



Installation and Setup

Installation and Setup

Section Goal:

Understand the basics for installing GitHub Enterprise in the cloud and on premise.



Topics and Agenda:

- Install GitHub Enterprise
- Obtain and Upload a new license
- Upload a new SSH key
- Add LDAP Sync



Topics and Agenda:

- Login as an LDAP User
- Access Org and Repo
- See Sync'd Teams
- Promote a User to Site Admin

Install GitHub Enterprise

What you will need:

- An [AWS account](#) capable of launching EC2 instances and creating EBS volumes.
- A GitHub Enterprise license file. To download an existing license file or request a trial license, visit enterprise.github.com.



Installation Instructions:

- [Enterprise 2.4 AWS Installation Guide](#)



Configuration Instructions:

- [Enterprise 2.4 Configuration Guide](#)

Select EC2

AWS Services | Services | Edit | enterprise-channels/coryvj@git... | Oregon | Support

Amazon Web Services

Compute

- EC2** Virtual Servers in the Cloud
- EC2 Container Service** Run and Manage Docker Containers
- Elastic Beanstalk** Run and Manage Web Apps
- Lambda** Run Code in Response to Events

Storage & Content Delivery

- S3** Scalable Storage in the Cloud
- CloudFront** Global Content Delivery Network
- Elastic File System PREVIEW** Fully Managed File System for EC2
- Glacier** Archive Storage in the Cloud
- Import/Export Snowball** Large Scale Data Transport
- Storage Gateway** Hybrid Storage Integration

Database

- RDS** Managed Relational Database Service
- DynamoDB** Managed NoSQL Database
- ElastiCache** In-Memory Cache
- Redshift** Fast, Simple, Cost-Effective Data Warehousing
- DMS PREVIEW** Managed Database Migration Service

Networking

- VPC** Isolated Cloud Resources
- Direct Connect** Dedicated Network Connection to AWS
- Route 53** Scalable DNS and Domain Name Registration

Developer Tools

- CodeCommit** Store Code in Private Git Repositories
- CodeDeploy** Automate Code Deployments
- CodePipeline** Release Software using Continuous Delivery

Management Tools

- CloudWatch** Monitor Resources and Applications
- CloudFormation** Create and Manage Resources with Templates
- CloudTrail** Track User Activity and API Usage
- Config** Track Resource Inventory and Changes
- OpsWorks** Automate Operations with Chef
- Service Catalog** Create and Use Standardized Products
- Trusted Advisor** Optimize Performance and Security

Security & Identity

- Identity & Access Management** Manage User Access and Encryption Keys
- Directory Service** Host and Manage Active Directory
- Inspector PREVIEW** Analyze Application Security
- WAF** Filter Malicious Web Traffic

Analytics

- EMR** Managed Hadoop Framework
- Data Pipeline** Orchestration for Data-Driven Workflows
- Elasticsearch Service** Run and Scale Elasticsearch Clusters
- Kinesis** Work with Real-Time Streaming Data

Internet of Things

- AWS IoT** Connect Devices to the Cloud

Mobile Services

- Mobile Hub BETA** Build, Test, and Monitor Mobile apps
- Cognito** User Identity and App Data Synchronization
- Device Farm** Test Android, FireOS, and iOS Apps on Real Devices in the Cloud
- Mobile Analytics** Collect, View and Export App Analytics
- SNS** Push Notification Service

Application Services

- API Gateway** Build, Deploy and Manage APIs
- AppStream** Low Latency Application Streaming
- CloudSearch** Managed Search Service
- Elastic Transcoder** Easy-to-Use Scalable Media Transcoding
- SES** Email Sending and Receiving Service
- SQS** Message Queue Service
- SWF** Workflow Service for Coordinating Application Components

Enterprise Applications

- WorkSpaces** Desktops in the Cloud
- WorkDocs** Secure Enterprise Storage and Sharing Service
- WorkMail** Secure Email and Calendaring Service

Resource Groups Learn more

A resource group is a collection of resources that share one or more tags. Create a group for each project, application, or environment in your account.

Create a Group **Tag Editor**

Additional Resources

Getting Started Read our documentation or view our training to learn more about AWS.

AWS Console Mobile App View your resources on the go with our AWS Console mobile app, available from Amazon Appstore, Google Play, or iTunes.

AWS Marketplace Find and buy software, launch with 1-Click and pay by the hour.

AWS re:Invent Announcements Explore the next generation of AWS cloud capabilities. See what's new

Service Health

All services operating normally. Updated: Jan 12 2016 09:54:00 GMT-0800

Service Health Dashboard



Launch Instance

The screenshot shows the AWS EC2 Dashboard. On the left sidebar, under the 'INSTANCES' section, the 'Launch Instance' button is highlighted with a large green arrow pointing towards it. The main content area displays various EC2 resource statistics and a 'Create Instance' section with a note about Amazon Simple Queue Service.

Resources

You are using the following Amazon EC2 resources in the US West (N. California) region:

18 Running Instances	4 Elastic IPs
0 Dedicated Hosts	50 Snapshots
52 Volumes	3 Load Balancers
7 Key Pairs	53 Security Groups
2 Placement Groups	

Need fast, reliable, scalable, fully-managed message queuing? Try Amazon Simple Queue Service. X

Create Instance

To start using Amazon EC2 you will want to launch a virtual server, known as an Amazon EC2 instance.

