

# Revenera Usage Intelligence vs. Microsoft Application Insights

Selecting the Software Usage Analytics Solution That Meets Your Needs



# Software companies increasingly recognize the business value of software usage analytics solutions that:

- Instrument software applications to capture meaningful data about how customers and prospects are using them
- Help analyze this data to gain actionable insights to optimize product development investment, increase customer adoption, and ultimately grow sales

However, since this product category is still relatively new, not all software companies recognize key differences among the options available to them. Clearly understanding these differences is crucial for choosing a sustainable, scalable solution that delivers ROI rapidly and scales to meet existing and future requirements.

This paper clarifies key considerations surrounding software usage analytics, helping you address your real needs without introducing unnecessary costs or management complexity. To do so, we compare two offerings: **Reverera Usage Intelligence**, which is defining the category; and **Microsoft Application Insights**, which is sometimes viewed as an alternative.

## Reverera Usage Intelligence: A Brief Introduction

Usage Intelligence is the first software usage analytics solution purpose-built for distributed C/C++, .NET, Obj-C and native Java applications on Windows, Macintosh, and Linux.

It provides extensive out-of-the-box tools for capturing granular information about application usage and software and hardware platforms and environments; and surfacing user behavior patterns to help fix usability problems, plan better roadmaps, and improve sales and marketing initiatives.

It also includes robust in-application messaging to help software providers improve the relevance and timeliness of their communications with customers and trial users.

## Microsoft Application Insights: A Brief Introduction

Microsoft Application Insights was built by Microsoft to solve an important, but different, set of problems.

It helps organizations understand the performance of their web-based applications running on the Microsoft Azure cloud platform, to quantify the breadth and impact of application failures, availability issues, bottlenecks, and slowdowns. It also aims to help customers identify the root causes of cloud application problems, so these can be addressed more quickly.

# The Differences Have Powerful Cost and Management Implications

Since Microsoft Application Insights can be adapted to capture and aggregate raw data about desktop applications, some customers envision it as a potential software usage analytics solution. However, as it was designed specifically for performance monitoring of Azure applications, it lacks many key elements required by desktop applications. As a result, these must be designed, built, and managed by the customer.

For software companies, the two products have radically different cost and management profiles. As we shall see, in many respects,

choosing Microsoft Application Insights as a software usage analytics solution for distributed Windows, macOS, or Linux applications resembles choosing a build-it-yourself approach. Significant engineering resources are needed to collect, visualize, and analyze usage data, and as your requirements become more complex, development investment and maintenance costs tend to grow significantly.

To understand the differences, we will consider several characteristics of each offering.

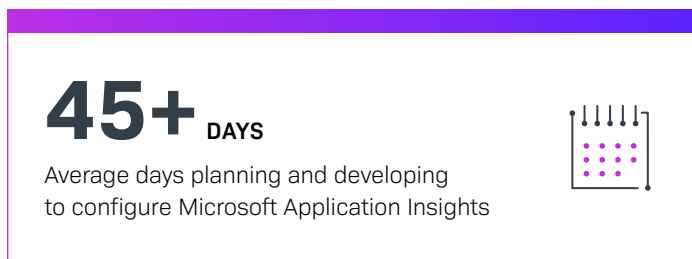
## Planning

Reverera Usage Intelligence, as a purpose-built software usage analytics solution, embeds extensive out-of-the box knowledge about:

- Metrics and KPIs that software companies typically need to collect
- Client, server, and communications infrastructure needed to support usage analytics
- Flexible types of reports required by diverse software company business and technical professionals
- Evolving requirements for advanced analytics that typically arise as companies mature and grow, and face greater complexity, larger user bases, and more sophisticated challenges

Microsoft Application Insights handles aspects of infrastructure associated with its underlying cloud platform, and stores data in an Azure database. However, software companies are still responsible for:

- Defining how tracking code will be instrumented in client software
- Deciding what data will be collected and how and when it will be sent
- Planning which metrics to report on and identifying SQL expertise to build these reports
- Determining what metrics should be combined, analyzed, and visualized
- Ensuring that the resulting metrics can be easily consumed by different personnel throughout the company
- Building client code to integrate with (and collect data from) client software during installation and usage; handling aspects of network connectivity; and managing data for offline users—all without affecting UX
- Planning for system maintenance (a sizable responsibility when systems involve extensive custom code)
- Anticipating potential costs associated with exceeding Microsoft cloud service plan limits, including data collection and storage thresholds as well as data retention periods



**45+** DAYS  
Average days planning and developing to configure Microsoft Application Insights

The infographic features a purple header bar. Below it, the text '45+ DAYS' is prominently displayed in a large, bold, black font. Underneath this, a smaller line of text reads 'Average days planning and developing to configure Microsoft Application Insights'. To the right of the text is a small icon consisting of a square grid of dots, with the top row of dots being purple and the rest being grey.

---

## Client Instrumentation and Telemetry

Both Revenera Usage Intelligence and Microsoft Application Insights permit you to instrument your client applications via an API that can natively support multiple languages (including C++, .NET, Python, Objective-C for macOS, and Python and C/ C++ for Linux). However, because Revenera's solution was purpose-built for software usage analytics, it includes several crucial capabilities absent from Microsoft's.

