# Loading & Storing Data



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## Overview



#### Read Through/Write Through Caching

- CacheWriters
- CacheLoaders

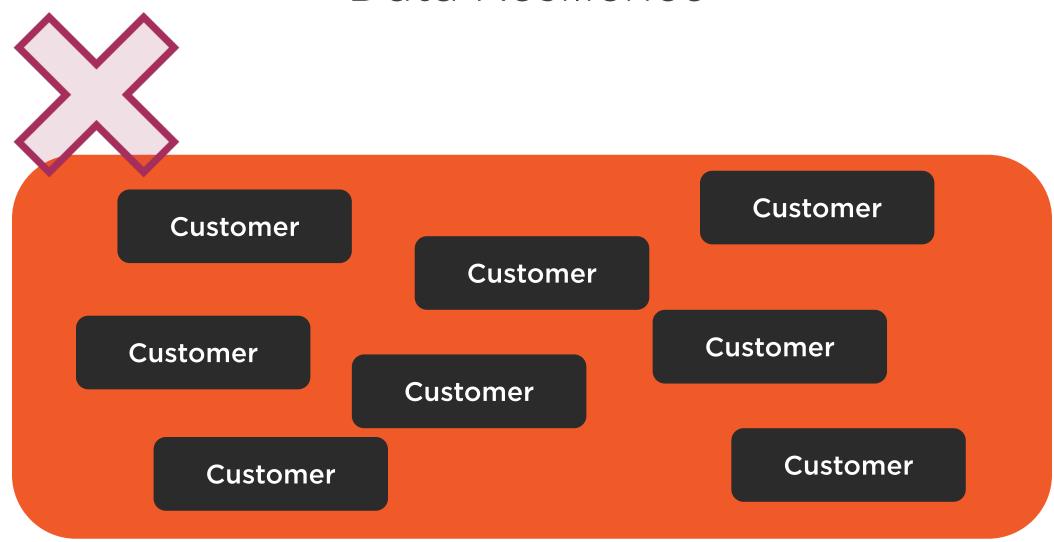
**Expiry Policies** 



# Using an External Data Store



## Data Resilience





## Distributed Data



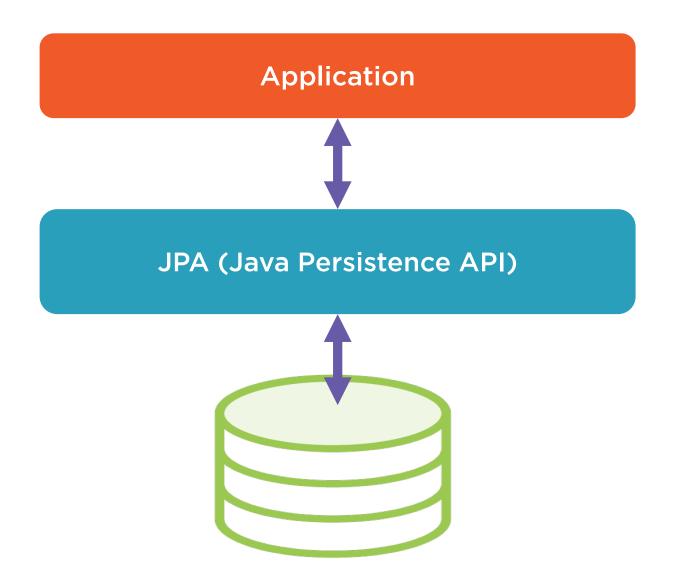


## Permanent Persistence

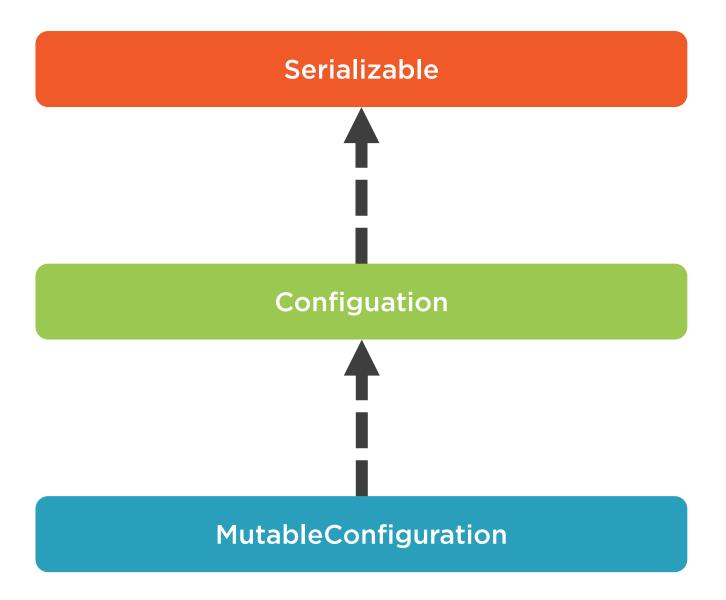




## Data Resilience







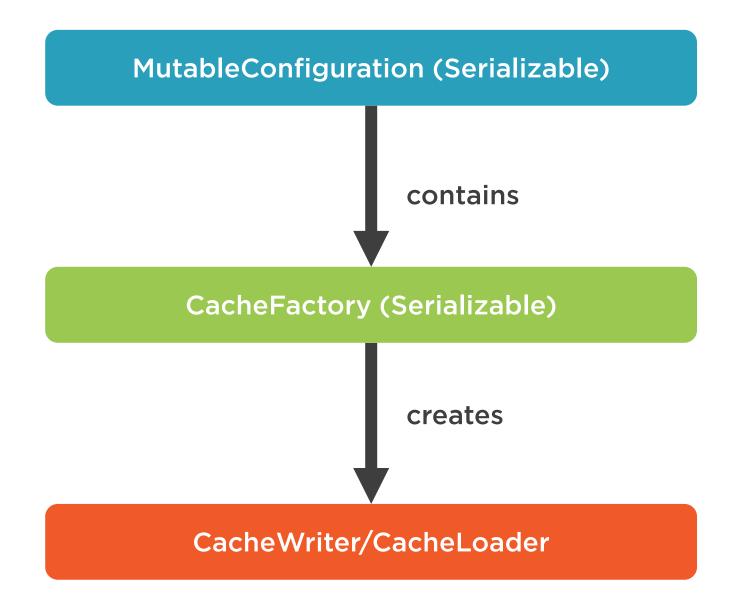




#### CacheWriter/Loader difficult to Serialize

- JDBC connections
- Connection pools
- Other non non serializable references







# **Expiry Policies**





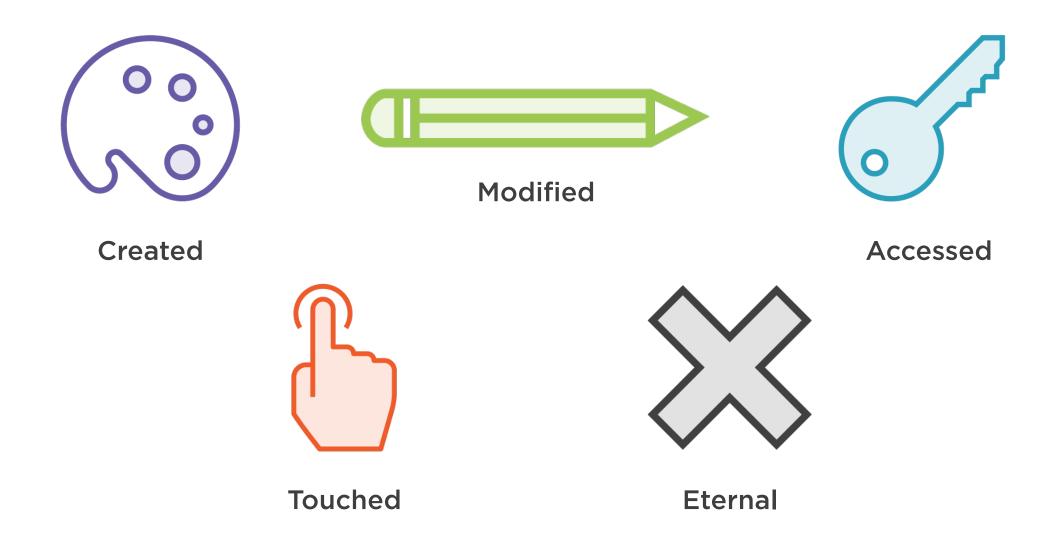
Defines when an entry may be removed from the cache based on some conditions

CacheWriters are not invoked when entries is expired

Performing a get request on the cache will cause the CacheLoader to retrieve the data



## Available Expiry Policies





mutableConfiguration.setExpiryPolicyFactory( . . . );

MutableConfiguration



```
public class MyFactory implements Factory<Object> {
    public Object create() {
        return new Object();
    }
}
```

## Factories

Custom



```
FactoryBuilder.factoryOf(MyObject.class);
FactoryBuilder.factoryOf("com.pluralsight.MyObject");
FactoryBuilder.factoryOf(new MyObject());
```

## FactoryBuilder



```
TouchedExpiryPolicy.factoryOf(
    new Duration(TimeUnit.SECONDS, 20)
)
```

# Object Specific Factories Expiry Policies



## Eviction

The process of removing entries from a Cache when the Cache has exceeded a resource limit



## Review



#### Write Through Caching

- Cache Writers

#### **Read Through Caching**

- Cache Loaders

**Factories** 

**Expiry Policies** 

