Integração Contínua e Entrega Contínua com

Jenkins

whoami





Arquiteto de soluções na Everis Brasil, formado em Sistemas de Informação, a mais de 12 anos de experiência no mercado de TI atuando em áreas de infra e desenvolvimento de software, como DevOps utilizando ferramentas como Docker, Kubernetes, Ansible, Puppet, Chef, Jenkins, Cloud Computing com AWS, Azure, Google Cloud Platform, Infra com servidores Linux e Windows, desenvolvimento em PHP, Python e Ruby, possuo certificações como AWS Solutions Architect, Ethical Hacker dentre outras, apaixonado Linux e Open Sources e Instrutor de vários treinamentos como certificação LPI, Docker e DevOps.

Agenda



O que é CI?
O que é CD?

O que é Jenkins?

Instalação

Overview



O que é Continuous Integration (CI)

O que Continuous Integration (CI)



Os desenvolvedores que utilizam a integração contínua "mergeam" suas alterações em uma "Branch" sempre que possível. As mudanças do desenvolvedor são validadas criando um "Build" e executando testes automatizados na compilação. Ao fazer isso, você evita vários conflitos de integração que geralmente acontece quando as pessoas esperam pelo dia da liberação para "mergear" suas alterações na "Branch" de "release".

A integração contínua coloca uma grande ênfase na automação de testes para verificar se o aplicativo não está corrompido sempre que novos commits são integrados ao branch principal.



O que Continuous Delivery (CD)

O que Continuous Delivery (CD)



A entrega contínua é uma extensão da integração contínua para garantir que você possa liberar novas alterações para seus clientes rapidamente e de maneira sustentável. Isso significa que, além de automatizar seus testes, você também automatizou seu processo de liberação e pode implantar seu aplicativo a qualquer momento, clicando em um botão.

Em teoria, com a entrega contínua, você pode decidir liberar diariamente, semanalmente, quinzenalmente, ou o que for adequado às suas necessidades comerciais. No entanto, se você realmente deseja obter os benefícios da entrega contínua, implante-a na produção o mais cedo possível para ter certeza de liberar pequenos lotes que sejam fáceis de solucionar em caso de um problema.



O que é JENKINS?



- Monitora execução de Jobs que precisam ser repetidos várias vezes,
- Usado principalmente para criar e testar continuamente projetos de software, por exemplo, "Integração contínua" ou "CI"
- Anteriormente conhecido como "Hudson"

http://jenkins-ci.org

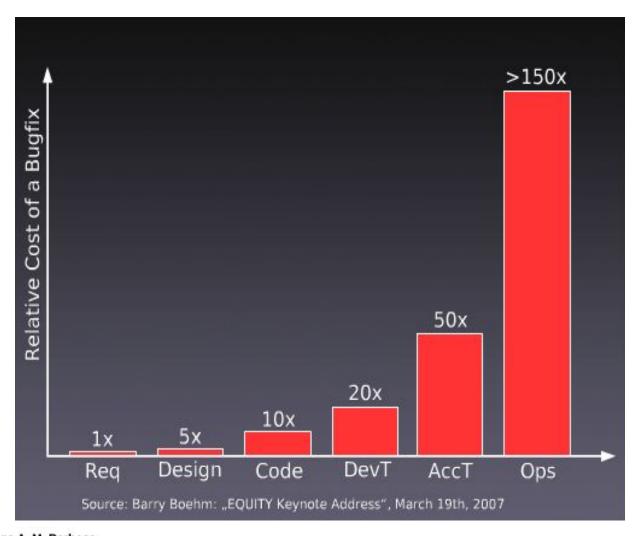
POR QUE USAR JENKINS?



- Feedback imediato sobre construções quebradas
- Nenhum Build em máquinas DEV e copiando arquivos manualmente
- Implantação automatizada
- Execução de teste e feedback automatizados

POR QUE USAR JENKINS?





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QUEM USA JENKINS?







SONY

























Instalação

Instalação



```
# wget -q -0 -
https://pkg.jenkins.io/debian-stable/jenkins.io.key | sudo
apt-key add -
# echo "deb https://pkg.jenkins.io/debian-stable binary/"
>> /etc/apt/sources.list
# apt-get update
# openjdk-8-jre-headless
```

