

# tasky\_delete\_task

## Description

Permanently deletes a Tasky task by ID, removing all associated data including tags and references.

## Purpose

Remove tasks from the system when they are no longer needed. This is a destructive operation that cannot be undone and requires explicit user confirmation.

## Parameters

Parameter	Type	Required	Description
id	string	<input checked="" type="checkbox"/>	Task ID to delete

## UI Flow

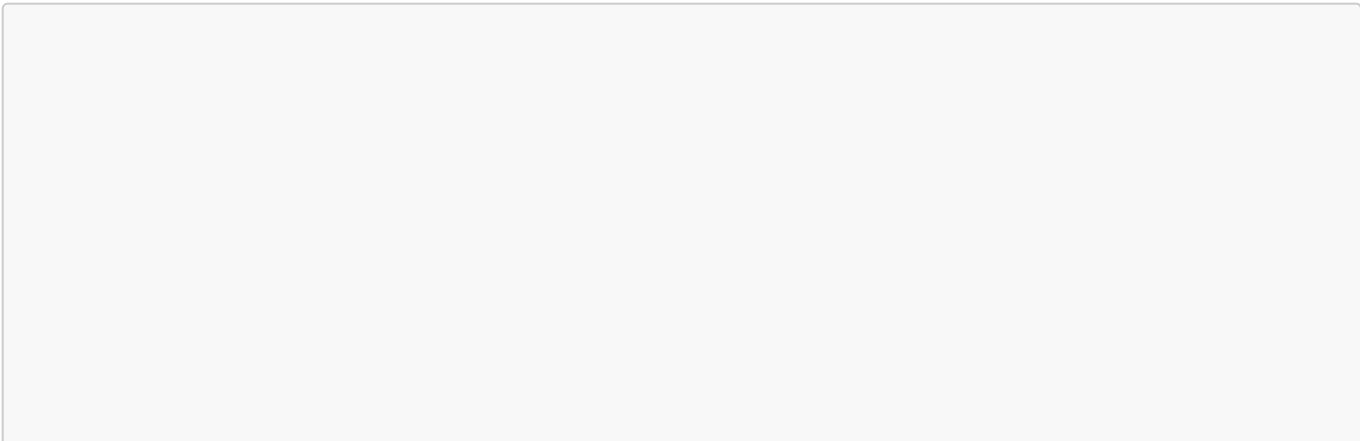
- User Input:** "Delete task ABC123" or "Remove the login bug task"
- AI Processing:** Identifies task ID to delete
- Tool Call:** `mcpCall` invoked with task ID
- ⚠ Confirmation Required:** User sees destructive action warning
- Confirmation Dialog:** Shows:
  - Task details to be deleted
  - Warning about permanent removal
  - Cascading deletions (tags, references)
- Execution:** Upon user approval, task permanently removed
- Result Display:** Confirmation message with deletion summary

