

Installing HP Universal Device Agent (UDA)



Table of contents

Installation	2
Proxy settings	6
Windows 2000 Server	8
Windows VISTA.....	8
Adding IP Ranges.....	8
Troubleshooting.....	9
How to uninstall.....	9
Technical description	10
Network requirements	10
Data	10
Technologies used.....	10
Prerequisites	10
The principal of HP UDA functions	10
HP UDA troubleshooting guide	12
Troubleshooting steps.....	12

Installation

This document explains how to successfully install the HP Universal Device Agent (HP UDA), and is valid for versions 2.1 and newer. The screenshots are taken from a Windows 7 installation and can look slightly different on other platforms.

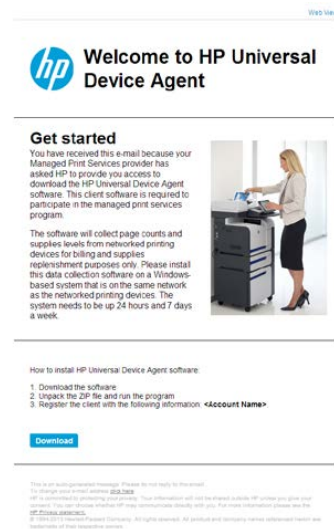
The HP UDA is supported on all newer Windows platforms, such as Windows Vista/7/8/10 and Windows Server 2008/2012. Windows Server 2000 is not supported as it does not support Microsoft .NET

Prior to installation of HP UDA you must install .NET Framework 4.6. Microsoft .NET Framework 4.6 can be downloaded from Microsoft's website: www.microsoft.com.

Hardware requirements:

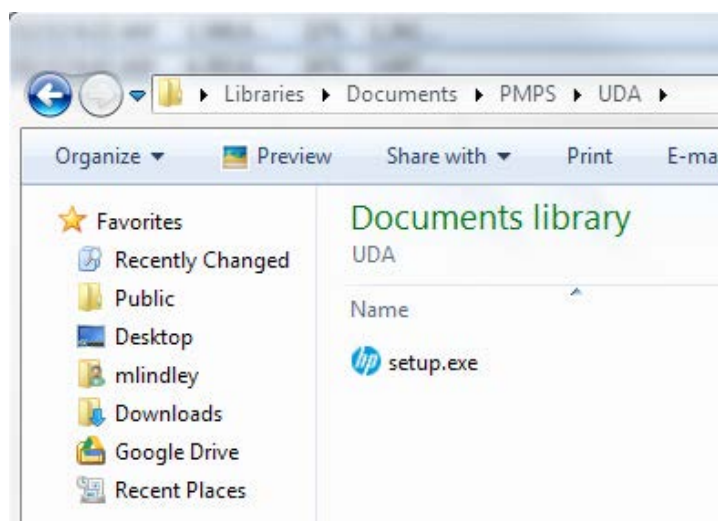
- 1 GHZ or faster processor
- 512 MB of RAM
- 10 MB of available hard disk space.

When you are set to install HP UDA, Click on "Download HP UDA" in the welcome email from uda@hpuda.com.



Your browser will now download a compressed zip file containing the installation files for HP UDA.

Next, unzip the compressed zip file and double-click Setup.exe. Installation will now begin.

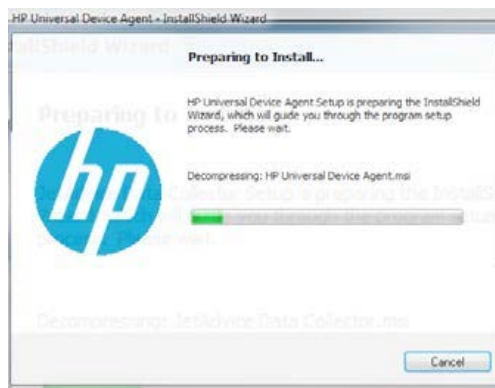


The installation wizard consists of a few minor steps.

