



Azure Monitoring & Capacity Metric Alerts

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Silver Learning
Gold Cloud Platform



Educate

Advise

Implement

Manage

Agenda

- Azure Resource Management with TAGS
- Azure Resource Costing
- Application Insights
- Metrics at:
 - Resource Level
 - Resource group level
 - Subscription level



Resource Management with TAGS

- Tags are additional meta-data / labels applied to resources.
- Allows logically organise resources.
- Limitations:
 - Each resource can have up to 15 TAGS
 - Tag name could be max 512 characters long
 - Few resources may support lesser characters than 512, So keep them small!
 - Not supported for Classic Resources
 - Beware of special characters



Azure Resource Costing

- Azure Cost Management : Service to manage your spending's
 - Reporting
 - Data Enrichment
 - Budgets
 - Alerts
 - Recommendations
- Cost management service is free for Azure resources.
- Available for AWS at 1% of managed spend *



Application Monitoring

- Monitor Applications
- Monitor Containers
- Monitor resource groups
- Monitor Networks
- Monitor Virtual Machines
- Monitoring other resources

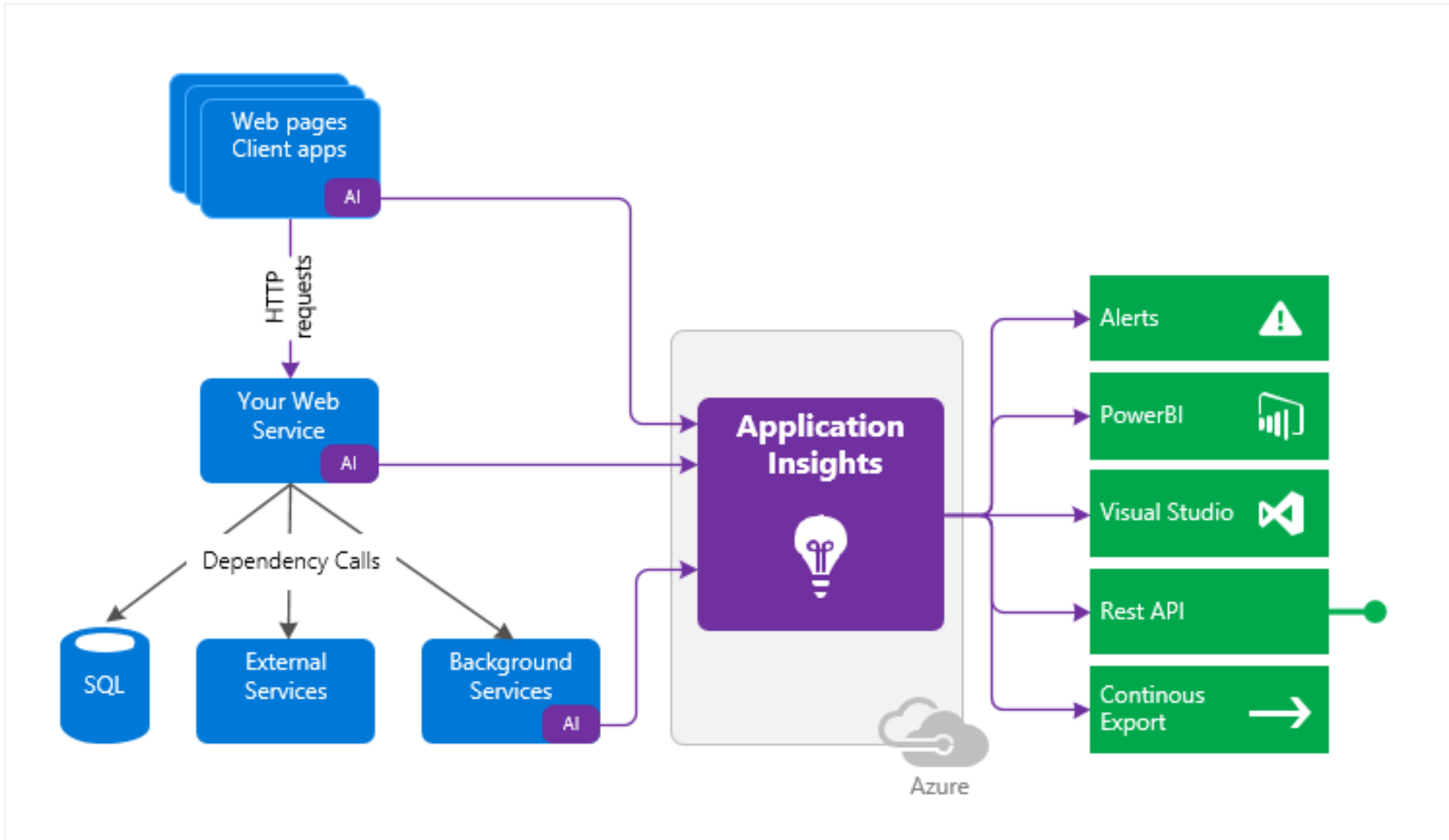


Application Insights

- Application Insights is an extensible Application Performance Management (APM) service for web developers on multiple platforms.
- Monitor live web applications.
- Detect performance anomalies.
- Helps in continuous monitoring.



