I Didn't Know You Could Do That

Monitoring your CSS Hardware

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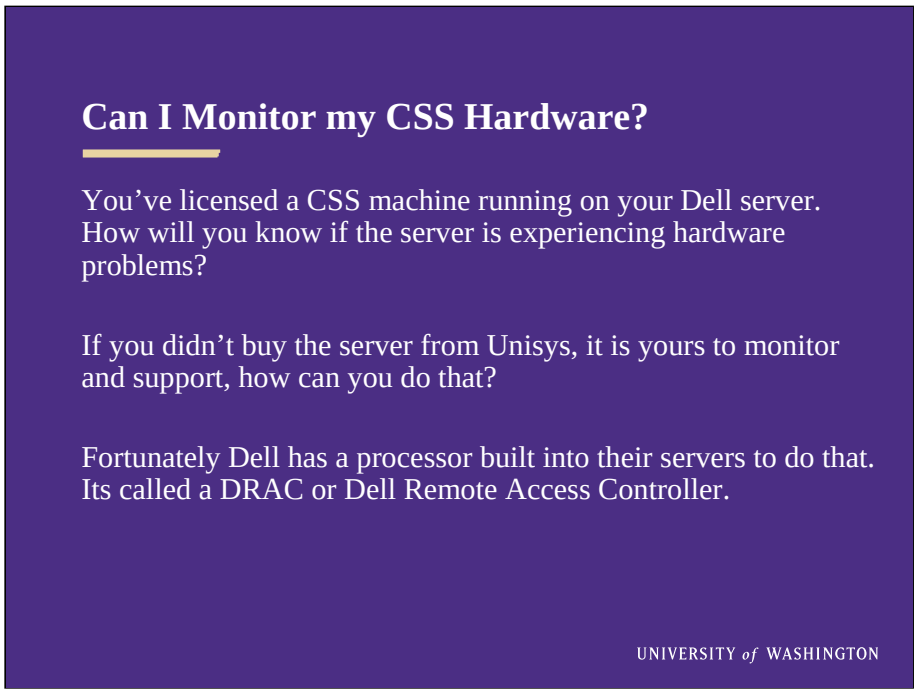
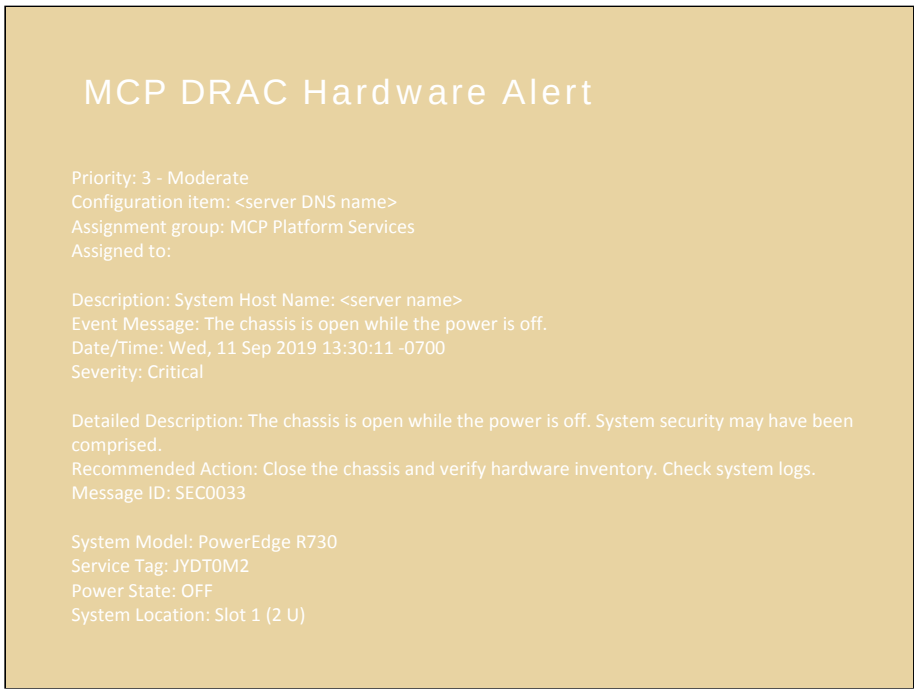


The **Dell Remote Access Controller** or **DRAC** is an out-of-band management platform on certain Dell servers. The platform may be provided on a separate expansion card, or integrated into the main board; when integrated, the platform is referred to as **iDRAC**.

