

PYRAMID 2018.01



JANUARY 2018 RELEASE

The January release of Pyramid brings a big list of over 100 new features and functional upgrades, designed to make Pyramid's **Analytics OS** the leading solution for customers wishing to deploy a comprehensive, end-user driven data analytics platform.

Headline Features

PULSE: Pulse is the new engine for Hybrid Analytic scenarios, making it very easy to connect a Pyramid installation with data sources on disparate networks.

Uptick: Pulse is perfect for customers wanting to deploy Pyramid in one place while their data resides in another. Good examples include hosting Pyramid in the cloud and working with on-premise databases. Pulse does not require any major networking configurations or security apparatus for deployment; while also performing with incredible speed and practically no latency.

PYTHON: New native support for using Python and Python related machine learning algorithms and scripts.

Uptick: Python is the preeminent solution for deploying high performance ML solutions. By providing native support, customers can now access python logic together with R and other data cleansing algorithms inside Pyramid's Data Flow application allowing them to build, richer, smarter data analytics and reporting solutions.

OEM & EMBEDDING: A big upgrade has been made in the embedding and OEM functionality to make deployment of Pyramid as part of a 3rd party application ultra-simple without compromising on performance, security and functionality.

Uptick: Pyramid embeds using modern HTML5 standards versus older style embedding options from other vendors – so it's significantly easier to deploy and can scale inside 3rd party applications. Coupling this with a new large REST API function list, the capabilities will make any 3rd party analytics application using Pyramid easier to deploy with just 2 lines of JavaScript.

LINUX: A new installer for Linux *.

Uptick: Many organizations use Linux-based software for high-end, high scale enterprise-grade deployments. Linux is also the preferred platform for many cloud-hosted systems.

* Note the initial release is for Ubuntu Server and Debian mid February 2018. The CentOS version will be available soon after.

New Functions and Features

Data Preparation

Multiple new features were added to the data preparation and modeling tool-set:

- New data connectors for Apache Hive, IBM DB2 and Salesforce. Both Hive and DB2 can also be queried directly.
- New data cleansing tools covering multiple mathematical, aggregate and trigonometric operations and date based functions
- New machine learning algorithms covering SVM, K*, PAM and logistic regression
- New support for Python (as described above). This extends to the shared scripting capabilities in the Formulate tools.
- 20+ new R and Python based algorithms were added to the Marketplace covering geospatial, financial and general logic.
- A new "step-by-step" data modeling wizard was added to make the process of ingesting data and building models less complicated than the full, advanced tool-set; yet more complete than 'one-click' modeling.

Uptick: Data modeling is more powerful now and will give citizen data scientists and data workers greater access to more tools than even before. At the same time, new wizards will make access to this functionality easier.

Visualizations

Five new visualizations were added:

- One-click Combo Charts for creating charts using two or more measures, on different axes, using 2 or more chart styles.
- Tree Map for drawing classic treemap visuals in both a flat and hierarchical formats
- Sankey for drawing 2 dimensional sankey diagrams
- Gauges for representing KPIs in a more graphical, gauge type formats
- Upgraded Circle Packing visuals to facilitate hierarchical circle packing

Uptick: Pyramid's ever growing list of native data visualizations make it easy for even non-technical users to build stunning data visualizations using complex options that require no expertise to access.

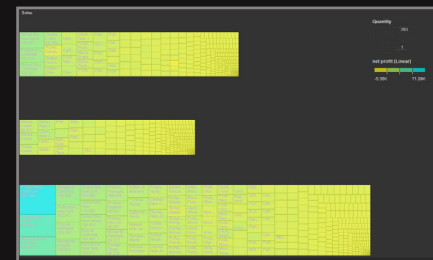
AT A GLANCE

CDOs: New deployment options for Linux for hardened enterprise-grade deployments; new Pulse engine to support your hybrid cloud strategy; Python support for your high-performance Machine Learning initiatives; Improved APIs for automated system management from your own tools;

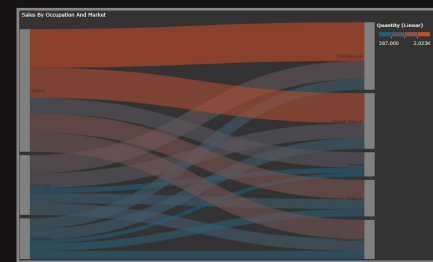
Business Users: New data visualizations and analytic capabilities for building smarter reports; new data modeling tools for smarter and easier data preparation; new slicer cross highlighting and filtering to make your presentations slicker; and the new 'page repeater' to make your publications smarter.

Developers & Citizen Data Scientists: New advanced querying features like parametrization and numeric variables to build more sophisticated queries; new machine learning algorithms as well as support for Python scripting; upgrades to the PQL function library; and numerous new scripts in the algorithm marketplace.

