



Difference between PUT and PATCH

Both methods update a resource, but the way they do it is fundamentally different.

1. PUT (Replace Whole Resource):

- **Behavior:** It replaces the **entire resource** at the target URL with the payload provided.
- **Implication:** If you only send one field (e.g., { "name": "New Name" }) for a User resource that has 10 fields, a strict PUT implementation will **delete the other 9 fields** (setting them to null/default).^{[1] [2]}
- **Idempotency:** It is **idempotent**. Sending the same PUT request 10 times results in the exact same state as sending it once.^[2]

2. PATCH (Partial Update):

- **Behavior:** It applies a **partial update** to the resource. It only modifies the fields included in the payload.
- **Implication:** If you send { "name": "New Name" }, it only updates the name and leaves the other 9 fields untouched.^{[3] [1]}
- **Idempotency:** It is **not necessarily idempotent** (though often implemented that way). For example, a PATCH instruction like "increment age by 1" would produce different results if run multiple times.^{[4] [2]}

Summary Table

Feature	PUT	PATCH
Scope	Full Replacement (Overwrites everything)	Partial Update (Modifies specific fields)
Payload	Must send all fields.	Sends only changed fields.
Idempotency	Yes (Safe to retry).	No (Depends on implementation).
Efficiency	Lower (sends more data).	Higher (sends less data).

Interview Best Practice:

"I prefer **PATCH** for most update operations to save bandwidth and avoid the risk of accidentally wiping out fields I didn't intend to change. I reserve **PUT** for scenarios where I truly want to reset the resource to a known state."^[3]



1. <https://www.geeksforgeeks.org/javascript/difference-between-put-and-patch-request/>
2. <https://zuplo.com/learning-center/http-patch-vs-put-whats-the-difference>

3. <https://www.baeldung.com/http-put-patch-difference-spring>
4. <https://www.abstractapi.com/guides/other/put-vs-patch>
5. <https://ppl-ai-file-upload.s3.amazonaws.com/web/direct-files/attachments/images/81815274/429036f4-3bc3-4a7a-8c6f-90246e73b9b9/image.jpg>
6. <https://dev.to/mehmehmehlol/put-vs-patch-put-vs-post-56i9>
7. https://www.reddit.com/r/node/comments/izijl3/question_do_companies_actually_use_patch_instead/
8. <https://www.servicenow.com/community/developer-forum/difference-between-put-and-patch-rest-api-methods/m-p/2961076>
9. <https://ppl-ai-file-upload.s3.amazonaws.com/web/direct-files/attachments/images/81815274/24f18c0a-b56e-4862-a619-e2959036a5c2/image.jpg>
10. <https://ppl-ai-file-upload.s3.amazonaws.com/web/direct-files/attachments/images/81815274/97e9ed86-ed11-4035-a18b-1eb05c1bab4e/image.jpg>
11. <https://ppl-ai-file-upload.s3.amazonaws.com/web/direct-files/attachments/images/81815274/87f62423-96f2-4071-9802-8f6699e0ecd8/image.jpg>
12. <https://apidog.com/blog/http-put-vs-patch/>
13. <https://stackoverflow.com/questions/21660791/what-is-the-main-difference-between-patch-and-put-request>
14. <https://www.geeksforgeeks.org/java/what-is-the-difference-between-put-post-and-patch-in-restful-api/>