

iVentureCapital

Development meets Infrastructure

CodeTalks, Hamburg, 2014
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iVentureCapital

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We're hiring!

**What does it mean
“Development meets
Infrastructure”?**

Software development tries to make solutions



Typical software development

- **Problem**
- Design
- Writing Code
- Compiling & Tests
- Release



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Agile Development



Test Driven Development



Pair-Programming



Code Review



Continuous Integration



Continuous Delivery



Software is Code

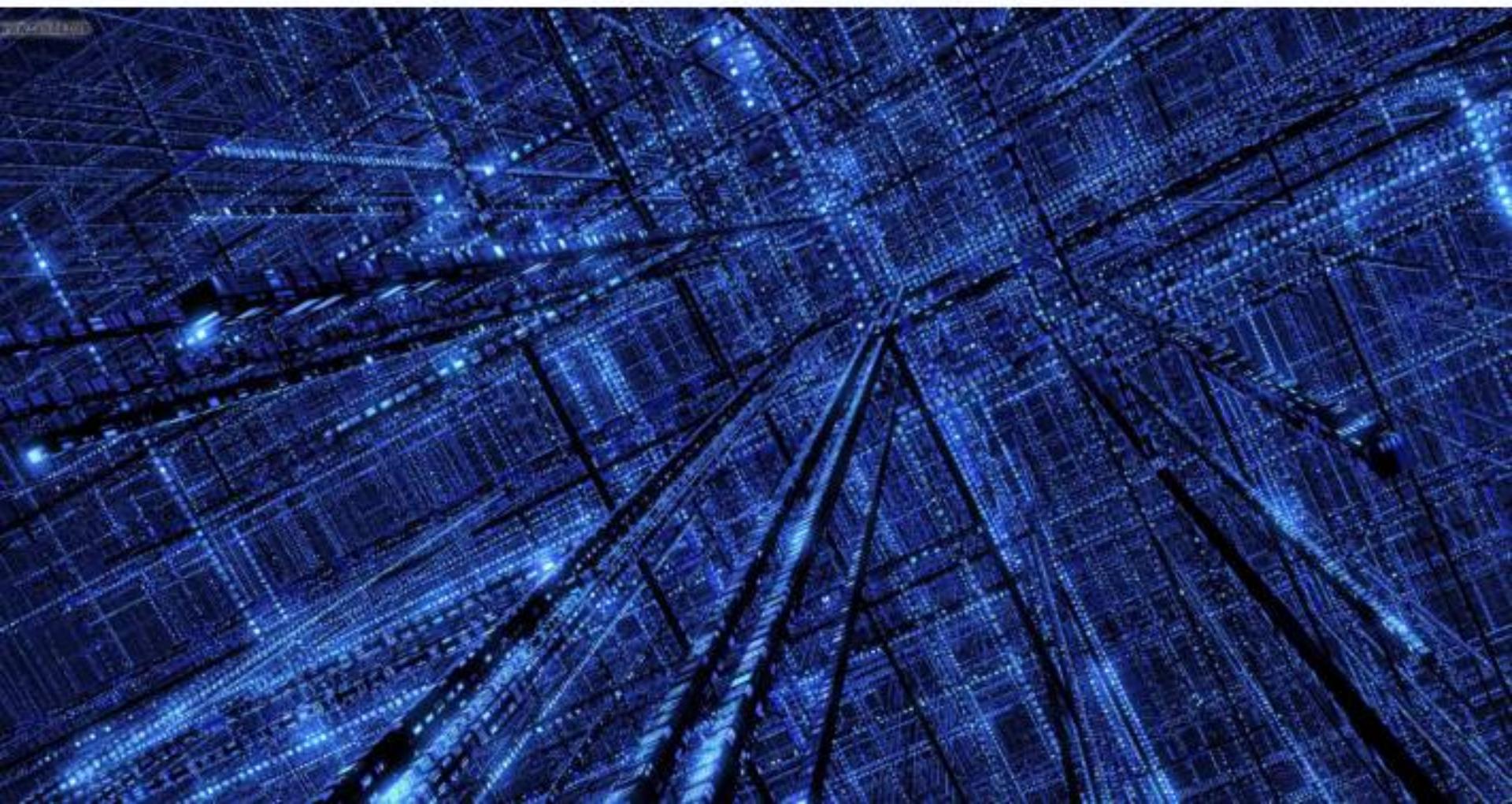
A blurred background image of a computer screen displaying a large amount of colorful code, likely PHP or MySQL, with various keywords and syntax highlighted in different colors like yellow, green, blue, and red.