Instalação

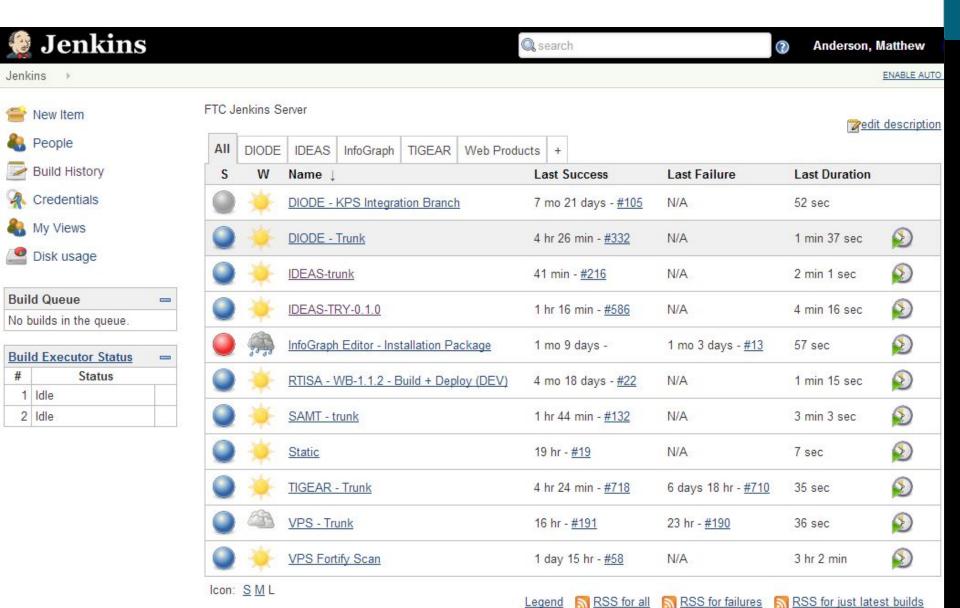


```
# apt-get install jenkins -y
# cat
/var/lib/jenkins/secrets/initialAdminPasswor
d
# cat /var/log/jenkins/jenkins.log
# vi /etc/default/jenkins
```