Launch Instance ←

Note: Your instances will launch in the US West (N. California) region

Service Health

Service Status:

- US West (N. California):
This service is operating normally

Availability Zone Status:

- us-west-1a:
Availability zone is operating normally
- us-west-1b:
Availability zone is operating normally

[Service Health Dashboard](#)

Scheduled Events

US West (N. California):
No events

Account Attributes

Supported Platforms
VPC
Default VPC
vpc-4edb3f25

Additional Information

Getting Started Guide
Documentation
All EC2 Resources
Forums
Pricing
Contact Us

AWS Marketplace

Find **free software trial** products in the AWS Marketplace from the [EC2 Launch Wizard](#). Or try these popular AMIs:

- Tableau Server (10 users)
Provided by Tableau
Rating ★★★★☆
Pay by the hour for Tableau software and AWS usage
[View all Business Intelligence](#)
- SAP HANA One 244GiB
Provided by SAP America, Inc
Rating ★★★★☆
Pay by the hour for SAP HANA One 244GiB software and AWS usage
[View all Business Intelligence](#)
- TIBCO Spotfire Analytics Platform (Hourly)

GitHub Enterprise AMI

Select a GitHub Enterprise AMI based on the [AWS Region](#) you would like to launch the instance into.

Region ID

- **ap-northeast-1**
- **ap-southeast-1**
- **ap-southeast-2**
- **eu-central-1**
- **eu-west-1**

AMI ID

- **ami-4d240e23**
- **ami-0818db6b**
- **ami-d84d16bb**
- **ami-abd2cec7**
- **ami-35319246**

Region ID

- **sa-east-1**
- **us-east-1**
- **us-west-1**
- **us-west-2**
- **us-gov-west-1**

AMI ID

- **ami-0ade5966**
- **ami-0ec38964**
- **ami-bd741fdd**
- **ami-28617e49**
- **ami-2075c841**

GovCloud Support:

- **AMIs are also available in the [AWS GovCloud \(US\) region](#). This allows US customers with specific regulatory requirements to run GitHub Enterprise in a federally compliant cloud environment.**
- **For more information on AWS compliance with federal standards, see the [AWS compliance page](#).**

Select the AMI

AWS Services Edit enterprise-channels/coryvj@git... N. California Support

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Tag Instance 6. Configure Security Group 7. Review

Step 1: Choose an Amazon Machine Image (AMI)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. You can select an AMI provided by AWS, our user community, or the AWS Marketplace; or you can select one of your own AMIs.

Quick Start My AMIs AWS Marketplace Community AMIs

Search: ami-bd741fdd

GitHub Enterprise 2.4.3 - ami-bd741fdd

Root device type: ebs Virtualization type: hvm 64-bit

Select

Operating system

- Amazon Linux
- Cent OS
- Debian
- Fedora
- Gentoo
- OpenSUSE
- Other Linux
- Red Hat
- SUSE Linux
- Ubuntu
- Windows

Architecture

- 32-bit
- 64-bit

Root device type

- EBS
- Instance store

Choose an Instance



For on-premises deployments, based on your seat count we recommend these hardware configurations:

Seats

- 0-499
- 500-2999
- 3000-5000

vCPUs

- 2
- 4
- 8

Memory

- 16 GB
- 32 GB
- 64 GB

Storage

- 100 GB
- 250 GB
- 500 GB

Root

- 80 GB
- 80 GB
- 80 GB



For AWS deployments, based on your seat count we recommend these instance types:

- 0 - 499
- 500 - 2999
- 3000 - 5000

- r3.large
- r3.xlarge
- r3.2xlarge

Select an Instance

Screenshot of the AWS CloudFormation console showing the "Step 2: Choose an Instance Type" page. The instance type "r3.large" is selected, indicated by a blue checked checkbox. A large green arrow points to the "r3.large" row.

	Compute optimized	c4.8xlarge	36	60	EBS only	Yes	10 Gigabit
<input type="checkbox"/>	Compute optimized	c3.large	2	3.75	2 x 16 (SSD)	-	Moderate
<input type="checkbox"/>	Compute optimized	c3.xlarge	4	7.5	2 x 40 (SSD)	Yes	Moderate
<input type="checkbox"/>	Compute optimized	c3.2xlarge	8	15	2 x 80 (SSD)	Yes	High
<input type="checkbox"/>	Compute optimized	c3.4xlarge	16	30	2 x 160 (SSD)	Yes	High
<input type="checkbox"/>	Compute optimized	c3.8xlarge	32	60	2 x 320 (SSD)	-	10 Gigabit
<input type="checkbox"/>	GPU instances	g2.2xlarge	8	15	1 x 60 (SSD)	Yes	High
<input type="checkbox"/>	GPU instances	g2.8xlarge	32	60	2 x 120 (SSD)	-	10 Gigabit
<input checked="" type="checkbox"/>	Memory optimized	r3.large	2	15	1 x 32 (SSD)	-	Moderate
<input type="checkbox"/>	Memory optimized	r3.xlarge	4	30.5	1 x 80 (SSD)	Yes	Moderate
<input type="checkbox"/>	Memory optimized	r3.2xlarge	8	61	1 x 160 (SSD)	Yes	High
<input type="checkbox"/>	Memory optimized	r3.4xlarge	16	122	1 x 320 (SSD)	Yes	High
<input type="checkbox"/>	Memory optimized	r3.8xlarge	32	244	2 x 320 (SSD)	-	10 Gigabit
<input type="checkbox"/>	Storage optimized	i2.xlarge	4	30.5	1 x 800 (SSD)	Yes	Moderate
<input type="checkbox"/>	Storage optimized	i2.2xlarge	8	61	2 x 800 (SSD)	Yes	High
<input type="checkbox"/>	Storage optimized	i2.4xlarge	16	122	4 x 800 (SSD)	Yes	High
<input type="checkbox"/>	Storage optimized	i2.8xlarge	32	244	8 x 800 (SSD)	-	10 Gigabit

Launch the Instance



Once your instance is running, copy the VM's public DNS name and paste it into a web browser. If the page doesn't load, try updating the AWS security group for your EC2 instance to allow https connections (port 443).

