Scaleway Quickstart Guide 1.4

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Overview

Welcome to Scaleway!

To help you get started we have prepared the Scaleway Quickstart Guide.

The goal of this document is to provide you with information about every resource in the Scaleway Ecosystem and the procedures you should follow to get the best experience from the Scaleway services.

We will guide you through our documentation and tutorials to help you:

- Navigate the Scaleway Console
- Create Resources
- Discover open source tools
- Protect your resources
- Set up monitoring tools
- Troubleshoot issues

Note: This guide is a curation of beginner-level Scaleway content. Once you have gone through the fundamentals, you can dive deeper into our ecosystem by checking out the rest of the <u>Scaleway Documentation pages</u>.

Let's begin!



Release Notes

Version	Description
1.4	Changed cover design, fixed links, added <u>VPC</u> and <u>Elastic Metal</u> documentation and links to <u>videos</u> .
1.3	Added links to <u>Kubernetes Kosmos</u> and Serverless <u>Functions</u> and <u>Containers</u> documentation.
1.2	Replaced all links to the new documentation platform.
1.1	Added <u>Getting Started with Scaleway IoT Hub</u> and <u>Getting Started with</u> <u>Scaleway Object Storage</u>
1.0	First publication

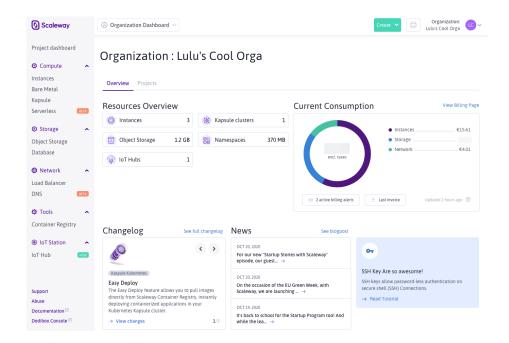


Scaleway Console

How to create a Scaleway account

Follow our guide to create your Scaleway account to deploy your first project with ease.

Watch your way through the first steps: <u>How to create a Scaleway account</u>



Magic Link Authentication

Instead of using your password, you can use a Magic Link to authenticate yourself against the Scaleway Console. It provides quick and secure access to your account without the hassle of remembering your password. Learn how to enable it with *this tutorial*!

Getting Started with the Scaleway Console

The Scaleway Console allows you to view and manage your Scaleway Elements products, billing information, support tickets and more. Learn how to navigate the Scaleway Console for the first time with *this quickstart*!

This content is also available in video form: <u>Quick Cloud Computing Tutorial for</u>

<u>Beginners | Tour of the Scaleway Console</u>



Managing Multi-User with Scaleway Organizations

Organizations is Scaleway's Multi-User feature. An Organization is a resource system, with hierarchically organized accesses and permissions. Learn how to navigate the feature to centrally manage and share resources across multiple accounts by following *the documentation*.

Manage your projects

Project is Scaleway's resource management feature. Designed to help you organize your infrastructure and cloud services, the feature allows resources to be isolated and grouped into specific projects, each with their own credentials. Follow *this guide* to group your features into a project.

How to create and enable SSH Keys

When connecting to an Instance, the authentication is based on secure SSH keys instead of passwords. SSH keys allow password-less authentication on secure shell (SSH) connections. *Follow our how-to* to find out how to configure and enable a SSH key on Windows, MacOS or Linux computers.

Watch your way through the first steps:

- How SSh Keys Work 1/3
- How to create or recreate an SSH key ^{2/3}
- How to create or recreate an SSH Key? 3/3

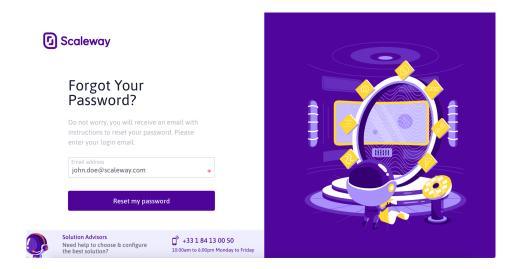
How to generate an API Key

API Keys are unique identifiers associated with your Scaleway account and consist of an Access Key and a Secret Key. Follow <u>this guide</u> to learn how to generate a Security Key and how you can use it to authenticate against our API.



Recover your lost Password

In case you have lost the password of your Scaleway Console account, you can recover it using different methods. *Follow the how-to* to find out how!



Enable Billing Alerts

The Scaleway Console Billing Alerts feature allows you to manage and keep track of your expenses by setting up alerts to trigger when a budget threshold is reached. An alert can be sent to you by SMS, e-mail or API webhook. In *this how-to*, we teach you how to enable them.



