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Enterprise Diagnostics Monitor

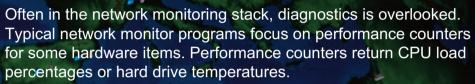
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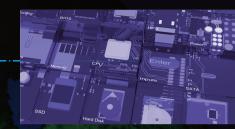


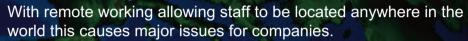




They often don't return any data regarding any hardware faults or failures.

A different type of network monitoring program is required for this. With Windows the underlying subset enables us to return live and current hardware diagnostic status.





Clearly access to distributed endpoints can be difficult. Sending out an engineer to employees homes can be time consuming and expensive.

Using a service probe on each machine enables diagnostic data to be sent over HTTPS to a cloud server.

Data is displayed in a web browser and alerts are sent through email to I.T staff, who can react accordingly.

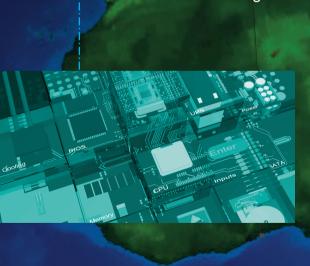
All connected endpoints wherever they are in the world can return data.

Diagnostic data on hardware components in the endpoint is returned.

Enterprise Diagnostics Monitor is a windows diagnostic monitor for companies that scans for problems with hardware components.







Cooling

Enterprise Diagnostics Monitor (EDM) is a cloud based remote network hardware monitor.

EDM is hosted by Syvir. We run the hosted server for you. A web interface provides monitoring and configuration.

To create a hosted solution please visit www.syvir.com and start a free trial.

Syvir automatically creates a local domain name for your instance of EDM.

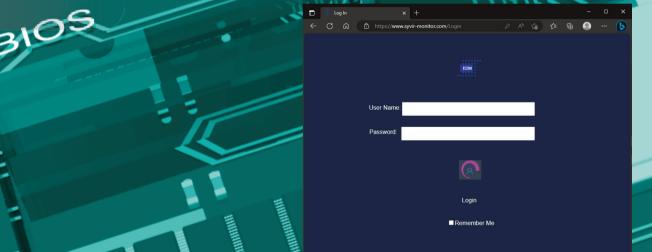
With your account you are assigned two usernames and passwords.

Make sure you agree to the privacy policy along with the terms and conditions.

Once you have signed up you will receive a welcome email. This contains your login information.

The site provides visual monitoring and reports of your monitored network.

Enter your credentials and click Login, to log into (EDM).





Introduction.

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In this eBook we guide you with monitoring your network endpoints with Enterprise Diagnostics Monitor (EDM) using our cloud based monitoring system.

To begin monitoring your endpoints you will need to download software to install on your endpoints. We advise if you are trying out EDM for the first time on a network to try the service on one machine, so you can assess the capabilities of EDM.



Once this process is complete run the software using the Probe@ account and password. Other account names will not work. Type in your Group code and select the endpoint type. A probe will be created on the SYVIR EDM cloud. Sensors are automatically created for the probe.

Next install the service probe, this runs on the endpoint all the time and scans WMI for diagnostic problems

Each time the system is scanned, diagnostic data is uploaded to the syvir-edm cloud.

A probe running on each monitored endpoint, connects to the EDM cloud server.

The probe is a windows service that runs all the time the endpoint is switched on.

Diagnostic data is transferred to the cloud.

Data is accessed through any device that supports a web browser.



inputs

UPS



......

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The structure of EDM.

Diagnostic data is gathered from the endpoint with WMI.

The sensors in the probe processes this data into channels and

sets alarms if a problem is found.

Data is encrypted through SSL to the edm server.

Data is transferred through HTTPS and uses port 443

Data is stored and rendered through active server pages.

Probe

A EDM probe is a windows based service that connects to the EDM server.

Each monitored ENDPOINT has its own Probe.

This is designated by the computer name.

We recommend that each monitored Endpoint has it's own unique name, to avoid conflicts using EDM.

The hierarchical structure of EDM places the probe as the most powerful item in a Endpoint deployment.

Sensors

The probe contains Sensors that use WMI technology to monitor the current state of hardware.

Sensors are deployed to monitor hardware.

Sensors contain channels for multiple items i.e several drives etc. Diagnostic data is received for each channel that's in use with a deployed sensor.

Channels

PU

The sensor contains multiple channels.

sets alarms if an action is needed.

For instance a USB sensor checks each usb port and assigns the port to a channel.

Inputs

Properties

Diagnostic data is gathered from the endpoint with WMI.

The sensors in the probe processes this data into channels and

Data is transferred through HTTPS to the EDM Cloud.

Data is stored and rendered through active server pages.







Each endpoint requires two installation processes.

One to create your machine probes profile, this will be where you enter your domain probe username and password.

These are stored locally in an encrypted file.

Select the machine type you wish to scan.

PC

Server

VMWare

Hyper-V

VMWare and Hyper-V deploy less sensors as quite a few are not detected.

In practice on Hyper-V and VMWare scans you can select PC or Server if you wish, but note you will get alot of Sensors, set to Not Detected.

Type in your username and password. For the console you need to use probe@company other logins will not work!

The second process requires installation of the Syvir - Enterprise Diagnostics Monitor service.

This service is the probe for the machine.

WMI services need to be running on each machine you wish to monitor with EDM.

Please note the account you use to monitor with WMI only requires Read permission.

Do not enable Read/Write or Write this may leave the machine open to viruses etc.

- 1. Install Enterprise Diagnostics Monitor Console
- 2. Once the Enterprise Diagnostics Monitor Console setup program is installed please run this.
- 3. Type in your username and password and Group code. This will create the probe for this machine in the EDM cloud.
- 4.Install Enterprise Diagnostics Monitor probe.

Diagnostics Monitor - Probe

Once this is installed monitoring is now setup for this machine. Repeat this process for each machine you wish to monitor.

Each endpoint requires two installation processes one to create your machine probes profile, this will be where you enter your domain probe username and password.

These are stored locally in an encrypted file.

The second process requires installation of the

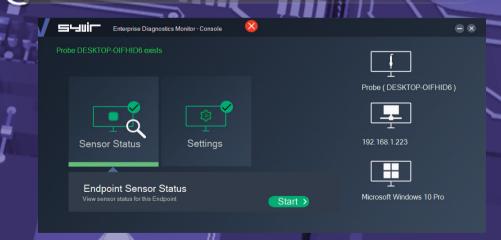
The Probe service transfers non-identifiable data through HTTPS to the EDM cloud.

Once the Enterprise Diagnostics Monitor Console is installed please run this.

Enterprise Diagnostics Monitor service.

This service is the probe for the machine.

WMI services need to be running on each machine you wish to monitor with EDM.



SYVIR EDM is specially designed to check endpoints for faults.

Groups are added in the Add Group page.

SHERRESE SERVICE To add a new group type in the groups name into the Group box.

Add a unique code for the group code.

The group code is used to separate different endpoints. This enables endpoints to be grouped together and avoid probe console name clashes. Once you have entered these click on add.

INTERIOR DE LA CONTRACTION DEL CONTRACTION DE LA To view a list of groups select the Group page. To delete groups from the system click on the Delete button the click on OK. This deletes the group from SYVIR EDM. To save a list in a .csv file, click on the download icon.

An email can be sent to each Group using Syvir EDM.

This will show that checks have been made on their systems.

The email will inform if any issues have detected with their endpoints hardware in the last 24 hours. To enable emails alerts goto the schedule page.

- 1. Click on the group you wish to setup email alerts for.
- 2. Select the time you wish each day for the email to be sent.
- 3. Type in the Groups email address.
- 4. Check the Send Email box.

Click on save.

Schedule

Reports

A wide range of reports are available in csv file format for use in a spreadsheet.

The directory box on the left contains all your Groups, click on a Group name. On the left hand directory box is a list of that Groups probes.

With some reports you need to select a Group first. All data for that Groups probes will be downloaded. Some reports require the probe to be selected so individual reports on specific probes can be made.

