

UrbanCode Deploy plugin for z/TPF

IBM z/TPF DevOps - Taskforce

Jesus Galvez

z/TPF Software Engineer

IBM **z/TPF** April 12, 2016

©Copyright IBM Corporation 2016.

Disclaimer

Any reference to future plans are for planning purposes only. IBM reserves the right to change those plans at its discretion. Any reliance on such a disclosure is solely at your own risk. IBM makes no commitment to provide additional information in the future.

1 Minute

Introduction

2 Minutes

UrbanCode Deploy

8 Minutes

z/TPF Plugins

4 Minutes

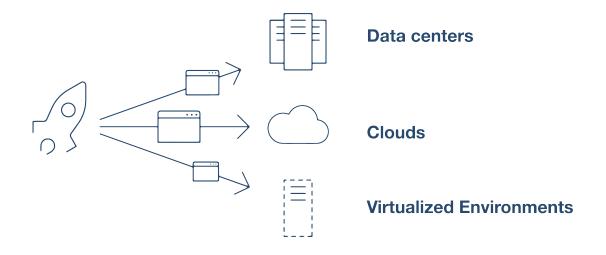
Q&A

IBM UrbanCode Deploy

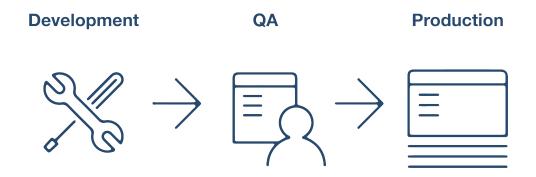
Orchestration, Automation and Deployment Platform

Industry-leading application release platform for faster time to market, higher quality and lower costs.

Reduce Errors • Improve Productivity • Ensure Compliance • Faster Deployment

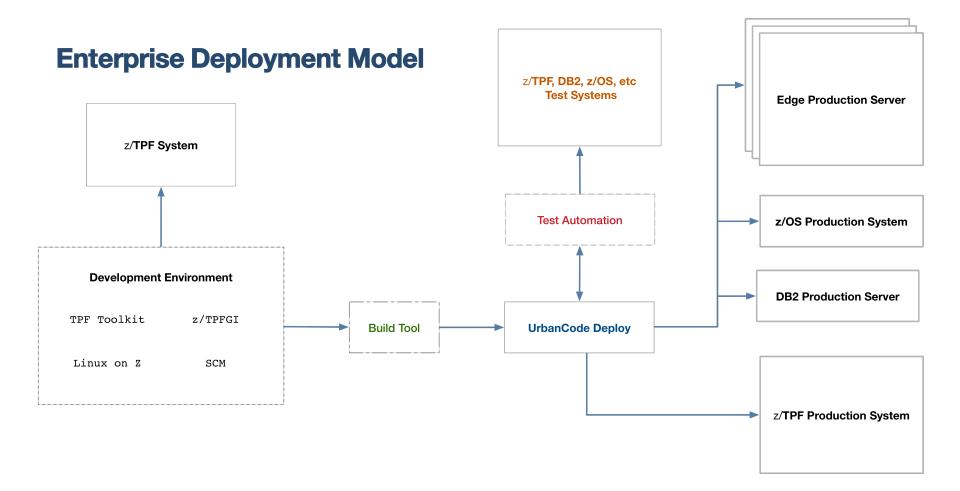


Automated end-to-end deployment of **applications** and orchestration of **middleware** and **databases** across all systems and environments.



Promote changes from **development** to **test** and into **production** environments.

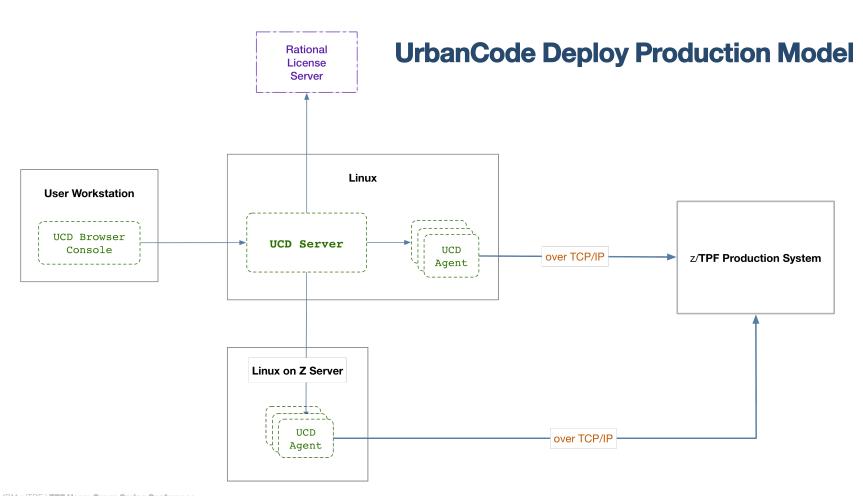
Where does UrbanCode Deploy fit in a Deployment Topology?



Developer submits code changes to build system which kicks off an automated UrbanCode deploy process to test environments.

If a failure occurs at any point UrbanCode handles the roll-back.

... now a closer look at a production UrbanCode Deploy configuration within the Enterprise Deployment Model ...



What's so special about UrbanCode Deploy?



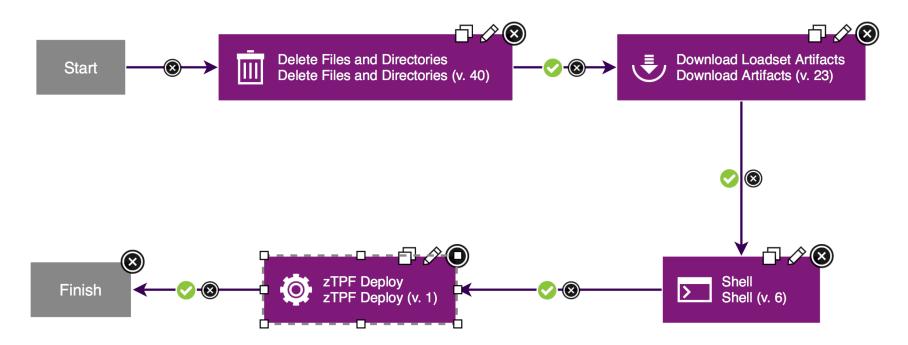
UrbanCode is built with flexibility and extensibility at its core, and much of the value of this automation engine stems from integration with other systems via **plugins** and **utilities**.

Plugins and Utilities are arranged visually via a web interface into an automated series - a Process.

Defined by you, a **Process** executes all the steps needed to **promote code changes** across your environments.

Lets take a look!

Sample Process



Ecosystem

Over 152 plugins, utilities and integration packages including:

z/OS, Linux, DB2, Hadoop, IMS, SQL Databases, Puppet, Jenkins, Git, Rational Asset Manager, Subversion, Maven, Chef, Groovy, Docker, Cloud Foundry, Amazon EC2, and much more.

... except plugins that integrates with our favorite system

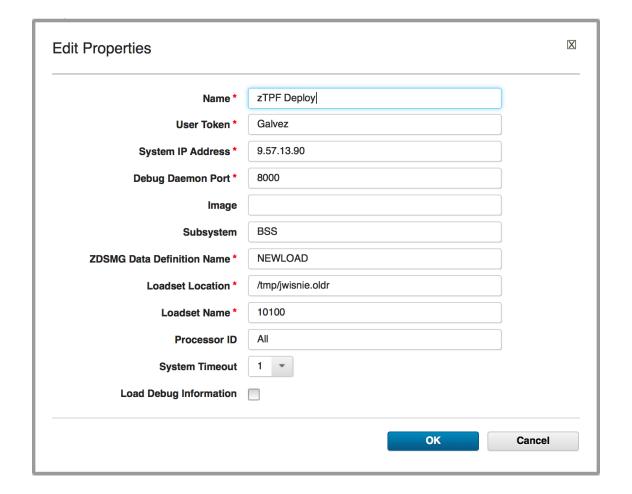
Until today.

Z/TPF Plugins_{beta}

We have created 3 separate beta plugins to send **ZOLDR LOAD**, **ACTIVATE**, **ACCEPT**, and **DELETE** actions to **z/TPF** systems.