Tools

APIs

Automate your workflows

<u>Scaleway Developer Tools Documentation</u>

Scaleway's APIs are a key part of the Scaleway Ecosystem: anything you can do from the Scaleway Console can be done through APIs. APIs give you access to all Scaleway products, including storage, compute and much more. You can get information about your infrastructure, create Instances, perform backups and much more with just a few HTTP(S) requests.

Command Line Interface (CLI)

Download and build the CLI

<u>Scaleway Command Line Interface</u>

The Scaleway Command Line Interface (CLI) helps you manage your Scaleway environment. It allows you to administer, execute and monitor your resources faster. Scaleway CLI is easy to use and offers many commands to interact with infrastructure such as login, creating servers, attaching volumes, moving IP addresses, fetching the logs and many others.

Terraform

Automate infrastructure resources

<u>Deploy Your First Infrastructure on Scaleway using Terraform</u>

HashiCorp Terraform is an open-source software tool to deploy laaC: Infrastructure as Code. It means that you can automate infrastructure resources such as Network, Instances, Elastic Metal servers and more. It allows you to use declarative configuration files to manage the full lifecycle — create new resources, manage existing ones, and delete those no longer needed.



Products

Compute

Instances

Kick off Your Project

How to Create and Connect to Your First Compute Instance

Follow these few simple steps and create a Scaleway instance and start developing your project today.

Watch your way through the first steps: <u>How to create an instance?</u>

Protect your Instance

How to Configure a Firewall on Your Server

Learn how to configure a firewall. This step-by-step will teach you to simplify the control of incoming and outgoing network traffic based on predefined security rules with Uncomplicated Firewall (UFW).

Back up your data

The backup feature allows you to create an image of your Instance, which contains all its volumes. You can use this image not only to restore your Instance and its data, but also to create a series of Instances with a predefined configuration. Find out how in this how-to.

Use Flexible IPs

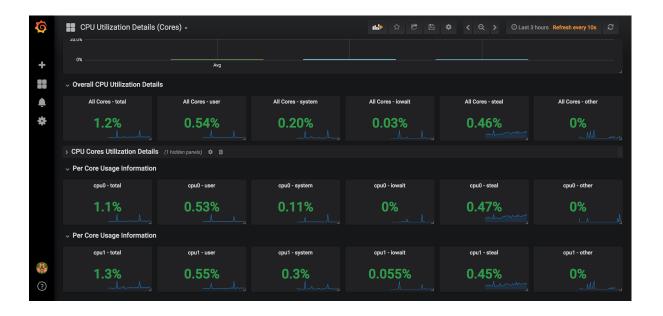
Flexible IP addresses allow you to do live migration of IP addresses between your Instances. You can hold flexible IP addresses independently of any Instance, and attach and detach them to/from any of your Instances. You can keep a number of flexible IP addresses in your account at any given time. Learn how to use IP addresses with Instances.

Monitor your Instance

Configure a Prometheus Monitoring Server with a Grafana Dashboard

Discover how to monitor your resources and ensure they are being properly allocated to your applications with Prometheus Monitoring. Make visualization easier by simultaneously installing a Grafana Dashboard.





Deploy Wordpress

How to deploy a Wordpress blog backed by Scaleway Database for MySQL 8

WordPress is a popular, free and open-source blogging tool and a content management system (CMS). Through this tutorial, you will learn how to install WordPress on a freshly created Ubuntu instance, backed by a Scaleway Database for MySQL.

GPU Instances

Kickoff your Project

How to Create your first GPU Instance

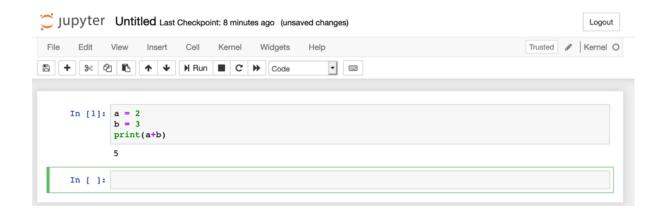
GPU servers are designed for artificial intelligence, machine learning and complex modeling. They are equipped with high-end GPUs and huge quantities of cores, memory and storage. In short, GPUs are optimized for taking huge batches of data and performing the same operation over and over very quickly. Start developing your project with GPU today.

Visualize your code

How to setup and configure Jupyter Notebook on a GPU instance

Jupyter Notebook is a client-server application that allows users to edit and run Notebook documents in a web browser. The application combines code, comments, multimedia contents, and visualizations in a single interactive document — called a notebook - which runs in a web browser. Follow the tutorial to set it up.





