

## Recommended Hardware Specifications – New

<http://www.varian.com/hardwarespecs>

Eclipse™ treatment planning system Hardware

V 11.0

## INTRODUCTION

Eclipse, Eclipse SV and related products are software & hardware packages. As a hardware reseller Varian provides these specs to inform customers as to the configuration of equipment they will receive from Varian when purchasing an Eclipse package at the time of writing of this document, however Varian reserves the right to provide hardware that may be different than the specifications provided here as newer models become available.

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# Recommended: Eclipse™ treatment planning system Non-Calculation Workstation Requirements

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| <b>Platform:</b>                              | <ul style="list-style-type: none"> <li>DELL® OptiPlex 960 (small form factor)</li> </ul>   |
| <b>Processor:</b>                             | <ul style="list-style-type: none"> <li>(Single) Intel® Core™ 2 Duo E8400 3.0 GHz, 6M, 1333MHz FSB</li> </ul>   |
| <b>Bus Type:</b>                              | <ul style="list-style-type: none"> <li>PCI-E</li> </ul>  |
| <b>Memory (RAM):</b>                          | <ul style="list-style-type: none"> <li>8GB DDR3 Non-ECC SDRAM, 1333 MHz</li> </ul>   |
| <b>Drive Controllers:</b>                     | <ul style="list-style-type: none"> <li>SATA-II controller</li> </ul>   |
| <b>Hard Drives:</b><br>Local Storage          | <ul style="list-style-type: none"> <li>≥ 250 GB SATA-II 3.0Gb/s and 8MB Data Burst Cache</li> </ul>  |
| <b>Optical Drive:</b>                         | <ul style="list-style-type: none"> <li>Internal Slim 8X optical DVD +/- RW</li> </ul>  |
| <b>Video Card/Adapter</b>                     | <ul style="list-style-type: none"> <li>256MB ATI RADEON HD 3450 with DVI output</li> </ul>   |
| <b>Monitor</b>                                | <ul style="list-style-type: none"> <li>17" LCD monitor capable of 1280 x 1024 at &gt; 60 Hz</li> <li>20" LCD monitor capable of 1600 x 1200 at &gt; 60 Hz. (optional)</li> </ul>       |
| <b>Keyboard:</b>                              | <ul style="list-style-type: none"> <li>101-key IBM®-compatible</li> </ul>  |
| <b>Mouse:</b>                                 | <ul style="list-style-type: none"> <li>Microsoft® Windows-compatible 2-button scroll mouse</li> </ul>  |
| <b>Network Interface:</b>                     | <ul style="list-style-type: none"> <li>1 LOM 10/100/1000Mbps, compatible with the network operating system and cabling.</li> </ul>   |
| <b>Ports:</b>                                 | <ul style="list-style-type: none"> <li>minimum 2 USB</li> </ul>  |
| <b>Operating System</b> <sup>[4], [5]</sup> : | <ul style="list-style-type: none"> <li>Eclipse (10.0, 11.0): Windows 7 (64 bit Only)</li> <li>Eclipse (8.6, 8.8): Windows XP Professional SP2 &amp; SP3 (32-bit and 64-bit)</li> </ul> |
| <b>Windows® MUI Packs:</b>                    | <ul style="list-style-type: none"> <li>XP Pro Multilingual User Interface License and MUI Software CD for</li> <li>XP Operating System (International Purchase Option)</li> </ul>      |

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| <b>Microsoft Windows Installer:</b> | <ul style="list-style-type: none"> <li>• 3.1</li> </ul>   |
| <b>File System:</b>                 | <ul style="list-style-type: none"> <li>• NT File System (NTFS)</li> </ul>   |
| <b>Windows® OS Architecture:</b>    | <ul style="list-style-type: none"> <li>• 64-bit</li> </ul>  |
| <b>Microsoft® .NET Framework:</b>   | <ul style="list-style-type: none"> <li>• Eclipse (8.6, 8.8, &amp; 10.0,11.0): 1.1, 2.0, 3.0, and 3.5</li> <li>• Eclipse 11.0: 4.0</li> </ul>  |
| <b>Peripherals</b>                  | <ul style="list-style-type: none"> <li>• Digitizer: Minimum of 4000 lines per inch with either USB or RS-232 Serial Interface connectivity</li> <li>• Printer: 64-bit Windows XP or 64-bit Windows 7 compatible network printer with minimum of 48 MB RAM, USB 2.0, Ethernet or wireless connectivity, and 1200x600 dpi b&amp;w and color printing capability.</li> </ul> |