These are the reports produced by SYVIR EDM

Sensors on the selected Group probe, that are UP. Sensors on the selected Group probe, that are set to WARNING. Sensors on the selected Group console probe, that are DOWN. All Probes and Sensors on the selected Group, that are UP. All Probes and Sensors on the selected Group, that are set to WARNING.

All Console Probes and Sensors on the selected Group, that are DOWN.

Diagnostics for the selected Group Probes sensors.

Sensors on the selected Group probe, that are set to UP, WARNING and DOWN.

All Probes and Sensors on the selected Group, that are set to UP, WARNING and DOWN.

Diagnostics for the selected Group Probes alarm.

Alarms on the selected Group probe.

Alarms on all Group probes.





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Roles and user credentials.

EDM uses Roles and user credentials to determine the access that user accounts have to the EDM server.

The administrator account and role has the user name of admin.

The admin account is typically held by the account owner.

This account gives you access to the control panel and

The probe account is used to authorize a local probe to authenticate the transfer of diagnostic data to the EDM of

Check the number of sensors deployed on your endpoints.

This number shows how many sensors assigned to the local probes on your computers.

Check the number of probes deployed on your computers.

This number indicates how many probes you have installed on your network computers.

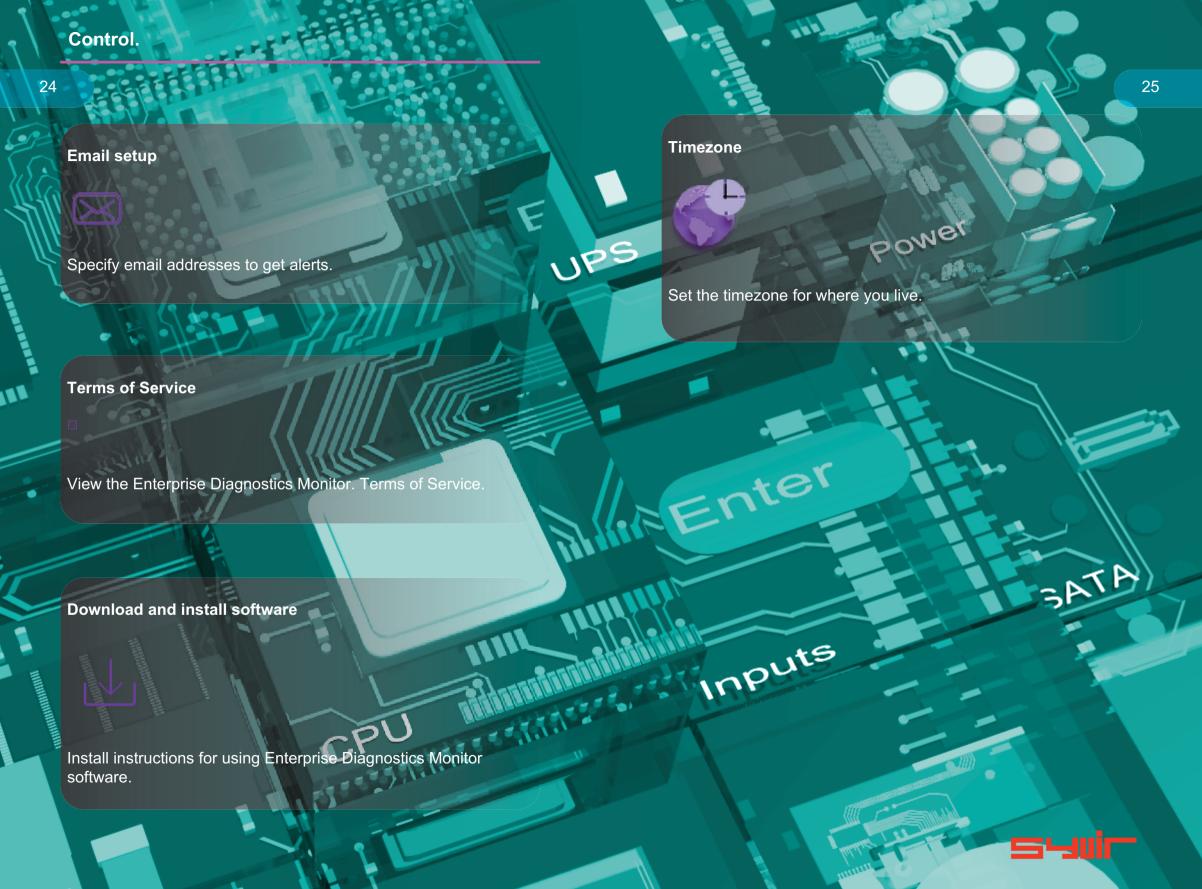
Probe Setup

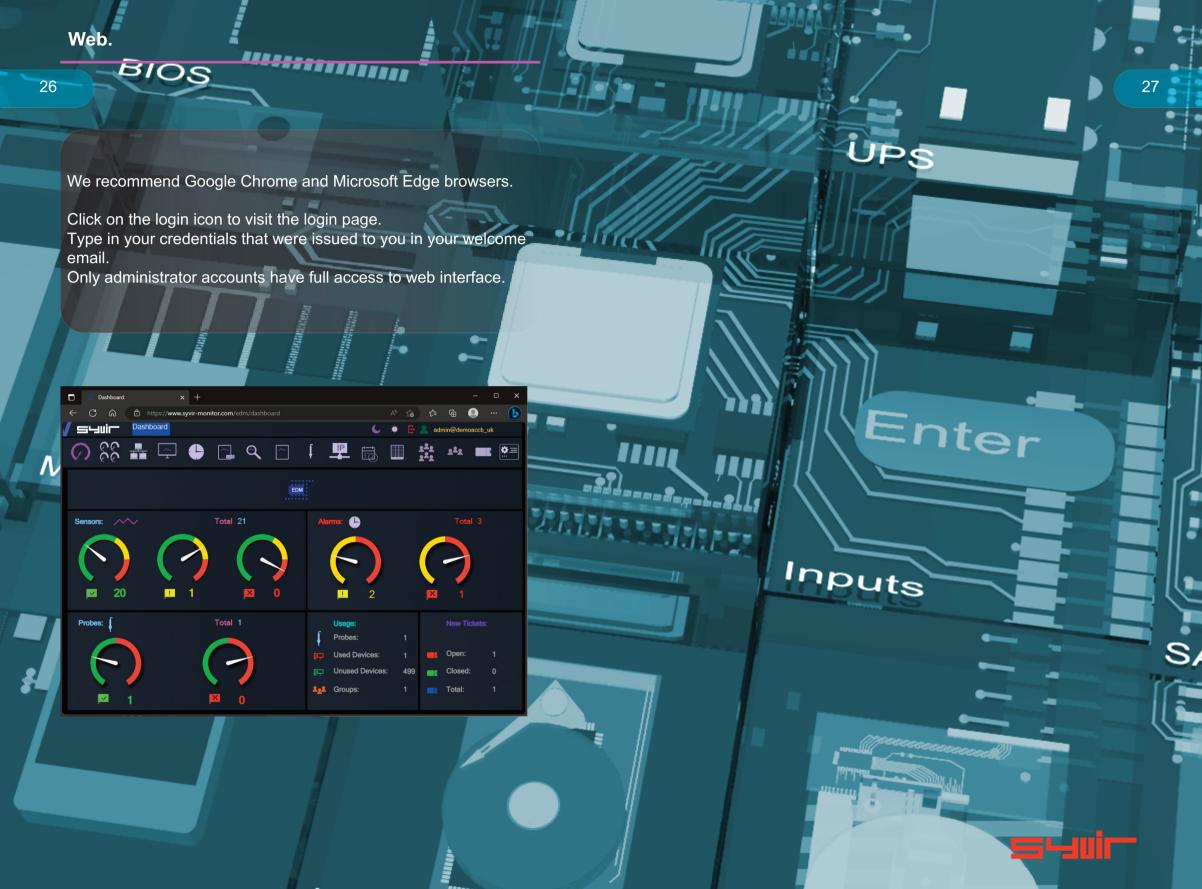
Install and setup a probe on a windows endpoint.

Interval

Set the interval between scans.







Dashboard.

28

The starting point for any web based monitoring session is the dashboard page.

This gives a quick at a glance view of the last known statuses of sensors probes and alarms.

