

# Foglight 101 Series

## Episode 1

Discover the Power of Foglight and Its  
New Features

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**Quest**<sup>®</sup>  
Where Next Meets Now.



# Agenda

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Quest

1. Query Insights
2. Alarm Templates
3. Audit Log
4. Swagger UI
5. Replacing Literals
6. MySQL & PostgreSQL PI
7. Foglight Cloud

# What is 'Query Insights'

Quest

Query Insights finds, ranks and sorts the highest impact queries that are causing performance issues.



The most time-consuming queries



The most frequently executed queries



Narrows down the scope of your analysis



Pinpoints specific queries causing issues

### Query Insights

Display: Top 50 Queries by Impact

Oracle, SQL Server, S... | Impact | Response Time | Elapsed Time | Executions | Search text | Apply | Reset

| Query   | Impact % | Elapsed Time | Executions | Response Time | Domain     | Target              |
|---|----------|--------------|------------|---------------|------------|---------------------|
| UPDATE [dbo].[BANK] SET [BANK_NAME] = LTRIM(RTRIM(B...        | 42.35 %  | 1.63 hr      | 39         | 2.51 min      | SQL Server | SQLSRV_GCP_Dbaas_19 |
| UPDATE [BB] set [B] = @1                                      | 8.55 %   | 19.79 min    | 244        | 4.8 sec       | SQL Server | SQLSRV_GCP_Dbaas_19 |
| UPDATE [AA] set [A] = @1                                      | 7.32 %   | 16.93 min    | 167        | 6.1 sec       | SQL Server | SQLSRV_GCP_Dbaas_19 |
| INSERT INTO [dbo].[ORDL1] SELECT * FROM [dbo].[ORDER_...      | 6.82 %   | 17.97 min    | 62         | 17.7 sec      | SQL Server | SQLSRV_GCP_Dbaas_19 |
| INSERT INTO [dbo].[ORDL2] SELECT * FROM [dbo].[ORDER_...      | 6.78 %   | 18.52 min    | 54         | 20.4 sec      | SQL Server | SQLSRV_GCP_Dbaas_19 |
| INSERT INTO [dbo].[ORDL3] SELECT * FROM [dbo].[ORDER_...      | 6.36 %   | 17.48 min    | 61         | 17.2 sec      | SQL Server | SQLSRV_GCP_Dbaas_19 |
| DELETE FROM [dbo].[ORDL1]                                     | 5.74 %   | 11.99 min    | 62         | 11.8 sec      | SQL Server | SQLSRV_GCP_Dbaas_19 |
| DELETE FROM [dbo].[ORDL3]                                     | 5.72 %   | 12.15 min    | 56         | 12.9 sec      | SQL Server | SQLSRV_GCP_Dbaas_19 |
| DELETE FROM [dbo].[ORDL2]                                     | 5.31 %   | 11.18 min    | 52         | 12.9 sec      | SQL Server | SQLSRV_GCP_Dbaas_19 |
| SELECT [customer_id], Sum(amount), Max(longstring), Max(...   | 3.07 %   | 4.36 min     | 1          | 1.97 min      | SQL Server | SQLSRV_GCP_Dbaas_19 |
| SELECT TOP (@RowLimit) CONVERT(xml, event_data).query(...     | 0.25 %   | 15.5 sec     | 17         | 919 ms        | SQL Server | SQLSRV_GCP_Dbaas_19 |
| SELECT owner, SUM(BYTES)/1024/1024 MB FROM DBA_EXTE...        | < 0.01 % | 3.67 min     | 11         | 19.6 sec      | Oracle     | Ora_18c_EE_1        |
| SELECT datafile_name, tablespace_name, file_id, auto_exten... | < 0.01 % | 3.78 min     | 6          | 34.5 sec      | Oracle     | Ora_18c_EE_1        |
| SELECT * FROM (SELECT t.tablespace_name tablespace_na...      | < 0.01 % | 2.92 min     | 3          | 52.7 sec      | Oracle     | Ora_18c_EE_1        |
| select /*+ RULE */ version_full "db_version", decode(log_m... | < 0.01 % | 1.18 min     | 18         | 3.9 sec       | Oracle     | Ora_18c_EE_1        |
| select /*+ RULE */ version_full "db_version", decode(log_m... | < 0.01 % | 22.6 sec     | 6          | 3.7 sec       | Oracle     | Ora_18c_EE_1        |
| SELECT substr(A.tablespace_name,1,14) tablespace_name, a...   | < 0.01 % | 23.2 sec     | 1          | 23.2 sec      | Oracle     | Ora_18c_EE_1        |
| SELECT summary.sql_id, event, sql_text, event_time_in_seco... | < 0.01 % | 29.8 sec     | 1          | 29.8 sec      | Oracle     | Ora_18c_EE_1        |

### Statement Details

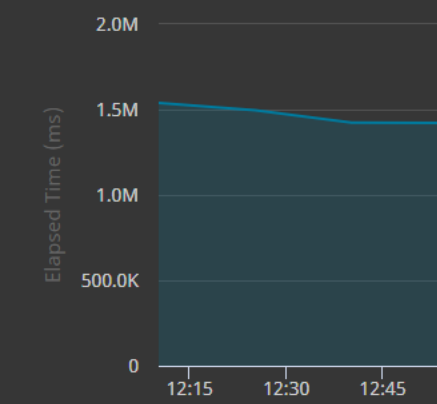
Name: UPDATE [dbo].[BANK] SET [BANK\_NAME] = LTRIM(RTRIM(BANK\_NAME)) FROM BANK WHERE [BANK\_CODE] = '00A'  
 Query ID: 0x0bd0a4d0d5e94049

SQL Text Copy

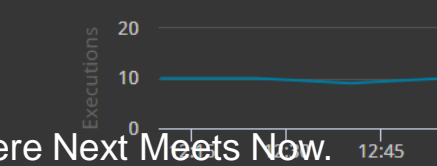
```
UPDATE [dbo].[BANK] SET [BANK_NAME] = LTRIM(RTRIM(BANK_NAME)) FROM BANK WHERE [BANK_CODE] = '00A'
```

Investigate

### Elapsed Time



### Executions



Where Next Meets Now.

