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What’s new in MicroStrategy 10.9

MicroStrategy release 10.9 further delivers on our vision for **Intelligence Everywhere**. More than any other analytics solution, MicroStrategy 10.9 delivers analytics that works for everyone. This release represents the biggest leap forward since the launch of MicroStrategy 10 and lays the foundation for the next generation of the MicroStrategy platform. The release celebrates the culmination of a year’s worth of development, spanning four releases and over 1,200 features.

Simultaneously with the 10.9 feature release, MicroStrategy 10.4™ Hotfix 5 is generally available to customers (10.4.5). This hotfix improves overall product stability and includes over 200 customer-reported enhancements and fixes across the platform. Furthermore, this latest update to our platform release will provide driver and feature parity for relational and big data gateways with the latest MicroStrategy feature release (10.9). This enables access to brand-new data sources and provides optimized connectors for additional sources — allowing customers to expand and enhance their existing applications. Installing this hotfix will only update the drivers that ship with MicroStrategy and will not introduce any functional changes. Existing applications will continue working in the same way as before the upgrade, and no SQL changes are expected. This allows for a risk-free upgrade to 10.4.5. Customers that want to take advantage of changes to existing connectors or enable new connectors will need to explicitly enable them in their applications.

This new hotfix is now available for MicroStrategy Cloud, as well as for enterprise downloads for Windows®, Linux, AIX®, and Solaris, and may be applied directly to existing 10.4 deployments without a metadata update.

Enterprise Analytics

**MicroStrategy Dossier**

MicroStrategy 10.9 introduces MicroStrategy Dossier, the next step in the evolution of business analytics. Dossiers are a new method of consuming analytics that your end users are going to love. With the new dossiers, we’ve built interactive books full of near-real time analytics that are simple for everybody to access and use. With collaboration, version 10.9 makes it easy to add comments directly into your analytics and collaborate on the live analytics in front of you - without losing that value in email inboxes. And with the new MicroStrategy Library, we’ve built a place where anybody will be able to find their analytics either using the new powerful search or the visual thumbnail views.

Featuring a brand-new streamlined interface, dossiers go beyond dashboards and bring together data from across the business in intuitive, interactive applications. Dossiers are organized in pages and chapters, that make it easy to navigate and share the reports and visualizations you’re familiar with. And with live collaboration, commenting, and notifications, your team can stay in sync and be ready to take informed action when it counts.

Dossiers replace dashboards with version 10.9. Key features of the MicroStrategy Dossier, that available for both web and mobile users are:

- A more modern interface with intuitive menu options for both analysts and consumers
- Powerful filtering options, with new visual filters
- Proactive alerts and push notifications for both web and mobile users
- Collaborative discussion threads for real-time and contextual idea exchange
With this release, MicroStrategy modernizes the interface by focusing on making the product easier-to-use and more intuitive. Organizations can now deploy MicroStrategy to a wider set of users across the enterprise, and get it into the hands of everyone — regardless of skillset, and for the first time, delivers the means to accelerate the adoption of analytics across the enterprise at a much faster rate.

Brand new analytics experience for both analysts and consumers

Dossiers enhances the experience for both analysts and consumers, by enabling storyboard, collaborative and published analytics.

- **Dossiers for authors or analysts**: Dossiers offer analysts or dashboard authors get a completely revamped interface for data discovery - to access data sources and build dashboards in minutes. With new tools, they can build dashboards or reports that are responsive in design, create new visual filters that are more intuitive, watermark content with a certified mark, and much more.

- **Dossiers for consumers**: Consumers gain a much more enriched experience with the new dossier library. It allows end users to find content more easily, collaborate with other users via discussion threads and much more. All of these features are available to consumers on both web and mobile, making it possible to access information and make decisions on any device.

New features available to both authors and consumers are described in the following section.

**MicroStrategy Library**

The MicroStrategy Library is a personalized portal for every end user to access all their BI content or dossiers. Dashboard authors can easily share a link to any dossier, which is hosted in the MicroStrategy Library. End users can login to the MicroStrategy Library to find a list of all dossiers that he or she has subscribed to and has access to.
Each dossier in the MicroStrategy Library is represented by a customized thumbnail image, making it easy to visually identify content. Additionally, powerful search options are available for end users to quickly find data. Each dossier thumbnail also indicates the owner name, last updated time and number of comments made on that dossier. Dossiers in any library can be sorted by name, date, last updated date, or date viewed – all of which makes it extremely easy to find information easily.

