## [Introduction](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=0&mode=live" \t "psplayer)

#### [Main SQL Server 2012 Editions](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live)

First we have  [Server 2012 Enterprise Edition. This is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=8.200000000000001" \t "psplayer) [the top-of-the-line edition and it only](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=10.933333333333334) [uses core-based licensing rather than](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=13.733333333333334) [socket-based licensing from previous](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=16.066666666666666) VESRIONS OF sql SERVER. For  [Windows Server 2012, you can use up to 4TB](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=57.68421052631578" \t "psplayer) [of RAM and 640 logical processors.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=61.47368421052629)  [Server 2012 Standard Edition and this is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=112.89473684210526) [the most affordable mainstream edition,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=116.21052631578947) [but it lacks many of the valuable features](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=118.57894736842104) [such as online indexing, for example,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=121.66666666666664) [which you get in Enterprise Edition and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=123.66666666666661) [with Standard Edition, you can choose](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=126) [between Server plus CAL licensing or](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=129.375) [core-based licensing, whichever makes more](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=132.75) [sense for your organization. You are](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=135.45) [limited to 64GB of memory for the Database](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=138.14999999999992) [Engine and for 64GB of memory for analysis](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=141.74999999999983) [services or reporting services and you're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=145.76470588235296) [also limited to four-sockets or 16 logical](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=149.29411764705887) [cores, whichever is the lowest. So, the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=153.41176470588243)[memory limit and the core limit is going](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=155.7) [to catch a lot of people who have modern](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=158.49999999999994) [hardware. They might not be able to take](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=161.6499999999999) [advantage of all their hardware with](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=169) [Standard Edition so that's something to keep in mind.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=1&mode=live&start=175)

[Additional SQL Server 2012 Editions](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live)

[There are some additional SQL Server 2012](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=1) [Editions beyond what I've already talked](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=3.5000000000000004) [about. The first one is SQL Server 2012](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=5.6428571428571415) [Developer Edition. This has all the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=8.578947368421051) [features of Enterprise Edition, but it's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=10.789473684210524) [only licensed for development and test](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=13) [usage. It's really the best choice for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=16) [developers and for DBA workstations. It's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=19.5) [very inexpensive, it's typically less than](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=22.36842105263158) [$50. 00, and if you're a high school or](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=24.57894736842105) [college student or faculty member, you can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=27.89473684210526) [go through Microsoft Dreamspark and get a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=30.684210526315795) [free copy of SQL Server 2012 Developer](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=33.631578947368425) [Edition. So it's really the best edition](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=36.57894736842104) [to learn SQL Server on. Next, you have SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=39.1818181818182) [Server 2012 Express Edition and this is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=43) [the absolutely free edition that's pretty](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=46.5) [severely limited, but still it's used by a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=49.5) [lot of organizations for specific](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=53.23076923076922) [purposes. It's limited to the lesser of 1](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=55.53846153846152) [socket or four cores in your CPU and it's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=58.625) [limited to using 1GB of RAM in your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=62)[machine no matter how much RAM it actually](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=65) [has. It also is limited to 10GB for the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=68.13043478260875) [size of your database, but you can have as](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=71.65217391304358) [many databases as you'd like running on an](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=75.28571428571429) [Express Edition Instance. You also have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=78.71428571428574) [SQL Server 2012 Web Edition and that's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=81.42857142857144) [targeted at web hosting, so people who are](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=84.76190476190482) [renting out their machines to run websites](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=88.57142857142867) [and have databases behind them, you know,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=91.4736842105263) [in hosting facilities and this is limited](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=94.05263157894733) [to 64GB of memory for the Database Engine](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=96.63157894736835) [and 64GB for analysis services so it's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=100.3157894736842) [very similar to Standard Edition, which is licensed with a different purpose in mind.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=2&mode=live&start=103.63157894736841)

[Licensing Changes for SQL Server 2012](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live)

[Now we'll talk about the Licensing Changes](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=2) [for SQL Server 2012. SQL Server 2012](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=5.181818181818181) [Enterprise Edition is only available with](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=8.636363636363635) [core-based licensing. This is a big change](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=11.909090909090905) [from previous versions of SQL Server, such](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=14.764705882352944) [as SQL Server 2008 R2. Previous versions](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=17.235294117647058) [of SQL Server had what was called](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=19.842105263157897)[socket-based licensing, so you paid for a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=22.789473684210538) [license for each physical socket in your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=25.73684210526318) [machine and it didn't matter how many](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=28.5) [cores were in that processor, but now with](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=31.125) [SQL Server 2012, you actually have to go](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=34.22727272727272) [and count the number of physical cores in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=37.49999999999997) [each processor in your machine and each](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=40.772727272727224) [one of those cores needs a license. Now](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=43.45454545454547) [the retail price for Enterprise Edition is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=46.611111111111114) [$6874. 00 per core and there's four-core](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=50.888888888888914) [minimum per socket. So if you have an](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=55.166666666666714) [older machine that's dual-core or even](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=58.75000000000001) [single-core, you still have to pay for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=60.850000000000016) [four cores, which really means that it's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=63.300000000000026) [time to retire that old machine because](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=65.8181818181818) [it's not going to make any sense to pay](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=68.36363636363632) [for all those extra core licenses and have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=71.63636363636355) [very bad performance from old hardware.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=74.69230769230771) [Now, moving on, SQL Server 2012 Business](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=77) [Intelligence Edition uses what's called a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=80.70588235294119) [server license plus Client Access](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=83.88235294117649) [Licenses. So you pay $8592. 00 per server,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=86.57142857142857) [plus you've got to count each user or](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=91.14285714285712) [device that connects to that server and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=95.71428571428568) [pay a fee of about $209. 00 for each one](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=98.99999999999999)[of those. So that's how you do it for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=102.33333333333327) [Business Intelligence Edition. Now SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=105.09999999999998) [Server 2012 Standard Edition lets you pick](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=106.94736842105263) [your method. You can pick core-based](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=110.26315789473684) [licensing or a server license plus CALs.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=113.10526315789473) [So core-based costs $1793. 00 per core,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=116.73684210526316) [again with that four-core minimum per](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=120.78947368421055) [socket, so that's quite a bit less money](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=124.26315789473688) [than Enterprise Edition, but you do give](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=127.42857142857146) [up a lot of very useful functionality if](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=129.42857142857142) [you're only using Standard Edition and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=131.71428571428564)[then if you decide to go with server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=134.14285714285708) [license route, its $898. 00 per server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=137.5714285714284) [plus you've got to pay for your client](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=140.57142857142833) [access licenses and again those CALs, the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=143.80000000000004) [Client Access Licenses, cost $209. 00 per](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=146.60000000000008) [CAL and again all these prices are retail](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=149.3181818181818) [prices. You may be able to get a better](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=151.86363636363632) [deal through your Microsoft sales rep or](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=154.72727272727263) [whoever's selling you your SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=159) [licenses so that's something you should look into.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=3&mode=live&start=165)

#### [Why Install SQL Server 2012 Properly?](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live)

[Why is it important to install SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=2) [2012 properly? Well, a proper installation](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=5.555555555555557) [will prevent many future problems you're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=8.222222222222225) [going to run into. For example, you'll](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=10.88888888888889) [have the appropriate service accounts and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=14.000000000000002) [you'll have the correct default locations](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=16.666666666666668) [for your database files instead of using](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=19.263157894736846) [the normal default, which is on your C](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=22.210526315789487) [drive. When you install SQL Server, you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=25.578947368421076) [want to make sure to only install the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=27.999999999999993) [components you actually need. This is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=30.66666666666665) [going to reduce your resource usage and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=32.7) [reduce the attack surface and also reduces](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=35.15000000000001) [the amount and the length of patching when](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=37.60000000000002) [you apply Service Packs and cumulative](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=40.81818181818181) [updates. You know you don't want to have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=43.54545454545453) [features such as analysis services](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=46.7222222222222) [installed that you're not actually using.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=48.66666666666663) [It's very important that you use the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=51) [correct type of service accounts for SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=53.79999999999999) [Server. It's going to give you a much more](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=56.59999999999998) [secure and reliable environment. You don't](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=59.666666666666686) [want to use accounts that are local](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=61.6666666666667) [administrators on your machine, for example.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=4&mode=live&start=64)

[Why Configure SQL Server 2012 Properly?](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=5&mode=live)

[Why do you need to configure SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=5&mode=live&start=2) [2012 properly? Well there's many default](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=5&mode=live&start=5.2) [configuration settings that are incorrect.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=5&mode=live&start=7.846153846153847) [There's operating system configuration](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=5&mode=live&start=10.153846153846155) [settings you need to change, there are](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=5&mode=live&start=12) [instance-level configuration settings that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=5&mode=live&start=14.625) [should be changed, and there's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=5&mode=live&start=16.125) [database-level configuration settings that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=5&mode=live&start=18) [should be changed in most cases. Changing](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=5&mode=live&start=20) [to what are considered best-practices](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=5&mode=live&start=23.53846153846154) [values for these things has many benefits.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=5&mode=live&start=26.23076923076924) [It's going to increase your performance](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=5&mode=live&start=30) [and scalability, it's going to give you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=5&mode=live&start=32.11764705882352) [increased reliability, and it's going to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=5&mode=live&start=34.58823529411763) [decrease your restore and recovery time,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=5&mode=live&start=36.631578947368425) [and it's really going to make things a lot](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=5&mode=live&start=38.5263157894737) [better going down the road for the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=5&mode=live&start=41.36842105263161) [long-term if you go through and make all](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=5&mode=live&start=43.57894736842106)[these changes before and after you install](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=5&mode=live&start=46.10526315789476) [SQL Server and after you create your databases going forward.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=5&mode=live&start=49)

#### [Why Maintain SQL Server 2012 Properly?](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live)

[Why is it important to maintain SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=1) [2012 properly? Proactive, preventative](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=5.5) [maintenance has many benefits. It's going](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=7.75) [to reduce the occurrence of known issues.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=10.842105263157894) [You know, Microsoft has telemetry in SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=13.789473684210522) [Server that reports certain types of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=16.736842105263154) [errors and any time somebody opens a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=18.999999999999996)[support case with CSS, quite often that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=21.33333333333332) [might lead to a hotfix that gets released](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=23.666666666666647) [and gets incorporated into a cumulative](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=26.714285714285708) [update for SQL Server. So keeping up with](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=29.28571428571427) [your maintenance is going to prevent you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=32.263157894736835) [from running into those problems that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=34.47368421052632) [other people have run into. It also forces](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=36.3684210526316) [you to exercise your testing and planning](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=39.571428571428584) [efforts. So whenever a new cumulative](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=42.5714285714286) [update or Service Pack comes out, you're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=44.42857142857142) [going to want to go through a certain](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=46.428571428571416) [amount of testing based on your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=48.714285714285694) [organization's capabilities and resources](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=51.35294117647058) [and doing that is good for your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=53.235294117647044) [organization. You're more likely to find](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=56.529411764705856) [problems with your application and you're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=58.57894736842106) [going to have more confidence in your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=60.473684210526336) [ability to exercise your testing and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=62.68421052631582) [planning and doing such things as a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=65.36842105263158) [failover to do things like rolling](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=68.68421052631578) [maintenance. So that's going to force you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=71.52631578947367) [to exercise any sorts of HA infrastructure](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=73.99999999999997) [you might have in place. So for example,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=76.33333333333327) [if you've got failover clustering or](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=79.3125) [database marrying or SQL Server 2012](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=81.9375) [AlwaysOn Availability Groups, you can use](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=84.5625" \t "psplayer) [those sorts of capabilities to do what's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=87.35294117647058) [called rolling upgrade and actually doing](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=90.64705882352939) [that on a regular basis to apply Service](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=93.3) [Packs and cumulative updates make sure](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=95.69999999999997) [that you're confident in how that actually](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=97.49999999999996) [works in your production environment. It's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=100.14285714285714) [also going to give you a much better](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=103.4) [supportability experience with all your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=106.60000000000005) [vendors. So your hardware vendor, for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=108.60000000000008) [example, if you keep your hardware](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=110.94444444444443) [up-to-date with BIOS updates and firmware](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=113.27777777777774) [updates and driver updates, you're less](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=115.61111111111106) [likely to have problems with your hardware](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=117.49999999999999) [and if you do, the first thing they're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=119.59999999999997)[going to want to check is whether or not](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=122) [you're up-to-date on your BIOS and your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=124.69999999999997) [firmware and your drivers. So staying](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=126.79999999999995) [up-to-date is just a good thing to do in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=128.63157894736844) [my opinion. Same thing with your storage](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=131.47368421052641) [vendor. They're going to want to make sure](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=133.68421052631595) [that you're up-to-date with your firmware](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=135.75) [and your drivers and they might not give](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=137.25) [you the same level of support until you do](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=139.4) [get up-to-date. Finally, there's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=143.00000000000006) [Microsoft. You know you have the operating](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=144.60000000000008) [system to maintain and SQL Server to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=146.90909090909088) [maintain and at some point, over the life](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=149.13636363636357) [of the operating system and the version of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=151.68181818181807) [SQL Server that you're using, the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=154.57894736842113) [operating system, and SQL Server itself](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=156.78947368421066) [will fall out of mainstream support and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=159) [even before that happens, certain Service](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=161.94736842105272)[Pack levels for SQL Server and the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=164.47368421052647) [operating system will fall out of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=167.31578947368422) [mainstream support if you don't stay](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=169.21052631578954) [up-to-date with Service Packs, for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=171.10526315789485)[example. So if you ever have a problem and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=172.68421052631595) [you call up Microsoft CSS, they're only](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=175.79999999999995) [going to give you limited troubleshooting](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=178.24999999999991) [support until you get yourself up to a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=180.41176470588235) [supported version of operating system or a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=183.70588235294113) [supported Service Pack of a particular](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=186.58823529411757) [operating system or SQL Server. So again,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=190.49999999999994) [this is important to do for several different reasons.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=6&mode=live&start=196)

[Summary](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live)

[So now it's time to summarize what we've](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=1) [talked about in this module. First, proper](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=3.461538461538461) [installation and configuration is very](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=5.875) [important. It prevents many future](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=8.0625) [problems you might have with your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=10.25) [instance, it's going to provide better](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=12.705882352941178) [performance, scalability, and security,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=14.82352941176471) [and it makes the instance easier to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=16.235294117647065) [maintain. SQL Server 2012 uses a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=19.166666666666664) [completely new licensing model. Core-based](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=22.666666666666657) [licensing requires you to rethink your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=25.38888888888889) [hardware choices and think about how many](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=27.722222222222225) [physical cores are in the processors that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=30.44444444444445) [you're buying for your servers. High](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=33.5) [core-count processors can be very](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=36.583333333333336) [expensive for SQL Server 2012 licensing.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=39.500000000000014) [SQL Server 2012 Business Intelligence](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=43) [Edition is a new edition for SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=44.818181818181834) [2012 and it can save a lot of money if you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=47.72727272727277) [have a dedicated SSAS instance that you're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=51.92307692307692) [going to be using. Operating system and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=55.15384615384614) [SQL Server maintenance is also very](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=58.199999999999996)[important. It's going to help you avoid](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=60.59999999999999) [known problems and it's going to keep you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=63.000000000000014) [in a supported configuration as far as](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=65.66666666666666) [your vendor is concerned. So that's really](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=67.99999999999999) [a much better place to be rather than](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=70.33333333333329) [letting your instances never have any](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=72.99999999999991) [sorts of maintenance for the OS or for SQL Server.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=7&mode=live&start=77)

[Course Structure](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=8&mode=live)

[Here's how the rest of the course is going](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=8&mode=live&start=1) [to be structured. Module 1 was the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=8&mode=live&start=3.6470588235294112) [Introduction. Next, we'll have Module 2,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=8&mode=live&start=5.705882352941175) [which will talk about Pre-Installation](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=8&mode=live&start=7.875) [Tasks for the Operating System itself.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=8&mode=live&start=9.75) [Module 3 will be Pre-Installation Tasks](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=8&mode=live&start=12) [for SQL Server 2012. Then Module 4 is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=8&mode=live&start=14.699999999999996) [going to walk through how to Properly](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=8&mode=live&start=18.29999999999999) [Install SQL Server 2012. Then Module 5 is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=8&mode=live&start=21.42105263157895) [going to go through all the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=8&mode=live&start=24.789473684210538) [Post-Installation Tasks that you have to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=8&mode=live&start=27.31578947368423) [do after you install SQL Server 2012.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=8&mode=live&start=29.888888888888886) [Finally, Module 6 is going to talk about](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=8&mode=live&start=33) [how to make sure your instance is ready](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=8&mode=live&start=35.909090909090935) [for production use and shows you how to automate some common maintenance tasks.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m1-intro&clip=8&mode=live&start=38.81818181818187)