The screenshot shows the AWS Step 7: Review Instance Launch wizard. The configuration includes:

- AMI Details:** GitHub Enterprise 2.4.3 - ami-bd741fdd (Root Device Type: ebs, Virtualization type: hvm)
- Instance Type:** r3.large (6.5 ECUs, 2 vCPUs, 15 GiB Memory, 1 x 32 Instance Storage, EBS-Optimized Available, Network Performance: Moderate)
- Security Groups:** launch-wizard-32 (SSH, TCP, Port Range 22, Source 0.0.0.0/0)
- Instance Details:** (Edit instance details)
- Storage:** Root volume (Volume Type: gp2, Device: /dev/sda1, Snapshot: snap-384692ff, Size: 60 GiB, IOPS: 180 / 3000, Delete on Termination: Yes, Encrypted: Not Encrypted)
- Tags:** (Edit tags)

At the bottom, there are "Cancel", "Previous", and "Launch" buttons.

Attach Block Storage



After you've verified the instance, attach block storage of at least 10GB from the AWS EC2 Console.

AWS Services Edit enterprise-channels/coryvj@git... N. California Support

EC2 Dashboard

- Events
- Tags
- Reports
- Limits

INSTANCES

- Instances
- Spot Requests
- Reserved Instances
- Dedicated Hosts

IMAGES

- AMIs
- Bundle Tasks

ELASTIC BLOCK STORE

- Volumes
- Snapshots

Resources

You are using the following Amazon EC2 resources in the US West (N. California) region:

19 Running Instances	4 Elastic IPs
0 Dedicated Hosts	50 Snapshots
53 Volumes	3 Load Balancers
8 Key Pairs	54 Security Groups
2 Placement Groups	

Create Instance

To start using Amazon EC2 you will want to launch a virtual server, known as an Amazon EC2 instance.

Launch Instance

Note: Your instances will launch in the US West (N. California) region

Service Health

Scheduled Events

Account Attributes

Supported Platforms
VPC
Default VPC
vpc-4edb3f25

Additional Information

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AWS Marketplace



EBS Volume

 Make sure the EBS volume is in the same availability zone as your EC2 instance.

The screenshot shows the AWS Management Console interface for creating an EBS volume. The top navigation bar includes links for EC2 Dashboard, Events, Tags, Reports, Limits, INSTANCES, IMAGES, and ELASTIC BLOCK STORE. The ELASTIC BLOCK STORE section is expanded, showing Volumes and Snapshots. The main content area has tabs for Create Volume and Actions, with the Create Volume tab selected. A modal window titled "Create Volume" is open, prompting for Volume Type (General Purpose SSD (GP2)), Size (GiB) (100), IOPS (300 / 3000), Availability Zone (us-west-1b), Snapshot ID (Search (case-insensitive)), and Encryption (checkbox). A large green arrow points to the "Availability Zone" dropdown. The background shows a list of existing EBS volumes with columns for Name, Size, Type, Status, Created, and Availability Zone, all listed under us-west-1b.

Name	Type	Status	Created	Availability Zone
vol-12345678	General Purpose SSD (GP2)	Available	January 12, 2016 at 10:00 AM	us-west-1b
vol-12345679	General Purpose SSD (GP2)	Available	January 10, 2016 at 10:00 AM	us-west-1b
vol-12345680	General Purpose SSD (GP2)	Available	January 10, 2016 at 10:00 AM	us-west-1b
vol-12345681	General Purpose SSD (GP2)	Available	January 21, 2015 at 10:00 AM	us-west-1a
vol-12345682	General Purpose SSD (GP2)	Available	January 21, 2015 at 10:00 AM	us-west-1a
vol-12345683	General Purpose SSD (GP2)	Available	January 20, 2015 at 10:00 AM	us-west-1a
vol-12345684	General Purpose SSD (GP2)	Available	January 16, 2015 at 10:00 AM	us-west-1a
vol-12345685	General Purpose SSD (GP2)	Available	January 15, 2015 at 10:00 AM	us-west-1a
vol-12345686	General Purpose SSD (GP2)	Available	January 15, 2015 at 10:00 AM	us-west-1a

Attach to EC2

 Attach the EBS volume to your EC2 instance.

AWS Services Edit enterprise-channels/coryvj@git... N. California Support

EC2 Dashboard Create Volume Actions Filter by tags and attributes or search by keyword 1 to 50 of 54