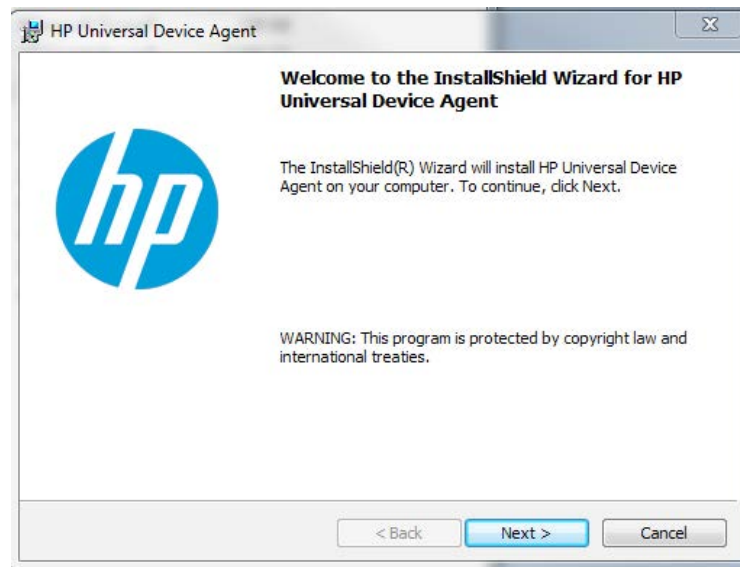
Start by choosing your language from the drop down list, then select OK



The HP UDA will prepare to setup the installation.



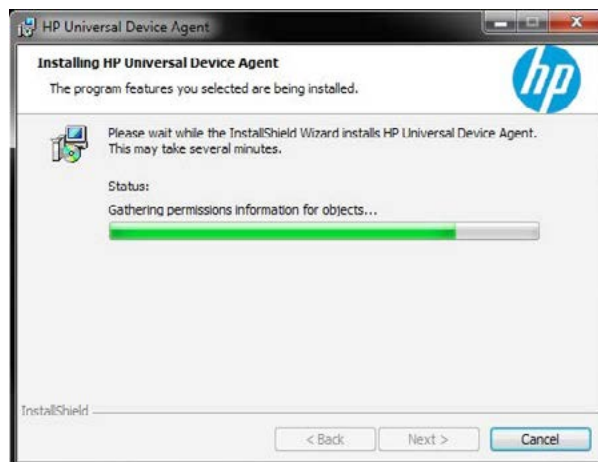
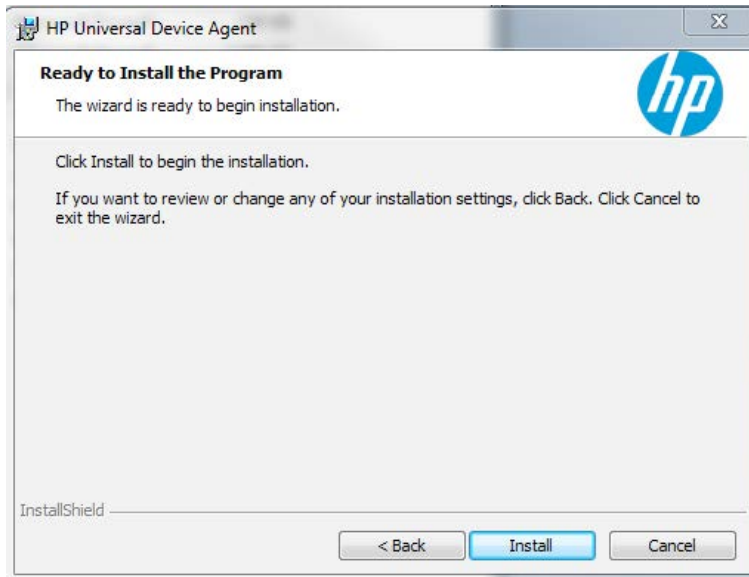
Select Next to proceed with the installation

