

# KGSweb Google Integration Plugin – Handoff Documentation

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## Root Integration File ( kgsweb-google-integration.php )

### Purpose

Central bootstrap for all KGSweb Google Integration plugin features. Defines constants, loads dependencies, and initializes feature classes.

### Key Constants

```
KGSWEB_PLUGIN_VERSION
KGSWEB_PLUGIN_FILE
KGSWEB_PLUGIN_DIR
KGSWEB_PLUGIN_URL
KGSWEB_SETTINGS_OPTION
KGSWEB_UPLOAD_PASS_HASH
```

### Initialization Flow

1. File guard: `if (!defined('ABSPATH')) exit;`
2. Define constants (paths, version, security hash)
3. Load all `/includes/` modules
4. Load Composer autoloader: `vendor/autoload.php`
5. Hook `plugins_loaded` → initialize classes:

```
KGSweb_Google_Integration::init();
KGSweb_Google_Admin::init();
KGSweb_Google_REST_API::init();
KGSweb_Google_Shortcodes::init();
KGSweb_Google_Secure_Upload::init();
```

```
KGWeb_Google_Ticker::init();
KGWeb_Google_Upcoming_Events::init();
```

### Responsibilities

- Dependency loader and system entry point
- Delegates logic to modular class files
- Establishes uniform namespace `KGWeb_Google_*`
- Ensures subsystems register after WordPress is ready

### Developer Notes

- Avoid adding feature logic here
- New subsystems → create `class-kgsweb-google-<feature>.php` + `::init()`
- Maintain consistent naming and directory structure

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## Google Integration Core ( `includes/class-kgsweb-google-integration.php` )

**Purpose** Creates and manages authenticated Google API client instances shared by all plugin modules. Handles enqueueing of shared front-end assets.

**Class:** `KGWeb_Google_Integration`

### Key Responsibilities

- Singleton Google API client instance
- Access to Drive, Docs, Calendar, Sheets, Slides
- Register/enqueue shared JS/CSS
- Maintain plugin paths and configuration
- Upload lockout for Secure Upload

### Properties

```
private static ?self $instance
private ?Client $client
private ?KGWeb_Google_Drive_Docs $drive
private ?Docs $docsService
private ?Calendar $calendar
private ?Sheets $sheets
private ?Slides $slides
private string $plugin_url
private string $plugin_path
private int $lockout_time = 86400
private int $max_attempts = 50
```

### Hooks

```
add_action('init', [$this, 'register_assets']);
add_action('wp_enqueue_scripts', [$this, 'enqueue_frontend']);
```

### Google API Services

- `get_client()`
- `get_drive()`

- `get_docs_service()`
  - `get_calendar()`
  - `get_sheets()`
  - `get_slides()`
- 

## Drive Docs (`class-kgsweb-google-drive-docs.php`)

**Purpose:** Interface between WordPress and Google Drive for:

- Retrieving folder contents
- Parsing API responses
- Caching results
- Generating download links
- Supporting front-end shortcodes

### Shortcode Syntax

```
[kgsweb_drive_folder id="FOLDER_ID" view="list|grid" sort="name_asc|modified_desc" filter="pdf,docx,folder" max_depth="1"]
```

### Example:

```
[kgsweb_drive_folder id="1AbCDefGhIjKlmnopQRsT" view="grid" filter="pdf,docx" sort="modified_desc"]
```

---

## Ticker (`includes/class-kgsweb-google-ticker.php`)

### Shortcode Syntax

```
[kgsweb_google_ticker folder="FOLDER_ID" max_items="5" speed="normal"]
```

---

## Display (`includes/class-kgsweb-google-display.php`)

### Shortcode Syntax

```
[kgsweb_display type="breakfast|lunch|calendar|feature_image" view="list|grid" max_items="N" filter="pdf,docx"]
```

---

## Upcoming Events (`includes/class-kgsweb-google-upcoming-events.php`)

### Shortcode Syntax

```
[kgsweb_upcoming_events folder="FOLDER_ID" limit="5" view="list"]
```

---

## Slides (`includes/class-kgsweb-google-slides.php`)

### Shortcode Syntax

```
[kgsweb_slides id="PRESENTATION_ID" width="800" height="600"]
```

---

## Sheets (includes/class-kgsweb-google-sheets.php)

### Shortcode Syntax

```
[kgsweb_sheets id="SHEET_ID" range="A1:E10"]
```

---

## Secure Upload (includes/class-kgsweb-google-secure-upload.php)

- Validates file type, size, MIME
  - Enforces lockout ( `lockout_time` , `max_attempts` )
  - Uploads to Drive folder
- 

