

# PYRAMID 2018.04

AUGUST 2018 RELEASE



The August release of Pyramid includes **over 100 new features** and numerous functional upgrades and fixes, designed to make Pyramid's **Analytics OS** the leading solution for customers wishing to deploy a comprehensive, end-user driven data analytics platform in the enterprise.

**TABLET APP:** New iOS and Android tablet apps to run the entire client application, complete with full touch and gesture support.

Uptick: The tablet app is designed to run the entire client, with full functionality, from a touch device - perfect for users and admins on the go. Complete with its own two-factor authentication framework, it offers a secure and powerful way to access analytics without a desktop.

**NEW LANGUAGES:** The product now comes in 7 new languages with full right-to-left support.

Uptick: French, Spanish, German, Dutch, Japanese, Hebrew and Arabic are now available in addition to English. Being able to use Pyramid in different languages greatly improves user-adoption rates and allows users to personalize their use of the application.

**MISSING DATA WIZARD:** New tool for analyzing report and content structures against data sources to find problems and provide a step-through wizard to correct them.

Uptick: Analytic content and data structures routinely get out of sync. The Missing Data Wizard ("MDW") provides an elegant, point-and-click tool for correcting these problems without making users rebuild the content from scratch or editing technical code structures.

**N-OF-N WIZARD:** New wizard tool for solving iterative queries to answer classic business questions, which are impossible to complete otherwise.

Uptick: "My top 10 customers and their top 10 products" is a classic business problem that is almost impossible to solve in most analytical tools without specialized coding and queries. The new N-of-N tool does it in 1 click and greatly simplifies finding the answer to such questions.

**VARIABLE LISTS WIZARD:** New wizard for building simple mechanisms to swap selections in queries.

Uptick: The best way to make analytics accessible for non-technical users is to make the process of interacting with data simple. Switchable lists or sets are a good example, allowing end users to change an entire analysis with simple button clicks. The Variable Lists (or Sets) wizard makes the process of building them faster and easier.

**LIST BUILDER WIZARD:** New tool for uploading selections rather than hand-picking a long list of elements from the hierarchy trees.

Uptick: Picking a few elements for analysis is simple and fast. But picking a large list of (disparate) elements can be a massive chore. The new List Builder wizard makes selecting tens or hundreds of elements as easy as uploading your selection list - driving discoveries, formulations and even security.

**DYNAMIC KPIS:** New capabilities added to support dynamic banding to deliver contextual KPI-driven business insights.

Uptick: KPIs are still one of the critical analytical tools used by management in assessing business outcomes and objectives. Too many tools offer simplistic KPIs that render them useful in a few, limited situations. Dynamic KPIs solve this problem, providing a comprehensive and powerful KPI logic framework.

**DROP ZONES:** New drop-zone options and functions to facilitate and accelerate analytics and visualization design, including data-driven colors, quick menus and improved tooltips.

Uptick: Drop zones in Discover were designed to make advanced analytical and visualization options accessible to a broad range of non-technical users through simple drag-and-drop. The new features extend this further.

**LEGENDS:** New legend options and capabilities to complement your analytic visualizations.

Uptick: The new legend capabilities include custom color settings, placement/layout, fonts and data formats - to greatly enhance the presentation of your visualizations in Discover reports, Present dashboards and Publish publications.

**DYNAMIC WEB PANELS:** New options to set the URLs of dashboard panels dynamically using interactions and selection injection.

Uptick: Dashboard web panels offer a great extensibility option to dashboard designers - allowing them to incorporate 3rd-party content alongside analytics. The ability to dynamically change the content of the web panels based on a user's input, at runtime, greatly enhances their utility - making it a powerful tool in its own right.

**AUTHENTICATION:** New support for AzureAD authentication and the ability to connect to MS SQL Server via Windows Authentication.