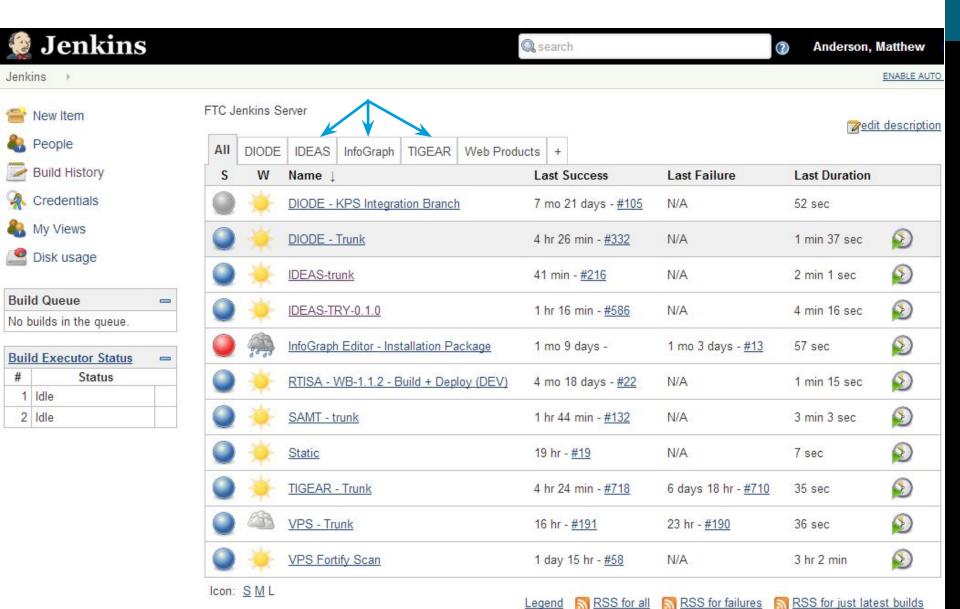


Overview

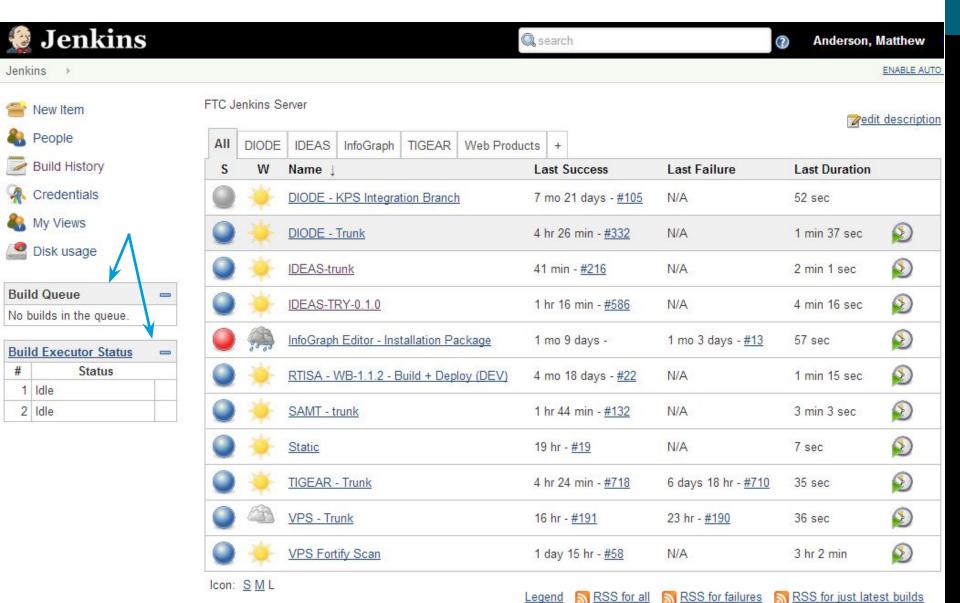




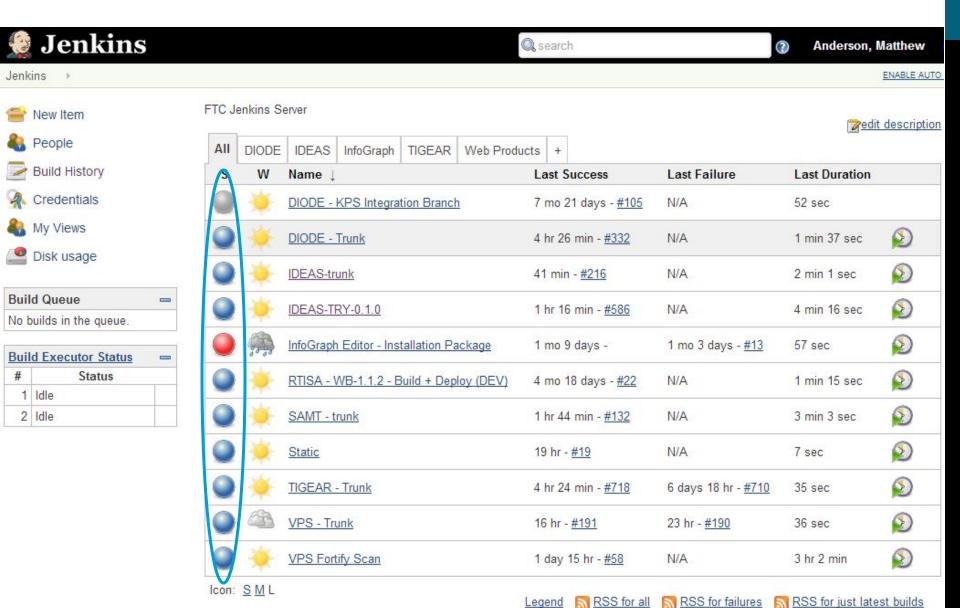




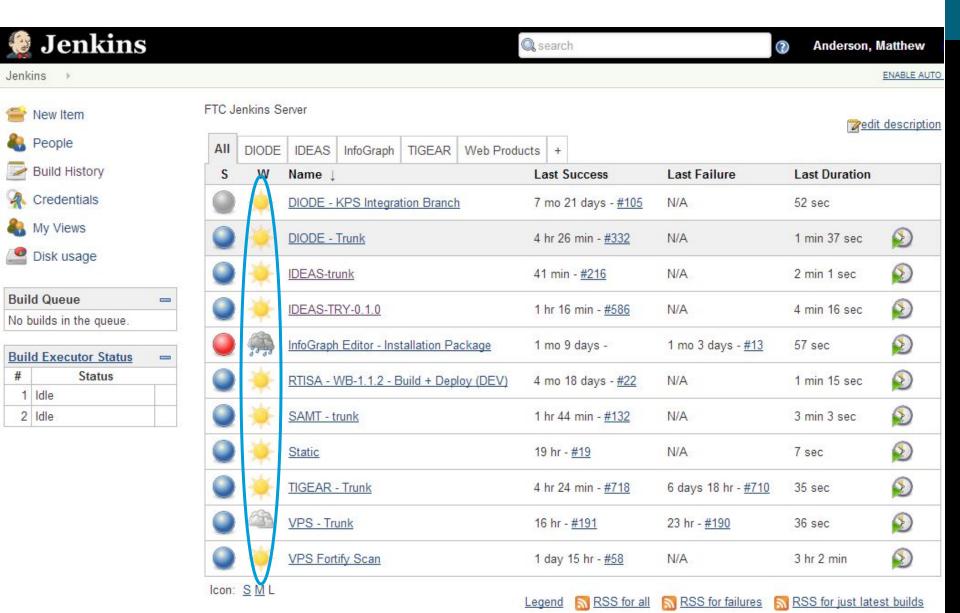




