What's New in MicroStrategy 10.5
TABLE OF CONTENTS

ANALYTICS - New certification and enhanced connectors to more enterprise assets
- Support for SAS data files
- Support for OData
- Support and certification for more data sources
- Better query performance with SparkSQL
- Enhanced support for Google BigQuery
- Support for RESTful APIs
- Support for multiple versions of JavaScript libraries
- Better defaults for dashboards
- Reduce memory footprint for MicroStrategy Desktop
- Support Windows authentication for MicroStrategy Desktop
- View filter in presentation mode
- Usability improvements and UX consistency on MicroStrategy Web

MICROSTRATEGY PLATFORM
- Stand-alone utility available for system cleanup prior to installation
- New Enterprise Manager dashboard for system admins

MICROSTRATEGY MOBILE 10.5
- iOS
  - Visual Insight Enhancements
  - Enhanced custom visualization API support in mobile dashboards
  - Improved combination charts
  - Additional map features
  - Custom error messages
  - Ability to create customizations using Swift
- Android
  - Custom font support
  - Ability to embed image in dashboards

SECURITY
- 2-way instant communication
- Usher Security Client: simplified badge setup with auto server configuration
- Usher Android Client: Proximity based access with auto-discovery
- Usher Gateways: Okta integration
- Usher Gateways: AMAG symmetry and Brivo OnAir PACS support
- Usher Network Manager: Control number of authorized devices
- Usher Network Manager: Customized email templates
What’s new in 10.5

MicroStrategy 10.5 delivers a platform with enhanced connectivity and new certifications for more enterprise assets, so our customers are able to make the most out of their investments. In addition to supporting the latest drivers and gateways in the market, this release delivers several features that improve the user experience across MicroStrategy Web, Mobile and Desktop.
Analytics - New certification and enhanced connectors to more enterprise assets

Support for SAS data files

SAS data files are a critical enterprise asset to many MicroStrategy customers and are prevalent across several verticals for statistical analysis, especially in the Healthcare and Pharmaceutical industries. With MicroStrategy 10.5, end-users will be able to upload their SAS files (as a file from disk, or as a URL, or via Dropbox), extract the tables, load into a cube, and visualize it.

Support for OData

OData delivers an open protocol to allow the creation and consumption of query-able and interoperable RESTful APIs in a simple and standard way. With the increasing demand to support the adoption of the latest connectors for web services options, MicroStrategy 10.5 announces support for OData.
Support and certification for more data sources

MicroStrategy 10.5 offers support for more data sources, and certifies the latest versions of connectors and drivers. With this release, the following connectors have been certified.

- MongoDB 3.x as a WH platform for analytics
- Cloudera CDH 5.x
- Microsoft SQL Server 2016

Better query performance with SparkSQL

MicroStrategy 10.5 continues to invest in big data to make it easier and faster to access and analyze large volumes of data on Hadoop. With enhancements to the SQL Engine, version 10.5 is able to pushdown more calculations to the database, and can leverage the power of the data source to improve overall query performance.

With SparkSQL 1.x, the number of analytical functions that are pushed down to the source has increased from 41 to 107. As a result, 82% of MicroStrategy analytical functions can be calculated at the data source.

Enhanced support for Google BigQuery

MicroStrategy 10.5 ships a new Google BigQuery driver, which is compliant with the SQL 2011 standard and enables MicroStrategy querying nested and repeated data.

Additionally, we have increased the number of pushdown functions supported for Google BigQuery as well, making it faster by improving overall speed to access data.
Support for RESTful APIs

In version 10.4, MicroStrategy introduced native support for RESTful APIs to allow access to data from the MicroStrategy Server in JSON format. The RESTful API can be used to easily access subsets of preprocessed data by 3rd party and custom applications, very commonly used across OEM customers and large enterprises.

MicroStrategy 10.5 has further enhanced the RESTful API to allow for advanced filtering. In the future, we will continue building upon this foundation to fully support developers and their needs for embedding analytics, custom-built data visualizations, and 3rd party application integration.
Support for multiple versions of JavaScript libraries

With MicroStrategy 10.5, dashboards can support multiple open source and 3rd party visualizations on the same panel or sheet, even when they are on different versions of D3.js (the same applies to other javascript frameworks as well). Every visualization is self-contained, preventing multiple versions of libraries on the same sheet or panel of the dashboard from conflicting with each other. End users and designers need not worry about including 3rd party charts and graphs that have older version JavaScript libraries, while extending their visualization options and can visualize information without restrictions.