### [Pre-Installation Tasks for the Operating System](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live)

#### [Introduction](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live)

[Hi, this is Glenn Berry for SQLskills.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=2) [com. I'm recording this course for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=4.5) [Pluralsight. It's SQL Server 2012](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=6.642857142857141" \t "psplayer) [Installation and Configuration and this is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=9)[Module 2: Pre-installation Tasks for the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=12) [Operating System. I'm going to be talking](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=15) [about several different operating](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=17.999999999999993) [system-level tasks that you have to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=19.599999999999987) [complete before you install SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=22) [2012. These affect security, performance,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=26.000000000000007) [scalability, and maintainability of the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=29.333333333333346) [operating system and of SQL Server itself.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=31.411764705882348) [The first thing you need to worry about is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=33.88235294117646) [getting some domain accounts provisioned](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=37.199999999999996) [for your SQL Server Service accounts and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=39.19999999999999) [this will depend on which SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=42) [features you're using, how many of these](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=43.647058823529406) [accounts you'll use, and different](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=45.29411764705881) [organizations have different policies for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=46.625) [this, but just be aware that it might take](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=48.1875) [a little bit of time for this actually to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=51) [happen depending on the bureaucracy in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=54.17647058823528) [your organization. The next thing I have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=56.294117647058805) [to worry about is getting Windows Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=58.764705882352935) [2012 installed and patched and ready to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=61.235294117647044) [install SQL Server 2012 on; another thing](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=63.84210526315789) [I always want to take care of is updating](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=66.7894736842105) [the main BIOS and any other firmware on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=70.57894736842101) [the server itself in making sure that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=73.05882352941178) [that's all completely ready to go before I](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=75.11764705882356) [try to install SQL Server. I also want to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=77.74999999999997) [get all the device drivers updated on the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=80.89999999999992) [server. I also want to check the power](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=83.73684210526315) [management settings on the server, both in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=86.68421052631575) [the BIOS and in Windows itself to make](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=89.26315789473678) [sure that we're running with the best](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=91.99999999999997) [performance possible. We're also going to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=94.33333333333327) [go through and talk about how to grant](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=96.25) [Windows rights to the SQL Server service](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=98.75) [account for a couple of important things.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=101.05882352941178) [We'll also make sure you have a static IP](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=103.52941176470594) [address for your database server and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=106.66666666666666) [finally, we want to make sure that you've](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=108.66666666666663) [got your database server added to the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=111.33333333333326) [Windows domain before you install SQL Server.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=0&mode=live&start=117)

[Getting Domain Accounts Provisioned](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live)

[Getting Domain Accounts Provisioned. You](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=1) [should have a Windows Domain account for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=2.9999999999999996) [each service that you're going to use for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=5.800000000000001) [SQL Server. Some organizations are also](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=8.764705882352942) [going to have one domain account for each](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=10.882352941176475) [SQL Server instance instead of just one](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=13.777777777777779) [that's used for all the SQL Services, for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=16.500000000000004) [example. How many domain accounts you need](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=19.611111111111118) [is going to depend on which components are](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=21.999999999999993) [installed. So, for example, the Database](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=24.66666666666665)[Engine will be the SQL Server Service and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=26.388888888888893) [it's going to require its own domain](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=28.61111111111112) [account. Also, you're probably going to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=30.875) [have the SQL Server Agent Service running](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=33.5) [and it should have its own separate domain](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=36.5625) [account for the Agent Service and then, if](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=39.33333333333335) [you end up installing SQL Server Reporting](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=42.000000000000036)[Service, it'll need its own account; SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=44.428571428571416) [Server Analysis Service will needs its own](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=46.928571428571395) [account; and SQL Server Integration](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=49.111111111111114) [Service would have its own account if you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=50.50000000000001) [had a machine where all of these things](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=52.722222222222236) [were running, they all should have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=55.625) [separate domain accounts set up ahead of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=57.875) [time before you try to install SQL Server.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=60.33333333333334) [Now these should all be regular Domain](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=63) [User accounts, they don't want to be](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=65.88235294117645) [Domain Admin accounts. The setup program](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=68.76470588235289) [for SQL Server will grant the necessary](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=71.125) [rights for each account on the local](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=73.75) [machine and you don't want them to have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=76.29411764705883) [Local Administrator rights on the machine;](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=78.64705882352943) [that's a common mistake that people make.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=80.41176470588239) [You're going to have to have the name and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=82.57894736842103) [the password for all of these accounts](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=85.42105263157887) [because this information is required](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=87.80000000000001) [during the SQL Server installation so make](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=89.80000000000004) [sure you have that ahead of time before you start the setup program.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=1&mode=live&start=92.60000000000008)

#### [Install and Patch Windows Server 2012](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live)

[Install and Patch Windows Server 2012](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=2) [Windows Server 2012 Standard Edition is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=6) [actually a very good choice for SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=8.14285714285714) [Server. It doesn't have the 32GB memory](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=10.642857142857144) [limit that Windows Server 2008 R2 Standard](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=13.8) [Edition had, it has all the same operating](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=17.066666666666663) [system limits as Windows Server 2012](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=20.571428571428562)[Enterprise Edition. The only difference is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=23.142857142857125) [the virtualization rights. It also allows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=25.714285714285708) [you to install the Failover Clustering](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=28.28571428571427) [feature if you need it and that's required](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=30.727272727272727) [for SQL Server AlwaysOn Availability](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=33.63636363636365) [Groups and also for traditional Failover](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=36.54545454545453) [Clusters. You're going to want to install](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=40.36363636363633) [the operating system on a hardware RAID 1](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=42.5) [array, so a minimum of two physical disks](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=44.5) [with a hardware RAID controller. That's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=46.8) [going to give you some basic protection](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=49.19999999999999) [from a single disk failure bringing down](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=52) [your entire server. You also want to make](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=54.33333333333335) [sure and go through and install Microsoft](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=57.000000000000036) [Update, which is a superset of Windows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=59.75) [Update that goes through and checks for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=62.8125) [updates to SQL Server, which is important.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=65.8235294117647) [Now you want to make sure to configure](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=68.70588235294113) [Microsoft Update properly. Don't use the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=72) [recommended settings from Microsoft.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=75) [Instead, you want to make sure that it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=77) [only notifies you of new updates because](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=79.10526315789468) [you don't want to have it go through and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=80.94736842105253) [automatically download and install updates](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=84.33333333333334) [because what would happen then is every](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=86.66666666666669) [month on Patch Tuesday, the following](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=89.75) [Wednesday morning by default at 3 a. m.,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=92) [it'll go through and install all those](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=95) [updates and in many cases automatically](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=97.47058823529416) [reboot and you don't want to do this on a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=99.58823529411772) [production database server. Then what](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=103.21052631578945) [you're going to do is actually check for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=105.05263157894733) [available updates from Microsoft Update](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=108) [and install them and you may have to do](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=109.76470588235297) [this several times to get every single](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=112.94117647058832) [update installed on your brand new server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=115.33333333333331) [that you just installed a fresh copy of Windows Server 2012 on.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=2&mode=live&start=117.66666666666661)

#### [BIOS and Firmware Updates](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live)

[BIOS and Firmware Updates I want to make](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=0) [sure that you have the latest main system](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=5.2631578947368425) [BIOS installed. What I've found many many](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=7.789473684210527) [times in my career is that brand new](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=10) [servers that were just shipped from the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=11.777777777777771) [vendor will sometimes have out-of-date](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=13.333333333333321) [BIOS versions so I always go and check the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=14.823529411764707) [system vendor's support site to make sure](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=18.529411764705873) [that I have the latest version and I](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=21.333333333333332) [actually install it once I get it. You](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=23.99999999999999) [also want to make sure that you have the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=26.666666666666647) [latest firmware for all of your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=29.052631578947363) [components. This is going to depend on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=30.315789473684198) [what components are actually in your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=31.789473684210506) [server. So, some examples are RAID](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=34.66666666666666) [controllers, Host bus Adapters, PCI-E](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=37.866666666666646) [storage cards, and your Network Interface](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=40.42857142857143) [Cards, whether they're actually expansion](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=43.000000000000014)[cards or the embedded ones on the mother](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=45.14285714285717) [board. They all have firmware that has to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=48.47058823529413) [be updated periodically. Now your vendor](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=51.76470588235297) [for your hardware is going to have some](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=53.94736842105264) [sort of management tools that can also](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=56.473684210526336) [help you detect out-of-date firmware. So,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=58.68421052631582) [for example, Dell has Open Management](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=61.14285714285715)[Systems Administrator or OMSA and then HP](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=63.71428571428574) [has System Insight Manager and IBM has](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=67.33333333333331) [Director and this is actually a screenshot](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=71.41666666666661) [of the Dell Support website and it shows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=74.47058823529409) [you for a Dell PowerEdge R720 server how](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=77.76470588235287) [you can go and see what the latest BIOS](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=80.84210526315788) [and the latest drivers and latest firmware is for that particular server.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=3&mode=live&start=84.15789473684205)

#### [Demo: Dell Support Web site](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live)

[In this demo I'm going to show you how to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=1) [navigate through the Dell website to find](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=3.5) [where you can download drivers and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=5.25) [firmware and BIOS updates. So if I fire up](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=7.166666666666668) [Internet Explorer, it takes me to the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=10.666666666666671) [dell. com homepage and if I scroll down,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=13.3125) [you'll find under Support where it says](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=15.8125) [Drivers & Downloads. So we click on that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=18) [and that takes us to the Drivers and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=21.111111111111114) [Downloads page and then I want to click on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=24.22222222222223) [Support for Enterprise IT and that's going](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=27.666666666666657) [to take me to a landing page that will](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=30.333333333333314) [remember the last product that you used.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=33.421052631578945) [So in this case, I have it set to a Dell](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=34.89473684210525) [PowerEdge R720, but if I wanted to I could](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=37.388888888888886) [click Change Product and pick a different](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=40.88888888888886) [server. So since I'm already here, it'll](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=43.61111111111106) [show you a list of operating systems. So](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=45.79999999999998)[what you want to do there is pick the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=48.19999999999996) [operating system that you're going to use](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=50.60000000000001) [on your server, so in our case we'll pick](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=52.00000000000003) [out Windows Server 2012 and then we wait](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=53.800000000000054) [for that to refresh and this shows all the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=57.1111111111111) [available downloads for Windows Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=61.111111111111086) [2012 and so let's take a look at the BIOS.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=63.00000000000001) [We click there and it tells you that the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=66.33333333333331) [latest BIOS for this server right now is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=69.55) [1. 3. 6 that was released back in October](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=73.94999999999997) [of 2012. So if I want to download that, I](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=78.89999999999995) [click where it says Other Formats and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=82.28571428571433) [that's going to come up and show all the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=84.28571428571438) [different formats so you can download that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=86.88235294117648) [BIOS, so if you're running Linux or](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=88.94117647058826) [different operating systems. Well in our](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=91) [case, we're running Windows so we're going](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=92.76470588235296) [to pick this one, Update Package for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=94.82352941176474)[Microsoft Windows, and then you pick](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=97.125) [Download File and you're going to pick](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=99.375) [Download and save file and then eventually](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=102) [it'll let you actually save that and I](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=105.8888888888889) [typically like to save it on my desktop on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=110.33333333333336) [the server just to make it easy to find.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=114.28571428571428) [So, anyways, once I do that, click Save](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=117.7142857142857) [and it downloads very quickly if you've](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=120.71428571428572) [got a broadband internet connection. So](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=123.21428571428575) [then once you're done with that, you'll](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=125.27777777777777) [see it eventually appear on your desktop](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=127.22222222222217) [and you can actually download it and use it on your server.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=4&mode=live&start=129.16666666666657)

#### [Install or Update Your Device Drivers](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live)

[Install or Update Your Device Drivers When](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=2) [you first install Windows Server 2012, the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=5.294117647058823) [setup program for the operating system is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=7.352941176470587) [going to detect all of your hardware as](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=9.411764705882355) [best it can and it's going to install](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=12.47058823529412) [generic Windows drivers for that hardware.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=15.764705882352946) [What you want to do instead, especially](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=18.199999999999996) [for a dedicated database server, is prefer](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=20.999999999999986) [vendor supplied, system-specific drivers](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=24.06666666666667) [for your exact system and what you're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=26.20000000000001) [going to need there is going to depend on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=29.933333333333355) [what components are actually in your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=32.99999999999999) [server. So, for example, you might have a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=34.7142857142857) [RAID controllers or Host Bus Adapter,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=36.8421052631579) [you're going to want to use the drivers](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=38.42105263157895) [from the system vendor or from the card](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=40.82352941176471) [vendor instead of those generic Windows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=44.11764705882355) [drivers that the operating system might've](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=46.58823529411768) [installed by default. Other examples, you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=49.14285714285715) [might have a PCI-E storage card like a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=51.71428571428574) [Fusion-io card for example and, again,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=54.47058823529413) [you're going to want the drivers from the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=56.235294117647086) [hardware vendor, not the Windows drivers.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=58.875) [The same thing for your network interface](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=61.5) [cards and for your video drivers. Now,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=64.5625) [you're going to want to go through and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=67.33333333333331) [install the chipset drivers from the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=70.4444444444444) [hardware vendor before you install any](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=72.8235294117647) [other drivers; then you go through and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=75.29411764705878) [install any storage related or NIC drivers](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=78.17647058823522) [next; and then finally, I always leave the video drivers until the last thing.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=5&mode=live&start=80.76470588235297)

[Checking Your Power Management Settings](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live)

[Checking Your Power Management Settings](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=2) [This is actually something that's very](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=4) [easy to do and it's very important for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=5.2857142857142865) [database server performance. There's two](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=7) [levels of things you have to check here.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=8.923076923076925) [First is your BIOS power management and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=12) [the BIOS setup application. This should be](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=14.722222222222225) [set to OS control or completely disabled.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=17.44444444444445) [Next you want to check your Windows Power](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=20.05882352941176) [Plan. This should be set to "High](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=22.882352941176457) [Performance", not the default "Balanced"](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=25.466666666666665) [Power Plan. Having the Balanced Power Plan](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=27.79999999999999) [in effect has a measurably negative effect](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=31.066666666666645) [on database server performance, especially](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=34.6923076923077) [for OLTP workloads. I've seen anywhere](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=37.3846153846154) [from 15-25% performance difference between](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=40.5) [having the Balanced Power Plan and the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=43) [High Performance Power Plan and this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=46.38461538461539) [depends on what processor you're using.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=48.69230769230771) [Next, you want to check your processor](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=51) [speed values to confirm that these](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=53.47058823529411) [settings are in effect. So, with Windows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=55.58823529411763) [Server 2012, you can use Task Manager to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=58.050000000000004) [do this and you can also use the free](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=60.850000000000016) [CPU-Z utility from cpuid. com and you can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=64) [use that to find out if your processor](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=67.20000000000005) [cores are running at full speed or not. So](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=70.40000000000009) [this is what the BIOS setup program looks](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=75.33333333333333) [like for a Dell Server under Power](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=77.99999999999996) [Management and you can see that it's set](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=80.33333333333326) [to OS control and that's what you want it to be.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=6&mode=live&start=87)

[Windows Power Options](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live)

[Windows Power Options Here you see a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=0) [screenshot from the Power Options screen](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=4.714285714285714) [for Windows Server 2012. You can see that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=7.285714285714287) [you have three built-in power plans to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=10.111111111111114) [choose from. When you first install the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=12.055555555555564) [operating system with Windows Server 2008](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=14) [and above, it's going to be set to the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=16.333333333333336)[Balanced Power Plan, which Microsoft](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=19.83333333333334) [recommends and that's going to balance](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=21.714285714285715) [your performance with your energy](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=23.85714285714286) [consumption and that's great on a desktop](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=25.64285714285715) [or a laptop, but it's not good for a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=27.999999999999993) [dedicated database server. Instead, you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=30.999999999999982) [want to make sure that you're using the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=32.55555555555556) [High Performance Power Plan like you see](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=34.777777777777786) [here and you definitely don't want to use](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=36.722222222222236) [the Power Saver Power Plan in Windows.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=39.49999999999998) [Next, you can see here what Task Manager](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=42) [in Windows Server 2012 looks like and this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=44.80000000000001) [is quite a bit different than you might be](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=47.60000000000002) [used to with previous versions of the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=50.78571428571427) [operating system. This shows each logical](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=53.28571428571425) [processor in its own box and it shows the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=55.64705882352942) [rated speed of this Intel Xeon E5-2670](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=59.352941176470615) [processor, which is 2. 6GHz at the top](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=62.199999999999996) [right, and then down kind of in the center](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=65.4) [of this screen, it shows the current speed](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=69) [of this processor and so that's going to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=71.9473684210526) [help you confirm whether or not you got](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=74.8947368421052) [Power Management disabled or not. And then](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=78.00000000000003) [finally, the CPU-Z utility is very very](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=80.77777777777777) [useful for giving you lots of details](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=83.49999999999997) [about your processor and also for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=86.22222222222217) [confirming the current speed of your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=88.88235294117646) [processors. So in this case, that same](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=91.70588235294116) [Xeon E5-2670 is rated at 2. 6GHz and you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=95) [can see that the Core Speed of Core #0 of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=98.68181818181816) [the first processor is 3276 MHz so it's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=102.77272727272722) [actually running above its rated speed due](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=106.77777777777779) [to something called Intel Turbo Boost. So](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=110.66666666666669) [this confirms that we don't have Power](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=114.29411764705883) [Management effect at the BIOS level or](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=116.35294117647061) [from the Windows Power Plan to be slowing](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=118.41176470588239) [down our database server and that's what you want.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=7&mode=live&start=125)