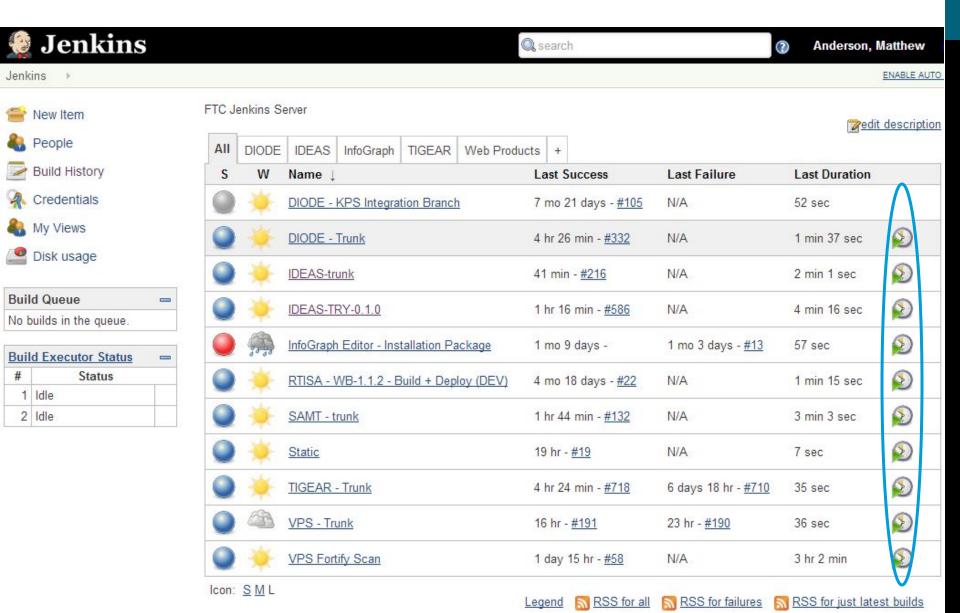




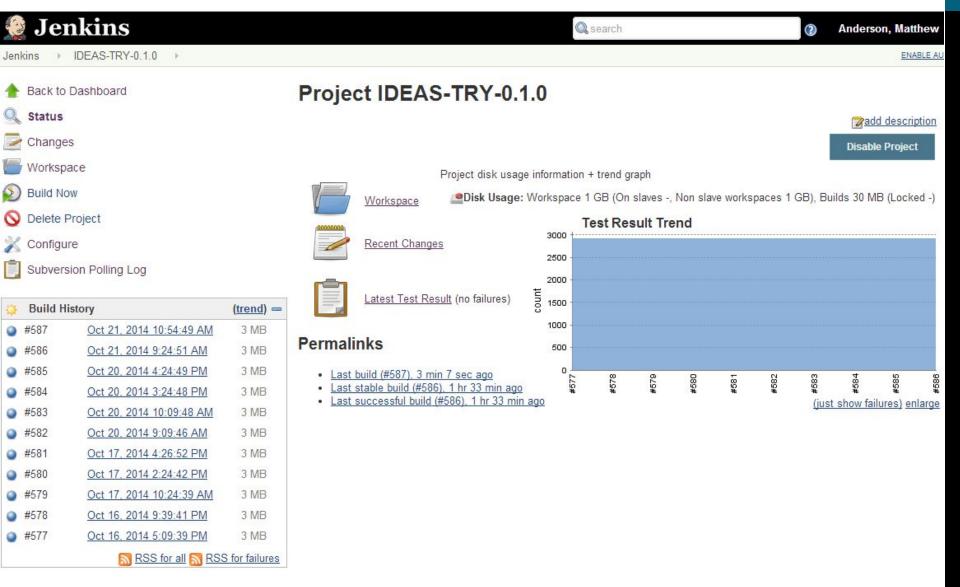




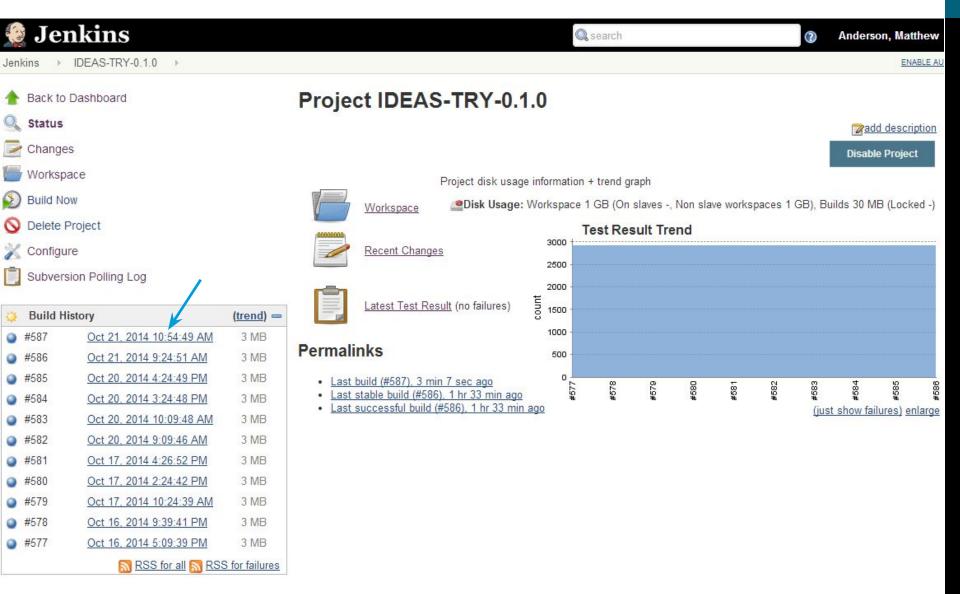




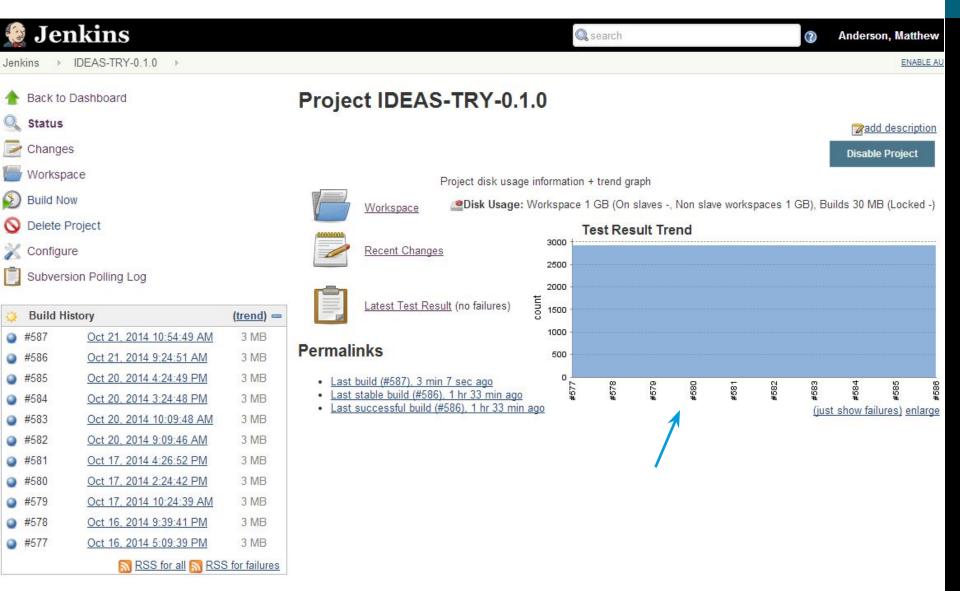




