



SAP ANALYTICS CLOUD REPORT BROADCASTING: APOS PUBLISHER FOR CLOUD

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APOS



INTRODUCTION

SAP Analytics Cloud report broadcasting has become a topic of growing interest among organizations running SAP solutions. Many such organizations need to expand report broadcasting (also referred to as report bursting) capabilities to replace functionality previously available to them in SAP BusinessObjects and SAP BW BEx Broadcaster. Others are finding new needs for communicating their SAP Analytics Cloud insights as they transform business processes.

“PULL” VS. “PUSH”

The default approach for consuming SAP Analytics Cloud reports and analytics is to log in and view the stories. This is known as a **“Pull”** strategy, because information consumers are pulled into the SAP Analytics Cloud system where they request or pull the stories and dashboards for viewing. For many organizations, this strategy is insufficient, because some stakeholders may not receive information in a timely manner due to their usage patterns, and because some other stakeholders do not log in to SAP Analytics Cloud at all (e.g., external stakeholders such as suppliers and customers).



These organizations require a **“Push”** strategy, which is what report broadcasting provides. In this strategy, information is pushed out directly to information consumers via email, or to a network file share, or to FTP or secure FTP. A Push strategy places information into the path of those who need it, when they need it, and in the format most useful to them.





APOS PUBLISHER FOR CLOUD BROADCASTING

[APOS Publisher for Cloud](#) is a report broadcasting solution for SAP Analytics Cloud. It provides greater flexibility, availability, scalability and higher volume than the native SAP Analytics Cloud Publications function.

Its automation provides personalized reports to the right people at the right time in the right format, and lowers the burden on IT teams.

APOS Publisher for Cloud's core report broadcasting functionality includes:

Dynamic rules – drive bursting definitions dynamically from a data source

Filters and variables – create multiple versions of a story with ease

Destinations – select from a variety of destinations to meet recipient needs

Formats – generate and send in PDF, PowerPoint, Excel, Word, CSV, RTF or image formats; use Excel and PowerPoint templates for professional look and feel

Consolidation of multiple reports – consolidate stories or pages into a single email or document

Multiple export options – multiple formats created from a single bursting definition; high-volume; support for large data set export to Excel or CSV

Widget-level broadcasting – selective bursting of report components to focus on most critical information

Integrated enterprise scheduling – built into the bursting definition creation process

Conditional broadcasting – monitor KPI thresholds to trigger the bursting process and email alerts; SAP Datasphere integration

BW/4HANA / Datasphere User-Based Broadcasting – replicating processes formerly available in BEx Broadcaster

Enterprise Scalability – distributed and targeted processing for high availability, high performance, and failover capabilities

Enterprise Security and Administration – secure team collaboration and enhanced administrative capabilities



CORE BROADCASTING FUNCTIONS

These are the features that make APOS Publisher for Cloud a highly flexible report broadcasting solution for SAP Analytics Cloud.

DYNAMIC RULES

When you create a report bursting definition, you specify the story you wish to burst, who will be the recipients, and the format in which it will be delivered. All of this information is stored in a data source that you specify. That data source could be a simple Excel spreadsheet, or a relational database of your choosing. APOS Publisher for Cloud accesses this information when it broadcasts a schedule that specifies a report bursting definition associated with the data source.

APOS Publisher for Cloud uses the data source as a means to drive the properties in your bursting definitions dynamically, allowing you to scale your broadcasts quickly and easily by simply updating the data source.

The information within your SAP Analytics Cloud deployment can expand and contract continuously, so report bursting needs to adapt to the content. If your SAP Analytics Cloud story contains grids or tables that expand beyond what can fit into a window, scrolling is added dynamically and ensures that the entire data set is sent and visible.

In another use case, suppose your story contains no data at a particular point in time. You should be able to specify that a story not be distributed if it is empty.

Data-driven broadcasting allows you to connect the bursting definition to a data source that dynamically drives all the properties within the definition.

	A	B	C	D	E
1	User	Format	Dimension	Value	Email To Address
2	Bill	PDF	COUNTRY	Argentina	bill@company.com
3	Bert	XLS	COUNTRY	US	bert@company.com
4	Bob	DOC	COUNTRY	Canada	bob@company.com
5	Betty	JPEG	COUNTRY	Australia	betty@company.com
6	Derek	PDF	COUNTRY	Brazil	derek@company.com
7	Darcy	XLS	COUNTRY	Mexico	darcy@company.com
8	David	DOC	COUNTRY	Germany	david@company.com
9	Michelle	JPEG	COUNTRY	Ireland	michelle@company.com
10	Mary	PDF	COUNTRY	India	mary@company.com
11	Mark	XLS	COUNTRY	Belgium	mark@company.com
12	Frank	DOC	COUNTRY	UK	frank@company.com
13	Francine	JPEG	COUNTRY	France	francine@company.com
14	Seamus	PDF	COUNTRY	Samoa	seamus@company.com
15	Sean	XLS	COUNTRY	New Zealand	sean@company.com
16	Sarah	DOC	COUNTRY	Thailand	sarah@company.com



FILTERS/VARIABLES

Filters let you send different sets of data to different recipients within a single broadcast. Rather than set up individual broadcasts for multiple recipients or groups of recipients using different dimensions and measures, you create a filter that draws on dimensions within your bursting data source.

The result of pushing the right information to your information consumers is that they will receive only the information they need. Based on this requirement, you need to be able to personalize the analytics you push out to those information consumers.

Broadcasting is a data-driven process that allows you to “set and forget” your personalized messaging in a bursting definition. Conversely, you can make global revisions to personalized bursting by simply changing the data used in the process. Such data-driven bursting removes significant IT burden and technical debt from your Analytics distribution workflows.

