



ondia

The logo for 'ondia' is centered on a white background. The word is written in a lowercase, rounded sans-serif font. The letters 'o', 'n', and 'd' are a medium purple, while 'i' and 'a' are a darker blue. A light blue and teal graphic element, resembling a stylized 'd' or a corner bracket, is positioned behind the 'd'. The background features four purple triangular corner accents pointing towards the center.



AWS CloudFormation

AGENDA



- ▶ Introduction to CloudFormation
- ▶ Templates
- ▶ Stacks
- ▶ CF's Working Process



Introduction to CloudFormation

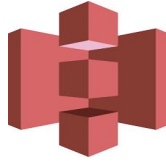
Introduction to CloudFormation

What is CloudFormation?

- Create-Delete-Modify one or few AWS resources

- Easy 

- Hundreds ?



- Automation?

Introduction to CloudFormation

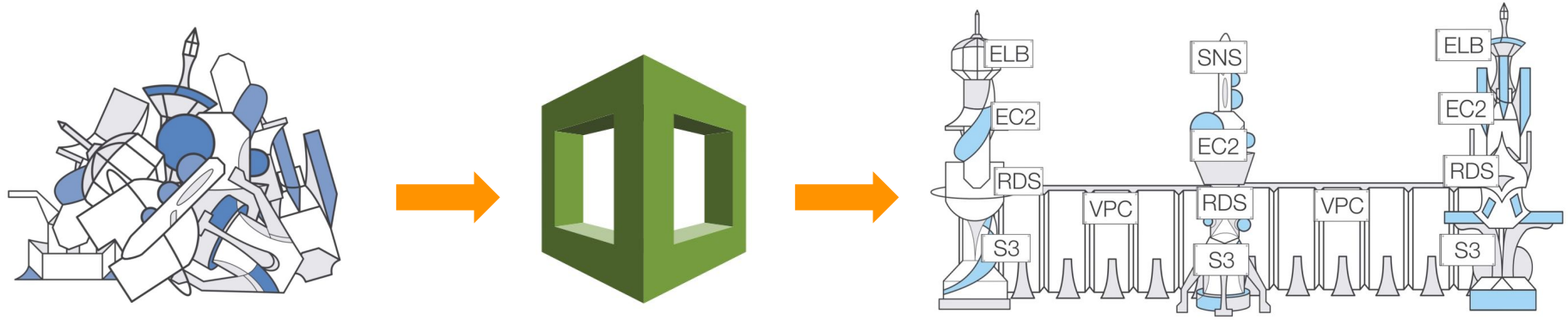
What is CloudFormation?



- **CloudFormation** is an **AWS service** which enables you to create, manage, configure, replicate and delete **AWS resources** easily and rapidly using **templates**.

Introduction to CloudFormation

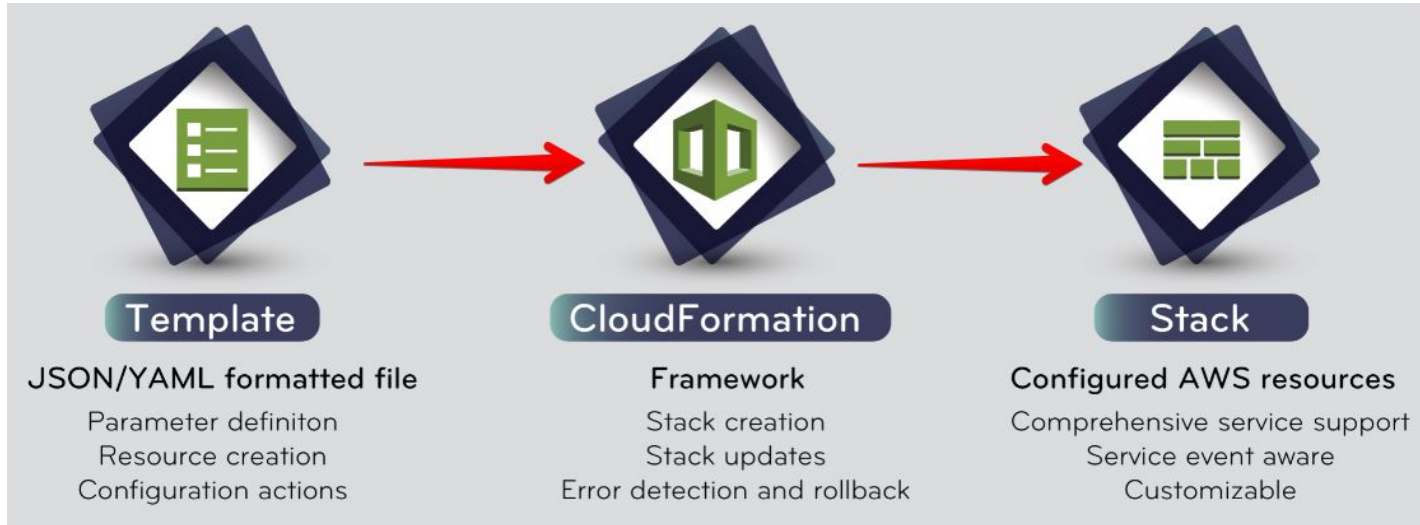
What is CloudFormation?