Z/TPF Deploy_{beta}

ZOLDR LOAD and **ACTIVATE**

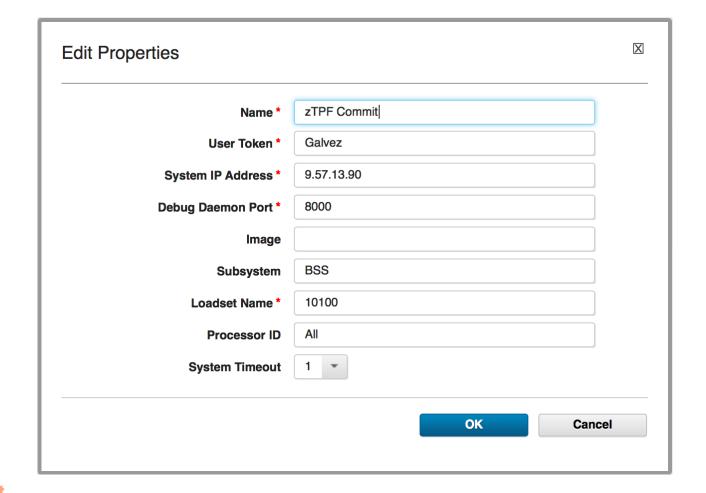




23

Z/TPF Commit beta

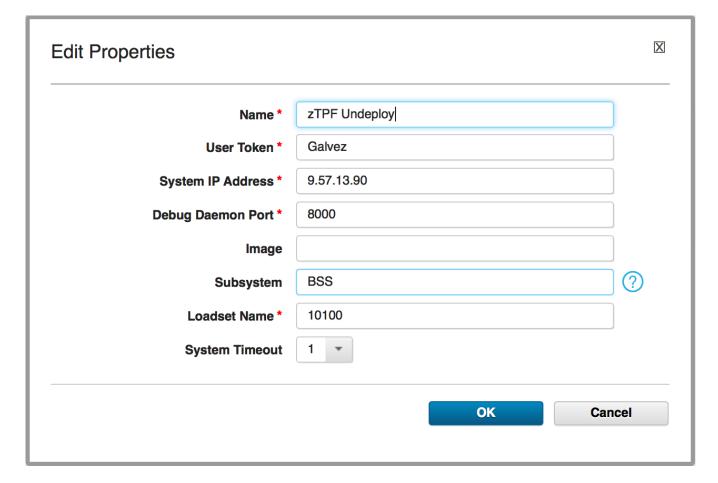
ZOLDR ACCEPT



z/TPF Commit

Z/TPF Undeploy_{beta}

ZOLDR DEACTIVATE and **DELETE**



z/TPF Undeploy

© 2016 IBM z/TPF | TPF Users Group Spring Conference

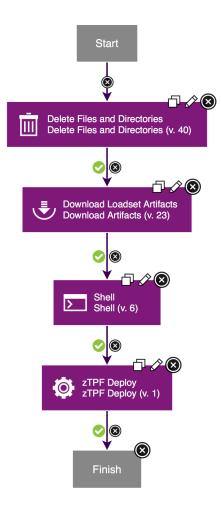
27

Let me tell you a story...

Create Process

Create Process

Bob selects a Component's process and adds a number of steps to load changes to his *z*/TPF system.



UrbanCode Deploy for z/TPF

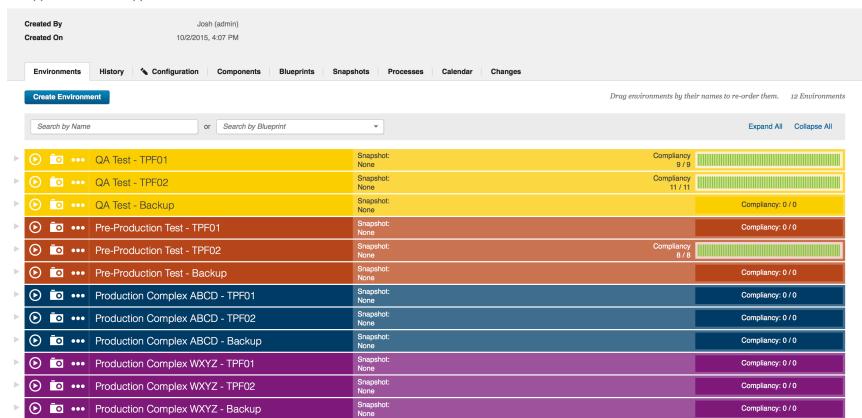
Create Process

Select Application Environment

Select Application Environment

Bob navigates to the Application tab where he selects the environment to deploy onto: QA Test – TPF01.

Application: TPF Application Code Base



UrbanCode Deploy for z/TPF

© 2016 IBM z/TPF | TPF Users Group Spring Conference

32

Create Process

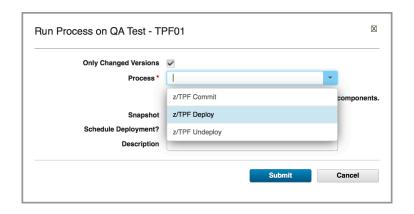
Select Application Environment

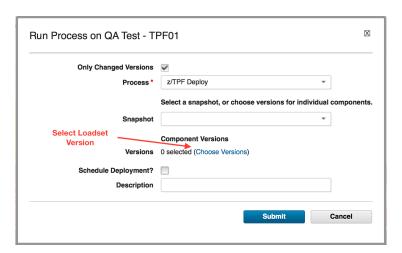
Select Process and Version

Select Process and Version

After selecting the environment a Process prompt allows him to select *z/TPF Deploy*, and submit.

He is then prompted to select the version of the loadset with the new code and submits the request.

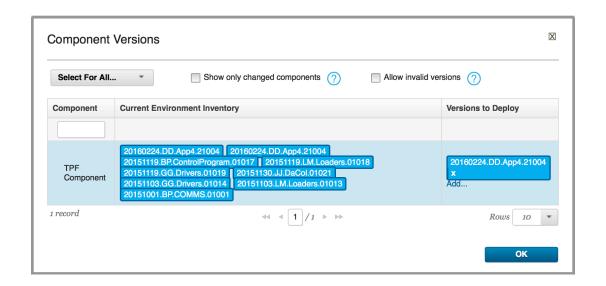




UrbanCode Deploy for *z***/TPF**

© 2016 IBM z/TPF | TPF Users Group Spring Conference

34



© 2016 IBM z/TPF | TPF Users Group Spring Conference

35

Create Process

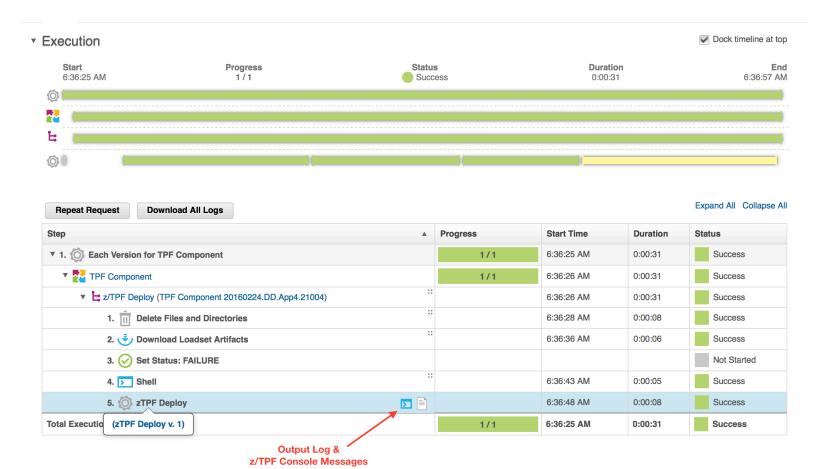
Select Application Environment

Select Process and Version

Execute Process

Execute Process

Bob monitors individual step's status of **Success** or **Failure** as the process completes. Bob drills into the executed process steps to reviews **the log of execution** if needed.



