



Dataplex User's Guide

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INTRODUCTION

Dataplex™ is a software product that increases the overall performance of your computer by using a small solid-state drive (SSD) as a high-performance "cache" for your existing hard disk drive (HDD). The result? You get SSD performance across the full storage capacity of your HDD — at a fraction of the cost of a full-sized SSD.

Dataplex continuously performs real-time analysis on the way you are using your applications and data, and automatically keeps those files ready on the SSD for optimal performance. Dataplex is fully automated for adaptive caching; no user management is necessary.

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INSTALLATION

SYSTEM REQUIREMENTS

In order to run Dataplex properly, your computer must meet the following requirements:

Item	Requirement
Operating System	<p>Dataplex supports all of the following:</p> <ul style="list-style-type: none"> • Microsoft Windows 7 Home Premium • Microsoft Windows 7 Home Premium x64-bit Edition • Microsoft Windows 7 Professional • Microsoft Windows 7 Professional x64-bit Edition • Microsoft Windows 7 Ultimate • Microsoft Windows 7 Ultimate x64-bit Edition • Microsoft Windows 7 Ultimate w/ BitLocker • Microsoft Windows 7 Ultimate x64-bit Edition w/ BitLocker
Memory	Maintain at least the minimum system memory required by the Operating System.
Storage	<p>1 (or more) SATA-based Hard Disk Drives</p> <p>AND</p> <p>1 (or more) SATA-based or mSATA-based Solid-State Drives</p>
Storage Controllers	<p>Dataplex supports all of the following:</p> <ul style="list-style-type: none"> • Microsoft AHCI Controller • Intel RAID Controllers • Intel AHCI Controller • AMD AHCI Controller • Legacy IDE Controller <p>Dataplex does not support the following:</p> <ul style="list-style-type: none"> • NVIDIA Storage Controllers



LIMITATIONS

Please note the following limitations when using Dataplex:

Limitations
The target drive must be the primary boot drive. Caching of a secondary drive is not supported.
Only MBR (Master Boot Record) partitions are supported. GPT (GUID Partition Table) partitions are not supported.
The Windows Reserved System Partition (100MB partition) must be on the same HDD as the Windows installation (the C:\Windows folder)
Multiple OSes are not supported.
There is no support for target drives larger than 2TB in capacity.
Only one cache drive is supported in a system.
There cannot be two identical SSDs in the system, one of which is to be used as cache.
There is no support for RAID sets as the cache drive.
After uninstalling Dataplex, if the system is restored to a prior state in which Dataplex was installed, Dataplex will be started in a disabled state.
Dataplex does not support the following configuration(s): <ul style="list-style-type: none"> NVIDIA storage controllers
Dataplex assumes English keyboard layout for key presses during the boot loader and recovery process (e.g., German keyboard "Y" key is actually the "Z" key).

RESTRICTIONS

Please note the following restrictions when using Dataplex:

Restrictions
 DO NOT detach your target drive (HDD) or cache drive (SSD) while Dataplex is enabled, otherwise you are at risk of losing data and/or rendering your machine unbootable. If you need to detach or swap a drive, please uninstall Dataplex first.
 DO NOT unplug your HDD and put it into another SATA port while Dataplex is enabled, otherwise you are at risk of losing data and/or rendering your machine unbootable. If you need to switch SATA ports, please uninstall Dataplex first.

PREPARING YOUR SYSTEM



You must have Administrator privileges to perform this operation.

Before you can install Dataplex, your system must include the following physical hardware -

- Target Drive - the Hard Disk Drive to be cached
- Cache Drive - the Solid State Disk (SSD) to be used by Dataplex as a cache

CONFIGURING THE BIOS

1. Within the system setup, ensure that the Target Drive is the primary boot drive.
2. Ensure that the SSD is detected and **not listed as the primary boot drive** . Make adjustments as necessary.

INSTALLING THE SOFTWARE



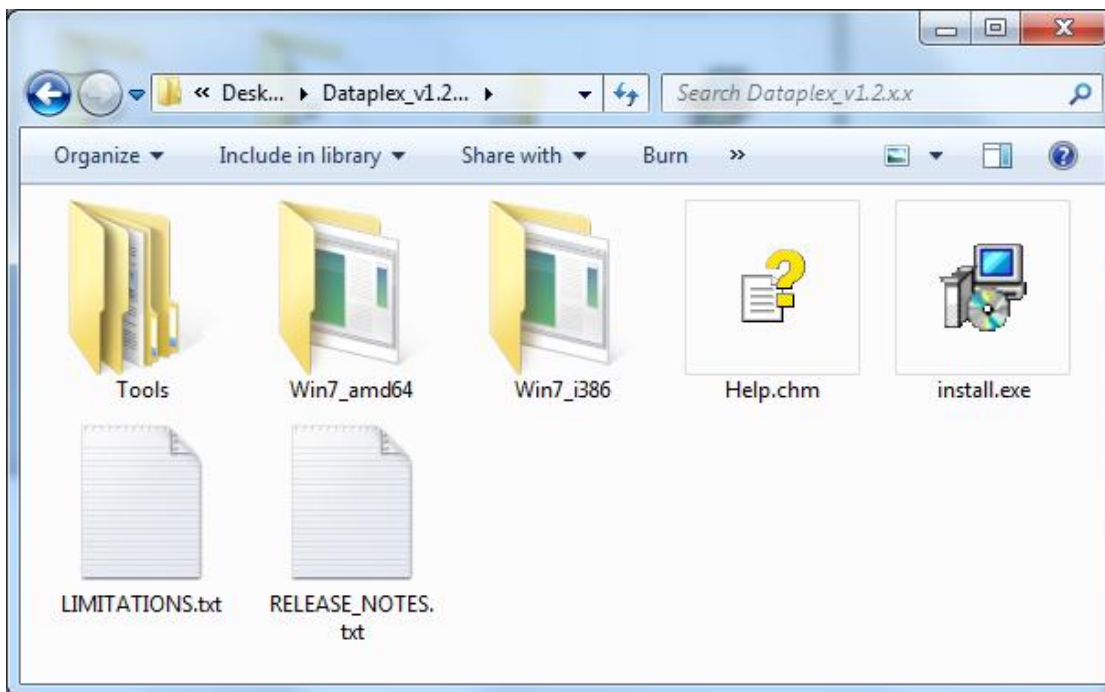
By nature of SSD caching, all data on the SSD will be deleted during Dataplex installation. Please back up any data on the SSD before installing Dataplex.