- **Provisions** and **manages** stacks of AWS resources based on **templates** you create to model your infrastructure architecture.

Introduction to CloudFormation

Templates and Stacks



- **Templates** and **Stacks** are the main components of AWS CloudFormation.

Introduction to CloudFormation

Pricing



- You **don't pay** for using **AWS CloudFormation**.
- You **pay** for the **resources you use**.



Templates

Templates

What is a Template?



```
{
  "AWSTemplateFormatVersion" : "2010-09-09",
  "Description" : "A simple EC2 instance",
  "Resources" : {
    "MyEC2Instance" : {
      "Type" : "AWS::EC2::Instance",
      "Properties" : {
        "ImageId" : "ami-0ff8a91507f77f867",
        "InstanceType" : "t1.micro"
      }
    }
  }
}
```

- A template is a **JSON** or **YAML** formatted text file which you specify the AWS resources you want to create.

Templates

What is a Template?



- You create resources, define the parameters and configure your settings with templates.
- Templates can have the extensions `.json`, `.yaml`, `.yml`, `.template`, or `.txt`.

Templates

Structure



- Template Version
- Description
- Metadata
- Parameters
- Mappings
- Conditions
- Transform
- Resources
- Outputs

```
{
  "AWSTemplateFormatVersion" : "version date",
  "Description" : "JSON string",
  "Metadata" : {
    template metadata
  },
  "Parameters" : {
    set of parameters
  },
  "Mappings" : {
    set of mappings
  },
  "Conditions" : {
    set of conditions
  },
  "Transform" : {
    set of transforms
  },
  "Resources" : {
    set of resources
  },
  "Outputs" : {
    set of outputs
  }
}
```

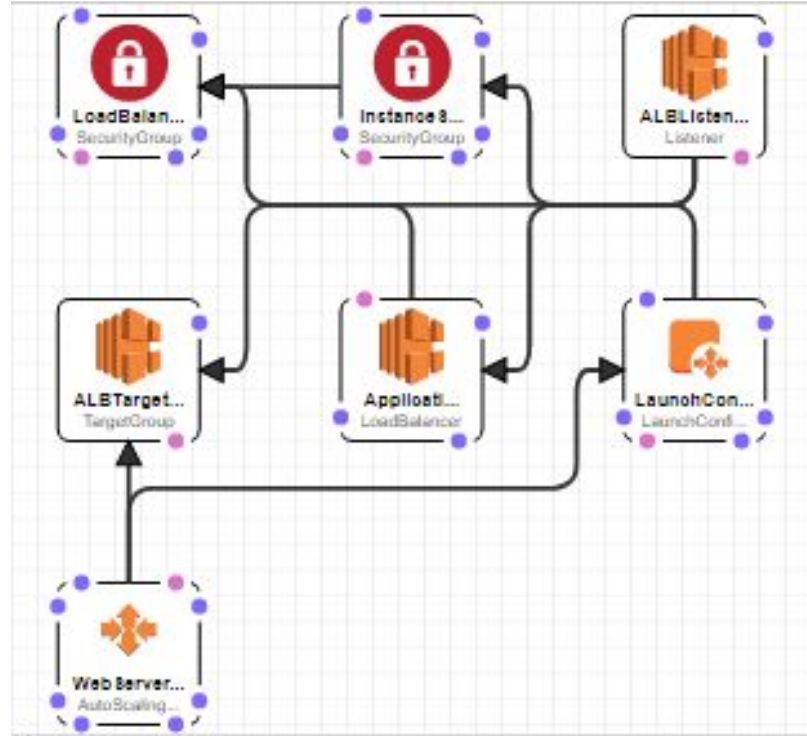


Stacks

Stacks

What is a Stack?

