How to Create a Project

Objective

The following page explains how to create a new project on Herrontech SaaS.

Every project requires a database resource to provision the deployment configuration and at least one infrastructure provider to deploy your projects' components.

Herrontech SaaS currently integrates with MongoDB Atlas to provision the deployment configuration and also integrates with Amazon Web Services and/or Google Cloud to deploy projects' components.

Steps

1. Create a new Database Resource Account
    a. Create new MongoDB Atlas Account
    b. Create an organization
    c. Create a Project
    d. Create a Cluster
    e. Create a Database Administrator Account
    f. Generate API Key & Token
2. Create a new Infrastructure Account
    a. Create new AWS Account
        i. Generate API Key & Token
    b. Create new Google Account
        i. Generate API Key & Token
3. Create New Herrontech Saas Project
    a. Enter Project Details
    b. Pick Project Package
    c. Provide Infrastructure API Key & Token
    d. Provide Resource API Key & Token

Database Resource Account

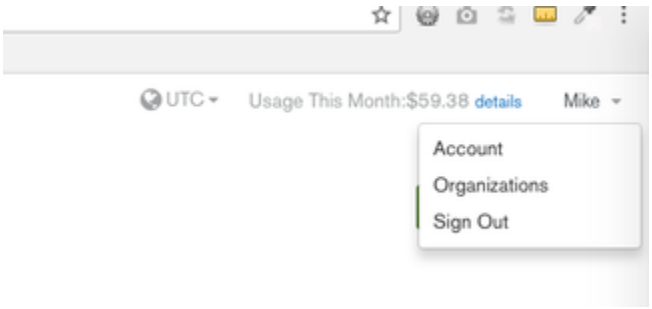
You need a resource to hold and persist your project's cloud deployment information. Herrontech currently support MongoDB Atlas.

If you do not already have an account, you need to create a new Atlas account; Click Here: https://docs.atlas.mongodb.com/getting-started

Login to your account and follow the steps below:

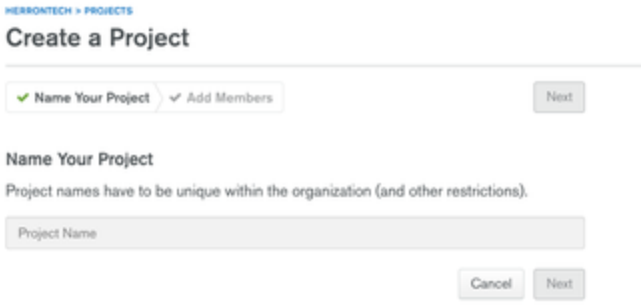
Step 1:

Create a new Organization the top right Menu



Step 2:

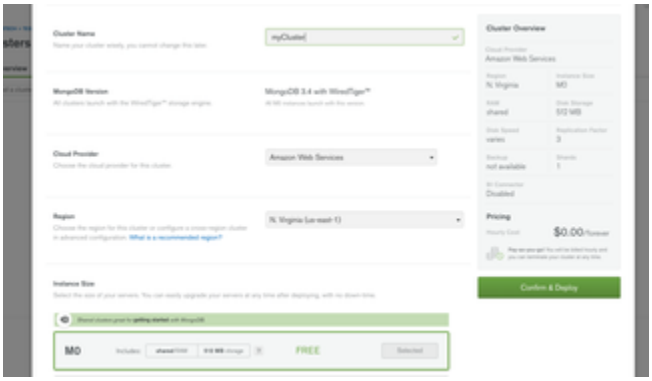
Create a new Project in your Organization



Step 3:

