PoINT Jukebox Manager

Version 7.0
Build 326

ReadMe

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General Information

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Install PoINT Jukebox Manager

In case of a Service Pack installation please refer to the INSTALL.TXT file for detailed installation information. For an upgrade or full installation proceed as described below:

To install, start the file SETUP.EXE from the distribution medium and follow the instructions. PoINT Jukebox Manager automatically detects supported iSCSI, SCSI, FireWire and FibreChannel jukeboxes. RS232 jukeboxes will be detected if they are connected on COM1 or COM2 and have either ID 0 or ID 1. Please refer to the documentation how to install other serial jukeboxes.

PoINT Jukebox Manager needs a 'License Key' for full functionality. Please contact your dealer under reference to Serial Number and Product Key (displayed under the menu Server > Settings > License).

Note:
The default drive letter for the virtual jukebox volume is Z:. You can change the drive letter using the Administration Tool. (Menu: Server > Settings > File System)

Removable Storage Service

The Removable Storage Service should be deactivated, because it would claim changer devices so that they will not be detected by PoINT Jukebox Manager. To stop and deactivate the Removable Storage Service, open Control Panel > Administrative Tools > Services. Now double click on "Removable Storage", select "Disabled" as Startup type and reboot the computer.

Other Jukebox Management Software

If you have other Jukebox Management Software installed on your computer, it is recommended to uninstall this software before installing PoINT Jukebox Manager. If this software is running concurrently, PoINT Jukebox Manager may not work as expected.

Please note that stopping this software will not help. It is necessary to either deactivate all modules belonging to this software AND reboot your computer or to uninstall this software AND reboot your computer.

Uninstall PoINT Jukebox Manager

Before uninstalling the software, make sure all cached data have been flushed to optical disc. You should also delete all virtual jukeboxes, unless you plan to re-install PoINT Jukebox Manager later.

Now stop the Jukebox Manager Service if it is running:
Start the Administration Tool and select Server > Stop Jukebox Manager Service

To start the uninstallation, open Control Panel > Add/Remove Software and select PoINT Jukebox Manager and follow the instructions. If the uninstall prompts to reboot the system, you should do this, before installing any new software.

Because PoINT Jukebox Manager permanently removes the drive letters for the drives in the jukebox, you need to manually assign the drive letters again after uninstallation. Drive letters can be assigned using the Windows Disk Administrator.

Depending on the configuration settings, PoINT Jukebox Manager may also disable system devices for jukebox drives. That's why you may need to enable such devices after uninstalling PoINT Jukebox Manager. Devices can be enabled using the Windows Device Manager.

Note:
If software updates have been installed, the uninstall program may not remove files from the installation directory which have been added by an update. To ensure the software will be completely removed, please manually remove the installation directory if it still exists after performing the uninstallation.

Device Driver Configuration

Changer Device Drivers

PoINT Jukebox Manager is able to detect and access SCSI and FibreChannel jukeboxes whether a changer device driver for the jukebox is installed or not. However, if a changer device driver is installed and the device is marked as active in Windows Device Manager, the Removable Storage Service must be disabled. Otherwise, if the changer device is active and Removable Storage is running, PoINT Jukebox Manager will not see the jukebox because it will be claimed by the Removable Storage Service.

Access to FireWire jukeboxes is only possible if a changer device driver has been installed and the device is marked as active in Windows Device Manager. The Removable Storage Service must be disabled.

Jukeboxes which are connected through a serial line must not have a device driver installed.

Drive Device Drivers

PoINT Jukebox Manager uses the Windows device drivers to support ISO9660/Joliet and the PoINT CD Audio File System. By default the Windows device drivers are enabled for CD/DVD/BD drives and disabled for MO/UDO drives. The setting can be changed in the Jukebox properties dialog. After changing this option, Jukebox Manager starts or stops the associated Windows devices depending on the selected option.

Note:
Device drivers for FireWire, USB and SATA drives must not be deactivated. Jukebox Manager will not detect such drives if the drivers are disabled.