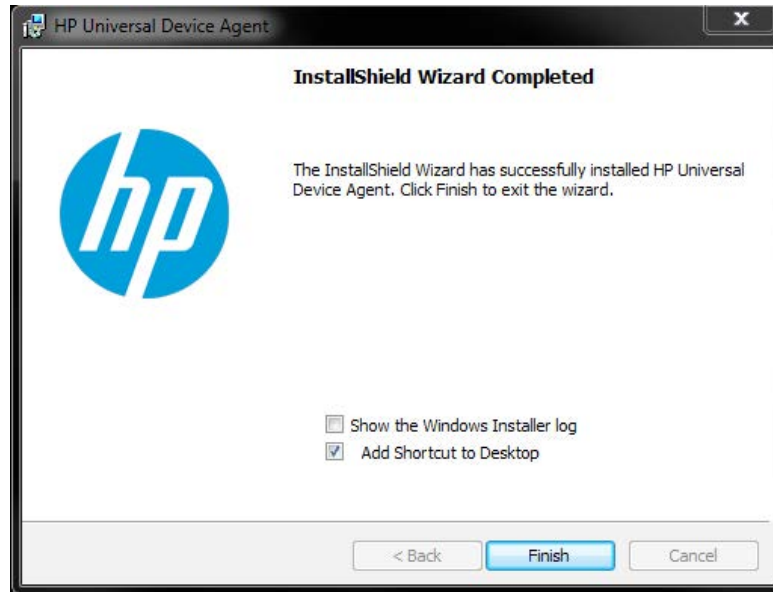


Next, make sure to read and accept the License Agreement. Then click Next.

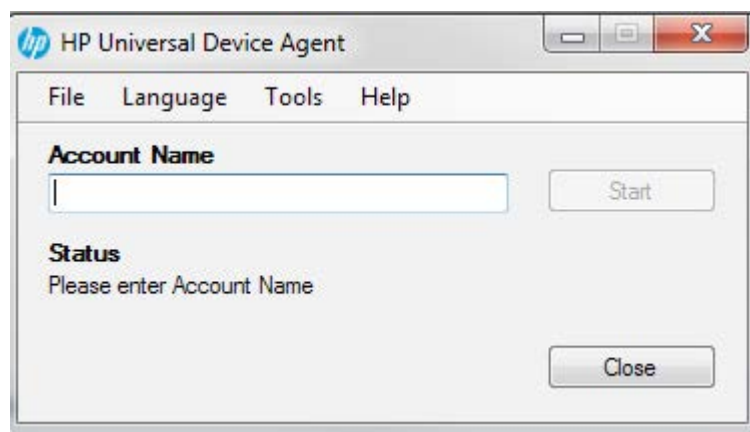
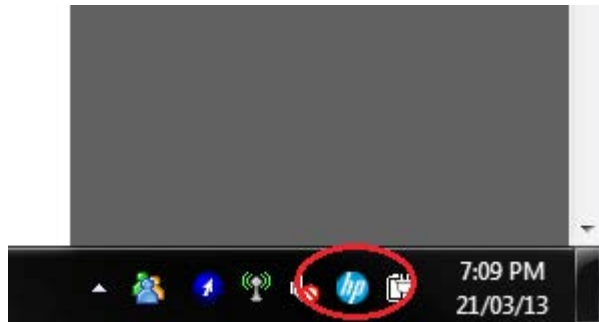


You are ready to install now. Just click Install and the installation will be done automatically.

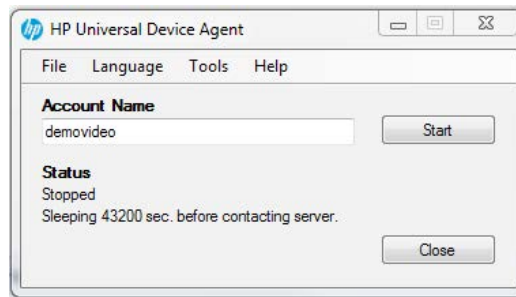




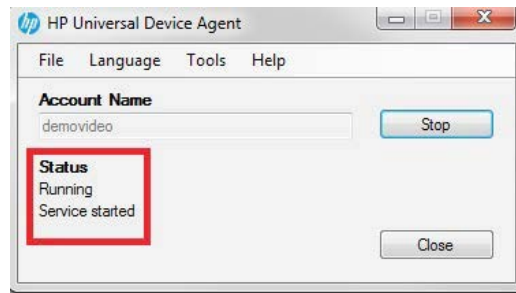
After installation is complete, click Finish. The HP UDA Manager will have started automatically during installation. If it does not appear you can find it in the system tray or start menu. Right-click the HP icon and select Open.