#### [Demo:Task Manager and CPU-Z](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live)

[In this demo, I'm going to show you how to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=1) [use Windows Server 2012 Task Manager. This](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=5.375) [looks quite a bit different than previous](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=8.25) [versions of Task Manager, but it's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=10) [actually quite a bit more useful. What you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=11.5) [see here on the Performance Tab is we have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=13.894736842105264) [several different things we can choose](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=16.736842105263154)[from over on the left-hand side. Right](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=18.700000000000003) [now, we're set to CPU and we can see all](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=21.150000000000013) [our logical cores here; we can see what](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=24.650000000000027) [sort of processor we have and it's rated](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=27.100000000000005) [speed; we can also see it's current speed.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=29.50000000000001) [What you might've noticed is that none of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=31.9375) [these numbers are changing and the reason](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=34.4375)[why is that if you leave Task Manager up](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=36.7) [in Windows Server 2012 for a long enough](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=39.850000000000016) [time, it'll pause it's updates. So, if you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=42.65000000000003) [actually want to see what's really](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=44.8421052631579) [happening, you have to go to the View Menu](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=46.42105263157895) [and go to Update Speed and then pick](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=49.10526315789475) [Normal and then you'll see everything](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=52.052631578947405) [updating at a normal speed and so, what](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=54.2631578947369) [you see here is here's the rated speed and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=57.210526315789494) [here's the current speed and here's the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=60.526315789473735) [overall CPU Utilization across the entire](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=62.9375) [server. Another nice thing about this is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=64.8125) [that it shows you that you've got two](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=67) [sockets in this server with a total of 16](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=69.9473684210526) [physical cores and 32 logical processors](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=73.26315789473678) [since I have hyperthreading enabled. It](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=75.60000000000002) [also shows me that virtualization is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=78.00000000000006) [enabled and it tells me how big all of my](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=80.45) [caches are across both processors](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=84.95000000000003) [combined, so I've got 1MB of L1 cache, 4MB](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=87.20000000000005) [of L2 cache, and 40MB of L3 cache. So this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=91.14285714285715) [is very useful compared to previous](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=95.42857142857146) [versions of Task Manager and you can also](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=98) [pull this menu up and change the graph to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=101.36842105263156) [show different things like your overall](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=105.15789473684207) [utilization or you can pick NUMA nodes and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=107.68421052631578) [it shows one NUMA node here and the other](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=111.05263157894734) [NUMA node there to show CPU Utilization](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=114.73684210526315) [across the NUMA nodes, but usually I leave](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=117.31578947368418) [it to logical processors so I can see all](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=120.26315789473678) [the logical processors and what they're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=123.47058823529416) [doing and after you're done looking at](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=125.58823529411772) [Task Manager, I still like to use the old](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=127.94736842105262) [CPU-Z utility and here's what it looks](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=130.78947368421058) [like on a live server and this shows you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=133) [the rated speed of this processor right](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=136.78947368421063) [there, 2. 6Ghz, and here's it's current](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=139.73684210526335) [speed, it's jumping around a bit. You](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=142.1111111111111) [might wonder, how is it possible that this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=144.0555555555555) [is running faster than it's rated speed,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=146.4) [you know, if I overclock this processor.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=149.20000000000005) [Well, the reason it's running faster than](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=152) [its rated speed is because it's an Intel](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=154.1875) [processor that has something called Turbo](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=156.6875) [Boost that will boost the speed of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=159.05882352941174) [individual cores based on the overall](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=161.94117647058818) [utilization and power usage of the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=164.47058823529412) [processor. So right now, Core #0 of the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=167.2941176470588) [first processor is running at this speed](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=171.05882352941174) [and that tells me that Power Management is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=173.84210526315795) [not throttling it back to less than the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=176.78947368421066) [rated speed, which is that's how you want](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=179.63157894736844) [it to be on a dedicated database server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=182.1578947368422) [and, of course, the way we got there is we](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=184.68421052631595) [made sure that we had the BIOS settings](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=187.86363636363632) [set to OS control and then we had the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=190.40909090909082) [Windows Power Plan set to High](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=193.17647058823525) [Performance. So just double-check that on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=194.94117647058812) [your database server before you install SQL Server 2012.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=8&mode=live&start=196.705882352941)

#### [Grant Windows Rights to the SQL Server Service](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=9&mode=live)

[Granting Windows rights to the SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=9&mode=live&start=1) [Service There's two specific Windows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=9&mode=live&start=5.375) [rights that should be granted on the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=9&mode=live&start=7.142857142857142) [machine to the SQL Server Service account.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=9&mode=live&start=9.142857142857144) [The first one is perform volume](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=9&mode=live&start=11.647058823529413) [maintenance tasks and the second one is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=9&mode=live&start=14.117647058823533) [lock pages in memory. Now the Windows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=9&mode=live&start=17) [domain account for the SQL Server Service](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=9&mode=live&start=20.294117647058812) [must exist first before you can do this so](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=9&mode=live&start=23.588235294117624) [you should do this before you install SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=9&mode=live&start=27.25) [Server 2012. Now it's possible to grant](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=9&mode=live&start=30.25) [these rights after you install SQL Server,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=9&mode=live&start=32.764705882352935) [but if you do that, you're going to have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=9&mode=live&start=35.235294117647044) [to restart the SQL Server Service for the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=9&mode=live&start=38) [change to take effect. Now you use the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=9&mode=live&start=40) [Local Group Policy Editor to do this on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=9&mode=live&start=42.47368421052633) [the machine where SQL Server is installed.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=9&mode=live&start=45.42105263157899) [You just type gpedit. msc at a command](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=9&mode=live&start=48) [prompt and then it'll let you go in and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=9&mode=live&start=51.04761904761904) [add these rights for those accounts and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=9&mode=live&start=54.47619047619045) [I'll talk about how to do that in the next couple of slides.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=9&mode=live&start=59)

#### [Perform Volume Maintenance Tasks](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live)

[Perform Volume Maintenance Tasks This](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=1) [right enables Windows instant file](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=5.375) [initialization or IFI. This is going to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=7.25) [let SQL Server avoid having to "zero-out"](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=9.875) [data files after they are created or](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=12.75) [grown. Now this only affects SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=15.8125) [data files, not SQL Server log files,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=19.07692307692308) [that's a common misconception. Having this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=22.84615384615386) [right in effect is going to give you a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=25.57142857142857) [huge reduction in the amount of time it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=28.14285714285713) [takes to create a data file and the amount](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=30.42857142857141)[of time it takes to grow a data file. This](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=33.1875) [is especially important for larger](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=36.5) [database data files. This will](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=39) [dramatically reduce the database restore](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=41.5)[time, makes it a lot easier to initialize](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=44) [high-availability secondary copies of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=48) [databases (such when you're using database](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=50) [mirroring or replication subscription](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=53.500000000000014) [databases or AlwaysOn Availability Group](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=55.83333333333336) [replicas). It also dramatically reduces](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=58.75000000000001) [the downtime during the disaster-recovery](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=61.666666666666686) [restore because if you're having to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=64.3125) [restore from a backup, it doesn't have to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=66.1875) [go through and zero-out that huge data](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=68.6875) [file as part of the restore and recovery](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=71.47058823529409) [process during a DR situation. Now there's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=74.76470588235287) [a very slight security risk with this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=77.64705882352939) [setting. What could happen is a DBA could](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=80.52941176470583) [possibly access previously deleted files](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=83.93333333333334) [that they don't have normal rights to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=86.26666666666668) [access. That's really not an issue if the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=89.53333333333336) [storage is dedicated to SQL Server. So](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=91.9444444444444) [what I'm talking about here is if somebody](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=93.8888888888888) [had a Word doc on the same one where your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=96.33333333333331) [data files were, but really that's not](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=99.6666666666666) [something you should be doing so this is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=102) [something that I always recommend that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=104.66666666666663) [people do is enable this right for the SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=106.6666666666666) [Server Service account; it's a very good](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=109.31578947368418) [idea; it makes your life a lot easier; and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=111.15789473684202) [it reduces your recovery time in a DR situation.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=10&mode=live&start=115)

#### [Lock Pages in Memory (LPIM)](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live)

[Lock Pages in Memory This is a right that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=1) [you grant to the SQL Server Service](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=5.315789473684212) [account from Windows on a machine where](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=7.15789473684211) [SQL Server is running. It prevents the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=9) [operating system from trimming the SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=12.0625) [Server working set. The operating system](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=14.6875) [can force SQL Server to release some](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=16.882352941176467) [memory and this will happen when the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=18.941176470588225) [operating system is under severe memory](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=21) [pressure and SQL Server does not](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=23.79999999999999) [voluntarily release memory when it sees](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=26.59999999999998) [that low memory signal from the operating](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=28.882352941176467) [system. It's often caused by memory leaks](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=30.941176470588225) [and device drivers and is more prevalent](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=33) [in earlier versions of the operating](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=35.47058823529411) [system, it's not as prevalent in newer](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=37.58823529411763) [versions of Windows Server. Now trimming](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=40.199999999999996) [the working set has an extremely negative](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=42.59999999999999) [effect on SQL Server performance and when](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=45.3125) [this happens, there'll be an entry in the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=47.5) [SQL Server error log that you can see to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=50) [see that it has happened in the past. This](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=52.647058823529434) [feature only used to be available in SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=55.35294117647059) [Server Enterprise Edition. Now with SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=58.17647058823528) [Server 2012 Standard Edition, you have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=60.294117647058805) [lock pages in memory support without using](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=62.41176470588235) [a trace flag like you had to do with](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=64.88235294117648) [previous versions of SQL Server Standard](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=67.99999999999999) [Edition. Now if you're going to use lock](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=69.99999999999996) [pages in memory, it's very important that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=72.66666666666659) [you set max server memory to an](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=75.25) [appropriate value using sp\_configure. You](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=77.875)[want to limit how much memory SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=79.63157894736841) [can use and you want to make sure that the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=82.15789473684205) [operating system is never under memory](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=85.3529411764706) [pressure because SQL Server is using too](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=87.47058823529416) [much and it won't release it because you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=89.94117647058832) [have lock pages in memory enabled. My](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=93.00000000000003) [colleague, Jonathan Keheyias has an](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=95.80000000000007) [excellent post available at this URL that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=97.88888888888889) [explains what you should set max server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=100.99999999999999) [memory to depending on what's running on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=104.11111111111109) [your server and what metrics you collect as you're watching it run.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=11&mode=live&start=110)

#### [Local Group Policy Editor](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live)

[Local Group Policy Editor This is a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=1) [screenshot of what it looks like when you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=3.833333333333333) [open up the Group Policy Editor, again,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=6.0555555555555545) [you type gpedit. msc to get here and on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=8) [the left pane you have Local Computer](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=11.000000000000005) [Policy and you go to where it says Windows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=13.333333333333343) [Settings and you pick Security Settings](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=16.5) [and then you pick Local Policies and then](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=18.75) [you pick User Rights Assignment and on the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=21.666666666666664) [right, you'll see all the various user](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=24.33333333333332) [rights that you can assign to different](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=26.666666666666647) [accounts and this is where you would go in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=28.764705882352935) [and find Perform volume maintenance tasks](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=31.411764705882337) [and also Lock pages in memory and you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=33.33333333333334) [would add this SQL Server Service account](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=36.00000000000003) [to have those rights and once you do this,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=38.55555555555554) [if SQL Server's already been installed and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=42.055555555555515) [you do it, you're going to have to restart](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=44.526315789473685) [SQL Server for the change to take effect,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=46.89473684210527) [so that's why it's better to go ahead and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=49) [do this now before you've installed SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=51.84210526315791) [Server, that way you won't forget about it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=54.0526315789474) [and you won't have to restart SQL Server just to have this change go into effect.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=12&mode=live&start=60)

#### [Demo: GPEDIT.MSC Usage](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live)

[In this demo, I'm going to show you how to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=1) [use Group Policy Editor to go in and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=3.5) [assign specific Windows rights to your SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=5.5) [Server Service account like I've been](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=7.923076923076925) [talking about. So, you go to the Start](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=10.230769230769235) [Menu and type in gpedit. msc and that'll](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=14.428571428571427) [open up the Local Group Policy Editor;](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=19.000000000000007) [then you want to go and pick Windows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=23) [settings and pick Security Settings and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=26) [then pick Local Policies and finally User](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=28.25) [Rights Assignment and this will show you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=30.764705882352935) [the list of all the various rights that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=33.235294117647044) [you can assign to a particular account.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=36.10526315789475) [So, in our case, we want to go down here](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=38.68421052631582) [to where it says Perform volume](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=42.375) [maintenance tasks right there and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=44.625) [double-click on that and then you can add](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=46.5) [a user or a group and this can be a local](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=49.33333333333334) [user or a domain group or a domain user.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=53.000000000000036) [So, in this case, I'm just going to type](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=56) [in the name of my machine, I'm going to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=58.45454545454546) [use a local user for this example. So,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=60.90909090909092) [it's Glenn2012 and then the account is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=64.10526315789474) [Glenn and so then I can hit the Check](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=67.78947368421053) [Names button and then go ahead and assign](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=72.375) [this and hit Apply and then OK. So then](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=75.375) [it'll show up over here and that means](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=78.63157894736841) [that particular account on my local](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=81.15789473684205) [machine has been assigned the right to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=83.05263157894728) [perform volume maintenance tasks and you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=85.25) [would want this to be your SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=87.125) [Service account that you did this for so](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=89.66666666666666) [you'd do it for both Perform volume](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=92.33333333333329) [maintenance tasks right there and you'd do](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=94.58823529411765) [the same thing for Lock pages in memory,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=96.64705882352943) [and again you should do this now before](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=99) [you've installed SQL Server. If you do it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=101.82352941176475) [afterwards, you're going to have to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=104.6470588235295) [restart SQL Server for the changes to take effect.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=13&mode=live&start=110)

#### [Final OS Configuration Tasks](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live)

[Final OS Configuration Tasks We saw the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=1) [number of things we have to do at the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=4.473684210526316) [operating system level to make sure we're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=5.894736842105264) [completely ready to install SQL Server.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=7) [One of the first things you should do is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=9.11764705882353) [double-check and make sure that your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=12.29411764705883) [network settings have been changed so that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=14.111111111111114) [your database server is going to use a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=16.055555555555564) [static IP address instead of using DHCP.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=18.36842105263158) [You also want to make sure that your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=20.94736842105263) [server has been added to the correct](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=23.89473684210526) [Windows domain, it's not still in a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=26.684210526315795) [workgroup. You also want to go and enable](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=29.631578947368435) [Remote Desktop in Windows. This will allow](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=33) [you to login remotely if you ever need to.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=35.625) [You know, normally you want to manage your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=39) [SQL Server using Management Studio from](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=42) [another machine, but there are some times](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=44.25) [when you might want to use a remote](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=46.000000000000014) [desktop to get in and see what's happening](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=47.60000000000004) [at the Windows level on the database](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=49.4375) [server. You want to configure your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=52.5) [anti-virus program to skip SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=55.125) [files that have an. MDF,. NDF or. LDF file](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=58.571428571428584) [extension. You should also go in and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=64.35714285714289)[manually optimize your C: drive. Optimize](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=67.33333333333331) [is the Windows 2012 term for defragment,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=69.66666666666663) [and if you're using SSDs for your boot](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=72.38888888888889) [drives, you don't need to do that, but](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=75.49999999999997) [most people won't be doing that yet. Also,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=78.61111111111106) [it's very important that you don't have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=81.47058823529416) [any pending reboots in Windows and this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=83.94117647058832) [can happen if you run a bunch of Windows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=86.05263157894734) [Updates or if you've done something like](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=88.42105263157886) [added the machine to a domain or changed](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=90.4) [the page file size, for example. That's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=93.60000000000005) [going to force you to reboot Windows and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=96.26315789473684) [you'll have a pending reboot and if there](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=98.36842105263152) [is a pending reboot, the SQL Server setup](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=100.4736842105262)[program won't let you proceed until you've](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=102.875) [gone ahead and rebooted Windows. If you're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=105.0625) [going to be using the FILESTREAM feature,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=107.33333333333331) [you're going to want to go in and disable](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=109.66666666666661) [8. 3 filename generation, which is a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=113) [Legacy feature for 16bit operating systems](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=116.5) [and you can use this command, fsutil](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=119.5)[behavior set disable8dot3 1, to actually](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=123.85714285714283) [do that. You'll also want to disable the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=127.71428571428567) [updating of the last file access time with](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=131.00000000000006) [a similar command right there and for more](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=133.6666666666668) [details about FILESTREAM and how you can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=136.5) [optimize it, read Paul Randal's whitepaper at this URL.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=14&mode=live&start=139.125)

#### [Optimize Drives Dialog](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=15&mode=live)

[The Optimize Drives Dialog After you've](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=15&mode=live&start=1) [installed and patched Windows, your hard](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=15&mode=live&start=4.666666666666666) [drive and your C: drive is going to be](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=15&mode=live&start=6.666666666666664) [very heavily fragmented so I always like](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=15&mode=live&start=9.666666666666666) [to go in and manually defragment this at](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=15&mode=live&start=12.333333333333336) [least once after I'm done doing that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=15&mode=live&start=15.44444444444445) [before I install SQL Server. I also like](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=15&mode=live&start=17.999999999999996) [to set up the schedule for the C: drive](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=15&mode=live&start=20.666666666666654) [only, so that every week it goes in and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=15&mode=live&start=23.700000000000003) [defragments the C: drive, it's just a good](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=15&mode=live&start=26.850000000000016) [thing to do in my opinion, it's very easy](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=15&mode=live&start=29.650000000000027) [to do. You shouldn't do it on your data](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=15&mode=live&start=32.10526315789474) [drives and your log drives that SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=15&mode=live&start=34.47368421052632) [will be using, just use it on your system](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=15&mode=live&start=36.79999999999998) [drive where SQL Server is installed and the rest of the operating system is.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=15&mode=live&start=39.49999999999996)

[Summary](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=16&mode=live)