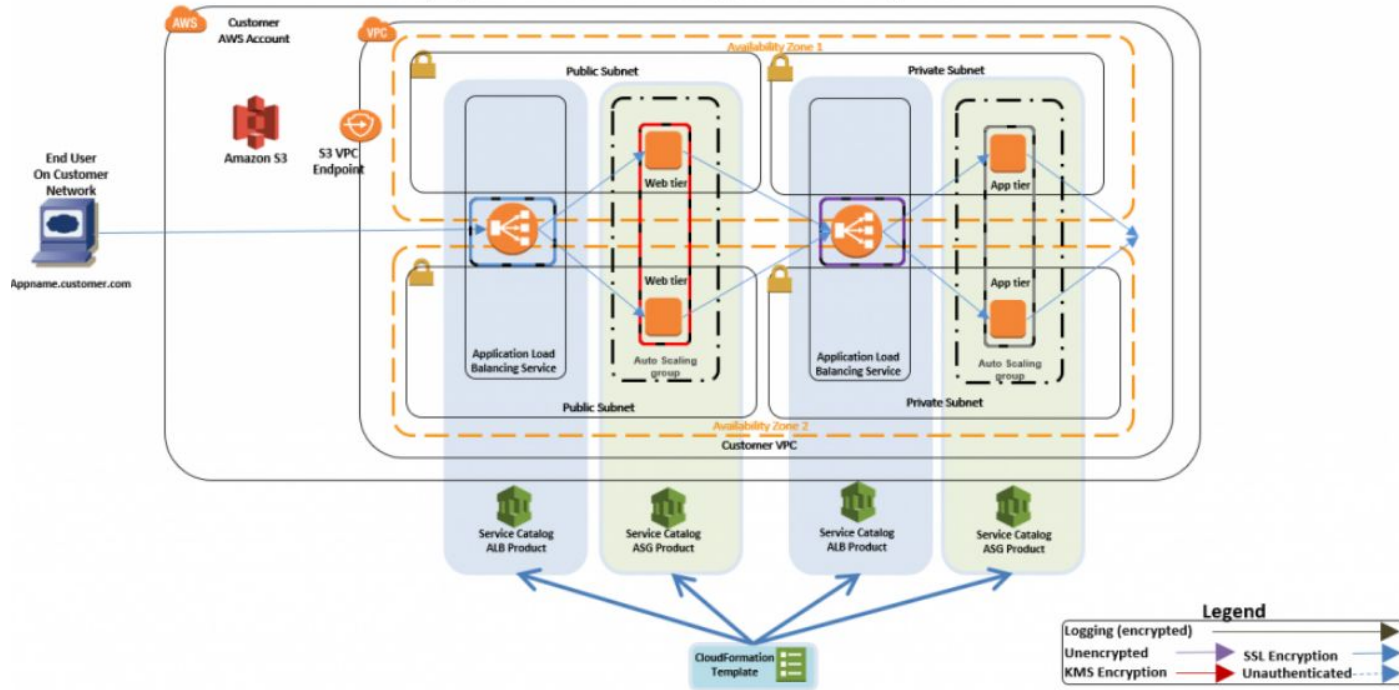
- A stack is a single unit **composed of the AWS resources** provisioned by CloudFormation.
- All of the resources in a **stack** are defined and configured by the **related template**.



Stacks

What is a Stack?

- A stack can be either **a single EC2 instance** or **a very complex VPC**.