Limitations

Configuration Limitations

- Maximum read/directory cache size: 2 TByte
- Maximum number of media per virtual jukebox: 1000 (12000 total)
- Number of simultaneously supported jukeboxes: 10
- Number of simultaneously supported drives: 192
- Total number of simultaneously supported devices: 256 (jukeboxes, virtual jukeboxes, CD/DVD changer, stand-alone drives)
- The number of media in a Volume Set is limited to 15.000

Write Cache Limitations

When using the file based write cache for UDF volumes, the following restrictions apply:

- It is not possible to rename non-empty directories. If it becomes necessary to rename a directory, you should temporarily set the volume to the"RAM Cache" caching mode.
- The maximum file path length is limited to 240 characters less the name length of the specified write cache directory.
- PoINT Jukebox Manager cannot exactly calculate the disc space which will be required for a particular file on the optical disc. Thus it calculates an estimation which will be slightly higher than what will really be allocated when writing the file to the optical disc. This may lead PoINT Jukebox Manager to report that the disc is full, but after flushing the whole write cache to the disc, more data can be written to this disc. This overhead depends on the media type and of the average size of the files. On rewritable media it may vary between 1 through 5% and on write once media up to 10% of the current write cache contents.

Default Network Shares

PoINT Jukebox Manager creates two default network shares:

Jukebox

This share points to the virtual jukebox drive letter (Z: by default) and allows full access for everyone. You need to adjust the permissions for this share to restrict access to specific users. To avoid automatic sharing of the root directory, set the share name in Server > Settings > File System to an empty string and remove the share using Windows Explorer.

PoINT_SP.DIR

This share points to the specified image directory and will be created with full access for everyone. The share is used to transfer CD/DVD images from client installations to the server installation and to allow clients to view the log file.
You can limit access to this share by either adjusting share permissions or file (NTFS) permissions for this directory. You can also avoid sharing of this directory by first manually removing the share and then creating the following registry value:
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\jbxServer\Parameters
Value Type: DWORD
Value Name: DsblShareImagePath
Value Contents: 1

Extended Logging

PoINT Jukebox Manager logs informative, warning and error messages to the log file 'default.log' in the configured image/spool directory. The log file can be viewed and exported using the Administration Tool.

It is possible to enabled more detailed logging by using the command Server > Settings > Advanced in the Administration Tool.

UDF Support

This version of PoINT Jukebox Manager supports read and write of DVD-RAM, BD-RE, MO, UDO and PDD media according to the UDF 1.02 standard.
Write-once media (CD-R, DVD-R/W, DVD+R/W, BD-R, MO/WORM, UDO/WO, PDD/WO) are supported using UDF 1.5 CD/DVD-RW media are handled like CD/DVD-R media, but additionally they can be erased.
Additionally, PoINT Jukebox Manager can read UDF versions up to 2.60 on all supported media types.

Error Recovery

After a write failure to a UDF volume, the volume will be marked as read only. Further read requests to the volume will be accepted, but write requests will be rejected.
To repair the volume, execute the command "Rescan" for the related slot (in case of a single disc) or "Incremental Rescan" for the Volume Set if the write failure occurred on a Volume Set disc.

After repairing the UDF file system it may be necessary to re-write files which have not been correctly written due to the write failure.
Because the default settings do not allow overwriting of files on write- once media (CD-R, DVD-R, MO/WORM or UDO/WO), the setting "Write Access for Write-once Media" in Server > Settings > File System must be set to "Append, overwrite (no delete)" before re-writing the files.

Data Verification

Because CD/DVD-R drives do not support verification for written data, PoINT Jukebox Manager performs data verification by default to increase data security. This means data which have been written to optical disc, will be read back and compared with the original data.
This option can be disabled in the Administration Tool: Server > Settings > Advanced

Dynamic Image Recording

CD-R, DVD-R and DVD+R media do not provide a hardware implemented defect management nor do they provide a drive supported verification. This hardware based drawback is compensated by a software mechanism called"Dynamic Image Recording" implemented in PoINT Jukebox Manager.
The purpose of this mechanism is to improve the reliability of the recording process for these media.
Dynamic Image Recording is the recommended method in case of CD-R, DVD-Rand DVD+R and is the default setting in PoINT Jukebox Manager. Refer to the manual and to the

online help for more information.