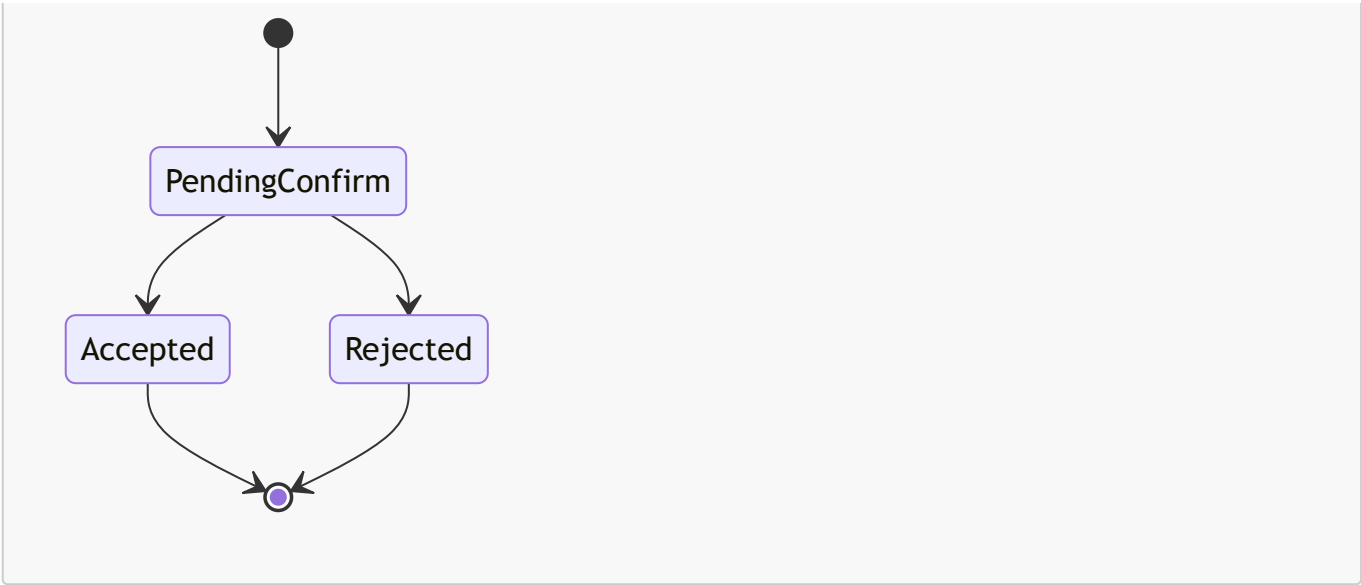
## Database Operations

## Confirmation Outcomes

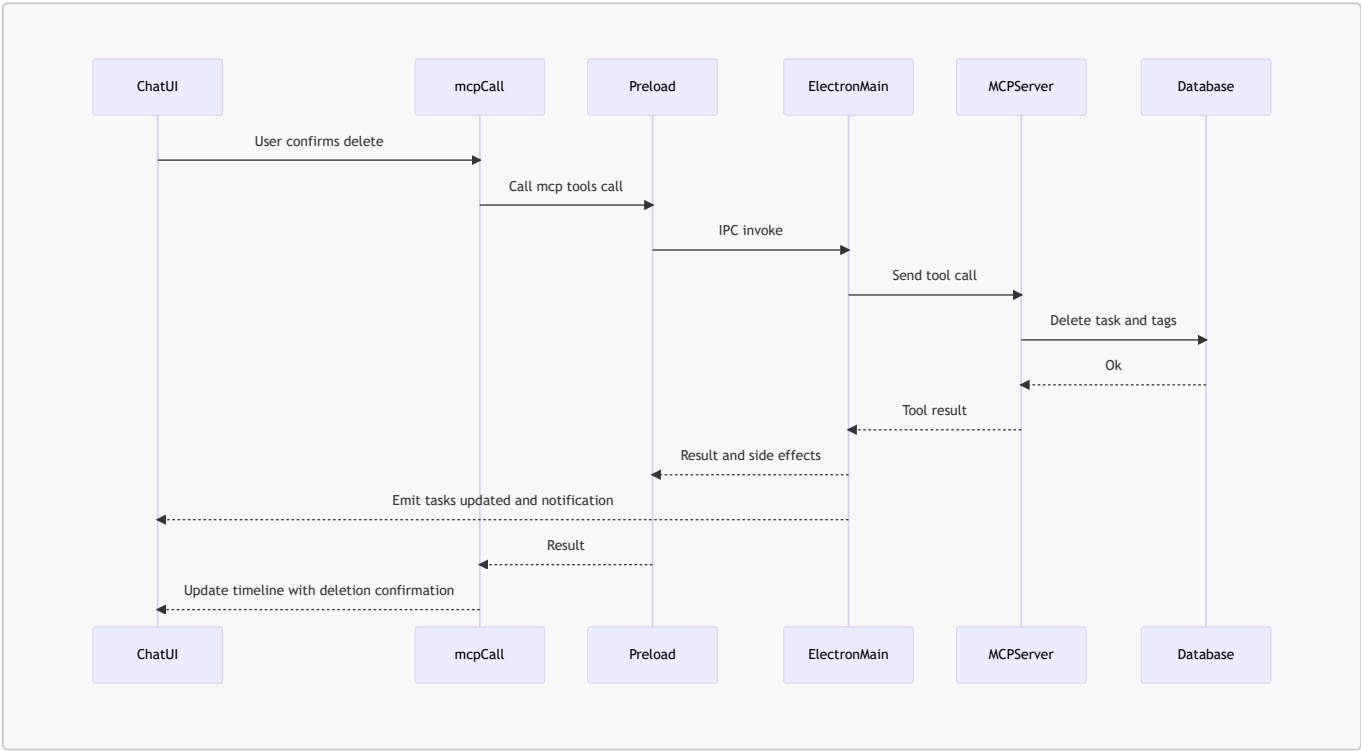
This tool requires user confirmation. Auto accept is not used for delete.