Software is Code

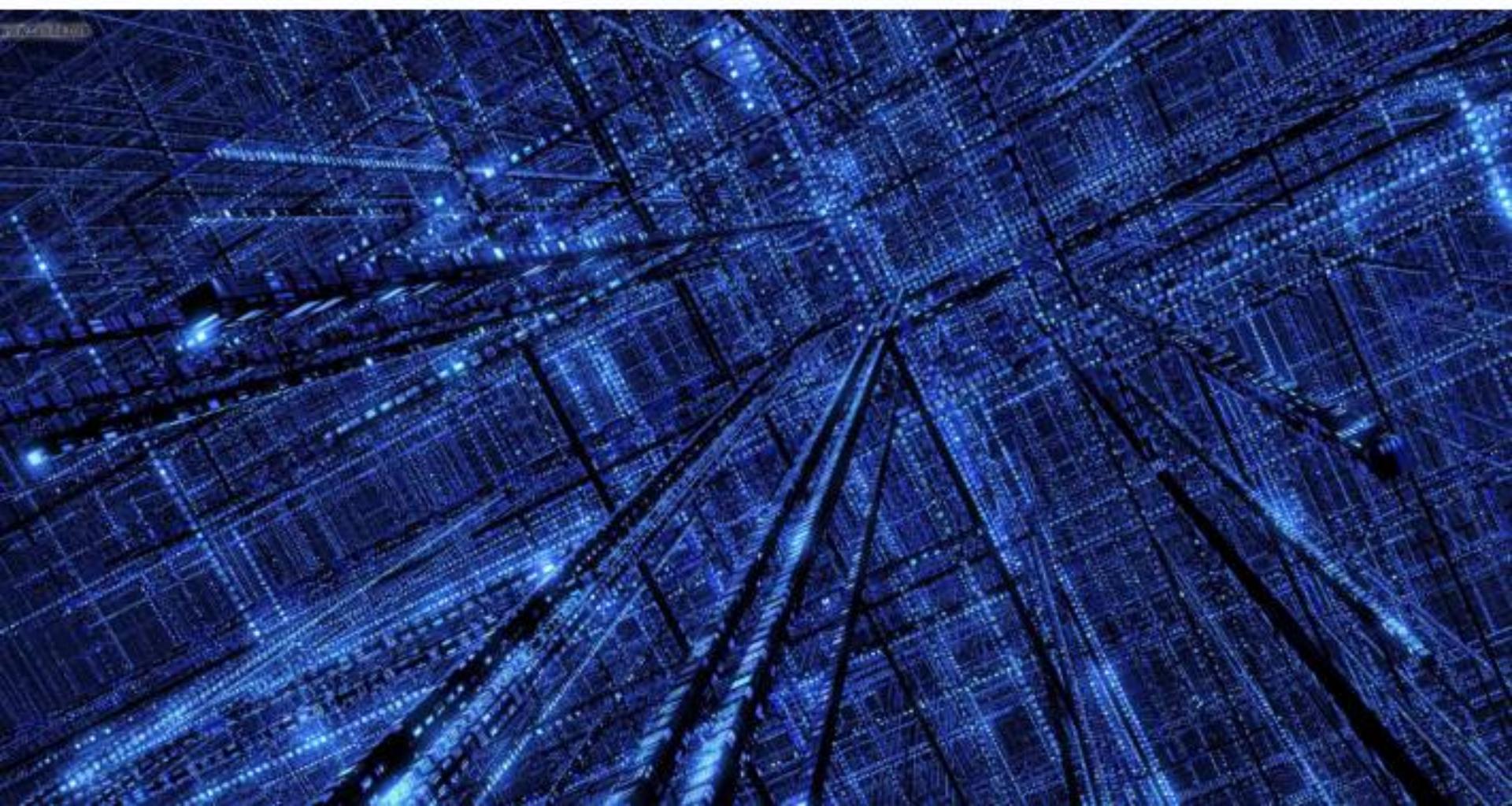
A blurred background image of a computer screen displaying colorful code. The code appears to be written in PHP, featuring various color-coded keywords and syntax. The text is oriented diagonally across the slide.

```
private $host;
private $char;
private $link = null;
public function Connect()
{
    if ($link = mysql_connect($this->host, $this->user, $this->password))
        new MySqlException("Connection successful!");
    else
        new MySqlException("Connection failed!");
}
```

Infrastructure as Code



Infrastructure is Software



Configuration Management



Puppet

- **Ruby DSL**
- Facter
- PuppetDB
- Hiera
- Puppet Forge



Puppet

- Ruby DSL
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Puppet

- Ruby DSL
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Puppet

- Ruby DSL
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- PuppetDB
- Hiera
- **Puppet Forge**



Code Style is important



Puppet Parser

- **Puppet included**
- **Syntax validation**
- **puppet parser validate init.pp**