EDM stores in the cloud the last known values from your network. The five sensor dials cover the various states of the sensors.

Probe diagnostic sensors

UP



The sensors channels are all functioning ok.

WARNING



A problem has been detected in one of the sensors channel(s).

DOWN



A serious issue has been detected in one of the sensors channel(s).

NOT DETECTED

Not detected in some cases EDM will not be able to retrieve WMI data for a given sensor.

Sometimes WMI data is not available for hardware devices. It can vary from each computer vendor what WMI data is available.

In a lot of situations WMI data can be retrieved with a sensor but the data for the sensors requirements is missing...





A windows based service that connects to the EDM server. Each monitored Endpoint has its own Probe. This is designated by the computer name.

The hierarchical structure of EDM places the probe as the most powerful item in a pc deployment.

Probe status

UP



The probe is functioning ok. emory

DOWN



The probe is either not running or the endpoint that the probe is on has been switched off.

Internet

Data is transferred to the EDM server using HTTPS, a constant internet connection is required to transfer data.

Delete probe

From the probe directory view open the User hierarchical structure to list Probes on your Groups network connected to the EDM cloud.

Select the probe you wish to delete.

Click on the delete probe icon.

All data will be deleted along with the sensors attached to the probe.

Inputs



Sensors.

32

The probe contains Sensors that use WMI technology to monitor the current state of hardware. Sensors are deployed to monitor Groups hardware. Sensors contain channels for multiple items i.e. several drives etc. Diagnostic data is received for each channel that's in use with a sensor. The sensor contains multiple channels.

For instance a USB sensor checks each usb port and assigns the port to a channel.

THE PROPERTY OF

Sensor Status values

UP



The sensors channels are all functioning ok.

WARNING



A problem has been detected in one of the sensors channel(s).

DOWN



A serious issue has been detected in one of the sensors channel(s). This will trigger an alarm.

NOT DETECTED

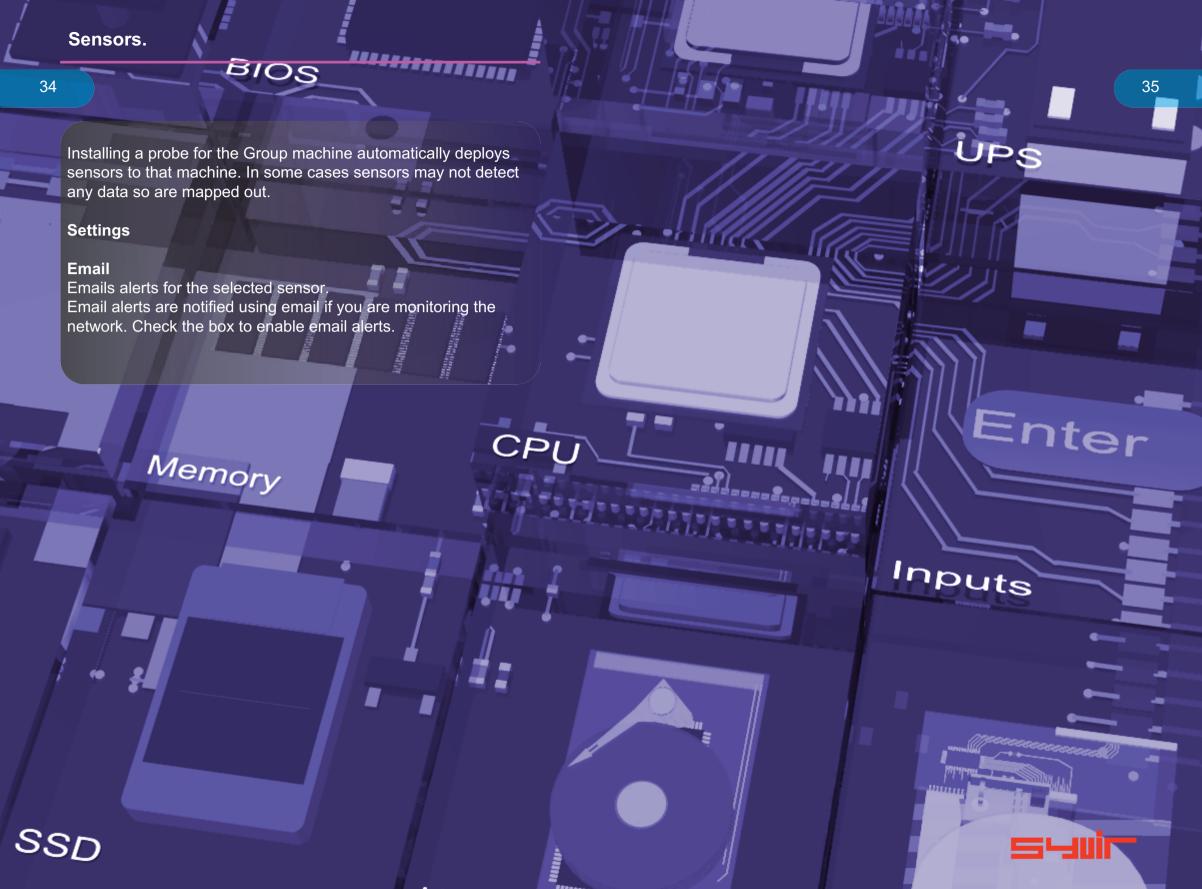
On deployment the hardware has not been detected.

This could be for a number of reasons. i.e. the hardware doesn't exist on this system.

Other reasons for not detected status. In our experience if there is no data there, then no data will appear in the future. In a lot of situations WMI data can be retrieved with a sensor but the data for the sensors requirements is missing...

So for some deployments some sensors won't be available.





Alarms are produced when a sensor is set to WARNING of DOWN.



DOWN



WARNING

The alarm takes the form of an email, when set, for the sensor that is changed.

View the current alarms.

From the Group directory view, select the Group you wish to view



B105

From the probe directory view open the User hierarchical structure to list alarms on Groups network connected to the EDM cloud.

Alarms are listed under each probe.



Alarm

Once an alarm is created an email alert is sent to the designated email address.

A notification icon indicates that an email has been sent to the designated email address.

Clear Alarms

Clear Alarm: 违

Select clear alarm and then the

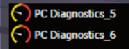
update icon. This clears the alarm.







Alarm diagnostics



Click on Probe Diagnostics to view the alarm status of the sensor on that probe.

Channel Properties: Channel 0

cooling device Name:

Error Status:

Click on the channel icons to retrieve diagnostic data for the particular channel. In some instances data can be basic.

In most instances you should be able to retrieve the Status of the Channel.

Usually this is a generic message of "OK"



Sensors dials are color coded to reflect the status of the sensor. Green = UP.

