Sun StorEdge™ Media Central 1.0 Global Release Notes

THE NETWORK IS THE COMPUTER™

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Introduction

This document contains information about the Sun StorEdge™ Media Central 1.0 global release.

Topics in this document include:

- Software Limitations
- known Bugs
- Closed Bugs
- Installing the Localized Media Central Software on Solaris
- Installing the Localized Media Central Software on Windows
- Removing the Localized Media Central Software
- Displaying Localized Property Key Names

Software Limitations

This section describes the limitations associated with the Media Central 1.0 global release, including:

- Java Clients
- VTR
- Louth
- File System
- NTP
- Vela Decoder and Genlock

Java Clients

Time Synchronization

- Time of client hosts needs to be in sync with MC servers. If the time is not synchronized within two seconds, behavior of the Player tool is unstable.
- To synchronize client and server time, use the following methods:

For Solaris, user needs to

- manually change the system time to be in sync by executing the following command as super user:

  ```
  % rdate <server name>
  ```

- or, set up `mcntp` on the Media Central server, and configure the client host as NTP client of the MC server.

NTP is suggested for users who need the GUI presentation matching exactly with MC server's activity. See the *Sun StorEdge Media Central Installation and Configuration Guide*.

For PCs, user needs to

- manually change system time to be in sync with, or
- set up `mcntp` on the MC server, and use public domain software like "Dimension4" for the client host.

  The URL is `http://www.thinkman.com/~thinkman/dimension4/index.htm`

  See the *Sun StorEdge Media Central Installation and Configuration User's Guide*.

Client Machine

- Java clients should NEVER be executed on MC server machine.

Inpoint/Outpoint in Player tool & Louth

- StorEdge Media Central supports only GOP accurate trimming. Trimming is a feature to achieve playing a clip with inpoint/outpoint.
- Inpoint/Outpoint needs to be specified on I-Frame boundary. Currently, MC does not support trimming (splicing) at non-I-frame (P or B-frame). If non-I-frame is specified as inpoint/outpoint, it will be trimmed (spliced) at the next I-frame.
- With I-frame only video clip, any frame can be specified as inpoint/outpoint.

VTR

- Support only one VTR per one MC server.

Louth

Frame Accuracy with Vela Decoders

- All decoders should be genlocked.
- With 8 Vela decoders, there will be a 15% of chance to have a delay on starting the first video clip of the playlist. The delay will be within a frame.

  There are no delay on the subsequent clips of the playlist.

Frame Accuracy with Tektronix Decoders

- Tektronix decoders have no genlock feature. Therefore, frame synchronizer is needed for Tektoronix decoders.
- Without the frame synchronizer, the magnitude of the delay on starting first clip of the playlist will be 1-2 frames.

  There are no delay on the subsequent clips of the playlist.

Frame Accuracy with Tektronix Encoders

- Tektronix Encoder causes 5-7 seconds of delay while starting encoding.

  This is same as the situation with Recorder tool described in Section, “Inpoint/Outpoint in Player tool & Louth,” above.

Exclusive Usage of Decoder/Encoder

- Once the Media Central server is configured for Louth by using the Admin. Tool, selected decoders and encoders for Louth will be exclusively used only for the Louth system. Therefore, once MC server is configured for Louth, decoders and encoders selected for the Louth system could not be used by the Player/Recorder tools.

File System

Throughput limitation

- Immediately after power-up of the A1000 storage arrays, the video file system write throughput (i.e. ability to support encoding and migration onto the server) is limited to approximately half rated capacity until the A1000 write caches become enabled. The A1000 write caches will become enabled when the battery which supplies power for the cache in the event of a power failure becomes fully charged. This period can vary from several minutes to several hours depending on how long the A1000's were powered off.
- Once the A1000 write cache battery is fully charged, the file system fully meets its throughput specification.

NTP

- The first time NTP is configured, it is necessary to use the date command to set the server time to a value close, but less than that of the external clock. Then NTP locking will occur relatively fast.

