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First 80 Hours (Days) with Foglight

You've just been handed the Foglight admin password.

Now what?



Agenda

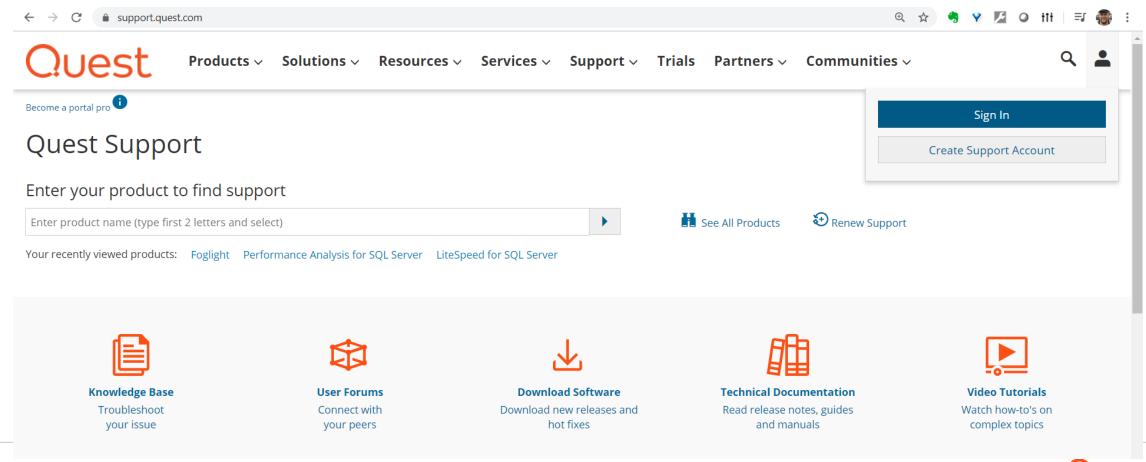
- Support and Community resources
- Version check and upgrade planning
- Deployment validation
- Security audit
- Alarm analysis and review
- Dashboard access
- Report setup
- Additional monitors





Support and Community resources

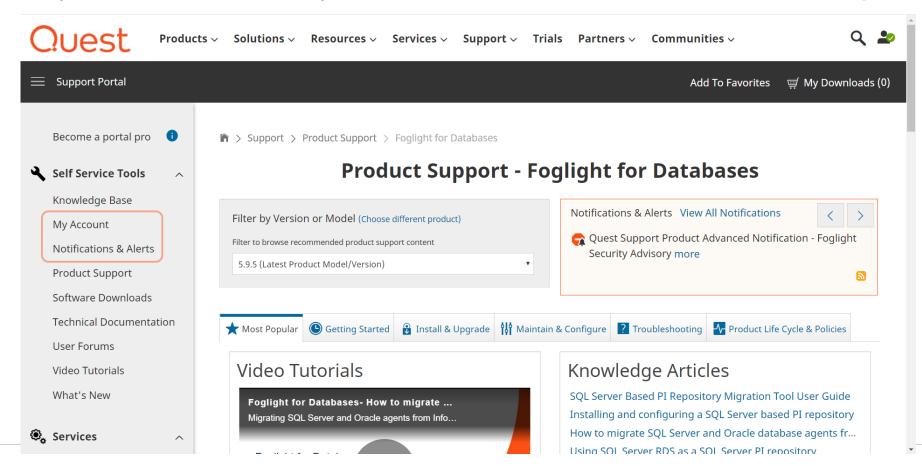
https://support.quest.com





Support Account

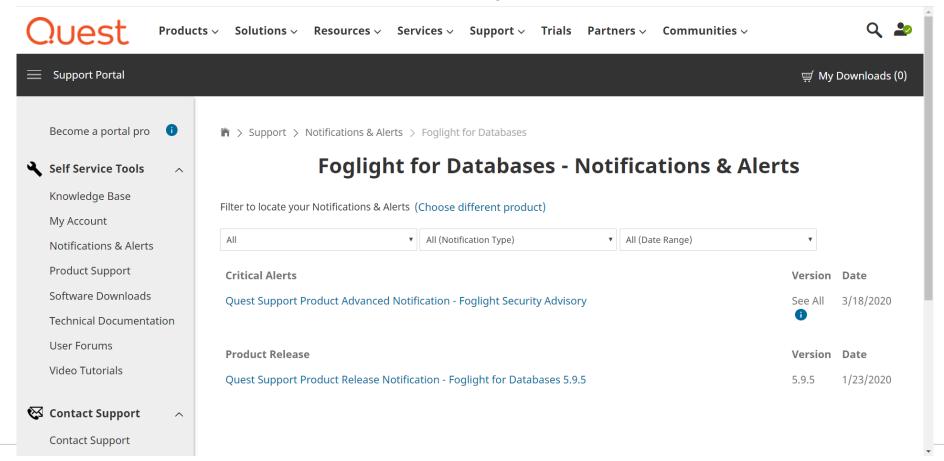
My Account – verify correct contact details, licenses, products, etc.





Support Notifications

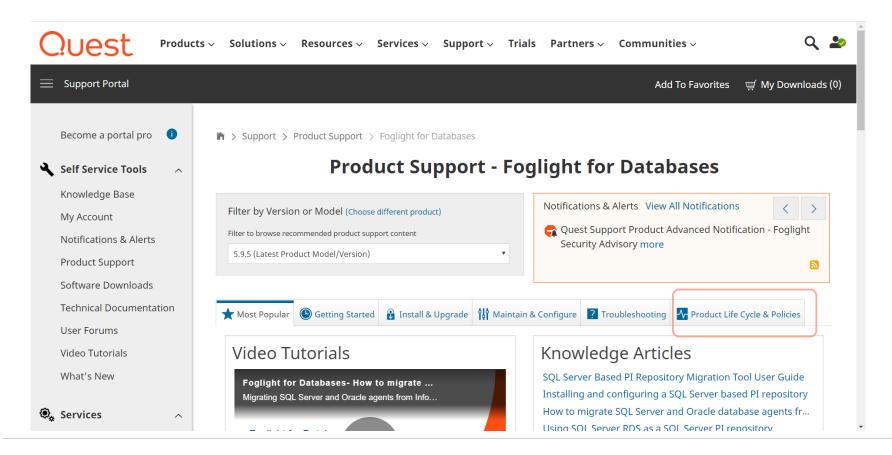
Notifications & Alerts – security alerts, new releases, etc.