[So now it's time for the summary. What](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=16&mode=live&start=0) [have we talked about in this module? Well,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=16&mode=live&start=2.6666666666666665) [proper operating system installation and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=16&mode=live&start=5.538461538461538) [configuration is very important for the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=16&mode=live&start=8.23076923076923) [performance and health of your SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=16&mode=live&start=11.46153846153846) [installation. You're going to get better](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=16&mode=live&start=13.84615384615385) [performance, better scalability, and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=16&mode=live&start=15.6923076923077) [better security if you take care of this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=16&mode=live&start=16.833333333333336) [stuff ahead of time and it's going to make](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=16&mode=live&start=19.055555555555564) [the instance easier to maintain in the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=16&mode=live&start=21.6) [future. Hardware configuration is also](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=16&mode=live&start=23.700000000000006) [very important. Making sure you have your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=16&mode=live&start=25.42857142857143) [power management and hyperthreading](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=16&mode=live&start=27.928571428571434) [settings set correctly is something you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=16&mode=live&start=29.3125) [should do. You also want to make sure that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=16&mode=live&start=31.1875) [your BIOS and firmware is up-to-date and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=16&mode=live&start=34) [all your driver updates are in place. You](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=16&mode=live&start=36.49999999999998) [want to make sure that all these tasks are](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=16&mode=live&start=39.35294117647059) [completed before you install SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=16&mode=live&start=42.52941176470587) [2012, that way you won't forget them and you'll have less disruption later on.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=16&mode=live&start=44.64705882352939)

#### [What is Next?](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=17&mode=live)

[So, what is next in Module 3? Module 3 is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=17&mode=live&start=1) [going to cover pre-installation tasks for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=17&mode=live&start=5.210526315789473) [SQL Server 2012 itself. These include](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=17&mode=live&start=7.736842105263154) [using a standardized naming scheme for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=17&mode=live&start=10.615384615384615) [your disks and directories, considering](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=17&mode=live&start=13.846153846153845) [your workload for storage provisioning,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=17&mode=live&start=16.583333333333332) [RAID levels and SQL Server workloads,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=17&mode=live&start=19.499999999999993)[provisioning your logical drives and then](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=17&mode=live&start=23) [testing your logical drive performance](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=17&mode=live&start=25.500000000000007) [with CrystalDiskMark, and then doing more](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=17&mode=live&start=27.583333333333346) [thorough testing in testing your logical drive performance with SQLIO.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m2-preinstall-os&clip=17&mode=live&start=33)

[Pre-installation Tasks for SQL Server 2012](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=0&mode=live)

#### [Introduction](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=0&mode=live)

[Hi, this is Glenn Berry with SQLskills.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=0&mode=live&start=2) [com. I'm recording this course for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=0&mode=live&start=4.5) [Pluralsight. This is SQL Server 2012](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=0&mode=live&start=6.642857142857141" \t "psplayer) [Installation and Configuration and this is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=0&mode=live&start=8.818181818181817)[Module 3: Pre-installation Tasks for SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=0&mode=live&start=11) [Server 2012. So, what am I going to talk](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=0&mode=live&start=14.75) [about in this module? Well, we'll start](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=0&mode=live&start=17.999999999999993) [out talking about how to use a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=0&mode=live&start=19.999999999999986) [standardized naming scheme for your disks](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=0&mode=live&start=22) [and directories for SQL Server; then we'll](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=0&mode=live&start=24.79999999999999) [get into considering your workload type](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=0&mode=live&start=28.066666666666645) [for storage and we'll talk about how to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=0&mode=live&start=30.411764705882348) [choose what sort of storage you're going](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=0&mode=live&start=33.235294117647044) [to use for SQL Server; we'll talk about](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=0&mode=live&start=35.77777777777777) [RAID and what that means; we'll get into](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=0&mode=live&start=38.88888888888886)[the RAID levels and the different kinds of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=0&mode=live&start=42) [SQL Server workloads and we'll get into](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=0&mode=live&start=45.19999999999999) [provisioning your logical drives; and then](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=0&mode=live&start=48) [finally we'll talk about how to actually](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=0&mode=live&start=50.000000000000014) [test your logical drive performance before you install SQL Server.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=0&mode=live&start=52.333333333333364)

#### [Uising a Standard Naming Scheme for Disks](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live)

[Using a Standard Naming Scheme for Your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=2) [Disks This makes it a lot easier to work](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=5.5) [with multiple database servers that you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=8.526315789473685) [might have in your organization. It's also](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=10.421052631578949) [very useful for database mirroring and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=13.09090909090909) [AlwaysOn Availability Groups. It makes it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=16.36363636363636" \t "psplayer) [a lot easier to restore database during a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=18.882352941176467)[disaster recovery if you have a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=21.235294117647047) [standardized naming scheme. Here's an](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=23) [example of a naming scheme that you might](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=25.058823529411757) [use for your servers. If you look at this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=28.35294117647057) [little table, it shows the drive letters](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=31.578947368421044) [and then the directory within that drive.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=33.78947368421053) [So, for example, for SQL Server log files,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=36) [I like to use the L: drive and create a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=38.35294117647061) [directory called SQLLogs and then I might](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=41.388888888888886) [have another log drive called K with a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=44.111111111111086) [directory called SQLLogs and then you can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=47.22222222222217) [go through there and see I've got](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=49.94444444444443) [different sorts of drive letters with](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=52.66666666666663) [different directory names for different](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=55) [purposes, so I want to have a dedicated](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=56.42857142857142)[LUN for SQL backups, which would be my end](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=58.7142857142857) [drive, and then I might have a P: drive](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=61.54545454545456) [and a Q: drive and an R: drive and an S:](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=64.40909090909093) [drive for SQL Server data assuming I have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=67.79999999999998) [enough LUNS to do this and then I like to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=70.19999999999996) [use T: for TempDB so whatever you want to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=73.14285714285717) [use, just come up with a standard and use](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=75.7142857142858) [it for all of your servers. That way, when](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=78.29411764705883) [you do things like database mirroring and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=80.94117647058826) [AlwaysOn Availability Groups, all the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=83" \t "psplayer) [drives and directories will be the same](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=84.875) [and that just makes things much easier](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=87.5) [when you're doing things like mirroring and Availability Groups.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=1&mode=live&start=92)

#### [Considering Your Workload for Storage](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live)

[Considering Your Workload for Storage SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=1) [Server can have several different distinct](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=5.4) [workload types from a storage point of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=7.8000000000000025) [view. The three most common types are](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=10.600000000000005) [Online Transaction Processing or OLTP,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=14.27272727272727) [Relational Data Warehouses or DW, and then](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=17) [Online Analytical Processing or OLAP.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=21.666666666666675) [These three workload types have different](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=25) [I/O access patterns and you need to think](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=26.411764705882348) [about this when you're thinking about what](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=28.294117647058812) [sort of storage to choose. An OLTP](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=30.647058823529406) [workload has frequent writes to the data](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=33.52941176470588) [files and to the log file. Also, it's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=36.3) [going to have random reads from the data](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=38.699999999999974)[files if the database does not fit into](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=41.09999999999995) [memory. Random I/O performance is very](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=45.00000000000001) [important for OLTP workloads, but also](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=48.600000000000016) [sequential write performance is important](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=51.90909090909091) [for the log file. With the data warehouse](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=54.18181818181817) [workload, you're going to have large](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=57.5) [sequential reads from the data files and,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=59.75)[except during data loads, the log file is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=62.285714285714285) [not going to be quite as important as it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=64.57142857142857) [will be with an OLTP workload. Finally, an](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=67.1428571428572) [OLAP workload has lots of random reads](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=70.5) [from the cube files. So random I/O](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=74) [performance is very important when you're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=77.05882352941178) [reading and you're also going to want to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=79.17647058823535) [worry about write performance when you're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=82) [building the cube files. So thinking about](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=83.99999999999997) [these workload types will have an effect](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=86.33333333333327) [on what sort of storage you want to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=88.0526315789474) [request and how you're going to configure it for SQL Server.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=2&mode=live&start=89.73684210526324)

#### [Additional Workload Considerations](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live)

[Additional Workload Considerations You may](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=2) [have a mixed I/O workload for several](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=6.555555555555555) [different reasons. If you have more than](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=8.5) [one database on the same instance, that's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=10.44444444444445) [going to tend to complicate and randomize](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=13.000000000000002) [your I/O workload. So instead of a pure](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=15.800000000000004) [sequential read or write workload, it's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=18.764705882352935)[going to be much more random. If you have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=20.882352941176457) [multiple databases with the log files on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=23.833333333333336) [the same LUN, that's going to cause the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=25.777777777777786) [I/O workload on that LUN to be random](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=28) [instead of sequential. If you're going to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=30.666666666666657) [be using any high availability or disaster](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=32.99999999999999) [recovery features that read from the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=36)[transaction log, such as database](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=39) [mirroring or log shipping for example,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=41.05882352941176) [that's going to cause reads from the LUN](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=43.17647058823528) [where the log files are located, where](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=46) [normally you have writes to the LUN where](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=48.45000000000001) [the log files are located. Index creation](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=51.25000000000002) [and maintenance is also going to cause a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=53.66666666666667) [lot of sequential I/O pressure. You're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=56.33333333333336) [going to have reads and writes to the data](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=58.3) [files and writes to the log file when](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=60.99999999999997) [you're doing index maintenance. Database](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=63.39999999999995) [backups are going to cause sequential I/O](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=65.63636363636364) [pressure. You're going to have reads from](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=69.45454545454547) [the data files and the log files and then](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=72.09999999999997) [writes to the backup file(s). Database](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=75.24999999999991) [restores will cause sequential I/O](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=77.57142857142857) [pressure. You're going to have reads from](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=80.42857142857142) [the backup files and then writes to the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=82.79999999999998)[data files and the log file. So you need](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=85.19999999999996) [to think about all these different things](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=90) [when you're designing and configuring your I/O subsystem.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=3&mode=live&start=97)

#### [Choosing the Storage Type for SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live)

[Choosing the Storage Type for SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=2) [This is going to depend on how you're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=6) [going to use your database server, what](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=7.684210526315788) [sort of workload you have, your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=9.157894736842106) [performance requirements, and your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=10.75) [available budget. So it's going to depend](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=12.25) [a lot on your existing infrastructure,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=14.875) [your employee skillset, and politics also](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=17.199999999999996) [make a lot of difference here. So for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=19.599999999999987) [example, if you've got a big investment in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=22.421052631578945) [a SAN, you're more likely to be using a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=24.105263157894726) [SAN whether you want to or not, whereas if](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=26) [your employees don't have any experience](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=28.99999999999999) [with a SAN, that may restrict you from](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=30.999999999999982) [using a SAN if you want to because that's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=33.31578947368421) [going to take some training and expertise](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=35.684210526315795) [to use a SAN effectively with SQL Server.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=37.875) [Now there's four main storage types that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=41.375)[you typically use with SQL Server. First,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=44.388888888888886) [you can use the internal drives of a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=47.111111111111086) [server and these can be the traditional](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=50.22222222222217) [magnetic drives or solid state drives or](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=52.764705882352935) [some combination of the two. Some of the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=55.235294117647044) [newer servers that are available now have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=57.94736842105264) [up to 26 internal drive bays so you can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=60.157894736842124) [actually have a decent amount of storage](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=63) [space and performance with internal](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=66.0625) [drives, but don't make the mistake of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=68.25) [trying to run a very heavy workload on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=70.89999999999999) [just say 4 or 6 internal drives because](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=73.29999999999997) [that's not going to work very well. Next,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=75.69999999999995) [you might be using PCI-E storage cards](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=78.88235294117644) [such as products available from Fusion-io,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=81.76470588235287) [LSI, OCZ, Intel, for example, those are](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=84.79999999999998) [quite expensive, but they're very high](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=88.99999999999994) [performance and they're becoming more](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=92.33333333333333)[popular over time. Another popular choice](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=93.99999999999997) [is direct-attached storage or DAS and this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=96.5) [can be traditional magnetic drives or SSDs](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=100) [or a combination of the two. Finally,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=103.72727272727273) [storage area networks or SANs, and these](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=107.47058823529412) [can use traditional magnetic drives or](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=110.76470588235293) [SSDs or a combination of the two. Of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=113.58823529411762) [course, storage area networks are](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=116.66666666666664) [typically much more expensive to start](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=118.33333333333329) [with and they require a lot of expertise](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=120.41666666666667) [to work with. Now your internal,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=123.75000000000004) [direct-attached storage or SANs, again,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=126.71428571428571) [can use hybrid or tiered-storage and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=129.57142857142858) [that's going to be a mixture of magnetic](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=133) [storage and SSD storage and what usually](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=136.1111111111111) [happens with these is that you try to move](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=138.8333333333333) [the data that has higher performance](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=142.00000000000006) [requirements as it's more volatile to the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=144.0000000000001) [SSD portion of the storage and the less](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=146.41176470588235) [frequently accessed data is on your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=149.70588235294113) [magnetic storage and this gives you a good](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=152.17647058823522) [compromise between space, performance, and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=156) [cost. Whatever you end up choosing, the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=158.5) [details of your storage can make a huge](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=161.33333333333331) [difference for I/O performance. So for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=164.4444444444444)[example, having 10K drives versus 15K](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=166.53333333333336) [drives actually does make a lot of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=168.13333333333344) [difference and having 3Gbps SAS versus](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=170) [6Gbps SAS also makes a lot of difference,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=173.1764705882353) [obviously you want 15K drives and 6Gbps](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=177.41176470588238) [SAS for example. The bandwidth of your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=181) [RAID controller or your HBA or your iSCSI](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=184.5) [NIC is also extremely important when it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=188.35294117647058) [comes to performance so don't let anybody](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=190.82352941176464) [tell you that, for example, you've got a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=193.2941176470587) [lot of cash in your SAN so it doesn't](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=195.42857142857144) [matter what sort of drives are behind it, that's just simply not true.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=4&mode=live&start=197.5714285714286)

#### [Tips for Requesting Storage](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live)

[Tips for Requesting Storage Don't just ask](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=2) [for storage based on your space](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=5.9375) [requirements. That's a very common mistake](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=7.8125) [that people make when they're provisioning](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=9.6875) [drives for SQL Server. If that happens,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=11.5625) [you're more likely to get very poor](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=13.75) [performance storage because whoever's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=16.384615384615383)[provisioning storage doesn't know what you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=18.230769230769223) [need it for and they don't know your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=21) [performance requirements, they just have a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=23.35294117647058) [space number that they're trying to meet.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=25.117647058823515) [You want to specify your necessary](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=27.714285714285708) [performance requirements up front. So for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=30.28571428571427) [sequential performance, tell them how many](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=32.705882352941174)[MB/second or GB/second that you would like](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=34.823529411764696) [to have based on the workload that you're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=37.294117647058805) [going to see from SQL Server. For random](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=40.11764705882352) [performance, tell them how many I/O's per](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=42.94117647058822) [second you need, that's IOPS. You also](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=45.882352941176464) [need to specify your redundancy](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=49.176470588235276) [requirements. Tell the person that's going](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=51.529411764705856) [to provision your storage, what will this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=53.25) [storage be used for. So for example,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=55) [you've got SQL Server data files, you've](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=56.92307692307692) [got SQL Server log files, you have backup](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=59.076923076923066) [files, and you have temp DB and these all](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=61.47058823529413) [have different levels of redundancy that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=64.11764705882356) [you would like to have. You know, the most](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=65.66666666666669)[important is going to be your log files,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=67.66666666666674) [for example. You also should consider](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=69.85714285714286) [using a technique called "short-stroking"](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=72.42857142857144) [to improve your I/O performance and that's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=74.5714285714286) [when you intentionally use a very small](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=77.25) [percentage of your available space so that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=79.875) [way the drive arm actuator doesn't have to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=82.77777777777777) [move as far to find data and that's also](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=86.33333333333331) [valid for SSDs. You want to leave some](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=89.83333333333331) [extra space beyond what you think you're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=92.05555555555549) [going to need so they perform better. So](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=94) [you end up asking for much more space than](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=96.10526315789468) [you really think you're going to need and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=98.4736842105262) [a thing to keep in mind about all of this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=100.76470588235296)[is, don't negotiate with yourself. You](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=103.70588235294122) [know, ask for what you really need and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=105.94444444444443) [then make them push you down and negotiate](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=109.05555555555551) [down to having less storage performance](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=112.05882352941178) [than you need, but always ask for what you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=114.17647058823535) [actually need, don't think about what you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=117.29411764705883) [think they're going to give you and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=119.35294117647061)[negotiate with yourself, that's always a mistake.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=5&mode=live&start=121.41176470588239)

### [RAID Basics](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=6&mode=live)

[RAID Basics RAID stands for Redundant](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=6&mode=live&start=1) [Array of Inexpensive Disks. It's a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=6&mode=live&start=5.714285714285715) [standardized method for managing multiple](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=6&mode=live&start=8.285714285714288) [drives with some sort of a controller,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=6&mode=live&start=10.384615384615385) [typically a hardware RAID controller;](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=6&mode=live&start=13.07692307692308) [provides redundancy and a higher](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=6&mode=live&start=15) [performance than you're going to get with](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=6&mode=live&start=16.999999999999996) [a single drive; and allows higher capacity](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=6&mode=live&start=19.799999999999986) [logical drives than is possible with one](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=6&mode=live&start=22.66666666666667) [drive. Hardware RAID controllers manage](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=6&mode=live&start=25.583333333333346) [multiple drives and server level RAID](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=6&mode=live&start=28.15384615384616)[controllers have dedicated cache memory.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=6&mode=live&start=31.3846153846154) [That cache can be used for reads or for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=6&mode=live&start=33.84210526315789) [writes or for both. Typically for SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=6&mode=live&start=37.631578947368396) [Server, you'll want to use it for writes](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=6&mode=live&start=40.57894736842101) [instead of reads. Now there's several](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=6&mode=live&start=42.647058823529406) [different RAID levels that are commonly](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=6&mode=live&start=44.058823529411754) [used. You have RAID 1, RAID 5, RAID 50,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=6&mode=live&start=46) [and RAID 10, and deciding which level of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=6&mode=live&start=50.5) [RAID to use depends on your workload and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=6&mode=live&start=54.5) [your desired level of redundancy and the kind of performance that you want to get.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=6&mode=live&start=57.05882352941178)

