



Terraform Enterprise Onboarding Program Kickoff

April 2022



Agenda

- Welcome/Code of Conduct
- Customer Success Overview
- TFE Onboarding Program
- Customer Support
- TFE Architecture Overview
- Next Steps

Code of Conduct



HashiCorp is dedicated to providing a harassment-free Terraform Enterprise Onboarding experience for everyone, regardless of gender, gender identity, sexual orientation, disability, physical appearance, body size, race, national origin, or religion. We value your attendance and do not wish anyone to feel uncomfortable or threatened at any time.

The bottom line is that we do not tolerate harassment of conference participants in any form. Harassment includes but is not limited to offensive verbal comments related to gender, gender identity, sexual orientation, disability, physical appearance, body size, race, national origin, religion; sexual or inappropriate images in public spaces; deliberate intimidation; stalking; trolling; sustained disruption of talks or other events; and unwelcome sexual attention. Participants asked to stop any harassing behavior are expected to comply immediately. If you are being harassed, notice that someone else is being harassed, or have any other concerns, please let the HashiCorp event representative know immediately or email customer.success@hashicorp.com.

The background features a dark blue gradient. In the top-left corner, there are several overlapping squares and rectangles with patterns of thin white lines and dots. In the bottom-right corner, there is a large square with a dense grid of small white dots.

Customer Success

Partnering Together

HashiCorp Customers



FINANCIAL SERVICES



ENTERTAINMENT & TELCO



MANUFACTURING & LOGISTICS



SOFTWARE & TECHNOLOGY



INSURANCE &



What You Can Expect from CS



Customer Success Manager (CSM)

Account & Success Management

- Providing a community-based onboarding program designed to get you up and running quickly
- Facilitating sessions to keep your team current with HashiCorp technology
- Joint discovery of objectives and success criteria
- Your customer advocate within HashiCorp

Customer Success Architect (CSA)

Technical Success & Advisory

- Technical resource for the onboarding process
- Providing product reference architecture information for better decision-making
- Thought leadership on best practices of product architecture and use-case patterns
- Timely education and enablement from a technical perspective

Other resources available to you



Ensure your team's success



Worldwide Support

With HashiCorp Worldwide Support, you can get assistance when you need it from anywhere in the world with our ready-to-serve ticketing system and expert support team.

[Learn More](#) 



Implementation Services

Let highly skilled product domain experts help you achieve success by simplifying and accelerating the adoption of our cloud solutions starting at the implementation phase.

[Learn More](#) →

Further information located at <http://hashicorp.com/customer-success>

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Customer Support

SLA, Contact Methods, Services, etc.

Contacting Support

There are two ways to contact our support team

- 1) **Support Portal:** Open a ticket through [our support portal](#)
 - Once customer access is setup, authorized users can submit a ticket using the email address they provided us.
 - The portal provides faster routing via product and sub-product selection, the ability to send encrypted attachments, and set ticket priority.
- 2) **Email Support:** Send an email to support@hashicorp.com
 - All emailed support tickets default to “normal” priority - and cannot be changed.

HashiCorp Support SLA

This info can also be accessed from our [Support SLA Page](#)

GOLD

SILVER

BRONZE

Hours of availability		24 X 7 (SEV-1 URGENT)	9-5, Monday - Friday US LOCAL TIME EUROPEAN CENTRAL TIME AUSTRALIA EASTERN TIME	N/A
SEVERITY 1 Urgent	FIRST RESPONSE	60 minutes	8 business hours	N/A
	RESOLUTION	24 elapsed hours	24 business hours	N/A
SEVERITY 2 High	FIRST RESPONSE	4 business hours	16 business hours	N/A
	RESOLUTION	3 business days	5 business days	N/A
SEVERITY 3 Normal	FIRST RESPONSE	8 business hours	24 business hours	N/A
	RESOLUTION	7 business days	7 business days	N/A
SEVERITY 4 Low	FIRST RESPONSE	24 business hours	24 business hours	24 business hours
	RESOLUTION	Best effort	Best effort	Best effort
Technical contacts allowed		4	3	2

