TIBCO Cloud™ Integration - BusinessWorks™

User Guide

Version 2.8.0
February 2023

Contents

Overview

The TIBCO Cloud™ Integration - BusinessWorks™ provides capabilities of TIBCO BusinessWorks Container Edition and Plug-ins on AWS. Using TIBCO Cloud™ Integration - BusinessWorks™, you can quickly and easily connect APIs, microservices, and backend systems. With easy-to-use drag-and-drop graphical development environment, graphical data mapper and a vast library of connectors, you can create cloud-native integration applications and deploy them on AWS leveraging native features of AWS Elastic Container Service or your choice of Docker-based PaaS build on AWS for container management.

The following are the product listing available for TIBCO Cloud™ Integration - BusinessWorks™ on AWS marketplace:

- **TIBCO Cloud™ Integration – BusinessWorks™ (PAYG)** - Consumption-based pricing model helps you to pay only for the number of containers running per hour. This gives you the flexibility to scale on demand and manage software cost as you go.
- **TIBCO Cloud™ Integration – BusinessWorks™ (BYOL)** - With BYOL model, you can use your existing TIBCO Cloud Integration licenses to run BusinessWorks Container Edition applications on AWS, leveraging the AMI (Amazon Machine Image) or CloudFormation templates provided on AWS Marketplace.

You must have knowledge of TIBCO BusinessWorks™ Container Edition to use TIBCO Cloud™ Integration - BusinessWorks™. For more information, see the TIBCO BusinessWorks™ Container Edition documentation.

This chapter contains the following sections:

Subscribing to TIBCO Cloud™ Integration - BusinessWorks™

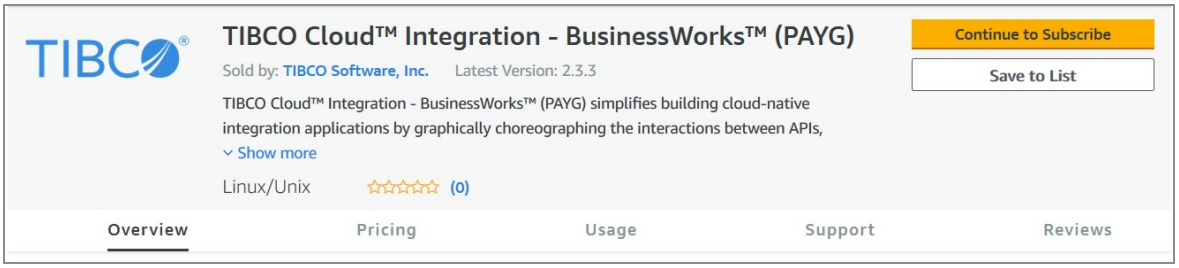
To get started, you must first access AWS marketplace and subscribe to TIBCO Cloud™ Integration - BusinessWorks™ (PAYG) or TIBCO Cloud™ Integration - BusinessWorks™ (BYOL).

Before you begin

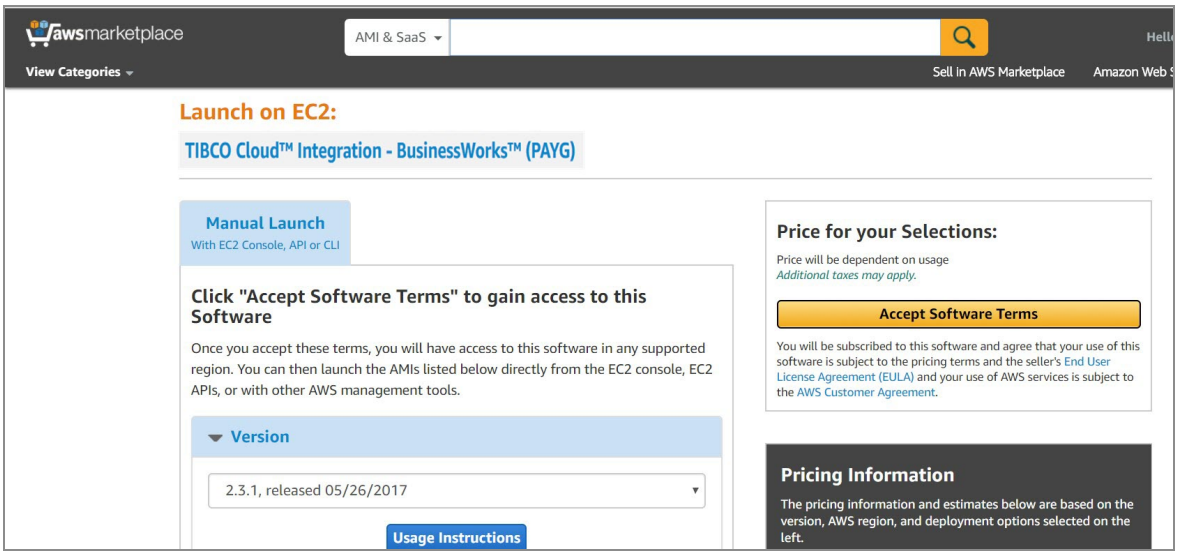
You'll need a few things before you install and run TIBCO Cloud™ Integration - BusinessWorks™ for AWS Marketplace on Amazon Web Services. Ensure that you have an AWS account. To create an AWS account, go to the Amazon Web Services sign up page, click the **Sign Up** button, and follow the instructions.

Procedure

1. Log in to the Amazon Web Services Marketplace account.
2. Use the search option to locate TIBCO Cloud™ Integration - BusinessWorks™ on the AWS Marketplace.
3. Click **Continue to Subscribe** to go to the Launch page.

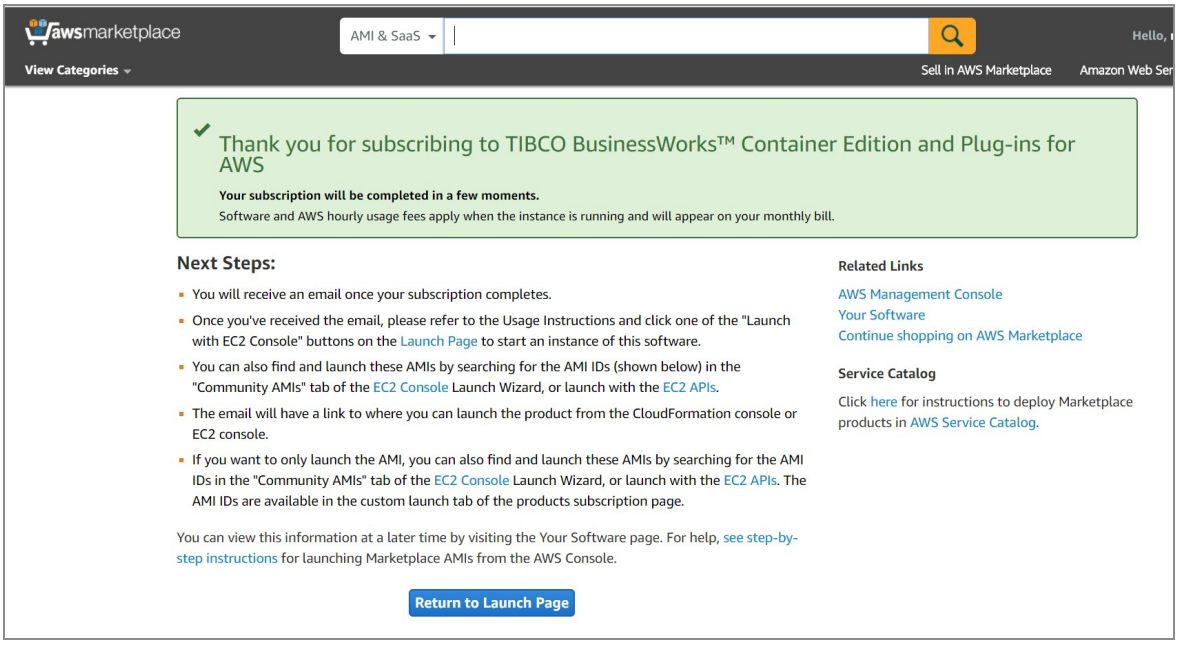


4. To subscribe to TIBCO Cloud™ Integration - BusinessWorks™, verify the information on this page and click **Accept Software terms**.



After subscribing to the TIBCO Cloud™ Integration - BusinessWorks™, you can launch the Single AMI or AWS CloudFormation Stack using CloudFormation template. For more information, see Launching TIBCO Cloud™ Integration - BusinessWorks™ on AWS Marketplace .

5. Click **Return to Launch Page** to start using TIBCO Cloud™ Integration - BusinessWorks™ software.



Flexible Consumption Pricing (FCP) for TIBCO Cloud™ Integration - BusinessWorks™ (PAYG)

TIBCO Cloud™ Integration - BusinessWorks™ starts an aggregator service on every EC2 instance, launched through Single AMI or CloudFormation Template option. This service must be running on the EC2 instance. Any TIBCO BusinessWorks Container Edition application started in a Docker container on the EC2 instance, it automatically connects to the aggregator and sends its metering units every hour. The aggregator service aggregates metering units from all the containers running on the EC2 instance and invokes AWS Marketplace Metering Service to send metering record every hour.

Scenario 1

If aggregator service is down,

- TIBCO BusinessWorks Container Edition application tries to send metering units to aggregator hourly.
- If the hourly invocation fails due to TIBCO BusinessWorks Container Edition application not receiving any response from aggregator, the application tries to send the metering units to aggregator in the next hour.
- If 2 retry attempt fails, then TIBCO BusinessWorks Container Edition application will be stopped.

Scenario 2

If aggregator service fails to send metering records to AWS metering service,

- TIBCO BusinessWorks Container Edition application tries to send metering units to aggregator hourly.
- If the hourly invocation fails due to TIBCO BusinessWorks Container Edition application receiving any status code other than 200 from aggregator, the application tries to send the metering units to aggregator in the next hour.
- If 3 retry attempts fail, then TIBCO Cloud™ Integration - BusinessWorks™ is stopped.

Flexible Consumption Pricing Model

TIBCO Cloud™ Integration - BusinessWorks™ uses consumption-based pricing model to calculate the cost of running TIBCO BusinessWorks Container Edition application on AWS Marketplace Metering Service. You pay only for the number of containers running per hour. This gives you flexibility to scale on demand and manage software cost on the go. All charges are incurred hourly by the customer. Usage is calculated and billed monthly.

Software Cost for FCP

TIBCO Cloud™ Integration - BusinessWorks™ uses "Consumption Unit" as a Flexible Consumption Pricing (FCP) dimension when sending metering records to AWS Marketplace Metering Service. The metering service uses this dimension to meter the TIBCO Cloud™ Integration - BusinessWorks™ and Plug-ins consumption per hour and charges the customer based on the consumption.

One TIBCO BusinessWorks Container Edition application docker container uses 5 TIBCO BusinessWorks consumption units per hour and one ActiveMatrix BusinessWorks plug-in uses 2 TIBCO BusinessWorks consumption units per hour.

For Example,

assume that 1 TIBCO BusinessWorks Container Edition application container is running for 10 hours and the TIBCO BusinessWorks Container Edition application uses 3 BusinessWorks Plug-ins supported with TIBCO Cloud™ Integration - BusinessWorks™ for AWS marketplace:

1 TIBCO Cloud™ Integration - BusinessWorks™ Application Container = 5 TIBCO BusinessWorks Consumption Units per hour

1 BW Plug-in = 2 TIBCO BusinessWorks consumption units per hour

Total units consumed per hour = 1*5 + 3*2 = 11 TIBCO BusinessWorks Consumption Units

Total units consumed in 10 hours = 10*11 = 110 TIBCO BusinessWorks ConsumptionUnit Hrs

Total Price for the application container = 110 * Price for 1 TIBCO BusinessWorks Consumption Unit

Note: Price per consumption unit is listed on the AWS Marketplace page for TIBCO Cloud™ Integration - BusinessWorks™ and Plug-ins. On Billing dashboard for your AWS account, you can see the total ConsumptionUnitHrs for TIBCO Cloud™ Integration - BusinessWorks™and Plug-ins and the software cost is calculated based on consumption.

Note: For BYOL, the software cost is not paid through AWS Marketplace. You can use your existing TIBCO BusinessWorks Container Edition software licenses purchased from TIBCO.

AWS Infrastructure Cost

You incur associated AWS infrastructure charges depending on the services and infrastructure used such as AWS EC2, S3, EBS and so on. These rates and fees are defined and controlled by AWS and can vary between regions.

Note: If the target group is not configured correctly for an application, the health check fails and the application is stopped. In this scenario, the new container spins up and you are charged for each new container spinned up automatically till the time you fix the target group or delete the application service.

Annual Premium Subscription

You can contact TIBCO Sales to purchase Premium Subscription for TIBCO Cloud™ Integration - BusinessWorks™. This subscription includes right to open up to 12 or unlimited Support Requests expiring in one year from the date of purchase.

Supported Plug-ins

The following plug-ins are supported by TIBCO Cloud™ Integration - BusinessWorks™ on Amazon Web Services Marketplace.

Sr.No.	ID	Plug-In Name	Version
1	ADB	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Database	8.5.0
2	AMQP	TIBCO ActiveMatrix BusinessWorks™ Plug-in for AMQP	6.3.1
3	bwpluginawsredshift	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Amazon Redshift	6.0.0
4	bwpluginbigdata	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Big Data	6.6.1
5	Cassandra	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Apache Cassandra	6.3.2
6	CAWSCS	TIBCO ActiveMatrix BusinessWorks™ Plug-in Component for AWS Common Services	6.1.1
7	bwpluginconfidentiality	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Confidentiality	6.1.1
8	DC	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Data Conversion	4.5.1
9	DCRM	TIBCO ActiveMatrix	6.9.4

Sr.No.	ID	Plug-In Name	Version
		BusinessWorks™ Plug-in for Microsoft Dynamics CRM	
10	bwpluginejb	TIBCO ActiveMatrix BusinessWorks™ Plug-in for EJB	6.1.1
11	bwplugineftl	TIBCO ActiveMatrix BusinessWorks™ Plug-in for TIBCO eFTL™	6.0.0 HF-002
12	Excel	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Microsoft Excel	6.1.1 HF-001
13	Facebook	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Facebook	6.5.0
14	Files	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Files for Unix and Windows	8.3.0
15	FTL	TIBCO ActiveMatrix BusinessWorks™ Plug-in for TIBCO FTL	6.7.0
16	bwpluginbigquery	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Google Big Query	6.0.0 HF-001
17	bwplugingooglecps	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Google Cloud	6.0.1 HF-001

Sr.No.	ID	Plug-In Name	Version
		Pub/Sub	
18	Google Cloud Storage	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Google Cloud Storage	6.0.0
19	JDE	TIBCO ActiveMatrix BusinessWorks™ Plug-in for JD Edwards EnterpriseOne	7.1.0
20	Kafka	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Apache Kafka	6.6.0
21	LDAP	TIBCO ActiveMatrix BusinessWorks™ Plug-in for LDAP	7.3.0
22	bwlx	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Large XML	6.1.4
23	Marketo	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Marketo	7.2.2
24	MongoDB	TIBCO ActiveMatrix BusinessWorks™ Plug-in for MongoDB	6.4.2
25	MQ	TIBCO ActiveMatrix BusinessWorks™ Plug-in for WebSphere MQ	8.5.1
26	Netsuite	TIBCO ActiveMatrix	6.3.6

Sr.No.	ID	Plug-In Name	Version
		BusinessWorks™ Plug-in for Netsuite	
27	OData	TIBCO ActiveMatrix BusinessWorks™ Plug-in for OData	6.4.0
28	OracleEBS	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Oracle E-Business Suite	6.1.2 HF-001
29	bwpluginpi	TIBCO ActiveMatrix BusinessWorks™ Plug-in for OSIsoft PI System	6.5.0
30	PDF	TIBCO ActiveMatrix BusinessWorks™ Plug-in for PDF	6.2.2 HF-002
31	PeopleSoft	TIBCO ActiveMatrix BusinessWorks™ Plug-in for PeopleSoft	7.2.0
32	S3	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Amazon S3	6.5.1 HF-002
33	SAP	TIBCO ActiveMatrix BusinessWorks™ Plug-in for SAP Solutions	8.6.0 HF-001
34	SAP Ariba	TIBCO ActiveMatrix BusinessWorks™ Plug-in for SAP Ariba	6.0.0 HF-001

Sr.No.	ID	Plug-In Name	Version
35	bwpluginsaphanadatabase	TIBCO ActiveMatrix BusinessWorks™ Plug-in for SAP HANA Database	6.0.0 HF-004
36	bwplugins4hana	TIBCO ActiveMatrix BusinessWorks™ Plug-in for OData Services for SAP S/4HANA	6.3.0
37	SFDC	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Salesforce.com	6.10.0
38	ServiceNow	TIBCO ActiveMatrix BusinessWorks™ Plug-in for ServiceNow	6.1.0 HF-001
39	SFTP	TIBCO ActiveMatrix BusinessWorks™ Plug-in for sFTP	6.1.4
40	SharePoint	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Microsoft SharePoint	6.3.1
41	adsmartmapper	TIBCO ActiveMatrix BusinessWorks™ Plug-in for SmartMapper	7.1.2 HF-001
42	bwsmpp	TIBCO ActiveMatrix BusinessWorks™ Plug-in for SMPP	6.0.2 HF-001
43	bwpluginsnowflake	TIBCO ActiveMatrix BusinessWorks™ Plug-	6.2.0

Sr.No.	ID	Plug-In Name	Version
		in for Snowflake	
44	Siebel	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Siebel	7.3.0
45	SQS-SNS	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Amazon SQS and SNS	6.5.2
46	SAP SuccessFactors	TIBCO ActiveMatrix BusinessWorks™ Plug-in for SAP SuccessFactors	6.1.0
47	SWIFT	TIBCO ActiveMatrix BusinessWorks™ Plug-in for SWIFT	6.8.0
48	Tuxedo	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Oracle Tuxedo	8.2.0
49	Twitter	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Twitter	6.1.2
50	Workday	TIBCO ActiveMatrix BusinessWorks™ Plug-in for Workday	6.0.1 HF-003

Cancellation and Termination

You have the right to cancel your subscription for TIBCO Cloud™ Integration - BusinessWorks™ at any time.

TIBCO may remove the listing from the AWS Marketplace at any time with prior notice in accordance with the AWS Marketplace Listing Guidelines. AWS may also remove the listing from the AWS Marketplace at any time for any reason. Upon any removal by TIBCO or AWS of the listing from the AWS Marketplace, existing users can continue to exercise their rights in Marketplace Listing for the remainder of the term the user has acquired rights to use Marketplace Content or, if longer, 90 days after removal. Upon termination of the Agreement, AWS may terminate all access to the Marketplace Content. We strongly advise existing users that they back up their data prior to expiration or cancellation, as TIBCO will not provide access to the customer's data after termination or cancellation.

Launching TIBCO Cloud™ Integration - BusinessWorks™

TIBCO Cloud™ Integration - BusinessWorks™ provides the following deployment options on AWS Marketplace.

