



AZ-203.5

Module 01: Azure Monitor

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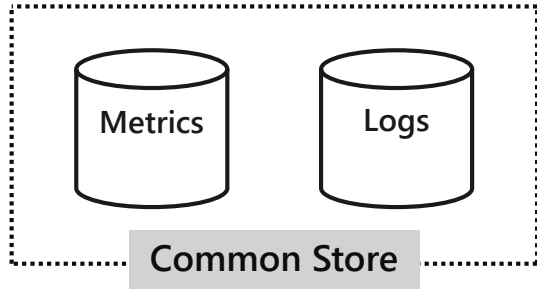
Topics

- Azure Monitor

Lesson 01: Azure Monitor

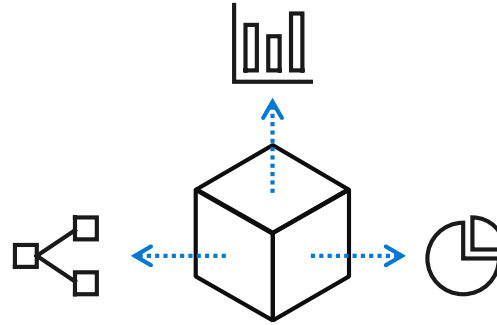


Azure Monitor



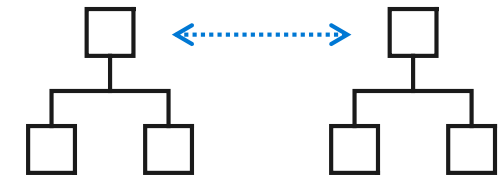
Unified Monitoring

A common platform for all metrics, logs and other monitoring telemetry



Data Driven Insights

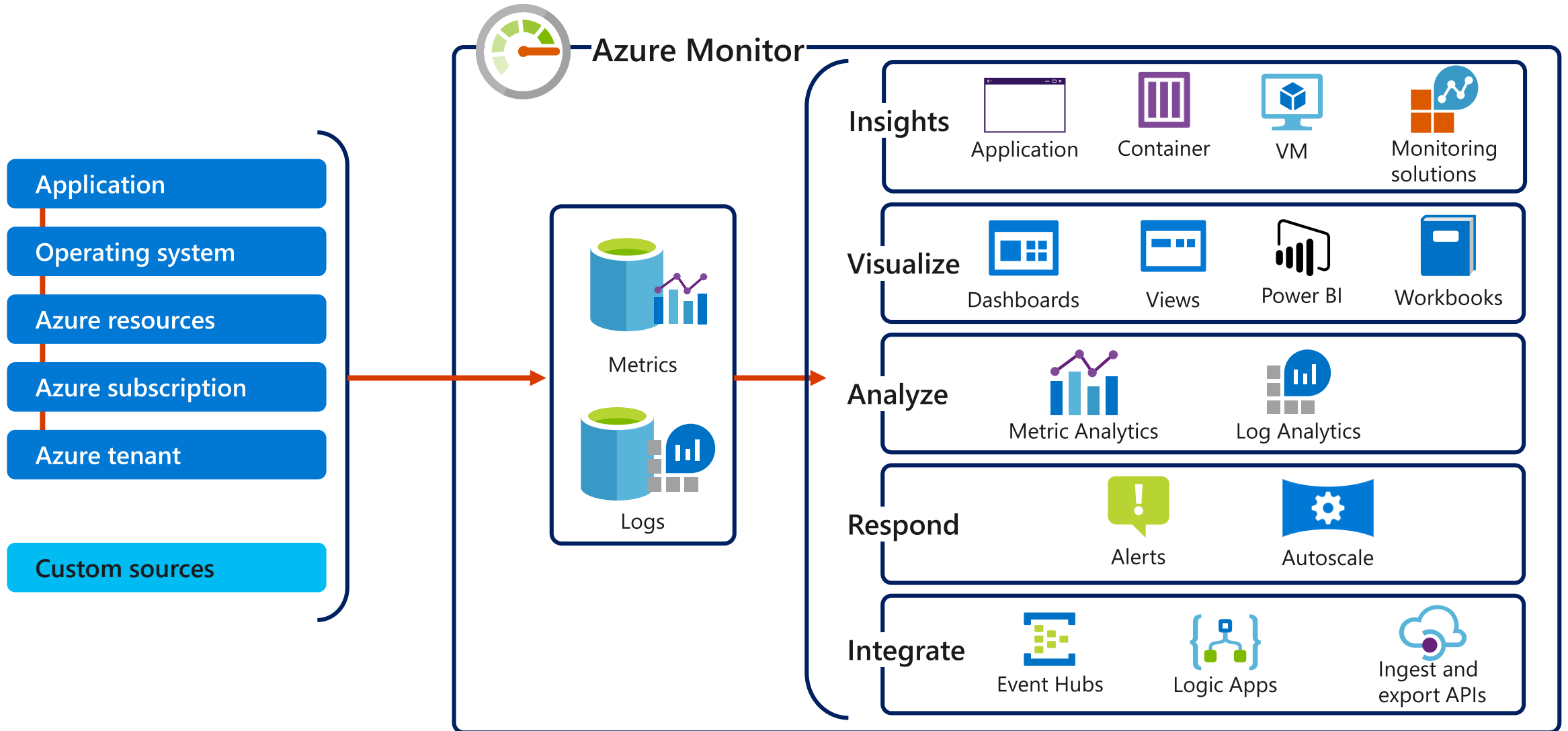
Advanced diagnostics and analytics powered by machine learning capabilities