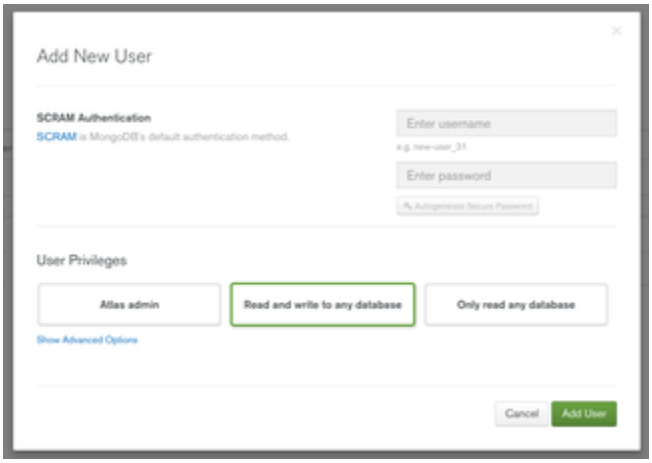
Create a new Cluster in your Project

> **Hint**
> You can choose the **M0** (Free Tier) Flavor while creating your cluster if this is your first testing project and upgrade the cluster at any moment later on.



Step 4:

Once you create your cluster, Click on the **Security** Tab and create a Database Administrator Account by providing a username & password



Step 5:

Finally, Click on **Account** in the top right menu, then click on **Public API Access** Tab and Generate a new API Key & Token.

Both the API Key & Token will be used so that Herrontech SaaS can communicate with your MongoDB Atlas Cluster.

Infrastructure Account

You need to have an account at a cloud provider in order to setup your infrastructure. Herrontech currently support Amazon web service and Goo

gle cloud.

Amazon Web Services

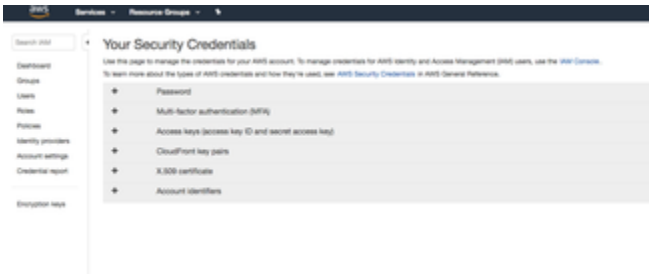
If you wish to use AWS as a cloud infrastructure provider, you need to have an account and provide Herrontech SaaS with the API credentials.

If you don't have an AWS Account, Click Here: https://aws.amazon.com

Login in to your AWS account and follow the steps below:

Step 1:

Click on your Username in the top right Menu and then click on **My Security Credentials** from the Menu.



Step 2:

Click on **Users** from the left sidebar menu then **Create new User** and follow the wizard steps.

Once your user is created, click on it and open **Security Credentials** Tab.

Generate a new Access Key along with its token.

Both the key and the Token will be used so that Herrontech SaaS can communicate with AWS and deploy your infrastructure.

User Permissions
While creating your user, make sure you provide the correct Access to your account.

Herrontech SaaS requires the following permissions to be enabled so it can deploy your infrastructure, create & manage load balancers along with certificates, firewall and dns entries:

- Amazon EC2 Full Access
- Route53 Management
- Amazon S3 Full Access
- Amazon DynamoDB Full Access
- Amazon SNS Full Access
- AWS CertificateManager Full Access
- AWS Cloud Formation Read Only Access
- Lambda Full Access
- Amazon SQS Full Access

Google Cloud

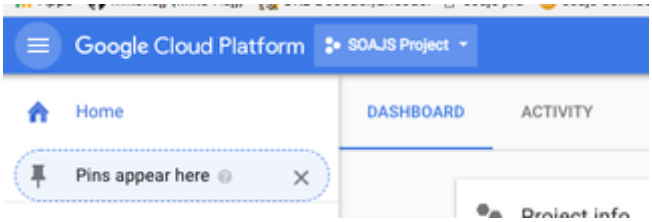
If you wish to use Google Cloud as a cloud infrastructure provider, you need to have an account and provide Herrontech SaaS with the API credentials.

