



Avid MediaNetwork v5.1 Performance Guide

Avid Unity MediaNetwork v5.1 Change History

| Date Revised | Release | Changes Made |
|--------------|---------|--|
| 9/07/2010 | V5.1.x | Performance data was added for AVC-Intra 50 and AVC-Intra 100 resolutions, see tables starting with “1080i on page 4.” |
| 4/20/2009 | V5.1.x | Avid has started an initiative to characterize a variety of software applications in an Avid Unity MediaNetwork shared storage environment. Apple® Final Cut Pro® is one of the applications that have been tested. For more information, see “Media Engine and MEDIArray Performance with Final Cut Pro on page 8.” |

The purpose of this document is to provide performance guidance for the Avid Unity MediaNetwork v5.1 release. This release will introduce support for operating systems Leopard (10.5.3 and later) and Vista Service Pack 1. As a result of new performance enhancements to the editor, Avid Unity MediaNetwork v5.1 will now have the ability to support additional stream counts on fewer drives from previous releases. **All results were based on using Media Composer and Symphony v3.0 as well as DS v8.4.**

What’s New in MediaNetwork v5.1

- Client support for Leopard (10.5.3 and later) and Vista Service Pack1
- Support for Media Composer v3.0 / Symphony v3.0 / DS v8.4 / NewsCutter v7.0
- Larger drive sizes (1TB)
- Increased scaling capabilities to a maximum of 8 engines.
- Increased client counts (for example: MediaNetwork 5.1 now supports up to eight 1:1 Uncompressed HD Editors.)

Important Information

Avid recommends that you read all the information in this performance document thoroughly before installing or using any new software release.

Δ! Avid stresses that the information in this document should be used as guidelines only. The amount and type of effects used by each client can cause changes in the provided guidelines.

Δ! If any Allocation Group includes an Avid editor earlier than the versions listed in the What’s New in MediaNetwork v5.1, see the Avid Unity MediaNetwork 5.0.x Performance Guide.

Δ! Meridien is not supported in MediaNetwork v5.1.

Δ! A reduction in the frequency of audio or video cuts might be necessary to allow for more streams of video playback.

Δ! Mac OSX clients cannot capture 8-bit 1:1 HD media to a mirrored Avid Unity MediaNetwork workspace; 10-bit 1:1 HD media works fine. To capture 8-bit 1:1 HD media to an Avid Unity MediaNetwork workspace, you must unmirror the workspace, and then capture the 8-bit 1:1 HD media.

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Media Engine and MEDIArray Performance

Scaling the Avid Unity MediaNetwork environment is based on the amount of bandwidth a Media Engine (or several MEDIArrays) is able to provide. A single Media Engine or MEDIArray comprised of 16 drives can produce upwards of 340 MB/s (DNxHD and SD) or 315 MB/s (1:1 Uncompressed HD).

- MediaNetwork 5.1 supports a Max of 46 Clients (26 Fibre and 20 Ethernet).
- MediaNetwork Ethernet configurations are limited to 90-100 MB/s.
- The data below applies to Media Engine, MEDIArray XT and MEDIArray LP storage.

△! To attain the best possible bandwidth, Avid recommends that an allocation group or multiple allocation groups not span a single Media Engine or MEDIArray.

△! Writes to a mirrored workspace are always two times a single stream.

| Allocation Group | DNxHD or SD | | 1:1 8 Bit HD with or w/o DNxHD or SD | | 1:1 10 Bit HD with or w/o DNxHD or SD | |
|-----------------------|--------------|-------------------|--------------------------------------|-------------------|---------------------------------------|-------------------|
| | Single Drive | Allocation Group | Single Drive | Allocation Group | Single Drive | Allocation Group |
| One 16 Drive | 21 MB/s | 340 MB/s | 19.5 MB/s | 315 MB/s | 19.5 MB/s | 315 MB/s |
| Two 16 Drive | 21 MB/s | 680 MB/s | 19.5 MB/s | 630 MB/s | 19.5 MB/s | 630 MB/s |
| Three 16 Drive | 21 MB/s | 1,020 MB/s | 19.5 MB/s | 945 MB/s | 19.5 MB/s | 945 MB/s |
| Four 16 Drive | 21 MB/s | 1,360 MB/s | 19.5 MB/s | 1,260 MB/s | 19.5 MB/s | 1,260 MB/s |
| Five 16 Drive | 21 MB/s | 1,700 MB/s | 19.5 MB/s | 1,575 MB/s | 19.5 MB/s | 1,575 MB/s |
| Six 16 Drive | 21 MB/s | 2,040 MB/s | 19.5 MB/s | 1,890 MB/s | 19.5 MB/s | 1,890 MB/s |
| Seven 16 Drive | 21 MB/s | 2,380 MB/s | 19.5 MB/s | 2,205 MB/s | 19.5 MB/s | 2,205 MB/s |
| Eight 16 Drive | 21 MB/s | 2,720 MB/s | 19.5 MB/s | 2,520 MB/s | 19.5 MB/s | 2,520 MB/s |

