



How to test performance on PowerEdge servers with Iometer

Iometer is both a **workload generator** (it performs I/O operations in order to stress the system) and a **measurement tool** (it examines and records the performance of its I/O operations and their impact on the system). It can be configured to emulate the disk or network I/O load of any program or benchmark, or can be used to generate entirely synthetic I/O loads. It can generate and measure loads on single or multiple (networked) systems.

Description:

The tool consists of two programs, **Iometer** and **Dynamo**.

- **Iometer** is the controlling program. Using Iometer's graphical user interface, you configure the workload, set operating parameters, and start and stop tests. Iometer tells Dynamo what to do, collects the resulting data, and summarizes the results in output files. Only one copy of Iometer should be running at a time; it is typically run on the server machine.
- **Dynamo** is the workload generator. It has no user interface. At Iometer's command, Dynamo performs I/O operations and records performance information, then returns the data to Iometer. There can be more than one copy of Dynamo running at a time; typically one copy runs on the server machine and one additional copy runs on each client machine.

Documentation:

[Iometer on Windows](#)[Iometer and Dynamo on Linux](#)

For testing the performance on Windows systems, Iometer can be installed and started directly.

An additional installation of Dynamo is not necessary. Below you find instructions for installing the tool and for starting the test procedure.

⬆ Installation of Iometer

1. First you have to download Iometer from [Iometer.org](http://www.iometer.org/doc/downloads.html) (<http://www.iometer.org/doc/downloads.html>).



Note: For Windows 2008 and above, download Version **1.1.0**. For older Windows editions use Version **2006.07.27**.

1.1.0

	OS	CPU	image	SHA256 checksum
download	Linux	i386	Prebuild binaries	44e308598463964c8c7632c4fe92871c84532a884809c826b3b9677ee677ad
download	Linux	x86_64	Prebuild binaries	2249664266454be9350ca515f22b72032db6c3e8b7e66162844696c0343b24c
download	Windows	i386	Installer and prebuild binaries	81419ba4a5462e544cbb646a5d4b81a7e020a5e8043040e882a6a5992c2daf
download	Windows	i386	Prebuild binaries	c5c4e35cf11089937f603cc926425c58e961514afa36866b3854d73b18461901
download	Windows	x64	Prebuild binaries	bd041836474457b2a1665de789164f7170195c6c8e402ca4738aa98b547
download	Windows	x86_64	Prebuild binaries	ba0065efb61ea451e34eba0dc002c948344f7232934e59250eda48c1509bf
download	common	common	Sources	659ba94e62743fee28a2a0896562aba2a6c5960dca258aaf96e757bc263
download	common	common	Documentation	4031a71778f13b026751efe1d39a073d6792432e30831e13b81b28fa20e715e

List of images for version 1.1.0

2006.07.27

	OS	CPU	image	MD5 checksum
download	Linux	i386	Prebuild binaries	fedba8016ba3036441e4414d8aa67d89
download	Netware	i386	Prebuild binaries	48f7ecb842ae988ac6b8645115487
download	Windows	i386	Installer and prebuild binaries	cc5814801a0ef9369644590e8bce7a
download	common	common	Sources	678a4c62e53d8ac5a969286a8e3c4c8
download	common	common	Documentation	2ae84ea964ed6713824c69a654bc5add

