What's new in MicroStrategy 10.7

MicroStrategy®

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MicroStrategy 10.7 delivers options that make the enterprise analytics platform more easily accessible to organizations and end-users via the AWS Marketplace. The release also supports enhanced extensibility by delivering the ability to build custom connectors to data assets that are not natively supported by the platform. Making the platform more open to be able to connect to other technologies makes it possible for MicroStrategy customers to instantly leverage other investments and draw more value. MicroStrategy 10.7 also offers NLG integration to transform visualizations into meaningful insights by providing textual descriptions and analysis of data. This release also offers new features across MicroStrategy Desktop™, MicroStrategy Web™, MicroStrategy Mobile™ and Usher™. Feature Releases are best for environments which can upgrade once every 3-9 months, and projects that want the latest new features from MicroStrategy.

Simultaneously with the 10.7 feature release, MicroStrategy 10.4™ Hotfix 3 is generally available to customers today. This hotfix is the third update to the MicroStrategy 10.4 platform release and includes 120 critical enhancements and fixes across the platform, improving overall product stability. For more information about MicroStrategy 10.4.3, visit the MicroStrategy Community. As a reminder to those looking to upgrade, the platform release (10.4) is best for customers who prioritize stability over cutting-edge innovation.
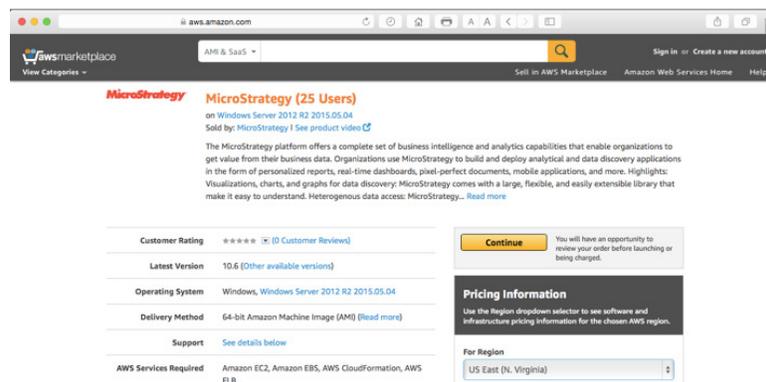
Analytics 10.7 – Release Features

MicroStrategy Platform on the AWS Marketplace

The AWS Marketplace is an online store where anybody in the world can access software on-demand. We are excited to announce that MicroStrategy 10.7 and MicroStrategy 10.4.3 are now available on AWS Marketplace.

The availability of MicroStrategy on the AWS Marketplace makes it extremely easy for any organization to launch a fully configured enterprise analytics platform at it's own convenience and with minimal cost. Organizations can spin up their own instance of MicroStrategy in as little as 15 minutes and start building transformative reports, dashboards, and even mobile applications immediately.

New and existing customers of MicroStrategy looking to deliver enterprise analytics and mobility to smaller teams (of size 50 or under) or looking to access newer feature releases quickly, can leverage the marketplace to deploy projects instantly.

AWS Marketplace users who select MicroStrategy can take advantage of:

- Global Infrastructure: select which region to deploy MicroStrategy

- Simple Paying Options: Pay by the hour or pay annually

- Scalability: Easily select your compute power and scale up anytime.

- Latest and Greatest: MicroStrategy will always provide
  the latest Platform and Feature Releases

- Security: organizations get access to Usher, a powerful, easy-to-use
  enterprise security, access management, and identity intelligence solution

The AWS Marketplace offers options for 25 user and 50 user teams on a single serve node. Teams looking to access enterprise analytics and deliver access to more than 50 users or looking to cluster more than a single node, can use MicroStrategy's managed services and deploy cloud analytics at a larger scale to their organizations.

Brand New Data Connector SDK

MicroStrategy 10.7 makes it possible to connect to more data assets than any other release.

