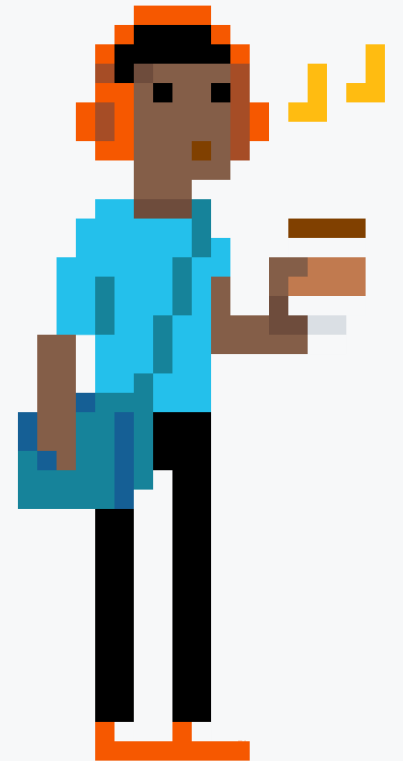


# While you wait...

Why not let us know about your cloud monitoring experiences?

Take the short survey at:

[squaredup.com/hybrid](https://squaredup.com/hybrid)

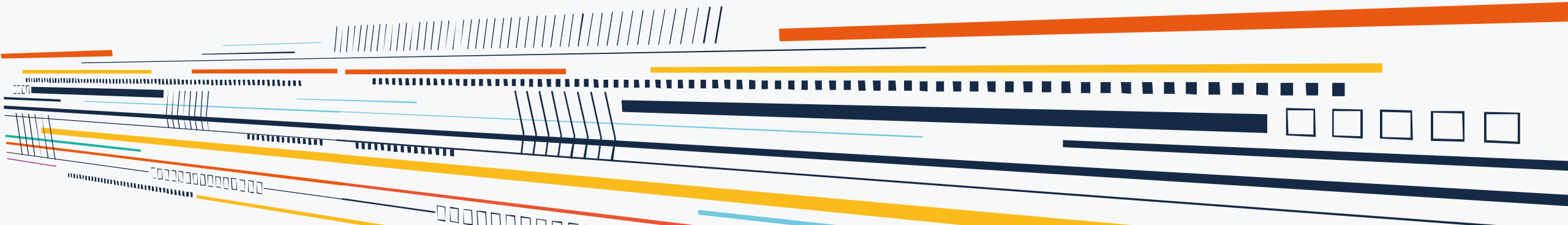




# SquaredUp

Coffee Break Webinar Series

## 3 awesome ways to use your SCOM DW

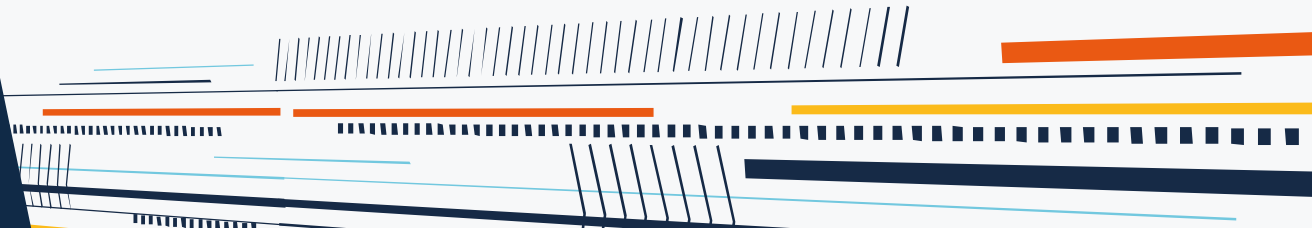


# Topic

Ever feel that your DW data is underused? (Even *with* Squared Up performance reporting!)