You must have Administrator privileges to perform this operation.

After [preparing your system](#) , you are ready to install Dataplex.

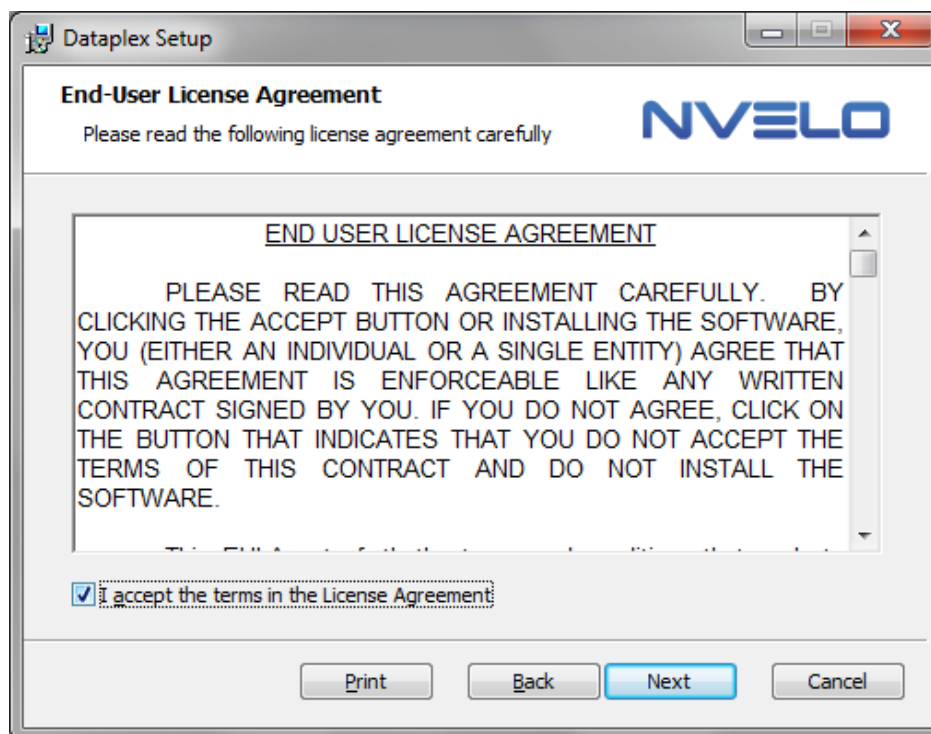
1. Extract the Dataplex software package.
2. Right-click "install.exe" and choose "Run as administrator."



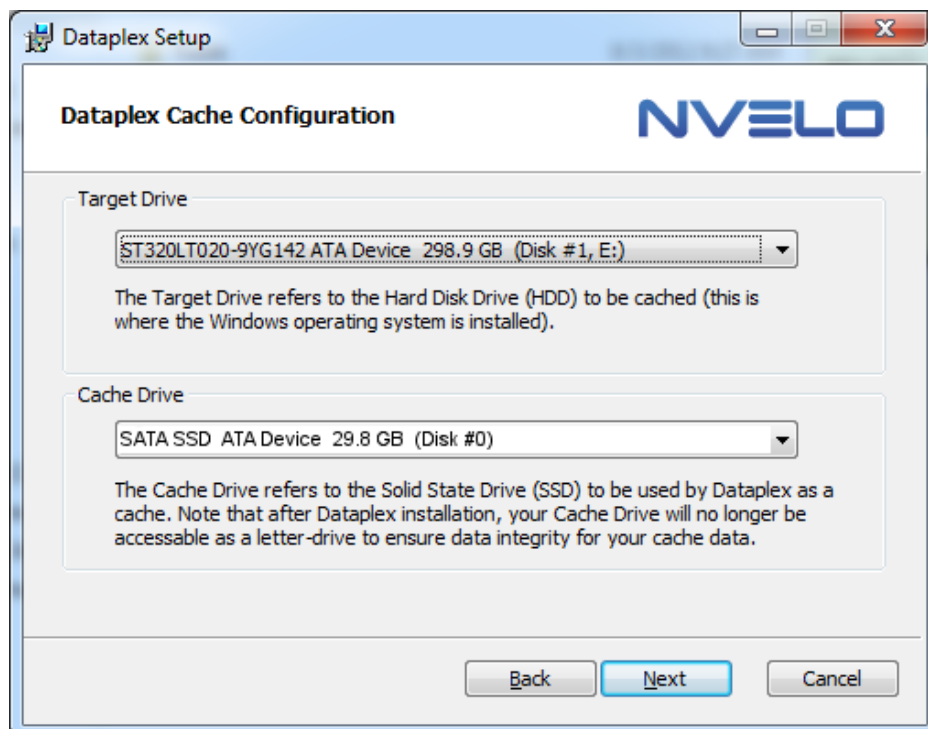
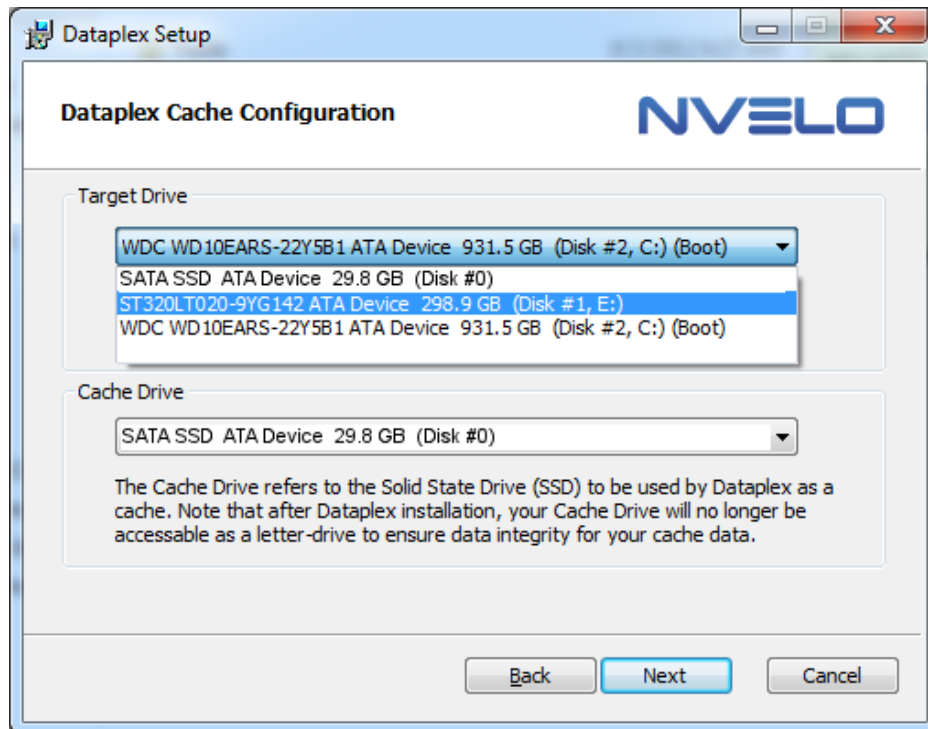
3. When the Dataplex Setup Wizard appears, click "Next" to continue.



