

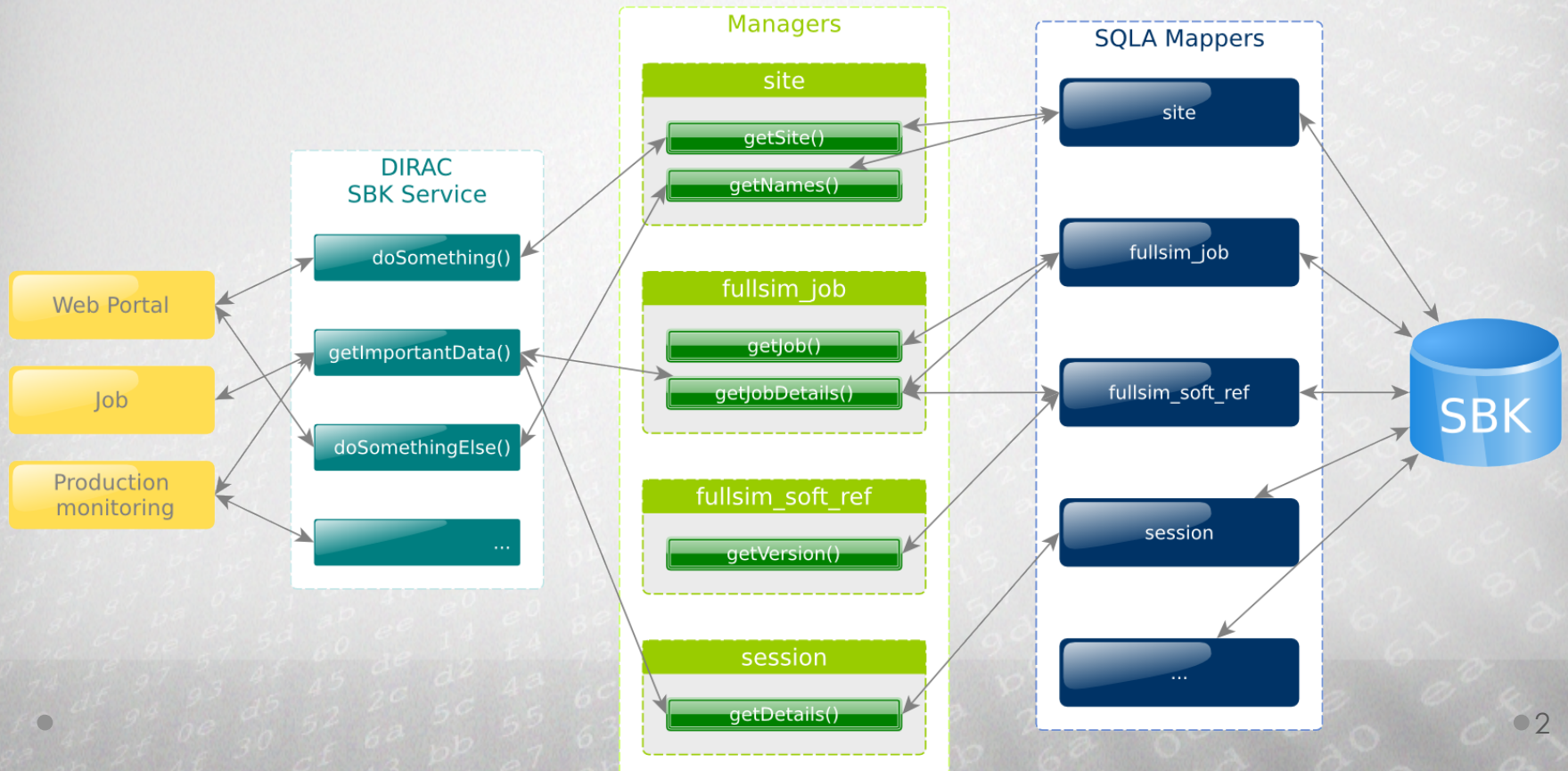
DIRAC SBKService progress report

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SBKService idea

- Explained in document emailed last week
- „Repository” of functions used for accessing SBK



Idea

- High level functions – level of abstraction above database model
- Logic on the Service level
- Changes in database or database handling don't affect the rest of code
- Low level getters and setters functions
(`get<tablename>(<primarykey>)`) – I'm not a fan, it kills data model independence
- Specialized functions – we need to implement all possible scenarios, but interface should be stable – no need to add or change functions

In action!

```
getSoftwareInfo()
```

```
getSoftwareInfo(software='FullSim')
```

```
getSoftwareInfo(sites=['INFN-PISA', 'WT2'])
```

```
getSoftwareInfo(software='FastSim', sites=['INFN-PISA',  
'WT2'])
```


getSoftwareInfo()

[illegible]

Response details

- DIRAC response wrapping:
 - OK: True or False
 - Value (if OK):
 - Dictionary – keys: site names, values:
 - List of dictionaries:
 - Software name: software version

Response details

```
{'OK': True, 'Value':{
```

```
  u'INFN-TORINO':
```

```
    [{'version': u'V0.2.5', 'software': u'FastSim'},  
     {'version': u'V0.0.1', 'software': u'FullSim'},  
     {'version': u'V0.0.2', 'software': u'FullSim'},  
     {'version': u'V0.0.3', 'software': u'FullSim'},  
     {'version': u'V0.0.4', 'software': u'FullSim'}]],
```

```
  u'INFN-BARI':
```

```
    [{'version': u'V0.2.5', 'software': u'FastSim'},  
     {'version': u'V0.0.1', 'software': u'FullSim'},
```

```
    ...
```