Discussion points:

- SCOM DW 101
- 3 awesome ways to use your SCOM DW
  - Alerts: correlation made easy
  - Performance: capacity planning
  - Health state: reporting on uptime
- Where to find help



```
SELECT * FROM vAlerts
```

SCOM Data Warehouse 101

*Don't do this*



# Data Warehouse 101

## What is the Data Warehouse?

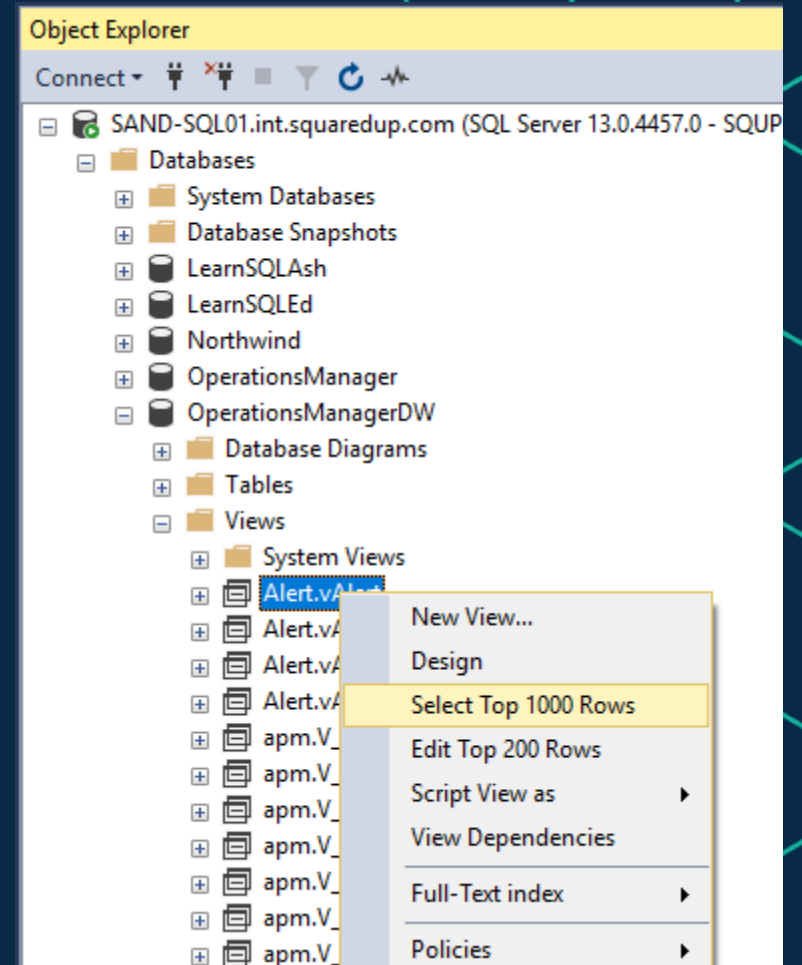
- SCOM has two databases Ops DB and Data Warehouse
  - OperationsManager
  - OperationsManagerDW
- Both *regular* SQL databases, often deployed on the same SQL server
- Ops DB is the runtime database used for alerting etc – it's the *source of truth*
- But Data warehouse stores much of the same useful data as the Ops DB
  - All objects (managed entities) and classes
  - Perf data written simultaneously to both (except in rare cases)
  - Health state changes
  - Alerts
- In addition Data warehouse calculates *aggregates* (e.g. daily min/max/avg) for long term retention



# Data Warehouse 101

## How do you query the Data Warehouse?

- You will need:
  - Microsoft SQL Server Management Studio
  - OpsMgrReader role (or admin, or other role with read permissions)
- Connect to your SQL server
- Writing your first query couldn't be simpler:
  - Browse to Views > Alert.vAlert
  - Right-click and choose 'Select Top 1000 Rows'
- Queries should be performed against *views* not tables
  - For queries, views behave the same as tables – just easier
  - Really helpful schema: <https://technet.microsoft.com/en-us/library/gg508713.aspx>



# Data Warehouse 101

## A warm up to get started

### From this

```
SELECT * FROM vAlerts
```

### To this

```
SELECT a.AlertName, a.RaisedDateTime, me.DisplayName, me.Path  
FROM Alert.vAlert AS a  
JOIN vManagedEntity AS me ON a.ManagedEntityRowId = me.ManagedEntityRowId  
WHERE a.AlertGuid = '0D3403FD-BDDE-4599-A77E-00D43DD14BDA'
```