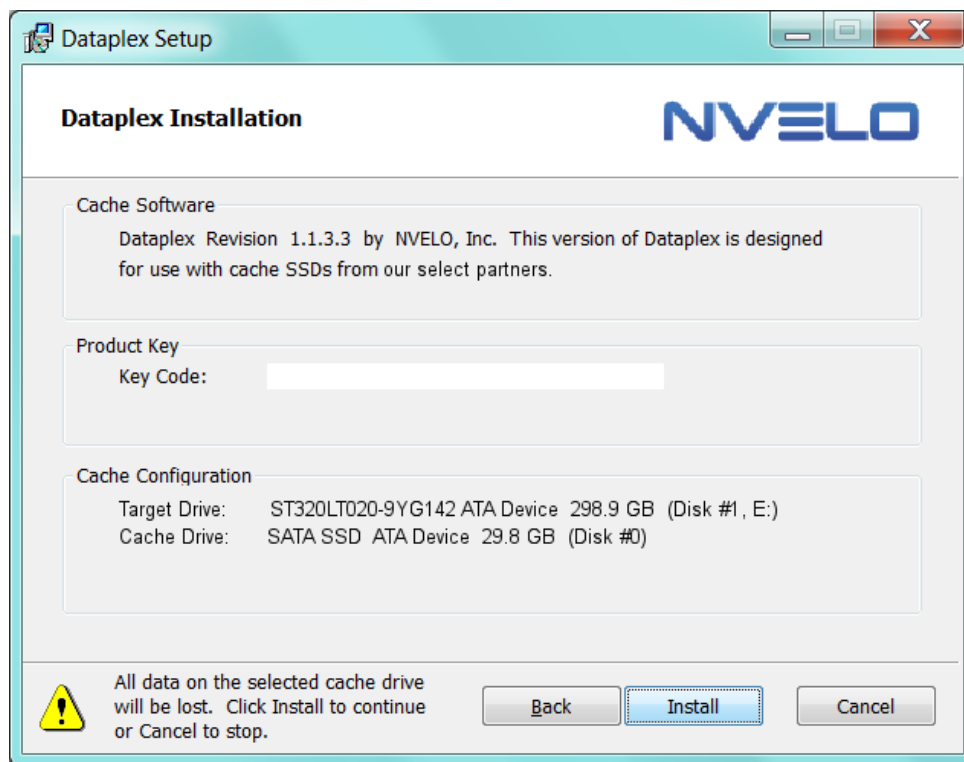
4. Please read the End-User License Agreement. Click the checkbox next to "I accept," then click "Next" to continue.



5. Select the target and cache drives to be used, and then click "Next" to continue. Reminder: the Target Drive should be the HDD which you wish to accelerate. It can be your primary boot drive or a secondary drive. The Cache Drive is the cache SSD used to accelerate the HDD.



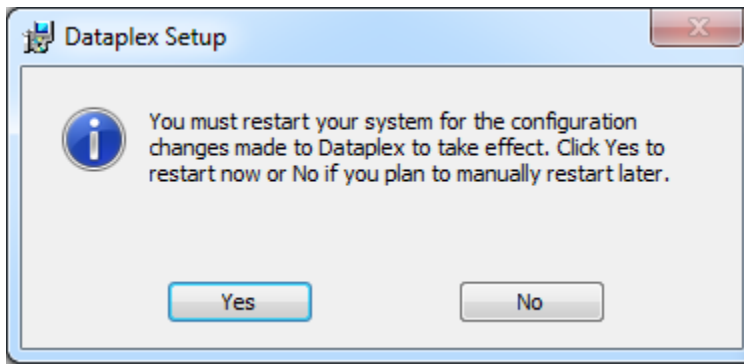
6. Confirm the target and cache drive selections and click "Install". Note that all data on the cache drive will be overwritten; if you have not backed up the data on the cache drive, cancel the installation and backup your data before reinstalling the software.



7. After the installation is complete, click "Finish."



8. The system must be rebooted in order to enable Dataplex SSD caching. Click "Yes" to reboot right away, or click "No" to manually restart later.



Dataplex is only enabled after your system is rebooted after installation.

9. Once enabled, Dataplex will begin SSD caching. To verify that the installation was successful, see [Verifying your Installation](#).

VERIFYING YOUR INSTALLATION



You must have Administrator privileges to perform this operation.

