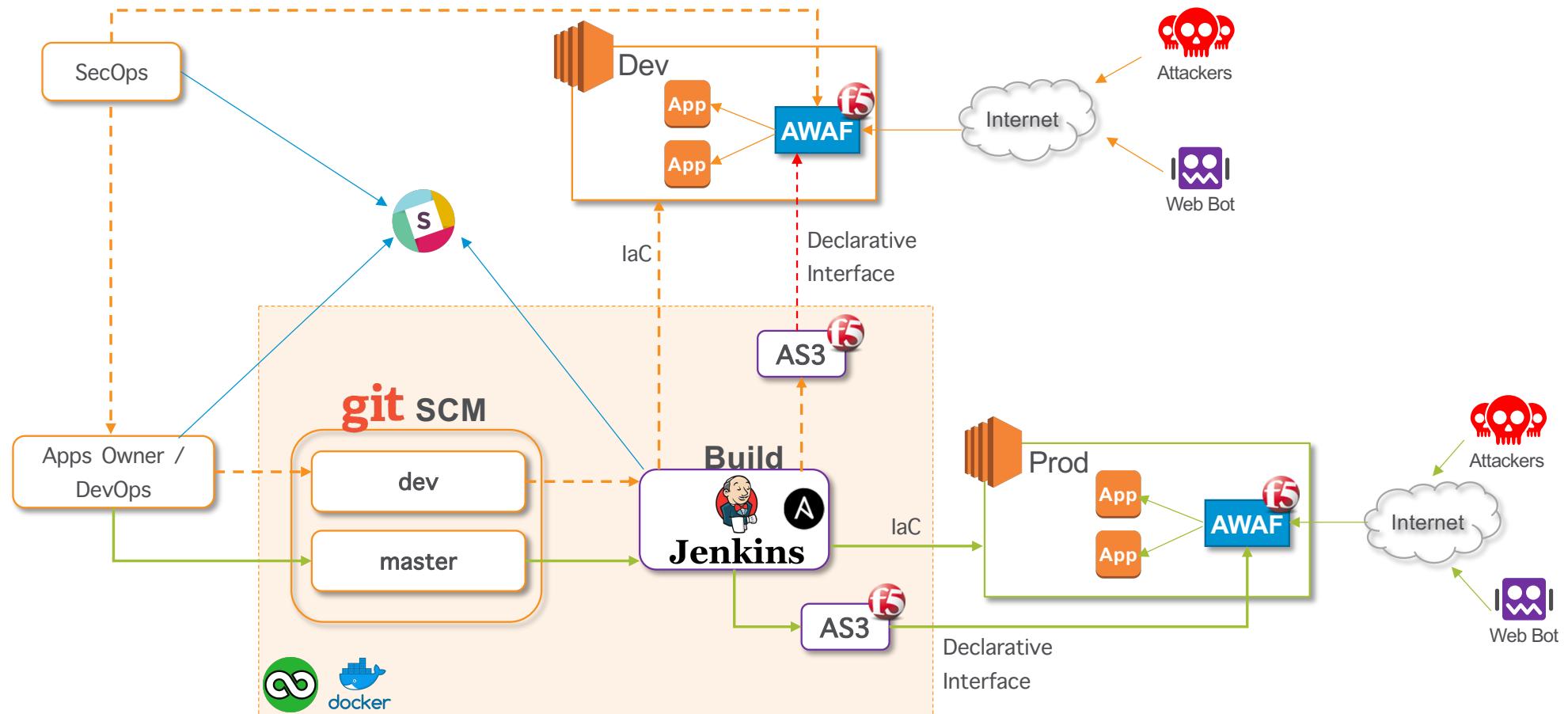


Environment





CI/CD in Dev Environment



The screenshot shows a web browser window titled "Apps Team / DevOps Logon". The address bar indicates the site is "Not Secure" and the URL is "winds:10000/login?from=%2F". The main content area displays a Jenkins login page with fields for "User" (snops) and "Password" (redacted). A blue arrow points from the text "Jenkins" to the Jenkins logo in the top right corner of the browser window.

F5 Reference Solution Containers

```
MEL-ML-00010384:~ fochan$ clear  
MEL-ML-00010384:~ fochan$ []
```

Slack Channel

Page generated: Oct 6, 2018 1:10:24 AM GMT REST API Jenkins ver. 2.121.2

is @ :)



Dashboard [Jenkins] x EC2 Management Console x | + Not Secure | winds:10000

Jenkins

5 search snaps log out DISABLE AUTO REFRESH

New Item People Build History Manage Jenkins Splunk My Views Credentials New View

All +

S	W	Name ↓	Last Success	Last Failure	Last Duration
Folder	Rain	Agility_DevSecOps	N/A	N/A	N/A
Folder	Rain	AWS WAF - AS3 - App1	N/A	N/A	N/A
Folder	Sun	azure	N/A	N/A	N/A
Folder	Sun	BIGIQ	N/A	N/A	N/A
Folder	Rain	DevSecOps - Lab - App2	N/A	N/A	N/A

Icon: S M L Legend RSS for all RSS for failures RSS for just latest builds

Build Queue No builds in the queue.

Build Executor Status 1 Idle 2 Idle

MEL-ML-00010384:~ fochan\$ clear
MEL-ML-00010384:~ fochan\$ []

Page generated: Oct 6, 2018 1:11:33 AM GMT REST API Jenkins ver. 2.121.2

Pipeline



All [DevSecOps - Lab - App2] | EC2 Management Console | Not Secure | winds:10000/job/devsecops-lab-app2/

Jenkins

5 search snaps log out DISABLE AUTO REFRESH

Up Status Configure New Item Delete Folder People Build History Move Credentials New View

Build Queue No builds in the queue.

Build Executor Status 1 Idle 2 Idle

winds:10000/job/devsecops-lab-app2/

DevSecOps - Lab - App2

Folder name: devsecops-lab-app2
Secdevops lab with waf, DOSL7, and ALE

Add description

All	W	Name ↓	Last Success	Last Failure	Last Duration
		f5-rs-app2-dev	N/A	N/A	N/A
		f5-ws-app2-prod	N/A	N/A	N/A

Icon: S M L

Legend RSS for all RSS for failures RSS for just latest builds

• Dev Pipeline
• Prod Pipeline

MEL-ML-00010384:~ fochan\$ clear
MEL-ML-00010384:~ fochan\$ []



All [DevSecOps - Lab - App2] > EC2 Management Console

Not Secure | winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-dev/

Jenkins > DevSecOps - Lab - App2 > f5-rs-app2-dev

DISABLE AUTO REFRESH

f5-rs-app2-dev

Continuous Integration with Dev Environment

built with <https://github.com/F5Networks/f5-aws-cloudformation/tree/master/support/standalone/znic>
licensing using bigip

[add description](#)

S	W	Name ↓	Last Success	Last Failure	Last Duration
	☀️	A1 - aws-net	N/A	N/A	N/A
	☀️	A2 - aws_app	N/A	N/A	N/A
	☀️	A3 - aws-bigip	N/A	N/A	N/A
	☀️	A4 - aws bigip onboard (rest_user)	N/A	N/A	N/A
	☀️	A5 - bigip rs onboard	N/A	N/A	N/A
	🌧️	B1 - push a WAF_policy	N/A	16 min - #1	1 min 4 sec
	☀️	B2 - rs-iapp service	N/A	N/A	N/A
	☀️	B3 - app-test	N/A	N/A	N/A
	☀️	B4 - rs-attacks	N/A	N/A	N/A
	☀️	SEC export waf policy	N/A	N/A	N/A
	☀️	7 - build a dashboard	N/A	N/A	N/A

MEL-ML-00010384:~ fochan\$ clear
MEL-ML-00010384:~ fochan\$

@ ☺



All [DevSecOps - Lab - App2] > EC2 Management Console

Not Secure | winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-dev/

Jenkins > DevSecOps - Lab - App2 > f5-rs-app2-dev

DISABLE AUTO REFRESH add description

Build Queue
No builds in the queue.

Build Executor Status
1 Idle
2 Idle

Pipeline environment variables in Ansible Vault

Icon: S M L

S	W	Name ↓	Last Success	Last Failure	Last Duration
Grey	Sun	A1 - aws-net	N/A	N/A	N/A
Grey	Sun	A2 - aws_app	N/A	N/A	N/A
Grey	Sun	A3 - aws-bigip	N/A	N/A	N/A
Grey	Sun	A4 - aws bigip onboard (rest_user)	N/A	N/A	N/A
Grey	Sun	A5 - bigip rs onboard	N/A	N/A	N/A
Red	Cloud	B1 - push a WAF policy	N/A	16 min - #1	1 min 4 sec
Grey	Sun	B2 - rs-iapp service	N/A	N/A	N/A
Grey	Sun	B3 - app-test	N/A	N/A	N/A
Grey	Sun	B4 - rs-attacks	N/A	N/A	N/A
Grey	Sun	SEC export waf policy	N/A	N/A	N/A
Grey	Sun	Z - destroy	N/A	N/A	N/A

f5 reference sol... Foo-Bang Chan #builds 153 0 Add Today

Icon: S M L

1. ssh

```
root/default
Go forth and automate!
[snops@f5-super-netops] [~] $
[snops@f5-super-netops] [~] $
[snops@f5-super-netops] [~] $ ls
f5-rs-app-test-traffic f5-rs-attacks
f5-rs-app1 f5-rs-aws
f5-rs-app2 f5-rs-aws-app
f5-rs-app3 f5-rs-aws-bigip
f5-rs-as3 f5-rs-aws-bigip-onboard
[snops@f5-super-netops] [~] $ ansible-vault edit --vault-password-file /var/jenkins_home/.vault_pass.txt /home/snops/host_volume/f5-rs-global-vars-vault.yaml
```

f5-rs-external-lb f5-rs-bigip-app f5-rs-jenkins
f5-rs-aws f5-rs-bigip-general-onboard f5-rs-waf
f5-rs-aws-tag-master f5-rs-bigiq host_volume
f5-rs-azure f5-rs-global-vars-vault.yaml log
f5-rs-azure-bigiq-iac f5-rs-iapp repos.json



All [DevSecOps - Lab - App2] > EC2 Management Console

Not Secure | winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-dev/

Jenkins > DevSecOps - Lab - App2 > f5-rs-app2-dev

DISABLE AUTO REFRESH add description

Pipeline environment variables in Ansible Vault

Icon: S M L

1. ssh

```
# Indirection taken from:  
# http://docs.ansible.com/ansible/playbooks_best_practices.html#best-practices-for-variables-and-vaults  
  
# variables you need to CHANGE  
  
vault_dac_user: "fbchan"  
vault_dac_email: "fbf5.com"  
vault_dac_password: "passw0rd"
```

####

f5 reference sol... Foo-Bang Chan #builds 153 0 Add Today

All Threads Channels

8,1 1%

9

This screenshot shows a Jenkins pipeline interface for a 'f5-rs-app2-dev' job. On the left, there's a sidebar with options like 'Delete Folder', 'People', 'Build History', 'Move', 'Credentials', and 'New View'. Below that are sections for 'Build Queue' (empty) and 'Build Executor Status' (2 Idle). A large central area displays a table of pipeline stages: A1 - aws-net, A2 - aws_app, A3 - aws-bigip, A4 - aws bigip onboard (rest_user), A5 - bigip rs onboard, B1 - push a WAF policy (status red, last failure 16 min ago), B2 - rs-iapp service, B3 - app-test, B4 - rs-attacks, SEC export waf policy, and Z - destroy. To the right of the table is a dark overlay window titled 'f5 reference sol...' showing user information and a '#builds' section. At the bottom, a terminal window titled '1. ssh' shows Ansible code for setting variables in a vault. An orange arrow points from the text 'Pipeline environment variables in Ansible Vault' to the 'vault_dac_*' variables in the terminal window.



Full stack deployment [DevSec] x EC2 Management Console x + Apps Team / DevOps deploying Apps2 into Dev – Start pipeline

Not Secure | winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-dev/view/Full%20stack%20deployment/ Jenkins DevSecOps - Lab - App2 f5-rs-app2-dev Full stack deployment edit description DISABLE AUTO REFRESH

Build Pipeline Triggered full stack deployment pipeline

Deploys full app stack, AWS network, deploys the containerized App into an EC2 instance bigip with LB/AWAF service definition

Pipeline #1

```
graph LR; A1["#1 A1 - aws-net  
Oct 6, 2018 1:12:42 AM  
1 min 25 sec  
snops"] --> A2["#1 A2 - aws_app  
Oct 6, 2018 1:14:14 AM  
52 sec and counting"]; A2 --> A3["#1 A3 - aws-bigip  
Oct 6, 2018 1:14:14 AM  
52 sec and counting"]; A3 --> A4["A4 - aws bigip onboard (rest_user)"]; A4 --> A5["A5 - bigip rs onboard"]; A5 --> B1["B1 - push a WAF policy"]; B1 --> B2["B2 - rs-iapp service"]; B2 --> B3["B3 - app-test"];
```

Run History Configure Add Step Delete Manage

Page generated: Oct 6, 2018 1:15:00 AM GMT REST API Jenkins ver. 2.121.2

[snops@f5-super-netops] [-] \$ ls
f5-rs-app-test-traffic f5-rs-attacks f5-rs-aws-external-lb f5-rs-bigip-ap
f5-rs-app1 f5-rs-aws f5-rs-aws-net f5-rs-bigip-ge
f5-rs-app2 f5-rs-aws-app f5-rs-aws-tag-master f5-rs-biq
f5-rs-app3 f5-rs-aws-bigip f5-rs-azure f5-rs-global-
f5-rs-as3 f5-rs-aws-bigip-onboard f5-rs-azure-biq-iac f5-rs-iapp
[snops@f5-super-netops] [-] \$ ansible-vault edit --vault-password-file /var/jenkins_ho
obal-vars-vault.yaml
[snops@f5-super-netops] [-] \$
[snops@f5-super-netops] [-] \$
[snops@f5-super-netops] [-] \$
[snops@f5-super-netops] [-] \$
[snops@f5-super-netops] [-] \$

general
random
builds
Direct Messages +
slackbot
Foo-Bang Chan (you)
+ Invite People
Apps +
+ Add Apps
Message #builds @ 😊



Full stack deployment [DevSec X] EC2 Management Console

Not Secure | winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-dev/view/Full%20stack%20deployment/ Jenkins DevSecOps - Lab - App2 f5-rs-app2-dev Full stack deployment

DISABLE AUTO REFRESH edit description

Build Pipeline

Deploys full app stack, AWS network, deploys the containerized App into an EC2 instance bigip with LB/AWAF service definition