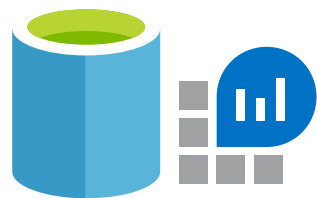
Workflow Integrations

Rich ecosystem of popular DevOps, issue management, SIEM, and ITSM tools

Azure Monitor overview



Monitoring data platform



Logs

Completed. Showing results from the last 24 hours.

TABLE CHART Columns

Computer

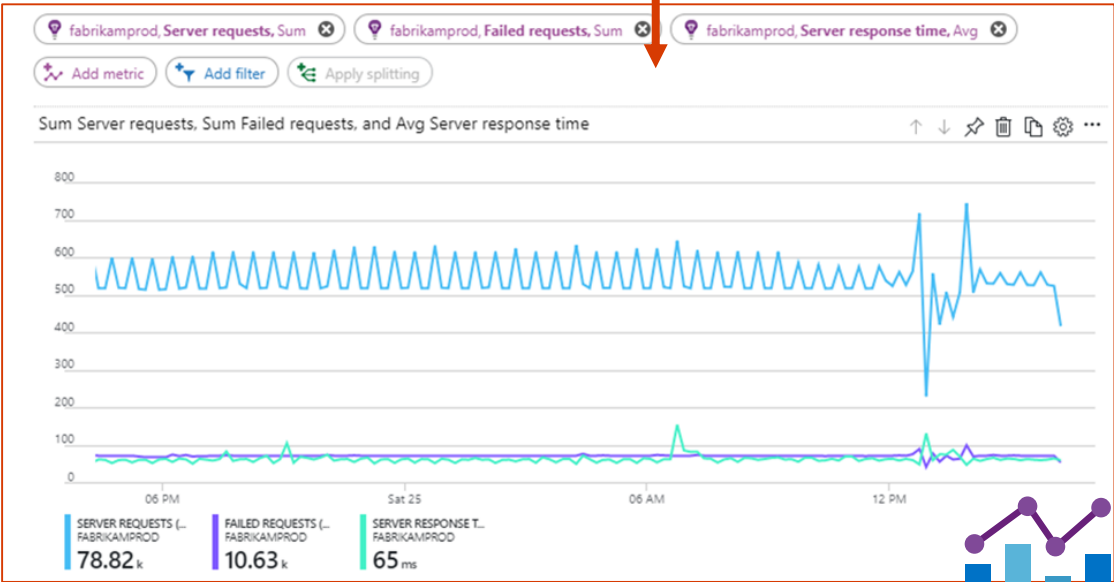
| TenantId | SourceSystem | TimeGenerated [Local Time] | Source | EventLog | Computer |
|--|--------------|----------------------------|-------------|-------------|----------------|
| Computer: ContosoSQLSrv1 | | | | | |
| > b438b4f6-912a-46d5-9cb1-b44069212abc | OpsManager | 2018-08-19T16:36:02.000 | MSSQLSERVER | Application | ContosoSQLSrv1 |
| > b438b4f6-912a-46d5-9cb1-b44069212abc | OpsManager | 2018-08-19T17:06:11.000 | MSSQLSERVER | Application | ContosoSQLSrv1 |
| > b438b4f6-912a-46d5-9cb1-b44069212abc | OpsManager | 2018-08-19T21:16:53.000 | MSSQLSERVER | Application | ContosoSQLSrv1 |
| > b438b4f6-912a-46d5-9cb1-b44069212abc | OpsManager | 2018-08-19T21:16:54.000 | MSSQLSERVER | Application | ContosoSQLSrv1 |
| > b438b4f6-912a-46d5-9cb1-b44069212abc | OpsManager | 2018-08-19T21:17:04.000 | MSSQLSERVER | Application | ContosoSQLSrv1 |
| > b438b4f6-912a-46d5-9cb1-b44069212abc | OpsManager | 2018-08-19T21:17:05.000 | MSSQLSERVER | Application | ContosoSQLSrv1 |
| > b438b4f6-912a-46d5-9cb1-b44069212abc | OpsManager | 2018-08-19T21:17:06.000 | MSSQLSERVER | Application | ContosoSQLSrv1 |
| > b438b4f6-912a-46d5-9cb1-b44069212abc | OpsManager | 2018-08-19T21:17:08.000 | MSSQLSERVER | Application | ContosoSQLSrv1 |
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| > b438b4f6-912a-46d5-9cb1-b44069212abc | OpsManager | 2018-08-19T21:17:10.000 | MSSQLSERVER | Application | ContosoSQLSrv1 |

