



## Persistent Suite 6.0

# DEPLOY PERSYSTENT AGENT

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## Best Practices

Persistent Suite supports no-touch installation for existing client computers. Installing Persistent Suite on your existing computers will help you maintain the configuration of your existing systems. Many organizations use this approach in addition to deploying Persistent Suite as part of their refresh process. This methodology will provide recovery and asset inventory for your existing systems and provide immediate value for your company.

Utopic Software recommends the following best practices for installing Persistent Agent on existing computers:

- When inheriting computers, you are capturing a state of an existing computer that may or may not be compliant with your company standards. However, capturing a state of an existing computer will provide you with a quick and easy way to restore the computer to a state where the user is operational.
- The MSI deployment methodology provides a fully automated installation of Persistent Suite on your existing client systems. Using this method does not provide information on whether your client computers meet the minimum requirements of Persistent Suite, including enough free disk space to create the cache, three or less primary partitions exists on MBR based computers, and memory requirements. The MSI install will fail on computers that do not meet the minimum client requirements as outlined in Persistent Suite Requirements. This will not affect the operation of the computer, but the install will need to be run again once the computer is reconfigured to meet the minimum specifications. The report "Inherit Status Summary" will give a list of reasons why it failed.
- Deploy the MSI using your existing software deployment toolkit. This is a standard MSI so you can also use a login script or other methods for smaller environments. The MSI created supports all relevant switches including quiet mode and no user interaction.
- Install Persistent Suite when the computer is unattended to limit end user disruption, if possible. The installation requires a reboot and will repartition the hard drive, which could take a while if data needs to be moved to create the Persistent cache.
- As always, proper planning and process review will help ensure the success of your deployment.



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## Client Requirements

- **Windows 7** (32-bit and 64-bit Professional, Ultimate, Enterprise Editions), **Windows 8/8.1/10** (32-bit and 64-bit Pro and Enterprise Editions)
- 1 GHz processor or higher recommended
- 1 GB RAM minimum (2 GB RAM or more recommended)
- About 30% of continuous free space based on the size of the hard drive.
- No more than 3 primary partitions on BIOS (MBR) based machines
- .NET Framework 4.5 or above

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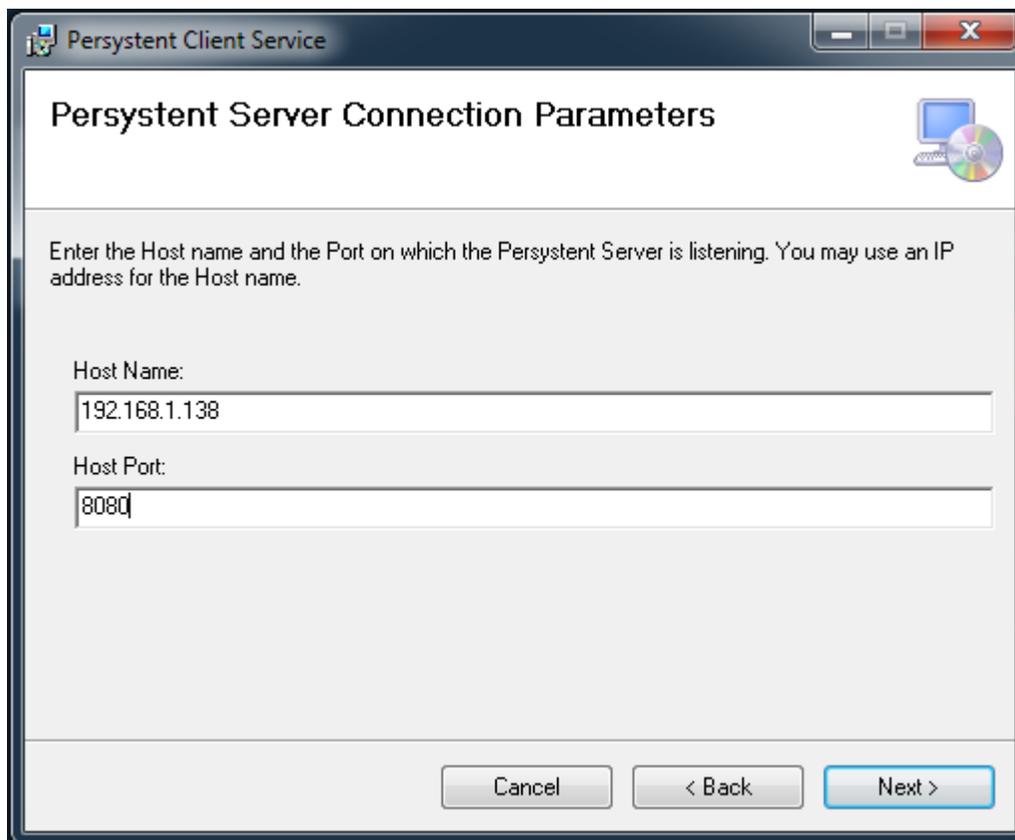
## MSI Installer