Run History Configure Add Step Delete Manage

Pipeline #1

#1 A1 - aws-net
Oct 6, 2018 1:12:42 AM 1 min 25 sec snops

#1 A2 - aws_app
Oct 6, 2018 1:14:14 AM 1 min 23 sec

#1 A3 - aws-bigip
Oct 6, 2018 1:14:14 AM 3 min 15 sec

#1 A4 - aws bigip onboard (rest_user)
Oct 6, 2018 1:17:39 AM 52 sec and counting

A5 - bigip rs onboard N/A N/A

B1 - push a WAF policy N/A N/A

B2 - rs-iapp service N/A N/A

B3 - app-test N/A N/A

Status notified via Slack Channel

Page generated: Oct 6, 2018 1:18:22 AM GMT REST API Jenkins ver. 2.121.2

[Snops@f5-super-netops] [-] \$ ls

f5-rs-app-test-traffic f5-attacks f5-rs-aws-external-lb f5-rs-bigip-ap f5-rs-app1 f5-rs-aws f5-rs-aws-net f5-rs-bigip-ge f5-rs-app2 f5-rs-aws-app f5-rs-aws-tag-master f5-rs-bigiq f5-rs-app3 f5-rs-aws-bigip f5-rs-azure f5-rs-global-v f5-rs-as3 f5-rs-aws-bigip-onboard f5-rs-azure-bigiq-iac f5-rs-iapp [Snops@f5-super-netops] [-] \$ ansible-vault edit --vault-password-file /var/jenkins_home/bigip-variables-vault.yaml

[Snops@f5-super-netops] [-] \$

general
random
builds
Direct Messages +
slackbot
Foo-Bang Chan (you)
+ Invite People
Apps +

jenkins APP 11:17 AM

DevSecOps - Lab - App2 » f5-rs-app2-dev » A3 - aws-bigip - #1 Success after 3 min 15 sec ([Open](#)) user: fbchan , solution: f5-rs-app2-dev, bigip acces: <https://35.161.78.196>

+ Message #builds @ 😊



Full stack deployment [DevSec] | EC2 Management Console | BIG-IP® - App2-dev-us-west-2 | +

Not Secure | winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-dev/view/Full%20stack%20deployment/?auto_refresh=false

Jenkins > DevSecOps - Lab - App2 > f5-rs-app2-dev > Full stack deployment >

ENABLE AUTO REFRESH | edit description

Build Pipeline

Deploys full app stack, AWS network, deploys the containerized App into an EC2 instance bigip with LB/AWAF service definition

Run History Configure Add Step Delete Manage

Apps Team / DevOps notice pipeline failed

Page generated: Oct 6, 2018 1:33:19 AM GMT REST API Jenkins ver. 2.121.2

[snops@f5-super-netops] ~ \$ ls

f5-rs-app-test-traffic f5-rs-attacks f5-rs-aws-external-lb f5-rs-bigip-ap
f5-rs-app1 f5-rs-aws f5-rs-aws-net f5-rs-bigip-ge
f5-rs-app2 f5-rs-aws-app f5-rs-aws-tag-master f5-rs-bigiq
f5-rs-app3 f5-rs-aws-bigip f5-rs-azure f5-rs-global-
f5-rs-as3 f5-rs-aws-bigip-onboard f5-rs-azure-bigiq-iac f5-rs-iapp
[snops@f5-super-netops] ~ \$ ansible-vault edit --vault-password-file /var/jenkins_home/.Vault/vars-vault.yaml

[snops@f5-super-netops] ~ \$

general
random
builds

Direct Messages
slackbot
Foo-Bang Chan (you)
+ Invite People

Apps

Message #builds

jenkins APP 11:32 AM

DevSecOps - Lab - App2 » f5-rs-app2-dev » A3 - aws-bigip - #1 Success after 3 min 15 sec ([Open](#))
user: fbchan , solution: f5-rs-app2-dev, bigip acces: <https://35.161.78.196>

new messages



Full Stack deployment [DevSet] EC2 Management Console 001-SecDevOps-dev.mov

Not Secure | winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-dev/view/Full%20stack%20deployment/?auto_refresh=false

Jenkins DevSecOps - Lab - App2 f5-rs-app2-dev Full stack deployment

Build Pipeline

Deploys full app stack

Pipeline #1

Apps Team / DevOps investigate and found AWAF baseline policy template by SecOps failed deployment – FAILED Automated Test.

Console output for B3 - app-test #1

```
17430117923107635223<br><br><a href='javascript:history.back();'[Go Back]</a></body></html>, "stdout_lines": ["<html><head><title>Request Rejected</title></head><body>The requested URL was rejected. Please consult with your administrator.<br><br>Your support ID is: 17430117923107635223<br><br><a href='javascript:history.back();'[Go Back]</a></body></html>"]
```

TASK [send_traffic : fail] ****

task path: /home/snops/f5-rs-app-test-traffic/roles/send_traffic/tasks/main.yaml:26

fatal: [localhost]: FAILED! => {"changed": false, "msg": "Unexpected response returned"}
to retry, use: --limit @/home/snops/f5-rs-app-test-traffic/playbooks/app_test_traffic.retry

PLAY RECAP ****

localhost : ok=2 changed=2 unreachable=0 failed=1

Build step 'Execute shell' marked build as failure

org.jenkinsci.plugins.scriptsecurity.scripts.UnapprovedUsageException: script not yet approved for use
at org.jenkinsci.plugins.scriptsecurity.scripts.ScriptApproval\$using\$call(Unknown Source)
at com.splunk.splunkjenkins.UserActionDSL.perform(UserActionDSL.groovy:41)
at com.splunk.splunkjenkins.listeners.LoggingRunListener.onCompleted(LoggingRunListener.java:85)

Page generated: Oct 6, 2018 1:33:19 AM GMT REST API Jenkins ver. 2.121.2

[snops@f5-super-netops] [-] \$ ls

f5-rs-app-test-traffic f5-rs-attacks f5-rs-aws-external-lb f5-rs-bigip-ap # general
f5-rs-app1 f5-rs-aws f5-rs-aws-ne # random
f5-rs-app2 f5-rs-aws-app f5-rs-aws-tag
f5-rs-app3 f5-rs-aws-bigip f5-rs-azure

[snops@f5-super-netops] [-] \$ ansible-vault edit --vault-password-file /var/jenkins_home/.Vault/vars-vault.yaml

[snops@f5-super-netops] [-] \$

1. Screenshot of Jenkins console showing a failed deployment due to an AWAF baseline policy. An orange arrow points from the Jenkins message to the error message in the console output.

2. Screenshot of a Jenkins job page showing a failed build step 'Execute shell' due to unapproved usage of Jenkins Script Security.

3. Screenshot of a Jenkins job page showing a successful build step 'rs-iapp service'.

4. Screenshot of a Jenkins job page showing a message from 'jenkins' at 11:32 AM.

5. Screenshot of a Jenkins job page showing a message from 'jenkins' at 11:32 AM.

6. Screenshot of a Jenkins job page showing a message from 'jenkins' at 11:32 AM.



Apps Team / DevOps escalate/notify
SecOps to review



Full stack deployment [DevSec] | EC2 Management Console | BIG-IP® - App2-dev-us-west-2 | +

Not Secure | https://35.161.78.196/tmui/login.jsp

BIG-IP Configuration Utility
F5 Networks, Inc.

Welcome to the BIG-IP Configuration Utility.
Log in with your username and password using the fields on the left.

SecOps logon to DEV AWAF

Hostname: App2-dev-us-west-2-bigip.com
IP Address: 10.0.200.69
Username: admin
Password:
Log in

(c) Copyright 1996-2017, F5 Networks, Inc., Seattle, Washington. All rights reserved.
[F5 Networks, Inc.](#) [Legal Notices](#)

Establishing secure connection...

```
[snops@f5-super-netops] [-] $ ls
f5-rs-app-test-traffic  f5-rs-attacks
f5-rs-app1              f5-rs-aws
f5-rs-app2              f5-rs-aws-app
f5-rs-app3              f5-rs-aws-bigip
f5-rs-as3              f5-rs-aws-bigip-onboard
[snops@f5-super-netops] [-] $ ansible-vault edit --vault-password-file /var/jenkins_home/.Vault/vars-vault.yaml
[snops@f5-super-netops] [-] $
[snops@f5-super-netops] [-] $
[snops@f5-super-netops] [-] $
[snops@f5-super-netops] [-] $
```

SSL

general
random
builds

Direct Messages
slackbot
Foo-Bang Chan (you)

+ Invite People

Apps

Message #builds

jenkins APP 11:17 AM
DevSecOps - Lab - App2 » f5-rs-app2-dev » A3 - aws-bigip - #1
Success after 3 min 15 sec ([Open](#))
user: fbchan , solution: f5-rs-app2-dev, bigip acces:
<https://35.161.78.196>





Full stack deployment [DevSec] | EC2 Management Console | BIG-IP® - App2-dev-us-west-2 | +

Not Secure | https://35.161.78.196/xui/

App2-dev-us-west-2-bigip.com

Hostname: App2-dev-us-west-2-bigip.com Date: Oct 6, 2018 User: admin IP Address: 10.0.200.69 Time: 1:32 AM (UTC) Role: Administrator Partition: Common Log out

f5 ONLINE (ACTIVE) Standalone

Main Help About Local Traffic > Virtual Servers : Virtual Server List

Virtual Server List Virtual Address List Statistics

Name	Description	Application	Destination	Service Port	Type	Resources	Partition / Path
App2_default_vs_443		App2	10.0.1.206	443 (HTTPS)	Standard	Edit...	Common/App2.app
analytics-splunk-hec-forwarder-snmptrap-stage1	lastdeployed:1538789258	analytics-splunk-local	255.255.255.254	1003	Standard	Edit...	Common
analytics-splunk-hec-forwarder-snmptrap-stage2	lastdeployed:1538789258	analytics-splunk-local	255.255.255.254	41003	Standard	Edit...	Common
analytics-splunk-hec-forwarder-syslog-stage1	lastdeployed:1538789258	analytics-splunk-local	255.255.255.254	1002	Standard	Edit...	Common
analytics-splunk-hec-forwarder-syslog-stage2	lastdeployed:1538789258	analytics-splunk-local	255.255.255.254	41002	Standard	Edit...	Common
analytics-splunk-hec-forwarder-tcp-log-stage1	lastdeployed:1538789258	analytics-splunk-local	255.255.255.254	1001	Standard	Edit...	Common
analytics-splunk-hec-forwarder-tcp-log-stage2	lastdeployed:1538789258	analytics-splunk-local	255.255.255.254	41001	Standard	Edit...	Common

Enable Disable Delete...

Configuration Orchestrated by CI/CD Pipeline

https://35.161.78.196/xui/#

```
[snops@f5-super-netops] [-] $ ls
f5-rs-app-test-traffic      f5-rs-attacks      f5-rs-aws-external-lb  f5-rs-bigip-ap
f5-rs-app1                  f5-rs-aws          f5-rs-aws-net          f5-rs-bigip-ge
f5-rs-app2                  f5-rs-aws-app     f5-rs-aws-tag-master   f5-rs-biq
f5-rs-app3                  f5-rs-aws-bigip    f5-rs-azure          f5-rs-global-
f5-rs-as3                  f5-rs-aws-bigip-onboard f5-rs-azure-biq-iac  f5-rs-iapp
[snops@f5-super-netops] [-] $ ansible-vault edit --vault-password-file /var/jenkins_ho
obal-vars-vault.yaml
[snops@f5-super-netops] [-] $
```

general
random
builds
Direct Messages +
slackbot
Foo-Bang Chan (you)
+ Invite People
Apps +

DevSecOps - Lab - App2 » f5-rs-app2-dev » A3 - aws-bigip - #1 Success after 3 min 15 sec (Open)
user: fbchan , solution: f5-rs-app2-dev, bigip acces: <https://35.161.78.196>

jenkins APP 11:32 AM DevSecOps - Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service - #1 Success after 12 sec (Open)
user: fbchan , solution: f5-rs-app2-dev, application at: <https://http://52.10.140.34:80>

+ Message #builds @ 😊



Full stack deployment [DevSec] | EC2 Management Console | BIG-IP® - App2-dev-us-west-2 | +

Not Secure | https://35.161.78.196/xui/

App2-dev-us-west-2-bigip.com

Hostname: App2-dev-us-west-2-bigip.com Date: Oct 6, 2018 User: admin
IP Address: 10.0.200.69 Time: 1:33 AM (UTC) Role: Administrator Partition: Common Log out

f5 ONLINE (ACTIVE) Standalone

Main Help About Local Traffic > Virtual Servers : Virtual Server List > App2_default_vs_443

Statistics iApps DNS SSL Orchestrator Local Traffic Network Map Virtual Servers Policies Profiles Ciphers

Properties Resources Security Statistics

Policy Settings

Destination	10.0.1.206:443
Service	HTTPS
Application Security Policy	Enabled... Policy: linux-high
Service Policy	None
IP Intelligence	Disabled
DoS Protection Profile	Enabled... Profile: rs_dosi7_profile
Anti-Fraud Profile	Enabled... Profile: rs_fps_profile
	Enabled...

