

Printer Diagnostics Monitor

User Guide

Syvir Technologies

www.syvir.com

Hard Disk

Syvir

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Printer Diagnostics Monitor

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Syvir Printer Diagnostics Monitor (PDM) is a cloud based network hardware monitor.
PDM 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 PDM.

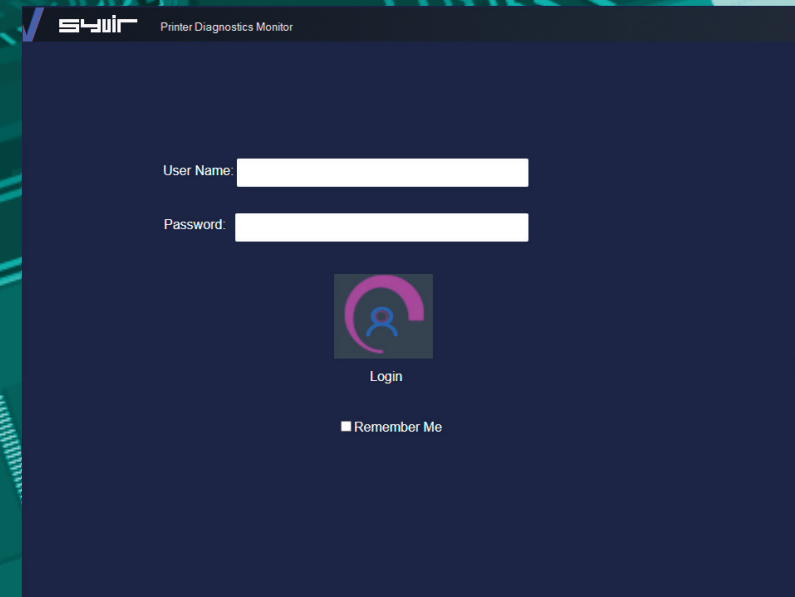
With your account you are assigned two usernames and passwords.

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.

To access Printer Diagnostics Monitor web interface please visit www.syvir-pdm.com

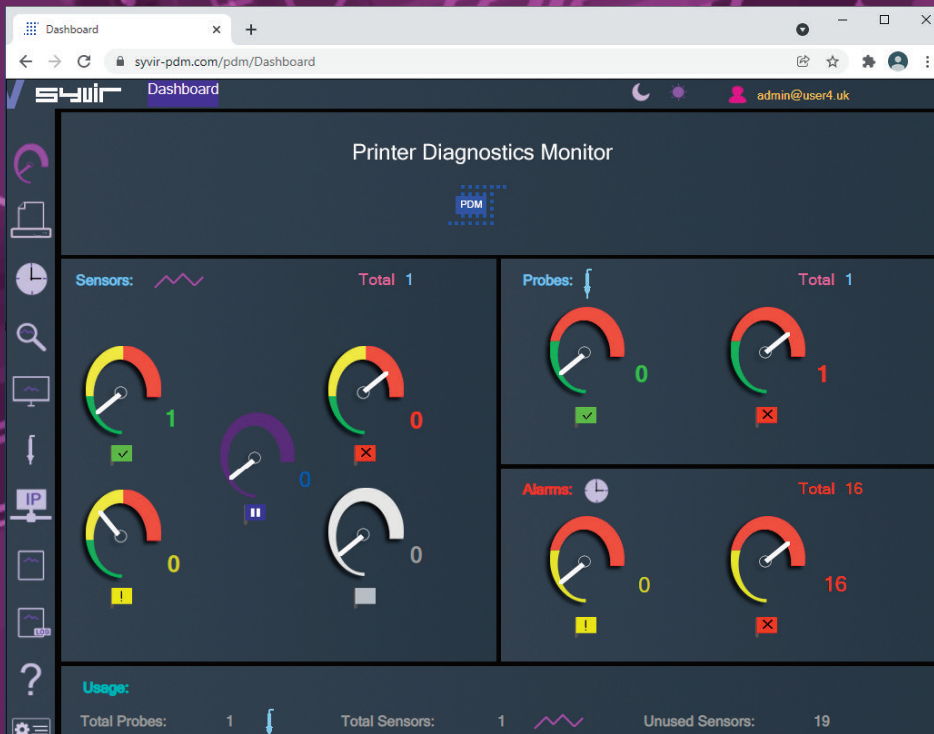
The site provides visual monitoring and reports of your monitored network.
Enter your credentials and click Login, to log into Printer Diagnostics Monitor.