A computer can be inherited into Persysent Suite by using the MSI installer. To do this:

1. Launch the MSI by double clicking **AgentInstaller.MSI**.
2. On the **Welcome** screen click **Next**.
3. On the Select Installation Folder screen, verify the installation folder and click **Next**.
4. On the Persysent Server Connection Parameters screen, enter the IP address of the Persysent server in the **Host Name** field. Enter the port of the Persysent server in the **Host Port** field. Click **Next**.

**Host Name:** IP address or hostname of the Persysent Server.

**Port:** Port configured for Persysent Client Server communication. If unsure, please check server management page on the Persysent WebUI.



5. On the **Confirm Installation** screen, click **Next**.
6. On the **Installation Complete** screen, click **Close**.
7. Persistent Client Service will be installed and it will create Persistent partition based on size of the hard drive. You will see that install is in progress when you see the message "**Inheriting Machine into Persistent Suite**".



8. You will note that Persistent partition will be shown in My Computer and it will be hidden once installation is complete. You will see that the install is completed when you see the message "**Machine inherited successfully**".



## Silent Installation

The MSI can be installed without user interaction. To perform a fully automated installation using the MSI run the following command:

**Syntax:** `msiexec /i AgentInstaller.msi /quiet HOSTNAME=<[Server IP]> HOSTPORT=<[Server Port]> CREATEREPAIRPOINT=<[1 = YES or 0 = NO]> SILENTINHERIT=<[1 = YES or 0 = NO]> PREFERREDGROUP=<[Name of the group where computer will be added in Persystem]>`

**Example:** `msiexec /i AgentInstaller.msi /quiet HOSTNAME=192.168.1.138 HOSTPORT=8080 CREATEREPAIRPOINT=0 SILENTINHERIT=0 PREFERREDGROUP=Engineering`

Option	Description
<b>HOSTNAME</b>	Name or IP address of the Persistent Server.
<b>HOSTPORT</b>	TCP port on which Persistent Server is configured to communicate with client machines.
<b>CREATEREPAIRPOINT</b>	<p><b>1</b> = Create repair point of the machine automatically after computer has finished the inherit process successfully.</p> <p><b>0</b> = Do not create repair point of the machine. (Administrator would schedule repair point either from the UI or using the Notifier Agent on the machine). This setting is default if this parameter is not used.</p>
<b>SILENTINHERIT</b>	<p><b>1</b> = The install process will be completely silent to the user. There will be no notifications shown to the user.</p> <p><b>0</b> = The user will be shown notifications of inherit process. This setting is default if this parameter is not used.</p>
<b>PREFERREDGROUP</b>	<p>Name of the Persistent computer group where the computer will be added. Note: if the group does not exist then the computer will be added to the default group called "Inherited Computers" group.</p> <p>If this parameter is not assigned at the install time then computer will be added to the default group called "Inherited Computers" group.</p>

