Intel® Solid State Drive Data Center Tool

Installation Guide

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Software Version 3.x
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## Revision History

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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 2016
  - Windows* Server 2012 / R2
  - Windows* Server 2008 SP2 / R2
  - Windows* 7/8/8.1/10
  - Red Hat* Enterprise Linux* (RHEL) 6.5/6.6/6.7/7.0/7.1/7.2/7.3 and SLES11.3/11.4/12.1
  - CentOS* 7.4
  - Ubuntu* 14.04, 16.04
  - ESXi* 5.5, 6.0, 6.5, 6.7

- 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:\Program Files\Intel\Intel(R) SSD Data Center Tool\`)

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-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.
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…
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 : idsct
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. Change directory to /opt/intel/isdct
3. Run the idsct 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