

Comfy UI API end-points

Sourced and made digestible after extensive internet searches, forum browsing, issue trackers, and insufficient documentation

HTTP Endpoints

Endpoint	Method	Purpose	Example Response	Example Test Command
/prompt	POST	Submit workflow	{ "prompt_id": "6f962d0e-40d9-45e8-b378-7247258cadde", "number": 1, "node_errors": {} }	Header: http://127.0.0.1:8000/prompt Body: { "prompt": {...}, "client_id": "df1465dc01f6446aa6f" }
/queue	GET	Get current queue status	{ "queue_running": [{ "prompt_id": "6f962d0e-40d9-45e8-b378-7247258cadde", "number": 1 }], "queue_pending": [{ "prompt_id": "7a973e1f-58b9-42d6-b3c5-e7adef5632dc", "number": 2 }] }	http GET http://127.0.0.1:8000/queue
/history	GET	Get execution history	{ "6f962d0e-40d9-45e8-b378-7247258cadde": { "prompt": {...}, "outputs": {...}, "status": "complete" } }	http GET http://127.0.0.1:8000/history
/history/{prompt_id}	GET	Get specific execution	{ "prompt": {...}, "outputs": {...}, "status": "complete" }	http GET http://127.0.0.1:8000/history/6f962d0e-40d9-45e8-b378-7247258cadde
/view	GET	View generated images	Binary image data (PNG/JPEG)	http GET http://127.0.0.1:8000/view?filename=ComfyUI_00042_.png --output
/upload/image	POST	Upload input image	{ "name": "uploaded_image.png", "subfolder": "", "type": "input" }	http -f POST http://127.0.0.1:8000/upload/image overwrite=true image@/path/to/image.png
/upload/mask	POST	Upload mask image	{ "name": "uploaded_mask.png", "subfolder": "", "type": "mask" }	http -f POST http://127.0.0.1:8000/upload/mask overwrite=true image@/path/to/mask.png
/object_info	GET	Get node information	{ "CheckpointLoaderSimple": { "input": {...}, "output": {...}, "KSampler": {...} } } (Large JSON with all node types)	http GET http://127.0.0.1:8000/object_info
/system_stats	GET	Get system statistics	{ "cuda": { "gpu": "NVIDIA GeForce RTX 3080", "vram_total": 10240, "vram_free": 8192 }, "system": { "cpu_percent": 25.6, "ram_total": 32768, "ram_free": 16384 } }	http GET http://127.0.0.1:8000/system_stats
/extensions	GET	List installed extensions	{ "extensions": ["ComfyUI-Manager", "ComfyUI-Impact-Pack"] }	http GET http://127.0.0.1:8000/extensions
/interrupt	POST	Stop execution	{ "success": true }	http POST http://127.0.0.1:8000/interrupt

