

Intel® Solid State Drive Data Center Tool

Installation Guide

March 2016

Software Version 3.x



Intel may make changes to specifications and product descriptions at any time, without notice. Designers must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined." Intel reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them.

No license (express or implied, by estoppel or otherwise) to any intellectual property rights is granted by this document.

Intel disclaims all express and implied warranties, including without limitation, the implied warranties of merchantability, fitness for a particular purpose, and non-infringement, as well as any warranty arising from course of performance, course of dealing, or usage in trade.

The products and services described may contain defects or errors known as errata which may cause deviations from published specifications. Current characterized errata are available on request.

Intel and the Intel logo are trademarks of Intel Corporation or in the US and/or other countries.

* Other brands and names may be claimed as the property of others.

Copyright © 2016 Intel Corporation. All rights reserved.



Contents

1	Introduction	5
1.1	Requirements.....	5
1.2	Known Installer Limitations.....	5
2	Windows Installation and Startup.....	6
2.1	Installing the Data Center Tool.....	6
2.2	Launching the Data Center Tool.....	8
2.3	Uninstalling the Data Center Tool.....	9
3	Linux Installation and Startup.....	11
3.1	Viewing RPM Metadata.....	11
3.2	Installing the Data Center Tool via GUI	12
3.3	RHEL Software Manager GUI.....	13
3.4	RHEL Command Line Installation and Removal.....	14
4	ESXi Installation and Startup.....	15
4.1	Installing the Data Center Tool.....	15
4.2	Launching the Data Center Tool.....	16
4.3	Uninstalling the Data Center Tool.....	16



Revision History

Document Number	Revision Number	Description	Revision Date
330713-001US	001	Initial release	June 2014
330713-002US	002	Added support on SLES11.3 and RHEL 6.6	December 2014
330713-003US	003	Added support for P3500 Series Added support features: <ul style="list-style-type: none">• Updated/merged i latest CLI Framework• LSI Support• Fixed issue with NVMe* Temp Stats parser Added Bootloader	February 2015
330713-004US	004	Release of Intel® SSD Data Center Tool 3.0.0 with support for ESXi 5.5 and 6.0	March 2016



1 Introduction

This guide describes how to install the *Intel® Solid State Drive (SSD) Data Center Tool (DCT)* software for both Windows* and Linux* operating systems.

1.1 Requirements

The Intel SSD Data Center Tool requires the following:

- Supported Operating Systems
 - Windows* Server 2012 / R2
 - Windows* Server 2008 SP2 / R2
 - Windows* 7/8/8.1/10
 - Red Hat* Enterprise Linux* (RHEL) 6.5/6.6/6.7/7.0/7.1 and SLES11.3/11.4/12.1
 - ESXi 5.5 and 6.0

- Available space of 23MBs

1.2 Known Installer Limitations

Review the following limitations before installing the Intel SSD Data Center Tool:

- Validated Linux environment is only Red Hat* Enterprise Linux (RHEL) 6.5/6.6/6.7/7.0/7.1 and SLES11.3/11.4/12.1
 - Other Linux environments may work
 - Other Linux environments will be added/validated in future versions

2 Windows* Installation and Startup

Download the Windows* version of the Intel® SSD Data Center Tool and save it to the system with the SSDs to be configured by the tool.

2.1 Installing the Data Center Tool

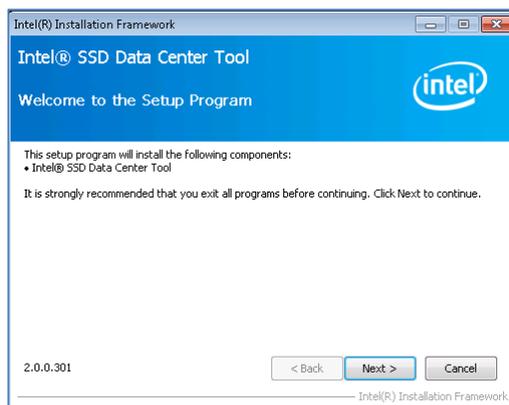
To install the Data Center Tool software, do the following:

1. Double click on the downloaded executable file to open up the self-extracting archive.

This extracts the installer .EXE file and the Intel SSD Data Center Tool User's Guide.

