Updates from the Elixir team

@elixirlang / elixir-lang.org

@josevalim

Agenda

- Elixir v1.8
- Elixir v1.9
- What's next?

Versioning

- Elixir follows semantic versioning

- Current release is v1.8.2

- New minor releases every 6 months: no breaking changes!

Policies

- Erlang/OTP compatibility policy
- Security policy
- Deprecation policy
- https://hexdocs.pm/elixir/compatibility-and-deprecations.html

Elixir v1.8
(out right now)

Elixir v1.8

- January/2019
- 800+ contributors
- 8 500+ packages on hex.pm
- 500 000 000+ downloads

Derivable structs inspection

Derivable **structs** inspection

```
defmodule User do
  defstruct [:id, :name, :age, :email, ...]
end

%User{name: "josé"}
%User{} = user
```

Derivable structs inspection

```elixir
defmodule User do
  defstruct [:id, :name, :age, :email, ...]
end

%User{id: …, name: …, age: …, email: …}
```

Derivable structs inspection

```elixir
defmodule User do
  @derive {Inspect, only: [:id, :name]}
  defstruct [:id, :name, :age, :email, ...]
end

#User<id: …, name: …, …>
```

Time zone database support

Time zone database support

- Since Elixir v1.4 we have:
  - Time
  - Date
  - NaiveDateTime
  - DateTime

Time zone database support

```elixir
defmodule Calendar.TimeZoneDatabase do
  @callback time_zone_period_from_utc_iso_days(iso_days(), time_zone()) ::
            {:ok, tz_period()}
            | {:error, :time_zone_not_found | :utc_only_time_zone_database}

  @callback time_zone_periods_from_wall_datetime(naive_datetime(), time_zone()) ::
            {:ok, tz_period()}
            | {:ambiguous, tz_period(), tz_period()}
            | {:gap, {tz_period(), tz_period_limit()}, {tz_period(), tz_period_limit()}}
            | {:error, :time_zone_not_found | :utc_only_time_zone_database}
end
```

Time zone database support

@lau

- Implemented the behaviour
- Developed the tzdata package
  - Fetches data from IANA
  - Implements tzdb behaviour
  - Provides auto-updates

Elixir v1.9
(out soon)

Releases

Releases

```
$ mix new my_app
$ cd my_app
$ mix release
$ _build/dev/rel/my_app/bin/my_app start
```

Release executable

- Start, restart and stop commands

- Supports RPC commands and a remote console

- Supports one-off commands

- Built-in command to install as a Windows service

- Built-in command to run as a UNIX daemon

Release configuration

- Customizable vm.args

- Customizable env.sh/env.bat

- Build-time configuration

- Configuration providers
(aka runtime configuration without REPLACE_OS_VARS)

Thank you's!

- Erlang/OTP
- Distillery
  - Thanks to Paul Schoenfelder
- Relx
  - Thanks to Tristan Sloughter

Elixir v2.0?

Elixir v1.10
(out eventually)

What's next?

- The backlog is empty

- New versions will continue to come every 6 months

- No plans for a major release

- Leverage improvements in and contribute to Erlang/OTP

- Most exciting developments come from the community

Thank you!

@elixirlang / elixir-lang.org