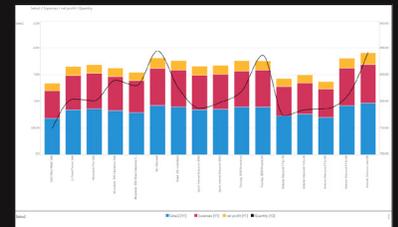
Uptick: Expanding the authentication footprint of Pyramid to include AzureAD makes it easier for large organizations that have embraced the cloud to integrate Pyramid into their infrastructure. While the support for Windows Authentication connectivity to MS SQL Server databases greatly enhances the enterprise options for using these data sources natively from Pyramid.

**Management:** New content management tools like the Missing Data Wizard make managing content stores easier and practical, reducing the total cost of ownership of managing an enterprise environment. Tablet apps and new languages allow more users to access the platform in their preferred mode - increasing adoption and data-driven decision-making.

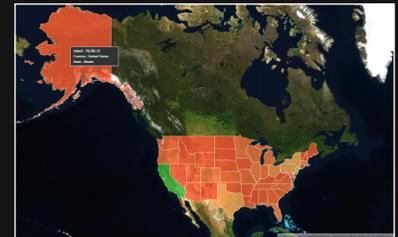
**Citizen Data Scientists & Business Users:** A vast array of new functions and wizards will make the process of data analysis simpler yet more powerful. The N-of-N wizard, List Builder, Variable Sets wizard, Dynamic KPIs and new color options greatly enhance and simplify the analytic options. Improved visualization options and upgrades will also impact the types of analytics produced.

**Developers:** A new set of APIs, dynamic web panels, advanced dashboard buttons and new PQL functions will make it easier to build smarter content and analytics for non-technical users and analytic consumers.

**Administrators:** Support for AzureAD and multi-method authentication for web servers makes deploying Pyramid easier than ever. Windows Authentication for MS SQL may also help eliminate numerous deployment roadblocks. While new mobile settings in the admin elegantly solve two-factor authentication problems out-of-the-box.



New Stacked Measure Charts



New Mapping Styles & Options

## Client

FEATURE	CATEGORY	BENEFIT
<b>Main Application</b>		
<ul style="list-style-type: none"> <li>7 new Languages: German, Spanish, French, Dutch, Japanese, Hebrew and Arabic</li> </ul>	Adoption	Enabling user access to the app in their native language greatly increases usability.
<ul style="list-style-type: none"> <li>Tablet Apps for iOS and Android. Both to be available soon after release.</li> </ul>	Access	The ability to use Pyramid from tablets will make access to the application more convenient for users.
<ul style="list-style-type: none"> <li>Customizable user &amp; admin dashboard layout (phase I)</li> </ul>	Adoption	Personalizing the application interface to improve usability and access to common functionality.
<ul style="list-style-type: none"> <li>3 new interactive tutorials</li> </ul>	Adoption	Immersive, quick tutorials to ramp up first time users on how the application works.
<b>Data Processing</b>		
<b>Data Flow</b>		
<ul style="list-style-type: none"> <li>New data sources: Sybase IQ, RSS feeds and Firebird</li> </ul>	Data Acquisition	Increased data access options. New options for accessing more data, means bringing more of the organization's data footprint into a single platform.
<ul style="list-style-type: none"> <li>New data target: Sybase IQ</li> </ul>	Data Acquisition	Increased data modeling options. Extending the ability to build models to alternative technologies, gives organizations broader latitude in picking their preferred data stack technology,
<ul style="list-style-type: none"> <li>New, high-scale data join engine</li> </ul>	Data Acquisition	Greatly improved scalability options for data mash-ups of disparate data sets.
<ul style="list-style-type: none"> <li>New support for SAP Hana hierarchies and column labels</li> </ul>	Advanced Analytics	Better support for SAP Hana features makes it easier for users to analyze data.
<ul style="list-style-type: none"> <li>New Multi-file data source uploader*</li> </ul>	Data Acquisition	Make the acquisition of multiple like-files from a directory easier and speeds up the data flow processing.
<ul style="list-style-type: none"> <li>New post-scripting option</li> </ul>	Data Acquisition	Apply user-defined 'post' scripts to targeted materialized databases to improve their function, speed and capabilities.
<ul style="list-style-type: none"> <li>New data flow descriptors</li> </ul>	Documentation	Add documentation to your data flows for better management.
<b>Data Modeling</b>		
<ul style="list-style-type: none"> <li>Upgraded Relationship table editor – with duplicate tables and custom query support</li> </ul>	Data Acquisition	More comprehensive semantic tools allow better data modeling with more flexibility for real world data applications.
<ul style="list-style-type: none"> <li>New support for left, right and outer joins on the in-memory engine</li> </ul>	Analytics	New table join options allow better data modeling and more flexibility for real world data applications using the in-built in-memory engine.