2. Double click on the installer .EXE file.

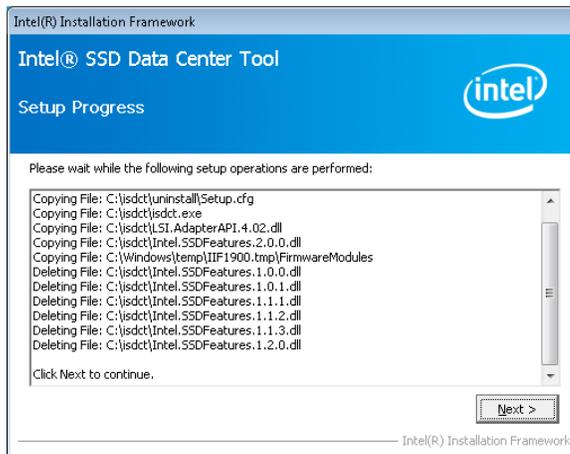
This opens the Welcome Screen.



3. Click **Next**.

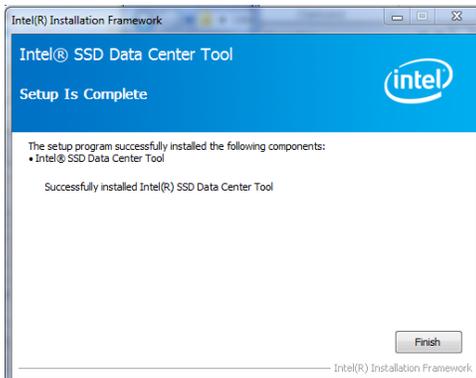
The Installer extracts the files to the system drive.

In the following screen example, files are extracted to the C:\isdct directory.



4. Click **Next**.

The setup completion screen will show where the software tool was copied.

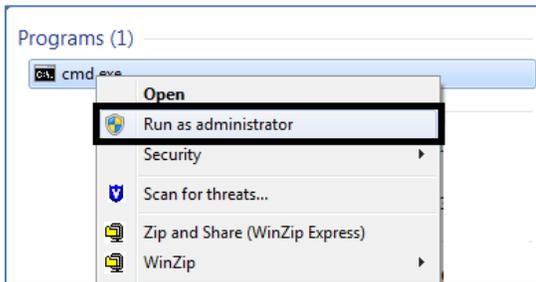


5. Click **Finish**.

2.2 Launching the Data Center Tool

To launch the Intel® SSD Data Center Tool software, do the following:

1. Type **cmd** in the Windows* search field to show the `cmd.exe` program
2. Right click to open the menu and select *Run as administrator*.



3. In the MS_DOS prompt window, change to the directory where the files were exacted (for example, `C:\isdct\`)
4. Run the `idsct` command.

Launch it as a single command by supplying the command and parameters immediately following the executable name.

```
idsct show -intelssd
```

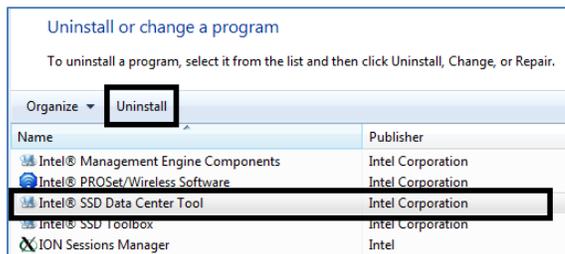
For a description of the command options and features, see the *Intel® Solid State Drive Data Center Tool User Guide*.

2.3 Uninstalling the Data Center Tool

Use the Windows* Control Panel to uninstall the Intel® SSD Data Center Tool software.

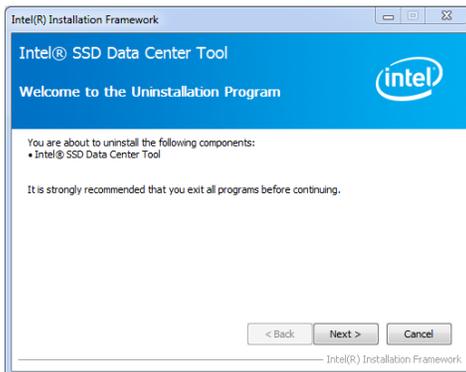
To uninstall the tool, do the following:

1. At the Control Panel, click “Program and Features,”
2. Highlight Intel® SSD Data Center Tool in the list of programs, and



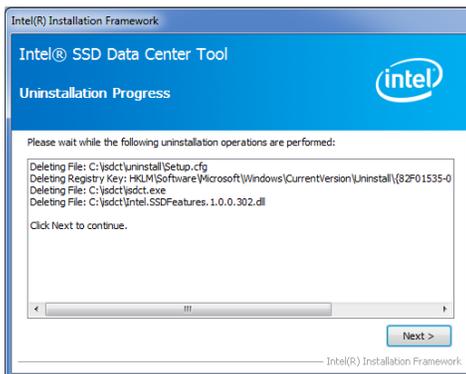
3. Click **Uninstall**.