| | | | | | | |
|-------------------|-----------|-------------------|-----------|-------------------|-----------|-----------------|
| 32 Drives | 17.5 MB/s | 560 MB/s | 15 MB/s | 490 MB/s | 15 MB/s | 490 MB/s |
| 48 Drives | 17.5 MB/s | 840 MB/s | 12.5 MB/s | 615 MB/s | 12.5 MB/s | 600 MB/s |
| 64 Drives | 17.5 MB/s | 1,120 MB/s | 12.5 MB/s | 810 MB/s | 9.5 MB/s | 620 MB/s |
| 80 Drives | 15 MB/s | 1,200 MB/s | 11.5 MB/s | 920 MB/s | 8.5 MB/s | 700 MB/s |
| 96 Drives | 15 MB/s | 1,440 MB/s | 10 MB/s | 1,000 MB/s | 9 MB/s | 910 MB/s |
| 112 Drives | 15 MB/s | 1,680 MB/s | 9 MB/s | 1,050 MB/s | 8 MB/s | 925 MB/s |
| 128 Drives | 15 MB/s | 1,920 MB/s | 8.5 MB/s | 1,115 MB/s | 7 MB/s | 935 MB/s |

Example 1: What is the expected Bandwidth of a **32 Drive** Allocation Group when using **1:1 10 Bit HD**?

| Closest Allocation Group | Total = |
|--------------------------|-----------------|
| 32 Drives | Total: 490 MB/s |



| |
|-------------------------------|
| 32 Drive AG Rating = 490 MB/s |
|-------------------------------|

Example 2: What is the expected Bandwidth of a **124 Drive** Allocation Group when using **DNxHD or SD**?

| Closest Allocation Group | Single Drive Bandwidth (128 Drives) | # of Drives in Allocation Group | Total = 124 Drives x 15 MB/s |
|--------------------------|-------------------------------------|---------------------------------|---------------------------------|
| 128 Drives | 15 MB/s | 124 Drives | Total: 1860 MB/s |



| |
|--------------------------------|
| 124 Drive AG Rating = 1860MB/s |
|--------------------------------|

Client Performance / Resolution (MB/s) Chart and Examples

The charts below define the bandwidth used for each resolution and the maximum stream count. For some platforms, achieving the maximum stream count per client will require switching the video quality mode. All ratings have been adjusted to include 8 tracks of audio.

DV

| Resolution | Project Format | Number of Streams per Client (MB/s) | | | | | | MultiCam | |
|------------|----------------|-------------------------------------|----|----|----|----|----|----------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 4-way | 9-way |
| DV 25 | NTSC, PAL | 4 | 8 | 12 | 16 | 20 | 24 | 20 | |
| DV 50 | NTSC, PAL | 8 | 16 | 24 | 32 | | | | |

MPEG

| Resolution | Project Format | Number of Streams per Client (MB/s) | | | | | | MultiCam | |
|------------|-------------------|-------------------------------------|----|------|----|----|----|----------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 4-way | 9-way |
| MPEG 30 | 30i NTSC, 25i PAL | 4 | 8 | 12 | 16 | 20 | 24 | 20 | |
| MPEG 40 | 30i NTSC, 25i PAL | 5 | 10 | 15 | 20 | 25 | | 25 | |
| MPEG 50 | 30i NTSC, 25i PAL | 6.5 | 13 | 19.5 | 26 | | | | |