Where a problem has been detected by the sensor, the dial will indicate Inputs

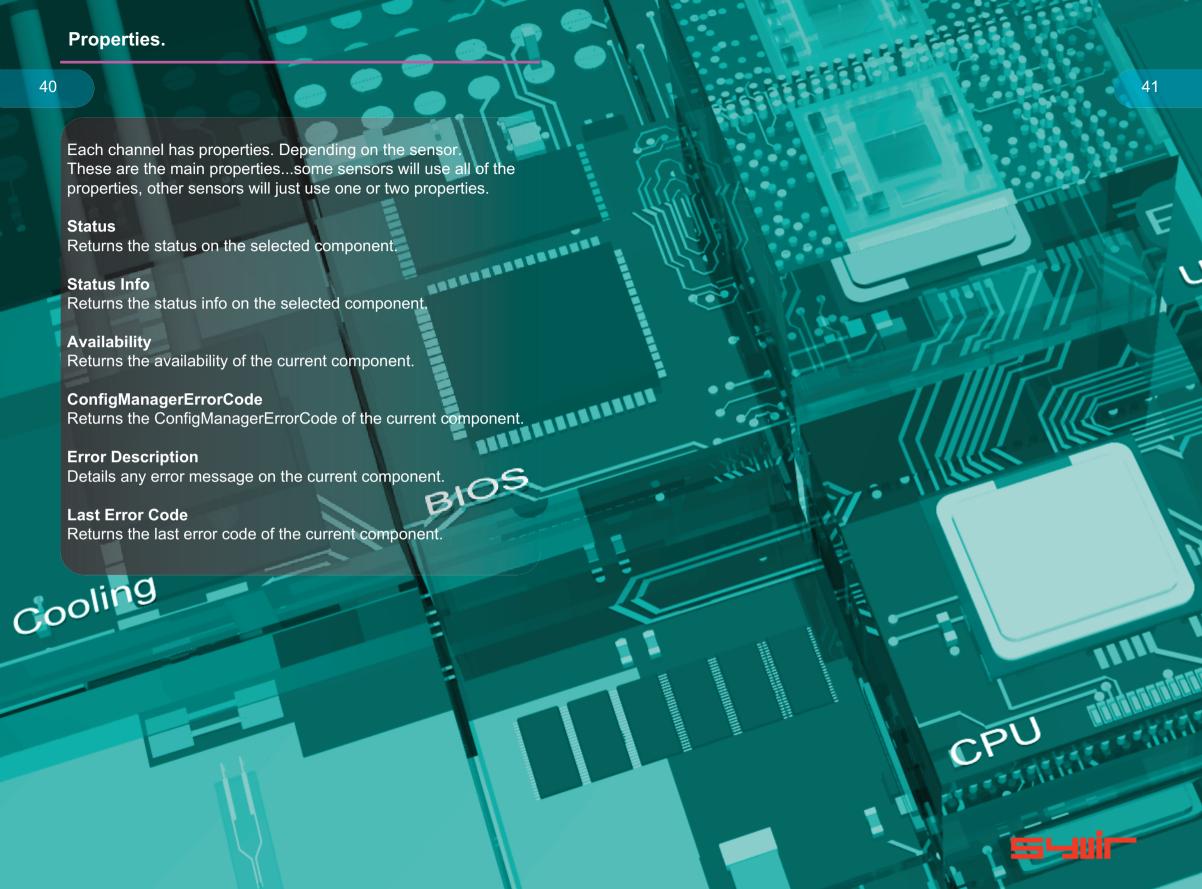
Yellow = Warning.

A dial that indicates

Click on a sensor to view channel data for the particular component.

In the system box is a generic pc view, Sensor channels are mapped to the hardware.





PC, Server, VMware, Hyper-V Diagnostics. Select the Diagnostics page.

Each time the probe scans the machine, diagnostic data is retrieved for the purpose of pinpointing more accurately where a problem exists. From the Group directory view, select the Group SERENCE EN LES ESTATES you wish to view.

■ User: admin@demoaccb_uk

Group 2

From the probe directory view open the User hierarchical structure to list Console Probes created on the SYVIR EDM cloud.

Select the Console probe you wish to view.

- User: admin@demoaccb_uk
- Probe (DESKTOP-OIFHID6)
 - Diagnostics
 - DVD Diagnostics
 - Fixed Drive Diagnostics
 - Ethernet Diagnostics
 - Fan Diagnostics
 - (Keyboard Diagnostics
 - E-IDE/SATA Diagnostics
 - Motherboard Diagnostics
 - Desktop Monitor Diagnostics
 - P.C.I Diagnostics
 - Serial Diagnostics
 - Sound Diagnostics
 - Video Diagnostics
 - USB Diagnostics
 - BIOS Diagnostics
 - CPU Diagnostics
 - Power Supply Diagnostics

Click on Diagnostics to view the last status of the deployed sensors on that probe.

Sensors dials are color coded to reflect the status of the sensor. Green = UP.

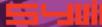
Where a problem has been detected by the sensor, the dial will indicate Yellow = Warning.

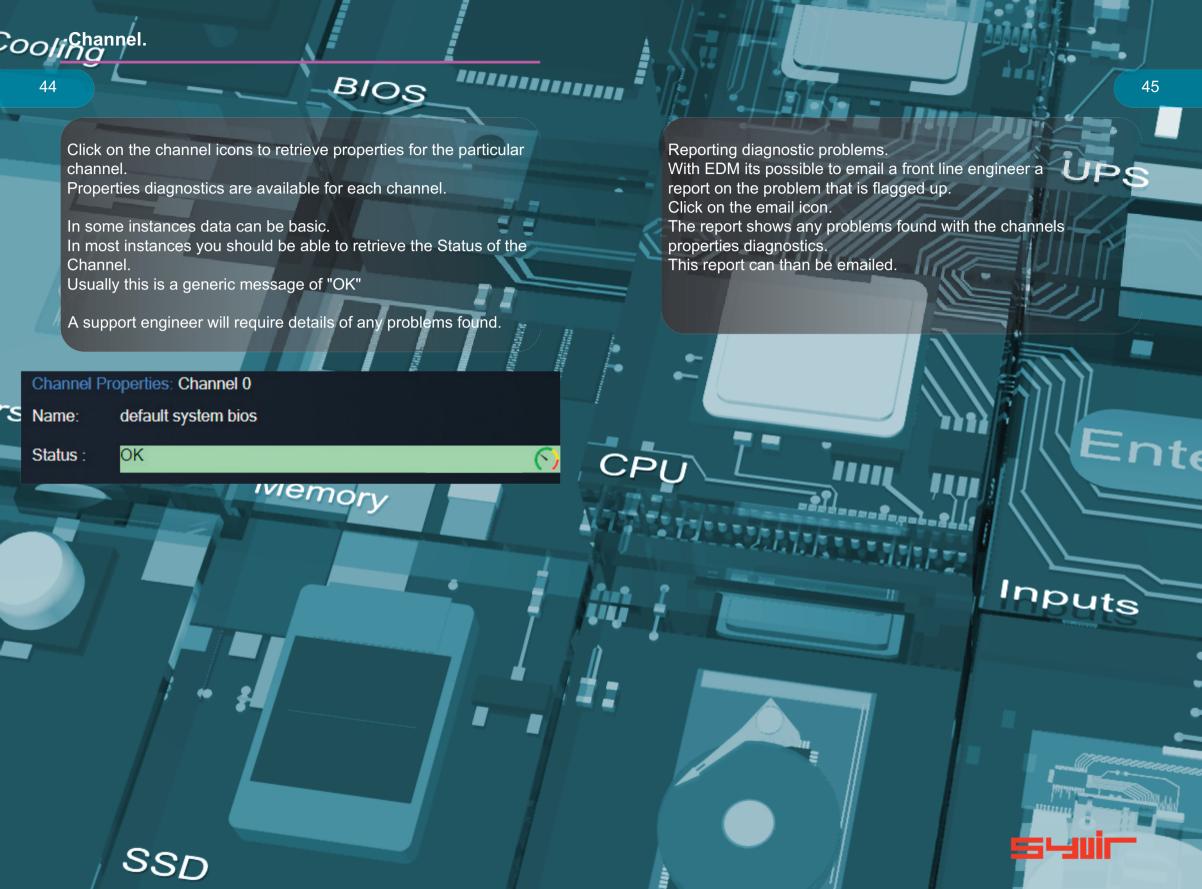
A dial that indicates

Click on a sensor to view channel data for the particular component.



In the system box is a generic pc view, Sensor channels are mapped to the hardware.





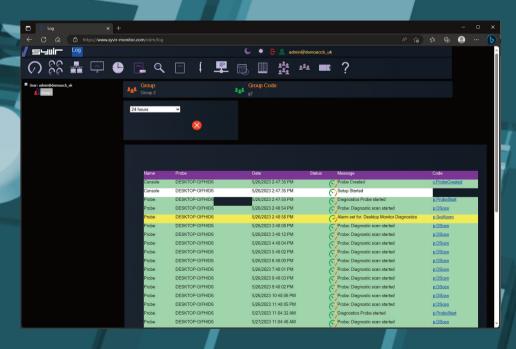
Log messages are produced by the local service probe each time a specific action such as a diagnostic scan is started.

Error messages produced by the local service probe are stored in the edm server.

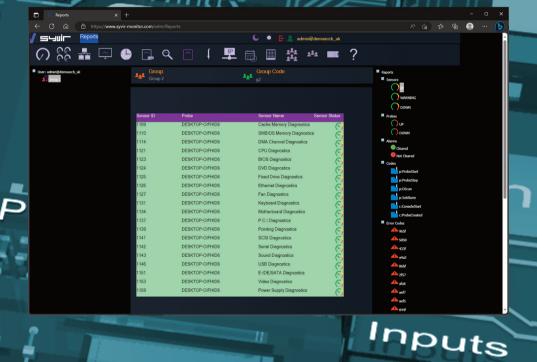
These messages are accessed through the Log page.