The screenshot shows the login page for the Syvir Printer Diagnostics Monitor. The page has a dark blue background. At the top left, the Syvir logo is visible. The title 'Printer Diagnostics Monitor' is at the top right. Below the title, there are two input fields: 'User Name:' and 'Password:'. Below these fields is a circular icon with a person silhouette, labeled 'Login'. At the bottom, there is a checkbox labeled 'Remember Me'.

This is your guide to monitoring your network PCs with Printer Diagnostics Monitorr (PDM) using our cloud based monitoring system.

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



A probe running on each monitored PC, connects to the PDM Cloud server.

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

Diagnostic data is transferred to the cloud.

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

The structure of the PDM cloud.

Diagnostic data is gathered from the endpoint with WMI.
The sensor in the probe processes this data into channels and sets alarms if an action is needed.
Data is encrypted through SSL to the pdm cloud.
Data is transferred through HTTPS and uses port 443
Data is stored and rendered through active server pages.



Probe

A PDM probe is a windows based service that connects to the PDM cloud server.
Each monitored PC has its own Probe. This is designated by the computer name.
We recommend that each monitored PC has it's own unique name, to avoid conflicts using the PDM cloud.
The hierarchical structure of PDM places the probe as the most powerful item in a PC deployment.

Sensors

The probe contains the Printer Sensor that uses WMI technology to monitor the current state of the printers that are visible to the pc that the probe is installed on.
The printer sensor contains multiple printer channels
Diagnostic data is received for each printer channel that's in use with a deployed sensor.

Printer Channels



The sensor contains Printer channels.
The probe sensor will monitor printer channels connected to the sensor.
Printer channels are generated each time a scan is completed..

Properties

Diagnostic data is gathered from the endpoint with WMI.
The Printer sensor in the probe processes this data into Printer channels and sets alarms if an action is needed.
Data is transferred through HTTPS to the PDM cloud.
Data is stored and rendered through active server pages.

Each pc 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 Printer 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 PDM.

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 Printer Diagnostics Monitor - Console
2. Once the Printer Diagnostics Monitor - Console setup program is installed please run this.
3. Type in your probe username and password. This will create the probe for this machine in the PDM cloud.
4. Select the chassis type of the pc.
5. Install Printer 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 pc 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 Printer Diagnostics Monitor service.

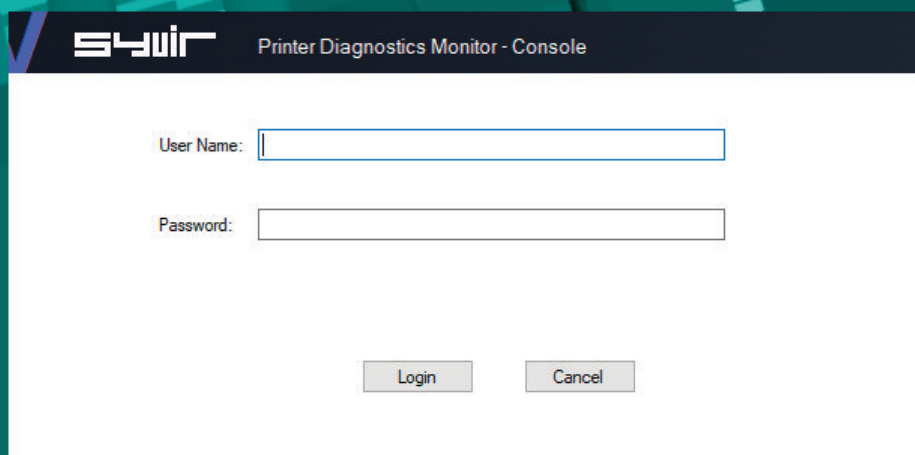
This service is the probe for the machine.

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

Create local probe.

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The Probe service transfers non-identifiable data through HTTPS to the PDM cloud.
Once the Printer Diagnostics Monitor Console is installed please run this.

