

CASS Impact Framework Baseline (Version 1 final)

Purpose and Principles

The purpose of the CASS Impact Framework (IF) process is to provide a uniform, but flexible approach to gathering information to help CASS and its member organizations understand the status and progress made by supported software projects and the effect those improvements have had on each product's ability to enable scientific discovery. **Our goals are to help software teams improve your products, and to identify impacts and accomplishments that we can highlight to our sponsors and to our community. We are focused on improvements in the software products over time. CASS and its member organizations recognize that software products in the ecosystem may differ significantly in many respects, and we are *not* focused on absolute metrics or comparisons between projects.**

Relationship to the Annual IF Document

In this **baseline** document, we are trying to capture where your software product **currently** stands with respect to **impact, sustainability, and quality**, and what **pain points** you're currently experiencing in each area, as well as any **long-range plans or goals** you may have for improvements in each area. This differs from the IF document in that the IF document is intended to capture your progress and plans in a specific time frame, moving forward. It is likely that many of the plans you report in your recurring IF document update will support the long-range goals or address pain points you describe here, but it would be unusual for *all* of those plans or pain points will be meaningfully addressed all at once.

Further, we realize that many projects are leveraging multiple sources of support in order to advance their software impact, sustainability, and quality. This baseline document should address the current status and plans **without regard to funding source** – it should be about your product and what it needs, period. The recurring IF document, on the other hand, will focus primarily on the work taking place through CASS stewardship support.

Structure and Guidance

The impact framework consists of three categories of software stewardship: **impact, sustainability, and quality**. The lines between these categories are fuzzy, and that's okay. The table below includes some prompts to help identify targets in each category, but they're not exhaustive. The purpose of the CASS Impact Framework Baseline document is to capture the starting point for your CASS-supported software improvements. The separate Impact Framework document will then capture your plans and progress on a regular basis for stewardship efforts supported by CASS funding..

We also ask you to identify **metrics** in each category (impact, sustainability, and quality) which you may already be using to in your project, or which you think would be indicative of progress with your stewardship plans. Again, **the purpose of the metrics is to help you manage your stewardship activities**, not for comparison with other software projects.

Take the space you need to describe your software stewardship baseline. But we expect that it should take about 2-3 pages in most cases.

CASS Software Product Baseline (Version 1 final)

| | | |
|---|---|---|
| Product name | | |
| Date | YYYY-MM-DD | |
| CASS catalog URL | https://cass.community/software/ | |
| CASS member | | |
| | Current State | Pain Points and Long-Range Plans |
| Impact How would you characterize the current state of your product with respect to its impact and usefulness to the research community? What are you doing to facilitate adoption of your product? (Right column) What are your biggest pain points currently with respect to impact? What long-range plans do you have to improve your product's impact? | | |
| Impact metrics What metrics do you currently use or would you consider relevant to tracking the progress | | |

| | | |
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| towards your long-range goals? | | |
| Sustainability How would you characterize the current state of your product with respect to its sustainability? This may include improvements to make the maintenance of the software easier, to make contributions easier, and to broaden the appeal of the software to more communities. (Right column) What are your biggest pain points currently with respect to sustainability? What long-range plans do you have to improve your product's sustainability? | | |
| Sustainability metrics What metrics do you currently use or would you consider relevant to tracking the progress towards your long-range | | |

| | | |
|---|--|--|
| goals? | | |
| Quality How would you characterize the current state of your product with respect to code quality (e.g., verification, validation, documentation, etc.)? (Right column) What are your biggest pain points currently with respect to code quality? What long-range plans do you have to improve your product's quality? | | |
| Quality metrics What metrics do you currently use or would you consider relevant to tracking the progress towards your long-range goals? | | |