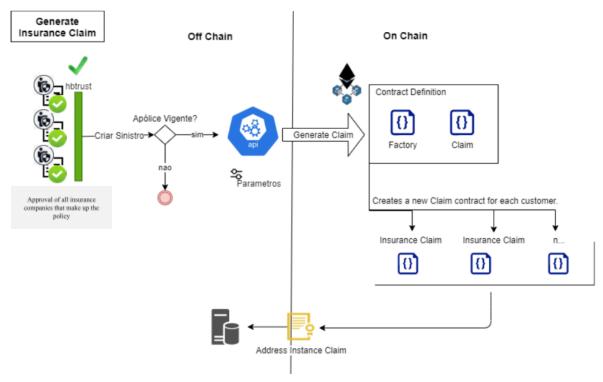
Claim Smart Contract Factory



Smart Contract

Self destroy	Yes	only Owner
Pausable	Yes	only Admin
Factory	Yes	Generate Claims Instances

Roles and Functions

- *Admin role* is allowed to:
 - Add Admin
 - o Remove Admin
 - o Pause / Unpause
 - o add Insurance Company
 - o remove Insurance Company
- *Insurance Company role* is allowed to:
 - Generate Claim
 - o All Consults Claim

Claim Parameters

• All are required

```
"privateKey": "string",
"insuranceCompany": [
    "string"
],
```

```
"apoliceData": {
  "apolice": 0,
  "startValidity": "2020-04-28",
  "endValidity": "2020-04-28",
  "apoliceStatus": 0
"claimInformation": {
  "claim": 0,
  "claimStatus": "string"
"conductorData": {
  "nameComplete": "string",
  "dateOfBirth": "2020-04-28",
  "maritalStatus": 0,
  "cnpjCpf": 0,
  "gender": 0,
  "profession": "string",
  "cnh": 0,
  "categoryCnh": "string",
  "dateValidateCnh": "2020-04-28"
"occurenceData": {
  "claimNumber": 0,
  "dateOccurrence": "2020-04-28",
  "timeOccurence": "string",
  "placeOccurence": "string",
  "policeReport": 0,
  "protocolPoliceReport": 0,
  "conductorGuiltyOccurrence": 0,
  "ocurrenceDescription": 0,
  "victims": 0,
  "damageVictims": "string",
  "damageVehicle": "string"
"thirdPartyData": {
  "involvement3rd": 0,
  "howManyInvolvement": 0,
  "licensesPlates": [
    "string"
  "damageCaused": "string"
},
"vehicleData": {
  "vehicleType": "string",
  "maker": "string",
  "model": "string",
  "numerSlides": 0,
  "yearManufacture": 0,
  "yearModel": 0,
  "licensePlate": "string",
  "chassis": "string",
  "renavam": "string",
  "fuel": 0
}
```

}

Functions

Factory

• To generate a claim and make an appointment you need to be an Insurance Company

Function	Entry parameters	Description
Generate Claim	All of the above parameters.onlyInsuranceCompany	Stores claim data in blockchain and creates the smart contract of the claim; Returns the transaction hash.
Consult Insurance Company Claims	Address insurance Company onlyInsuranceCompany	Consultation that returns all claims related to an insurer. Returns: (address[] memory claimAddress, address[] memory ownerAddress)

Claim

• To check or change status you need to be an insurance company

Update Status Claim	Address Claim smart contract New status = status onlyInsuranceCompany	Updates the status of a policy and returns the transaction hash.
Consult Apolice	Address Claim smart contract onlyInsuranceCompany	Returns the parameters of the policy associated with the claim. (uint256 apolice, string memory start_validity, string memory end_validity, uint256 apolice_status)
Consult Vehicle	Address Claim smart contract onlyInsuranceCompany	Returns vehicle parameters. (string memory vehicle_type, string memory maker, string memory model, uint256 numer_slides, uint256 year_manufacture, uint256 year_model, uint256 fuel)
Consult Vehicle Licence	Address Claim smart contract onlyInsuranceCompany	Returns vehicle document parameters. (string memory license_plate, string memory chassis, string memory renavam)
Consult Conductor	Address Claim smart contract onlyInsuranceCompany	Returns the driver parameters. (string memory name_complete, string memory date_of_birth, uint256 marital_status, uint256 cnpj_cpf, uint256 gender, string memory profession, uint256 cnh, string memory category_cnh, string memory date_validate_cnh)
Consult Ocurrence	Address Claim smart contract	Returns the parameters of when the accident occurred.

	onlyInsuranceCompany	(uint256 claim_number, string memory date_occurrence, string memory time_occurrence, string memory place_occurrence)
Consult Ocurrence Report	Address Claim smart contract onlyInsuranceCompany	Returns the parameters of the claim. (uint256 police_report, uint256 protocol_police_report, uint256 conductor_guilty_occurrence, uint256 ocurrence_description, uint256 victims, string memory damage_victims, string memory damage_vehicle)
Consult Third Party	Address Claim smart contract onlyInsuranceCompany	Returns the parameters of those involved in the occurrence. (uint256 involvement_3rd, uint256 how_many_involvement, string[] memory licenses_plates, string memory damage_caused)
Consult Claim Information	Address Claim smart contract onlyInsuranceCompany	Returns the parameters of the claim document. (uint256 claim, string memory claimStatus)
Consult Claim Insurance Company	Address Claim smart contract onlyInsuranceCompany	Returns the parameters of the insurance company. (address[] memory insuranceCompanyWallets)

Access

Access				
Add Admin	Address onlyAdmin	Adds an address as admin of the factory contract and returns the transaction hash.		
Remove Admin	Address onlyAdmin	Removes an admin role address from the factory contract and returns the transaction hash.		
Is Admin	Address	Checks whether the address is admin of the factory contract, returns true / false		
add Insurance Company	Address onlyAdmin	Adds an address to the Factory Insurance role of the factory contract and returns the transaction hash.		
remove Insurance Company	Address onlyAdmin	Removes an address to the Factory Insurance role of the factory contract and returns the transaction hash.		
Is Insurance Company	Address	Checks if the address is Insurance Company of the factory contract, returns true / false		