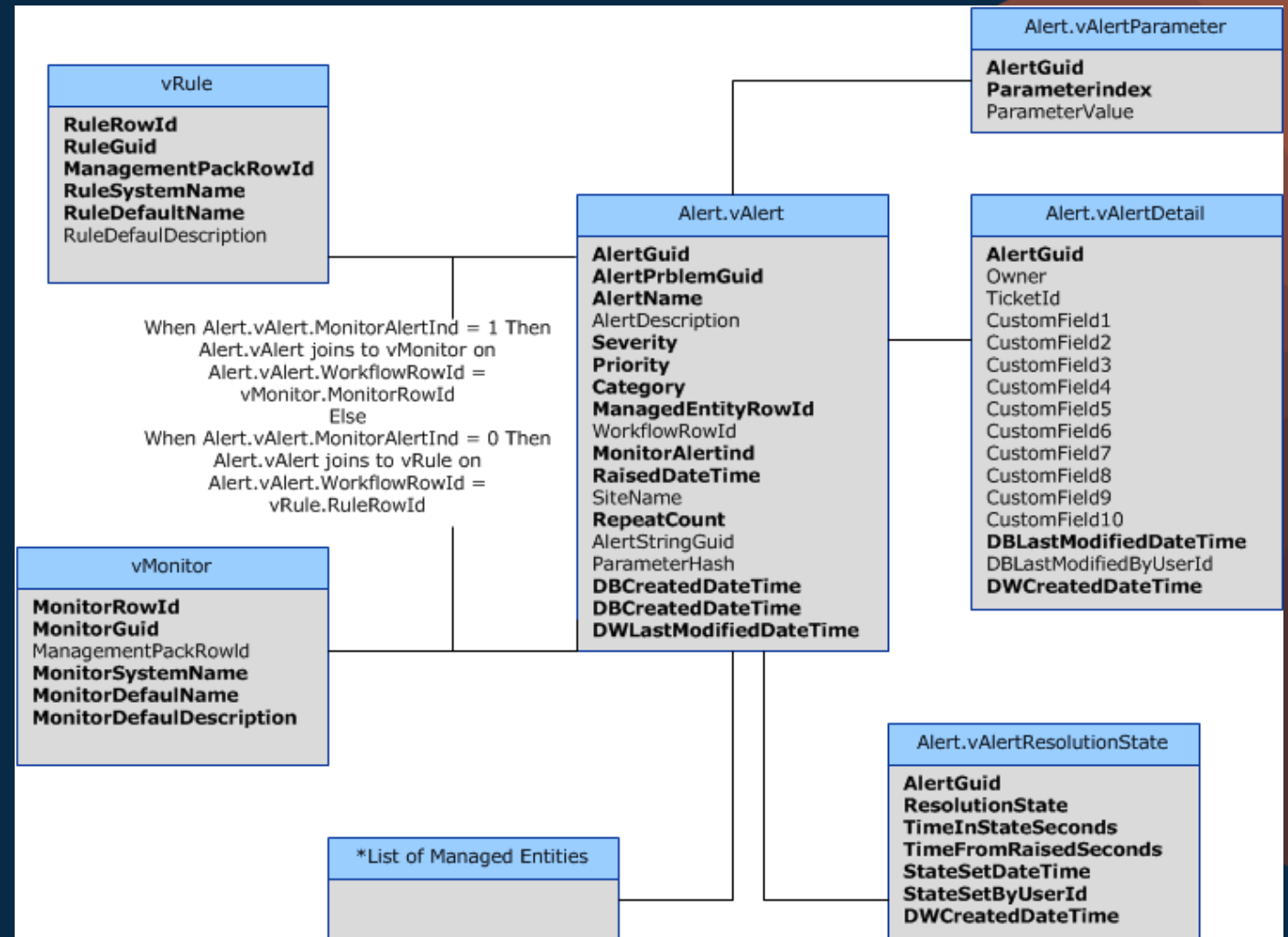
# 3 awesome ways to use your SCOM DW

(all by putting the data into Squared Up, of course 😊)