To verify your Dataplex installation, do the following:

1. From the Windows Start Menu, select "All Programs."
2. Locate and expand the "Dataplex" folder.
3. Select "Dataplex Status."

```
Administrator: C:\Windows\system32\cmd.exe

*****
*                               *
*             NUELO Inc.       *
*              2011           *
*                               *
*             Dataplex         *
*            version 1.2.x.x    *
*                               *
*          Installed 08/15/2012 *
*                               *
*                               *
* Status      =  ENABLED !!!   *
* Target Drive =  ST320LT020-9YG142 <298.9 GB> *
* Cache Drive  =  SATA SSD <29.8 GB>          *
*                               *
*                               *
c:\Program Files\Dataplex\CacheFilter>
```

4. If the Status field is Enabled, then Dataplex is running.

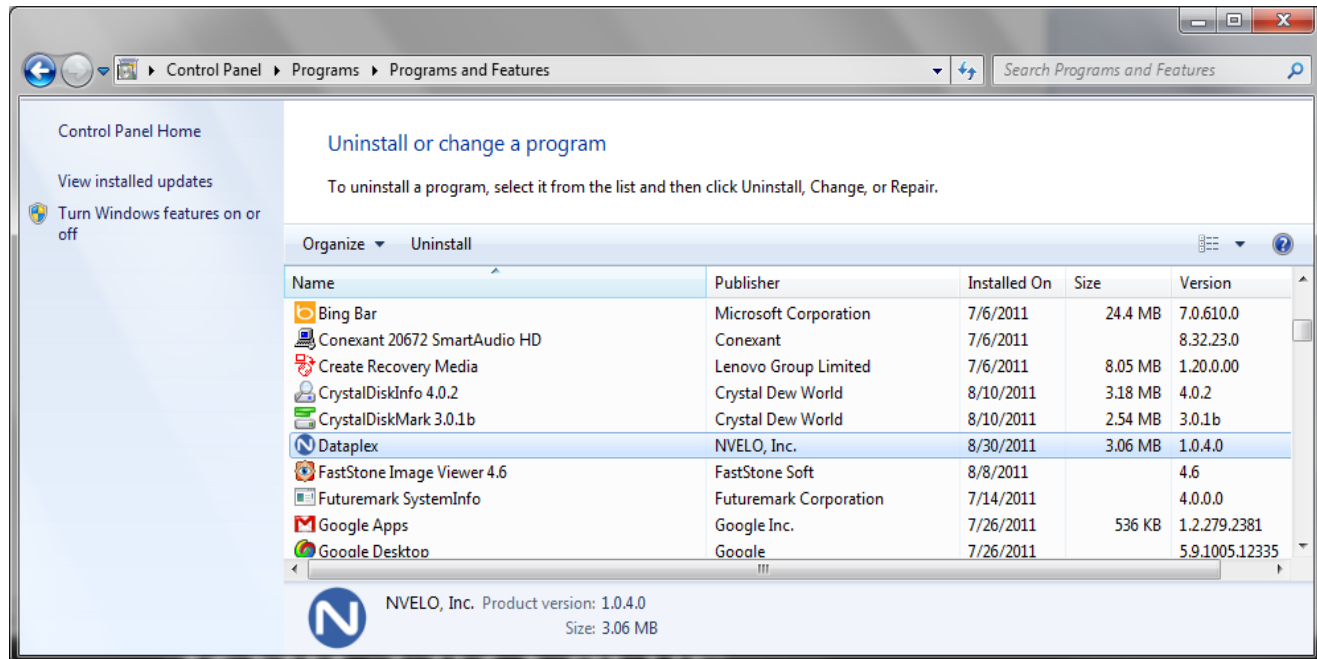


Dataplex is only activated after your system is rebooted after installation.

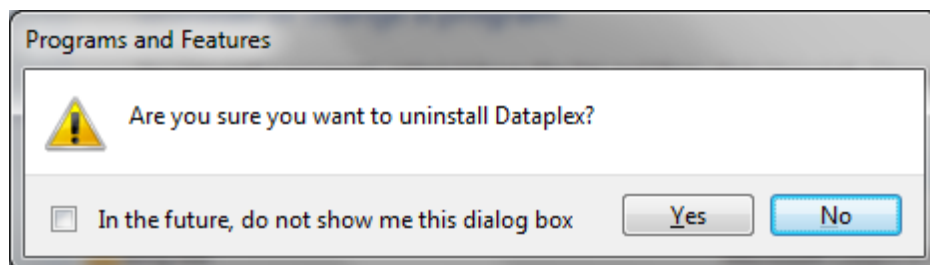
UNINSTALLING THE SOFTWARE

To uninstall Dataplex, do the following:

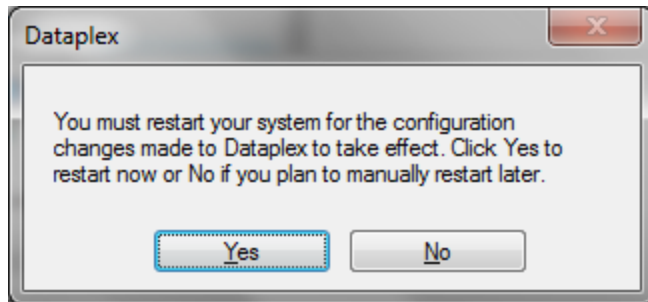
1. From the Windows Start menu, select "Control Panel."
2. If you are in the "Category View," select "Uninstall a Program." Otherwise, select "Programs and Features."
3. Locate and select "Dataplex" under the "Name" column.



4. Click "Uninstall."
5. The uninstall program will start. Click "Yes" to confirm that you wish to uninstall Dataplex.



6. After the program has been uninstalled, click "Yes" to reboot your system.



If you are planning to re-install Dataplex, you must reboot your system first.

ADVANCED OPTIONS

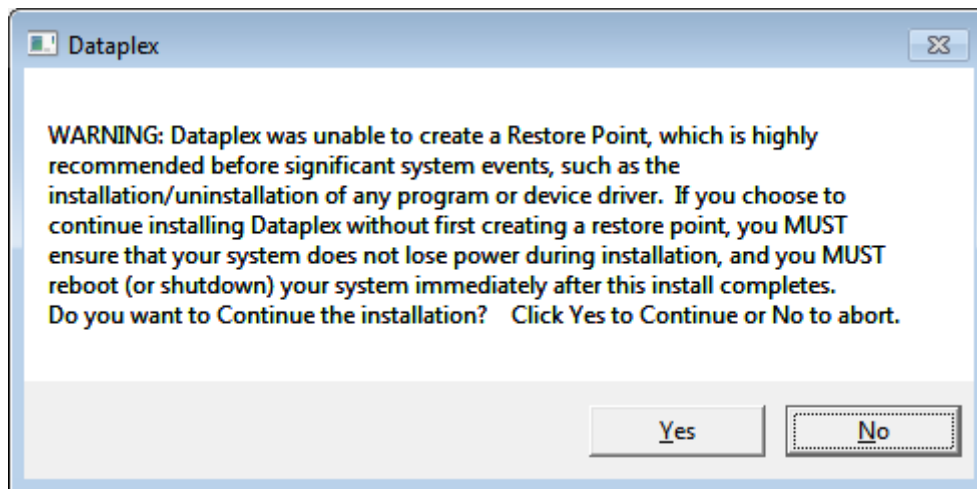
INSTALLING THE SOFTWARE IN AUDIT MODE

Audit mode enables OEMs and corporations to customize a Windows installation before shipping a computer to an end user. In order to install Dataplex in Audit mode, please take the following steps -



Recommendation: Install Dataplex as the final step when preparing the system.