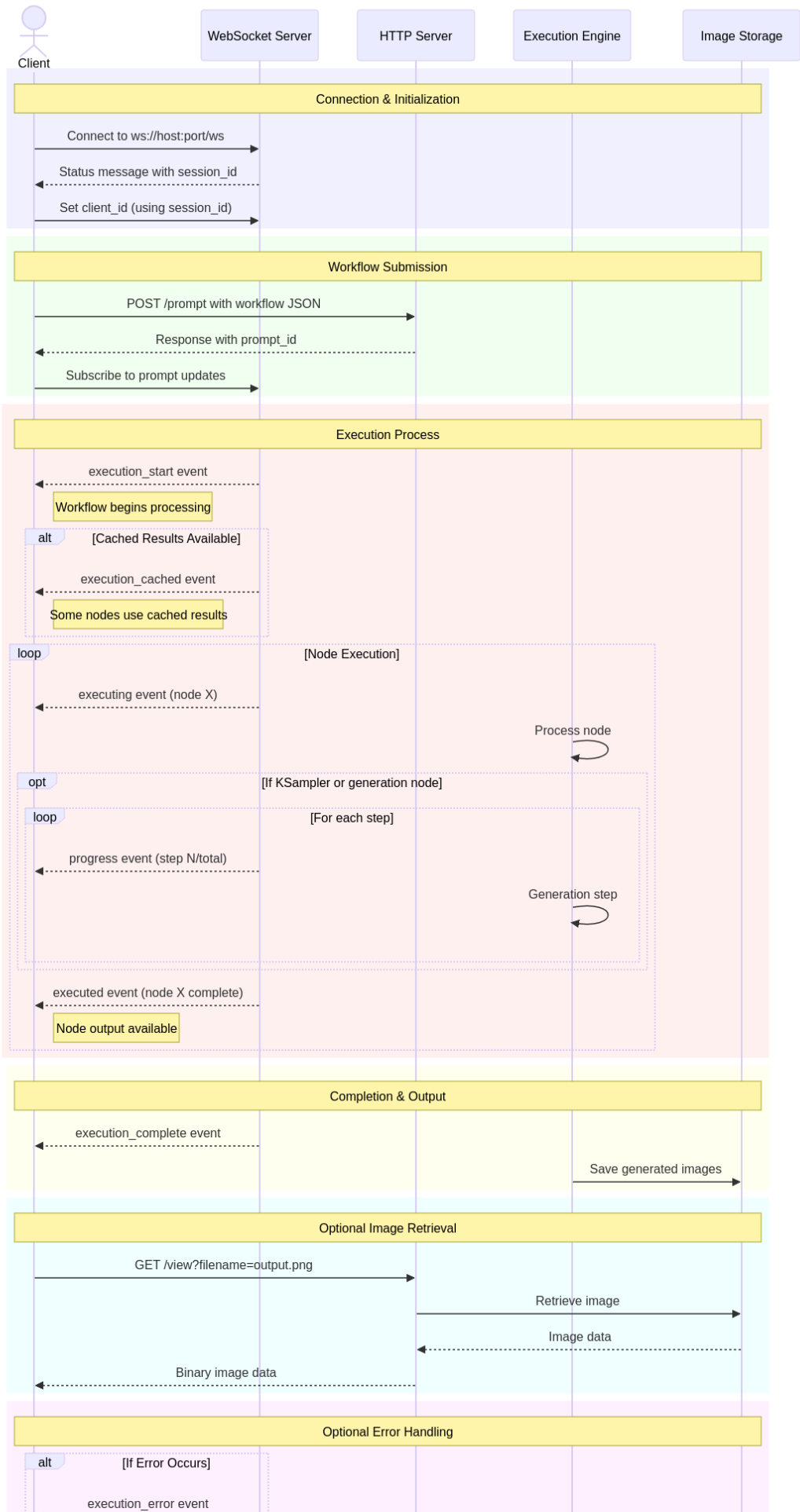
WebSocket Messages

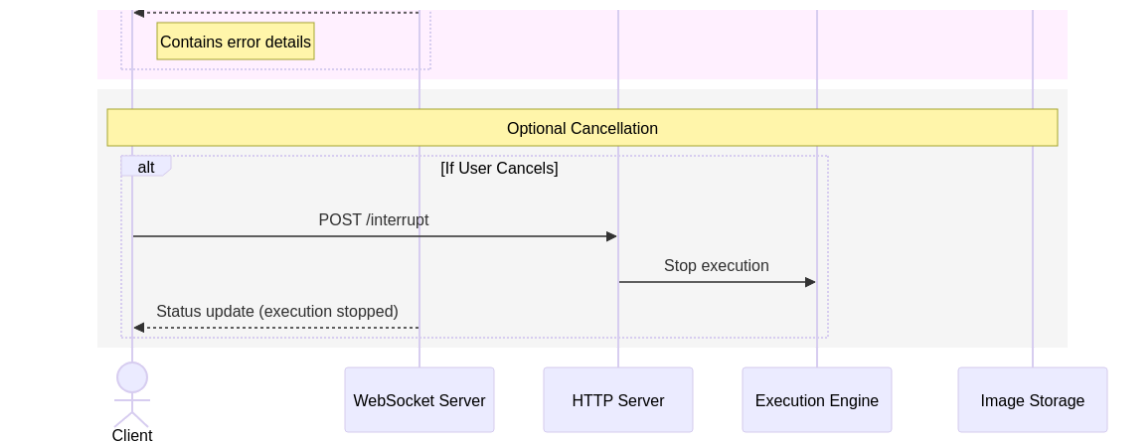
Message Type	Direction	Purpose	Example Message	Implementation Status
status	Server→Client	System status	<code>{"type": "status", "data": {"status": {"exec_info": {"queue_remaining": 1}}, "sid": "4921363473c149bfaab99efa190033b3"}}</code>	✅ Used to get session ID
execution_start	Server→Client	Execution begins	<code>{"type": "execution_start", "data": {"prompt_id": "6f962d0e-40d9-45e8-b378-7247258cadde"}}</code>	✅ Monitored in script
execution_cached	Server→Client	Results from cache	<code>{"type": "execution_cached", "data": {"prompt_id": "6f962d0e-40d9-45e8-b378-7247258cadde", "nodes": ["1", "2", "3"]}}</code>	✅ Monitored in script
executing	Server→Client	Current node	<code>{"type": "executing", "data": {"node": "5", "prompt_id": "6f962d0e-40d9-45e8-b378-7247258cadde"}}</code>	✅ Monitored and displayed
progress	Server→Client	Generation progress	<code>{"type": "progress", "data": {"value": 10, "max": 20, "prompt_id": "6f962d0e-40d9-45e8-b378-7247258cadde"}}</code>	✅ Monitored with percentage
executed	Server→Client	Node completion	<code>{"type": "executed", "data": {"node": "5", "output": {"images": [...]}, "prompt_id": "6f962d0e-40d9-45e8-b378-7247258cadde"}}</code>	✅ Monitored in script
execution_error	Server→Client	Error reporting	<code>{"type": "execution_error", "data": {"node": "5", "exception_message": "CUDA out of memory", "prompt_id": "6f962d0e-40d9-45e8-b378-7247258cadde"}}</code>	✅ Basic error handling
execution_complete	Server→Client	Execution finished	<code>{"type": "execution_complete", "data": {"prompt_id": "6f962d0e-40d9-45e8-b378-7247258cadde"}}</code>	✅ Used to detect completion
Client message	Client→Server	Set client ID	<code>{"client_id": "test_client"}</code>	✅ Used for connection tracking
Client message	Client→Server	Subscribe to updates	<code>{"op": "subscribe_to_prompt", "data": {"prompt_id": "6f962d0e-40d9-45e8-b378-7247258cadde"}}</code>	✅ Used for monitoring

Execution Flow Diagram

📄 If mermaid is not visisble in your markdown renderer, checkout the [png](#) / [svg](#) / [UML](#)

ComfyUI API Interaction Flow





Credits & Sources

Descending order of discovery

1. Official ComfyUI Github:[ISSUE:2110](#)
2. Official ComfyUI Github: [ComfyUI's script_examples](#)
3. Official ComfyUI docs: docs.comfy.org/essentials/comms_routes
4. Official ComfyUI docs: docs.comfy.org/essentials/comfyui-server/comms_messages#built-in-message-types
5. Medium Article: [ComfyUI : WebSockets API : Part 1](#)
6. Medium Article: [ComfyUI : WebSockets API : Part 2](#)
7. Medium Article: [ComfyUI : WebSockets API : Part 3](#)