Events Tags Reports Limits

INSTANCES Instances Spot Requests Reserved Instances Dedicated Hosts

IMAGES AMIs Bundle Tasks

ELASTIC BLOCK STORE Volumes Snapshots

Attach Volume

Volume vol-7e60e8d1 in us-west-1b

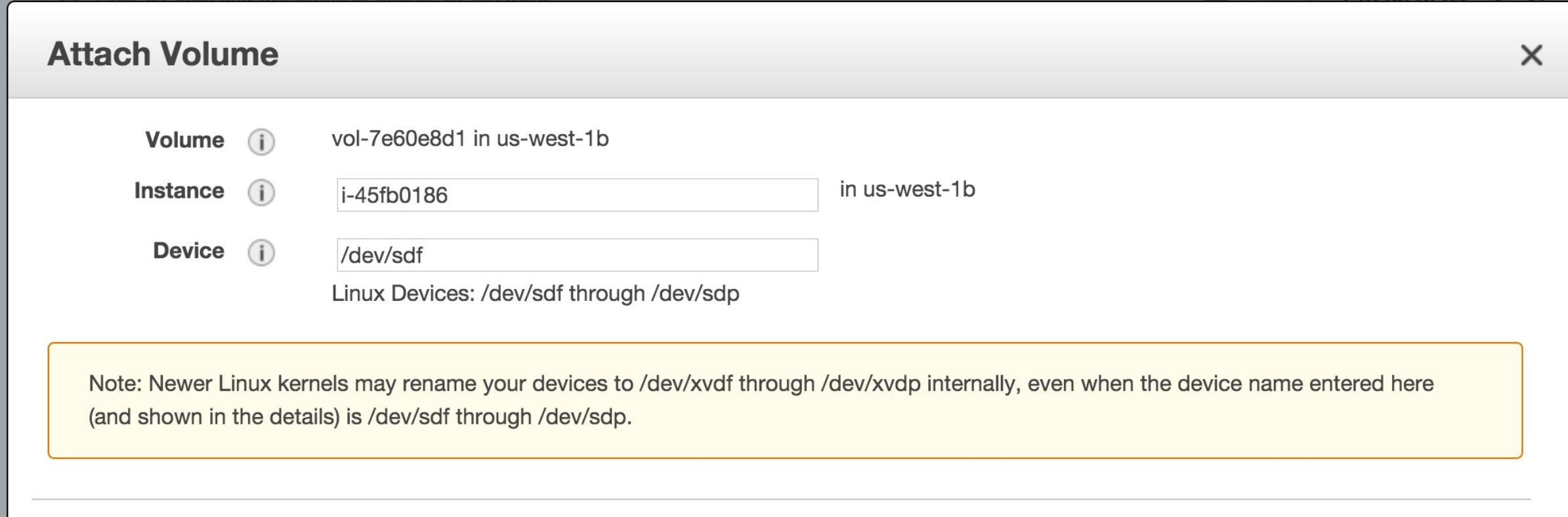
Instance i-45fb0186 in us-west-1b

Device /dev/sdf

Linux Devices: /dev/sdf through /dev/sdp

Note: Newer Linux kernels may rename your devices to /dev/xvdf through /dev/xvdp internally, even when the device name entered here (and shown in the details) is /dev/sdf through /dev/sdp.

Cancel Attach



GitHub Enterprise Login

The screenshot shows the GitHub Enterprise login page. At the top, there is a message: "Login or sign up for a trial at enterprise.github.com/login to obtain your license." Below this, the GitHub logo is displayed next to the text "Login or sign up for a trial at enterprise.github.com/login to obtain your license." The main content area features a "Sign in" form with fields for Email and Password, and a "Sign in via GitHub" button. A large green arrow points from the top message down to the "Try it for free" button in the navigation bar.

GitHub Enterprise

Features Case Studies Pricing Resources Contact Sign in Try it for free

Sign in

Email or [Sign in via GitHub](#)

Password

[Sign in](#)

[Forgot your password?](#)