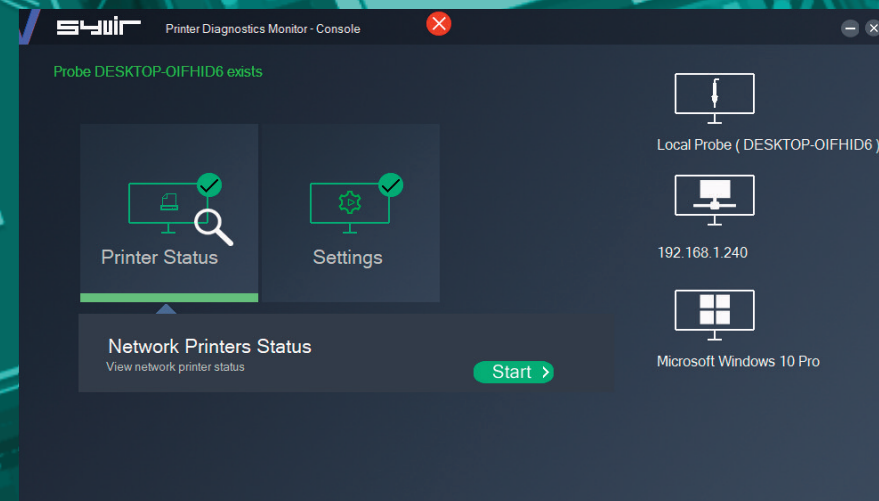


The screenshot shows the login interface of the SYUIR Printer Diagnostics Monitor - Console. It features a dark header with the SYUIR logo and the title 'Printer Diagnostics Monitor - Console'. Below the header, there are two input fields: 'User Name:' and 'Password:'. At the bottom, there are two buttons: 'Login' and 'Cancel'.

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

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The monitoring is now setup for this printers visible by this machine.



Domain

Each company is assigned a local domain. @domain. In the domain we have two different account types which are assigned roles.

Each account type has different objectives and usage requirements for particular types of users.

Administrator

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 dashboard.

Probe

The probe account is used to authorize a local probe to authenticate the transfer of diagnostic data to the pdm cloud. A probe account only works with a local probe. It will not give access to the web interface.

Control Panel



The Control Panel is accessed through the Dashboard page. Control Panel provides information on various aspects of the PDM cloud. The administrator account has sole access to the control panel.

View the current status of the Printer Diagnostics Monitor cloud.



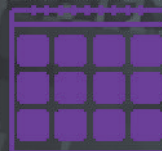
Here we provide details of any service issues with the PDM cloud.

Raise a support ticket.



On occasions you may have need to contact us with a query with the Printer Diagnostics Monitor cloud. You can send us a message using the web based form. We will get back to you within 24 hours concerning your query.

View your subscription plan.



This details the subscription package you have subscribed to.

Roles and user credentials.



PDM uses Roles and user credentials to determine the access that user accounts have to the PDM cloud. 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 dashboard. The probe account is used to authorize a local probe to authenticate the transfer of diagnostic data to the pdm cloud.

Check the number of sensors deployed on your computers.



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 pc.

Interval



Set the interval between scans.

Email setup



Specify email addresses to get alerts.

Terms of Service



View the Printer Diagnostics Monitor Terms of Service.

Download and install software



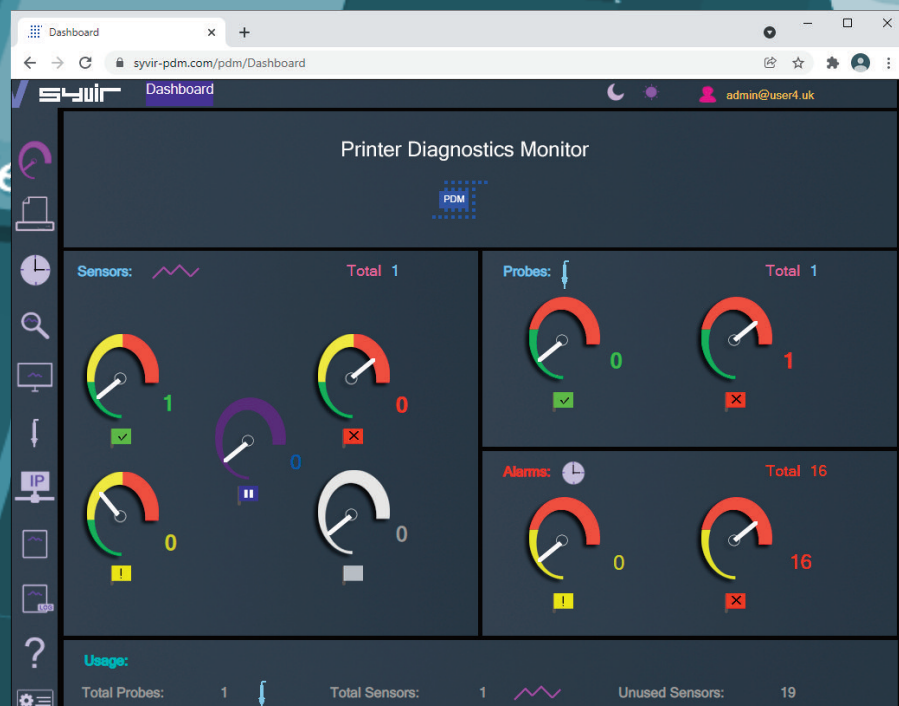
Install instructions for using Printer Diagnostics Monitor software.