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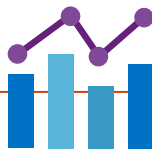
Log Analytics



Metrics

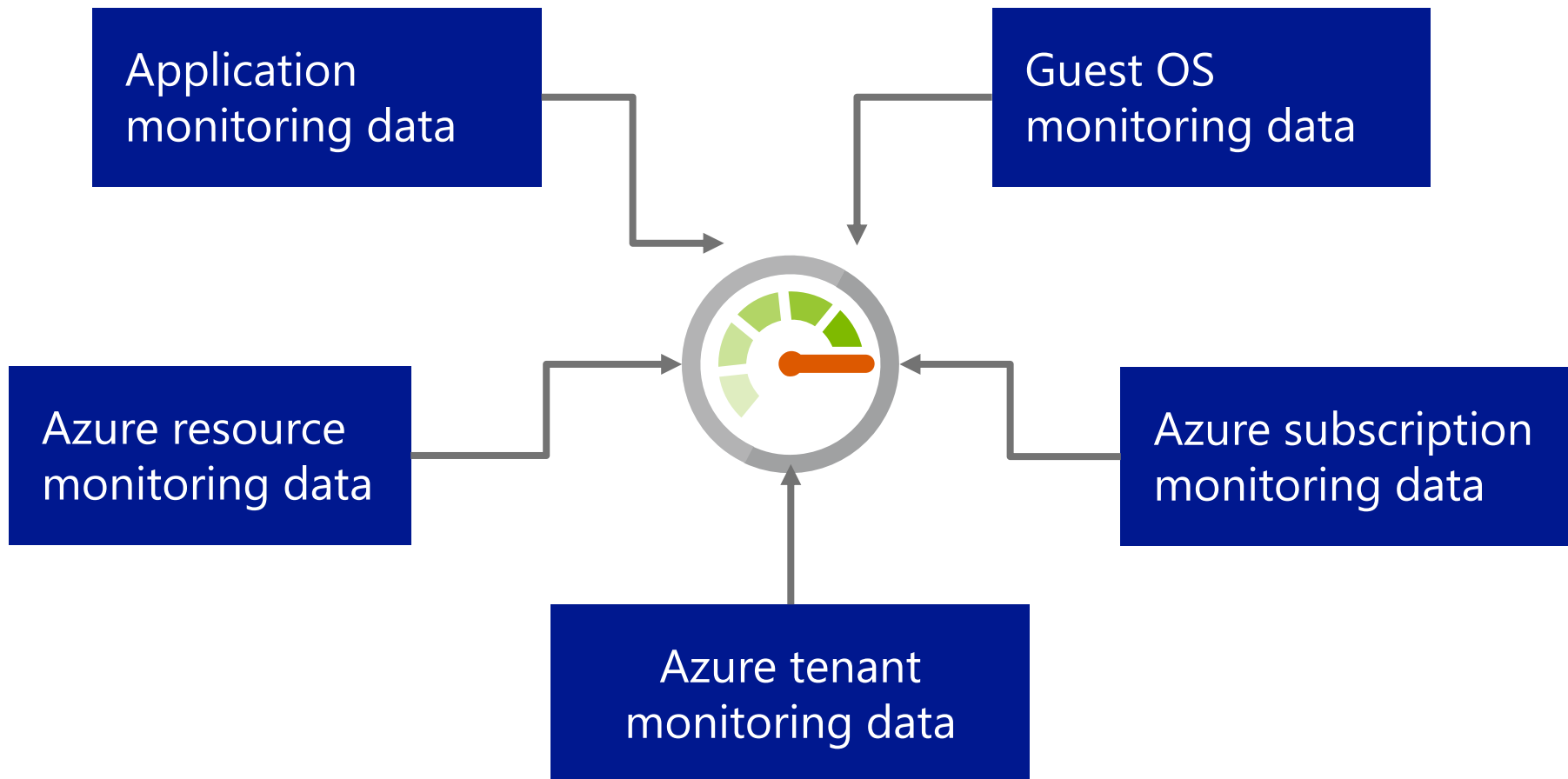


Metrics Explorer

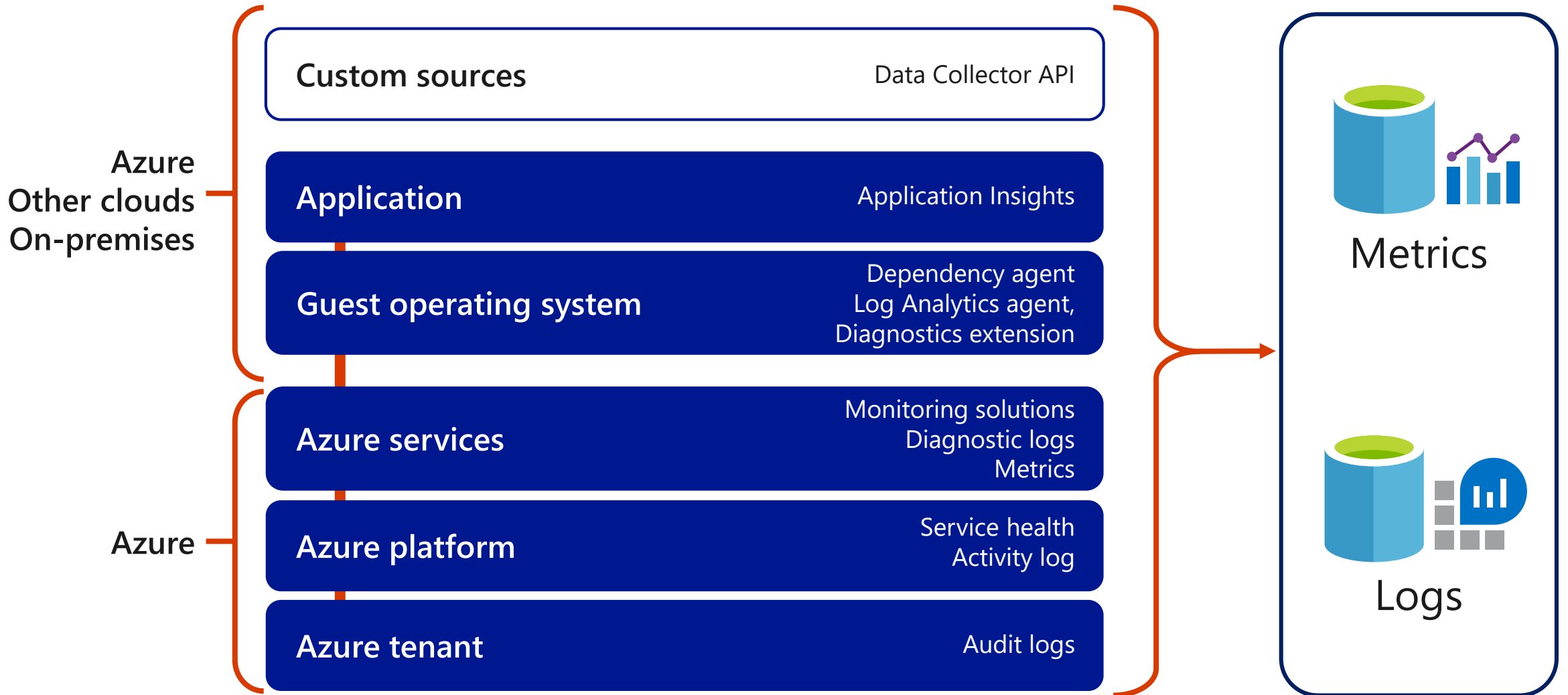


What data does Azure Monitor collect?