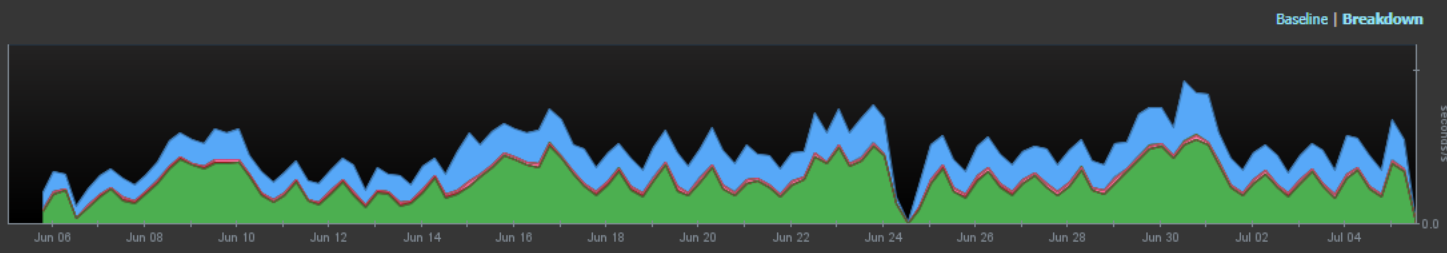
Performance Tree Tops: 25

- Instance View
  - SQL Statements
  - PL/SQL Blocks
  - Programs
  - OS Users
  - DB Users
    - C#FOGMON
    - WORKLOAD
    - SYS
  - Machines
    - win-ora-18c
    - WORKGROUP\win-ora-18c
    - fglam
  - Actions
  - Modules
  - Client Info
  - Command Types
  - Services
  - Consumer Groups
  - Databases
  - Sessions
  - Client PIDs
  - Locked Objects
  - 1@0
  - Files
    - C:\USERS\ORACLE\DOWNLOADS\ORADATA\G
    - C:\USERS\ORACLE\DOWNLOADS\ORADATA\G
    - C:\USERS\ORACLE\DOWNLOADS\WINDOWS:
    - C:\USERS\ORACLE\DOWNLOADS\ORADATA\G
    - C:\USERS\ORACLE\DOWNLOADS\ORADATA\G
    - C:\USERS\ORACLE\DOWNLOADS\ORADATA\G
    - C:\USERS\ORACLE\DOWNLOADS\ORADATA\G
    - C:\USERS\ORACLE\DOWNLOADS\ORADATA\G
    - C:\USERS\ORACLE\DOWNLOADS\ORADATA\G
    - C:\USERS\ORACLE\DOWNLOADS\ORADATA\G
  - Disks
  - Objects I/O
    - WORKLOAD.H\_LINITEM
    - WORKLOAD.H\_LINITEM
    - 747@
    - SYS.I\_DEFERRED\_STG1

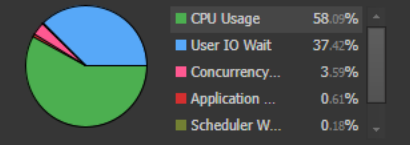
History | Advanced Analytics

Dimension Filter: Instance View > SQL Statements

Resource Consumption

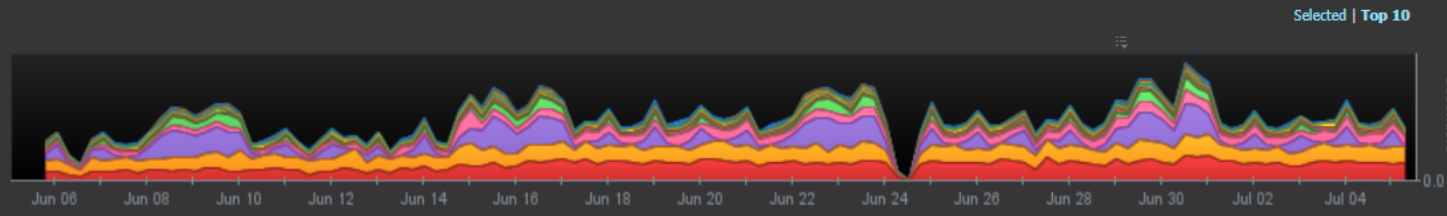


Resource Breakdown



Overview

Active Time



Comparing Top 10 Workload activity over selected timeframe

Top SQL Statements

| SQL Statements  | SQL ID        | Active Time | Active Time Percent | Average SQL Response Time | Buffer Gets    | CPU Usage | Disk Reads    | Direct Writes | Elapsed Time E |
|---|---------------|-------------|---------------------|---------------------------|----------------|-----------|---------------|---------------|----------------|
| SELECT * FROM (SELECT t.tablespace_name tablespace_name, t.BLOCK...EM', ' '), DECODE (:5, 1, 'SYSAUX', ' ')) AND ROWNUM <= 2000     | 6j7hh8w95xz4r | 104,126.16  | 17.18               | 152.60                    | 64,469,632.00  | 60,309.03 | 16,149,947.00 | 0.00          | 89,119.21      |
| SELECT owner, SUM(BYTES)/1024/1024 MB FROM DBA_EXTENTS group by owner   | 3h6cp961rydbg | 103,794.20  | 17.13               | 13.16                     | 359,175,475.00 | 19,681.98 | 52,141,979.00 | 0.00          | 106,676.30     |
| call dbms_stats.gather_database_stats_job_proc ( )  | b6usrq82hwsa3 | 75,972.18   | 12.53               | 32.88                     | 671,985,219.00 | 75,023.86 | 89,056,925.00 | 33,955.00     | 118,118.42     |
| SELECT datafile_name, tablespace_name, file_id, auto_extensible,... t.file_id, t.con_id, t.tablespace_name) WHERE ROWNUM <= 2000    | 4g3bca0jwk8x4 | 49,412.66   | 8.15                | 533.16                    | 79,320,359.00  | 10,327.28 | 31,092,722.00 | 0.00          | 76,241.80      |
| MERGE /*+ dynamic_sampling(ST 4) dynamic_sampling_est_cdn(ST) OP...0.01, NVL( LEAST( 100, GREATEST( 0.01, (DECODE(BITAND(M.FLAGS    | 9mwkqzbg6bz3  | 23,668.68   | 3.91                | 10.23                     | 70,467,651.00  | 23,227.26 | 741,632.00    | 0.00          | 28,989.76      |
| select /*+ RULE */ version_full "db_version", decode(log_mode,"N... rds_count from sys.all_users where username='RDSADMIN') rds     | 6ahnjh077hkax | 18,947.68   | 3.13                | 4.97                      | 8,833,001.00   | 6,501.38  | 725.00        | 0.00          | 49,355.43      |
| select sum(l_extendedprice) / 7.0 as avg_yearly from H_lineitem,...avg(l_quantity) from H_lineitem where l_partkey = p_partkey )    | 42hkuxgnq6a1a | 16,461.50   | 2.72                | 54.92                     | 30,359,713.00  | 12,850.23 | 43,278,532.00 | 12,588,746.00 | 20,374.47      |
| select /*+ RULE */ version_full "db_version", decode(log_mode,"N... rds_count from sys.all_users where username='RDSADMIN') rds     | 8j76b391nh012 | 11,501.80   | 1.90                | 5.10                      | 5,286,896.00   | 4,018.32  | 238.00        | 0.00          | 29,234.35      |
| select /*+ no_parallel_index(t, "H_LINITEM_IDX1") dbms_stats cu...NUM("WORKLOAD", "H_LINITEM", 388123, 4, 0, "L_ORDERKEY") = :objn) | fuhhhuf1c7q6  | 8,974.38    | 1.48                | 11.71                     | 2,149,569.00   | 3,669.22  | 2,097,209.00  | 718.00        | 9,229.74       |
| SELECT substr(A.tablespace_name,1,14) tablespace_name, a.file_na...pace_name=b.tablespace_name(+) ORDER BY A.tablespace_name ASC    | 0pgnz8chrnn5r | 8,731.99    | 1.44                | 12.33                     | 11,832,167.00  | 1,360.44  | 4,580,481.00  | 0.00          | 9,310.78       |

Where Next Meets Now.