- Single AMI
- CloudFormation Template to setup AWS ECS Cluster
- CloudFormation Template to create and extend TIBCO BusinessWorks Container Edition base docker image and push installers to S3

Launching Single Amazon Machine Image (AMI)

You can create an EC2 instance from Amazon Machine Image (AMI). After you subscribe to TIBCO Cloud™ Integration - BusinessWorks™, you can launch the AMI from the marketplace page.

The following are the artifacts that are provided in the Single AMI:

Directory `/home/ec2-user/bwce/` includes the following directories:

- `bwce-runtime`: Contains bwce-runtime zip.
- `bwce-docker`: Contains TIBCO BusinessWorks Container Edition docker open source script. For more information, refer to https://github.com/TIBCOSoftware/bwce-docker.
- `scripts`: Contains create-push-image.sh script which creates TIBCO BusinessWorks Container Edition base image and pushes it to ECR repo.
- `bwce-mon`: Contains application monitoring feature for TIBCO Cloud™ Integration - BusinessWorks™.

The following are the installer that are shipped with the Single AMI:

- `bwce`: Contains TIBCO Business Studio™ for BusinessWorks™ installers for all

supported OS

- `plugins`: Contains installer for TIBCO Cloud™ Integration - BusinessWorks™ supported plugins & runtime zip files for all supported OS. For more information on supported plug-ins, see Supported Plug-ins.

For more details about AMI, see AWS Documentation.

Before you begin

Ensure that you have subscribed to TIBCO Cloud™ Integration - BusinessWorks™ and Plug-ins. See Subscribing TIBCO Cloud™ Integration - BusinessWorks™.

Run the following command:

to install docker in Single AMI

```
sudo yum -y install docker-ce
```

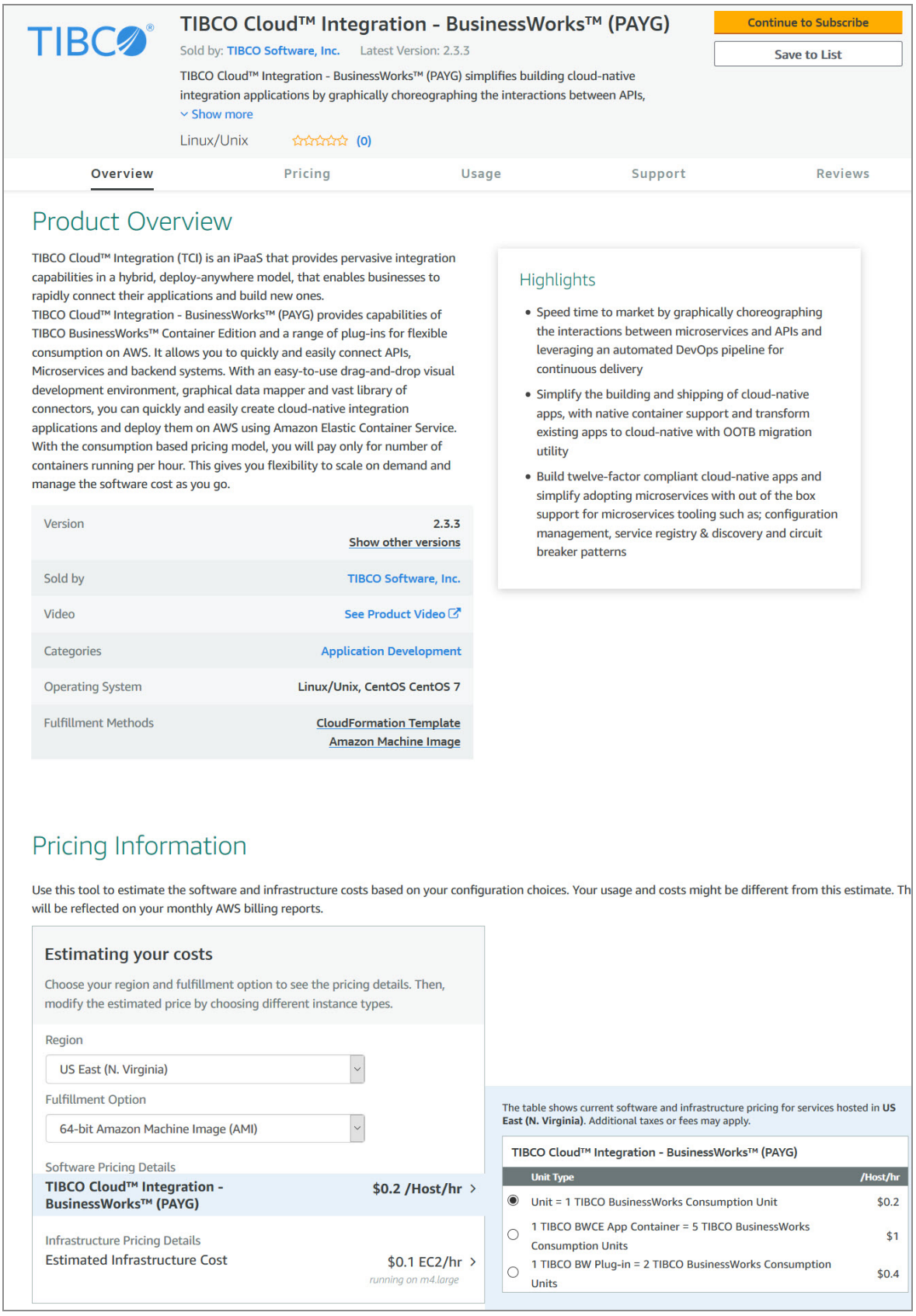
to start docker

```
sudo systemctl start docker
```

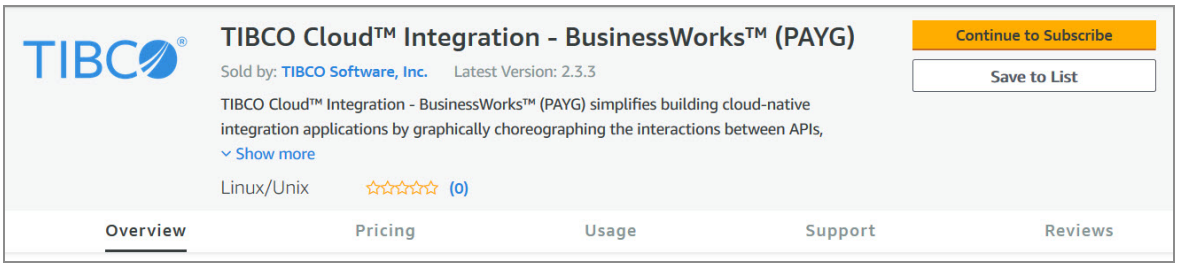
For more details about Docker, Refer Docker Documentation.

Procedure

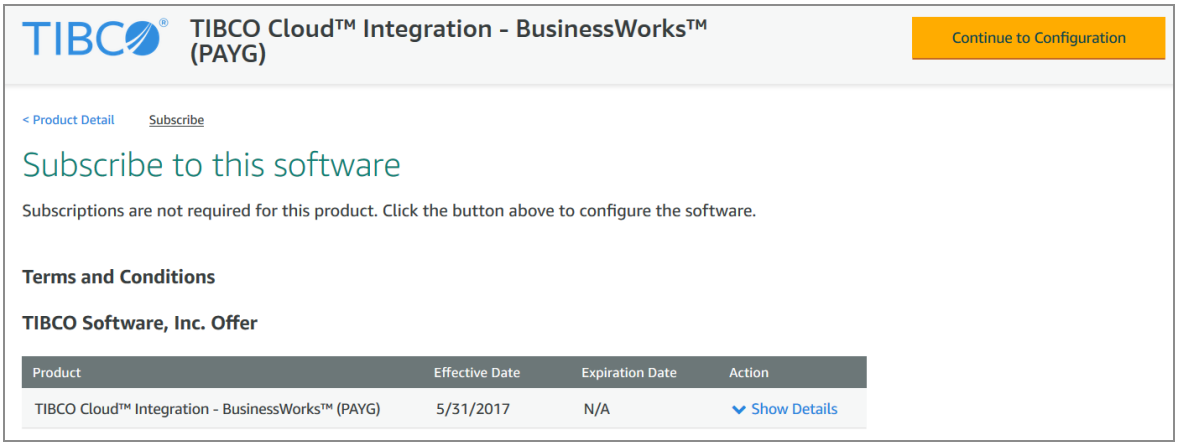
1. Open the TIBCO Cloud™ Integration - BusinessWorks™ web page in AWS Marketplace.
2. In the **Pricing Information** section, select the region where you want to make the software available and specify the delivery method as **Single AMI**.


TIBCO Cloud™ Integration - BusinessWorks™ (PAYG)
Sold by: TIBCO Software, Inc. Latest Version: 2.3.3
TIBCO Cloud™ Integration - BusinessWorks™ (PAYG) simplifies building cloud-native integration applications by graphically choreographing the interactions between APIs,
Show more
Linux/Unix (0)
Continue to Subscribe
Save to List
Overview
Pricing
Usage
Support
Reviews
Product Overview
TIBCO Cloud™ Integration (TCI) is an iPaaS that provides pervasive integration capabilities in a hybrid, deploy-anywhere model, that enables businesses to rapidly connect their applications and build new ones.
TIBCO Cloud™ Integration - BusinessWorks™ (PAYG) provides capabilities of TIBCO BusinessWorks™ Container Edition and a range of plug-ins for flexible consumption on AWS. It allows you to quickly and easily connect APIs, Microservices and backend systems. With an easy-to-use drag-and-drop visual development environment, graphical data mapper and vast library of connectors, you can quickly and easily create cloud-native integration applications and deploy them on AWS using Amazon Elastic Container Service. With the consumption based pricing model, you will pay only for number of containers running per hour. This gives you flexibility to scale on demand and manage the software cost as you go.
Highlights
Speed time to market by graphically choreographing the interactions between microservices and APIs and leveraging an automated DevOps pipeline for continuous delivery
Simplify the building and shipping of cloud-native apps, with native container support and transform existing apps to cloud-native with OOTB migration utility
Build twelve-factor compliant cloud-native apps and simplify adopting microservices with out of the box support for microservices tooling such as; configuration management, service registry & discovery and circuit breaker patterns
Version 2.3.3
Show other versions
Sold by TIBCO Software, Inc.
Video See Product Video
Categories Application Development
Operating System Linux/Unix, CentOS CentOS 7
Fulfillment Methods CloudFormation Template
Amazon Machine Image
Pricing Information
Use this tool to estimate the software and infrastructure costs based on your configuration choices. Your usage and costs might be different from this estimate. Th
will be reflected on your monthly AWS billing reports.
Estimating your costs
Choose your region and fulfillment option to see the pricing details. Then, modify the estimated price by choosing different instance types.
Region
US East (N. Virginia)
Fulfillment Option
64-bit Amazon Machine Image (AMI)
Software Pricing Details
TIBCO Cloud™ Integration - BusinessWorks™ (PAYG)
$0.2 /Host/hr
Infrastructure Pricing Details
Estimated Infrastructure Cost
$0.1 EC2/hr
running on m4.large
The table shows current software and infrastructure pricing for services hosted in US East (N. Virginia). Additional taxes or fees may apply.
TIBCO Cloud™ Integration - BusinessWorks™ (PAYG)
Unit Type
/Host/hr
Unit = 1 TIBCO BusinessWorks Consumption Unit
$0.2
1 TIBCO BWCE App Container = 5 TIBCO BusinessWorks Consumption Units
$1
1 TIBCO BW Plug-in = 2 TIBCO BusinessWorks Consumption Units
$0.4

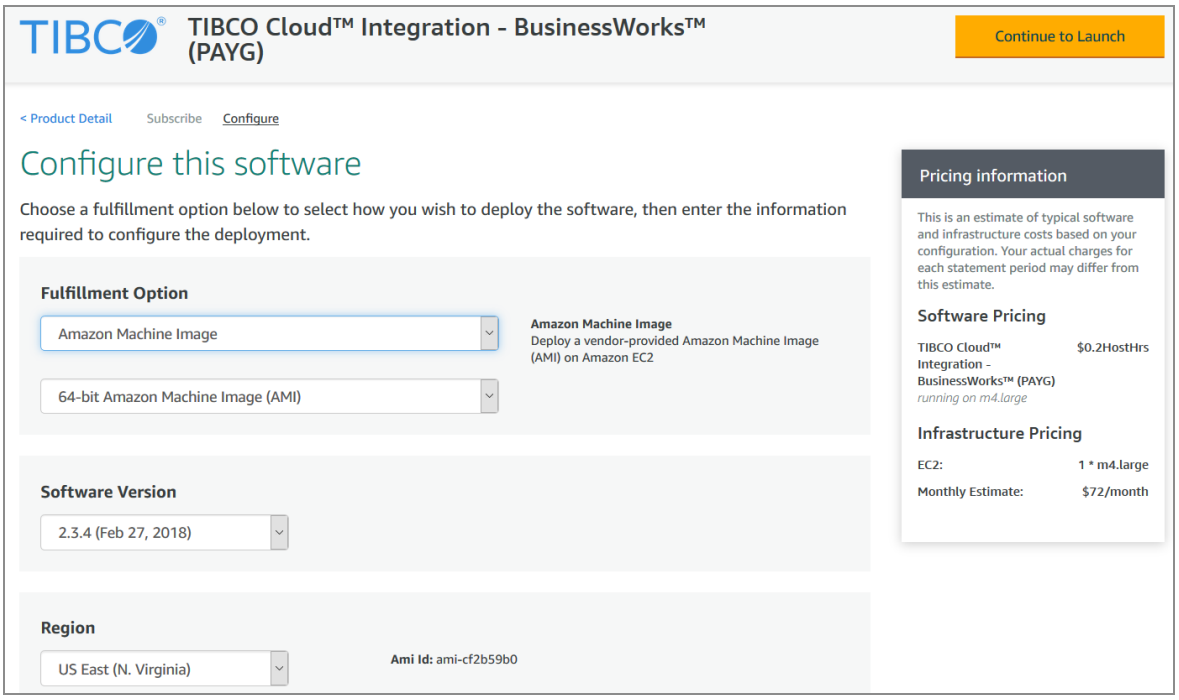
3. Click **Continue to Subscribe** to go to the Launch page.



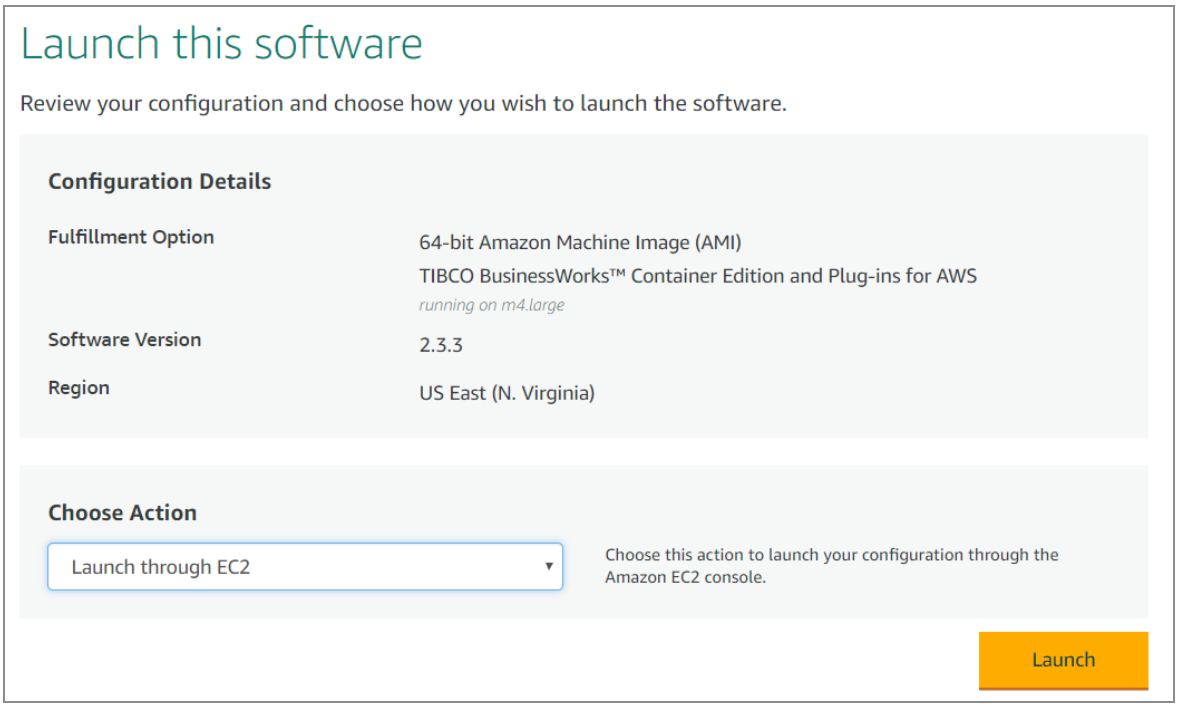
4. To configure the application, click **Continue to Configuration**.



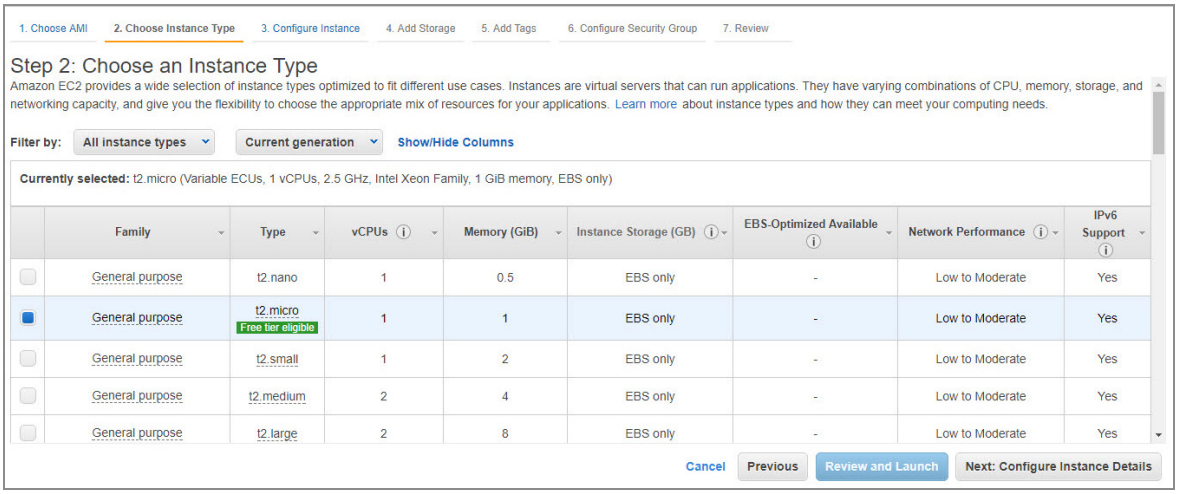
5. Select a fulfillment option as **Amazon Machine Image**. Also, select the **Software Version** and **Region** to launch the EC2 instance from the AMI.