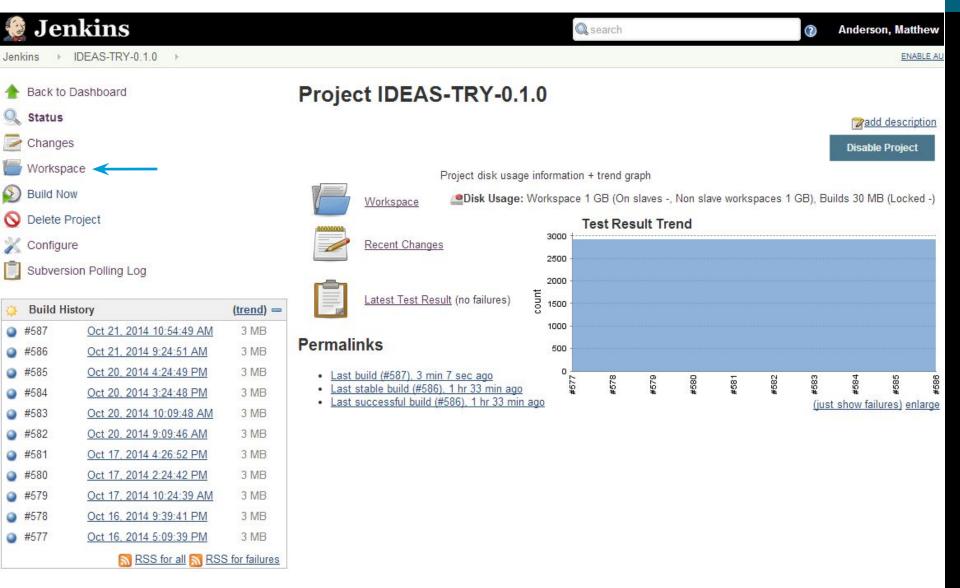










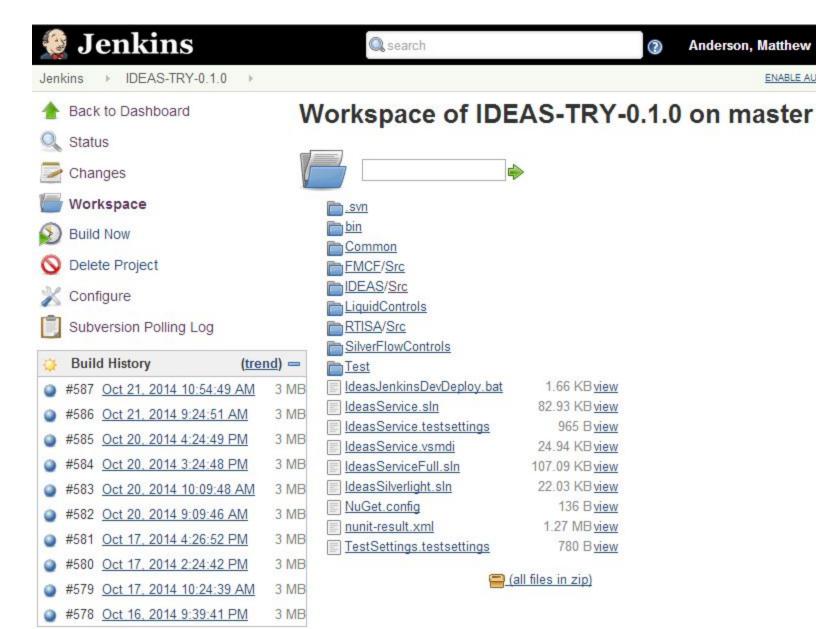


WORKSPACE

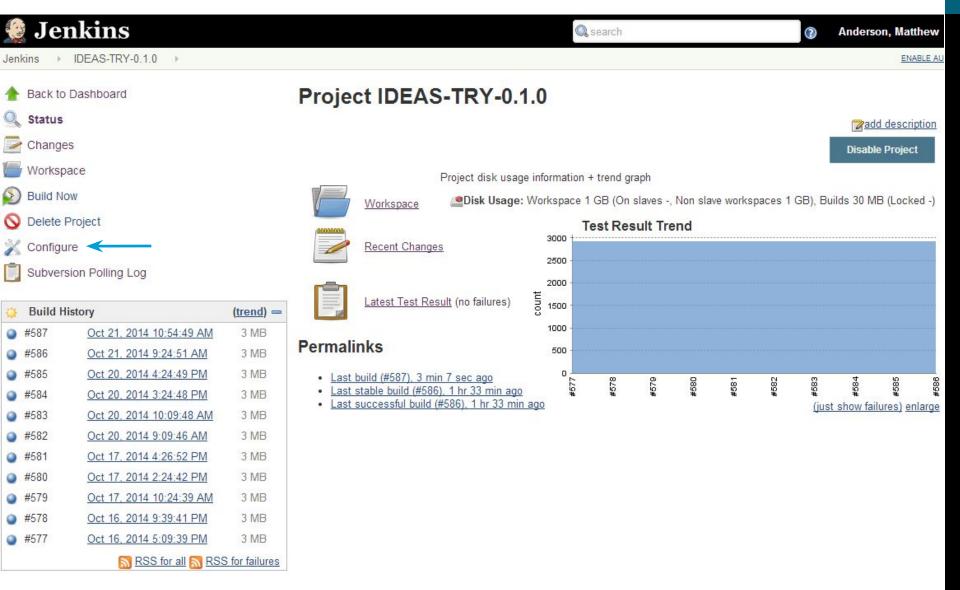