#### [RAID 1](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live)

[RAID 1 RAID 1 is called mirroring,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live&start=0) [requires two physical drives, and your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live&start=5.352941176470589) [data is copied to both drives, so this is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live&start=8.176470588235295) [going to require 50% storage space](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live&start=12.105263157894736)[overhead. A RAID 1 drive array can survive](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live&start=14.315789473684209) [the loss of one drive. When you lose one](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live&start=17.26315789473684) [drive, you need to replace that failed](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live&start=20.333333333333325) [drive and then the RAID controller will](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live&start=22.66666666666665) [automatically rebuild the mirror and you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live&start=24.882352941176467) [need to do this as soon as possible so you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live&start=26.647058823529402) [don't lose the second drive. There's no](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live&start=29.555555555555557)[performance impact after you lose one](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live&start=31.500000000000007) [drive when you have RAID 1. It's very](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live&start=33.16666666666668) [common to install the operating system to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live&start=36.105263157894726) [a RAID 1 volume on a server. That's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live&start=39.05263157894734) [usually done with two internal drives in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live&start=42.22222222222222) [the server and that's going to allow the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live&start=43.77777777777777) [server to operate normally after losing](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live&start=45.55555555555554) [one drive. Of course, you do lose half](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live&start=47.26315789473685) [your space if you have RAID 1, but it's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live&start=49.78947368421055) [just a basic level redundancy that you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live&start=54) [really should have, especially on a database server.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=7&mode=live&start=61)

#### [RAID 5](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live)

[RAID 5. RAID 5 is called striping with](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=1) [parity. It requires at least three](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=5.333333333333335) [physical drives and your data is striped](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=7.6666666666666705) [between all of the drives in the RAID 5](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=10.3)[array. After the data is written to all](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=13.000000000000007) [the drives, parity information is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=15.400000000000013) [calculated by the RAID controller and then](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=17.05882352941176) [it's striped to all of the drives. This](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=19.52941176470587)[causes a write performance penalty. Having](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=22.444444444444443) [RAID 5 allows the RAID to survive the loss](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=25.1111111111111) [of one drive in the array. Performance is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=29.111111111111086) [severely affected after the loss of one](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=32.25) [drive because the missing data from the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=34.875) [failed drive is recalculated from the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=37.5) [parity information and that takes a bit of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=39.75) [time. This failed drive has to be replaced](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=42.66666666666667) [as soon as possible because if you lose a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=45.33333333333336) [second drive, the array is down and you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=48.357142857142854) [lose all of your data. RAID 5 requires](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=51.21428571428569) [1/(the number of drives) as storage](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=54.5) [overhead. So if you had four drives, it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=57.5) [would take one-fourth of your space as](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=60.1875) [storage overhead. RAID 5 is very popular](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=62.375) [with I. T. departments. It's very](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=65.05882352941175) [economical because of the low storage](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=67.52941176470584) [overhead, but the risk of failure goes up](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=70) [as you add drives to the array. There's a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=72.66666666666663) [statistical chance that any one drive in a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=75.5) [RAID 5 array is going to fail and the more](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=77.5) [drives that you have in the array, the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=80)[higher chance that one of those drives](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=82.35294117647061) [will fail. So typically don't usually have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=84.41176470588239) [more than 8 or 10 drives in a RAID 5 array.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=8&mode=live&start=90)

#### [RAID 50](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=9&mode=live)

[RAID 50 RAID 50 is called striping across](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=9&mode=live&start=2) [multiple RAID 5 data sets. It requires at](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=9&mode=live&start=6.4705882352941195) [least six physical drives so that means a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=9&mode=live&start=9.764705882352946) [minimum of two three-drive RAID 5 arrays](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=9&mode=live&start=12.66666666666667) [that you require to have a RAID 50 array.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=9&mode=live&start=15.000000000000007) [It's going to require 1/(the number or](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=9&mode=live&start=18.166666666666668) [drives) in each RAID array for your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=9&mode=live&start=20.888888888888893) [storage overhead and you can survive the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=9&mode=live&start=23.611111111111118) [loss of one drive in each RAID 5 array so](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=9&mode=live&start=25.714285714285708) [this makes RAID 50 more redundant than](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=9&mode=live&start=28.571428571428555) [RAID 5 by itself. Performs better than](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=9&mode=live&start=30.799999999999997) [RAID 5 after the loss of one drive so it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=9&mode=live&start=33.59999999999999) [can be a good compromise between RAID 5](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=9&mode=live&start=37.59999999999997) [and RAID 10, it's less expensive than RAID](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=9&mode=live&start=40.578947368421076) [10, and it's more expensive than RAID 5,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=9&mode=live&start=43.526315789473735) [but provides better redundancy. Not all](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=9&mode=live&start=46.599999999999994) [RAID controllers support RAID 50, but RAID](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=9&mode=live&start=48.999999999999986) [50 is becoming more popular with I. T.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=9&mode=live&start=52.882352941176464) [departments as more RAID controllers support it.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=9&mode=live&start=60.41176470588232)

#### [RAID 10](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live)

[RAID 10 RAID 10 is called a striped set of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live&start=1) [mirrors. Your data is mirrored and then](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live&start=6.823529411764703) [it's striped. This makes it possible to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live&start=9.29411764705882) [survive the loss of more than one drive.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live&start=11.578947368421053) [This requires a minimum of four physical](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live&start=14.105263157894738) [drives in your array and you must have an](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live&start=16.35) [even number of physical drives in a RAID](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live&start=19.500000000000014) [10 array. There's no write performance](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live&start=22.300000000000026) [penalty with RAID 10 so it's very](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live&start=24.599999999999994) [well-suited to write-intensive workloads.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live&start=27.399999999999984) [It's ideal for SQL Server log files. It](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live&start=29) [does require a 50% storage space overhead](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live&start=32.19999999999999) [so it's more expensive than RAID 5,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live&start=35) [sometimes RAID 10 is called rich man's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live&start=37.79999999999999) [RAID. RAID 10 is very popular with](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live&start=40.59999999999998) [database administrators because it gives](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live&start=43.39999999999999) [you better write performance and better](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live&start=45.399999999999984) [redundancy than RAID 5. Of course, it is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live&start=47.66666666666667) [more expensive than RAID 5. As a DBA, I](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live&start=50.33333333333336) [always want to have RAID 10 for everything](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live&start=53.33333333333334) [if possible and then, if necessary,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live&start=56.00000000000003) [negotiate down to other levels of RAID that we've talked about.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=10&mode=live&start=58)

#### [RAID Level and SQL Server Workloads](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live)

[RAID Level and SQL Server Workloads The](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=1) [number of spindles in an array is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=5.375) [extremely important. A larger number of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=8) [smaller drives perform much better than a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=10.25) [small number of larger drives and this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=12.388888888888893) [ties into the mistake that people](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=14.333333333333343) [sometimes make of just requesting a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=16) [certain amount of space instead of giving](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=18.3076923076923) [performance characteristics when they're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=21) [requesting your storage. RAID 5 has a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=23.285714285714292) [write performance handicap because of the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=26.200000000000003) [fact that you have to write out the data](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=28.000000000000007) [and then calculate the parity information](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=30.700000000000014) [and write it out. RAID 5 cannot survive](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=32.666666666666664) [the loss of more than one disk in an array](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=35.33333333333335) [and RAID 5 arrays with larger numbers of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=38.95652173913043) [disks are more likely to lose one of those](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=42.08695652173912) [disks. So, if you're going to have to use](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=45.60869565217389) [RAID 5 for cost reasons, try to put your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=47.411764705882376) [infrequently accessed data on RAID 5 if](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=49) [possible. For example, if you've got data](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=51.882352941176485) [files that don't change that much then I](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=54.76470588235297) [would use that for RAID 5 or maybe I would](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=57.75000000000001) [use RAID 5 for my database backup files,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=61.25000000000002) [for example. RAID 10 and RAID 1 have very](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=64.6) [good write performance. RAID 10 also has](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=69.39999999999998) [more redundancy than RAID 5 so I always](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=72.09090909090907) [try to use either RAID 1 or RAID 10 for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=74.2727272727272) [SQL Server log files. As a database](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=77)[administrator, don't negotiate with](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=80.5) [yourself on storage. You should always ask](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=82.5) [for RAID 10 and then negotiate down if](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=85.68421052631578) [necessary, and again use RAID 5 for data](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=89.05263157894734) [files that don't change that much and use](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=92.26315789473684) [them for backup files if necessary, but in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=94.36842105263152) [an ideal world from a database](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=96.4736842105262) [administrator's point-of-view, you want RAID 10 for everything if at all possible.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=11&mode=live&start=101)

#### [Provisioning Your Logical Drives](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live)

[Provisioning Your Logical Drives Drive](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=1) [arrays must be created and presented to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=4.315789473684211) [the host. The host is just another name](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=6.526315789473685) [for a server. This is going to be done](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=9.05263157894737) [differently depending on the type of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=11.600000000000005) [storage you're using. So, you might have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=13.20000000000001) [internal drives, for example, and they're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=14.941176470588232) [going to use a hardware RAID controller.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=16.35294117647058) [It might have internal PCI-E storage, it's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=18) [usually going to end up using Windows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=20.625) [Software RAID. Then you'll have direct](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=23.25)[attached storage, which you use a hardware](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=25.230769230769226) [RAID controller, and you might have a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=27.384615384615373) [storage area network and it will have its](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=29.25) [own method depending on a SAN for creating](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=31.25) [a drive array and presenting it to the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=33.36842105263158) [host. After you do this, you use Windows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=36.31578947368424) [Disk Manager to initialize and format](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=39.2631578947369) [those drives and that's when you assign](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=41.33333333333334) [drive letters and give a name to the LUN.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=43.66666666666669) [You're going to want to use your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=46.58823529411765) [standardized naming scheme that we talked](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=48.647058823529434) [about earlier. So for example, you might](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=50.41176470588239) [use the P: drive for a SQL Server data](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=52.5625) [file drive. It's also a good idea to go](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=55.375) [ahead and create the directories for SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=57.647058823529406) [Server, you know, such as the SQL data and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=59.29411764705881) [the SQL log directory on these drives.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=61.71428571428571) [That way you don't have to do it during](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=63.7142857142857) [the middle of the setup program, this will save you some time.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=12&mode=live&start=67)

#### [Testing Your Logical Drive Performance](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=13&mode=live)

[Testing Your Logical Drive Performance](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=13&mode=live&start=1) [CrystalDiskMark is a quick way to test](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=13&mode=live&start=5" \t "psplayer) [drive performance. It enables you to test](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=13&mode=live&start=7.470588235294115) [each logical drive in just a few minutes.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=13&mode=live&start=9.941176470588236) [It tests sequential and random I/O](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=13&mode=live&start=12.875) [performance in several different ways. You](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=13&mode=live&start=15.125) [should use this just for the first round](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=13&mode=live&start=17.333333333333332) [of testing before you use SQLIO. SQLIO](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=13&mode=live&start=19.99999999999999) [allows you to do much more detailed](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=13&mode=live&start=22.375) [logical drive testing. Despite the name,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=13&mode=live&start=25) [it doesn't require SQL Server to be](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=13&mode=live&start=27.25) [installed and it doesn't generate a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=13&mode=live&start=30.142857142857135) [database specific workload. It can be used](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=13&mode=live&start=32.7142857142857) [for much more time consuming tests that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=13&mode=live&start=35.33333333333334) [take a lot more time, but they're much](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=13&mode=live&start=37.66666666666669) [more comprehensive. So again, use](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=13&mode=live&start=40.33333333333338) [CrystalDiskMark first to see if everything](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=13&mode=live&start=42.07142857142856" \t "psplayer) [looks ok on the surface and then use SQLIO to do more detailed testing.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=13&mode=live&start=44.21428571428569)

#### [CrystalDiskMark 3.0.1 x64](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live)

[CrystalDiskMark 3. 0. 1 This is very easy](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=1) [to use with no complicated configuration](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=5.647058823529413) [required. You can choose the file size for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=8.117647058823533) [the test runs. You can choose between](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=11.666666666666666) [50MB, 100MB, 500MB, 1000MB, 2000MB or](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=16.33333333333333) [4000MB. You can also choose the file type.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=20.333333333333336) [You can choose between random data or](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=24.0625) [non-random data. The reason why this is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=27.125) [important for SQL Server is because some](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=30.058823529411757) [SSD controllers use compression to get](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=32.941176470588225) [performance and random data is not very](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=35.333333333333336) [compressible. So if you use random data](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=37.666666666666686) [with that sort of an SSD controller,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=40.000000000000036) [you're not going to get very good](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=42.25)[performance like you might expect, but](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=44.4375) [that's actually probably more realistic](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=46.3125) [for SQL Server. You can also choose a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=47.875) [number of test runs between 1 and 9, the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=50.375) [default is 5. CrystalDiskMark is going to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=54.29411764705881) [quickly measure your sequential and random](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=57.588235294117624) [I/O performance. It's going to measure](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=60.28571428571429)[sequential reads and writes and MB/second](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=62.857142857142875) [and then it's going to measure large and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=65.44444444444444) [small random reads and writes at different](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=68.99999999999999) [queue depths. Higher queue depths are more](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=72.11111111111109) [accurate for a server compared to a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=74.53846153846153) [desktop. It's going to be measured in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=76.69230769230768) [MB/second and IOPS. This tool's a free](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=79.66666666666666)[download at this URL and, again, this is a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=82.77777777777776) [very good tool to use for getting a quick](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=86.19999999999999) [and dirty look at your I/O performance and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=88.89999999999996) [this is what it looks like when you get](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=91.27272727272727) [the output, which you can see along the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=93.72727272727266) [left side is the different sorts of tests](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=95.90909090909079) [that it runs and then you can see the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=98.05263157894734) [results and reads and writes and MB/second](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=100.42105263157886) [and if you hover over the bottom two rows,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=102.35) [you also get the IOPS and a tool tip and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=105.49999999999994) [down at the bottom is the description of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=109) [the drive that you're testing. You](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=111.46153846153845) [actually have to type that in yourself,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=113.2) [but it's a good idea to do that because](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=114.60000000000002) [then you can take a screenshot like I've](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=116.40000000000005) [done here and have a record of what your results were.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=14&mode=live&start=122)

#### [Demo: CrystalDiskMark](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live)

[In this demo, I'm going to show you how to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=1) [use CrystalDiskMark 3. 0. 1. You can see](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=4.333333333333333) [what it looks like, I've already started](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=6.473684210526316) [it right up here, and down here is the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=7.578947368421053) [description of the drive you're going to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=9) [test, you have to type that in yourself.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=11.333333333333337) [What you see here is this is a number of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=14) [test runs it's going to do. By default it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=16.17391304347826) [comes up with 5, but you can choose](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=18.13043478260868) [between 1 and 9 test runs, I'm choosing 1](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=20.33333333333333) [for this demo so it'll go more quickly.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=23.333333333333318)[Right here is the size of the test file](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=26) [it's going to generate and use for its](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=28.04545454545454) [tests so I'm going to leave it at the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=29.863636363636353) [1000MB default. In real life, you'd want](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=32.263157894736835)[to make that large enough so it's larger](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=34.47368421052632) [than the cache in your RAID controller to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=37) [have a more realistic test. Right here is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=39.22222222222223) [where you'd choose the logical drive that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=41.44444444444446) [you're going to test. In my case, I've](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=43.25) [only got a C: drive on my workstation and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=45.25) [it shows how full it is and how large it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=47.8) [is to begin with, it's a 512GB SSD, and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=51.79999999999998) [then up here under file, you can choose](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=55.4) [your Test Data. By default, it's going to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=58.59999999999999) [use random data, which is not very](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=61.799999999999976)[compressible and then if you wanted to you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=63.94117647058823) [could change to non-random data, whether](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=65.8235294117647) [it's all zeros or all ones, I'm going to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=67.29411764705883) [leave it at the default for now. So once](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=69.94117647058826) [you've done this, click the All button and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=72.57142857142858) [what it will go and do is create that file](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=74.85714285714292) [and start running the tests in order, so](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=77.71428571428584) [it's going to run the sequential read test](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=80.625) [first. In a few seconds, it'll show up](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=83.625) [with the results for that test and it's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=86.00000000000004) [going to be in MB/second for sequential](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=88.28571428571438)[reads. Now sequential reads are really](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=90.41666666666667) [important for SQL Server for data](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=92.9166666666667) [warehouse workloads, for example, and so](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=95.52941176470588) [we see that we've got 407MB/second, which](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=98.70588235294119) [is a pretty decent performance for a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=102.41176470588238) [single drive. Of course, this is an SSD](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=105.11111111111109) [and then we have even better write](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=107.33333333333326) [performance, 426MB/second, and what you'll](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=109.6) [see is the next test will be testing](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=112.59999999999997) [smaller random reads, so in this case it's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=117.39999999999992) [512K reads and that's coming up](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=122.6666666666667)[304MB/second and then 428 writes/second,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=126.66666666666673) [so that's quite good, and then it goes](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=129.4) [into random I/O with 4K reads and writes](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=133.13333333333335) [with a queue depth of 1 for this third](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=136.5) [round of tests. And what's nice about this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=139.875) [is if you hover over the result, it gives](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=142.4285714285714) [you a result in IOPS in that tool tip so](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=144.9999999999999) [you can see we're getting about 7800 IOPS](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=148.22727272727272) [with a queue depth of 1 for a 4K random](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=151.49999999999997) [read and even higher for random writes,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=155.59090909090904) [nearly 18, 000 IOPS, and that's again with](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=157.89473684210532) [a queue depth of 1, which is more typical](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=160.42105263157907) [of a desktop or a laptop workload and down](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=163.33333333333337) [here is a 4K read and write with a queue](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=166.33333333333346) [depth of 32 and that's more accurate for a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=170.0769230769231) [server-type workload. So you can see we're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=174.92307692307702) [getting nearly 71, 000 IOPS on a single](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=177.74999999999997) [consumer level SSD here and then even](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=180.54999999999993) [better for the writes, 74, 854 IOPS. So,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=183) [again, you can see in just a few minutes](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=185.66666666666674) [you can run a single test run on a logical](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=188.66666666666683) [drive. In real life I'd probably run it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=192.09999999999997) [five times, so I would pick 5 instead of 1](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=194.89999999999992) [here, but then what I would do is after I](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=197.90909090909088) [had all this for each one of my logical](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=200.18181818181807) [drives, I'd just take a screenshot and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=202.23809523809524) [paste that into an email or a Word doc so](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=203.90476190476193) [you have a record of it as your first](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=206.28571428571433) [round of testing for your logical drives before you install SQL Server.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=15&mode=live&start=213)