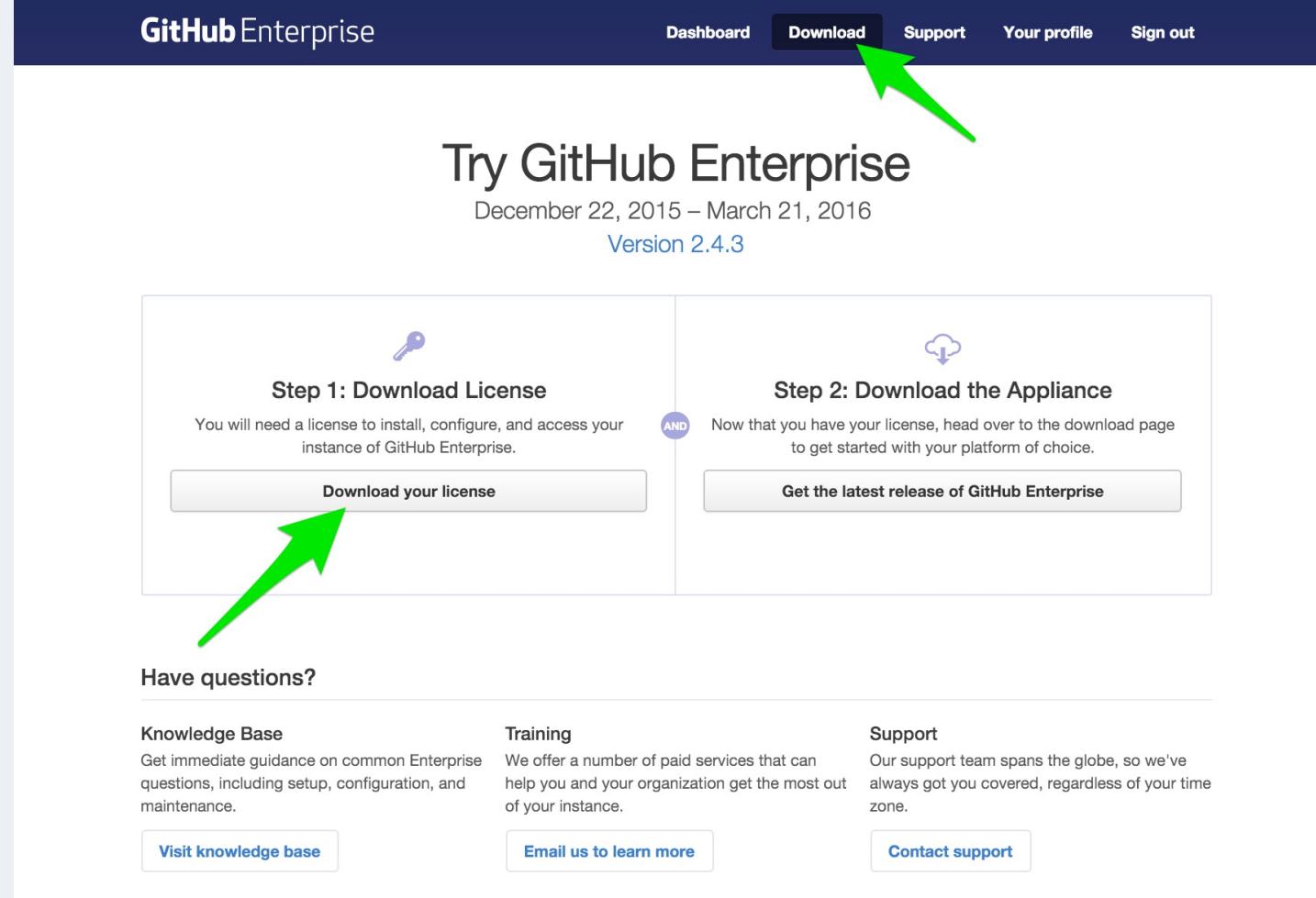
Contact us to create your account

GitHub Enterprise accounts are subject to approval. To create an account and start your **45 day** free trial, contact us today.

[Contact us](#)

GitHub Enterprise License

 Download License (or appliance for an on-premises install).



The screenshot shows the GitHub Enterprise landing page. At the top, there's a navigation bar with links for Dashboard, Download (which is highlighted with a green arrow), Support, Your profile, and Sign out. Below the navigation, the text "Try GitHub Enterprise" is displayed along with the dates "December 22, 2015 – March 21, 2016" and "Version 2.4.3". The main content area is divided into two sections: "Step 1: Download License" (with a key icon) and "Step 2: Download the Appliance" (with a cloud icon). The "Step 1" section contains the instruction "You will need a license to install, configure, and access your instance of GitHub Enterprise." and a "Download your license" button, which is also highlighted with a green arrow. The "Step 2" section contains the instruction "Now that you have your license, head over to the download page to get started with your platform of choice." and a "Get the latest release of GitHub Enterprise" button.

GitHub Enterprise Setup



Navigate to the public DNS of the EC2 VM and continue to Setup, bypassing browser certificate warnings.

The screenshot shows the GitHub Enterprise setup interface. At the top is the GitHub logo. Below it is a message: "GitHub Enterprise uses a self-signed SSL certificate to secure the configuration of your instance. You may see a warning about this in your web browser on the next screen, but rest assured this is expected and all is well." To the left is a screenshot of a Safari browser window displaying a certificate warning: "Safari can't verify the identity of the website '172.28.3.64'." It includes options to "Show Certificate," "Cancel," or "Continue." To the right of the browser screenshot is a gray box containing the text: "Safari
On the next screen, click **Continue** when prompted to bypass Safari." Below this is another gray box with a lock icon and the text: "Verifying the certificate's authenticity" followed by a terminal command: "\$ ssh -p122 admin@172.28.3.64.us-west-1.compute.amazonaws.com \$ openssl x509 -fingerprint -in /etc/haproxy/ssl.crt -noout # SHA1 Fingerprint=...". At the bottom is a green button labeled "Continue to setup".

GitHub Enterprise Setup



Upload the GitHub Enterprise License file and create a Site Administrator password.

Enterprise

Install GitHub Enterprise

To finish the installation of GitHub Enterprise, upload your license and provide a password. This password will be used to access the management console as well as the API. SSH administrative access uses authorized SSH keys you've added instead of this password.

License ready to upload
github-enterprise.ghl selected

New password
.....

Confirm password
.....

Passwords must be at least 7 characters long and include at least one number and one upper case letter.

Finish installation

ⓘ Don't have your license? [Download it here.](#)



GitHub Enterprise Setup

 Select a New Install.

 Enterprise

Choose installation type

Set up a new GitHub Enterprise instance or migrate from an existing version.

New Install
Use this option to set up a fresh GitHub Enterprise instance.

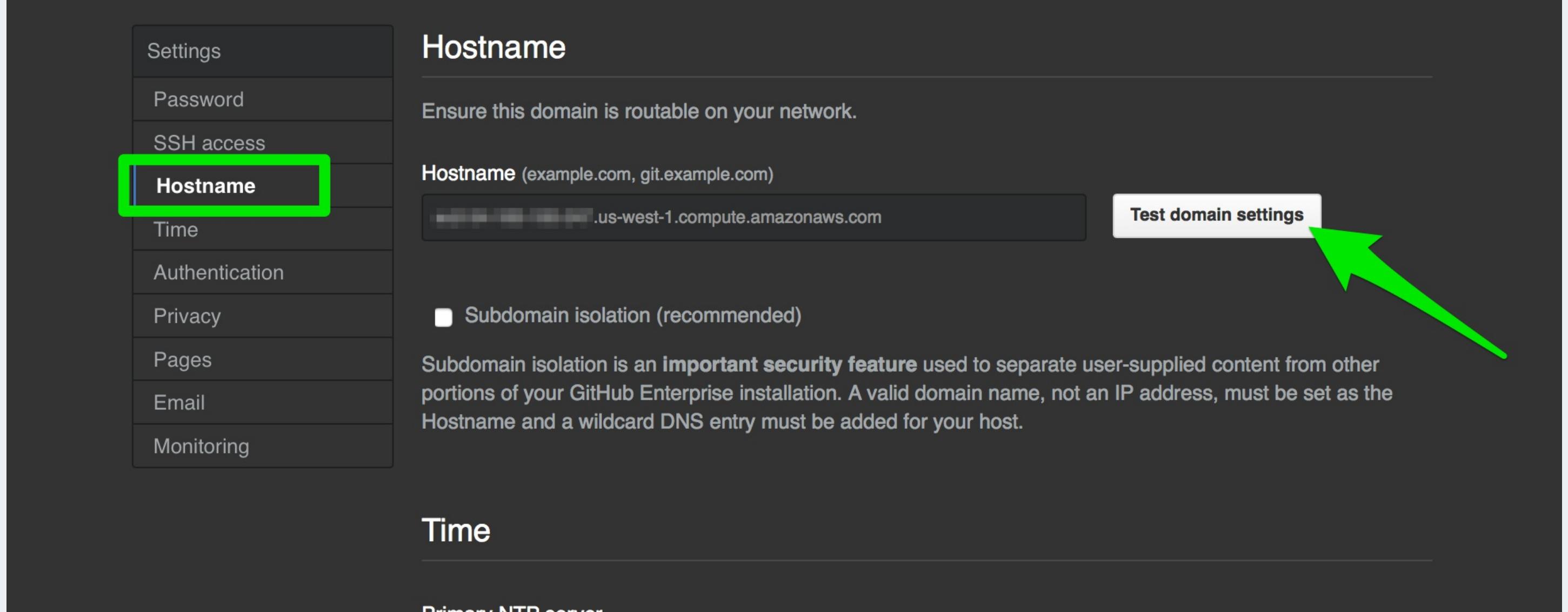
Migrate
Use this option to transfer settings and data to this instance from another instance.