PoINT CD Audio File System

PoINT Jukebox Manager installs a File System Driver which represents Audio Tracks on Audio CDs as wave files (*.wav). The Audio File System has been tested with many different drives, but there are also drives which do not support the required functionality.
If not all drives in your jukebox are supported by the CD Audio File System, you can disable the File System for these drives, using the drive properties dialog box in the Administration Tool.

MO, UDO & PDD Support

PoINT Jukebox Manager automatically disables system device drivers for UDO, PDD and MO drives. However, if you decide to enable the drivers for UDO drives (see online help), you must make sure that you have required Microsoft Patches installed. Otherwise the system may hang or crash. See Microsoft Knowledge Base Article 831293.
If system device drivers are enabled, it is also necessary to disable Tagged Queuing for the SCSI controller. See section Known Problems below.

Notes for PDD

- The current implementation does not consider the limited write repeatability of re-writable media.

Backup of the PoINT Jukebox Manager Databases

The recommended way to backup the database contents is to regularly export the database contents and to backup the exported database file.
However, it is also possible to backup the PoINT Jukebox Manager databases directly by using a 3rd party backup software. Please refer to the online help for detailed information about backup of the database.

Command Line Tools

PoINT Jukebox Manager installs the following command line tools into the installation directory. To start these tools, open a command line and change into the Jukebox Manager installation directory. Alternativly, add the Jukebox Manager installation directory to your PATH environment variable.

jbmcmd.exe

This tool provides an command line interface which allows to perform media and jukebox operations without starting the Administation Tool. The tool allows addressing of jukeboxes either through their name (j JUKEBOX) or their unique ID (j @8). Both information will be

returned when querying jukebox information:
jbmcmd query jukeboxes

Execute the tool with help as parameter to get a list of all available commands and options:
jbmcmd help

Other examples:
jbmcmd server jbx_server query volumes
jbmcmd query volumes notable separator=,
jbmcmd enable j @8 m1
jbmcmd export j JUKEBOX m1 s1-5

The output format of the query command can be customized by specifying the table width, columns, sortorder (sort) and the text which will be used as separator for the columns. Defaults will be used if either setting has been omitted.
The tool detects if it outputs to the console and adjusts the table width accordingly, unless specified otherwise on the command line.

Note:
jbmcmd does not yet support the following functionality:
- Volume Sets (it is only possible to activate and deactivate by ID)
- Dynamic Image Recording
- Mirroring

jbxfinfo.exe

This tool can be used to query the location of files in a Volume Set. You can specify a directory or a file on a Volume Set as parameter and the tool reports the media where the files are. Start the tool without parameters for additional command line parameters.

vscopy.exe

This tool can be used to copy contents of Volume Sets to the hard disk if the Jukebox Manager Service is not running. This tool must not be run while the Jukebox Manager Service is running.

On the command line specify the drive with a Volume Set disc and optionally a directory or file on the disc. As second parameter specify a hard disk directory to copy the files to. The files will be restored with their full path names appended to the specified hard disk directory. This tool also restores spanned files. To do this insert all media which contain parts of the file and restore the whole media or only the file you are interested in.
Note that vscopy creates a second directory with the extention '.map' which stores Volume Set meta data. This directory should be kept until all media have been restored.

Start the tool without parameters to get a list of command line parameters.

No Jukebox Manager license is required to use this tool. Also, this tool does not require the server components and will also be installed when performing a client installation.

Known Problems

Hardware Problems

* PIONEER DVD-ROM D-7563
If multiple of these drives are connected to the same SCSI bus, you may experience SCSI

timeout failures. This problem has been observed with firmware revision 1.04.
To workaround this problem, the drives must be connected to a separate SCSI bus, e.g. one bus for the changer, one bus for the DVD-R drives and one bus for the DVD-ROM drives. Additionally, the option "Enable Disconnection" must be disabled for all DVD-ROM drives in the SCSI BIOS.

