



# Requirements

Requirements derived from SKA Design Phase

- scalability
- integrated tools
- extendability
- completeness

Requirements derived from SKA Bridging Phase

- full compatibility with Tango Controls Framework
- open-source
- web-based

# A Technology Downselection for SKA User Interface Generator

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## Abstract

The Square Kilometre Array (SKA) project is an international collaboration aimed to design and build the world's largest radio telescope, composed of thousands of antennae and related support systems, with over a square kilometre of collecting area.

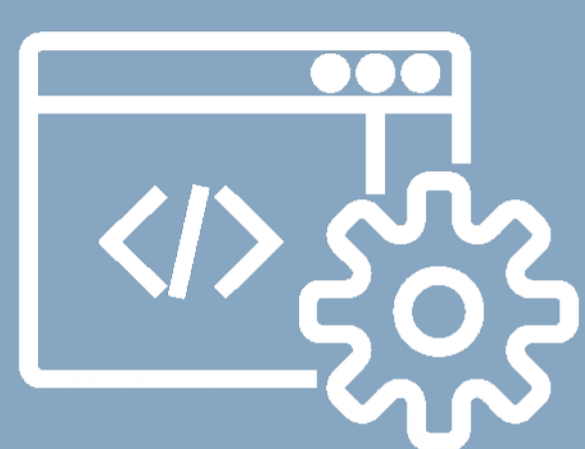
In order to ensure proper and uninterrupted operation of SKA, the role of the operator at the control room is crucial and the User Interface is the main tool that the operator uses to control and monitor the telescope. During the current bridging phase, a user interface generator has been prototyping. It aims to provide a tool for UI developer to create an own engineering user interface compliant with SKA User Interface Design Principle and operator and stakeholder needs. A technology downselection has been made in order to evaluate different web-solution based on TANGO.

## Conclusion

Starting from the requirements derived during the Design Phases and Bridging Phase, two framework have been identified. Following the feedback from the SKA stakeholders during the decision process and defining a list of evaluation criteria, Webjive has been chosen as framework for SKA User Interface Generator.

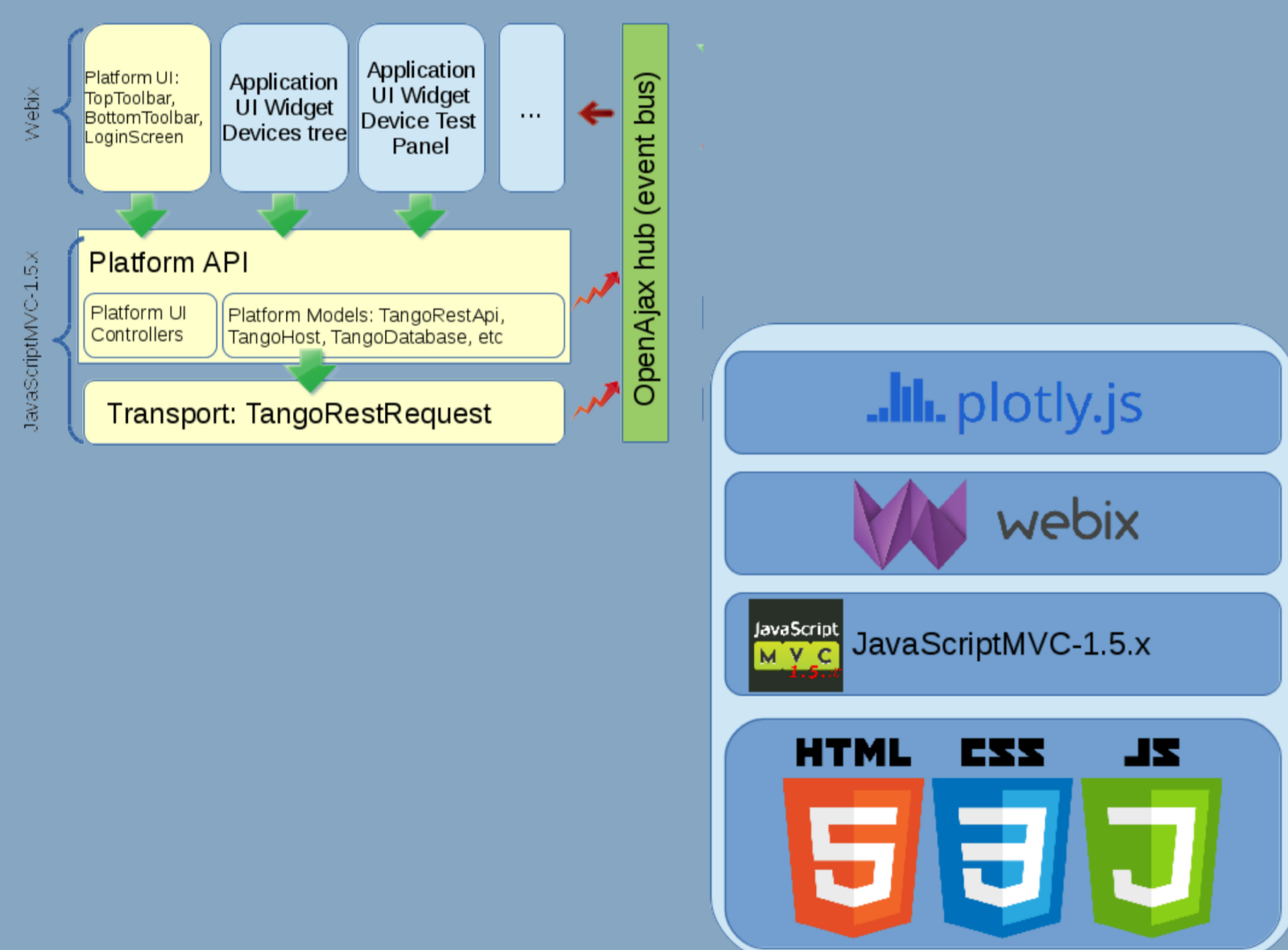
Following the User-Centered Design process, a selection a software between the two very valid candidates has been possible. Also if Waltz has a higher level of maturity than Webjive, thanks with the interaction with the SKA stakeholders during the decision making, the last one has been selected because has proven to adapt better the operators' expectations and necessities.