With the new Data Connector SDK, now available with MicroStrategy 10.7, organizations can use standard web technologies (JavaScript and HTML) to build custom connectors and securely access data from any source that is not natively supported with the MicroStrategy platform. This includes Eloqua, Amazon S3, One Drive and more, all on top of secure authentication modes.

This added functionality will allow customers to extend the reach of the MicroStrategy platform to their end-users and enables them to access data from any source, as well as any proprietary web service they might have built.
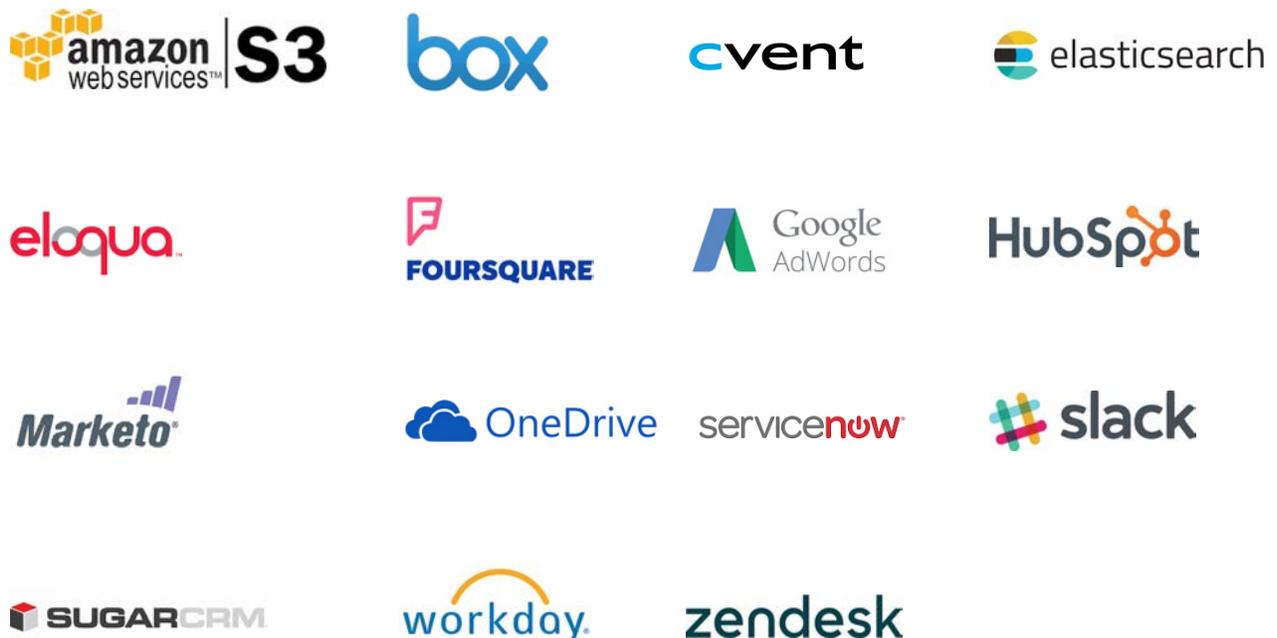
Smart Data Discovery

Natural language generation (NLG) refers to the use of advanced technology to create narratives, stories, or analyses. NLG can make data, charts, and dashboards more accessible to more people by providing textual descriptions and interpretation. NLG can also provide a faster path to insights by indicating trends to be further explored.

With MicroStrategy 10.7, you can now add the power and sophistication of NLG alongside your visualizations and dashboards, and it is now possible to display information and insights via text. This new feature creates narrative stories using data, but in a medium that people understand. This makes it incredibly simple for end-users to read data, without missing anything or requiring any skillset (well, beyond being able to read text that is).

Together with the leading vendors in this space, Automated Insights and Narrative Science, MicroStrategy 10.7 delivers the ability to build and deploy NLG solutions that make the most complex dashboards clear.