## Monitoring Installation Progress

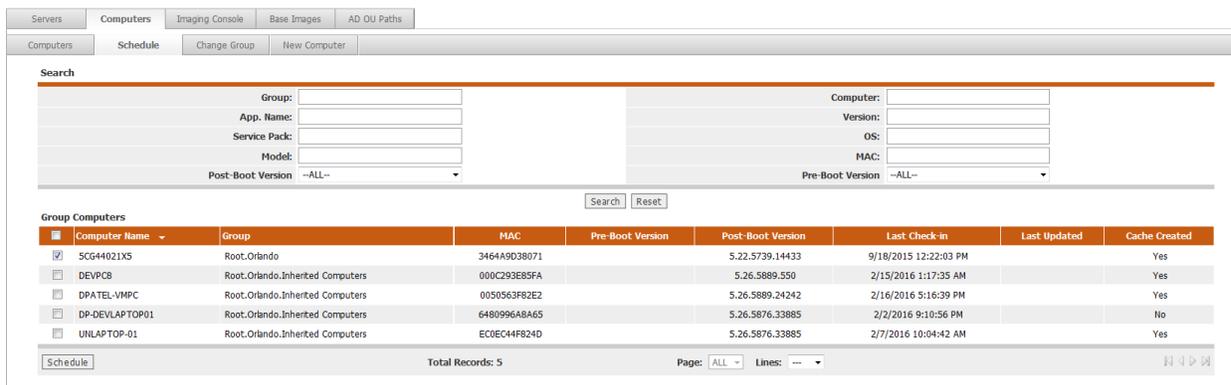
Once installed, the Persysnt client will report back status on the computer(s) on which the MSI was installed. To view the status, run the report **Inherit Status Summary**. This report will display all successfully installations and any failed installations. If the installation failed, the reason is listed in this report as well.

## Capturing Repair Point

Computer is ready to create the first repair point once Persysnt partition is created and configured. You can verify that Persysnt partition is created in the Disk Management or on the Persysnt WebUI. Here are the steps to capture a repair point of computer using Persysnt WebUI.

### Steps:

1. Login to the WebUI.
2. Click on the Computer Group or the Server where the computer is located.
3. Click on **Computers** tab.
4. Click on **Schedule** tab.
5. Select computer(s) to assign the schedule and click on “Schedule” button.

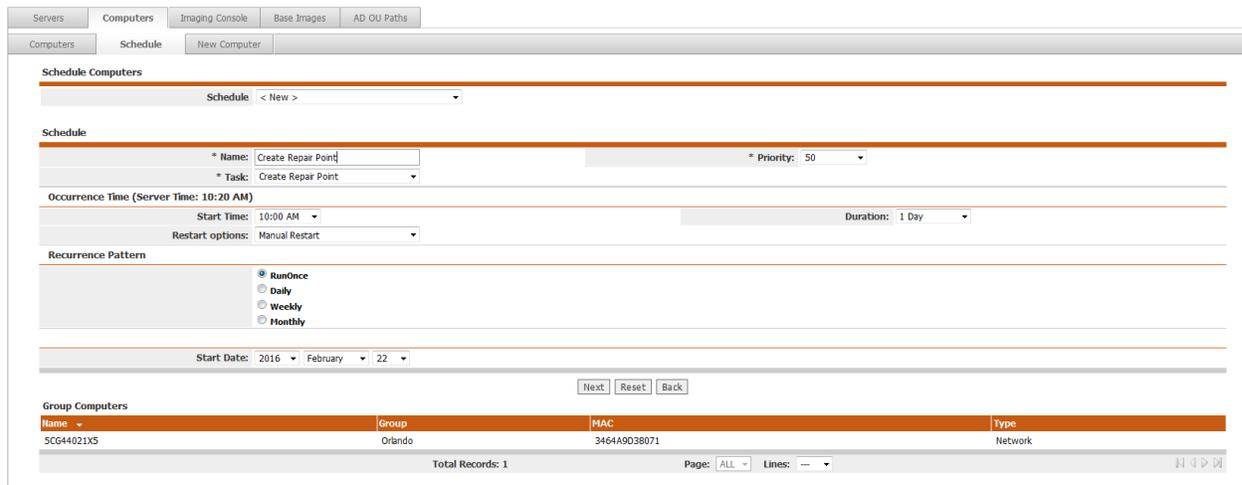


The screenshot shows the Persysnt WebUI interface. At the top, there are navigation tabs: Servers, Computers, Imaging Console, Base Images, and AD OU Paths. Below these, there are sub-tabs: Computers, Schedule, Change Group, and New Computer. A search form is visible with fields for Group, App. Name, Service Pack, Model, Post-Boot Version, Computer, Version, OS, and Pre-Boot Version. Below the search form is a table titled 'Group Computers' with the following data:

Computer Name	Group	MAC	Pre-Boot Version	Post-Boot Version	Last Check-in	Last Updated	Cache Created
<input checked="" type="checkbox"/> 5CG44021X5	Root.Orlando	3464A9D38071	5.22.5739.14433	5.26.5889.550	9/18/2015 12:22:03 PM		Yes
<input type="checkbox"/> DEVPC8	Root.Orlando.Inherited Computers	000C293E85FA		5.26.5889.550	2/15/2016 11:17:35 AM		Yes
<input type="checkbox"/> DPATEL-VMPC	Root.Orlando.Inherited Computers	0050563F82E2		5.26.5889.24242	2/16/2016 5:16:39 PM		Yes
<input type="checkbox"/> DP-DEVLAPTOP01	Root.Orlando.Inherited Computers	648099648A65		5.26.5876.33885	2/2/2016 9:10:56 PM		No
<input type="checkbox"/> UNLAPTOP-01	Root.Orlando.Inherited Computers	EC0EC44F824D		5.26.5876.33885	2/7/2016 10:04:42 AM		Yes

At the bottom of the table, there is a 'Schedule' button, 'Total Records: 5', 'Page: ALL', and 'Lines: ...'.

6. Select task to capture repair point from the pull down menu and give a name for the schedule.
7. Select schedule options (type of schedule, reboot options, etc.) based on requirement.



The screenshot shows the 'Schedule Computers' configuration page in the UTOPIA software. The page is divided into several sections:

- Schedule:** Includes fields for Name (Create Repair Point), Task (Create Repair Point), and Priority (50).
- Occurrence Time (Server Time: 10:20 AM):** Includes Start Time (10:00 AM), Duration (1 Day), and Restart options (Manual Restart).
- Recurrence Pattern:** Includes radio buttons for RunOnce (selected), Daily, Weekly, and Monthly.
- Start Date:** Set to 2016 February 22.
- Buttons:** Next, Reset, and Back.
- Group Computers Table:**

Name	Group	MAC	Type
SG644021XS	Orlando	3464A9038071	Network

8. Click on "Next" button.
9. Click on "Confirm" to assign schedule to computer(s).
10. Computer will pick up and execute the schedule once it has contacted the server based on polling interval.

## Troubleshooting Installation Problems

**Several of the computers I've run the installer on are not reporting back to the console.**

Check the following:

- The IP or Port entered for the Persistent server may have been mistyped.
- The client is not able to reach the Persistent Server (Server may be down, firewall is blocking communication, or Persistent Service may be stopped).

**Several of the computers are not creating Persistent partition.**

There are couple of reasons why Persistent agent would not be able to create the Persistent partition on the client machines.

1. On a BIOS (MBR) based machine, if there are already 4 primary partitions present then the Persistent agent would not be able to create the Persistent partition. This is a limitation of BIOS (MBR) based machines.

Solution: You would need to delete one of the existing partition so that Persistent agent can create its own partition.

2. There isn't enough continuous free space available to create Persistent partition. Continuous free space is required in order to create a new partition.

Solution: You would need to do the followings to create continuous free space

- a. Run Disk Cleanup and cleanup everything that is unnecessary from C:\
- b. Disable System Restore and delete all system restore points for C:\
- c. Disable offline file support.
- d. Run Defrag on C:\

If you are still having issue creating partition then check the event logs and it should say what file is causing issue for creating continuous free space. You may need to disable hibernation and or pagefile support in some cases to create the continuous free space. You can reenale it back once the partition is created.

## UTOPIC

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