

# Event Monitoring

Now and future

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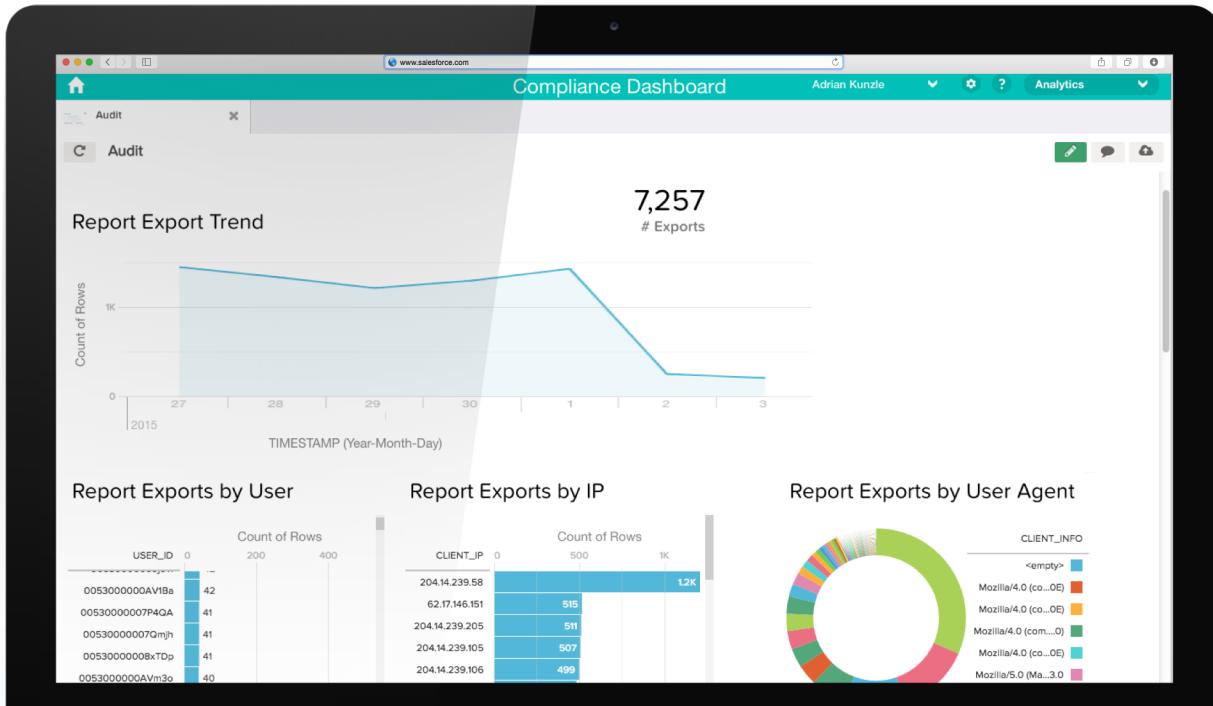
# Event Monitoring Today

## Generally Available Product



# Event Monitoring

Add visibility and automation to your Salesforce data



Monitor and take action on user activity  
Know who is accessing data from where

Drive user adoption  
Analyze user behavior to drive training and adoption of Salesforce

Optimize Performance  
Proactively identify bottlenecks and high demand pages to improve user experience