Severity Definitions

Sev-1 (Urgent)	<p>A Sev-1 incident is an operational outage as defined below:</p> <p>Any error reported by customer where majority of the users for a particular part of the software are affected, the error has high visibility, there is no workaround, and it affects the customer's ability to perform its business.</p>
Sev-2 (High)	<p>Any error reported by customer where the majority of the users for a particular part of the software are affected, the error has high visibility, a workaround is available; however, performance may be degraded or functions limited and it is affecting revenue.</p>
Sev-3 (Normal)	<p>Any error reported by customer where the majority of the users for a particular part of the software are affected, the error has high visibility, a workaround is available; however, performance may be degraded or functions limited and it is NOT affecting revenue.</p>
Sev-4 (Low)	<p>Any error reported by customer where a single user is severely affected or completely inoperable or a small percentage of users are moderately affected or partially inoperable and the error has limited business impact.</p>

This info can also be accessed at the bottom of our [Support SLA Page](#)

The image features a dark blue background with decorative geometric patterns. In the top-left corner, there are several overlapping squares and rectangles filled with a grid of small white dots. In the bottom-right corner, there are similar shapes, but they are filled with a grid of small white dots that are slightly more spaced out. The text "Any questions?" is written in a large, bold, white sans-serif font, centered horizontally and slightly above the vertical center.

Any questions?

The background features a dark blue gradient. In the top-left corner, there are several overlapping squares and rectangles with patterns of thin, parallel white lines and a fine grid of white dots. A similar pattern of fine white dots is located in the bottom-right corner.

Terraform Enterprise

Onboarding Program

TFE Onboarding Program

An 9-week guided community environment

Assisting customers with onboarding and adoption



Community Onboarding Activities



We'll provide the following deliverables.

Kickoff Session

The kickoff session will introduce you to the different aspects of the program and walk through our support process

Training Plan

This plan provides you with formal and informal learning tracks such as:

- workshops
- product deep dives
- lunch and learn
- pre-recorded content

Success Plan

Your Onboarding Program CSM will schedule a one-on-one meeting with you to discuss your TFE objectives and a roadmap for success

Office Hours

Office hours will be offered to answer specific questions about your TFE implementation



TFE Onboarding

Program Schedule

- Week 1 - Webinar - Kickoff & Architectural Decisions
- Week 2 - Webinar - Terraform Enterprise Architecture Deep Dive (Stand Alone)
- Week 3 - Webinar - Importing Resources and State into Terraform Enterprise
- Week 4 - Community Office Hours
- Week 5 - Webinar - Lifecycle Management (Monitoring, Upgrade, Backup)



TFE Onboarding

Program Schedule

- Week 6 - Webinar - Terraform Workflows (Modules, Workspaces, Git)
- Week 7 - Terraform Enterprise Arch Deep Dive (Active/Active) and Community Office Hours
- Week 8 - Webinar - Terraform Cloud Agents, RBAC & Sentinel / Architecture
- Week 9 - Program Closure

Customer Responsibilities



These are critical for your onboarding success



Training Consumption

Ensure team members attend workshops, training, office hours



Use Case Guidance

Provide timely information on your intended use cases



Project Team Participation

Inclusive of any stakeholder required for successful completion of your onboarding