Legend: Shaded cells = Fibre Only
Empty Cells = Not Supported

JFIF Progressive

| Resolution | Project Format | Number of Streams per Client (MB/s) | | | | | | MultiCam | |
|----------------|-------------------|-------------------------------------|----|------|----|------|----|----------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 4-way | 9-way |
| 35:1 | 24p, 23.976p NTSC | 1.5 | 3 | 4.5 | 6 | 7.5 | 9 | 7.5 | 15 |
| | 25p, 24p PAL | 1.5 | 3 | 4.5 | 6 | 7.5 | 9 | 7.5 | 15 |
| 28:1 | 24p, 23.976p NTSC | 1.5 | 3 | 4.5 | 6 | 7.5 | 9 | 7.5 | 15 |
| | 25p, 24p PAL | 1.5 | 3 | 4.5 | 6 | 7.5 | 9 | 7.5 | 15 |
| 14:1 | 24p, 23.976p NTSC | 2.5 | 5 | 7.5 | 10 | 12.5 | 15 | 12.5 | 25 |
| | 25p, 24p PAL | 2.5 | 5 | 7.5 | 10 | 12.5 | 15 | 12.5 | 25 |
| 3:1 | 24p, 23.976p NTSC | 6 | 12 | 18 | 24 | | | 30 | |
| | 25p, 24p PAL | 7 | 14 | 21 | 28 | | | 35 | |
| 2:1 | 24p, 23.976p NTSC | 8 | 16 | 24 | 32 | | | 40 | |
| | 25p, 24p PAL | 9.5 | 19 | 28.5 | 38 | | | 47.5 | |
| 1:1 | 24p, 23.976p NTSC | 17.5 | 35 | 52.5 | 70 | | | | |
| | 25p, 24p PAL | 22 | 44 | 66 | 88 | | | | |
| 1:1 10b | 24p, 23.976p NTSC | 22 | 44 | 66 | | | | | |
| | 25p, 24p PAL | 25 | 50 | 75 | | | | | |

Legend: Shaded cells = Fibre Only
Empty Cells = Not Supported

JFIF Interlaced

| Resolution | Project Format | Number of Streams per Client (MB/s) | | | | | | MultiCam | |
|-------------------|-------------------|-------------------------------------|----|------|----|------|----|----------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 4-way | 9-way |
| 15:1s | 30i NTSC, 25i PAL | 1.5 | 3 | 4.5 | 6 | 7.5 | 9 | 7.5 | 15 |
| 4:1s | 30i NTSC, 25i PAL | 2.5 | 5 | 7.5 | 10 | 12.5 | 15 | 12.5 | 25 |
| 2:1s | 30i NTSC, 25i PAL | 4 | 8 | 12 | 16 | 20 | 24 | 20 | 40 |
| 20:1 | 30i NTSC, 25i PAL | 2 | 4 | 6 | 8 | 10 | 12 | 10 | 20 |
| 10:1 | 30i NTSC, 25i PAL | 3 | 6 | 9 | 12 | 15 | 18 | 15 | 30 |
| 3:1 | 30i NTSC, 25i PAL | 7 | 14 | 21 | 28 | | | 35 | |
| 2:1 | 30i NTSC, 25i PAL | 9.5 | 19 | 28.5 | 38 | | | 47.5 | |
| 1:1 SD | 30i NTSC, 25i PAL | 22 | 44 | 66 | 88 | | | | |
| 1:1 10b SD | 30i NTSC, 25i PAL | 28.5 | 57 | 85.5 | | | | | |

Legend: Shaded cells = Fibre Only
Empty Cells = Not Supported

1080i

| Resolution | Project Format | Number of Streams per Client (MB/s) | | | | | | MultiCam | |
|----------------------|----------------|-------------------------------------|-----|------|----|---|---|----------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 4-way | 9-way |
| 1:1 10-bit | 1080i/59.94 | 157 | 314 | | | | | | |
| 1:1 | | 125 | 250 | | | | | | |
| DNxHD 220 X | | 28 | 56 | 84 | | | | | |
| DNxHD 220 | | 28 | 56 | 84 | | | | | |
| DNxHD 145 | | 18.5 | 37 | 55.5 | 74 | | | | |
| DVCPRO HD | | 14.5 | 29 | 43.5 | | | | | |
| AVC-Intra 50 | | 8 | 16 | | | | | | |
| AVC-Intra 100 | | 14 | 28 | | | | | | |

| | | | | | | | | | |
|----------------------|----------|------|-----|------|----|--|--|--|--|
| 1:1 10-bit | 1080i/50 | 131 | 262 | | | | | | |
| 1:1 | | 105 | 210 | | | | | | |
| DNxHD 185 X | | 23.5 | 47 | 70.5 | | | | | |
| DNxHD 185 | | 23.5 | 47 | 70.5 | | | | | |
| DNxHD 120 | | 16 | 32 | 48 | 64 | | | | |
| DVCPRO HD | | 14.5 | 29 | 43.5 | | | | | |
| AVC-Intra 50 | | 8 | 16 | | | | | | |
| AVC-Intra 100 | | 14 | 28 | | | | | | |