<http://www.lometer.org/doc/downloads.html>

Figure 1.1: lometer download page

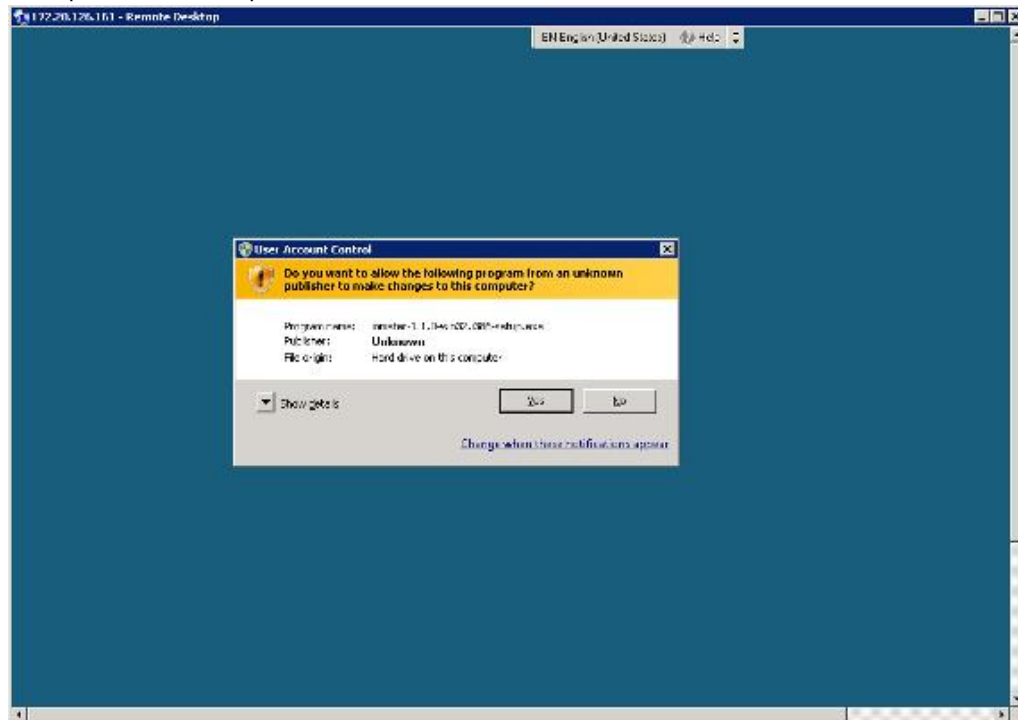
2. Right click the setup file and then click on **Run as administrator**



/library/KB/DELL_ORGANIZATIONAL_GROUPS/DELL_GLOBAL/ContentTeam/image4.png

Figure 1.2: lometer file on desktop

3. Accept the UAC request.



[\(/library/KB/DELL_ORGANIZATIONAL_GROUPS/DELL_GLOBAL/ContentTeam/image5.png\)](#)

Figure 1.3: UAC request

4. Click **Next >** on the Welcome screen.



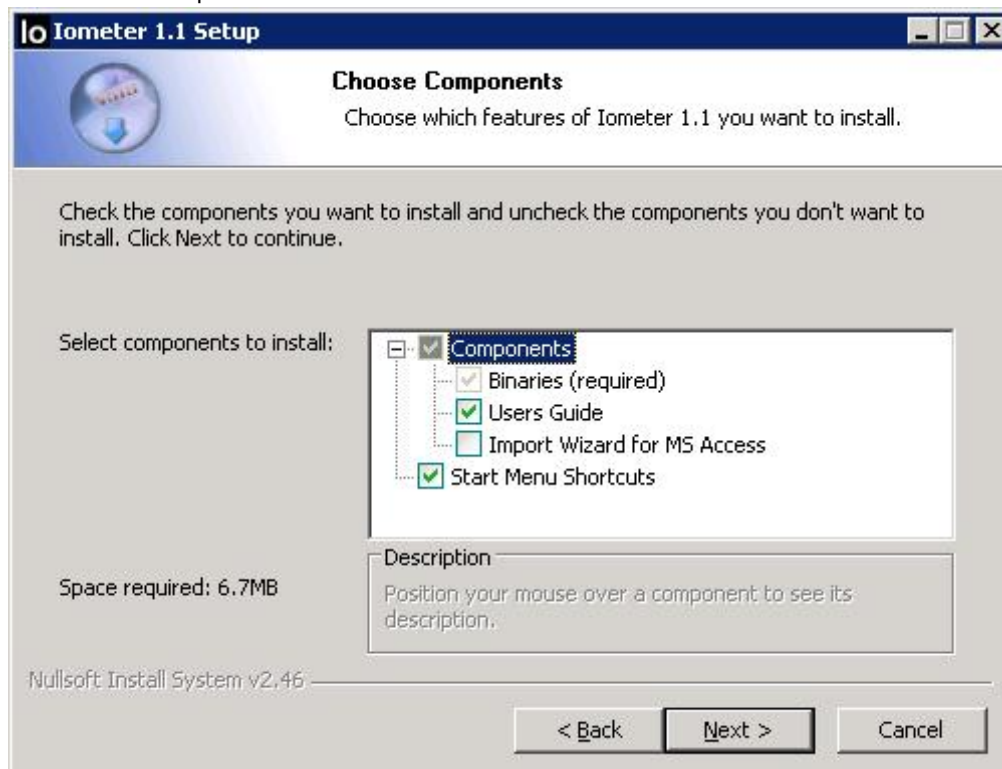
[\(/library/KB/DELL_ORGANIZATIONAL_GROUPS/DELL_GLOBAL/Content%20Team/image6.png\)](#)

