

# Differences between service, factory and provider in AngularJs

by Benny Bottema - Friday, January 17, 2014

<http://www.bennybottema.com/2014/01/17/differences-between-service-factory-and-provider-in-angularjs/>

The differences between a service, factory and provider are subtle.

It turns out that a service and factory are actually providers that differ in how they return a value. Let me just [link the whole thing](#) (credits go to [Ben Clinkinbeard and Miško Hevery](#)).

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## Services

**Syntax:** `module.service( 'serviceName', function );`

**Result:** When declaring `serviceName` as an injectable argument you will be provided with an instance of the function. In other words `new FunctionYouPassedToService()`.

## Factories

**Syntax:** `module.factory( 'factoryName', function );`

**Result:** When declaring `factoryName` as an injectable argument you will be provided with the value that is returned by invoking the function reference passed to `module.factory`.

## Providers

**Syntax:** `module.provider( 'providerName', function );`

**Result:** When declaring `providerName` as an injectable argument you will be provided with `new ProviderFunction().$get()`. The constructor function is instantiated before the `$get` method is called – `ProviderFunction` is the function reference passed to `module.provider`.

## Everything is a provider:

```
provider.service = function(name, Class) {
```

```
provider.provide(name, function() {
  this.$get = function($injector) {
    return $injector.instantiate(Class);
  };
});
}
```

```
provider.factory = function(name, factory) {
  provider.provide(name, function() {
    this.$get = function($injector) {
      return $injector.invoke(factory);
    };
  });
}
```

```
provider.value = function(name, value) {
  provider.factory(name, function() {
    return value;
  });
};
```