Legend: Shaded cells = Fibre Only
Empty Cells = Not Supported

1080p

| Resolution | Project Format | Number of Streams per Client (MB/s) | | | | | | MultiCam | |
|----------------------|----------------|-------------------------------------|-----|------|----|----|---|----------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 4-way | 9-way |
| 1:1p 10-bit | 1080p/29.97 | 157 | 314 | | | | | | |
| 1:1 | | 125 | 250 | | | | | | |
| DNxHD 220 X | | 28 | 56 | 84 | | | | | |
| DNxHD 220 | | 28 | 56 | 84 | | | | | |
| DNxHD 145 | | 18.5 | 37 | 55.5 | 74 | | | | |
| DNxHD 45 | | 6 | 12 | 18 | 24 | 30 | | 30 | |
| 1:1p 10-bit | 1080p/25 | 131 | 262 | | | | | | |
| 1:1 | | 105 | 210 | | | | | | |
| DNxHD 185 X | | 23.5 | 47 | 70.5 | | | | | |
| DNxHD 185 | | 23.5 | 47 | 70.5 | | | | | |
| DNxHD 120 | | 16 | 32 | 48 | | | | | |
| DNxHD 36 | | 5 | 10 | 15 | 20 | 25 | | 25 | |
| 1:1p 10-bit | 1080p/24 | 126 | 252 | | | | | | |
| 1:1 | | 101 | 202 | | | | | | |
| DNxHD 175 X | | 23 | 46 | 69 | | | | | |
| DNxHD 175 | | 23 | 46 | 69 | | | | | |
| DNxHD 115 | | 15.5 | 31 | 46.5 | 62 | | | | |
| DNxHD 36 | | 5 | 10 | 15 | 20 | 25 | | 25 | |
| 1:1p 10-bit | 1080p/23.976 | 126 | 252 | | | | | | |
| 1:1 | | 101 | 202 | | | | | | |
| DNxHD 175 X | | 23 | 46 | 69 | | | | | |
| DNxHD 175 | | 23 | 46 | 69 | | | | | |
| DNxHD 115 | | 15.5 | 31 | 46.5 | 62 | | | | |
| DNxHD 36 | | 5 | 10 | 15 | 20 | 25 | | 25 | |
| AVC-Intra 50 | | 8 | 16 | | | | | | |
| AVC-Intra 100 | | 14 | 28 | | | | | | |