* MATSUSHITA BD SW-5582 (Rev. BZE6)
A problem exists in the integrated Defect Management functionality of the drive with 50GB BD-R media. This problem increases the possibility of an unrecoverable recording error. To our knowledge and according to our test results it does not affect consistency and readability of the medium nor does it cause data loss. In such a case previously recorded data are still readable.

In addition the drive reports a wrong number of defects for 25GB and 50GB BD-R media. This number is logged in the PoINT Jukebox Manager log file. According to our experience reliability of the recording process is not affected by the incorrect reporting.

Please contact the manufacturer of your hardware regarding details about the problems and availability of a new firmware revision solving these problems.

* PowerFile changer:
On Windows XP SP2 and Windows Server 2003 SP1, the operating system may hang up to 6 minutes while booting. The system is working correctly then.

After temporarily removing the changer from the system it may be necessary to reboot in order to reinitialize the changer. Otherwise the changer and the drives will not be detected by Device Manager nor PoINT Jukebox Manager.

Software Problems

* SCSI throughput of UDO drives very slow when running Jukebox Manager for for the first time.
On some systems the UDO drives will be forced into ASYNC SCSI mode after a communication problem with the Windows disk driver. In this case the reported throughput in the log file is about 1500 KByte/s. Because Jukebox Manager disables the Windows driver at first start, it is sufficient to reboot Windows to get the maximum throughput.

* Low disk space notification
When only using read only media in the jukebox, the total free space on the virtual jukebox volume is 0. This leads to a "low disk space" notification from Windows Explorer, which repeatedly pops-up.

Please refer to Microsoft Knowledge Base article 285107 for more information.

The following registry value can be used to disable free space notifications for the current user for ALL drives:

HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Policies\Explorer
Value Type: DWORD
Value Name: NoLowDiskSpaceChecks
Contents: 1

This change is valid after the next log in.

* Network time out on client computers
The LanManager assumes that a connection to a server is broken if it does not receive an answer within a time out interval. If multiple clients try to access different media, it is possible that the requests cannot be satisfied within the default time out interval.

To increase this value on clients computers add or change this registry value of type DWORD:
\HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\LanmanWorkstation\Parameters\SessTimeout

The value SessTimeout specifies the time out in seconds. Set this value to at least 300. If you are still experiencing network time out errors you may need to increase this value.

After changing this value it is necessary to reboot Windows.

* PoINT Jukebox Manager fails to scan media and the log file contains error messages similar to this:

Reading disc "Jukebox 1\Slot 1" in drive 1 (\Device\CdRom1) failed: 5
(Access is denied.)

This may happen if you used the Security Configuration Editor and enabled the option "Restrict CD-ROM access to locally logged on user only". To solve this problem, either disable the mentioned option or use REGEDIT to clear the value manually:
HKEY_LOCAL_MACHINE\Software\Microsoft\Windows NT\CurrentVersion\Winlogon
Find the value 'allocatecdroms' and set it to 0. Now reboot.

Supported Devices

Contents

This version of PoINT Jukebox Manager supports the devices listed below. If your device is not in the list, refer to the information provided at www.point.de or contact PoINT Software & Systems GmbH.

Jukeboxes

CD/DVD Jukeboxes

- ASACA AM250DVD, AM750DVD, AM1450DVD (opt. double sided)
- ASM CDR-xxx, Series 1000, DVD Series (opt. double sided)
- ASM Zeta
- BDT QuikStor-72, QuikStor-162
- CYGNET ID100

- DISC NSM CDR 100, NSM Mercury
- DISC NSM Satellite, NSM2000
- DISC NSM3000(U), NSM4000(U), NSM6000, NSM7000(U) (opt. Capacity Doubler)
- GRUNDIG GMS-1035, GMS-2105, GMS-3280, GMS-3560
- JVC MC-1x00, MC-2x00, MC-7x00, MC-8x00 (opt. Flipping Mechanism)
- KODAK CD Library 54, CD Library 144
- KUBOTA BA-xxx (opt. double sided)
- KUBOTA DJ20/40 DX
- PIONEER DRM-1004X / DVD-1004V
- PIONEER DRM-5004
- PIONEER DRM-3000, DRM-7000 (opt. Flipping Mechanism)
- PLASMON D-120, D-240, D-480 (opt. Rotation Station)
- PLASMON Enterprise D-875, D-1525, D-2175 (opt. Rotation Station)
- PowerFile C200, R200, R200DL (Requires device driver software)