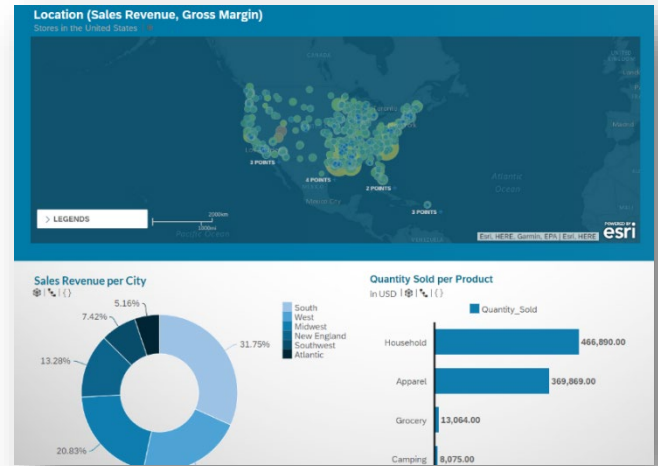
In the example below, we use the City ID in the data source to filter the results for each recipient.

The screenshot shows a dialog box titled "Add Filter" with the following fields:

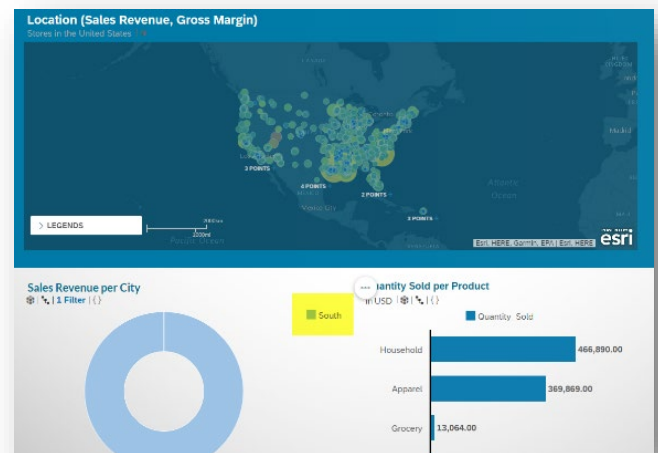
- Document: APOS Demo Report
- Models: CompanyBlank
- Model ID: t.V:CompanyBlank
- Dimensions: City_ID_9902
- Dimension ID: t.V:City_ID_9902
- Values: //DATAFIELD-FilterValue//



Without this filter, all recipients would see data for all cities, as in this screenshot:



With the filter applied, each recipient sees data for only the City ID associated with their record in the data source, as in this screenshot:



Each recipient gets a tailored slice of data.

DESTINATIONS

As much as we need to ensure that information consumers get the right information, we need to ensure that the data is received using the right method for them. The right method is the one that makes the information most available and timely.

That's why APOS Publisher for Cloud includes multiple destinations to choose from when broadcasting SAP Analytics Cloud reports, including

- Email (embedded or attached)
- Network file share
- Secure FTP (FTPS, SFTP)



In the example below, content is delivered via email, but also in attachments as PDF, Excel and PowerPoint files.



FORMATS

Just as destinations should reflect what is most useful for recipients, formats should reflect what is most usable by recipients. Some only need to see data. Others need to work with the data. Still others need to present the data. Some need content delivered in multiple formats.

Formats available:

- PDF
- Excel with Data
- CSV
- PowerPoint
- JPEG, TIFF, GIF, PNG, BMP
- Microsoft Word
- RTF



Excel with Raw Data

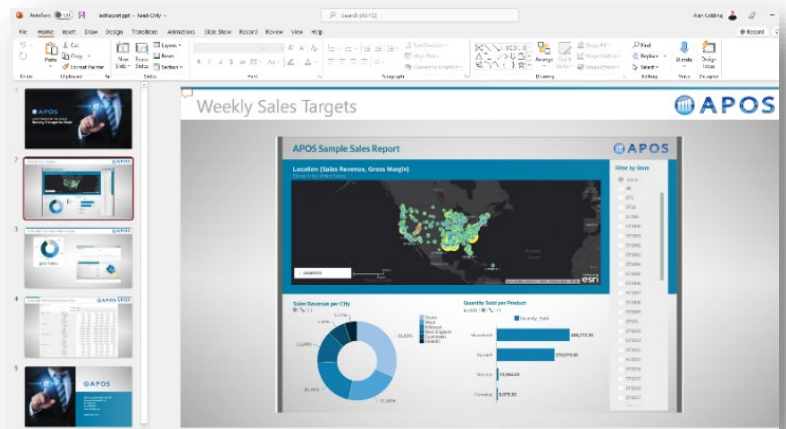
APOS Sample Sales Report							APOS	
Total Sales by Region								
Region	Date	Apparel	Grocery	Household	Camping	Total Sales	Sales Above \$2,500	
South	21/04/2021	\$1,266.68	\$1,735.78	\$1,280.84	\$2,137.19	\$6,420.67	Above	
Northwest	21/04/2022	\$97.49	\$115.34	\$93.76	\$261.31	\$558.38	Below	
Southwest	21/04/2023	\$792.72	\$652.81	\$472.47	\$1,198.58	\$3,116.58	Above	
Central	21/04/2024	\$792.47	\$797.37	\$684.59	\$687.28	\$2,945.71	Above	
West	21/04/2025	\$261.86	\$262.30	\$182.37	\$899.42	\$1,547.95	Below	
South	21/04/2026	\$1,393.16	\$2,111.95	\$1,131.99	\$2,985.55	\$8,135.65	Above	
Northwest	21/04/2027	\$196.84	\$298.88	\$188.99	\$942.50	\$1,706.78	Below	
Southwest	21/04/2028	\$89,112.00	\$72,370.00	\$62,734.00	\$22,853.00	\$247,089.00	Above	
Central	21/04/2029	\$72.00	\$98.00	\$73.00	\$188.00	\$448.00	Below	
West	21/04/2030	\$40,501.00	\$28,886.00	\$22,408.00	\$14,085.00	\$105,940.00	Above	
South	21/04/2031	\$48,429.00	\$13,388.00	\$40,253.00	\$8,570.00	\$160,700.00	Above	
Northwest	21/04/2032	\$195.00	\$294.00	\$194.00	\$718.00	\$1,716.00	Below	
Southwest	21/04/2033	\$99,848.00	\$106,109.00	\$50,378.00	\$20,421.00	\$276,740.00	Above	
Central	21/04/2034	\$148.00	\$224.00	\$118.00	\$421.00	\$922.00	Below	
West	21/04/2035	\$288,018.04	\$239,577.32	\$204,462.51	\$73,793.34	\$806,851.01	Above	
South	21/04/2036	\$212.52	\$291.50	\$216.59	\$849.57	\$1,810.38	Below	
Northwest	21/04/2037	\$11,726.31	\$29,254.82	\$14,457.02	\$9,253.82	\$150,012.62	Above	



PDF



PowerPoint





TEMPLATES – XLS AND PPT

In APOS Publisher for Cloud, formats such as Excel and PowerPoint can make use of templates to support corporate communications standards and provide a custom and polished finish to content. Templates allow you to preformat data.