37

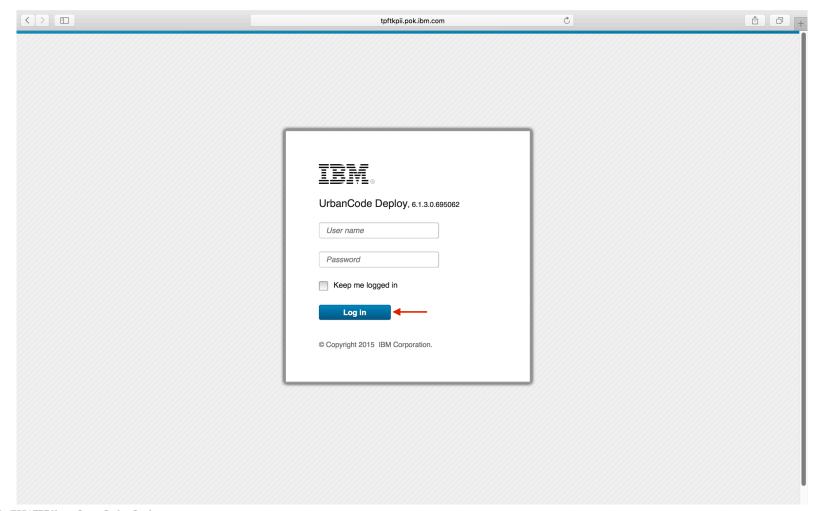
```
1
2
       plugin: zTPF Deploy, id: com.urbancode.plugin.tpf.deploy, version: 1
3
       pluqin command: 'cmd' '/C' '"C:\Users\tpftool\Desktop\UCD\agent\opt\qroovy-1.8.8\bin\qroovy -cp "C:\Users\tpftool\l
       working directory: C:\Users\tpftool\Desktop\UCD\agent\var\work\TPF Component
5
       properties:
         DebugOption=false
         DebugPort=8000
         Image=
9
         LoadsetLocation=/tmp/jwisnie.oldr
10
         LoadsetName=10100
11
         PLUGIN INPUT PROPS=C:\Users\tpftool\Desktop\UCD\agent\var\temp\logs5536845507641044494\input.props
12
         PLUGIN OUTPUT PROPS=C:\Users\tpftool\Desktop\UCD\agent\var\temp\logs5536845507641044494\output.props
13
         Processor=All
14
         Subsystem=BSS
15
         SystemIP=9.57.13.90
30
31
       TDRS0004I Request has been received.
32
       ZDSMG DEFINE NEWLOAD path-'/tmp/jwisnie.oldr'
33
       DBUG8012I Registered z/TPF Debugger Debug Console.
34
       LNIATA is d00302.
35
       CSMP0097I 06.37.45 CPU-B SS-BSS SSU-HPN IS-01
36
       DSMG0001I 06.37.45 DDNAME NEWLOAD
                                                  DEFINED
37
       +ZOLDR DEACT 10100
38
       CSMP0097I 06.37.45 CPU-B SS-BSS SSU-HPN IS-01
39
       OLDR1016I 06.37.45 CELA - DEACTIVATE REQUEST RECEIVED
40
       +CSMP0097I 06.37.45 CPU-B SS-BSS SSU-HPN IS-01
41
       OLDR1068W 06.37.45 COLA - LOADSET 10100 NOT ACTIVE ON CPU B
42
       +CSMP0097I 06.37.45 CPU-B SS-BSS SSU-HPN IS-01
216
       +CSMP0097I 06.37.47 CPU-B SS-BSS SSU-HPN IS-01
217
       OLDR2036I 06.37.47 ACTIVATE OF LOADSET 10100 SCHEDULED
218
       FOR CPU 6
219
       +CSMP0097I 06.37.47 CPU-B SS-BSS SSU-HPN IS-01
220
       OLDR2015I 06.37.47 CEL2 - LOADSET 10100 ASSIGNED ACTIVATION
221
                         NUMBER 17 ON CPU B
222
       +CSMP0097I 06.37.47 CPU-B SS-BSS SSU-HPN IS-01
223
       OLDR2043I 06.37.47 ACTIVATE OF LOADSET 10100 COMPLETED
224
       FOR CPU B AS REQUESTED BY CPU B
225
       +ZDSMG REL NEWLOAD
226
       CSMP0097I 06.37.48 CPU-B SS-BSS SSU-HPN IS-01
227
       DSMG0104I 06.37.48 DDNAME NEWLOAD
228
      + TDRS0005I Processing completed successfully.
229
```

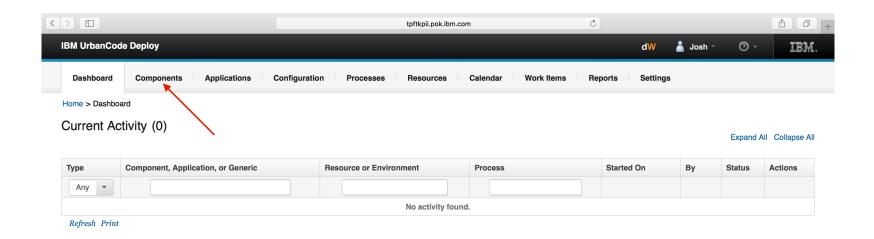
UrbanCode Deploy for z/TPF

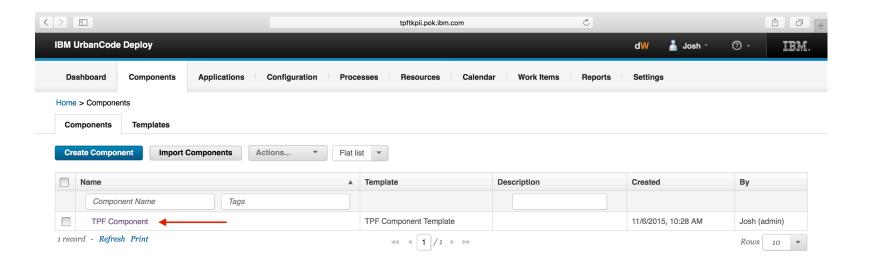
© 2016 IBM z/TPF | TPF Users Group Spring Conference

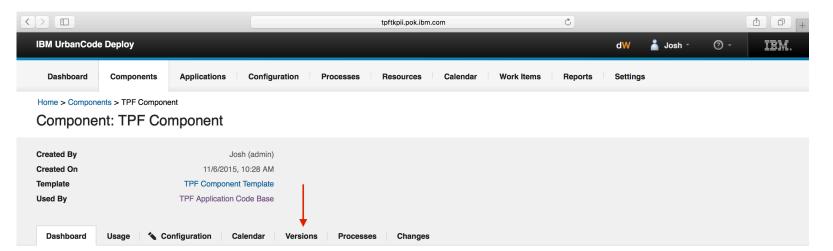
38

Demo

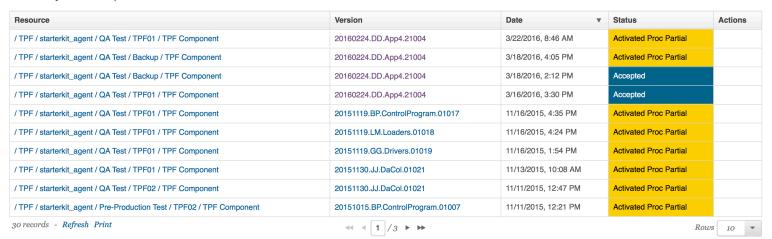






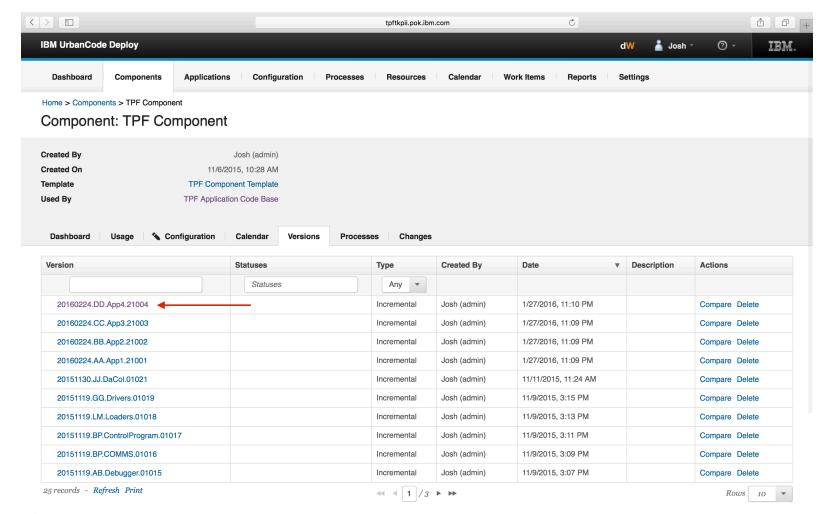


Inventory For Component



© 2016 IBM z/TPF | TPF Users Group Spring Conference

43





Statuses



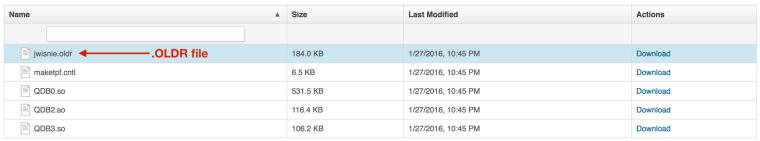
Status	Description	Created	Ву	Actions
No statuses have been assigned to this version.				
Refresh				