OR



GitHub Enterprise Setup

 Under Hostname, test the domain settings.



The screenshot shows the GitHub Enterprise setup interface. On the left, a sidebar lists various configuration sections: Settings, Password, SSH access, Hostname (which is selected and highlighted with a green box), Time, Authentication, Privacy, Pages, Email, and Monitoring. The main content area is titled "Hostname" and contains the instruction "Ensure this domain is routable on your network." Below this, there is a field labeled "Hostname (example.com, git.example.com)" containing the placeholder ".us-west-1.compute.amazonaws.com". To the right of this field is a button labeled "Test domain settings". A large green arrow points from the top text "Under Hostname, test the domain settings." down towards the "Test domain settings" button.

Hostname

Ensure this domain is routable on your network.

Hostname (example.com, git.example.com)

.us-west-1.compute.amazonaws.com

Subdomain isolation (recommended)

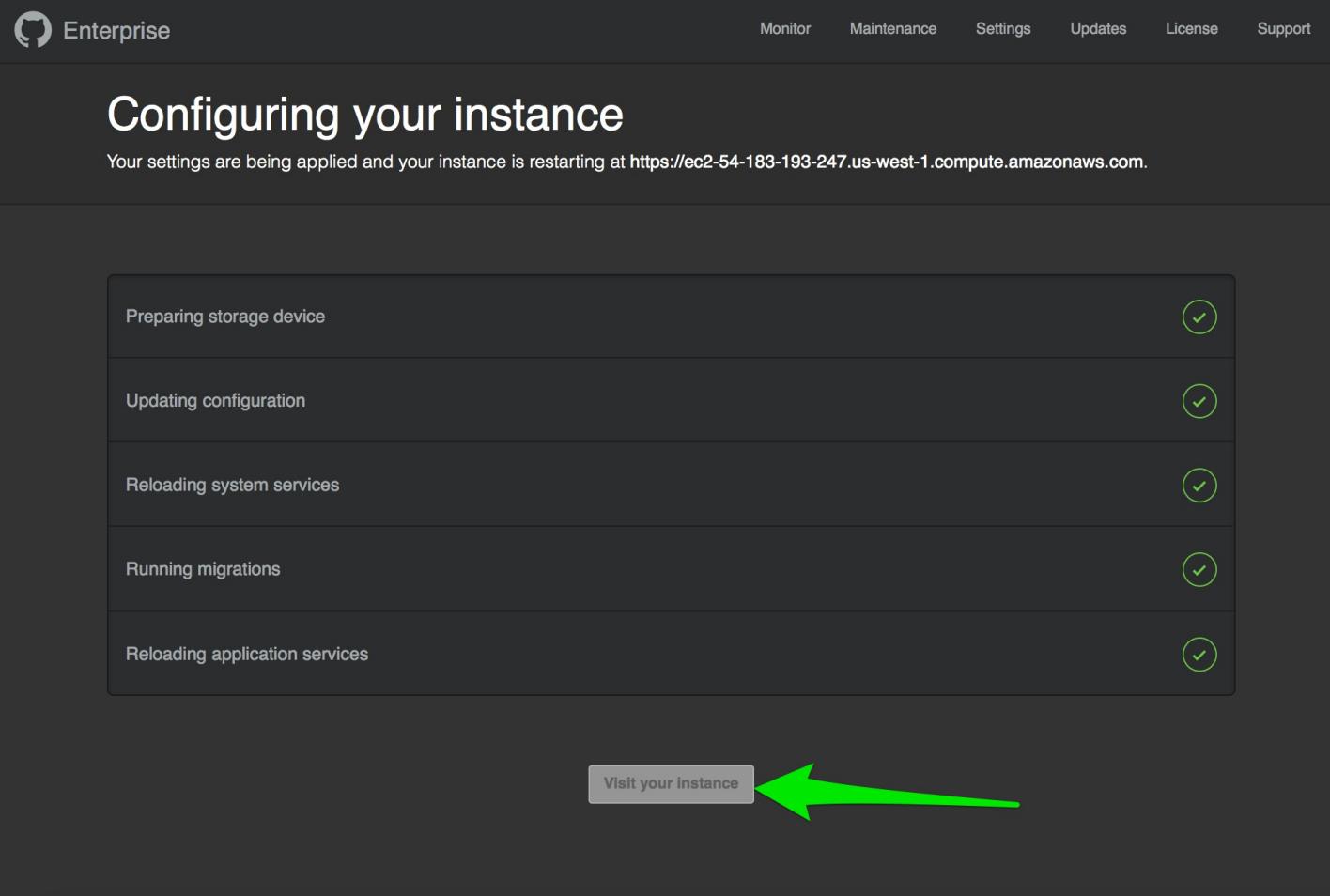
Subdomain isolation is an **important security feature** used to separate user-supplied content from other portions of your GitHub Enterprise installation. A valid domain name, not an IP address, must be set as the Hostname and a wildcard DNS entry must be added for your host.