Legend: Shaded cells = Fibre Only
Empty Cells = Not Supported

720p

| Resolution | Project Format | Number of Streams per Client (MB/s) | | | | | | MultiCam | |
|---------------|----------------|-------------------------------------|-----|------|----|------|---|----------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 4-way | 9-way |
| 1:1p 10-bit | 720p/59.94 | 142 | 284 | | | | | | |
| 1:1 | | 106 | 212 | | | | | | |
| DNxHD 220 X | | 28 | 56 | 84 | | | | | |
| DNxHD 220 | | 28 | 56 | 84 | | | | | |
| DNxHD 145 | | 18.5 | 37 | 55.5 | 74 | | | | |
| DVCPRO HD | | 14.5 | 29 | 43.5 | | | | | |
| AVC-Intra 50 | | 8 | 16 | | | | | | |
| AVC-Intra 100 | | 14 | 28 | | | | | | |
| 1:1p 10-bit | 720p/50 | 120 | 240 | | | | | | |
| 1:1 | | 89 | 178 | | | | | | |
| DNxHD 185 X | | 23.5 | 47 | 70.5 | | | | | |
| DNxHD 185 | | 23.5 | 47 | 70.5 | | | | | |
| DNxHD 120 | | 15 | 30 | 45 | 60 | | | | |
| DVCPRO HD | | 14.5 | 29 | 43.5 | | | | | |
| AVC-Intra 50 | | 8 | 16 | | | | | | |
| AVC-Intra 100 | | 14 | 28 | | | | | | |
| 1:1p 10-bit | 720p/29.97 | 71 | 142 | | | | | | |
| 1:1 | | 53 | 106 | | | | | | |
| DNxHD 220 X | | 28 | 56 | 84 | | | | | |
| DNxHD 220 | | 18.5 | 37 | 55.5 | | | | | |
| DNxHD 145 | | 18.5 | 37 | 55.5 | 74 | | | | |
| DVCPRO HD | | 14.5 | 29 | 43.5 | | | | | |
| 1:1p 10-bit | 720p/25 | 60 | 120 | | | | | | |
| 1:1 | | 48 | 96 | | | | | | |
| DNxHD 90 X | | 12 | 24 | 36 | 48 | | | | |
| DNxHD 90 | | 12 | 24 | 36 | 48 | | | | |
| DNxHD 60 | | 8 | 16 | 24 | 32 | 40 | | 40 | |
| AVC-Intra 50 | | 8 | 16 | | | | | | |
| AVC-Intra 100 | | 14 | 28 | | | | | | |
| 1:1p 10-bit | 720p/23.976 | 58 | 116 | | | | | | |
| 1:1 | | 46 | 92 | | | | | | |
| DNxHD 90 X | | 11.5 | 23 | 34.5 | 46 | | | | |
| DNxHD 90 | | 11.5 | 23 | 34.5 | 46 | | | | |
| DNxHD 60 | | 7.5 | 15 | 22.5 | 30 | 37.5 | | 37.5 | |
| DVCPRO HD | | 14.5 | 29 | 43.5 | | | | | |
| AVC-Intra 50 | | 8 | 16 | | | | | | |
| AVC-Intra 100 | | 14 | 28 | | | | | | |

Legend: Shaded cells = Fibre Only
Empty Cells = Not Supported

Example 1: What is the minimum drive requirement for an Allocation Group to support a 1:1 10-bit HD editor playing two streams?

| # of Clients | Project Format | Resolution | # of Streams per client | Total Bandwidth Needed = |
|--------------|----------------|------------|-------------------------|--------------------------|
| 1 | 1080i/59.94 | 1:1 10bit | 2 | 314 MB/s (See Page 4) |
| | | | | Total: 314 MB/s |

**Rating for 1:1 HD on 16 Drives
(See Page 2) = 315 MB/s**

Example 2: What is the minimum drive requirement for an Allocation Group to support two 1:1 SD editors writing a single stream each and six DNxHD 145 editors playing six stream each? Note: (See page 2, Writes to a mirrored workspace are always two times a single stream.)

| # of Clients | Project Format | Resolution | # of Streams per client | Total Bandwidth Needed = |
|--------------|----------------|------------|-------------------------|--------------------------|
| 2 | 30i NTSC | 1:1 | 1 x 2 | 88 MB/s (See Page 3) |
| 6 | 1080i/59.94 | DNxHD145 | 4 | 444 MB/s (See Page 4) |
| | | | | Total: 532 MB/s |

**Rating for DNxHD and SD on 32 Drives
(See Page 2) = 560 MB/s**

Example 3: What is the minimum drive requirement for an Allocation Group to support Two DNxHD 90 editors playing two streams each and 1 DV25 4-way MultiCam editors over Ethernet, and a dual stream 1:1 10-bit HD and four triple stream DNxHD 145 editors over fiber?

| # of Clients | Project Format | Resolution | # of Streams per client | Total Bandwidth Needed = |
|--|----------------|------------|-------------------------|--------------------------|
| 2 | 720p/25 | DNxHD90 | 2 | 48 MB/s (See Page 5) |
| 1 | 30i NTSC | DV25 4way | 5 | 20 MB/s (See Page 3) |
| Ethernet Total = (Must be < 90-100 MB/s) | | | | 68 MB/s |
| 1 | 1080i/59.94 | 1:1 10-Bit | 2 | 314 MB/s (See Page 4) |
| 4 | 1080i/59.94 | DNxHD145 | 3 | 222 MB/s (See Page 4) |
| Fibre Total = | | | | 536 MB/s |
| | | | | Total: 604 MB/s |

**Rating for 1:1 10-bit HD with DNxHD and SD on 64 Drives
(See Page 2) = 620 MB/s**

Media Engine and MEDIArray Performance with Final Cut Pro

Avid has tested Final Cut Pro as a client in the Avid Unity MediaNetwork shared storage environment. Testing was done with Avid Unity MediaNetwork v5.1.2 and Final Cut Pro v6.0.4 and v6.0.5. There is no Avid restriction on the QuickTime version. Use the QuickTime version recommended in the Final Cut Pro application. QuickTime v7.6 was the version used in the Avid testing. The following provides information on how many streams were qualified per client at various resolutions.

