



IT Strategy Simplified

Helping companies cost effectively simplify their IT strategy.

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Implementing a Production Zabbix Enviroment

- Project: 24/7 Monitoring of a Production Corporate IT Enviroment



Implementing a Production Zabbix Environment

IT Managed Solutions (ITMS)

- 25 years working for IBM
- Established 2016

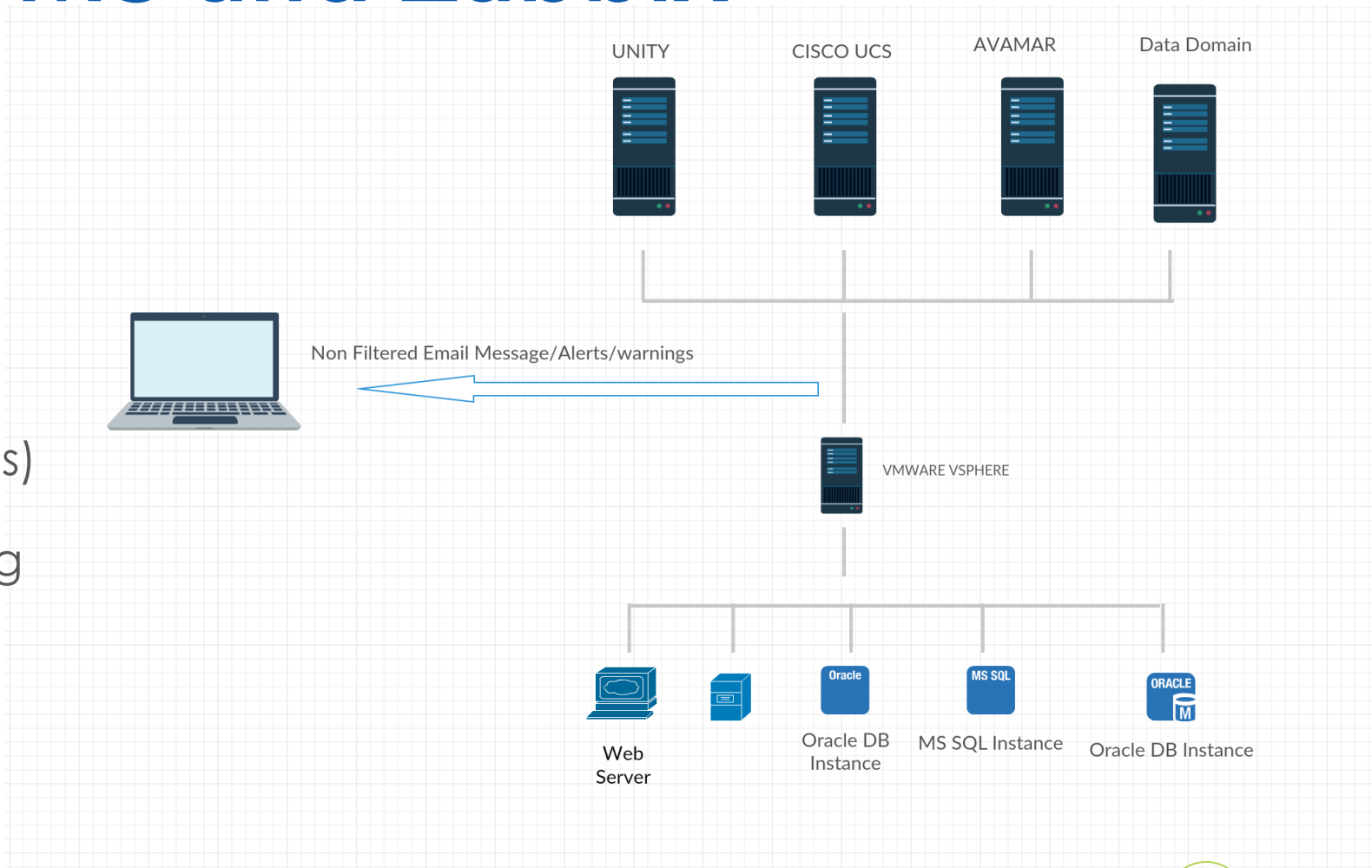
Gardner Denver:

- Founded in 1859
- Worldwide provider of industrial equipment, technologies and related parts and services
- **1.94B Yearly Revenue**



Gardner Denver Prior to ITMS and Zabbix

- Company in Transition
- Looking to Outsource
- Splintered IT Environment (multiple mergers/acquisitions)
- No enterprise-level Monitoring



Current Gardner Denver IT Environment

Gardner Denver IT Environment:

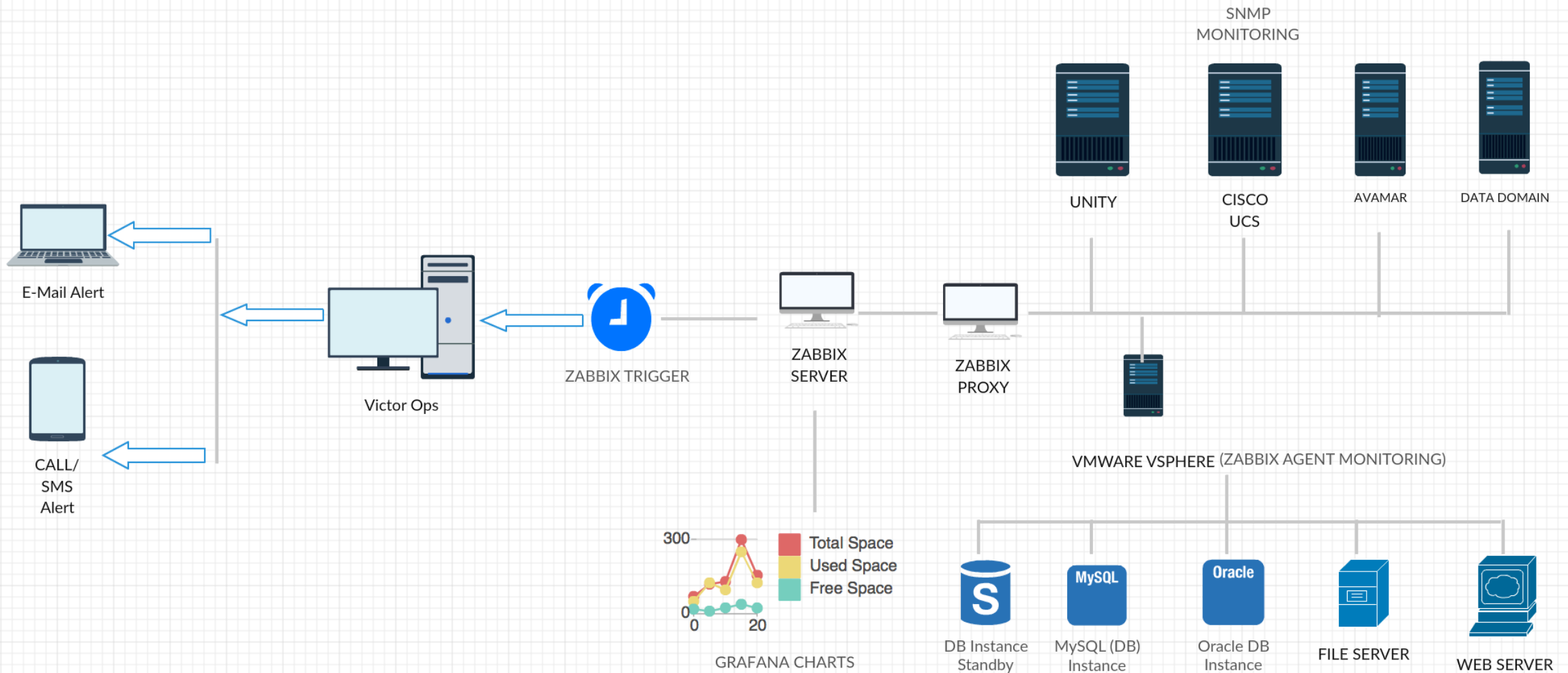
- 3 Data Centers, 1 DR Site
- VxBlock System
 - Storage: Dell EMC Unity
 - Compute: Cisco UCS
 - Backup: Avamar/Data Domain



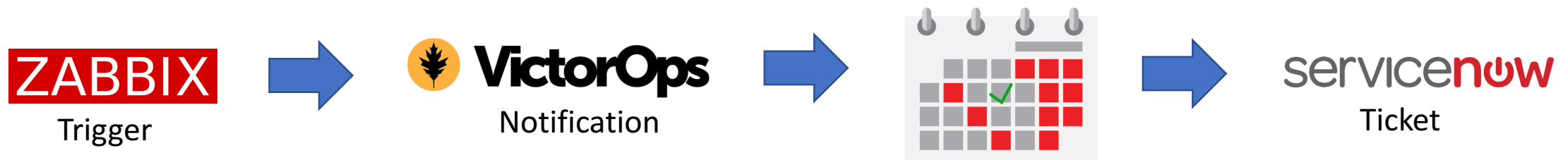
THE VIRTUAL COMPUTING
ENVIRONMENT COMPANY



Current Gardner Denver IT Environment



Escalation Policy using VictorOps



Requirements for Monitoring

Project Hardware/Software Requirements:

