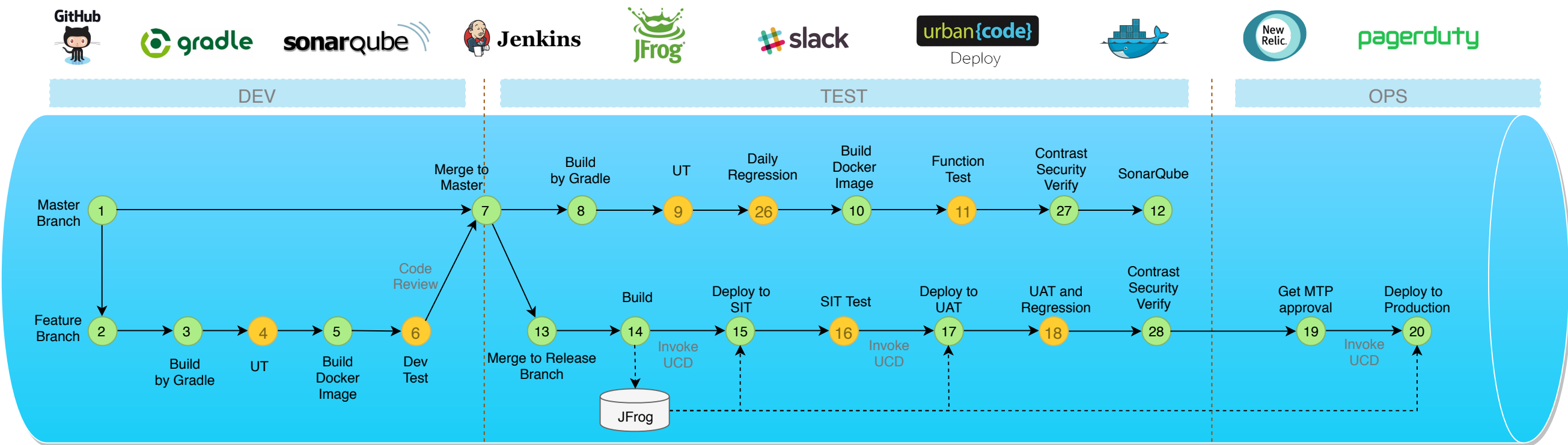


ESW ShopZ & LMS DevOps Pipeline

Ver.201805



- 21 . SonarQube for code quality visualization and management
- 22 . JFrog for application package management
- 23 . App Monitoring & Metrics Dashboard
- 24 . Slack & Pagerduty for event notification & warning
- 25 . Application governance and compliance

|   | DEV  | TEST   | OPS   |
|---|--|--|---|
| <div>Phase I: Done</div> <div>Nov.2016 - Feb.2017</div> <div>Core DevOps pipeline</div>                             | <div>1</div> <div>2</div> <div>3</div> <div>8</div> <div>Migrated to Github, leverage social and agile development capability from Github</div> <div>Fast development workspace setup, improve productivity</div>  | <div>16</div> <div>18</div> <div>16</div> <div>18</div> <div>12</div> <div>Automation test coverage is 24% for LMS</div> <div>Adopt RobotFrameWork for automation test</div> <div>Set up SonarQube for code quality visualization</div>  | <div>15</div> <div>17</div> <div>20</div> <div>On demand automation deployment on SIT/UAT/PROD is with ONE click</div>  |
| <div>Phase II: Done</div> <div>Mar.2017 - May.2017</div> <div>E2E DevOps pipeline</div>                             | <div>6</div> <div>5</div> <div>24</div> <div>Fast development test environment setup, improve productivity &amp; support versioned env</div> <div>Decouple application runtime in container for application transformation</div> <div>All development activities status can be informed by slack channel</div> | <div>10</div> <div>24</div> <div>21</div> <div>22</div> <div>Adopt Docker for testing Functional Test</div> <div>All test activities status can be shown in slack channel</div> <div>Code quality can be visualized and measured by leveraging SonarQube in each iteration</div> <div>Manage App build package by JFrog</div>  | <div>23</div> <div>24</div> <div>Monitor pages, services, API, connection availability and performance, visualized dashboard by New Relic</div> <div>Deploy status can be put in slack channel</div>  |
| <div>Phase III: Doing</div> <div>Jun.2017 - Sep.2018</div> <div>Improve code quality &amp; auto-test coverage</div> | <div>4</div> <div>21</div> <div>New code is covered by unit test</div> <div>Leverage SonarQube to fix technical debt and improve product quality iteratively</div>   | <div>9</div> <div>11</div> <div>16</div> <div>27</div> <div>28</div> <div>18</div> <div>26</div> <div>New code is covered by unit test</div> <div>Update V18 automation test cases, increase function coverage</div> <div>Add stub testing capability increase API &amp; service coverage</div> <div>Add Contrast to monitor security</div> <div>Increase auto regression coverage, add capability of test case choreography</div> | <div>23</div> <div>23</div> <div>24</div> <div>Monitor E2E ESW Orders by Hackathon idea - on bluemix</div> <div>Monitor function availability (business flow, transactions) and performance by New Relic</div> <div>Use PagerDuty for prod availability and performance warning</div> |
| <div>Phase IV: To Do</div> <div>Oct.2018 - Dec.2018</div> <div>Governance and info management</div>                 | <div>25</div> <div>Adjust process and R&amp;R for app governance and compliance</div>  | <div>22</div> <div>Leverage JFrog to manage app lifecycle info through CI/CD</div>   | <div>22</div> <div>Leverage JFrog to deploy fully tested application on production</div>  |

- Legend:
- 1 Action #n has been done
  - 1 Action #n is in progress
  - 1 Action #n is not started