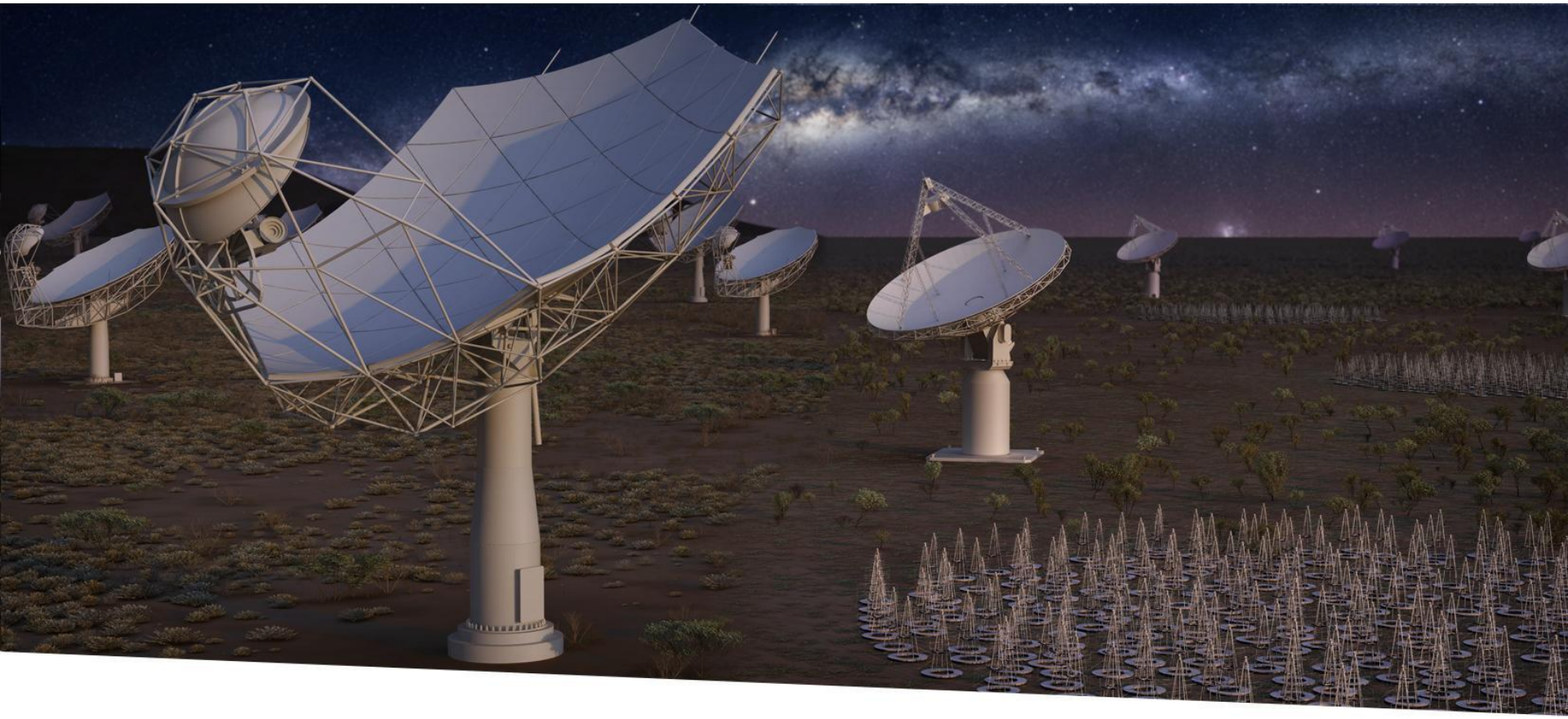
WebJive Roadmap

A SKA perspective



SQUARE KILOMETRE ARRAY

Exploring the Universe with the world's largest radio telescope

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Vision

- Important SKA deadline:

  June 2021: beginning of construction

Development of the WebJIVE **engineering web-based user interface tool** to a **sufficient level of maturity** such that it can be mandated for use in construction by all teams responsible for delivering software components based on the TANGO framework.