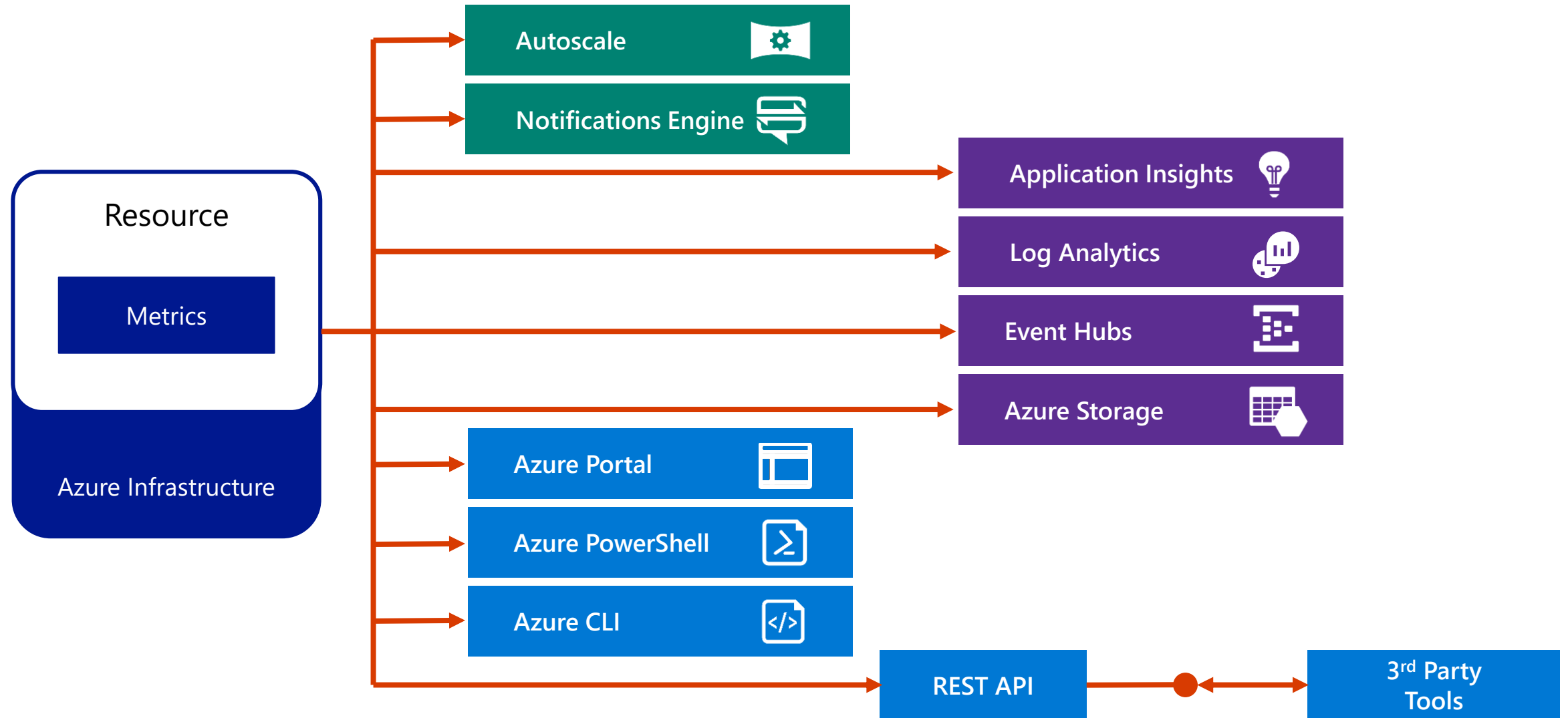
- Azure Monitor can collect data from:



Data sources

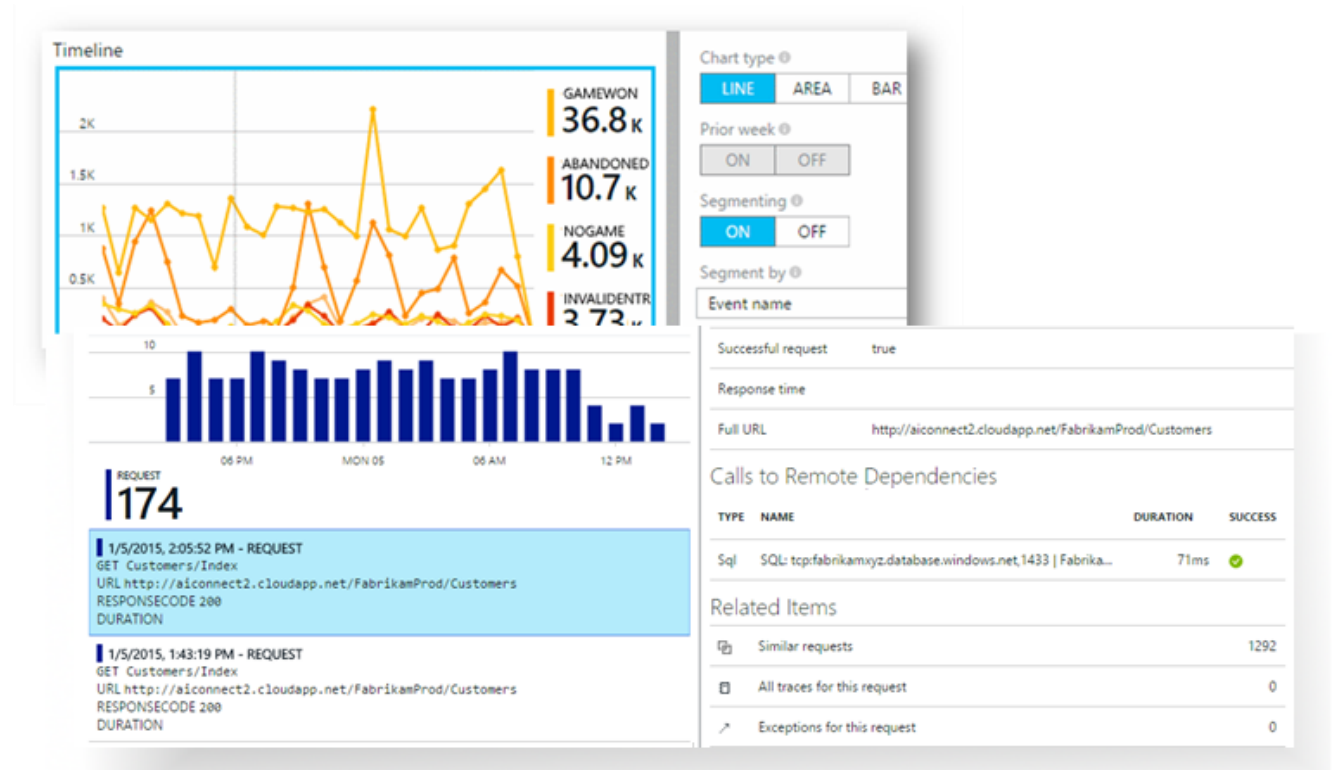


Azure Monitor sources



Application Insights

- Extensible application performance monitoring (APM) service
- Can be used to:
 - Monitor a live web application
 - Automatically detect performance anomalies
 - Diagnose issues by using analytical tools
 - Understand real-world user behavior by using custom queries and metric visualizations