6. Click the **Continue to Launch** button to launch the EC2 instance from the AMI.
7. To launch your configuration through the Amazon EC2 console, select **Launch through EC2** and click **Launch**.



8. From **All instance types** list, select an instance type. For more information, see Amazon EC2 Instance Types.



9. Click **Next: Configure Instance Details** at the bottom of the page, and provide the following details as per requirement. See the ⓘ icon for descriptions of each item.

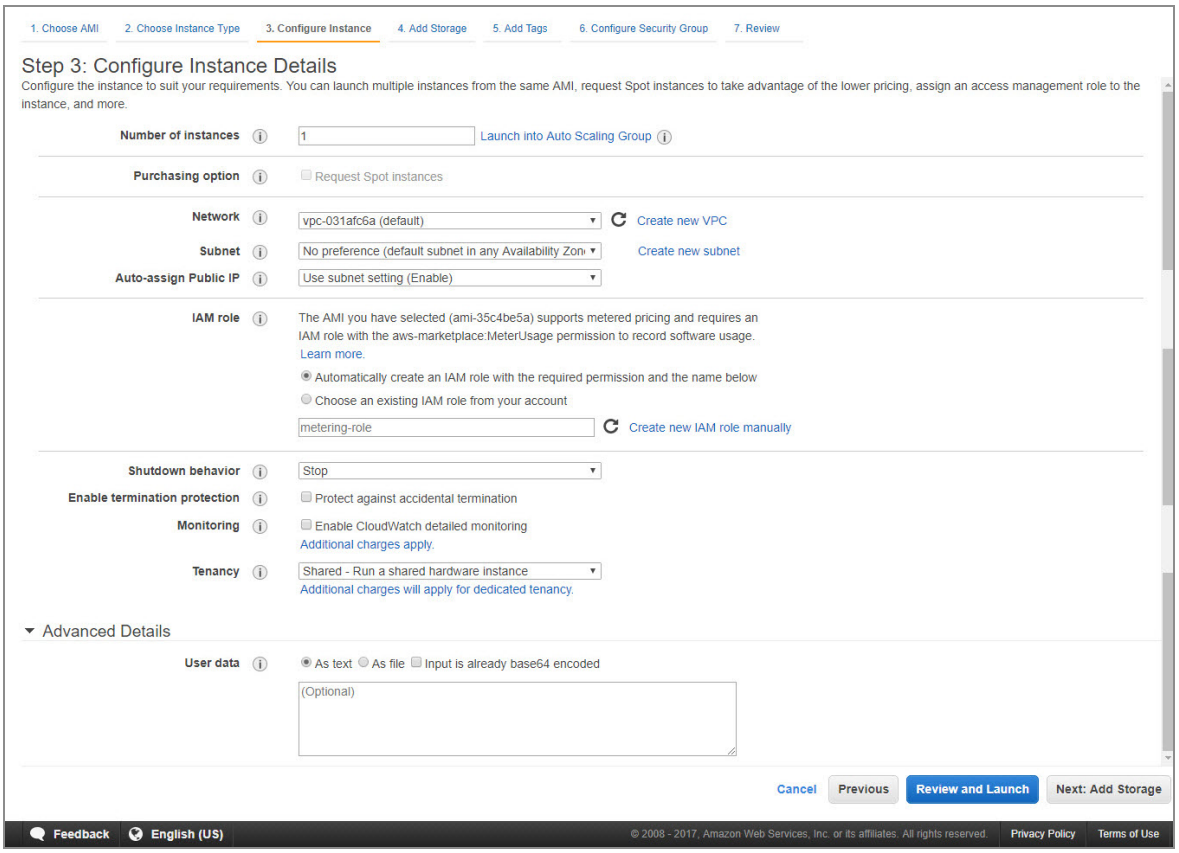
    - Number of instances
    - Purchasing option

- Network
- Availability Zone (if using EC2) or Subnet (if using VPC)
- Auto-assign Public IP
- IAM role

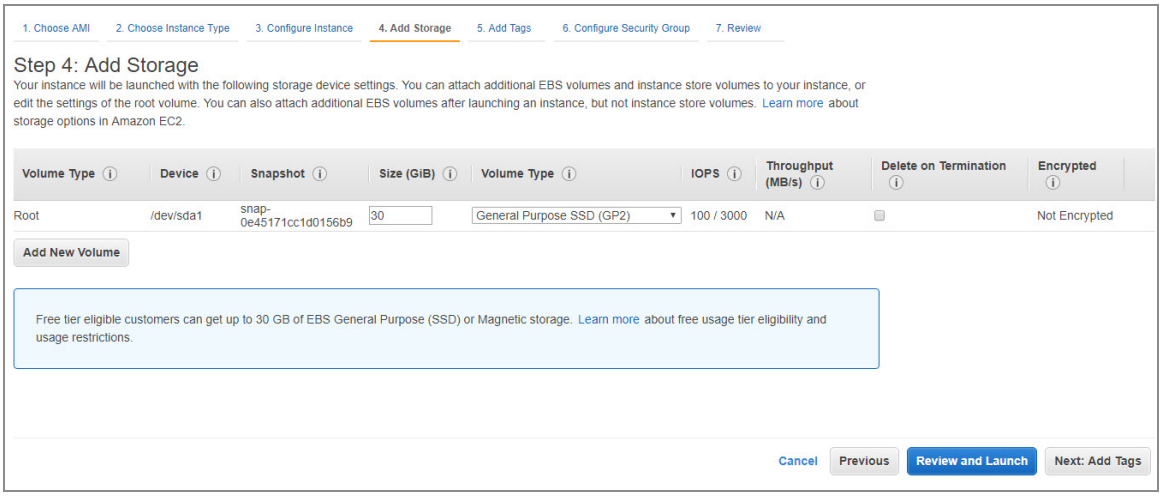
  > **Note:** IAM role must have permission for action `aws-marketplace:MeterUsuage`.

- Shutdown behavior
- Enable termination protection
- Monitoring
- Tenancy

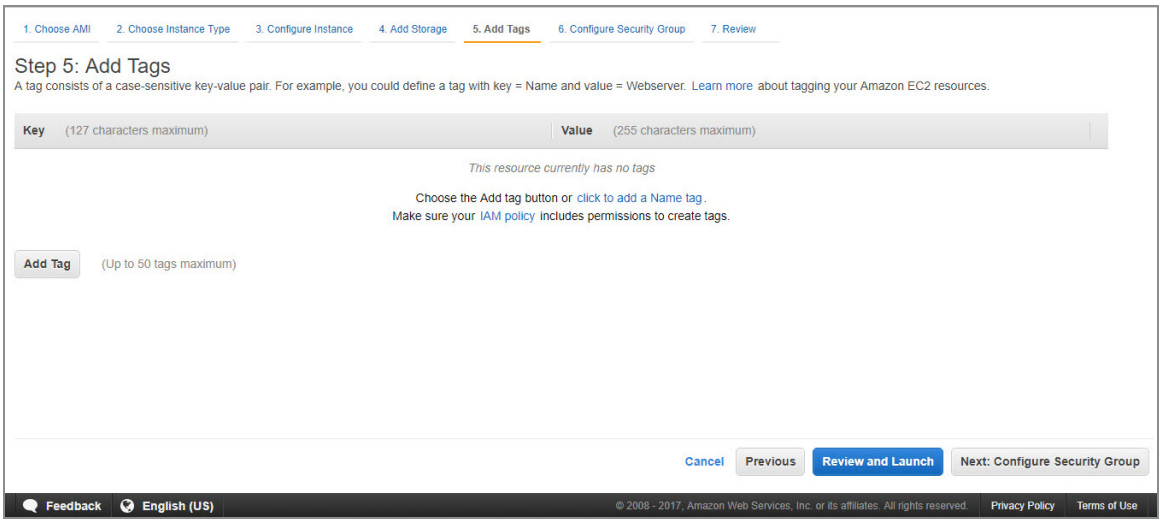
10. Expand the **Network interfaces** section, where you can attach one or more network interface to your instance during launch.
11. Expand the **Advanced Details** section and fill out the **User data** field if required.



12. Click **Next: Add Storage** and review the storage details. You can add Elastic Block Store and instance store volumes by clicking the **Add New Volume** button.

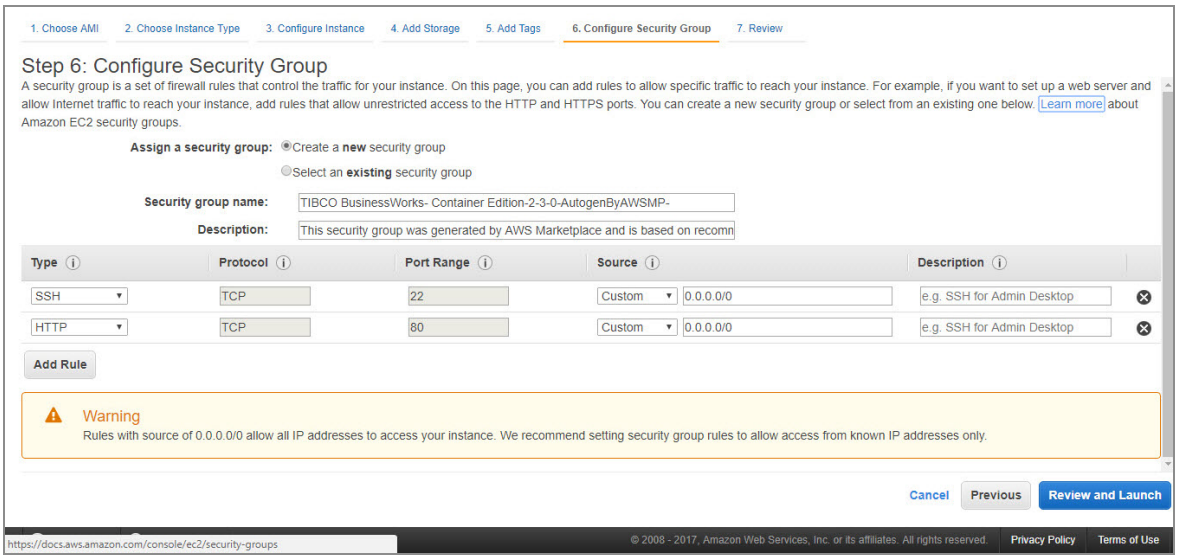


13. Click **Next: Tag Instance** and add optional tags. To add more tags, click the **Create Tag** button.



Note: A tag is a key or value pair that flows to resources inside your stack. You can add up to 10 unique tags to each instance.

14. Click **Next: Configure Security Group** and configure your firewall rules. Choose an existing security group or create a new security group.



15. Click **Review and Launch**. Review your information and edit if necessary.
16. Click **Launch**.

    A message is displayed, informing you that the instance is now launching. Your

instances might take a few minutes to launch, depending on the software you are running.

17. Click **Close**.

Running TIBCO BusinessWorks Container Edition Application on Standanlone EC2

You can run a TIBCO BusinessWorks Container Edition application on standalone EC2 instance using Single AMI.

Before you begin

1. Run the following command to install required packages for Docker.

```
sudo yum install -y yum-utils device-mapper-persistent-data lvm2
```

2. Run the following command to set up stable repository.

```
sudo yum-config-manager --add-repo
https://download.docker.com/linux/centos/docker-ce.repo
```

Procedure

1. Log in to EC2 instance of TIBCO Cloud™ Integration - BusinessWorks™ created by launching Single AMI.
2. Run the following command to install Docker:

```
sudo yum -y install docker-ce
```

3. Run the following command to start Docker container:

```
sudo systemctl start docker
```

> **Note:** The scripts for creating Docker image for TIBCO Cloud™ Integration - BusinessWorks™ are available at `/home/ec2-user/bwce/bwce-docker/`.

4. Run the following command to manage Docker as non-root user:

```
sudo usermod -aG docker $USER
```

5. Copy the required artifacts at `/home/ec2-user/bwce/bwce-docker/resources/addons/` (certs, jars, lib, monitoring-agents, plugins, thirdparty-installs) location if you want to extend TIBCO BusinessWorks Container Edition base image.
6. Run the following command to create TIBCO Cloud™ Integration - BusinessWorks™ Docker image at `/home/ec2-user/bwce/bwce-docker/ run` location:

```
./createDockerImage.sh /home/ec2-user/bwce/bwce-
runtime/bwceruntime-aws-<version>.zip tibco/bwce:<version>
```

7. Run the following command to create the application image:

```
docker build -t http-app .
```

> **Note:** You can build the TIBCO Cloud™ Integration - BusinessWorks™ applicaiton image on top of `tibco/bwce:<version>` image.

8. Run the application image using the following command:

```
docker run -i -d -p 8080:8080 http-app
```

For more information about running application on Docker, see of *TIBCO BusinessWorks Container Edition Samples* guide.

Launching CloudFormation Template to Set up AWS ECS Cluster

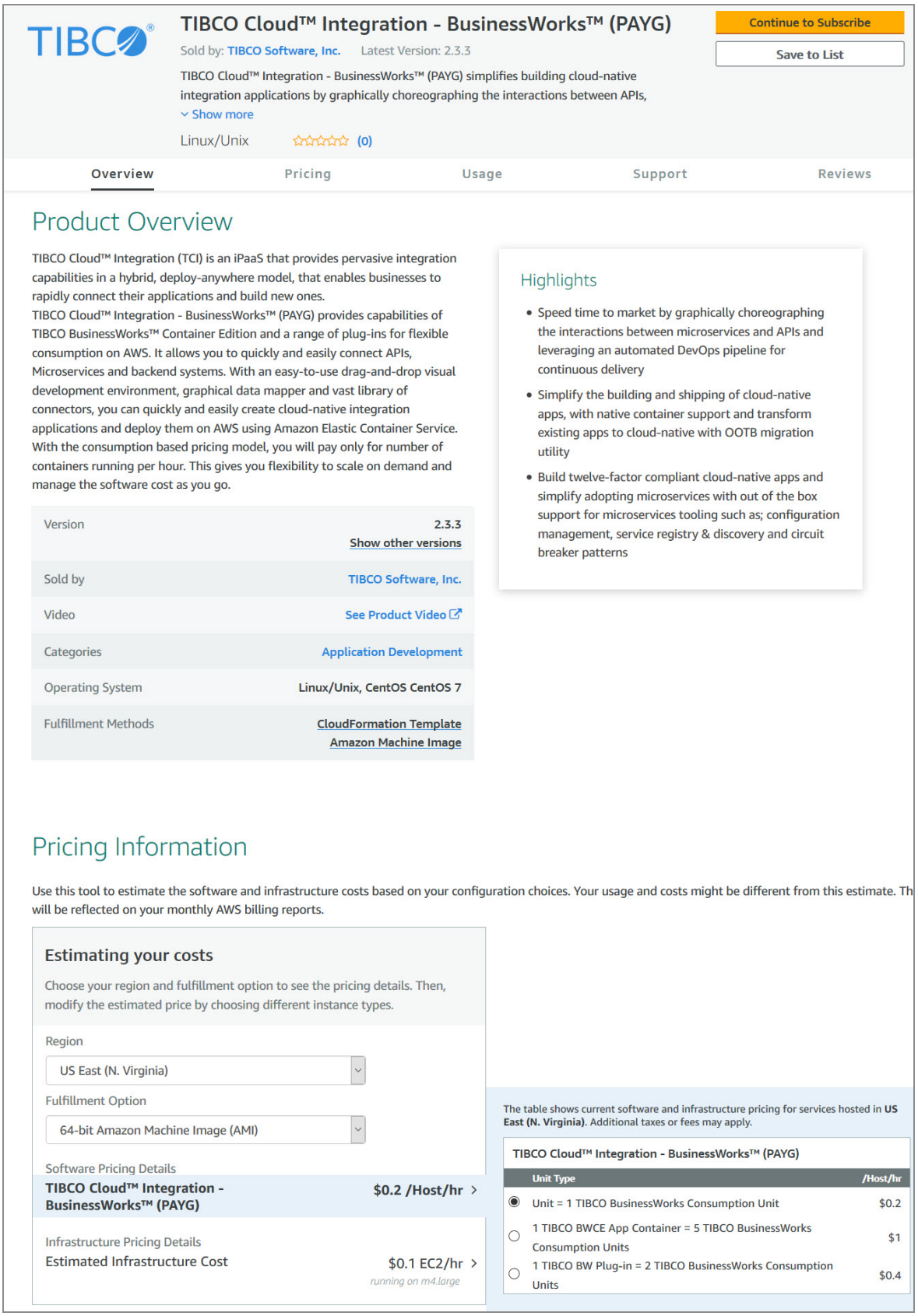
CloudFormation template creates a CloudFormation Stack, which builds a base TIBCO Cloud™ Integration - BusinessWorks™ and Plug-ins docker image, creates an ECR repository with name 'tibco-bwce', and pushes base docker image into the ECR repository. It then deploys a VPC with a pair of public and private subnets spread across two availability zones. It deploys an Internet Gateway with a default route on the public subnets. It deploys a pair of NAT Gateways (one in each AZ) and default routes for them in the private subnets. It then deploys a highly available ECS cluster of EC2 instances (ECS Hosts) launched from the TIBCO BWCE AMI in an AutoScaling Group, with the EC2 instances distributed across multiple Availability Zones. This template also provides you an option to create an Amazon S3 bucket and folder structure inside the bucket required for base docker image customization.

Before you begin

Ensure that you have subscribed to TIBCO Cloud™ Integration - BusinessWorks™ and Plug-ins on AWS Marketplace. For more information, see Subscribing TIBCO Cloud™ Integration - BusinessWorks™.

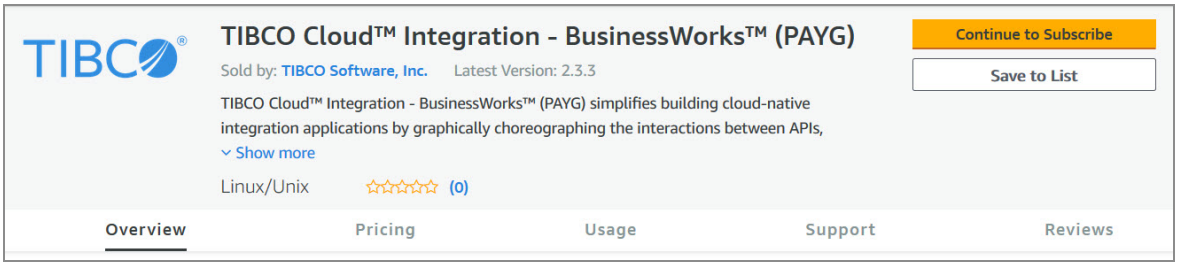
Procedure

1. Open the TIBCO Cloud™ Integration - BusinessWorks™ web page.
2. In the **Pricing Information** section, select the region, where you want to make the software available and specify the delivery method as **Setup ECS Cluster**.