Single Point of Contact

Main contact for decision making



Escalation Process

Understanding of escalation process



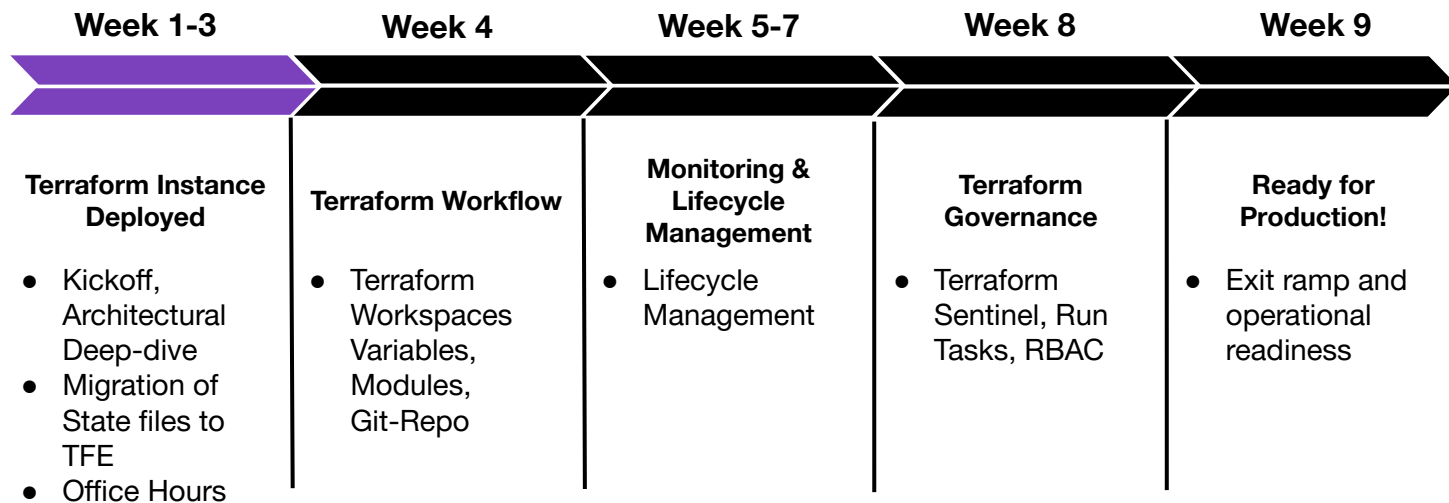
Surveys Responses

Provide timely responses to surveys

The background features abstract geometric patterns. In the top-left corner, there are several overlapping squares and rectangles filled with a grid of small white dots. In the bottom-right corner, there are similar shapes, but they are filled with a grid of small white dots. The rest of the background is a solid dark blue color.

Architecture Overview

Terraform Enterprise Path to Production





TFE Installation

What do we need to decide?

1

Network Access

What level of network connectivity:

- **Public Egress**
- **Air-gapped**

2

Installation Location

Where will TFE be installed:

- **On-Premise Data Center**
- **Cloud Provider**

3

Installation Mode

TFE supports two installation modes:

- **Mounted Disk**
- **External Services**



Installation Mode

Online

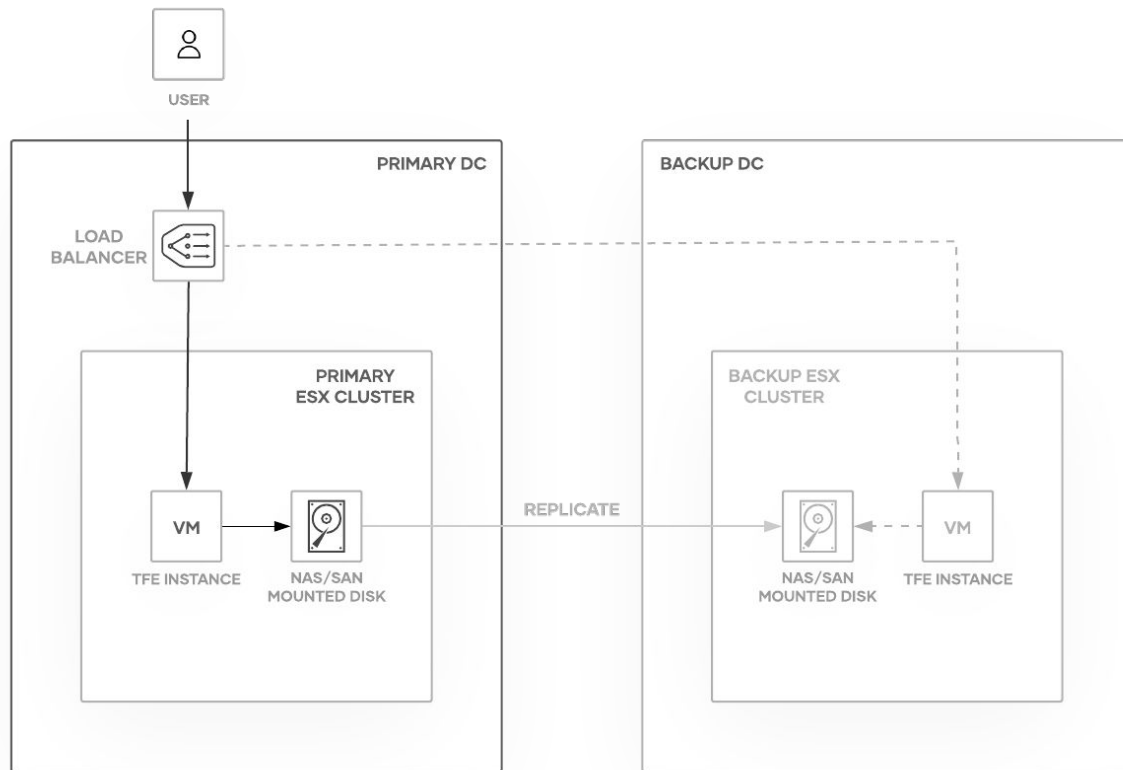
If the TFE server has public internet access, an admin can execute the installer directly in a terminal. The installer will install any required software and output the url to access the dashboard.