Each log entry provides details of the message and status of the probe.

A code is produced that hyperlink to further details of the log entry.



Various reports about your Endpoint sensors and probes, alarms along with codes and error codes.







Tickets by default are produced when a sensor is set to WARNING or DOWN.

Tickets are accessible from the tickets page.

View tickets.

From the Drop-Down box select the period you wish to view Tickets from. Select 24 Hours.

Tickets from the last 24 hours are listed.

Edit a ticket.

Select the ticket by checking the edit checkbox.

Click on the Edit button.

In this mode we have three options.

Ticket

Shows the sensor details when the ticket was created by the probe.

Live

Shows the sensor details from the last scan by the probe.

Edit

Edit details such as Priority and Ticket Status.

Priority

By default the probe defines a WARNING status as Priority 4 and DOWN as priority 5.

You can change these by selecting priority Drop-Down box. Click on Save.

Ticket Status

By default, the probe defines a tickets status as Open, to close a ticket select Closed form the Change status drop down box

Click on Save.

To view the diagnostic state of the sensor at the time the probe created the ticket. Click on Ticket and Diagnostics.

Click on Channel icons for diagnostic data for each Channel(s) To view the diagnostic state of the sensor at the last scan by the probe. Click on Live and Diagnostics.

Click on Channel icons for diagnostic data for each Channel(s)

Create your own Tickets.

Select the ticket by checking the edit checkbox. Click on the New button.

Select the Group and the probe and sensor.

Type in a subject and message.

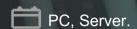
Click on Save.











Battery Diagnostics

Sensor id: 1122

Monitors a battery connected to the endpoint.

PC, Server, Hyper-V, VMware.

BIOS Diagnostics

Sensor id: 1123

Monitors the endpoints basic input/output services (BIOS) that is installed.

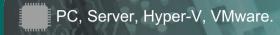


PC, Server, VMware.

Cache Memory Diagnostics

Sensor id: 1109

Monitors Cache Memory on the endpoint running Windows.



CPU Diagnostics

Sensor id: 1121

Monitors a CPU running a Windows operating system.



PC, Server, Hyper-V, VMware.

DMA Diagnostics

Sensor id: 1114

Monitors DMA as seen by the endpoint running the Windows operating system.



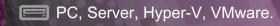
PC, Server, Hyper-V, VMware.

Fixed Drive Diagnostics

Sensor id: 1125

Monitors a physical disk drive as seen by the endpoint running the Windows operating system.

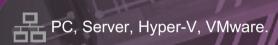




CD/DVD Diagnostics

Sensor id: 1124

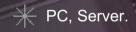
Monitors a CD-ROM/DVD drive on a endpoint running Windows



Ethernet Diagnostics

Sensor id: 1126

Monitors the network adapters on a endpoint running a Windows operating system.



Fan Diagnostics

Sensor id: 1127

Monitors endpoint fan diagnostics.



PC, Server, VMware.

FireWire Diagnostics

Sensor id: 1150

Monitors the endpoints FireWire diagnostics.

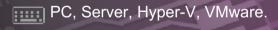


PC, Server.

Heat Pipe Diagnostics

Sensor id: 1129

Monitors the endpoints heat pipe cooling device.



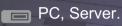
Keyboard Diagnostics

Sensor id: 1131

Monitors the keyboards installed on the endpoint running Windows.







PCMCIA Diagnostics

Sensor id: 1138

Monitors Personal Computer Memory Card Interface Adapter (PCMCIA of a PC Card) controller device.



PC, Server, Hyper-V, VMware.

PC Pointing Diagnostics

Sensor id: 1139

Monitors input device used to point to and select regions on the display of a endpoint running Windows. Any device used to manipulate a pointer, or point to the display on a endpoint running Windows.



PC, Server, Hyper-V, VMware.

Power Diagnostics

Sensor id: 1159

Monitors the power supply state.



* PC, Server.

Refrigeration Diagnostics

Sensor id: 1140

Monitors Refrigeration.



PC, Server, Hyper-V, VMware.

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Inputs

SCSI Diagnostics

Sensor id: 1141

Monitors SCSI on Windows.



PC, Server, Hyper-V.

Serial Diagnostics

Sensor id: 1142

Monitors serial ports on a endpoint running Windows.





SMBIOS Diagnostics

Sensor id: 1110

Monitors SMBIOS on a endpoint running Windows.



PC, Server.

Sound Diagnostics

Sensor id: 1143

Monitors sound devices on a endpoint running Windows.



PC, Server, VMware.

System Memory Diagnostics

Sensor id: 1133

Monitors a physical memory device located on the endpoint and available to the operating system.



PC, Server.

Temperature Diagnostics

Sensor id: 1145

Monitors temperature sensors on a endpoint motherboard running Windows.



•← PC, Server.

USB Diagnostics

Sensor id: 1146

Monitors universal serial bus (USB) hub.



PC, Server, Hyper-V, VMware.