- Zabbix Server
- Zabbix Proxy
- Zabbix SNMP Proxy
- Zabbix MySQL DB
- Grafana Server
- VictorOps Service



Vsphere Monitoring

Virtualized Environment:

- 250+ VMs
- 25 ESXi Hosts
- 14 Data stores
- 3 Server Escalation Tiers

System status						
Host group	Disaster	High	Average	Warning	Information	Not classified
Discovered hosts	0	0	2	10	1	0
EMC Avamar	0	0	0	0	1	0
Hypervisors	0	0	0	0	0	0
Linux servers	0	0	0	0	1	0
Ping Only Hosts	0	1	0	0	0	0
SNMP Trap Hosts	0	0	0	0	1	0
Tier 1	0	0	0	6	0	0
Tier 2	0	0	0	0	0	0
Tier 3	0	0	2	4	0	0
UNITY	0	0	0	0	0	0
VMWARE	0	0	0	0	0	0
Zabbix servers	0	0	0	0	1	0

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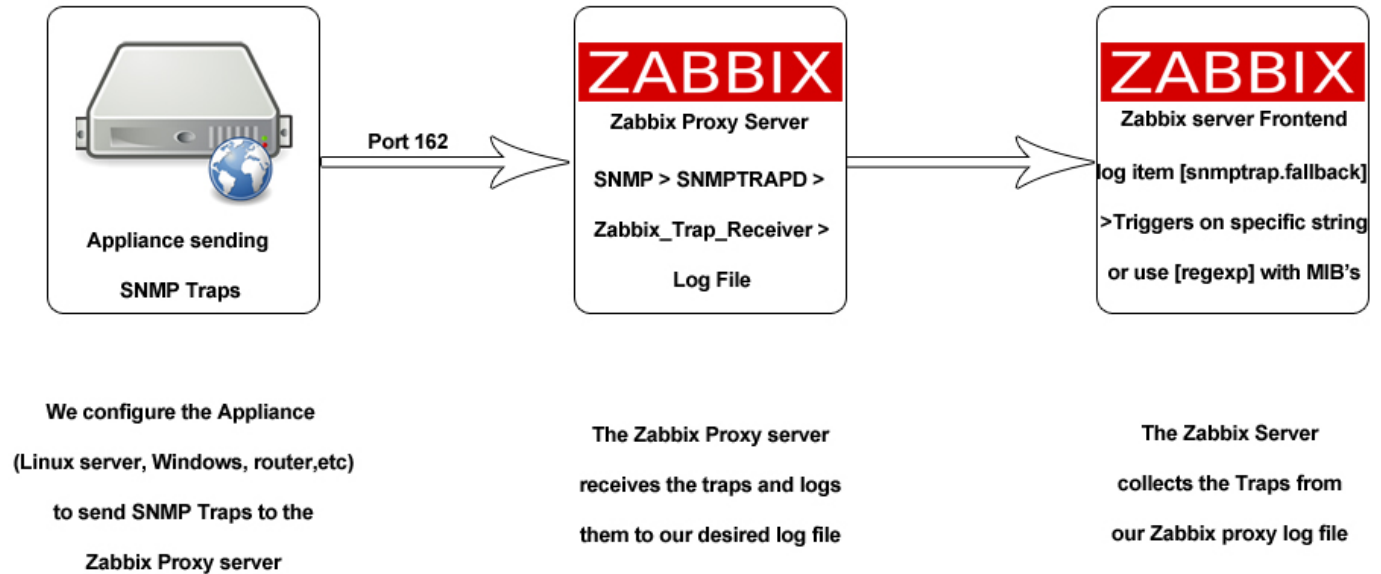
Last 20 Issues						
Host	Issue	Last change	Age	Info	Ack	Actions
Avamar Testing	Activity failed - timed out before completion	2017-08-29 08:00:20	56m 50s		No	
	Zabbix agent on is unreachable for 5 minutes	2017-08-21 08:18:00	8d 39m		No	Done 1
Tier 1	Free disk space is less than 2% on volume H:	2017-08-19 15:46:34	9d 17h 10m		No	
	Free disk space is less than 2% on volume C:	2017-08-19 03:26:36	10d 5h 30m		No	
	Zabbix agent on is unreachable for 5 minutes	2017-08-15 21:56:30	13d 11h		No	Done 1
	Free disk space is less than 2% on volume L:	2017-08-01 03:47:44	28d 5h 9m		No	
	is unavailable by ICMP	2017-07-26 15:14:22	1m 3d 17h		No	
	Too many processes on sfosvpm01.gardnerdenver.org	2017-07-18 18:59:38	1m 11d 13h		No	
	Free disk space is less than 2% on volume D:	2017-07-16 02:54:50	1m 14d 6h		No	
	Free disk space is less than 2% on volume L:	2017-06-29 11:46:35	2m 21h		No	
	Free disk space is less than 2% on volume D:	2017-06-21 15:55:37	2m 8d 17h		No	
	Free disk space is less than 2% on volume D:	2017-06-21 15:50:37	2m 8d 17h		No	
	Free disk space is less than 2% on volume D:	2017-06-21 15:50:01	2m 8d 17h		No	
	Free disk space is less than 2% on volume H:	2017-06-21 15:47:09	2m 8d 17h		No	

