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If someone else has already created a Portal for you, you can skip Portal creation. Just point your browser at the new Portal and perform the initial login as user: admin@chordsrt.com, password: realtimedata. You will be prompted to change the password during this first login. You can then proceed to Site configuration.

The Portal runs as a standalone web server on Amazon Web Services (AWS). The interface to AWS can seem a bit overwhelming (currently offering 52 services!).

We use the **AWS CloudFormation** service to create a new portal. The steps are simple.

Go ahead and log into your AWS account in your browser. We will come back to it shortly.

1. Fetch the CloudFormation template

CloudFormation uses a template file, which you need to get from the CHORDS GitHub project. A simple way to do this is just to cut and paste the text from your browser, into a local file on your computer.

In a new browser tab, open the CloudFormation template file{:target="_blank"}.

Copy and paste the text into a local file named chords_cf_template.yml on your computer. It's a long file, so be sure to scroll all of the way to the bottom and copy all of the text.

2. Run CloudFormation

• First click on "Services" and then click on "Cloud Formation"



3. Start stack creation and upload the template



- Click Create new stack
- Click on Upload a template file and then choose your local template file (chords_cf_template.yml) for uploading:



• Click Next

4. Specify stack details

- Give the stack a name. The convention is *CHORDS* suffixed with your project or organization name, e.g. *CHORDS-CSURadar*.
- You will need to create a key pair for your Amazon account if you have not already done so. You can see
 instructions about how to do this on Step 4 of Setting up your Amazon Account{:target="_blank"}. Then
 select an EC2 KeyPair that you created for KeyName. This will allow you to ssh into the instance, if ever
 needed.

The ChordsEmailAddress and ChordsEmailPassword parameters are not required, but can be used to specify an email account that can be used for email forwarding of password reset requests and grafana alerts. Gmail is typically used for this. Since the email credentials are stored on this CHORDS server instance, **you really should** create an email account to be used specifically and only for this purpose.

(Note: gmail will require you to allow insecure application access to the mail account, unlock Captcha, and finally to

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authorize the CHORDS server when the first test email is sent from the CHHORDS admin account. It can be tricky to get the email forwarding to work.)

For demonstrations and simple, low-bandwidth streaming feeds, select a *t2.micro* instance type which are free of charge for the first year. Otherwise, select a more capable instance. *t2.small* provides good responsiveness for sites with half a dozen instruments, and *t2.medium* has successfully hosted sites with 50 instruments, or those with higher frequency (>1 Hz) data streams.



Hit Next

5. Configure stack options

• Click Stack creation options

· Rollback on failure: Disabled

Termination protection: Enabled



• Hit Next.

6. Review

Verify that everything looks good and then click Create Stack



7. Wait for the portal to be created

• After the creation has started, you will be taken to the stack summary page. Go to the *Events* tab to watch the progress of the stack creation. It usually takes about 6 minutes to complete, but it can take much longer (even 30 minutes), depending upon AWS performance.



8. Accessing the new portal

Once your portal is created click on your **Stack Name** then the **"Outputs"** tab. Below it will show a URL for the new portal, **click** on the URL to access your new portal.



9. Log Into to Your Brand-New CHORDS Portal!

· Click on the "Sign in"



Once the Portal is running, you will want to immediately change the admin acount and password to your own email and password.

- Log into your new portal, as user: admin@chordsrt.com, and password: realtimedata
- Click on Users, then click on admin@chordsrt.com

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- Click Edit User
- Change your email and then click Change Password
- Enter your new password and use realtimedata as your old password to confirm the change
- Click Update

If something breaks

• If the provisioning fails, the instance will be stopped, and you won't know why. You can redo the process, and disable the rollback, so that the instance is left running. To do this, when on the *Options* page, open the Advanced section, and change *Rollback on Failure* to *No*. This will keep the instance running when the provisioning fails, so that you can ssh in and diagnose the problem.

Continue to Portal Configuration (: .btn .btn--info)