Application Insights



Application Insights : Data Collection

- Request rates, response times and failure rates
- Dependency rates, response times & failure rates
- Exceptions
- Page views and load performance
- User and Session counts
- Custom events and metrics



Application insights : telemetry

Smart detection and manual alerts

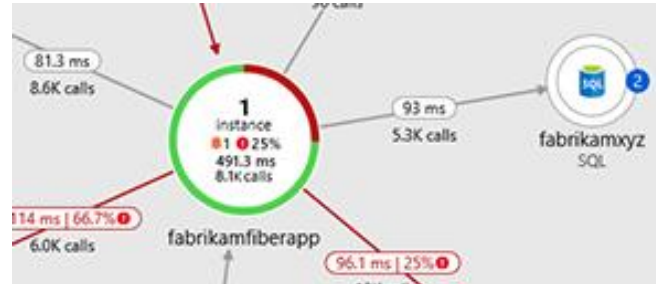
Abnormal rise in failed request rate in app "fabrikamprod"

Analysis time (UTC)	Detected failed request rate	Normal rate (8 minutes)
03/27/2016, 07:56 - 07:58	93.8% (45/48)	1%

78% of the failed requests affected 1 user and have these characteristics:

Response code:	500 - Internal server error
Operation name:	POST Customers/Create

Application map



Live Metrics Stream



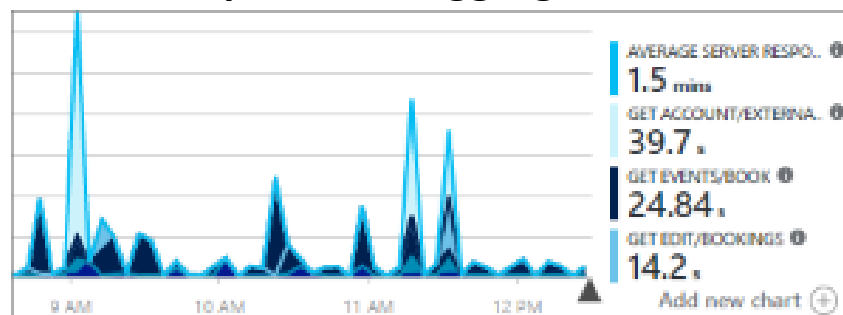
Profiler

Activity.AspNetRequest(events)	15394.66 ms
Activity.AspNetRequest(events)	15390.10 ms
Threads	15390.10 ms
Thread (3596) CPU=155ms (.NET ThreadPoo)	15390.10 ms
OTHER <= _ThreadStart>	13676.30 ms
AWAIT_TIME	7693.28 ms
dynamicClass.lambda_method	5907.67 ms
EventsController.Index	5907.67 ms

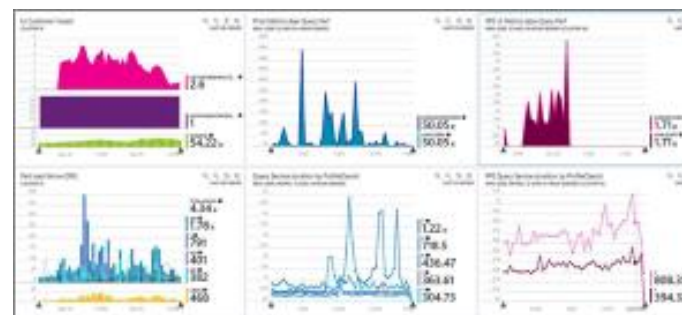
Usage analysis

	Users	<1w	+1w	+2w	+3w	+4w
Overall	29	85.5%	23.3%	20%	28.6%	50%
Apr 2 - Apr 8	2	100%	50%	50%	50%	50%
Apr 9 - Apr 15	5	100%	20%	20%	20%	
Apr 16 - Apr 22	13	76.9%	30.8%	15.4%		
Apr 23 - Apr 29	10	80%	10%			
Apr 30 - now	8	100%				

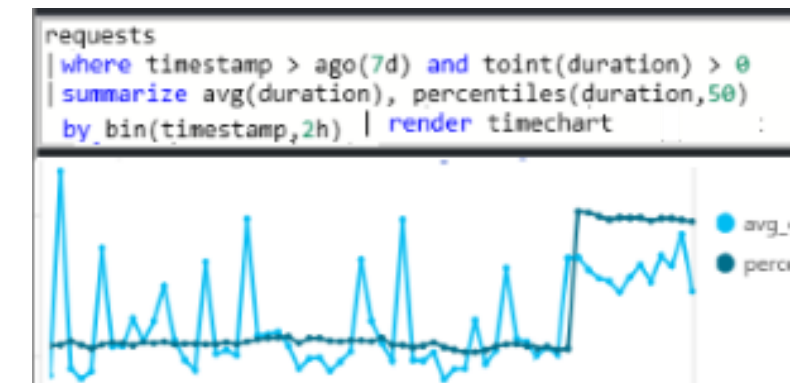
Metrics Explorer for aggregated data



Dashboards



Analytics



Educate

Advise

Implement

Manage



GET IT RIGHT

Educate

Advise

Implement

Manage