# Using Alarm Templates

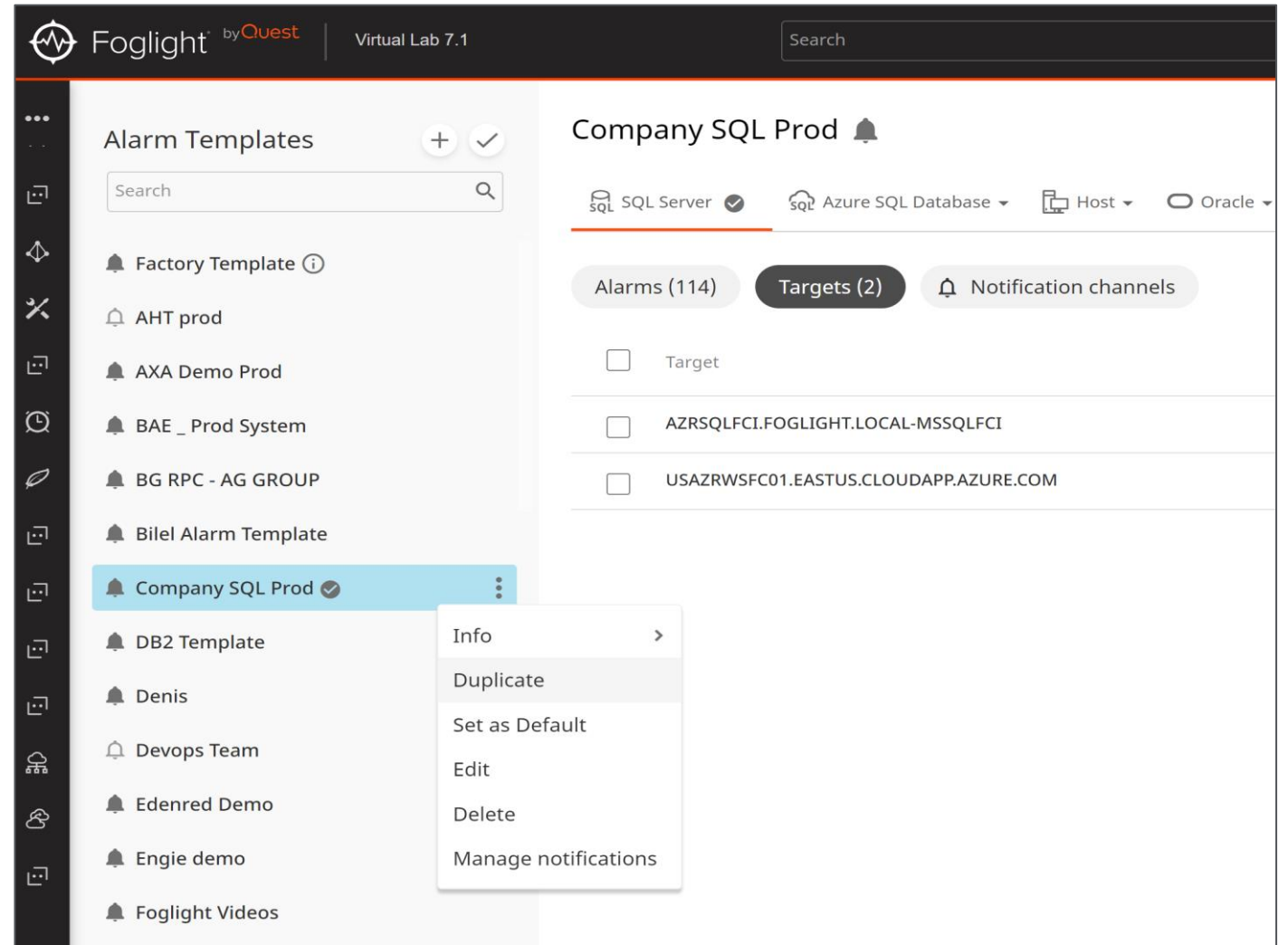
The 'Alarm Templates' dashboard displays the default factory template and any duplicated or created templates. For each template, you can view the configured targets, selected domains, and available alarms for that domain.

The screenshot shows the Foglight interface for managing alarm templates. The left sidebar lists various alarm templates, with 'Factory Template' selected. The main area displays the configuration for the 'Factory Template' under the 'ActiveDirectory' domain. It includes a search bar, a notification icon, and a list of alarms with their status and configuration details.

| Alarm  | On/Off | Warning    | Info       | Alert     |
|--|--------|------------|------------|-----------|
| <input type="checkbox"/> Alarm   |        | ✖          | ⚠          | ⚠         |
| <input type="checkbox"/> DRA Outbound Values Total/sec<br>Checks if the DRA Outbound Values Total/sec are trending upward.   | 🔵      |            |            | ✓         |
| <input type="checkbox"/> ESE Table Open Cache Misses/sec<br>Checks if the ESE Table Open Cache Misses/sec is trending upward.                                      | 🔵      | ✓          |            |           |
| <input type="checkbox"/> DC Connectivity<br>Reachability of a Domain Controller from the FMS installation.   | 🔵      |            | ✓          |           |
| <input type="checkbox"/> DNS Total Responses Sent/sec<br>Total Responses Sent/sec.   | 🔵      |            |            | ✓         |
| <input type="checkbox"/> LDAP DS Threads in Use<br>Checks if the LDAP DS Threads in Use is above the threshold value.  | 🔵      |            |            | ✓         |
| <input type="checkbox"/> DRA Inbound Full Sync Objects Remaining<br>Checks if the number of DRA Inbound Full Sync Objects Remaining is above the threshold value.  | 🔵      | 2000 Count | 1000 Count | 300 Count |
| <input type="checkbox"/> DRA Outbound Objects/sec<br>Checks if the DRA Inbound DRA Outbound Objects/sec are trending upward.                                       | 🔵      |            |            | ✓         |
| <input type="checkbox"/> DRA Inbound Bytes Not Compressed (Within Site)/sec<br>Checks if the DRA Inbound Bytes Not Compressed Within Site/sec are trending upward. | 🔵      |            |            | ✓         |
| <input type="checkbox"/> DRA Inbound Values (DNs Only)/sec<br>Checks if the DRA Inbound DRA Inbound Values (DNs Only)/sec are trending upward.                     | 🔵      |            |            | ✓         |
| <input type="checkbox"/> ESE Table Opens/sec   | 🔵      |            |            | ✓         |

# Using Alarm Templates

- Creating a new template
- Duplicating a template
- Setting Default Templates
- Viewing template information
- Editing templates
- Attaching Targets to Templates
- Removing Targets from a template
- Deleting a template



# Using Alarm Templates: Notification Channels

Foglight has a notification system that allows users to receive alerts or notifications about events and issues detected within the monitored environment. These notifications are sent through communication channels, referred as **Notification Channel**