Benefits of using templates:

Customized and polished finish to your content



For Excel, utilize:

- Conditionally formatted columns
- Excel formulas
- Custom formatting
- Macros

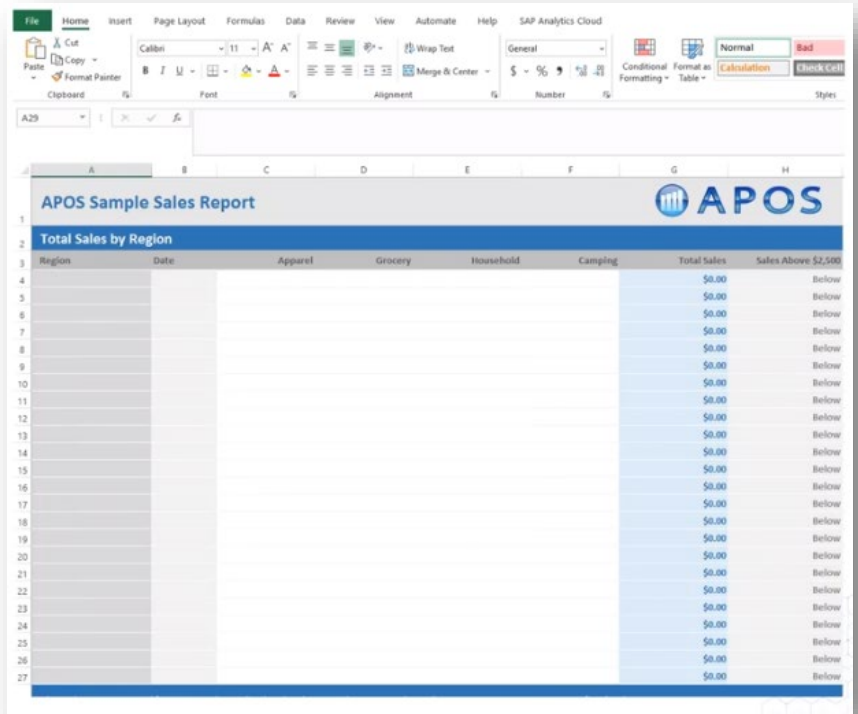


For PowerPoint, utilize:

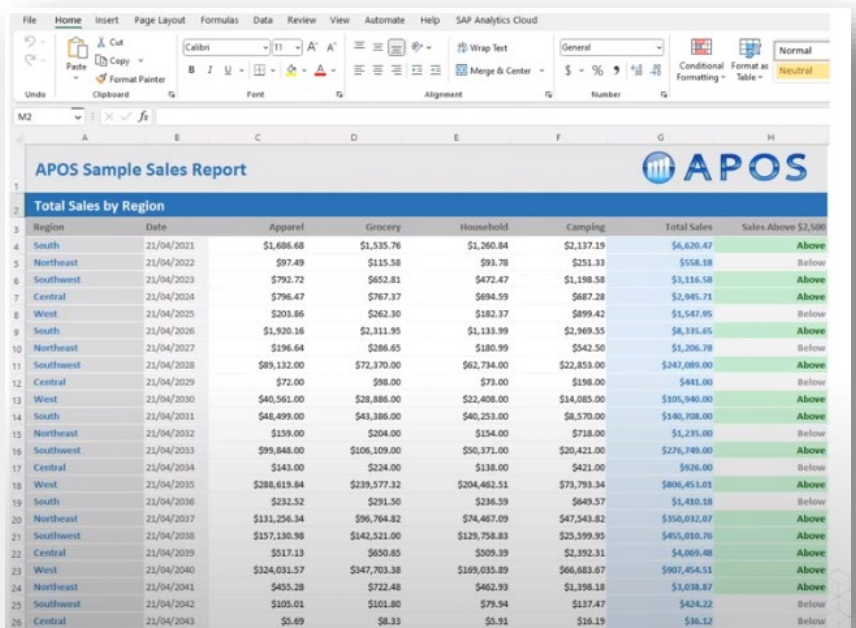
- Targeted slide placement
- Custom formatting
- Collaboration
- Streaming of Excel table into a slide deck



Here is a blank Excel template with color schemes and a conditionally formatted column:



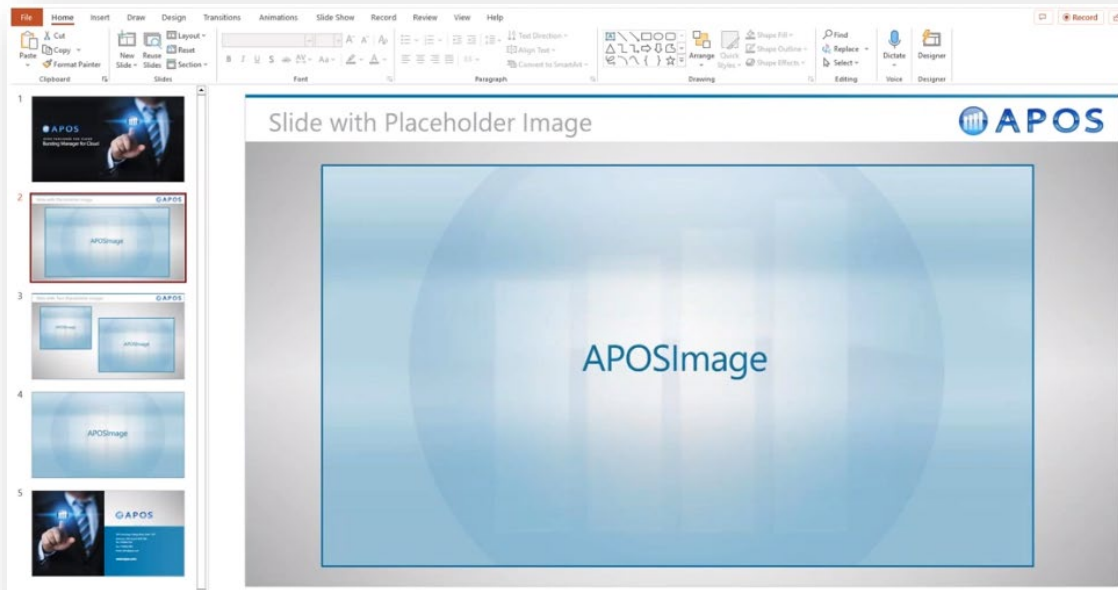
Here is the result of flowing information from SAP Analytics Cloud into the template:



The data in the spreadsheet is raw and allows the recipient to interact and analyze.

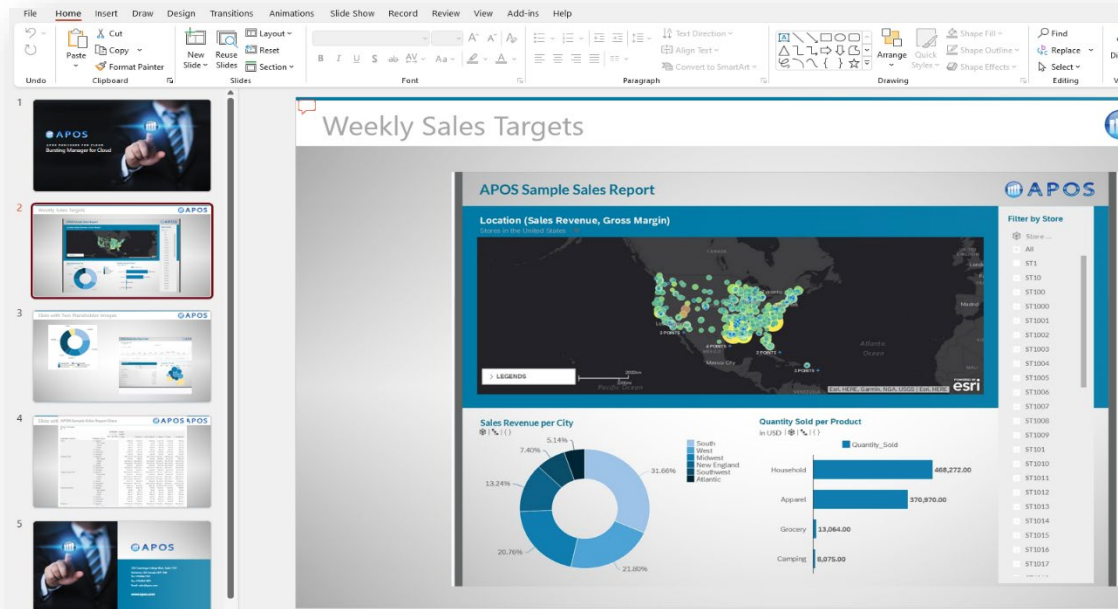


Here is a blank PowerPoint template that gives complete control over where images and other content are placed:



Note the cover and end slides that bookend the content slides in this example. Templates are fully customizable to fit the use case needs.

Here is the result of flowing information from SAP Analytics Cloud story pages into the template:

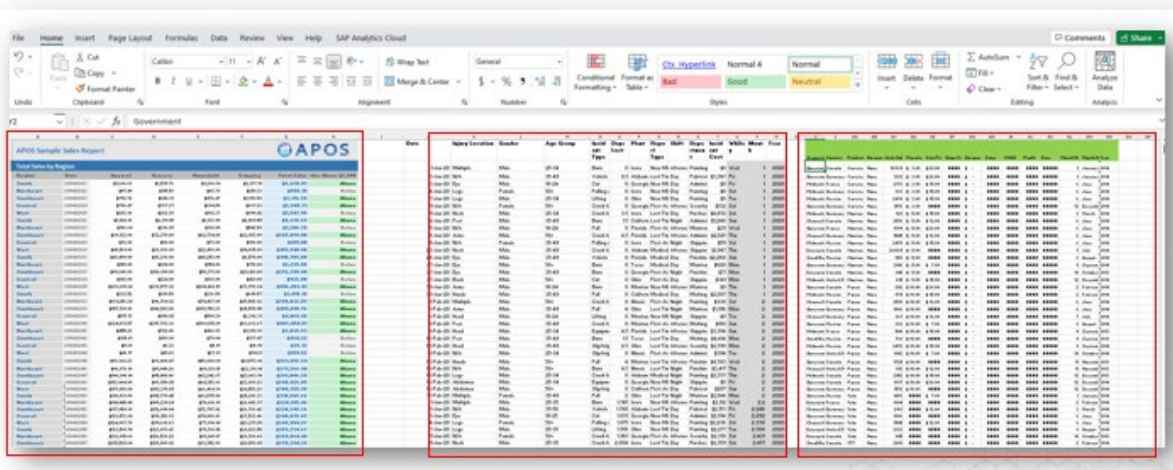




GRID/TABLE EXCEL CONSOLIDATION

You may have multiple worksheets in an Excel workbook. APOS Publisher for Cloud also lets you consolidate the tables or grids on multiple worksheets into a single worksheet, summarizing raw data content, and eliminating the need for multiple worksheets in the delivered report.