Figure 1.4: Welcome screen

5. **Agree** license agreement

[\(/library/KB/DELL_ORGANIZATIONAL_GROUPS/DELL_GLOBAL/Content%20Team/image7.png\)](#)

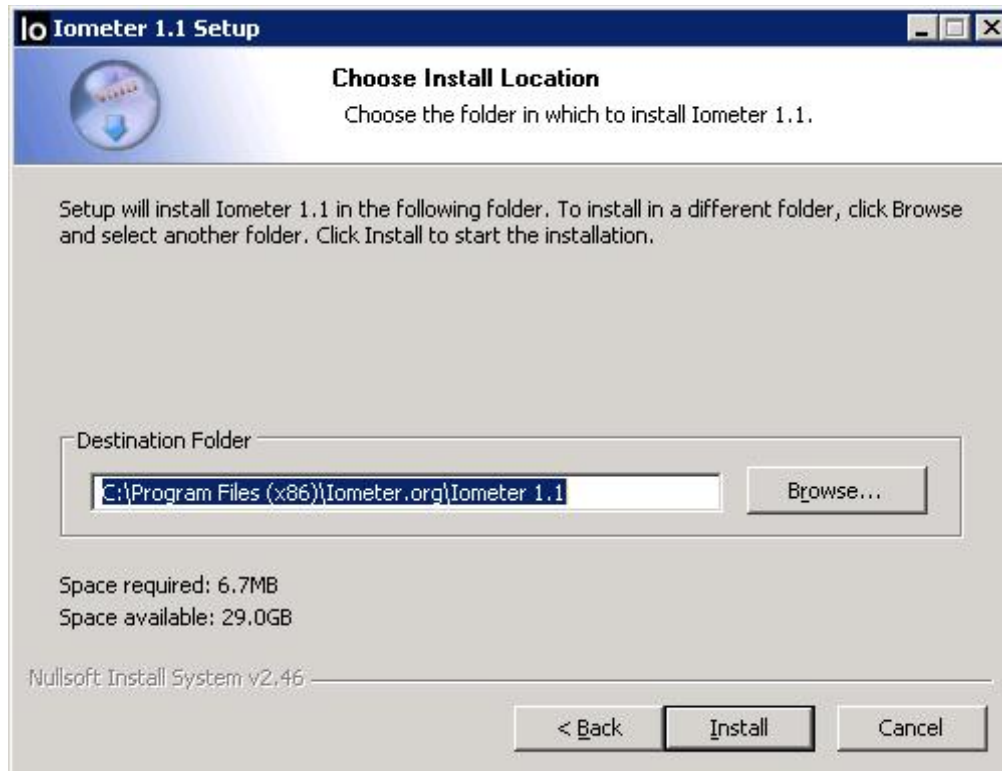
Figure 1.5: license agreement

6. Select the components that should be installed and click **Next**

[\(/library/KB/DELL_ORGANIZATIONAL_GROUPS/DELL_GLOBAL/Content%20Team/image8.png\)](#)