New notifications and comments made to the user will show up clearly as an alert, making sure that the user doesn’t miss an update.

Mobile Users can also access the MicroStrategy Library on iPad and Android tablets. Users can easily switch to different library pages and connect to different environment directly from their mobile app.

The MicroStrategy Library is fully responsive in design. Regardless of what browser or device you’re on, it’ll automatically resize as needed. Additionally, within the MicroStrategy Library, users can conveniently switch to a list view to maximize screen real estate which is especially useful on mobile devices with smaller real estate.
Cover Images

The MicroStrategy Library organizes dossiers by displaying them as thumbnails on the main home page, instead of offering a folder structure to browse through and find content. Designers can easily assign thumbnails or cover pages to every dossier, and that will help them visually identify unique datasets.

Pre-defined sample images are available out-of-the-box on the dossier authoring interface via MicroStrategy Web, but designers also have the option to choose their own custom images and can assign logos, icons, photos etc. as well.

Modern search options for the MicroStrategy Library

Finding content within the MicroStrategy Library is exceptionally easy with a powerful search engine that is driven by a simple and intuitive search bar. Consumers can search content based on dossier names, owner names, and even by the names of chapter or pages available within the dossier itself. Additionally, users can also search by dimension, metric and visualization names as well.

The search bar offers suggestions based on what the user is typing, that makes finding content faster and more intuitive.
New Table of Contents panel, that allows consumers navigate through stories easily

MicroStrategy dossiers offers a new way to consume analytics, that makes it extremely intuitive for business users to navigate through data and stories. BI content is organized as chapters and pages within the dossier, presenting information in a way that everyone instinctively understands.

A Table of Contents menu option offers end users on both web and mobile, the ability to easily navigate through chapters and pages within a dossier. It offers end users the ability to find high-level content as well as more granular information that they need, with easy navigation options. This is possible since the chapters and pages can now be listed in a hierarchical format. Users also have the option to jump across chapters and pages and quickly dive into the page they want to analyze.

In addition to the Table of Contents view, (also known as List View), users have the option to choose from tab views as available in the previous versions (which can be placed on both top and bottom).

Enhanced filtering experience for consumers

MicroStrategy Dossier delivers a completely revamped filtering experience for consumers, with a simple and clean design that makes slicing and dicing of data easier than ever before. Available both in web and mobile, the new and modern filter panel can be locked into place on the dossier or hidden as needed, giving end users the flexibility to decide how they’d like to use dashboard screen space. Standard filters offer multiple display options including drop down, check box, text search are available to the end users, all of which offer a more modern looking UX.
Filters can be applied to both attributes and metrics; The filter panel displays a list of filters on attributes or metrics, that target the data at the chapter level. Cascading filters are also available to end users, so the selections in one filter will affect the choices displayed for ensuing filters on the panel.

**Visual Filters**

MicroStrategy dossiers make the filtering options more intuitive and modern with its ability to use any visualization, chart or graph within the filter panel. Visually presenting selections in new filter panel enables the user to make more informed selections – and also frees up dashboard space to focus on the results – rather than giving up screen real estate for ‘selectors’.

Adding a visual filter to the dossier is just as simple as adding a standard filter. Designers can choose from any of the charts or graphs available on the dossier authoring interface (just as they would design a new visualization) and use it as a filter on other charts and graphs within the dossier. For instance, designers can use a map visualization as a visual filter, and users can click on bubbles or shapes on the map, to filter content down to that geography.