This will show the uninstallation program screen.



4. Click **Next**.

This will show the uninstall progress screen.





5. Click **Next**.

This will show the installation completion screen.



6. Select **Yes** or **No** to restart the computer for the changes to take effect, and then click **Finish**.



3 Linux Installation and Startup

Download the Linux version of the Intel® SSD Data Center Tool and copy it to a directory

When the installer finishes:

- The `isdct` executable file will be placed in `/usr/bin` directory.
- The libraries used by DCT will be placed in `/usr/lib/isdct` directory.

3.1 Viewing RPM Metadata

View the RPM metadata with the command:

```
rpm -q -i -p <package_name>.rpm
```

The following shows an example of the output:

```
Name       : idsct
Version    : 3.0.0.400
Release    : 1
Architecture: x86_64
Install Date: (not installed)
Group      : default
Size       : 7448888
License    : Intel® NSG End User Software Agreement
Signature  : (none)
Source RPM : isdct-3.0.0.400-15.src.rpm
Build Date : Tue 01 Mar 2016 03:11:32 PM PST
Build Host : remlab-desktop
Relocations : /
Packager   : Intel (R) Corporation
Vendor     : Intel (R) Corporation
URL        : https://downloadcenter.intel.com/download/23931/Intel-Solid-State-Drive-Data-Center-ToolSummary : Intel (R) SSD Data Center Tool
Description :
Intel (R) SSD Data Center Tool
The Intel (R) SSD Data Center Tool provides firmware update capability as well as reading and setting many configuration settings on Intel's SSD Data Center Family of products.
```

3.2 Installing the Data Center Tool via GUI

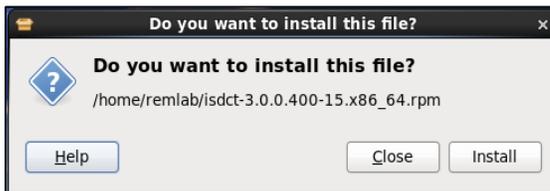
To install the Intel® SSD Data Center Tool software using the graphical user interface (GUI), do the following:

1. Unzip the downloaded file.

This extracts the RPM installer file and Intel SSD Data Center Users Guide.

2. Double click on the RPM file.

This opens a confirmation box.



3. Click **Install**.

This opens the Authentication form.



4. Enter the Admin password and click **Authenticate**.

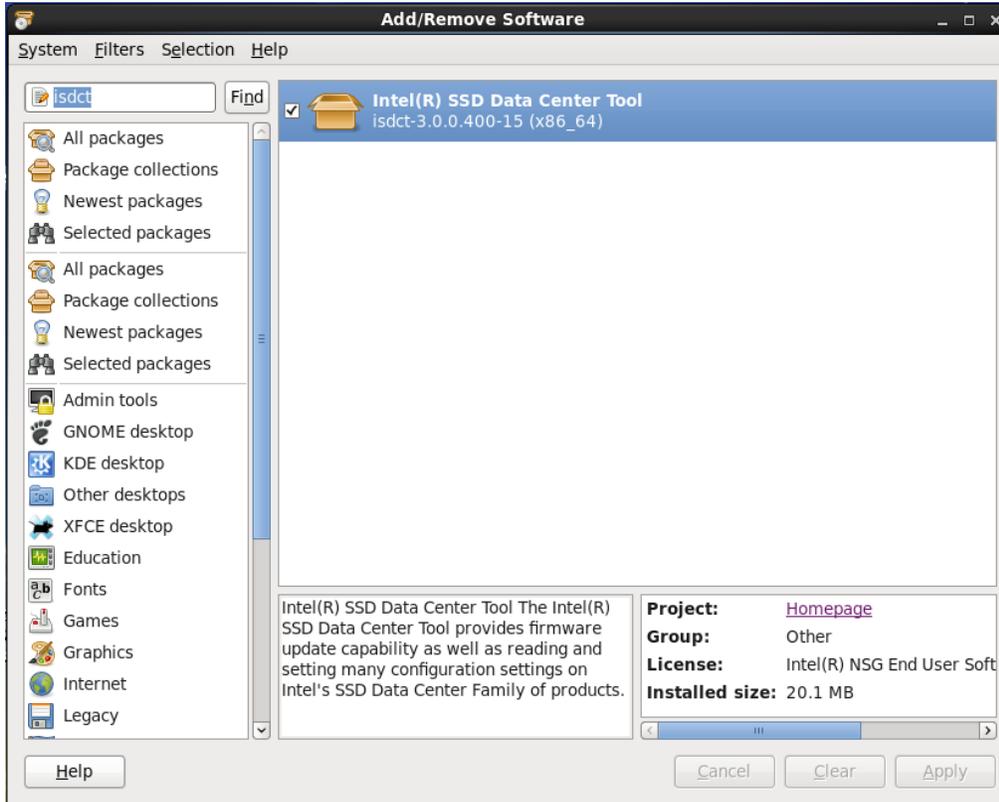
Installation will proceed and complete.