Vela Decoder and Genlock

- Vela Decoders need to be genlocked for frame accurate start and following problem.
- If Vela Decoders are not genlocked, very first frames of a video clip will be shown as black and white video for any PAL video clip.

  This will not happen for the NTSC video clip.

Known Bugs

The following is a list of all the unresolved problems in the Media Central 1.0 global release. If you need to communicate a problem with a Sun representative, please mention the corresponding Id associated with the bug.

Bug Id: 4327074

When clip is created or deleted while the Player tool is running, the "Add clip" button of the Player tool will not show a dialog box to display the contents. If this occurs, the user needs to retstart the Player tool.

Bug Id: 4306128

When different locales (en, ja, zh, de) are used on the same client machine, the Admin. Tool shows "Admin.RefreshRate (sec)" parameter multiple times in the client property (shown by clicking on the "StorEdge Media Client" node). When locale is changed, the user needs to remotely access the `.mcconf` file of their home directory to fix this problem.

Bug Id: 4313386

The Video clip that is encoded by the Record tool will be 5 to 7 seconds shorter than the specified duration. The user needs to take it into account when to specify the duration.

Bug Id: 4317663

Record tool will start 5 to 7 seconds after the start time specified. This happens on both manual start and timed start. The user needs to take the delay into account when to specify the start time.

Bug Id: 4297074

When the LTC Sync error occurs with `mcntpd` that uses AEC-BOX-20 , the user must set the AEC-BOX-20 unit ID to 1.

Workaround: If this value is not set to 1 then, the user needs to set the DIP switches inside the AEC-BOX to the lowest ID values (that is 1).

Bug Id: 4299262

The Media Central NTP daemon performs NTP locking of Media Central to an external LTC clock via the AEC-BOX-20. This works only if the supplied LTC signal is reliable. If the timecode is interrupted or changed, the syncing server (`mcntpd`) needs to be restarted.

Bug Id: 4287327

When recording from the Visiontech encoder, “libthread” panic will occur intermittently with the start-at option.

Bug Id: 4292855

When the PCI extension chassis is used, intermittent system panics occurs.

Bug Id: 4260678

If two VTRs are opened at different nodes from one recorded application this will crash the server.

Bug Id: 4268182

The PID values inserted by the encoders (Tektronix and Visiontech) may cause contention with DVB applications.

Bug Id: 4299236

Playout through Velas may result in Black and White during first frames of the video. This is a RFE.

Bug Id: 4252208

While playing on all the channels, some channels stop playing after a long time.

Bug Id: 4285622

Location of locale files are not Sun’s standard location. This is a RFE.

Bug Id: 4321689

When starting a single A/V clip by using a Tek decoder video, artifacts appear at the beginning and at the end of the A/V clip. When in the loop mode, the second play will not show any artifacts. The user, however, needs to stop the clip before the end of the clip. In this case, the video artifact may or may not appear.

Bug Id: 4314126

In the Media Central Video Asset Property Page, the "panel: Cancel” button is not working.

Bug Id: 4250320

Terminating a recording session prematurely when the recording clip is playing simultaneously produces an error dialog box and does not reclaim the unused file space.

Bug Id: 4265628

The Adminstrator displays a Louth VideoBeans component whether or not a Louth Automation system has been installed.

Closed Bugs

This section contains a list of all bugs that have been resolved since the first release of the Media Central software.

Bug Id: 4306487

Louth cannot access Tektronics encoders and decoders even if those devices are connected and configured appropriately.

Bug Id: 4294491

Users cannot import or export video contents to and from Windows NT servers. They are still unable to import or export contents from those platforms.

Note – Windows NT workstation, Windows 95, and Windows 98 do not support the FTP protocol.

Bug Id: 4294495

The MC server would crash when a content is being exported to external hosts.

Bug Id: 4297171

The VTR GUI tool window would freeze when the connection between the VTR and MC fails.

Bug Id: 4297179

The VTR GUI tool window would freeze when user clicks operational buttons many times very quickly.

Bug Id: 4297682

When a video content is copied by the Migrator tool, parameters of the content being shown by the Migrator tool will be different from the original.