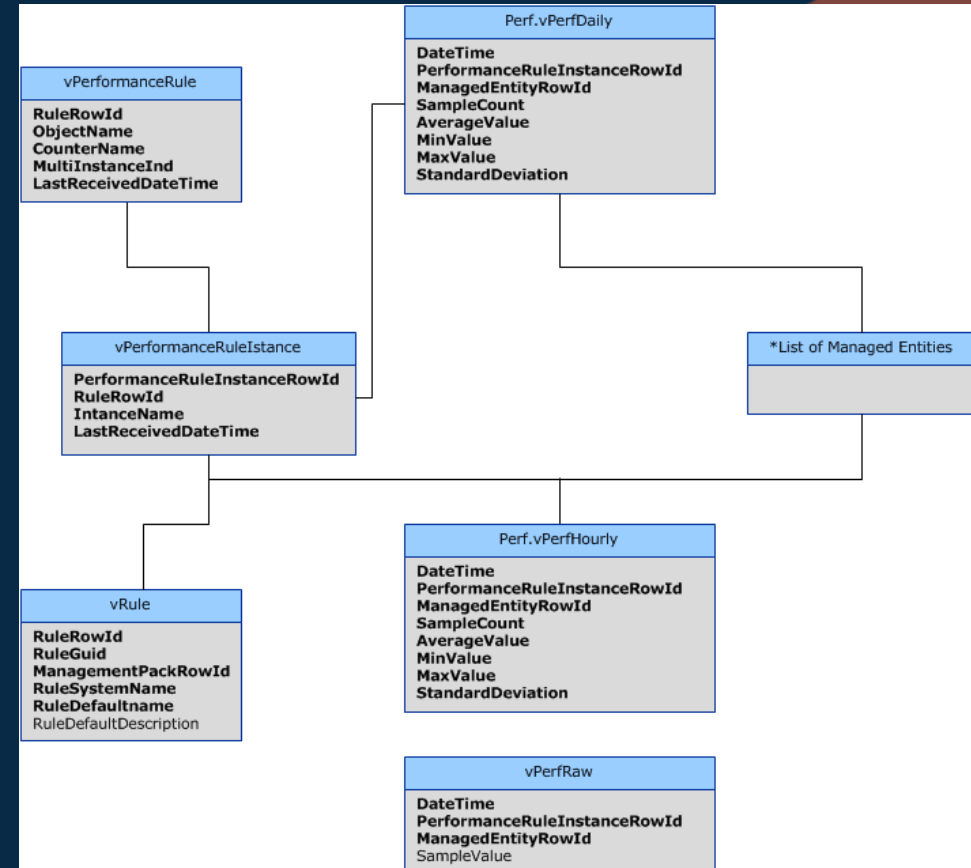
# 1. Alert analysis

For any alert:  
When has this happened in the past?  
Where else is this alert occurring?  
How long does it take to resolve?



# 2. Disk capacity forecast

How long until I run out of disk?



# 3. Server downtime

What is the total number of hours downtime for a group of servers over the last 3 months?



Where to get help...

# Welcome to Community A

Got a burning question about SCOM, OMS or related technologies? Join our community, ask your questions, get answers and put it to the experts.

## Solved Who put machine in maintenance mode

rtbywalski 207 rep. 07 Ma

Is there a way to show or report on who put a machine in maintenance mode? I can see this request coming down from management soon. Ideally I would like to add into my dashboard I created showing machine maintenance mode but a report would be my second choice.

scom scom-2016 scom-administration

BEST ANSWER

dgallay 115 rep. 07 Ma

There's a great previous Answer that goes over a SQL query and dashboard to do exactly this. We use it in our environment and it's great.

[community.squaredup.com/answers/question/sql-query-maintenance-mode-history/](http://community.squaredup.com/answers/question/sql-query-maintenance-mode-history/)

ANSWER THIS QUESTION

To reply or comment, use the 'Comment' link on the relevant answer or question.