Figure 1.6: Choose Components

7. Select the installation destination and click **Install**



[\(/library/KB/DELL_ORGANIZATIONAL_GROUPS/DELL_GLOBAL/Content%20Team/image9.png\)](#)

Figure 1.7: Define destination folder

8. When installation is done, click on **Finish**



[\(/library/KB/DELL_ORGANIZATIONAL_GROUPS/DELL_GLOBAL/Content%20Team/image10.png\)](#)

Figure 1.8: Finished installation

Start the test procedure in Iometer

1. Start Iometer
2. Agree the license conditions

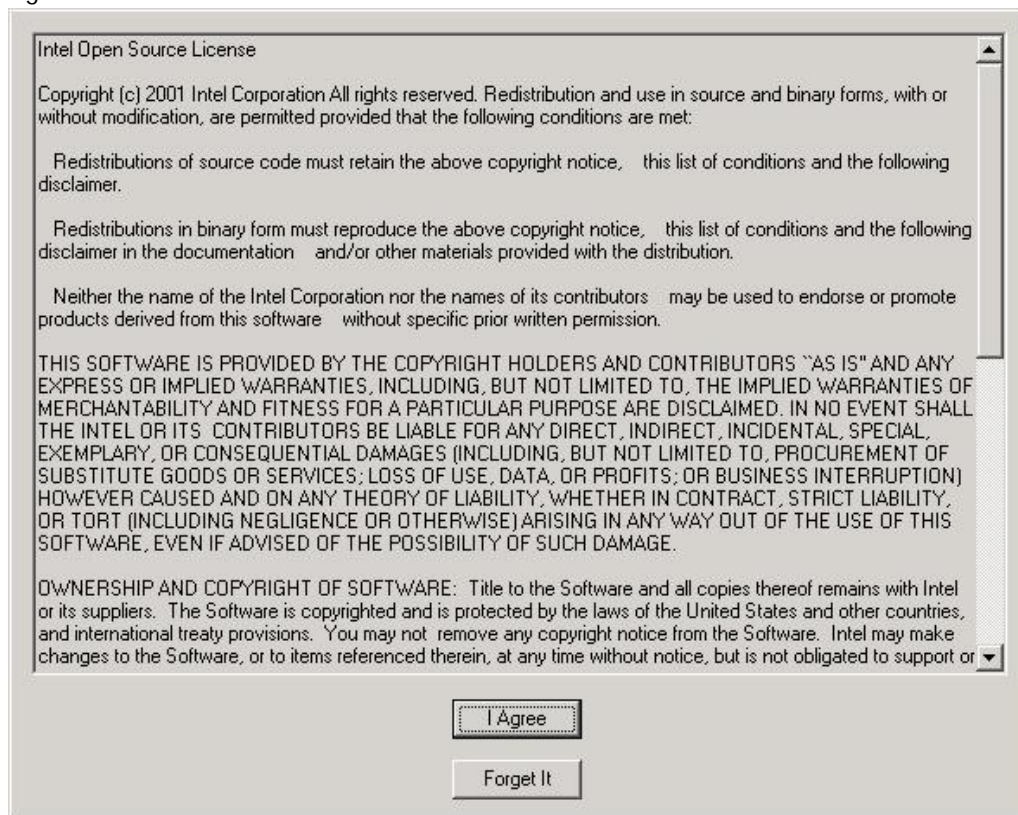


Figure 2.1: License conditions

