

JBoss Cache Searchable

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JBoss Cache Searchable basics

- Integration project between JBoss Cache and Hibernate Search
- Provides full text search capabilities to the cache.
- Extends `org.jboss.cache.Cache` interface
 - Retains `put()`, `get()`, `remove()`, etc.
 - Adds `createQuery()`

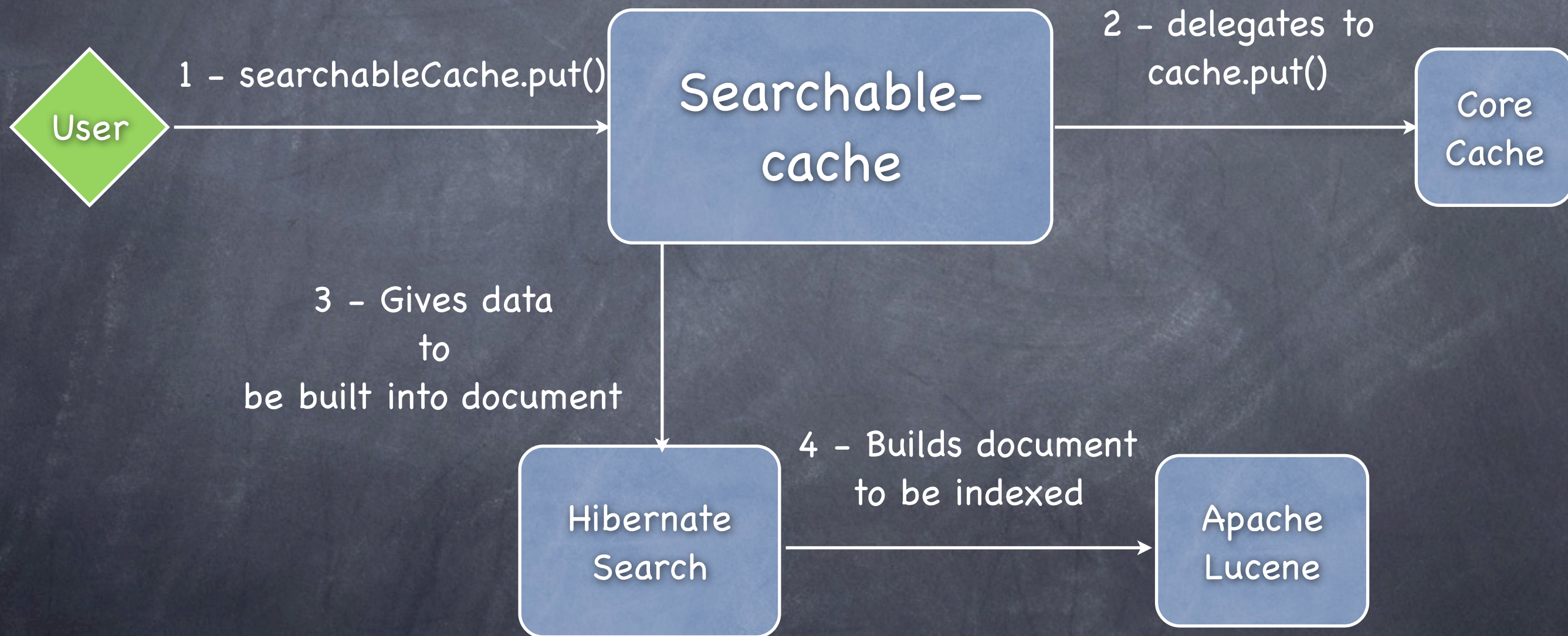
Limitations

- Elements in Fqn/Key combinations can only contain Strings
- Currently not compatible with POJO Cache

Internals – putting data into your searchable cache

- User calls `searchableCache.put()`
- Searchable-cache internals give Hibernate Search data to build document
- Hibernate Search builds document and indexes

