

## Application Monitoring Solutions

# CustardWare V6.5

Application monitoring on a broadcast management system.

# Application Monitoring Solutions

CustardWare is designed to support applications, not just the code in use, but also databases, storage and networking and any other components that form a dependency that your business depends on:

- Cost effective.
- Efficient, powerful and intuitive operation.
- Flexible and highly customizable.
- Managed service reduces hidden staff costs.
- Fast delivery and excellent support

“We needed to understand our system at a glance and to quickly drill down to identify problems – CustardWare gives us that ability.”

*Database Architect – European Broadcaster*

Application monitoring allows the operational teams managing the system to understand where function is normal or where problems are occurring.

The screenshot displays a comprehensive application monitoring dashboard. On the left is a vertical navigation sidebar with buttons for Dashboard, DB Servers, RD Farm, Prod, and five Frozen servers (Frozen\_1 to Frozen\_5), plus Support\_1, BAU\_Test, and Dev servers (Dev1 to Dev8) and Testing. The main content area is divided into several sections:

- Most recent alarm:** 2021-03-09 12:00:28 | AGBS001 | CROOM001 | Windows Service running/hung in DB
- RDS Metrics:** Average Sessions (8.0), Total Sessions (160). A list of services with status indicators: Remote Desktop Connection Broker, Remote Desktop Gateway, Remote Desktop Management, Remote App and Desktop Connection Manager, RPC/HTTP Load Balancing Service, Terminal Services Licensing, and Remote Desktop Web Interface Availability.
- Production AMP API Availability:** A table with columns for Agg, Push, and Expand, showing status for AMP, MRS, Quota Expand, and Unprocessed Quota.
- DFS Services:** Partner Connection and File Replication Backlog.
- Prod SQL long queries:** A table with columns OS User, User, SQL ID, and Query.
- Top 10 Active Alarms:** A table listing recent alarms with columns Date, Object, Element, and Description.

Date	Object	Element	Description
2021-03-09 12:00:28	AGBSX1	CROOMX01	Windows Service stopped/stopped in DB
2021-03-09 12:00:28	AGBSX2	CROOMX02	Windows Service running/hung in DB
2021-03-09 11:57:26	AGBSX3	CROOMX03	Windows Service stopped/stopped in DB
2021-03-09 11:54:25	AGBSX4	CROOMX04	Windows Service lost/stopped in DB
2021-03-09 11:54:25	AGBSX5	CROOMX05	Windows Service running/hung in DB
2021-03-09 11:49:22	AGBSX6	CROOMX06	
2021-03-09 11:41:18	AGBSX7	CROOMX07	
2021-03-09 11:38:16	AGBSX8	CROOMX08	
2021-03-09 11:30:08	AGBSX9	CROOMX09	
2021-03-09 11:12:31	AGBSX10	CROOMX10	

CustardWare allows Layer3 to build bespoke displays and solutions that match the requirements of the team monitoring the system.