State

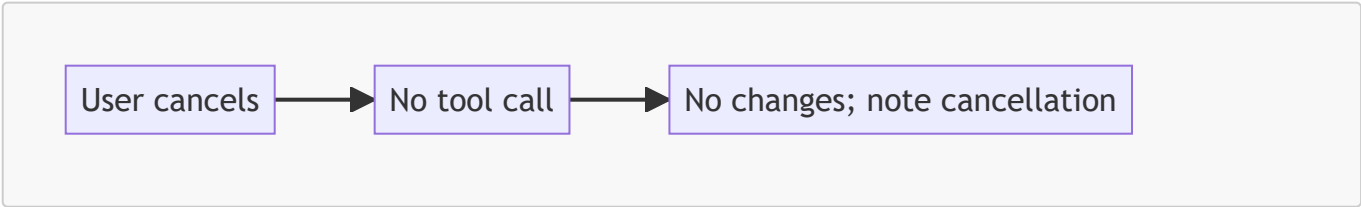




Accepted



Rejected



Auto accept

- Not applicable for delete

Side effects on accept

- Emits `tasky:tasks-updated` event

- OS notification for deleted task
- Adaptive card snapshot embedded in chat

See also: [State Management Diagrams](#)

## Adaptive Card Response

Snapshot shape

```
{
  "__taskyCard": {
    "kind": "result",
    "tool": "tasky_delete_task",
    "status": "success",
    "data": {
      "id": "fix_login_bug_20250907_143022_abc123",
      "title": "Fix login bug",
      "tags": ["bug", "authentication"],
      "status": "PENDING"
    },
    "meta": {
      "operation": "delete",
      "timestamp": "2025-09-17T16:00:00.000Z"
    }
  }
}
```

Error variant

```
{
  "__taskyCard": {
    "kind": "result",
    "tool": "tasky_delete_task",
    "status": "error",
    "error": { "message": "Task not found", "code": "NOT_FOUND" }
  }
}
```

Renderer notes

- Success: Deletion confirmation with task summary.
- Error: Inline error card with retry guidance.
- Unknown shape: Fallback to raw JSON rendering.

```
-- Transaction ensures referential integrity
BEGIN TRANSACTION;


-- Delete associated tags first (foreign key constraint)
```

```
DELETE FROM task_tags WHERE task_id = ?;

-- Delete the main task record
DELETE FROM tasks WHERE id = ?;

COMMIT;
```

## UI Components

- **ConfirmOverlay:** Enhanced confirmation dialog with:
  -  Destructive action warning
  - Task details preview
  - "This action cannot be undone" message
  - Explicit "Delete Task" / "Cancel" buttons
- **ToolCallDisplay:** Shows deletion operation status
- **AdaptiveCardRenderer:** Displays confirmation result
- **MessageContainer:** Integrates deletion result in chat

## MCP Request Example

```
curl -X POST http://localhost:7844/mcp \
-H "Content-Type: application/json" \
-d '{
  "jsonrpc": "2.0",
  "id": 4,
  "method": "tools/call",
  "params": {
    "name": "tasky_delete_task",
    "arguments": {
      "id": "fix_login_bug_20250907_143022_abc123"
    }
  }
}'
```

## Response Format

```
{
  "jsonrpc": "2.0",
  "id": 4,
  "result": {
    "content": [
      {
        "type": "text",
        "text": "{\"success\": true}"
      }
    ]
  }
}
```


```
    }  
  }  
}
```

# Confirmation Flow

## Step 1: Tool Request

```
User: "Delete task ABC123"  
AI: Calls tasky_delete_task
```

## Step 2: Confirmation Dialog

 Delete Task

Task: fix\_login\_bug\_20250907\_143022\_abc123

Title: Fix login bug

Status: PENDING

Tags: bug, authentication

This action cannot be undone.