Timezone



Set the timezone for where you live.

We recommend Google Chrome and Microsoft Edge browsers. Printer Diagnostics Monitors web interface is accessed through www.syvir-pdm.com. Click on the login icon to visit the login page. Type in your credentials that were issued to you in your welcome email. Only administrator accounts have full access to web interface.



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. PDM 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).

PAUSE



The sensor has been set to pause so no diagnostic data is collected.

NOT DETECTED



Not detected, in some cases PDM will not be able to retrieve WMI data for the printer sensor. Sometimes WMI data is not available for printer. It can vary from each computer vendor. The not detected message doesn't mean the hardware is not in existence, just there is no complete WMI data available. In a lot of situations WMI data can be retrieved with a sensor but the data for the sensors requirements is missing...

BIOS

A windows based service that connects to the PDM cloud server. Each monitored PC has its own Probe. This is designated by the computer name. The hierarchical structure of PDM places the probe as the most powerful item in a pc deployment.

Probe status**UP**

The probe is functioning ok.

DOWN

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

SSD

CPU

Internet

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

UPS

Delete probe

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

Enter

Inputs

The probe contains a printer sensor that uses WMI technology to monitor the current state of the network printers. A sensor is deployed to monitor network printers. Sensors contain channels for multiple printers. Diagnostic data is received for each printer channel that's in use with a deployed printer sensor.

The sensor contains upto 40 printer channels. i.e it will monitor upto 40 printers.

Sensor Status values

UP



The sensors printer channels are all functioning ok.

WARNING



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

DOWN



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

PAUSE



The sensor has been set to pause so no diagnostic data is collected.

NOT DETECTED



On deployment the printers have not been detected.

This could be for a number of reasons. i.e. the printer 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.

The not detected message doesn't mean the printer is not in existence, just there is no complete WMI data available. In a lot of situations WMI data can be retrieved with a sensor but the data for the sensors requirements is missing...

Add monitoring sensor to probe.

Select the Printers page.



By default when you create a local probe the Printers Sensor is automatically created.

To view the Printers sensor state.

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

```
User: admin@user4.uk
├── Probe (DESKTOP-OIFHID6)
│   └── Diagnostics
│       └── Printer
├── Probe (DESKTOP-HBA9GC2)
└── Probe (customer-PC)
```

You can change the default properties for the sensor.

Settings**Email**

Emails alerts for the selected sensor.

Email alerts are notified using email if you are monitoring the network. Check the box to enable email alerts.

To view printer channels click on a printer in the printer directory.

```
XR9C934E618C4F
Xerox Phaser 6020-00000
Xerox Phaser 3320 XPS
Xerox Phaser 3320 PS
Xerox Phaser 3320
OneNote (Desktop)
Microsoft XPS Document Writer
Microsoft Print to PDF
HP1CE475 (HP Officejet 7610 series)
Fax
```

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



DOWN

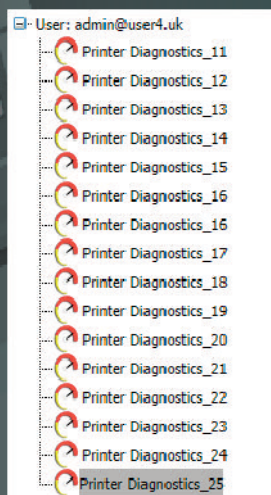


WARNING

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

View the current alarms.