3. Click on the **folder** button

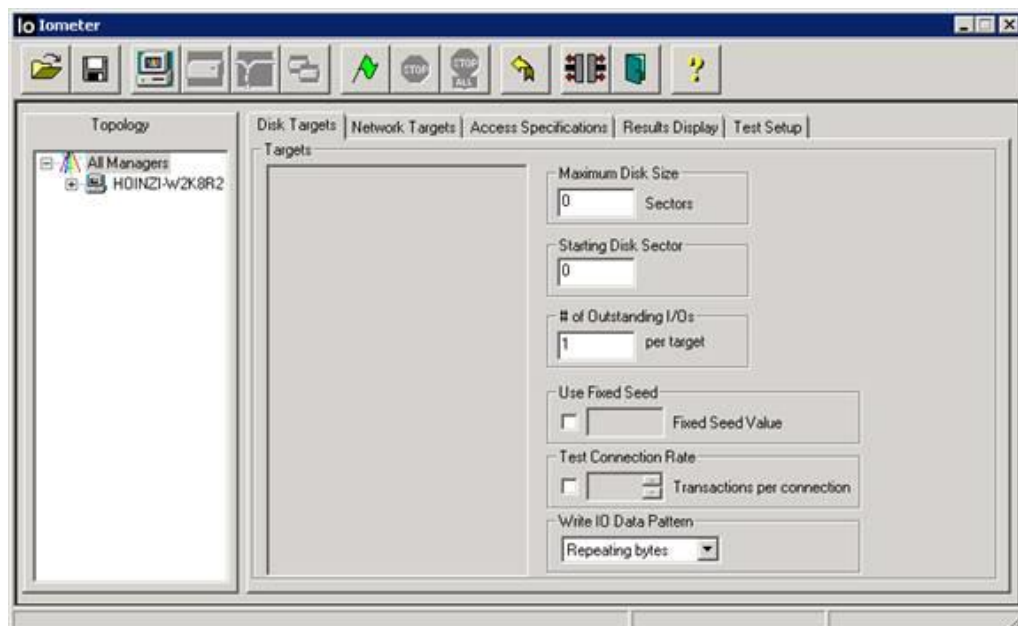


Figure 2.2: Folder button in upper left corner

4. Download the test configuration file [SIM-Real-World-Workload-2.1.0.icf](https://dell.box.com/s/6szgbh47sdrxjfx9s1o9p1i1f7zsw7q0) (<https://dell.box.com/s/6szgbh47sdrxjfx9s1o9p1i1f7zsw7q0>), and open it with Iometer.

Note: If you are using **Iometer 2006.07.27**, use [Sim-Real-World-Workload-1.2.0.icf](https://dell.box.com/s/mxd4l90exipqu3t9eclhengzknzbtnfk) (<https://dell.box.com/s/mxd4l90exipqu3t9eclhengzknzbtnfk>) instead.