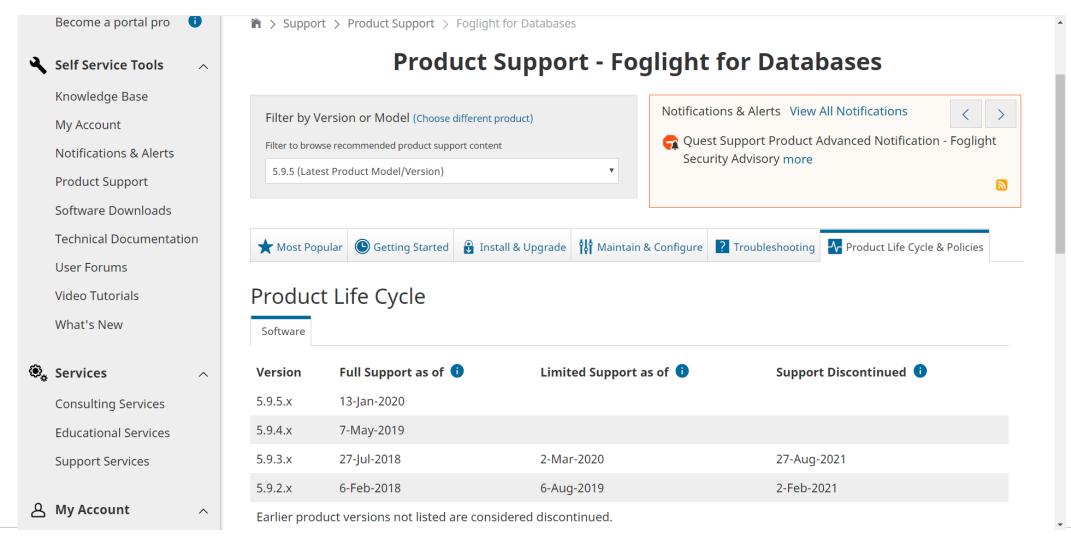
Product Life Cycle

Verify current supported versions of Foglight





Product Life Cycle





Quest Community

 Blogs: https://www.quest.com/community/blogs/b/performance-monitoring

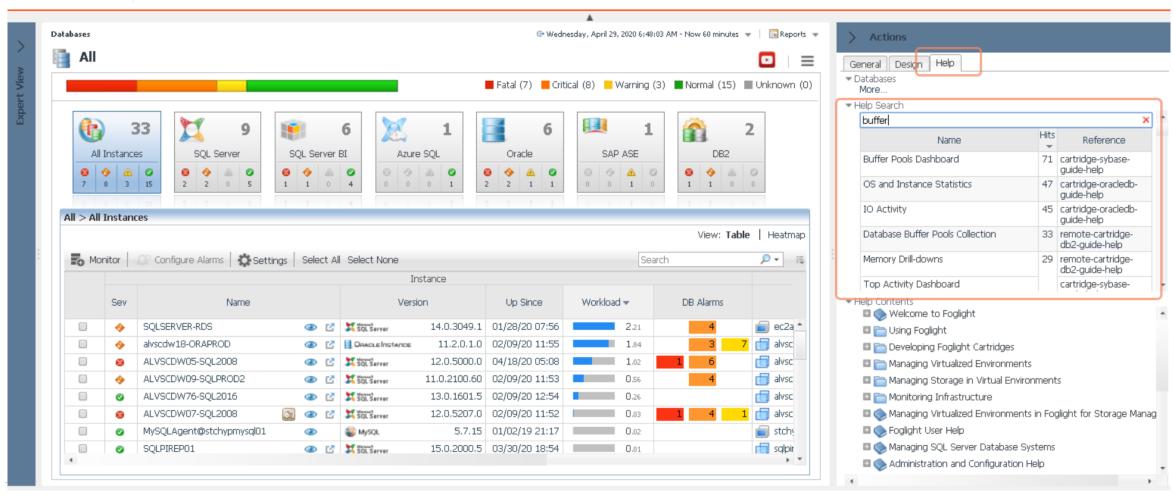
 Forum: https://www.quest.com/community/foglight



Help / Search within Foglight

Quest™

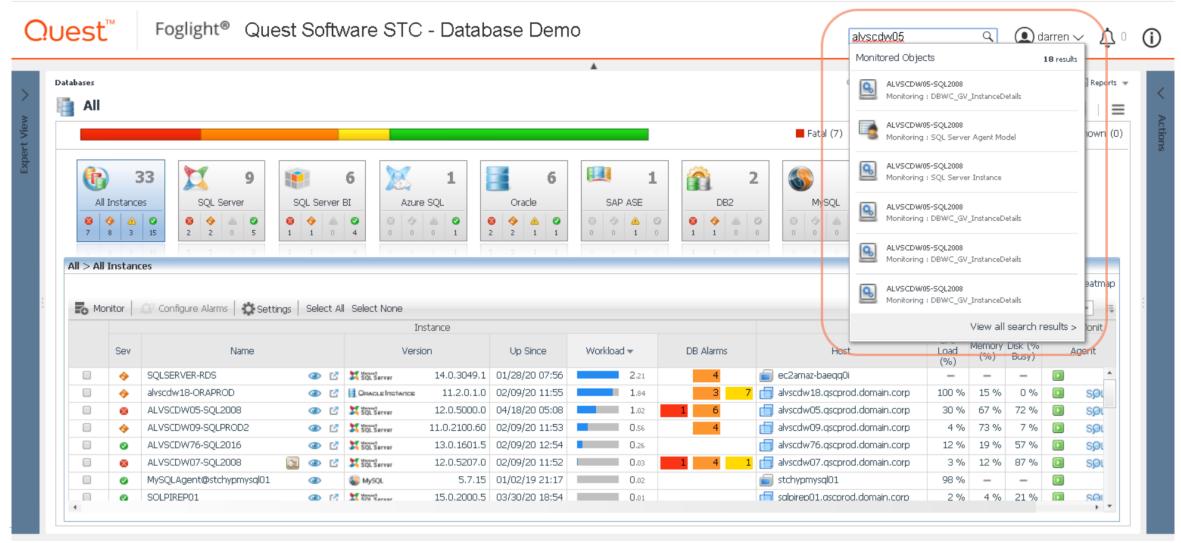
Foglight® Quest Software STC - Database Demo





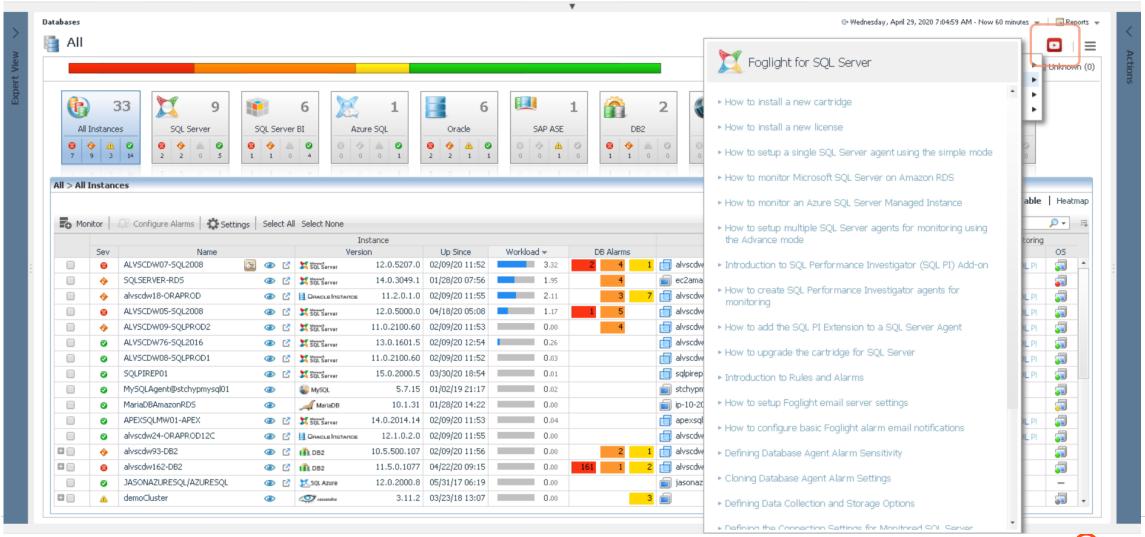
Search

Help / Search within Foglight

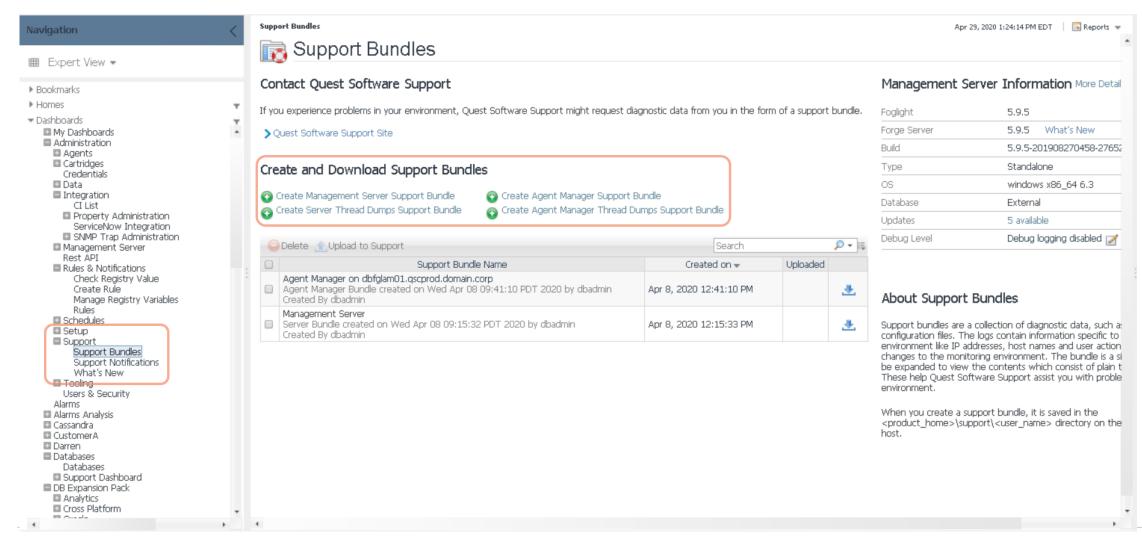




YouTube Videos



Support Bundles





Foglight 101 Skills Archive

- Archival of webcasts since April 2017
- Organized into categories for quick reference

https://www.quest.com/community/blogs/b/performance-monitoring/posts/foglight-skills-101-webcast-series



Get to Know Your Account Manager

- Your account manager is there to help you
- Can provide details on the history of Quest in your organization
- Can get project reports from PSO on customizations, recent work, any remaining hours, etc.
- Can setup sessions on product "tips & tricks", etc.