12:07<sup>03</sup>

Overview WMI Servers Services Database Queues

DB: AGBS001 db001.layer3.co.uk db002.layer3.co.uk

Uptime: 89 days, 12h 44m 56s as at: 12:06:06 on Tue Mar 09 2021

PSI size (GBytes): 331 Long Running Queries: 0 Sessions: 517 BO Sessions: 2

CAPACITY	DBAUDIT	OFCOM_IND	OFCOM_TS	PSI_INDEXES	PSI_TABLES	RMAN
SYSAUX	SYSTEM	TEMP	UNDOTBS1	USERS	WON_BO_TABLES	

**SQL long queries**

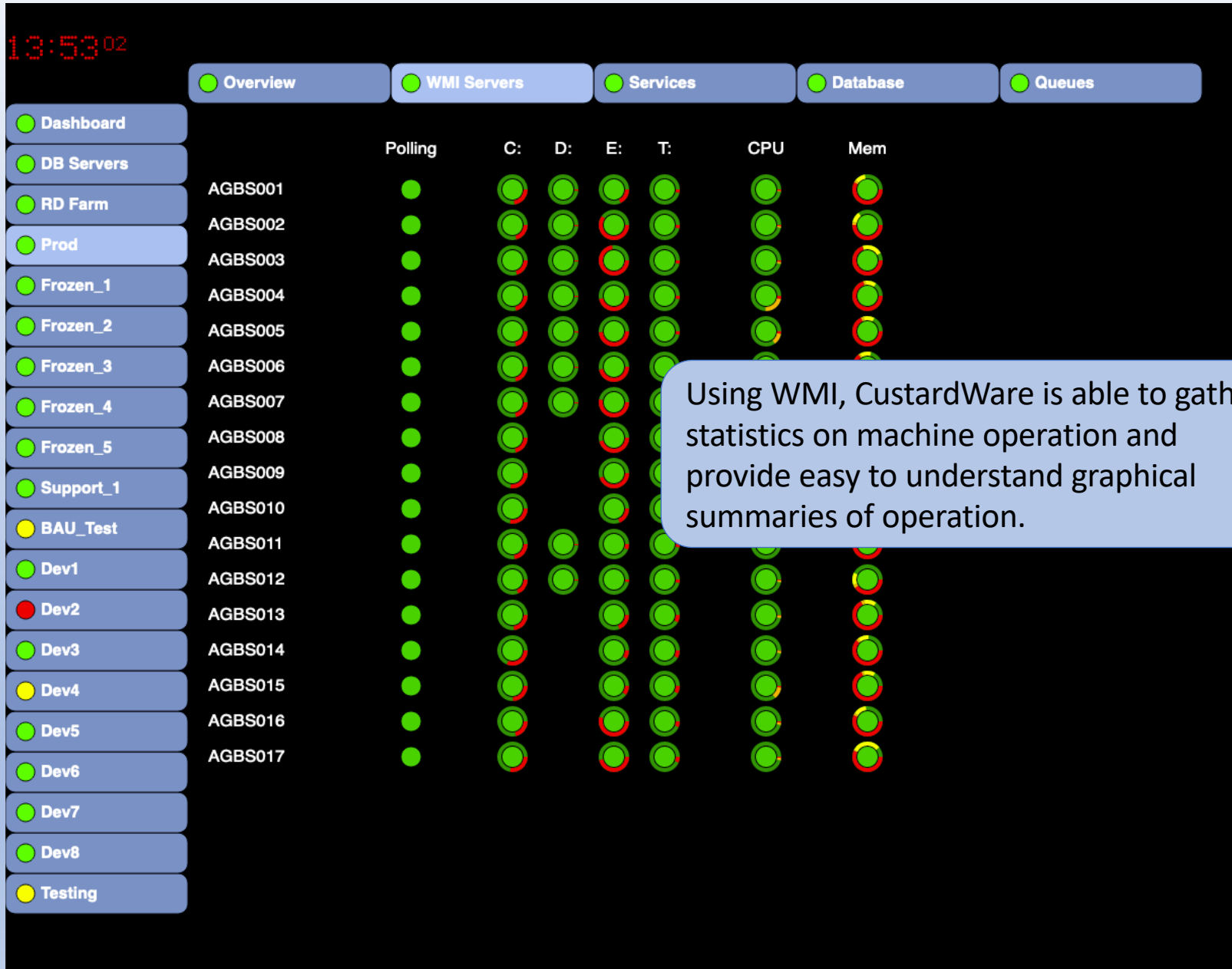
OS User	User	SQL ID	Query

**SQL Blocking**

User	Object Name	SID	Se

Dashboard DB Servers RD Farm Prod Frozen\_1 Frozen\_2 Frozen\_3 Frozen\_4 Frozen\_5 Support\_1 BAU\_Test Dev1 Dev2 Dev3 Dev4 Dev5 Dev6 Dev7 Dev8 Testing

This application has a large number of component groups including databases, remote desktop farms, production systems and development and test environments. CustardWare allows fast checking and drill down to analyse activity in any area.



Using WMI, CustardWare is able to gather statistics on machine operation and provide easy to understand graphical summaries of operation.