Start by entering your Account Name. You can find your Account Name from welcome email you received.



Then press Start to register and start the HP UDA Service.



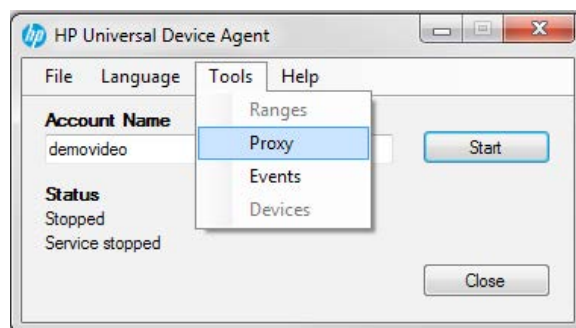
The HP UDA is now running and the Status will reflect its condition.

Proxy settings

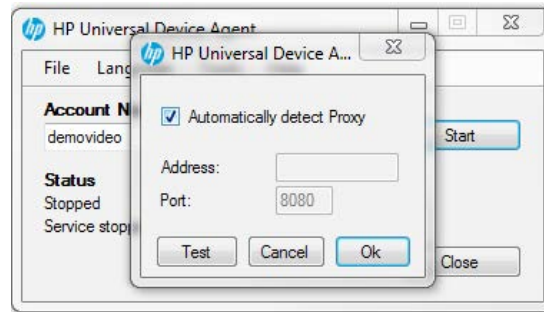
If you use a Proxy then you need to add Proxy settings in the HP UDA during the installation.

If you are accessing the Internet through a proxy server the following error may happen: HP UDA Collection Manager - DataCollectorWebApplication:run System.ServiceModel.EndpointNotFoundException: There was no endpoint listening at https://jadcws.jetadvice.com/v2/service1.svc that could accept this message. This is often caused by an incorrect address or SOAP action. By default, the HP UDA will try to detect your proxy settings automatically. If it cannot auto detect your proxy, you can still configure it yourself.

If you access the Internet through a proxy with authentication Stop the HP UDA by clicking Stop, then choose Tools then Proxy from the menu.



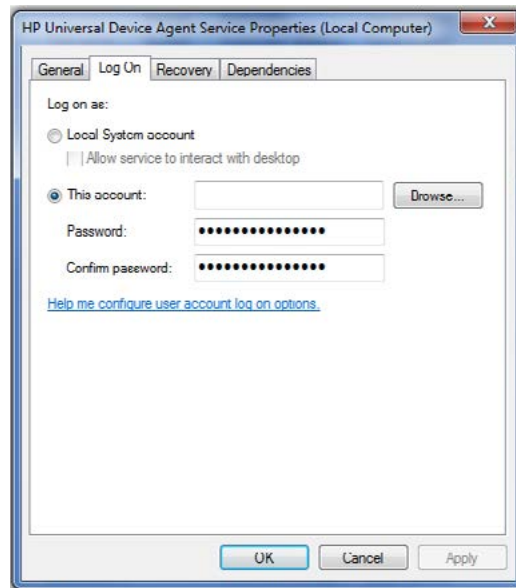
First uncheck the “Automatically detect Proxy”. Then enter the correct address and port for the proxy server. Press Test to verify the connection then press OK.



If the error appears again, you can access the Internet through a proxy with authentication. Stop the service from the Manager. Then open the Service Console (services.msc) which can be found in the Administrative Tools menu. Locate the “HP Universal Device Agent Service”.



Right-click and open Properties. Go to the Log On tab and change the setting from “Local System” account to “This account” and enter credentials for an account which can access the Internet through your proxy with authentication. If you are unsure about this, contact your system administrator.



- Start HP UDA service
 - Here the credentials defined in the HP UDA service are used and if Proxy settings are needed then the Proxy settings defined in HP UDA are used
 - The user needs to have rights to access the internet using http - port 80 and https port 443

After accessing the Internet, return to the manager HP UDA and click Start. Now everything should be running.

Windows 2000 Server

Windows 2000 server is not supported, as Windows 2000 server does not support .NET.

Windows VISTA

To install the HP UDA on Windows Vista, the User Account Control (UAC) needs to be disabled.