**Notes:**

1. Customers, who require the use and access of EclipseSV version 11.0 from an ARIA version 11.0 workstation, must use the Eclipse version 11.0 hardware specifications instead of the "ARIA for Radiation Oncology Information System (OIS) Workstation" specification.
2. Windows® Vista® is not a validated operating system for Eclipse Version 11.0.
3. Other qualified operating systems for Eclipse v10 & v11 are Windows XP Professional SP2 (64-bit only) , however Eclipse v11 is **not** qualified with Windows XP in 'standalone mode' (e.g. single workstation also supporting the DB).
4. Client workstations usually do not require uninterruptible power supplies. However, they may be needed in areas that experience frequent brown outs or brief power drop outs.
5. Eclipse and Eclipse SV hardware is provided by Varian as a software/hardware package.
6. Specifications subject to change without notice as newer computer models become available.

## Recommended: Eclipse™ treatment planning system Dose Calculation Workstation Requirements

|   |   |
|---|---|
| <b>Platform:</b>                            | <ul style="list-style-type: none"> <li>• DELL® Precision T5500 (mini-tower form factor)<sup>6</sup></li> </ul>  |
| <b>Processor:</b>                           | <ul style="list-style-type: none"> <li>• (Dual) Intel® Xeon™ E5620 with VT/2.4GHz, 12M, 1333MHz FSB</li> </ul>  |
| <b>Bus Type:</b>                            | <ul style="list-style-type: none"> <li>• PCI-E</li> </ul>   |
| <b>Memory (RAM):</b>                        | <ul style="list-style-type: none"> <li>• 24 GB DDR3 ECC SDRAM, 1333 MHz</li> </ul>  |
| <b>Drive Controllers:</b>                   | <ul style="list-style-type: none"> <li>• SATA-II controller</li> </ul>  |
| <b>Hard Drives:<br/>Local Storage</b>       | <ul style="list-style-type: none"> <li>• ≥ Dual 250GB SATA-II 3.0Gb/s and 8MB Data Burst Cache</li> </ul>   |
| <b>Optical Drive:</b>                       | <ul style="list-style-type: none"> <li>• Internal optical DVD +/- RW</li> </ul>   |
| <b>Video Card/Adapter</b>                   | <ul style="list-style-type: none"> <li>• 1GB ATI FirePro V4800 with DVI &amp; Display Port output</li> </ul>  |
| <b>Monitor</b>                              | <ul style="list-style-type: none"> <li>• 17" LCD monitor capable of 1280 x 1024 at &gt; 60 Hz</li> <li>• 20" LCD monitor capable of 1600 x 1200 at &gt; 60 Hz. (optional)</li> </ul>      |
| <b>Keyboard:</b>                            | <ul style="list-style-type: none"> <li>• 101-key IBM®-compatible</li> </ul>   |
| <b>Mouse:</b>                               | <ul style="list-style-type: none"> <li>• Microsoft® Windows-compatible 2-button scroll mouse</li> </ul>   |
| <b>Network Interface:</b>                   | <ul style="list-style-type: none"> <li>• 1 LOM 10/100/1000Mbps, compatible with the network operating system and cabling.</li> </ul>  |
| <b>Ports:</b>                               | <ul style="list-style-type: none"> <li>• minimum 2 USB</li> </ul>   |
| <b>Operating System<sup>[4], [5]</sup>:</b> | <ul style="list-style-type: none"> <li>• Eclipse (10.0, 11.0): Windows 7(64-bit only)</li> <li>• Eclipse (8.6, 8.8): Windows XP Professional SP2 &amp; SP3 (32-bit and 64-bit)</li> </ul> |
| <b>Windows® MUI Packs:</b>                  | <ul style="list-style-type: none"> <li>• XP Pro Multilingual User Interface License and MUI Software CD for XP Operating System (International Purchase Option)</li> </ul>                |
| <b>Microsoft Windows</b>                    | <ul style="list-style-type: none"> <li>• 3.1</li> </ul>   |

