



Vapor

VAPOR 1.+

VAPOR

Droplet

Config

Authc/z

Provider

Routing

Views

JSON

Session

ENGINE

HTTP

WebSocket

SMTP

FLUENT

Model

Query

Driver

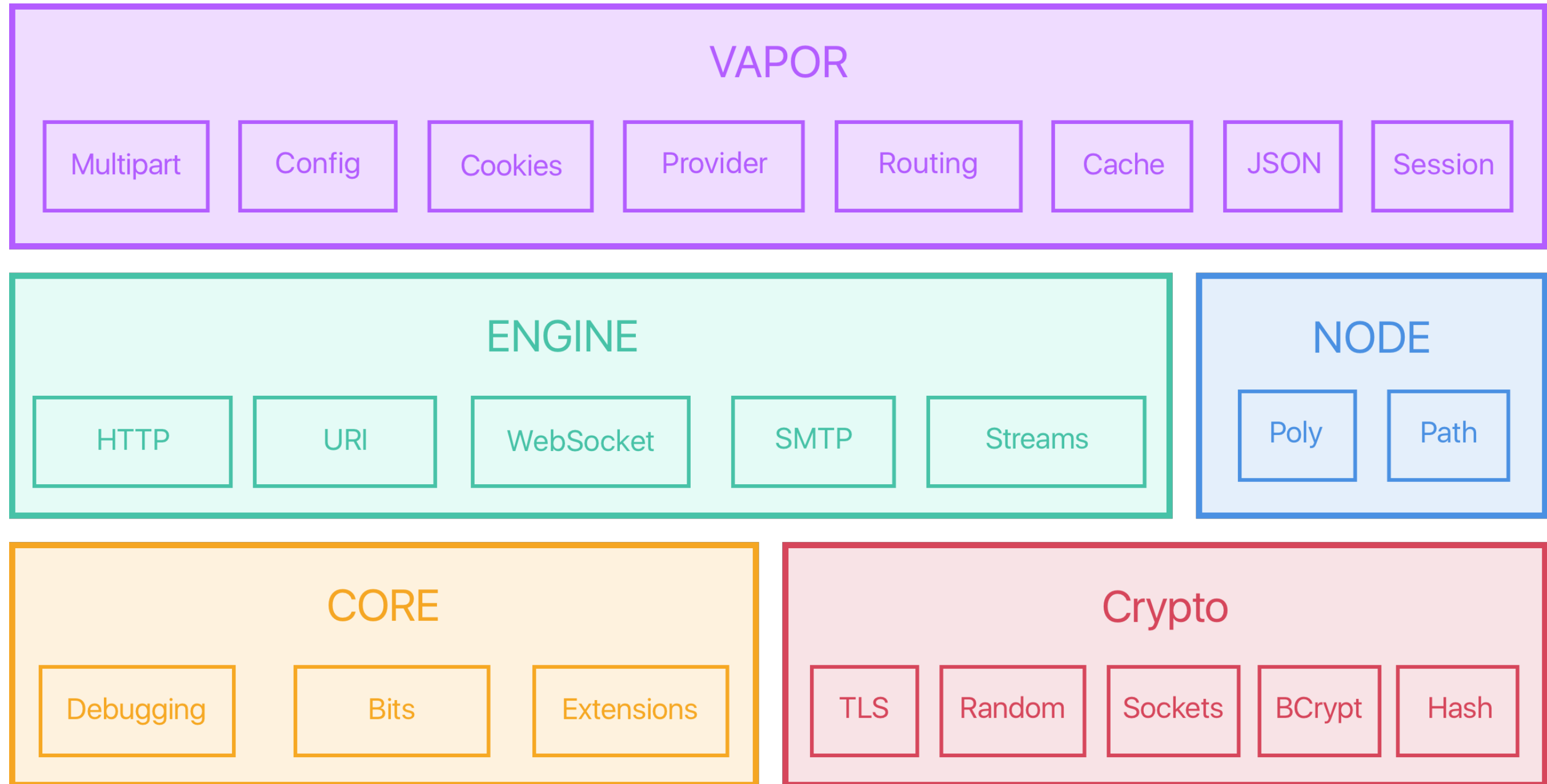
NODE

Poly

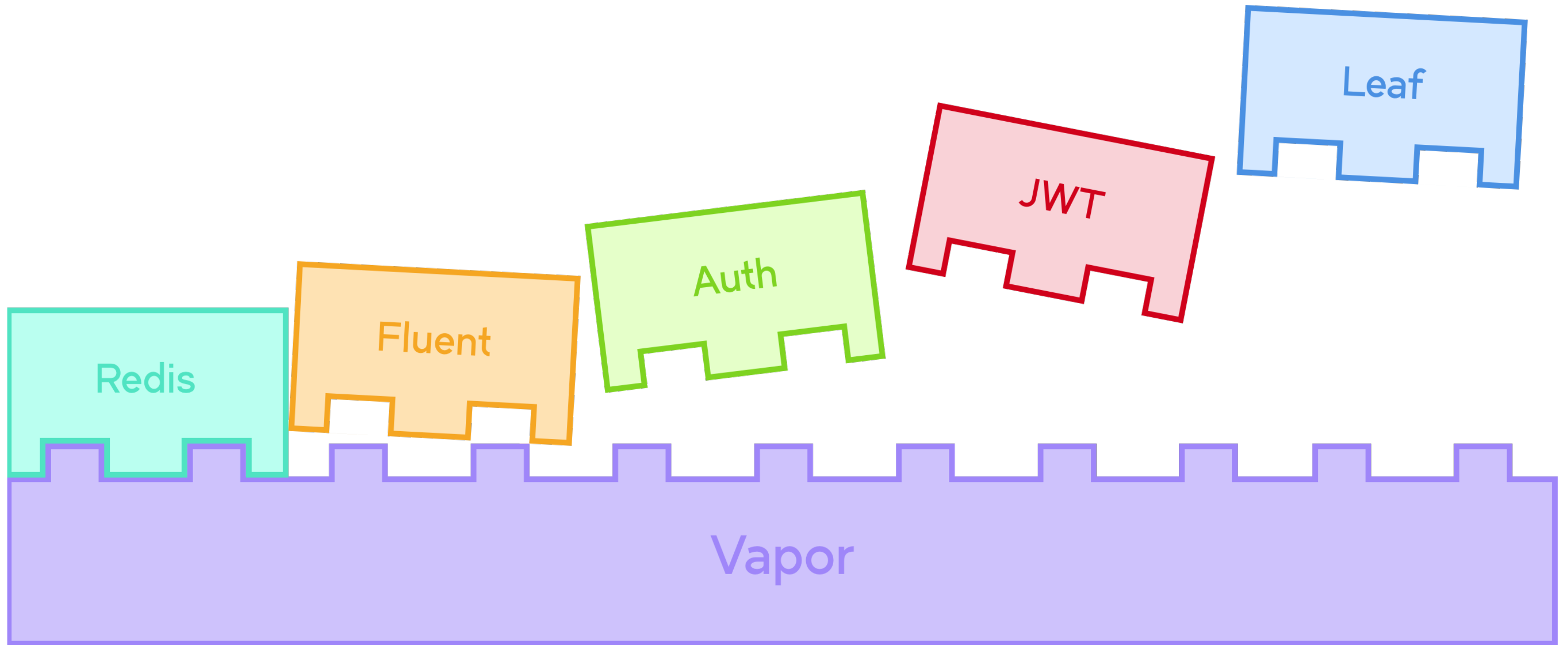
Path

CORE

VAPOR 2



PROVIDERS





- » Byte Manipulation
- » Common Types
- » Core extensions
- » Fills in for Foundation

CORE

```
let size = try stream.read(max: 8)  
return UInt64(size)
```



- » SMTP, WebSockets, HTTP, Streams
- » Can be used completely independent of Vapor
- » Starting point for custom applications
- » Client implementations for WebSockets and HTTP

ENGINE

```
import HTTP
```

```
let socket = try TCPInternetSocket(  
    scheme: "http",  
    hostname: "0.0.0.0",  
    port: 8080  
)  
let server = try TCPServer(socket)  
  
try server.start(responder) { error in  
    print("Server received error \(error)")  
}
```


ENGINE

```
import WebSockets
```

```
try WebSocket.connect(to: url, using: client) { ws in  
    print("Connected to \(url)")
```

```
    ws.onText = { ws, text in  
        try ws.send("[echo] \(text)")  
    }
```

```
}
```



- » Stringy web to type-safe Swift
- » Transforming to various types
- » Abstract data structure

NODE

```
// Creating Models
```

```
let models = try [MyModel](node: json)
```

```
// Unwrapping
```

```
let age = node["users.0.age"]?.int
```

```
// Generic
```

```
let foo: Foo = try node.get("foo")
```



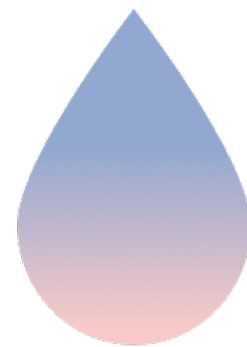
- » ORM
- » Interface with multiple databases
- » SQL / NoSQL / Mongo
- » Nested / Relational
- » iOS Shared Future

FLUENT

```
let user = try User.find(42)
```

FLUENT

```
let user = try User.makeQuery()  
    .filter("age" >= 21)  
    .all()
```



Vapor