The screenshot shows the Foglight web interface for managing notification channels. The top navigation bar includes the Foglight logo, the text 'Virtual Lab 7.1', a search bar, and user profile icons. The main content area is titled 'Notification Channels Management' and features a search bar and two buttons: 'Add notification channel' and 'Manage global mail server settings'. Below this is a table listing various notification channels with columns for Name, Alarm Template, Date of last change, and Active status.

| <input type="checkbox"/> | Name   | Alarm Template | Date of last change↓ | Active                   |
|--------------------------|--|----------------|----------------------|--------------------------|
| <input type="checkbox"/> | Denis OSullivan<br>just emails Denis               | 0              | 19 Jul 2024          | <input type="checkbox"/> |
| <input type="checkbox"/> | DBAA_TEAM  | 0              | 11 Mar 2024          | <input type="checkbox"/> |
| <input type="checkbox"/> | Bilel Notification Channel<br>just to spam Bilel ! | 0              | 29 Feb 2024          | <input type="checkbox"/> |
| <input type="checkbox"/> | MobiChannel  | 0              | 8 Jan 2024           | <input type="checkbox"/> |
| <input type="checkbox"/> | SwissLifeChannel                                   | 0              | 11 Dec 2023          | <input type="checkbox"/> |
| <input type="checkbox"/> | DEVOPS TEAM OPERATIONS<br>DEVOPS TEAM OPERATIONS   | 0              | 11 Aug 2023          | <input type="checkbox"/> |
| <input type="checkbox"/> | OPSGenie Team<br>OPSGenie Team                     | 0              | 11 Aug 2023          | <input type="checkbox"/> |
| <input type="checkbox"/> | Oracle DBA Team<br>Oracle DBA Team                 | 0              | 11 Aug 2023          | <input type="checkbox"/> |
| <input type="checkbox"/> | Transcom DBA TEAM<br>Transcom DBA TEAM             | 0              | 11 Aug 2023          | <input type="checkbox"/> |
| <input type="checkbox"/> | VMWARE ADMINS                                      | 0              | 11 Aug 2023          | <input type="checkbox"/> |
| <input type="checkbox"/> | Graphnet DBA TEAM                                  | 0              | 11 Aug 2023          | <input type="checkbox"/> |



# Using Alarm Templates: Notification Channels

Managing Notification Channels | Managing Contacts | Setting Alarm's Notification

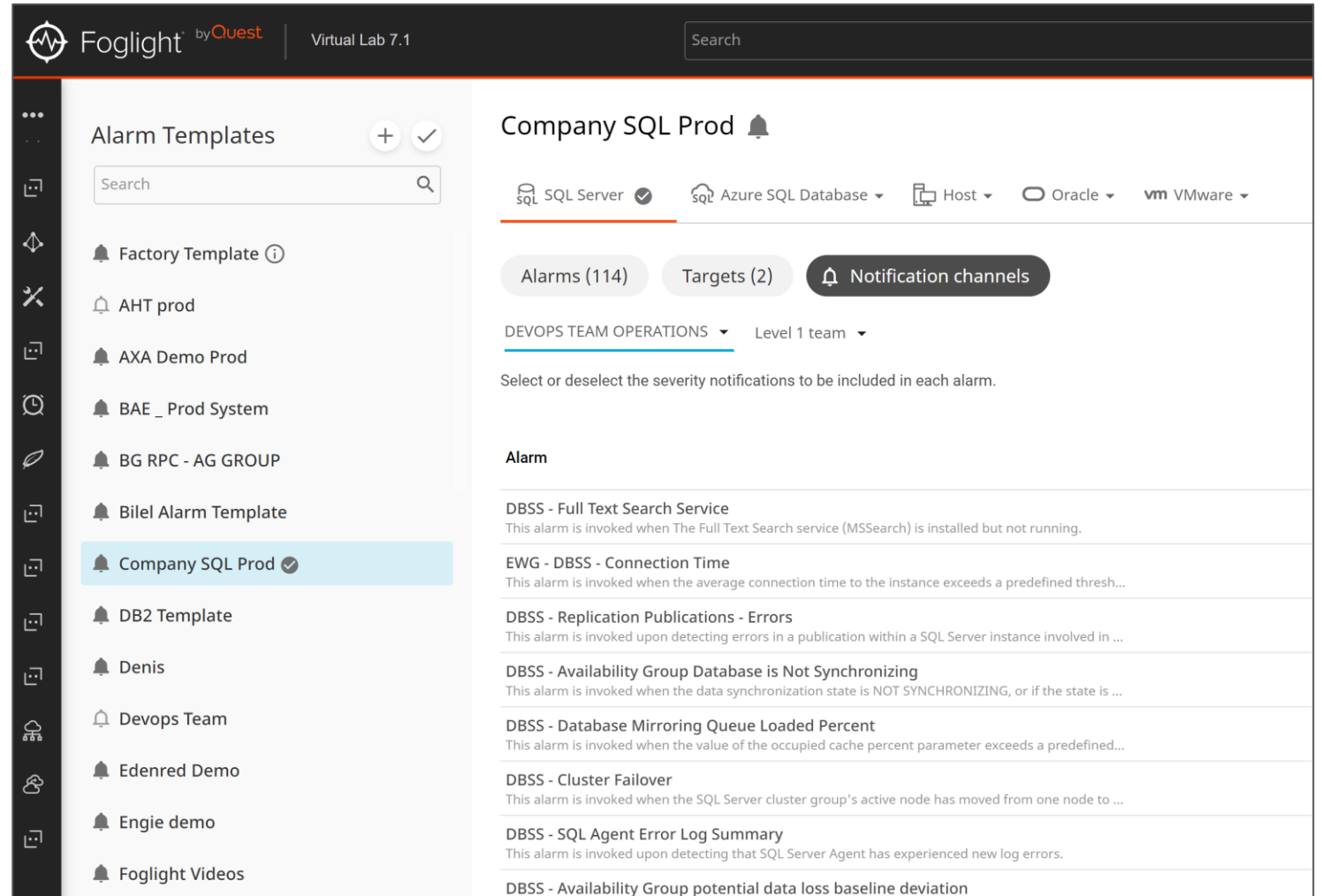
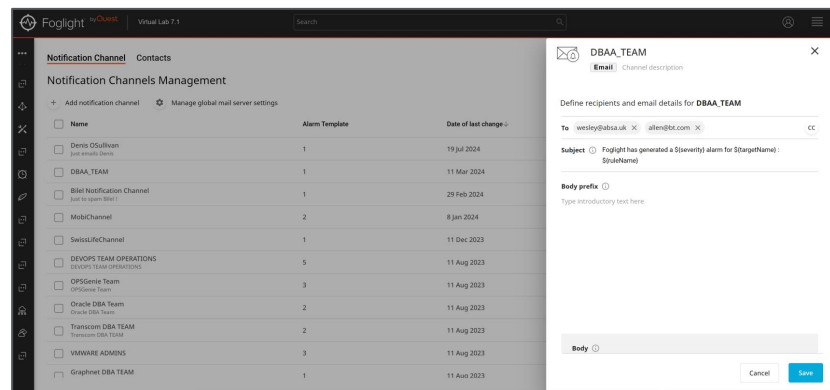
The screenshot shows the Foglight interface with the 'Notification Channels Management' section. A modal window is open for configuring the 'DBAA\_TEAM' notification channel. The modal includes fields for 'To' (wesley@absa.uk, allen@bt.com), 'Subject' (Foglight has generated a \$(severity) alarm for \$(targetName): \$(ruleName)), and 'Body prefix' (Type introductory text here). Buttons for 'Cancel' and 'Save' are at the bottom.