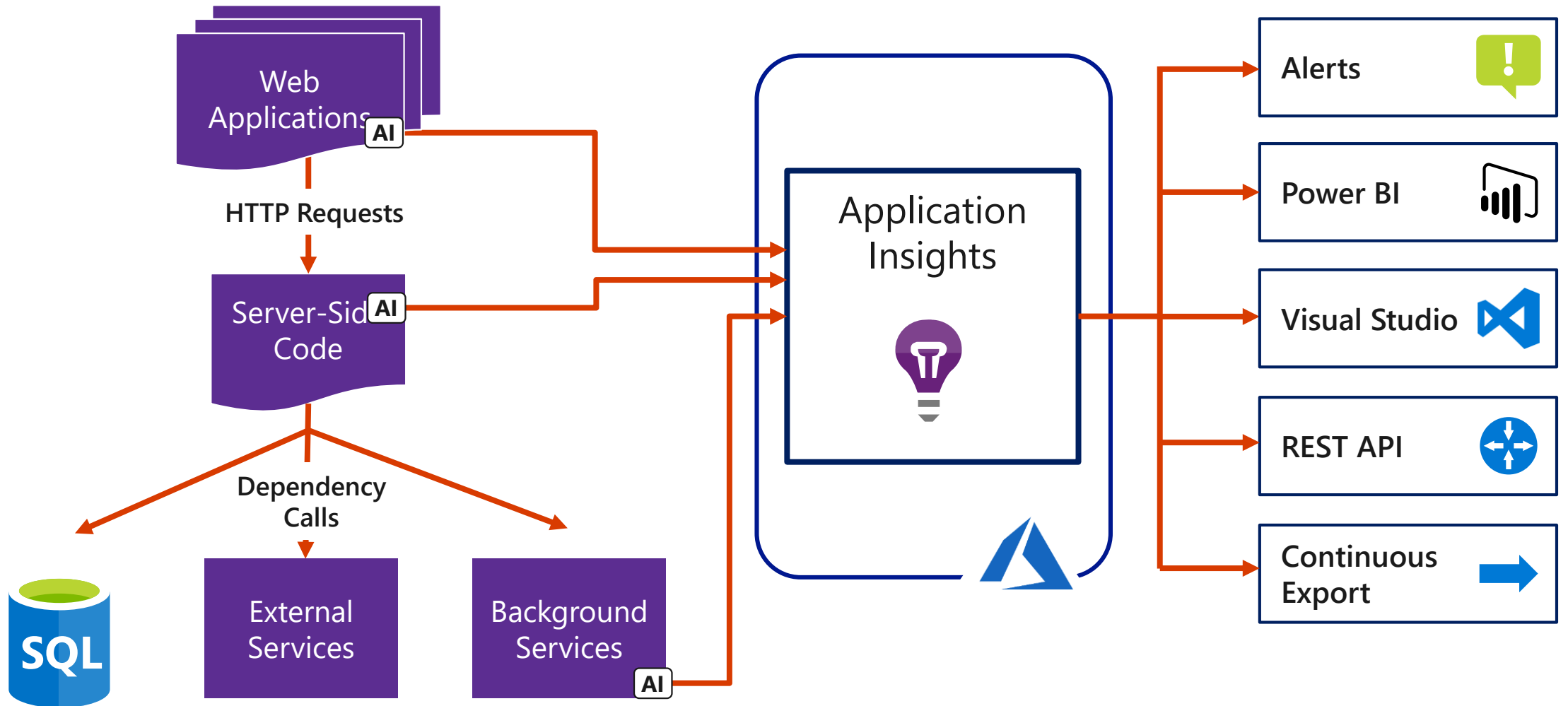
Monitored metrics

- Request rates, response times, and failure rates
 - Find out which pages are most popular, what times of day are most popular, and where your users are. Observe which pages perform the best. If your response times and failure rates go high when there are more requests, you might have a resourcing problem.
- Dependency rates, response times, and failure rates
 - Find out whether external services are slowing you down
- Exceptions
 - Analyze the aggregated statistics, or pick specific instances and drill into the stack trace and related requests. Both server and browser exceptions are reported.
- Page views and load performance