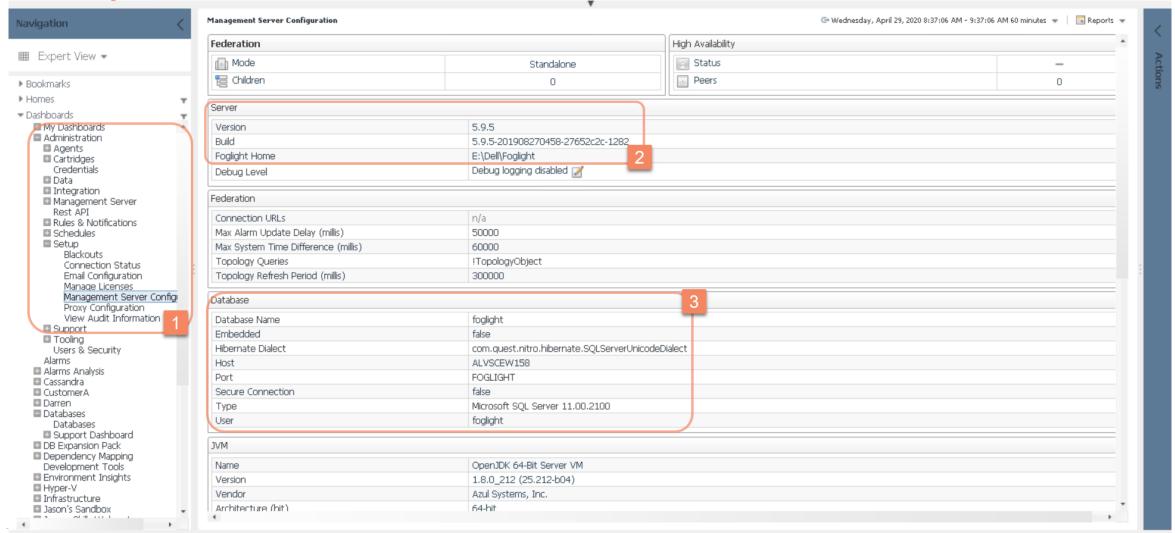


Version check and upgrade planning

Verify the versions of the Foglight Management Server (FMS)
 (this is generally what is referenced on the product life cycle page, eg. 5.9.5.x)

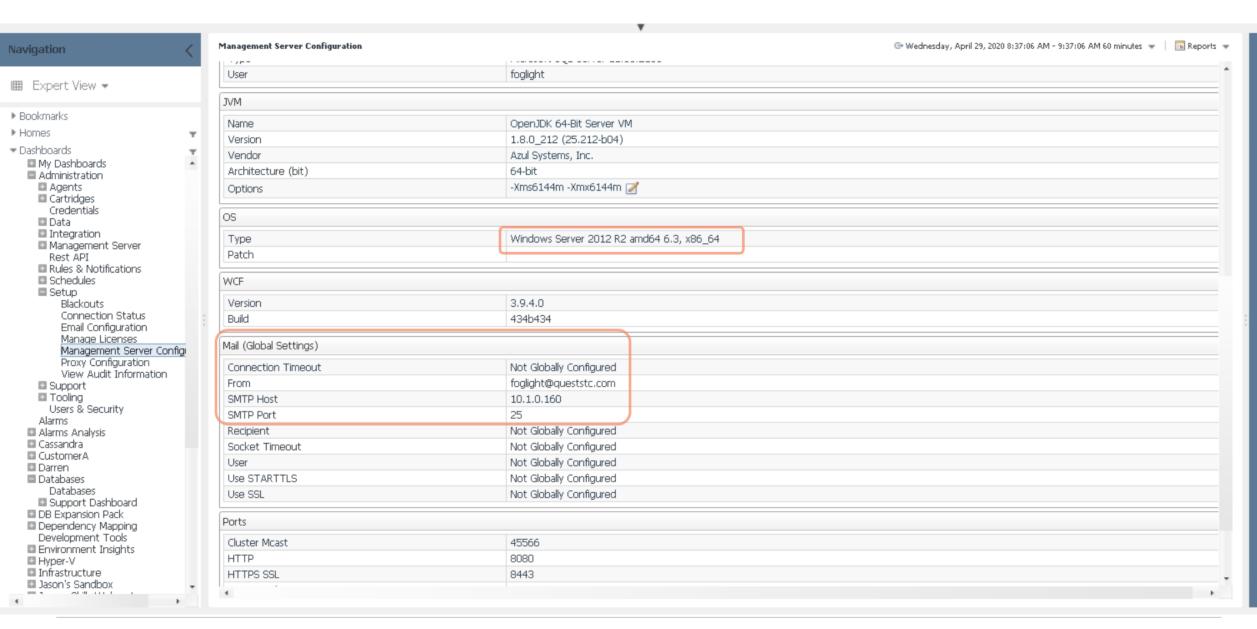
Verify the cartridge versions for databases, etc.
 (these can be updated independently from the FMS and are generally performed to enable new functionality)

Verify FMS Version



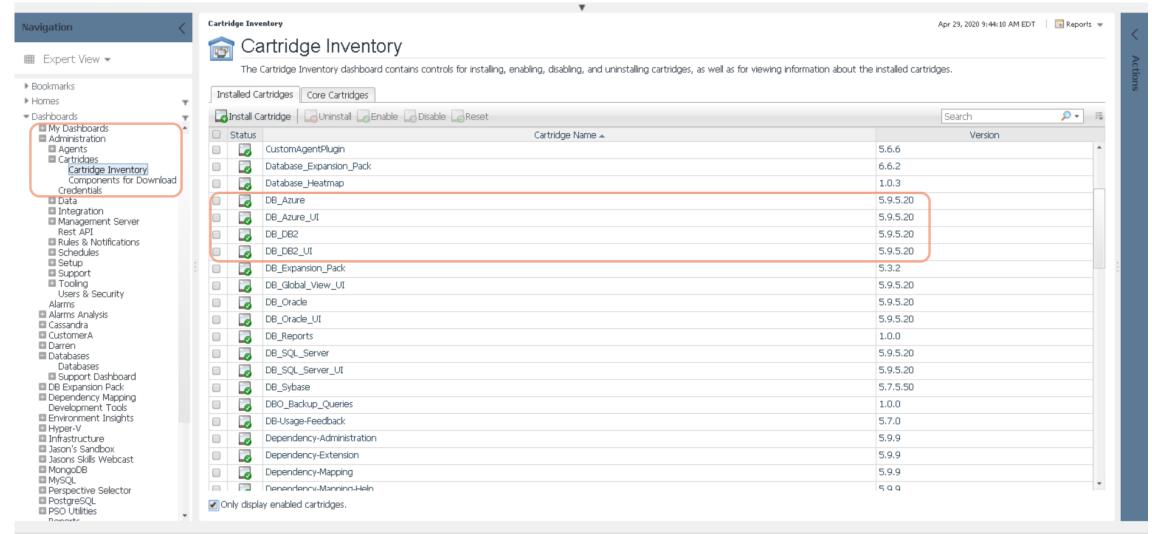








Verify Cartridge Versions





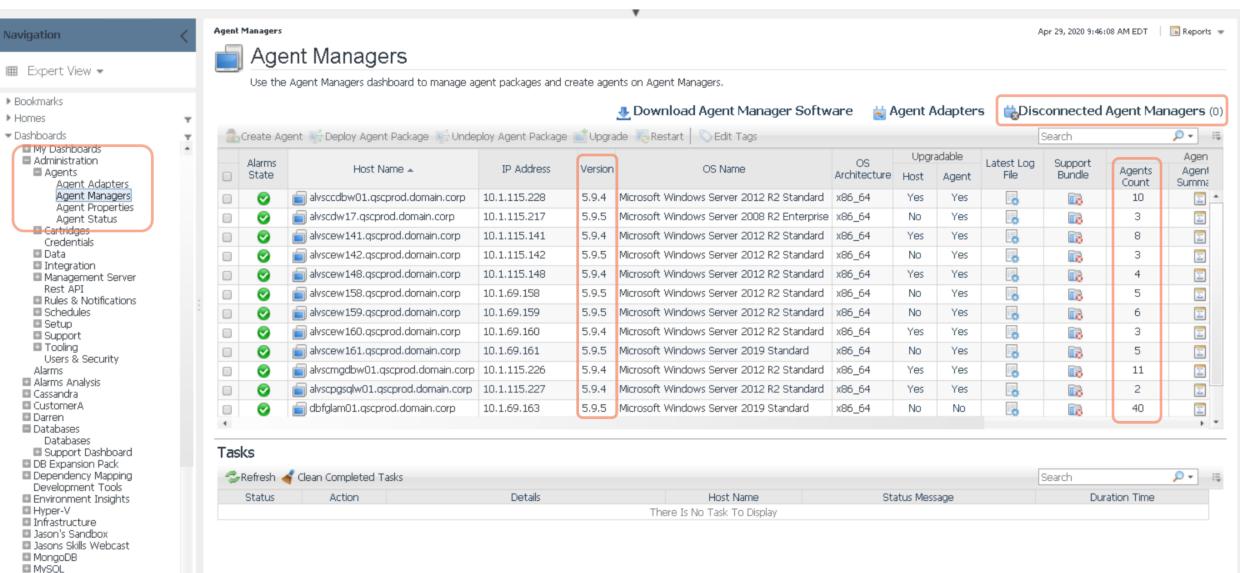


Deployment validation

- Review deployment guide for compute resource requirements
- Validate against your current implementation
- Check Agent Managers dashboard for number of agent managers, agent count per manager, any alarms or disconnected agent managers
- Verify Performance Investigator status*
- Latest Foglight for Databases Deployment Guide: https://support.quest.com/download/downloads?id=6104301