How to disable UAC:

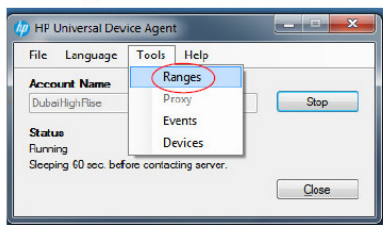
- Select "Control panel"
- Select "User Account"
- Select "Turn User Account Control on or off"
-
- Select "OK"
- Restart the Windows Vista PC
- Then install "HP UDA"

Remove the checkmark in "Use User Account Control (UAC) to help protect your computer"

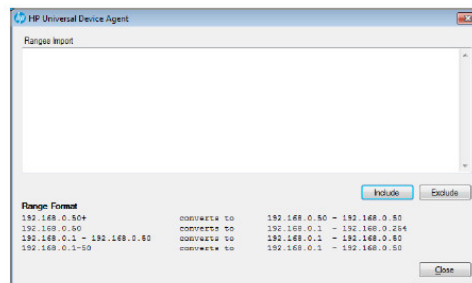
Adding IP Ranges for detection of print devices

By default, HP UDA will add the IP Range of the PC or Server that the UDA Data Collector is installed on. To fully detect all printers on your network, add additional IP Ranges or IP addresses of devices using the "Ranges" tool from the Tools menu in the Data Collector

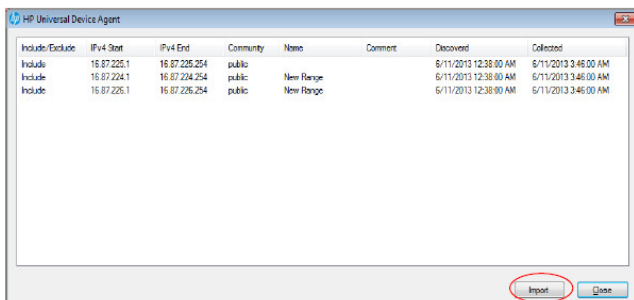
To select additional IP ranges for HP UDA to detect, open the HP UDA control window by double clicking on desktop icon, select 'Tools', then select 'Ranges'



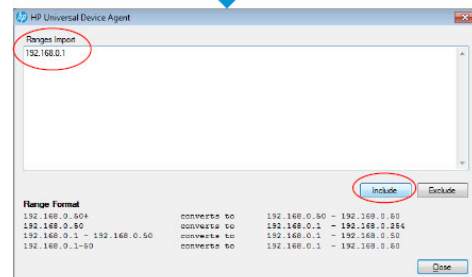
Enter the new IP range or just an IP address and the tool will automatically fill in the range as shown in the 'Range Format' key. Select 'Include' to have the range added to the UDA discovery list.



Existing IP ranges will be shown. Click on 'Import' to add new ranges.

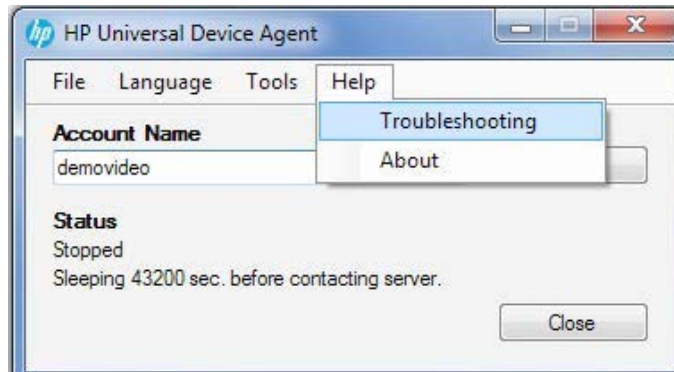


The new IP ranges will then be added to the discovery search that the UDA software client performs.

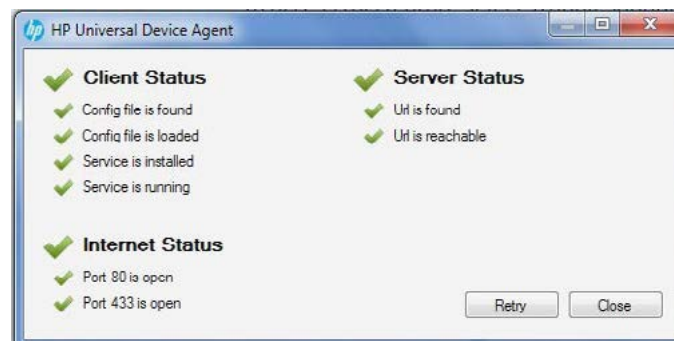


Troubleshooting

The HP UDA now provides a troubleshooting feature to see the status of the services and components required.