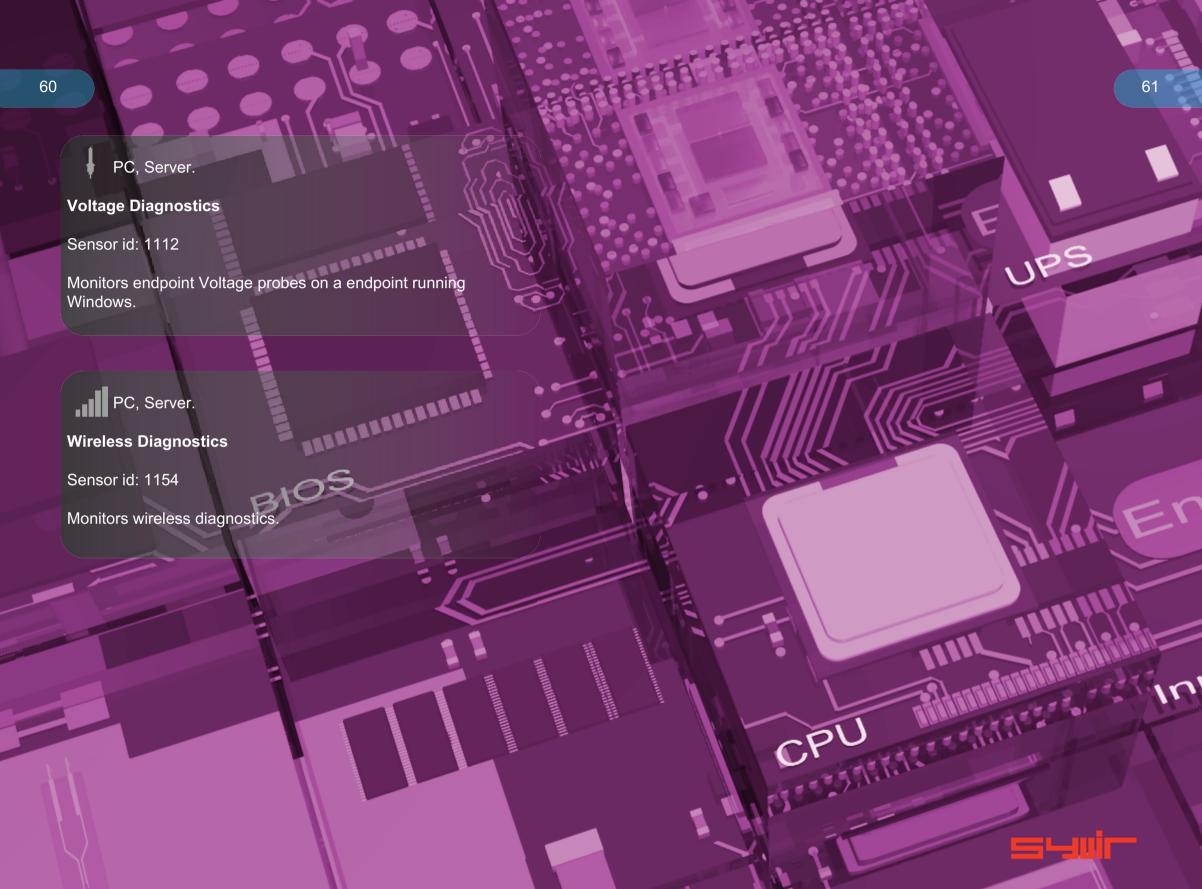
Video Diagnostics

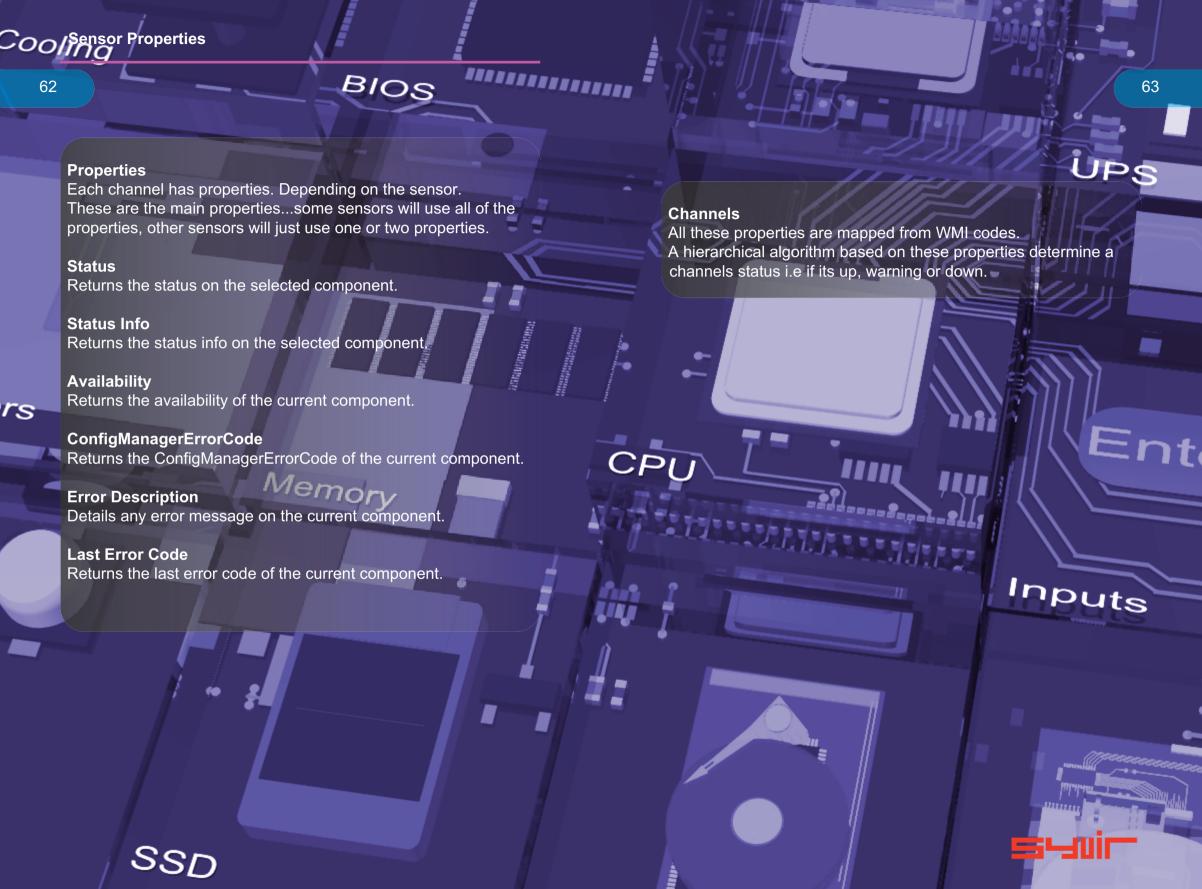
Sensor id: 1153

Monitors video controllers on a endpoint running Windows.











Battery Diagnostics

Status. Status Info. Availability.ConfigManagerErrorCode.

Error Description. Last Error Code.



BIOS Diagnostics

Sensor id: 1123

Status.





Cache Memory Diagnostics

Sensor id: 1109

Status. Status Info. Availability.ConfigManagerErrorCode.

Error Description. Last Error Code.



CPU Diagnostics

Sensor id: 1121

Status. Status Info. Availability.ConfigManagerErrorCode.

Error Description. Last Error Code.



DMA Diagnostics

Sensor id: 1114

Status.



Fixed Drive Diagnostics

Sensor id: 1125

Status. Status Info. Availability.ConfigManagerErrorCode

Error Description. Last Error Code.





CD/DVD Diagnostics

Sensor id: 1124

Status. Status Info. Availability.ConfigManagerErrorCode.

Error Description. Last Error Code.



Ethernet Diagnostics

Sensor id: 1126

Status. Status Info. Availability.ConfigManagerErrorCode.

Error Description. Last Error Code.



Fan Diagnostics

Sensor id: 1127

Status. Status Info. Availability.ConfigManagerErrorCode. Error Description. Last Error Code.



FireWire Diagnostics

Sensor id: 1150

Status. Status Info. Availability. ConfigManager Error Code.

POWER

Error Description. Last Error Code.



Heat Pipe Diagnostics

Sensor id: 1129

Status. Status Info. Availability.ConfigManagerErrorCode.

Error Description. Last Error Code.