Perspective Selector

Consider Additional Deployments

- There is no license cost for FMS when used for Database-only monitoring
- Good practice to have a "non-production" install in order to validate upgrades, etc.
- Consider installing a small, "vanilla" FMS (sandbox)
 - Use it to check what is "out of the box" vs. customized
 - I have one installed on a laptop with 2 cpu and 4 GB RAM.. And it works fine!
 - Also have one on a small Azure VM (4 cpu / 16 GB)

matror_mod = modifier_or mirror object to mirror mirror_mod.mirror_object peration == "MIRROR_X": "Irror_mod.use_x = True lrror_mod.use_y = False mirror_mod.use_z = False _operation == "MIRROR_V" irror_mod.use_x = False lrror_mod.use_y = True lrror_mod.use_z = False _operation == "MIRROR_Z" rror_mod.use_x = False lrror_mod.use_y = False lrror_mod.use_z = True selection at the end -add ob.select= 1 er_ob.select=1 ntext.scene.objects.action "Selected" + str(modified irror ob.select = 0 bpy.context.selected_obje Mata.objects[one.name].sel int("please select exactly -- OPERATOR CLASSES ---mirror to the selected ject.mirror_mirror_x" ontext): ext.active_object is not

Security / Audit

Security

- Verify the methods users are using to connect to Foglight (SAML, AD, native)
- Check the groups and roles that users are mapped to
- Pay attention to those in the Foglight Security Administrators and Foglight Administrators groups
- Check on any custom groups or roles (this is where the "vanilla" FMS can help!)
- Create a "backup" admin login and change the "Foglight" user password







Use this dashboard to manage users, groups, and roles, and to configure password policy settings and LDAP.



User Look Up

- Enter part of the user name.





Manage Users, Groups, Roles

- There are 25 users (0 managed by Active Directory).
- There are 6 groups (0 managed by Active Directory).
- There are 43 roles.



Password Policy Settings

· Use the Configure Password Settings dashboard to edit any policies that you want to change.



Directory Services Settings

- Use the Directory Services dashboard to edit any LDAP settings to integrate Foglight with Active Directory.
- LDAP is not configured.



SAML 2.0 Integration Settings

- · Use the SAML 2.0 Integration Services dashboard to edit any SAML 2.0 settings to integrate Foglight with SAML Identity Provider.
- SAML 2.0 is not configured.



User Session Settings

- · Configure how long users are allowed to be inactive before they are logged out.
- Currently users are never logged out.



Dashboard Access Control Settings

Ouest

Navigation

Bookmarks

Dashboards

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☐ Alarms Analysis ☐ Cassandra ☐ CustomerA

Databases

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 DB Expansion Pack
 Dependency Mapping Development Tools

Environment Insights

Perspective Selector

Alarms

□ Darren□ Databases

Hyper-V

MongoDB

MvSOL

■ Infrastructure
 ■ Jason's Sandbox
 ■ Jasons Skills Webcast

Users & Security

🥵 User Management

Select the corresponding tab to manage users, groups, or roles. You can create users internally or import them using LDAP. You can place a user in one or more groups. Assign roles to a user using the Groups tab.

0	New User Remove Users	✓ Use	r Preferenc	es					Search	P) +
)	Name 🔺	Lock	Password Expired	Force Password Change	Email	Groups			Search	D •	
	aparikh	-	-	-	unset	Belongs to 3 groups	Take on 15 role	ь	Role Names ▲		
	ben	-	-	-		Belongs to 6 groups	Take on 16 role		Administrator	A	П
	customer1	-	-	-	unset	Foglight Operators, Foglight Users	Operator, Consc		Advanced Operator		
	darren	-	-	-		Belongs to 6 groups	Take on 40 role	•	API Access		
	dashboard	-	-	-	unset	Foglight Operators, Foglight Users	Operator, Consc	•	Capacity Management Administrator		
	David Orlandi	-	-	-		MySQL Admins, Foglight Users	Administrator		Cartridge Developer		П
	dbadmin	-	-	-		Belongs to 5 groups	Take on 17 role	•	Cassandra Administrator		П
	demo	-	-	-	unset	Foglight Users	Take on 7 roles	•	Cassandra User		[
	foglight	-	-	-	unset	Belongs to 4 groups	Take on 16 role		Command Line Access		П
	janis	-	-	-		Belongs to 6 groups	Take on 16 role		Console User		П
	janis1	-	-	-		Belongs to 5 groups	Take on 16 role	•	Core Reports		П
	jason	-	-	-	unset	Belongs to 5 groups	Take on 19 role		Dashboard Designer		П
	JasonAdmin	-	-	-	unset	Foglight Administrators, Foglight Users	Take on 14 role		Dashboard User		П
	jgreenle	-	Ø	-	unset	Belongs to 5 groups	Take on 16 role		General Access		A
	mike	-	-	-	unset	Belongs to 6 groups	Take on 16 role	•	Hyper-V Administrator		П
	Mike_test	-	-	-	unset	Foglight Users	Console User	•	Hyper-V Automation User		
	mnguyen1	-	⊘	-	unset	Foglight Users	Operator, Dashb	•	Hyper-V QuickView User		r
	NoLoginUser	-	···Ø	-	unset	Foglight Users	Assign roles	•	Hyper-V Report User	Hyper-V QuickVie	J WS
	nshaik	-	-	-	unset	Foglight Operators, Foglight Users	Operator, Consc	•	MongoDB Administrator		
	pschwerd	-	-	-	unset	Belongs to 4 groups	Take on 15 role	•	MongoDB User		п
									MySQL Admin	*	"

Cancel

Save



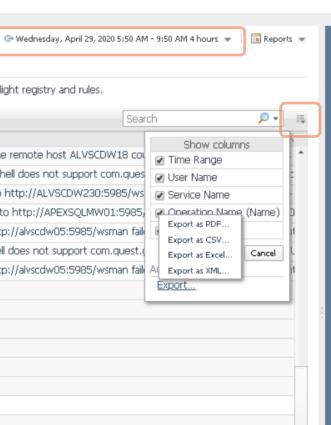
User Management

Select the corresponding tab to manage users, groups, or roles. You can create users internally or import them using LDAP. You can place a user in one or more groups. Assign roles to a user using the Groups tab.

Users Groups Roles			
New Role	Search	₽▾	
□ Name ▲	Groups		
NoLogin	Assign groups		•
Operator	Foglight Operators, Foglight Administrators		
PostgreSQL Administrator	Foglight Administrators		
PostgreSQL User	Assign groups		
Report Manager	Assign groups		
SAP HANA Administrator	Foglight Administrators, Foglight Security Administrators		
SAP HANA User			
Security	Foglight Security Administrators		
Skills101 Dashboard Viewer	Assign groups		
Storage Administrator	Assign groups		
Storage QuickView User			
Storage Report User	Assign groups		
Support			
Sybase ADMIN	Foglight Administrators		
SysAdmin SysAdmin			
☐ Test Role	Assign groups		
	Assign groups		
	Assign groups		
	Assign groups		
□ VMware Report User	Assign groups		

Audit

- Use Audit dashboard for time period to show internal Foglight events/changes along with user interactions
- Can export this data to Excel to make it easier to filter, etc.





Navigation

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Management Server Rest API Rules & Notifications

Schedules

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Manage Licenses Management Server Config Proxy Configuration

View Audit Information

Support ■ Tooling

Users & Security Alarms

Alarms Analysis Cassandra

CustomerA Darren

Databases Databases Support Dashboard

DB Expansion Pack Dependency Mapping Development Tools

dbsolfms:8080/console/page/czzvkhjmmd#

View Audit Information

View Audit Information

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.