**rodjek / puppet-lint**

Check that your Puppet manifest conform to the style guide

693 commits

11 branches

29 releases

branch: **master** ▾**puppet-lint / +**

Bump to 1.1.0



rodjek authored 44 minutes ago



Pass exit value to the shell



Bump to 1.1.0



Add specs for multiple controls in a comment



Ignore swp files



Force rubygems 2.1.11 on travis



drwahl / **puppet-git-hooks**

Git client and server side hooks for puppet development

51 commits

1 branch

0 releases



branch: **master** ▾

puppet-git-hooks / +

Merge pull request #9 from steeef/master ...



drwahl authored on Jul 31

latest commit

commit_hooks mac-friendly escape characters

README.md Adjusted from pre-recieve to pre-receive

post-update initial checkin of files currently in use

pre-commit remove debugging

pre-receive mac-friendly escape characters

update initial checkin of files currently in use

README.md



garethr / puppet-module-skeleton

A pretty opinionated skeleton for writing your own puppet modules

68 commits

1 branch

0 releases



branch: master ▾

puppet-module-skeleton / +

Merge pull request #26 from craigwatson/master

[...]



garethr authored 3 hours ago



skeleton

Travis won't respect the matrix unless you pass the full env



LICENSE

added license details



README.md

README typo and style changes



install.sh

put the install command in a shell script

Unit Tests





rodjek / rspec-puppet

RSpec tests for your Puppet manifests <http://rspec-puppet.com>

303 commits

8 branches

16 releases



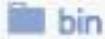
branch: **master** ▾

rspec-puppet / +

Merge branch 'doc75-fix_nil_array' ...



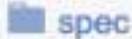
jeffmccune authored on May 2



Add helper script to configure a module for rspec-puppet tests



Add behavior tests for parameter matchers



Add behavior tests for parameter matchers



Ignore .ruby-version



update puppet version and ruby version to test with travis

Example

```
require 'spec_helper'

describe 'logrotate::rule' do
  let(:title) { 'nginx' }

  it { should contain_class('logrotate::rule') }

  it do
    should contain_file('/etc/logrotate.d/nginx').with({
      'ensure' => 'present',
      'owner'  => 'root',
      'group'  => 'root',
      'mode'   => '0444',
    })
  end
end
```

Acceptance Tests



Vagrant



Development environments
environments
made easy.

Puppet Labs Vagrant Boxes

Pre-rolled vagrant boxes, ready for use ... made by the folks at Puppet Labs

Overview

Current Boxes

Current Boxes

Deprecated Boxes

Latest boxes, built with VirtualBox and/or VMWare Fusion Guest extensions, als...

OS	Version	Arch	Guest OS
Fedora	18	x64	Virtua...
Fedora	18	x64	Fusion...
CentOS	6.4	x64	Virtua...
CentOS	6.5	x64	Virtua...
CentOS	6.5	i386	Virtua...
CentOS	6.4	x64	Fusion...



SERVERSPEC

RSpec tests for your servers configured
by Puppet, Chef or anything else.



puppetlabs / beaker



Puppet acceptance testing harness

2,922 commits

13 branches

60 releases

64 contributors



branch: master ▾

beaker / +



Merge pull request #467 from anodelman/master ...



branan authored 4 days ago

latest commit

bin (QENG-310) move various host configuration steps together

lib (GEM) version bump for 1.19.1 gem

spec (QENG-1212) Improve module installation experience

.gitignore (maint) Add new patterns to gitignore

.rspec bump to rspec 2.11

.simplecov PDB-554 Implement a new EC2 backend and add jenkins_build_url to tags

.travis.yml (MAINT) travis failing on ruby 1.8

CONTRIBUTING.md (QENG-941) create contributor documentation for beaker

Test Automation



Jenkins





vStone / jenkins-puppet-scripts

Some scripts to do various checks, mainly for jenkins use.

108 commits

1 branch

0 releases

5



branch: master ▾

[jenkins-puppet-scripts](#) / +

NOOOOO hardcoded paths!



vStone authored on Apr 14

latest commit

check_git_release

Updated help

check_puppet_style

NOOOOO hardcoded paths!

check_puppet_syntax

check_syntax/check_style: initialize \$GIT_PREVIOUS_COMMIT if not present

check_yaml_syntax

Only check for existence of hash if there are no parse errors

common

Added method to get the best branch match

package_puppet_tree_fpm

New fpm excludes work in a different way

README.md

Update README.md

Travis CI



Gitlab CI



Continuous Integration

GitLab CI runs tests for your GitLab projects

Load Tests



Gatling





KEEP
CALM
AND
DEPLOY TO
PRODUCTION

iVentureCapital

Thanks! Any Questions?