Selected Available /Common /Common

DevSecOps - Lab - App2 » f5-rs-app2-dev » A3 - aws-bigip - #1 Success after 3 min 15 sec (Open)
user: fbchan , solution: f5-rs-app2-dev, bigip acces:
<https://35.161.78.196>

new messages

jenkins APP 11:32 AM DevSecOps - Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service - #1 Success after 12 sec (Open)
user: fbchan , solution: f5-rs-app2-dev, application at:
<https://http://52.10.140.34:80>

general
random
builds
Direct Messages +
slackbot
Foo-Bang Chan (you)
+ Invite People
Apps +

+ Add Apps

Message #builds @ 😊

[snops@f5-super-netops] [-] \$ ls
f5-rs-app-test-traffic f5-attacks f5-rs-aws-external-lb f5-rs-bigip-ap
f5-rs-app1 f5-rs-aws f5-rs-aws-net f5-rs-bigip-ge
f5-rs-app2 f5-rs-aws-app f5-rs-aws-tag-master f5-rs-bigiq
f5-rs-app3 f5-rs-aws-bigip f5-rs-azure f5-rs-global-
f5-rs-as3 f5-rs-aws-bigip-onboard f5-rs-azure-biqq-iac f5-rs-iapp
[snops@f5-super-netops] [-] \$ ansible-vault edit --vault-password-file /var/jenkins_ho
obal-vars-vault.yaml
[snops@f5-super-netops] [-] \$
[snops@f5-super-netops] [-] \$
[snops@f5-super-netops] [-] \$
[snops@f5-super-netops] [-] \$
[snops@f5-super-netops] [-] \$



Not Secure | <https://35.161.78.196/xui/>

App2-dev-us-west-2-bigip.com

Hostname: App2-dev-us-west-2-bigip.com Date: Oct 6, 2018 User: admin
IP Address: 10.0.200.69 Time: 1:34 AM (UTC) Role: Administrator Partition: Common Log out

ONLINE (ACTIVE)
Standalone

Main Help About Security > Event Logs : Application : Requests

Statistics iApps DNS SSL Orchestrator Local Traffic Acceleration Device Management Security Overview

Illegal Requests: Illegal Requests

[HTTPS] / 12.12.12.12 01:32:55 2018-10-06 Delete Request Export Request Accept Request

HTTP protocol compliance failed [1]

HTTP Validation: High ASCII characters in headers
Details: Bare bytes in HTTP header
Applied Blocking Settings: Block, Alarm, Learn

Request Response N/A

DevSecOps - Lab - App2 » f5-rs-app2-dev » A3 - aws-bigip - #1 Success after 3 min 15 sec (Open)
user: fbchan , solution: f5-rs-app2-dev, bigip acces: <https://35.161.78.196>

jenkins APP 11:32 AM DevSecOps - Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service - #1 Success after 12 sec (Open)
user: fbchan , solution: f5-rs-app2-dev, application at: <http://52.10.140.34:80>

SecOps review exception from logs

The screenshot shows the F5 BIG-IP Management Console interface. On the left, there's a sidebar with various navigation options like Statistics, iApps, DNS, and Security. The main area is titled 'Event Logs' under 'Security'. It displays a log entry for an 'Illegal Requests' event. An orange box highlights this entry, and an arrow points from the text 'SecOps review exception from logs' to it. Below the log, there's a 'Request' and 'Response' section. To the right, there's a Slack-like interface showing messages from users like 'jenkins' and 'fbchan' about successful application deployments. The bottom left shows a terminal session with some command-line history.



Full stack deployment [DevSec] | EC2 Management Console | BIG-IP® - App2-dev-us-west-2 | +

Not Secure | https://35.161.78.196/xui/

App2-dev-us-west-2-bigip.com

Hostname: App2-dev-us-west-2-bigip.com Date: Oct 6, 2018 User: admin
IP Address: 10.0.200.69 Time: 1:34 AM (UTC) Role: Administrator Partition: Common Log out

ONLINE (ACTIVE)
Standalone

Main Help About Security > Event Logs : Application : Requests

Statistics iApps DNS SSL Orchestrator Local Traffic Acceleration Device Management Security Overview

Illegal Requests: Illegal Requests

[HTTPS] / 12.12.12.12 01:32:55 2018-10-06 Delete Request Export Request Accept Request Response N/A

Request

Request actual size: 124 bytes.

GET / HTTP/1.1
Host: 52.10.140.34
User-Agent: curl/7.61.0
Accept: */*
X-Forwarded-For: 12.12.12.12
author: 1011

ASCII Chars in header against default policy template

DevSecOps - Lab - App2 » f5-rs-app2-dev » A3 - aws-bigip - #1 Success after 3 min 15 sec (Open)
user: fbchan , solution: f5-rs-app2-dev, bigip acces: https://35.161.78.196

new messages

jenkins APP 11:32 AM DevSecOps - Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service - #1 Success after 12 sec (Open)
user: fbchan , solution: f5-rs-app2-dev, application at: https://http://52.10.140.34:80

Message #builds

```
[snops@f5-super-netops] [-] $ ls
f5-rs-app-test-traffic      f5-rs-attacks      f5-rs-aws-external-lb      f5-rs-bigip-ap
f5-rs-app1                   f5-rs-aws          f5-rs-aws-net              f5-rs-bigip-ge
f5-rs-app2                   f5-rs-aws-app      f5-rs-aws-tag-master       f5-rs-bigiq
f5-rs-app3                   f5-rs-aws-bigip    f5-rs-azure                f5-rs-global-
f5-rs-as3                   f5-rs-aws-bigip-onboard f5-rs-azure-biqq-iac     f5-rs-iapp
[snops@f5-super-netops] [-] $ ansible-vault edit --vault-password-file /var/jenkins_home/.ansible/vault/vars-vault.yaml
[snops@f5-super-netops] [-] $
```



Full stack deployment [DevSec] | EC2 Management Console | BIG-IP® - App2-dev-us-west-2 | +

Not Secure | https://35.161.78.196/xui/

App2-dev-us-west-2-bigip.com

Hostname: App2-dev-us-west-2-bigip.com Date: Oct 6, 2018 User: admin IP Address: 10.0.200.69 Time: 1:34 AM (UTC) Role: Administrator Partition: Common Log out

ONLINE (ACTIVE)
Standalone

Main Help About

Statistics iApps DNS SSL Orchestrator Local Traffic Acceleration Device Management Security Overview

Security » Event Logs : Application : Requests

Application Protocol Network DoS Bot Defense Logging Profiles

Illegal Requests: Illegal Requests

[HTTPS] / 12.12.12.12 01:32:55 2018-10-06 Delete Request Export Request Request successfully accepted Request Response N/A

Request actual size: 124 bytes.

GET / HTTP/1.1 Host: 52.10.140.34 User-Agent: curl/7.61.0 Accept: */* X-Forwarded-For: 12.12.12.12 author: 1011

SecOps "Accepted Request" exception – requirement from Apps

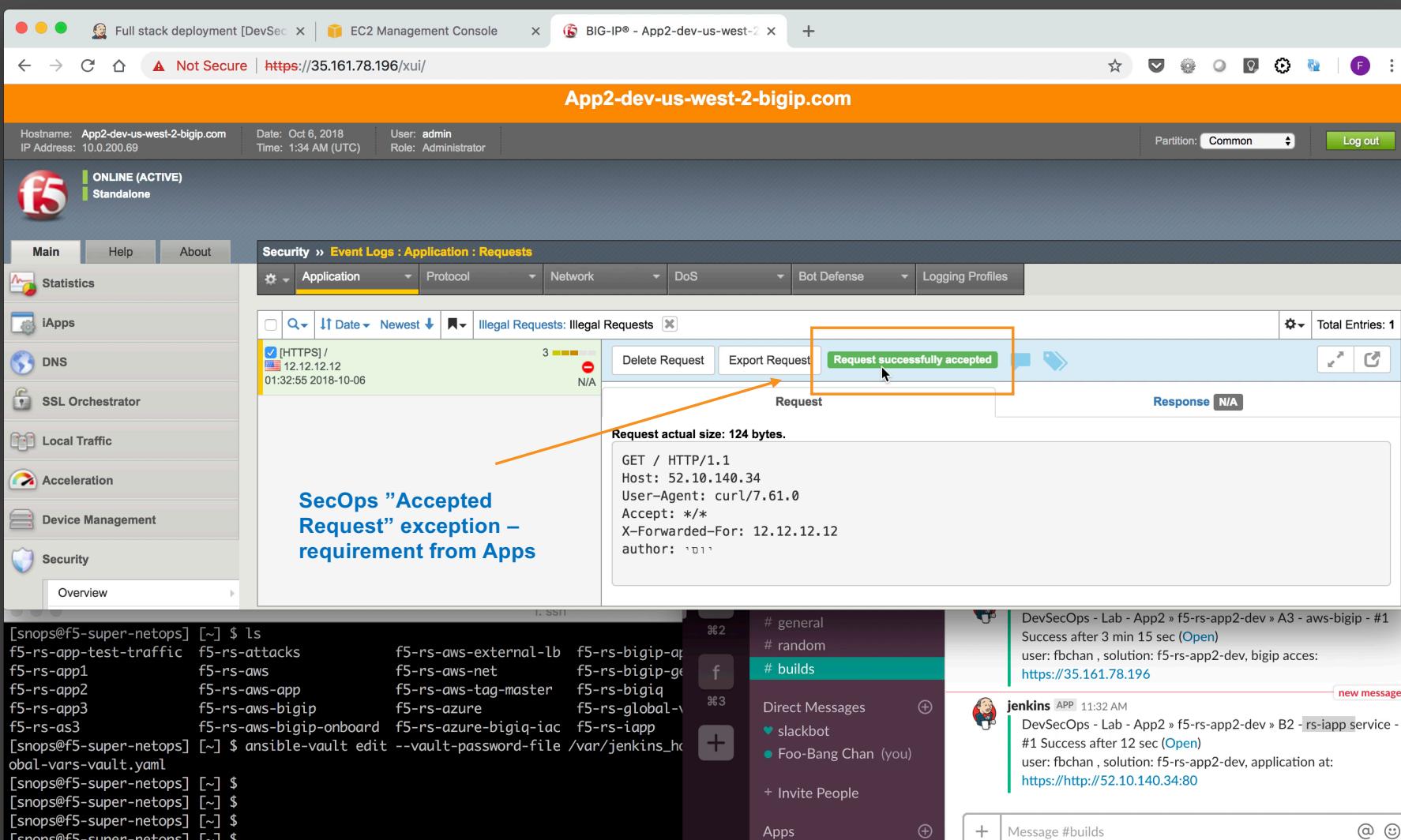
Snops@f5-super-netops ~ \$ ls f5-rs-attacks f5-rs-aws f5-rs-aws-external-lb f5-rs-bigip-ap f5-rs-builds f5-rs-builds f5-rs-aws-net f5-rs-bigip-ge f5-rs-builds f5-rs-builds f5-rs-aws-app f5-rs-aws-tag-master f5-rs-bigiq f5-rs-global-v f5-rs-builds f5-rs-aws-bigip f5-rs-azure f5-rs-iapp f5-rs-builds f5-rs-aws-bigip-onboard f5-rs-azure-bigiq-iac f5-rs-iapp f5-rs-builds f5-rs-as3 f5-rs-builds f5-rs-builds f5-rs-builds f5-rs-builds [snops@f5-super-netops ~] \$ ansible-vault edit --vault-password-file /var/jenkins_home/.Vault/obal-vars-vault.yaml [snops@f5-super-netops ~] \$ [snops@f5-super-netops ~] \$ [snops@f5-super-netops ~] \$ [snops@f5-super-netops ~] \$ [snops@f5-super-netops ~] \$

general
random
builds
Direct Messages +
slackbot
Foo-Bang Chan (you)
+ Invite People
Apps +

DevSecOps - Lab - App2 » f5-rs-app2-dev » A3 - aws-bigip - #1 Success after 3 min 15 sec (Open)
user: fbchan , solution: f5-rs-app2-dev, bigip acces: https://35.161.78.196

jenkins APP 11:32 AM DevSecOps - Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service - #1 Success after 12 sec (Open)
user: fbchan , solution: f5-rs-app2-dev, application at: https://http://52.10.140.34:80

+ Message #builds @ 😊





Full stack deployment [DevSec] | EC2 Management Console | BIG-IP® - App2-dev-us-west-2 | +

Not Secure | https://35.161.78.196/xui/

App2-dev-us-west-2-bigip.com

Hostname: App2-dev-us-west-2-bigip.com Date: Oct 6, 2018 User: admin
IP Address: 10.0.200.69 Time: 1:35 AM (UTC) Role: Administrator Partition: Common Log out

ONLINE (ACTIVE)
Standalone

Main Help About

Statistics iApps DNS SSL Orchestrator Local Traffic Acceleration Device Management Security Overview

Apply Policy Configuration Operation completed successfully.

Security > Application Security : Policy : Policy Properties

Current edited security policy linux-high (blocking)

Policy Properties Basic

Policy Name: linux-high
Version: 2018-10-06 01:34:49 (Source Host Name: App2-dev-us-west-2-bigip.com, Source Policy Name: /Common/linux-high)
Policy Type: Security Policy
Application Language: Unicode (utf-8)
Policy Description: Fundamental Policy
Enforcement Readiness Period: 7 days
Signature Staging: Disabled (Attack Signatures Configuration)
Policy is case sensitive: Yes

Apply Policy Cancel Save

SecOps Applied policy changes to Dev AWAF

DevSecOps - Lab - App2 » f5-rs-app2-dev » A3 - aws-bigip - #1 Success after 3 min 15 sec (Open)
user: fbchan , solution: f5-rs-app2-dev, bigip acces: https://35.161.78.196

jenkins APP 11:32 AM DevSecOps - Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service - #1 Success after 12 sec (Open)
user: fbchan , solution: f5-rs-app2-dev, application at: https://http://52.10.140.34:80

+ Message #builds @ 😊

[snops@f5-super-netops] ~ \$ ls
f5-rs-app-test-traffic f5-rs-attacks f5-rs-aws-external-lb f5-rs-bigip-ap
f5-rs-app1 f5-rs-aws f5-rs-aws-net f5-rs-bigip-ge
f5-rs-app2 f5-rs-aws-app f5-rs-aws-tag-master f5-rs-biq
f5-rs-app3 f5-rs-aws-bigip f5-rs-azure f5-rs-global-
f5-rs-as3 f5-rs-aws-bigip-onboard f5-rs-azure-biqq-iac f5-rs-iapp
[snops@f5-super-netops] ~ \$ ansible-vault edit --vault-password-file /var/jenkins_ho
obal-vars-vault.yaml
[snops@f5-super-netops] ~ \$
[snops@f5-super-netops] ~ \$
[snops@f5-super-netops] ~ \$
[snops@f5-super-netops] ~ \$
[snops@f5-super-netops] ~ \$



SecOps notify App Team / DevOps of
new policy changes in DEV



All [DevSecOps - Lab - App2] > EC2 Management Console | BIG-IP® - App2-dev-us-west-2 | +

Not Secure | winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-dev/

Jenkins > DevSecOps - Lab - App2 > f5-rs-app2-dev >

Build Queue: No builds in the queue.