BlakeTheITGuy 457 rep. 02 May, 2017

I'm sure we've all seen it all over the internet, the query below (slightly modified) can pull the MMODE history from the OpsMgr DW. What I'm looking for is someone who's already done this, or can help refine it to provide better results in the SquaredUp SQL tile. Specifically, I'm looking for a way to translate the numerical values into actual date/time.

```
SELECT ManagedEntity.DisplayName, MaintenanceModeHistory.*
FROM ManagedEntity WITH (NOLOCK)
INNER JOIN
MaintenanceMode ON ManagedEntity.ManagedEntityRowId = MaintenanceMode.ManagedEntityRowId
INNER JOIN
MaintenanceModeHistory ON MaintenanceMode.MaintenanceModeRowId =
MaintenanceModeHistory.MaintenanceModeRowId
```

MMode History

DisplayName	maintenanceModeHistoryRowId	maintenanceModeRowId	CreatedDateTime	Class	ReasonCode	PlannedMaintenanceIndex	StartDateTime	EndDateTime	ReasonCode
...	17762	24885	139316258713253	True	0				
...	27126	24885	139316258713253	True	0				
...	27214	24885	139316258713253	True	0				
...	27248	24885	1470248100747	True	0				
...	30522	27627	1477402340296	True	0				
...	33551	28900	1481140007470	True	0				
...	33618	28900	1481140007470	True	0				
...	32788	28770	1481140007470	True	0				
...	33887	28770	1481140007470	True	0				

dashboards sql useful-sql-queries

BEST ANSWER

Vyper 708 rep. 03 May, 2017

As always, Kevin Holman to the rescue!

[Outages and Maintenance Report](#)

The query below is slightly modified (it includes the Path and Class which can be helpful when you're looking at a whole bunch of databases.)

```
1 Select
2     vme.DisplayName,
3     vme.Path,
4     vmet.ManagedEntityTypeDefaultName as 'Class',
5     vmm.StartDateTime as 'Start',
6     vmm.EndDateTime as 'End',
7     CASE vmm.PlannedMaintenanceInd
8         WHEN '1' THEN 'Scheduled'
9         WHEN '0' THEN 'Unscheduled'
10    END AS 'Outage',
11     CASE vmmh.ReasonCode
12         WHEN '0' THEN 'Other (Planned)'
13         WHEN '1' THEN 'Other (Unplanned)'
14         WHEN '2' THEN 'Hardware: Maintenance (Planned)'
15         WHEN '3' THEN 'Hardware: Maintenance (Unplanned)'
16         WHEN '4' THEN 'Hardware: Installation (Planned)'
17         WHEN '5' THEN 'Hardware: Installation (Unplanned)'
18         WHEN '6' THEN 'Operating System: Reconfiguration (Planned)'
19         WHEN '7' THEN 'Operating System: Reconfiguration (Unplanned)'
20         WHEN '8' THEN 'Application: Maintenance (Planned)'
```

Active 10 May, 2017

Views 1363 views

Answers 1 answer

RELATED QUESTIONS

Why has a previously working Heat Map stopped showing heat?  
0 answers 0 votes

Monthly Alert Summary  
4 answers 1 vote

Is it possible generate dashboard squared up v3 through Powershell?  
1 answer 1 vote

SquaredUp

### Case Study

## Purdue University

Download

5 minute read

# Coffee Break: Resources

Let us know your Cloud experiences :  
[squaredup.com/hybrid](https://squaredup.com/hybrid)

See what's coming up next:  
[squaredup.com/coffee-break-series](https://squaredup.com/coffee-break-series)

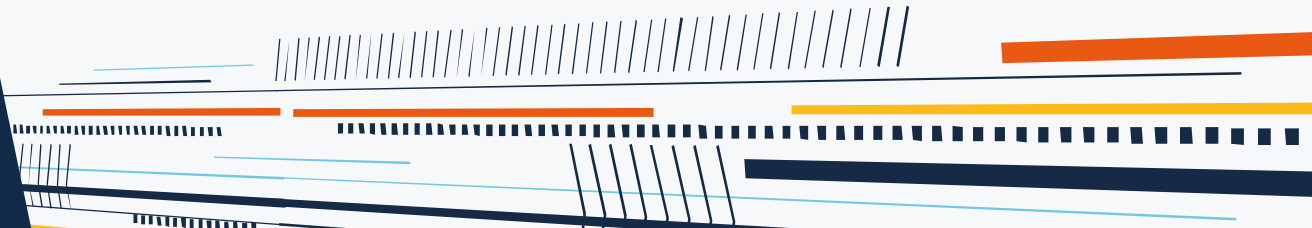
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# Q&A





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