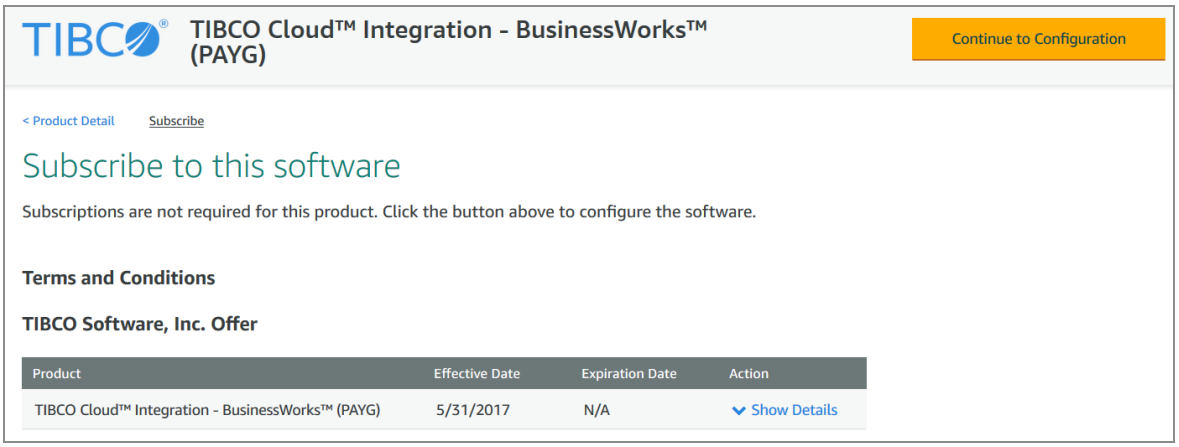

TIBCO Cloud™ Integration - BusinessWorks™ (PAYG)
Sold by: TIBCO Software, Inc. Latest Version: 2.3.3
TIBCO Cloud™ Integration - BusinessWorks™ (PAYG) simplifies building cloud-native integration applications by graphically choreographing the interactions between APIs,
Show more
Linux/Unix (0)
Continue to Subscribe
Save to List
Overview
Pricing
Usage
Support
Reviews
Product Overview
TIBCO Cloud™ Integration (TCI) is an iPaaS that provides pervasive integration capabilities in a hybrid, deploy-anywhere model, that enables businesses to rapidly connect their applications and build new ones.
TIBCO Cloud™ Integration - BusinessWorks™ (PAYG) provides capabilities of TIBCO BusinessWorks™ Container Edition and a range of plug-ins for flexible consumption on AWS. It allows you to quickly and easily connect APIs, Microservices and backend systems. With an easy-to-use drag-and-drop visual development environment, graphical data mapper and vast library of connectors, you can quickly and easily create cloud-native integration applications and deploy them on AWS using Amazon Elastic Container Service. With the consumption based pricing model, you will pay only for number of containers running per hour. This gives you flexibility to scale on demand and manage the software cost as you go.
Highlights
Speed time to market by graphically choreographing the interactions between microservices and APIs and leveraging an automated DevOps pipeline for continuous delivery
Simplify the building and shipping of cloud-native apps, with native container support and transform existing apps to cloud-native with OOTB migration utility
Build twelve-factor compliant cloud-native apps and simplify adopting microservices with out of the box support for microservices tooling such as; configuration management, service registry & discovery and circuit breaker patterns
Version 2.3.3
Show other versions
Sold by TIBCO Software, Inc.
Video See Product Video
Categories Application Development
Operating System Linux/Unix, CentOS CentOS 7
Fulfillment Methods CloudFormation Template
Amazon Machine Image
Pricing Information
Use this tool to estimate the software and infrastructure costs based on your configuration choices. Your usage and costs might be different from this estimate. Th
will be reflected on your monthly AWS billing reports.
Estimating your costs
Choose your region and fulfillment option to see the pricing details. Then, modify the estimated price by choosing different instance types.
Region
US East (N. Virginia)
Fulfillment Option
64-bit Amazon Machine Image (AMI)
Software Pricing Details
TIBCO Cloud™ Integration - BusinessWorks™ (PAYG)
$0.2 /Host/hr
Infrastructure Pricing Details
Estimated Infrastructure Cost
$0.1 EC2/hr
running on m4.large
The table shows current software and infrastructure pricing for services hosted in US East (N. Virginia). Additional taxes or fees may apply.
TIBCO Cloud™ Integration - BusinessWorks™ (PAYG)
Unit Type
/Host/hr
Unit = 1 TIBCO BusinessWorks Consumption Unit
$0.2
1 TIBCO BWCE App Container = 5 TIBCO BusinessWorks Consumption Units
$1
1 TIBCO BW Plug-in = 2 TIBCO BusinessWorks Consumption Units
$0.4

> **Note:** Ensure that the ECS is supported in some regions only. For more information, see Region Table.

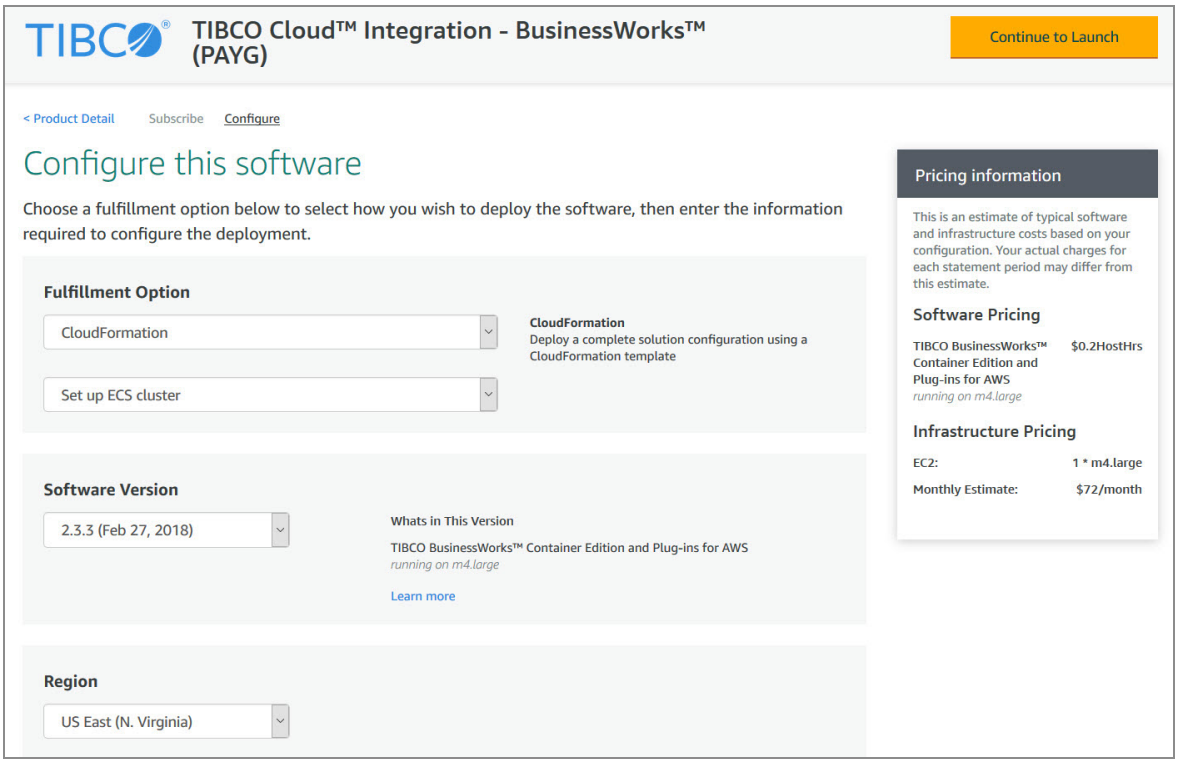
3. Click **Continue** to go to the Launch page.



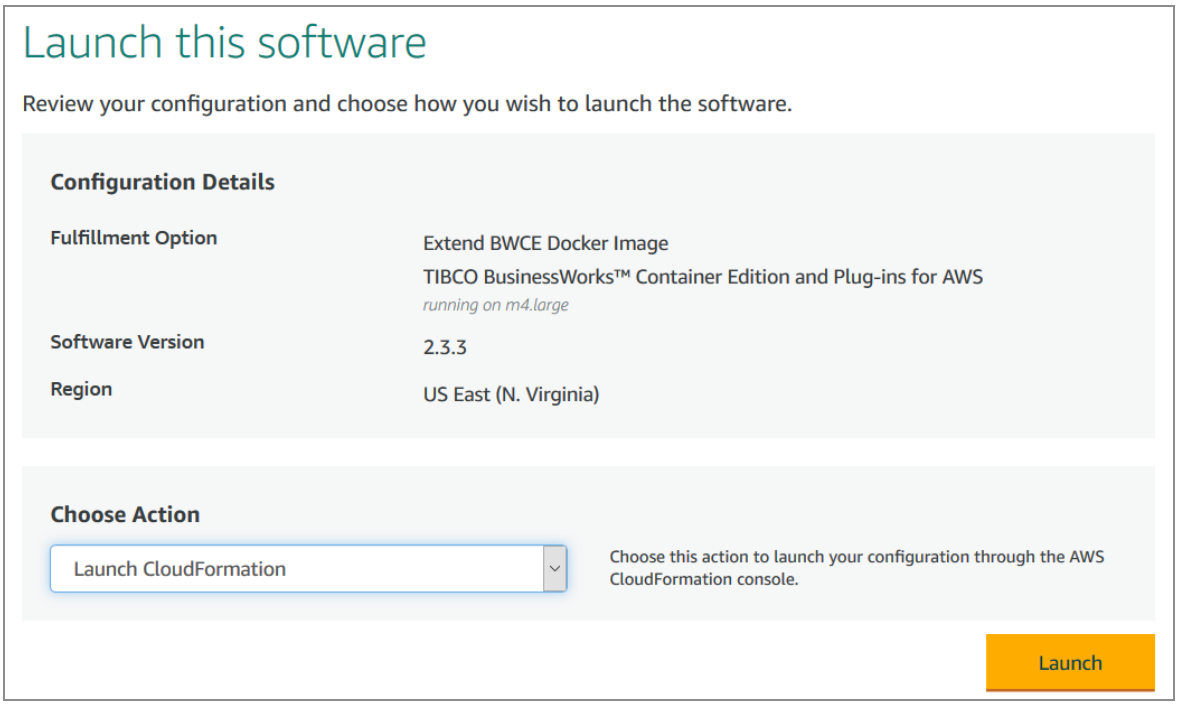
4. To configure the application, click **Continue to Configuration**.



5. Select a fulfillment option as **Cloud Formation** and **Set up ECS Cluster**, **Software Version**, and **Region** to launch the EC2 instance from the AMI.

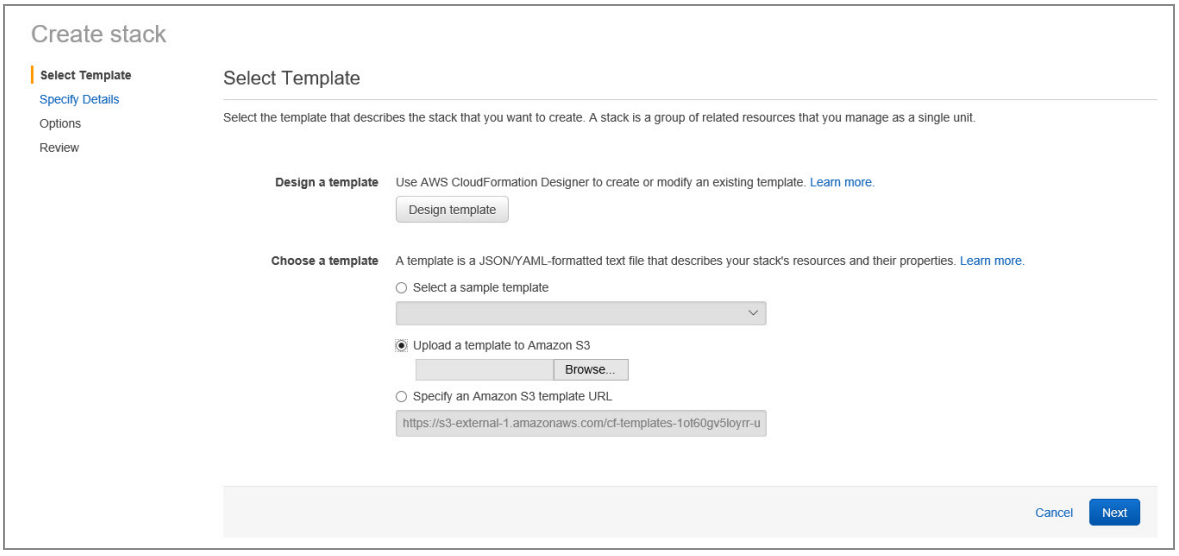


6. To launch your configuration through the Cloud Formation, select **Launch Cloud Formation**, and click **Launch**.

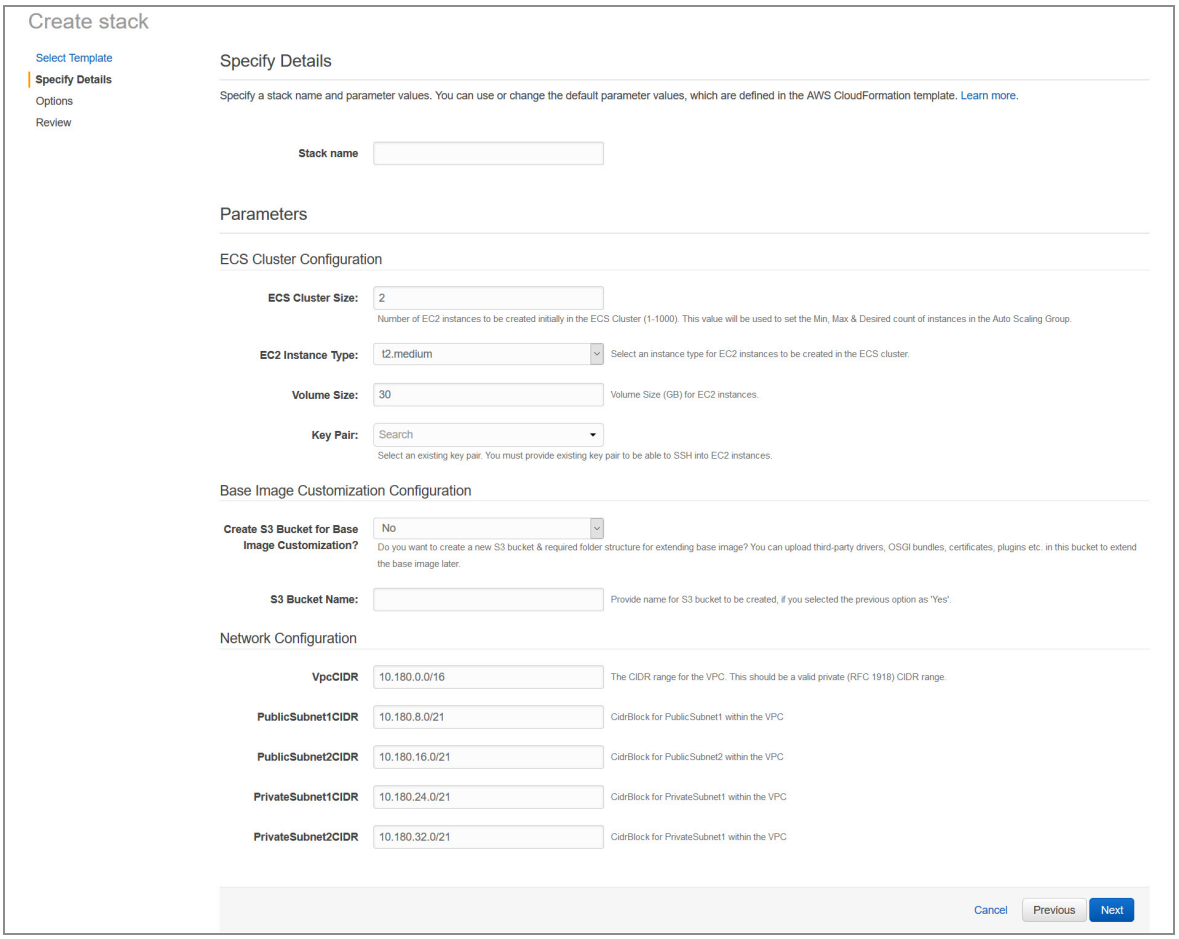


The Select Template page is displayed.

Note: By default, AWS provides a template source URL. Do not change this.



7. Click **Next**. The Specify Details page is displayed.



8. In the **Stack Name** field, give a unique name to your CloudFormation stack .

> **Note: Stack name must not exceed 24 characters.**

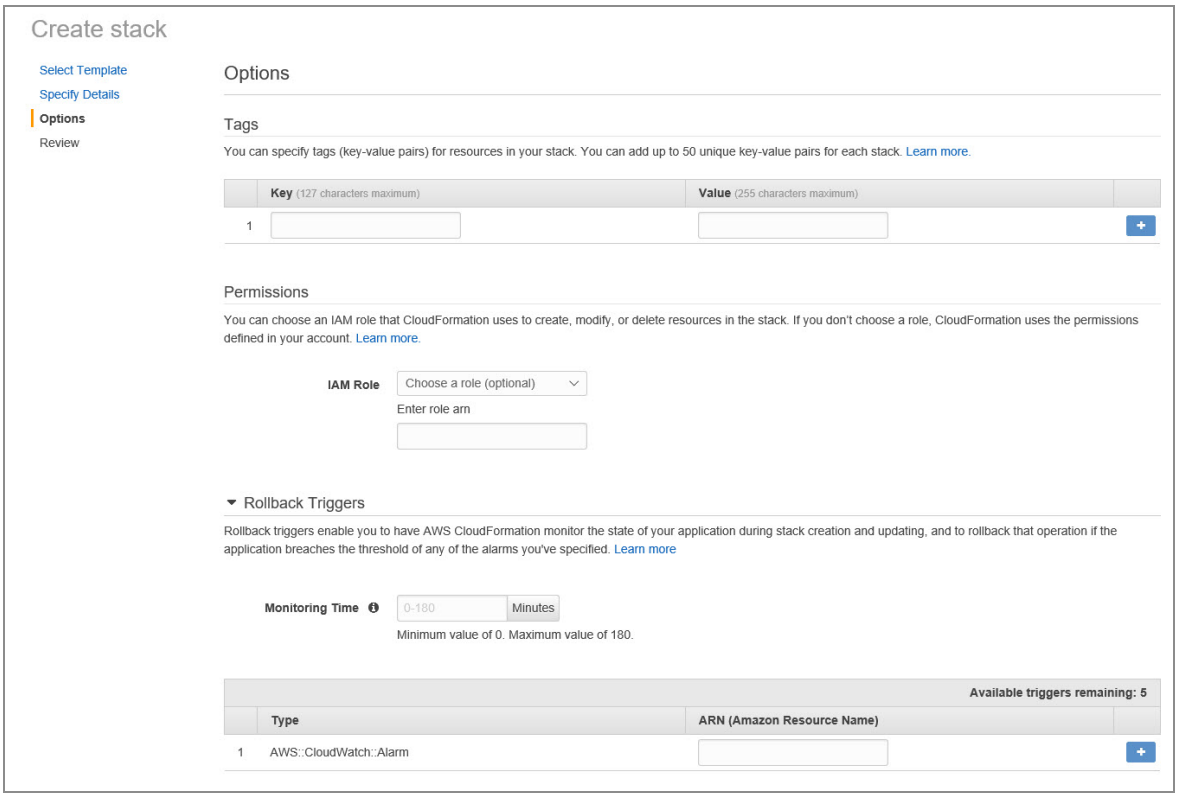
9. In the **ECS Cluster Size** field, enter the number of ECS hosts you want to deploy.
10. Select an appropriate **EC2 InstanceType** for the ECS Cluster from the drop-down list.

