

## ORM (Object Relational Model)

Basically is a **technique** that allows us to create a layer between the language and the database. Without having to write SQL queries.

There's a dilemma about when to use SQL and when ORMs. Advocates of ORMs claim they increase productivity, improve application design, reuse code and maintain the application. According to detractors, a negative aspect of ORMs is performance.

- Pros
  - It standardizes interfaces reducing boilerplate
  - It speeds development time.
  - Reduced Testing
- Cons
  - Poor Mapping
  - Performance

## ORM IN RUBY

- ORM - active record

```
def show
  @article = Article.find_by(title: 'Hello Rails')
end
```

```
@article = Article.find(params[:id])
@article.update(article_params)
```

- SQL

```
SELECT * FROM Articles WHERE title = "Hello Rails";
```

```
•UPDATE Articles
SET title = 'New name', body= 'Body with more than 10 characters'
WHERE id = 13
```

## WHAT ARE RFCs? (Request for comments)

It's a document that describes the standards, protocols and technologies of the internet and TCP/IP. They are mainly to develop a "standard" network protocol, a function of a network protocol or any feature which is related with network communication.

## What is HTTP? Hypertext Transfer Protocol

It's the protocol that allows transfer data between networked devices. A typical flow over HTTP involves a client machine making a **request to a server**. HTTP is called a **stateless** protocol because each request is executed independently, without any knowledge of the requests that were executed before it.

## HTTP RFCs:

### RFC (7321)

It defines representation metadata that describe how a **payload is intended to be interpreted** by a recipient, the request header fields that might influence content selection, and the various selection algorithms that are collectively referred to as "content negotiation".

### RFC (2616)

This RFC specifies an Internet standards track protocol for the Internet community, and requests discussion and suggestions for improvements.

## What is SSH?

The Secure Shell (SSH) is a protocol for **secure remote login** and other **secure network services** over an insecure network.

## SSH RFCs:

### RFC (4253)

This RFC describes the SSH **transport layer protocol**, which typically runs on top of TCP/IP. The protocol can be used as a basis for a number of secure network services. It provides strong encryption, server authentication, and integrity protection. It may also provide compression.

### RFC (4254)

This RFC describes the SSH **Connection Protocol**. It provides interactive login sessions, remote execution of commands, forwarded TCP/IP connections, and forwarded X11 connections. All of these channels are multiplexed into a single encrypted tunnel.