self-profile

The -Zself-profile compiler flag enables rustc's internal profiler. When enabled, the compiler will output three binary files in the specified directory (or the current working directory if no directory is specified). These files can be analyzed by using the tools in the measureme repository.

To control the data recorded in the trace files, use the <code>-Zself-profile-events</code> flag.

For example:

First, run a compilation session and provide the -Zself-profile flag:

\$ rustc --crate-name foo -Zself-profile

This will generate three files in the working directory such as:

- foo-1234.events
- foo-1234.string_data
- foo-1234.string_index

Where foo is the name of the crate and 1234 is the process id of the rustc process.

To get a summary of where the compiler is spending its time:

\$../measureme/target/release/summarize summarize foo-1234

To generate a flamegraph of the same data:

\$../measureme/target/release/inferno foo-1234

To dump the event data in a Chromium-profiler compatible format:

\$../measureme/target/release/crox foo-1234

For more information, consult the measureme documentation.