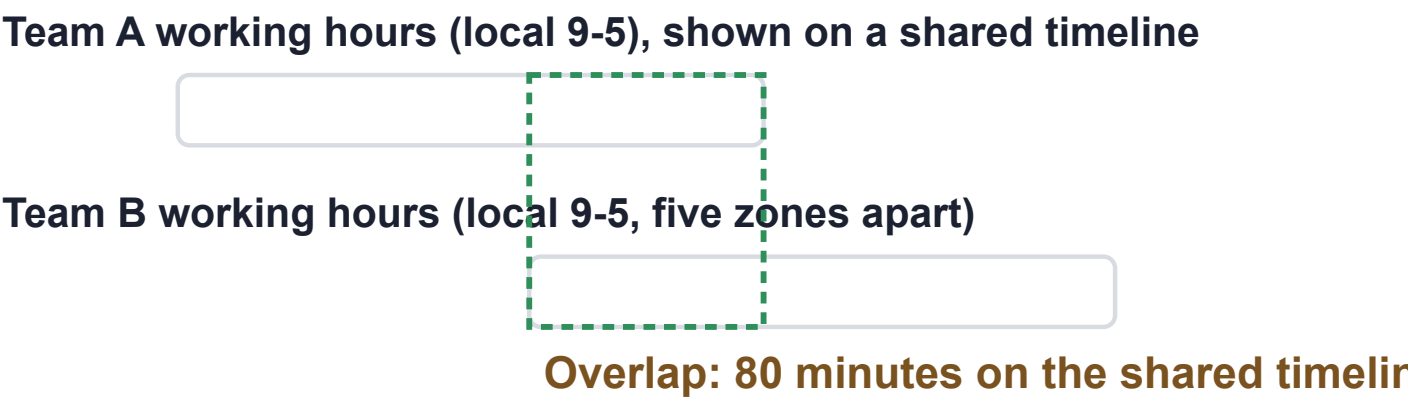
Finding Real Working-Hours Overlap Across Time Zones

> Two people in different zones do not just have a "time difference," they have an overlap window that can be small, awkward, or nonexistent depending on both of their actual working hours.

Knowing that two time zones differ by, say, five hours tells you nothing about when two specific people can actually meet, because that depends on each person's own working hours, not just the raw offset. A five-hour difference between two 9-to-5 schedules can still leave a comfortable multi-hour overlap, or almost none at all, depending on exactly where each person's working day starts and ends relative to the other's.



Converting both teams' working hours onto one shared timeline reveals the real overlap, which is much narrower than either team's full working day.

Why the raw time difference is not the answer

The time difference between two zones tells you how to convert a single clock reading from one zone to the other. It does not, by itself, tell you the overlap between two working-hours windows, because that overlap also depends on how each side's specific working hours are positioned within their own day. Two teams with identical working hours (9 to 5) but a large zone difference can have a small or zero overlap even though each team individually has a full 8-hour working day.

What actually determines the overlap size

The overlap is the intersection of two intervals once both are converted onto one shared timeline. Each side's start and end time, expressed as a real instant, is compared against the other side's start

and end instant on the same day. Shifting either side's working hours earlier or later, even without changing the zone difference itself, directly changes the size of the overlap, sometimes eliminating it entirely if the two windows no longer touch at all.

Where this matters beyond a single meeting

Recurring cross-timezone collaboration (a daily standup, a shared on-call handoff, a support queue staffed from multiple regions) depends on this same overlap calculation holding up across DST transitions on either side, which can shift the overlap window even when neither team changes their stated local working hours. A follow-the-sun handoff plan, in particular, depends on chaining multiple such overlaps correctly rather than just picking a single meeting time.

Key takeaway. Working-hours overlap across zones is the intersection of two converted intervals, not a function of the raw time difference alone. Recompute it whenever either side's hours change or a DST transition shifts one side but not the other.

Frequently asked

Can two teams with a huge time difference still have a usable overlap?

Yes, if at least one side has working hours positioned to catch the edge of the other's day (an early start or a late finish), a workable overlap can exist even across many zones. The Working-Hours Overlap Calculator checks this directly rather than relying on intuition about the raw offset.

What if the overlap is technically zero?

A zero overlap means no shared real-time working window exists under the stated hours. The practical options are asynchronous handoff, a working-hours exception on one side, or accepting a meeting outside normal hours for someone.

Do public holidays affect this calculation?

A holiday on either side effectively removes that day's overlap entirely for that team, which is a separate check from the daily overlap window itself. Combine this with the business-day and holiday-data resources when planning recurring cross-timezone work.

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