

## tf.contrib.seq2seq.AttentionWrapperState

## Contents

Class `AttentionWrapperState`

## Properties

`alignment_history``alignments`Class **AttentionWrapperState**Defined in `tensorflow/contrib/seq2seq/python/ops/attention_wrapper.py`.`namedtuple` storing the state of a `AttentionWrapper`.

Contains:

- `cell_state`: The state of the wrapped `RNNCell` at the previous time step.
- `attention`: The attention emitted at the previous time step.
- `time`: `int32` scalar containing the current time step.
- `alignments`: A single or tuple of `Tensor` (s) containing the alignments emitted at the previous time step for each attention mechanism.
- `alignment_history`: (if enabled) a single or tuple of `TensorArray` (s) containing alignment matrices from all time steps for each attention mechanism. Call `stack()` on each to convert to a `Tensor`.

## Properties

**alignment\_history**

Alias for field number 4

**alignments**

Alias for field number 3

**attention**

Alias for field number 1

**cell\_state**

Alias for field number 0

**time**

## Methods

---

### `__new__`

```
__new__(
    _cls,
    cell_state,
    attention,
    time,
    alignments,
    alignment_history
)
```

Create new instance of `AttentionWrapperState`(`cell_state`, `attention`, `time`, `alignments`, `alignment_history`)

### `clone`

```
clone(**kwargs)
```

Clone this object, overriding components provided by `kwargs`.

Example:

```
initial_state = attention_wrapper.zero_state(dtype=..., batch_size=...)
initial_state = initial_state.clone(cell_state=encoder_state)
```

Args:

- `**kwargs` : Any properties of the state object to replace in the returned `AttentionWrapperState` .

Returns:

A new `AttentionWrapperState` whose properties are the same as this one, except any overridden properties as provided in `kwargs` .

---

*Except as otherwise noted, the content of this page is licensed under the [Creative Commons Attribution 3.0 License](#), and code samples are licensed under the [Apache 2.0 License](#). For details, see our [Site Policies](#). Java is a registered trademark of Oracle and/or its affiliates.*

*Last updated November 2, 2017.*

#### Stay Connected

[Blog](#)

[GitHub](#)

[Twitter](#)

#### Support

[Issue Tracker](#)

[Release Notes](#)

[Stack Overflow](#)

**English**

[Terms](#) | [Privacy](#)