Build Executor Status: 1 Idle, 2 Idle

Table:

S	W	Name ↓	Last Success	Last Failure	Last Duration
●	☀	A1 - aws_net	23 min - #1	N/A	1 min 25 sec
●	☀	A2 - aws_app	21 min - #1	N/A	1 min 23 sec
●	☀	A3 - aws-bigip	21 min - #1	N/A	3 min 15 sec
●	☀	A4 - aws bigip onboard (rest_user)	18 min - #1	N/A	4 min 53 sec
●	☀	A5 - bigip rs onboard	13 min - #1	N/A	8 min 27 sec
●	☁	B1 - push a WAF policy	4 min 46 sec - #2	40 min - #1	1 min 9 sec
●	☀	B2 - rs-iapp service	3 min 31 sec - #1	N/A	12 sec
●	⛈	B3 - app-test	N/A	3 min 11 sec - #1	6.7 sec
●	☀	B4 - rs-attacks	N/A	N/A	N/A
●	☀	SEC export waf policy	N/A	N/A	N/A
●	☀	Z - destroy	N/A	N/A	N/A

Icon: S M L

Legend: RSS for all RSS for failures RSS for just latest builds

winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-dev/job/SEC export waf policy/

```
[snops@f5-super-netops] [-] $ ls f5-rs-app-test-traffic f5-rs-attacks f5-rs-aws-external-lb f5-rs-bigip-app f5-rs-jenkins f5-rs-app1 f5-rs-aws f5-rs-aws-net f5-rs-bigip-general-onboard f5-rs-waf f5-rs-app2 f5-rs-aws-app f5-rs-aws-tag-master f5-rs-bigiq host_volume f5-rs-app3 f5-rs-aws-bigip f5-rs-azure f5-rs-global-vars-vault.yaml log f5-rs-as3 f5-rs-aws-bigip-onboard f5-rs-azure-biqq-iac f5-rs-iapp repos.json [snops@f5-super-netops] [-] $ ]
```

Page generated: Oct 6, 2018 1:36:00 AM GMT REST API Jenkins ver. 2.121.2

Lab - App2 » f5-rs-app2-dev » A3 - aws-bigip - #1
3 min 15 sec (Open)
, solution: f5-rs-app2-dev, bigip acces:
1.78.196

new messages

32 AM Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service - after 12 sec (Open)
, solution: f5-rs-app2-dev, application at:
/52.10.140.34:80

@ ☺

App Team / DevOps pull AWAF policy from DEV env

An orange arrow points from the text "App Team / DevOps pull AWAF policy from DEV env" to the Jenkins build status for "SEC export waf policy".



All [DevSecOps - Lab - App2] > EC2 Management Console | BIG-IP® - App2-dev-us-west-2 | +

Not Secure | winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-dev/

Jenkins

Jenkins > DevSecOps - Lab - App2 > f5-rs-app2-dev

[Up](#) [Status](#) [Configure](#) [New Item](#) [Delete Folder](#) [People](#) [Build History](#) [Move](#) [Credentials](#) [New View](#)

[Build Queue](#) [No builds in the queue.](#)

[Build Executor Status](#) [1 Idle](#) [2 Idle](#)

f5-rs-app2-dev

built with <https://github.com/F5Networks/f5-aws-cloudformation/tree/master/supported/standalone/2nic>
licensing using bigip

[add description](#)

S	W	Name ↓	Last Success	Last Failure	Last Duration
		A1 - aws-net	25 min - #1	N/A	1 min 25 sec
		A2 - aws_app	23 min - #1	N/A	1 min 23 sec
		A3 - aws-bigip	23 min - #1	N/A	3 min 15 sec
		A4 - aws bigip onboard (rest_user)	20 min - #1	N/A	4 min 53 sec
		A5 - bigip rs onboard	15 min - #1	N/A	8 min 27 sec
		B1 - push a WAF policy	6 min 35 sec - #2	42 min - #1	1 min 9 sec
		B2 - rs-iapp service	5 min 20 sec - #1	N/A	12 sec
		B3 - app-test	N/A	5 min 0 sec - #1	6.7 sec

1. ssh

```
f5-rs-app1      f5-rs-aws          f5-rs-aws-net        f5-rs-bigip-general-onboard  f5-rs-waf
f5-rs-app2      f5-rs-aws-app       f5-rs-aws-tag-master   f5-rs-bigip                host_volume
f5-rs-app3      f5-rs-aws-bigip     f5-rs-azure           f5-rs-global-vars-vault.yaml log
f5-rs-as3       f5-rs-aws-bigip-onboard f5-rs-azure-bigip-iac  f5-rs-iapp               repos.json

[snops@f5-super-netops] ~]$ ls
f5-rs-app-test-traffic  f5-rs-attacks      f5-rs-aws-external-lb  f5-rs-bigip-app        f5-rs-jenkins
f5-rs-app1              f5-rs-aws          f5-rs-aws-net         f5-rs-bigip-general-onboard  f5-rs-waf
f5-rs-app2              f5-rs-aws-app       f5-rs-aws-tag-master   f5-rs-bigip                host_volume
f5-rs-app3              f5-rs-aws-bigip     f5-rs-azure           f5-rs-global-vars-vault.yaml log
f5-rs-as3              f5-rs-aws-bigip-onboard f5-rs-azure-bigip-iac  f5-rs-iapp               repos.json

[snops@f5-super-netops] ~]$ git config --global user.email "fb@f5.com"
[snops@f5-super-netops] ~]$ git config --global user.name "Foo-Bang"
[snops@f5-super-netops] ~]$
```

32 AM
Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service -
fter 12 sec (Open)
, solution: f5-rs-app2-dev, application at:
[/52.10.140.34:80](#)

new messages →

32 AM
Lab - App2 » f5-rs-app2-dev » SEC export waf
success after 23 sec (Open)
, solution: f5-rs-app1-dev, NEW security policy
lux-high-v01

@ ☺



All [DevSecOps - Lab - App2] > EC2 Management Console | BIG-IP® - App2-dev-us-west-2 | +

Not Secure | winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-dev/

Jenkins

Jenkins > DevSecOps - Lab - App2 > f5-rs-app2-dev

Up Status Configure New Item Delete Folder People Build History Move Credentials New View Build Queue No builds in the queue. Build Executor Status 1 Idle 2 Idle

f5-rs-app2-dev

built with <https://github.com/F5Networks/f5-aws-cloudformation/tree/master/support/standalone/2nic>
licensing using bigip

App Team / DevOps ensure dev branch on SCM [add description](#)

S	W	Name ↓	Last Success	Last Failure	Last Duration
●	☀	A1 - aws-net	25 min - #1	N/A	1 min 25 sec
●	☀	A2 - aws_app	23 min - #1	N/A	1 min 23 sec
●	☀	A3 - aws-bigip	23 min - #1	N/A	3 min 15 sec
●	☀	A4 - aws bigip onboard (rest_user)	20 min - #1	N/A	4 min 53 sec
●	☀	A5 - bigip rs onboard	15 min - #1	N/A	8 min 27 sec
●	☁	B1 - push a WAF policy	6 min 46 sec - #2	42 min - #1	1 min 9 sec
●	☀	B2 - rs-iapp service	5 min 31 sec - #1	N/A	12 sec
●	⛈	B3 - app-test	N/A	5 min 11 sec - #1	6.7 sec

1. ssh

```
[snops@F5-super-netops] [-] $ ls
f5-rs-app-test-traffic  f5-rs-attacks  f5-rs-aws-external-lb  f5-rs-bigip-app  f5-rs-jenkins
f5-rs-app1              f5-rs-aws       f5-rs-aws-net          f5-rs-bigip-general-onboard  f5-rs-waf
f5-rs-app2              f5-rs-aws-app   f5-rs-aws-tag-master   f5-rs-bigip                host_volume
f5-rs-app3              f5-rs-aws-bigip  f5-rs-azure           f5-rs-global-vars-vault.yaml log
f5-rs-as3              f5-rs-aws-bigip-onboard  f5-rs-azure-bigip-iac  f5-rs-iapp  repos.json

[snops@F5-super-netops] [-] $ cd f5-rs-app2/
[snops@F5-super-netops] [~/f5-rs-app2] $ ls
README.md  all-in-one-hackazon_iac_parameters.yaml  repo_install.log  snops_install.sh

[snops@F5-super-netops] [~/f5-rs-app2] $ git branch
* dev
  master
[snops@F5-super-netops] [~/f5-rs-app2] $
```

32 AM Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service - after 12 sec (Open)
, solution: f5-rs-app2-dev, application at: 52.10.140.34:80
new messages →

Lab - App2 » f5-rs-app2-dev » SEC export waf success after 23 sec (Open)
, solution: f5-rs-app1-dev, NEW security policy lux-high-v01

@ ☺



All [DevSecOps - Lab - App2] > EC2 Management Console | BIG-IP® - App2-dev-us-west-2 | +

Not Secure | winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-dev/

Jenkins

Jenkins > DevSecOps - Lab - App2 > f5-rs-app2-dev

[Up](#)

[Status](#)

[Configure](#)

[New Item](#)

[Delete Folder](#)

[People](#)

[Build History](#)

[Move](#)

[Credentials](#)

[New View](#)

f5-rs-app2-dev

built with <https://github.com/F5Networks/f5-aws-cloudformation/tree/master/supported/standalone/2nic>
licensing using bigip

[All](#) [Full stack deployment](#) [Service deployment pipeline](#) [+](#)

S	W	Name ↓	Last Success	Last Failure	Last Duration
●	☀	A1 - aws-net	25 min - #1	N/A	1 min 25 sec
●	☀	A2 - aws_app	23 min - #1	N/A	1 min 23 sec
●	☀	A3 - aws-bigip	23 min - #1	N/A	3 min 15 sec
●	☀	A4 - aws bigip onboard (rest_user)	20 min - #1	N/A	4 min 53 sec
●	☀	A5 - bigip rs onboard	15 min - #1	N/A	8 min 27 sec
●	☁	B1 - push a WAF policy	6 min 56 sec - #2	42 min - #1	1 min 9 sec
●	☀	B2 - rs-iapp service	5 min 41 sec - #1	N/A	12 sec
●	⛈	B3 - app-test	N/A	5 min 21 sec - #1	6.7 sec

[add description](#)

App Team / DevOps modify Infrastructure as Code (IaC) parameter

1. ssh

```
[snops@F5-super-netops] [-] $ ls
f5-rs-app-test-traffic  f5-rs-attacks  f5-rs-aws-external-lb  f5-rs-bigip-app  f5-rs-jenkins
f5-rs-app1              f5-rs-aws       f5-rs-aws-net          f5-rs-bigip-general-onboard  f5-rs-waf
f5-rs-app2              f5-rs-aws-app   f5-rs-aws-tag-master   f5-rs-bigip                host_volume
f5-rs-app3              f5-rs-aws-bigip  f5-rs-azure           f5-rs-global-vars-vault.yaml  log
f5-rs-as3              f5-rs-aws-bigip-onboard  f5-rs-azure-bigip-iac  f5-rs-iapp             repos.json

[snops@F5-super-netops] [-] $ cd f5-rs-app2/
[snops@F5-super-netops] [~/f5-rs-app2] $ ls
README.md  all-in-one-hackazon_iac_parameters.yaml  repo_install.log  snops_install.sh
[snops@F5-super-netops] [~/f5-rs-app2] $ git branch
* dev
  master
[snops@F5-super-netops] [~/f5-rs-app2] $ vi iac_parameters.yaml
```

32 AM
Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service -
fter 12 sec (Open)
, solution: f5-rs-app2-dev, application at:
52.10.140.34:80

new messages →

Lab - App2 » f5-rs-app2-dev » SEC export waf
success after 23 sec (Open)
, solution: f5-rs-app1-dev, NEW security policy
lux-high-v01

@ ☺



All [DevSecOps - Lab - App2] > EC2 Management Console | BIG-IP® - App2-dev-us-west-2 | +

Not Secure | winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-dev/

Jenkins

f5-rs-app2-dev

built with https://github.com/F5Networks/f5-aws-cloudformation/tree/master/support/standalone/2nic licensing using bigip

Original AWAF policy template

S	W	Name ↓	Last Success	Last Failure	Last Duration
●	☀	A1 - aws-net	25 min - #1	N/A	1 min 25 sec
●	☀	A2 - aws_app	23 min - #1	N/A	1 min 23 sec
●	☀	A3 - aws-bigip	23 min - #1	N/A	3 min 15 sec
●	☀	A4 - aws bigip onboard (rest_user)	20 min - #1	N/A	4 min 53 sec
●	☀	A5 - bigip rs onboard	15 min - #1	N/A	8 min 27 sec
●	☁	B1 - push a WAF policy	6 min 56 sec - #2	42 min - #1	1 min 9 sec
●	☀	B2 - rs-iapp service	5 min 41 sec - #1	N/A	12 sec
●	⛈	B3 - app-test	N/A	5 min 21 sec - #1	6.7 sec

service_name: "App2"
aws_region: "us-west-2"
rs_container_name: "mutzel/all-in-one-hackazon:postinstall supervisord -n"
waf_policy_name: "linux-high" linux-high
enables or disables proactive bot mitigation - Sends JS challenge
allowed values: disabled / always
proactive_automated_attack_prevention: "disabled"
#enables or disables login page parameters encryption
#login_page_file and login_page_path are made of the login URL, for example /user/login will have login_page_file: "login", login_page_path: "user"
login_password_encryption: "disabled"
login_page_file: "login"
"iac_parameters.yaml" 13L, 596C

1. ssh

32 AM
Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service - after 12 sec (Open)
, solution: f5-rs-app2-dev, application at:
/52.10.140.34:80

new messages →
Lab - App2 » f5-rs-app2-dev » SEC export waf success after 23 sec (Open)
, solution: f5-rs-app1-dev, NEW security policy
ux-high-v01

@ ☺



All [DevSecOps - Lab - App2] > EC2 Management Console | BIG-IP® - App2-dev-us-west-2 | +

Not Secure | winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-dev/

Jenkins

f5-rs-app2-dev

built with <https://github.com/F5Networks/f5-aws-cloudformation/tree/master/support/standalone/2nic>
licensing using bigipq

New AWAF Policy

[add description](#)

S	W	Name ↓	Last Success	Last Failure	Last Duration
●	☀	A1 - aws-net	25 min - #1	N/A	1 min 25 sec
●	☀	A2 - aws_app	24 min - #1	N/A	1 min 23 sec
●	☀	A3 - aws-bigip	24 min - #1	N/A	3 min 15 sec
●	☀	A4 - aws bigip onboard (rest_user)	20 min - #1	N/A	4 min 53 sec
●	☀	A5 - bigip rs onboard	15 min - #1	N/A	8 min 27 sec
●	☁	B1 - push a WAF policy	7 min 7 sec - #2	43 min - #1	1 min 9 sec
●	☀	B2 - rs-iapp_service	5 min 52 sec - #1	N/A	12 sec
●	⛈	B3 - app-test	N/A	5 min 32 sec - #1	6.7 sec

Build Queue: No builds in the queue.