Artifacts

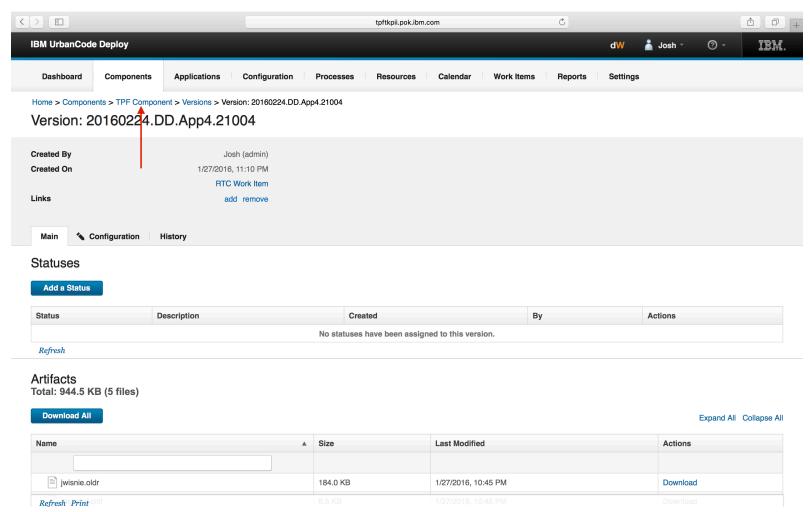
Total: 944.5 KB (5 files)

