

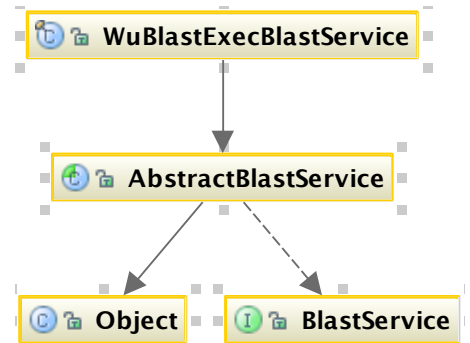
Putting:

- All blast access occurs through BlastService interface.
- singleton access

Sequence sequence =

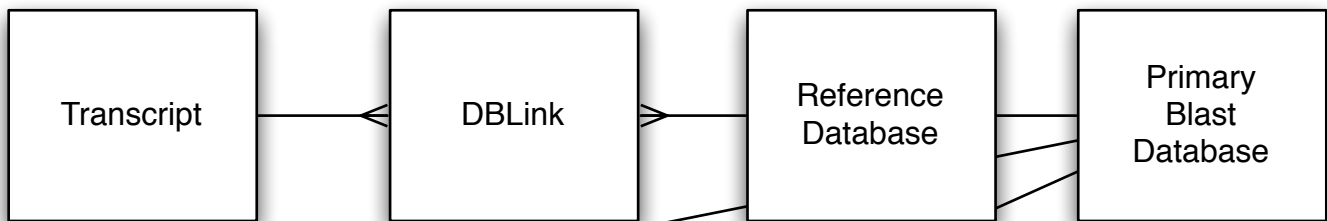
```
WuBlastExecBlastService.createWuBlastExecBlastService().addSequenceToTranscript(transcript
DTO.getZdbID(),sequenceDTO.getData(),referenceDatabaseDTO.getZdbID());
```

- **Sequence** is a presentation object wrapping a blast sequence with a reference to its DBLink



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- Create dblink and accession bank entries from autogenerated accessions.
 - BlastService.addSequenceToTranscript -> WuBlastExec.addSequence
 - * BlastService.addProteinToMarker -> WuBlastExec.addSequence
- Validate sequence
- Create FASTA file with cool define and write to temp.
- Use xdformat to create entry.



```
xdformat -a -n /research/zunloads/dev_blastfiles/vega_trans /tmp/fasta1234
```

```
File fastFilePath = File.createTempFile("fasta","fa");
BufferedWriter bufferedWriter = new BufferedWriter(new
FileWriter(fastFilePath));
bufferedWriter.write(sequence.getFormattedData());
bufferedWriter.close();
List<String> commandList = new ArrayList<String>();
commandList.add("/private/apps/wublast/xdformat");
commandList.add("-"+type);
commandList.add("-a");
commandList.add(blastDBPath); // vega transcript
commandList.add(fastFilePath.getAbsolutePath());
```

```
Process process = Runtime.getRuntime().exec(commands);
// todo: add buffer output onto process . .. may need to
use threading
BufferedReader stderr = new BufferedReader(new
InputStreamReader(process.getErrorStream()));
BufferedReader stdout = new BufferedReader(new
InputStreamReader(process.getInputStream()));
```