Enhance image quality

Achieving Super Resolution with a Sub-Pixel Convolutional Neural Network on Scaleway GPU

Super resolution is the process of enhancing the details of a low-resolution image to recover a high-resolution image. In the context of deep learning, the technique consists of taking a low-resolution image as input, passing it through a neural network and receiving an output which will be a higher resolution version of the input. In this tutorial, we will show you how to prepare your data, construct the Sub-pixel convolutional neural network, train it and test it using a Scaleway GPU instance.

Elastic Metal

Kickoff Your Project

Elastic Metal Servers Quickstart

Scaleway Elastic Metal servers allow you to order dedicated servers on-demand, like Instances. Elastic Metal servers can be used for large workloads, big data and applications that require increased security and dedicated resources. Start developing your applications today!

Configure additional IP addresses

How to order a Flexible IP

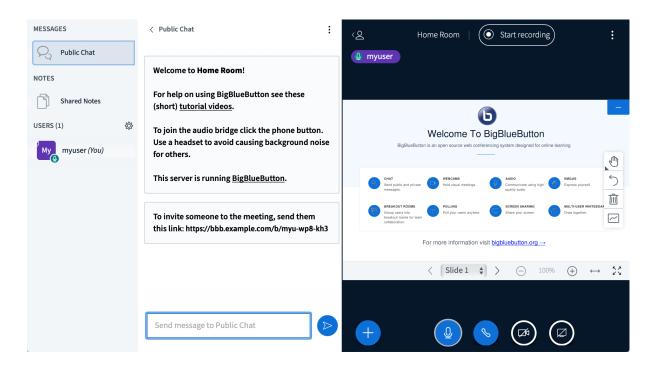
Flexible IP addresses are additional IP addresses, available for Elastic Metal servers. They allow you to move an IP from one server to another without changing your whole configuration. Flexible IPs can also be used as additional IP addresses to create virtual machines on your Elastic Metal server.

Setup a Video Conferencing Solution

<u>Deploy BigBlueButton on your Elastic Metal server</u>



After having successfully deployed the application for the community during the initial stages of the COVID-19 crisis, we show you how to deploy a BigBlueButton platform on your servers.



Kubernetes

An Introduction To Kubernetes

Kubernetes (K8s) is an open-source platform for managing containerized workloads and services. Check out the blog post to learn more about the basic concepts behind the technology.

Or check it out in video form:

Introduction to Kubernetes - Webinar

Create a cluster

Kubernetes Kapsule Quickstart

Learn how to create Kubernetes clusters without the complexity of managing the infrastructure. We will show you how to scale the number of pods depending on your workload and how to manage your cluster via the Kubectl.

Create a Multi Provider cluster

How to create a Kubernetes Kosmos cluster



Kubernetes Kosmos is the first managed Kubernetes engine that allows you to attach an instance or dedicated server from any Cloud provider to a Scaleway Kubernetes control plane. Find out how to begin your multi-cloud project with our guide.

Enter a Name for the Cluster

Give your cluster an identifying name and choose the Kubernetes version to use.



Scale up your cluster

Understanding Kubernetes Autoscaling

Kubernetes provides a series of features to ensure your clusters have the right size to handle any type of load. Have a look into the different auto-scaling tools provided by Kubernetes on this blog post.

Monitor your cluster

Monitor your Kubernetes cluster with Grafana

When using a managed Kubernetes cluster, you may want to know what is going on inside it. Follow

this step by step to learn how you can monitor the resource usage of all your running pods and nodes,

and dozens of other metrics with Grafana and its custom dashboards.

Create Containerized Applications

<u>Creating Containerized Applications with the Easy Deploy Feature</u>

The Easy Deploy feature allows you to pull images directly from Scaleway Container Registry, instantly deploying containerized applications in your Kubernetes Kapsule cluster. With only the basic options to set, you can use Kubernetes Kapsule without managing your .yaml manifests. Find out how in this guide.

Container Registry



Store, manage and deploy container images

Container Registry Quickstart

Scaleway Elements Container Registry is a fully-managed mutualized container registry, designed to facilitate storing, managing and deploying container images. The service simplifies the development to production workflow as there is no need to operate an own container registry or to worry about the underlying infrastructure. Find out more with the documentation.

Deploy images on Kapsule

<u>How to Deploy an Image from Scaleway Elements Container Registry to Kubernetes Kapsule</u>

A container image consists of several bundled files, which encapsulate an application. This image can be built on a local machine, uploaded to the image registry, and then deployed on several Kubernetes pods with Kapsule. Kapsule is the managed Kubernetes service provided by Scaleway Elements. In this tutorial you learn how to create and push a container image to the Scaleway Elements Container Registry and how to use it on Kubernetes Kapsule.