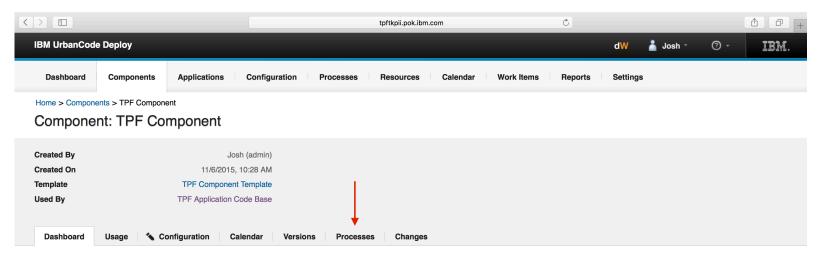
Download All

Expand All Collapse All

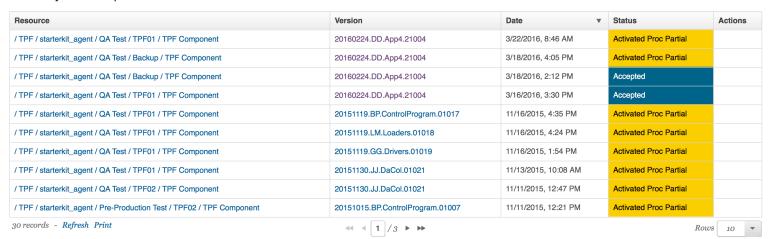


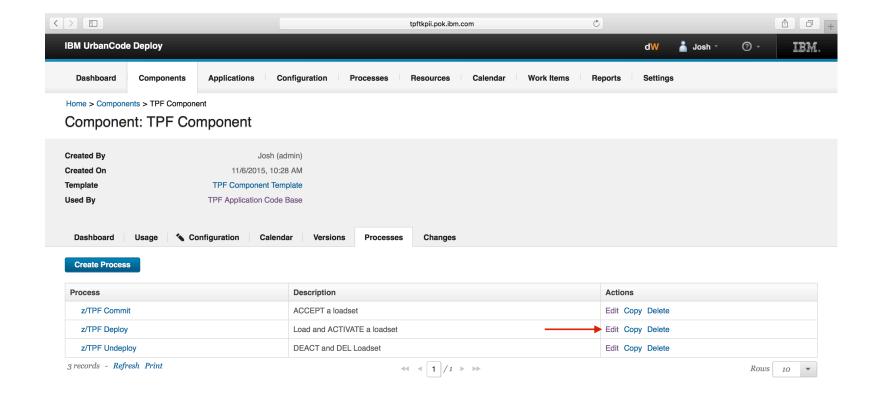
Refresh Print

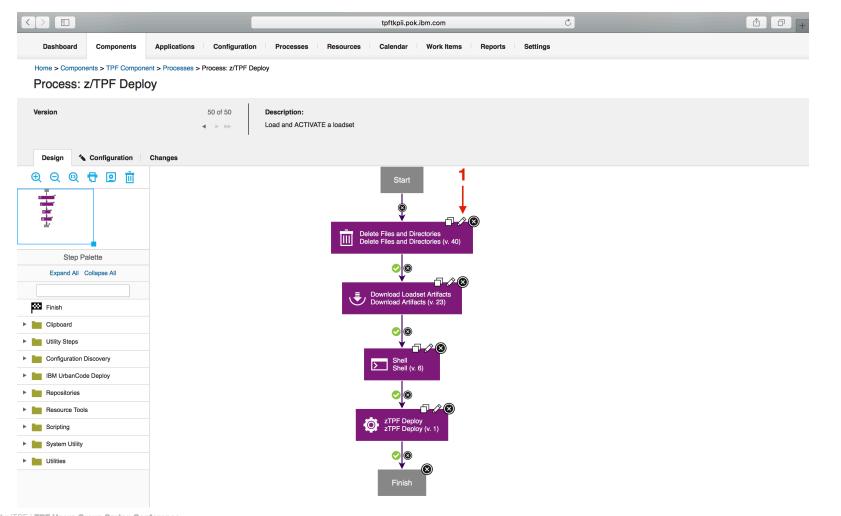




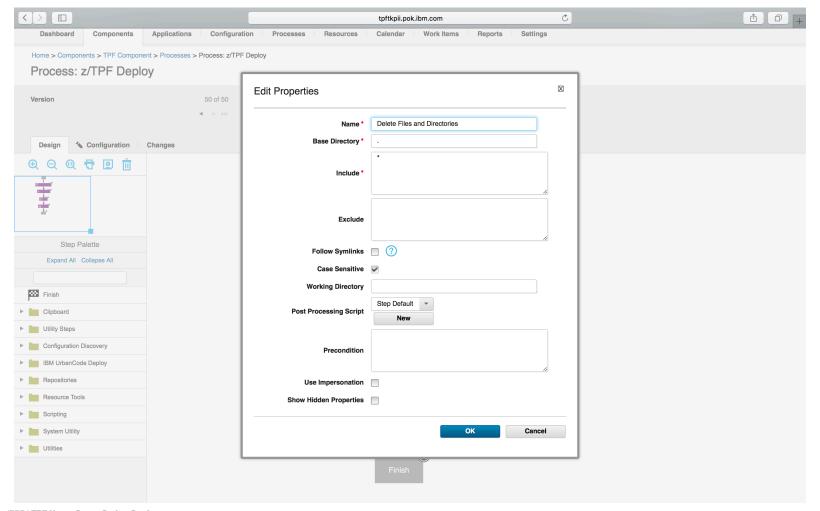
Inventory For Component

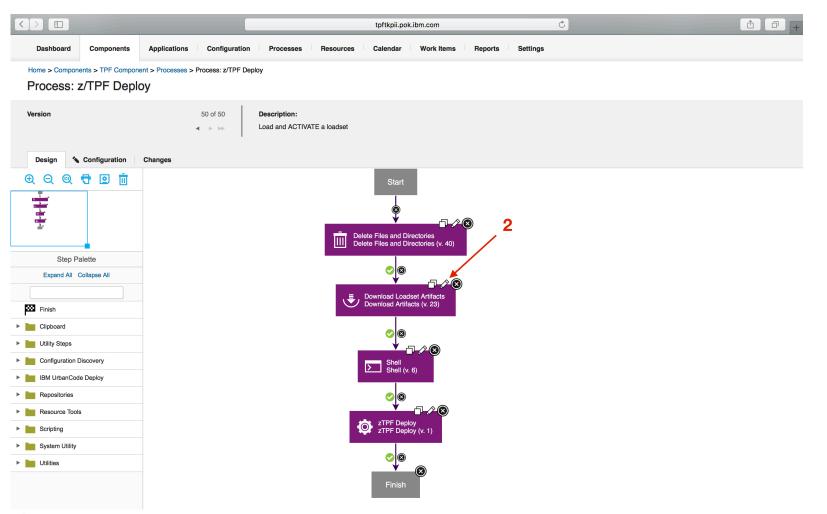




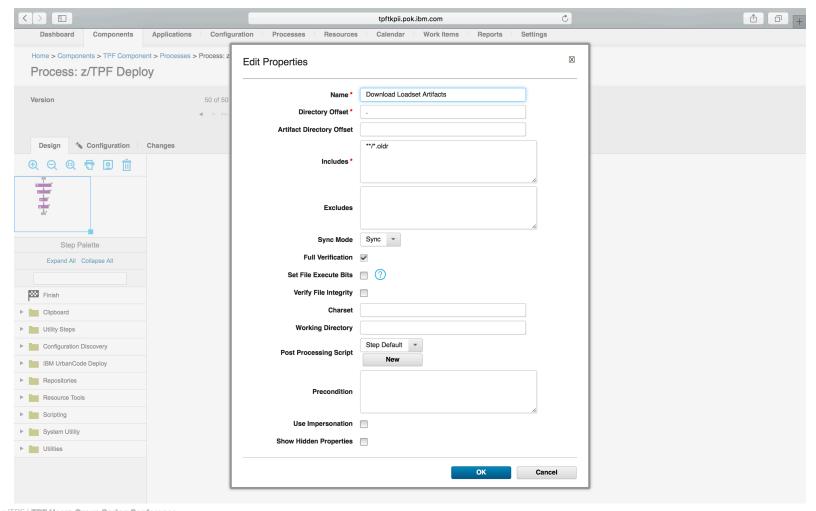


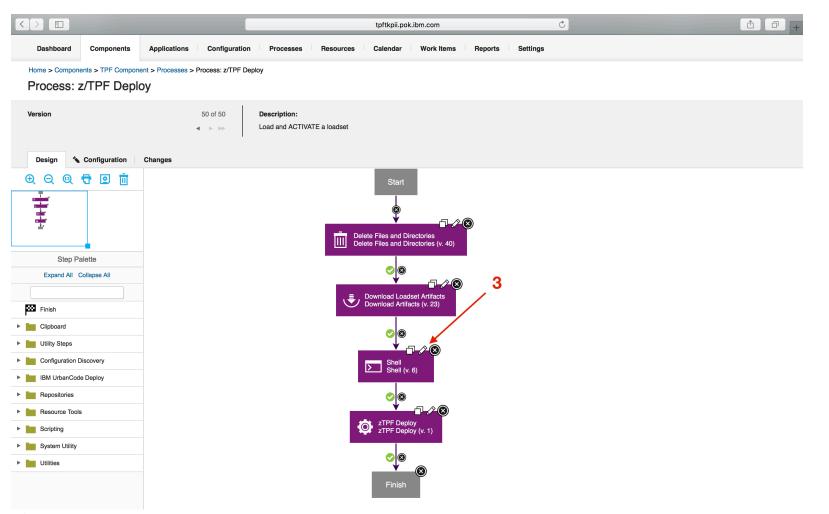
49

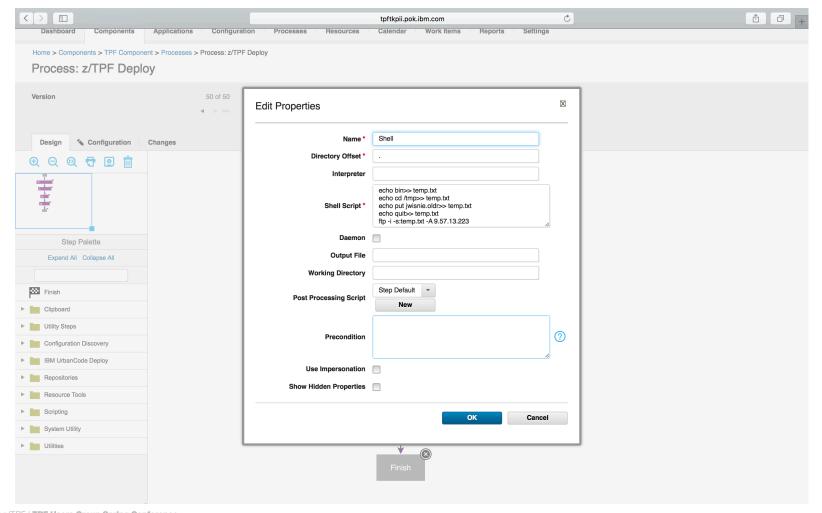


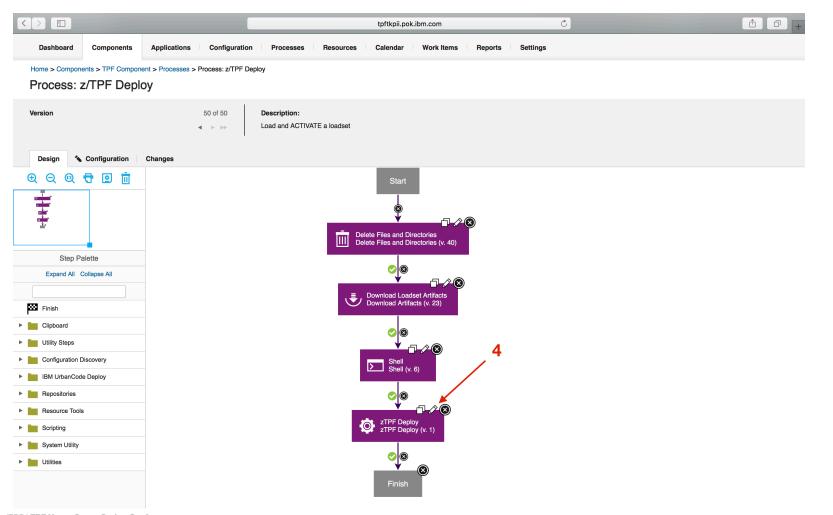


51

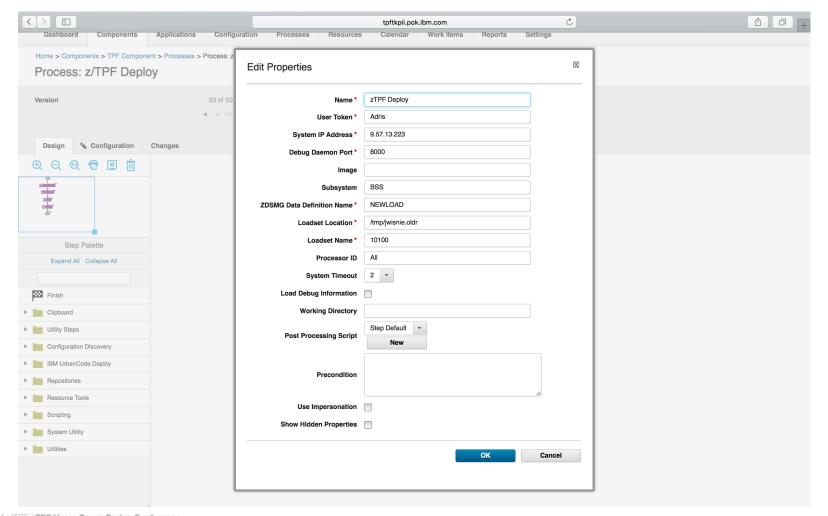


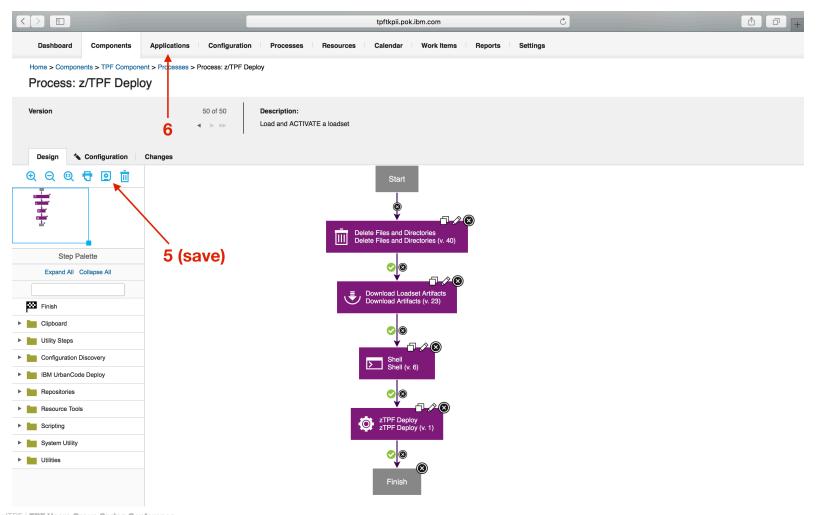


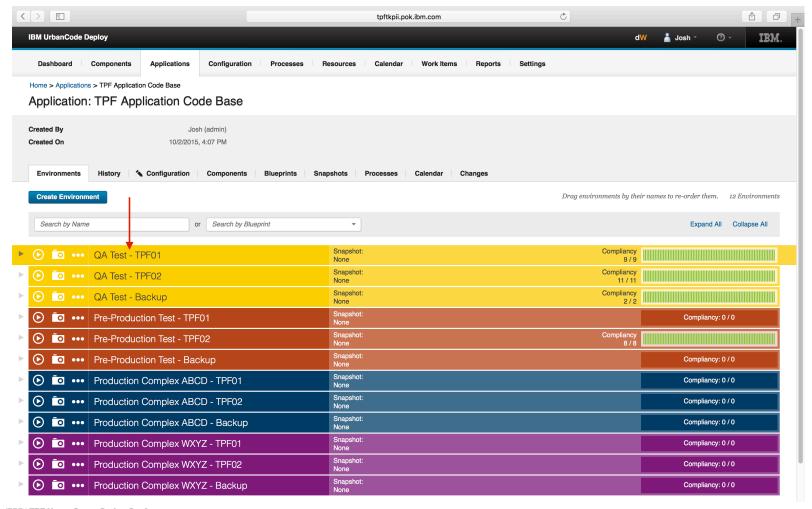




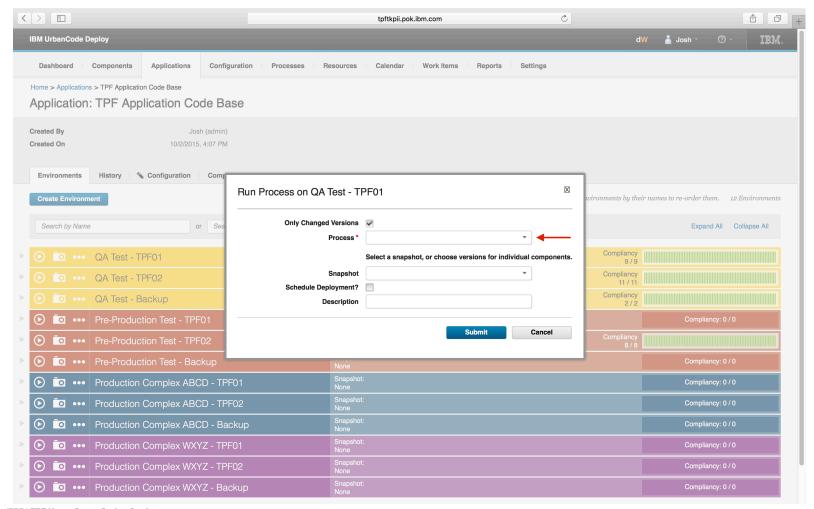
55



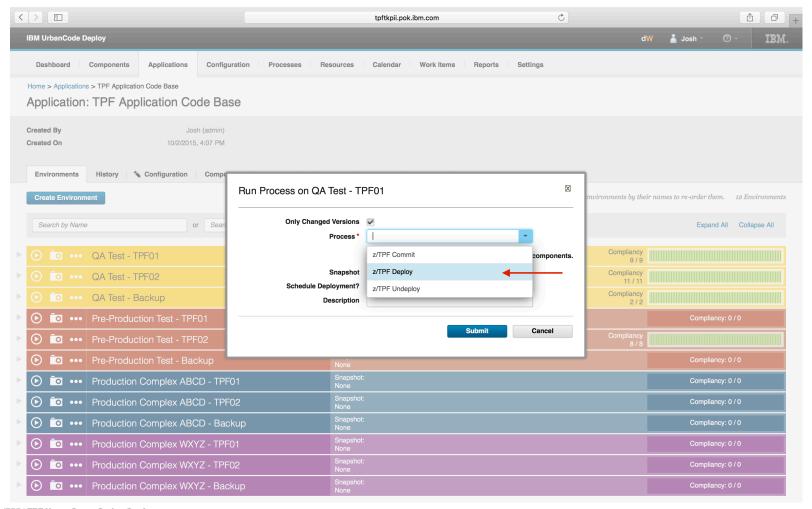


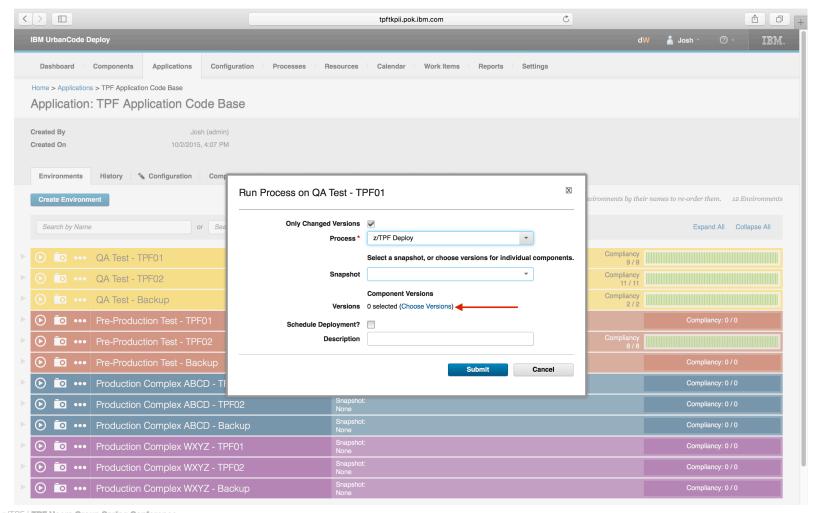


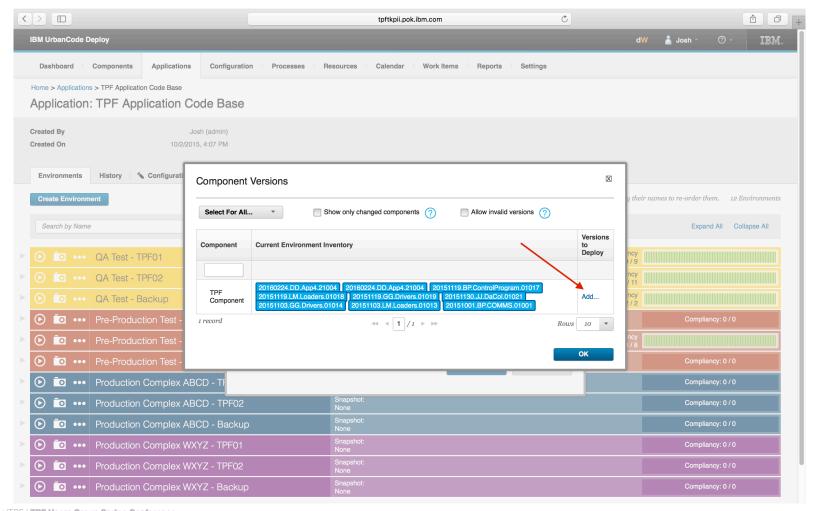
58

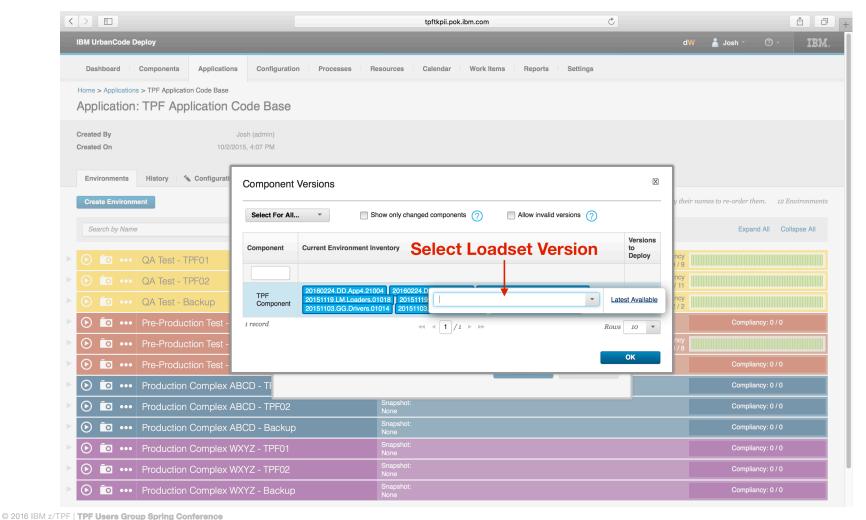


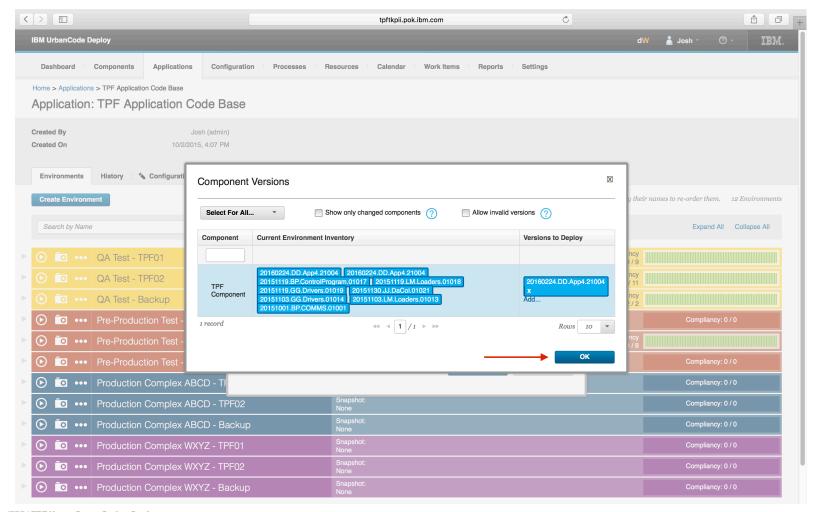
59

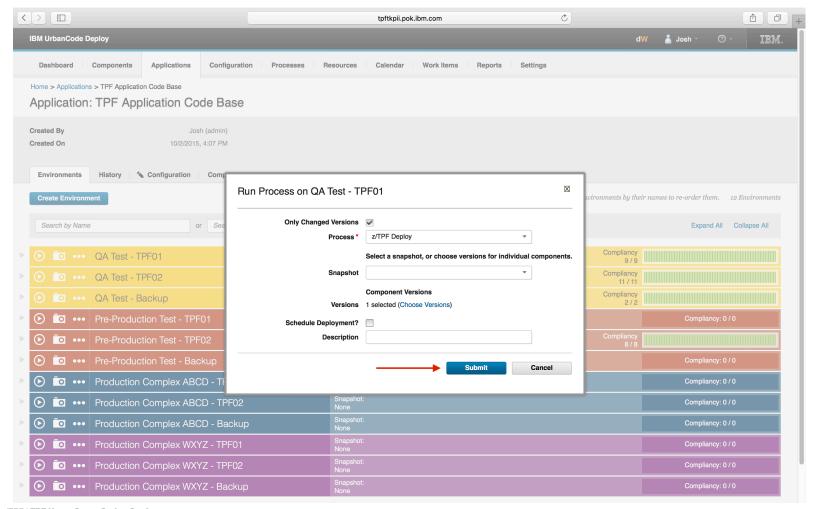