Available both in web and mobile, this new feature makes it more visually intuitive to narrow focus within a dossier. It is especially useful when the number of data points are extremely high for a standard dropdown or radio button filter. With visual filters, business users can use bar charts, pie charts, or even geography maps as filters within the filter panel – making it incredibly easy to limit the data and focus within a dossier. The examples below highlight a heat map and a geography map, both acting as visual filters within the dossier consumer interface.
Advanced Qualification Filters

The new filters within dossiers are not only intuitive but also powerful, as they can include complex filtering conditions and set analysis. Advanced filter qualifications can be included at the visualization level with the following options:

- Attribute form qualifications (Contains, Begins with, Ends with, etc.)
- Attribute element qualification (in list, not in list)
- Set operators for Filters (AND, OR, OR NOT, AND NOT)
- Relationship filters

Place filters anywhere, with In-canvas Filters

In addition to using standard filters or visual filters, both of which are within the filter panel, dossiers can also include filters within the main canvas itself. The filters can be formatted as selectors (buttons, text searches, drop down, radio buttons or sliders) on the dossier interface itself, and can target other visualizations on the canvas. Additionally, existing charts and graphs on the dossier can also be used as filters to control the data on other visualizations on the dossier as well.
Page-to-page linking

With MicroStrategy 10.9, users can use a visualization on a particular page to control other visualizations on the same page or on any other page within the dossier.

To add these filters, authors of dashboards can click on the “select targets” and choose from a list of visualizations that will be enlisted on the dossier. This feature gives consumers a far more intuitive and powerful means to switch between pages and chapters, while carrying forward the context.

Collaboration

Consumers or end users have the ability to collaborate with each other via discussion threads or comments that can be made within the dossier interface. Anyone who can access a dossier via the MicroStrategy Library, can add comments that are specific to that dossier. Users can ask questions, highlight trends, and call attention to specific data points on the dossier itself. All comments are saved on the discussion thread and end-users who have access to the dossier can see the entire string of comments with time stamps.
**Share personal views of dossiers in real-time**

End users who want to collaborate with other users, can send other users a link to the exact same “view” of the dossier that they are looking at for context. Especially helpful to end users who apply several filters to slice and dice the data on a page, changing the state of the page from its original state, and would like to share a link with others to the current state of the dossier without actually saving the dashboard.

Users will be able to embed his or her current filter criteria using either the @ filter syntax by simply clicking on the filter icon within the comments panel. End users who receive this link, will be able to launch the exact same view of the dashboard, with all the same filters applied as the person who shared the link, and can contextually share information.

**Tagging users with comments**

End users can mention other user’s names within comments to get their attention. Tagging a user will send notifications on both web browsers and mobile devices directly to that user whose name has been mentioned in the comment.

Users can see other users who are online and can use the `@<name>` syntax to send notifications directly to other individuals or groups. The notifications are delivered via pop-ups to users who are online on a web browser or on the mobile app. Notifications are also seen as alerts on the dossier itself on both web or mobile, for anyone who isn’t online when the comments are made.
**Browser and mobile notifications**

Users can send notifications to other users or user groups by tagging them within comments on the dossiers. The ability to do this ensures that no update ever gets missed, and will drive up the overall adoption of the dossier.

Notifications are sent in real-time and across all interfaces. Web users can get notifications via email, browser banners, and as page and library alerts. Mobile users also receive alerts and notifications through the device’s native push notification system in one of the three forms: A badge (a graphic associated with the application), a home screen notification (a message which the user can view and optionally interact with), and/or a sound. In the case of multiple notifications, users can expand and collapse the notification window from the home screen using native device gestures.

![Browser and mobile notifications](image)

**Certification of Dossiers and Documents**

Analysts, dashboard authors, or data stewards now have the ability to watermark BI content with a “certified” stamp. The purpose of the certified stamp on the dossier is to highlight dossiers that have been vetted by the right authority to only contain trustworthy information.

With dossier authors able to blend data from both system of record and external or personal sources, a common need for organizations who have invested in self-service strategies is the ability to ensure that everyone is able to differentiate content that is tied to certified versus untrustworthy data. This certification process, which is often associated with governance workflows may vary by organization; but the ability to watermark BI content with a “certified” stamp offers an easy way to manage governance. This step will allow business users to easily identify what content has been approved by the organization and are able trust the data.
Data stewards or analysts will need the right privileges to certify content, which can be assigned via the User Manager.

Sharing

New menu options are available both on MicroStrategy Web and Library, making it easier than ever before to share dossiers for both authors and consumers respectively.

Sharing options for dossier authors or analysts:

Dossier authors or analysts can share separate personalized links for three different use cases. Links can be shared with:

- **Other authors or analysts who can edit the dossier**: This link will give users access to the authoring interface of the dossier that will allow end users to add new data sources, add and modify new visualizations, add or modify filters, create or rearrange chapters and pages and more.