Time Range →	User Name	Service Name		Show columns					
/29/20 8:25 AM	service	AlarmService	clearAlarm (>> Failure: Cannot establish connection to ALVSCDW18: A connection to the remote host ALVSCDW18 col	✓ Time Range					
/29/20 8:16 AM	service	AlarmService	clearAlarm (>> Failure: Cannot establish connection to SQLPIREP01: WinRM Command Shell does not support com.ques	✓ User Name					
/29/20 8:09 AM	service	AlarmService	clearAlarm (>> Failure: Cannot establish connection to ALVSCDW230: WinRM request to http://ALVSCDW230:5985/ws	✓ Service Name					
1/29/20 8:07 AM	service	AlarmService	clearAlarm (>> Failure: Cannot establish connection to APEXSQLMW01: WinRM request to http://APEXSQLMW01:5985	Oneration Name (Name)				
	service	AlarmService	clearAlarm (>> Failure: Cannot establish connection to alvscdw05: WinRM request to http://alvscdw05:5985/wsman fail	Export as PDF Export as CSV					
	service	AlarmService	clearAlarm (>> Failure: Cannot establish connection to alvscdw05: WinRM Command Shell does not support com.quest.		Cancel				
	service	AlarmService	clearAlarm (>> Failure: Cannot establish connection to alvscdw05: WinRM request to http://alvscdw05:5985/wsman fail	A(Export as XML					
4/29/20 7:57 AM	darren	FSMService	topology.change (FTP (DBWC_GV_GroupIdentifier))	Export					
	darren	FSMService	topology.change (Customer2 (DBWC_GV_GroupIdentifier))						
	darren	FSMService	topology.change (Customer1 (DBWC_GV_GroupIdentifier))						
	darren	FSMService	topology.delete (Customer2 (DBWC_GV_GroupIdentifier))						
	darren	FSMService	topology.change (Database Groups (DBWC_GV_GroupIdentifier))						
	darren	FSMService	topology.change (Database Groups (DBWC_GV_GroupsContainer))						
/29/20 7:50 AM	darren	RegistryServiceInterface	saveRegistryVariable (DBWC_GV_GroupsIsConvertedToServices)	Variable (DBWC_GV_GroupsIsConvertedToServices)					
1/29/20 7:48 AM	darren	RegistryServiceInterface	saveRegistryVariable (DBWC_GV_GroupsIsConvertedToServices)						
	darren	SecurityService	authenticate (Login OK from dbsolptl02.qscprod.domain.corp)						
/29/20 7:42 AM	service	AlarmService	clearAlarm (>> Failure: Cannot establish connection to ALVSCDW18: A connection to the remote host ALVSCDW18 could not be established. Windows						
/29/20 7:16 AM	service	AlarmService	clearAlarm (>> Failure: Cannot establish connection to SQLPIREP01: WinRM Command Shell does not support com.quest.glue.core.credentials.types.Loc						
4/29/20 7:12 AM	service	AlarmService	clearAlarm (>> Failure: Cannot establish connection to alvscdw05: WinRM request to http://alvscdw05:5985/wsman faile	d: received HTTP/401	cred				
	service	AlarmService	clearAlarm (>> Failure: Cannot establish connection to alvscdw05: WinRM Command Shell does not support com.quest.g	lue.core.credentials.ty	pes.Lo				
/29/20 7:08 AM	service	AlarmService	clearAlarm (>> Failure: Cannot establish connection to ALVSCDW230: WinRM request to http://ALVSCDW230:5985/wsman failed: received HTTP/40						
/29/20 7:07 AM	service	AlarmService	clearAlarm (>> Failure: Cannot establish connection to APEXSQLMW01: WinRM request to http://APEXSQLMW01:5985/	wsman failed: received	HTTP				



Databases – User Level Access

- Check if User Level Access is being used on the Databases dashboard
- If so, verify that users/groups are mapped correctly and still valid



Databases

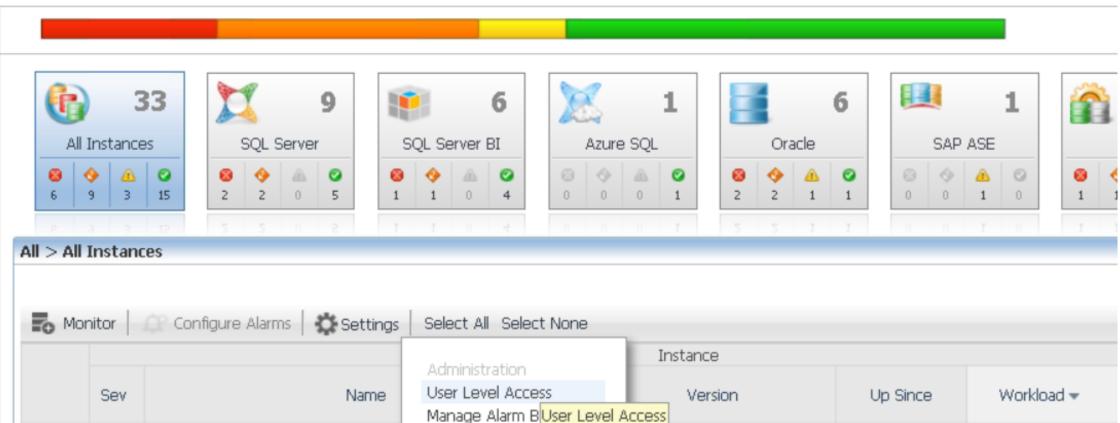


ΑII

alvscdw18-ORAPROD

ALMOSPIMOE COLODO

SQLSERVER-RDS



Manage Agent Blackouts

Start monitoring

ACLE INSTANCE

L Server

11.2.0.1.0

14.0.3049.1 01/28/20 07:56

40.0 5000.0 04/40/00.05:00

2.51

2.29

User Level Access

Filter which instances are accessible to Foglight users or Foglight user groups

Word to Low DECOVIDE DET 2010.

Users User Groups @ Reset Search Assigned Instances Foglight User Name ... Assigned Groups Last Logon Cassandra SQL Server Oracle DB2 MySQL PostgreSQL MongoDB Admin Tue Nov 27 10:30:13 PST 2018 2 3 All All Αll Αll Αll 0 Configure uasripoard ΑII All All All ΑII All 0 Configure Tue Apr 07 12:31:34 PDT 2020 0 0 0 0 0 Configure customer1 0 Αll 0 0 0 0 Configure Thu Apr 11 07:34:59 PDT 2019 0 0 0 Αll All Αll Αll Αll 0 Configure Thu Dec 19 07:50:14 PST 2019 All demo 0 Configure Fri Jul 05 04:11:21 PDT 2019 2 0 0 0 0 Αll All All All All ΑII All 0 Configure training Tue Mar 24 19:27:04 PDT 2020 Wed Apr 29 04:48:03 PDT 2020 Αll All All All Αll ΑII All 1 Configure darren All 0 Configure Mon Apr 20 08:23:36 PDT 2020 Αll All ΑII ΑII ΑII All 0 Configure Wed May 16 22:49:12 PDT 2018 Αll All All All All All All 0 Configure All All All ΑII All test Tue Oct 01 10:47:13 PDT 2019 Αll 0 Configure Mon Mar 02 09:32:20 PST 2020 0 0 0 0 0 0 All Αll Αll Αll 1 Configure Αll All Thu Apr 16 13:21:14 PDT 2020 1 Configure All Αll All All All All All All All All All ΑII All 1 Configure Tue Apr 16 12:56:37 PDT 2019 0 Configure Fri Mar 13 12:13:45 PDT 2020 0 0 0 0 0 0 0 Configure Skills101 Tue Oct 01 11:47:05 PDT 2019 0 0 1 0 0 0 0 0 Configure dbadmin Wed Apr 29 06:44:00 PDT 2020 All All All All Αll All