Response details

{'OK': True, 'Value':{ **DIRAC response wrapping**
u'INFN-TORINO':

```
[{'version': u'V0.2.5', 'software': u'FastSim'},  
{ 'version': u'V0.0.1', 'software': u'FullSim'},  
{ 'version': u'V0.0.2', 'software': u'FullSim'},  
{ 'version': u'V0.0.3', 'software': u'FullSim'},  
{ 'version': u'V0.0.4', 'software': u'FullSim'}]]},
```

u'INFN-BARI':

```
[{'version': u'V0.2.5', 'software': u'FastSim'},  
{ 'version': u'V0.0.1', 'software': u'FullSim'},  
...
```


Response details

{'OK': True, 'Value':{ **DIRAC response wrapping**
u'INFN-TORINO': **Site name**

[{'version': u'V0.2.5', 'software': u'FastSim'},
{'version': u'V0.0.1', 'software': u'FullSim'},
{'version': u'V0.0.2', 'software': u'FullSim'},
{'version': u'V0.0.3', 'software': u'FullSim'},
{'version': u'V0.0.4', 'software': u'FullSim'}]]},

u'INFN-BARI':

[{'version': u'V0.2.5', 'software': u'FastSim'},
{'version': u'V0.0.1', 'software': u'FullSim'},

...

Response details

{'OK': True, 'Value':{ **DIRAC response wrapping**
u'INFN-TORINO': **Site name**

[{'version': u'V0.2.5', 'software': u'FastSim'},
{'version': u'V0.0.1', 'software': u'FullSim'},
{'version': u'V0.0.2', 'software': u'FullSim'},
{'version': u'V0.0.3', 'software': u'FullSim'},
{'version': u'V0.0.4', 'software': u'FullSim'}]]},

u'INFN-BARI': **Software versions**

[{'version': u'V0.2.5', 'software': u'FastSim'},
{'version': u'V0.0.1', 'software': u'FullSim'},

...

Response details

{'OK': True, 'Value':{ **DIRAC response wrapping**

u'INFN-TORINO': **Site name**

[{'version': u'V0.2.5', 'software': u'FastSim'},
{'version': u'V0.0.1', 'software': u'FullSim'},
{'version': u'V0.0.2', 'software': u'FullSim'},
{'version': u'V0.0.3', 'software': u'FullSim'},
{'version': u'V0.0.4', 'software': u'FullSim'}]],

u'INFN-BARI': **Software versions**

[{'version': u'V0.2.5', 'software': u'FastSim'},
{'version': u'V0.0.1', 'software': u'FullSim'},
...

And so on...

getSoftwareInfo(software='FullSim')

- Gets info about version of specified software on all sites
- `{'OK': True, 'Value': {u'INFN-T1': [{'version': u'V0.0.1', 'software': u'FullSim'}, {'version': u'V0.0.2', 'software': u'FullSim'}, {'version': u'V0.0.3', 'software': u'FullSim'}, {'version': u'V0.0.4', 'software': u'FullSim'}], u'SPRACE': [], u'GRISU-UNINA': [{'version': u'V0.0.1', 'software': u'FullSim'}, {'version': u'V0.0.2', 'software': u'FullSim'}, {'version': u'V0.0.3', 'software': u'FullSim'}, {'version': u'V0.0.4', 'software': u'FullSim'}], u'RAL-LCG2': [{'version': u'V0.0.1', 'software': u'FullSim'}, {'version': u'V0.0.2', 'software': u'FullSim'}, {'version': u'V0.0.3', 'software': u'FullSim'}, {'version': u'V0.0.4', 'software': u'FullSim'}], ... }`

getSoftwareInfo(sites=['INFN-PISA', 'WT2'])

- Gets info about software available on specified sites
- {'OK': True, 'Value': {'WT2': [{'version': 'V0.2.5', 'software': 'FastSim'}, {'version': 'V0.0.1', 'software': 'FullSim'}, {'version': 'V0.0.2', 'software': 'FullSim'}, {'version': 'V0.0.3', 'software': 'FullSim'}, {'version': 'V0.0.4', 'software': 'FullSim'}], 'INFN-PISA': [{'version': 'V0.2.5', 'software': 'FastSim'}, {'version': 'V0.0.1', 'software': 'FullSim'}, {'version': 'V0.0.2', 'software': 'FullSim'}, {'version': 'V0.0.3', 'software': 'FullSim'}, {'version': 'V0.0.4', 'software': 'FullSim'}]}}

`getSoftwareInfo(software='FastSim', sites=['INFN-PISA', 'WT2'])`

- Versions of specified software available on specified sites
- `{'OK': True, 'Value': {u'WT2': [{'version': u'V0.2.5', 'software': u'FastSim'}], u'INFN-PISA': [{'version': u'V0.2.5', 'software': u'FastSim'}]}}`

Next steps

- Real integration into DIRAC
- More functionalities
 - Working with Rafal on site management
 - Give me a sign if you need one or two!