Vision

For	Developers of TANGO systems, Operators using TANGO systems in the early years of operations, and SKA1 Commissioning teams
who	wish to create and/or configure custom web-based user interfaces to monitor and control TANGO systems
the	WebJIVE is a web-based configurable tool
that	allows users to create, modify and use their own UIs to TANGO systems
unlike	existing solutions (Taurus, EPICS EDM, …)
our solution	is fully web-browser based and is based on modern Javascript frameworks
expected outcomes	WebJIVE is mature enough to be mandated for SKA construction teams to use as their **preferred UI tool for TANGO systems**, making it easy to create new interfaces which are **consistent** across the project; a set of UI and **HMI guidelines** to accompany the tool; and **digital assets** (logos, themes, ...) within WebJive that are compliant to those guidelines.
NFRs	Performance; Scalability; Usability; Reliability

For example: performance

High throughput:

- “each screen should handle an update rate of 1000 updated items/sec”
- “a screen should populate in less than 2sec”

Low latency:

- “a command roundtrip time is less than 0.1sec”

Roadmap - short term

By the end of August:

- **Import/export dashboards**

- There are 3 **dashboards** for 10-15 devices within the correlator
  - they are **interconnected** (drill-down, wrap-up)
  - they are visually **appealing** (alignments, bg colors, boxes, images)
  - they are **information-dense.**

- **Improvements in user documentation** so that non SKA users can easily deploy WebJive, use it and extend it.

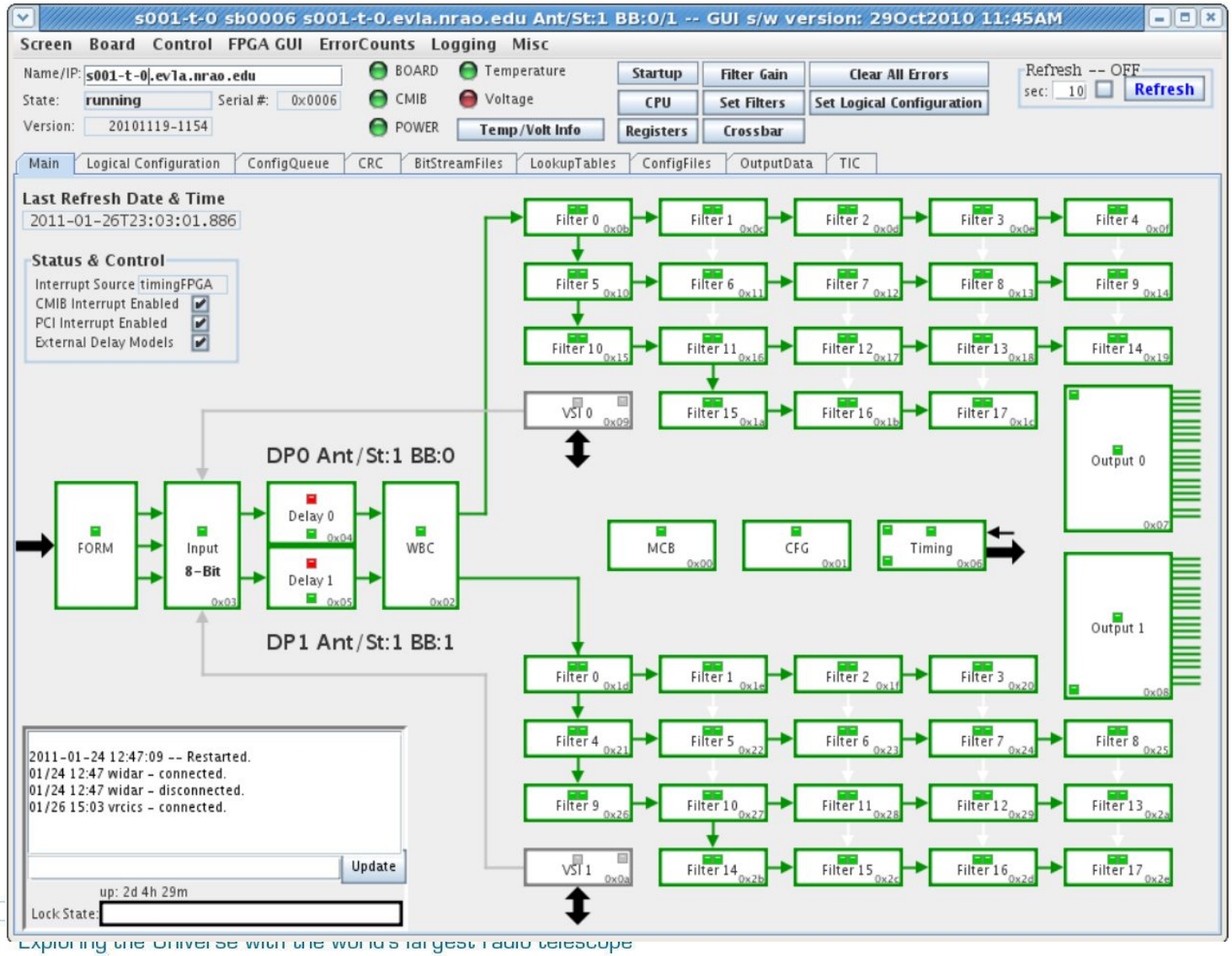
This is developed according the SKA Definition-of-Done and a Lean UX process.