- **Consumers or end users who can view and interact with the dossier**: This link will give users access to the dossier in the MicroStrategy Library, and will allow end users to read and interact with the dossier. Consumers can switch between pages, change filter selectors, drill or sort on data, and make comments via the discussion threads – but will not give them the ability to edit and save changes to the dossier. With this link, consumers will not be able to edit the design of the dossier. When a link is shared with consumers, it also gives those end users the option to save the dossier to their MicroStrategy Library, and in this way, each user will have a single portal to access all dossiers that have been shared with him or her.

- **Developers who want to embed the iframe into an external portal**: The iframe can be used to embed directly into a 3rd party portal or business app, so that the same dossier can be accessed by users directly from those applications.
Analysts or authors can easily click on the “Email Link” option to launch a new email with the link in the body of the email, making it incredibly seamless to share direct access to the dossier – both for web and mobile users. Analysts or authors can also invite other users to access the dossier on Web by entering their names and assigning view, modify, full control, denied all and custom privileges.

Additionally, authors can also schedule the delivery of the dossier with time and event schedules, or manually download the dossier as a .mstr or PDF file.

**Sharing options for consumers:**

Consumers can also invite other users and share dossiers directly from the MicroStrategy Library.

Users who are invited to the dossier, will get an email notification with direct links to access the dossier on both web and mobile.
Additionally, users can also get a link to the dossier as well, and can chat or email the link to other users directly as well.

End users can also download the PDF version of the dossier or can download an interactive MSTR file, of the dossier – both from web and mobile.

**Responsive Design**

Designers have the ability to create dossiers that are responsive in design. This allows them to control how the dossier is displayed on different devices or screen sizes.

Dossier authors or analysts can arrange the visualizations with complete flexibility on a dossier interface. As the width of the screen reduces when seen on different screens or mobile devices, the visualizations that are horizontally positioned next to each other, will automatically rearrange themselves into a single column. Designers who want 2 or more visualizations to always remain horizontally side-by-side, can choose to group multiple visualizations together. Grouped visualizations will resize together *with the same aspect ratio* and as a single unit, despite the width of the browser or the device.

Designers also have the ability to preview the content for various size configurations, as they author the dossiers on a web browser. Analysts can resize the browser and see the end-result, and how the visualizations rearrange themselves without having to use multiple devices to test it.
Dossiers can save their last view for each user

MicroStrategy automatically saves the latest state of the dossier for any consumer. Any user that open again his/her dossier, will see the chapter, panel, filters, and manipulations performed the last time it was opened. Additionally, users have the ability to reset the dossier to it’s last published state with a single click or tap.

In addition to introducing the new dossier, MicroStrategy 10.9 offers several other enhancements with MicroStrategy Web and Server.

New MicroStrategy Project connector, to access data between projects

MicroStrategy 10.9 for the first time allows users to access datasets between projects. Users can now use this connector to access cubes and reports from one project and build dashboards on another. This connector, built using the JSON Data API greatly increases the flexibility of sharing information and BI content across projects.
New certifications for data sources

MicroStrategy 10.9 certifies the latest data sources. New certifications available in version 10.9 are listed below:

- Maria Database 10.x (certified as a data warehouse)
- Apache Hive 2.x (Full encryption for Hive with support for SSL)
- Spark SQL 2.0
- MapR 5.2
- Druid

Access Semi-structured data with new Solr and Elasticsearch connectors

MicroStrategy 10.9 delivers an out of the box connector to Solr. This connector allows end users to run queries on semi-structured or text-based data. This connector was built using our Data Connector API, and is available to download on the data connector library, which is on the MicroStrategy Community.

The connector supports basic authentication and allows users to govern the maximum number of documents to import. The new connector can be access here: https://community.microstrategy.com/s/gallery

Also, new in version 10.9, a connector to Elasticsearch is now available out of the box for web users. With this new connector, analysts can run queries against semi-structured data like log files, text scripts. Data is available to MicroStrategy users in tabular format, and can be readily used to build reports or dossiers.