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



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

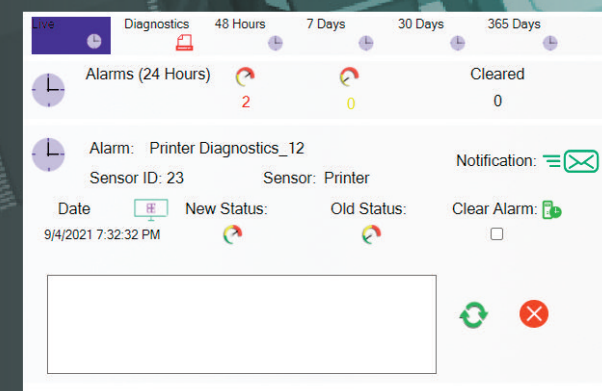
Clear Alarm: 



Select clear alarm and then the



update icon. This clears the alarm.



Alarm diagnostics

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

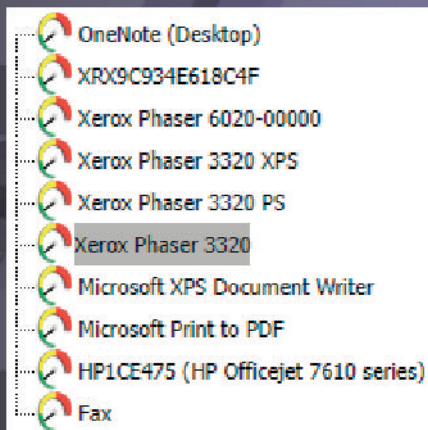
Green = UP.

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

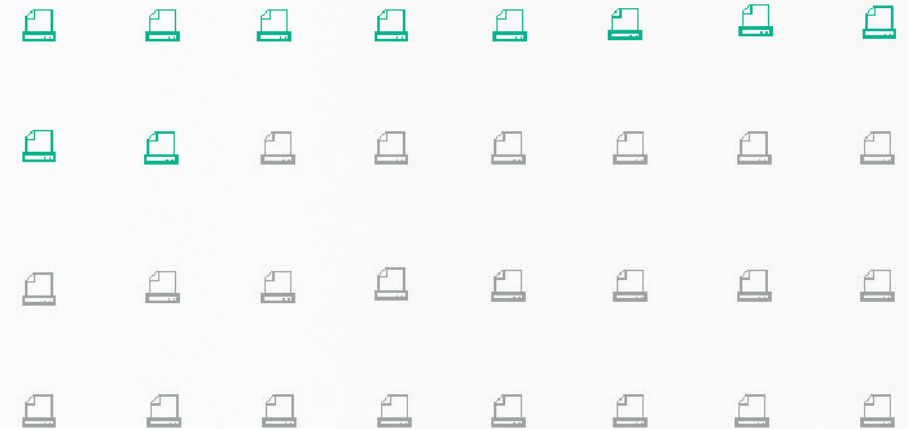
A dial that indicates Red= Down.

To view printers channel data select the Click on printer.

Click on the printer to view channel data.




Printers Diagnostics:





In the printers diagnostics box, is a icon representation for each printer or driver that is mapped to a channel. Click on the printer channel icons to retrieve properties for the particular printer channel. Properties diagnostics are available for each printer 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"


Printer Properties: Xerox Phaser 3320 XPS

Status : Error 

Status Info : 

Availability: 


Config Manager Error Code:

Device is working properly. 


Error Description:

Last Error Code:

Extended Printer Status:

Other 

Extended Detected Error State:

No Paper 

A support engineer will require details of any problems found.

Reporting diagnostic problems.

With PDM its possible to email a front line engineer a report on the problem that is flagged up.
Click on the email icon.

To:

Printer Properties: Xerox Phaser 3320

Status: Error

Status Info:

Availability:



Config Manager Error Code: Device is working properly.

Error Description:

Last Error Code:

Extended Printer Status: Unknown

Extended Detected Error State:

The report shows any problems found with the printer channels properties diagnostics.
This report can then be emailed.

Each printer has properties. Depending on the printer. These are the main properties...some sensors will use all of the properties, other sensors will just use one or two properties.

Status

Returns the status on the selected component.

Status Info

Returns the status info on the selected component.

Availability

Returns the availability of the current component.

ConfigManagerErrorCode

Returns the ConfigManagerErrorCode of the current component.