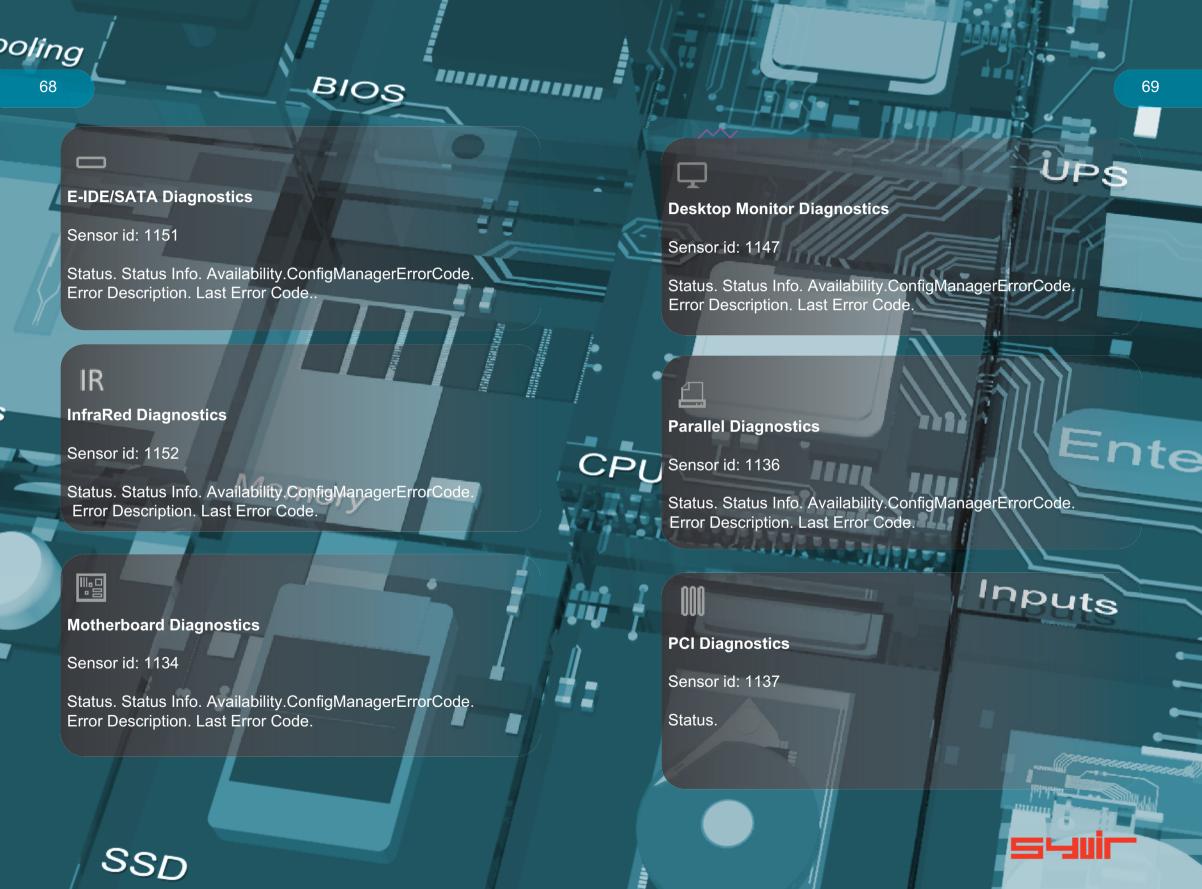
Keyboard Diagnostics

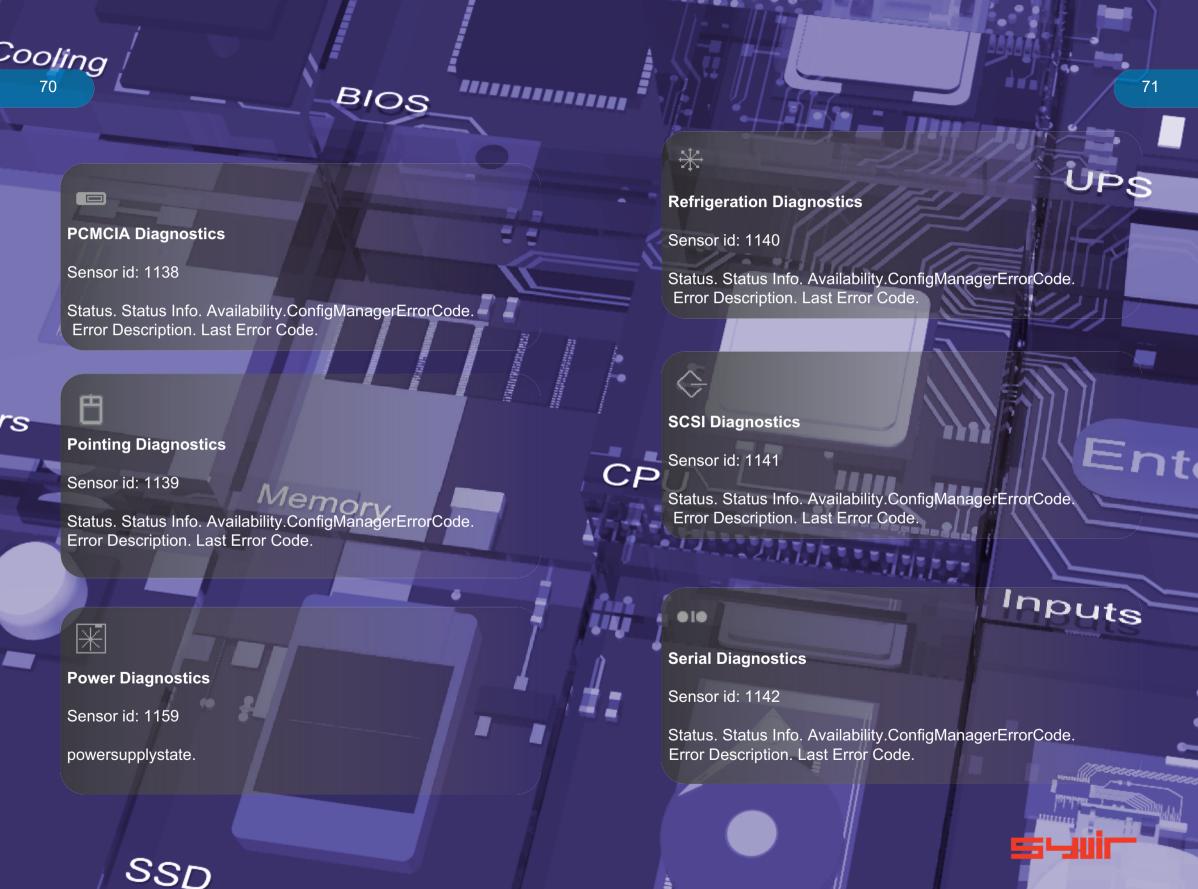
Sensor id: 1131

Status. Status Info. Availability.ConfigManagerErrorCode.

Error Description. Last Error Code.









SMBIOS Diagnostics

Sensor id: 1110

Status. Status Info. Availability.ConfigManagerErrorCode.

Error Description. Last Error Code.



Sound Diagnostics

Sensor id: 1143

Status. Status Info. Availability.ConfigManagerErrorCode. Error Description. Last Error Code.



System Memory Diagnostics

Sensor id: 1133

Status.



Sensor id: 1145

Status. Status Info. Availability.ConfigManagerErrorCode. Error Description. Last Error Code.



USB Diagnostics

Sensor id: 1146

Status. Status Info. Availability.ConfigManagerErrorCode. Error Description. Last Error Code.