#### [SQLIO Disk Benchmark](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=16&mode=live)

[SQLIO Disk Benchmark Despite the name, it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=16&mode=live&start=1) [has nothing to do at all with SQL Server.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=16&mode=live&start=5.05263157894737) [It's a free tool developed by Microsoft to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=16&mode=live&start=7.421052631578952) [evaluate I/O performance on any sort of a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=16&mode=live&start=9.736842105263158) [server. You can use it on any server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=16&mode=live&start=12.684210526315788) [running a recent version of Windows, it's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=16&mode=live&start=15.631578947368418) [a command-line utility, and it requires a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=16&mode=live&start=18.117647058823522)[little bit of expertise to properly](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=16&mode=live&start=20.58823529411763) [configure and run it. It can also take a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=16&mode=live&start=22.6) [long time to run a comprehensive set of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=16&mode=live&start=25.300000000000008) [tests, so that's why you should use](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=16&mode=live&start=27.700000000000014)[CrystalDiskMark before you do SQLIO. It](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=16&mode=live&start=30.333333333333336) [allows you to test the limits of your I/O](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=16&mode=live&start=32.666666666666664) [subsystem and you do this before you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=16&mode=live&start=35.88235294117648) [install SQL Server, but after you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=16&mode=live&start=37.94117647058826) [provisioned your logical drives. It](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=16&mode=live&start=39.70588235294122) [measures IOPS and measures sequential](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=16&mode=live&start=42.28571428571428) [throughput in MB/second and also measures](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=16&mode=live&start=45.142857142857125) [latency in milliseconds and you can download it from this URL.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=16&mode=live&start=49)

#### [Summary](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live)

[So what have we talked about in this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=2) [module? Well first, you want to make sure](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=3.6842105263157876) [to use a standardized naming scheme for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=5.368421052631575) [your drives and directories. That's going](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=7.1764705882352935) [to make it a lot easier to work with](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=8.941176470588237) [multiple database servers. It's also going](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=11.666666666666668) [to make it a lot easier to use HA/DR](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=13.666666666666671) [features like AlwaysOn Availability](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=16.66666666666667) [Groups. You also need to consider your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=17.999999999999996) [workload type when you think about](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=20.33333333333332) [storage, think about your read versus your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=22.294117647058822)[write frequency, and whether you have more](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=24.35294117647058) [of a sequential or a random I/O workload,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=26.411764705882337) [so that's going to affect how you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=29.625) [configure your storage. You also want to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=32.6875) [choose the appropriate RAID level for your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=35.230769230769226) [logical drives. That's going to affect](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=37.38461538461537) [performance, redundancy, and cost. You](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=39.25) [also want to make sure your drives are](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=40.8125) [provisioned and tested before you install](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=43.5) [SQL Server 2012. You want to use](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=46.5) [CrystalDiskMark for the first round of I/O](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=49.33333333333334" \t "psplayer) [testing and then use SQLIO for more](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=51.66666666666669) [comprehensive testing and, again, you do this before you install SQL Server 2012.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=17&mode=live&start=54)

#### [What is Next?](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=18&mode=live)

[So what's next in Module 4? Module 4 will](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=18&mode=live&start=1) [cover actually installing SQL Server 2012](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=18&mode=live&start=5.000000000000001) [after all this preparation work, we'll](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=18&mode=live&start=7.666666666666669) [cover selecting which features to install,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=18&mode=live&start=10.615384615384615) [specifying the Service accounts for the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=18&mode=live&start=13.846153846153845) [SQL Server Services, changing the SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=18&mode=live&start=17.07692307692308) [Server Agent to automatic start, the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=18&mode=live&start=20.30769230769232) [Database Engine configuration tasks that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=18&mode=live&start=23.4) [you have to complete, and then specifying](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=18&mode=live&start=25.39999999999999) [the data directories for SQL Server and,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=18&mode=live&start=27.882352941176467) [again, after all this work we've done](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=18&mode=live&start=29.941176470588225) [upfront, the installation's going to go](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=18&mode=live&start=32) [much more smoothly with less work and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=18&mode=live&start=33.66666666666667) [we're going to have a more reliable and better performing instance in the end.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m3-preinstall-sql&clip=18&mode=live&start=35.61111111111112)

[Installing SQL Server 2012](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live)

[Introduction](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live)

[This is Glenn Berry from SQLskills. com.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=0) [I'm recording this course for Pluralsight.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=3.5) [This is SQL Server 2012: Installation and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=6.5) [Configuration and this is Module 4:](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=10.166666666666668) [Installing SQL Server 2012. What are we](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=13.666666666666671) [going to talk about in this module? Well,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=16.75) [there are several important choices you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=18.75) [have to make during installation. These](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=20.25) [affect security, performance, scalability,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=22.84615384615385) [and the maintainability of your instance](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=25.307692307692317) [over time. You don't want to make the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=29)[mistake that a lot of people make and just](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=31.181818181818187) [simply click Next on every single dialog.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=33.63636363636365) [Selecting which instance and shared](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=36.14285714285714) [features to install is also very](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=38.999999999999986) [important. You should only install the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=42.4285714285714) [features that you actually need now, not](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=44.499999999999986) [ones that you might need in the future.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=46.599999999999966) [Instance configuration - You need to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=49) [decide whether you're going to install the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=51.11764705882352) [default instance or a named instance of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=53.58823529411763) [SQL Server. Specifying service accounts --](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=56.800000000000004) [You have to select which accounts to use](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=59.41176470588235) [for each SQL Server Service. These should](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=62.235294117647044) [be the accounts you've already created](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=64.6) [ahead of time. You also need to go in and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=66.39999999999998) [change the SQL Server Agent to use](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=69.39999999999995) [automatic startup because it's set to use](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=72.1875) [manual startup by default. When it comes](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=75.25) [to Database Engine configuration tasks,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=78.125) [there's a server configuration tab that's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=80) [very important and then a data directories](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=82.25) [tab and then a FILESTREAM tab. Finally,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=84.66666666666664) [you have to decide whether or not to use](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=86.99999999999994) [error reporting. That's disabled by](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=90) [default, but you might want to turn it on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=91.25) [so that you send telemetry to Microsoft to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=93.5) [help them fix problems with SQL Server over time.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=0&mode=live&start=97)

[Selecting Which Features to Install](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live)

[Selecting Which Features to Install You](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=1) [only should install the features that you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=5.388888888888889) [actually need right now. This will reduce](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=8.111111111111114) [your attack surface, it also will reduce](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=10.83333333333334) [your resource usage, and it's going to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=13.263157894736842) [reduce your patch surface, so fewer](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=15.473684210526317) [reboots are required when you install](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=17.36842105263157) [Service Packs and Cumulative Updates. It's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=20.22222222222223) [relatively easy to add additional features](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=23.375) [later. You don't want to install features](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=25.625) [now that you might need later because,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=27.894736842105253)[again, you're going to increase your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=30.105263157894715) [attack surface and increase your resource](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=32) [usage if you do that. You can simply run](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=34.10000000000001) [setup from the Control Panel and add those](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=37.25000000000002) [additional features later if you end up](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=40.00000000000001) [needing them. You should use a development](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=42.33333333333336) [or test instance for experimentation. You](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=45.5)[can install all the features there for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=48.333333333333336) [learning purposes rather than doing it on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=50.666666666666686) [your production server. You can use](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=53.000000000000036) [Developer Edition on a workstation or you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=55.00000000000001) [can use the free Enterprise Evaluation](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=57.33333333333336) [Edition for experimentation on a test](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=59.33333333333337) [machine. This is what the Feature](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=64) [Selection Screen looks like and this shows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=66.66666666666664) [a minimal set of features selected. You're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=68.99999999999994) [going to need the Database Engine for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=71.2) [pretty much any time you use SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=72.60000000000002) [and then I have Documentation Components](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=74.20000000000005) [selected here and Management Tools, so](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=75.93333333333334) [it'll have SQL Server Management Studio](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=78.73333333333335) [installed on this server itself just in case you ever need it.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=1&mode=live&start=81.53333333333336)

#### [Instance Configuration](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live)

[Instance Configuration You must choose](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=2) [between the default instance or a named](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=5.75) [instance of SQL Server when you actually](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=7.5) [get around to installing SQL Server. You](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=9.25) [can only have one default instance of SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=11.846153846153847) [Server. Normally the first installed](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=15.53846153846154) [instance is the default instance, but it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=17.599999999999994)[doesn't have to be. You can have up to 49](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=20.399999999999984) [named instances of SQL Server on a single](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=23.9090909090909) [machine. There's a 16 character limit for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=26.454545454545432) [the name of a named instance. It's much](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=28.681818181818148) [more common for production servers to only](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=31.57894736842105) [have a single instance of SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=34.157894736842124) [installed and in most cases that's the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=36.57142857142857)[default instance. That way the instance](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=38.57142857142856) [name is the same as the NetBIOS name of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=40.28571428571427) [the machine. Having multiple instances](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=43.5) [installed means they're going to be](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=46) [competing for resources such as memory and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=49) [CPU and I/O. Multiple instances are harder](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=51.84210526315791) [to manage and maintain so that's another](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=54.42105263157899)[reason you don't want to do it on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=57) [production servers in most cases. Named](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=59.80000000000001) [instances are much more useful for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=61.90000000000002) [development and testing. They allow you to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=64) [have different versions of SQL Server on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=66.7222222222222) [the same machine or multiple instances](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=69.4444444444444) [that are the same version of SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=71.58823529411765) [and that's very useful again for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=73.94117647058826) [development and testing and it saves on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=75.70588235294122) [license costs, so that's another good](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=77.82608695652172) [reason to do that, but again I don't like](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=79.65217391304344) [to do this in production unless I really](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=82.39130434782602) [have to. This is what the Instance](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=86) [Configuration Screen looks like. You can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=88.31578947368418) [see here that I selected a default](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=89.89473684210519)[instance to install SQL Server, but just](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=91.73684210526304) [below it, that radio button called Named](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=94.21052631578945) [Instance, I could select that and then give it a name for the named instance.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=2&mode=live&start=96.78947368421048)

#### [Specifying Service Accounts](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=3&mode=live)

[Specifying Service Accounts. You need to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=3&mode=live&start=2) [specify accounts for each SQL-related](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=3&mode=live&start=5.199999999999999) [service that you install. These should be](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=3&mode=live&start=7.866666666666665) [the domain accounts that were previously](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=3&mode=live&start=11.3125) [created before you even started this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=3&mode=live&start=13.9375) [process. This will depend on which](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=3&mode=live&start=16.5625) [services you decide to install, so you're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=3&mode=live&start=18.750000000000007) [likely to have the SQL Server Agent](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=3&mode=live&start=21.200000000000017) [service and the SQL Server Database Engine](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=3&mode=live&start=23.650000000000027) [service and then you might have SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=3&mode=live&start=26.25) [Analysis Services, SQL Server Reporting](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=3&mode=live&start=29.25) [Instances, and SQL Server Integration](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=3&mode=live&start=31.125) [Services. It's relatively unlikely you'll](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=3&mode=live&start=33) [have all of these on a single machine. You](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=3&mode=live&start=34.875) [must enter the credentials for each](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=3&mode=live&start=38.39999999999999) [account during setup, so you're going to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=3&mode=live&start=40.79999999999998) [have to have the Account Name and the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=3&mode=live&start=43.59999999999997) [Password for each one of these services if](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=3&mode=live&start=45.909090909090914)[you're going to install it on your SQL Server machine.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=3&mode=live&start=48.0909090909091)

[Server Configuration Screen](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=4&mode=live)

[This is what the Server Configuration](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=4&mode=live&start=3) [Screen looks like when you first open it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=4&mode=live&start=4.6) [up. It's opened up to the Service Accounts](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=4&mode=live&start=6.7333333333333325) [tab and it has SQL Server Agent, SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=4&mode=live&start=9.210526315789474) [Server Database Engine, and the SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=4&mode=live&start=11.73684210526316) [browser. All of these are currently set up](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=4&mode=live&start=13.85714285714286) [to use the built-in accounts, which is not](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=4&mode=live&start=16.14285714285715) [what you want to do for a production](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=4&mode=live&start=18.428571428571427) [server. So, you're going to want to go in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=4&mode=live&start=20.428571428571423) [here and change these, set the domain](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=4&mode=live&start=22.57142857142856) [accounts that you created for each one of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=4&mode=live&start=24.31578947368421) [these services, and then enter in the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=4&mode=live&start=26.84210526315788) [correct password and make sure that the Startup Type is set to automatic.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=4&mode=live&start=29.05263157894734)

[Changing SQL Server Agent Properties](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=5&mode=live)

[Changing SQL Server Agent Properties By](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=5&mode=live&start=3) [default, the SQL Server Agent service is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=5&mode=live&start=7.3) [set to Manual start. You should change](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=5&mode=live&start=9.400000000000002) [this to Automatic start during](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=5&mode=live&start=11.500000000000007) [installation, otherwise, you might forget](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=5&mode=live&start=13) [to change it later. This is especially](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=5&mode=live&start=15.1875) [important for replication and log](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=5&mode=live&start=18.25) [shipping, which create SQL Server Agent](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=5&mode=live&start=20.35) [jobs. You want to use the SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=5&mode=live&start=22.45000000000001) [Configuration Manager if you do need to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=5&mode=live&start=25.25000000000002) [change it later. Don't use the Windows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=5&mode=live&start=27.888888888888886) [Services applet to make changes to SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=5&mode=live&start=30.999999999999986) [Server-related services. The Windows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=5&mode=live&start=34.111111111111086) [Services applet doesn't handle all the SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=5&mode=live&start=35.631578947368425) [Server settings properly so always make](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=5&mode=live&start=37.84210526315791) [sure to use the Configuration Manager if](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=5&mode=live&start=39.736842105263186) [you have to make any changes to Windows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=5&mode=live&start=42.125) [Services related to SQL Server, such as](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=5&mode=live&start=45.125)[changing their password or changing their account.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=5&mode=live&start=49)

#### [Database Engine Configuration Tasks (1)](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live)

[Database Engine Configuration Tasks On the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=3) [Server Configuration tab, you have to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=7.666666666666666) [choose the Authentication Mode for SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=9.666666666666668) [Server. You can choose Windows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=11.666666666666671) [Authentication mode, which is more secure,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=13.473684210526315) [but it requires a domain login for anybody](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=15.684210526315788) [to log in to SQL Server. Mixed Mode](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=18.631578947368418)[authentication is less secure, but it's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=21.88235294117646) [still required for many legacy](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=24.35294117647057) [applications, especially if people don't](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=26.41176470588235) [have Windows domain logins. With Mixed](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=28.47058823529411)[Mode, you must enter a system](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=30.941176470588218) [administrator password and you have to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=33.4) [make sure to use a strong password and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=35.79999999999999) [don't forget what it is. You should also](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=38.99999999999998) [add at least one SQL Server administrator.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=42.16666666666666) [Typically, you add your current Windows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=44.88888888888886) [domain account that you're logged in to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=47.22222222222217) [the machine during the installation. You](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=50.058823529411775) [can add more administrators after](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=52.529411764705905) [installation inside of SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=54.58823529411768) [Management Studio. Here's what the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=57)[Database Engine -- Server Configuration](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=58.833333333333336) [tab looks like. You can see where you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=60.22222222222223) [enter the Authentication Mode, whether its](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=62.44444444444446) [Windows authentication mode or a Mixed](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=64.60000000000001) [Mode like you see here. If you choose](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=67.00000000000004) [Mixed Mode, you have to put an (sa)](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=69.9375) [password, which I've done here. You also](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=72.4375) [want to specify at least one SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=74.57142857142858) [administrator so I clicked on the Add](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=76.85714285714292) [Current User button to get myself added for this screenshot.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=6&mode=live&start=78.85714285714296)