Δ! Avid Interplay Access supports the Mac OSX platform, and through this application Final Cut Pro QuickTime files and projects can be checked into Interplay. Any Interplay workstation can search for these files and edit their Interplay metadata, though there is currently no tightly integrated workflow between Avid editors and Final Cut Pro within Interplay.

The following list characterizes the setup guidelines for your Final Cut Pro client with Avid Unity MediaNetwork:

- You need to stay in line with the general client parameters specified for all Avid Unity MediaNetwork Macintosh clients. The following are the specific hardware details used in the Avid testing:
 - Platforms — Mac Pro (early 2008) “Harpertown” Dual Quad-Core 3.0 or 3.2 GHz.
 - Operating system — Mac OS 10.5.4 and later.
 - Avid Unity MediaNetwork — Fibre Channel connection using the ATTO Celerity FC-41ES adapter board (Avid has not tested Final Cut Pro as an Ethernet client on Avid Unity MediaNetwork and is not supported at this time).
- Final Cut Pro editing software was characterized with the AJA KONA™3 hardware. The complete Apple Studio 2 bundle was installed.
- Verification tests on Apple Color and Sound Track Pro were run to verify Push - Pull capabilities.
- Final Cut Pro media should be in its own Allocation Group. Including:
 - Scratch disks
 - Project files

Δ! Do not mix Final Cut Pro clients and Avid editor clients within the same Allocation Group.

- Final Cut Pro editing systems require 30% to 50% more bandwidth than Avid Media Composer at similar resolutions.
- The number of Final Cut Pro clients supported in an Allocation Group are about 1/2 the number of Avid Media Composer clients at similar resolutions.

Δ! Make sure the workspaces you are using is part of the Allocation Group you created for Final Cut Pro clients. When Final Cut Pro clients are sharing the same Allocation Group as Avid editing clients, the Final Cut Pro clients have poor performance.

- Digidesign Pro Tools software was not tested with Final Cut Pro clients.

Scaling the Avid Unity MediaNetwork environment is based on the amount of bandwidth a Media Engine (or several MEDIArrays) are able to provide. A single Media Engine or MEDIArray comprised of 16 drives can produce upwards of 220 MB/s (Compressed) or 180 MB/s (Uncompressed SD and HD).

Media Engine Bandwidth with Final Cut Pro Clients

| Allocation Group | Compressed SD | | Uncompressed SD and HD | |
|------------------|---------------|------------------|------------------------|------------------|
| | Single Drive | Allocation Group | Single Drive | Allocation Group |
| One 16 Drive | 13.75 MB/s | 220 MB/s | 11.25 MB/s | 180 MB/s |

Apple DVCPPro

| Resolution | Project Format | Number of Streams per Client | | | | | |
|------------|------------------------|------------------------------|------|------|------|------|------|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| 720*480 | SD DVCPRO25 NTSC/29.97 | 4.1 | 9.2 | 11.2 | 14.9 | 20.2 | 22.9 |
| 720*576 | SD DVCPRO25 PAL/25 | 4.8 | 7.6 | 11.2 | 16.2 | 18.5 | 22.2 |
| 720*480 | SD DVCPRO50 NTSC/29.97 | 7.4 | 14.7 | 22.5 | 29.5 | 36.8 | |
| 720*576 | SD DVCPRO50 PAL/25 | 7.6 | 16.6 | 23 | 29.3 | 36.5 | |