Build Executor Status: 1 Idle, 2 Idle

SSH Terminal:

```
service_name: "App2"
aws_region: "us-west-2"
rs_container_name: "mutzel/all-in-one-hackazon:postinstall supervisord -n"
waf_policy_name: "linux-high-v0" |
# enables or disables proactive bot mitigation - Sends JS challenge
# allowed values: disabled / always
proactive_automated_attack_prevention: "disabled"
#enables or disables login page parameters encryption
#login_page_file and login_page_path are made of the login URL, for example /user/login will have login_page_file: "login", login_page_pa
th: "user"
login_password_encryption: "disabled"
login_page_file: "login"
-- INSERT --
```

Terminal Output:

```
32 AM
Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service - after 12 sec (Open)
, solution: f5-rs-app2-dev, application at:
/52.10.140.34:80
new messages →
Lab - App2 » f5-rs-app2-dev » SEC export waf success after 23 sec (Open)
, solution: f5-rs-app1-dev, NEW security policy
linux-high-v01
```



All [DevSecOps - Lab - App2] > EC2 Management Console | BIG-IP® - App2-dev-us-west-2 | +

Not Secure | winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-dev/

Jenkins

Jenkins > DevSecOps - Lab - App2 > f5-rs-app2-dev

[Up](#) [Status](#) [Configure](#) [New Item](#) [Delete Folder](#) [People](#) [Build History](#) [Move](#) [Credentials](#) [New View](#)

f5-rs-app2-dev

built with <https://github.com/F5Networks/f5-aws-cloudformation/tree/master/supported/standalone/2nic>
licensing using bigiq

Code commit [add description](#)

S	W	Name ↓	Last Success	Last Failure	Last Duration
●	☀	A1 - aws-net	25 min - #1	N/A	1 min 25 sec
●	☀	A2 - aws_app	24 min - #1	N/A	1 min 23 sec
●	☀	A3 - aws-bigip	24 min - #1	N/A	3 min 15 sec
●	☀	A4 - aws bigip onboard (rest_user)	24 min - #1	N/A	4 min 53 sec
●	☀	A5 - bigip rs onboard	16 min - #1	N/A	8 min 27 sec
●	☁	B1 - push a WAF policy	7 min 27 sec - #2	43 min - #1	1 min 9 sec
●	☀	B2 - rs-iapp service	6 min 12 sec - #1	N/A	12 sec
●	⛈	B3 - app-test	N/A	5 min 52 sec - #1	6.7 sec

Build Queue [-](#)
No builds in the queue.

Build Executor Status [-](#)
1 Idle
2 Idle

1. ssh

```
f5-rs-as3      f5-rs-aws-bigip-onboard  f5-rs-azure-bigiq-iac  f5-rs-iapp
[snops@f5-super-netops] [~] $ cd f5-rs-app2/
[snops@f5-super-netops] [~/f5-rs-app2] $ ls
README.md  all-in-one-hackazon  iac_parameters.yaml  repo_install.log  snops_install.sh
[snops@f5-super-netops] [~/f5-rs-app2] $ git branch
* dev
  master
[snops@f5-super-netops] [~/f5-rs-app2] $ vi iac_parameters.yaml
[snops@f5-super-netops] [~/f5-rs-app2] $ git add iac_parameters.yaml
[snops@f5-super-netops] [~/f5-rs-app2] $ git commit -m "changed asm policy"
[dev 0f81e81] changed asm policy
 1 file changed, 1 insertion(+), 1 deletion(-)
[snops@f5-super-netops] [~/f5-rs-app2] $
```

repos.json

32 AM

Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service - after 12 sec ([Open](#))
, solution: f5-rs-app2-dev, application at: [52.10.140.34:80](#)

Lab - App2 » f5-rs-app2-dev » SEC export waf success after 23 sec ([Open](#))
, solution: f5-rs-app1-dev, NEW security policy lux-high-v01

new messages [@](#) [smiley](#)

The screenshot shows a Jenkins pipeline named 'f5-rs-app2-dev'. On the left, there's a sidebar with various Jenkins management links like 'Up', 'Status', 'Configure', etc. The main area displays a table of build steps with columns for status (S), weather icon (W), name, last success time, last failure time, and duration. Below the table is a terminal window showing a sequence of commands being run on a host named 'f5-rs-as3'. One specific command, 'git commit -m "changed asm policy"', is highlighted with a red box and has an orange arrow pointing upwards towards the 'Code commit' section of the pipeline interface. This indicates that the commit message is being tracked or displayed within the Jenkins pipeline's context.



All [DevSecOps - Lab - App2] > EC2 Management Console > BIG-IP® - App2-dev-us-west-2

Not Secure | winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-dev/

Jenkins

f5-rs-app2-dev

built with https://github.com/F5Networks/f5-aws-cloudformation/tree/master/support/standalone/2nic licensing using bigiq

Jenkins WebHook triggered build pipeline

S	W	Name	Last Success	Last Failure	Last Duration
●	☀	A1 - aws-net	26 min - #1	N/A	1 min 25 sec
●	☀	A2 - aws_app	24 min - #1	N/A	1 min 23 sec
●	☀	A3 - aws-biqiq	24 min - #1	N/A	3 min 15 sec
●	☀	A4 - aws bigip onboard (rest_user)	21 min - #1	N/A	4 min 53 sec
●	☀	A5 - bigip rs onboard	16 min - #1	N/A	8 min 27 sec
●	☁	B1 - push a WAF policy	7 min 49 sec - #2	43 min - #1	1 min 9 sec
●	☀	B2 - rs-iapp service	6 min 34 sec - #1	N/A	12 sec
●	⛈	B3 - app-test	N/A	6 min 14 sec - #1	6.7 sec

Build Queue (1)

DevSecOps - Lab - App2 » f5-rs-app2-dev » B1
push a WAF policy

Build Executor Status

1 Idle

1. ssh

```
f5-rs-as3 f5-rs-aws-bigip-onboard f5-rs-azure-biqiq-iac f5-rs-iapp
[snops@f5-super-netops] [~] $ cd f5-rs-app2/
[snops@f5-super-netops] [~/f5-rs-app2] $ ls
README.md all-in-one-hackazon iac_parameters.yaml repo_install.log snops_install.sh
[snops@f5-super-netops] [~/f5-rs-app2] $ git branch
* dev
  master
[snops@f5-super-netops] [~/f5-rs-app2] $ vi iac_parameters.yaml
[snops@f5-super-netops] [~/f5-rs-app2] $ git add iac_parameters.yaml
[snops@f5-super-netops] [~/f5-rs-app2] $ git commit -m "changed asm policy"
[dev 0f81e81] changed asm policy
 1 file changed, 1 insertion(+), 1 deletion(-)
[snops@f5-super-netops] [~/f5-rs-app2] $
```

repos.json

32 AM Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service - after 12 sec (Open)
, solution: f5-rs-app2-dev, application at: /52.10.140.34:80

new messages →

Lab - App2 » f5-rs-app2-dev » SEC export waf success after 23 sec (Open)
, solution: f5-rs-app1-dev, NEW security policy lux-high-v01

@ ☺



Service deployment pipeline | EC2 Management Console | BIG-IP® - App2-dev-us-west-2 | +

Not Secure | winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-dev/view/Service%20deployment%20pipeline%20/

Jenkins 5 search snaps log out

Jenkins DevSecOps - Lab - App2 f5-rs-app2-dev Service deployment pipeline

f5-rs-app2-dev

Deploys/updates security policies and irules, Deploys/updates the service definition (iapp)

Pipeline automatically runs

Build Pipeline

Run History Configure Add Step Delete Manage

Pipeline #3 #3 B1 - push a WAF policy Oct 6, 2018 1:39:09 AM 29 sec and counting

B2 - rs-app service N/A N/A

B3 - app-test N/A N/A

B4 - rs-attacks N/A N/A

Notification on Slack Channel

edit description

#builds

All Threads Channels # general # random # builds Direct Messages slackbot Foo-Bang Chan (you) + Invite People Apps

Success after 3 min 15 sec (Open)
user: fbchan , solution: f5-rs-app2-dev, bigip acces: https://35.161.78.196

jenkins APP 11:32 AM
DevSecOps - Lab - App2 » f5-rs-app2-dev » B2 - rs-app service - #1 Success after 12 sec (Open)
user: fbchan , solution: f5-rs-app2-dev, application at: https://http://52.10.140.34:80

DevSecOps - Lab - App2 » f5-rs-app2-dev » SEC export waf policy - #1 Success after 23 sec (Open)
user: fbchan , solution: f5-rs-app1-dev, NEW security policy available: linux-high-v01

new messages

Message #builds

The screenshot shows a Jenkins pipeline named 'f5-rs-app2-dev' running automatically. It consists of four stages: Pipeline #3 (yellow), B2 - rs-app service (light blue), B3 - app-test (light blue), and B4 - rs-attacks (light blue). Stage #3 is currently executing a task. A Jenkins terminal window at the bottom shows the command-line steps for pushing a WAF policy. An orange arrow points from the Jenkins interface to the Slack notifications on the right, which show messages from the '#builds' channel indicating successful pipeline runs and new security policy availability.



Service deployment pipeline | EC2 Management Console | BIG-IP® - App2-dev-us-west-2 | Hackazon

Not Secure | winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-dev/view/Service%20deployment%20pipeline%20/

Jenkins Jenkins DevSecOps - Lab - App2 f5-rs-app2-dev Service deployment pipeline

f5-rs-app2-dev

Pipeline successfully completed

Deploys/updates security policies and irules, Deploys/updates the service definition (iapp)

Build Pipeline

Run History Configure Add Step Delete Manage

Pipeline #3 #3 B1 - push a WAF policy #2 B2 - rs-iapp service #2 B3 - app-test #1 B4 - rs-attacks

Oct 6, 2018 1:39:09 AM 1 min 0 sec Oct 6, 2018 1:40:19 AM 11 sec Oct 6, 2018 1:40:39 AM 7.2 sec Oct 6, 2018 1:40:54 AM 5.5 sec

Page generated: Oct 6, 2018 1:40:59 AM GMT REST API Jenkins ver. 2.121.2

https://http://52.10.140.34:80

f5-rs-as3 f5-rs-aws-bigip-onboard f5-rs-azure-biq-iac f5-rs-iapp [snops@f5-super-netops] [~] \$ cd f5-rs-app2/ [snops@f5-super-netops] [~/f5-rs-app2] \$ ls README.md all-in-one-hackazon iac_parameters.yaml repo_install.log snops_install.log [snops@f5-super-netops] [~/f5-rs-app2] \$ git branch * dev master [snops@f5-super-netops] [~/f5-rs-app2] \$ vi iac_parameters.yaml [snops@f5-super-netops] [~/f5-rs-app2] \$ git add iac_parameters.yaml [snops@f5-super-netops] [~/f5-rs-app2] \$ git commit -m "changed asm policy" [dev 0f81e81] changed asm policy 1 file changed, 1 insertion(+), 1 deletion(-) [snops@f5-super-netops] [~/f5-rs-app2] \$ [snops@f5-super-netops] [~/f5-rs-app2] \$

general # random # builds

Direct Messages + slackbot Foo-Bang Chan (you) + Invite People Apps +

Message #builds @ 😊

DevSecOps - Lab - App2 » f5-rs-app2-dev » SEC export waf policy - #1 Success after 23 sec (Open) user: fbchan , solution: f5-rs-app1-dev, NEW security policy available: linux-high-v01

DevSecOps - Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service - #2 Success after 11 sec (Open) user: fbchan , solution: f5-rs-app2-dev, application at: https://http://52.10.140.34:80



Service deployment pipeline | EC2 Management Console | BIG-IP® - App2-dev-us-west-2 | Hackazon

Not Secure | https://52.10.140.34

HACKAZON

All ▾ Search products... Search!

Register on the site Apps successful security tested (automated scanned) and deployed into dev. Get the Best Price

Special selection

Diesel Men's Sleenker Skinny-Leg Jean 0608D
98% Cotton/2% Elastane

Martha Stewart Crafts Garland, Pink Pom Pom Small
Fun festive party decorative

Cricut Explore Electronic Cutting Machine with...
Cuts the widest variety of

Top 3 most popular

Edwin Jagger 4 Piece Ivory Color Shaving Shave Set
15pcs Nail Art Painting Pen Brush
Callaway Strata Women's Complete Golf Set with Bag, 11-Piece

Top 3 best selling

DevSecOps - Lab - App2 » f5-rs-app2-dev » SEC export waf policy - #1 Success after 23 sec (Open)
user: fbchan , solution: f5-rs-app1-dev, NEW security policy available: linux-high-v01
DevSecOps - Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service - #2 Success after 11 sec (Open)
user: fbchan , solution: f5-rs-app2-dev, application at: https://http://52.10.140.34:80

```
f5-rs-as3      f5-rs-aws-bigip-onboard f5-rs-azure-biqq-iac f5-rs-iapp
[snops@f5-super-netops] [~] $ cd f5-rs-app2/
[snops@f5-super-netops] [~/f5-rs-app2] $ ls
README.md all-in-one-hackazon iac_parameters.yaml repo_install.log snops_install.s
[snops@f5-super-netops] [~/f5-rs-app2] $ git branch
* dev
  master
[snops@f5-super-netops] [~/f5-rs-app2] $ vi iac_parameters.yaml
[snops@f5-super-netops] [~/f5-rs-app2] $ git add iac_parameters.yaml
[snops@f5-super-netops] [~/f5-rs-app2] $ git commit -m "changed asm policy"
[dev 0f81e81] changed asm policy
 1 file changed, 1 insertion(+), 1 deletion(-)
[snops@f5-super-netops] [~/f5-rs-app2] $ 
```

general
random
builds
Direct Messages +
slackbot
Foo-Bang Chan (you)
+ Invite People
Apps +

+ Add Apps

+ Message #builds @ 😊



Verifying deployed AWAF Policy



Service deployment pipeline | EC2 Management Console | BIG-IP® - App2-dev-us-west-2 | Hackazon

Not Secure | https://35.161.78.196/xui/

App2-dev-us-west-2-bigip.com

Hostname: App2-dev-us-west-2-bigip.com Date: Oct 6, 2018 User: admin IP Address: 10.0.200.69 Time: 1:41 AM (UTC) Role: Administrator Partition: Common Log out

ONLINE (ACTIVE)
Standalone

Main Help About Local Traffic > Virtual Servers : Virtual Server List > App2_default_vs_443

Statistics iApps DNS SSL Orchestrator Local Traffic Network Map Virtual Servers Policies Profiles Ciphers