All associated data will be permanently removed.

[Delete Task] [Cancel]

## Step 3: Result Display

☒ Task Deleted

Successfully deleted task:  
fix\_login\_bug\_20250907\_143022\_abc123

- Removed main task record
- Deleted 2 associated tags
- Cleared any references

# Cascading Deletions

Component	Action
Task Record	Permanently removed from <code>tasks</code> table
Task Tags	All tags deleted from <code>task_tags</code> table
Dependencies	References removed from other tasks

Component	Action
Reminders	Associated reminders remain (separate entities)
Chat History	Tool results preserved in conversation

Error Handling

Error	Cause	Response
Missing ID	<code>id</code> parameter not provided	<code>{"content": [{"type": "text", "text": "id is required"}], "isError": true}</code>
Task not found	ID doesn't exist	Silent success (idempotent)
Database error	SQLite operation failure	Transaction rollback with error details
Foreign key violation	Constraint issues	Error message with relationship details

Security Considerations

- **Confirmation Required:** Always requires explicit user approval
- **No Bulk Delete:** Single task deletion only
- **Audit Trail:** Deletion logged in chat history
- **Transaction Safety:** Atomic operation prevents partial deletions
- **User Intent:** AI must clearly identify task to delete

Transaction Details

```
-- Atomic deletion transaction
BEGIN IMMEDIATE TRANSACTION;

-- Check if task exists (optional validation)
SELECT COUNT(*) FROM tasks WHERE id = ?;

-- Delete tags first to satisfy foreign key constraints
DELETE FROM task_tags WHERE task_id = ?;

-- Delete main task record
DELETE FROM tasks WHERE id = ?;

-- Commit all changes atomically
COMMIT;
```

Common Usage Patterns

Direct ID Deletion

- "Delete task ABC123"
- "Remove task with ID XYZ789"

## Natural Language Deletion

- "Delete the login bug task" (AI must resolve to ID)
- "Remove my urgent authentication task"

## Bulk-like Requests

- "Delete all completed tasks" → Requires individual confirmations
- "Clean up old tasks" → User must specify criteria

## Recovery Options

⚠ **Important:** Task deletion is permanent. No built-in recovery options exist.

### Prevention Measures:

- Always show task details in confirmation
- Require explicit user approval
- Consider task archiving instead of deletion
- Backup database before bulk operations

## Performance Impact

- **Fast Operation:** Single transaction with minimal queries
- **Index Usage:** Benefits from primary key lookup
- **Minimal I/O:** Only affected records modified
- **Lock Duration:** Brief exclusive lock during transaction

## Related Operations

### Alternative to Deletion

- **Archive Task:** `tasky_update_task` with `status: "archived"`
- **Cancel Task:** `tasky_update_task` with `status: "cancelled"`

### Cleanup Operations

- **List Completed:** Use before deletion to review candidates
- **Bulk Operations:** Multiple individual delete calls required

## Implementation Details

- **Tool Handler:** `tasky-mcp-agent/src/mcp-server.ts:148-170`
- **Database Logic:** `tasky-mcp-agent/src/utils/task-bridge.ts:240-249`
- **UI Confirmation:** `src/components/chat/ConfirmOverlay.tsx`
- **Result Display:** `src/components/chat/AdaptiveCardRenderer.tsx`

## Best Practices

1. **Confirm Before Delete:** Always show task details
2. **Consider Alternatives:** Archive vs. delete
3. **Document Reason:** Add deletion context to chat
4. **Backup Critical:** Backup before bulk deletions
5. **User Education:** Explain permanent nature

## Related Components

- [tasky-mcp-agent/src/mcp-server.ts:148-170](#) - Tool definition and handler
- [tasky-mcp-agent/src/utils/task-bridge.ts:240-249](#) - Database deletion logic
- [src/components/chat/ConfirmOverlay.tsx](#) - Destructive action confirmation
- [src/ai/mcp-tools.ts:102-111](#) - Confirmation logic for destructive operations