Serverless

Manage your production environment

<u>How to manage a Container</u>

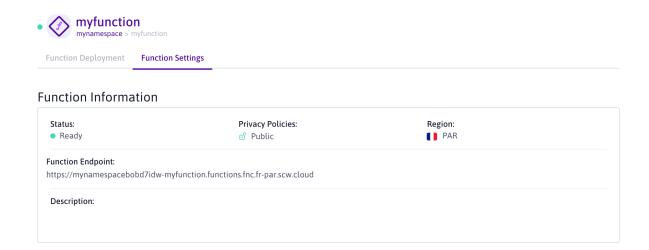
A container is a package of software that includes all dependencies: code, runtime, configuration, and system libraries so that it can run on any host system. Scaleway provides you with custom Docker images that are entirely handled for you in the cloud. With Containers, you can rely on your favorite technologies such as Django or Ruby On Rails. Learn how to manage your containers with *this how-to*.

Simplify development

How to manage a Function

With Serverless Functions, you can focus on writing and deploy your code easily. A function defines a procedure on how to change one element into another. The function remains static, while the variables that pass through it can vary. Find out how it works with the documentation.





Storage

Object Storage

What is Object Storage? Quickstart video with use cases

Learn how to store your objects

Getting Started with Scaleway Object Storage

Take the first steps with Object Storage: create your first bucket, learn how to upload and download objects, access objects via web browser, enable bucket versioning and change storage classes. We show you how in this beginner guide!

Set up bucket policies

A bucket policy is a resource-based policy option. It allows users to grant access to buckets in other Scaleway projects and organizations. By default, all Object Storage resources in a project are private and can be accessed only by users of said project. Adding a bucket policy to a bucket allows you to grant access to outside users. You can use different combinations of the policy's component strings to customize your permissions for different purposes as required. Learn more on our documentation.

Protect your data

Setting up a Nginx reverse proxy with Object Storage

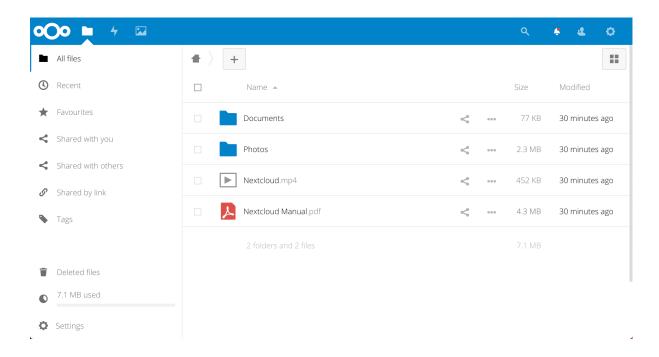
Learn how to set up a Nginx reverse proxy with Object Storage to provide **read-only** access to your buckets' contents.



Manage and share your files

Deploy Nextcloud with Object Storage

Nextcloud is an open source, self-hosted file share and communication platform. It allows you to manage and organize files by uploading and downloading them into a storage space of your choice manageable via web browser or phone and desktop applications. Combine Nextcloud with Object Storage to benefit from infinite storage space!



Benefit from s3 features

How to use Object Storage with AWS-CLI

The AWS-CLI is an open source tool that provides commands for interacting with AWS services. With minimal configuration, you can start using all of the functionalities provided by the AWS Management with Object Storage.

Dive deeper with this series of articles:

Object Storage - What Is It? 1/3

A look into the Object Storage technology currently in production at Scaleway.

Object Storage - How does it work?^{2/3}

How Object Storage's internal management works.

Object Storage - How Is It Built? 3/3

Find out what is under the hood of our Object Storage.

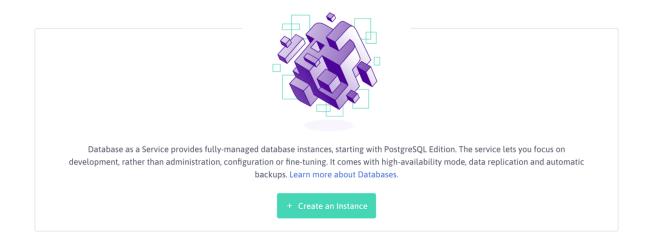


Database

Focus on development

Scaleway Elements Database for PostgreSQL and MySQL

Scaleway Elements Database provides fully-managed relational Database Instances, providing MySQL and PostgreSQL as database engines. The product lets you focus on development, rather than administration or configuration. It comes with high-availability mode, data replication, and automatic backups. In this documentation, we show you how to set-up a Managed Database.