To access this feature select Troubleshooting under Help in the menu.



If a problem has occurred a yellow warning will appear next to one of the components providing a simple and direct method of showing where the problem lies. Once you have resolved the problem select retry to verify all components are ok, if so, all green check marks will appear.

How to uninstall

Please follow the steps to remove a program installed on the computer:

- On the PC/server select "Start"
- Select "Control Panel"
- Select "Add or remove program"
- Then go to "HP UDA" and select "Remove"
- Then select OK to remove the HP UDA

Technical description

This section describes technical details about the HP Server and HP UDA and how the communication between your network and the HP Server is performed.

Network requirements

- Access to Internet
- SNMP enabled network

Data

Which data is transmitted over the Intranet/Internet, how much and how often?

HP uses HTTP port 80 (HyperText Transfer Protocol) for communication between the HP UDA and the HP Server. You can compare this to browsing the web with an Internet browser on a standard PC.

All data is exchanged in a compressed and encrypted way using HTTPS port 443 (HyperText Transfer Protocol Secure).

HP UDA uses Simple Network Management Protocol (SNMP) to collect MIB / OID data from the printers on your network. This is done using as few network resources as possible.

Print jobs can not be reproduced or replicated based on submitted data. Only accounting/status information (meta data) is transmitted. This ensures a high degree of confidentiality.

Please notice that data is encrypted and compressed when transmitted.

The data transmission (HTTP request) is usually below 100 Kb.

The Data Collector uses following default settings for Collecting and Discovering devices.

- Poll interval (every 30th. minutes), is the interval the Data Collector waits between calls to the server.
- Collect interval (every 180th. minutes), is the interval between collecting of data from known devices.
- Discover interval (every 300th. minutes), is the interval between discovering new network connected devices.

Technologies used

The HP server and HP UDA are building on the flexible and highly secure .NET platform that offers superior performance and scalability.

Microsoft Windows Communication Foundation (WCF) is used for communication.

Prerequisites

Microsoft .NET 4.6 Framework (if not installed on the server will take up ~600MB)

SNMP version 1.0 enabled on network and devices.

Community name standard is "Public". Note: UDA can support other SNMP Community Names, but this requires assistance from HP Technical Support to configure. Please contact your Reseller for assistance on this.

The HP UDA service requires few resources on the host computer, and can run on any hardware that meets the .Net 4.6 requirements

The principal of Data Collector functions

The program will contact the HP server for:

- Authentication
- List of network ranges
- List of MIBS
- Scan intervals

The HP UDA will scan all defined network ranges searching for printing devices (printers, MFP's, fax etc.)

If a printer is found, it will be matched to a specific MIB, and via SNMP, will be asked for the specific type and model information.

See example below:

Printer name	No Name Color Copy
IPv4	192.168.0.169
Serial Number	JPC1H11795
Hostname	NPI870A6C
Date	20-03-2010
MLC	1265
Mono	558744
Color	125587
Model Number	XYZ481Q
Firmware Date Code	29-08-2007
Firmware Version	50.021.1
Printer Display	Ready
Device Location	Reception
Device AssetNumber	PRN-2007-A8743
Black toner	53%
Cyan toner	68%
Magenta toner	21%
Yellow toner	100%
Black drum	na
Cyan drum	na
Magenta drum	na
Yellow drum	na
Image Transfer	98%
Image Fuser Kit	98%
Document Feeder	99%
Black (Coverage)	5,3
Cyan (Coverage)	3,4
Magenta (Coverage)	2,7
Yellow (Coverage)	2,8
Printing (Watt)	720
Standby (Watt)	85
PowerSave (Watt)	26
Off (Watt)	0,42