Data from Solr and Elasticsearch is available to MicroStrategy in JSON format, allowing the connector to parse the data into tabular format for MicroStrategy applications. For more details on how to connect to these options, refer to the data connectors gallery.

Enhanced connectors to improve performance

MicroStrategy 10.9 improves performance by pushing down more functions to the database, including case, least, greatest and more. The latest version delivers improvements for the following connectors:

- Presto
- Snowflake
- Amazon Redshift
New connectors on the Community

The Data Connector library on the MicroStrategy Community hosts custom connectors to several unique data sources. New connectors are now available to download on the library, including connectors to:

- SurveyMonkey: Allows end users to access survey results from Survey Monkey directly into MicroStrategy, and to visualize results quickly.
- Fitbit: Allows end users to access activity time series data from Fitbit directly into MicroStrategy, and allows users to build visualizations in minutes.
- JethroData: The new driver-based gateway gives organizations a new way to make faster queries to Hadoop.

Direct data access for Hadoop Gateway

New in MicroStrategy 10.9, the Hadoop Gateway can now not only connect to Hadoop and import data as in-memory cubes, but can also be used to perform live queries against the data source using Live-connect. The ability to connect directly to Hadoop greatly reduces latency in accessing the file system, and ensures that users have access to the most current data.
Hierarchy Reporting

Starting with MicroStrategy 10.4, analysts can use the platform to create and interact with hierarchy reports that visualize ragged hierarchies. The ability to build hierarchy reports is supported for MDX sources, including MSAS and Essbase.

When users connect to these sources, the product maintains the hierarchies within their sources as it imports the data into MicroStrategy. The product does this by creating a new “hierarchical attribute” in a cube that is stored on the Server, and can be used as any other reusable object within other reports or dossiers by MicroStrategy Web users. The data from these sources, stored as in-memory cubes, can be used by other analysts for data discovery and can use this data to build dossiers and other BI content.

MicroStrategy 10.9 introduces new features to enhance the hierarchy reporting capabilities.

Ability to sort based on the sort order defined in the data source

Often the data in MDX sources is ordered in accordance to business rules or requirements. Prior to version 10.9, when end users connect to MDX sources and create hierarchical attributes, the elements are sorted by the ID form by default. This happens even when the elements are not sorted by the ID form in the database itself; as a result, when the elements are displayed on a grid, they may not be sorted as the business user expects.
Starting in MicroStrategy 10.9, elements on a report, containing the hierarchical attribute will be sorted by default by the order defined in the data source. So when the hierarchical attribute is first displayed on a grid or the filter panel, the elements will be displayed as the user expects.

**Dynamic filters for ragged hierarchies**

The data in hierarchies often keep changing and new elements are either added or removed within the MDX data sources. With MicroStrategy 10.9, users can define filters that will dynamically include new elements as the hierarchy structure changes in the database, without needing to re-publish the cube.
Custom MDX queries for derived elements and metrics

The ability to use functions and complex formulas to define derived elements and metrics is critical to fulfill many business reporting requirements. This is especially true on MDX sources, where time transformations can be done only by using functions.

MicroStrategy 10.9 allows business users and analysts to create derived metrics or attributes, by modifying existing elements within the MDX source. Users can apply mathematical or other transformational functions and can now create derived elements within hierarchy reports using more complex formulas and calculations. In addition to using out of the box functions, users can also manually write custom MDX queries to achieve this. Business users now have more flexibility in defining derived elements and metrics, and the ability to do more advanced analysis on their data.

Enterprise Embedded Analytics

Embedding API for dossiers

MicroStrategy 10.9 introduces a new API that makes it easy to embed dossiers directly into third-party applications. This new API makes it easy for users to embed the interactive dossiers in applications such as blogs, articles, portals, and more. With this embedding API, users can leverage JavaScript to expose MicroStrategy capabilities and allow third-party applications to interact with MicroStrategy content and associated functionalities.

Capabilities that can be exposed via the API include: navigation to pages and chapters, apply filters, get filter elements, get a list of chapters, and more. Single Sign-On can also be implemented so that users can seamlessly access the dossier in any third-party application, without getting prompted to log in.
New REST APIs

MicroStrategy has invested in making the platform more open to the larger technology ecosystems, that allows easier embedding, integration and extension of the capabilities. In recent feature releases, the platform has delivered the following advancements for embedded analytics: (JSON API) third-party applications can easily gain access to system of record and governed data via MicroStrategy, (Push API), push external data directly into MicroStrategy, and (Data Connector API) connect to custom data assets including proprietary data sources.

