To be or not to be in core

This document explains things to consider when deciding whether a component should be in core or not.

A component may be included in core as a dependency, a module, or integrated into the code base. The same arguments for including/not including in core generally apply in all of these cases.

Strong arguments for including a component in core

- 1. The component provides functionality that is standardized (such as a <u>Web API</u>) and overlaps with existing functionality.
- 2. The component can only be implemented in core.
- 3. The component can only be implemented in a performant way in core.
- 4. Developer experience is significantly improved if the component is in core.
- 5. The component provides functionality that can be expected to solve at least one common use case Node.js users face.
- 6. The component requires native bindings. Inclusion in core enables utility across operating systems and architectures without requiring users to have a native compilation toolchain.
- 7. Part or all of the component will also be re-used or duplicated in core.

Strong arguments against including a component in core

- 1. None of the arguments listed in the previous section apply.
- 2. The component has a license that prohibits Node.js from including it in core without also changing its own license
- 3. There is already similar functionality in core and adding the component will provide a second API to do the same thing.
- 4. A component (or/and the standard it is based on) is deprecated and there is a non-deprecated alternative.
- 5. The component is evolving quickly and inclusion in core will require frequent API changes.

Benefits and challenges

When it is unclear whether a component should be included in core, it might be helpful to consider these additional factors.

Benefits

- 1. The component will receive more frequent testing with Node.js CI and CITGM.
- 2. The component will be integrated into the LTS workflow.
- 3. Documentation will be integrated with core.
- 4. There is no dependency on npm.

Challenges

- 1. Inclusion in core, rather than as an ecosystem module, is likely to reduce code merging velocity. The Node.js process for code review and merging is more time-consuming than that of most separate modules.
- 2. By being bound to the Node.js release cycle, it is harder and slower to publish patches.
- 3. Less flexibility for users. They can't update the component when they choose without also updating Node.js.