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ENABLE AUT

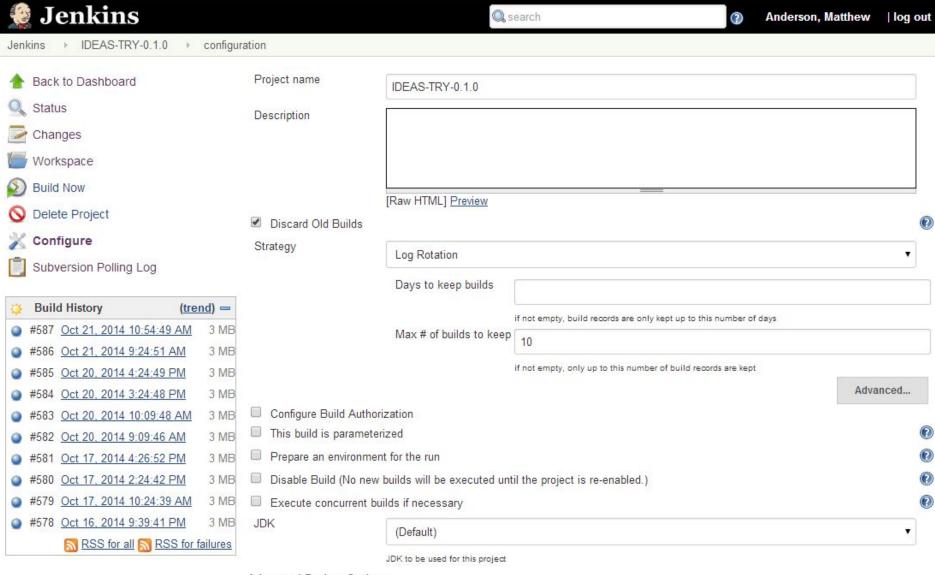






CONFIGURE

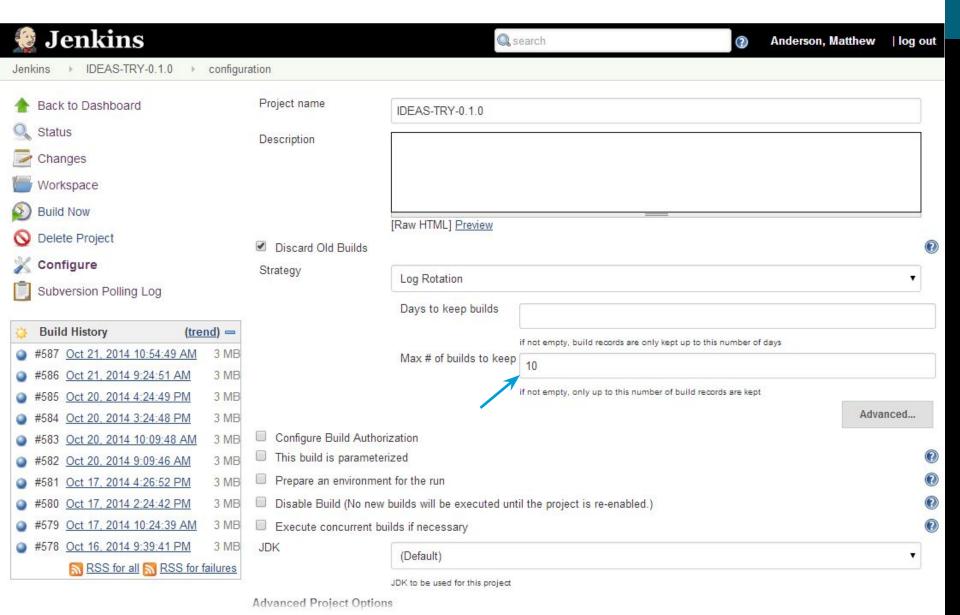




Advanced Project Options

