# API Documentation Generator Agent

This document outlines the API specification for the Documentation Generator Agent, including its endpoints and all valid input formats.

## Agent Endpoints

### Health Check

* **URL:** https://api-documentation-agent.onrender.com/health
* **Method:** GET
* **Description:** A simple endpoint to verify that the agent is running.

### Documentation Generation

* **URL:** https://api-documentation-agent.onrender.com/execute
* **Method:** POST
* **Content-Type:** application/json
* **Description:** The main endpoint that receives a task assignment and generates documentation.

## Agent Inputs

Our Agent accepts three types of inputs:

1. **Code files** (one or more)
2. **Zip file** (whole project in zip format)
3. **Github repository link** (HTTPS .git link)

**Note:** For each input scenario, the user can optionally provide existing\_documentation as a valid JSON object. If provided, the agent will add new endpoints to this object. If it is null, the agent will create a new documentation object from scratch.

## Part 1: Agent Inputs (Without Existing Documentation)

These examples show how to generate new documentation from scratch.

### 1. Github Repository Example (New)

{  
 "message\_id": "sup-msg-123",  
 "sender": "supervisor",  
 "recipient": "documentation\_generator\_agent",  
 "type": "task\_assignment",  
 "timestamp": "2025-11-15T12:00:00Z",  
 "results/task": {  
 "language": "javascript",  
 "git\_repo\_url": "[https://github.com/Taimoor-Raza-Asif/event-planer.git](https://github.com/Taimoor-Raza-Asif/event-planer.git)",  
 "existing\_documentation": null,  
 "search\_patterns": null,  
 "zip\_file\_base64": null,  
 "code\_files\_base64": null  
 }  
}

### 2. Zip File Example (New)

{  
 "message\_id": "sup-msg-456",  
 "sender": "supervisor",  
 "recipient": "documentation\_generator\_agent",  
 "type": "task\_assignment",  
 "timestamp": "2025-11-15T12:00:00Z",  
 "results/task": {  
 "language": "java",  
 "zip\_file\_base64": "UEsDBBQA...[the giant Base64 string]...kQAAAAA=",  
 "existing\_documentation": null,  
 "search\_patterns": null,  
 "git\_repo\_url": null,  
 "code\_files\_base64": null  
 }  
}

### 3. Code Files Example (New)

{  
 "message\_id": "sup-msg-789",  
 "sender": "supervisor",  
 "recipient": "documentation\_generator\_agent",  
 "type": "task\_assignment",  
 "timestamp": "2025-11-15T12:00:00Z",  
 "results/task": {  
 "language": "python",  
 "code\_files\_base64": [  
 {  
 "file\_path": "routes/users.py",  
 "content\_base64": "ZGVmIGdldF91c2VycygpOgogICAgcGFzcw=="  
 },  
 {  
 "file\_path": "routes/products.py",  
 "content\_base64": "ZGVmIGdldF9wcm9kdWN0cygpOgogICAgcGFzcw=="  
 }  
 ],  
 "existing\_documentation": null,  
 "search\_patterns": null,  
 "git\_repo\_url": null,  
 "zip\_file\_base64": null  
 }  
}

## Part 2: Agent Inputs (With Existing Documentation)

These examples show how to **update** existing documentation. The existing\_documentation field is populated with a JSON object.

### 1. Github Repository Example (Update)

{  
 "message\_id": "sup-msg-124",  
 "sender": "supervisor",  
 "recipient": "documentation\_generator\_agent",  
 "type": "task\_assignment",  
 "timestamp": "2025-11-15T12:05:00Z",  
 "results/task": {  
 "language": "javascript",  
 "git\_repo\_url": "[https://github.com/Taimoor-Raza-Asif/event-planer.git](https://github.com/Taimoor-Raza-Asif/event-planer.git)",  
 "existing\_documentation": {  
 "openapi": "3.0.0",  
 "info": {  
 "title": "My Existing API",  
 "version": "1.0.0"  
 },  
 "paths": {  
 "/api/v1/health": {  
 "get": {  
 "summary": "Health Check",  
 "responses": {  
 "200": {  
 "description": "Service is healthy"  
 }  
 }  
 }  
 }  
 }  
 },  
 "search\_patterns": null,  
 "zip\_file\_base64": null,  
 "code\_files\_base64": null  
 }  
}

### 2. Zip File Example (Update)

{  
 "message\_id": "sup-msg-457",  
 "sender": "supervisor",  
 "recipient": "documentation\_generator\_agent",  
 "type": "task\_assignment",  
 "timestamp": "2025-11-15T12:06:00Z",  
 "results/task": {  
 "language": "java",  
 "zip\_file\_base64": "UEsDBBQA...[the giant Base64 string]...kQAAAAA=",  
 "existing\_documentation": {  
 "openapi": "3.0.0",  
 "info": {  
 "title": "My Existing Java API",  
 "version": "2.1.0"  
 },  
 "paths": {  
 "/api/v2/admin/status": {  
 "get": {  
 "summary": "Admin Health Check",  
 "responses": {  
 "200": {  
 "description": "Admin service is healthy"  
 }  
 }  
 }  
 }  
 }  
 },  
 "search\_patterns": null,  
 "git\_repo\_url": null,  
 "code\_files\_base64": null  
 }  
}