12:21<sup>04</sup>

Overview WMI Servers **Services** Database Queues

AGBS001	AMP_CastMember_Aggregation_Service	CDChangeLogEntryAggregationService
AGBS002	AMP_CastMember_Push_Service	CDChangeLogEntryPushService
AGBS003	Prod_AMP_GetPost_Service_Port	ConfigurableRESTInterfaceService
AGBS004	AMP_GetPost_Service_Port	ConfigurableRESTInterfaceService
AGBS005	Prod_AMP_GetPost_Service_Port	ConfigurableRESTInterfaceService
AGBS006	AMP_GetPost_Service_Port	ConfigurableRESTInterfaceService

Dashboard  
DB Servers  
RD Farm  
Prod  
Frozen\_1  
Frozen\_2  
Frozen\_3  
Frozen\_4  
Frozen\_5  
Support\_1  
BAU\_Test  
Dev1  
Dev2  
Dev3  
Dev4  
Dev5  
Dev6  
Dev7  
Dev8  
Testing

CustardWare can monitor services and detect failures or loss of service. This can then be used to drive displays or produce alarms and alerts.

12:28<sup>34</sup>

Overview WMI Servers Services Database Queues

Dashboard DB Servers RD Farm Prod Frozen\_1 Frozen\_2 Frozen\_3 Frozen\_4 Frozen\_5 Support\_1 BAU\_Test Dev1 Dev2 Dev3 Dev4 Dev5 Dev6 Dev7 Dev8 Testing

### Invalid Objects

Owner	Object Type	Status	Totals

### Crashes

Date	User Crashes	Service Crashes
09-MAR-21	2	0
08-MAR-21	2	2
07-MAR-21	1	0
06-MAR-21	0	0
05-MAR-21	16	0
04-MAR-21	18	0

CustardWare can monitor database operation. It is possible to integrate operation with scripts or database calls to determine database operation. This supports fast checking and enables drill down to analyse activity in any area.

dbCROOMX01, XPS1

Show events

Last 24 Hours

Last week

Last month

Last Year

12:27<sup>10</sup>

Overview WMI Servers Services Database Queues

Dashboard DB Servers RD Farm Prod Frozen\_1 Frozen\_2 Frozen\_3 Frozen\_4 Frozen\_5 Support\_1 BAU\_Test Dev1 Dev2 Dev3 Dev4 Dev5 Dev6 Dev7 Dev8 Testing

Log Group	Class	% Complete	# Complete	Total
AMP aggregated	BMTxEvent	100.000	170856	170856
AMP aggregated	MM2MediaAsset	100.000	21866	21866
AMP aggregated	PSIPerson	100.000	61	61
AMP aggregated	PSIProductCastParticipant	100.000	549	549
AMP aggregated	PSIProgram	99.920	105876	105961
AMP Cast member	PSIProductCastParticipant	100.000	549	549
AMP Media asset	MM2MediaAsset	99.993	14007	14008
AMP Person	PSIPerson	100.000	61	61
AMP Product	PSIProgram	99.984	89017	89031
AMP Transmission event	BMTxEvent	99.992	171148	171161
AMP Media asset	MM2MediaAssetSequence	99.937	3172	3174
AMP Media asset	MM2SegmentationProfile	100.000	1290	1290
AMP Media asset	PSIProgram	99.956	8999	9003
AMP Product	CM2Contract	100.000	118	118
AMP Product	MM2MediaAsset	100.000	3905	3905
AMP Product	PSIProductTitle	100.000	7598	7598
AMP Product	PSITransmission	100.000	17751	17751
AMP Product	WOnCommercial	0.000	0	266
AMP Product	WOnProgramPressInformationRecord	100.000	425	425
AMP Product	WOnRegionalProgramCertification	100.000	6133	6133
AMP Transmission event	MM2MediaAsset	100.000	4031	4031
AMP Transmission event	PGProgramGuideRecord	100.000	6255	6255
AMP Transmission event	PSIProductT			
AMP Transmission event	PSIProgre			
AMP Transmission event	PSITrailer			
AMP Transmission event	PSITransi			
AMP Transmission event	WOnActiv			
AMP Transmission event	WOnCom			
MRS Trailer changes - Aggregated	PSITrailer			
MRS Trailer Changes	PSITrailer			
MRS Material Changes	PSISimple			

CustardWare can be programmed by Layer3 to integrate with almost any software component. Here a number of message passing queues are being monitored for proper operation.