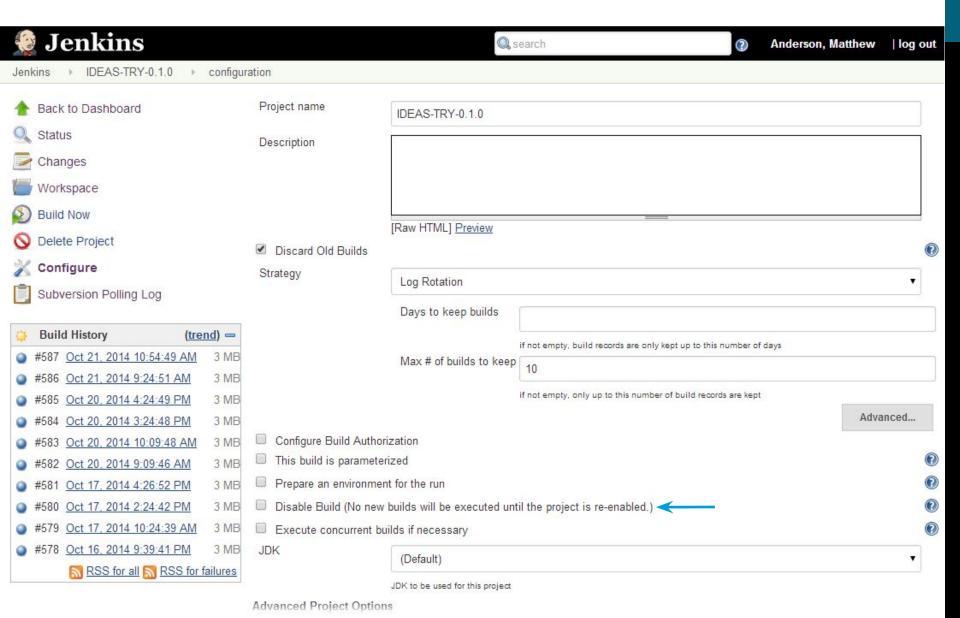
CONFIGURE





CONFIGURE





SOURCE CODE MANAGEMENT



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Repository browser	(Auto)			- 6