BD Jukeboxes

- ASACA AM50BD, AM100BD, AM250BD, AM750BD, AM1450BD
- DISC 1000/3000/4000/7000 (1)
- DISC *Blu-safe*® (2)
- HIT NetzOn BD HMS 1035, HMS 2105
- JVC MC-8x00

(1) Robotic also supported using SCSI to USB converter. Tested products:
RATOC Systems, Inc.; USB2.0-UltraWide SCSI Converter U2SCX-LVD
Drives are also supported by SAS connection. Tested products:
LSI Logic SAS1068

(2) DISC Blu-safe Manager must be installed. Please note that DISC Blu-safe Manager will be deactivated and cannot be used anymore, if the device has been configured in PoINT Jukebox Manager. The DISC Blu-safe media changer is not supported on 64 bit operating systems.

MO/UDO Jukeboxes

- ASM ASM20 - ASM150, ASM1100 - ASM1400
- DISC D20, D40
- DISC D9-150U, D9-245, D9-280U, D9-340U, D9-525, D9-525U, D9-1050
- DSM TERASTORE 1800
- DSM TERASTORE 4000 - 7600
- HP 10LC/C, 20LT/T, 20XT, 40fx, 80ex
- HP 125ex, 220mx, 700ux
- HP 20C, 40T, 40st, 80fx, 160ex, 300mx, 1000ux, 1100ux
- HP 80st, 160fx, 320ex, 600mx, 1900ux
- HP 100st, 200fx, 400ex, 700mx, 2300ux
- HP 60C, 120T
- HP 165st, 330fx, 660ex, 1200mx, 3800ux
- HP 100C, 200T
- HP 300st, 600fx, 1200ex, 2200mx, 7100ux
- PLASMON M20, M32, M52, M104, M156, M258, M500
- PLASMON G64, G104, G164, G238, G438, G638
- PLASMON Gx24, Gx32, Gx72, Gx80, Gx134, Gx166, Gx174

PDD Jukebox

- ASACA AM230PD, AM250PD, AM420PD, AM750PD, AM1450PD
- ASM PDD30 - PDD700
- DISC 3000 PDD, 4000 PDD, 7000 PDD

- DISC 3000U PDD, 4000U PDD, 7000U PDD
- DSM V50, V51, V60, V61, V71, V72, V73
- KUBOTA VDC-60
- SONY BW-J601

SCSI CD-ROM Changer

- NAKAMICHI MJ4.8, MJ-5.16S
- PIONEER DRM-624X, DRM-6324X

Drives

CD/DVD-ROM Drives

- Drives of the supported CD/DVD jukeboxes and in addition MMC compatible drives are supported.

MO/UDO Drives

- HP 30ux
- HP 1300t, 2600fx, 5200ex, 9100mx
- Plasmon MOD910E
- Plasmon UDO30E, UDO30I (Rev. A027, A028 have been tested)
- Plasmon UDO60E, UDO60I (Rev. T480 have been tested)
- Sony SMO-F541, SMO-F551, SMO-F561

PDD Drives

- Sony BW-F101, BW-RS101 (Rev. 1.19, 1.50 have been tested)

BD Drives

- LG BE06
- Matsushita BD SW-5582 (FW BZE6 has been tested)
- Matsushita BD SW-5583 (FW 1009)
- Matsushita BD SW-5584
- Matsushita LKM-KB12 (ADA Drive)
- Matsushita LKM-KB23 (ADA Drive)
- Optiarc BD-RW BD-M100A
- Pioneer BD-RW BD-R101A
- Pioneer BD-RW BD-R203
- Plextor BD-R PX-B900A
- Plextor BD-R PX-B920SA

CD/DVD Drives

- Hitachi GF-105x
- Hitachi GF-205x
- HL-DT-ST DVDRAM GMA-4020B
- HL-DT-ST DVDRAM GMA-4120B
- HL-DT-ST DVDRAM GSA-4167B
- HL-DT-ST DVDRAM GSA-H10N/L
- HL-DT-ST DVDRAM GSA-H12N/L
- HL-DT-ST DVDRAM GSA-H42N/L
- HL-DT-ST DVDRAM GSA-H55N/L