Properties Resources Security Statistics

AWAF Policy deployed

Destination: 10.0.1.206:443 Service: HTTPS Application Security Policy: Enabled... Policy: linux-high-v01 (highlighted with orange box and arrow)

Service Policy: None IP Intelligence: Disabled DoS Protection Profile: Enabled... Profile: rs_dosi7_profile Anti-Fraud Profile: Enabled... Profile: rs_fps_profile

Selected Available

general
random
builds
Direct Messages +
slackbot
Foo-Bang Chan (you)
+ Invite People
Apps +

https://http://52.10.140.34:80

DevSecOps - Lab - App2 » f5-rs-app2-dev » SEC export waf policy - #1 Success after 23 sec (Open)
user: fbchan , solution: f5-rs-app1-dev, NEW security policy available: linux-high-v01

DevSecOps - Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service - #2 Success after 11 sec (Open)
user: fbchan , solution: f5-rs-app2-dev, application at: https://http://52.10.140.34:80

+ Message #builds @ 😊

```
f5-rs-as3      f5-rs-aws-bigip-onboard f5-rs-azure-biqq-iac f5-rs-iapp
[snops@f5-super-netops] [~] $ cd f5-rs-app2/
[snops@f5-super-netops] [~/f5-rs-app2] $ ls
README.md all-in-one-hackazon iac_parameters.yaml repo_install.log snops_install.s
[snops@f5-super-netops] [~/f5-rs-app2] $ git branch
* dev
  master
[snops@f5-super-netops] [~/f5-rs-app2] $ vi iac_parameters.yaml
[snops@f5-super-netops] [~/f5-rs-app2] $ git add iac_parameters.yaml
[snops@f5-super-netops] [~/f5-rs-app2] $ git commit -m "changed asm policy"
[dev 0f81e81] changed asm policy
 1 file changed, 1 insertion(+), 1 deletion(-)
[snops@f5-super-netops] [~/f5-rs-app2] $ ]
```



Continuous Integration and Deployment of Proactive Bot-Detection



Dashboard [Jenkins] | EC2 Management Console | BIG-IP® - ip-10-0-200-140.us... | +

Not Secure | winds:10000

Jenkins

5

Search | snops | log out

ENABLE AUTO REFRESH

New Item | add description

People

Build History

Manage Jenkins

Splunk

My Views

Credentials

New View

All +

S	W	Name ↓	Last Success	Last Failure	Last Duration
Folder	Rain	Agility DevSecOps	N/A	N/A	N/A
Folder	Rain	AWS WAF - AS3 - App1	N/A	N/A	N/A
Folder	Sun	azure	N/A	N/A	N/A
Folder	Sun	BIGIQ	N/A	N/A	N/A
Folder	Rain	DevSecOps - Lab - App2	N/A	N/A	N/A

Icon: S M L

Legend: RSS for all | RSS for failures | RSS for just latest builds

Build Queue: No builds in the queue.

Build Executor Status: 1 Idle | 2 Idle

App Team / DevOps enable proactive automated attack prevention

```
service_name: "App2"
aws_region: "us-west-2"
rs_container_name: "mutzel/all-in-one-hackazon:postinstall supervisord -n"
waf_policy_name: "linux-high-v01"
# enables or disables proactive bot mitigation - Sends JS challenge
# allowed values: disabled / always
proactive_automated_attack_prevention: "always"
# enables or disables login page parameters encryption
#login_page_file and Login_page_path are made of the login URL, for example /user/login will have login_page_file: "login", login_page_pa
th: "user"
login_password_encryption: "disabled"
login_page_file: "login"
-- INSERT --
```

Page generated: Oct 6, 2018 11:12:52 AM GMT | REST API | Jenkins ver. 2.121.2

7,47 Top

@ ☺



All [DevSecOps - Lab - App2] > EC2 Management Console > BIG-IP® - ip-10-0-200-140.us-west-2.compute.internal

Not Secure | winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-dev/

Jenkins > DevSecOps - Lab - App2 > f5-rs-app2-dev >

DISABLE AUTO REFRESH

Build Executor Status

1 Idle
2 DevSecOps - Lab - App2 » f5-rs-app2-dev » B1 - push a WAF policy #5

Code commit

Icon: S M L

Last Success Last Failure Last Duration

S	W	Name ↓	Last Success	Last Failure	Last Duration
●	☀	A1 - aws-net	45 min - #2	N/A	1 min 23 sec
●	☀	A2 - aws_app	43 min - #2	N/A	1 min 23 sec
●	☀	A3 - aws-bigip	43 min - #2	N/A	3 min 32 sec
●	☀	A4 - aws bigip onboard (rest user)	40 min - #2	N/A	4 min 33 sec
●	☀	A5 - bigip rs onboard	35 min - #2	N/A	8 min 38 sec
●	☁	B1 - push a WAF policy	26 min - #4	10 hr - #1	1 min 9 sec
●	☀	B2 - rs-iapp service	25 min - #3	N/A	12 sec
●	☁	B3 - app-test	25 min - #3	9 hr 41 min - #1	7.6 sec
●	☀	B4 - rs-attacks	24 min - #2	N/A	5.6 sec
●	☀	SEC export waf.policy.	9 hr 37 min - #1	N/A	23 sec
●	☀	Z - destroy	9 hr 11 min - #1	N/A	6 min 34 sec

Legend RSS for all RSS for failures RSS for just latest builds

```
* dev
  master
[snops@f5-super-netops] [~/f5-rs-app2] $ ls
README.md all-in-one-hackazon iac_parameters.yaml repo_install.log snops_install.sh
[snops@f5-super-netops] [~/f5-rs-app2] $ git branch
* dev
  master
[snops@f5-super-netops] [~/f5-rs-app2] $ vi iac_parameters.yaml
[snops@f5-super-netops] [~/f5-rs-app2] $ git add iac_parameters.yaml
[snops@f5-super-netops] [~/f5-rs-app2] $ git commit -m "enabled proactive bot defense"
[dev 2431ccf] enabled proactive bot defense
 1 file changed, 1 insertion(+), 1 deletion(-)
[snops@f5-super-netops] [~/f5-rs-app2] $
```



Service deployment pipeline | EC2 Management Console | BIG-IP® - ip-10-0-200-140.us... | +

Not Secure | winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-dev/view/Service%20deployment%20pipeline%20/

Jenkins 5 Search snops log out

Jenkins DevSecOps - Lab - App2 f5-rs-app2-dev Service deployment pipeline

f5-rs-app2-dev

Deploys/updates security policies and irules, Deploys/updates the service definition (iapp)

Pipeline triggered and successfully completed

Build Pipeline

Run History Configure Add Step Delete Manage

Pipeline #5 #5 B1 - push a WAF policy #4 B2 - rs-iapp service #4 B3 - app-test #3 B4 - rs-attacks

Oct 6, 2018 11:14:06 AM 27 sec Oct 6, 2018 11:14:41 AM 11 sec Oct 6, 2018 11:15:01 AM 7.6 sec Oct 6, 2018 11:15:16 AM 5.5 sec

Notification on Slack Channel

edit description

Page generated: Oct 6, 2018 11:15:17 AM GMT REST API Jenkins ver. 2.121.2

* dev master [snops@f5-super-netops] ~/f5-rs-app2 \$ ls README.md all-in-one-hackazon iac_parameters.yaml repo_install.log snops_install.log [snops@f5-super-netops] ~/f5-rs-app2 \$ git branch * dev master [snops@f5-super-netops] ~/f5-rs-app2 \$ vi iac_parameters.yaml [snops@f5-super-netops] ~/f5-rs-app2 \$ git add iac_parameters.yaml [snops@f5-super-netops] ~/f5-rs-app2 \$ git commit -m "enabled proactive bot defense" [dev 2431ccf] enabled proactive bot defense 1 file changed, 1 insertion(+), 1 deletion(-) [snops@f5-super-netops] ~/f5-rs-app2 \$ [snops@f5-super-netops] ~/f5-rs-app2 \$

general # random # builds Direct Messages slackbot Foo-Bang Chan (you) + Invite People Apps

jenkins APP 9:14 PM DevSecOps - Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service - #4 Success after 11 sec (Open) user: fbchan , solution: f5-rs-app2-dev, application at: https://http://54.68.239.5:80

+ Message #builds @ 😊

The screenshot shows a Jenkins pipeline named 'f5-rs-app2-dev' which has just completed successfully. The pipeline consists of four stages: 'Pipeline #5', '#5 B1 - push a WAF policy', '#4 B2 - rs-iapp service', and '#3 B4 - rs-attacks'. Each stage is represented by a green card with its name, ID, timestamp, and duration. An orange arrow points from the Jenkins interface to the Slack notification, indicating the successful completion of the pipeline. The Slack message includes the Jenkins job name, the build number, and a link to the application's IP address.



Verifying deployed proactive automated attack prevention



Service deployment pipeline X EC2 Management Console X BIG-IP® - ip-10-0-200-140.us- +

Not Secure | https://34.217.201.232/xui/

ONLINE (ACTIVE)
Standalone

Main Help About

Statistics iApps DNS SSL Orchestrator Local Traffic Acceleration Device Management Security

Overview Application Security Protocol Security Network Firewall DoS Protection

Security » DoS Protection : DoS Profiles » rs_dosi7_profile

Properties Application Security

Application Security

General Settings	✓
Proactive Bot Defense	✓
Bot Signatures	✓
Mobile Applications	Off
TPS-based Detection	✓
Behavioral & Stress-based Detection	Off
Record Traffic	Off

Application Security » Proactive Bot Defense

This feature proactively detects bots and scripts, and prevents them from accessing the site. It may be used to prevent DDoS, Web Scraping, and Brute Force attacks. Enabling this feature requires JavaScript support from the browsers.

Edit All

Operation Mode	Specifies the conditions under which bots are detected and blocked. Always	Edit	
Block requests from suspicious browsers	Strengthen the bot defense by blocking suspicious browsers. Highly suspicious browsers are completely blocked, while moderately suspicious browsers are challenged with CAPTCHA.	Block Suspicious Browsers: Enabled CAPTCHA Challenge: Enabled CAPTCHA Settings	Edit
Grace Period	The Grace Period gives time for browsers to be validated as non-bots. During this period, requests that were not validated are allowed to go through. 300 seconds	Edit	
Cross-Domain Requests	Additional security can be added by allowing only the configured domains to reference resources of the site. Allow all requests	Edit	

* dev
master
[snops@f5-super-netops] [~/f5-rs-app2] \$ ls
README.md all-in-one-hackazon iac_parameters.yaml repo_install.log snops_install.log
[snops@f5-super-netops] [~/f5-rs-app2] \$ git branch
* dev
master
[snops@f5-super-netops] [~/f5-rs-app2] \$ vi iac_parameters.yaml
[snops@f5-super-netops] [~/f5-rs-app2] \$ git add iac_parameters.yaml
[snops@f5-super-netops] [~/f5-rs-app2] \$ git commit -m "enabled proactive bot defense"
[dev 2431ccf] enabled proactive bot defense
1 file changed, 1 insertion(+), 1 deletion(-)
[snops@f5-super-netops] [~/f5-rs-app2] \$

general
random
builds
Direct Messages
slackbot
Foo-Bang Chan (you)
+ Invite People
Apps

jenkins APP 9:14 PM
DevSecOps - Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service - #4 Success after 11 sec ([Open](#))
user: fbchan , solution: f5-rs-app2-dev, application at: <https://http://54.68.239.5:80>

+ Message #builds @ 😊



Service deployment pipeline | EC2 Management Console | BIG-IP® - ip-10-0-200-140.us- | Hackazon | Not Secure | https://34.217.201.232/xui/

Bot Defense Logging Profiles

Request URI	Request Status	Action	Reason
/favicon.ico	challenged	allow	Passed Redirect Challenge
/products_pictures/Orphan_Black_small_b124b2.jpg	challenged	allow	Passed Redirect Challenge
/products_pictures/Orphan_Black_small_b124b2.jpg	challenged	redirect_challenge	No Valid Cookie: Unable to challenge, during grace period
/favicon.ico	challenged	redirect_challenge	No Valid Cookie: Unable to challenge, during grace period
/products_pictures/Yukon_Gear_Long_Sleeve_Mock_T_shirt_small_5d4da6.jpg	challenged	allow	Passed Redirect Challenge
/products_pictures/Yukon_Gear_Long_Sleeve_Mock_T_shirt_small_5d4da6.jpg	challenged	redirect_challenge	No Valid Cookie: Unable to challenge, during grace period
/products_pictures/Poo_Pourri_Before_You_Go_Toilet_Spray_2_Ounce_Bottle_Original_small_8fa587.jpg	challenged	allow	Passed Redirect Challenge
/products_pictures/Febreze_Notifyables_Gain_Original_Air_Freshener_Refill_small_6cff33.jpg	challenged	allow	Passed Redirect Challenge
/products_pictures/Via_Spiga_Women_s_Chic_Wool_Walking_Coat_with_Gold_Hardware_small_1ec431.jpg	challenged	allow	Passed Redirect Challenge
/products_pictures/Via_Spiga_Women_s_Chic_Wool_Walking_Coat_with_Gold_Hardware_small_1ec431.jpg	challenged	redirect_challenge	No Valid Cookie: Unable to challenge, during grace period
/products_pictures/Enamelware_Fleur_Bowl_with_Lid_Primitive_Country_Rustic_Enameled_H_small_5320b9.jpg	challenged	allow	Passed Redirect Challenge
/products_pictures/Enamelware_Fleur_Bowl_with_Lid_Primitive_Country_Rustic_Enameled_H_small_5320b9.jpg	challenged	redirect_challenge	No Valid Cookie: Unable to challenge, during grace period
/products_pictures/Poo_Pourri_Before_You_Go_Toilet_Spray_2_Ounce_Bottle_Original_small_8fa587.jpg	challenged	redirect_challenge	No Valid Cookie: Unable to challenge, during grace period
/products_pictures/GAME_GOLF_Digital_Tracking_System_Red_small_bd6c7a.jpg	challenged	allow	Passed Redirect Challenge
/products_pictures/GAME_GOLF_Digital_Tracking_System_Red_small_bd6c7a.jpg	challenged	redirect_challenge	No Valid Cookie: Unable to challenge, during grace period
/products_pictures/Disney_Princess_Sterling_Silver_Pink_Crown_Shaped_Stud_Earrings_small_96f646.jpg	challenged	allow	Passed Redirect Challenge
/products_pictures/Disney_Princess_Sterling_Silver_Pink_Crown_Shaped_Stud_Earrings_small_96f646.jpg	challenged	redirect_challenge	No Valid Cookie: Unable to challenge, during grace period

```
* dev
  master
[snops@f5-super-netops] [~/f5-rs-app2] $ ls
README.md all-in-one-hackazon iac_parameters.yaml repo_install.log snops_install.s
[snops@f5-super-netops] [~/f5-rs-app2] $ git branch
* dev
  master
[snops@f5-super-netops] [~/f5-rs-app2] $ vi iac_parameters.yaml
[snops@f5-super-netops] [~/f5-rs-app2] $ git add iac_parameters.yaml
[snops@f5-super-netops] [~/f5-rs-app2] $ git commit -m "enabled proactive bot defense"
[dev 2431ccf] enabled proactive bot defense
 1 file changed, 1 insertion(+), 1 deletion(-)
[snops@f5-super-netops] [~/f5-rs-app2] $ 
```

general
random
builds
Direct Messages +
slackbot
Foo-Bang Chan (you)
+ Invite People
Apps +

jenkins APP 9:14 PM
DevSecOps - Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service - #4 Success after 11 sec ([Open](#))
user: fbchan , solution: f5-rs-app2-dev, application at:
<https://http://54.68.239.5:80>

+ Message #builds @ 😊



Continuous Integration and Deployment of Password Encryption / DataSafe Protection (Zero Touch on Apps)



Not Secure | <https://54.68.239.5/user/login>

HACKAZON

All ▾ Search products... Search!