3.3 RHEL Software Manager GUI

Use the RHEL software manager GUI to query the software tool package information. Click on the homepage link to go to the Intel Download Center page for the tool.

Uninstall the software from this screen by unchecking the box next to *Intel® SSD Data Center Tool* and clicking **Apply**.





3.4 RHEL Command Line Installation and Removal

To install the Intel® SSD Data Center Tool via command line, use the RPM utility to run the following command:

```
sudo rpm -ivh <package_name>.rpm
```

The following shows a sample output:

```
[remlab@localhost ~]$ sudo rpm -ivh isdct-3.0.0.400-15.x86_64.rpm
Preparing..##### [100%]
 1:isdct##### [100%]
```

After the tool is installed, run the following command to get information:

```
rpm -q -i isdct
```

The following shows a sample output:

```
Name       : isdct
Version    : 3.0.0.400
Release    : 1
Install Date: Fri 07 Jun 2014 12:59:56 PM PDT
Group      : default
Size       : 7448888
License    : IntelNSGEnd_User_License
Signature  : (none)
Source RPM : isdct-3.0.0.400-15.src.rpm
Build Date : Tue 01 Mar 2016 03:11:32 PM PST
Build Host : linuxU12br
Relocations: /
Packager   : Intel
Vendor     : Intel
URL        : https://downloadcenter.intel.com//download/23931/Intel-Solid-State-Drive-Data-Center-Tool
Summary    : Intel (R) SSD Data Center Tool
Description:
Intel (R) SSD Data Center Tool
The Intel (R) SSD Data Center Tool provides firmware update capability as well as reading and setting many configuration settings on Intel's SSD Data Center Family of products.
```

To remove an RPM package, run the following command:

```
sudo rpm -e isdct
```



4 ESXi Installation and Startup

Download the ESXi version of the Intel® SSD Data Center Tool and copy it to a directory on an ESXi host (i.e. /tmp).

When the installer finishes:

- The `isdct` executable file and associated libraries will be placed in `/opt/intel/isdct` directory.

4.1 Installing the Data Center Tool

Follow the steps below to install the Intel SSD Data Center Tool.

1. Login to your ESXi Host. You will need to set your Host's acceptance level to "CommunitySupported". Run the following command to see what your host's acceptance level is set to:

```
> esxcli software acceptance get
PartnerSupported
```

2. Run the following command to set your Host's acceptance level to "CommunitySupported":

```
> esxcli software acceptance set --level=CommunitySupported
Host acceptance level changed to 'CommunitySupported'.
```

3. Login to your ESXi host and run the following `esxcli` command:

```
esxcli software vib install -v <package name>.vib
```

4. Once successfully installed you will see the following:

Installation Result

Message: Operation finished successfully.

Reboot Required: false

VIBs Installed: Intel_bootbank_intel_ssd_data_center_tool_3.0.0-400

VIBs Removed:

VIBs Skipped:



4.2 Launching the Data Center Tool

To launch the Intel® SSD Data Center Tool software, do the following:

1. Login to the ESXi host.
2. Chang directory to `/opt/intel/isdct`
3. Run the `isdct` command

Launch it as a single command by supplying the command and parameters immediately following the executable name.

```
./isdct show -intelssd
```

4. For a description of the command options and features, see the *Intel® Solid State Drive Data Center Tool User Guide*.

4.3 Uninstalling the Data Center Tool

To uninstall the Intel® SSD Data Center Tool software, do the following:

1. Login to the ESXi host.
2. Run the following `esxcli` command:

```
esxcli software vib remove -n intel_ssd_data_center_tool
```