Time

Primary NTP server

GitHub Enterprise Setup

 Save settings and the instance will be configured.



The screenshot shows the GitHub Enterprise setup interface. At the top, there's a navigation bar with the GitHub logo, 'Enterprise', and links for Monitor, Maintenance, Settings, Updates, License, and Support. Below the navigation, the title 'Configuring your instance' is displayed, followed by a message stating 'Your settings are being applied and your instance is restarting at <https://ec2-54-183-193-247.us-west-1.compute.amazonaws.com>'. A progress list shows five tasks: 'Preparing storage device', 'Updating configuration', 'Reloading system services', 'Running migrations', and 'Reloading application services', each marked with a green checkmark. At the bottom, a button labeled 'Visit your instance' is highlighted with a large green arrow pointing towards it.

GitHub Enterprise Setup

The screenshot shows the 'Create Admin Account' page from GitHub Enterprise. At the top, there's a large GitHub logo and the text 'Create an Admin Account.' Below the header, the GitHub logo is again present, followed by a 'Sign in' button. The main section is titled 'Create Admin Account' with the sub-instruction 'Welcome to GitHub Enterprise! Please set up an admin user below.' The form itself is titled 'Create your personal account'. It contains four input fields: 'Username' (cory), 'Email Address' (cory@████████.████), 'Password' (a series of dots), and 'Confirm your password' (also a series of dots). Below these fields is a checkbox for 'Help me set up an organization next', which is checked. A small explanatory text follows, mentioning that organizations are best suited for businesses managing multiple employees, with a link to 'Learn more about organizations'. At the bottom right of the form is a green button labeled 'Create an account'. A large green arrow points from the bottom right towards this button.

GitHub Enterprise Setup

The screenshot shows the GitHub 'Create an Organization' interface. At the top, there's a large header with the GitHub logo and the text 'Create an Organization.' Below the header is a navigation bar with links for 'Pull requests', 'Issues', and 'Gist'. The main content area has a title 'Create an organization' and a progress bar showing three steps: 'Completed' (Set up a personal account), 'Step 2: Set up the organization' (which is currently active), and 'Step 3: Add organization members'. The 'Set up the organization' section contains fields for 'Organization name' (set to 'Vander') and 'Contact email' (set to 'cory@...'). A green 'Create organization' button is at the bottom of this section. To the right, there's a sidebar titled 'Organizations' listing features like 'Repository management', 'Fine-grained permissions', and 'Focused dashboard'. Another section titled 'Managed by owners' explains that users will be able to grant administrative access to other GitHub users. At the bottom, there are copyright notices for GitHub, Inc. and links for API, Training, Shop, Blog, and About.

Create an Organization.

Search GitHub Pull requests Issues Gist

Completed Set up a personal account Step 2: Set up the organization Step 3: Add organization members

Create an organization

Organization name
Vander

Contact email
cory@...

Create organization

Organizations

- Repository management
- Fine-grained permissions
- Focused dashboard

Managed by owners

On the next screen you'll be able to grant administrative access to other GitHub users. These people will be able to manage every aspect of the organization (repositories, teams, etc).

Learn more

© 2016 GitHub, Inc. Help Support API Training Shop Blog About

GitHub Enterprise Setup

Add Organization Members (optional).

The screenshot shows the GitHub interface during the setup process. At the top, there's a header bar with the GitHub logo, a search bar, and navigation links for 'Pull requests', 'Issues', and 'Gist'. Below the header, a message says 'Working with your organization just got easier' with a subtext about customizable member privileges and improved security. A 'Take the tour' button is also present. The main content area is titled 'Add organization members' and displays three completed steps: 'Set up a personal account', 'Set up the organization', and 'Step 3: Add organization members'. The 'Add organization members' section includes a search bar for 'Add people to Vander', a list of found users ('cvj'), and a 'Finish' button. To the right, a sidebar titled 'Organization members' lists permissions: 'See all repositories', 'Create repositories', 'Organize into teams', 'Review code', and 'Communicate via @mentions'. A note below states that as an organization owner, the user will have complete access to all of the organization's repositories and control over member permissions. A 'Learn more' link is at the bottom of the sidebar.

Setup is Complete!

The screenshot shows the GitHub organization setup interface for an organization named 'Vander'. The top navigation bar includes the GitHub logo, a search bar, and links for Pull requests, Issues, and Gist. A notification bell icon, a plus sign for creating new items, and a user profile icon are also present. A promotional message at the top states: "Working with your organization just got easier. New customizable member privileges, fine-grained team permissions, and improved security." A "Take the tour" button is located in the top right corner.

The main content area displays the organization's logo, which is a stylized green 'T' composed of smaller squares. The organization name "Vander" is prominently displayed next to the logo. Below the logo, there are four navigation tabs: "Repositories" (selected), "People" (1), "Teams" (0), and "Settings".

The "Repositories" section contains the message: "This organization has no repositories. Create one now." with a green "+ New repository" button.

The "People" section shows one member, "cvj", represented by a yellow pixelated icon. There is a "Add someone" button at the bottom of this section.

Upload New SSH Key



Add your SSH public key to the list of authorized keys on the Management Console's settings page.