FAQ Contact Us Wish List Sign In / Sign Up

Home / Login

Before DataSafe Protection (username)

`input#username.form-control.input-lg | 570x46`

Username or Email

Elements Console Sources Network Performance Memory Application Security Audits

`<form role="form" class="signin bv-form" method="POST" action="/user/login?return_url=" id="loginPageForm" novalidate="novalidate">`

`<h1>...</h1>`

`<ol class="breadcrumb">...`

`<hr class="colorgraph">`

`<div class="row">`

`::before`

`<div class="col-xs-6 col-sm-6 col-md-6">`

`<div class="form-group has-feedback">`

`<input type="text" maxlength="100" required name="username" class="form-control input-lg" id="username" placeholder="Username or Email" value data-bv-field="username"> == $0`

`<i class="form-control-feedback" data-bv-icon-for="username" style="display: none; top: 0px;"></i>`

`<small class="help-block" data-bv-validator="notEmpty" data-bv-for="username" data-bv-result="NOT_VALIDATED" style="display: none;">Please enter a value</small>`

`<small class="help-block" data-bv-validator="stringLength" data-bv-for="username" data-bv-result="NOT_VALIDATED" style="display: none;">Please enter a value with valid length</small>`

`</div>`

`</div>`

`::after`

Styles Computed Event Listeners DOM Breakpoints

Filter

element.style { } .has-feedback .form-control { padding-right: 42.5px; } .input-lg, .form-horizontal .form-group-lg { height: 46px; padding: 10px 16px; font-size: 18px; line-height: 1.33; border-radius: 6px; } .form-control { display: block; width: 100%; height: 34px; }

forms.less:339 bootstrap.css:2504 forms.less:125

html body div#container div.container div.row form#loginPageForm.signin.bv-form div.row div.col-xs-6.col-sm-6.col-md-6 div.form-group.has-feedback input#username.form-control.input-lg

[snops@f5-super-netops] [~/f5-rs-app2] \$



Not Secure | <https://54.68.239.5/user/login>

HACKAZON

FAQ Contact Us Wish List Sign In / Sign Up

`input#password.form-control.input-lg | 570x46`

Search!

Before DataSafe Protection (password)

Elements Console Sources Network Performance Memory Application Security Audits

Styles Computed Event Listeners DOM Breakpoints

Filter

element.style { } .has-feedback .form-control { padding-right: 42.5px; } .input-lg, .form-horizontal .form-group-lg .form-control { height: 46px; padding: 10px 16px; font-size: 18px; line-height: 1.33; border-radius: 6px; } .form-control { display: block; width: 100%; height: 34px; }

`</div></div>::after</div><div class="row">::before<div class="col-xs-6 col-sm-6 col-md-6"><div class="form-group has-feedback"><input type="password" maxlength="100" required name="password" class="form-control input-lg" placeholder="Password" id="password" data-bv-field="password" data-bv-icon-for="password" style="display: none; top: 0px;"><i class="form-control-feedback" data-bv-icon-for="password" style="display: none; top: 0px;"><small class="help-block" data-bv-validator="notEmpty" data-bv-for="password" data-bv-result="NOT_VALIDATED" style="display: none;">Please enter a value</small><small class="help-block" data-bv-validator="stringLength" data-bv-for="password" data-bv-result="NOT_VALIDATED" style="display: none;">Please enter a value with valid length</small></div></div>::after</div>`

[snops@f5-super-netops] [~/f5-rs-app2] \$



All [DevSecOps - Lab - App2] > EC2 Management Console > BIG-IP® - ip-10-0-200-140.us-west-2.compute.internal > Hackazon — Login

Not Secure | winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-dev/ Jenkins > DevSecOps - Lab - App2 > f5-rs-app2-dev >

New Item Delete Folder People Build History Move Credentials New View

Build Queue No builds in the queue.

Build Executor Status 1 Idle 2 Idle

licensing using bigiq

All Full stack deployment Service deployment pipeline +

Enable Password encryption (IaC)

S	W	Name ↓	Last Success	Last Failure	Last Duration
●	☀	A1 - aws-net	1 hr 13 min - #2	N/A	1 min 23 sec
●	☀	A2 - aws_app	1 hr 11 min - #2	N/A	1 min 23 sec
●	☀	A3 - aws-biqip	1 hr 11 min - #2	N/A	3 min 32 sec
●	☀	A4 - aws bigip_onboard(rest_user)	1 hr 7 min - #2	N/A	4 min 33 sec
●	☀	A5 - bigip_rs_onboard	1 hr 3 min - #2	N/A	8 min 38 sec
●	☀	B1 - push a WAF policy	8 min 58 sec - #7	10 hr - #1	28 sec
●	☀	B2 - rs-app service	8 min 23 sec - #6	N/A	11 sec
●	☀	B3 - app-test	8 min 3 sec - #6	10 hr - #1	7.5 sec
●	☀	B4 - rs-attacks	7 min 48 sec - #5	N/A	5.6 sec
●	☀	SEC export waf policy	10 hr - #1	N/A	23 sec
●	☀	Z - destroy	9 hr 39 min - #1	N/A	6 min 34 sec

Icon: S M L

Legend RSS for all RSS for failures RSS for just latest builds

1. ssh

```
rs_container_name: "mutzel/all-in-one-hackazon:postinstall_supervisord -n"
waf_policy_name: "linux-high-v01"
# enables or disables proactive bot mitigation - Sends JS challenge
# allowed values: disabled / always
proactive_automated_attack_prevention: "always"
#enables or disables login page parameters encryption
#login_page_file and login_page_path are made of the login URL, for example /user/login will have login_page_file: "login", login_page_pa
lh: "user"
login_password_encryption: "enabled"
login_page_file: "login"
login_page_path: "user"

-- INSERT --
```

10,36 Bot



Jenkins Webhook triggered pipeline build

S	W	Name ↓	Last Success	Last Failure	Last Duration
●	☀	A1 - aws-net	1 hr 14 min - #2	N/A	1 min 23 sec
●	☀	A2 - aws_app	1 hr 12 min - #2	N/A	1 min 23 sec
●	☀	A3 - aws-bigip	1 hr 12 min - #2	N/A	3 min 32 sec
●	☀	A4 - aws bigip onboard (rest_user)	1 hr 9 min - #2	N/A	4 min 33 sec
●	☀	A5 - bigip rs onboard	1 hr 4 min - #2	N/A	8 min 38 sec
●	☀	B1 - push a WAF policy	10 min - #7	10 hr - #1	28 sec
●	☀	B2 - rs-app service	9 min 25 sec - #6	N/A	11 sec
●	☀	B3 - app-test	9 min 5 sec - #6	10 hr - #1	7.5 sec
●	☀	B4 - rs-attacks	8 min 50 sec - #5	N/A	5.6 sec
●	☀	SEC export waf policy	10 hr - #1	N/A	23 sec
●	☀	Z - destroy	9 hr 40 min - #1	N/A	6 min 34 sec

Build Executor Status

- 1 Idle
- 2 DevSecOps - Lab - App2 » f5-rs-app2-dev » B1 - push a WAF policy #8

Icon: S M L

Legend RSS for all RSS for failures RSS for just latest builds

```
[snops@f5-super-netops] [~/f5-rs-app2] $ ls
README.md all-in-one-hackazon iac_parameters.yaml repo_install.log snops_install.sh
[snops@f5-super-netops] [~/f5-rs-app2] $ vi iac_parameters.yaml
[snops@f5-super-netops] [~/f5-rs-app2] $ git add iac_parameters.yaml
[snops@f5-super-netops] [~/f5-rs-app2] $ git commit -m "enabled login password encryption"
[dev 445e245] enabled login password encryption
 1 file changed, 1 insertion(+), 1 deletion(-)
[snops@f5-super-netops] [~/f5-rs-app2] $ []
```

Code commit



Service deployment pipeline | EC2 Management Console | BIG-IP® - ip-10-0-200-140.us... | Hackazon — Login

Not Secure | winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-dev/view/Service%20deployment%20pipeline%20/

Jenkins

Jenkins DevSecOps - Lab - App2 f5-rs-app2-dev Service deployment pipeline

f5-rs-app2-dev

Pipeline successfully completed

Notification via Slack

Build Pipeline

Deploy/updates security policies and irules, Deploy/updates the service definition (iapp)

edit description

Run History Configure Add Step Delete Manage

Pipeline #8 #8 B1 - push a WAF policy #7 B2 - rs-iapp service #7 B3 - app-test #6 B4 - rs-attacks

Oct 6, 2018 11:43:06 AM 28 sec Oct 6, 2018 11:43:41 AM 10 sec Oct 6, 2018 11:44:01 AM 6.9 sec Oct 6, 2018 11:44:16 AM 5.4 sec

Page generated: Oct 6, 2018 11:44:24 AM GMT REST API Jenkins ver. 2.121.2

[snops@f5-super-netops] [~/f5-rs-app2] \$ ls
README.md all-in-one-hackazon iac_parameters.yaml repo_install.log snops_install.s
[snops@f5-super-netops] [~/f5-rs-app2] \$ vi iac_parameters.yaml
[snops@f5-super-netops] [~/f5-rs-app2] \$ git add iac_parameters.yaml
[snops@f5-super-netops] [~/f5-rs-app2] \$ git commit -m "enabled login password encryption"
[dev 445e245] enabled login password encryption
1 file changed, 1 insertion(+), 1 deletion(-)
[snops@f5-super-netops] [~/f5-rs-app2] \$ []

general
random
builds
Direct Messages +
slackbot
Foo-Bang Chan (you)
+ Invite People
Apps +

jenkins APP 9:43 PM
DevSecOps - Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service - #7 Success after 10 sec (Open)
user: fbchan , solution: f5-rs-app2-dev, application at:
<https://http://54.68.239.5:80>

Message #builds @ 😊



Not Secure | <https://54.68.239.5/user/login>

HACKAZON

Products... Search!

Username or Email

Password

FAQ Contact Us Wish List Sign In / Sign Up

After DataSafe Protection. Username encrypted.

Elements Console Sources Network Performance Memory Application Security Audits

Styles Computed Event Listeners DOM Breakpoints

Filter

element.style {

.has-feedback .form-control { padding-right: 42.5px; }

.input-lg, .form-horizontal .form-group-lg { height: 46px; padding: 10px 16px; font-size: 18px; line-height: 1.33; border-radius: 6px; }

.form-control { display: block; width: 100%; height: 34px; }

bootstrap.css:2528

bootstrap.css:2510

bootstrap.css:2353

html body div#container div.container div.row form#loginPageForm.signin.bv-form div.row div.col-xs-6.col-sm-6.col-md-6 div.form-group.has-feedback input#username.form-control.input-lg

[snops@f5-super-netops] [~/f5-rs-app2] \$ ls

README.md all-in-one-hackazon iac_parameters.yaml repo_install.log snops_install.log

[snops@f5-super-netops] [~/f5-rs-app2] \$ vi iac_parameters.yaml

[snops@f5-super-netops] [~/f5-rs-app2] \$ git add iac_parameters.yaml

[snops@f5-super-netops] [~/f5-rs-app2] \$ git commit -m "enabled login password encryption"

[dev 445e245] enabled login password encryption

1 file changed, 1 insertion(+), 1 deletion(-)

[snops@f5-super-netops] [~/f5-rs-app2] \$ []

general

random

builds

Direct Messages +

slackbot

Foo-Bang Chan (you)

+ Invite People

Apps +

jenkins APP 9:43 PM

DevSecOps - Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service - #7 Success after 10 sec (Open)

user: fbchan , solution: f5-rs-app2-dev, application at: <https://http://54.68.239.5:80>

+ Message #builds @ 😊



Not Secure | <https://54.68.239.5/user/login>

HACKAZON

All ▾ Search products... Search!

fbchan

.....

After DataSafe Protection. Password encrypted.