n II

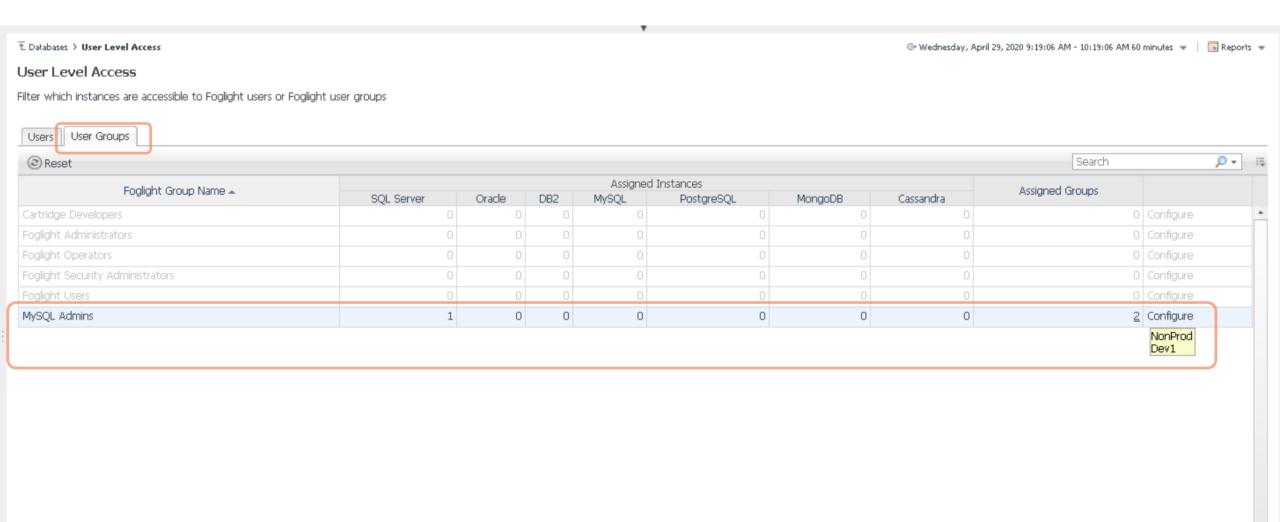


Close

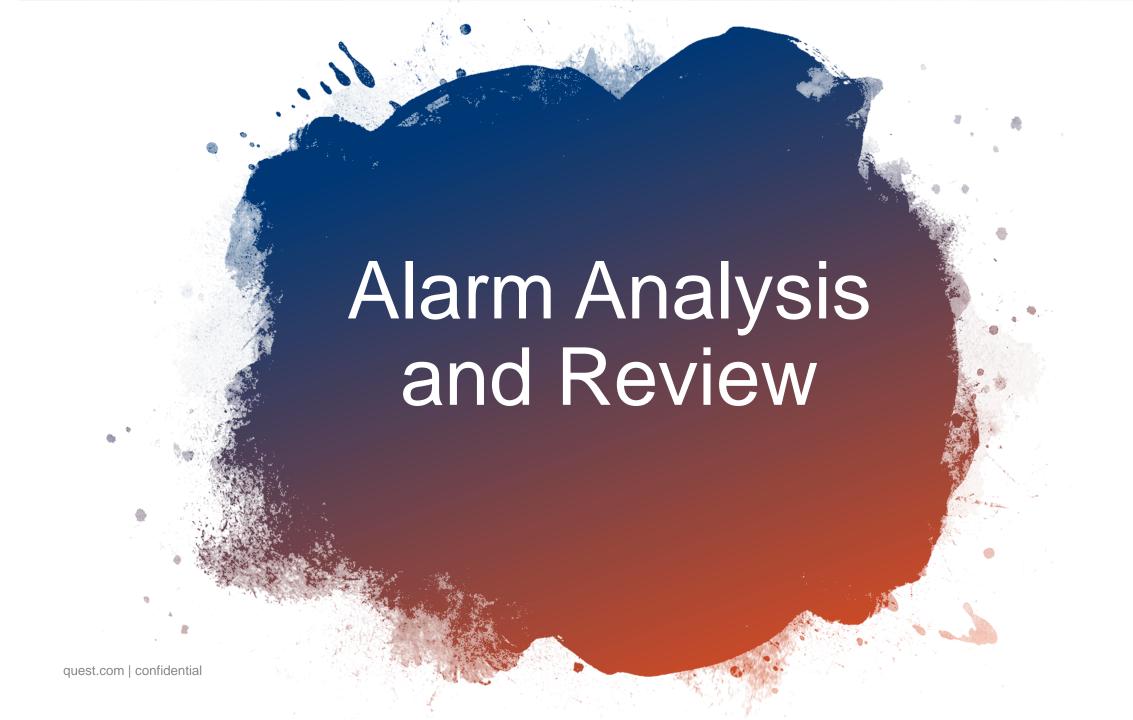


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Alarm Analysis Dashboard

- The Alarm Analysis tab of the Alarms dashboard is very useful
 - What alarms have fired? How many times over the time interval?
 - What are the most frequent alarms?
 - What severities are firing the most?





Alarms

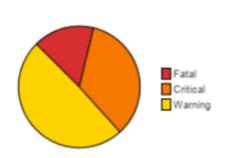
This dashboard shows the information of system alarms and changes, and facilitates the investigation of top issues in your environment.

Alarms Analysis Blackouts

Alarms by Source

		Severities Alarm Duration					
Alarm Source	Alarm Count ▼	F	C	W	Min	Max	Avg
Catalyst Garbage Collector Check	313			313	8 sec	40 sec	11 sec
UserLogCache	293			293	54 sec	38 min	3.9 min
DB2 - Database Log Message	169	169			15 min	1.8 d	21 hr
Copy of DB2 - Database Connection Time	158		79	79	2.9 min	3.1 d	39 min
High Percentage of Queries Waiting	155	80	38	37	2.7 min	55 min	10 min
DBO - Datafile Average Read Time	138		138		3.1 min	1.5 hr	20 min
High Percentage of Connection Failures	131	64	67		54 sec	3.0 min	1.1 min
VMW Virtual Machine VMware Tools	111			111	2.8 min	2.7 d	16 hr
/MW Virtual Machine CPU Utilization	109		49	60	4.8 min	3.2 d	1.2 hr
Slow Connection	97		4	93	53 sec	8.9 min	2.0 min
DBSS - Connection Time	90		75	15	1.1 min	40 min	8.7 min
DBSS - Plan Cache Hit Rate	73		73		5.0 min	1.2 hr	17 min
Catalyst Database Latency Check	66			66	5.0 min	20 min	6.0 min
Copy of DBSS - Long Lock Running	63	25	38		1.1 min	12 min	2.8 min
MongoDB Database ExecutionTime Read	49		10	39	1.7 min	5.1 min	4.9 min
DBO - IO Average Read Time	42		42		10 min	56 min	24 min
Page In Rate	38	37		1	4.1 min	15 min	6.3 min
MongoDB Database ExecutionTime Command	37		18	19	4.8 min	5.0 min	5.0 min
DBO - Datafile Average Write Time	37		37		5.0 min	14 hr	1.6 hr
VMW Virtual Machine Logical Drive Availability	28	10	7	11	5.0 min	3.2 d	1.9 d

Counts by Severity



Sev	Name	Count	ij
4	Warning	1,282	*
4	Critical	903	
3	Fatal	427	
			-

Max Number of Evaluated Alarms 50000 Apply

Alarm Management

- Disable alarms that you're not going to respond to
 - No need for excess noise
- Turn down alarms that may be too noisy
 - Disable severity, adjust thresholds, add exclusions or scoping query
- Be mindful of the number of historical alarms in the alarms table
 - This can be a major impact on UI performance!
- Install the Database Expansion Pack
 - https://www.quest.com/community/foglight/f/forum/418/foglight-databaseexpansion-pack

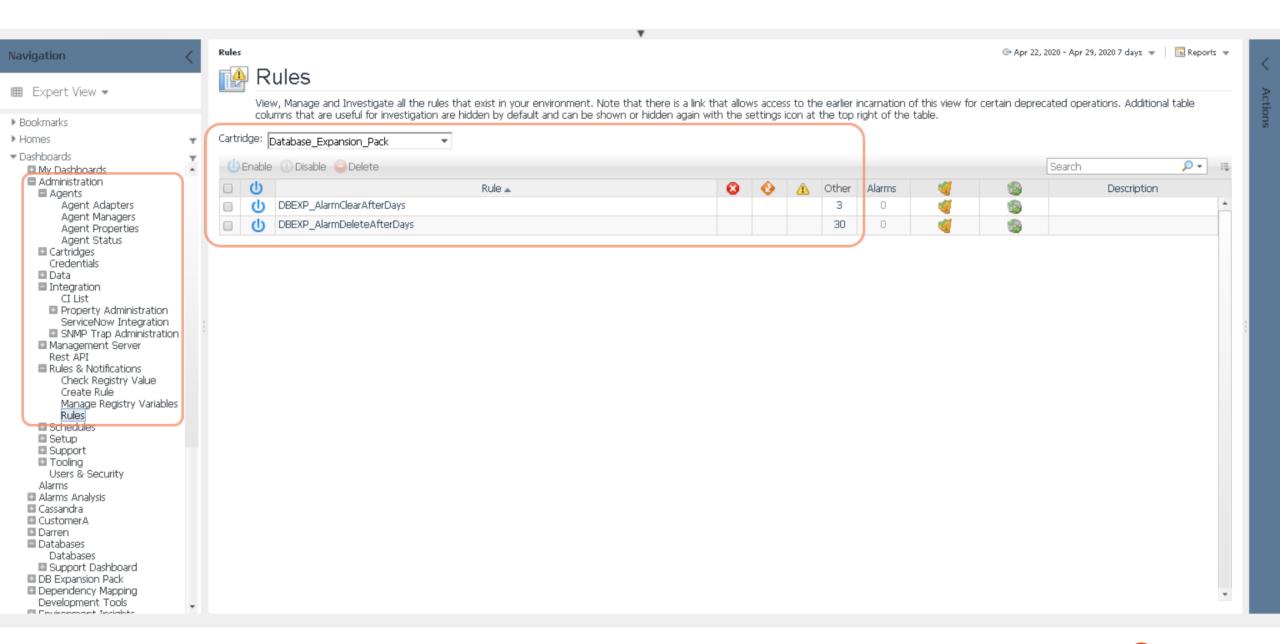


DB Expansion Pack

- Custom dashboards/reports for Oracle and SQL Server
- But, it also has 2 rules for alarm management

- Clear alarms after 3 days
- Delete alarms after 30 days
 - Can configure those via registry variable







Core Alarms

- There are self-monitoring rules as part of the Core package
- Monitor various conditions with the Foglight server, performance, licenses, agents, etc.
- Bigger topic around automation and self-monitoring
 - Planned topic for May Skills 101 Webcast



14

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0

Rule to check whether the memory available to the management server is critical...