| Name  | Alarm Template | Date of last change |
|---|----------------|---------------------|
| Denis OSullivan<br><small>Just emails Denis</small>               | 1              | 19 Jul 2024         |
| DBAA_TEAM   | 1              | 11 Mar 2024         |
| Bilel Notification Channel<br><small>Just to spam Bilel !</small> | 1              | 29 Feb 2024         |
| MobiChannel   | 2              | 8 Jan 2024          |
| SwissLifeChannel  | 1              | 11 Dec 2023         |
| DEVOPS TEAM OPERATIONS<br><small>DEVOPS TEAM OPERATIONS</small>   | 5              | 11 Aug 2023         |
| OPSGenie Team<br><small>OPSGenie Team</small>                     | 3              | 11 Aug 2023         |
| Oracle DBA Team<br><small>Oracle DBA Team</small>                 | 2              | 11 Aug 2023         |
| Transcom DBA TEAM<br><small>Transcom DBA TEAM</small>             | 2              | 11 Aug 2023         |
| VMWARE ADMINS   | 3              | 11 Aug 2023         |
| Graphnet DBA TEAM   | 1              | 11 Aug 2023         |

The screenshot shows the 'Alarm Templates' section in Foglight. A list of alarm templates is visible, with 'Company SQL Prod' selected. The details for this alarm are shown on the right, including the target 'Company SQL Prod' and a list of alarm messages such as 'DBSS - Full Text Search Service' and 'DBSS - Availability Group Database is Not Synchronizing'.

# Using Alarm Templates: Notification Channels

Managing Notification Channels | Managing Contacts | Setting Alarm's Notification



# Using Swagger UI

- API's
  - Alarm Templates
  - Audit Log
  - Telemetry

<https://hostname/api/openapi/swagger-ui>

The screenshot shows the Swagger UI interface for the 'Alarm Template APIs'. At the top, there is a header with the Swagger logo and the text 'Supported by SMARTBEAR'. On the right, there is a dropdown menu labeled 'Select a definition' with 'Alarm Template APIs' selected. Below the header, the title 'Alarm Template APIs' is displayed with version '1.3.3' and 'OAS3' tags. The URL '/api/openapi/openapi-alarm-template-v1.yaml' and the description 'Alarm template management APIs' are shown. A 'Servers' section contains a dropdown menu with the selected server '/api/v1 - Endpoints to manage alarm templates and domain templates'. An 'Authorize' button is located to the right of the servers dropdown. The main content area is titled 'all' and lists ten API endpoints with their respective HTTP methods and descriptions:

- GET** /alarm-templates List all alarm templates
- POST** /alarm-templates Add new alarm template
- POST** /alarm-templates/set-defaults Set default template for domains
- GET** /alarm-templates/{alarmTemplateId} Get alarm template details
- PUT** /alarm-templates/{alarmTemplateId} Update alarm template
- DELETE** /alarm-templates/{alarmTemplateId} Delete alarm template
- POST** /alarm-templates/{alarmTemplateId}/clone Clone alarm template
- POST** /alarm-templates/{alarmTemplateId}/assign-targets Assign targets
- POST** /alarm-templates/{alarmTemplateId}/unassign-targets Unassign targets
- GET** /alarm-templates/{alarmTemplateId}/export Get the configuration of an alarm template.

# Audit Log

The View Audit Information dashboard allows you to review these logs and to filter them to show information for a specific time span.

The screenshot shows the Foglight interface for 'Virtual Lab 7.1'. The main heading is 'View Audit Information', with a sub-heading: 'Information about the users who are authenticated upon logging in to Foglight, and user management, or configuration changes, such as changes to Foglight registry and rules.' The interface includes a search bar and a navigation menu on the left. The audit log table is as follows:

| Time Range        | User Name     | Service Name       | Operation Name (Name)  |
|-------------------|---------------|--------------------|--|
| 02/08/2024, 16:49 | Adminuser     | SecurityService    | authenticate (Login OK from 145.224.65.39)   |
|                   | Adminuser     | SecurityService    | authenticate (Login OK from 145.224.65.39)   |
|                   | Adminuser     | SecurityService    | authenticate (Login OK from 145.224.65.39)   |
|                   | Adminuser     | SecurityService    | authenticate (Login OK from 145.224.65.39)   |
|                   | Adminuser     | SecurityService    | authenticate (Login OK from 145.224.65.39)   |
|                   | Adminuser     | SecurityService    | authenticate (Login OK from 145.224.65.39)   |
|                   | Adminuser     | SecurityService    | authenticate (Login OK from 145.224.65.39)   |
|                   | Adminuser     | SecurityService    | authenticate (Login OK from 145.224.65.39)   |
| 02/08/2024, 16:48 | Adminuser     | SecurityService    | authenticate (Login OK from 145.224.65.39)   |
|                   | Adminuser     | RestResourceAccess | Access REST resource through path : /security/login (Adminuser)  |
|                   | n/a           | APILogin           | jwtTokenLoginSuccess   |
|                   | Adminuser     | SecurityService    | authenticate (Login OK from 145.224.65.39)   |
|                   | Adminuser     | RestResourceAccess | Access REST resource through path : telemetry/configurations (Adminuser)   |
|                   | Adminuser     | SecurityService    | authenticate (Login OK from 145.224.65.39)   |
|                   | Adminuser     | SecurityService    | authenticate (Login OK from 145.224.65.39)   |
|                   | Adminuser     | SecurityService    | authenticate (Login OK from 145.224.65.39)   |
|                   | __service__   | AlarmService       | clearAlarm (Jobs Failed. The SQL Server Job DeadLock2 has failed on 08/03/24 12:45 AM with message The job failed. The Job was invoked by Schedule 54 (every |
| 02/08/2024, 16:41 | __service__   | AlarmService       | clearAlarm (Jobs Failed. The SQL Server Job TWO STEP JOB has failed on 08/02/24 4:40 PM with message The job failed. The Job was invoked by Schedule 14 (sch |
|                   | __service__   | AlarmService       | clearAlarm (Jobs Failed. The SQL Server Job TWO STEP JOB has failed on 08/02/24 4:25 PM with message The job failed. The Job was invoked by Schedule 14 (sch |
|                   | foelkshidwall | SecurityService    | authenticate (Logged out)  |

