Perf sheriffs are the main drivers for the entire perf investigation process. They are responsible for the actual investigation as well as for maintaining the perf tools. They know the entire system in and out. They must meet two distinct responsibilities at the same time: being both PerfInspector sheriffs and Perf Tools members.

Perfinspector sheriffs dedicate their time in pushing the follow ups on perf tracking bugs, inquiring developers, retriggering the tests etc. Their responsibilities will always include at least those of Code sheriffs.

They are also responsible for instructing the Code sheriffs, in an attempt to hand them out more or higher responsibilities and ensure *near 100% availability for a basic perf investigation process*.

They constantly keep an eye on performance alerts, by checking Perfherder every 2 hours. Also whenever an alert lands, they get notified via the performance dashboard(s), email & IRC channels and begin to investigate it. At the end of this investigation, they should have found out the root cause of the alert and the regression author. They then file a bug with all the details they can provide, so that the regression author has a solid starting point.

PerfInspector sheriffs must also play a role in "educating" developers from both Firefox and tools. Whenever they file a perf tracking bug, at some point in that bug they should also require new regression authors to needinfo them in the future, when their work could affect performance or the performance monitoring tools. Developers that were already informed and complied to this shouldn't be asked again.

Perf Tools members provide maintenance for all the tools that Perf sheriffs and Code sheriffs use. This includes fixing harness bugs, refactoring & updating perf tools' dependencies, supervise & provide help when adding new perf tests, proposing & creating new perf tools, harnesses, features etc.

PerfInspector sheriffs and Perf Tools members switch shifts on a daily basis. I.e. for a team of two perf sheriffs, one will act as PerfInspector sheriff, while the other will act as a Perf Tools member. Whatever the number of Perf sheriffs, their responsibilities will split according to the guidelines mentioned in the <u>Performance Team - Evolution Roadmap</u> document.

Code sheriffs represent lower ranked PerfInspector sheriffs. Their primary responsibilities include:

- retriggering/backfilling perf data + basic downstreaming
- 24/7 presence on perf dashboards
- report any kind of problems with the tools

We said primary, because their responsibilities can grow in time, under the observation and guidance of PerfInspector Sheriffs or even high ranked Code sheriffs.

They have multiple ranks, ascending in this order:

- Rank I
 - primary responsibilities defined above
- Rank II
 - o advanced ***r/b
 - investigate alert summaries in multiple rounds & know when finished
 - efficient r/b (minimal & sufficient; cherry-picking can be automated)
 - advanced downstreaming
 - invalidating
 - recognize backout
 - o other moderate tasks
 - use Compare tool
 - report Perfherder issues
 - suggest Perfherder improvements
- Rank III
 - conduct almost complete perf investigations (except filing perf tracking bugs)
 - identify culprit
 - reassignment
 - bisect regressions
 - procure Gecko profiles
 - ensuring the perf docs are up to date
 - >6 months experience
- Rank IV
 - file perf tracking bugs
 - o follow them up
 - o instruct lower rank Code sheriffs
 - escalate rotting bugs to RelMan members

Though ranks II to IV are very beneficial for the entire process, it's not something we will insist on getting with all costs. We will just constantly invest time to increasing them for Code sheriffs, for situations where Perf sheriffs will be out of office or maintenance tasks are urgent and alerts volume relatively low. This investment will be small, but on a daily basis. There will always be a prompt communication channel between Code sheriffs and PerfInspector sheriffs.

Code sheriffs must always report problems with the tools they work with, by filing bugs and needinfo Perf Tools members onto them.

They are also encouraged to propose UI/UX improvements for their tools.

Maintaining & improving perf harness

Perf Tools members maintain and improve the existing perf test harnesses. All development in this direction is planned and prioritized in advance using Bugzilla.

Major tool changes or additions demand preliminary team discussions, followed by a thorough planning using Bugzilla.

Another responsibility PerfHarness have is to ensure the CI system always run the unit tests for the push that updated the test harnesses and that only. They must treat this task as P1.

Glossary

- [1] business day: from Monday to Friday, excluding holidays
- [2] perf tracking bug: i.e. bug Perf sheriffs and Code sheriffs file for new perf regressions
- [3] rottyness (perf tracking bugs): bugs that haven't reach VERIFIED FIXED resolution after 3 weeks (meaning 15 business days). Or bugs that didn't update after 7 calendaristic days.