Make time for your core projects

Migrating existing Databases to a Managed Database Instance

The Managed Database product provides reliable high-performance managed SQL database engines, both for PostgreSQL and MySQL. Using the service allows you to stay focussed on the development of your applications and to benefit from Scaleway's expertise in the management of your database engines. Learn how to migrate your existing Databases on your Database Instances using an intermediate host with this guide.

Create a Database for your Wordpress

How to deploy a Wordpress blog backed by Scaleway Database for MySQL 8

WordPress is a popular, free and open-source blogging tool and a content management system (CMS). Through this tutorial, you will learn how to install WordPress on a freshly created Ubuntu instance, backed by a Scaleway Database for MySQL.



Monitor time-series data

How to visualize Time-Series data with TimescaleDB and Grafana

Time-series data is everywhere around us and an important point of our everyday life. Whether it is a factory that measures the production output of a specific machine, a farmer observing the humidity of the soil or a city measuring the regularity between trains. Learn how to use the TimescaleDB, a time series Database built on top of PostgreSQL, with a Scaleway Managed Database.

Network

VPC

Set up Private Networks

Private Networks enable you to build a virtual Layer 2 network between your Scaleway resources, such as Instances, Elastic Metal servers and Database Instances, allowing them to communicate in an isolated and secure network. Learn how to use them with this how-to.

Create Public Gateways

Public Gateways sit at the border of Private Networks and provide extra functionality. They provide services to automate the allocation of private IP addresses (DHCP), and deal with traffic entering and exiting the network (NAT). You can add a Public Gateway to each of your Private Networks. Follow the hem-to-network.

Load Balancer

Distribute workload

<u>Scaleway Load Balancer Quickstart</u>

Load Balancers are highly available and fully-managed Instances which allow you to distribute the workload among your various services. They ensure the scaling of all your applications while securing their continuous availability, even in the event of heavy traffic.

Increase trust level

<u>How to import your own SSL cert to a Load Balancer</u>

The managed Load Balancer service supports Let's Encrypt SSL/TLS certificates by default. It is possible to import your own SSL certificate in case you want either to use a self-signed



certificate or to increase the trust level issued by another certificate authority (CA). Follow this tutorial to find out how!

Handle encrypted HTTPS traffic

Setup SSL Offloading on Load Balancer

Learn how to handle encrypted HTTPS traffic on the Scaleway Managed Load Balancer by setting up SSL offloading.

DNS

Manage external domain names

Scaleway DNS

Scaleway DNS is a managed DNS service that allows you to easily configure the DNS zones of your domains. It provides support for queries via both IPv4 and IPv6 and supports all common types of DNS records.

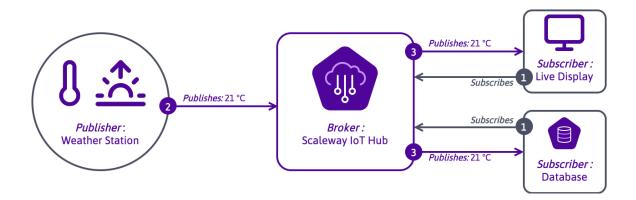
IOT

IoT Hub

Connect devices

Getting Started with Scaleway IoT Hub

The Internet of Things, or IoT, is about creating a wide ecosystem of services for connected objects to turn them into smart devices. Follow the tutorial and learn how to create your first IoT Hub to connect to objects, Scaleway services and applications, and send messages.





Learn more about the world of IoT:

Scaleway Elements IoT Hub

Learn more about how IoT Hub works.

• <u>Scaleway Elements IoT Hub Metrics</u>

Metrics report usage of your Hub and Devices.

• IoT Hub Events

Hub Events represent devices and routes events or errors.

• <u>Scaleway Elements IoT Kickstarts</u>

An IoT Kickstart is a Scaleway instance providing an application for a typical IoT use case. Scaleway will spawn, install and configure the instance for you with the required software so messages flowing through your IoT Hub end up in the application.

Set-up real-time message alerts

<u>How to Configure Real-time Alerting with IoT Hub and Slack</u>

Set up "Slack applications" to send messages to team members and notify them about ongoing problems. In this tutorial, we show you how to enable device-to-Slack messaging through IoT Hub.

Dig deeper with our blog posts:

The IoT Hub, a simple platform for your connected objects based on a market standard.

Scaleway IoT Hub - Introduction to MQTT Topics

IoT Hub: A Quick Introduction to the MOTT Protocol



Join the community

Want to talk about the project you are developing, have any questions or just love talking about the Cloud? Our team is at your disposal on our <u>Slack</u> <u>community</u> channel.