For example, the Usage Intelligence SDK automatically generates and manages machine fingerprints and user installation IDs. This enables you to build unique user profiles and usage trends for each installation, and link installation profiles to your download sources and marketing campaigns.

Revenera also provides automated licensing validation, and an easy customer opt-in/ opt-out mechanism. In addition, its lightweight SDK was designed from the ground up to avoid application bloat or any performance impact.

When it comes to delivering telemetry, both Revenera and Microsoft provide APIs—but, once more, the differences reflect Revenera' targeted focus on desktop usage analytics. Only Revenera provides built-in mechanisms to:

- Test for server and Internet availability
- Provide reliable, secure caching in the event of temporary network problems

- Aggregate telemetry for delivery at a specific time to minimize call home traffic
- Give developers full control of when to sync and what to track

Depending on the complexity of your telemetry, building comparable functionality for Microsoft Application Insights may take months of development time.

Revenera client-server communication is encrypted, but you are allowed to choose between HTTPS or HTTP transmission. For sensitive data collection where you want to favor security over coverage, you can force the system to use only HTTPS. For anonymous and less-sensitive industries, transmission can be set to fall back to HTTP with pre-shared key AES encryption, making it easier to track installations behind firewalls and gateway filters that may block HTTPS.

## Data Collection, Management, and Integration

Revenera offers software companies the flexibility they need to gain more value from their usage data, whereas Microsoft establishes limits that can prove costly. For example, Revenera offers unlimited analytics and reporting data export via a Web API, and permits the export of raw event data. In contrast, Microsoft charges for exports through the Continuous Export feature (only available with paid subscription).

Moreover, it can only export directly to Microsoft Azure, which requires paid storage as well as an Azure subscription. Only after

data is exported to Azure can it be reexported to the software company's premises.

Revenera retains telemetry data for at least a year (extensible to five years upon request), whereas Microsoft retains it for only 90 days. If software companies want to retain their Microsoft data longer in order to understand trends over time, they must implement a process to export this data to Azure.

# Reporting

Out of the box, Revenera includes many flexible reports designed specifically to help software companies answer key questions about how users engage with their products. All reports can be customized, segmented and filtered to drill down into specifics, without requiring users to learn any reporting syntax. Revenera's reports include details about:

- Hardware architecture and operating system platforms
- Software environments, including versions, builds, and licensing
- User activity, software engagement, event tracking, and feature usage trends
- License usage, user retention, and churn analysis
- Installation-to-conversion funnels and drop-off rates
- Version and feature adoption
- Usage by geography, region, or language
- Exceptions and stack trace reporting

Microsoft Application Insights dashboards provide significant data on web application performance and failure. However, if software companies want information on how their customers are using distributed Windows, macOS, or Linux applications, they must build most of this reporting from scratch, or create custom dashboards within Microsoft's Power BI analytics engine, potentially at additional cost.

With Revenera, many software companies can get all the data needed by all stakeholders using built-in, out-of-the-box reports. Companies don't need SQL skills to build new reports requested by software development, product management, marketing organizations, or anyone else. For companies that require collection of more custom data to build specific reports, the Usage Intelligence client and reporting framework natively support this capability. For example, you could collect specific string data or name-value pairs every time an event occurs to capture more detailed user environment or application status parameters.

Revenera also supports integration with third party frameworks—such as CRM or BI tools—without significant additional development. Moreover, the Web Reporting API permits real-time reporting in JSON or graphical formats through diverse third-party applications.

**288+** HOURS ANNUALLY

Ongoing maintenance diverted from core product development to Microsoft Application Insights.



## In-application Messaging with ReachOut

Getting the right message to the right user at the right time is crucial to building customer adoption, receiving critical feature usage feedback, and promoting continued revenue streams, whether via upgrades or ongoing subscriptions.

Often, the best time to communicate with your users is when they are engaging with your software. For example, you may want to:

- Send targeted messages about the benefits of and 'how to' use key features not tried yet
- Request feedback about new feature implementations during beta
- Encourage upgrade opportunities with targeted offers

Robust in-app messaging for distributed Windows, macOS, and Linux software is built into Usage Intelligence. This powerful capability, called ReachOut™, supports customized messages to different segments of users. These messages may be delivered via automated pop-ups within your product UI or by manually showing messages in specific areas within your product. ReachOut can even present quick surveys and forward users' answers to whatever survey framework you use.

You can precisely target in-app messaging via filters based on geographical location, customer, age of lead, product details, generic product usage, specific feature usage, environment information, or other properties you define. You can automate delivery and message display, or control delivery manually; test campaigns before rolling them out to entire segments or user communities; and automatically message all users whenever a relevant upgrade becomes available to them.

Since Microsoft Application Insights was not originally designed for these use cases, it contains none of these features. To build equivalent functionality capable of building effective, contextually relevant messages, you would first have to find ways to match message delivery with usage intelligence data collected from each installation. ReachOut provides these capabilities out of the box.