Bug Id: 4299245

The Player tool window would freeze when the decoder on the MC server stops with an error.

Bug Id: 4307030

The Content list dialog of the Player tool will not be updated when the list is changed by other client tools.

Bug Id: 4293111

The Play button of the Player tool would not come back to "active" when it finishes playing.

Bug Id: 4314178

When the MC server is crashed, the Recorder application does not detect it and display as if it is still running.

Bug Id: 4295469

The Text field length of AMS property in Admin. Tool is too short to enter long class name.

Bug Id: 4268603

"mcainit stop" does not stop all processes started by "mcainit start."

Bug Id: 4315091

When the "New Clip" button is pressed and displays the "New Clip" dialog box, the Recorder application window would freeze.

Bug Id: 427418

The "Stop" functionality of the search feature on the Browser was not functioning properly.

Bug Id: 4299986

The Migrator tool window would freeze when the disk is full on the MC server.

Bug Id: 4272506

The Clock and Timer displayed in the Player/Recorder tool runs slower than the real time.

Bug Id: 4296294

The "Abort" feature of the Migration, Import, and Export from the Migrator tool is not functioning.

Bug Id: 4314177

“vssm” crashes when playing more that 25 playlists. This was caused by bad clip.

Bug Id: 4296346

Tek Encoder: The Mux rate is greater than 40 bits/s is set to 6 Mbits/s.

Fix: The Tek encoder can generate MPEG2 bitstream up to 50Mbps. This 50Mbps limitation is from vsm.

Bug Id: 4297682

Migrator does not copy video_profile, video_frame_rate, and video_bit_rate. When a video content is copied by the Migrator tool, the parameters of the content being shown by the Migrator tool will be different from the original.

Fix: The problem was the metadata file associated with the source, which contained the video and audio specific metadata, was not copied by the vssm server during the migration process. This was corrected and by performing the metadata copy operation after the migration finishes.

Bug Id: 4285152

Trimming of the 4:2:2 clips (25Mbits/s and higher) does not work well on Tektronix generated content.

Fix: This bug is fixed by nulling the PTS of last audio PES packet, thus the decoder will stop getting extra data from audio buffers. Now trimmer works fine for all bitrates.

Bug Id: 4267099

Open GOP support for MPEG trimming. In gop accurate trimming, the losing of the reference picture will cause some artifacts (like blocks, etc.) in decoding.

Bug Id: 4292865

Tek decoder configuration parameters for A/V mezzanines is undefined or incomplete. This bug cannot be reproduced any more.

Bug Id: 4272305

The asset server does not work with the Oracle 8*i* database.

Bug Id: 4262517

Louth Automation integration is limited to recording or playing one channel.

Bug Id: 4271801

Tektronix encoders and decoders may not work in the SBS PCI expansion chassis.

Bug Id: 4272599

The Asset Manager should not allow the following fields to be edited: duration, URL, and modified date. Editing these fields produces an error message and does not update the asset database.

Bug Id: 4273254

When using the Player client, or a Louth automation system in cue-with-data mode, the outpoint must not be set closer than five frames from the end of the clip. If the outpoint is too close to the end of the clip, the Player displays an error message; the Louth Automation system may stop playing

Installing the Localized Media Central Software on Solaris

The Media Central software is localized into German, Japanese, and simplified Chinese. To install the localized packages, follow these steps *after* the installation of the English Media Central packages is complete.

English version of the Media Central Software is the prerequisite for the localized Software.

1. **Become the superuser.**
2. **Insert the Media Central Global CD in the host's CD-ROM drive.**
3. **Start the installation script to install the English version of the Media Central Software on required hosts.**

```
# cd /cdrom/mediacentral_1_0_global/MediaCentral/Solaris_2.6/sparc/
# ./mcinstall.sh
```

Note – See the *Sun StorEdge Media Central Installation and Configuration Guide* for more information on how to install the Media Central software.

