ImplementationPlan.md

Version: 1.0.0 **Target:** 0.140.0-Beta

1. File Identification

- `Docs/ReportInterpretationGuide.md` (Baseline: 0.119.1-Beta)
- `Docs/UsersGuide.md` (Baseline: 1.1.0)
- `README.md` (Baseline: 1.2.0)
- `Docs/ProgrammersGuide.md` (Baseline: 0.126.0-Beta)
- `web_app/analyzer/templates/analyzer/help_reports.html` (Baseline: Source 1708)

2. Surgical Changes

2.1. `Docs/ReportInterpretationGuide.md`

- **Update Header:** Bump version to `0.140.0-Beta` and date to today.
- **Add Section:** Insert "Multiplier Breakdown (Group Par)" under "2. Text Reports".
  - **Content:** Explain the concept of "Group Par" (Universe Count), "Common" (Intersection), and "Delta" (Distance from Par). Explain that this report highlights *relative* performance against the group's collective potential.
- **Update Section 6 (WRTC):** Ensure description matches the new interactive animation capabilities if needed (currently looks accurate in baseline).

2.2. `Docs/UsersGuide.md`

- **Update Header:** Bump version to `1.2.0` and date to today.
- **Update Section 5 (Available Reports):**
  - Add `html_multiplier_breakdown`: Multiplier Breakdown (HTML).
  - Add `text_multiplier_breakdown`: Multiplier Breakdown (Text).
  - Add `json_multiplier_breakdown`: JSON Multiplier Breakdown Artifact.

2.3. `README.md`

- **Update Header:** Bump version to `1.3.0` and date to today.
- **Update "Available Reports":**
  - Add `html_multiplier_breakdown`.
  - Add `text_multiplier_breakdown`.
  - Add `json_multiplier_breakdown`.

2.4. `Docs/ProgrammersGuide.md`

- **Update Header:** Bump version to `0.127.0-Beta` and date to today.

- **Add Section:** "The Manifest & WORM Strategy" under "Phase 3: Web Architecture".
    - **Content:** Document the use of `ManifestManager` for artifact discovery. Document the "Write Once, Read Many" (WORM) pattern where expensive aggregations are serialized to JSON artifacts (`json_multiplier_breakdown`) for instant dashboard hydration.

2.5. `web_app/analyzer/templates/analyzer/help_reports.html`

- **Locate:** The "Text Reports (Deep Dive)" card.
- **Insert:** A new entry for "Multiplier Breakdown" below "Missed Multipliers".
    - **Content:** "The 'Group Par' analysis. Compares your multiplier total against the 'Universe' of multipliers worked by the entire group. A negative Delta indicates multipliers you missed that others found."

3. Surgical Change Verification (`diff`)

--- BEGIN DIFF --- --- Docs/ReportInterpretationGuide.md +++ Docs/ReportInterpretationGuide.md @@ -2,5 +2,5 @@

-**Version: 0.119.1-Beta** -**Date: 2025-12-15** +**Version: 0.140.0-Beta** +**Date: 2025-12-23**

@@ -107,4 +107,14 @@

+### Multiplier Breakdown (`text_multiplier_breakdown` & `html_multiplier_breakdown`) +This report provides a hierarchical "Group Par" analysis. It establishes a "Universe" of all unique multipliers worked by the entire group (e.g., all 3 logs combined) and compares each station against that standard. + +#### How to Interpret This Report +* **Total Worked (Par):** The count of unique multipliers found by the group combined. This represents the "potential" score available on the band. +* **Common:** The count of multipliers worked by *everyone* in the group. +* **Delta:** The most critical metric. It shows your distance from the Group Par. A delta of **-10** means there were 10 multipliers worked by others that you missed. +* **Strategic Insight:** In a team contest (like WRTC or Multi-Op), minimizing the standard deviation of the Delta across stations is key to maximizing the group score. + +--- +

Multiplier Summary (`multiplier_summary`)

This report lists every unique multiplier (e.g., each individual Country, Zone, or State) worked by one or more logs and shows the QSO count for that multiplier on each band. --- Docs/UsersGuide.md +++ Docs/UsersGuide.md @@ -2,5 +2,5 @@

-**Version: 1.1.0** -**Date: 2025-12-15** +**Version: 1.2.0** +**Date: 2025-12-23**

@@ -112,6 +112,7 @@

HTML Reports (`html/`) +* `html_multiplier_breakdown`: Multiplier Breakdown Report (Group Par)

- `html_qso_comparison`: HTML QSO Comparison Report

@@ -129,4 +130,5 @@

Text Reports (`text/`)