Better defaults for dashboards

MicroStrategy allows users to build dashboards faster while significantly reducing the time required by users to improve the readability and appearance of visualizations. Smart defaults provide a combination of better default properties and improved rules for visualizations and layout components. In version 10.5, MicroStrategy intelligently displays axis labels on visualizations. End users will now be able to display a lot more axis titles in the same space. Longer labels will automatically be shortened to provide enough space for visualization display and the default display for axis label on graph matrix will be much better than before. We intend to keep investing in this area in upcoming releases to enhance the overall user experience.
Reduce memory footprint for MicroStrategy Desktop

MicroStrategy Desktop users have the flexibility to launch and work on multiple dashboards at the same time. This capability is supported on both Mac and Windows. MicroStrategy 10.5 offers optimized memory footprint for Desktop, when multiple dashboards are launched at the same time. Desktop now consumes less memory than prior versions, freeing up system resources to improve overall performance.

Support Windows authentication for MicroStrategy Desktop

MicroStrategy Desktop for Windows, now supports Windows Authentication with version 10.5. Users of MicroStrategy Desktop who would like to connect to a Server that is configured to use Windows Authentication can now connect much more seamlessly; making it easier and faster to share and collaborate with other users.
Accessibility mode improvements with MicroStrategy Web

MicroStrategy 10.5 is introducing several new enhancements targeting the Screen Reader Mode, a preference available for people with disabilities. With Version 10.5, we are improving Report Services document selectors, grid headers, keyboard navigation and highlighting capabilities with scrollbars, that will support this mode.

View filter in presentation mode

With version 10.5, MicroStrategy supports view filtering on grids and graphs in documents, when run in presentation mode. Users will have more interactive options and can now include filters on-the-fly to slice and dice their data, even when they are in presentation mode.
Usability improvements and UX consistency on MicroStrategy Web

MicroStrategy 10.5 introduces a list of features intended to provide a better experience for MicroStrategy Web users. The enhancements include easy access to recent or current folders when saving a document or dashboard, and improved notifications to the user regarding unsaved changes to dashboards, before closing out.

Additionally, enhancements deliver consistency between all the navigation bars within MicroStrategy Web, so users can have a more intuitive user experience, and are able to find relevant menu options faster.

MicroStrategy Platform

Stand-alone utility available for system cleanup prior to installation

With MicroStrategy 10.5, users can choose to run a stand-alone utility that will remove all the MicroStrategy legacy files that conflict with the installation of a newer version of MicroStrategy. Administrators who are installing the enterprise platform will no longer face errors due to older files that are not cleaned up prior to a new installation. With this new utility, IT admins will no longer have to manually remove these unwanted registry or configuration files nor troubleshoot tough errors involving previous installations. It is now possible to reuse a machine which previously had MicroStrategy on it and run the Express install on it without having to perform additional manual clean up.

New Enterprise Manager dashboard for system admins

With version 10.5, a new Enterprise Manager dashboard is added that helps system admins gain a high level view of the operating status of their MicroStrategy environment. The two areas of analysis available are Trends (provides a high level snapshot of the Key Performance Indicators in your MicroStrategy environment) and Peak Usage.
MicroStrategy Mobile 10.5

iOS - Visual Insight Enhancements

Enhanced custom visualization API support in mobile dashboards

In 10.5, custom properties, color-by and palettes properties are supported in custom visualization i.e. D3, to add greater parity with Web Visual Insight. App designers now have the flexibility to add different color and properties to attribute elements as differentiators.

With 10.5, users can render KPI, Bullet and Gauge custom visualization from the visualization gallery on their iOS devices, providing users with a wider choice of representing their data via custom visualizations on iOS devices.
**Improved combination charts**

Users can now render the tick, circle and square shapes in combination charts. This enhancement maintains consistent user experience between MicroStrategy web and iOS dashboards.

**Additional map features**

Legends can now be displayed in iOS VI maps for user reference. Prior to 10.5, iOS VI maps used color by metric for both size-by and color-by functions. With 10.5, iOS VI maps will use separate size-by and color-by metrics, providing more dimensions in data representation.
Custom error messages

Mobile administrators can customize error messages during report/document execution to make the error messages easier to understand by mobile users. Administrators can also override unhandled intelligence server error messages.

<error code="-2147466604" displayError="true" showContactInfo="true" target="" useOriginalMessage="false">
<message XMLmerge_id="1" desc="The page could not be displayed because cube is not published or dataset returns an error. Please publish the cube or contact your administrator for help." desc-id="mstrWeb.14780"/>
</error>

Ability to create customizations using Swift

With 10.5, mobile app designers can create customizations using Swift in MicroStrategy Mobile iOS SDK, which provides app designers with a faster, safe and more modern development ecosystem.
Android

**Custom font support**

Style dashboards using custom fonts to adhere to corporate style guidelines, display special characters and much more.