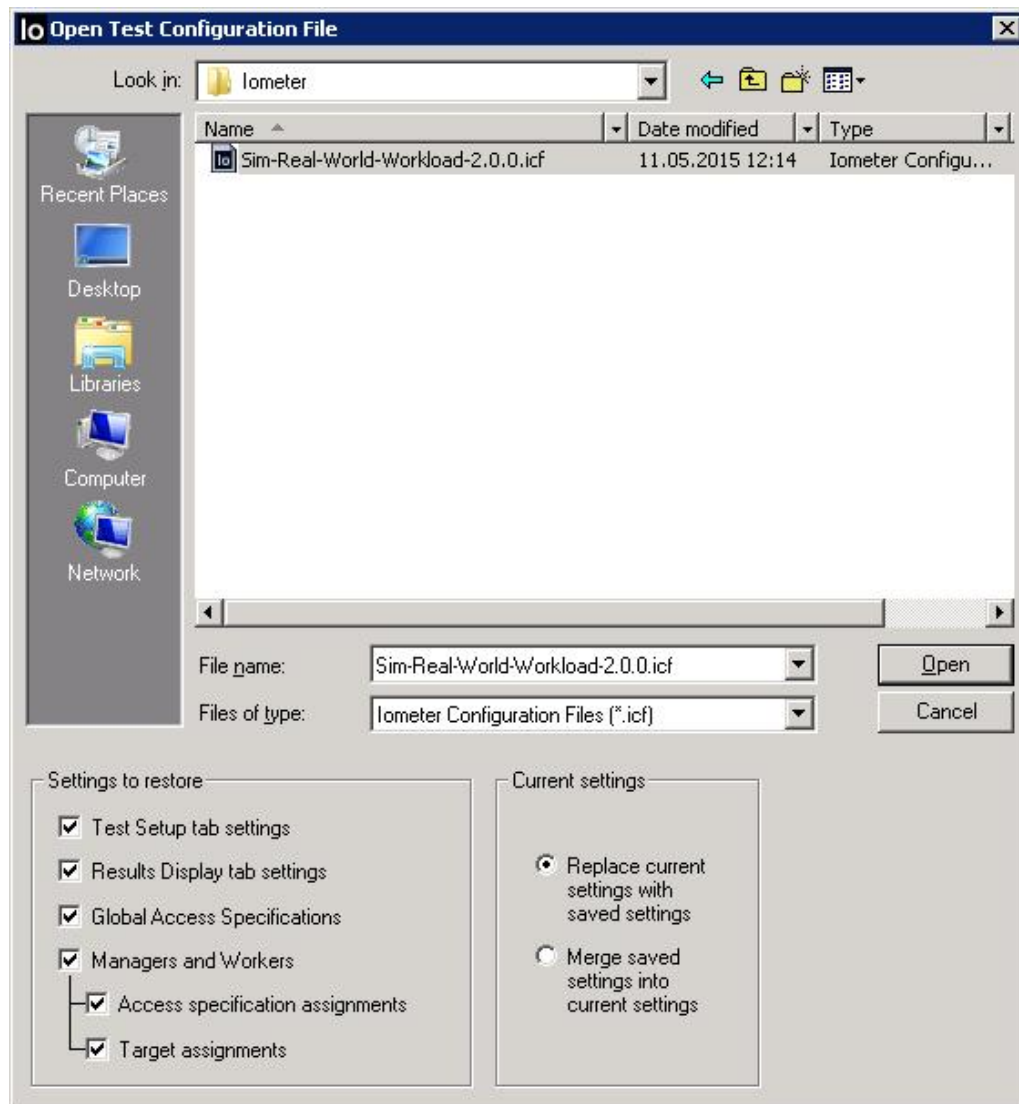


Figure 2.3: Choose configuration file

5. Choose the device to be tested

Warning: Unless instructed otherwise, use Iometer only on filesystems or data loss might occur!