- `comparative_continent_summary`: Comparative Continent QSO Summary +* `text_multiplier_breakdown`: Multiplier Breakdown (Group Par)
- `rate_sheet_comparison`: Comparative Rate Sheet
- `comparative_score_report`: Comparative Score Report @@ -135,4 +137,5 @@
- `missed_multipliers`: Missed Multipliers
- `multiplier_summary`: Multiplier Summary +* `json_multiplier_breakdown`: JSON Multiplier Breakdown Artifact (Data Source)
- `qso_comparison`: QSO Comparison Summary
- `rate_sheet`: Hourly Rate Sheet --- README.md +++ README.md @@ -2,5 +2,5 @@

-**Version: 1.2.0** -**Date: 2025-12-18** +**Version: 1.3.0** +**Date: 2025-12-23**

@@ -83,6 +83,7 @@

HTML Reports (`html/`) +* `html_multiplier_breakdown`: Multiplier Breakdown Report (Group Par)

- `html_qso_comparison`: HTML QSO Comparison Report

@@ -100,4 +101,5 @@

Text Reports (`text/`)

- `comparative_continent_summary`: Comparative Continent QSO Summary +* `text_multiplier_breakdown`: Multiplier Breakdown (Group Par)
- `rate_sheet_comparison`: Comparative Rate Sheet
- `comparative_score_report`: Comparative Score Report @@ -106,4 +108,5 @@
- `missed_multipliers`: Missed Multipliers Report
- `multiplier_summary`: Multiplier Summary +* `json_multiplier_breakdown`: JSON Multiplier Breakdown Artifact (Data Source)
- `qso_comparison`: QSO Comparison Summary
- `rate_sheet`: Hourly Rate Sheet --- Docs/ProgrammersGuide.md +++ Docs/ProgrammersGuide.md @@ -2,5 +2,5 @@

-**Version: 0.126.0-Beta** -**Date: 2025-12-18** +**Version: 0.127.0-Beta** +**Date: 2025-12-23**

@@ -155,4 +155,13 @@

- **`contest_tools/utils/log_fetcher.py`**: A utility class used by the web view to scrape public contest log archives (e.g., CQ WW) and download logs on-demand. +* **`contest_tools/manifest_manager.py`**: Manages the `session_manifest.json`, providing a decoupled way for the UI to discover generated artifacts without hardcoding paths.

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+### The Manifest & WORM Strategy +To ensure the dashboard remains responsive even with large datasets, the application employs a **"Write Once, Read Many" (WORM)** strategy for expensive aggregations. + +1. **Generation Phase:** During the initial analysis (`analyze_logs`), specific "Artifact Reports" (e.g., `json_multiplier_breakdown.py`) are executed. These reports do not produce human-readable text but instead serialize processed aggregation trees into JSON files. +2. **Hydration Phase:** When the user loads a dashboard view (e.g., `multiplier_dashboard`), the view uses the `ManifestManager` to locate the JSON artifact. +3. **Rendering:** The view hydrates its context directly from this pre-computed JSON, avoiding the need to re-parse Cabrillo logs or re-run aggregators on every page load.

--- web_app/analyzer/templates/analyzer/help_reports.html +++ web_app/analyzer/templates/analyzer/he
@@ -124,4 +124,10 @@

- `<h5 class="fw-bold text-dark mt-3">Multiplier Breakdown (Group Par)</h5>`

- `<p>Benchmarking against the group's potential.</p>`

- `<ul>`

- `<li><strong>Total Worked (Par):</strong> The total number of unique`

- `<li><strong>Delta:</strong> How far a specific station is from the P`

- `</ul>`

- `<hr>`

- `<h5 class="fw-bold text-dark mt-3">Missed Multipliers Report (`missed_mu` `<p>The "Checklist" of costly missed opportunities.</p>`

--- END DIFF ---

4. Affected Modules Checklist

- `Docs/ReportInterpretationGuide.md`
- `Docs/UsersGuide.md`
- `README.md`
- `Docs/ProgrammersGuide.md`
- `web_app/analyzer/templates/analyzer/help_reports.html`

5. Pre-Flight Check

- **Inputs:** Baseline versions of documentation and template.
- **Expected Outcome:**
  - Documentation accurately reflects the existence and purpose of the new "Group Par" reports.
  - Web help includes the new Multiplier Breakdown explanation.
  - Programmers Guide documents the WORM strategy.
- **Sanitization:** Checked for internal backticks in markdown updates.
- **Visual Compliance:** N/A (Text updates).

6. Post-Generation Verification

I will verify that the version numbers in the headers match the Implementation Plan and that the added text is free of typos.

Next Action: I will issue the standardized prompt for **Protocol 6.10 (Context Lock-In)**.