1. Install Windows 7 from media.
2. Boot Windows.
3. When prompted for your username, enter audit mode by pressing "CTRL+SHIFT+F3".
4. When in audit mode, install all other drivers and software packages first. (Dataplex should be installed last)
5. Follow the standard Dataplex Installation Procedures, with internet connected and proper license key.
6. During Dataplex install, there will be a warning message window. Select "Yes" to continue installation.



7. Once Dataplex install finishes, restart or shutdown.

WORKING WITH BITLOCKER



Due to the nature of software-based disk encryption, there will be a noticeable performance impact when BitLocker Drive Encryption is enabled.



Please contact NVELO support if you plan to use other Drive Encryption solutions.

BitLocker Drive Encryption is a full disk encryption feature included with Windows 7 Ultimate and Enterprise and Windows Server 2008. It is designed to protect data by providing encryption for entire volumes.

When installing or uninstalling Dataplex on a system with BitLocker not authenticated with TPM -

1. Follow the normal Dataplex [installation](#) and [uninstallation](#) procedures.

When installing Dataplex on a system with BitLocker authenticated with TPM, special consideration needs to be taken -

1. **IMPORTANT** : Your BitLocker recovery password should be inserted via USB for the entire installation process.
2. Follow the normal Dataplex [installation procedures](#) .
3. Reboot a second time.
4. Suspend Bitlocker protection –

Control Panel > System and Security > Manage Bitlocker > Turn Off Bitlocker

5. Resume Bitlocker protection –

Control Panel > System and Security > Manage Bitlocker > Turn On Bitlocker

When uninstalling Dataplex on a system with BitLocker authenticated with TPM, special consideration needs to be taken -

1. **IMPORTANT** : Your BitLocker recovery password should be inserted via USB for the entire uninstallation process.
2. Follow the normal Dataplex [uninstallation procedures](#) .
3. Reboot a second time.

FAQ

GENERAL

WHY DO I NEED DATAPLEX?

Dataplex cache software improves the overall performance of your system by leveraging a small, fast SSD as a cache for your hard drive or RAID array.

WHAT IS SSD CACHING?

SSD caching is a process by which frequently-used programs (such as Outlook, browsers, Photoshop, games, etc.) and data (email database, recent documents, etc.) are copied to a fast SSD instead of comparatively slower hard drives. This allows requests for these items to be served faster.



SSD caching can improve storage performance, but it does not provide fault tolerance. Please back up your data before you install caching software. Do not attempt to hot plug any target drive or cache drive as data damage and/or data loss will occur; always uninstall Dataplex and shut down the system before replacing computer system components.

WHAT IS A TARGET DRIVE?

The target drive is the hard disk drive (HDD) to be cached. This is where the data permanently resides and where the operating system is installed. This can be a single HDD or a RAIDed HDD array. See the [System Requirements](#) for supported target drives.

WHAT IS A CACHE DRIVE?

The cache drive is the solid-state disk (SSD) to be used as cache for the hard disk drive (HDD). Because a SSD is faster than a HDD, this is where Dataplex temporarily stores data to accelerate the system. The cache drive can be a single SSD or a RAIDed SSD array (depending on your version of Dataplex).



By nature of SSD caching, all data on the SSD will be deleted during Dataplex installation. Please back up any data on the SSD before installing Dataplex.

CAN DATAPLEX CACHE MULTIPLE HARD DRIVES?

On a given system, Dataplex caches one drive only. Additionally, some versions of Dataplex support RAIDed SSD as the cache drive.

INSTALLATION

HOW DO I KNOW IF MY SSD IS PROPERLY INSTALLED INTO THE SYSTEM?

Before installing Dataplex, to confirm that your SSD is properly installed into the system, do the following from System BIOS -

1. Within the system setup, ensure that the Target Drive is the primary boot drive.
2. Ensure that the SSD is detected, but **not listed as the primary boot drive**. Make adjustments as necessary.

And, from Windows -

3. From the Windows Start menu, select "Control Panel."
4. Switch to the "Small icons" or "Large icons" view.
5. Select "Device Manager."
6. In the Device Manager window, your SSD should be listed under "Disk drives."

If your SSD is not listed in Windows, please check the physical connections of the SSD to your PC.

HOW DO I KNOW THAT DATAPLEX IS RUNNING?

To verify if Dataplex is running:



You must have Administrator privileges to perform this operation.

1. From the Windows Start Menu, select "All Programs."
2. Locate and expand the "Dataplex" folder.
3. Select "Dataplex Status."

```
Administrator: C:\Windows\system32\cmd.exe

*****
*                               NVELO Inc.                               *
*                               2011                                     *
*                               Dataplex                               *
*                               version 1.2.x.x                         *
*                               Installed 08/15/2012                   *
*****

Status      =  ENABLED !!!
Target Drive =  ST320LT020-9YG142 <298.9 GB>
Cache Drive  =  SATA SSD <29.8 GB>

c:\Program Files\Dataplex\CacheFilter>
```

4. Check the Status field. If the status is Enabled, then Dataplex is running. If the status is Disabled, then an event (such as an unclean shutdown or SSD failure) has disabled Dataplex. You must uninstall and then re-install Dataplex to re-enable it.



Please contact NVELO support if Dataplex cannot be enabled even after re-installing the software.

WHICH STORAGE MODE SHOULD I USE (IDE, AHCI, RAID)?

Any storage configuration mode may be used.

For best performance, please select native drivers for your storage controller. For example, the generic Microsoft AHCI driver may not be optimized for your hardware.