The process of incorporating these new plugins into dashboards is similar to including custom visualizations from the Visualization Library. There are a few plugins which will be available for download from the MicroStrategy Visualization Library. Each of them contains a detailed description on how to set it up, and get the license for the NLG platform you are interested in. Currently, the following NLG plug-ins are available:

- QuillTM platform by Narrative Science
- Wordsmith by Integrated Insights

Ability for 3rd party to update data in an existing single table dataset

In version 10.6, MicroStrategy delivered the ability for 3rd party applications to push datasets directly into the MicroStrategy platform and populate it with data using RESTful API calls. This made it possible to leverage existing investments in other technologies.

With MicroStrategy 10.7, the developer can now update the data in an existing cube using the same RESTful API server and select the dataset update logic:

- Replace: the entire existing dataset is replaced by the new one
- Insert: add only new data to the existing data
- Update: update existing data, new data is ignored
- Ipsert: update existing data, insert new data

This allows MicroStrategy to be more closely integrated with the larger ecosystem. The feature includes ETL tools that push the data and data updates directly to MicroStrategy.

MicroStrategy in-memory cube

Improved PDF Export

In version 10.6, MicroStrategy revamped the export engine to enhance the ability to share dashboards in PDF format. This feature, which is a separate microservice with the Server installation, generates high-fidelity PDF files.

With version 10.7, in instances where scroll bars allow the user to explore other parts of the visualization (where non-grid visualization doesn't fit in the panel), smart pagination for PDFs allows users to choose options to display information: fit to one page, fit width to page, and fit length to page.

These new options for the delivery of non-grid visualizations in PDF format, improves the export experience with better formatting.

Visual Insight Filter Enhancements

MicroStrategy 10.7 introduces two very useful options for filters. You can now select what attribute forms are displayed in the filter panel and in-canvas selectors. This enhancement enables an uncluttered and more readable selector when attributes have multiple attribute forms.

Also, a new option lets you show or hide the element to select "All". This option is useful to limit the amount of data that is rendered on the dashboard.
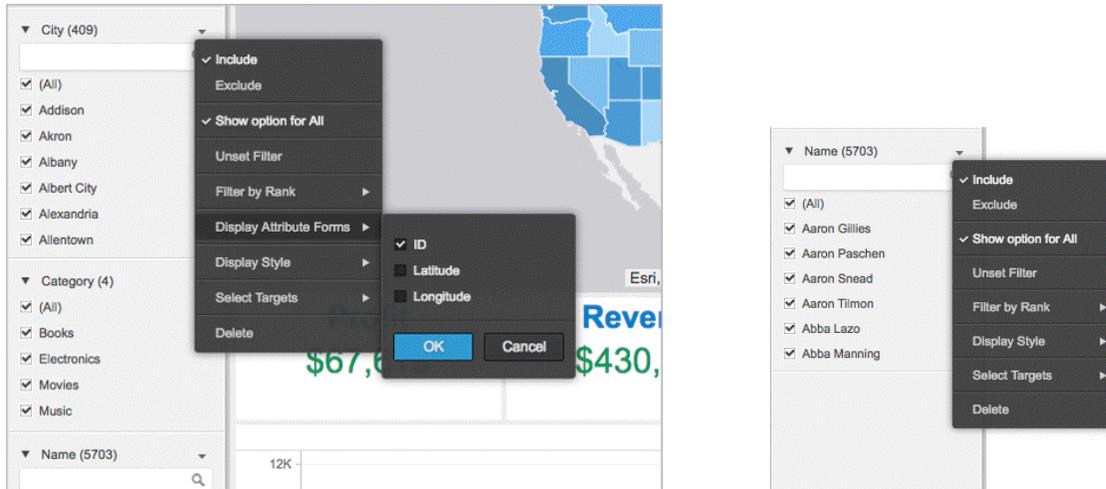
Expanded support for MTDI cubes in Command Manager