**Ability to embed image in dashboards**

With 10.5, users can now consume embedded images from a file or local disk on mobile dashboards as previously available in iOS and MicroStrategy Web. The image types supported are png, jpg, jpeg, gif, bmp.
Security

2-way instant communication

In MicroStrategy 10.5, Usher’s 2-way communication capability enables an Usher Professional user to instantly message an individual or group of Usher Security mobile app users. Messages are sent via push notification directly to each user’s mobile device using an Usher-secured communication channel. Easy-to-use, low friction responses are in the form of configurable single-choice soft buttons (e.g. Yes, No, and Help-In Distress).

Building on the existing 1-way message broadcasting feature, Usher’s 2-way messaging capability enables a simple yet effective feedback mechanism. All responses feed into a dashboard in Usher Professional for tabulating like-responses and drilling-down to individual responses. Usher’s 2-way messaging capability enables wide variety of use cases and applications where secure, private communication with an authenticated user is important. Examples include, but are not limited to, instant communication with geographically distributed workforce, instant polling of a set of users, emergency response by communicating individual status and locate where to send help for users that need help or have not responded.
Usher Security Client: simplified badge setup with auto server configuration

In MicroStrategy 10.5, it is now much simpler to recover or load an Usher badge in the Usher Security client. Usher Security mobile app users simply navigate to an Usher-enabled application in their browser and scan the QR code to attempt access regardless if the user has the correct badge provisioned to their mobile device. If the user’s Usher Security mobile app lacks the correct server configuration or required badge, the user is prompted to approve the action of setting the configuration and recovering the badge. If the corresponding Usher Network leverages Active Directory or an Open LDAP directory, the user is also prompted to enter their username and password.

![User scans Usher QR Code on the login page of the application.](image1)

![User approves new server configuration.](image2)

![User approves badge recovery to download the corresponding Usher badge.](image3)

Usher Android Client: Proximity based access with auto-discovery

Android users can now take advantage of proximity-based detection using Bluetooth (BLE) rather than manually selecting digital keys or scanning QR codes. Usher badges on Android devices can be discovered automatically by Usher Professional and custom applications built on top of the Usher Mobile SDK, including the Usher Badge Reader apps for physical access control. The Usher Security mobile app can be in the foreground or in the background. Apple iPhone users already enjoyed this capability.

Usher Gateways: Okta integration

In MicroStrategy 10.5, Usher has been integrated with the Okta identity and access management platform via SAML. Any customer who is using Okta within their enterprise can now enable their users to single sign on (SSO) into applications by using password-free Usher digital credentials. This feature will enable single sign-on to over 5,000 applications which are pre-integrated with Okta’s identity cloud.

The new feature in Usher leverages Okta’s inbound SAML option and requires only simple configuration including downloading the IDP certificate from Usher and uploading Okta service provider metadata.
Usher Gateways: AMAG symmetry and Brivo OnAir PACS support

In MicroStrategy 10.5, Usher now works with AMAG Technology’s Symmetry and Brivo’s OnAir physical access control system (PACS). Usher Security mobile app users can digitally interact with their enterprise physical infrastructure including accessing doors, gates and other resources managed by these PACS. AMAG and Brivo customers can now reduce friction and frustration of users by leveraging soft keys, QR codes and Bluetooth beacons supported by Usher to access doors leveraging the user’s mobile phone to serve as a secure digital badge. AMAG and Brivo customers can also exploit mobile biometrics, entering of PIN codes, geo-fencing, 2-way messaging and other advanced features not available in traditional and competitive badge solutions. Usher Administrators are also able to leverage rich Usher mobile app telemetry data to run pre-integrated analytics reports on usage behavior, gateway utilization and other physical access intelligence.

Usher Network Manager: Control number of authorized devices

In MicroStrategy 10.5, Usher Administrators can limit the number of mobile devices that users can install their badges. A different limit can be set for different Usher badges. Limiting the number of devices per badge type improves a security posture. Device management and central governance is further enhanced by layering this new feature with the previously released Phone Number Enrollment option to more tightly bind a user to a defined set of devices.
Usher Network Manager: Customized email templates

In MicroStrategy 10.5, Usher Administrators can customize the email templates that are used for the badge provisioning and recovery process. Full HTML-based customization includes adding or modifying any text, hyperlinks and images, personalizing messages with the user’s name, phone number and other key identity attributes, as well as exploiting other unique Usher Internal Constants for the particular user to make conditional statements (if/then/else). A real-time preview pane and email test tool ensures that all messages match the customer’s design. This feature ensures compliance with corporate branding policies and enables increased levels of ease-of-use and personalization for Usher email messages.