 - Directly reported by your users' browsers
- User and session counts

Monitored metrics (continued)

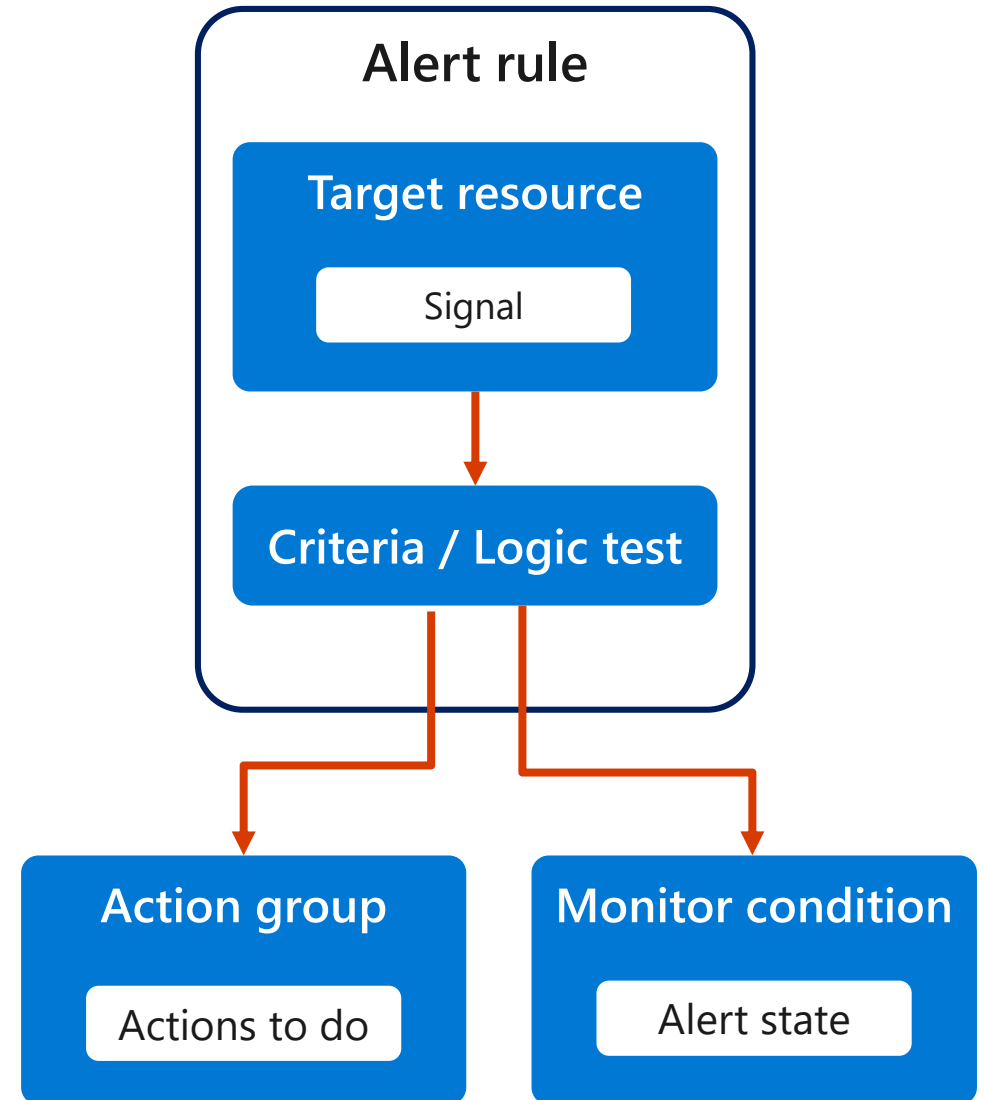
- Asynchronous JavaScript and XML (AJAX) calls
 - Rates, response times, and failure rates for these webpage-based calls
- Performance counters
 - Measured from your Windows Server or Linux server machines, such as counters for CPU, memory, and network usage
- Host diagnostics
 - Ingested from Docker or Azure
- Diagnostic trace logs
 - Logs from your app so that you can correlate trace events with requests
- Custom events and metrics
 - Custom metrics that you write yourself in the client or server code to track business events, such as the number of items sold or games won