MicroStrategy 10.7 has expanded support in Command Manager for individual table refresh for Multi-table data import (MTDI) cubes sourced from different data-sources. The following syntax is supported:

- Refresh all tables in bulk or individual tables in the MTDI cube
- Refresh data in the table using either Table name or the Table ID
- Four data refresh policies supported, (Replace, Update & add, Update, Add New Data)

Additionally, users now have the ability to get status of table refresh within an MTDI cube (fail, in-progress, ready)
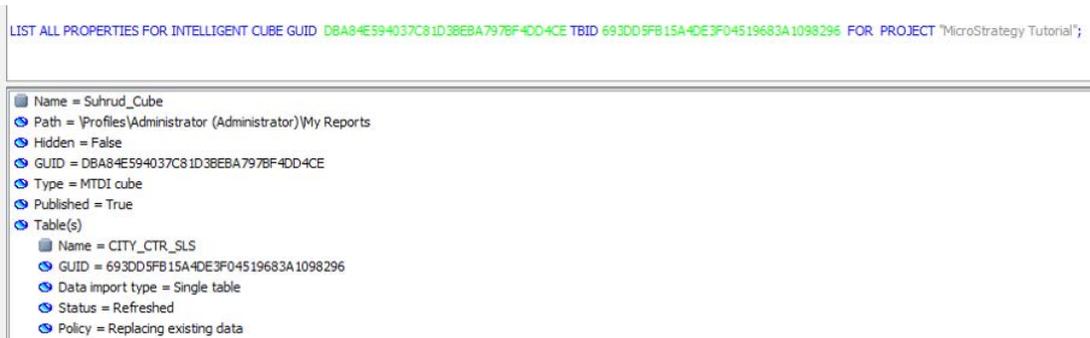
New certifications for data sources

MicroStrategy 10.7 supports more data sources and certifies the latest versions. New certifications available in version 10.7 are listed below:

- Microsoft MSAS 2016 (certified as a data warehouse)
- Certify Amazon Aurora, MySQL Edition (certified as a data warehouse and metadata)

Enhanced Native Hadoop Gateway

MicroStrategy 10.7 delivers a completely re-architected native connector, called the Hadoop Gateway, which leverages Spark to increase the scalability and performance while accessing data directly from HDFS. The new release also makes the process to setup the Hadoop Gateway easier and more seamless, by consolidating the installation and configuration process with the rest of the analytics platform.

New in the latest version, the Hadoop Gateway will now be able to access more file types, and will be able to access Parquet, AVRO, and JSON formats. This is in addition to previously supported csv and text file formats.

## Support for pre-post SQL statements for multi-source reports

With version 10.7, it is possible to execute multiple pre-post SQL statements for both primary and secondary databases for a multi-source report.

In versions prior to10.7, pre-post SQL statements would only be executed for primary databases in a multi-source report.

Mobile – Release Features

Support for SHP files for custom shapes on your iOS devices

MicroStrategy allows users to add custom shapes using. kml shapes in the map widget. Users can now also use .SHP files to deploy custom shapes and areas maps, providing consistent user experience and behavior across different interfaces in Maps.
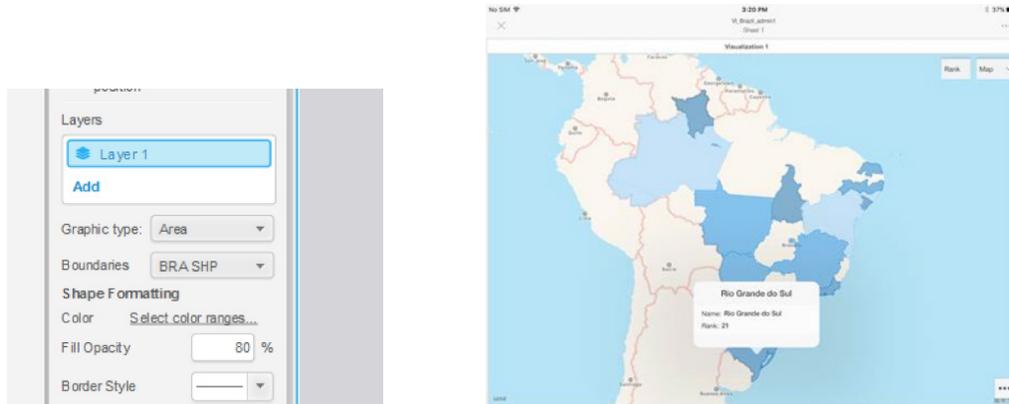
Easily change selector values via the new URL Api to update a view of the dashboard

