

# FlightAware Chainlink (Testnet)

This Chainlink has a dedicated connection to [FlightAware](#).

## Steps for using this oracle

- Write and deploy your [Chainlink](#) contract using the network details below
- Fund it with [LINK](#)
- Call your [request method](#)

## Chainlink Network Details

You will need to use the following LINK token address, oracle address, and Job IDs to create the request.

### Kovan

LINK Token address: `0xa36085f69e2889c224210f603d836748e7dc0088`

Oracle address: `0x2f90A6D021db21e1B2A077c5a37B3C7E75D15b7e`

JobID: `a644d4e30977459d9a596bef89c09e71`

Sleep JobID: `f0003b2c52024e7fa931d6ee9a947c87`

## Create your Chainlink contract

Import `ChainlinkClient.sol` into your contract so you can inherit the Chainlink behavior.

Solidity 6

Solidity 5

Solidity 4

```
pragma solidity ^0.6.0;
import "@chainlink/contracts/src/v0.6/ChainlinkClient.sol";
contract FlightAwareChainlink is ChainlinkClient {

    uint256 oraclePayment;

    constructor(uint256 _oraclePayment) public {
        setPublicChainlinkToken();
        oraclePayment = _oraclePayment;
    }
    // Additional functions here:

}
```

# Tasks

- [FlightAware](#)
- [Copy](#)
- [Ethereum256](#)
- [EthTx](#)

## Request Parameters

### endpoint

The endpoint to query (optional, defaults to `FlightInfoEx`)

#### Solidity example

```
req.add("endpoint", "FlightInfoEx");
```

### flight

The flight identification/number (required)

#### Solidity example

```
req.add("flight", "NAX105");
```

### departure

The unix timestamp of the departure (required)

#### Solidity example

```
req.addUint("departure", 1594378824);
```

### until

Required for the Sleep job

#### Solidity example

```
req.addUint("until", now + 1 hours);
```

## Chainlink Examples

The examples below use the different endpoints available from this Chainlink:

```
function createRequest
(
    address _oracle,
    bytes32 _jobId,
    string memory _flight,
    uint256 _departure,
)
public
onlyOwner
{
    Chainlink.Request memory req = buildChainlinkRequest(_jobId, this, this.fulfillment);
    req.add("flight", _flight);
    req.addUint("departure", _departure);
    sendChainlinkRequestTo(_oracle, req, oraclePayment);
}
```

Here is an example of the `fulfill` method:

```
uint256 public result;
function fulfill(bytes32 _requestId, uint256 _result)
public
recordChainlinkFulfillment(_requestId)
{
    result = _result;
}
```