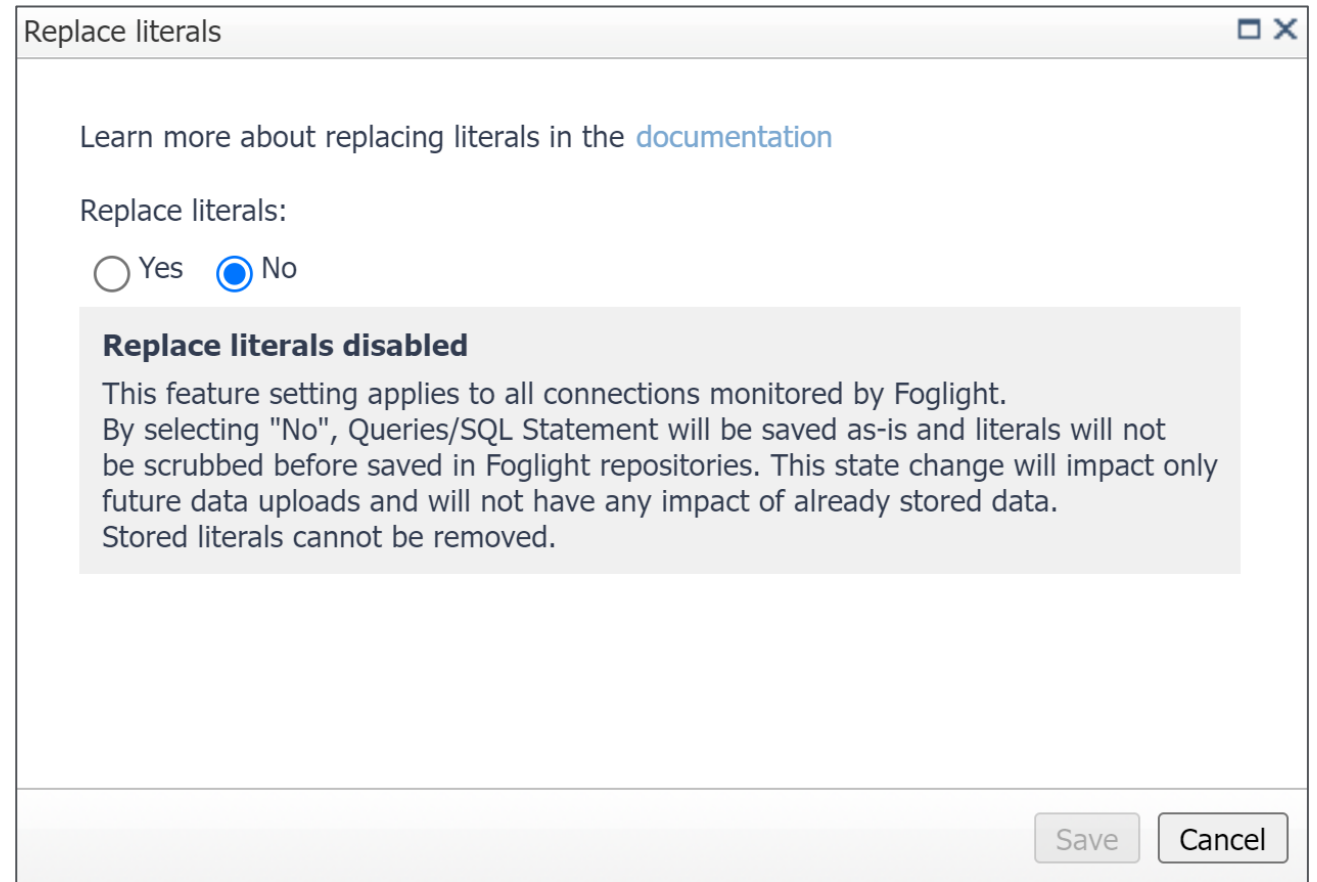
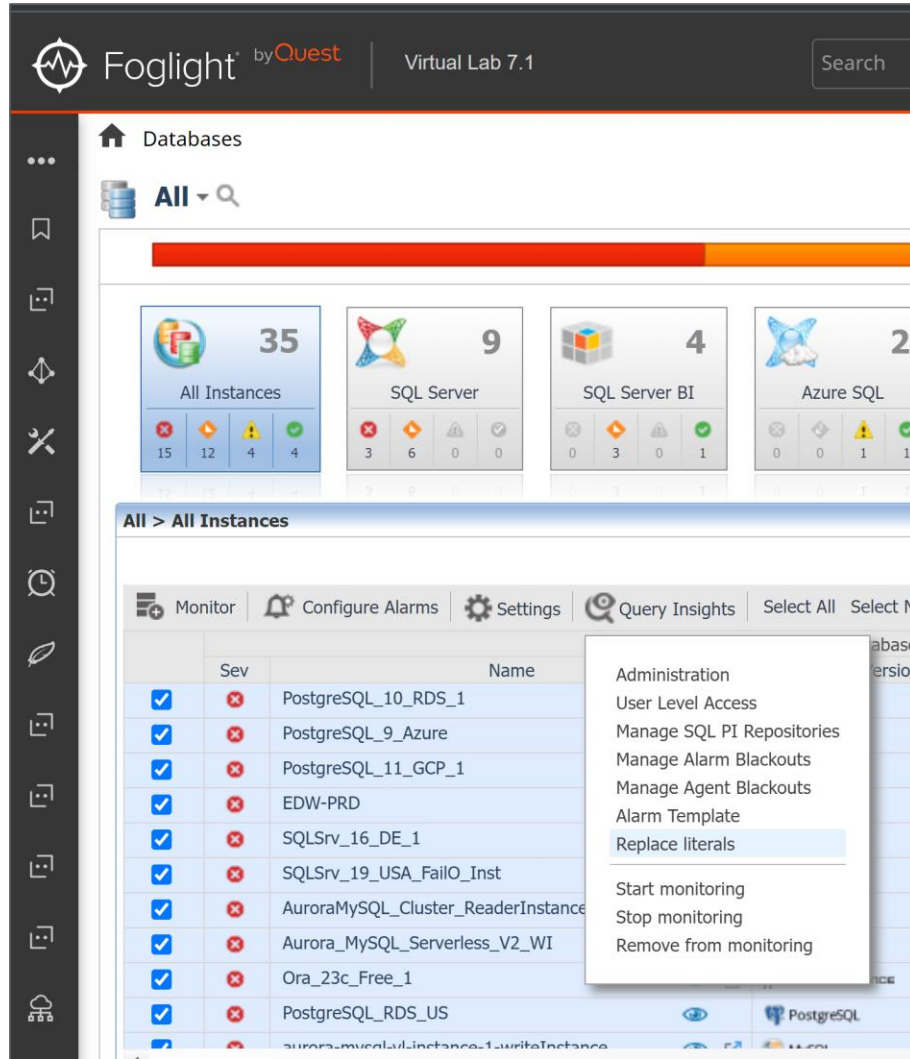
# Replacing Literals

Foglight replaces string and numeric literals in uploaded SQL statements and queries by default as they may contain sensitive or Personally Identifiable Information (PII).