Users can now programmatically set the value of a selector via an URL api event to create a custom visualization that acts as a selector, filter target data and modify the dashboard view by triggering an attribute selector on the grid or visualization. This feature provides flexibility to the mobile app developers to update a view of the dashboard on other custom actions.

Pick the best-fit image based on android device resolution

Android app designers can now define images in their dashboards with varying resolutions allowing the Android devices to pick the best-fit image depending on its own resolution to make the image size similar among different device resolutions. This enhancement provides users the advantage to use the varied resolutions available in Android devices.

Appconfig (formerly known as ACE) support in Android

In addition to our native integration support with AirWatch, MicroStrategy now provides implementation of AppConfig for standardized enterprise mobility management process to configure and secure apps on Android based on AppConfig guidelines.

The integration with AppConfig will result in more consistent, open and simple ways to configure and secure mobile Apps.

Usher – Release Features

Usher WatchKit App: Updated to WatchOS3

For MicroStrategy 10.7, Usher's WatchKit app has been rebuilt for WatchOS 3 and will provide users with significant performance benefits. WatchOS 3 was designed by Apple to enable wearers to interact with their applications more quickly than was possible in previous versions. For example, Usher on WatchOS 3 will include a Complication option. If the Usher Complication is used in an active watch face, the full Usher WatchOS app will be kept in-memory as a companion and can launch nearly instantly (up to seven times faster than previously) when the Complication is tapped. To increase performance still more, the Usher WatchKit app will now make requests directly from the Apple Watch to the Usher Server instead of going through the Usher Security app on the paired iPhone.

In WatchOS 3, the Side button on the watch now navigates to the new Dock and presents your recently opened apps in "cards" similar to how double-tapping on the home button on the iPhone works. This will also make it easier to re-open Usher for users who are regularly accessing Usher resources via their Apple Watch.

Usher Security Client: Scanning Non-Usher Bar/QR codes

A significant enhancement to Usher functionality in 10.7 is to the Usher Security badge client's integrated QR scanner, which can now read non-Usher barcodes and QR codes (e.g., Aztec Codes). The scanning transaction can be stored in the Usher Server and linked to the user performing the scan, the time of the scan, and the location at which the scan took place (if Location Services are enabled). The barcodes and QR codes supported are those compatible with Apple's AVFoundation or Google's ZXing. This non-Usher barcode data can be used in Usher Analytics to parse barcode data, create derived attributes from the parsed barcode data, and to generate custom reports.

Many organizations utilize various barcodes and QR codes to represent people (such as an employee, contractor, customer, patient, or a party to a transaction); and objects (such as a vehicle, computer, desk, component, package, form, contract, transaction receipt, or other important document). The Usher mobile app can now serve as a convenient means of documenting a transaction or linking an Usher user and another person or object at a certain moment in time using an identity-centric and location-aware approach. The information from the scans will help create reports and dashboards that tie these scanning transactions (and data inside the scanned codes) to Usher users, further digitizing an organization's physical infrastructure and adding insight to its business operations.