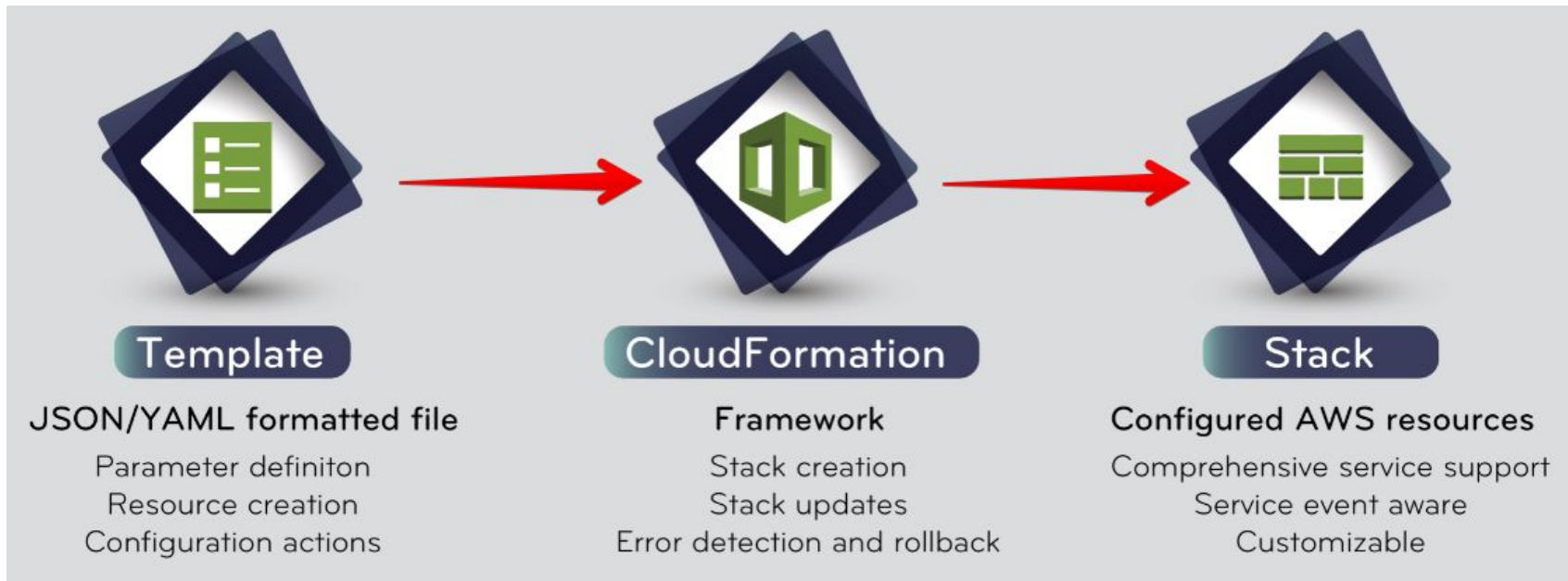


CloudFormation's Working Process

CloudFormation's Working Process



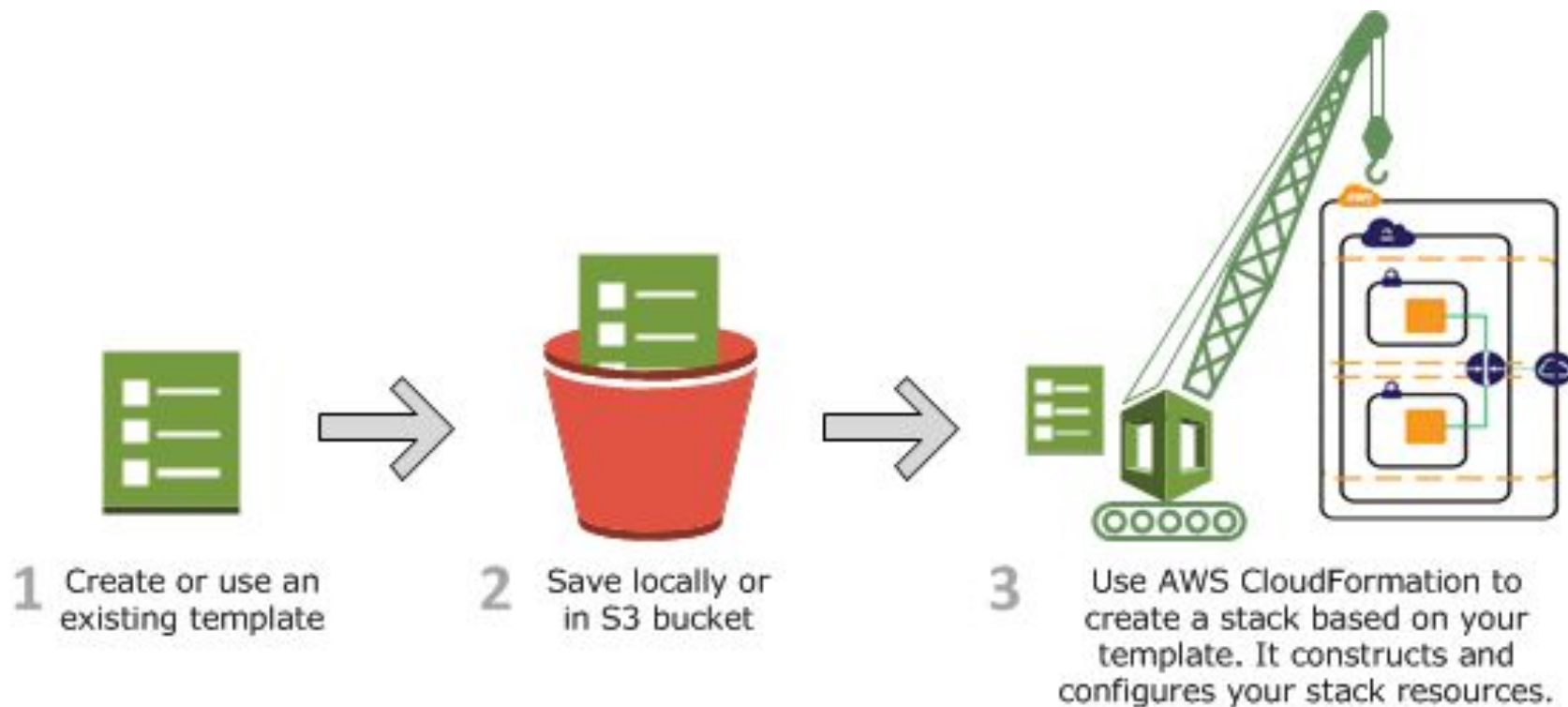
How does it work?



CloudFormation's Working Process



How does it work?





THANKS!

Any questions?