Roadmap - until June 2021

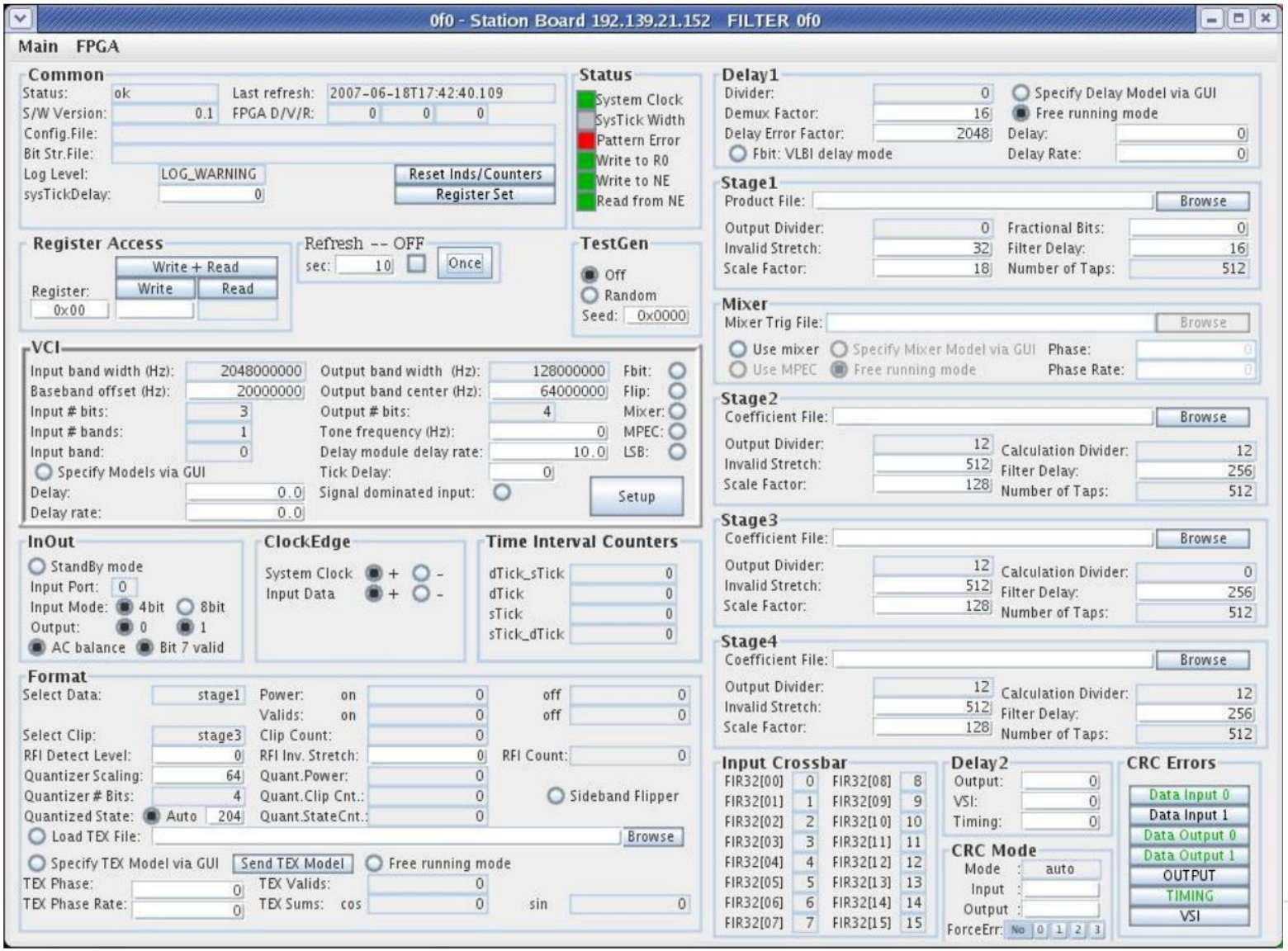
We are aiming at enabling users to develop complex monitoring and control UIs.

Like these ones:

Examples of compelling UIs



Examples of compelling UIs



Roadmap - until June 2021

- conditional styles (fonts, colors based on values)
- grouping/ungrouping of items
- error handling and notifications
- configurable themes, logos
- improved usability of editor
- svg-based interactive synoptics
- tabs in dashboards
- architectural changes:
  - features can be toggled
  - plugins for widgets

- support for the Tango community:
  - establish an effective user feedback channel

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Thank you for your attention!

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**“Lean UX expert” and “Testing community coordinator”
for SKA software**