Usher Security Client: Usher Code Improvements

Each Usher badge includes a 4- or 8-digit code at the bottom which is valid for a badge user as a second (or primary) factor of authentication into various systems like VPNs and web applications on a 60-second rotating basis. This can also serve as a means of identity validation that is superior to knowledge-based authentication where users are asked personal questions about themselves. MicroStrategy 10.7 comes with an upgrade to this feature wherein the use of an Usher Code will immediately trigger the reissuance of an Usher Code for the user so that the user does not have to wait up to 60 seconds for a new one-time-passcode to be generated and permit them to log in to another Usher-connected resource. At the same time, this paradigm is implemented in place of an alternate, less secure scenario where the Usher Code is valid for the entirety of 60 seconds no matter how many times it is used within those 60 seconds.

Usher Professional: Communication Enhancements

In terms of collaboration, Usher Professional provides a significant value-add to the Usher badge functionalities by allowing administrators to communicate with Usher badge users with push notification polls (and then receive responses in real-time). In 10.7, the number of poll response options that can be made available to an Usher badge user has been augmented to five (from three). Furthermore, sent communications and received responses will display in Usher Professional as a threaded conversation, thereby improving the way messages are organized. This will now be accessible in a pinned panel rather than a drop-down menu.

Another aspect of Usher Professional that has been improved in MicroStrategy 10.7 is the pre-caching of photos and demographic information related to Usher badge users who are located near the Usher Professional user. This way, a subsequent query by the Usher Professional user does not have to reach out to the server and potentially increase response time by a significant amount unless they are looking for an Usher badge user who is not nearby.
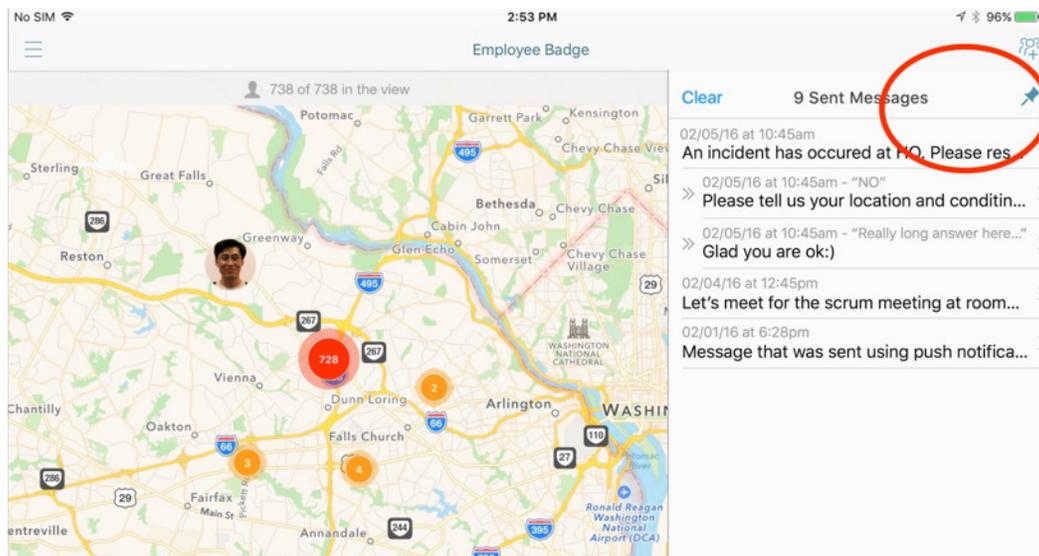

Usher Network Manager: Okta Universal Directory Support

In MicroStrategy 10.7, Usher supports Okta Universal Directory as an Identity Management source, allowing organizations that are a customer of Okta to leverage their investment in Okta as an authoritative directory service. Thousands of organizations are using Okta as their corporate user identity repository to aggregate multiple directories and govern internal access. Usher's identity engine synchronizes to Okta Universal Directory for person-records and attributes, supporting the enforcement of Okta provisioning as an authoritative source for authorization (privileges, entitlements and restrictions). Usher also continues to support other AD/LDAP directories as needed in addition to Okta. This adds to the Early Adopter Usher support for Okta Universal Directory (released in MicroStrategy 10.6), and will simultaneously support other AD/LDAP directories as needed without person-record collisions, conflictions or duplications.