- LG GMA-4020B
- LG GMA-4120B
- LG GSA-4167B
- LG GSA-H10N/L
- LG GSA-H12N/L
- LG GSA-H42N/L
- LG GSA-H55N/L
- Matsushita BD SW-5582
- Matsushita BD SW-5583
- Matsushita DVD-R SW-9501 (*)
- Matsushita DVD-RAM LF-D310
- Matsushita DVD-RAM LF-D521
- Matsushita DVD-RAM SW-9571
- Matsushita DVD-RAM SW-9572
- Matsushita DVD-RAM SW-9573
- Matsushita DVD-RAM SW-9575
- Matsushita DVD-RAM SW-9581
- Matsushita DVD-RAM SW-9582
- Matsushita DVD-RAM SW-9583
- Matsushita DVD-RAM SW-9585
- Matsushita DVD-RAM SW-9590
- _NEC DVD_RW ND-1300A
- _NEC DVD+RW ND-2100A
- _NEC DVD+RW ND-2110A
- _NEC DVD_RW ND-2300A
- _NEC DVD_RW ND-2500A
- _NEC DVD_RW ND-2510A
- _NEC DVD+-RW ND-2510A
- _NEC DVD+RW ND-3100A
- _NEC DVD+-RW ND-3450A
- _NEC DVD_RW ND-3500A
- _NEC DVD_RW ND-3520A
- _NEC DVD_RW ND-3530A
- _NEC DVD+-RW ND-3530A
- _NEC DVD_RW ND-3540A
- _NEC DVD_RW ND-3550A
- _NEC DVD_RW ND-3551A
- _NEC DVD+-RW ND-3650A
- _NEC DVD_RW ND-4550A
- _NEC DVD_RW ND-4551A
- _NEC DVD+RW ND-5100A
- _NEC DVD+RW ND-6100A
- _NEC DVD_RW ND-6650A
- _NEC DVD_RW ND-6750A
- _NEC DVD_RW ND-6751A
- _NEC DVD_RW ND-7550A
- _NEC DVD_RW ND-7551A
- Optiarc DVD RW AD-5170A/S
- Optiarc DVD+-RW AD-5170S
- Optiarc DVD RW AD-5173A/S
- Optiarc DVD RW AD-5540A
- Optiarc DVD+-RW AD-5540A
- Optiarc DVD RW AD-5543A
- Optiarc DVD RW AD-5630A
- Optiarc DVD RW AD-5633A
- Optiarc DVD RW AD-5910A
- Optiarc DVD RW AD-5913A

- Optiarc DVD RW AD-7170A/S
- Optiarc DVD RW AD-7173A/S
- Optiarc DVD RW AD-7540A
- Optiarc DVD RW AD-7543A
- Optiarc DVD RW AD-7630A
- Optiarc DVD RW AD-7633A
- Optiarc DVD RW AD-7910A
- Optiarc DVD RW AD-7913A
- Optorite DVD RW DD0201
- Philips DVDRW228
- Philips DVD+-RW DVD8801
- Pioneer BDR101A
- Pioneer DVD-R DVD-R7211 (*)
- Pioneer DVD-R DVD-R7322
- Pioneer DVD-R DVD-R7783
- Pioneer DVD-R DVR-U201 (*)
- Pioneer DVD-RW DVR-103
- Pioneer DVD-RW DVR-104
- Pioneer DVD-RW DVR-105
- Pioneer DVD-RW DVR-106
- Pioneer DVD-RW DVR-107
- Pioneer DVD-RW DVR-108
- Pioneer DVD-RW DVR-109
- Pioneer DVD-RW DVR-110D
- Pioneer DVD-RW DVR-110
- Pioneer DVD-RW DVR-111D
- Pioneer DVD-RW DVR-112
- Pioneer DVD-RW DVR-K11
- Pioneer DVD-RW DVR-K12
- Pioneer DVR-S201 (*)
- Plextor DVDR PX-504A
- Plextor DVDR PX-708A
- Plextor DVDR PX-712A
- Plextor DVDR PX-716A
- Plextor DVDR PX-740A
- Plextor DVDR PX-750A
- Plextor DVDR PX-755A
- Plextor DVDR PX-800A
- Plextor DVDR PX-810A
- Sony DVD RW DRU-500A
- Sony DVD RW DRU-510A
- Sony DVD RW DRU-530A
- Sony DVD RW DRU-700A
- Sony DVD RW DW-D22A
- Sony DVD RW DW-Q30A
- Sony DVD RW DW-U10A
- Teac DV-W50E
- Teac DV-W58D
- Teac DV-W516D
- Teac DV-W516E
- Teac DV-W5000
- Toshiba SD-W1101 (*, single lun mode)
- Toshiba SD-W1111 (*, single lun mode)