It uses mostly separate resources to the main server resources, and provides a browser-based or command-line interface (or both) for managing and monitoring the server hardware.

It can do lots of cool things like, allowing you to remotely power up and down the server, but this presentation is about it's monitoring capabilities.



You may recall this from my presentation on Monday

We set up iDRAC monitoring because our CSS machines are not monitored by Unisys.

We want to know things like if the fan is failing, or any other hardware component, so we can failover to our DR system, and get the prod system repaired.

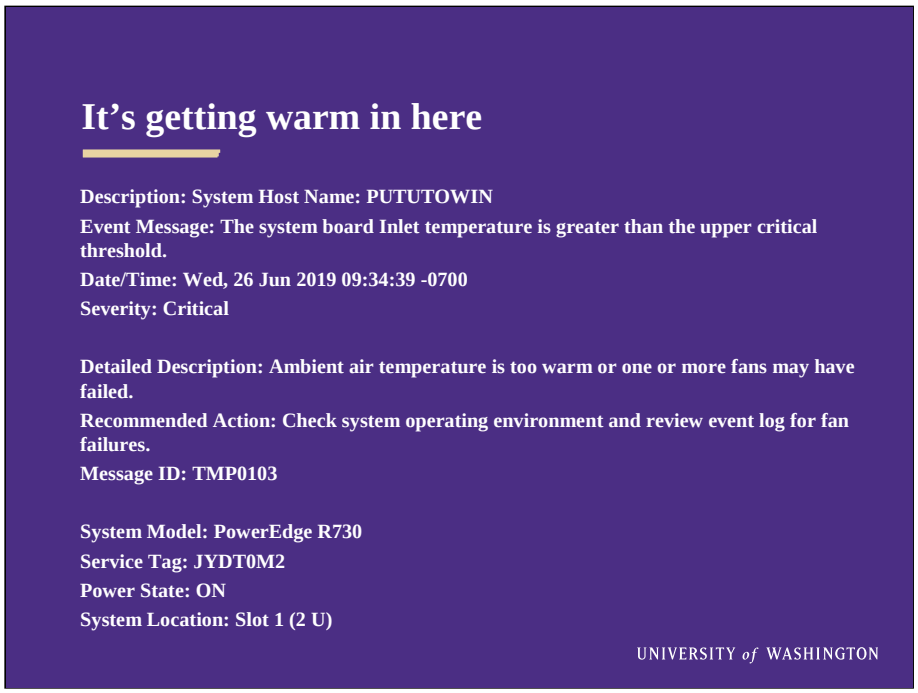
Earlier this month we were upgrading our network cards on a server at a remote data center, and in the middle of the upgrade we got an incident task to work.

What?

It turns out the iDRAC noticed that someone had pulled the skins off our machine while it was powered down, and was mucking with the hardware.

That sounded like a security problem.

I'll show you how to do this on Wednesday.



If a fan goes out on your server, and no one is there to here it, does your server still burn up?

You bet it does!

The event tells you the symptom – inlet temperature is too high
Probable cause – one of your fans may have failed
What to do about it

My network card's a little flakey

Description: System Host Name: PUTUTOWIN

Event Message: The FC Slot 2 port 2 link is not functioning either because the FC cable is not connected or the FC device is not functioning.

Date/Time: Wed, 18 Sep 2019 06:56:47 -0700

Severity: Warning

Detailed Description: The FC controller port link identified in the message is not functioning either because the FC cable is not connected or the FC device is not functioning.

Recommended Action: Do the following: 1) Make sure that the FC port is enabled. 2) Make sure the Activity/Speed LEDs are lit if the physical port has LEDs. 3) Check the FC cable and FC cable connections for proper installation. 4) Check that the attached FC switch is functioning.