Error Description

Details any error message on the current component.

Last Error Code

Returns the last error code of the current component.

Extended Printer Status

Returns the last Printer Status message.

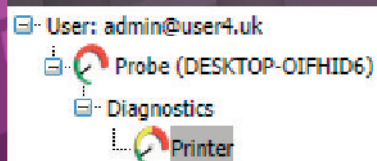
Extended Detected Error State

Returns the last Extended Detected Error State message.

Every time a probe scans the pc network printers diagnostic data is retrieved for the purpose of pinpointing more accurately where a problem exists.

To view printers channel data select the Diagnostics page.

From the probe directory view open the User hierarchical structure to list Probes on your network connected to the PDM cloud. Select the probe you wish to view.



Click on Diagnostics to view the last status of the printer sensor on that probe.

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

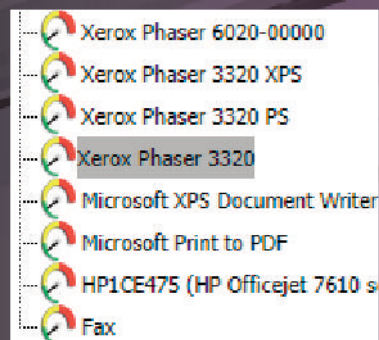
Green = UP.

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

A dial that indicates Red= Down.

To view printers channel data select the Click on printer.

Click on the printer to view channel data.



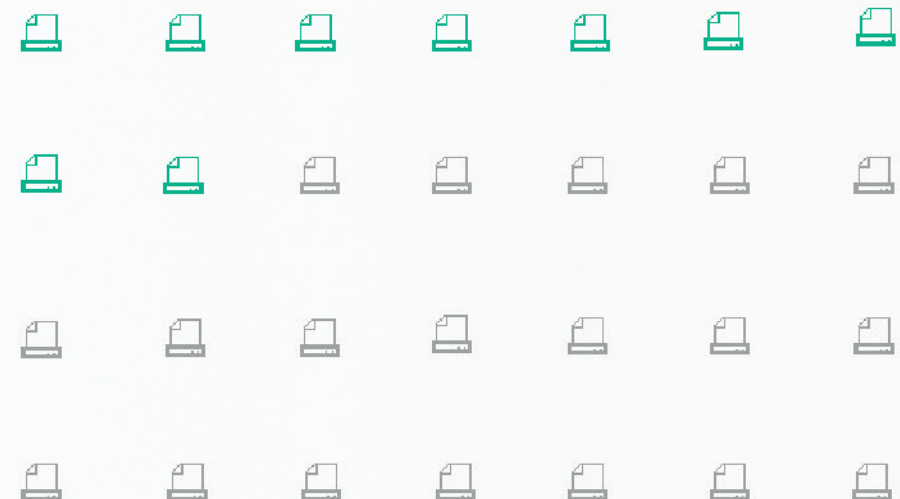
In the printers diagnostics box, is a icon representation for each printer or driver that is mapped to a channel.

Click on the printer channel icons to retrieve properties for the particular printer channel.

Properties diagnostics are available for each printer channel.

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


Printers Diagnostics:





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"

A support engineer will require details of any problems found.


Printer Properties: Xerox Phaser 3320

Status: Unknown 

Status Info: 


Availability: 


Config Manager Error Code:

Device is working properly. 

Error Description:

Last Error Code:

Extended Printer Status: Unknown 

Extended Detected Error State: 

Reporting diagnostic problems.

With PDM its possible to email a front line engineer a report on the problem that is flagged up.
Click on the email icon.

To: techsupport@syvir.com

Printer Properties: Xerox Phaser 3320

Status: Error

Status Info:

Availability:



Config Manager Error Code: Device is working properly.