Discover

Analytics

- New N-of-N query wizard for iterative querying \*

Analytics

New query option to solve complex business questions with iterative queries that are impossible to achieve otherwise
- New Variable Lists/Sets wizard for simplifying the process of building dynamic lists.

Analytics

The best way to make analytics accessible for non-technical users is to make the process of interacting with data simple. Switchable lists or sets are a good example, allowing end users to change an entire analysis with simple button clicks. The Variable Lists (or Sets) wizard makes the process of building them faster and easier.
- New support for measure sets and parameters

Analytics

Greater flexibility in the usage of model elements simplifies the way visualizations and analytics work for deeper insights without complexity
- New member search capabilities, including cross-dimensional searching

Analytics

Improved member search capabilities to simplify the selection of dimension elements especially in larger complex structures.
- New execution notifications and highlight

Adoption

Enhanced user experience to guide users when solution changes have been applied or are required.
- New editable report titles

Analytics

Improve the design and visual aspects of reports and visualizations.
- New List Builder for high-volume element selections \*

Analytics

Picking a few elements for analysis is simple and fast. But picking a large list of (disparate) elements can be a massive chore. The new List Builder wizard makes selecting tens or hundreds of elements as easy as uploading your selection list - driving discoveries, formulations and even security.
- Upgraded support for hierarchy and measure descriptions and metadata modifications

Adoption

Further enhance the end-user experience with dimension and measure descriptions
- New support for sanctioned data models \*

Adoption

The ability to tag data models as sanctioned improves the end-user experience as they understand the data they are using is centrally approved for use.
- New auto-folder option for MS OLAP measure groups

Adoption

Improved support for MS OLAP measure groups
- New Show/Hide options for showing empty data on MS OLAP/Tabular

Analytics

Improved support to show and hide empty rows and columns for MS OLSP and Tabular models
- Upgraded Totaling options: 'sub totals only'

Analytics

Improved grid totaling options
- Upgraded filter options: 'equals' and 'not equals'

Analytics

Extended filter options to include 'equals' and 'not equals' option to improve the list creation and data filtering options.
- New Quick Calculations for members and measures

Analytics & Adoption

Further simplifies the creation of member and measure-based calculations
- Upgraded Cascading wizard

Analytics

Improved cascading wizard simplifies the creation of linked data filters
- Upgrades for MS OLAP /Tabular content: customizable Drillthrough, KPI trend values, custom data formats.