|                                   |   |
|-----------------------------------|---|
| <b>Installer:</b>                 |   |
| <b>File System:</b>               | <ul style="list-style-type: none"> <li>• NT File System (NTFS)</li> </ul>   |
| <b>Windows® OS Architecture:</b>  | <ul style="list-style-type: none"> <li>• 64-bit</li> </ul>  |
| <b>Microsoft® .NET Framework:</b> | <ul style="list-style-type: none"> <li>• Eclipse (8.6, 8.8, &amp; 10.0,11.0): 1.1, 2.0, 3.0, and 3.5</li> <li>• Eclipse 11.0: 4.0</li> </ul>  |
| <b>Peripherals</b>                | <ul style="list-style-type: none"> <li>• Digitizer: Minimum of 4000 lines per inch with either USB or RS-232 Serial Interface connectivity</li> <li>• Printer: 64-bit Windows XP or 64-bit Windows 7 compatible network printer with minimum of 48 MB RAM, USB 2.0, Ethernet or wireless connectivity, and 1200x600 dpi b&amp;w and color printing capability.</li> </ul> |

**Notes:**

1. Windows® Vista® is not a validated operating system for Eclipse Version 11.0.
2. Other qualified operating systems for Eclipse v10 & v11 are Windows XP Professional SP2 (64-bit only), however Eclipse v11 is **not** qualified with Windows XP in 'standalone mode' (e.g. single workstation also supporting the DB).
3. Client workstations usually do not require uninterruptible power supplies. However, they may be needed in areas that experience frequent brown outs or brief power drop outs.
4. Eclipse and Eclipse SV hardware is provided by Varian as a software/hardware package.
5. Specifications subject to change without notice as newer computer models become available.

# Recommended: Eclipse™ FAS Server Requirements - Rack Mounted

|   |  |
|---|--|
| <b>Platform:</b>                        | <ul style="list-style-type: none"> <li>Dell PowerEdge R610</li> </ul>  |
| <b>Processor:</b>                       | <ul style="list-style-type: none"> <li>Dual Xeon X5680, 12M L3 Cache, 3.46 GHz</li> </ul>  |
| <b>Bus Type:</b>                        | <ul style="list-style-type: none"> <li>PCI-E</li> </ul>  |
| <b>Memory (RAM):</b>                    | <ul style="list-style-type: none"> <li>24 GB DDR3 ECC SDRAM, 1333 MHz</li> </ul>   |
| <b>Hard Drives:<br/>(Local Storage)</b> | <ul style="list-style-type: none"> <li>2x146 GB, 10K RPM, SAS (RAID1 + 1 HS).</li> </ul>   |
| <b>Drive Controller:</b>                | <ul style="list-style-type: none"> <li>H200</li> </ul>   |
| <b>Optical Drive:</b>                   | <ul style="list-style-type: none"> <li>Internal optical DVD +/- RW</li> </ul>  |
| <b>Video Card/Adapter</b>               | <ul style="list-style-type: none"> <li>Integrated Matrox G200, 8 MB shared video memory</li> </ul>   |
| <b>Network Interface:</b>               | <ul style="list-style-type: none"> <li>Dual 2 port LOM 1Gbps, compatible with the network operating system and cabling.</li> </ul>   |
| <b>Redundancy:</b>                      | <ul style="list-style-type: none"> <li>Redundant Power Supplies</li> </ul>   |
| <b>Ports:</b>                           | <ul style="list-style-type: none"> <li>Minimum 2 USB</li> </ul>  |
| <b>Operating System:</b>                | <ul style="list-style-type: none"> <li>Eclipse (11.0): Windows Server 2008 R2</li> <li>Eclipse (10.0): Windows Server 2008 R1</li> <li>Eclipse (8.8): Windows Server 2003</li> </ul> |
| <b>File System:</b>                     | <ul style="list-style-type: none"> <li>NTFS</li> </ul>   |
| <b>Windows® OS Architecture:</b>        | <ul style="list-style-type: none"> <li>Eclipse (10.0, 11.0): 64 bit</li> <li>Eclipse (8.8): 32 bit</li> </ul>  |
| <b>Microsoft® .NET Framework:</b>       | <ul style="list-style-type: none"> <li>Eclipse (8.8, &amp; 10.0, 11.0): 1.1, 2.0, 3.0, and 3.5</li> <li>Eclipse 11.0: 4.0</li> </ul>   |

## NOTES:

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1. Software RAID is neither recommended nor supported with the TPS FAS Server.
  2. Hardware used should be approved based on the current Microsoft® Windows Catalog Listing.
  3. Other compatible Windows® operating systems for Eclipse (11.0) include: Windows Server 2008 R1 (Standard or Enterprise) 64-bit only.
  4. Windows Server 2008 R2 is currently **not** compatible with the Eclipse (10.0) FAS Server.
  5. Specifications subject to change without prior notification.