HP UDA troubleshooting guide

This guide will help you troubleshoot the HP UDA installation and starting the program. After installing the HP UDA , and finding that no devices are discovered or collected, follow these steps:

Troubleshooting Steps

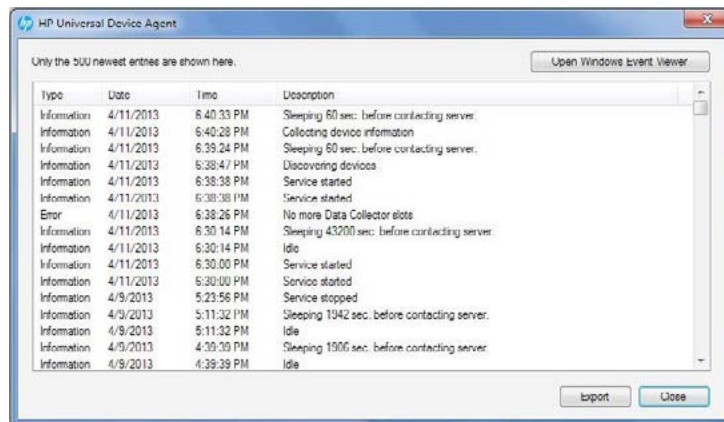
1. Open HP UDA Manager and in the top menu select “Help” and “Troubleshooting”



2. Please make sure all show as running.

- a) Client Status - If the Config file is not found, not loaded or if the Service is not installed then re-install the HP UDA.
- b) Internet Status - If port 80 or port 443 is not open, contact your Network System Administrator to solve the issue.
- c) Server Status - If URL is not found or unreachable, contact your Network System Administrator to solve the issue.

3. Open HP UDA Manager and in the top menu select “Tools” and “Events”



In “Events”, check that the Service is started and Discover and Collecting is running. And, make sure no other errors are detected in the Event view.

4. Check if the customer uses a Proxy server or see if they have a Firewall blocking the traffic from the HP UDA on port 443 to the HP server
5. Verify and test Proxy settings. If the installation requires Proxy settings, then configure and check Proxy settings in the HP UDA.
 - a) Open HP UDA Manager and if the program is running, press “Stop”. Stopping the program allows the ability to modify the proxy settings.

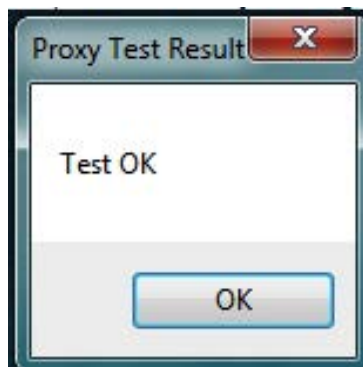
b) In the top menu select “Tools” and “Proxy”



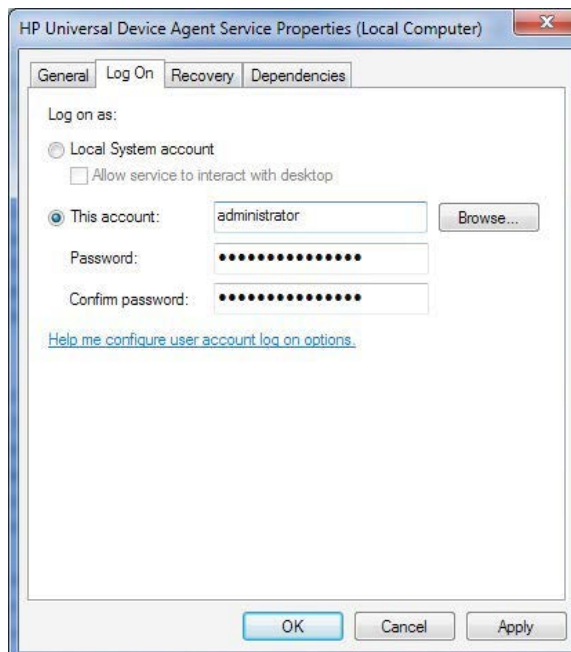
The HP UDA automatically tries to detect the Proxy settings. The Proxy settings are taken from the web browser e.g. Internet Explorer - Internet Options - Connections - Local Area Network (LAN) Settings.

c) Select “Test” to check the Proxy settings in the HP UDA Manager, to see if the automated Proxy settings are working

d) If the Proxy settings are working you will receive “Test OK”. If the Proxy settings test fails then contact your Network System Administrator.