# Adding Visibility and Automation to Your Salesforce Data

## Event Monitoring with Transaction Security



### Event Log Files

```
00:00:00 | Type: Rest
2015-08-12 00:00:00 | Type: Logout
2015-08-12 00:00:00 | Type: Login
2015-08-12 00:00:00 | Type: BulkApi
Date: 2015-08-12 00:00:00 | Type: ApexExecution
Date: 2015-08-11 00:00:00 | Type: ApexCallout
Date: 2015-08-11 00:00:00 | Type: VisualforceRequest
Date: 2015-08-11 00:00:00 | Type: URI
Date: 2015-08-11 00:00:00 | Type: RestApi
Date: 2015-08-11 00:00:00 | Type: Report
Date: 2015-08-11 00:00:00 | Type: Logout
Date: 2015-08-11 00:00:00 | Type: Login
Date: 2015-08-11 00:00:00 | Type: BulkApi
Date: 2015-08-11 00:00:00 | Type: ApexExecution
Date: 2015-08-10 00:00:00 | Type: API
Date: 2015-08-10 00:00:00 | Type: VisualforceRequest
Date: 2015-08-10 00:00:00 | Type: UITracking
Date: 2015-08-10 00:00:00 | Type: URI
2015-08-10 00:00:00 | Type: RestApi
2015-08-10 00:00:00 | Type: Logout
2015-08-10 00:00:00 | Type: Login
```

### Data Visualization



### Transaction Security



Capture events

API-first service  
48 event types,  
30 days

Analyze patterns

Integrated Einstein  
Analytics app, and  
partner ecosystem

Trigger policies

Block, additional  
authentication



# What Kinds of Log Files?

## 48 Event Types Supported



- |                                                      |                                   |                          |
|------------------------------------------------------|-----------------------------------|--------------------------|
| 1. APEX CALLOUT                                      | 17. DOCUMENT ATTACHMENT DOWNLOADS | 33. PLATFORM ENCRYPTION  |
| 2. APEX EXECUTION                                    | 18. EXTERNAL CROSS-ORG CALLOUT    | 34. QUEUED EXECUTION     |
| 3. APEX SOAP                                         | 19. EXTERNAL CUSTOM APEX CALLOUT  | 35. REPORT               |
| 4. APEX TRIGGER                                      | 20. EXTERNAL ODATA CALLOUT        | 36. REPORT EXPORT        |
| <b>NEW</b><br>5. APEX UNEXPECTED EXCEPTION           | 21. INSECURE EXTERNAL ASSETS      | 37. REST API             |
| 6. API                                               | 22. KNOWLEDGE ARTICLE VIEW        | 38. SANDBOX              |
| 7. ASYNCHRONOUS RUN REPORT                           | 23. LIGHTNING ERROR               | 39. SEARCH               |
| 8. BULK API                                          | 24. LIGHTNING INTERACTION         | 40. SEARCH CLICK         |
| 9. CHANGE SET OPERATION                              | 25. LIGHTNING PAGE VIEW           | 41. SITES                |
| <b>NEW</b><br>10. CONCURRENT LONG RUNNING APEX LIMIT | 26. LIGHTNING PERFORMANCE         | 42. TIME-BASED WORKFLOW  |
| 11. CONSOLE                                          | 27. LOGIN                         | 43. TRANSACTION SECURITY |
| 12. CONTENT DISTRIBUTION                             | 28. LOGIN AS                      | 44. URI                  |
| 13. CONTENT DOCUMENT LINK                            | 29. LOGOUT                        | 45. VISUALFORCE REQUEST  |
| 14. CONTENT TRANSFER                                 | 30. MDAPI OPERATION               | 46. WAVE CHANGE          |
| 15. CONTINUATION CALLOUT SUMMARY                     | 31. MULTI BLOCK REPORT            | 47. WAVE INTERACTION     |
| 16. DASHBOARD                                        | 32. PACKAGE INSTALL               | 48. WAVE PERFORMANCE     |