### 3. Code Files Example (Update)

{  
 "message\_id": "sup-msg-790",  
 "sender": "supervisor",  
 "recipient": "documentation\_generator\_agent",  
 "type": "task\_assignment",  
 "timestamp": "2025-11-15T12:07:00Z",  
 "results/task": {  
 "language": "python",  
 "code\_files\_base64": [  
 {  
 "file\_path": "routes/new\_feature.py",  
 "content\_base64": "ZGVmIGdldF9mZWF0dXJlKCk6CgkgICAgcGFzcw=="  
 }  
 ],  
 "existing\_documentation": {  
 "openapi": "3.0.0",  
 "info": {  
 "title": "My Existing Python API",  
 "version": "1.0.3"  
 },  
 "paths": {  
 "/api/v1/users": {  
 "get": {  
 "summary": "Get all users",  
 "responses": {  
 "200": {  
 "description": "A list of users"  
 }  
 }  
 }  
 }  
 }  
 },  
 "search\_patterns": null,  
 "git\_repo\_url": null,  
 "zip\_file\_base64": null  
 }  
}

## Output format:

{

**"message\_id":** "doc-agent-uuid-abc-123",

**"sender":** "documentation\_generator\_agent",

**"recipient":** "supervisor",

**"type":** "task\_response",

**"related\_message\_id":** "sup-msg-789",

**"status":** "completed",

**"timestamp":** "2025-11-15T12:01:00Z",

**"results/task":** {

**"status\_message":** "Documentation successfully processed for 4 endpoint(s).",

**"endpoints\_found":** 4,

**"file\_by\_file\_results":** [

{

**"file\_path":** "routes/users.py",

**"language\_detected":** "python",

**"endpoints\_found":** 2,

**"documentation":** [

{

**"path":** "/api/users",

**"method":** "get",

**"summary":** "Gets all users",

**"description":** "Retrieves a list of all users.",

**"tags":** ["Users"],

**"requestBodySchema":** null,

**"successResponseSchema":** "{\"type\":\"array\",\"items\":{\"type\":\"object\"}}",

**"errorResponses":** [

{ **"code":** "500", **"description":** "Internal server error" }

]

},

{

**"path":** "/api/users",

**"method":** "post",

**"summary":** "Creates a new user",

**"description": "**Adds a new user to the system.",

**"tags":** ["Users"],

**"requestBodySchema":** "{\"type\":\"object\",\"properties\":{\"username\":{\"type\":\"string\"}}}",

"successResponseSchema": "{\"type\":\"object\",\"properties\":{\"id\":{\"type\":\"integer\"}}}",

"errorResponses": [

{ "code": "400", "description": "Invalid input" }

]

}

]

},

{

**"file\_path":** "routes/products.py",

**"language\_detected":** "python",

**"endpoints\_found":** 2,

**"documentation":** [

{

**"path":** "/api/products",

**"method":** "get",

**"summary":** "Gets all products",

**"description":** "Retrieves a list of all products.",

**"tags":** ["Products"],

**"requestBodySchema":** null,

**"successResponseSchema":** "{\"type\":\"array\",\"items\":{\"type\":\"object\"}}",

**"errorResponses":** []

}

]

}

],

**"merged\_documentation":** {

**"openapi":** "3.0.0",

**"info":** {

**"title":** "New API Documentation",

**"version":** "1.0.0",

**"description":** "Generated by AI Architect Agent"

},

**"paths":** {

**"/api/users":** {

**"get":** {

**"summary":** "Gets all users",

**"description":** "Retrieves a list of all users.",

**"tags":** ["Users"],

**"responses":** {

**"200":** {

**"description":** "Successful operation",

**"content":** {

**"application/json":** {

**"schema":** {

**"type":** "array",

**"items":** { "type": "object" }

}

}

}

},

**"500":** { **"description":** "Internal server error" }

}

},

**"post":** {

**"summary":** "Creates a new user",

**"description":** "Adds a new user to the system.",

**"tags":** ["Users"],

**"responses":** {

**"201":** {

**"description":** "Successful operation",

**"content":** {

**"application/json":** {

**"schema":** {

**"type":** "object",

**"properties":** { "id": { "type":"integer" } }

}

}

}

},

**"400":** { **"description":** "Invalid input" }

},

**"requestBody":** {

**"description":** "Request body for post /api/users",

**"required":** true,

**"content":** {

"**application/json":** {

**"schema":** {

**"type":** "object",

**"properties":** { "username": { "type": "string" } }

}

}

}

}

}

},

**"/api/products":** {

**"get":** {

**"summary":** "Gets all products",

**"description":** "Retrieves a list of all products.",

**"tags":** ["Products"],

**"responses":** {

**"200":** {

**"description":** "Successful operation",

**"content":** {

**"application/json":** {

**"schema":** {

**"type": "**array",

**"items":** { "type": "object" }

}

}

}

}

}

}

}

}

}

}

}