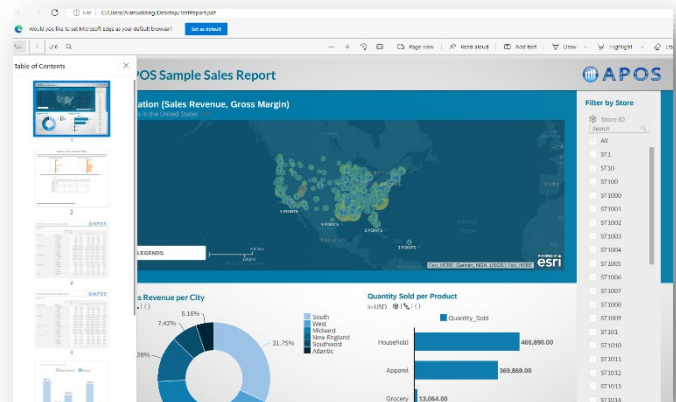
Here are three worksheets from three separate pages in SAP Analytics Cloud consolidated into a single worksheet by APOS Publisher for Cloud:



CONSOLIDATION OF MULTIPLE REPORTS

Report consolidation within a broadcast is a very useful feature, especially for executives who wish their information consolidated in a single email rather than dispersed via separate emails through the course of the day or week.

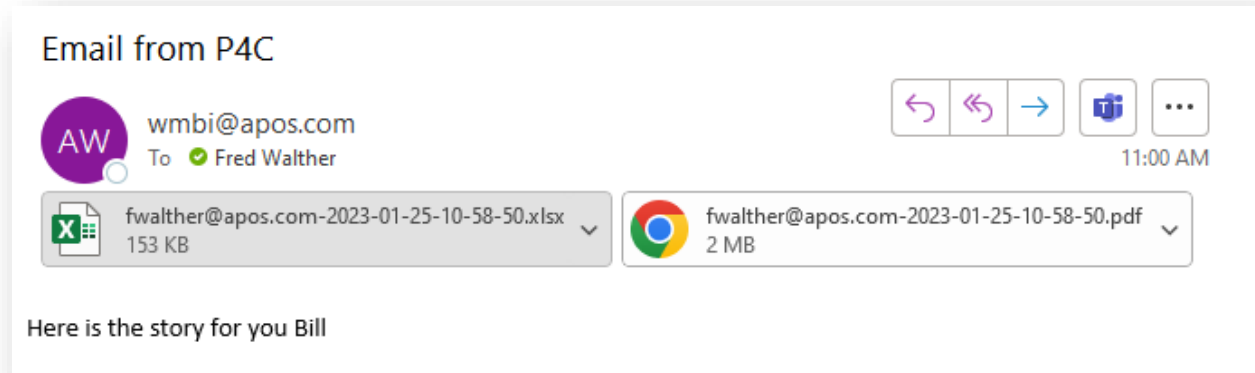
APOS Publisher for Cloud can consolidate summary pages from one or more SAP Analytics Cloud stories in a single email or attachment. This screenshot shows such a consolidation within a single PowerPoint presentation:





MULTIPLE EXPORT OPTIONS

APOS Publisher for Cloud allows you to create multiple formats for a report in a single bursting definition and attach them to a single email. For example, your broadcast can generate an Excel spreadsheet and a PDF file simultaneously and attach them, as in the screenshot below:



All popular output formats are available: Excel, PowerPoint, Word, RTF, and image formats such as GIF, TIFF, BMP and PNG.

HIGH VOLUME EXPORT

When you have tables or grids on your SAP Analytics Cloud story pages, the data in those grids may vary according to recipients, and can contain large data sets. APOS Publisher for Cloud lets you export that raw data to Excel or CSV, allowing recipients to scroll through them with excellent performance.

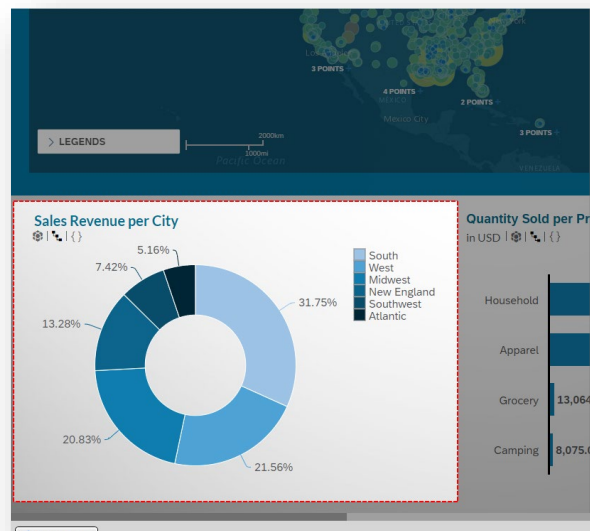
This screenshot shows such a large data set in Excel. The highlighted column indicates just how large this data set is:



WIDGET-LEVEL BROADCASTING

Some pages in your SAP Analytics Cloud stories may be quite busy, containing more information than you need to broadcast for use by recipients with very specific needs. APOS Publisher for Cloud lets you select and broadcast specific components of these pages. When set up your broadcast, you define which widgets from which report pages you want to send, and only those widgets are sent to the recipients, allowing them to focus on the most critical information.

This tailored distribution of targeted information simplifies consumption by users.



ENTERPRISE SCHEDULING

APOS Publisher for Cloud simplifies and broadens your broadcasting capabilities with:

- Integrated schedule creation
- Integrated conditional broadcasting
- BW/Datasphere user-based broadcasting

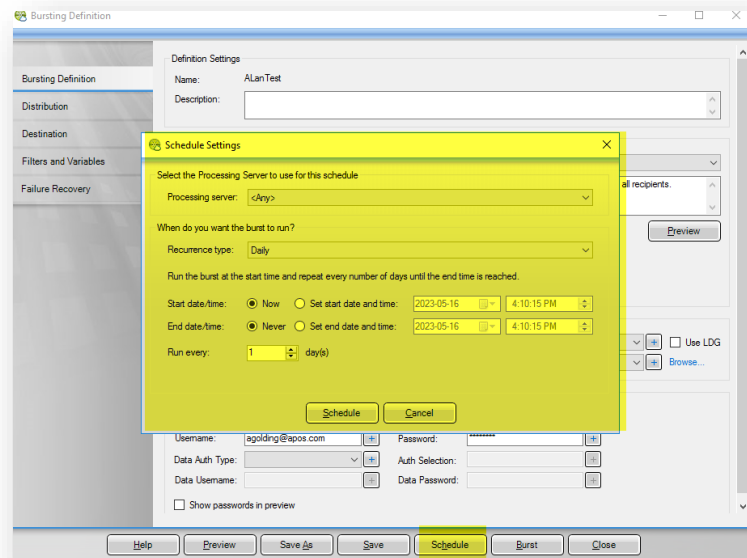


INTEGRATED SCHEDULE CREATION

APOS Publisher for Cloud simplifies schedule creation by integrating it with bursting definition creation. The bursting definition contains the information needed for your broadcast. You simply specify schedule settings on the Bursting Definition screen and APOS Publisher for Cloud creates the schedule and runs it automatically.