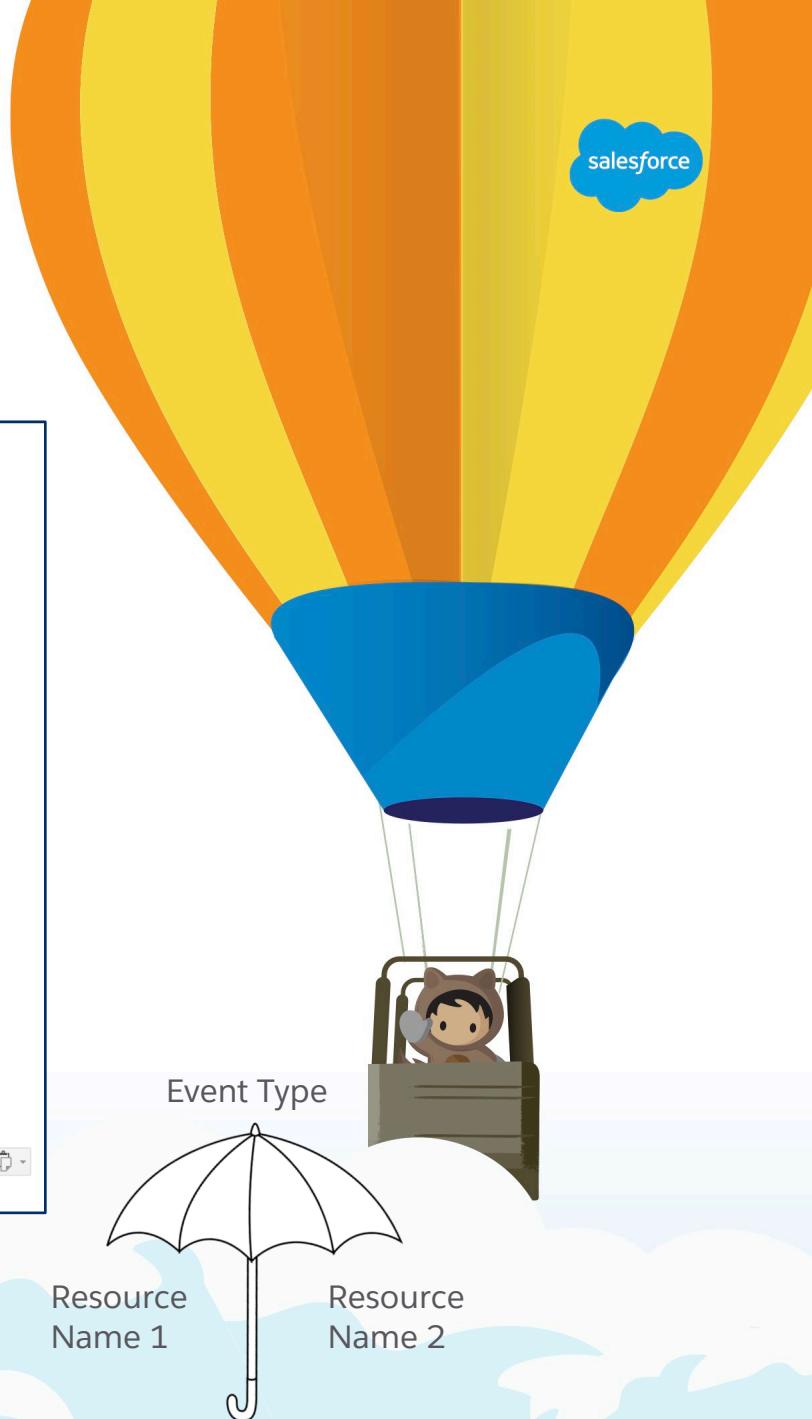
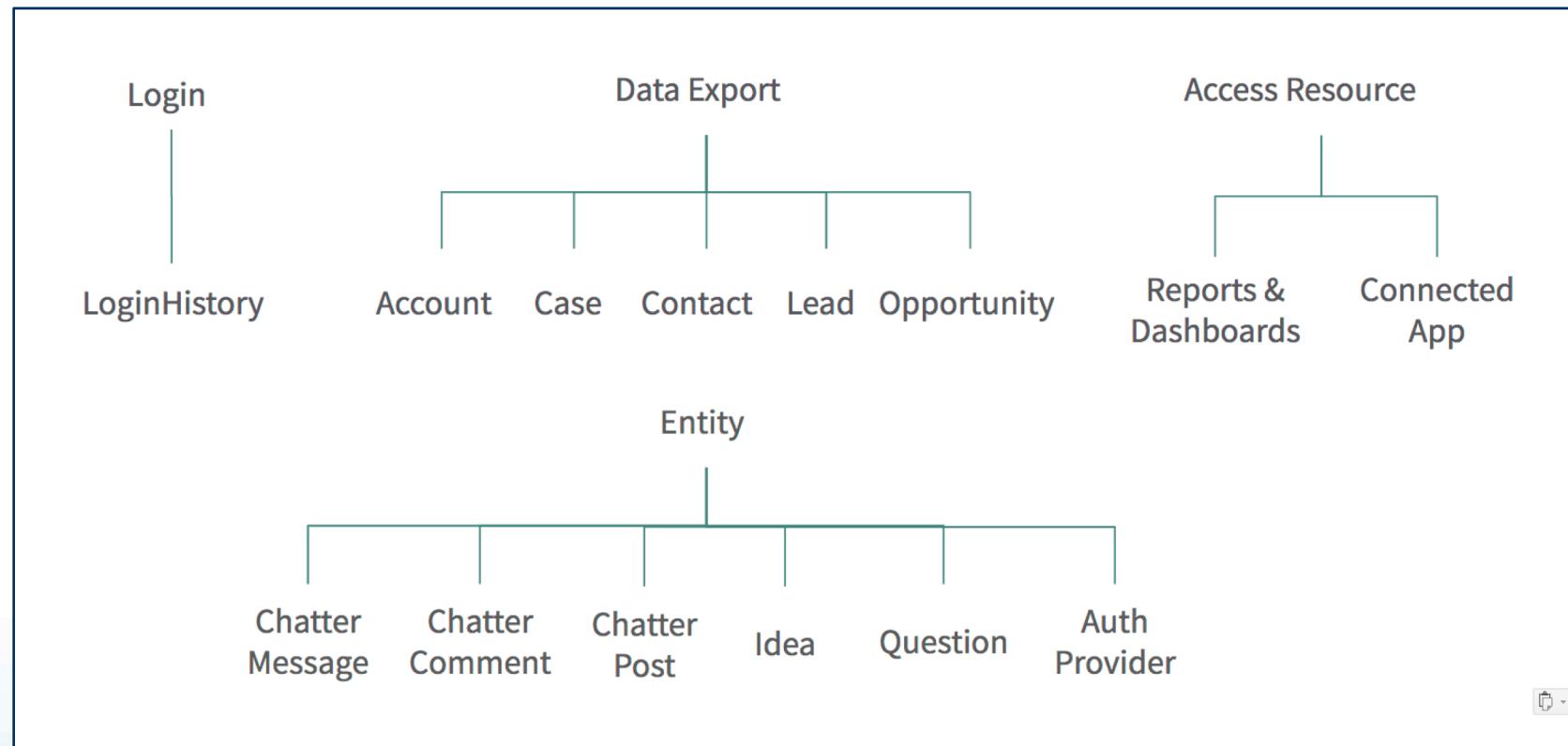
Using EM: [https://developer.salesforce.com/docs/atlas.en-us.api\\_rest.meta/api\\_rest/using\\_resources\\_event\\_log\\_files.htm](https://developer.salesforce.com/docs/atlas.en-us.api_rest.meta/api_rest/using_resources_event_log_files.htm)