This rule is to create support bundle periodically based on CreateSupportBundleS...

This rule checks whether all Agent Manager Clients (e.g. FglAM) on a particular ...

This rule checks periodically whether there are idle agents. An agent is conside...

Check if the number of topology history versions is bigger than threshold.

Checks whether the total number of alarms stored in the database exceeds a prede...

Catalyst Garbage Collector Check

Catalyst License Monitoring

Clear Old LogFilter Alarms

Idle Aaents

Create SupportBundle Rule

Catalyst Memory Usage Check

Catalyst Number of Alarms Check

Disconnected Agent Manager Clients

Catalyst Number of Topology History Versions Check

90

30

unset

10

30

100..

5000

unset

(III)

Report Setup

Report Cleanup

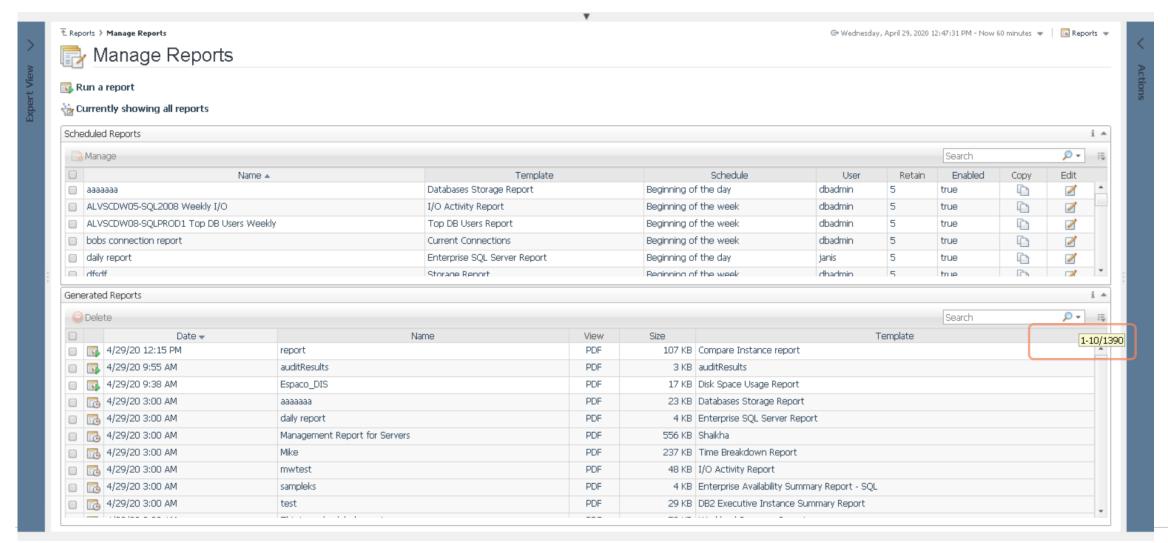
- Get input from user community on the reports that they would like to have
- Verify the reports that are scheduled are valid and being used
- Verify the schedules for reports
 - Tracked down a severe performance issue to having multiple reports set on the "every 5 minutes" schedule!
- Cleanup the saved reports



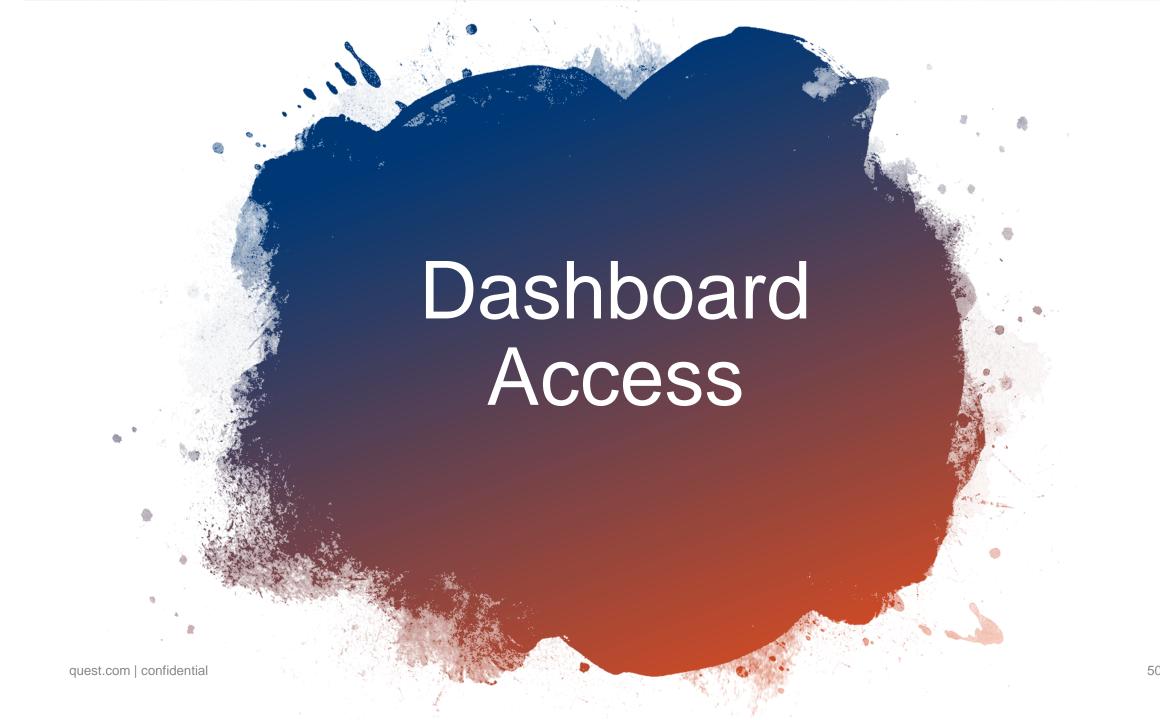
T. Reports > Manage Reports G Wednesday, April 29, 2020 12:50:16 PM - Now 60 minutes ▼ In Reports ▼ Manage Reports Run a report Gurrently showing all reports Scheduled Reports D + - Manage Search Template Schedule Enabled Name User 🔺 Retain Copy Edit test DB2 Executive Instance Summary Report Beginning of the day 1 darren true HC - oraprod Health Check Report Beginning of the month 5 1 darren true Jobs! Enterprise SQL Server Job Summary Report - SQL First day of month 5 dbadmin 1 true Weekly Disk Space Report Disk Space Usage Report Every Monday at 9am dbadmin true 1 Beginning of the day Databases Storage Report dbadmin aaaaaaa true sampleks Enterprise Availability Summary Report - SOL Reginning of the day dhadmin true Generated Reports Search ₽ • Delete Date 🕶 Name View Size Template 3 4/29/20 12:15 PM 107 KB Compare Instance report report PDF 3 4/29/20 9:55 AM auditResults PDF 3 KB auditResults ■ 4/29/20 9:38 AM Espaco_DIS PDF 17 KB Disk Space Usage Report



Clean up Generated Reports



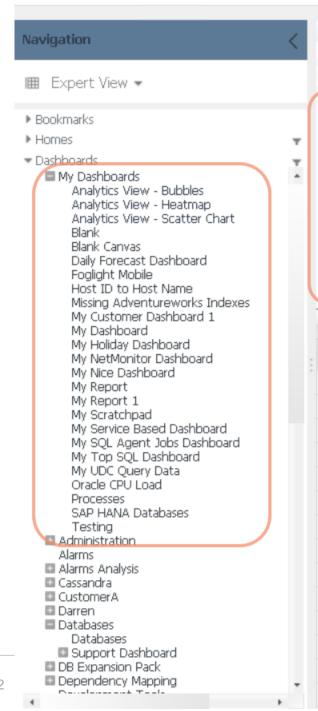




Dashboard Access

- Get input from user community on the dashboards and interactivity that they would like to have
- Verify what custom dashboards are out there
 - My Dashboards for current logged in user
 - Configuration -> Definitions for other users' dashboards
- Start a list of additional audiences for Foglight data beyond the Database team
 - Developers, Operations, Management, Application Owners, etc.