With MicroStrategy 10.9, REST APIs are a part of the MicroStrategy Library and is no longer a separate install.

The latest release also offers new APIs, that allows organizations to build custom workflows for 3rd party applications.

- Third-party applications can now login using all the supported authentication modes. The REST APIs can be used to authenticate users against the Intelligence Server or any third-party server.
- Third-party applications can leverage the MicroStrategy metadata and its associated security. For example, search for specific MicroStrategy objects, get MicroStrategy folder content, leverage and manage the users and security, obtain a list of projects a user has access to, and much more.
- Create, update, and delete database connections in the MicroStrategy metadata, which can be used to automate the update of data source credentials.
- Ability to programmatically manage objects in the MicroStrategy metadata, certify or decertify a report or dossier, delete objects, and update object information.
- Execution and exporting of dossiers and documents to a variety of export formats.

A detailed list of new APIs is available with the product documentation. With these new set of REST APIs, developers are now empowered to build more powerful data-driven client applications with ease.
Enterprise Cloud

MicroStrategy on AWS

The MicroStrategy for AWS solution continues to gain traction. As a fully-functional enterprise analytics and mobility deployment setup and live from click to production in minutes, it’s the quickest way to deploy a MicroStrategy 10 environment. Version 10.9 enhances it further with support to deploy instances into existing AWS Virtual Private Clouds, upgrade in a single click, and enabled the deployment of MicroStrategy on AWS into eight AWS regions (N. Virginia, Ohio, Oregon, Ireland, Frankfurt, London, Sydney, Tokyo), and have further enhanced the upgrade experience so it is fully automated and available to immediately or set by a schedule.

Seamless Hotfix Upgrades

This new enhancement makes upgrading the platform easier than ever before. Starting today, administrators can upgrade to the latest hotfix with a single click.

With the general availability of any hotfix release, the latest version will be automatically available on the MicroStrategy on AWS provisioning tool. An upgrade button will appear on the main administrative page, and by clicking on it will automatically validate the upgrade process and administrators can then choose to schedule the upgrade at an off-peak time or can also upgrade instantly. For instance, for deployments that are on 10.4.4, will now see an “upgrade” button. Clicking on which, the ensure deployment will be upgraded to 10.4.5.

The process will automatically restart the MicroStrategy Server, and the entire process takes less than an hour. Full backups of your environments are also created during upgrades.

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<th>MicroStrategy on AWS</th>
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<td>192 actions</td>
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Deploy MicroStrategy into Existing Virtual Private Cloud (VPC)

Starting in MicroStrategy 10.9, customers will be able to deploy, manage, upgrade and resize their own MicroStrategy on AWS environments within their own VPC and still leverage the powerful deployment and management tool.
Deploying MicroStrategy into existing VPC accounts will now give customers full control of their own AWS security settings.

**Global Expansion**

MicroStrategy on AWS now allows organizations to deploy the application directly into data centers in the North America, Europe, Australia, and Asia. The new regions now available will allow organizations to deploy in a data center close to home, so they can deliver faster response times for mission-critical KPIs.

This makes it easier for organizations to comply with local data regulations. Customers can now deploy MicroStrategy on AWS in data centers in 8 different locations: Northern Virginia, Ohio, Oregon, Ireland, Frankfurt, London, Sydney, and Tokyo.

**Languages**

In addition to expanding the list of data centers around the world, MicroStrategy on AWS provisioning tool is now available in 9 different languages: English, French, Italian, Portuguese, Spanish, Dutch, Japanese, Korean, and Chinese.
Enterprise Mobility

In addition to introducing the new dossier mobile apps, MicroStrategy 10.9 continues to expand server side and client side functionality on MicroStrategy Mobile iOS and Android apps.

MicroStrategy Dossier for iPad and Android

As mentioned in the Analytics section of this guide, users can consume dossiers via mobile. This section highlights some mobile-specific capabilities beyond what’s already been detailed.