Elements Console Sources Network Performance Memory Application Security Audits

Styles Computed Event Listeners DOM Breakpoints »

Filter :hover .cls +

element.style { }

.has-feedback .form-control { padding-right: 42.5px; }

.form-control:focus { border-color: #66afe9; outline: 0; -webkit-box-shadow: inset 0 1px 1px rgba(0,0,0,.075), 0 0 8px rgba(102, 175, 233, .6); box-shadow: inset 0 1px 1px rgba(0,0,0,.075), 0 0 8px rgba(102, 175, 233, .6); }

.input-lg, .form-horizontal .form-group-lg .form-control { height: 46px; padding: 10px 16px; }

```
</div>
</div>
::after
</div>
<div class="row">
  ::before
  <div class="col-xs-6 col-sm-6 col-md-6">
    <div class="form-group has-feedback">
      <input type="password" maxLength="100" required class="form-control input-lg" placeholder="Password" id="password" data-bv-field="password" data-bvia="" _password"> == $0
      <input type="hidden" name="08a6a2c244081800f9199084d19557976b3cc256fc36065d6fbe006c87a679" value="08a6a2c244081800e1bde4f6c13550234f9ea06edc62e0964bae5658099ca6b62327b1b679c310884fb3a9c75800512abe53edf6c211cd7efe2e67a23bc4f4ca8bae03bb995947160de8c28" />
      <i class="form-control-feedback" data-bv-icon-for="password" style="display: none; top: 0px;"></i>
      <small class="help-block" data-bv-validator="notEmpty" data-bv-for="password" data-bv-result="NOT_VALIDATED" style="display: none;">Please enter a value</small>
      <small class="help-block" data-bv-validator="stringLength" data-bv-for="password" data-bv-result="NOT_VALIDATED" style="display: none;">Please enter a value with valid length</small>
    ...
```

[snops@f5-super-netops] [~/f5-rs-app2] \$ ls

README.md all-in-one-hackazon iac_parameters.yaml repo_install.log snops_install.log

[snops@f5-super-netops] [~/f5-rs-app2] \$ vi iac_parameters.yaml

[snops@f5-super-netops] [~/f5-rs-app2] \$ git add iac_parameters.yaml

[snops@f5-super-netops] [~/f5-rs-app2] \$ git commit -m "enabled login password encryption"

[dev 445e245] enabled login password encryption

1 file changed, 1 insertion(+), 1 deletion(-)

[snops@f5-super-netops] [~/f5-rs-app2] \$ []

jenkins APP 9:43 PM

DevSecOps - Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service - #7 Success after 10 sec (Open)

user: fbchan , solution: f5-rs-app2-dev, application at: <https://http://54.68.239.5:80>

+ Message #builds



Verifying deployed DataSafe Protection



Service deployment pipeline | EC2 Management Console | BIG-IP® - ip-10-0-200-140.us-west-2.compute.internal | Hackazon — Login

Not Secure | https://34.217.201.232/xui/

Hostname: ip-10-0-200-140.us-west-2.compute.internal Date: Oct 6, 2018 User: admin
IP Address: 10.0.200.140 Time: 11:45 AM (UTC) Role: Administrator Partition: Common Log out

**f5 ONLINE (ACTIVE)
Standalone
FPS Signature Update Available**

Main Help About

Statistics iApps DNS SSL Orchestrator Local Traffic Acceleration Device Management Security

Overview Application Security Rules

rs_fps_profile » URL List Advanced Off

Anti-Fraud Configuration General Settings URL List User Enforcement

Malware Detection General Settings Malware List

URL Path Description Malware Detection Phishing Detection Application Layer Encryption Mobile Encryption Automatic Transactions

/user/login

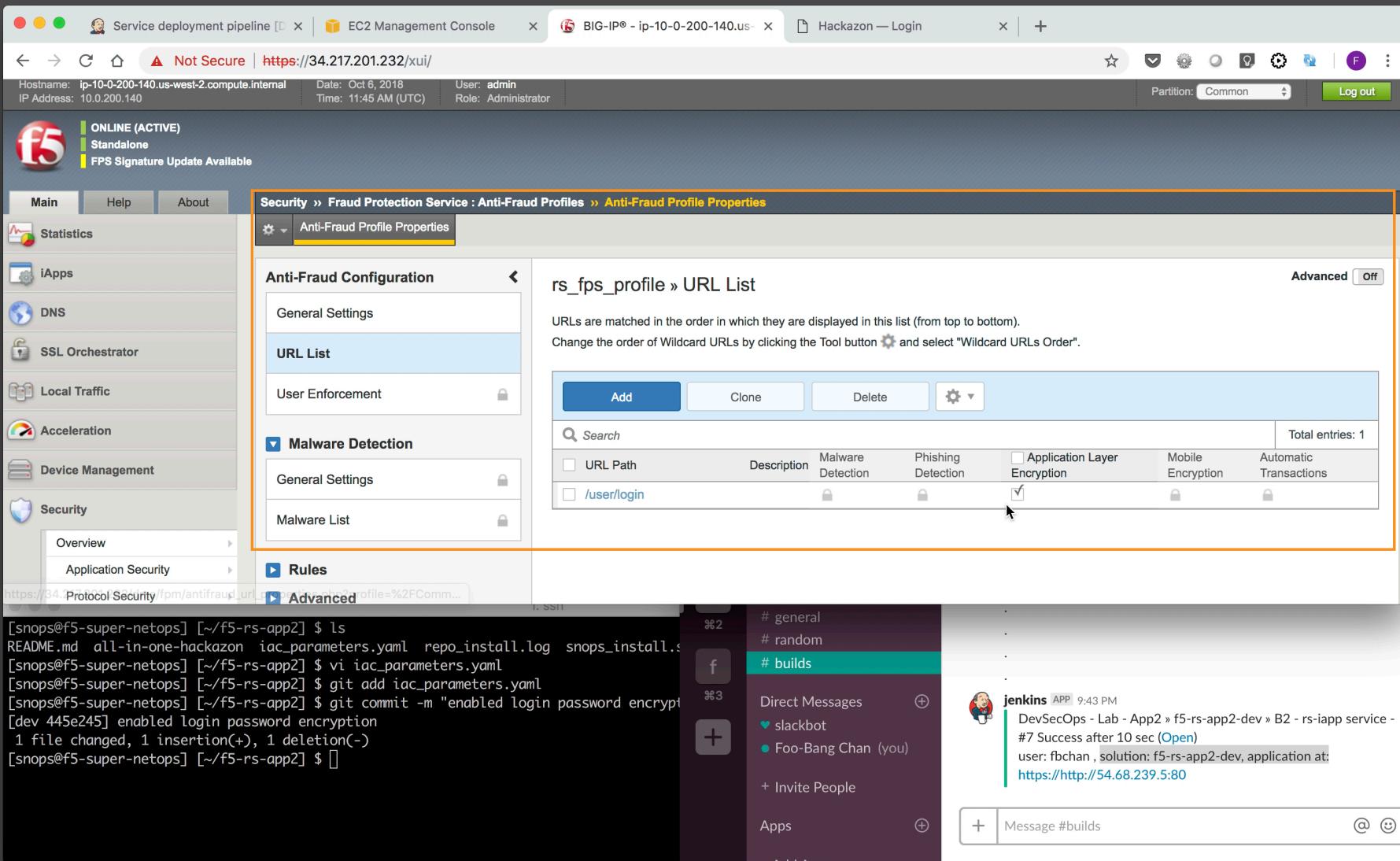
Protocol Security/fpm/antifraud_url_list?profile=%2FCommon... Advanced

[snops@f5-super-netops] [~/f5-rs-app2] \$ ls README.md all-in-one-hackazon iac_parameters.yaml repo_install.log snops_install.log [snops@f5-super-netops] [~/f5-rs-app2] \$ vi iac_parameters.yaml [snops@f5-super-netops] [~/f5-rs-app2] \$ git add iac_parameters.yaml [snops@f5-super-netops] [~/f5-rs-app2] \$ git commit -m "enabled login password encryption" [dev 445e245] enabled login password encryption 1 file changed, 1 insertion(+), 1 deletion(-) [snops@f5-super-netops] [~/f5-rs-app2] \$ []

general
random
builds
Direct Messages +
slackbot
Foo-Bang Chan (you)
+ Invite People
Apps +

jenkins APP 9:43 PM DevSecOps - Lab - App2 » f5-rs-app2-dev » B2 - rs-iapp service - #7 Success after 10 sec (Open)
user: fbchan , solution: f5-rs-app2-dev, application at: https://http://54.68.239.5:80

+ Message #builds @ 😊





Deployment in Prod Environment



Full stack deployment [DevSec] x EC2 Management Console x BIG-IP® x | Hackazon x +

Not Secure | winds:10000/job/devsecops-lab-app2/job/f5-rs-app2-prod/view/Full%20stack%20deployment/

Jenkins > DevSecOps - Lab - App2 f5-rs-app2-prod > Full stack deployment

AWS network, deploys the containerized App into an EC2 instance bigip with LB/AWAF service definition

Successful pipeline deployment

Build Pipeline

Deploys full app stack, AWS network, deploys the containerized App into an EC2 instance bigip with LB/AWAF service definition

Run History Configure Add Step Delete Manage

Pipeline #8 app 9:59:05 AM

bigip 9:59:05 AM

#1 A4 - aws bigip onboard (rest_user) Oct 6, 2018 10:02:45 AM 4 min 44 sec

#1 A5 - bigip rs onboard Oct 6, 2018 10:07:35 AM 8 min 26 sec

#3 B1 - push a WAF policy Oct 6, 2018 10:16:10 AM 1 min 9 sec

#1 B2 - rs-iapp service Oct 6, 2018 10:17:25 AM 12 sec

#1 B3 - app-test Oct 6, 2018 10:17:45 AM 7.5 sec

#1 B4 - rs-attacks Oct 6, 2018 10:18:00 AM 5.6 sec

* dev
master
[snops@f5-super-netops] [~/f5-rs-app2] \$ git checkout master
Switched to branch 'master'
Your branch is up-to-date with 'origin/master'.
[snops@f5-super-netops] [~/f5-rs-app2] \$ git branch
dev
* master
[snops@f5-super-netops] [~/f5-rs-app2] \$ git merge dev -m "changed asm policy"
Merge made by the 'recursive' strategy.
 iac_parameters.yaml | 2 +-
 1 file changed, 1 insertion(+), 1 deletion(-)
[snops@f5-super-netops] [~/f5-rs-app2] \$

general
random
builds

Direct Messages
slackbot
Foo-Bang Chan (you)

+ Invite People

Apps

DevSecOps - Lab - App2 » f5-rs-app2-prod » A3 - aws-bigip - #8 Success after 3 min 31 sec (Open)
user: fbchan , solution: f5-rs-app2-master, bigip acces: <https://52.33.83.2>

jenkins APP 8:17 PM
DevSecOps - Lab - App2 » f5-rs-app2-prod » B2 - rs-iapp service - #1 Success after 12 sec (Open)
user: fbchan , solution: f5-rs-app2-master, application at: <http://54.189.251.243:80>

Message #builds



Verifying Production Deployment



The screenshot shows a web browser window with the following tabs:

- Full stack deployment [DevSec]
- EC2 Management Console
- Hackazon
- BIG-IP® - App2-master-us-west-2

The current tab, "BIG-IP® - App2-master-us-west-2", displays the F5 BIG-IP Configuration Utility login page. The page includes fields for Hostname (App2-master-us-west-2-bigip.com), IP Address (10.0.200.217), Username (admin), and Password. A "Log in" button is present. The main content area says "Welcome to the BIG-IP Configuration Utility. Log in with your username and password using the fields on the left."

Below the login form, a copyright notice reads: "(c) Copyright 1996-2017, F5 Networks, Inc., Seattle, Washington. All rights reserved. [F5 Networks, Inc.](#) Legal Notices".

At the bottom of the screen, there is a terminal window showing a git session:

```
* dev
  master
[snops@f5-super-netops] [~/f5-rs-app2] $ git checkout master
Switched to branch 'master'
Your branch is up-to-date with 'origin/master'.
[snops@f5-super-netops] [~/f5-rs-app2] $ git branch
  dev
* master
[snops@f5-super-netops] [~/f5-rs-app2] $ git merge dev -m "changed asm policy"
Merge made by the 'recursive' strategy.
 iac_parameters.yaml | 2 +-
 1 file changed, 1 insertion(+), 1 deletion(-)
[snops@f5-super-netops] [~/f5-rs-app2] $
```

On the right side of the screen, there is a Slack interface showing a channel named "# builds". It contains messages from users "DevSecOps" and "jenkins".

DevSecOps message: "Success after 3 min 31 sec ([Open](#)) user: fbchan , solution: f5-rs-app2-master, bigip acces: <https://52.33.83.2>"

Jenkins message: "Success after 12 sec ([Open](#)) user: fbchan , solution: f5-rs-app2-master, application at: <https://http://54.189.251.243:80>"



Full stack deployment [DevSec] | EC2 Management Console | Hackazon | Hackazon | BIG-IP® - App2-master-us-west-2-bigip.com | Hackazon | +

Not Secure | https://52.33.83.2/xui/

App2-master-us-west-2-bigip.com

Hostname: App2-master-us-west-2-bigip.com Date: Oct 6, 2018 User: admin
IP Address: 10.0.200.217 Time: 10:19 AM (UTC) Role: Administrator Partition: Common Log out

ONLINE (ACTIVE)
Standalone

Main Help About

Statistics iApps DNS SSL Orchestrator Local Traffic Acceleration Device Management Security

Security > Application Security : Policy : Policy Properties

Policy Properties Basic

Current edited security policy linux-high-v01 (blocking) Apply Policy

Cancel Save

Policy Name	linux-high-v01
Version	2018-10-06 01:34:49 (Source Host Name: App2-dev-us-west-2-bigip.com, Source Policy Name: /Common/linux-high)
Policy Type	Security Policy
Application Language	Unicode (utf-8)
Policy Description	Fundamental Policy
Enforcement Readiness Period	7 days
Signature Staging	Disabled (Attack Signatures Configuration)

https://52.33.83.2/xui/#

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[snops@f5-super-netops] [~/f5-rs-app2] $ git branch
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[snops@f5-super-netops] [~/f5-rs-app2] $ 
```

general
random
builds
Direct Messages +
slackbot
Foo-Bang Chan (you)
+ Invite People
Apps +

DevSecOps - Lab - App2 » f5-rs-app2-prod » A3 - aws-bigip - #8 Success after 3 min 31 sec (Open)
user: fbchan , solution: f5-rs-app2-master, bigip acces: https://52.33.83.2

jenkins APP 8:17 PM DevSecOps - Lab - App2 » f5-rs-app2-prod » B2 - rs-iapp service - #1 Success after 12 sec (Open)
user: fbchan , solution: f5-rs-app2-master, application at: https://http://54.189.251.243:80

+ Message #builds @ 😊



Full stack deployment [DevSec] | EC2 Management Console | Hackazon | BIG-IP® - App2-master-us-west-2-bigip.com | Hackazon

Not Secure | https://52.33.83.2/xui/

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Hostname: App2-master-us-west-2-bigip.com Date: Oct 6, 2018 User: admin
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ONLINE (ACTIVE)
Standalone

Main Help About

Statistics iApps DNS SSL Orchestrator Local Traffic Network Map Virtual Servers Policies Profiles Ciphers

Local Traffic > Virtual Servers : Virtual Server List > App2_default_vs_443

Properties Resources Security Statistics

Policy Settings

Destination	10.0.1.155:443
Service	HTTPS
Application Security Policy	Enabled... Policy: linux-high-v01
Service Policy	None
IP Intelligence	Disabled
DoS Protection Profile	Enabled... Profile: rs_dosl7_profile
Anti-Fraud Profile	Enabled... Profile: rs_fps_profile
	Enabled...

Selected Available

/Common /Common

```
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+ Message #builds