(*) These drives must be connected to a separate SCSI bus.

Tested iSCSI and FibreChannel Hardware

iSCSI Bridges

- ATTO iPBridge 1550D
- Paralon iS550 iSCSI Bridge

FibreChannel Bridge

- CROSSROADS 4250 Storage Router

FibreChannel host bus adapters

- Emulex LP8000
- ATTO ExpressPCI FC SW
- Qlogic SANblade

System Requirements

Contents

Operating System

Supported 32 Bit operating systems are:
- Windows Server 2008 SP2
- Windows 7 (Professional, Ultimate and Enterprise)
- Windows Vista SP2 (Business, Ultimate and Enterprise)
- Windows Server 2003 SP1 and 2003 R2
- Windows XP Professional SP3

Supported 64 Bit operating systems are:
- Windows Server 2008 and 2008 R2
- Windows Server 2003 and 2003 R2

PoINT Jukebox Manager also requires the .NET 2.0 Framework (download 32 Bit Framework, download 64 Bit Framework).

Hardware Requirements

Intel Pentium based system or a compatible processor with at least 2.0 GHz (or a multi core processor).

For 32 Bit Windows operating systems the minimum requirement is 2 GByte RAM. On 64 Bit Windows operating systems 4 GByte RAM are required.

Hard Disk Space

Note that the hard disk used to store images and the database must not be encrypted or compressed.

Program Files
The program files require about 100 MByte of hard disk space on the system partition.

Database / Read & Directory Cache
NTFS formatted hard disk partition with space to store the complete directory structure of all files and directories which will be managed by PoINT Jukebox Manager. The following formula is an estimation for the required space for the directory cache in bytes when not using Volume Sets:

(512 * NumDirs) + (128 * (NumDirs + NumFiles))

When using Volume Sets, the calculated space must be multiplied by 2.

<NumDirs> and <NumFiles> are the total number of files and directories stored in the jukebox.

Because PoINT Jukebox Manager requires one entry for the size of Read & Directory Cache, the size for an optional Read Cache must be added to the calculated Directory Cache size.

Write Cache
Hard disk space required to cache at least one complete optical disc, if write cache should be used.

Dynamic Image Recording
When using Dynamic Image Recording (recommended for CD-R, DVD-R, DVD+R and BD) or Mirroring, at least two recording drives are required per jukebox (except single drives). Additionally, hard disk space to cache at least 3 media is required.
Attention: The administrator should be aware of the fact that data that is not yet migrated to optical media is stored on hard disk. Therefore it is strongly recommended to use a RAID system to store the buffered data.

SCSI Subsystem

The SCSI adapters connected to hard disks and optical drives shall be PCI bus-master adapters. This version has been tested with Adaptec and LSILOGIC Ultra and Ultra160 adapters.

In case of recorder drives which do not support Buffer Underrun Protection not more than 4 recorder drives shall be connected to one SCSI bus.

SCSI hard disks shall not be connected to the same SCSI bus as recorder drives.

To ensure best reliablity of the SCSI subsystem we recommend to connect recorder drives (CD/DVD/BD, MO, UDO) and other devices (hard disk, CD/DVD reader drives, jukebox robotic) to separate SCSI buses.

Contact Information

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