Definitions	
SYBA: Sybase_RS -	
■ SybaseMDA -	
■ VMware -	
■ Web Monitor ▼	
Other User Definitions	
aparikh	
customer1	
<u>darren n</u> oadmin	
dbadmin	
demo	
foglight	
janis	
jason	
mike	
mnguyen1	
nodarren	
nshaik	
tfritz	
VA /	

Views ▼ 🚱 🕖 Search Definitions	₽ ▼			
Name	Component	Purpose(s)	ID	Last Modified Time
Application Summary	Fixed Portal Container	Dashboard, Portal	610	10/21/16 3:54 PM
Exec Management Dashboard	Portal Container	Dashboard, Portal	629	11/9/16 11:32 AM
EMR Application Overview - For Developers	Portal Container	Dashboard, Portal	868	7/25/17 2:53 PM
Backup Report	Report Builder	Dashboard, Report	934	9/15/17 8:56 AM
Application A User B	Portal Container	Dashboard, Portal	943	10/5/17 3:15 PM
Client Summary Dashboard	Portal Container	Dashboard, Portal	965	10/23/17 1:18 PM
DB Space Usage SQL Server	Report Builder	Dashboard, Report	985	10/25/17 9:06 AM
Datafile Used and Availlable	Portal Container	Dashboard, Portal	1004	10/30/17 1:11 PM
Enterprise SQL Server Days Since Backup Report	Report Builder	Dashboard, Report	1088	12/19/17 5:16 PM
Enterprise Oracle Tablespace Summary	Portal Container	Dashboard, Portal	1145	3/13/18 9:59 AM
Enterprise Disk Space Summary	Portal Container	Dashboard, Portal	1177	4/17/18 10:12 AM
All Alarms by instance	Fixed Portal Container	Dashboard, Portal	1187	4/20/18 4:30 AM
Developer Summary	Portal Container	Dashboard, Portal	1205	4/26/18 12:41 PM
DevOps Overview	Fixed Portal Container	Dashboard, Monitor, Portal	1208	5/1/18 1:58 PM



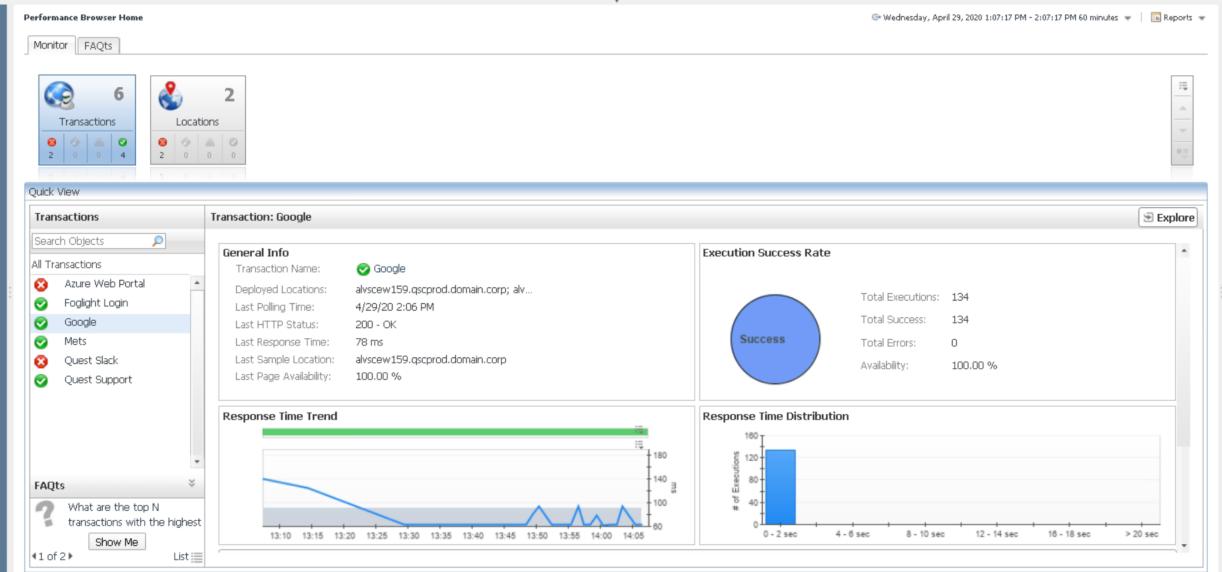
If you've still got time...

Consider additional monitors

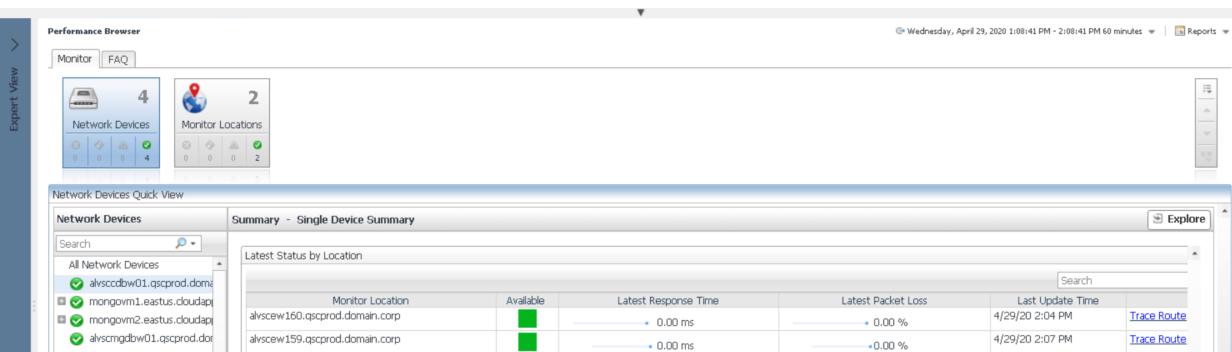
- Web Monitor
- Net Monitor
- Log Monitor

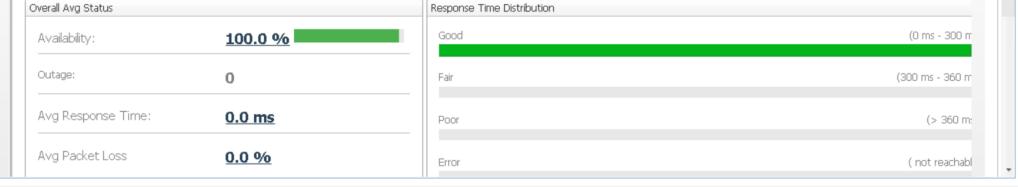








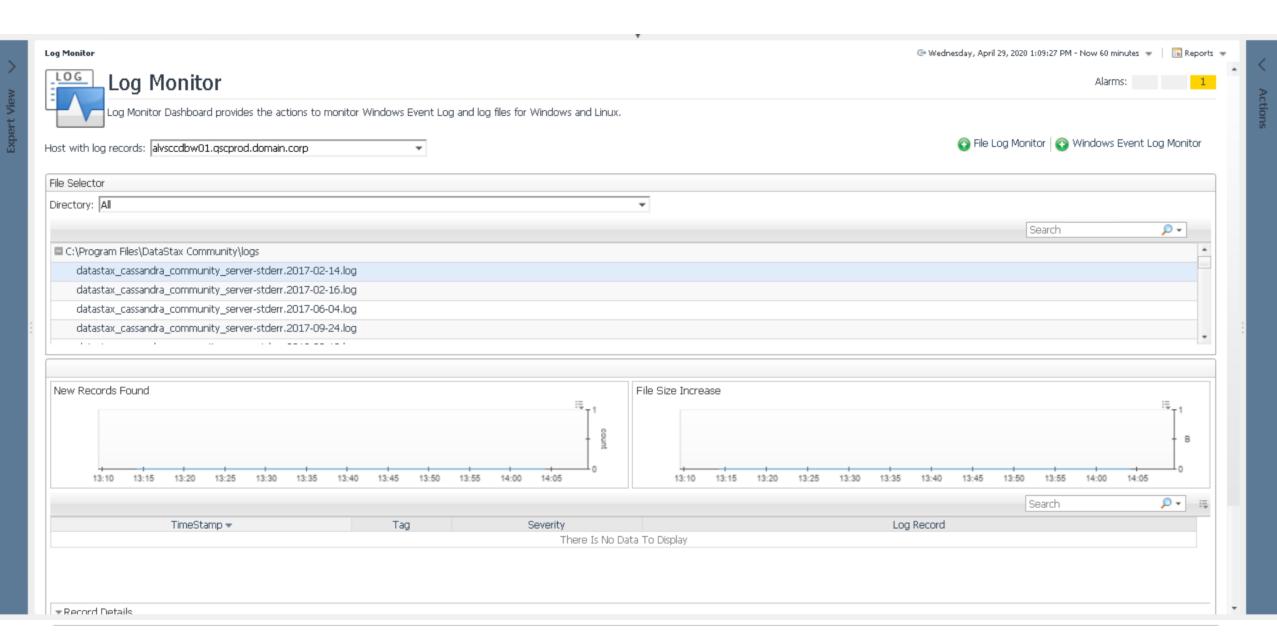






Actions

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Before you go... Your feedback is valuable

• Please take a minute for this 3 question survey:

https://www.surveymonkey.com/r/NRRCTCX

<u>OR</u>

https://bit.ly/Foglight430