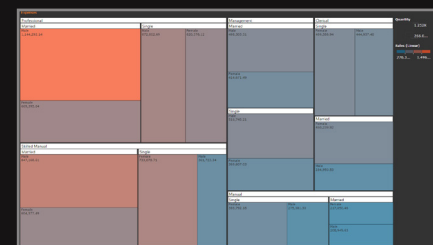
Admins: New content tools like tagging, content versioning and cross-tenant folders; new admin tools for managing Pulse hybrid data sources; new options to apply member-level security to all data source types; and upgraded support for embedded content, white labeling and REST APIs.



Treemap



Sankey



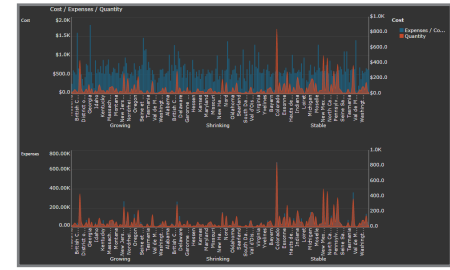
Hierarchical Treemap

Analytics

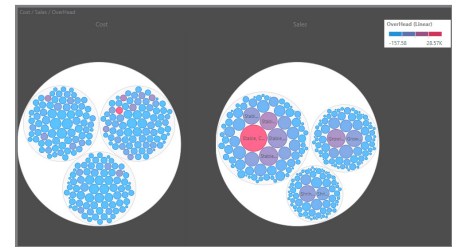
Numerous new features were added for analytics and business logic:

- New member/row driven security settings for users and roles
- New query “Elimination” functionality for building ragged queries
- Multiple New PQL functions covering dates and element selections were added
- New advanced parameter functionality to create parameterized queries. This includes cascading capabilities and nested business logic support for both Discover and Present reports and dashboards. It also includes numeric parameter support (for building variables into equations).
- Upgrades to slicers for the “ALL” selection as well as one-click cascading from context menus
- Separately, for MS Analysis Services:
 - New support for Visual Totals
 - Added support for optimized filters and totals as well as the ability to run queries using “Sub-query” mode.

Uptick: The new analytic functions will continue to allow users to build highly sophisticated queries and reports through simple, yet comprehensive tools. Parameterization, in particular, is a fundamental capability that allows BI developers to build clever reporting options that, ironically, make analytics simpler for non-technical data consumers.



Combo Charting



Hierarchical Circle Packing

Presentations & Publications

New features for delivering analytics through dashboards or published content were added:

- Slicer cross highlighting and cross filtering in presentations
- Undo and Redo of user interactions in live presentations
- New Present design short cuts including the ability to change panel and slicer titles
- A new ‘page repeater’ feature in publications to automatically repeat pages based on injected slicer values

Uptick: The new Present and Publish features will make it easier to deliver richer, smarter dashboards and reports to end users without added complexity and large investments in BI development.



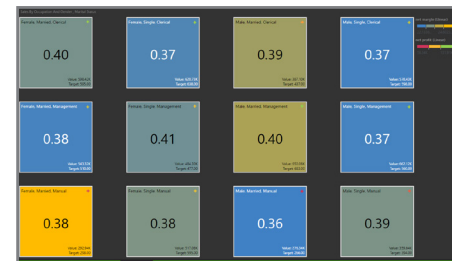
Arrow Gauges

Content Management

The latest upgrades to the ‘CMS’ include these key items:

- New content tagging and search options, including an auto-tagging feature in Discover
- New built-in content versioning
- New cross-tenant settings to allow shared content ACROSS different tenants in a multi-tenant deployment

Uptick: Centralized content management is the cornerstone of collaborative data analytics. The ability to version content natively in the application is a major pillar of a solid governance model for larger, complex deployments; content tagging makes content easier to search and reuse; while the new cross-tenant capabilities will make it simpler for admins to deploy common content to multiple tenants reducing duplication and management overhead.



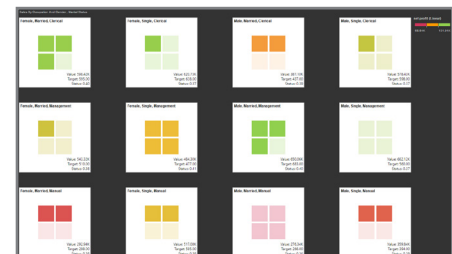
Tiled Gauges

Administration & APIs

New administrative functions reflect the new general functions of the application:

- New tools for managing Pulse servers and remote data sources
- Improved integration with Active Directory with support for groups in roles
- Improved messaging capabilities with native ‘SendGrid’ integration
- New tools to set and manage member level security by role for all data sources
- Publication of 50+ new REST API functions for managing the platform

Uptick: An operating system needs a robust administrative framework to operate efficiently. Pyramid’s Analytics OS and its new administrative tools and functions continue to deliver on this set of capabilities.



Graphic Gauges

In addition to these many features and functions, Pyramid 2018.01 comes with bug fixes and numerous enhancements including upgraded documentation - designed to make the product faster, better, easier!