#### [Database Engine Configuration Tasks (2)](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live)

[Database Engine Configuration Tasks On the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=4) [Data Directories tab, there's several](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=7.545454545454545) [things you want to go in and change. You](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=8.90909090909091) [want to make sure to change the default](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=11.36363636363637) [data directories. They'll be on the C:](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=13.823529411764707) [drive by default, which is usually not](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=16.705882352941178) [optimal. Your C: drive is not likely to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=19.588235294117638) [have enough space or enough redundancy or](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=22.79999999999999) [enough performance to support your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=25.59999999999998) [workload. It's really easy to miss this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=27.599999999999973) [because people typically just blow right](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=29.578947368421055) [by this, so if they've never thought about](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=31.15789473684211) [this, and so they'll be stuck with the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=33.266666666666666) [default until they change it later. You](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=35.39999999999999) [want to change these directories from the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=37.388888888888886) [defaults. The user database directory](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=40.111111111111086) [should be set to the directory that you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=42.055555555555515) [set up ahead of time, it would be](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=45.0909090909091) [hopefully on the P: drive with a directory](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=48.000000000000036) [called SQL Data. The user database log](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=50.90909090909097) [directory should also be changed, that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=53.5) [should be on the L: drive with a directory](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=55.75) [called SQL Logs. The temp DB directory,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=59.00000000000001) [you want to change that to be the T: drive](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=61.52380952380952) [and have a directory called temp DB. Same](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=65.33333333333331) [way for the temp DB log directory, it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=68.28571428571429) [should be in the same directory in most](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=70.57142857142863) [cases, and then finally, the Backup](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=72.85714285714296) [directory where your SQL Server backups](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=74.57142857142858)[will go by default, that should be on the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=76.28571428571433) [M: drive on a directory called SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=78.85714285714296) [backups. And here's what that screen looks](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=82.25) [like, you know with all the changes made,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=84.71428571428575) [so you can see that instead of having the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=87.00000000000009) [C: drive being used for everything, I've](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=89.78260869565219) [got a P: drive, an L: drive, the T: drive,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=92.52173913043484) [and the N: drive. So, doing it now means](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=96.43478260869577) [that you won't forget to do it later and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=99.59090909090907) [have things such as TempDB initially on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=102.45454545454538) [your C: drive and you'll have to go](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=104.68181818181807)[through the work of moving that to where you really want it to be.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=7&mode=live&start=112)

#### [Database Engine Configuration Tasks (3)](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=8&mode=live)

[Database Engine Configuration Task for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=8&mode=live&start=3) [FILESTREAM On the FILESTREAM tab, there's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=8&mode=live&start=6.333333333333334) [a number of options you need to enable if](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=8&mode=live&start=8.052631578947368) [you're going to use the FILESTREAM](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=8&mode=live&start=9.947368421052637) [feature. First, you'll have to enable](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=8&mode=live&start=11.533333333333333) [FILESTREAM for Transact SQL access, that's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=8&mode=live&start=14.733333333333333) [required before the other options are](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=8&mode=live&start=17.933333333333337)[actually available in the dialog. Next](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=8&mode=live&start=20.5) [you'll have to enable FILESTREAM for file](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=8&mode=live&start=22.75) [I/O streaming access. That let's Win32](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=8&mode=live&start=25.444444444444443) [streaming access work for FILESTREAM. You](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=8&mode=live&start=28.1111111111111) [also have to specify a Windows share name.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=8&mode=live&start=30.777777777777757) [This can be used for the name of the file](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=8&mode=live&start=34.14285714285714) [share where the FILESTREAM data will be](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=8&mode=live&start=37.952380952380935)[stored. Finally, you need to decide](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=8&mode=live&start=40.61904761904759) [whether to allow remote clients to have a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=8&mode=live&start=42.94444444444443) [streaming access to FILESTREAM data.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=8&mode=live&start=46.055555555555515) [That's going to be required if you want](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=8&mode=live&start=48) [remote clients to be able to access the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=8&mode=live&start=50.22222222222223) [data there. This is what the dialog looks like with all the options enabled.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=8&mode=live&start=52.44444444444446)

[Error Reporting](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=9&mode=live)

[Error Reporting Microsoft collects](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=9&mode=live&start=3) [telemetry information about fatal SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=9&mode=live&start=6.066666666666666) [Server errors for these components: the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=9&mode=live&start=8.733333333333333) [Database Engine, SQL Server Agent,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=9&mode=live&start=11.933333333333332) [Analysis Services, Reporting Services,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=9&mode=live&start=15.454545454545455) [Integration Services, and Replication.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=9&mode=live&start=18.727272727272723) [This is very useful information for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=9&mode=live&start=22) [Microsoft to pay a lot of attention to.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=9&mode=live&start=23.800000000000004) [This helps them improve the product over](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=9&mode=live&start=26.20000000000001) [time. Despite this, it's your decision](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=9&mode=live&start=28.4) [whether to allow this or not. You can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=9&mode=live&start=30.79999999999999) [change your mind later and enable or](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=9&mode=live&start=33.99999999999998) [disable this. You'd use the Error and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=9&mode=live&start=36.736842105263165) [Usage Report Settings dialog to make that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=9&mode=live&start=39.31578947368424) [change later and here's what the Error](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=9&mode=live&start=41.89473684210532)[Reporting Screen looks like in setup,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=9&mode=live&start=47) [there's just one check box to either enable or not.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=9&mode=live&start=53)

[Demo: Installing SQL Server 2012 (1)](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live)

[In this demonstration, I'm going to show](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=3) [you how to install SQL Server 2012. In](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=4.999999999999999) [this case it's on Windows 7, but would](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=7.285714285714284) [work exactly the same on Windows Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=9.608695652173914) [2012. When you first open up the setup](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=11.739130434782613) [program, it's going to be on the Planning](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=14.173913043478269) [Screen. You need to switch to the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=16.6) [Installation Screen, which I've done here,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=18.700000000000006) [and then you click on the SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=20.50000000000001) [stand-alone installation or add features](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=23.84615384615385) [to an existing installation link. And then](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=26.923076923076934)[after a few seconds, the actual setup](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=31) [program will start up (Typing) and the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=34.5) [speed of this will depend on your hardware](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=37.526315789473685) [and whether or not you've got an SSD](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=39.631578947368425) [installed, which in most cases you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=41.736842105263165) [probably won't on a server. So, the first](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=43.000000000000014) [thing that it does is checks the Setup](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=44.60000000000004) [Support Rules and if you pass all eight of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=46.36363636363637) [those tests then you click OK and wait a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=49.63636363636367) [few more seconds for the next screen to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=52.90909090909097) [come up, (Typing), then you've got to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=56.272727272727266) [enter in a License Key, and then you have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=59.45454545454544) [to accept the License Terms and I always](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=63.54545454545452) [choose to send the feature usage data to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=66.3333333333333) [Microsoft, but that's up to you if you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=68.99999999999993) [want to do that. Now this is a new feature](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=71.63636363636363) [for SQL Server 2012 where the setup](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=74.81818181818176) [program will actually go out and see if](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=77.04545454545445) [there's any updates to the setup program](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=79.66666666666664) [itself and that's what's happening here.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=81.99999999999994) [Even though it says SQL Server 2012 SP1](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=84) [Setup Update, again, that's only updating](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=87.11111111111109) [the setup program itself, not the product,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=89.4444444444444) [so when I'm done installing here I won't](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=91.99999999999999) [have Service Pack 1 for the entire SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=94.66666666666661) [Server product, just for the setup](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=97.33333333333324) [program. So, then what it's going to do is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=101.19999999999999) [it's going to go out and download those](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=104.28571428571433) [product updates and extract them and go](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=106.57142857142867)[ahead and install them and this will take a few seconds to complete.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=10&mode=live&start=110)

#### [Demo: Installing SQL Server 2012 (2)](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live)

[The next step is Setup Support Rules.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=4) [There's several different rules that the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=6.333333333333331) [setup program will check and in this case](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=8.33333333333333) [I've got a Warning about my Windows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=10.75) [Firewall being enabled, which I'll go](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=12.5) [ahead and ignore for this demonstration.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=14) [Click Next and you have to decide what](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=15.8) [sort of installation you want to do and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=18.99999999999999) [what you're going to want to do in most](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=22.199999999999978) [cases is go ahead and choose SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=24.66666666666666) [Feature Installation so you can pick the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=26.57142857142856)[exact features that you want. You don't](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=28.285714285714285) [want to do this unless you're doing](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=30.285714285714278) [something on just a test machine and you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=32.28571428571427) [want to save some time because this is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=34.47619047619048) [important that you only choose the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=36.38095238095241) [features you're really going to actually](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=37.80952380952385) [be using right now. So, I'll click Next](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=39.36842105263158) [and wait a few seconds and then we get the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=42.31578947368424) [Feature Selection screen and you can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=46) [scroll up and down here and see what](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=48.10000000000001) [features are available for SQL Server and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=50.90000000000002) [in most cases, you're going to want to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=53.26315789473684) [click the Database Engine Services so you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=55.36842105263158) [actually have the SQL Server Database](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=57.21052631578948) [Engine installed and then, you're going to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=59.28571428571429) [want Management Tools Basic, which gives](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=62.285714285714306) [you SQL Server Management Studio on the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=64.80000000000001) [machine where you're installing SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=67.60000000000005)[Server. Even if you're going to manage it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=69.60000000000008) [remotely most of the time, it's a good](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=71.21739130434786) [idea to have it on there in case you ever](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=72.60869565217398) [need it and then I usually choose](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=74.63157894736841) [Documentation Components, but you should](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=76.84210526315785) [know ahead of time which one of these](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=78.42105263157887) [feature you want to install and, again,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=80.89999999999999) [don't pick features that you're not](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=82.99999999999997) [actually going to use just because you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=84.79999999999995) [might use them in the future. So, after](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=86.7894736842105) [you've picked out the features that you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=88.89473684210519) [want, then you can go ahead and click Next](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=90.73684210526304) [and we'll be waiting a few seconds for the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=95) [next screen to come up. Then it checks](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=99.5) [Installation Rules again and we passed all](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=102.83333333333331) [those so we'll go ahead and click Next and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=104.77777777777771) [this is where we pick the Instance](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=107.35) [Configuration settings that we want and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=109.79999999999995) [want to install a default instance of SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=111.89999999999992) [Server on this machine, so that's what the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=116) [default is here, we'll just leave it that way and we'll click next.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=11&mode=live&start=124)

#### [Demo: Installing SQL Server 2012 (3)](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live)

[Now we've made it to the Disk Space](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=4) [Requirements screen and this just tells me](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=6.434782608695656) [that I need about 2. 7GB based on the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=8.565217391304355) [features that I chose earlier. So, I'll go](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=11.3) [ahead and click Next and this is the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=13.700000000000006) [Server Configuration screen. This is where](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=16.100000000000012) [you enter in the credentials for all the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=17.999999999999996) [SQL Server-related services that you chose](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=20.666666666666654) [earlier. So, in my case, I have the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=22.666666666666647) [Database Engine and then we have SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=24.909090909090914) [Server Agent and I've already entered in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=26.818181818181827)[the Account Information here and the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=28.72727272727274) [Password and notice the Startup Type is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=30.578947368421044) [set to Manual for SQL Server Agent. It's a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=32.78947368421051) [good idea to go ahead and change that to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=35.47619047619048) [automatic here so you don't forget to do](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=37.61904761904765) [it later. So, we click Next and this takes](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=39.523809523809575) [us to the Database Engine Configuration](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=42.09999999999998)[screen and it starts off on the Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=43.89999999999996) [Configuration tab and you've got to know](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=46.36842105263158) [ahead of time, do you want to use Windows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=48.94736842105266) [authentication mode or do you want to use](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=52.2631578947369) [Mixed Mode. Windows authentication mode is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=54.79999999999998) [more secure, but a lot of applications](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=56.599999999999966) [require Mixed Mode authentication so they](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=58.699999999999946) [can use SQL Server Authentication. So, I'm](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=60.57894736842106) [going to go ahead and do that and when you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=62.78947368421055) [pick that, then you have to put a password](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=65.95454545454544) [in for the (sa) account and this password](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=68.81818181818176) [should be something that is a strong](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=71.36363636363626) [password that you're not going to forget.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=74.04545454545453) [So, I'm going to go ahead and type in my](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=76.90909090909088) [information here and then it's a really](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=81) [good idea to add yourself, the Current](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=84.26666666666668) [User, as a SQL Server administrator so at](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=87.53333333333336) [least there's one SQL Server administrator](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=90.66666666666666) [on this instance and what a lot of people](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=92.95238095238093) [make the mistake of who don't know what](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=96.28571428571429) [they're doing, frankly, is they just click](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=98.57142857142863)[Next after they do this and they never go](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=100.57142857142867) [into the Data Directories tab to see](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=103.27272727272725) [what's there and so when you go there,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=105.49999999999994) [you'll notice that these default](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=108.04545454545445) [directories for user databases and user](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=109.8235294117647) [log files and temp DB and your backup](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=112.29411764705878) [directory are really long file paths on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=115.58823529411757) [your C: drive and that's not where you're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=118.18181818181816) [going to want them on a production server.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=121.09090909090904) [My system here only has a C: drive, but I](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=124) [do have directories besides these long](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=127.88888888888886) [directories there. So, you can click this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=130.22222222222217) [little ellipsis and you can explore around](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=132.59090909090907) [on your C: drive and see what you have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=134.81818181818176) [available or you can go ahead and create](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=137.68181818181807) [new directories. So, I'm going to pick](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=139.90909090909096) [SQLData and what it does there is it sets](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=141.81818181818193" \t "psplayer) [SQLData for the data files and the log](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=144.36363636363637" \t "psplayer) [files and I'm going to put a separate](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=147.27272727272737) [directory for my log files, so that'll be](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=150.18181818181836) [SQLLogs in my case; and then for TempDB,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=153.00000000000003" \t "psplayer) [I'm going to go ahead and choose a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=155.66666666666677) [different directory for that and I've got](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=158.3333333333335) [a TempDB directory that I created earlier;](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=160.94444444444443) [and then for the backup directory, I want](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=163.66666666666663) [to pick the actual directory that I'm](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=166.8181818181818) [going to be using for that, so in this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=169.68181818181816) [case it'll be SQLBackups. So, that's what](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=173.36363636363632) [it would look like except on a real server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=175.75)[these would be different drive letters and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=178) [those would be the LUNS that you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=179.75) [provisioned earlier and if you decide to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=181.71428571428567) [enable FILESTREAM, you need to come to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=183.7142857142856) [this File tab and enable all of these and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=185.71428571428555) [enter in your share name, but I'm not](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=188.18181818181824) [going to do that for now. So, we'll go](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=190.3636363636365) [ahead and click Next and then this is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=192.88235294117644) [where you get the question about, do you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=195.23529411764693) [want to enable error reporting, and this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=197.63157894736844) [is completely optional, but I actually do](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=199.84210526315798) [it myself because Microsoft pays a lot of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=202.0526315789475) [attention to this telemetry and they fix](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=204.6666666666667) [things based on what's reported through](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=207.0000000000001) [doing this, but again that's your choice.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=209) [So, I'll click Next and then it checks](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=211.1875) [some Installation Configuration Rules and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=213.6875) [we click Next and finally we're ready to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=215.8461538461538) [install. So, this would go for a number of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=219.53846153846143) [minutes based on the speed of your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=222.66666666666674) [hardware and frankly whether you have an](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=225.00000000000014) [SSD or not, that's going to make a lot of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=227.3) [difference when you're installing this,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=230.30000000000013) [and most servers probably don't have solid](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=231.80000000000018) [state drives for their boot drive, their](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=234.05882352941174) [system drive, but that'll probably be changing over the next year or two.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=12&mode=live&start=236.5294117647058)

#### [Summary](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=13&mode=live)

[So what have we talked about in this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=13&mode=live&start=4) [module? Proper SQL Server installation is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=13&mode=live&start=7) [very important. It's going to give you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=13&mode=live&start=9.25) [better performance, better scalability,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=13&mode=live&start=12.000000000000002) [and better security for your instance.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=13&mode=live&start=13.600000000000003) [It's also going to reduce the amount of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=13&mode=live&start=16) [configuration work that's needed after the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=13&mode=live&start=18.666666666666657) [installation. It'll make the instance](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=13&mode=live&start=20.66666666666665) [easier to maintain in the future. You want](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=13&mode=live&start=22.200000000000003) [to take your time and be detail oriented](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=13&mode=live&start=24.60000000000001) [while you're doing this, it's very easy to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=13&mode=live&start=27) [miss important settings. Don't make the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=13&mode=live&start=29.80000000000001) [mistake that so many people do and just click Next on every single dialog.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=13&mode=live&start=31.90000000000002)

#### [What is Next?](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=14&mode=live)

[So what's in the next module? Module 5](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=14&mode=live&start=4) [will cover post-installation configuration](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=14&mode=live&start=7.294117647058826) [tasks for SQL Server 2012. These include](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=14&mode=live&start=8.941176470588239) [the importance of updating SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=14&mode=live&start=12.058823529411764) [2012, how to obtain Service Packs and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=14&mode=live&start=15.235294117647058) [Cumulative Updates, setting instance-level](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=14&mode=live&start=18.941176470588243) [properties with SSMS using the user](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=14&mode=live&start=21.111111111111114)[interface, setting instance-level](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=14&mode=live&start=24.444444444444457) [properties with T-SQL, configuring TempDB](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=14&mode=live&start=26.555555555555557) [data files, and then adding common instance-level trace flags.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m4-install&clip=14&mode=live&start=30.44444444444445)

### [Post-Installation Tasks for SQL Server 2012](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=0&mode=live)

#### [Introduction](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=0&mode=live)

[This is Glenn Berry with SQLskills. com.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=0&mode=live&start=0) [I'm recording this course for Pluralsight.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=0&mode=live&start=3.7692307692307687) [It's SQL Server 2012: Installation and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=0&mode=live&start=7) [Configuration and this is Module 5:](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=0&mode=live&start=10) [Post-Installation Configuration Tasks for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=0&mode=live&start=13) [SQL Server 2012 In this module, we'll be](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=0&mode=live&start=15.600000000000001) [talking about how SQL Server 2012 is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=0&mode=live&start=20.5) [updated; the importance of updating SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=0&mode=live&start=24) [Server 2012; how do you obtain SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=0&mode=live&start=27) [2012 Service Packs; how to install SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=0&mode=live&start=31.176470588235304) [Server 2012 Service Packs; how do you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=0&mode=live&start=34.88235294117649) [obtain SQL Server 2012 Cumulative Updates;](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=0&mode=live&start=38.28571428571429) [and how you install them. Also, we'll talk](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=0&mode=live&start=40.857142857142875) [about how to set instance level properties](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=0&mode=live&start=43.9375) [with SQL Server Management Studio and how](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=0&mode=live&start=46.125) [to set them with T-SQL and then how to configure tempdb data files.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=0&mode=live&start=49)