SF Object Ref: [https://developer.salesforce.com/docs/atlas.en-us.object\\_reference.meta/object\\_reference/sforce\\_api\\_objects\\_eventlogfile.htm](https://developer.salesforce.com/docs/atlas.en-us.object_reference.meta/object_reference/sforce_api_objects_eventlogfile.htm)



# Transaction Security 1.0 Data Model

Certain standard Objects are supported



# Tap into a Strategic Ecosystem of Partners for Insights

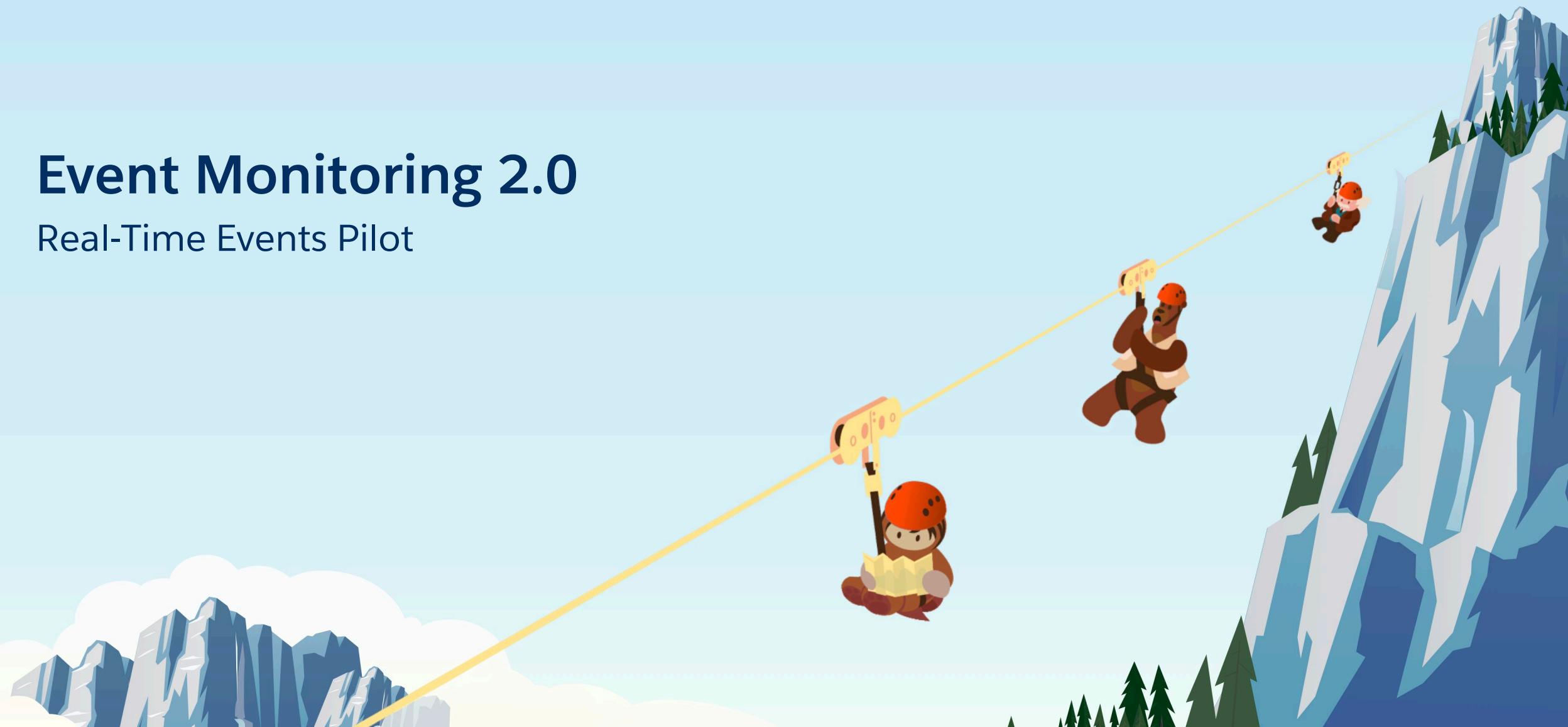
Explore the benefit of using your existing analytics and visualization tools





# Event Monitoring 2.0

Real-Time Events Pilot

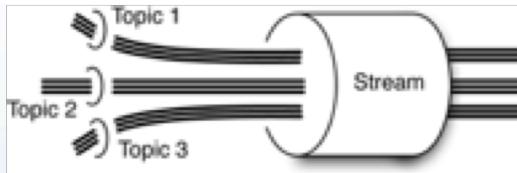


# Real-Time Events

## Event Monitoring 2.0

### Streaming using Platform Events

- Standard events published in real-time available for customer subscription
- Consume events in an external data system