# Recommended: Eclipse™ TPS Server Requirements

|                                     |  |
|-------------------------------------|--|
| <b>Platform:</b>                    | <ul style="list-style-type: none"> <li>Dell T610</li> </ul>  |
| <b>Processor:</b>                   | <ul style="list-style-type: none"> <li>(Dual) Intel® Quad Core Xeon E5620, 2.4GHz, 12M Cache, 1333MHz FSB or better</li> </ul>   |
| <b>Bus Type:</b>                    | <ul style="list-style-type: none"> <li>PCI-E</li> </ul>  |
| <b>Memory:</b><br>(RAM)             | <ul style="list-style-type: none"> <li>12 GB DDR3 ECC SDRAM, 1333 MHz.</li> </ul>  |
| <b>Hard Disk:</b>                   | <ul style="list-style-type: none"> <li>4 x 300GB 15k (RAID 5) SAS interface</li> </ul>   |
| <b>Drive Controller:</b>            | <ul style="list-style-type: none"> <li>H700</li> </ul>   |
| <b>Optical Drive:</b><br>(CD / DVD) | <ul style="list-style-type: none"> <li>Multisession 24X CD-RW and DVD-ROM combo drive.</li> </ul>  |
| <b>Backup Tape:</b>                 | <ul style="list-style-type: none"> <li>LTO-4 800 GB/1.6 TB internal tape drive; BrightStor™ ARCserve® 15 or later.</li> </ul>  |
| <b>Network Interface:</b>           | <ul style="list-style-type: none"> <li>Dual LOM 1 Gbps, compatible with the network operating system and cabling.</li> </ul>   |
| <b>Redundancy:</b>                  | <ul style="list-style-type: none"> <li>PSU and Fans</li> </ul>   |
| <b>Ports:</b>                       | <ul style="list-style-type: none"> <li>minimum 2 USB</li> </ul>  |
| <b>Operating System:</b>            | <ul style="list-style-type: none"> <li>Eclipse (11.0)<sup>[3], [4], [5], [6]</sup>: Windows Server® 2008 R2 SP2 (Standard or Enterprise) .</li> <li>Eclipse (10.0)<sup>[3], [4], [5], [6]</sup>: Windows Server® 2008 R1 (Standard or Enterprise).</li> <li>Eclipse (8.6, 8.8)<sup>[3], [4], [5], [6]</sup>: Windows Server® 2003 R2 (Standard or Enterprise) .</li> </ul> |
| <b>File System:</b>                 | <ul style="list-style-type: none"> <li>NTFS</li> </ul>   |
| <b>Windows® OS Architecture</b>     | <ul style="list-style-type: none"> <li>Eclipse (10.0,11.0) : 64 bit</li> <li>Eclipse (8.6,8.8): 32-bit</li> </ul>  |

|                                  |   |
|----------------------------------|---|
| <b>Microsoft® .NET Framework</b> | <ul style="list-style-type: none"> <li>• Eclipse(8.6, 8.9, 10.0,11.0): 1.1, 2.0, 3.0, and 3.5</li> <li>• Eclipse (11.0): 4.0</li> </ul> |
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**NOTES:**

1. This server can also be purchased in a Rack configuration.
2. Software RAID is neither recommended nor supported with the TPS File Server.
3. Hardware used should be approved based on the current Microsoft® Windows Catalog Listing.
4. Other compatible Windows® operating systems for Eclipse (11.0) include: Windows Server 2008 R1 (Standard or Enterprise) 64-bit only.
5. Windows Server 2008 R2 is currently **not** compatible with the Eclipse (10.0) TPS Server.
6. Specifications subject to change without prior notification.
7. Additional hard disk space may be required with newer capabilities; customer's IT/S staff shall review backup means and schedule.

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