Message ID: FC102

System Model: PowerEdge R730

Service Tag: JYDT0M2

Power State: ON

Operating System: Microsoft Windows Server 2012 R2, Standard x64 Edition

System Location: Slot 1 (2 U)

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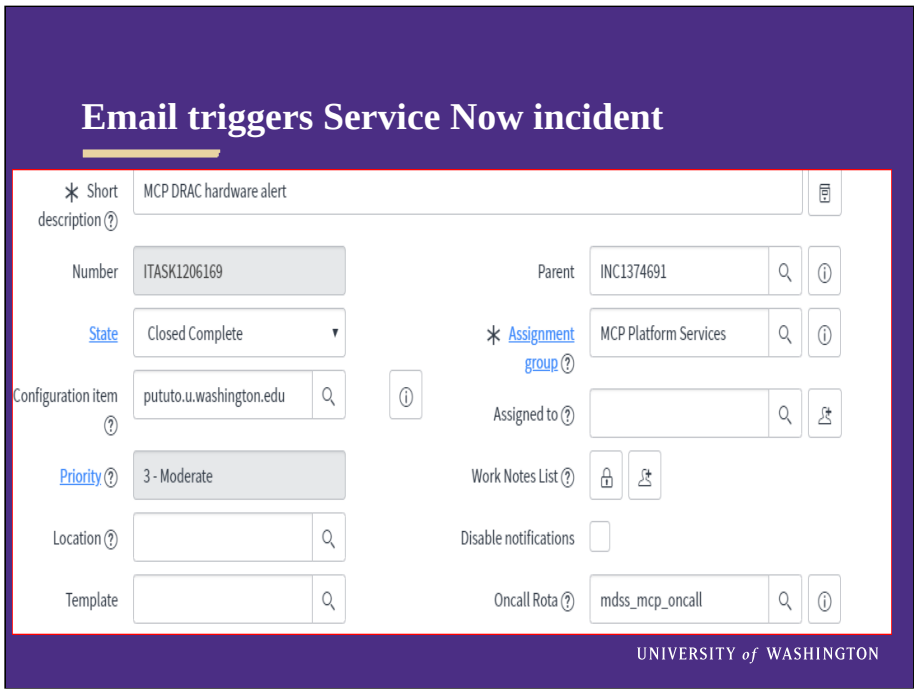
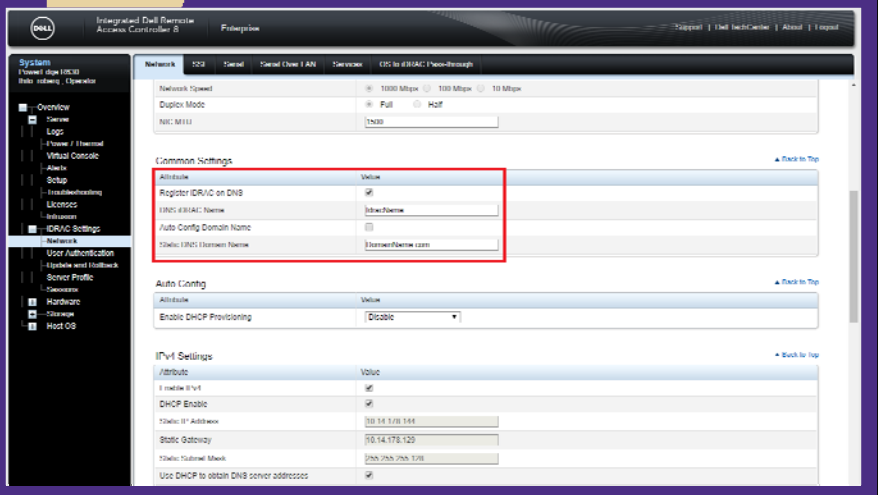


We have our SMTP server set up to map emails from the DRAC to our Service Now instance.
It uses the service tag to determine the ITIL CI.
A give CI will have a specific default priority.

In this case the CI is not a production server, so the priority is 3, which tells Service now we just need an email for this one.

If it is a more urgent priority, we would have the on call rotation notified.

Give your DRAC an IP address and DNS name.



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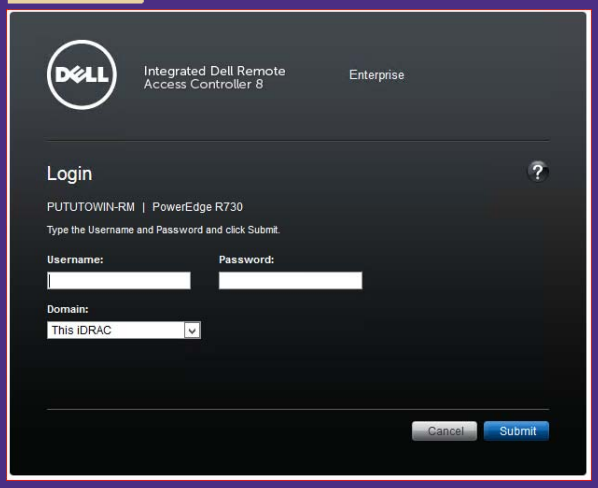
So, how do you do it?