*Legend: Shaded cells = Fibre Only
Empty Cells = Not Supported*

Apple ProRes 422

| Resolution | Project Format | Number of Streams per Client | | | | | |
|------------|----------------|------------------------------|------|------|------|------|------|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| 720*576 | HQ PAL/25 | 8.3 | 15.9 | 27.8 | 32.1 | 39.5 | 48.6 |
| 720*486 | HQ NTSC/29.97 | 9.8 | 18.3 | 26.1 | 34.2 | 43 | 50.5 |
| 1280*720 | HQ/23.98 | 11.5 | 23.7 | 35.5 | 47.1 | 59.8 | 70.6 |
| 1280*720 | HQ/25 | 12.3 | 24.1 | 36 | 50.6 | 60.3 | 71.6 |
| 1280*720 | HQ/29.97 | 15.2 | 29.8 | 45.2 | 61.7 | 74.7 | |
| 1920*1080 | HQ/23.98 | 22.7 | 45.3 | 66.5 | 89.7 | | |
| 1920*1080 | HQ/25 | 24.3 | 47.8 | 72.8 | 95 | | |
| 1280*720 | HQ/50 | 24.8 | 49.4 | 73.6 | 97.6 | | |
| 1920*1080 | HQ/29.97 | 31.8 | 62.6 | 93.3 | | | |
| 1280*720 | HQ/59.94 | 31.7 | 61.3 | 91.9 | | | |
| 720*576 | NQ PAL/25 | 5.6 | 10.9 | 17.7 | 22.5 | 26.6 | 32.1 |
| 720*486 | NQ NTSC/29.97 | 5.8 | 11.1 | 16.5 | 21.9 | 28.1 | 33.4 |
| 1280*720 | NQ/23.98 | 7.5 | 15.7 | 21.6 | 28.9 | 36 | 44.5 |
| 1280*720- | NQ/25 | 8.4 | 16 | 23.9 | 31.7 | 39.9 | 49.5 |
| 1280*720 | NQ/29.97 | 10.3 | 18.1 | 27.1 | 36.1 | 45 | 54 |
| 1920*1080 | NQ/23.98 | 16.4 | 32.1 | 46 | 60 | 74.1 | 89.3 |
| 1920*1080 | NQ/25 | 16.7 | 32.3 | 45.3 | 60.5 | 75.4 | |
| 1280*720 | NQ/50 | 17.4 | 32.2 | 47.7 | 62.9 | 78.3 | |
| 1920*1080 | NQ/29.97 | 19.8 | 36.9 | 54.8 | 73 | | |
| 1280*720 | NQ/59.94 | 19.3 | 38.9 | 58.7 | 75.2 | | |

*Legend: Shaded cells = Fibre Only
Empty Cells = Not Supported*

Hardware and Software Used During Testing

Below is a chart which describes both the hardware and software used at the time of the test qualification.

| Platform | OS | CPU | Memory | Editor Version | Client |
|-----------|----------------|--------------------|--------|----------------------|---------------------|
| HP xw8600 | Vista-64 SP1 | Dual 3.00GHz Xeon | 4GB | Symphony v3.0 | MediaNetwork v5.1 |
| HP xw8600 | XP 32 SP2 | Dual 3.00GHz Xeon | 4GB | Media Composer v3.0 | MediaNetwork v5.1 |
| HP xw8400 | Vista-64 SP1 | Dual 2.66GHz Xeon | 4GB | Media Composer v3.0 | MediaNetwork v5.1 |
| HP xw8400 | Vista-64 SP1 | Dual 2.66GHz Xeon | 4GB | Symphony v3.0 | MediaNetwork v5.1 |
| HP xw8400 | XP 32 SP2 | Dual 2.66GHz Xeon | 4GB | Symphony v3.0 | MediaNetwork v5.1 |
| HP xw8400 | Vista-64 SP1 | Dual-Quad 2.66GHz | 4GB | Media Composer v3.0 | MediaNetwork v5.1 |
| HP xw8400 | XP 32 SP2 | Dual-Quad 2.66GHz | 2GB | Media Composer v3.0 | MediaNetwork v5.1 |
| HP xw8200 | XP 32 SP2 | Quad 2.66GHz | 2GB | Media Composer v3.0 | MediaNetwork v5.1 |
| Mac Pro | 10.5.3 | 2 x 3GHz Dual-Xeon | 4GB | Media Composer v3.0 | MediaNetwork v5.1 |
| Mac G5 | 10.5.3 | 2 x 3GHz Quad G5 | 2GB | Media Composer v3.0 | MediaNetwork v5.1 |
| Mac Pro | 10.5.4, 10.5.6 | 2 x 3GHz Dual-Xeon | 4GB | Final Cut Pro v6.0.4 | MediaNetwork v5.1.2 |