Usher Network Manager: Connect Multiple Usher Networks to a Single Logical Resource

Multiple Usher networks will be able to connect to the same logical resource starting in MicroStrategy 10.7, thereby expanding the flexibility of Usher in accommodating key architecture needs of certain customer environments. This will save customers money by not requiring the setup and maintenance of multiple instances of a logical resource just for separate Usher networks. The logical resource will identify each Usher Network and its corresponding Gateway Agent as a unique, trusted Identity Provider with distinct signing certificates.

Usher Network Manager: Photo Policy Enhancements
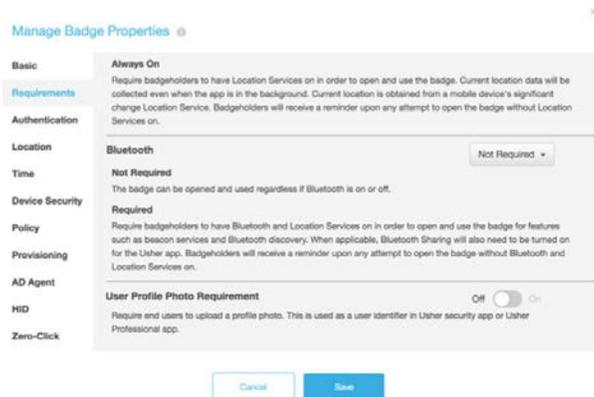
Several Usher features, such as identity validation in the mobile app as well as user location and communication in Usher Professional, are supported by allowing users to see a photo of the user(s) with whom they are interacting. However, sometimes the user directory does not include a photo for everyone, and the badge users may not opt to provide a photo of their own. Starting in MicroStrategy 10.7, Network Manager will allow an administrator to configure an Usher badge in a way that will require users to upload a photo to his or her badge if one does not currently exist. Failing to do so will prevent further access to the resources secured by the badge.

For implementations where an administrator does not require a user photo, then the initials of users who have not uploaded a photo will be displayed in the photo field to demonstrate to all parties involved (e.g., when an Usher Professional user is looking at a grid of users, or in a peer-to-peer validation scenario) that the user image repositories have loaded to the fullest extent possible.
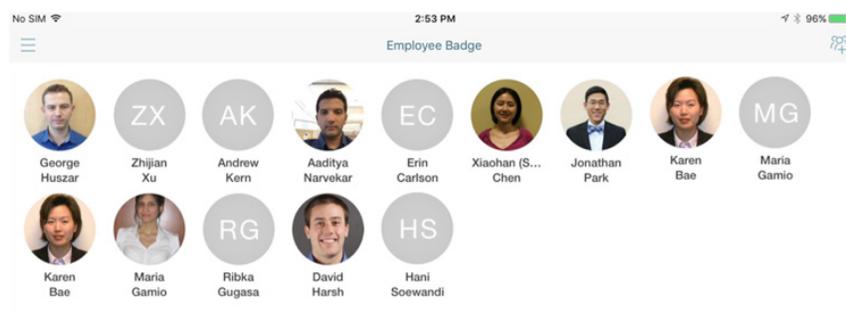
Usher Analytics: Badge Properties Reporting

In 10.7, badge properties set by Network Manager that can require end-user action or compliance will now be able to be reported on with a new out-of-the-box dashboard and schema. This way, Usher can report on pertinent user behavior outside of access requests and geography. The new reports will be able to display information on the number (and identities of) users who have or have not configured their badges in certain ways, filtered by and overlaid against the corresponding Network Manager setting at the time of the action. A few examples of newly trackable actions include:

- Location Services Enablement
- Bluetooth Enablement
- Badge Authentication
- Photo Uploaded
- Multiple Device Installations
- Terms of Use Acceptance