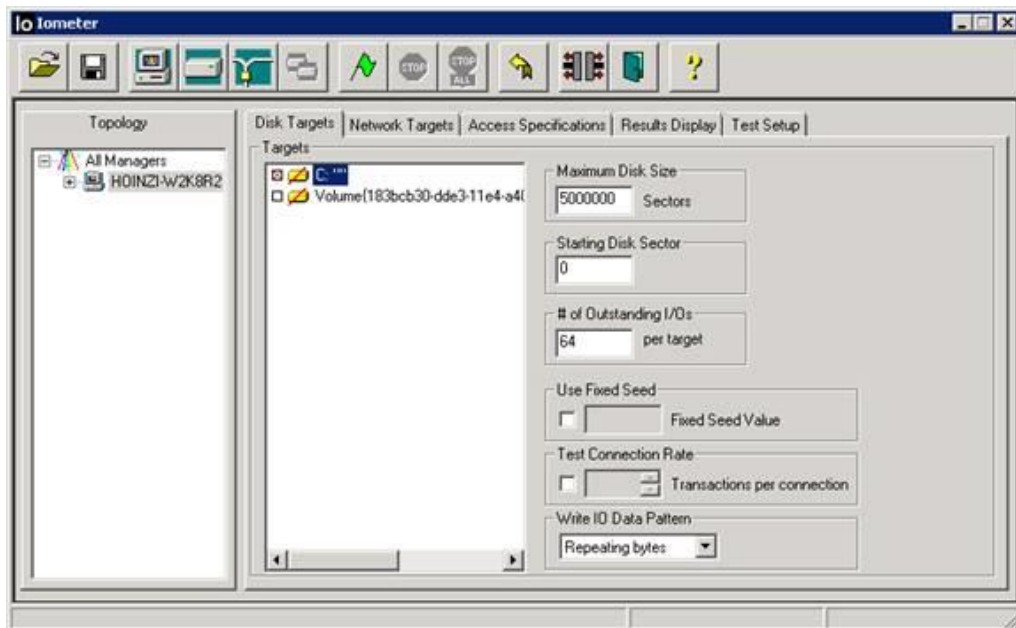


Figure 2.4: Choose device to be tested

6. Start the test by clicking on the **green flag** button

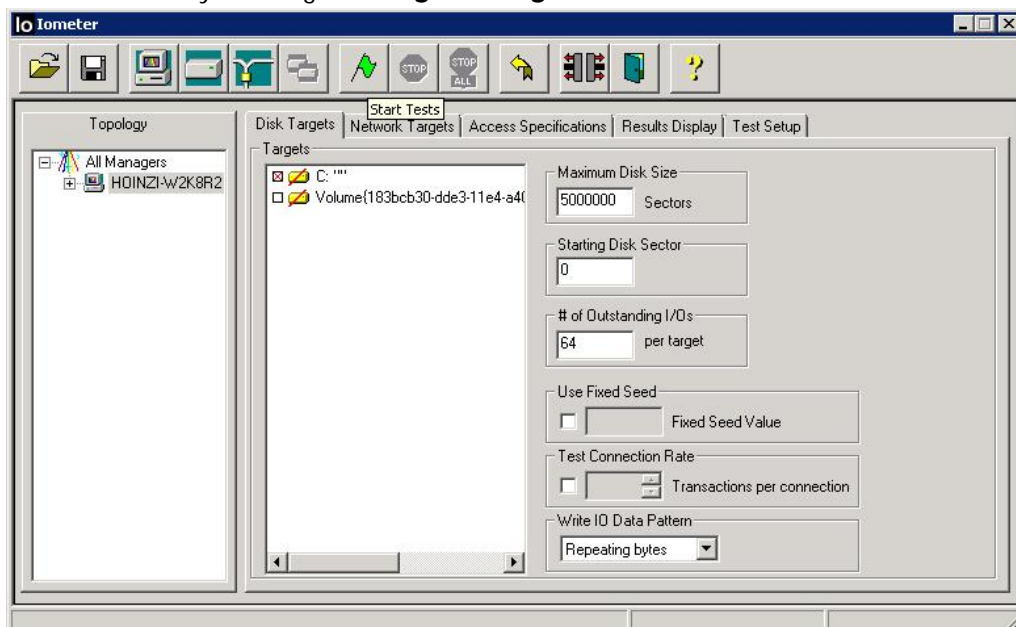


Figure 2.5: Green flag button in upper middle

7. Define the destination where to save the results file