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4. **Start the l10n installation script to install the localized version of the MediaCentral Software on the required host.**

```
# cd /cdrom/mediacentral_1_0_global/MediaCentral/Solaris_2.6/sparc/
# ./mcinstall_l10n.sh
```

The script displays its Main Menu:

```
     Sun StorEdge Media Central Localization
                   Main Menu

installed packages, if any
1) Install
2) Remove
3) Quit
Enter your choice:
```

5. **Type 1 to install the localized packages.**

   The script displays available languages to be installed:

```
     Sun StorEdge Media Central Localization
                   Main Menu

Languages to install

1) Japanese
2) Simplified Chinese
3) German
4) Done

Enter your choice:
```

6. **Select the language you want to install.**

   The script installs Localization packages which are corresponding to the English packages.

7. **Press Return.**

   The script displays Install Menu.

8. **Type 4 when installation is finished.**

   The script displays Main Menu.

9. **Type 3 to quit the script.**

Installing the Media Central Software on Windows

To install the Media Central Software on the Microsoft Windows Client, follow these steps on any Microsoft Windows 95, 98, or NT Workstation. Sun provides the zipped files to be installed because of the bug below.

Note – As indicated in Bug Id 4309899, the InstallShield dialog is not displayed correctly in Japanese Windows.

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1. **Insert the Media Central Global CD in the CD-ROM and open it in Windows Explorer.**
2. **Navigate to the `MediaCentral/Win32/x86/jar_zip` folder.**

   You will see files named `de.zip`, `en.zip`, `ja.zip`, and `zh.zip`.
3. **Unzip the files into the `C:\Program Files` folder for English, Japanese and simplified Chinese, and the `C:\Programme` folder for German as a default folder to install Localized Media Central Client Software.**
4. **Double click the `launcher.bat` to start the Media Central Client GUI.**

   You will see `launcher.bat` in `C:\Program Files\MediaCentral\bin`.

   In the same folder, you can find the shortcut called `launcher`.
5. **To uninstall Media Central Software, delete the `Media Central` folder.**

Removing the Localized Media Central Software

To remove the localized packages for German, Japanese, and Simplified Chinese languages, follow the following steps *before* removing the English packages.

1. **Become the superuser.**
2. **Insert the Media Central Global CD in the host's CD-ROM drive.**
3. **Start the l10n installation script to remove the localized version of the Media Central software on the required host.**

```
# cd /cdrom/mediacentral_1_0_global/MediaCentral/Solaris_2.6/sparc/
# ./mcinstall_l10n.sh
```

The script displays its Main Menu:

```
     Sun StorEdge Media Central Localization
                   Main Menu

Installed packages, if any

1) Install
2) Remove
3) Quit

Enter your choice:
```

4. **Type 2 to remove the localized packages.**

The script displays languages to be removed:

```
     Sun StorEdge Media Central Localization
                  Main Menu

   Languages to remove

   1) Japanese
   2) Simplified Chinese
   3) German
   4) Done

   Enter your choice:
```

5. **Select the language you want to remove.**

   The script removes localized packages for the language you choose in the menu.

6. **Press Return.**

   The script displays the Remove Menu when it's done.

7. **Type 4 to go back to the Main Menu.**

8. **Type 3 to quit the script in the Main Menu.**

9. **Start the installation script to remove the English version of the Media Central software on the required host.**

```
# cd /cdrom/mediacentral_1_0_global/MediaCentral/Solaris_2.6/sparc/
# ./mcinstall.sh
```

Note – Please see the *Sun StorEdge Media Central Installation and Configuration Guide* to remove the English version of Media Central software *after* removing the localized packages.

Displaying Localized Property Key Names

To display the property key names in Administrator GUI on Clients, follow these steps on Video server and Asset Manager Server.

Note – As indicated in Bug Id 4313999, In Administrator all property key names are displayed in English.

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1. **Set the environment variable LANG to a designated locale. If the LC_environment variables are already set, LANG might be ignored. In that case, LC_ALL should be set to a designated locale. Please refer to the locale(5) manual page for the detailed information.**

```
# LANG=locale name; export LANG
```

2. **Restart the Video server and Asset server.**

   Please refer to the *Sun StorEdge Media Central Installation and Configuration Guide*.