

Seal Report

Comparative Analysis: Telerik vs. Seal Report

The Core Problem with Telerik Reporting

The performance issues we are facing are not a "bug" but a fundamental part of Telerik's design.

- Telerik is a "Service-Based Enterprise Suite": It runs as a separate, heavy REST service on our server. When a user requests a report, our application must communicate with this separate service, which then processes the report, caches it (creating large temp files), and sends it back.
- The Impact: This architecture is built for large corporations with powerful, dedicated servers. On our servers, it is causing:
 1. **High Resource Drain:** The service consumes a high, constant amount of CPU and RAM.
 2. **Temp File Accumulation:** The service's caching mechanism is filling our server storage, requiring manual cleanup and risking downtime.
 3. **Slow Report Generation:** The communication overhead between our app and the service makes reports slow for the end-user.

Comparative Analysis: Telerik vs. Seal Report

Seal Report is a direct, mature competitor that solves these problems because it uses a different, more efficient architecture.

- **Seal Report is a "Lightweight Embedded Library":** It runs inside our main application or as a lightweight web server. When a user requests a

report, our application builds it directly in-process or via a minimal web service. There is no separate heavy service, minimal overhead, and no external temp file caching.

Feature	Telerik	Seal Report
Core Architecture	Enterprise Service (Out-of-Process)	Lightweight Library (In-Process or Web Server)
Server Performance	High CPU & RAM usage; very resource-hungry	Low CPU & RAM usage; runs on-demand
Generation Speed	Slower — due to service communication overhead	Faster — direct in-process or minimal web generation
Temp File Issue	Yes — known issue from its service-based cache	No — problem eliminated entirely
Web Report Viewer	Yes — full-featured interactive HTML5 viewer	Yes — full-featured interactive web viewer
Web Report Designer	Yes — allows designing reports in a browser	Yes — web-based drag-and-drop designer

Core Features	Full-featured: Visual Designer, PDF/Excel exports, etc.	Full-featured: Visual Designer, PDF/Excel/CSV exports, LINQ queries, KPIs, scheduling
Licensing Cost	High — typically bundled in expensive suites	Free — open-source (MIT-like license)

Advantages of moving to Seal Report:

1. **Solves Our Core Problems:** It will immediately fix the high CPU/RAM usage and stop the temp file accumulation, leading to a more stable server.
2. **Faster Performance:** Users will experience faster report loading times.
3. **Lower Total Cost:** The licensing cost for Seal Report is free, reducing our annual subscription fees compared to Telerik.
4. **Simplified Deployment:** We will no longer have to deploy and manage a separate, complex reporting service alongside our main application.

Disadvantages (Risks) of moving to Seal Report:

1. **One-Time Migration Cost:** This is the primary disadvantage. Reports cannot be automatically converted. Our development team will need to manually recreate our existing Telerik reports in the Seal Report designer.
2. **Developer Learning Curve:** The team will need a brief period to learn the new Seal Report designer and API, though it is functionally similar to Telerik's.

FastReport.NET (Paid)

FastReport.NET (Paid) is your **most direct solution**. It is a **lightweight embedded library** (solving your resource and temp file problems) but also **includes the interactive web report viewer** (giving you the same user experience you have with Telerik).

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- **Telerik is a "Service-Based Enterprise Suite"**: It runs as a separate, heavy REST service on our server. When a user requests a report, our application must communicate with this separate service, which then processes the report, caches it (creating large temp files), and sends it back.
- **The Impact**: This architecture is built for large corporations with powerful, dedicated servers. On our servers, it is causing:
 - **High Resource Drain**: The service consumes a high, constant amount of CPU and RAM.
 - **Temp File Accumulation**: The service's caching mechanism is filling our server storage, requiring manual cleanup and risking downtime.
 - **Slow Report Generation**: The communication overhead between our app and the service makes reports slow for the end-user.

Comparative Analysis: Telerik vs. FastReport.NET

FastReport.NET is a direct, mature competitor that solves these problems because it uses a different, more efficient architecture.

- **FastReport.NET is a "Lightweight Embedded Library":** It runs *inside* our main application. When a user requests a report, our application builds it directly in-process. There is no separate service, no heavy overhead, and no external temp file caching.

Here is a direct, feature-by-feature comparison:

Feature	Telerik Reporting (Current)	FastReport.NET (Recommended)
Core Architecture	Enterprise Service (Out-of-Process)	Lightweight Library (In-Process)
Server Performance	High CPU & RAM usage. Very resource-hungry.	Low CPU & RAM usage. Runs on-demand.
Generation Speed	Slower , due to service communication overhead.	Faster , due to direct in-process generation.
Temp File Issue	Yes. A known issue from its service-based cache.	No. This problem is eliminated entirely.
Web Report Viewer	Yes. Full-featured interactive HTML5 viewer.	Yes. Full-featured interactive HTML5 viewer.

Web Report Designer	Yes. (Allows designing reports in a browser).	Yes. (Available in Enterprise/Ultimate editions).
Core Features	Full-featured: Visual Designer, PDF/Excel exports, etc.	Full-featured: Visual Designer, PDF/Excel exports, etc.
Licensing Cost	High. (Typically bundled in expensive suites).	Medium. (Generally lower-cost, standalone licenses).

Advantages and Disadvantages of Migrating

Advantages of moving to FastReport.NET:

1. **Solves Our Core Problems:** It will immediately fix the high CPU/RAM usage and stop the temp file accumulation, leading to a more stable server.
2. **Faster Performance:** Users will experience faster report loading times.
3. **Lower Total Cost:** The licensing cost for FastReport.NET is typically lower than Telerik's, reducing our annual subscription fees.
4. **Simplified Deployment:** We will no longer have to deploy and manage a separate, complex reporting service alongside our main application.

Disadvantages (Risks) of moving to FastReport.NET:

1. **One-Time Migration Cost:** This is the primary disadvantage. Reports cannot be automatically converted. Our development team will need to manually recreate our existing Telerik reports in the FastReport designer.

2. **Developer Learning Curve:** The team will need a brief period to learn the new FastReport designer and API, though it is functionally very similar to Telerik's.

Conclusion

Seal Report is highly competitive as a free tool, covering most core features of FastReport.NET (Paid) and Telerik. However, it lacks some advanced export options (e.g., Word), a more polished web designer, and enterprise-level support, which could be critical for a small company needing reliability. For your setup with limited servers. Seal Report is a strong free alternative, but if these gaps (especially Word export or support) are essential, FastReport.NET (Paid) or Telerik might be worth considering despite the cost.