CAN I SWITCH STORAGE MODES WHILE DATAPLEX IS ACTIVE?

No. You must uninstall Dataplex before switching storage modes (i.e., between RAID, AHCI, or IDE). After switching modes, you may re-install Dataplex.



Do not attempt to switch storage modes while Dataplex is enabled as you are at risk of losing data and/or rendering your machine unbootable. Always uninstall Dataplex before switching storage modes.

CAN DATAPLEX SUPPORT DIFFERENT CONTROLLERS AT THE SAME TIME?

Dataplex seamlessly handles the simultaneous use of different storage controllers. For example, you can use an Intel SATA controller for the Target Drive and a 3rd party SATA controller for the Cache Drive.

HOW DO I DETERMINE THE STORAGE CONTROLLER MODE?

To determine the system storage controller, do the following:

1. From the Windows Start menu, select "Control Panel."
2. Switch to the "Small icons" or "Large icons" view.
3. Select "Device Manager."
4. In the Device Manager window, your controllers should be listed under either "Storage Controllers" or "IDE ATA/ATAPI Controllers." This will also give you an indication if you are running in IDE, AHCI or RAID mode.

HOW CAN I IDENTIFY WHICH HDD IS CACHED?

To identify your cached HDD:



You must have Administrator privileges to perform this operation.

1. From the Windows Start Menu, select "All Programs."
2. Locate and expand the "Dataplex" folder.
3. Select "Dataplex Status."

```
Administrator: C:\Windows\system32\cmd.exe

*****
*                               *
*           NUELO Inc.         *
*           2011               *
*                               *
*           Dataplex           *
*           version 1.2.x.x    *
*                               *
*           Installed 08/15/2012
*                               *
*****

Status      =  ENABLED !!!
Target Drive =  ST320LT020-9YG142 <298.9 GB>
Cache Drive  =  SATA SSD <29.8 GB>

c:\Program Files\Dataplex\CacheFilter>
```

4. Check the value listed in the Target Drive field.

HOW CAN I IDENTIFY WHICH IS MY SSD CACHE DRIVE?

To identify your SSD cache drive:



You must have Administrator privileges to perform this operation.

1. From the Windows Start Menu, select "All Programs."
2. Locate and expand the "Dataplex" folder.
3. Select "Dataplex Status."

```
Administrator: C:\Windows\system32\cmd.exe

*****
*                               *
*           NUELO Inc.         *
*           2011               *
*                               *
*           Dataplex           *
*           version 1.2.x.x    *
*                               *
*           Installed 08/15/2012
*                               *
*****

Status      =  ENABLED !!!
Target Drive =  ST320LT020-9YG142 <298.9 GB>
Cache Drive  =  SATA SSD <29.8 GB>

c:\Program Files\Dataplex\CacheFilter>
```

4. Check the value listed in the Cache Drive field.

WHY CAN'T I SEE THE CACHE DRIVE?

Dataplex hides your cache drive to protect data integrity.

HOW DO I KNOW WHICH DATAPLEX VERSION WAS INSTALLED?

To verify your Dataplex version, do the following:

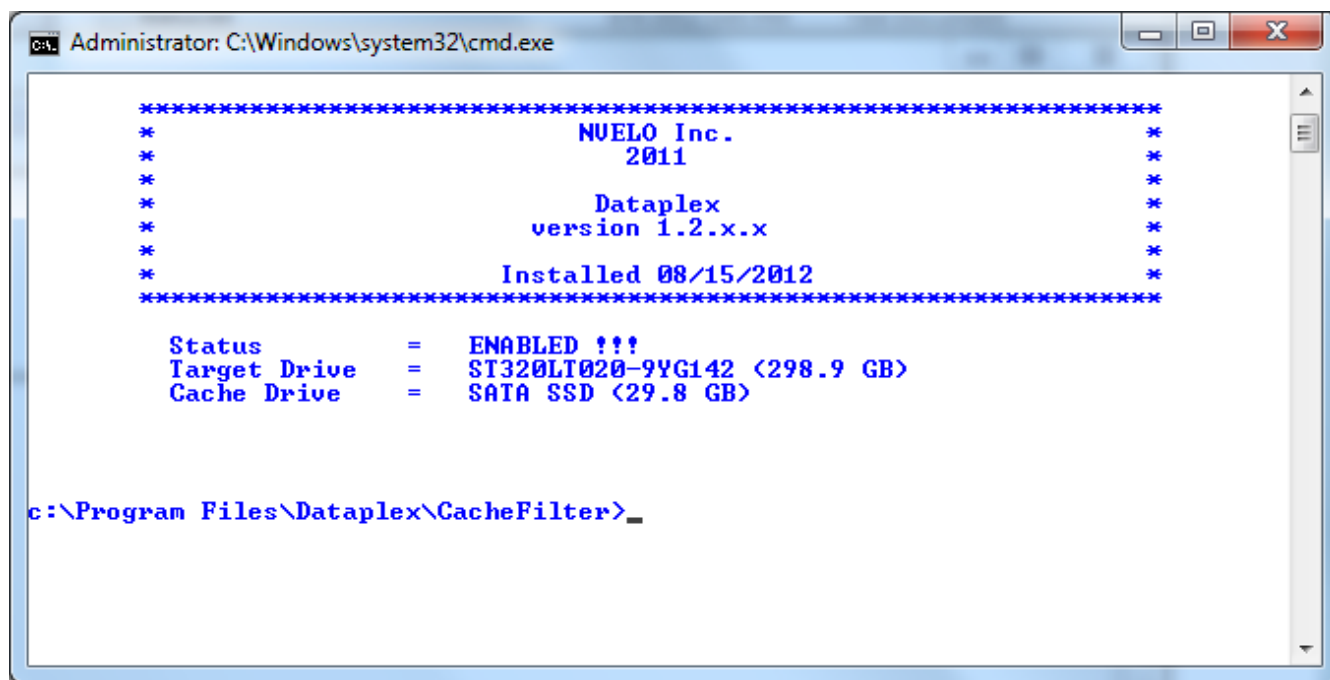
1. From the Windows Start menu, select "Control Panel."
2. If you are in the "Category View," select "Uninstall a Program." Otherwise, select "Programs and Features."
3. Locate "Dataplex" under the "Name" column.
4. Note the Dataplex version listed in the "Version" column.

