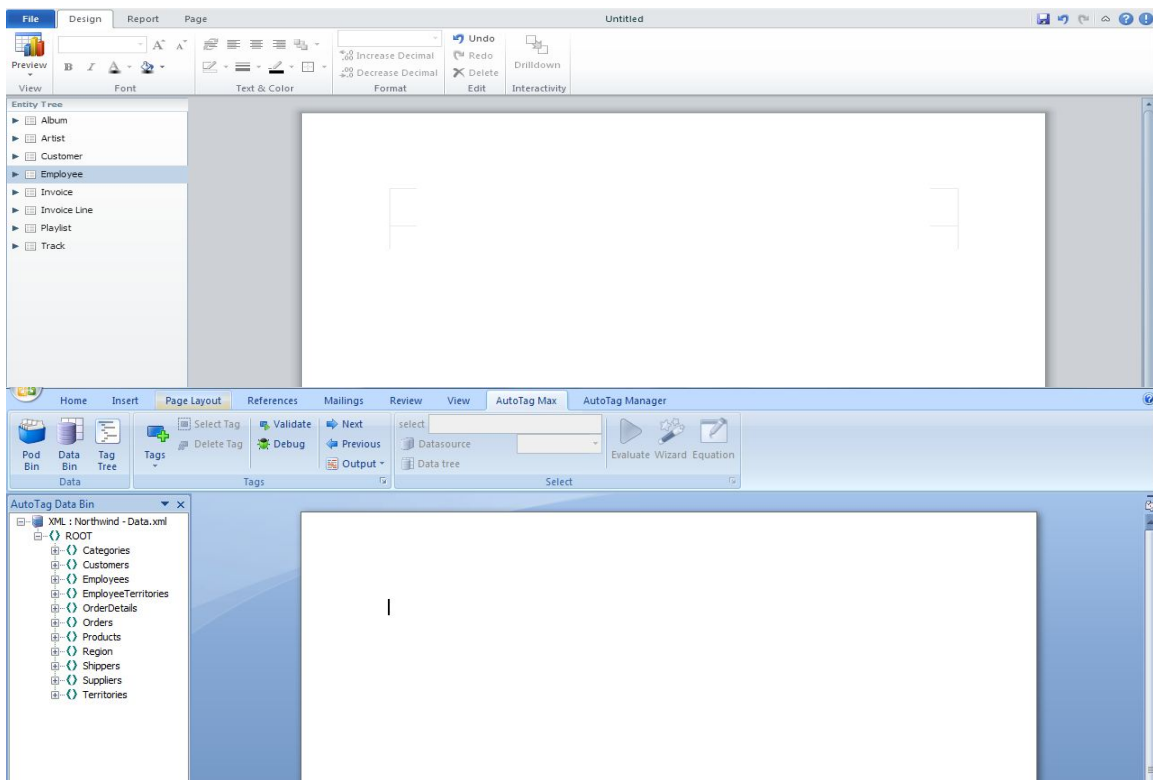# Active Reports Server Analysis

Introduction

Active Reports Server is a web-based designer by GrapeCity that operates very closely to AutoTag because of its Office-inspired interface, drag-and-drop data selection tools, and document-focus. Active Reports Server is very intuitive and offers a lot of features that would be helpful to incorporate in Windward's web designer. As Active Reports Server is likely to be a primary competitor of Windward's online designer, it is also especially important to note its flaws to try to avoid them in our implementation and compete against them. Everything highlighted green in this document I found to be an advantage of Active Reports Server, and everything in red is a flaw.

Above: Active Reports Server (Top) is remarkably similar to AutoTag (Bottom).

Interface Layout

The interface is organized to cater towards the design of the document rather than purely data manipulation. The majority of space is dedicated toward the document, with a data tree bin on the left sidebar and formatting/insertion menu tabs located on top. The formatting tools are similar to Word. Most of the major text-formatting tools exist and there are typical style choices to format charts and tables available in menu tabs. It is worth noting that text cannot be inserted by default. A text box must be placed into a document position through dragging along with tables and charts.

Because of this, spaces between report elements cannot be neatly expanded and contracted using "delete" and "enter". Instead, report elements must be dragged and placed the correct distance from one another. For large reports, this could be a significant issue. Guides do exist, though, to allow snapping when dragging elements. Headers and footers can be quickly inserted and removed with dedicated menu buttons. The interface is incredibly responsive which is impressive for a web designer. There's a slight delay in previewing reports, adding charts, and loading new views, but formatting, designing, and data insertion are very quick.

Menu's and Tools:
File: Save, Save As, Open, New
Design: Preview, Font (B,I, Color, Back. Color, Size, Font), Text&Color (Align left, right, center, arrange, borders), Format (increase/decrease decimal), Edit (undo, redo, delete), Interactivity (drilldown).
Report: Preview, Insert (Parameter, Report Info), Theme, Report (Preferences, Region), Controls (Insert textbox/image).
Page: Page Layout (Margins, Orientation, Size), Header&Footer (Header, Footer).
Chart Design Tools: (Preview, Style, Axis (Log scale, angled labels), Tools (Swap data, chart type), Legend (Show Legend, columns, rows, table)

Creating Tables
Dragging any piece of the data hierarchy out of the data tree into the document (which in Autotag creates a table and inserts the "for each" tag) opens a small menu in the location that prompts the user to either "Select a Table" or "Select a Chart Type". By clicking on the "Table" icon, a new table is created and is formatted based on the data available. Only the header row and the title of the first row is shown along with icons representing the data type, which is helpful for keeping the designer organized.