If you don't have a Google Cloud Account, Click Here: https://cloud.google.com

Login in to your Google Cloud account and follow the steps below:

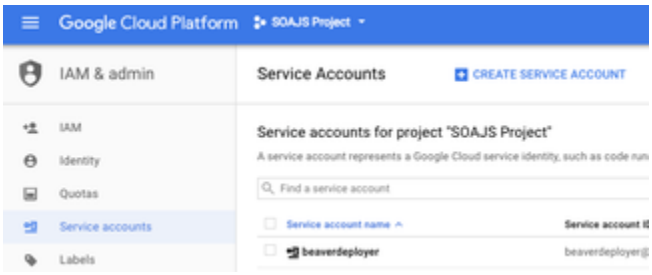
Step 1:

Choose or create a new project from the top center menu next to **Go ogle Cloud Platform**



Step 2:

Choose **IAM & admin** from the left sidebar menu and click on **Service Accounts**



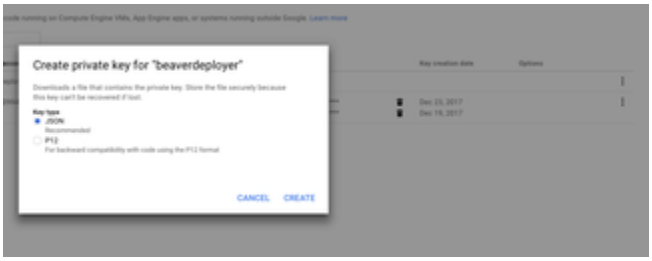
Step 3:

Click on **Create Service Account** at the top of the page and follow the wizard to create a new user with permissions to deploy in your google cloud project.

Once the user is created, click the **configure** icon at the right end of the user record and choose **Create Key** then **JSON**.

Google Cloud will generate a new key for you in a JSON format and downloads it to your computer.

Both the Project Name from Step 1 and the JSON Key will be used so that Herrontech SaaS can communicate with Google Cloud and deploy your infrastructure.



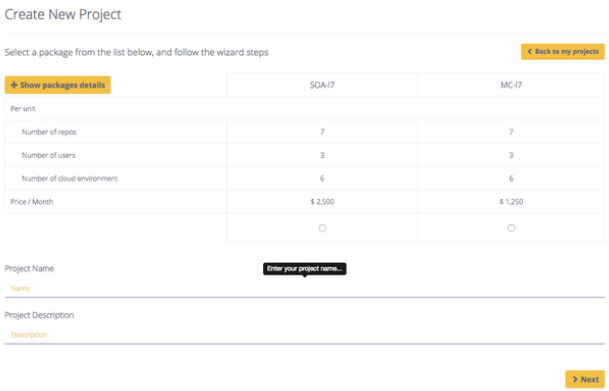
> **User Permissions**
> While creating your user, make sure you provide the correct Access to your account.
>
> Herrontech SaaS requires the following permissions to be enabled so it can deploy your infrastructure, create & manage load balancers along with certificates, firewall and dns entries:
>
> - App Engine Admin
> - Compute Admin
> - Kubernetes Engine Admin
> - Kubernetes Engine Cluster Admin
> - DNS Admin

Create New Herrontech SaaS Project

At this point, you have all the requirements needed to create a new project on Herrontech SAAS.

1. Log in to the members area under the Herrontech Website: https://www.herrontech.com/members/login
2. Click on **Create New Project**
    a. Provide a name & a description for your project
    b. Select a package from the available package
3. Select the infrastructure provider you wish and fill in the API information
    a. AWS: API key + Token
    b. GC: Project Name/Id + JSON Token

4. Fill in the information of your Atlas Cluster
    a. Organization Id
    b. Project Name
    c. Cluster Name
    d. Database Username
    e. Database Password
    f. API Username
    g. API Token



> You can extract from the organization id from the URL. When you click on the organization from the list, you can see all the projects under it and the URL will be for example: **https://cloud.mongodb.com/v2#/org/5a18277b96e821988f515a42/projects**, where **5a18277b96e821988f515a42** is the Organization Id.

Your project will be Created but might take up to 10 minutes for it to be activated because during that time, Herrontech will request to whitelist it's server IPs in your cluster's security panel so it can execute mongo operations and provision your cloud's configuration.

Once the project is activated, an **Open** button will be available next to its name and you can click it to open and access your deployment.