ALTERNATE METHOD:



You must have Administrator privileges to perform this operation.

1. From the Windows Start Menu, select "All Programs."
2. Locate and expand the "Dataplex" folder.
3. Select "Dataplex Status."



```
Administrator: C:\Windows\system32\cmd.exe

*****
*                               *
*          NUELO Inc.          *
*            2011              *
*                               *
*          Dataplex            *
*        version 1.2.x.x       *
*                               *
*          Installed 08/15/2012 *
*                               *
*****

Status      =  ENABLED !!!
Target Drive =  ST320LT020-9YG142 <298.9 GB>
Cache Drive  =  SATA SSD <29.8 GB>

c:\Program Files\Dataplex\CacheFilter>
```

CAN I ACCESS THE TARGET DRIVE AS A SECONDARY DRIVE ON ANOTHER COMPUTER?

There are several scenarios for which you may wish to access the target disk on another computer:

- You are unable to boot from the disk (due to system crash, bad drivers, virus infection, etc.).
- You wish to transfer certain data on the target drive to another machine.

Before accessing the target drive in a different computer, all cache data should be synchronized from the cache drive to the target drive. To do so, Dataplex must be uninstalled, otherwise data on it will not be accessible. This is to protect you from corrupting the target drive data by mistake.

WHAT HAPPENS IF I BOOT TO THE WINPE/WINRE ENVIRONMENT?

When you boot to the Windows Pre-Installation Environment (WinPE) or Windows Recovery Environment (WinRE) by pressing F8 during boot, Dataplex temporarily pauses all caching activity. Upon the next boot to the normal Windows environment, Dataplex restarts automatically.

WHAT HAPPENS IF I BOOT FROM AN EXTERNAL USB DRIVE?

When you boot from an external USB drive, you will not be able to access the Target and Cache Drives unless Dataplex has been uninstalled. These drives are intentionally obfuscated in order to protect the integrity of the data on these drives.

TROUBLESHOOTING

INSTALLATION

WHY CAN'T DATAPLEX FIND MY SSD?

If Dataplex cannot find your SSD, check the following:

1. Verify that the SSD is properly connected to the system physically via a SATA cable or properly inserted into the PCIe or mSATA slot.
2. Verify that the SSD is detected in the System BIOS.
3. Verify that the SSD can be detected by your system. Go to Disk Management and confirm that the SSD drive is listed and is online.
4. Confirm that you are running the Dataplex installer with Administrator privileges.

WHY IS MY SYSTEM STILL SLOW EVEN AFTER INSTALLING DATAPLEX?

If Dataplex is properly installed, you should experience a noticeable improvement in system responsiveness. However, individual system performance will vary based on usage patterns, SSD performance, CPU performance, and so on.

Please confirm that your system meets the minimum system requirements.

WHAT HAPPENS DURING AN UNCLEAN SHUTDOWN?

An unclean shutdown can happen in any of the following scenarios:

- Sudden power loss (e.g., when a desktop power cord is disconnected)
- The system crashes (blue screen of death)
- The system hangs
- You press the power button for 5 seconds and bypass the normal Windows shutdown process

Dataplex will detect this condition and will go through several steps to recover the cache state. Depending upon the size of the cache and amount of data to be recovered, this process typically takes several minutes, but can take longer.

You may also be presented with the option to disable the cache. When prompted, you may press "D" to disable Dataplex. Once Dataplex is disabled, all of the data from the cache drive is synchronized to the target drive. To re-enable Dataplex, you will need to boot to Windows, uninstall Dataplex, then re-install it again.

LICENSING / PRODUCT KEY

CAN I USE THE SAME PRODUCT KEY ON A DIFFERENT PC?

Dataplex is licensed on a perpetual, single-user basis. Dataplex may not be used on more than one machine at the same time. Unlimited product activations are allowed on the same PC.

If you wish to transfer the product key for use on another PC, you must first deactivate the original product key by [uninstalling](#) Dataplex while you are connected to the internet so that the Dataplex license manager can properly log the request. Then, you may install Dataplex on the new machine.

IS A PERMANENT INTERNET CONNECTION REQUIRED?

No, internet connection is only required during installation.

IS THE PRODUCT KEY ACTIVATION A ONE-TIME EVENT?

Yes, the activation is a one-time event during install. You must be connected to the internet to activate the product key.

WHAT HARDWARE CHANGES MAY INVALIDATE MY LICENSE?

The licensing feature looks at the following “soft” components to identify a PC:

- 1) Ethernet card
- 2) Memory
- 3) OS
- 4) Primary/boot Drive
- 5) CPU ID
- 6) BIOS

If two or more components change, it is considered a “different” machine. If only one component changes, Dataplex automatically revalidates the license without issues, as long as the user is connected to the internet when the PC is rebooted after the change. Prior to changing two or more components, the user should uninstall Dataplex to release the license. Licenses cannot be released after the system is no longer valid. In this case, you will need to be in touch with NVELO or hardware provider to reset the license.

MY PRODUCT KEY CODE IS NOT WORKING

Please make sure you are entering the Product Key code exactly as it appears in your license letter or email. If any key information is entered differently than how it appears in your license letter or email, the Dataplex software will be inactive. The license key consists of 7 sets of 4 alphanumeric characters with dashes in between each set, like

AAAA-BBBB-CCCC-DDDD-EEEE-FFFF-GGGG

If you have entered the Product Key correctly but are still getting license errors, please contact support.

I MISPLACED MY PRODUCT KEY CODE

Registered users may retrieve their Product Key code by contacting support.

BITLOCKER MESSAGE: BOOT INFORMATION CHANGED

You may see the following message from the TPM module -

The system boot information has changed since BitLocker was enabled. You must supply a BitLocker recovery password to start this system. Confirm that the boot changes to this system are authorized. If the changes to the boot system are trusted, then suspend and resume BitLocker. This will reset BitLocker to use the new boot information. Otherwise, restore the system boot information. ENTER= Continue

There are several reasons for this -

1. You did not insert your BitLocker recovery password via USB during Dataplex installation or uninstallation.
2. Your system experienced a sudden power loss.

