# SALTCONF 15

#### **Developing SaltStack**

Nicole Thomas, SaltStack QA Engineer Nitin Madhok, Clemson University Systems Developer

Follow us on GitHub @rallytime and @nmadhok



#### Welcome

What we'll cover...

- Setting up your Development Environment
- Salt's Branching Strategy
- Creating An Issue
- Finding and Fixing Issues



### Set up your Development Environment

Installing packages, Cloning repository, Creating isolated python environment etc.



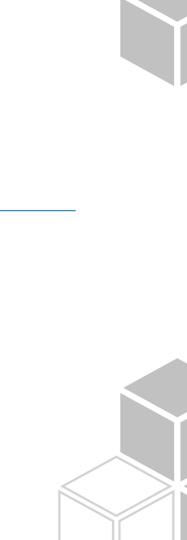
#### Resources

Helpful links to be used during this demo

- Setting up git:
  - https://help.github.com/articles/set-up-git/
- Generating SSH Keys
  - https://help.github.com/articles/generating-ssh-keys/
- Installing Salt for Development
  - http://docs.saltstack.com/en/latest/topics/development/hacking.html



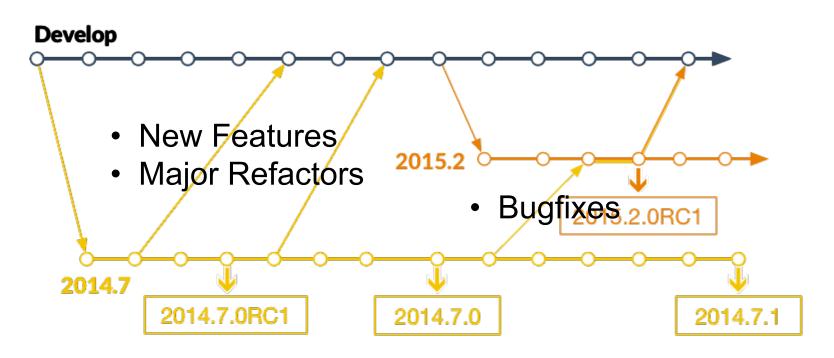
## **Branching Strategy**





## Salt's Branching Strategy

Features, Bugfixes, and Forward Merges





#### **Creating an Issue**

Have a great idea for a new feature? Found a bug?





#### **Creating Issues**

Best Practices for creating new issues

- Does the issue already exist?
  - Yes? Document your findings there.
  - If not, good bug reports include:
    - Descriptive Title
    - Detailed report of the problem
    - Steps to reproduce the issue
    - Versions Report:
      - salt --versions-report
      - salt <minion> test.versions\_report



## Finding and Fixing Issues

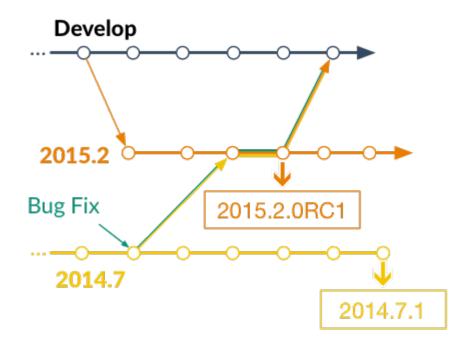
Learn how to find existing issues and submit a Pull Request to fix them.





#### **Branching Strategy: Bugfix**

Bugfix on 2014.7 merges forward





#### **Contributing: Preparation**

Find the correct branch and prepare for commits.

- New Feature? Large Refactor?
  - Develop!
- Bugfix?
  - Locate Correct Bugfix Branch
    - 2014.7 or 2015.2
- Pull fresh copy down of the correct branch
  - Create new, local branch
    - "fix\_25381" or "linode\_cloud\_tests"



### Contributing: Work Your Magic

Make your changes and commit them.

- Only fix "one story"
  - Commit changes to local branch
- Auto-Close Issues
  - "Fixes #25381"
    - Must go in the commit message
- Push local branch to your GitHub repository
  - Create Pull Request



### **Contributing: Pull Requests**

Submit your changes to Salt!

- Descriptive PR Title
  - Message provides more details
    - Reference issue number
- Submit PR against the correct branch
  - Defaults to develop
- Keep an eye on test results
  - Fix any issues
    - New commits == new testrun



#### Resources

Helpful Salt and GitHub Documentation

- Salt Documentation:
  - http://docs.saltstack.com
- Contributing Documentation:
  - http://docs.saltstack.com/en/latest/topics/development/contributing.html
- Installation for Developers Documentation:
  - http://docs.saltstack.com/en/latest/topics/development/hacking.html
- Testing Documentation:
  - http://docs.saltstack.com/en/latest/topics/development/tests/index.html
- GitHub:
  - Forking a repo: <a href="https://help.github.com/articles/fork-a-repo/">https://help.github.com/articles/fork-a-repo/</a>
  - Submitting a PR: <a href="https://help.github.com/articles/using-pull-requests/">https://help.github.com/articles/using-pull-requests/</a>



## SALTCONF 15

Thank you

Please provide session feedback in the SaltConf15 mobile app