Currently, the team is developing new features and making improvements in Webjive in order to reach a good level of maturity. Next step will be to analyze if, with the modification of the code, the framework can be definitively adopted as a possible candidate as the Graphical User Interface tool for the whole SKA.

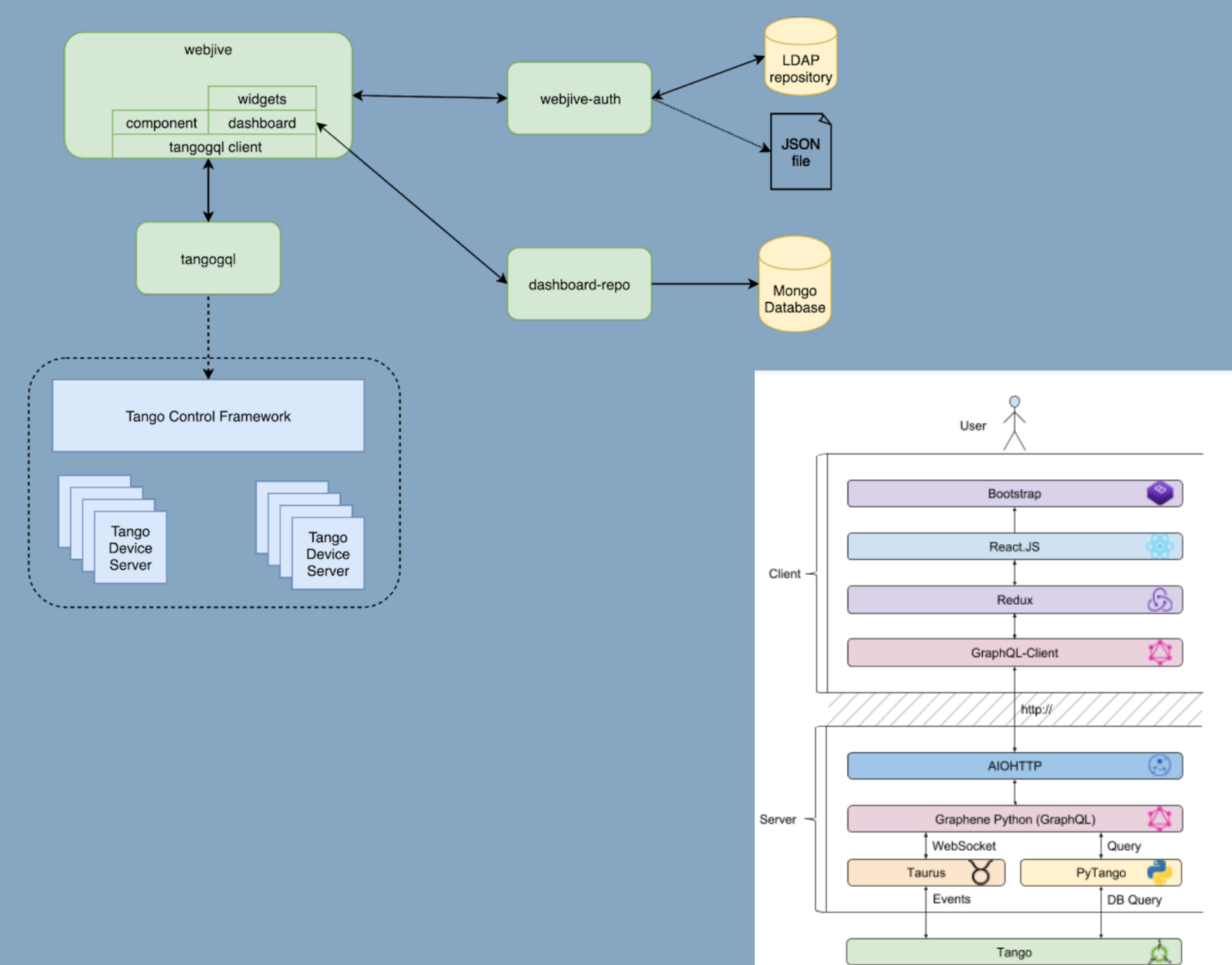


# Technology selection

## Waltz



## Webjive



# Downselection

Selection based on:

- Stages of maturity
- Support from the community
- Patterns and Technologies used
- Quality and Availability of Documentation