To resolve this issue -

1. Insert a USB key or memory device (containing your BitLocker recovery password) and press ENTER.
2. You will be asked to press ENTER to continue or ESC to reboot and use the key to continue. Press ESC.
3. On reboot, you will see a message from Dataplex:
"Dataplex ALERT: Improper Shutdown Detected."
4. After Dataplex finishes recovery and boots into windows, you must suspend and resume BitLocker:
START --> Control Panel --> System and Security --> Manage BitLocker
5. Click to suspend BitLocker (this may take a few seconds).
6. Then, click to resume BitLocker (this may take a few seconds).

I JUST INSTALLED DATAPLEX BUT THE STATUS SAYS IT IS DISABLED.

On rare occasions, Dataplex will come up as "Disabled" after install. Should you encounter this problem, please do the following:

1. Uninstall dataplex
2. Reboot
3. In "Disk Management", initialize your SSD, create a simple volume on your ssd, format and assign a drive letter.
4. Close out of Disk Management
5. Re-install dataplex
6. Reboot
7. Start > Program Files > All Programs > Dataplex > Dataplex Status
 - i) If Dataplex is enabled, reboot once more. If it is still enabled on second reboot, you should be good.
 - ii) If Dataplex is Disabled, please place a support ticket

ERROR MESSAGES

INVALID STATE DETECTED

Error Message:

```
Invalid state detected.  
Please insert the proper TargetDrive/CacheDrive to boot.
```

Possible Reason(s):

- 1) Target or Cache drive mismatch. If an older cache drive or a different target drive used to install Dataplex is connected to the system, Dataplex issues this error. Reconnecting the original target or cache drive should resolve this issue.
- 2) Insufficient memory during pre-OS (BIOS) phase. There may be compatibility issues with other add-on or on-board PCI devices in the system. Try removing or disabling the other PCI devices.

DEVICE FAILURE OCCURRED WHILE ACCESSING THE CACHE DRIVE

Error Message:

```
Device failure occurred while accessing the Cache Drive.
```

Possible Reason(s):

- 1) When read and/or write requests to the cache drive (SSD) fails (possibly due to a cache drive failure), Dataplex will synchronize all data back from the cache drive to the target drive (HDD). Dataplex will switch to pass-through mode and operate exclusively from the target drive. The user may optionally uninstall Dataplex and remove the faulty SSD from the system.

IMPROPER SHUTDOWN

Error Message:

```
Dataplex ALERT: Improper Shutdown Detected.
```

Possible Reason(s):

- 1) Power outage or sudden power loss.
- 2) System crash (e.g., BSOD).
- 3) Forced shutdown (e.g., holding power-button for 5+ seconds).

Resolution:

Dataplex will detect this condition and go through several steps to recover the cache state. Depending upon the size of the cache and amount of data to be recovered, this process typically takes several minutes, but can take longer. Please be patient while the process runs to completion.

You will also be presented with the option to disable the cache. When prompted, you may press "D" to disable Dataplex. Once Dataplex is disabled, all of the data from the cache drive is synchronized to the target drive. To re-enable Dataplex, you will need to boot to Windows, uninstall Dataplex, then re-install it again.

CACHE DRIVE NOT FOUND

Error Message:

```
Dataplex ERROR: Cache Drive not found
```

Possible Reason(s):

- 1) The cache drive (SSD) has been disconnected. Please check cable connections or try re-seating the cache drive.
- 2) Cache drive is not accessible at boot time. Confirm that the cache drive is accessible during boot and in the system BIOS (i.e., it should be available for use in the system BIOS boot order).
- 3) Read or Write I/O error to the cache drive has failed. Follow the on-screen instructions to make the target drive available again.
- 4) Critical Dataplex information on the target drive (HDD) or cache drive has been destroyed. Follow the on-screen instructions to make the target drive available again.

NOTE: do not connect the target drive or cache drive to another computer without first disabling Dataplex.

WINDOWS FAILED TO START

Error Message:

`Windows failed to start.`

Possible Reason(s):

You may receive this error if the boot partition (100MB system partition) is on a different HDD from your operating system partition (C:\Windows) when you installed Dataplex.

If your system does not boot or complains about your drive being RAW or not having anything on it, please perform the following steps -

- 1) Reboot your system.
- 2) When Dataplex comes up, press "D" for disable after your data syncs back boot to windows.

If the above option fails, perform the following steps -

- 1) Power off your system
- 2) Disconnect your SSD Power on your system
- 3) Dataplex should warn you that you have no SSD and offer to disable the system

If the above solutions fail, please place a support call.

NO QUALIFIED CACHE SSD DETECTED

Error Message:

`No qualified cache SSD detected`

Possible Reason(s):

This means that the Dataplex installer is having trouble identifying your drive. Please take the following steps -

1. Verify that the SSD is properly connected to the system physically via a SATA cable or properly inserted into the PCIe or mSATA slot.
2. Verify that the SSD is detected in the System BIOS.
3. Verify that the SSD can be detected by your system. Go to Disk Management and confirm that the SSD drive is listed and is online.
4. Confirm that you are running the Dataplex installer with Administrator privileges.

REPORTING ISSUES

In addition to a detailed problem description, information about your particular system configuration can be very helpful in diagnosing support issues. Here is a quick and easy way for you to provide this valuable information –

1. Download the following package from –
<http://dl.dropbox.com/u/4732943/NVReleases/DataplexCollectLogs.zip>
2. Extract the DataplexCollectLogs.zip file
3. Run the DataplexCollectLogs.bat file as an Administrator
 - A *._zip file will be created in the execution directory
4. Attach the *._zip file in an email to support@nvelo.com
5. Please include a detailed problem description and your contact information

GLOSSARY

AHCI - Advanced Host Controller Interface

Cache - A small fast storage drive holding recently accessed data, designed to speed up subsequent access to the same data.

Cache drive - SSD to be used to cache the hard disk drive

GPT - GUID Partition Table

HDD - Hard Disk Drive

IDE - Integrated Drive Electronics

MBR - Master Boot Record

PATA - Parallel ATA

RAID - Redundant Array of Independent Disks

SATA - Serial ATA

SSD - Solid-State Drive

Target drive - Hard disk drive to be cached

WinPE - Windows Pre-Installation Environment

WinRE - Windows Recovery Environment