Error Description:

Last Error Code:

Extended Printer Status: Unknown

Extended Detected Error State:

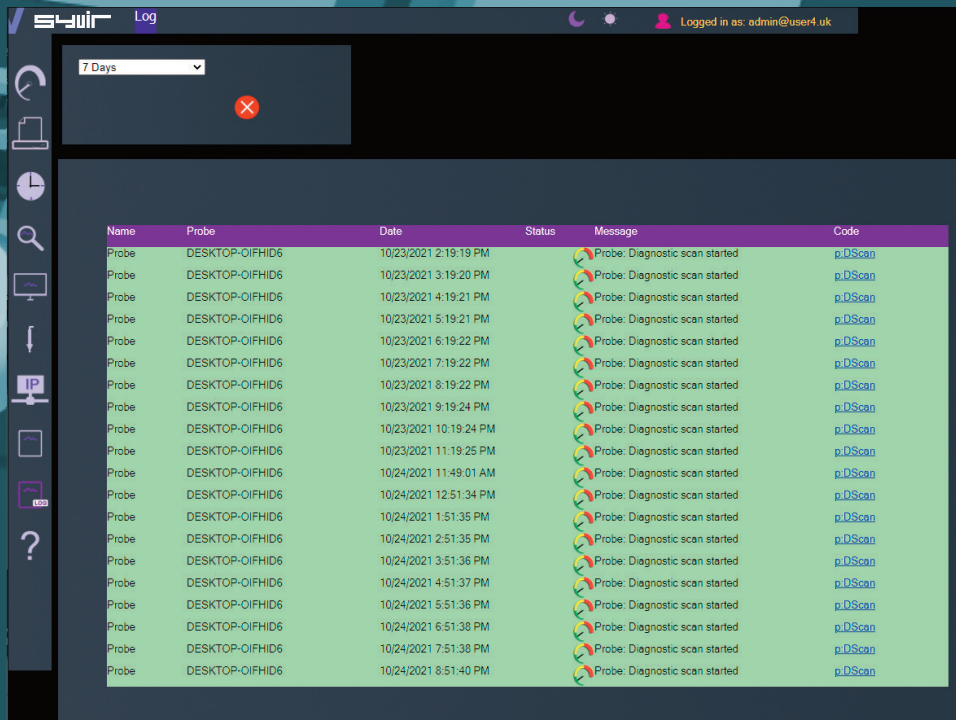
 

The report shows any problems found with the printer channels properties diagnostics.
This report can than be emailed.

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 pdm cloud.

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.

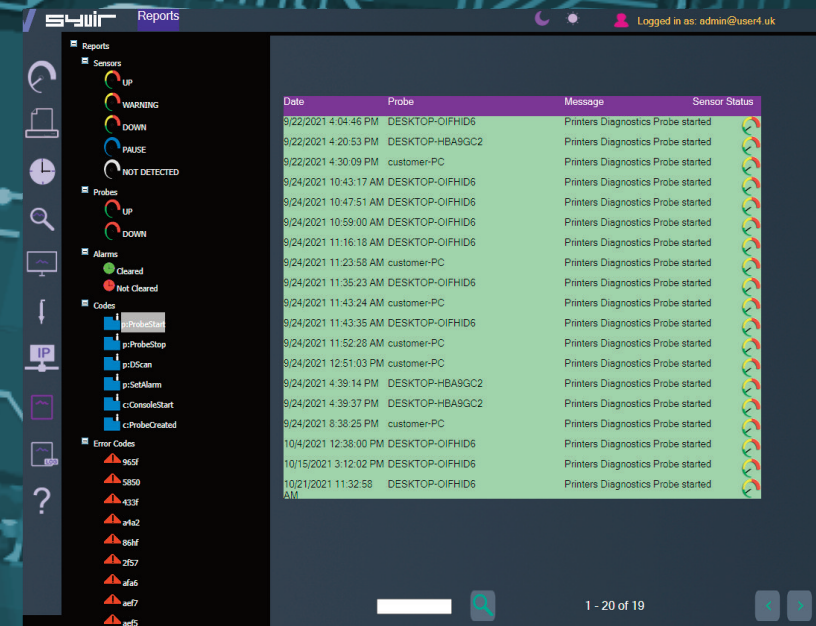
Various reports about your Printer sensors and probes, alarms along with codes and error codes.