The placeholder data has no reference to the original data, cannot be reversed into the original data, and has no association with the original data.

| Before uploading to Foglight  | On upload to Foglight string literals are replaced  |
|---|---|
| select @quest   | select @quest   |
| select 'quest'  | select '*** Removed by Foglight **'   |
| select 'quest' and 'TIGER'  | select '*** Removed by Foglight **' and '*** Removed by Foglight **'  |
| select 'quest' SET QUOTED_IDENTIFIER OFF;<br>select "tiger"   | select '*** Removed by Foglight **' SET QUOTED_IDENTIFIER OFF;<br>select "tiger"  |
| select 'quest' SET QUOTED_IDENTIFIER OFF;<br>select "tiger" SET QUOTED_IDENTIFIER ON<br>select "wolf"   | select 'quest' SET QUOTED_IDENTIFIER OFF;<br>select "tiger" SET QUOTED_IDENTIFIER ON<br>select "wolf"   |
| select 'quest' /* this is a comment 'Next' line */ 'frog'   | select '*** Removed by Foglight **' /* this is a comment 'Next' line */ '*** Removed by Foglight **'  |
| select payment where ccn = '12345678901234';  | select payment where ccn = '*** Removed by Foglight **';  |
| 'select top(526) from aaa'  | '*** Removed by Foglight **'  |
| begin – get the data select target_data from sys.dm_xe_sessions s join sys.dm_xe_session_targets t on t.event_session_address = s.address where s.name = N'FoglightWorkloadAnalysis_MEL602102_3843_mel602102_sql2008r2_sqlserver' and t.target_name = N'ring_buffer' – stop session | begin – get the data select target_data from sys.dm_xe_sessions s join sys.dm_xe_session_targets t on t.event_session_address = s.address where s.name = N'*** Removed by Foglight **' and t.target_name = N'*** Removed by Foglight **' – stop session |
| select 'quest' 'hare'   | select '*** Removed by Foglight **' and '*** Removed by Foglight **'  |
| select 'quest' – 'hare'   | select '*** Removed by Foglight **' – 'hare'  |
| select 'quest' – 'hare' –   | select '*** Removed by Foglight **' – 'hare' –  |
| select 'quest' and "hare"   | select '*** Removed by Foglight **' and "hare"  |
| select 'quest' and "hare" and 'quest'   | select '*** Removed by Foglight***' and "hare" and '*** Removed by Foglight **'   |
| select 'q"ue' and 'hare' and 'q"ue'   | select '*** Removed by Foglight****' and '*** Removed by Foglight **' and '*** Removed by Foglight **'  |

# Replacing Literals



# MySQL PI

Foglight by Quest Updated at 4-Aug 06:42 Search

Databases > SQL PI Jul 28, 2024 - Now 7 days Reports

DB 10.240.86.5 Overview | **SQL PI** | Server | Tables | Connections | Blocked TRX | Configuration

Workload I/O Lock Synch Network Other Powered by SQL PI

Performance Tree Tops: 25

Instance View

- Normalized Statements
  - SELECT `t`.`thread\_id` AS `thread`
  - SELECT `t`.`thread\_id` AS `thread`
  - SELECT \*, `h`.`sql\_text` AS `QUE`
  - SHOW FULL PROCESSLIST
  - SELECT ?
  - SELECT `r`.`trx\_id` `waiting\_trx\_id`
  - SET `autocommit` = ?
  - SELECT `thread\_id`, `event\_id`, ``
  - SELECT `thread\_id`, `event\_id`, ``
  - SET `character\_set\_results` = ?
  - SELECT `thread\_id`, `event\_id`, ``
  - SELECT `thread\_id`, `event\_id`, ``
  - SELECT `thread\_id`, `event\_id`, ``
  - SELECT @@SESSION.`auto\_increm`
  - SHOW WARNINGS
  - SELECT `thread\_id`, `event\_id`, ``
  - SET `time\_zone` = ?
  - SELECT `thread\_id`, `event\_id`, ``
  - SELECT `thread\_id`, `event\_id`, ``
  - SELECT `thread\_id`, `event\_id`, ``
  - SELECT `thread\_id`, `event\_id`, ``
  - SELECT `thread\_id`, `event\_id`, ``
- Schemas
- Users
  - root
  - foglight
- Client Machines
- Programs
- Command Types
- Operations

History Dimension Filter: Instance View

Resource Consumption

Baseline | Breakdown

Resource Breakdown

Top Wait Events

- Network Wait 99.99%
- Other Wait <0.01%
- Synch Wait <0.01%

Overview

Active Time

Sum of all the active waits within the current interval.

Workload Related Metrics

| Metric                    | Resource       | Per Execution | Total      | Minimum  | Maximum  | Average  |
|---------------------------|----------------|---------------|------------|----------|----------|----------|
| Active Time               | Workload       | 0.03          | 122296.00  | 0.06     | 2736.13  | 732.31   |
| Average SQL Response Time | Workload       | < 0.01        | 0.38       | 0.12     | 1.04     | 0.38     |
| Blocked Transactions      | Workload, Lock | 0.00          | 0.00       | 0.00     | 0.00     | 0.00     |
| Buffer Pool               | Workload       | 0.04          | 100.00     | 100.00   | 100.00   | 100.00   |
| Created Tmp Disk Tables   | Workload, I/O  | 0.06          | 246252.00  | 1076.00  | 1985.00  | 1474.56  |
| Created Tmp Tables        | Workload, I/O  | 2.45          | 9942183.00 | 39497.00 | 72847.00 | 59534.03 |
| Deleted Rows              | Workload, I/O  | < 0.01        | 22.67      | 0.00     | 0.10     | 0.01     |
| Errors                    | Workload, I/O  | 0.00          | 0.00       | 0.00     | 0.00     | 0.00     |
| Executions                | Workload       | 1.00          | 4057406.00 | 15545.00 | 28451.00 | 24295.84 |
| Execution Time            | Workload       | 0.36          | 1446762.60 | 3056.76  | 17791.31 | 8663.25  |

# Quick Reminder:

Foglight 101 Series – Episode 2

## Why Upgrade

23<sup>rd</sup> Oct 2024 – 1pm EST

Alex Tarte

Snr. Tech Specialist





# Latest Release – 1<sup>st</sup> Aug 2024

## Security Enhancements

- Updated Java JRE used by Foglight to version 17.0.11
- Updated third-party libraries
- Addressing issues with supporting HTTPS traffic when the FMS is running in FIPS mode

## Foglight Agent Manager Enhancements

- Update the SSH library used by agents to provide support for newer encryption and signature algorithms.