Open <https://{{host}}/setup/settings> in a browser and add your key to the list:

The screenshot shows the 'SSH access' settings page. At the top, it says 'This grants limited SSH access to the appliance to perform specific operations. You can access this appliance via `ssh -p 122 admin@github.example.com`'. Below that is a section titled 'Authorized SSH keys' containing three entries: 'ssh-rsa 9b:bd:6d:ff:73:97:9e:3b:b6:57', 'ssh-rsa 71:86:87:ce:0c:53:d6:a7:e1:b0', and 'ssh-rsa 0b:9d:e8:ec:c8:37:c3:ca:82:89'. There is also a link 'Add new SSH key' at the bottom.

SSH Administration

SSH access allows you to run the [GitHub Enterprise command line utilities](#) and is useful for troubleshooting, running backups with the GitHub Enterprise Backup Utilities, and for configuring replication. Administrative SSH access is managed separately from Git SSH access and is accessible only via port 122.

Once your SSH key has been added to the list, connect to the instance over SSH as the "admin" user:

```
$ ssh -p 122 admin@github.example.com
Last login: Sun Nov 9 07:53:29 2014 from 169.254.1.1
admin@github-example-com:~$ █
```

Enable LDAP

LDAP lets you authenticate GitHub Enterprise against your existing accounts and centrally manage repository access. [Refer to the Enterprise 2.4 documentation](#) for instructions to configure LDAP Synchronization:

The screenshot shows the configuration interface for LDAP synchronization. At the top left, a blue button labeled "Synchronization" has a white checkmark icon and the word "Synchronization". Below it is a descriptive text: "Automatically update users and teams to match LDAP entries and groups. Read the documentation on configuring LDAP authentication to learn how it works." Underneath, there are two sections for scheduling synchronization: "Synchronize all users" set to "every 1 hour" and "Synchronize all teams" also set to "every 1 hour". Further down, there's a section titled "Synchronize User Emails & SSH keys" with two recommended options: "Synchronize Emails (recommended)" and "Synchronize SSH Keys (recommended)". A note below states: "Forces User Emails and SSH Keys to be managed in LDAP. Valid user fields are required to use this option. Existing, manually entered Emails and SSH Keys will be removed when enabled."

Synchronization

Automatically update users and teams to match LDAP entries and groups. Read the documentation on configuring LDAP authentication to learn how it works.

Synchronize all users every 1 hour ▾

Synchronize all teams every 1 hour ▾

Synchronize User Emails & SSH keys

Synchronize Emails (recommended) **Synchronize SSH Keys (recommended)**

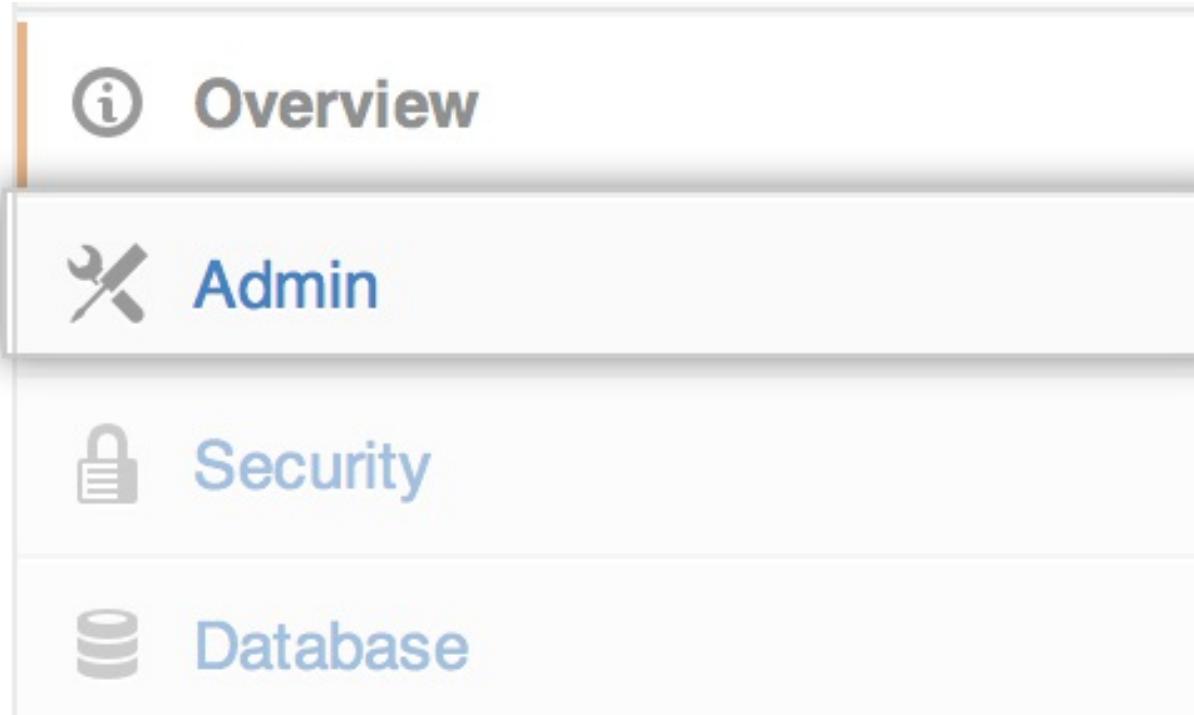
Forces User Emails and SSH Keys to be managed in LDAP. Valid user fields are required to use this option. Existing, manually entered Emails and SSH Keys will be removed when enabled.

Promote Site Admin

Site administrators can promote any normal user account to a site administrator, as well as demote other site administrators to regular users. [Refer to the Enterprise 2.4 documentation](#) for full instructions.

SSH into your appliance and run `ghe-user-promote` with the username to promote:

```
$ ghe-user-promote username
```



- Sign in to your GitHub Enterprise instance
- In the upper-right corner of any page, click ↗
- Search for the name of the user
- In the left sidebar, click 'Admin'
- Site admin > Danger Zone, click 'Promote'
- Type a reason for promoting the user
- Click 'Promote'