Cloud.Haskzure.Core

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

Core contains the core components of the project.

The AzureResource typeclass.

```
class (ToJSON a, FromJSON a) =>
AzureResource r a | r -> a where       #
```

Contents

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.

Minimal complete definition

rID, rName, rLocation, rType, rProperties

Methods

```
rID :: r -> Text                                      #
```

rID returns the Text ID of the AzureResource:

```
rName :: r -> Text                                    #
```

rName returns the Text name of the AzureResource:

```
rLocation :: r -> Text                                #
```

rLocation returns the normalized String location of the AzureResource:

```
rType :: r -> Text                                    #
```

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

```
rProperties :: r -> a                                 #
```

rProperties returns the set of properties specific to this AzureResource:

⊟ **Instances**

```
⊞  (ToJSON a, FromJSON a) => AzureResource (Resource a) a
                                                      | #
```

The Resource ADT.

```
data Resource a                                       #
```
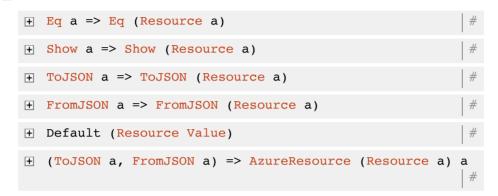
Resource defines the core Resource ATD which will be used to model Azure resources. Resource is an instance of AzureResource.

Resource is the basic implementation of a generic Azure resource:

Constructors

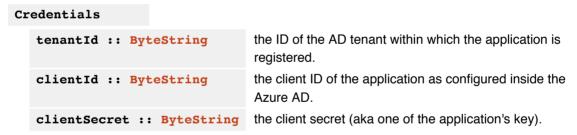| **Resource**	
resID :: Text	resID is the ID of the Resource:
resName :: Text	resName is the Name of the Resource:
resLocation :: Text	resLocation is the Location of the Resource:
resType :: Text	resType is the Type of Resource:
resProperties :: a	resProperties are the properties of the Resource:

☐ Instances

⊞ Eq a => Eq (Resource a)	#
⊞ Show a => Show (Resource a)	#
⊞ ToJSON a => ToJSON (Resource a)	#
⊞ FromJSON a => FromJSON (Resource a)	#
⊞ Default (Resource Value)	#
⊞ (ToJSON a, FromJSON a) => AzureResource (Resource a) a	#

Authentication data strutures and functions:

data **Credentials**	#

The standard set of credentials required for Azure authentication.

Constructors

Credentials	
tenantId :: ByteString	the ID of the AD tenant within which the application is registered.
clientId :: ByteString	the client ID of the application as configured inside the Azure AD.
clientSecret :: ByteString	the client secret (aka one of the application's key).

☐ Instances

⊞ Show Credentials	#

data **Token**	#

The datatype representing an Azure API token.

Constructors

Token	

token :: ByteString	the `String` representation of the API token.
expiresOn :: Integer	the `Integer` representing the absolute epoch time moment in which the token expires.
tokenType :: ByteString	the type of the token; shall be Bearer for all intents and purposes.

⊟ **Instances**

⊞ Show Token | #

⊞ FromJSON Token
              | #

---

getToken :: Credentials -> IO (Either String Token) | #

Requests and deserializes an API `Token`.