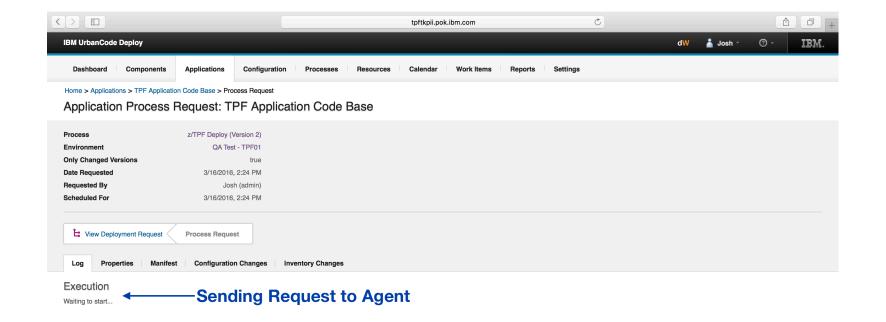


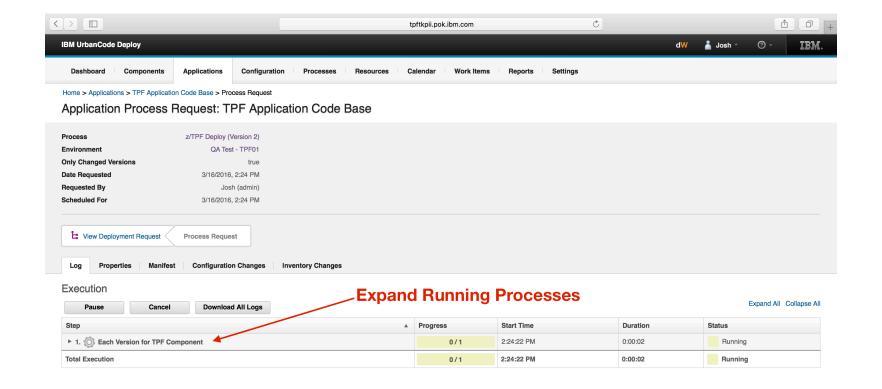


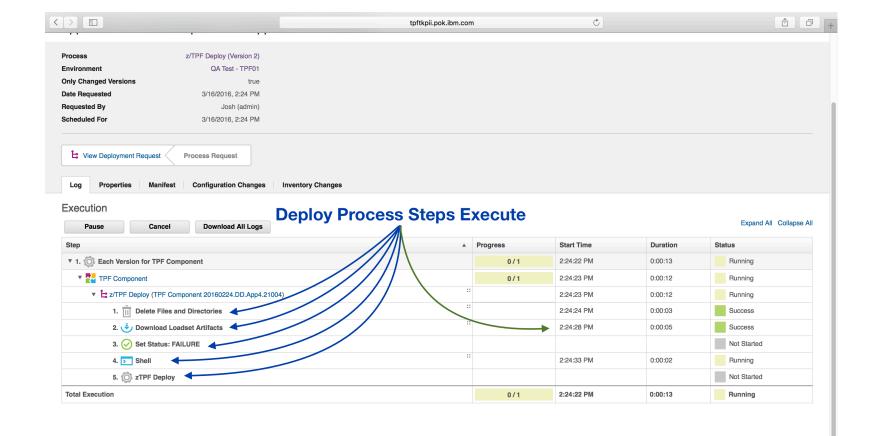


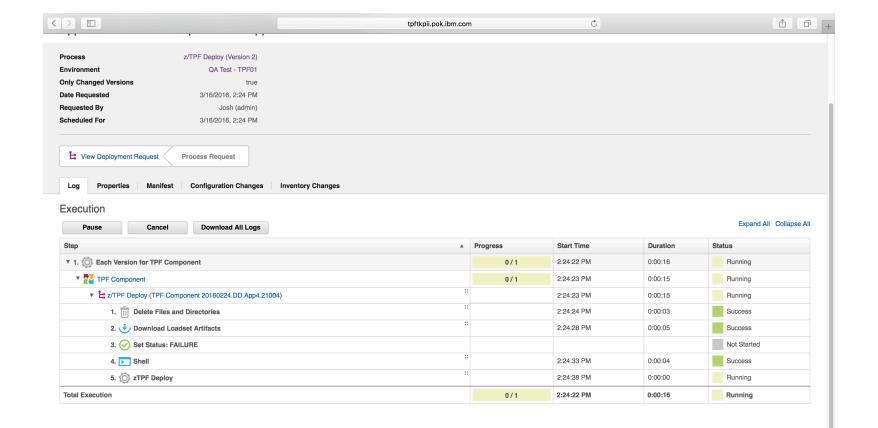


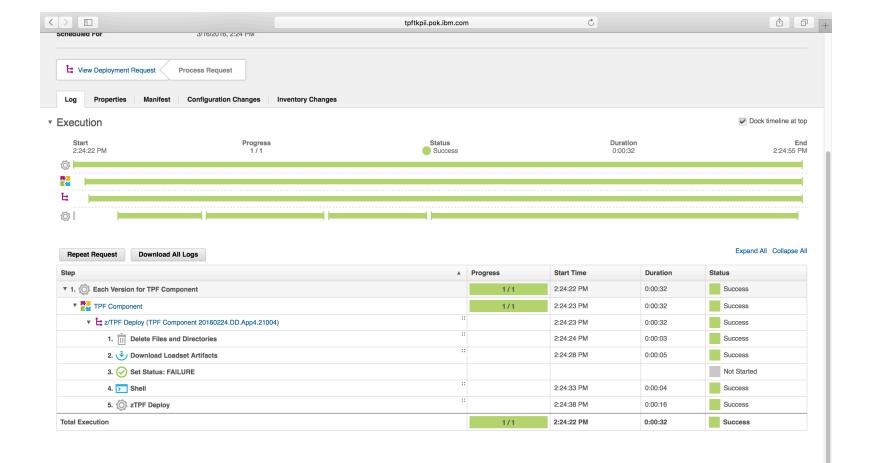


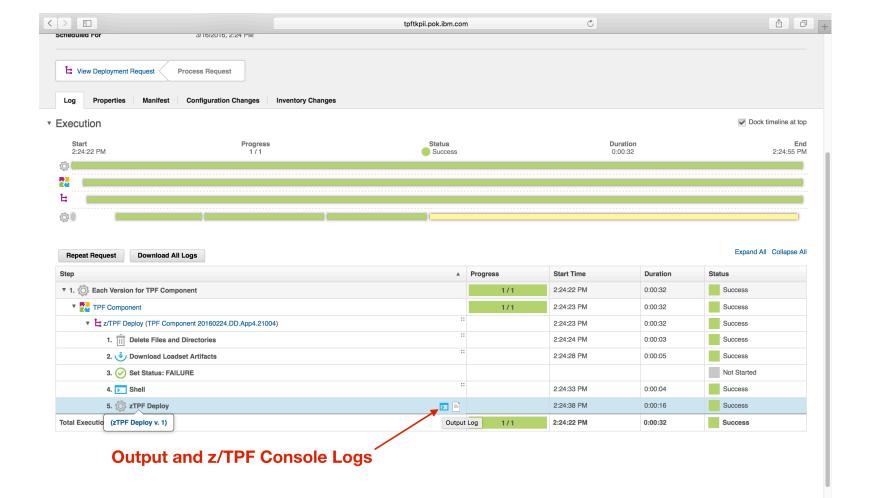


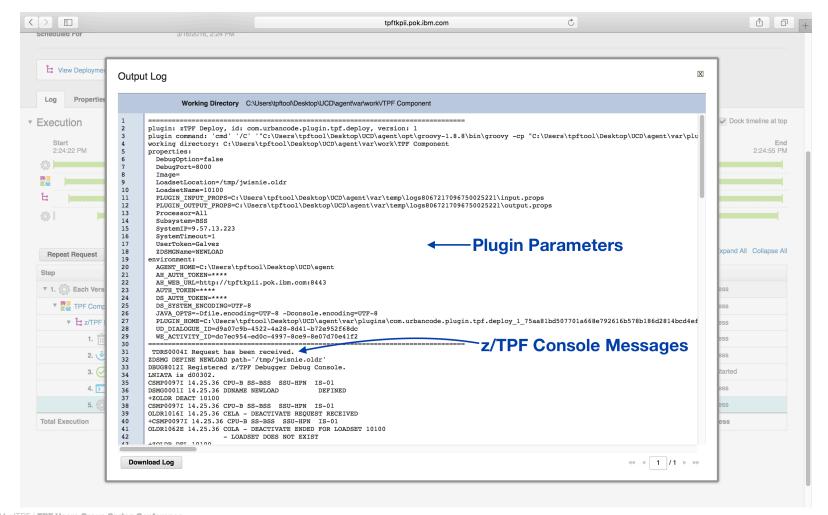


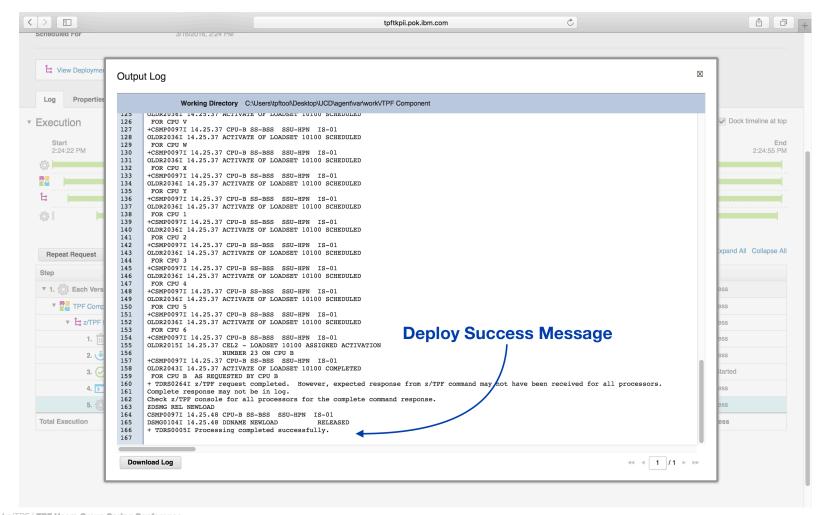












End of Demo

z/TPF Commit_{beta} and z/TPF Undeploy_{beta} plugins function in the same manner as the z/TPF Deploy_{beta} plugin demoed.

Getting Started

Your company may already be using UCD in your distributed environments!

Starter Kit

(including z/TPF beta plugins)

Will be announced on the TPF Blog.

https://www.ibm.com/developerworks/community/blogs/zTPF

UrbanCode Deploy Plugins

(including z/TPF beta plugins)

https://developer.ibm.com/urbancode/plugins/ibm-urbancode-deploy/

Request For Enhancements

The z/TPF Plugins are in the beta stage. If you would like us to develop these and more functionalities formally submit a Request For Enhancement (RFE).

Contact your CSR if you need any assistance through the RFE process.

Questions?

Thank You!

Trademarks

• IBM, the IBM logo, ibm.com and Rational are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.

Notes

- Performance is in Internal Throughput Rate (ITR) ratio based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput that any user will experience will vary depending upon considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve throughput improvements equivalent to the performance ratios stated here.
- All customer examples cited or described in this presentation are presented as illustrations of the manner in which some customers have used IBM products and the results they may have achieved. Actual environmental costs and performance characteristics will vary depending on individual customer configurations and conditions.
- This publication was produced in the United States. IBM may not offer the products, services or features discussed in this document in other countries, and the information may be subject to change without notice. Consult your local IBM business contact for information on the product or services available in your area.
- All statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives
 only.
- Information about non-IBM products is obtained from the manufacturers of those products or their published announcements. IBM has not tested those products and cannot confirm the performance, compatibility, or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.
- · Prices subject to change without notice. Contact your IBM representative or Business Partner for the most current pricing in your geography.
- This presentation and the claims outlined in it were reviewed for compliance with US law. Adaptations of these claims for use in other geographies must be reviewed by the local country counsel for compliance with local laws.