New mobile app for MicroStrategy Library

To consume Dossiers on mobile, users should download the MicroStrategy Dossier for iPad and/or the MicroStrategy Dossier for Android apps on the respective Apple and Google Play app stores.

Users can configure the app by tapping on a Library link shared with them and following login prompts. Alternatively, users can manually add environments from the Advanced menu options.
Quickly toggle between different Library environments

Rather than having to re-configure the app each time, users can store multiple environment configurations in the Mobile Dossier app. With two quick taps, users can easily switch between the different environments.

For users that regularly access Dossiers in separate Libraries, this provides significant convenience and time savings.

The Dossier app also includes Folders to access downloaded .mstr files and PDF exports.

Rather than having to save these files outside of the app, these folders provide a convenient place to store and view downloaded dossiers within the app.

Flexible export to PDF

Users can export entire dossiers or single chapters of dossiers to PDF.
Share via native extensions

Mobile users have the ability to share links to Dossiers, .mstr files and PDFs from the Dossier app using native OS extensions. iOS and Android users can mail, print, copy, use communicators such as Slack and AirDrop (only iOS users), or import to other apps (i.e. iBook, Dropbox).

Native touch-optimized controls for optimized workflows

Users can take advantage of native touch-optimized gestures to manipulate content within their dossiers. Using long swipe, users can sort charts in ascending or descending order. Long and/or double tap displays a filtering menu with Keep Only, Exclude or Drill options. Users can also use free form lasso options to multi-select elements in visualizations.

Leveraging native mobile controls provides users with more advanced options to interact with dossiers.
Search within Maps

Users can search for attribute elements on maps directly from their iPad and Android tablets. The searched element gets highlighted in the map and provides users with the location and other information instantly. If the searched element is within a cluster, the whole cluster is highlighted specifying the number of elements found within the cluster.

This feature—previously available on MicroStrategy Web dashboards—adds parity between Web and Mobile applications, providing users with a seamless map search interface.

Automatically align to any form factor with enhanced responsive design capabilities

The MicroStrategy Dossier mobile app provides significantly enhanced responsive design capabilities, making the experience seamless when switching between interfaces, devices and form factors. Dossier components, such as visualizations, filters, images, and notification panels are automatically resized and arranged for optimal display on iPads and Android tablets. Though there are several form factors and aspect ratios, MicroStrategy prioritizes the visualizations view, by adjusting spacing and padding, and object alignment.
Real-time alerting through native device push notifications

For customers who deploy MicroStrategy on AWS, alerts and notifications can be delivered through the device's native push notification system without requiring any SDK configuration. Alerts can be delivered either as a home/lock screen notification (a message which the user can view and optionally interact with) or as a banner while in-app. The mobile users are notified when they are mentioned in a collaboration post and can take action directly from the home screen or lock screen. In the case of multiple notifications, users can expand and collapse the notification window from the home screen using native device gestures.

Support for AppConfig on iOS and Android

The mobile Dossier apps for iOS and Android have been compiled using AppConfig guidelines. Without having to employ an SDK, customers can deploy the application to their users securely as well as configure it remotely via any of the leading Enterprise Mobility Management (EMM) vendors compatible with AppConfig standards.
MicroStrategy Mobile for iOS

Enhanced mobile server logging

The mobile server logs generated in 10.9 are now grouped into distinct modules, such as memory usage, performance statistics, network bandwidth and much more. This new log framework makes the logs more digestible for analysis; Users can search, view and analyze logs by modules rather than having to review one massive pile of rows. For example, users can focus on reviewing the performance log to analyze processing time for server and network operations.

Relevant email subject with Annotate and share

Rather than displaying “annotation.jpg” as the email subject line, when users share an annotated dashboard via email, the email subject is automatically populated with the dashboard name.

This feature makes it more intuitive for email recipients to understand the analysis another user has shared with them.
Ability to sort projects directly from the mobile app

When users add a project manually via the Settings page in the mobile app, they can sort the projects alphabetically (by name or by description). Prior to 10.9, the projects could only be sorted from oldest to newest.

For customers who have many projects, this makes it easier and faster for users to find their desired project. This parity with MicroStrategy Web provides a consistent user experience and behavior across different web and iOS interfaces.