> **Note:** Performance might vary based on system attributes such as network bandwidth, memory requirements for a given use case and query requirements. For more information about EC2 instance types, see AWS documentation.

11. In the **Key Pair** field (optional), enter an existing key pair name for SSH access to the ECS instance.

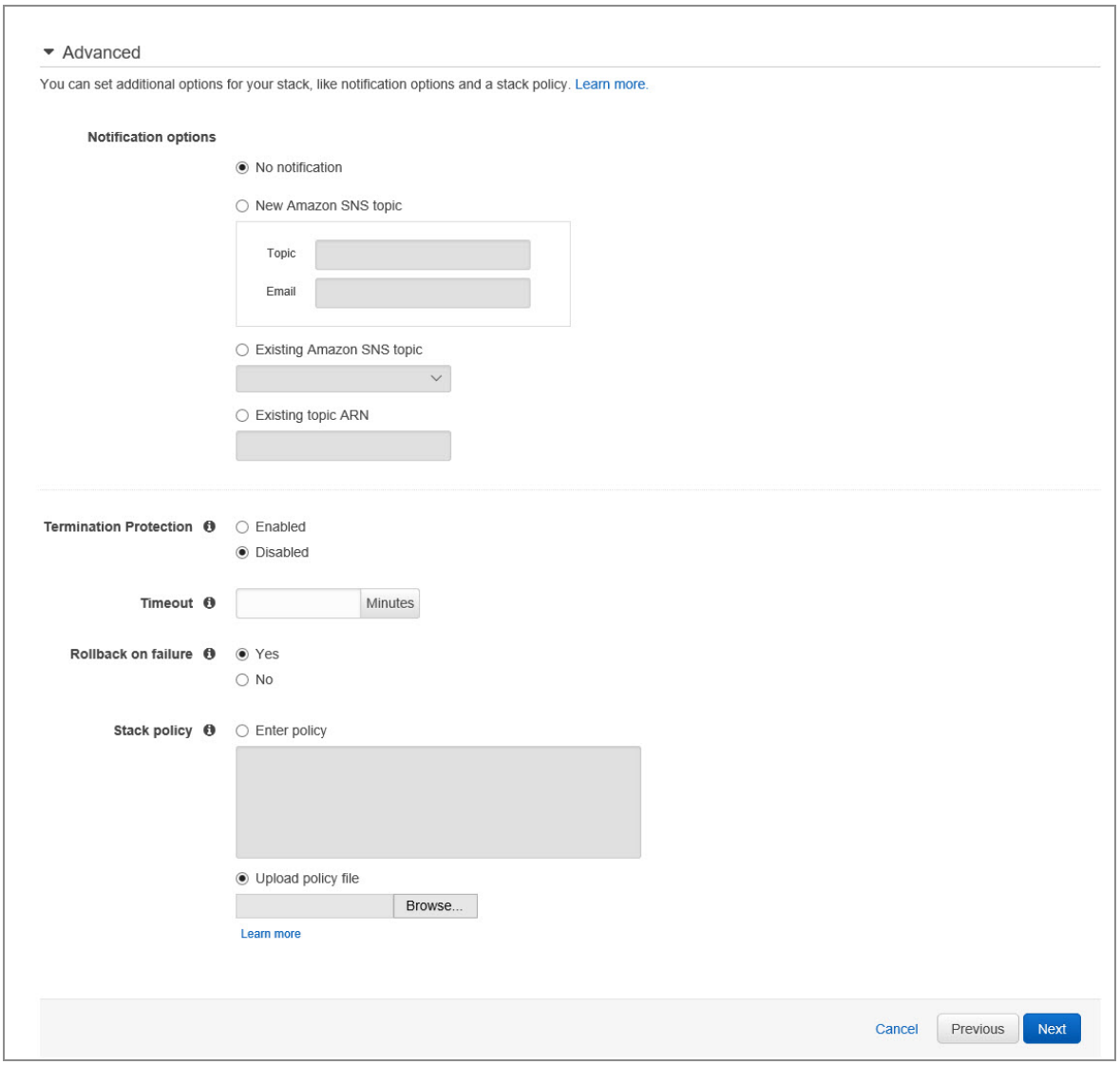
12. Select **Yes** to **Create S3 Bucket for Base Image Customization** and specify **S3 Bucket Name**.
    a. After the Stack is in `CREATE_COMPLETE` state, an S3 Bucket is created with the user provided name.
    b. The S3 Bucket consist of following folders:
        - /certs
        - /jars
        - /lib
        - /monitor-agents
        - /plugins
        - /thirdparty-installs
    c. Before running the Extend TIBCO Cloud™ Integration - BusinessWorks™ Docker Image CloudFormation template, you must copy required artifacts (optional) in respective folders in the S3 bucket.
        - Copy certificates to the `/certs` folder.
        - Copy additional OSGi bundle jars (jars required by plugins, DB drivers, MQ jars etc.) to the `/jars` folder.
        - Copy additional libraries to the `/lib` folder.
        - Copy TIBCO Cloud™ Integration - BusinessWorks™ monitoring agent jar to /the `monitor-agents` folder.
        - Copy TIBCO Cloud™ Integration - BusinessWorks™ supported plug-in runtime zip files to the `/plugins` folder.
        - Copy thirdparty installation zip to the `/thirdparty-installs` folder.
    d. Configure the network by providing the CIDR IP range for VPC, public and private subnets. By default, the values are provided.
13. Click **Next**. The Options page is displayed.
14. Specify tags (key-value pairs) for resources in your stack and select the **IAM Role** to create, modify, or delete resources from the stack. You can also set the amount of monitoring time, during which CloudFormation monitor all rollback triggers after the

stack creation or update operation deployed on all necessary resources.

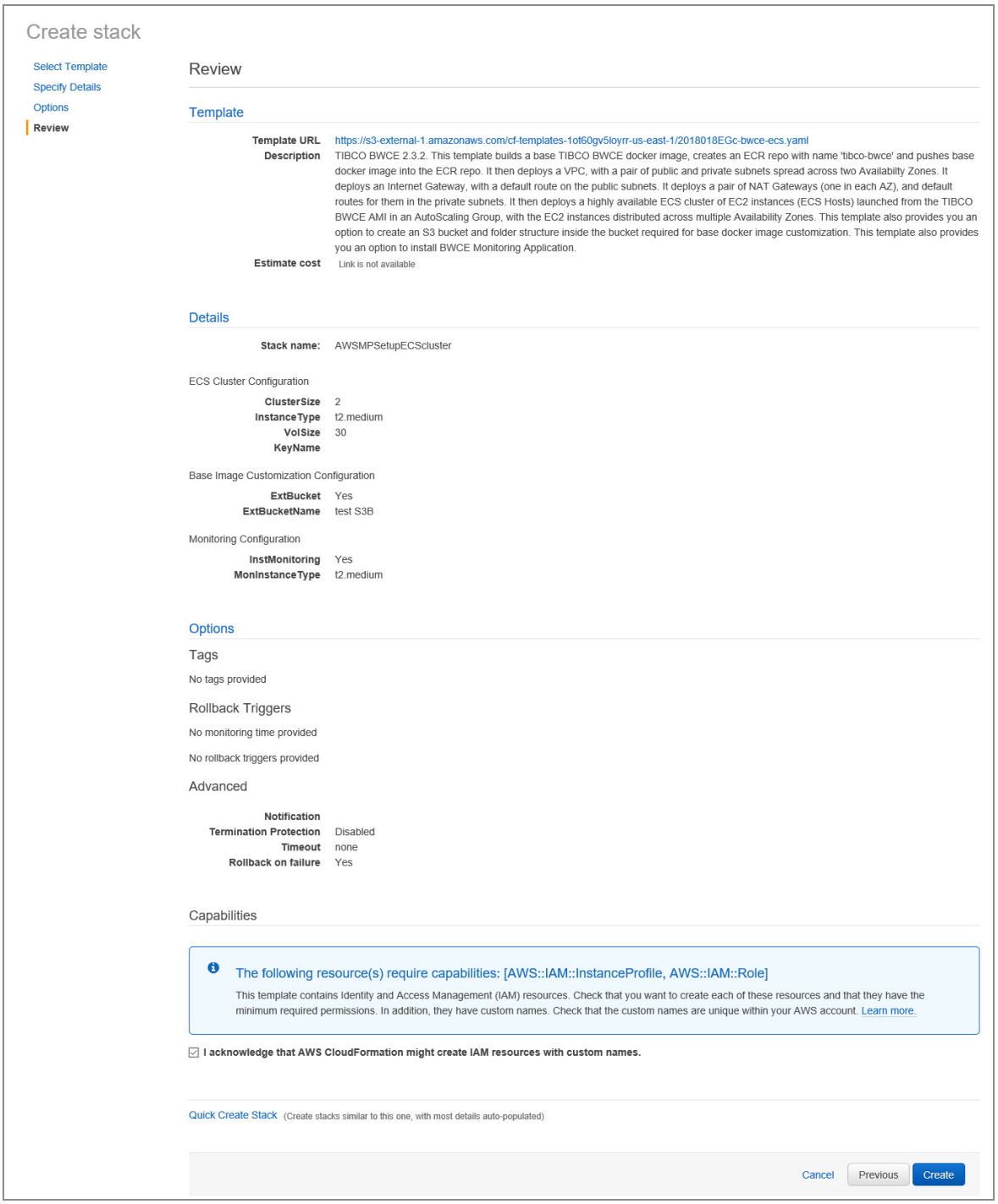


Note: A tag consists of a key or value pair that flows to resources inside your stack. You can add up to 10 unique tags for each instance.

15. Expand the **Advanced** section of the Options page and set your notification, timeout, and other options, if required. Click the **Learn more** link for an explanation of these options.

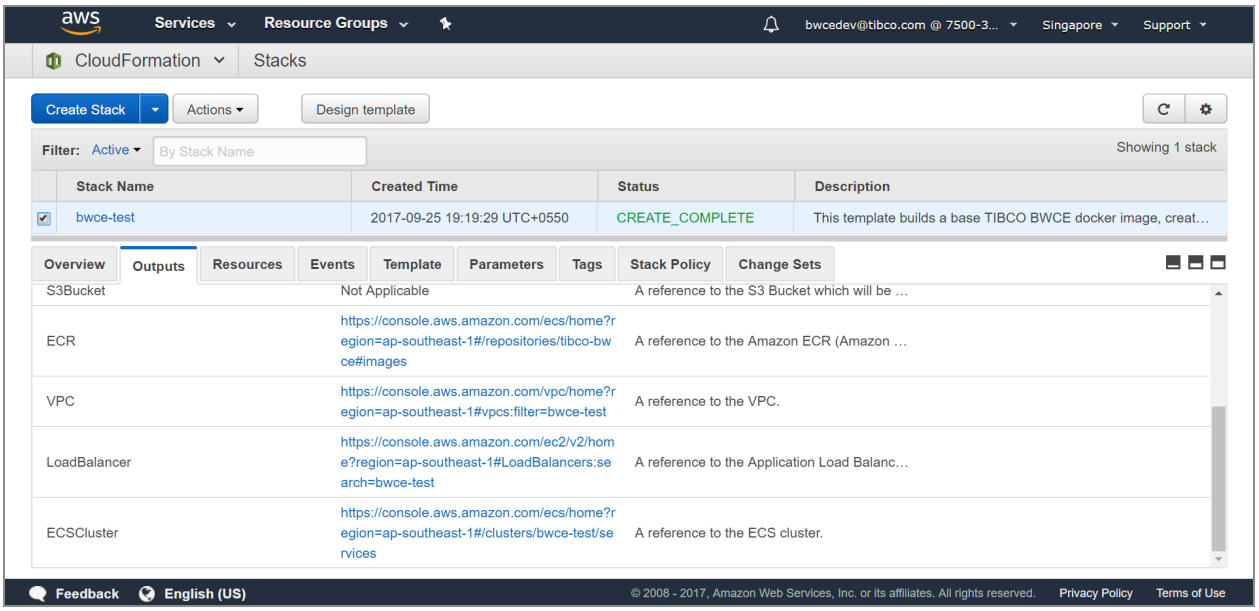


16. Click **Next**. The Review page is displayed.
17. Click the **acknowledgment** check box and click **Create**.



Result

You see your Stack Name listed in a table. While it is being created, the Status column is displays the status as `CREATE_IN_PROGRESS`. After a few minutes the status should change to `CREATE_COMPLETE`. After the Stack is in `CREAT_COMPLETE` state, the **Outputs tab** contains the URL for various AWS resources created as part of the Stack.



Launching CloudFormation Template to Create and Extend TIBCO BusinessWorks Container Edition Base Docker Image

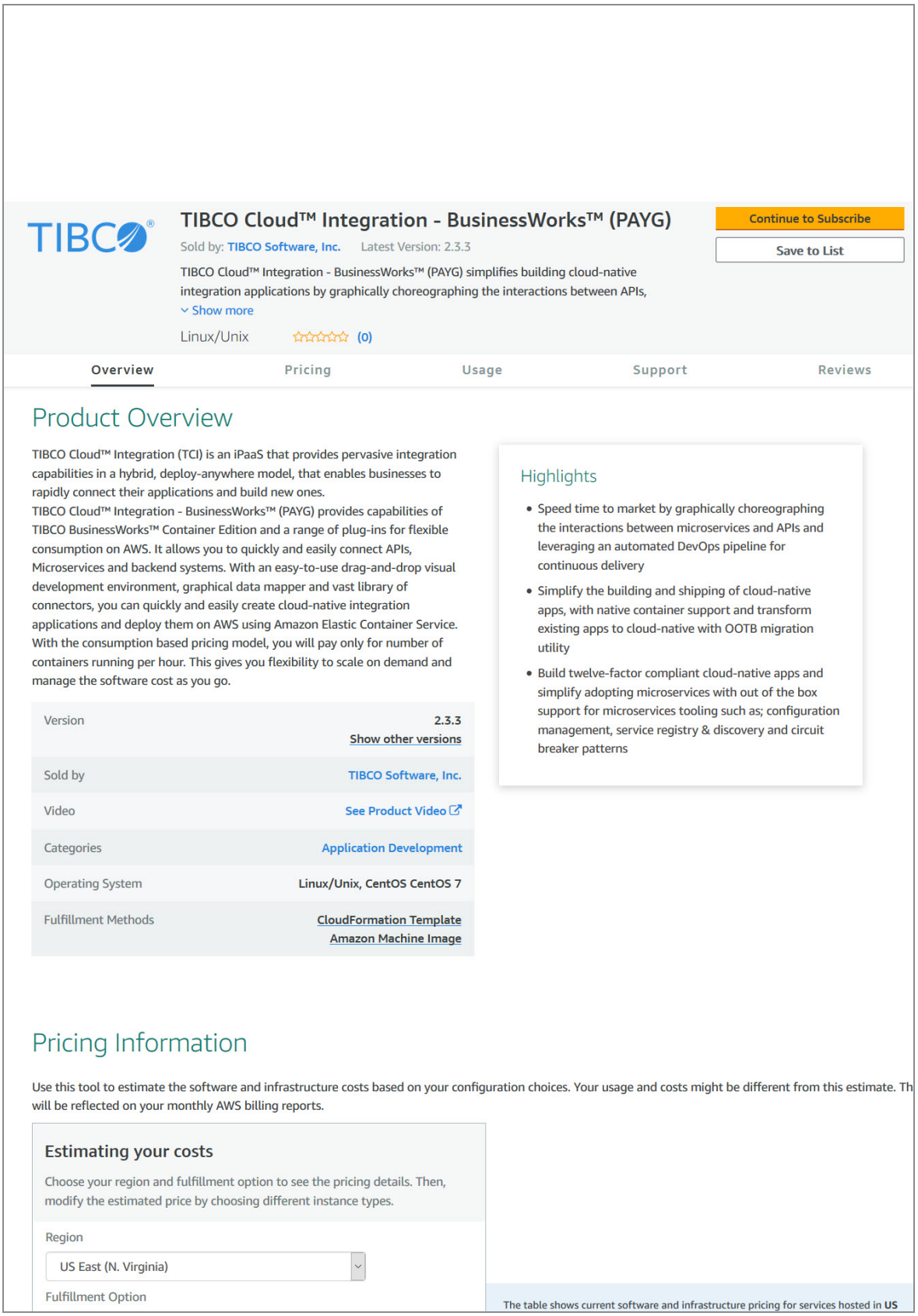
The CloudFormation template creates new ECR repository and pushes TIBCO BusinessWorks Container Edition base docker image into the repository. You can use it to extend the base docker image. If you provide S3 Bucket Name, the template adds all resources uploaded in the S3 bucket to the base image. If you provide the list of plug-ins, the template adds specified BusinessWorks Plug-ins runtime artifacts to the base image. In case, you select **Do you want to push Business Studio and BusinessWorks Plug-ins installer to S3** as **Yes** and provide **S3 Bucket Name**, the TIBCO Business Studio™ for BusinessWorks™ and Business works Plug-ins installer is copied to the S3 bucket.

Before you begin

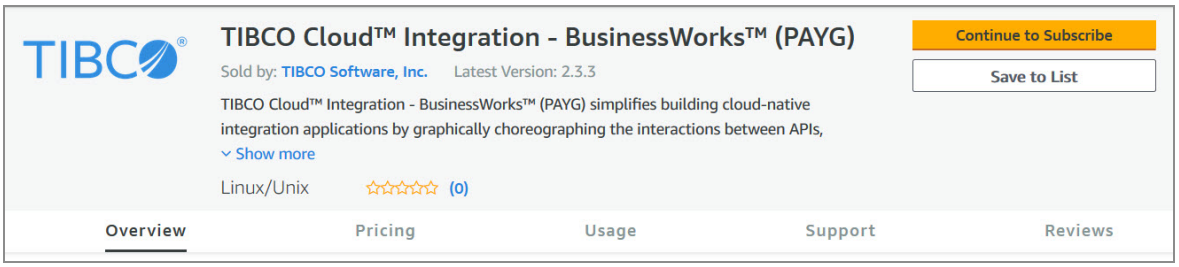
Ensure that you have subscribed to TIBCO Cloud™ Integration - BusinessWorks™ on AWS Marketplace. Refer Subscribing to TIBCO Cloud™ Integration - BusinessWorks™.

