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| Artifact ID:  CD-002 | Artifact Title:  Server-Based UI Definition | |  |
| Revision:  1.0 | Revision Date:  11 NOV 2019 | |
| Prepared by:  Joe Hansen | | Checked by:  Jesse Krage |
| Purpose:  The purpose of this artifact is to define the value of a Server-Based user interface. | | |

# Revision History

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| --- | --- | --- | --- |
| Revision: | Revised by: | Checked by: | Date: |
| 1.0 | Joe Hansen | Jesse Krage | 6 NOV 2019 |

# References

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| N/A | N/A | N/A |

# Definition

Our design necessitates the use of some kind of user interface for setup configuration. The most important requirements for this UI are:

* Real-time communication with the control software
* Easily accessible
* Reliable

A server-based GUI is valuable because it is accessible by any device that is on the same network as the processor that hosts the server. In meeting with Mark, we discussed usability scenarios and determined that connecting to the positioner via Ethernet to access the web browser is both convenient and desirable.

If we connect our Raspberry Pi to a router, anything on that network will also be able to access the User Interface. This will allow for very convenient access for a variety of use cases. Another notable advantage to this approach is that the user will not need to have the software installed natively on their own machine. This would remove an element of complexity in the current system and improve the end user’s experience.

The GUI will be built using HTML, CSS, and Javascript. We will