If Proxy settings are required then the HP UDA Service needs to be started with a User account which has appropriate rights to access the Proxy server. A Local System account cannot be used, contact your Network Administrator for further assistance.



6. If still no data is received on the account, make sure that a local or company firewall is not blocking the data from the HP UDA to the HP server.

- a) If required the customer can add the full URL to the HP server or add the IP of the HP server to the firewall URL:
<https://jadcws.jetadvice.com/v2/service1.svc>

When the HP UDA is sending data to the HP server it is encrypted and the data is sent on port 443.

Device connectivity issues

- Verify the device is connected to the network (network cable directly connected to the device)
- Verify SNMP information
 - SNMP v1/2 (port 161/162) is enabled
 - SNMP community name is “public”
 - When using a custom SNMP community name, contact: L1.EDP@hp.com for updating of the IP Range to use the custom SNMP community name.
- Devices must be awake during a scan. Check device Auto Shutdown settings by reviewing energy settings in the administrative options of the Embedded Web Server (EWS): Energy Settings>Shutdown
- Device firmware may need to be updated; HP regularly releases new firmware with product enhancements and address known issues
 - Check for HP firmware updates at: <http://support.hp.com/us-en/drivers> and search/select your device; select OS independent; select updated firmware to download as required
- Review Access Control – some devices have an option to restrict communication to specific IP addresses (Example: Load the EWS > Network > Authorization)

	Save	IPv4 Address	Mask
1.	<input type="checkbox"/>		
2.	<input type="checkbox"/>		
3.	<input type="checkbox"/>		
4.	<input type="checkbox"/>		
5.	<input type="checkbox"/>		
6.	<input type="checkbox"/>		
7.	<input type="checkbox"/>		
8.	<input type="checkbox"/>		
9.	<input type="checkbox"/>		
10.	<input type="checkbox"/>		

- Verify the UDA client application is running by checking Windows Task Manager for the data collection agent (HP Universal Device Agent). If the PC/Server running UDA is rebooted, the service must be restarted, which with UDA is automatic by default. If it is not enabled at reboot, add the short cut to the Startup folder or set Windows Control Panel > Administrative Tools > Services console properties > General Startup type to Automatic.

System, network or application issues

UDA

- Verify the following for correct HP UDA client installation (as applicable):
 - Windows Vista, Windows 7, 8, 10 Server 2008 and 2012 uses .NET 4.6
 - Windows XP / Server 2003 uses .NET 3.5
- Ensure the UDA client application is current. Download most current version: <http://hpuda.com/install/HPUDAInstaller.zip>
- Open HP UDA client application, ensure the account name is entered and start the service. Verify the application status by selecting Help > Troubleshooting. A green check indicates set-up is correct (see example right).
- If status errors are given, verify the UDA client can communicate:
 - Ensure access to HTTP Port: 80 and HTTPS Port: 443 (outbound)
 - If a proxy server is used to access the Internet and auto-detection is unsuccessful (error message “There was no endpoint listening”) stop the UDA service. Go to Tools > Proxy and manually enter the proxy server settings in the UDA client and retest. Alternatively, using Windows Control Panel > Administrative Tools > Services console properties > Log On tab, enter credentials for an account with Internet access.
 - The firewall (local or company) should not block communication from the HP UDA client to the UDA server.
 - Add the URL setting: <https://iadcws.ietadvice.com/v2/service1.svc>
 - If needed, add an exception to anti-virus software:
 - C:\Program Files (x86)\HP Universal Device Agent\DataCollector
 - C:\ProgramData\HP Universal Device Agent\DataCollector (hidden folder)
- Enter the IP addresses / IP ranges to be scanned by UDA. Ensure the Community name matches.
NOTE: The number of IP ranges that can be scanned (~1500 max), varies based on network bandwidth/performance. One or more UDA clients can be used to balance the data collection responsibility if needed.
- Check whether the device MAC or HW address changed due to a service event or a transition from a wired to a wireless network (or vice versa). A remapping may be required – contact: l1.edp@hp.com

