#

Cloud.Haskzure.Core

Core contains the core components of the project.

The AzureResource typeclass.

Copyright (c) Nashwan Azhari, 2016 License Apache 2.0 Maintainer aznashwan@yahoo.com Stability experimental POSIX, Win32 Portability Safe Haskell None Haskell2010 Language

class (ToJSON r, FromJSON r) => AzureResource r where

AzureResource is the typeclass to which all AzureResource resource datatypes must comply in order to be deployed. It should be directly serializable to/from JSON.

Contents

The AzureResource typeclass. The Resource ADT. Authentication data strutures and functions:

Minimal complete definition

```
rID, rName, rLocation, rType
```

Methods

```
rID :: r -> String
```

rID returns the String ID of the AzureResource:

```
rName :: r -> String
```

rName returns the String name of the AzureResource:

```
rLocation :: r -> String
```

rLocation returns the normalized String location of the AzureResource:

```
rType :: r -> String
```

rType returns the String Type of the AzureResource in 'Provider/ResourceType' form:

The Resource ADT.

data Resource a

Resource defines the core Resource ATD which will be used to model Azure resources.

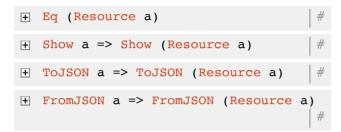
Resource is the basic implementation of a generic Azure resource:

Constructors

Resource

```
resID :: String
resName :: String
resGroup :: String
resGroup :: String
resLocation :: String
resType :: String
resProperties :: a
resID is the ID of the Resource:
resName is the Name of the Resource:
resGroup is the Name of the Resource Group in which the
Resource lives.
resLocation is the Location of the Resource:
resType is the Type of Resource:
resProperties :: a
```

□ Instances

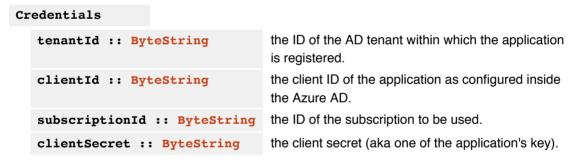


Authentication data strutures and functions:

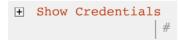
data Credentials

The standard set of credentials required for Azure authentication.

Constructors



□ Instances



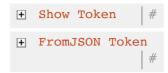
data Token

The datatype representing an Azure API token.

Constructors



Instances



```
getToken :: Credentials -> IO Token
```

Requests and deserializes an API Token.

```
createOrUpdate :: ToJSON a => Credentials -> Resource a -> IO ()
```

creates or updates an Azure Resource by issuing a PUT request on the appropriate URL using the given Credentials.

```
get :: FromJSON a => Credentials -> Resource a -> IO (Resource a)
```

gets the given Azure Resource by issuing a GET request on the appropriate URL using the given Credentials.

```
delete :: Credentials -> Resource a -> IO ()
```

deletes the given Azure Resource by issuing a DELETE request on the appropriate URL using the given Credentials.