### Big Objects Storage & Querying

- Store and manage data at scale on Salesforce
- Preserve historical event data for security audits or trending analysis



Common data model

### Transaction Security

- Intercept user behavior
- Block, enforce 2FA, or alert on customer-defined event policies
- New: declarative UI using Flows
- New: support for policies on standard AND custom objects



Event Monitoring Updates

PILOT



# Real-Time Events

## Event coverage

PILOT



Event Name	Use Case	Features
AdminSetupEvent	Monitor administrator access to Setup and Platform Encryption feature (additional setup features on roadmap)	Stream*, Store, Policies
ApiEvent	Monitor / protect all API queries, number and individual records in a query.	Stream, Store, Policies
LightningEvent*	<i>Monitor Create, Read, Update, Delete [CRUD] of Objects in Lightning UI.*</i>	Stream*, Store*
ListViewEvent (Aloha + API)	Monitor / protect what data users access using ListViews. ( <i>Lightning support targeted to Summer '19</i> ).*	Stream, Store, Policies
LoginEvent	Monitor / protect logins.	Stream, Store, Policies
LoginAsEvent	Monitor what activities admins do when logged in as other users, by correlating this event with other events from the session.	Stream, Store
LogoutEvent	Monitor user logouts.	Stream, Store
ReportEvent	Monitor / protect what data users access or export using Reports..	Stream, Store, Policies
UriEvent (Aloha UI)	Monitor Create, Read, Update, Delete [CRUD] activities on Objects in Aloha UI.	Stream, Store



# Transaction Security 2.0

All standard and custom Objects supported for a given event

New policy

What conditions do you want your policy to monitor?

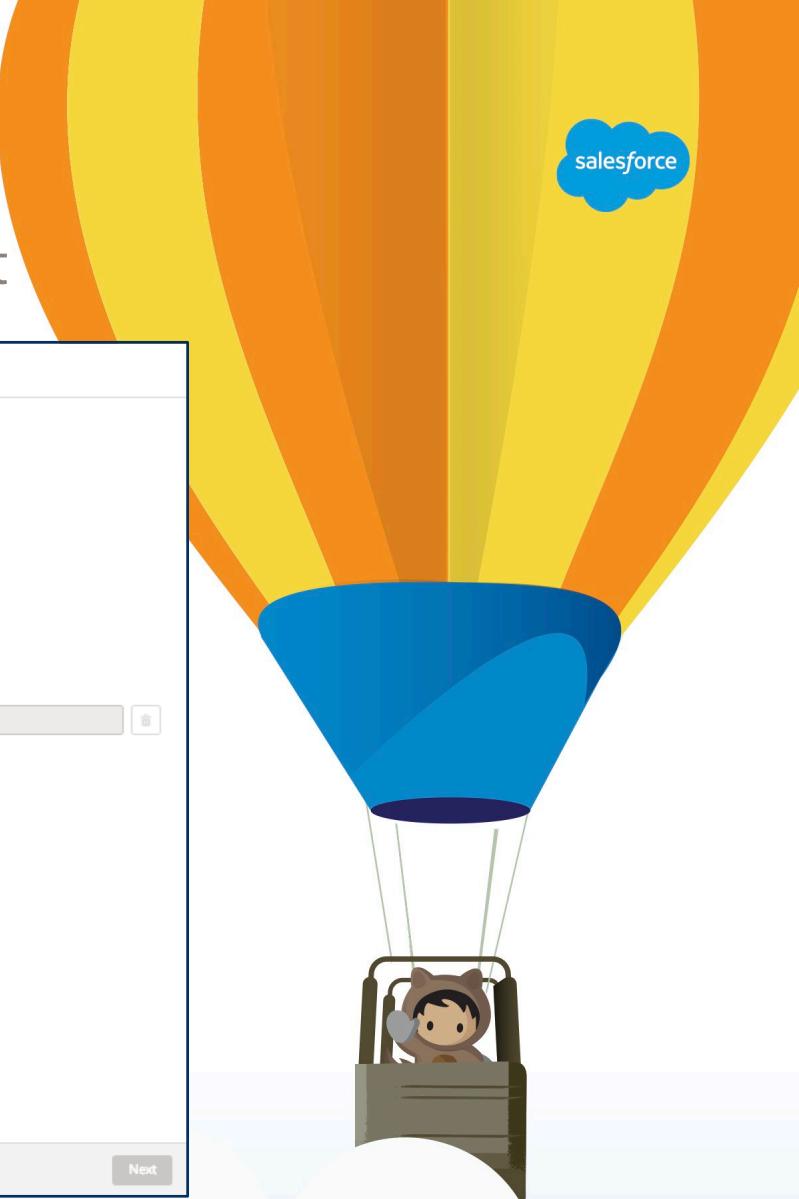
When all of these conditions are met for the event, your policy triggers an action. You select an action in the next step.