Procedure

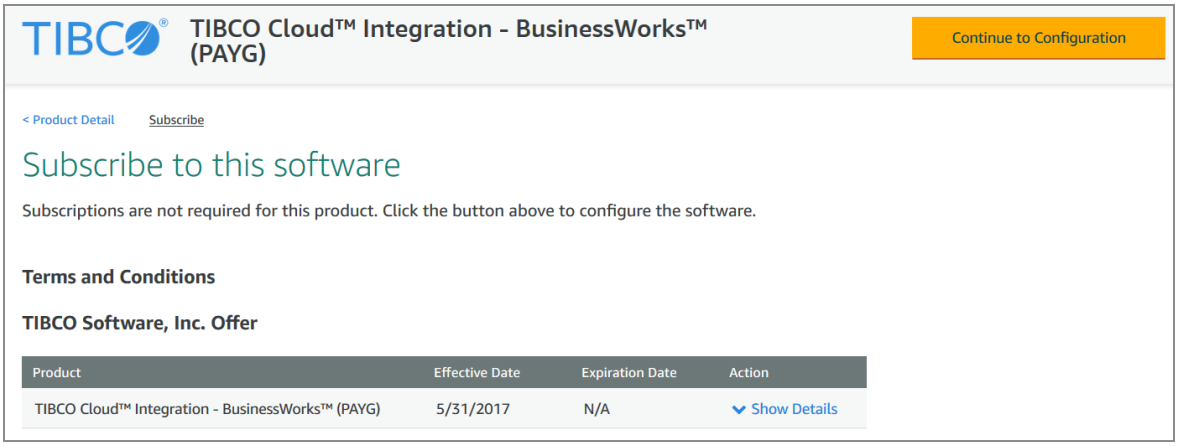
1. Open the TIBCO Cloud™ Integration - BusinessWorks™ webpage.
2. Select the region, where you want to make the software available and select the delivery method as **Extend BWCE Docker Image** from the drop-down list.


TIBCO Cloud™ Integration - BusinessWorks™ (PAYG)
Sold by: TIBCO Software, Inc. Latest Version: 2.3.3
TIBCO Cloud™ Integration - BusinessWorks™ (PAYG) simplifies building cloud-native integration applications by graphically choreographing the interactions between APIs,
Show more
Linux/Unix
(0)
Continue to Subscribe
Save to List
Overview
Pricing
Usage
Support
Reviews
Product Overview
TIBCO Cloud™ Integration (TCI) is an iPaaS that provides pervasive integration capabilities in a hybrid, deploy-anywhere model, that enables businesses to rapidly connect their applications and build new ones.
TIBCO Cloud™ Integration - BusinessWorks™ (PAYG) provides capabilities of TIBCO BusinessWorks™ Container Edition and a range of plug-ins for flexible consumption on AWS. It allows you to quickly and easily connect APIs, Microservices and backend systems. With an easy-to-use drag-and-drop visual development environment, graphical data mapper and vast library of connectors, you can quickly and easily create cloud-native integration applications and deploy them on AWS using Amazon Elastic Container Service. With the consumption based pricing model, you will pay only for number of containers running per hour. This gives you flexibility to scale on demand and manage the software cost as you go.
Version
2.3.3
Show other versions
Sold by
TIBCO Software, Inc.
Video
See Product Video
Categories
Application Development
Operating System
Linux/Unix, CentOS CentOS 7
Fulfillment Methods
CloudFormation Template
Amazon Machine Image
Highlights
Speed time to market by graphically choreographing the interactions between microservices and APIs and leveraging an automated DevOps pipeline for continuous delivery
Simplify the building and shipping of cloud-native apps, with native container support and transform existing apps to cloud-native with OOTB migration utility
Build twelve-factor compliant cloud-native apps and simplify adopting microservices with out of the box support for microservices tooling such as; configuration management, service registry & discovery and circuit breaker patterns
Pricing Information
Use this tool to estimate the software and infrastructure costs based on your configuration choices. Your usage and costs might be different from this estimate. Th
will be reflected on your monthly AWS billing reports.
Estimating your costs
Choose your region and fulfillment option to see the pricing details. Then, modify the estimated price by choosing different instance types.
Region
US East (N. Virginia)
Fulfillment Option
The table shows current software and infrastructure pricing for services hosted in US

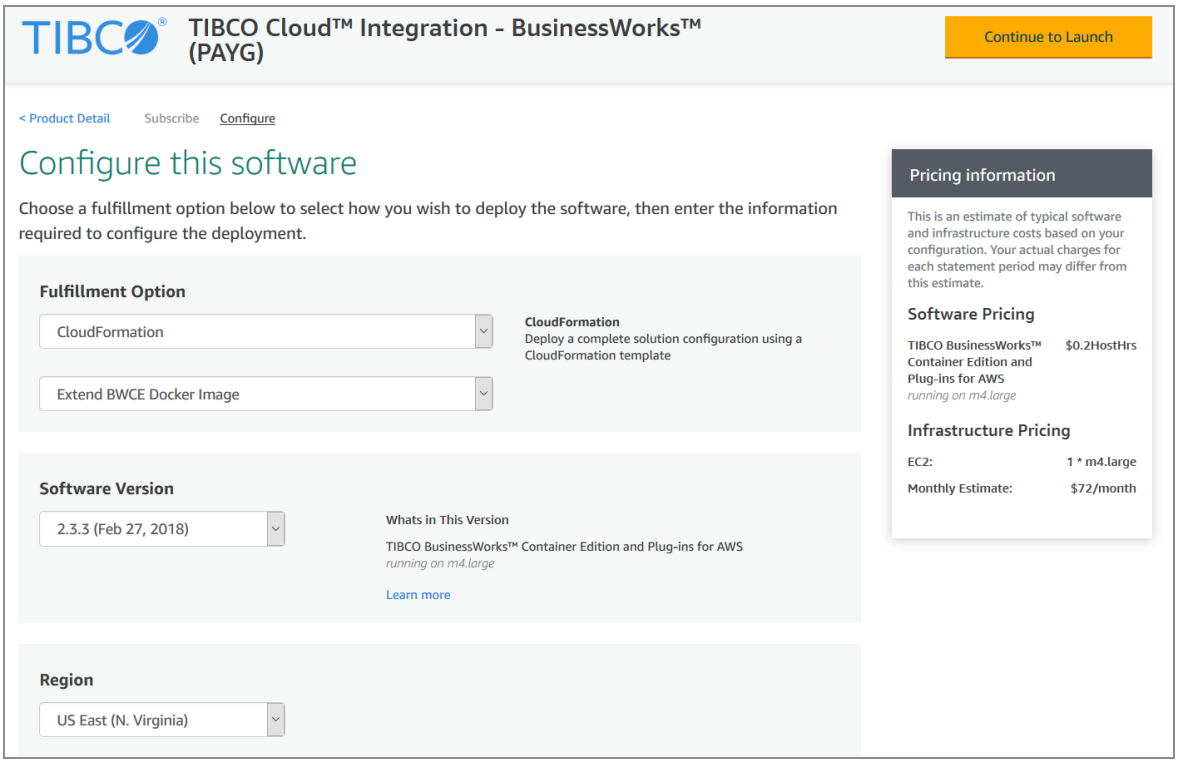
3. Click **Continue** to go to the Launch page.



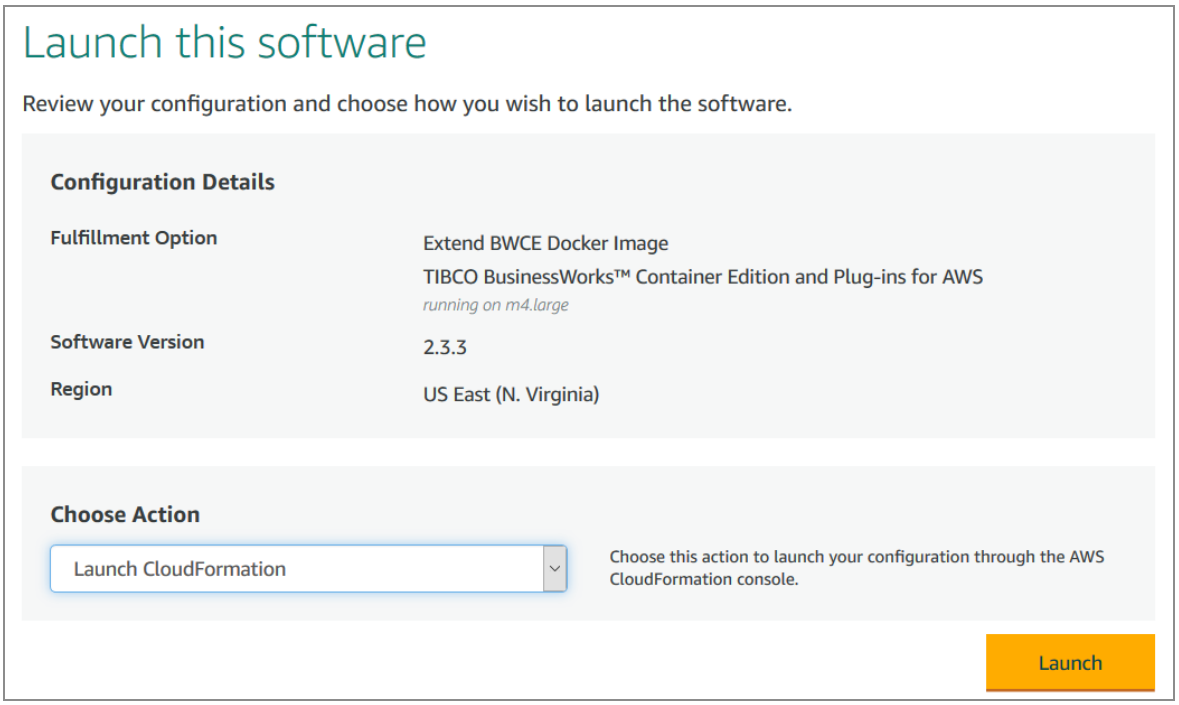
4. To configure the application, click **Continue to Configuration**.



5. Select the fulfillment options as **Cloud Formation** and **Extend BWCE Docker Image**. Select the **Software Version** and **Region** to launch the EC2 instance from the AMI.

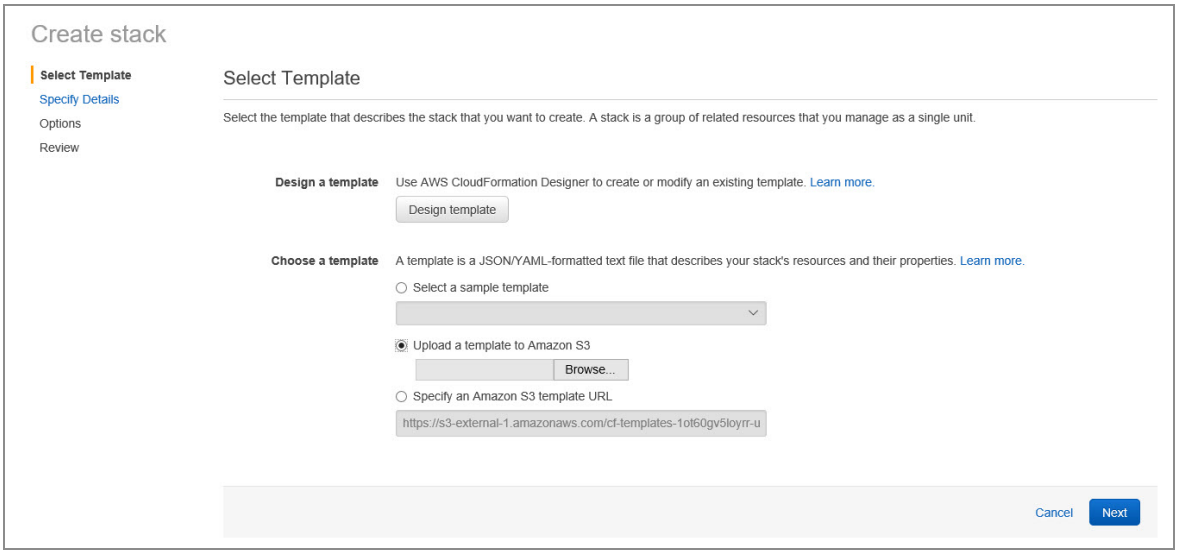


6. To launch your configuration through the Cloud Formation, Select **Launch Cloud Formation** and click **Launch**.

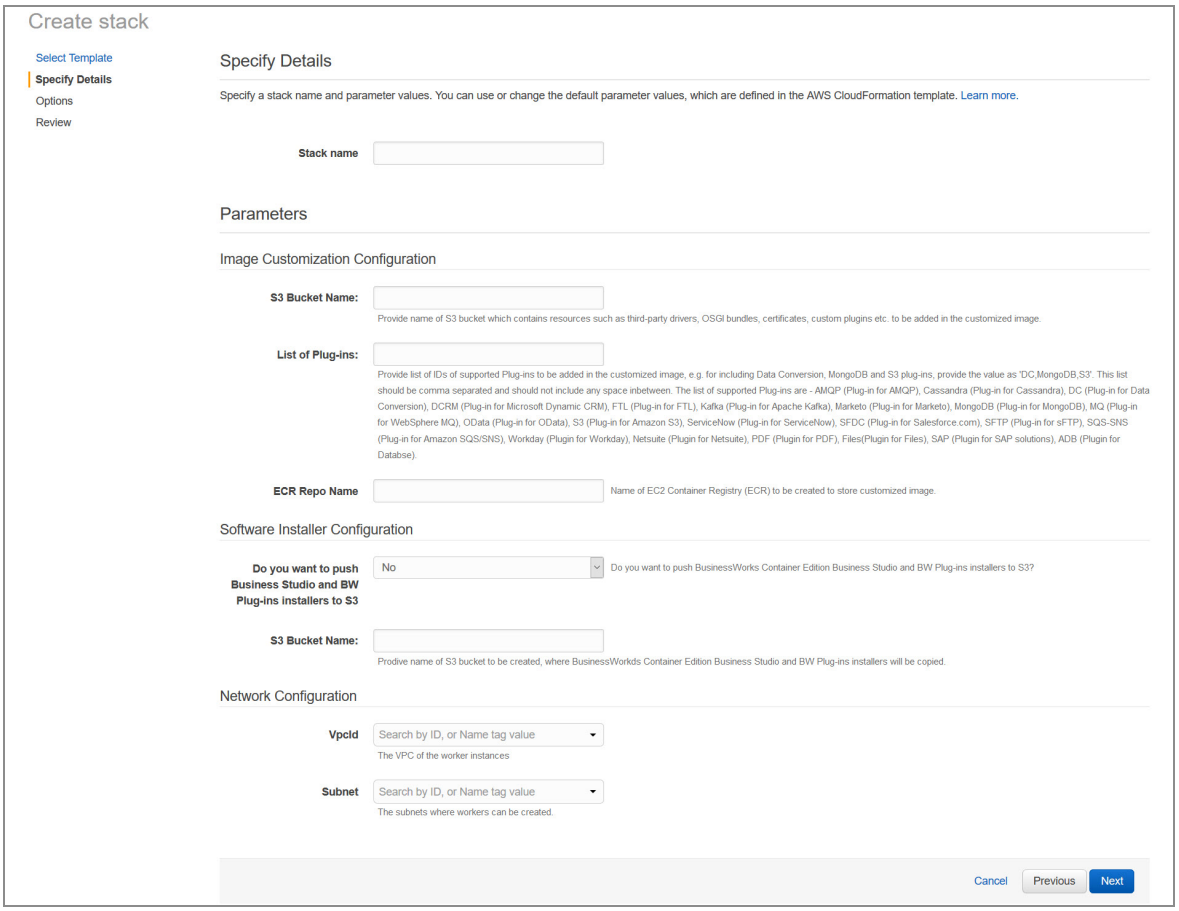


The Select Template page is displayed.

Note: By default, AWS provides a template source URL. Do not change this.



7. Click **Next**. The Specify Details page is displayed.



8. In the **Stack Name** field, give a unique name to your CloudFormation stack .
9. In **S3 Bucket Name** field, provide the bucket name from where the artifacts are included in the customized base image.
10. Provide list of IDs of supported Plug-ins to be added in the customized image. For more information, refer Supported Plug-ins.

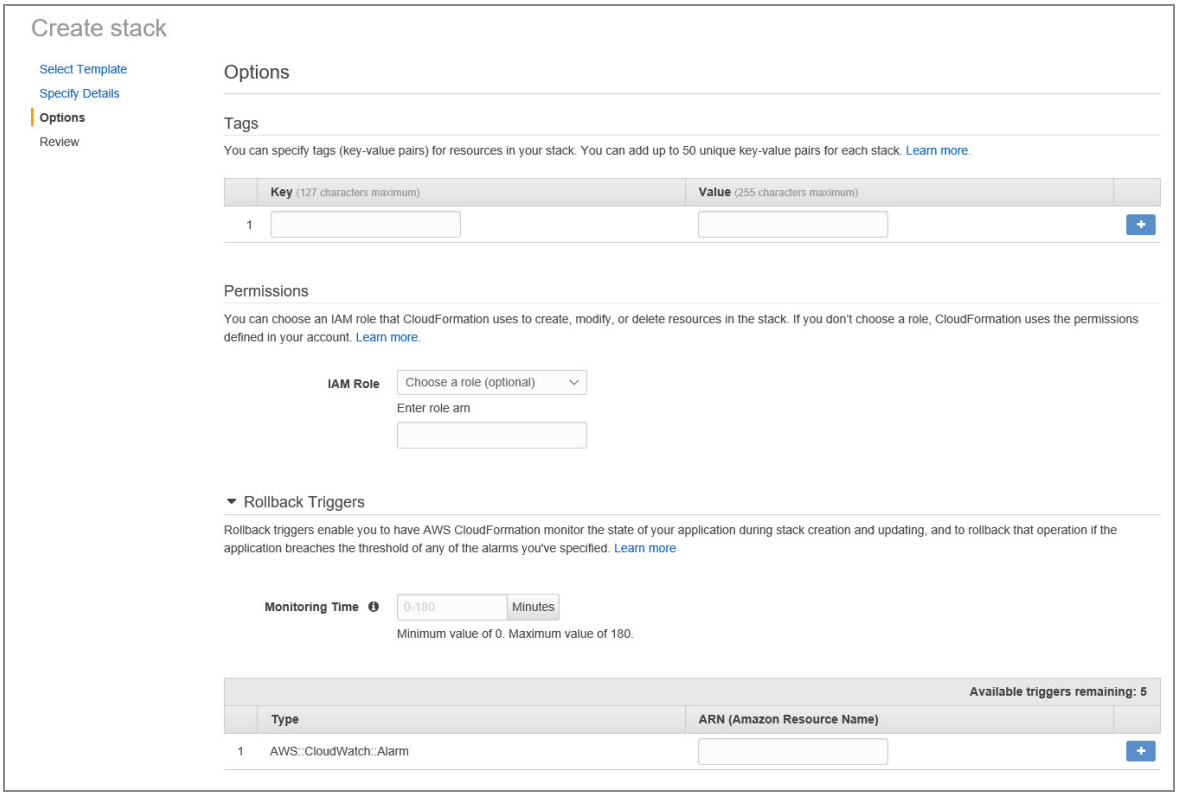
> **Note:** The list of plug-ins is case sensitive and must be comma separated with no space in between. This field is not available for TIBCO Cloud™ Integration - BusinessWorks™ (BYOL). You need to download the plug-in installer from the edelivery site and upload it to the plug-in S3 bucket.