Optimized image size and resolution with Photo Uploader widget

Image resolution and size when uploading images via the Photo Uploader widget have now been standardized to achieve optimal app performance without compromising image quality.

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MicroStrategy for Android

Enhanced, movable Information Window

In addition to the full screen option, Information Windows on Android can now be displayed on a specified portion of the screen. App developers can specify size and positions, but end users can also manipulate the display of the Information Window on demand.

With so many different Android devices and resolutions in the market, this responsive design capability makes it easier for Android app developers to optimize user experience and provides end users with more interactive controls.
Enterprise IoT

Usher Privacy

MicroStrategy 10.9 allows administrators to tailor their deployment to protect their users’ privacy. Restricting the collection or storage of certain data elements will result in restricting some Usher functions, but this feature provides the flexibility to balance desired functionality with required data collection.

Usher Privacy screen controls:

- Transaction location information
- Bluetooth discovery
- Usher telemetry feed to Analytics

Active Directory controls (existing):

- Control information imported from Active Directory by opting not to import restricted or personal information, e.g., don’t import phone number

Specific Usher Functions Control (existing):

- Control information collected by opting not to require data that should be restricted; e.g., don’t require that users enter their phone number

Discovery with Caching; Filtering / Search on Attributes and Groups (Usher Pro)

Communication tools within Usher have been enhanced, making it easier than ever to send messages to your specific, targeted users. Additional user attributes can be configured in Network Manager for more filter and search options, and a new, streamlined workflow makes managing groups easier.

In addition, the Previously Discovered Users list provides the ability to select users who have recently exited Usher Pro range. For example, a security guard who monitors employees entering an office building could send a message only to those who were recently in the area when a set of keys were found.
Lastly, user data is now cached, providing better discovery and search performance, even when connectivity is low or drops entirely.

**Communicator Available to All Users, with Role-based Functionality Restrictions (Usher Pro)**

Usher Pro Communicator is now available to all users irrespective of their Usher Pro analyst role. However, access to specific functionality can be restricted based on a user’s role and their access level for that badge network, including the ability to view other users’ specific locations and profiles.

As shown on the left, Usher Pro users without the Analyst role will not have access to the map view showing the location of other users. On right, Usher Pro users without the Analyst role will see contact information for a user but will not have access to the “View Profile” link to view the badge interaction history of individual users.

**Usher Badge: Enable NFC for iOS Devices**

Now, both Android and iOS device owners can enjoy the security and convenience of using NFC tags to access resources, which has the advantage of explicitly signaling the user’s intent to access the resource due to its very short range.

Usher supports NFC tags on iPhone 7, iPhone 7 Plus, and iPhone 8 devices running iOS 11. Users select the Near Field Communications (NFC) scanner within Usher and hold their device (or watch) near an NFC tag to execute the tag action. Type 1, 2, 3, 4 and 5 NFC tags are supported.

**Network Manager: Usher Approver Role for Badge Issuance / Reactivation**

Enterprises require Separation of Duties across many roles, including Badge Issuance Approver, in order to mitigate the danger of a single employee taking unauthorized actions. The Approver role is activated and assignable using Network Manager.

Approvers are responsible for reviewing badges that are ready to be issued prior to their issuance. They may review the identity record, including biographic and biometric data, and enter notes (e.g., a case number, background check results, etc.) to explain the approval decision, before selecting “Approve” or “Deny.” The capability is available in workflows for all new badges and badges re-issued after being previously revoked centrally.
**Usher Inbox: Pending Message Indicator**

A new display indicator on the inbox icon shows the number of unread messages, so users don’t have to click into the inbox to check for messages. Once all messages have been read, the indicator is removed.

![Badge Image]

**Usher Badge: Local List of “Scanned Actions” on Usher Client**

Users now have personal real-time analytics showing their own scan history, with the ability to identify the scan date and time, the resource being accessed and badge used, and the results of the scan. Third-party (non-Usher) codes are also supported, for a complete history of scanning activity.

![Scan History Image]

**Desktop Agent: Using Android, Unlock/Login to Windows 10 and Unlock MacOS**

Now, Android users can log in to or unlock a Windows 10 computer and MacOS 10.10 or higher computers. Now, both Android and iOS device owners can enjoy the security and convenience of using Usher to log into their computers.