SOURCE CODE MANAGEMENT



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SOURCE CODE MANAGEMENT

Repository browser

(Auto)



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BUILD TRIGGERS



Build Triggers		
Trigger builds remotely (e.g., from scripts)		•
Build after other pro	jects are built	?
Build periodically		?
Poll SCM		•
Schedule	H/15 * * * *	?
	Would last have run at Wednesday, October 22, 2014 11:30:24 AM EDT; would next run at Wednesday, October 22, 2014 11:45:24 AM EDT.	
Ignore post-commit hoo	oks 🔲	②
Build Environment		
☐ Inject environment v	ariables to the build process	•
Inject passwords to	the build as environment variables	

BUILD TRIGGERS



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BUILD



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MSBuild Bu	uild File	IdeasService.sln	•
Command I	Line Arguments		
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BUILD



Build a Visual Studio proj	ect or solution using MSBuild
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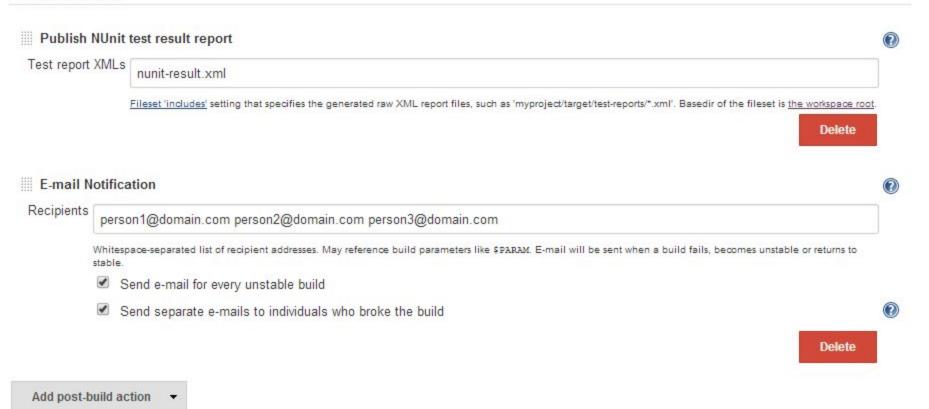


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POST BUILD ACTIONS



Post-build Actions



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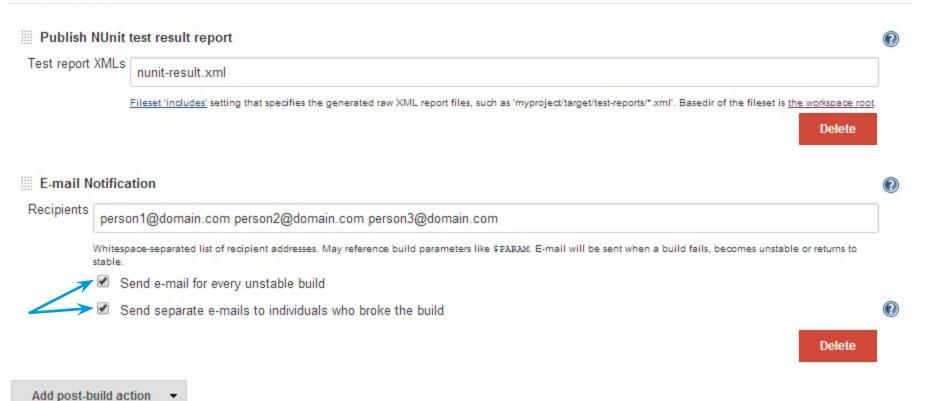
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POST BUILD ACTIONS



Post-build Actions



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POST BUILD ACTIONS



- Notificações de email personalizadas
- Construa outros projetos
- Criar / atualizar problemas do JIRA
- Publicar Javadocs

PLUG-INS



Mais de 600 plug-ins disponiveis para customizar Exemplos:

- JIRA
- Ant
- Maven
- JUnit
- Javadoc
- SSH
- MSBuild
- NUnit
- PowerShell
- Email Notifications

https://wiki.jenkins-ci.org/display/JENKINS/Plugins

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Até a próxima!