\*Event

Choose... API Event Report Event Admin Setup Event Login Event List View Event

\*Operator Choose... \*Value Enter a value. Examples: DashboardName, 43.0...

Back Next



# Comparison of architecture functionality



	Event Monitoring GA Product	Real-Time Events Pilot
Event visibility	CSV logs via API	Streaming and / or query from Big Objects
Latency	3-4 hours minimum	Real-time
Event details	Salesforce IDs only	Adds user context (Report name, API query etc.)
Data Retention	30 days in API	7 days during pilot; longer retention post-release
Transaction Security coverage	Limited to specific standard objects	A given event includes all standard and custom objects
Transaction Security mode	Apex code	Declarative Condition Builder UI (future: Apex in new framework)
Data Model	Different between EventLogFile and Transaction Security	Common data model across the 3 features

# Event Monitoring 2.0

Path to release

Winter '20 & Beyond



Real-Time Events GA

Performance events (real-time)

Native reporting

Summer '19

Real-Time Events Beta

Lightning URI Event  
(real-time)

Apex support in  
Transaction Security

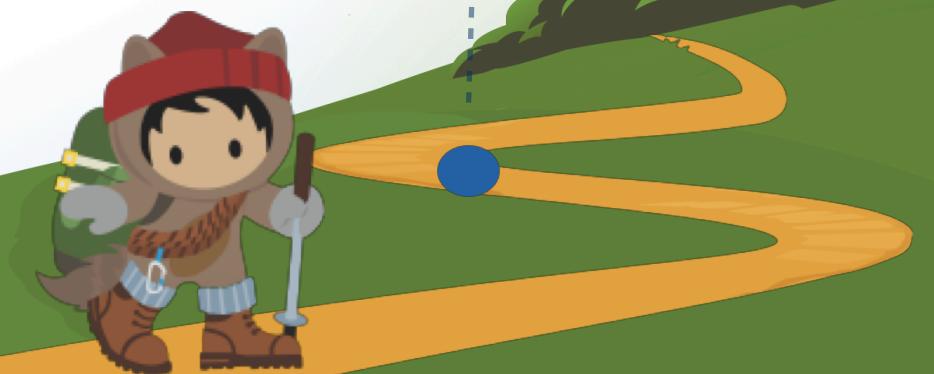
2.0

Spring '19

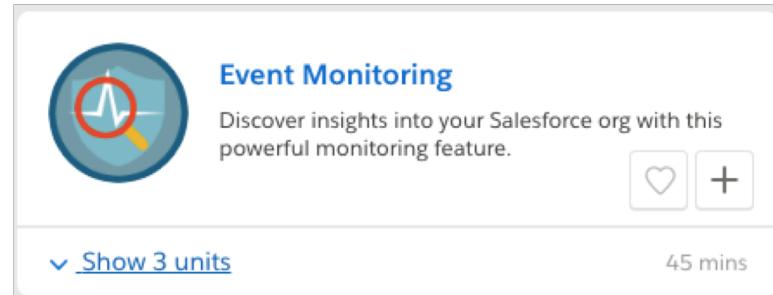
Real-Time Events Pilot

New EventLogFile  
additions

Transaction Security UX  
Enhancements



# Reference & Resources



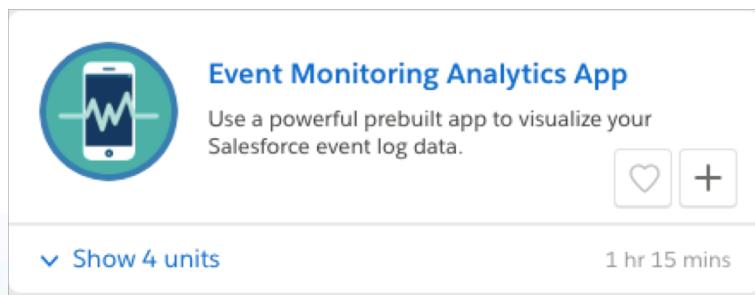
**Event Monitoring**  
Discover insights into your Salesforce org with this powerful monitoring feature.

Show 3 units      45 mins



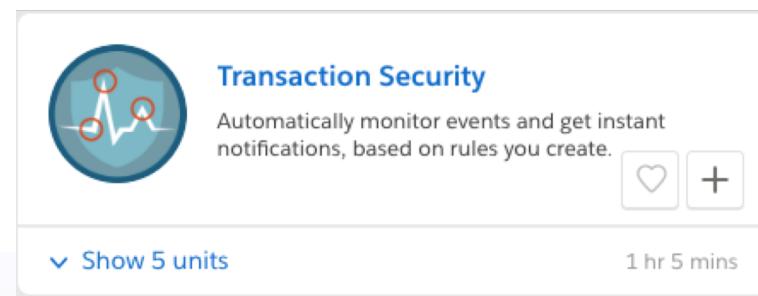
## Learn Salesforce Shield with Trailhead

<https://trailhead.salesforce.com/en/trails/shield>



**Event Monitoring Analytics App**  
Use a powerful prebuilt app to visualize your Salesforce event log data.

