

| Consideration | Paging | Segmentation |
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| Need the programmer be aware that this technique is being used? | No | Yes |
| How many linear address spaces are there? | 1 | Many |
| Can the total address space exceed the size of physical memory? | Yes | Yes |
| Can procedures and data be distinguished and separately protected? | No | Yes |
| Can tables whose size fluctuates be accommodated easily? | No | Yes |
| Is sharing of procedures between users facilitated? | No | Yes |
| Why was this technique invented? | To get a large linear address space without having to buy more physical memory | To allow programs and data to be broken up into logically independent address spaces and to aid sharing and protection |

Fig. 4-37. Comparison of paging and segmentation.