Analytics

Updated support for advanced analytics based on MS OLAP and Tabular models

Visualizations

<ul style="list-style-type: none"> <li>• New visual legends with capabilities for custom layouts, item colors, fonts and data formats</li> </ul>	Visualizations	Improved control over chart settings and display - improving the quality of the visualization
<ul style="list-style-type: none"> <li>• New layout options for data filters to appear above and below visuals</li> </ul>	Visualizations	Greater flexibility on the design and layout for reports and visualizations
<ul style="list-style-type: none"> <li>• New Color drop zone options including custom colors, discrete colors and advanced colors (for KPI banding)</li> </ul>	Visualizations	New ways of representing setting the colors in visuals, including logic driven 'custom' colors, discrete colors and advanced color settings for KPIs and gauges
<ul style="list-style-type: none"> <li>• New quick menus from certain drop zones for colorization, filters, sorts and N-of-N operations</li> </ul>	Analytics	Improved access to common analytical functions make it easier than ever to create reports.
<ul style="list-style-type: none"> <li>• New shared measure visual options including auto-colorization and stacking</li> </ul>	Visualizations	Improved ways for blending multiple measures in the same chart to greatly improve flexibility in the portrayal of multi-measure charts.
<ul style="list-style-type: none"> <li>• New notes panel</li> </ul>	Adoption	Add descriptive notes to the report and visualization
<ul style="list-style-type: none"> <li>• New split visual option to see underlying query data alongside the primary visual</li> </ul>	Analytics	Improved design options to quickly view the underlying query data driving the report or visualization
<ul style="list-style-type: none"> <li>• Upgrades to Drill-Through action dialog for MS OLAP</li> </ul>	Analytics	Improved user experience when using MS LAP drill through actions
<ul style="list-style-type: none"> <li>• Upgraded KPI and Gauge visualizations</li> </ul>	Visualizations	Improved KPI and Gauge representations, including new cylinder and arc gauge designs
<ul style="list-style-type: none"> <li>• New chart design settings: tick intervals, axis sizing options and axis proportions</li> </ul>	Visualizations	More chart design settings improve chart design options
<ul style="list-style-type: none"> <li>• Upgraded data labelling for all visuals</li> </ul>	Visualizations	Improved visualization controls
<ul style="list-style-type: none"> <li>• Upgraded grid visualizations with custom column widths and wrap-able headers</li> </ul>	Visualizations	Improved grid control enhances the visual display for grids
<ul style="list-style-type: none"> <li>• New hierarchical grid options: expand/collapse buttons and color gradients for each level</li> </ul>	Visualizations	Improved display options for hierarchical dimensions
<ul style="list-style-type: none"> <li>• New stacked measure charts #</li> </ul>	Visualizations	The ability to create stacked charts using measures
<ul style="list-style-type: none"> <li>• New map design options: overlay opacity and bubble sizing; 4 new map tiling choices</li> </ul>	Visualizations	Improved geo-spatial data display options
<ul style="list-style-type: none"> <li>• Greatly improved rendering of massive matrix grid data sets</li> </ul>	Visualizations	Improved grid display for very large data sets

Present

- New jump button advanced options  
Analytics & Extensibility  
New self-refreshing capability for self-running dashboards and presentations. The new feature allows dashboards to auto-refresh or cycle with new data.
- New dynamic web panels with interactive URLs  
Extensibility  
Enhance dashboards by embedding other web-based applications and linking content
- New slicer edit functions and options, including support for measure slicers  
Analytics  
Improved control for data filters in dashboards
- New runtime options for dashboards, including full screen mode and 'edit the presentation' button  
Adoption  
Enhanced end-user experience when running a dashboard
- New visual legend functionality, including embedded and floating legend options  
Visualization  
New dashboard design and layout options to share common visualization legends
- Improved panel title options  
Visualization  
Improved dashboard design options

Publish

- New visual legend functionality, including embedded and floating legend options  
Visualization  
New publication design and layout options to share common visualization legends
- New slicer edit functions and options, including support for measure slicers  
Analytics  
Improved control for data filters in publications
- Improved caption options  
Visualization  
Improved publication design options

Formulate

- New KPI functionality for creating dynamic KPI and gauge bands  
Advanced Analytics  
Enhanced KPI design options to control KPI bands and evaluation criteria
- Support for Measure Parameters #  
Advanced Analytics  
Easier to create advanced analytics using measure parameters
- Upgrade for 'union' and 'intersect' functions in List designer  
Advanced Analytics  
Extended List design options
- New 'parallel period' and 'period to date' functions in PQL  
Advanced Analytics  
New PQL functions to support Formulate based objects and enhance visualizations
- Upgraded 'NonEmpty' PQL function to support list parameters  
Advanced Analytics  
Improved PQL function

Content Management & Governance

- New content structure analyzer and 'missing data wizard' toolset \* #  
Management & Governance  
Simplify the management of content and lower the total cost of ownership when managing content changes impacted by structural data model changes
- New advanced content search  
Management  
Better search makes it easier to find relevant content quicker. Search is also key the running the different content wizards across multiple content items.
- New metadata tools for data source management  
Management & Governance  
Improved data source management options

# Preview Features: Although these features are in preview, they are upgradable and fully supported.

\* Item not fully or partially available in the Community Edition.