Application Insights architecture

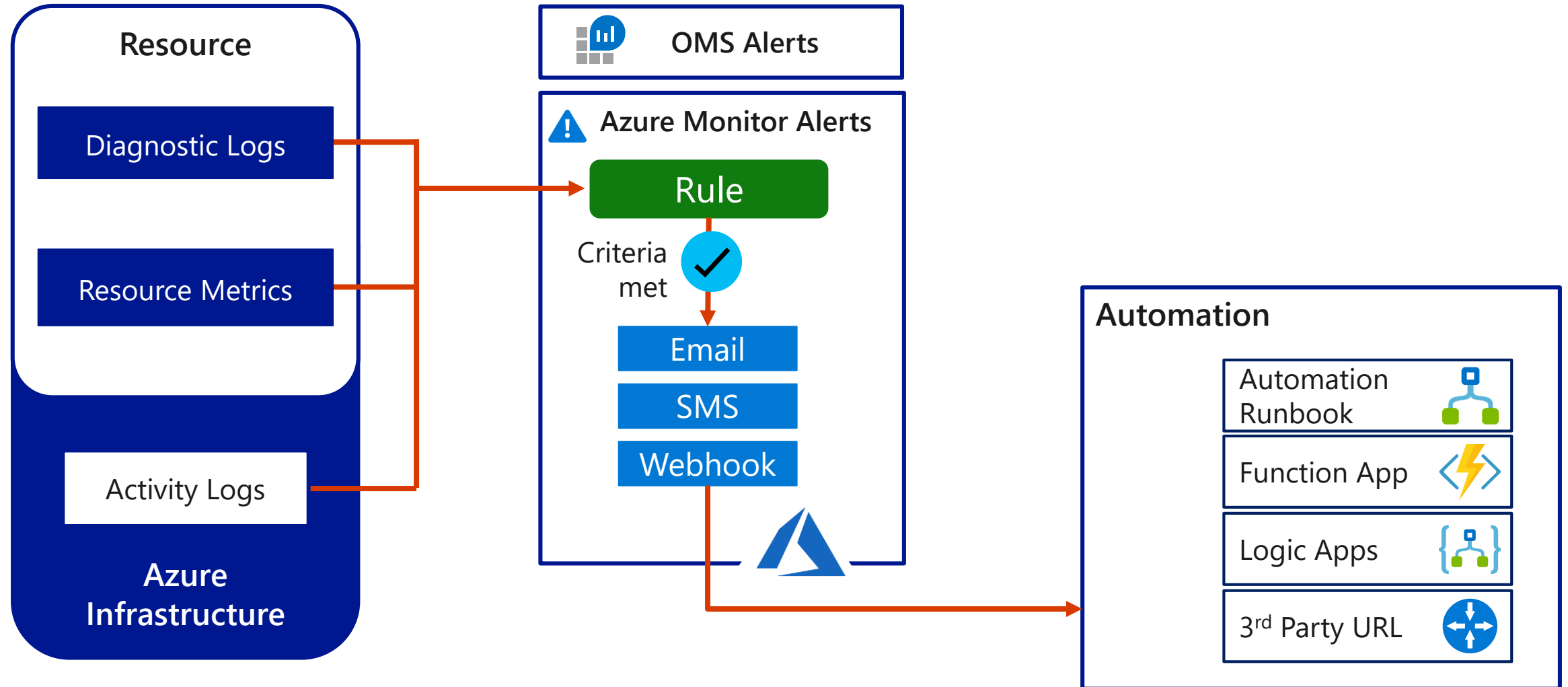


Alerts

- Proactively notify you when conditions are met
 - Defined in alert rules
- Now unified across multiple services
 - Application Insights
 - Log Analytics
 - Azure Monitor



Alerts workflow



Alert state

| State | Description |
|---------------------|---|
| New | The issue has just been detected and has not yet been reviewed. |
| Acknowledged | An administrator has reviewed the alert and started working on it. |
| Closed | The issue has been resolved. After an alert has been closed, you can reopen it by changing it to another state. |



Review

- Azure Monitor