13:58<sup>14</sup>

Overview WMI Servers RD Certificates

Dashboard DB Servers RD Farm Prod Frozen\_1 Frozen\_2 Frozen\_3 Frozen\_4 Frozen\_5 Support\_1 BAU\_Test Dev1 Dev2 Dev3 Dev4 Dev5 Dev6 Dev7 Dev8 Testing

	Contactable	RD Config	RD Services	RD Port Redirect	Sessions	Disconnected	Total
AGBS020	●	●	●	●	4	7	11
AGBS021	●	●	●	●	6	5	11
AGBS022	●	●	●	●	7	4	11
AGBS023	●	●	●	●	5	6	11
AGBS024	●	●	●	●	5	6	11
AGBS025	●	●	●	●	6	4	10
AGBS026	●	●	●	●	7	4	11
AGBS027	●	●	●	●	4	7	11
AGBS028	●	●	●	●	6	5	11
AGBS029	●	●	●	●	6	6	12
AGBS030	●	●	●	●	5	6	11
AGBS031	●	●	●	●	8	3	11
AGBS032	●	●	●	●	7	4	11
AGBS033	●	●	●	●	6	5	11
AGBS034	●	●	●	●	5	6	11
AGBS035	●	●	●	●	6	5	11
AGBS036	●	●	●	●	5	6	11
AGBS037	●	●	●	●	6	5	11
AGBS038	●	●	●	●	5	6	11
AGBS039	●	●	●	●	7	3	10

Many applications use “Remote Desktops” as a way to provide access to applications. CustardWare provides the means to analyse activity and quickly confirm operational availability.

14:12<sup>33</sup>

Overview
  WMI Servers
  RD Certificates

- Dashboard
- DB Servers
- RD Farm
- Prod
- Frozen\_1
- Frozen\_2
- Frozen\_3
- Frozen\_4
- Frozen\_5
- Support\_1
- BAU\_Test
- Dev1
- Dev2
- Dev3
- Dev4
- Dev5
- Dev6
- Dev7
- Dev8
- Testing

AGBS040	CN=GlobalSign RSA OV SSL CA 2018, O=GlobalSign nv-sa, C=BE	2813 days
AGBS041	CN=GlobalSign, O=GlobalSign, OU=GlobalSign Root CA - R3	2930 days
AGBS042	CN=dev2.layer3.co.uk, O=Layer3 Systems, L=London, S=London, C=GB	298 days
AGBS043	CN=GlobalSign Organization Validation CA - SHA256 - G2, O=GlobalSign nv-sa, C=BE	510 days
AGBS044	CN=GlobalSign RSA OV SSL CA 2018, O=GlobalSign nv-sa, C=BE	2813 days
AGBS045	CN=GlobalSign, O=GlobalSign, OU=GlobalSign Root CA - R3	2930 days
AGBS046	CN=dev3.layer3.co.uk, O=Layer3 Systems, L=London, S=London, C=GB	298 days
AGBS047		622 days
AGBS048	CN=dev4.layer3.co.uk, OU=IT, O=Layer3 Systems, L=LONDON, C=GB	287 days
AGBS049		623 days
AGBS050		287 days

Almost any feature of an application can be monitored. In this case CustardWare is used to check that software certificates are up-to-date and are not running out.

# Any Questions?

- We would be pleased to answer questions and explore possible use cases:
  - [email vivg@layer3.co.uk](mailto:vivg@layer3.co.uk)
  - or call 0208 769 4484.
- Please contact us directly if you have more in depth questions or would like to discuss requirements or ideas in more detail.
- Demonstrations can be arranged at your request...

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