

Continuous Integration

на примере Jenkins CI

Continuous Integration

Что же это такое?

Continuous Integration

Непрерывная интеграция (англ. Continuous Integration) — это практика разработки программного обеспечения, которая заключается в выполнении частых автоматизированных сборок проекта для скорейшего выявления и решения интеграционных проблем.

Жизнь без CI - Сценарий 1

- Все неделю разрабатывали функционал
- В конце недели — закоммитили
- Проект не собирается
- И вот, вся команда сидит и чинит проект, ищет виновного
- А виновный вообще ещё днём домой ушёл

Жизнь без CI - Сценарий 2

- Разработчик починил баг
- Тестер хочет протестировать
- Он должен сходить за сборкой к программисту или скачать и собрать проект самостоятельно

Плюсы CI

- Даёт частые билды для тестирования
- Позволяет проверить на работоспособность каждый отдельный небольшой участок работы (вплоть до конкретного коммита)
- Чётко указывает, кто проект поломал, и кто, соответственно, будет его чинить

Единый репозиторий

- Всё, необходимое для сборки должно быть в репозитории
- Создание и использование бранчей для параллельной разработки должно быть ограничено

Автоматизированная сборка

- Автоматизации подлежат все шаги, включая саму сборку и развёртывание для тестирования
- Сборку имеет смысл делать конфигурируемой

Автоматизированное тестирование

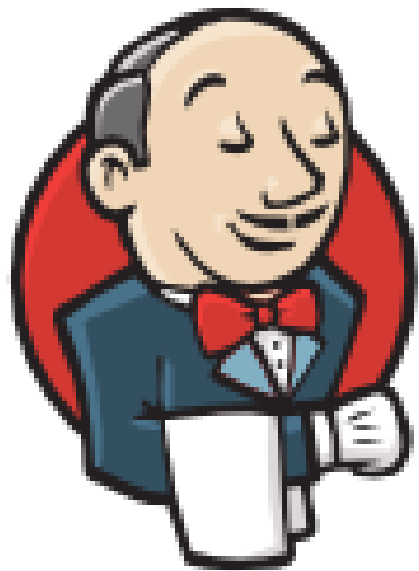
- На функционал также следует писать тесты и запускать их для каждой сборки
- Если тесты не прошли — билд также должен считаться сломанным

Система непрерывной интеграции

- Регулярная/событийная сборка всего проекта
- Запуск тестов для каждой сборки
- Хранение истории предыдущих результатов
- Уведомление команды о проблемах

Примеры систем непрерывной интеграции

- Jenkins / Hudson
- TeamCity
- Buildbot
- Cruisecontrol
- ...



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Build Queue

No builds in the queue.

Build Executor Status

#	Status	
1	Building Unit_Tests #1738	
2	Idle	
3	Idle	
4	Idle	
5	Idle	

Project

add description

All

All jobs

+

S	W	Name ↓	Progress	Last Duration	Last Success	Last Failure	
		Autotests_Linux_Full		5 hr 6 min	16 days (#486)	13 days (#498)	Disable Project
		Autotests_Linux_Quick		21 min	N/A	30 min (#34)	Disable Project
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Please, keep in mind, that build will fail if:

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- [Autotests_Real_Quick](#)
- [Autotests_Windows_Quick](#)

Build History

[\(trend\)](#)

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	#840	Feb 15, 2013 4:00:46 PM	
	#839	Feb 14, 2013 4:47:52 PM	353KB
	#838	Feb 14, 2013 4:00:46 PM	374KB
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