You can schedule broadcasts:

- Hourly
- Daily
- Weekly
- Monthly



INTEGRATED CONDITIONAL BROADCASTING

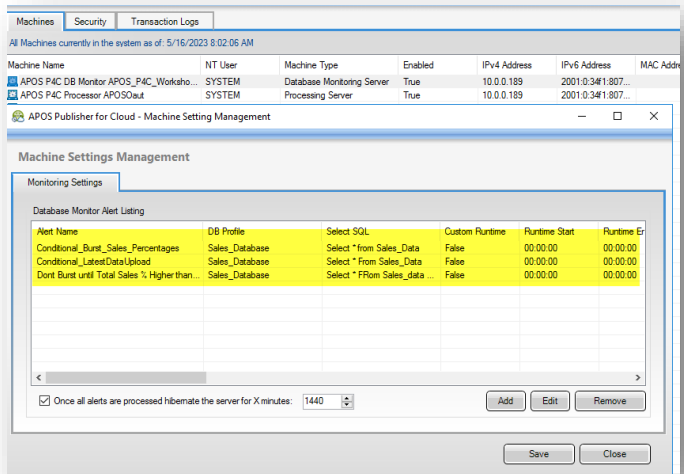
With integrated conditional broadcasting, you can monitor key data values in your system and automatically trigger broadcasts when thresholds have been exceeded.

Say, for example, you want to:

- Know when sales for a certain region exceed 33% or dip below 30%.
- Schedule story broadcasts to run after intermittent updates from the BW, DWC or Datasphere database have occurred, ensuring that you are not broadcasting outdated data.

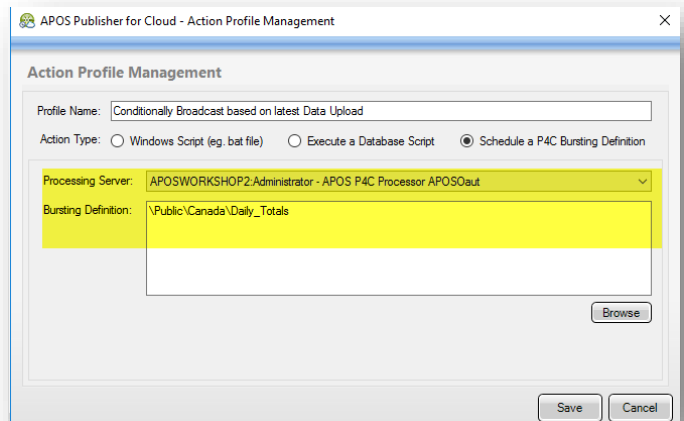


You can set APOS Publisher for Cloud's Database Monitoring service to monitor for these conditions and trigger automatic broadcasts. This screenshot shows such a scenario.



Another use case for this functionality is scheduling story broadcasts to run after intermittent data updates occur for the BW or Datasphere database. In this way, you can ensure that you are not broadcasting outdated data. With integrated conditional broadcasting, you can also monitor BW and conditionally broadcast based on pre-defined events.

This screenshot shows an action profile scheduling a conditional broadcast when notification of a data upload has been received.



In this way, users receive the uploaded data only once, as shown here:





BW/4HANA / DATASPHERE USER-BASED BROADCASTING

APOS Publisher for Cloud can replicate important BEx Broadcaster functionality in SAP Analytics Cloud for BW/4HANA and Datasphere users. This functionality uses BW or Datasphere authentication integration to allow SAC reports to be sent on behalf of the BW recipient using their authorizations within the data source. This allows BW deployments that are moving processes to Datasphere to be able to fulfill the ongoing report broadcasting expectations of their user community.

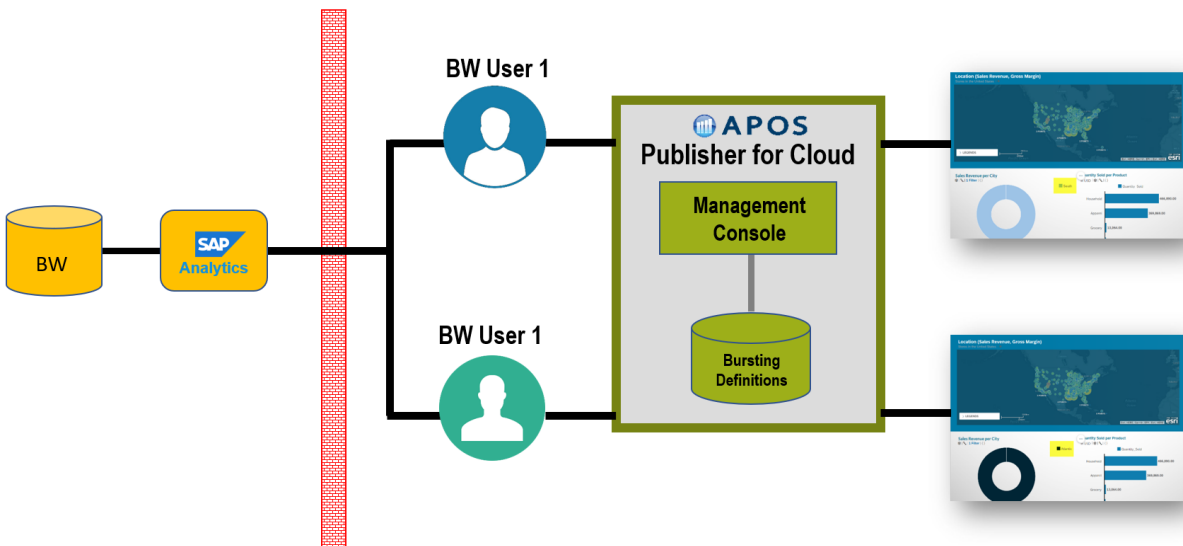
Users who wish to receive BW reports from SAC give consent in a Web-based UI for APOS Publisher for Cloud to broadcast reports on their behalf, using their data source access rights. This consent ensures that they receive only the data to which they are entitled according to the security structure of the data source.