You configure your IDRAC from the BIOS, typically when you first install your server.

Give it a DNS name and IP configuration

Login to your DRAC
HTTPS://10.18.178.144/login.htm



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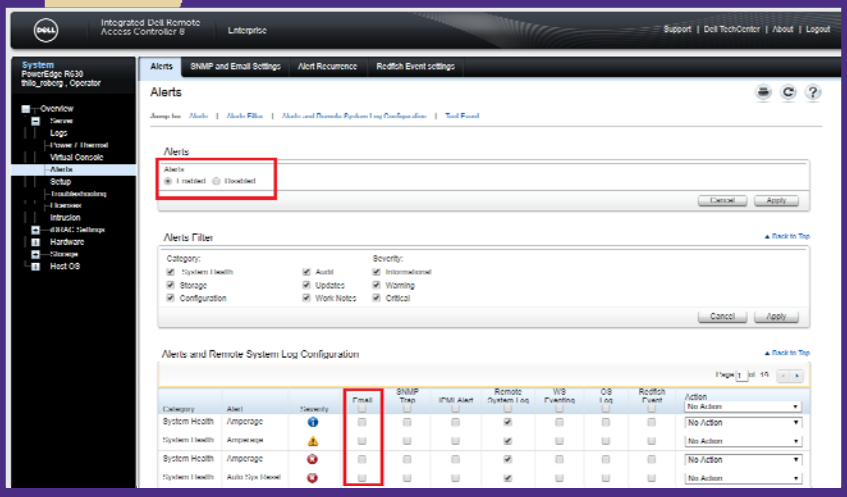
Connect to your DRAC from a browser

What do you want to monitor



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A user can monitor for events related to all major hardware components such as power supplies, fans, RAID cards, as well as environmental factors like air and CPU temperatures. A System event Log (SEL) keeps accurate historical records of the events, allowing an administrator to spot recurring patterns and take action before a failure occurs. You can even configure it to tell you when you need to take action.

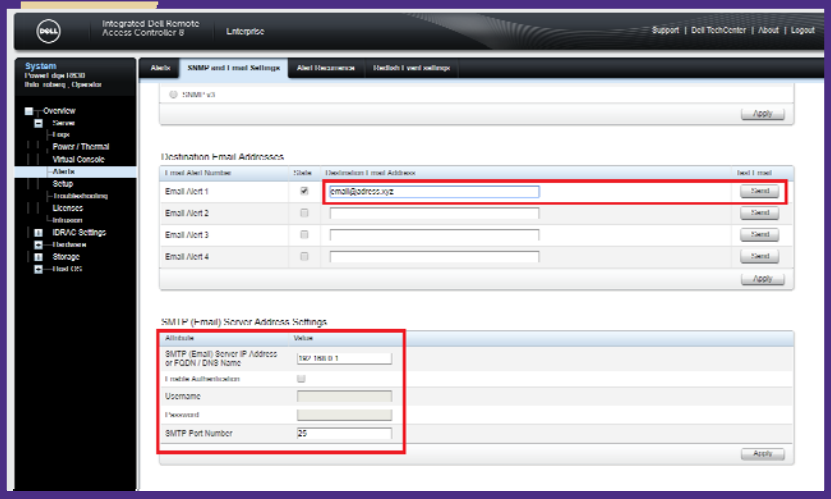
Within the Alert section of the iDRACs of the MCP systems there are over 150 categories of alerts that can be selected to be reported on.

Check the ones you want to send you an email.

There are other cool interfaces like SNMP, IPMI, and assorted logging options

You can also tell it to reboot, power cycle, or shutdown if one of these events happens.

Tell it where to send the email and what SMTP server to use



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That's it. There is a test interface at the bottom you can use to trigger an email.

Complete How To At:

https://www.dell.com/support/article/us/en/04/sln309388/dell-idrac-how-to-configure-the-email-notifications-for-system-alerts-on-idrac-7-8-and-9?lang=en