SHUIR Log

7 Days

Name	Probe	Date	Status	Message	Code
Probe	DESKTOP-OIFHID6	10/23/2021 2:19:19 PM		Probe: Diagnostic scan started	p.DScan
Probe	DESKTOP-OIFHID6	10/23/2021 3:19:20 PM		Probe: Diagnostic scan started	p.DScan
Probe	DESKTOP-OIFHID6	10/23/2021 4:19:21 PM		Probe: Diagnostic scan started	p.DScan
Probe	DESKTOP-OIFHID6	10/23/2021 5:19:21 PM		Probe: Diagnostic scan started	p.DScan
Probe	DESKTOP-OIFHID6	10/23/2021 6:19:22 PM		Probe: Diagnostic scan started	p.DScan
Probe	DESKTOP-OIFHID6	10/23/2021 7:19:22 PM		Probe: Diagnostic scan started	p.DScan
Probe	DESKTOP-OIFHID6	10/23/2021 8:19:22 PM		Probe: Diagnostic scan started	p.DScan
Probe	DESKTOP-OIFHID6	10/23/2021 9:19:24 PM		Probe: Diagnostic scan started	p.DScan
Probe	DESKTOP-OIFHID6	10/23/2021 10:19:24 PM		Probe: Diagnostic scan started	p.DScan
Probe	DESKTOP-OIFHID6	10/23/2021 11:19:25 PM		Probe: Diagnostic scan started	p.DScan
Probe	DESKTOP-OIFHID6	10/24/2021 11:49:01 AM		Probe: Diagnostic scan started	p.DScan
Probe	DESKTOP-OIFHID6	10/24/2021 12:51:34 PM		Probe: Diagnostic scan started	p.DScan
Probe	DESKTOP-OIFHID6	10/24/2021 1:51:35 PM		Probe: Diagnostic scan started	p.DScan
Probe	DESKTOP-OIFHID6	10/24/2021 2:51:35 PM		Probe: Diagnostic scan started	p.DScan
Probe	DESKTOP-OIFHID6	10/24/2021 3:51:36 PM		Probe: Diagnostic scan started	p.DScan
Probe	DESKTOP-OIFHID6	10/24/2021 4:51:37 PM		Probe: Diagnostic scan started	p.DScan
Probe	DESKTOP-OIFHID6	10/24/2021 5:51:36 PM		Probe: Diagnostic scan started	p.DScan
Probe	DESKTOP-OIFHID6	10/24/2021 6:51:38 PM		Probe: Diagnostic scan started	p.DScan
Probe	DESKTOP-OIFHID6	10/24/2021 7:51:38 PM		Probe: Diagnostic scan started	p.DScan
Probe	DESKTOP-OIFHID6	10/24/2021 8:51:40 PM		Probe: Diagnostic scan started	p.DScan



SHUIR Reports

Logged in as: admin@user4.uk

Date	Probe	Message	Sensor Status
9/22/2021 4:04:46 PM	DESKTOP-OIFHID6	Printers Diagnostics Probe started	
9/22/2021 4:20:53 PM	DESKTOP-HBA9GC2	Printers Diagnostics Probe started	
9/22/2021 4:30:09 PM	customer-PC	Printers Diagnostics Probe started	
9/24/2021 10:43:17 AM	DESKTOP-OIFHID6	Printers Diagnostics Probe started	
9/24/2021 10:47:51 AM	DESKTOP-OIFHID6	Printers Diagnostics Probe started	
9/24/2021 10:59:00 AM	DESKTOP-OIFHID6	Printers Diagnostics Probe started	
9/24/2021 11:16:18 AM	DESKTOP-OIFHID6	Printers Diagnostics Probe started	
9/24/2021 11:23:58 AM	customer-PC	Printers Diagnostics Probe started	
9/24/2021 11:35:23 AM	DESKTOP-OIFHID6	Printers Diagnostics Probe started	
9/24/2021 11:43:24 AM	customer-PC	Printers Diagnostics Probe started	
9/24/2021 11:43:35 AM	DESKTOP-OIFHID6	Printers Diagnostics Probe started	
9/24/2021 11:52:28 AM	customer-PC	Printers Diagnostics Probe started	
9/24/2021 12:51:03 PM	customer-PC	Printers Diagnostics Probe started	
9/24/2021 4:39:14 PM	DESKTOP-HBA9GC2	Printers Diagnostics Probe started	
9/24/2021 4:39:37 PM	DESKTOP-HBA9GC2	Printers Diagnostics Probe started	
9/24/2021 8:38:25 PM	customer-PC	Printers Diagnostics Probe started	
10/4/2021 12:38:00 PM	DESKTOP-OIFHID6	Printers Diagnostics Probe started	
10/15/2021 3:12:02 PM	DESKTOP-OIFHID6	Printers Diagnostics Probe started	
10/21/2021 11:32:58 AM	DESKTOP-OIFHID6	Printers Diagnostics Probe started	

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