11. In the **ECR Repo Name** field, enter the name of EC2 Container Registry (ECR) to be created to store the customized image.
12. Select **Yes** to push Business Studio and BW Plug-ins installers to S3 and specify **S3**

Bucket Name.

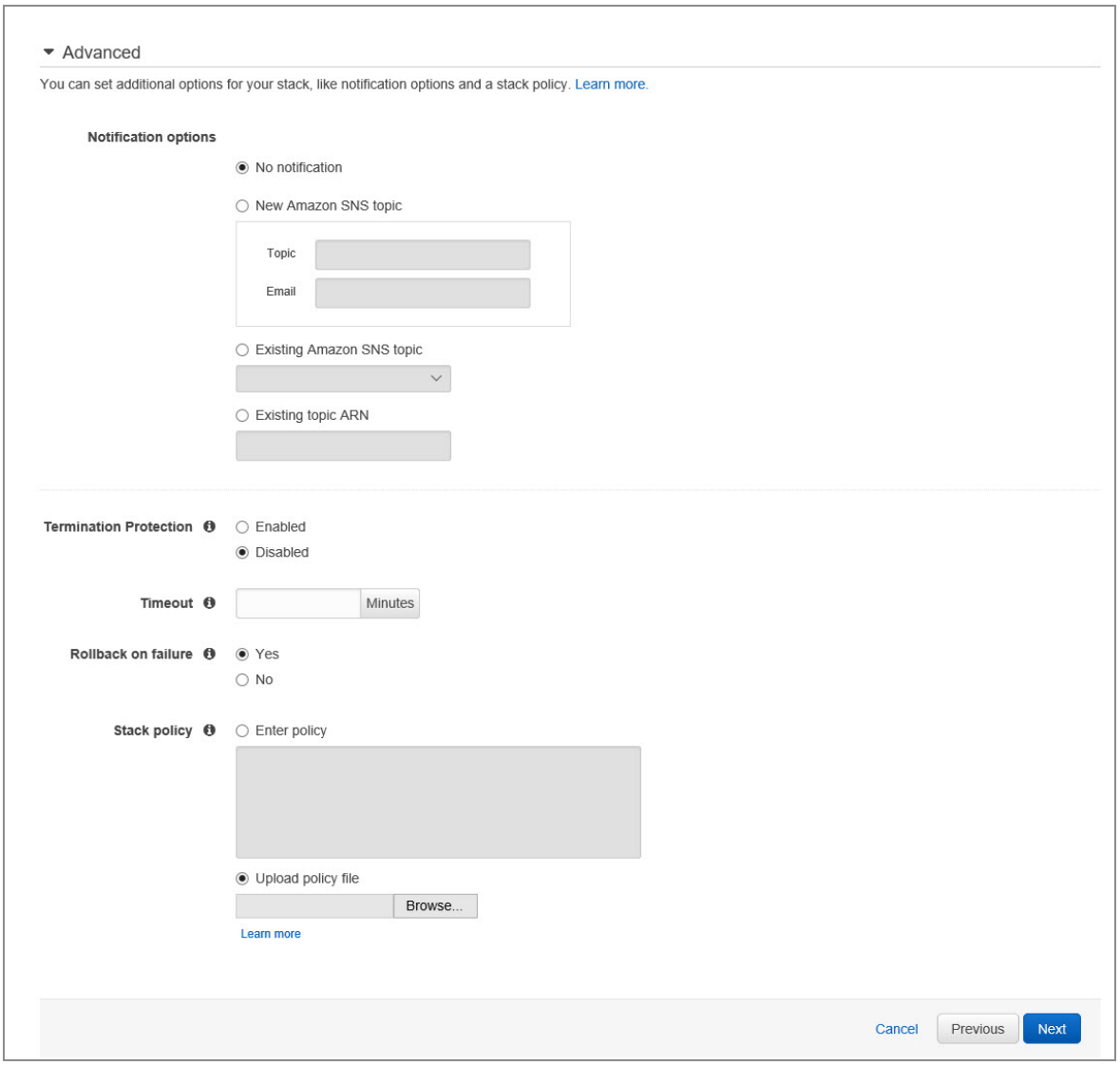
> **Note:** This field is not available for TIBCO Cloud™ Integration - BusinessWorks™ (BYOL).

13. Configure the network by providing existing VPC and subnet ID.
14. Click **Next**. The Options page is displayed.
15. Add any tags you want to simplify administration of your infrastructure.



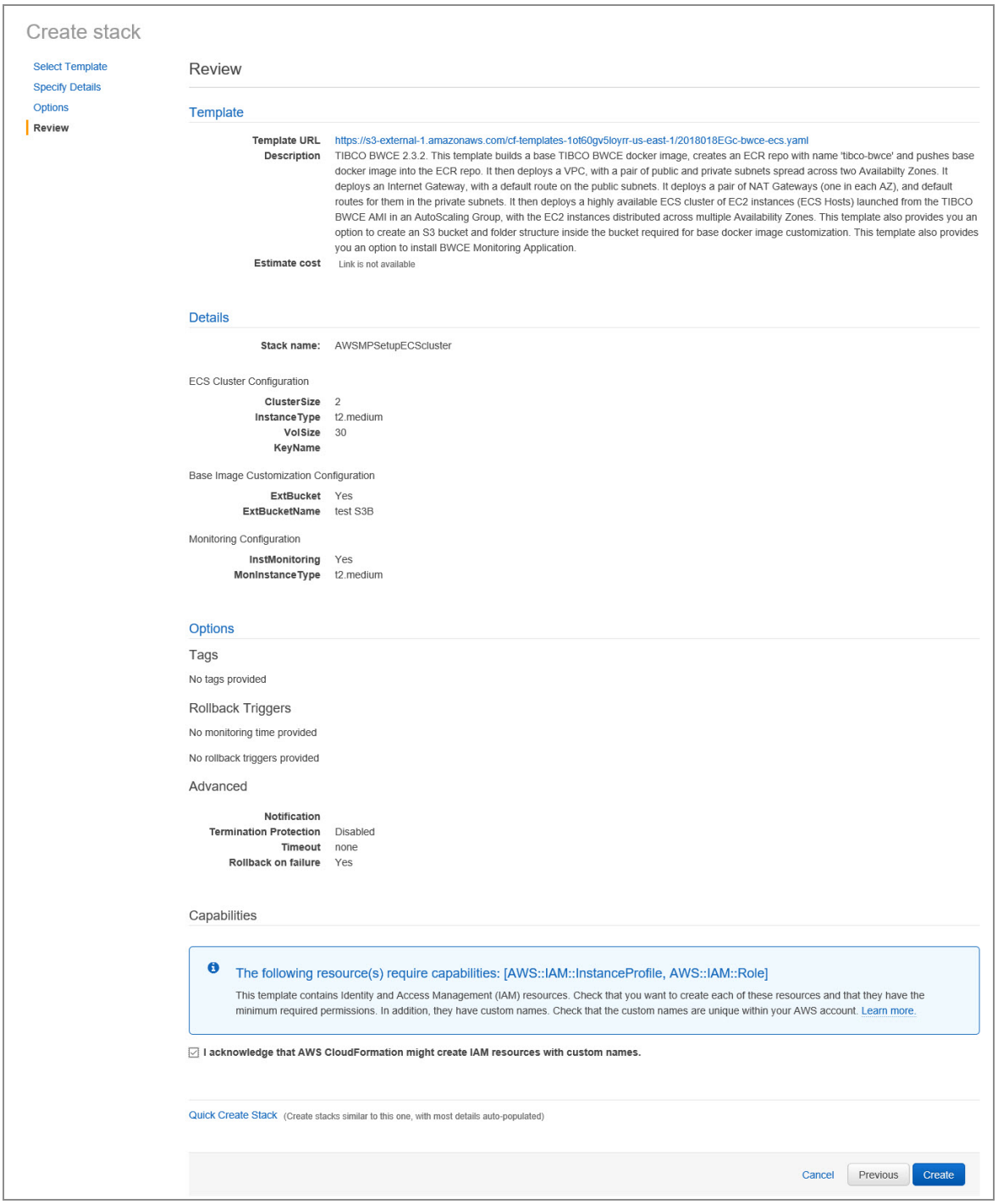
> **Note:** A tag consists of a key-value pair and flows to resources inside your stack. You can add up to 10 unique tags for each instance.

16. Expand the **Advanced** section of the Options page and set your notification, timeout, and other options. Click the **Learn more** link for an explanation of these options if required.



17. Click **Next**. The Review page is displayed.
18. Select the **acknowledgment** check box and click **Create**.

    You see your Stack Name listed in a table. While it's being created the Status column displays `CREATE_IN_PROGRESS`. After a few minutes, the status should change to `CREATE_COMPLETE`.


Create stack
Select Template
Specify Details
Options
Review
Review
Template
Template URL https://s3-external-1.amazonaws.com/cf-templates-1ot60gv5loyrr-us-east-1/2018018EGc-bwce-ecs.yaml
Description TIBCO BWCE 2.3.2. This template builds a base TIBCO BWCE docker image, creates an ECR repo with name 'tibco-bwce' and pushes base docker image into the ECR repo. It then deploys a VPC, with a pair of public and private subnets spread across two Availabilty Zones. It deploys an Internet Gateway, with a default route on the public subnets. It deploys a pair of NAT Gateways (one in each AZ), and default routes for them in the private subnets. It then deploys a highly available ECS cluster of EC2 instances (ECS Hosts) launched from the TIBCO BWCE AMI in an AutoScaling Group, with the EC2 instances distributed across multiple Availability Zones. This template also provides you an option to create an S3 bucket and folder structure inside the bucket required for base docker image customization. This template also provides you an option to install BWCE Monitoring Application.
Estimate cost Link is not available
Details
Stack name: AWSMPSetupECScluster
ECS Cluster Configuration
ClusterSize 2
InstanceType t2.medium
VolSize 30
KeyName
Base Image Customization Configuration
ExtBucket Yes
ExtBucketName test S3B
Monitoring Configuration
InstMonitoring Yes
MonInstanceType t2.medium
Options
Tags
No tags provided
Rollback Triggers
No monitoring time provided
No rollback triggers provided
Advanced
Notification
Termination Protection Disabled
Timeout none
Rollback on failure Yes
Capabilities
The following resource(s) require capabilities: [AWS::IAM::InstanceProfile, AWS::IAM::Role]
This template contains Identity and Access Management (IAM) resources. Check that you want to create each of these resources and that they have the minimum required permissions. In addition, they have custom names. Check that the custom names are unique within your AWS account. Learn more.
I acknowledge that AWS CloudFormation might create IAM resources with custom names.
Quick Create Stack (Create stacks similar to this one, with most details auto-populated)
Cancel
Previous
Create

Cloud Formation Template Behavior

This section describe the creation and deletion behavior of the cloud formation templates.

- **Set up ECS cluster:**

  The following AWS resources are created when ECS Cloud Formation template is used to create a stack.

  ```
  AWS::EC2::VPC
  AWS::EC2::Subnet (4)
  AWS::EC2::SubnetRouteTableAssociation (4)
  AWS::EC2::Route (3)
  AWS::EC2::RouteTable (2)
  AWS::EC2::EIP (2)
  AWS::EC2::NatGateway (2)
  AWS::EC2::SecurityGroup (2)
  AWS::EC2::VPCGatewayAttachment
  AWS::EC2::InternetGateway
  AWS::ECS::Cluster
  AWS::ElasticLoadBalancingV2::LoadBalancer
  AWS::ElasticLoadBalancingV2::TargetGroup
  AWS::ElasticLoadBalancingV2::Listener
  AWS::AutoScaling::LaunchConfiguration
  AWS::AutoScaling::AutoScalingGroup
  AWS::IAM::InstanceProfile
  AWS::IAM::Role
  AWS::ECR::Repository
  AWS::S3::Bucket
  ```

  When you delete the stack, the AWS resources are deleted except for the following resources.

  ```
  AWS::ECR::Repository
  AWS::S3::Bucket
  ```

- **"Extend BusinessWorks Container Edition base Docker image" template:**

  The following AWS resources are created when the EXT Cloud Formation template is used to create a stack.

```
AWS::EC2::Instance
AWS::IAM::InstanceProfile
AWS::IAM::Role
AWS::ECR::Repository
AWS::S3::Bucket
```

When you delete the stack, the AWS resources are deleted except for the following resources.

```
AWS::IAM::Role
AWS::ECR::Repository
AWS::S3::Bucket
```

Application Development for Docker

The following section provides information about system module properties and environment variables as they apply to TIBCO BusinessWorks™ Container Edition.

Switching the Container Platform

Procedure

1. In TIBCO Business Studio™ for BusinessWorks™, click **Window > Preferences** .
2. In the Preferences dialog click **BusinessWorks Container Edition > Container Platform**.
3. Choose **Docker**.
4. Click **Apply** and then **OK**.

What to do next

TIBCO Business Studio for BusinessWorks has to be restarted for the changes to take effect.

Note: TIBCO recommends that you clean your workspace after TIBCO Business Studio for BusinessWorks is restarted.

This option can be accessed from the TIBCO Business Studio for BusinessWorks menu **Project > Clean**.

Starting TIBCO Business Studio™ for BusinessWorks™ in the Docker Mode

To start TIBCO Business Studio for BusinessWorks in the Docker mode add the property `ContainerTarget` and set the value to `Docker` in the following file:

- *TIBCO_HOME*\studio\<*version*>\eclipse\configuration\config.ini

Here is a snippet of a sample `config.ini` file:

```
eclipse.application=org.eclipse.ui.ide.workbench
eclipse.p2.data.area=@config.dir/../p2
osgi.bundles.defaultStartLevel=4
ContainerTarget=Docker
```

The preference is now set to `Docker` for every new workspace.

Environment Variables

This section lists the environment variables that can be used for TIBCO BusinessWorks™ Container Edition application deployment on Docker and Docker based platforms.

Environment Variable	Default Values	Description
BW_LOGLEVEL	ERROR	Used to set a log level for the TIBCO BusinessWorks™ Container Edition application. The default value is ERROR. Supported values are: • INFO • DEBUG • WARN • ERROR
BW_ENGINE_ THREADCOUNT	8	Used to set engine thread count for the TIBCO BusinessWorks™ Container Edition application.
BW_ENGINE_ STEPCOUNT	-1	Used to set engine step count for the TIBCO BusinessWorks™ Container Edition application.
BW_APPLICATION_	n/a	Used to set flow limit for TIBCO

Environment Variable	Default Values	Description
JOB_FLOWLIMIT		BusinessWorks™ Container Edition application.
APP_CONFIG_ PROFILE	n/a	Name of the application profile that is to be used from a configuration management system such as ZUUL, Spring Cloud Config etc.
BW_PROFILE	n/a	Used to set the name of the BusinessWorks profile from the application.
BW_JAVA_OPTS	n/a	Used to set Java properties that are used at run time. The properties are specified using name-value pairs and are separated by spaces. For example, `BW_JAVA_OPTS="-Dname=value -Dname=value"`
MASHERY_ SERVICE_CONFIG	n/a	Applications can pass TIBCO Mashery configuration information using the `MASHERY_SERVICE_CONFIG` environment variable. The value of the environment variable is a JSON string with the required TIBCO Mashery configuration. See Integrating with TIBCO Mashery for more information.
CONSUL_SERVER_ URL	n/a	Used to set Consul server configuration. For example, `CONSUL_SERVER_ URL=http://127.0.0.1:8085`

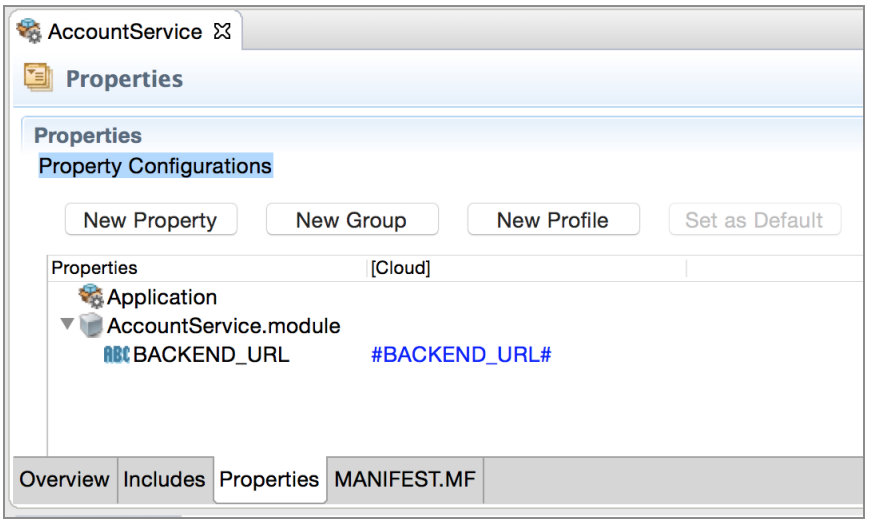
Environment Variable	Default Values	Description
		This must be set if you intend to use Consul for application configuration or for service registration and discovery.
EUREKA_SERVER_URL		Used to set Eureka server configuration. For example, `EUREKA_SERVER_URL=http://127.1.0.1:8080/eureka` This must be set if you intend to use Eureka for service registration and discovery.
MEMORY_LIMIT	1024M	To optimize memory usage at runtime, set this environment variable to the configured memory. For example, `MEMORY_LIMIT=512M` when the Docker container is launched with `512M`.
BW_JMX_CONFIG	n/a	Used to set JMX configuration (RMI host and JMX port) for monitoring TIBCO BusinessWorks™ Container Edition application. The value should be provided in RMI_HOST:JMX_PORT format. For example, `BW_JMX_CONFIG=192.168.99.100:8050`
BW_JAVA_GC_OPTS	-XX:+UseG1GC	Used to set JAVA GC configuration. The value should be one of the standard Java GC VM Options.

Environment Variable	Default Values	Description
		For example: `BW_JAVA_GC_OPTS=-XX:+UseParallelGC`
-e DISABLE_BWCE_EAR_VALIDATION=true	None	Used to deploy the ActiveMatrix BusinessWorks 6.x application `EAR` file on TIBCO Cloud™ Integration - BusinessWorks™ without converting project to Container Edition and rebuilding EAR file from TIBCO Business Studio for BusinessWorks **Note:** Ensure that the ActiveMatrix BusinessWorks 6.x EAR file is exported. ActiveMatrix BusinessWorks 6.x EAR file should only have TIBCO Cloud™ Integration - BusinessWorks™ supported activities and features.

