
Subject: Re: [PATCH 3/7] perf: add ability to change event according to sample (v2)
Posted by [Arnaldo Carvalho de M\[2\]](#) on Tue, 06 Dec 2011 14:24:46 GMT
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Em Tue, Dec 06, 2011 at 12:19:42PM -0200, Arnaldo Carvalho de Melo escreveu:

> Em Mon, Nov 28, 2011 at 12:03:31PM +0300, Andrew Vagin escreveu:
> > It's opposition of perf_session__parse_sample.
> >
> > v2: fixed mistakes which David Arhen found
>
> Ok, I'm taking this one, David, can I added an 'Acked-by: you'? Or even
> "reviewed-by:" ?
>
> I'm just changing 'data' to 'sample', data is way to vague, I kept it
> for a while in the past just to reduce patch size, but this is something
> completely new, so better use 'sample'.

Also I'm changing it from perf_event__change_sample() to
perf_event__synthesize_sample() as that is what is happening, you're not
taking some perf_sample and changing it just a bit, but synthesizing it
completely.

Since synthesize is used elsewhere when we synthesize PERF_RECORD_MMAP,
etc for existing threads, I'll use it here too.

> - Arnaldo
>
> > Signed-off-by: Andrew Vagin <avagin@openvz.org>
> > ---
> > tools/perf/util/event.h | 2 +
> > tools/perf/util/evsel.c | 74 +++++
> > tools/perf/util/session.h | 9 +++++
> > 3 files changed, 85 insertions(+), 0 deletions(-)
> >
> > diff --git a/tools/perf/util/event.h b/tools/perf/util/event.h
> > index 357a85b..0493101 100644
> > --- a/tools/perf/util/event.h
> > +++ b/tools/perf/util/event.h
> > @@ -187,5 +187,7 @@ const char *perf_event__name(unsigned int id);
> > int perf_event__parse_sample(const union perf_event *event, u64 type,
> > int sample_size, bool sample_id_all,
> > struct perf_sample *sample, bool swapped);
> > +int perf_event__change_sample(union perf_event *event, u64 type,
> > + const struct perf_sample *data, bool swapped);
> >
> > #endif /* __PERF_RECORD_H */
> > diff --git a/tools/perf/util/evsel.c b/tools/perf/util/evsel.c
> > index e426264..d697568 100644

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>> --- a/tools/perf/util/evsel.c
>> +++ b/tools/perf/util/evsel.c
>> @@ -494,3 +494,77 @@ int perf_event__parse_sample(const union perf_event *event, u64
type,
>>
>> return 0;
>> }
>> +
>> +int perf_event__change_sample(union perf_event *event, u64 type,
>> +    const struct perf_sample *data, bool swapped)
>> +{
>> + u64 *array;
>> +
>> + /*
>> +  * used for cross-endian analysis. See git commit 65014ab3
>> +  * for why this goofiness is needed.
>> +  */
>> + union {
>> +  u64 val64;
>> +  u32 val32[2];
>> + } u;
>> +
>> + array = event->sample.array;
>> +
>> + if (type & PERF_SAMPLE_IP) {
>> +  event->ip.ip = data->ip;
>> +  array++;
>> + }
>> +
>> + if (type & PERF_SAMPLE_TID) {
>> +  u.val32[0] = data->pid;
>> +  u.val32[1] = data->tid;
>> +  if (swapped) {
>> +   /* undo swap of u64, then swap on individual u32s */
>> +   u.val32[0] = bswap_32(u.val32[0]);
>> +   u.val32[1] = bswap_32(u.val32[1]);
>> +   u.val64 = bswap_64(u.val64);
>> +  }
>> +
>> + *array = u.val64;
>> + array++;
>> + }
>> +
>> + if (type & PERF_SAMPLE_TIME) {
>> +  *array = data->time;
>> +  array++;
>> + }
>> +

```

```

>> + if (type & PERF_SAMPLE_ADDR) {
>> + *array = data->addr;
>> + array++;
>> + }
>> +
>> + if (type & PERF_SAMPLE_ID) {
>> + *array = data->id;
>> + array++;
>> + }
>> +
>> + if (type & PERF_SAMPLE_STREAM_ID) {
>> + *array = data->stream_id;
>> + array++;
>> + }
>> +
>> + if (type & PERF_SAMPLE_CPU) {
>> + u.val32[0] = data->cpu;
>> + if (swapped) {
>> + /* undo swap of u64, then swap on individual u32s */
>> + u.val32[0] = bswap_32(u.val32[0]);
>> + u.val64 = bswap_64(u.val64);
>> + }
>> + *array = u.val64;
>> + array++;
>> + }
>> +
>> + if (type & PERF_SAMPLE_PERIOD) {
>> + *array = data->period;
>> + array++;
>> + }
>> +
>> + return 0;
>> +}
>> diff --git a/tools/perf/util/session.h b/tools/perf/util/session.h
>> index 6e393c9..444f121 100644
>> --- a/tools/perf/util/session.h
>> +++ b/tools/perf/util/session.h
>> @@ -167,6 +167,15 @@ static inline int perf_session__parse_sample(struct perf_session
>> *session,
>>     session->header.needs_swap);
>> }
>>
>> +static inline int perf_session__change_sample(struct perf_session *session,
>> +      union perf_event *event,
>> +      const struct perf_sample *sample)
>> +{
>> + return perf_event__change_sample(event, session->sample_type,
>> +     sample,

```

```
> > + session->header.needs_swap);
> > +}
> > +
> > struct perf_evsel *perf_session__find_first_evtype(struct perf_session *session,
> >     unsigned int type);
> >
> > --
> > 1.7.1
```