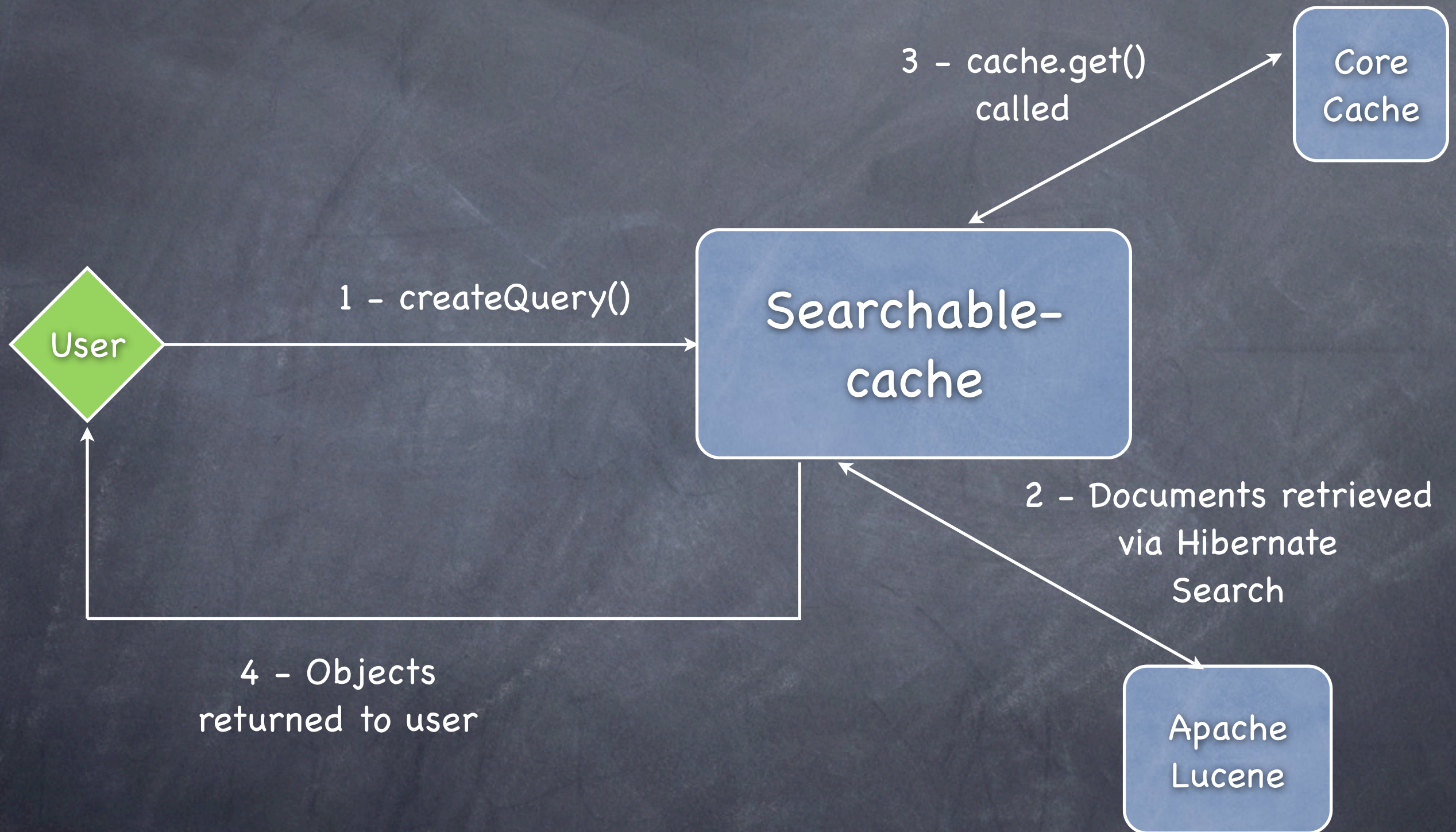
Internals – putting data into your searchable cache



Internals – searching for data

- `searchableCache.createQuery()` called by user
- Lucene indexes searched
- Relevant fqns / key combinations obtained
- `searchableCache.get()` called internally
- Matching objects returned

Internals - searching for data



Differences between JBCS and Hibernate API

- @ProvidedId. Used instead of @DocumentId
- @Entity not required
- Give searchable types to be searched when cache is created
 - **not** per query

Code examples – different APIs

JBCS API

```
@ProvidedId
@Indexed
public class Person{

@Field
public String name;

@Field
public Date dateOfBirth;

public String massiveString;

//getters, setters etc etc
}
```

Hibernate Search API

```
@Indexed
@Entity
public class Person{

@Id
@DocumentId
@Field
public String name;

@Field
public Date dateOfBirth;

public String massiveString;

//standard getters, setters etc
etc.

}
```

Code examples – putting stuff into the searchable cache

```
public class AddData{  
    public void putStuffIn(){  
        Cache coreCache = DefaultCacheFactory.createCache();  
  
        SearchableCache searchableCache =  
        SearchableCacheFactory.createSearchableCache(cache, Person.class);  
  
        searchableCache.put(Fqn.fromString("/a/b/c"), keyString, person1);  
    }  
}
```

Code examples – searching for stuff

```
public class RunSearch{  
    public void findStuff(){  
        //assume cache is created and is running etc.  
  
        QueryParser parser = new QueryParser ("name", new StandardAnalyzer());  
        org.apache.lucene.search.Query luceneQuery = parser.parse("John");  
        CacheQuery cacheQuery = searchableCache.createQuery(luceneQuery);  
        List<Person> results = cacheQuery.list(); //Returns results as a List  
    }  
}
```

For more information

- JBoss Cache – <http://www.jbosscache.org>
- JBoss Cache Searchable wiki – <http://wiki.jboss.org/wiki/JBossCacheSearchable>
- JBoss Cache Blog – <http://jbosscache.blogspot.com/>

End
Q&A