## Administrative & Backend

FEATURE	CATEGORY	BENEFIT
<b>Administrative Tools</b>		
<ul style="list-style-type: none"> <li>New mobile configuration pages *</li> </ul>	Management & Security	Control how your users access Pyramid 2018 from mobile devices. Includes in-built two-factor authentication framework for extra security.
<ul style="list-style-type: none"> <li>Support for AzureAD authentication provider *</li> </ul>	Management & Security	Greater support for authentication providers offers better and easier enterprise integration options.
<ul style="list-style-type: none"> <li>New server configuration options for network encryption; web server authentication methods; task server priorities; system schedules.</li> </ul>	Management	New enterprise management features making the deployment of Pyramid 2018 easier to manage with more sophisticated options.
<ul style="list-style-type: none"> <li>New metadata panels and tools for data sources</li> </ul>	Data Management	Better and more accessible tools for managing data sources, data models and their associated metadata, including details for certain types of databases.
<ul style="list-style-type: none"> <li>New metadata options for data sources: data sanctioning, property and business logic governance options</li> </ul>	Data Management	Tools for administrators to control the extent to which data sources can be customized by users in a shared environment.
<ul style="list-style-type: none"> <li>Full support for optional parameters in all data connectors</li> </ul>	Data Management	More control on how Pyramid 2018 connects to data sources.

### Server Functionality

- |   |          |  |
|---|----------|--|
| <ul style="list-style-type: none"> <li>New support for MS SQL Server database connectivity via Windows Authentication*</li> </ul> | Security | Improved database connectivity options to align better with numerous enterprise deployments and configurations of MS SQL SERVER. |
|---|----------|--|

### APIs

- |   |                            |  |
|---|----------------------------|--|
| <ul style="list-style-type: none"> <li>addActiveDirectoryUser</li> <li>addServerRoles</li> <li>changeDataSourceForSpecificConnectionString</li> <li>changeDataSources</li> <li>changeItemDescription</li> <li>changeLicenseForUser</li> <li>copyItemsToFolder</li> <li>cutItemsToFolder</li> <li>deleteMaterializedModel</li> <li>getAllTenants</li> <li>getCountLicenseType</li> <li>getDefaultTenantId</li> <li>getMaterializedContentRoles</li> <li>getMaterializedRoles</li> <li>getScheduleExecutionStatus</li> <li>getTenantByName</li> <li>getUserLastLogin</li> <li>getUserStatus</li> <li>propagateRolesApi</li> <li>purgeItem</li> <li>runSchedule</li> <li>testDataSourceStatus</li> </ul> | Management & Extensibility | A stronger, more extensive API framework to greatly increase extensibility options for developers and OEM customers. |
|---|----------------------------|--|

### Infrastructural

- |  |            |  |
|--|------------|--|
| <ul style="list-style-type: none"> <li>Upgrades to the diagnostics page</li> </ul>                         | Management | Better insights for administrators on resource allocation and bottlenecks. |
| <ul style="list-style-type: none"> <li>Installer in German, Spanish, French, Dutch and Japanese</li> </ul> | Deployment | Localized instructions for installation to improve deployment.             |

## Documentation

- |  |            |   |
|--|------------|---|
| • Upgraded Online help   | Adoption   | New help topics to explain the new features in this release.  |
| • New guide documents on scaling, mobile implementations and Kerberos delegation | Deployment | Deeper explanations to help administrators better implement some of the more complex options in the platform. |
| • New tutorial video snippets in help  | Adoption   | New tutorial topics to explain the features in the product.   |

\* Item not fully or partially available in the Community Edition.