Airgapped

If the TFE server does not have internet access, airgapped installation is supported. This requires an Admin to download the airgap file and installer bootstrapper, and install a supported version of Docker.

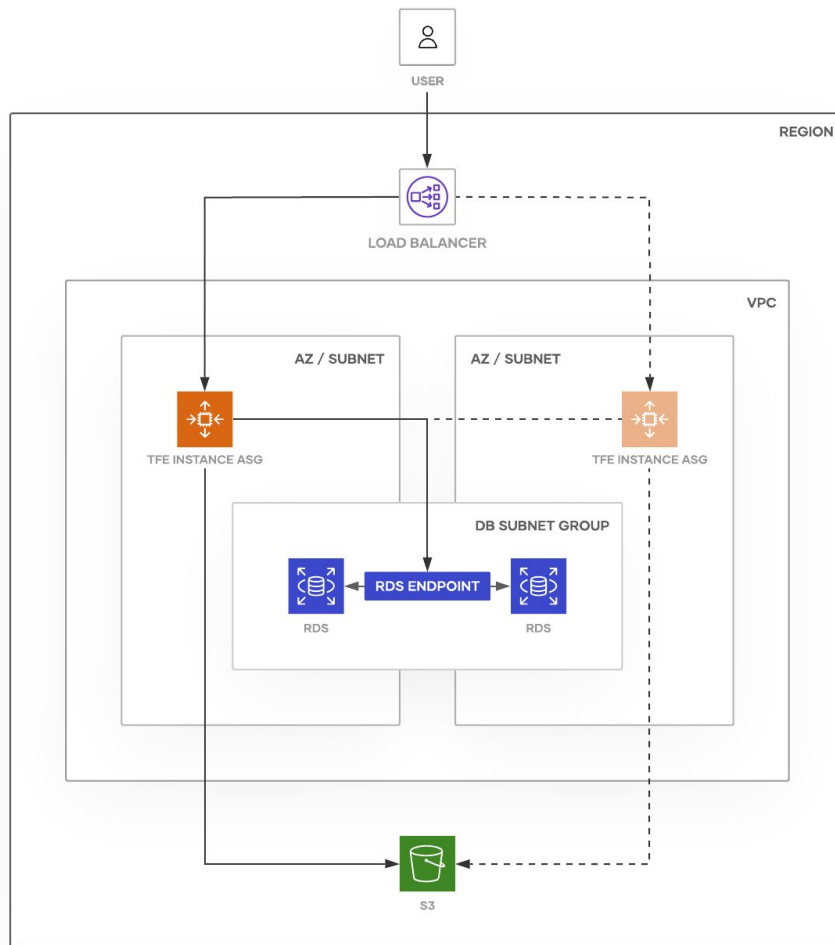


VMware Standalone Architecture (Recommended)