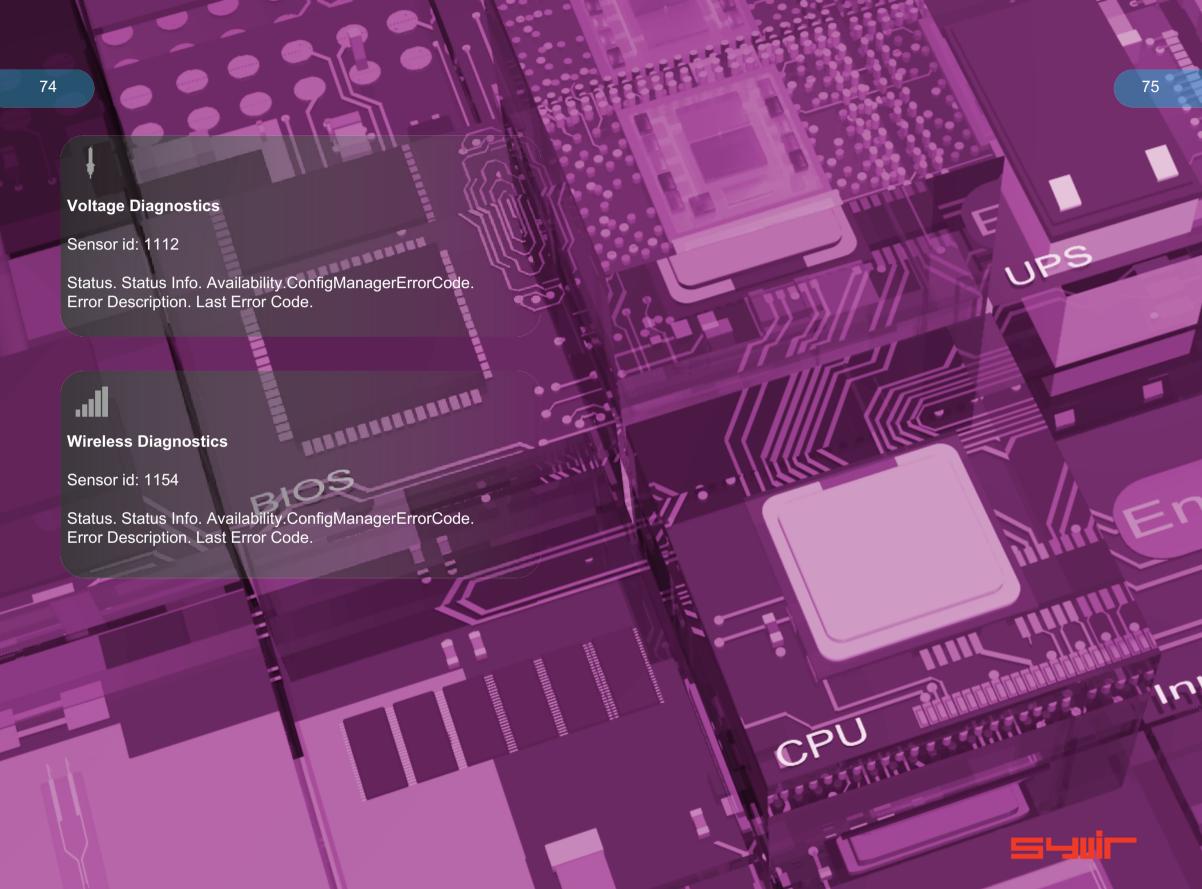
Video Diagnostics

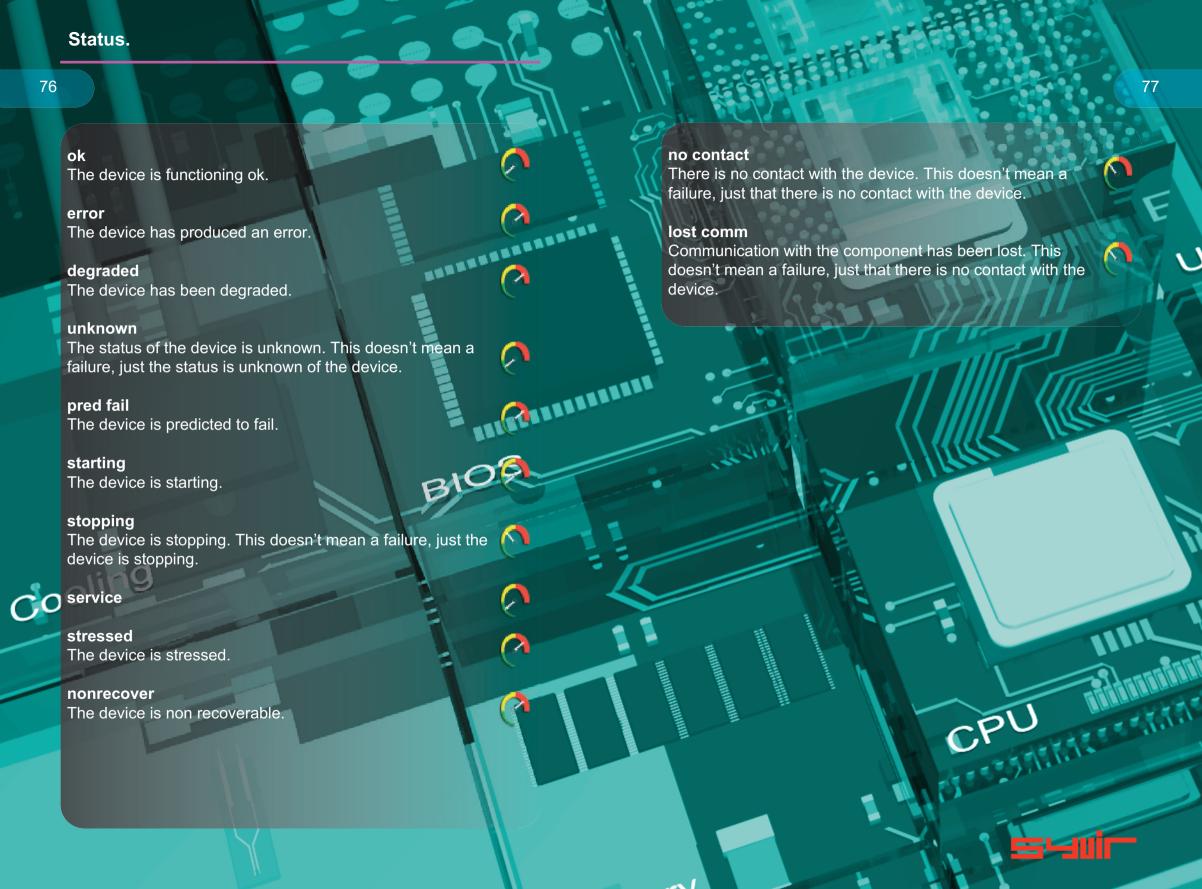
Sensor id: 1153

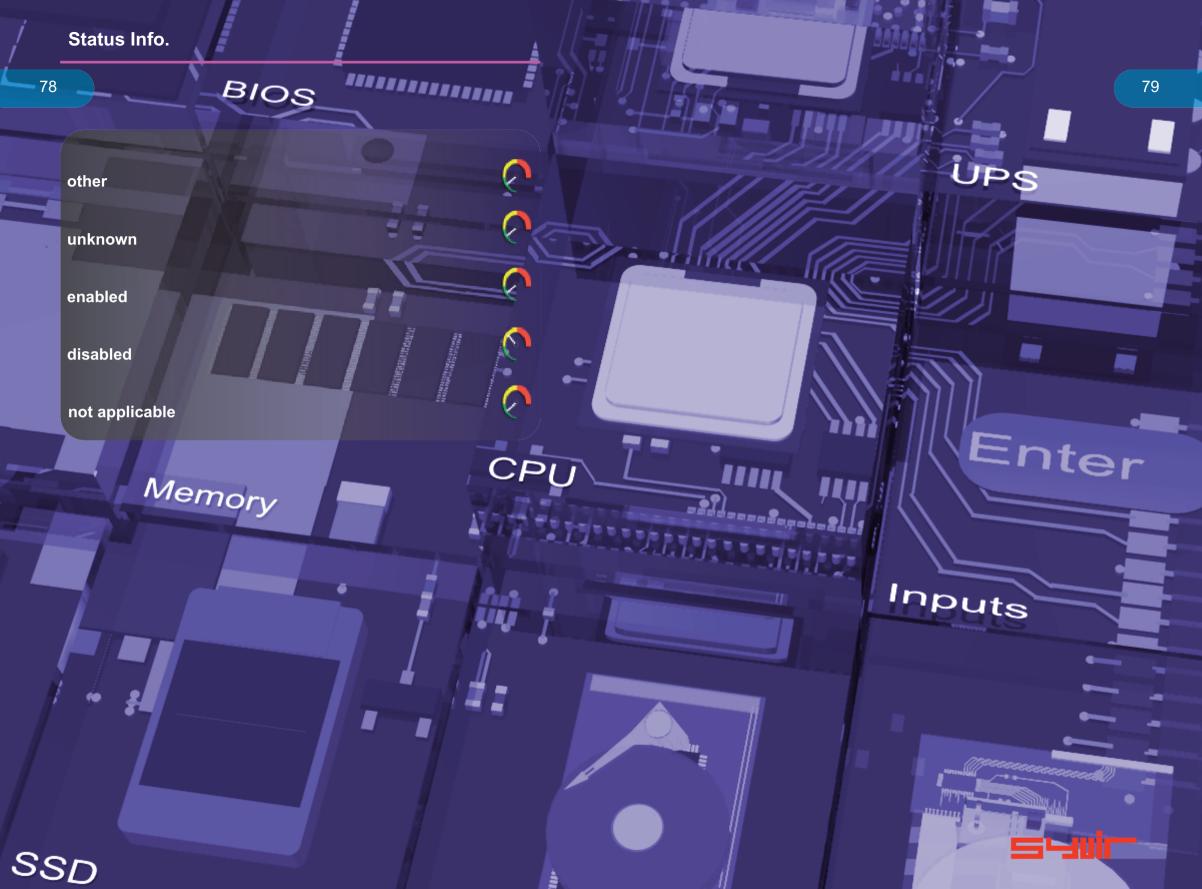
Status. Status Info. Availability.ConfigManagerErrorCode. Error Description. Last Error Code.











Device is working properly.

The device is working and functioning properly.

Device is not configured correctly.

The device is not configured correctly.

Windows cannot load the driver for this device

The driver for this device might be corrupted, or your system may be running low on memory or other resources.

This device is not working properly.

One of its drivers or your registry might be corrupted.

The driver for this device needs a resource that Windows cannot manage.

The boot configuration for this device conflicts with other devices.

Cannot filter.

The driver loader for the device is missing.

This device is not working properly because the controlling firmware is reporting the resources for the device incorrectly.

Device cannot start.

Device failed.

Device cannot find enough free resources that it can use.

Windows cannot verify this device's resources.

Device cannot work properly until the computer is restarted.

Device is not working properly due to a possible re-enumeration problem.

Windows cannot identify all of the resources that the device uses.

Device is requesting an unknown resource type.

Device drivers must be reinstalled

Failure using the VxD loader.

Your registry might be corrupted.

System failure: Try changing the driver for this device. If that does not work, see your hardware documentation. Windows is removing this device

This device is disabled.

System failure. If changing the device driver is ineffective, see the hardware documentation.