Show 4 units      1 hr 15 mins



**Transaction Security**  
Automatically monitor events and get instant notifications, based on rules you create.

Show 5 units      1 hr 5 mins

# References and resources



Shield Trailhead	<a href="https://trailhead.salesforce.com/en/trails/shield">https://trailhead.salesforce.com/en/trails/shield</a>
Salesforce Hacker Blog	<a href="http://www.salesforcehacker.com/">http://www.salesforcehacker.com/</a>
Success Community Group	<a href="https://sfdc.co/em_community">https://sfdc.co/em_community</a>
EventLogFile Supported Event Types	<a href="https://developer.salesforce.com/docs/atlas.en-us.object_reference.meta/object_reference/sforce_api_objects_eventlogfile_supportedeventtypes.htm">https://developer.salesforce.com/docs/atlas.en-us.object_reference.meta/object_reference/sforce_api_objects_eventlogfile_supportedeventtypes.htm</a>
Transaction Security Implementation Guide	<a href="https://developer.salesforce.com/docs/atlas.en-us.securityImplGuide.meta/securityImplGuide/security_overview_transactions.htm">https://developer.salesforce.com/docs/atlas.en-us.securityImplGuide.meta/securityImplGuide/security_overview_transactions.htm</a>
Event Monitoring Analytics App	<a href="https://help.salesforce.com/articleView?id=bi_app_admin_wave.htm&amp;type=5">https://help.salesforce.com/articleView?id=bi_app_admin_wave.htm&amp;type=5</a>
Platform Events Sample Connector	<a href="https://developer.salesforce.com/docs/atlas.en-us.api_streaming.meta/api_streaming/code_sample_java_client_intro.htm">https://developer.salesforce.com/docs/atlas.en-us.api_streaming.meta/api_streaming/code_sample_java_client_intro.htm</a>

To join the Real-Time Events Pilot, ask your account team to nominate you.

# thank you