## REST API (includes/class-kgsweb-google-rest-api.php)

- Provides JSON endpoints for menus, events, Drive folder data
  - Registers routes via WordPress REST API
- 

## Helpers (includes/class-kgsweb-google-helpers.php)

- MIME type mapping
  - PDF → PNG conversion
  - Date formatting
  - Cache key generation
  - Shared validation utilities
- 

## KGSweb Google Plugin – Quick Reference

| Category | Feature / Type       | Shortcode Example                                 | Admin Folder / Setting   | Notes                  |
|----------|----------------------|---|--------------------------|------------------------|
| Display  | Breakfast Menus      | [kgsweb_display type="breakfast" view="list"]     | Breakfast Menu Folder ID | PDF/image menus        |
|          | Lunch Menus          | [kgsweb_display type="lunch" view="grid"]         | Lunch Menu Folder ID     | Grid display           |
|          | Calendars            | [kgsweb_display type="calendar" filter="pdf"]     | Calendar Folder ID       | PDF calendars          |
|          | Feature Images       | [kgsweb_display type="feature_image" view="grid"] | Feature Image Folder ID  | Visual featured images |
| Ticker   | News / Announcements | [kgsweb_google_ticker folder="abc123"]            | Ticker Folder ID         | Rotating content       |
|          |                      |   |                          |                        |

|         |                       |   |                       |                           |
|---------|-----------------------|---|-----------------------|---------------------------|
| Events  | Upcoming Events       | [kgsweb_upcoming_events folder="xyz456"]                | Events Folder ID      | List/grid upcoming events |
| Sites   | Google Sites Embed    | [kgsweb_google_site url="https://sites.google.com/..."] | Allowed Sites Setting | Iframe embed              |
| Drive   | Drive Folder Display  | [kgsweb_drive_folder id="folder_id_here"]               | N/A                   | Cached listing            |
| Slides  | Google Slides Embed   | [kgsweb_slides id="presentation_id"]                    | N/A                   | Embeds slides             |
| Sheets  | Google Sheets Display | [kgsweb_sheets id="sheet_id" range="A1:E10"]            | N/A                   | Table display             |
| Uploads | Secure Upload         | Handled internally                                      | Upload Target Folder  | Secure Drive upload       |
| API     | REST Endpoints        | N/A   | N/A                   | JSON endpoints            |
| Helpers | Utilities / PDF Tools | N/A   | N/A                   | Shared utilities          |

## Admin Summary

| Setting Name                  | Purpose                  | Used By             |
|-------------------------------|--------------------------|---------------------|
| kgsweb_drive_breakfast_folder | Breakfast menus folder   | Display             |
| kgsweb_drive_lunch_folder     | Lunch menus folder       | Display             |
| kgsweb_drive_calendar_folder  | Calendar folder          | Display             |
| kgsweb_drive_feature_folder   | Feature images           | Display             |
| kgsweb_drive_ticker_folder    | Ticker items             | Ticker              |
| kgsweb_drive_events_folder    | Upcoming events          | Upcoming Events     |
| kgsweb_allowed_sites          | Allowed Sites URLs       | Google Sites Embed  |
| kgsweb_cache_duration         | Cache lifetime (seconds) | Drive Docs, Display |

## Core Classes at a Glance

| Class                     | Responsibility                                |
|---------------------------|---|
| KGSweb_Google_Integration | Initializes modules, sets up Google Client    |
| KGSweb_Google_Admin       | Admin menus, folder mappings                  |
| KGSweb_Google_Shortcodes  | Registers all shortcodes, dispatches handlers |
|                           |   |

|                               |   |
|-------------------------------|---|
| KGSweb_Google_Drive_Docs      | Fetches, parses, caches Drive folder contents |
| KGSweb_Google_Secure_Upload   | Secure Drive uploads                          |
| KGSweb_Google_Ticker          | Rotating content display                      |
| KGSweb_Google_Display         | Menus, calendars, feature images              |
| KGSweb_Google_Upcoming_Events | Upcoming events display                       |
| KGSweb_Google_Slides          | Embed Google Slides                           |
| KGSweb_Google_Sheets          | Display Google Sheets                         |
| KGSweb_Google_REST_API        | Provides JSON endpoints                       |
| KGSweb_Google_Helpers         | Shared utilities (PDFs, MIME, dates)          |

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## Developer Flow Overview

```
[shortcode invoked]
  ↓
KGSweb_Google_Shortcodes → target class
  ↓
Drive data fetched via KGSweb_Google_Drive_Docs
  ↓
Filtered / sorted / formatted
  ↓
Rendered (list, grid, ticker, embed)
  ↓
Displayed on front-end
```

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**End of README.md**