Invoice Date	Full Name	Total
10 5/23/2013	Abc...	$12.34

There are inherent problems with the tables, though. It is impossible to know whether or not a chart will overflow another, so when previewing, there are many times that tables overlap and need to be reformatted. Sometimes one column from a table will appear on odd pages while the other columns appear on evens. It isn't clear whether a table column is too wide for the page when sizing it in the designer, even with the margin heads. AutoTag avoids these problems because the cursor-based input in Word allows Word to track the sequence of tables (if a table is placed under another table, a the lower table will be shifted to be under the first table when the report is generated).

Creating Charts
As stated in the previous section, dragging a data from the data tree to the designer opens a small insertion menu. A chart can be selected from the options. Active Reports Server has very limited charting capabilities as only column, bar, scatter, line, and bubble charts are available with no interactivity, 3d, or trend options.

Charts are very easy to manipulate as the labels and axes are always available and the data is dragged directly from the tree rather than selected from a wizard. Charts in ActiveReportsServer display live, so the report does not need to be previewed to view the chart.
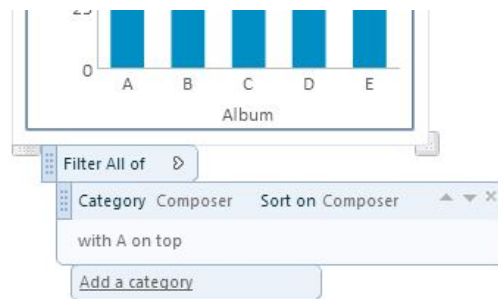

Above- The Active Reports Server Insertion Menu

Data Filtering
Clicking on a chart or table will immediately bring up the filtering tool directly the chart/table. Because of this, there does not need to be a separate wizard for handling filtering. Filtering is especially impressive because it adapts to data type recognition. If the data is in date format, the filter tool will alter the drop-down to say "before" "after" and "during" rather than "greater than", "less than", and "equal to". The user chooses the category to be sorted in a drop down, what the category should be sorted on in the second drop down, and the order of sorting in the third. Additional categories can be added optionally, but the drop-down menus do not appear until those options are selected.

Additional Features
A page on the Active Reports Server website mentions a mobile BI solution, but nothing in the demo or documentation mentioned it. It cannot be purchased through the store, and the one screenshot included of it makes it appear very limited. Active Reports Server does not promote embedding as an option but has one blog article on it in its servers. I would imagine that it is possible using the SDK, but not directly supported. Active Report Server's report scheduling isn't particularly complex, but allows reports to be generated to the portal at designated time intervals.

Exporting
Active Reports Server reports can be exported to Excel, HTML, PDF, Word, XML, and Image formats.

Support
I found support to be relatively unnecessary as Active Reports Server is intuitive enough for anyone with a basic understanding of Office products to manipulate it. There are video tutorials at launch, documentation, and forums. The forums and

documentation would likely be more helpful for IT trying to build custom solutions. There are no interactive tutorials or equivalents to the new Windward Tutor.

Pricing

There are only a few features that distinguish Small Business and Enterprise editions of Active Reports Server, and the Enterprise Edition is still only limited to a single license.

Licenses:

	Small Business	Enterprise	SaaS
Price***	$5,000	$15,000	$15,000
License	Yes	Yes	Yes
Designer/Viewer	Yes	Yes	Yes
Web Reporting Portal	Yes	Yes	Yes
Web Administration	Yes	Yes	Yes
Managed Agents*		Two	Two
Report Scheduling		Yes	Yes
Single-Sign On		Yes	Yes
Multi-Tenant		Yes	Yes
SDK		Yes	Yes
Maintenance**	$1250/yr	$3,750/yr	$3,750/yr

Managed Agents Pricing: 2 Included with enterprise/SaaS. $5,000 for each additional up to 5 agents.

Professional Services and Training: Jumpstart Package for $2,500

*A managed agent is a Windows service that allows reports to be run in the Active Reports Server environment. The difference between managed agents and generating reports in the Small Business edition is not clear.
**Maintenance includes email support, phone support, and major releases.
***From all research, the license is perpetual and there is no sign that it is subscription-based.

Strengths/Windward Product Recommendations
-Header and Footer buttons in the menu make that process easy.
-Data type recognition allows for tables to display data more clearly and accurately.
-Active Report Server's filtering is great by adapting to data types and providing options next to the table/chart rather than opening a wizard.
-Having a "chart/table" menu that appears when dragging data from a tree allows for charts to be created much faster than through a wizard.
-The designer is very responsive.
-There is no programming or IT knowledge required whatsoever.
-Style tools are attractive and the interface is similar to Office.

Weaknesses:

-Charting is extremely limited with only bar, bubble, line, scatter, and column charts available in static forms.

-Tables are buggy and sometimes display incorrectly/overlap when the report is generated.

-The designer does not make it clear whether a table is in an acceptable position.

-Moving/sizing data displays is difficult and frustrating.

-Deleting tables and charts is difficult. The "delete" key does not work, nor does clicking the "delete" icon in the interface.

-Text can only be inserted through text boxes.

-Space between report elements cannot be expanded/contracted by enter/delete.