Using Configurations from Configuration Management Services

You can use configurations from the configuration management services such as Consul by defining a token such as `#`*<property name>*`#` in the application properties, where *<property name>* is the name of the configuration parameter.

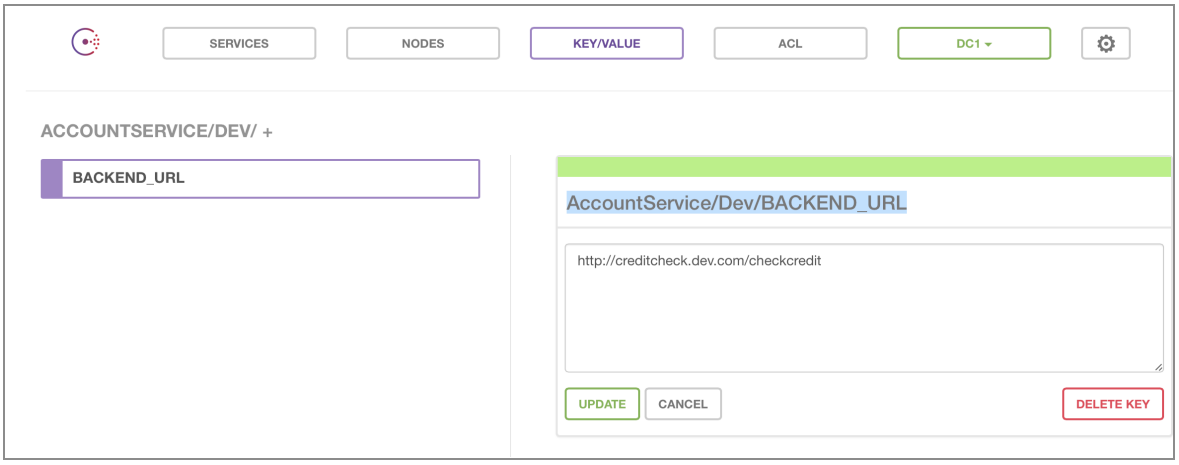
For example, `#BACKEND_URL#`.



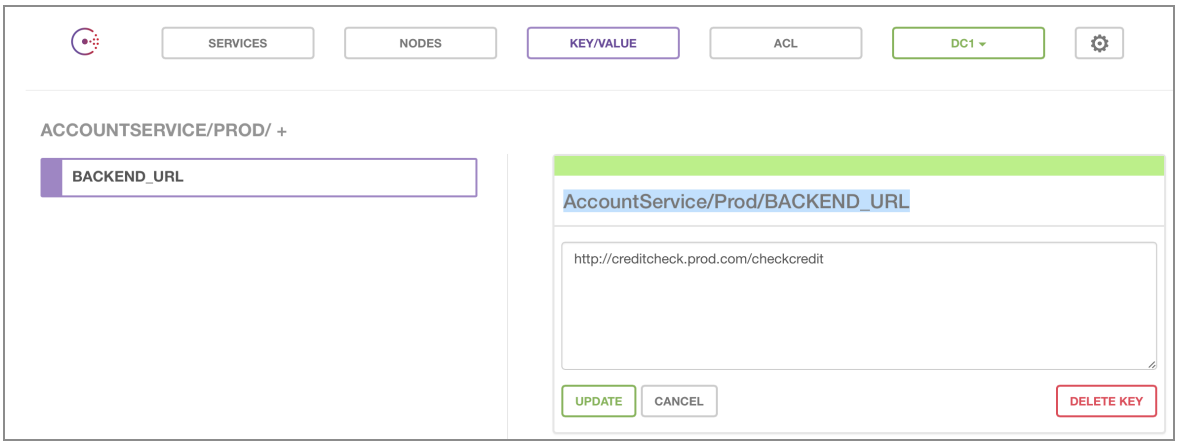
Follow these steps to use configurations from Consul:

1. Set the environment variable `CONSUL_SERVER_URL`. See Environment Variables.
2. In your Consul service, define the keys using the format `<BWCE_APP_NAME>/<PROFILE NAME>/<KEY Name>`.

   For example, `AccountService/Dev/BACKEND_URL`

   `AccountService/Prod/BACKEND_URL`



For more information, see Launching CloudFormation Template to create and extend TIBCO BusinessWorks™ Container Edition Base Docker Image.

Deploying an Application on ECS

You can deploy an application on ECS and monitor the application logs by configuring the container with CloudWatch.

Before you begin

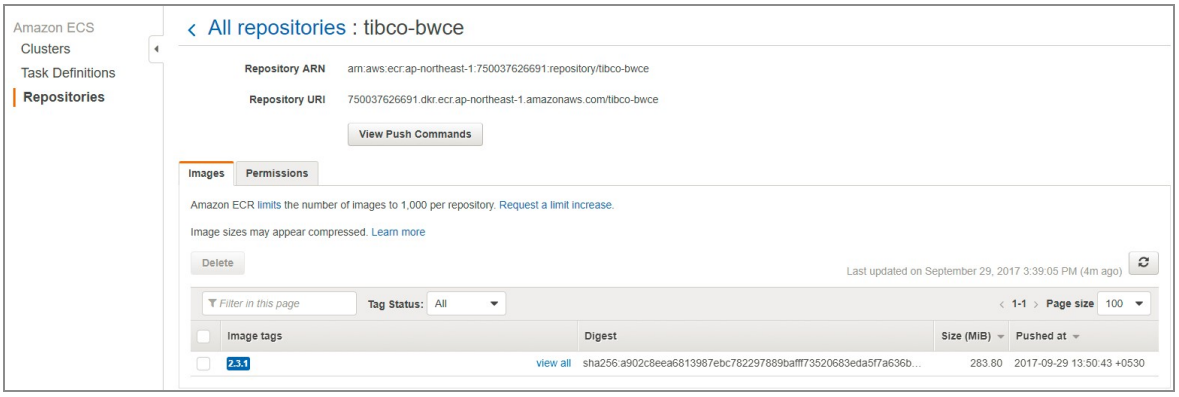
- Ensure that you have the TIBCO BusinessWorks Container Edition application EAR and Docker files in the same directory.
- In the Docker file, ensure that the EAR file name and path are correct.
- In the Docker file, ensure that the base image points to the TIBCO BusinessWorks™ Container Edition runtime base image, which is created by the CloudFormation template.

Procedure

1. To view the runtime base image, go to **AWS Console > Services > EC2 Container Service > Repositories > tibco-bwce**.

   The Repository URI is shown as

   ```
   <AWS_account_id>.dkr.ecr.<region_name>.amazonaws.com/tibco-bwce
   ```

   To install the AWS CLI and Docker and for more information, see Amazon ECR Documentation.
2. Retrieve the docker login command that is used to authenticate your Docker client

with your registry.

```
aws ecr get-login --no-include-email --region <region_name>
```

> **Note:** If you receive an Unknown options: --no-include-email error, install the latest version of the AWS CLI. For more details, see Installing the AWS Command Line Interface.

3. Run the docker login command that was returned in the previous step.

   If you are using Windows PowerShell, run the following command.

```
Invoke-Expression -Command (aws ecr get-login --no-include-email --
region <region_name>)
```

4. To generate the application image, navigate to the folder where the EAR and Docker files are stored and run the following command. For information about building a Docker file, see Docker Basics.

```
docker build -t <application_name> .
```

> **Note:** You can skip this step if your image is already built.

5. After the build is ready, tag the image to push it to the repository.

```
docker tag application_name:latest <AWS_account_id>.dkr.ecr.<region_
name>.amazonaws.com/application_name:latest
```

6. Run the following command, to push the image to your newly created AWS repository:

```
docker push <AWS_account_id>.dkr.ecr.<region_name>.amazonaws.com/application_
name:latest
```

> **Note:** Ensure that you replace the *<region_name>* with your region such as ap-northeast-1 and Repository URI with the URI.

7. Create the services and task definition in ECS. A task definition is required to run Docker containers on Amazon ECS. Create task definition for TIBCO Cloud™ Integration - BusinessWorks™ application. For more details, see Amazon ECS Task Definitions.

   The following is a sample taskdef.json file for reference.

```
{
    "family": "launch-test-app",
    "containerDefinitions": [
        {
            "image": "<AWS-account_id>.dkr.ecr.<region_
name>.amazonaws.com/<repo_name>:latest",
            "name": "bwce-test-app",
            "cpu": 10,
            "memory": 512,
            "essential": true,
            "portMappings": [
                {
                    "containerPort": 8080,
                    "hostPort": 8080
                }
            ],
            "environment": [
                {
                    "name": "BW_LOGLEVEL",
                    "value": "DEBUG"
                }
            ],
            "logConfiguration": {
                "logDriver": "awslogs",
                "options": {
                    "awslogs-group": "bwce-app-log",
                    "awslogs-region": "<region_name>",
                    "awslogs-stream-prefix": "bwce"
                }
            }
        }
    ]
}
```

8. Run the following command to tegister the task definition in the repository:

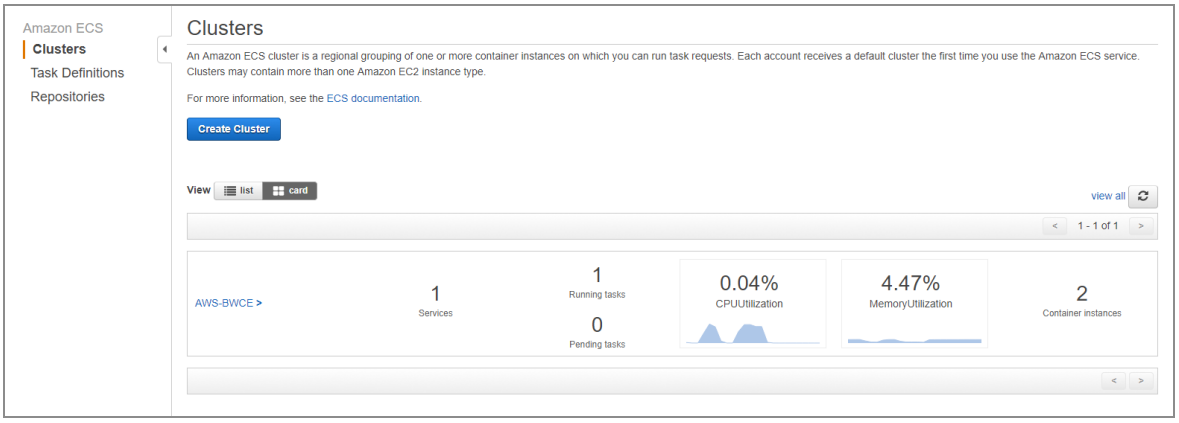
```
aws ecs register-task-definition --family <family_name_for_your_app> --cli-input-json file://<taskdef_path>.json/> --region <aws_region>
```

9. Run the following command using the task definition to create a new service for your application. You can optionally configure your service to use load balancer to distribute traffic evenly across tasks in your service. For more details, see Services in Amazon ECS Documentation.

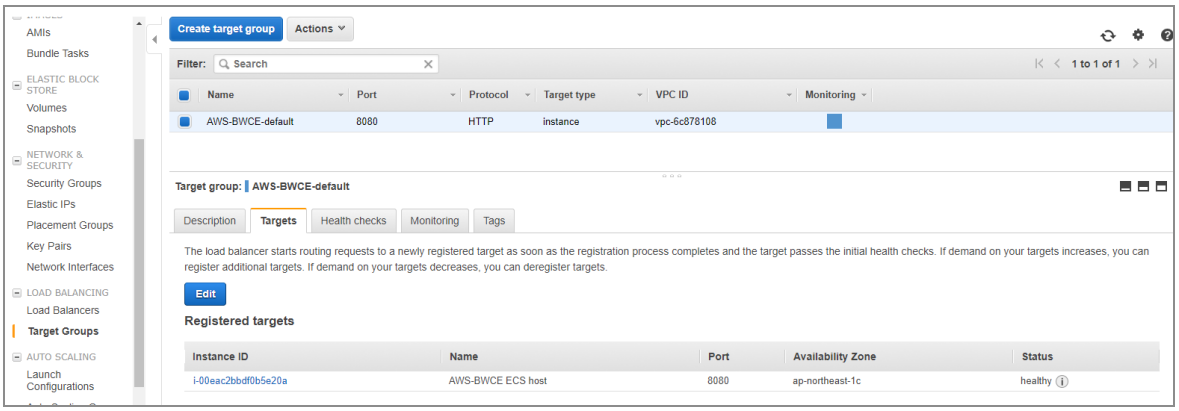
```
aws ecs create-service --service-name <Your_service_name> --desired-count 1 --task-definition <your_family_name> --load-balancers targetGroupArn=<your_target_group_arn>,containerName=<container_name>,containerPort=<container_Port> --role <your_IAM_role_Arn> --cluster <your_cluster_name>
```

After the container is automatically configured with CloudWatch logs in taskdef, you can check your application logs in the service created in the ECS cluster.

You can also manually configure the CloudWatch. For more details, see Amazon Cloud watch Logs.



After the service is successfully running and the target group status is healthy, you can hit the load balancer URL according to the listener and target group configured in load balancers.


AMIs
Bundle Tasks
ELASTIC BLOCK STORE
Volumes
Snapshots
NETWORK & SECURITY
Security Groups
Elastic IPs
Placement Groups
Key Pairs
Network Interfaces
LOAD BALANCING
Load Balancers
Target Groups
AUTO SCALING
Launch Configurations
Create target group
Actions
Filter:
Search
1 to 1 of 1
Name
Port
Protocol
Target type
VPC ID
Monitoring
AWS-BWCE-default
8080
HTTP
instance
vpc-6c878108
Target group: AWS-BWCE-default
Description
Targets
Health checks
Monitoring
Tags
The load balancer starts routing requests to a newly registered target as soon as the registration process completes and the target passes the initial health checks. If demand on your targets increases, you can register additional targets. If demand on your targets decreases, you can deregister targets.
Edit
Registered targets
Instance ID
Name
Port
Availability Zone
Status
i-00eac2bbdf0b5e20a
AWS-BWCE ECS host
8080
ap-northeast-1c
healthy

Amazon Terminology

- Amazon Machine Image (AMI)

  A supported and maintained Linux provided by Amazon Web Services for use on Amazon Elastic Compute Cloud (Amazon EC2). It is designed to provide a stable, secure, and high-performance execution environment for applications running on Amazon EC2. It also includes several packages that enable easy integration with AWS, including launch configuration tools and many popular AWS libraries and tools. Amazon Web Services also provides ongoing security and maintenance updates to all instances running the Amazon AMI.

- Amazon Web Services (AWS)

  Cloud platform, used to provide and host a family of services, such as RDS, S3, EC2, DynamoDB.

- AWS Console

  The user interface Amazon has built around the available services offered. Within the AWS Console, there are sub-consoles for individual services (EC2, S3, RDS, CloudFront, DynamoDB, etc.)

- AWS Marketplace

  Storefront for commercial AMIs provided and managed by Amazon, which bills customer for usage and keeps a percentage of sales proceeds.

- AWS Identity and Access Management (IAM)

  AWS Identity and Access Management (IAM) enables you to create multiple users and manage the permissions for each of these users within your AWS Account. A user is an identity within your AWS account with unique security credentials that can be used to access AWS Services. IAM eliminates the need to share passwords or access keys, and makes it easy to enable or disable a user’s access as appropriate.

- CloudFormation (CF)AWS CloudFormation gives developers and systems administrators an easy way to create and manage a collection of related AWS resources, provisioning and updating them in an orderly and predictable fashion.

- Marketplace AMI

  An AMI that is distributed through the AWS Marketplace.

- Public AMI

  AMI configured as public by any Amazon user, and listed in everyone's AWS EC2 console AMI area.

- RDS

  Amazon Relational Database Service, which makes it easy to run MySQL, Oracle, or SQL Server database servers in the cloud. Amazon manages, upgrades, and backs up the server.

- Stack

  A collection of AWS resources you create and delete as a single unit.

- CloudWatch

  Amazon CloudWatch is a monitoring service for AWS cloud resources and the applications you run on AWS. You can use Amazon CloudWatch to collect and track metrics, collect and monitor log files, set alarms, and automatically react to changes in your AWS resources. Amazon CloudWatch can monitor AWS resources such as Amazon EC2 instances, Amazon DynamoDB tables, and Amazon RDS DB instances, as well as custom metrics generated by your applications and services, and any log files your applications generate. You can use Amazon CloudWatch to gain system-wide visibility into resource utilization, application performance, and operational health. You can use these insights to react and keep your application running smoothly.

- ECS

  Amazon EC2 Container Service (Amazon ECS) is a highly scalable, fast, container management service that makes it easy to run, stop, and manage Docker containers on a cluster of Amazon Elastic Compute Cloud (Amazon EC2) instances. Amazon ECS lets you launch and stop container-based applications with simple API calls, allows you to get the state of your cluster from a centralized service, and gives you access to many familiar Amazon EC2 features.

TIBCO Documentation and Support Services

For information about this product, you can read the documentation, contact TIBCO Support, and join TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the TIBCO Product Documentation website, mainly in HTML and PDF formats.

The TIBCO Product Documentation website is updated frequently and is more current than any other documentation included with the product.

Product-Specific Documentation

The following documentation for this product is available on the TIBCO Cloud™ Integration - BusinessWorks™ Product Documentation page:

- *TIBCO Cloud™ Integration - BusinessWorks™ Release Notes*
- *TIBCO Cloud™ Integration - BusinessWorks™ User's Guide*

To directly access documentation for this product, double-click the following file:

`TIBCO_HOME/release_notes/TIB_bwce-aws_2.8.0_docinfo.html`

where *TIBCO_HOME* is the top-level directory in which TIBCO products are installed. On Windows, the default *TIBCO_HOME* is `C:\tibco`. On UNIX systems, the default *TIBCO_HOME* is `/opt/tibco`.

Other TIBCO Product Documentation

When working with <product name>, you may find it useful to read the documentation of the following TIBCO products:

- TIBCO <product name>™: <Statement of purpose of software - relating it to the current product if relevant.>
- TIBCO <product name>™: <Statement of purpose of software - relating it to the

current product if relevant.>

- TIBCO <product name>™: <Statement of purpose of software - relating it to the current product if relevant.>

How to Access Related Third-Party Documentation

When working with TIBCO Cloud™ Integration - BusinessWorks™, you may find it useful to read the documentation of the following third-party products:

How to Contact TIBCO Support

Get an overview of TIBCO Support. You can contact TIBCO Support in the following ways:

- For accessing the Support Knowledge Base and getting personalized content about products you are interested in, visit the TIBCO Support website.
- For creating a Support case, you must have a valid maintenance or support contract with TIBCO. You also need a user name and password to log in to TIBCO Support website. If you do not have a user name, you can request one by clicking **Register** on the website.

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employee subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the TIBCO Ideas Portal. For a free registration, go to TIBCO Community.

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