14 of 15 issues are shown Updated: 08:57:10

SNMP Monitoring

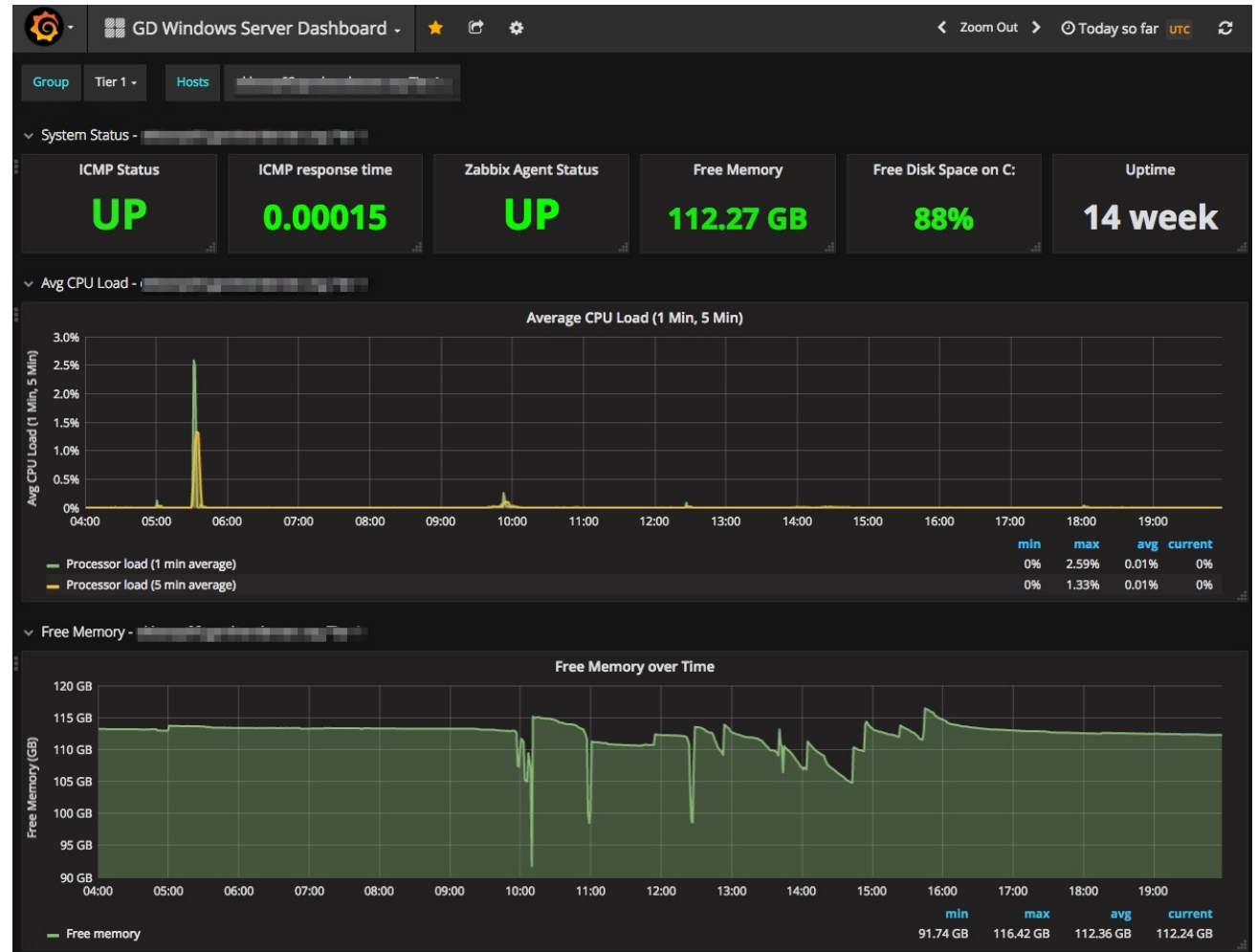
Using SNMP Trap to Monitor:

- Avamar
- EMC Unity
- Cisco UCS
- DataDomain



Integration with Grafana

- Easy Setup
- Open Source
- Gives 24/7 Client Access
- 1 Week Historical Data
- Custom Dashboards



Benefits for IT Administrators

Status of Zabbix

Parameter	Value	Details
Zabbix server is running	Yes	localhost:10051
Number of hosts (enabled/disabled/templates)	335	285 / 3 / 47
Number of items (enabled/disabled/not supported)	14737	14084 / 643 / 10
Number of triggers (enabled/disabled [problem/ok])	3261	3066 / 195 [15 / 3051]
Number of users (online)	10	3
Required server performance, new values per second	194.4	

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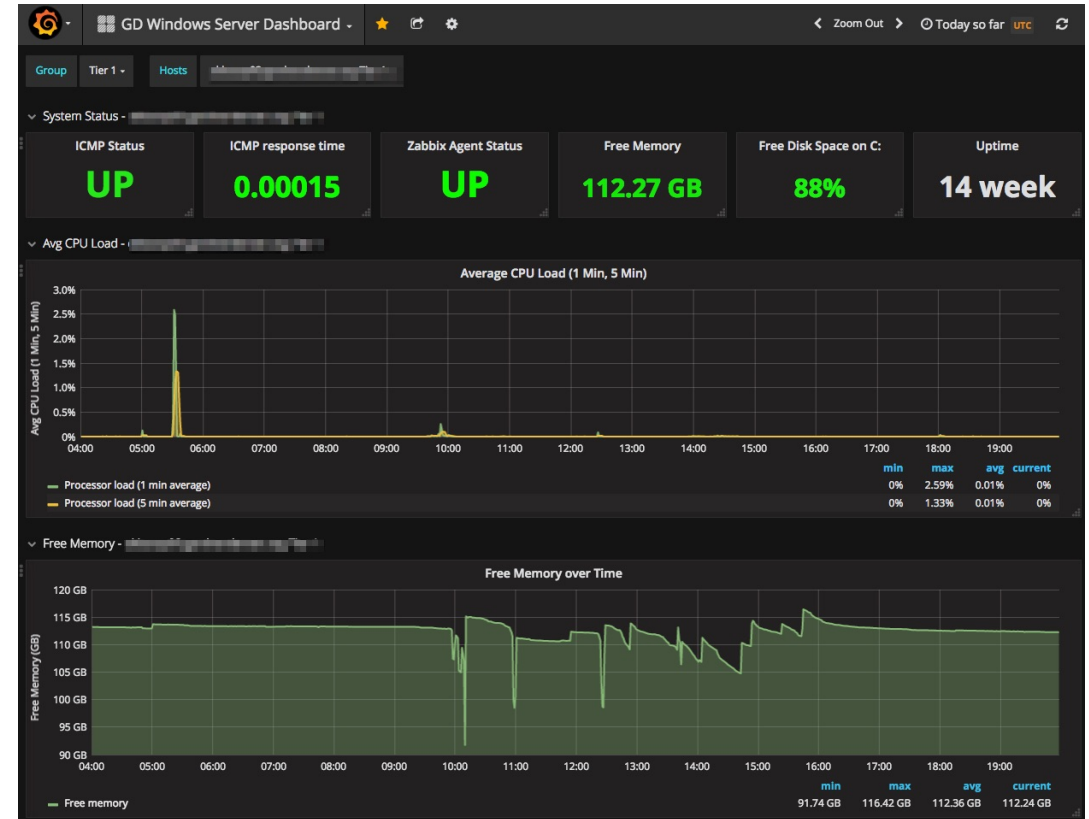
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SNMP Trap Hosts	0	0	0	0	1	0
Tier 1	0	0	0	6	0	0
Tier 2	0	0	0	0	0	0
Tier 3	0	0	2	4	0	0
UNITY	0	0	0	0	0	0
VMWARE	0	0	0	0	0	0
Zabbix servers	0	0	0	0	1	0

Updated: 14:37:57

- Clear and Accessible System Data
- Organized Alerting Structure
- Custom Scheduling and Escalation

Results For Gardner Denver

- 24/7 Monitoring
- Historical System Data
- Live Server Information Access
- Weekly Reporting



In Closing...