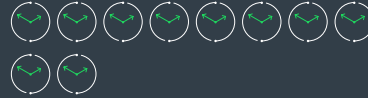
**RESOURCE INVESTMENT TO BUILD SOFTWARE USAGE ANALYTICS**

**MICROSOFT APPLICATION INSIGHTS**

**REVERERA USAGE INTELLIGENCE**

**Defining Your Telemetry Needs**

Specifying requirements for data collection, transmission, reporting and third-party integration



**Writing Code to Instrument Clients**

Building client-server communications protocol; implementing API calls to record telemetry events and parameters; encoding customer data in telemetry; aggregating and optimizing data transmission; creating opt-out functionality



**Defining Server-Side Telemetry Infrastructure**

Quantifying server-side infrastructure needs

Already Done

Already Done

**Building Server Telemetry Logic**

Building secure communication servers and database schema; developing logic to generate and manage unique IDs and store user profiles and usage data; implementing logic for data aggregation, correlation and cohort analysis; establishing role-based access; creating user interfaces, dashboards, and reports; preparing data export logic; integrating data with CRM and other systems



Already Done

**Testing Telemetry Systems**

Testing client-side code, communication with server-side application and reporting framework, and final product with telemetry embedded



**Integrating Telemetry Into Your Software**

Calling client telemetry SDK APIs; populating event parameters for each telemetry call



**Ongoing Monthly Maintenance**



Done by Reverera

 = 8 Estimated Man Hours.

*Estimates are based on sample installed software application, tracking 300+ events. Your results may vary.*



## Comparing Solution Cost

The discussion thus far has identified several areas where choosing Microsoft Application Insights rather than Revenera is likely to increase costs. These include the requirements for significant custom development to:

- Instrument clients
- Manage telemetry and caching
- Integrate usage intelligence data with other business systems, such as CRM
- Custom-build reports required by different users within your organization

But there are other direct, indirect, and hidden costs to consider. For example:

**Support costs:** A Revenera subscription includes free support; Microsoft offers no free support. Revenera subscription plans charge a flat fee based on active users, regardless of how much data is collected and reported.

**Event data costs:** With Microsoft's basic plan, costs increase proportionally with event data: a disincentive to use Microsoft Application Insights for deep research about customer usage. Microsoft's Enterprise plan sets data collection limits per node, with cost directly dependent on how many concurrent users send telemetry every hour. Customer usage patterns or increased activity in certain time zones can directly impact your monthly cost, and may be difficult to predict.

## Comparing Solution Effectiveness

Costs are only one side of the equation. The other is effectiveness: what does it take to get actionable, useful answers?

The best way to evaluate this is to consider an example. Software developers often need to understand whether specific features are being used, how they are being used, who is using them, and whether usability problems might be limiting their effectiveness.

Out of the box, Revenera Usage Intelligence captures all the information most software companies need to answer questions like these. It can segment and filter granular usage information based on software editions and versions, user hardware and software environments, and a variety of custom properties. You can assess the number and duration of attempts to use a feature; related features used or left unused, and many other factors. All this helps you quickly pinpoint problems and opportunities related to new features, so you can target development investments far more effectively.

Since Microsoft Application Insights offers no comparable out-of-the-box data capture or reporting, software companies must first identify the metrics they want to collect, without the benefit of experience across many software vendors and products. Since it is designed for cloud rather than distributed applications, software providers must build client services to collect these values. Once data is being collected in an Azure-based database or data warehouse, they must construct SQL reports that perform all the necessary data mining.

Given enough time and otherwise unallocated resources, development teams with the right skillsets can accomplish these tasks. However, software companies who pursue this route can take several months to start receiving useful analytics and can become so frustrated with the effort involved decide to employ an out-of-the-box solution instead.


As software companies well know, getting telemetry and reporting up-and-running is only the beginning. When analytics become available, multiple stakeholders—executives, sales organizations, marketers, product developer—quickly recognize the power of this intelligence. They rapidly start asking new questions and requesting new custom reports. Even more questions arise as products, competitors, and markets evolve.

Many of these new questions are anticipated by Revenera's out-of-the-box data capture and reporting. In contrast, with Microsoft Application Insights, new reports must be custom-built—and if these reports require new source data, costly changes to client instrumentation may be needed.

4x

LICENSE COST

License cost of Microsoft Application Insights Enterprise vs. Revenera Usage Intelligence





## The Value of a Purpose-Built Solution

No tool can do everything. Microsoft Application Insights excels at the tasks it was originally designed for: measuring the performance of Microsoft Azure cloud applications. Unlike Revenera Usage Intelligence, however, it is simply not optimized for software usage analytics in distributed Windows, macOS, or Linux applications. Its shortcomings can be overcome, but to do so, software companies must commit to significant development projects and extensive ongoing support. These costs can be avoided by choosing a solution purpose-built for software usage analytics: Usage Intelligence.

### NEXT STEPS

Click here for more information about what Revenera Usage Intelligence can do for you.

[LEARN MORE >](#)

Revenera provides the enabling technology to take products to market fast, unlock the value of your IP and accelerate revenue growth—from the edge to the cloud. [www.revenera.com](http://www.revenera.com)