Cloud Provider Standalone Architecture (Recommended)





Mounted Disk vs. External Services

Mounted Disk

- Low Capacity
- Self-contained
- Easy to set up manually
- Good for Non-Production Workloads and Testing
- Single Docker instance for Postgres, S3 Storage, Redis

External Services

- High Capacity
- Needs automation to set up quickly
- Good for Production Workloads
- Uses externally running Postgres, S3 Storage, and Redis (only with Active/Active)



Architecture

- TFE is an Infrastructure as Code (IaC) system that enables companies to define their cloud resources as HCL2 code, that can be stored in a Git repo, to be automated, versioned, and audited.
- TFE is a self-managed service, unlike TFCB SaaS. They both include 23+ microservices running within Docker.
- Includes remote runners called Cloud Agents, that can be deployed both on-prem and across your multiple cloud accounts.
- Uses S3-compatible Storage, Postgres, Redis, and Replicated for licensing.



Features

- Organizations
- SSO, Teams, Users
- API Tokens
- VCS Provider / Git Connections
- Private Module Registry
- Workspaces
 - Tags
 - Terraform Code, Statefiles
 - Run History
 - Variables, Sensitive, ENV, Sets
 - Run Notifications, Tasks, Triggers
 - RBAC for selective Team Access
- SSH Keys
- Sentinel Policy Sets
- Cloud Agents

VCS Integration



TFE is most powerful when integrated with a VCS Provider. TFE registers Git Webhooks with your Git Repos to monitor for new Git Commits and Git Pull Requests.

TFE will interact with most providers using the providers API and OAuth token. BitBucket Server does require an SSH key for downloading repo contents. TFE supports integrating with multiple VCS providers within an Organization. During workspace creation you will select a configured provider.

Supported VCS Providers
<u>GitHub</u>
<u>GitHub Enterprise</u>
<u>GitLab.com</u>
<u>GitLab EE and CE</u>
<u>BitBucket Cloud</u>
<u>BitBucket Server</u>
<u>Azure DevOps</u>

Private Module Registry



A module is a container for multiple cloud resources that are used together. Modules can be used to create lightweight abstractions, so that you can describe your infrastructure in terms of its architecture, rather than directly in terms of specific cloud resources. We will cover in more detail in a later webinar.

The screenshot shows the Terraform Registry page for the `vnet` module by `azurerem`. The page has a purple header with the Terraform logo and navigation links. The main content area includes the module name, version (1.2.0), and a description: "Terraform module to create/provision Azure vnet". It also shows the publication date (August 15, 2018) and the number of provisions (13,132). A "Provision Instructions" box on the right provides a code snippet for using the module. Below the main content, there are tabs for "Readme", "Inputs (9)", "Outputs (5)", "Dependencies (0)", and "Resources (3)". The "Readme" tab is active, showing the title "terraform-azurerem-vnet" and a "build" status. The "Create a basic virtual network in Azure" section describes the module's purpose and usage. The "Usage" section shows an HCL code snippet for using the module.

Terraform | Registry

Search Browse Publish Sign-in

vnet
AZURERM

Version 1.2.0

Terraform module to create/provision Azure vnet

Published August 15, 2018 by Azure
Module managed by rguthrie@msft
Total provisions: 13,132
Source: github.com/Azure/terraform-azurerem-vnet (report an issue)

Provision Instructions
Copy and paste into your Terraform configuration, insert the variables, and run `terraform init` :

```
module "vnet" {  
  source = "Azure/vnet/azurerem"  
  version = "1.2.0"  
}
```

Readme Inputs (9) Outputs (5) Dependencies (0) Resources (3)

terraform-azurerem-vnet

build **passing**

Create a basic virtual network in Azure

This Terraform module deploys a Virtual Network in Azure with a subnet or a set of subnets passed in as input parameters.

The module does not create nor expose a security group. This would need to be defined separately as additional security rules on subnets in the deployed network.

Usage

HCL

```
1 module "vnet" {  
2   source      = "Azure/vnet/azurerem"
```

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Next Steps