Using row-level authorizations in BW or Datasphere lets you filter the information a recipient receives. APOS Publisher for Cloud renders the SAP Analytics Cloud story on behalf of the recipient, using their row-level authorizations in the database.

Note that this capability is available to support other live data sources also.



[CLICK TO READ THIS SUCCESS STORY](#)





ENTERPRISE SCALABILITY

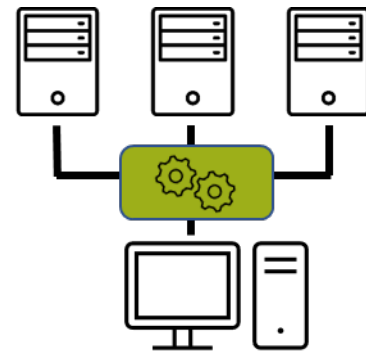
APOS Publisher for Cloud runs on the individual user’s desktop, but the solution is highly scalable because it uses processing and scheduling servers to create high availability and failover for your broadcasting activities. Scale up the number of these servers to create distributed and targeted processing for rapid, high-volume broadcast execution.

DISTRIBUTED PROCESSING

You define and schedule your broadcasts in the APOS Publisher for Cloud desktop application. When the application executes the broadcast, it does so using a processing server. Because APOS Publisher for Cloud enables a collaborative environment, many broadcasts may be scheduled to run simultaneously, which is why many organizations will choose to set up numerous processing servers to enable distributed processing of broadcasting requests.

Setting up multiple processing and scheduling servers as processing agents allows you to scale your broadcasting operation for high performance and high volume. Processes can be multi-threaded and run on multiple processing servers, using processing servers as they become available.

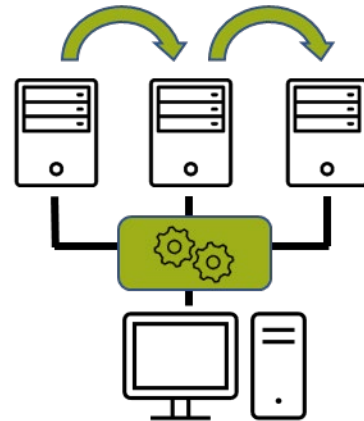
For example, if a broadcast consists of 5,000 generated documents, multiple processing servers will distribute the workload to increase efficiency and ensure timely delivery to all recipients.





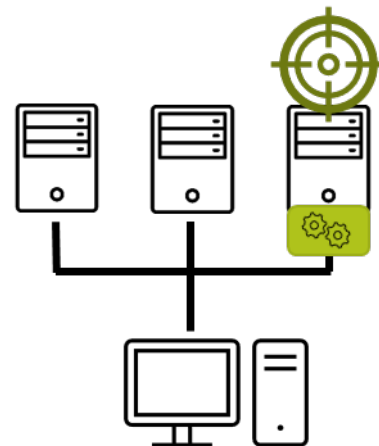
HIGH AVAILABILITY AND FAILOVER

In a distributed processing scenario, you are not dependent on any one processing server. If one machine becomes unavailable, the workload assigned to that machine will automatically be reassigned to another machine, providing you with high availability and failover on your broadcasting platform.



TARGETED PROCESSING

Targeted processing allows you to use a specified processing server to take advantage of greater RAM or CPU power on a specific machine for larger or more critical broadcasts. You may also want to use a specific server because of other applications that may reside only on that server. For example, a schedule may call for reports to be exported in Microsoft Excel, PowerPoint, or Word, which means that Microsoft Office must be installed on the machine hosting the APOS Publisher for Cloud processing server.





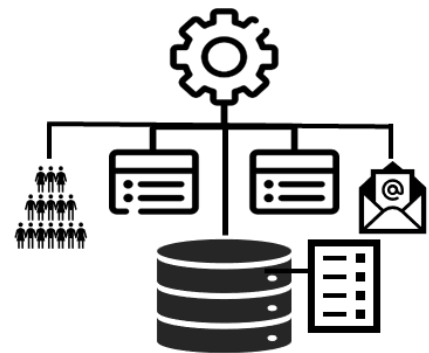
ENTERPRISE SECURITY

Administered, secure team collaboration for users and groups with shared and private folders, data sources, and bursting definitions enables separate broadcasting programs by department or line of business. Multiple broadcast designers can collaborate securely on content and safely share data sources.

SECURITY AND PERMISSIONS

APOS Publisher for Cloud promotes team collaboration by creating an environment in which work can be shared with team members in shared folders. It also allows private folders individuals can use to develop their broadcasting before sharing, or for projects that are not team-based.

- **Shared & Private Folders** – a shared folder is a public folder in which authorized user groups can collaborate to build bursting definitions and broadcasting content. A private folder can be used by individuals to control access to bursting definitions and broadcasting content for individual use.
- **Shared & Private Bursting Definitions** – private bursting definitions are ones that are relevant only to an individual, while shared bursting definitions allow the group to maintain a consistent means of communication with a defined audience.
- **Shared & Private Bursting Data Sources** – bursting data sources contain email addresses, filter values, destinations and format settings, SAC story IDs and model names, and dimension names.



ENHANCED SECURITY - USER GROUP ACCESS RIGHTS

APOS Publisher for Cloud security enables stronger controls for secure usage of the solution across multiple business units of an organization.