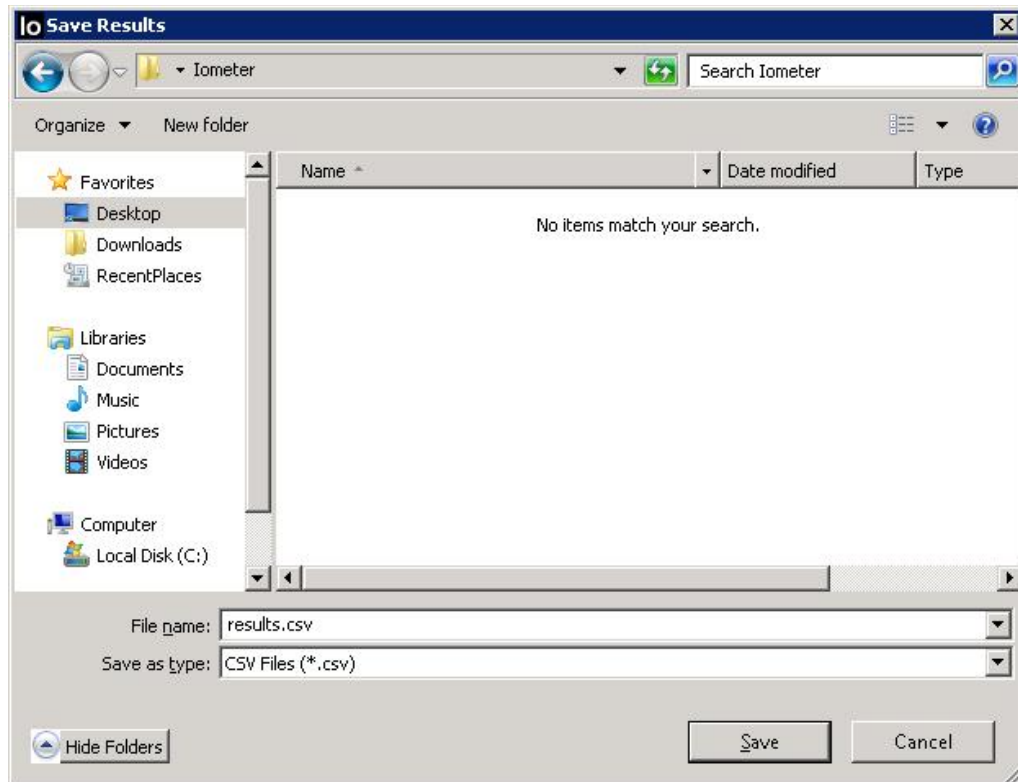


Figure 2.6: Choose destination for results

8. Now the test starts and will run for about **10-15 minutes**

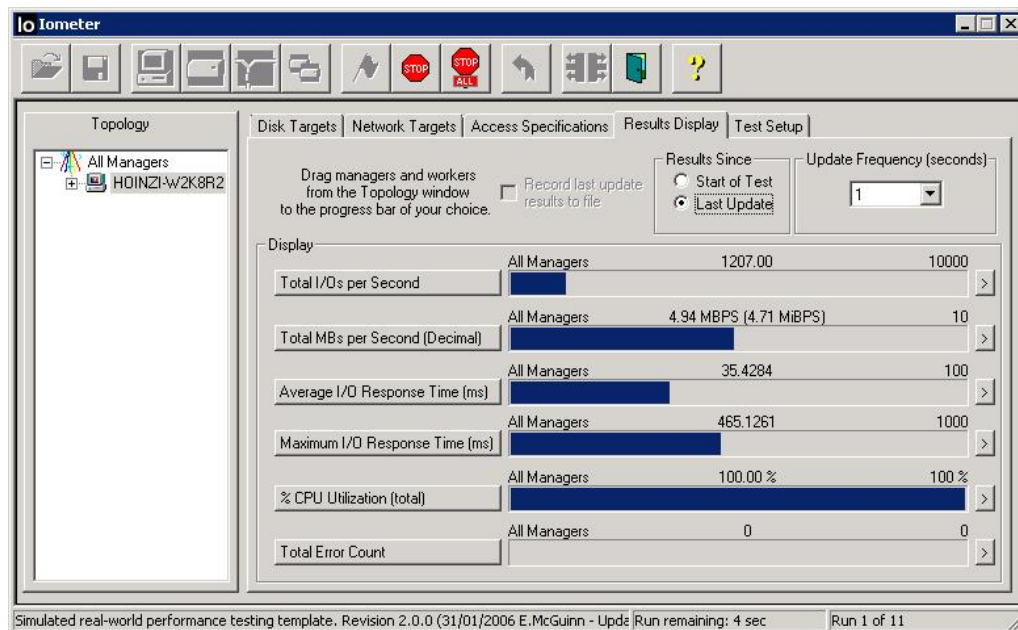


Figure 2.7: Running test

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