## User Experience Enhancements

- Fixed date format inconsistency in timeframe selector
- Timeframe reset when zoom-in on a wcf chart and set

## Features Enhancements of Foglight for Databases:

- Add the ability to remove literals from queries collected and supported for the following database cartridges: SQL Server, Oracle, Azure DB, DB2, MySQL, PostgreSQL, SAP Hana, Snowflake, Redis, Redshift, MongoDB, Cassandra
- Easy link to Query Insight dashboard - Query Insight dashboard is now accessible directly from the Database Global view dashboard.
- Add the ability to set PI data storage period to lower than 1 year (minimum 90 days)
- Audit kill sessions - The audit record will be created when a user terminates a database session using the Sessions dashboard on SQL Server and Oracle or in the Current Agent dashboard on DB2.
- Enhance historic blocking analysis in SQL Server PI. Add the ability to view more detailed information about locked resources.
- Configure Long running session alarms in both Oracle and SQL Server

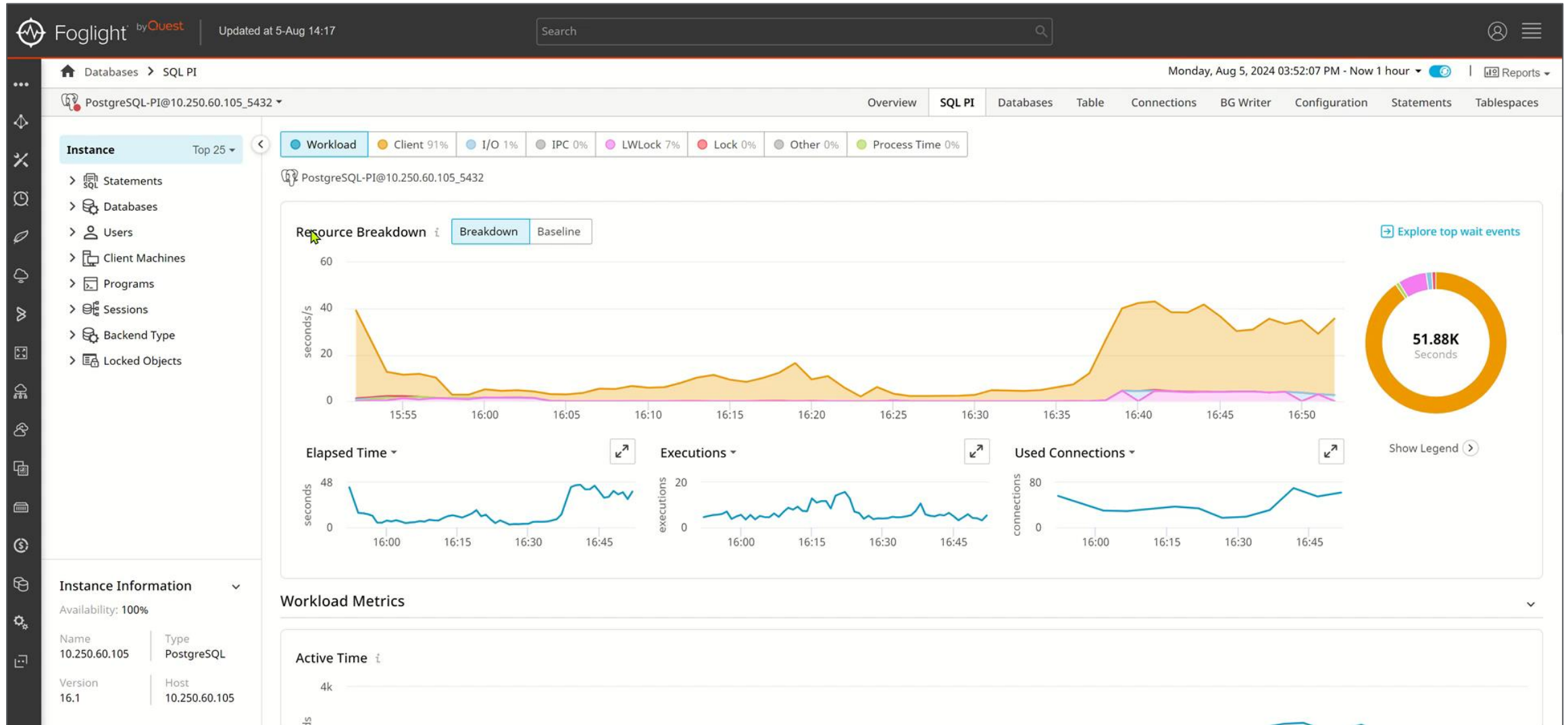
# Latest Release – 1<sup>st</sup> Aug 2024

Quest

- SQL Server 7.2.3.12
- Oracle 7.2.3.12
- DB2 7.2.3.10
- Azure SQL DB 7.2.3.12
- MySQL PI 7.2.3.12
- MongoDBAgent 7.2.3.10
- PostgreSQLAgent 7.2.3.10
- MySQL 7.2.3.10
- SnowflakeAgent 7.2.3.10
- RedshiftAgent 7.2.3.10
- SAP ASE 7.2.3.10
- FglAM linux 7.1.5
- FglAM windows 7.1.5

<https://support.quest.com/foglight/kb/4376552/foglight-7-1-5-release-notes>

# PostgreSQL **PI** (ETA this QTR Aug/Sep '24)

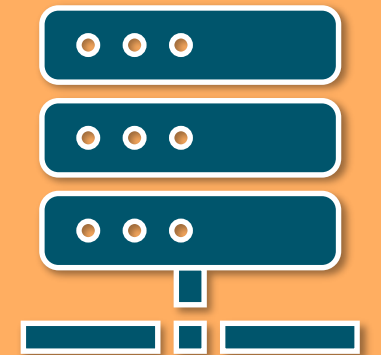




**FULLY  
MANAGED  
SERVICE**

**Vs.**

**SELF  
MANAGED  
SERVICE**



# Foglight Cloud

Foglight Cloud is a managed software that combines many of the capabilities of [Foglight for Databases](#) and [Foglight Evolve](#). Foglight Cloud offers extensive diagnostic capabilities and performance monitoring for databases, servers, virtual machines, containers, and cloud services

- Time to Value within Hours (TTV)
- Reduces Total Cost of Ownership (TCO)
- Continuous Updates Provide Users with Recent Tech Innovations Faster Than Conventional Systems
- Managed Maintenance of Foglight Cloud Minimizes Downtimes, Boosting Efficiency and User Contentment



## Foglight for Databases

- SQL Server & Oracle (all flavors), MySQL, Postgres, Cassandra, MongoDB, Redshift, Redis, Snowflake, SAP HANA), **Azure SQL DB**, Infrastructure (host)

## Foglight for Infrastructure

- Infrastructure (host), Hyper-V, VMWare, vCloud, Cloud Providers (Azure, AWS, Google), Containers



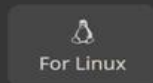


## Welcome to Foglight Cloud!

Discover more powerful capabilities of Foglight Cloud by monitoring your Databases and Servers.

[Learn more](#)

Download agent manager:



### Monitor your Databases and Servers



#### Database

- [Monitor Database](#)
- [Query Insights](#)



#### Hosts

- [Monitor Hosts](#)
- [Environment Overview](#)



#### VMware

- [Monitor VMware](#)



#### HyperV

- [Monitor HyperV](#)



#### Cloud

- [Monitor Cloud](#)



#### Container

- [Monitor Container](#)

### Invite users and manage notifications



#### User Management

- [Invite or manage user](#)



#### Notification channels

- [Manage Contacts](#)
- [Manage Notification Channels](#)



#### Alarms Templates

- [Setup your own alarm template](#)



#### Alarms

- [Review outstanding alarms](#)



# Thank You

## Additional Resources



Sandbox / Interactive Lab  
[FREE]

## Looking Forward to Seeing You There

### Register Today!

## Foglight 101 Series: Episode 2

QR  
code

### Why Upgrade

23<sup>rd</sup> Oct 2024 – 1pm EST

Alex Tarte

Snr. Tech Specialist

**Quest**  
Where Next Meets Now.