An APOS Publisher for Cloud administrator creates individual user profiles and groups, as well as shared and private folders to enable team collaboration and segregation of work across business units. The administrator defines which user groups can access which folders, and which rights users have over the content of the shared folders.



ENHANCED ADMINISTRATION

Using a dedicated administration console, an administrator can view and track:

- When users create, delete, modify
- What machines they are logging in from
- When potential issues arise

Note too that the solution includes a Recycle Bin, which allows the administrator to restore content that users may have deleted accidentally.

CONCLUSION

What should you look for in an enterprise report broadcasting solution?

- ✓ **Scalability & High Availability** – scale up processing capabilities and failover according to your broadcasting needs.
- ✓ **Security & Administration** – enable administrators to define users and groups, assign permissions, and monitor activities and processes.
- ✓ **Formats** – enable your recipients to work with analytics data using the formats that work best for them, whether PDF, Excel, Word, PowerPoint, RTF, CSV or image. Use templates to present analytics consistently and professionally.
- ✓ **Personalization** – use your bursting data source to create personalized slices of data for your recipients without having to create different versions of reports.
- ✓ **High-Volume Export** – provide the analytics data recipients need, regardless of data volume.
- ✓ **External Stakeholders** – communicate with suppliers and customers, and with internal stakeholders that do not or cannot log in to SAP Analytics Cloud.
- ✓ **Live Data Sources** – draw live broadcast data from a wide variety of data sources, including Datasphere.

EXTENDED BROADCASTING FOR THE SAP ANALYTICS LANDSCAPE

APOS Publisher for Cloud extends broadcasting for the SAP Analytics landscape and enables:

- BEx Broadcasting replacement ([learn more](#))
- SAP Analysis for Office broadcasting ([learn more](#))



RESOURCES

CUSTOMER SUCCESS:

- [Personalized SAP Analytics Cloud Broadcasting with APOS Publisher for Cloud](#)
- [Automotive Import, Distribution, Leasing and Fleet Management: Timely Report Distribution to SAC & Non-SAC Recipients](#)
- [Agricultural Manufacturer: Replacing BEx Broadcaster in an SAP BW/HANA Environment](#)
- [NLMK Europe: “Push” Publishing with APOS Publisher for Cloud](#)
- [Precision Drilling: Automated Distribution of Personalized SAC Reports](#)
- [Vonex: Data-Driven Scheduling of Personalized Data Distribution](#)
- [Hunt Oil Company: Data-Driven Distribution & Reduced IT Burden](#)

ON-DEMAND WEBINARS

- [Breaking BI Barriers: Automated SAP Analytics Cloud Report Broadcasting](#)
- [Technical Deep Dive – APOS Publisher for Cloud](#)
- [Team Collaboration for Enterprise Broadcasting of SAP Analytics Cloud Stories](#)
- [Extend Analytics Content with Broadcasting and Publishing Webinar Series](#)
- [Flexible SAP Analytics Cloud Broadcasting & Publishing for Countless Business Use Cases](#)

BLOG POSTS

- [The BEx Broadcasting Need and SAP Analytics Cloud](#)
- [APOS Publisher for Cloud – SAP Analytics Amplification – Enterprise Broadcasting](#)
- [The Other Cloud Analytics Challenge – Broadcasting](#)
- [Team Collaboration for SAP Analytics Cloud Broadcasting](#)



APPENDIX: APOS SOLUTIONS FOR SAP ANALYTICS CLOUD



APOS Live Data Gateway

Live connectivity from SAC to a wide range of data sources – Editions for SAC, Power BI, Snowflake, Ariba, S/4HANA, SAP Landscape, Premium Sources



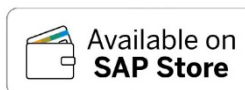
APOS Publisher for Cloud

Broadcasting and distributing SAC content – Editions for SAP Analytics Cloud and S/4HANA



APOS Insight for Cloud

Enhanced monitoring, auditing and validation of SAP Analytics Cloud



APPENDIX: APOS SOLUTIONS FOR SAP BUSINESSOBJECTS



APOS Insight

- BI System Auditing
- BI System Monitoring
- BI Query Surveillance
- BI Report Testing



APOS Administrator

- Object Management
- Schedule Management
- Instance Management
- Web Intelligence Migration



APOS Storage Center

- System Backup
- Content Archiving
- Content Versioning
- Automated System Clean Up



APOS Publisher

- Systematic Content Delivery
- Advanced Document Bursting
- Enhanced Content Distribution
- Security and Encryption



APOS Web Intelligence Migrator

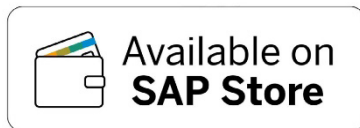
- Bulk Convert from UNV to UNX
- High-Volume Web Intelligence Repointing
- Success Validation
- Controlled Workflow



ABOUT APOS SYSTEMS

Since its beginning in 1992, APOS Systems has evolved from a custom business application development shop to a global provider of solutions promoting Well Managed Business Intelligence and Analytics.

APOS provides software products which deliver enhanced capabilities and strong agility in the management and administration of SAP BusinessObjects and SAP Analytics Cloud platforms, across the SAP solution landscape, and beyond. APOS well managed BI and well managed Analytics products improve return on investment and time to value for our global base of customers. APOS solutions simplify, automate, complement, enhance and extend BI practices, and focus BI and Analytics processes for greater agility in your organization's decision-making capabilities.



APOS is a long-time SAP Partner with over 20 years of success in providing software solutions to enhance and extend SAP Analytics and Business Intelligence capabilities. APOS Data Connectivity solutions provide live, virtualized data connectivity for SAP Analytics Cloud to non-SAP data sources, including a wide range of relational and OLAP sources, and the vital cloud data platforms. APOS enables simplified analytics data processes for SAP Applications, such as SAP Ariba, SuccessFactors, Fieldglass and Concur. APOS Publishing solutions enable broadcasting and delivery of SAP Analytics Cloud and S/4HANA Analytics reports to targeted recipients. APOS BI Management solutions automate administration, testing, auditing, monitoring, and archiving for SAP BusinessObjects and SAP Analytics Cloud.



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