[How SQL Server 2012 Is Updated](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live)

[How SQL Server 2012 Is Updated Microsoft](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=1) [has three primary ways to update SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=5.5) [Server. The first is hotfixes, the second](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=9) [is Cumulative Updates, and the third is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=12.5) [Service Packs. Hotfixes are designed to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=16) [fix one specific defect. You must contact](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=19) [Microsoft Support (CSS) to get a hotfix,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=22.588235294117652) [they're normally not publicly available](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=26.29411764705884) [for download. Second, you have Cumulative](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=28.94117647058826) [Updates and these are rollups of hotfixes](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=31.33333333333333) [that typically have between 10 and 50](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=33.66666666666667) [defects that are corrected in that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=36.235294117647065) [Cumulative Update. They're released every](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=38.705882352941195) [eight weeks and they're not fully](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=40.76470588235297) [regression tested. You must request and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=43.5) [download Cumulative Updates from Microsoft](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=46.5) [by going to a webpage from the KB article](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=49) [for that CU. Service Packs are designed to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=52.2727272727273) [fix a larger number of defects and they're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=55.18181818181824) [released about every 12 months. They are](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=58.41176470588235) [full regression tested and you can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=61.70588235294116) [manually download Service Packs whenever](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=64.52941176470586) [you want to. They're also available from](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=66.75) [Microsoft Update that'll show up as an optional download in Microsoft Update.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=1&mode=live&start=69.8125)

#### [Optional Update in Microsoft Update](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=2&mode=live)

[Optional Update in Microsoft Update This](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=2&mode=live&start=1) [is a screenshot of what Microsoft Update](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=2&mode=live&start=4.35) [looks like when Service Pack 1 for SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=2&mode=live&start=6.799999999999997) [Server 2012 is available. If you've](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=2&mode=live&start=9.599999999999994) [installed Microsoft Update, which is a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=2&mode=live&start=11.666666666666668) [superset of Windows Update, you'll see a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=2&mode=live&start=13.666666666666671) [notification like this, but for a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=2&mode=live&start=16.000000000000007) [production server, this is not a high](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=2&mode=live&start=17.95454545454545) [recommend that you get it. What I](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=2&mode=live&start=20.181818181818166) [recommend you do is actually manually](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=2&mode=live&start=22.40909090909088) [download the Service Pack yourself and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=2&mode=live&start=24.31578947368421) [stage it on your server and then you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=2&mode=live&start=26.210526315789462) [install it when you're ready to do it, you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=2&mode=live&start=28.736842105263133) [definitely don't want it to happen automatically through Microsoft Update.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=2&mode=live&start=35)

[The Importance of Updating SQL Server 2012](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live)

[The Importance of Updating SQL Server 2012](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=1) [SQL Server Service Packs are required in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=5) [order to stay in a fully supported](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=7.882352941176473) [configuration for Microsoft. Microsoft](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=10.764705882352946) ["retires" branches of code after certain](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=12.529411764705882) [milestones occur. So, for example, the RTM](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=15.705882352941176) [branch is retired one year after Service](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=19.411764705882362)[Pack 1 is released. So, sometime in late](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=23) [2013, the RTM branch of SQL Server 2012](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=27) [will be retired. The SP1 branch will be](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=31) [retired one year after SP2 is released. If](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=34.19999999999999) [you're on a retired branch, you will get](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=37.30434782608695) [limited CSS support if you ever call them](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=39.73913043478258) [and open up a support call, that means](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=42.17391304347821) [just basic troubleshooting until you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=44.92307692307692) [upgrade to a supported Service Pack. Also,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=47.23076923076922) [if you're on a retired branch, you're not](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=50.27777777777778) [going to see anymore Cumulative Updates on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=52.50000000000001) [that branch. Service Packs and Cumulative](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=54.44444444444446) [Updates fix many defects. You're much less](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=56.55555555555554) [likely to run into problems if you stay](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=59.27777777777774) [up-to-date. You should test Service Packs](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=62.4) [and Cumulative Updates before you apply](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=64.8) [them to a production server. Testing and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=67.20000000000003) [applying Service Packs and CUs is good](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=70.5) [practice for your organization. It forces](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=74) [you to exercise your testing and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=76.80000000000001) [high-availability plans and infrastructure](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=79.20000000000005) [rather than just leaving a server alone](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=80.80000000000007) [and never ever doing any maintenance on it, which I think is a big mistake.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=3&mode=live&start=86)

[Obtaining SQL Server 2012 Service Packs](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live)

[Obtaining SQL Server 2012 Service Packs](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=1) [You can use this Microsoft Knowledge Base](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=5) [article to find the latest Service Pack](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=7.333333333333331) [for SQL Server 2012. It's available at](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=9.666666666666666) [this URL. You can also use your favorite](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=11.947368421052632) [search engine to find the latest Service](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=14.473684210526317) [Pack. You should be aware that there's a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=16.684210526315788) [separate download for SQL Server 2012](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=19.722222222222225) [Express Edition, so don't download that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=22.05555555555556) [version of the Service Pack unless you're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=24.416666666666668) [actually running Express Edition. They're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=27.333333333333343) [also now separate full slipstream installs](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=29.5) [for SQL Server 2012 that include Service](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=32.5) [Pack 1 so you don't have to install the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=36) [RTM version and then apply Service Pack 1](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=38.8421052631579) [on top of it. You want to make sure to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=40.94736842105264) [download the correct Service Pack version](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=44.25) [for SQL Server 2012. You want to run](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=46.5)[SELECT @@VERSION to find out whether](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=50) [you're running X86 or X64 version of SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=53) [Server 2012. X64 is a 64-bit version for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=57) [Intel and AMD systems, most servers should](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=61.176470588235304) [be using this version. The x86 version is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=64.88235294117649) [a 32-bit version for Intel and AMD systems](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=68.60000000000002) [and that's really most useful for old](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=71.80000000000007) [workstations and for legacy support. You](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=74.60000000000011) [really shouldn't be running the x86](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=76.76470588235297) [version on a brand new server. There is no](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=78.88235294117653) [Itanium version of SQL Server 2012 so the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=81.7894736842105) [only two versions you're going to see are](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=83.89473684210519) [the x64 version and the x86 version and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=86) [this is what the download screen looks](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=90.30434782608695) [like for SQL Server 2012 Service Pack 1](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=92.43478260869563) [and you can see at the top the full](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=94.86956521739125) [slipstream versions and then at the bottom](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=97.8235294117647) [the regular executable versions and that's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=100.70588235294113) [what normally people are going to run if](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=103.17647058823522) [they've already installed the RTM version from the installation media.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=4&mode=live&start=110)

[Installing SQL Server 2012 Service Packs](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live)

[Installing SQL Server 2012 Service Packs](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=1) [You want to make sure and confirm that you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=6) [have the right version of the Service Pack](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=8.571428571428571) [for the correct product. So, you want to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=10.857142857142863) [check whether it's x86 or x64, whether](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=13.25) [it's Express Edition or not, and whether](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=15.4375) [it's the full slipstream installation or](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=17.875) [just the stand-alone installation of the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=20.5) [Service Pack. You also want to read the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=23.125) [release notes for the Service Pack.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=25.999999999999993) [They're available for SQL Server 2012](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=28)[Service Pack 1 at this URL. You need to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=30.333333333333336) [schedule the installation of the Service](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=33.83333333333332) [Pack during some sort of a maintenance](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=36.00000000000001) [window. You can use a rolling upgrade](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=38.33333333333336) [technique to minimize your downtime, but](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=40.66666666666671) [you must have some sort of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=42.66666666666668) [high-availability technology in place to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=44.66666666666669) [do this, such as database mirroring or SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=46.33333333333337) [Server AlwaysOn Availability Groups or](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=50) [traditional failover clustering. You want](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=52.5) [to make sure that you don't have any](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=54.57142857142857)[pending reboots of Windows because if](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=56.85714285714285) [there are any pending reboots, the setup](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=58.571428571428555) [program will prevent the installation from](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=60.82352941176471) [running. You also don't want to have SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=63.29411764705884) [Server Management Studio running locally](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=66.58823529411764) [on the machine that you're going to apply](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=68.5) [the Service Pack to because that'll pretty](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=71.5) [much guarantee that you're going to have to reboot.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=5&mode=live&start=76)

[Obtaining SQL Server 2012 Cumulative Updates](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live)

[Obtaining SQL Server 2012 Cumulative](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=1) [Updates You want to use these two](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=5.166666666666667) [Microsoft KB articles to find the latest](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=8.210526315789473) [Cumulative Update for SQL Server 2012. The](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=10.789473684210524) [first one is all of the Cumulative Updates](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=13.25) [in the RTM branch so the name of this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=15.25) [article is The SQL Server 2012 builds that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=17.5) [were released after SQL Server 2012 was](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=20.699999999999996) [released and it's available at this URL.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=23.84999999999999) [The second KB article is for the Service](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=27) [Pack 1 branch and the title of this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=29.22222222222223)[article is The SQL Server 2012 builds that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=31.444444444444457) [were released after SQL Server 2012](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=34.11764705882352) [Service Pack 1 was released and it's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=36.235294117647044) [available at this URL. You must obtain the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=38.888888888888886) [latest CU for your branch of the code. So,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=42.44444444444443) [for example, you have the RTM branch and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=46.391304347826086) [then you have the Service Pack 1 branch so](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=49.521739130434774) [far for SQL Server 2012. An RMT branch CU](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=53.04347826086955) [will not work on an instance that has](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=56.565217391304344) [Service Pack 1 installed and a Service](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=59.69565217391303) [Pack 1 release CU will not work on an](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=62.434782608695635) [instance that only has the RTM branch](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=65.66666666666664) [installed and also you've got to be](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=67.99999999999994) [careful that an x86 CU will not work on an x64 instance of SQL Server and vice-versa.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=6&mode=live&start=70.33333333333324)

[Requesting a Specific Cumulative Update](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live)

[Requesting a Specific Cumulative Update](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=2) [After you've identified the correct CU,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=5) [you must request it from Microsoft from a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=7.454545454545455) [link in a KB article for that CU. So, for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=10.727272727272723) [example, once you've figured out that you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=14.875) [actually need SQL Server 2012 SP1 CU1,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=17.9375) [which is available from this URL, you go](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=21) [in and click on a link at the top of the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=23.666666666666657) [page that says Request Hotfix even though](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=27.33333333333331) [it's requesting a Cumulative Update. Once](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=29.842105263157897) [you go into that next page, you have to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=32.36842105263159) [select the correct CU package and this is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=36.157894736842096) [going to be somewhat confusing. There'll](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=38.41176470588235) [be several different packages to choose](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=39.823529411764696) [from and unfortunately Microsoft doesn't](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=41.53333333333333) [clearly label what each CU package is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=44.19999999999999) [actually for. Once you've figured out](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=47.93333333333331) [which one is the correct one, you actually](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=50.14285714285714) [have to request it from the web page and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=52.428571428571416) [you have to give Microsoft a valid email](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=55) [address so they can send you a download](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=57.909090909090935) [link for the CU package and before you do](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=60.81818181818187) [that, you have to enter a CAPTCHA code,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=63.89999999999999) [which it sometimes can be difficult to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=66.29999999999997) [read and once you've done all that, within](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=68.39999999999995) [a few minutes you'll receive an email with](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=71.28571428571428) [a download link for that CU package and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=74.33333333333331) [then you actually have to download it and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=77.33333333333333) [extract it from a self-extracting](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=79.99999999999996) [executable to get the actual CU that you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=81.6666666666666) [can run to install the Cumulative Update.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=84.45454545454544) [This is what it looks like once you get in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=87) [to the page to request the CU package and,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=89.99999999999997) [again, you can see here you've got three](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=92.69999999999995) [packages at the top that are x86 for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=96.1111111111111) [32-bit systems and then three at the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=99.66666666666664) [bottom for x64 systems and it turns out](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=102.27272727272725) [that the one in the middle is the correct](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=104.81818181818176) [one for x64, but again that can be sort of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=107.68181818181807) [confusing because they don't really](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=110.8125) [describe it, you have to look closely at the file name to figure that out.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=7&mode=live&start=112.375)

[Demo: Requesting a SQL Server 2012 CU](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live)

[In this demonstration, I'm going to show](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=2) [you how to request a Cumulative Update for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=4.722222222222222) [SQL Server 2012. Using your favorite](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=7.833333333333337) [browser, you need to navigate to the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=10.23529411764706) [Knowledge Base article that you're looking](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=13.117647058823533) [for and the way that the title is going to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=15.588235294117652) [be on these to make them easier to find](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=17.95652173913042) [will be in this format. In this case, it's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=19.91304347826084) [Cumulative Update Package 1 for SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=22.684210526315795) [2012 Service Pack 1 and that's the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=25.631578947368435) [particular Cumulative Update that I'm](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=28.578947368421076) [looking for and what you want to find in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=30.263157894736835) [this KB article is right here, this green](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=33.105263157894726) [bar that says Hotfix Download Available.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=36) [Even though we're actually requesting a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=39) [Cumulative Update, Microsoft calls them](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=42) [hotfixes in this content. So, when I click](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=44.00000000000001) [on this green bar, it'll take me to the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=46.66666666666669) [Hotfix Request page and when you first](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=49.5909090909091) [pull this up, it's going to look at the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=51.81818181818184) [platform of the machine that you're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=54.68181818181822) [running on when you do this and so, see](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=56.75000000000001)[how it says Platform: x64 there, well if](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=59.90000000000002) [it turns out that you actually need the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=62.63636363636364) [x86 version, the 32-bit version of this,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=65.18181818181817) [you need to click on this link that says,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=67.40909090909086) [Show hotfixes for all platforms and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=70.52380952380952) [languages, and when I do that, it shows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=72.8095238095238) [the x86 versions of the Cumulative Update](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=75.85714285714283) [along with the x64 versions down here and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=78.39999999999998) [since I actually really want an x64](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=81.19999999999993) [version, I need to look down here and what](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=83.64999999999989) [you have to do next is look at these fix](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=86.18181818181813)[names very carefully and figure out which](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=88.90909090909079) [one's the correct one and what you're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=91.83333333333334) [looking for is the one that says](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=96.11111111111114) [SQLServer2012\_CP1\_CU1. So, I click on that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=100.38888888888894) [to select that package and then you have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=103.04545454545453) [to enter in a valid email address down](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=106.31818181818178) [here. and you can't just put in some fake](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=109.59090909090904) [email address because Microsoft's actually](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=112) [going to send you an email link to this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=113.25) [address so you can download the hotfix](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=115.80000000000001) [package. Now the next tricky part is to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=118.60000000000005) [type in the CAPTCHA code here and you've](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=121.8000000000001) [got to get it right or else it's not going](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=124.875) [to work to have the email sent to you. So,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=128.625) [we'll see if I can get it right the first](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=132.27777777777777) [time here, this can sometimes be tricky.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=135.0555555555555) [So, we'll see if that worked and it did.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=137) [So, once that goes out, within a minute or](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=139.62499999999991)[two I'll get an email from Microsoft that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=142.24999999999983) [has a download link for this Cumulative](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=144.77777777777777) [Update package and when you download it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=147.49999999999997) [from that, it'll be in a self-extracting](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=150.22222222222217) [executable file that you have to run and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=153.00000000000003) [extract before you can actually run it and install it later on.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=8&mode=live&start=156.20000000000007)

[Installing a SQL Server 2012 Cumulative Update](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live)

[Installing a SQL Server 2012 Cumulative](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=2) [Update After you've extracted the CU setup](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=5.428571428571427) [file, you can actually run it to install](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=8.117647058823527) [the Cumulative Update. You want to make](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=10.941176470588237) [sure to schedule this installation during](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=12.941176470588232) [a maintenance window because it's likely](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=14.35294117647058) [to cause a reboot. You can use a rolling](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=15.764705882352928)[upgrade technique to minimize your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=18.94736842105263) [downtime, but you have to have some sort](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=20.789473684210524) [of HA technology in place to do this, such](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=23.77777777777778) [as database mirroring or traditional](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=27.277777777777782) [failover clustering or SQL Server 2012](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=29.22222222222223) [AlwaysOn Availability Groups. You need to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=31.263157894736835" \t "psplayer) [make sure that you don't have any pending](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=33.1578947368421) [reboots of Windows because if you do, the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=35.6842105263158) [setup program will prevent the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=39.26666666666668) [installation from running. You also want](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=41.60000000000002) [to make sure you don't have SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=43.833333333333336) [Management Studio running locally on the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=46.055555555555564) [instance that you're going to install the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=47.722222222222236) [CU on because that's going to decrease the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=50.000000000000014) [chance of the CU requiring a reboot.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=52.6666666666667) [Cumulative Updates usually install quite a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=55) [bit faster than Service Packs, but the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=57.333333333333314) [installation time is going to depend on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=60.055555555555515)[your hardware and what SQL Server features](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=62.66666666666667) [you have installed on the instance and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=65) [this is what the SQL Server 2012](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=68) [installation program looks like for a Cumulative Update.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=9&mode=live&start=75)

[Install the Latest Service Pack and CU](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live)

[Install the Latest Service Pack and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=1) [Cumulative Update I've spent quite a bit](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=4) [of time, on purpose explaining how SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=6.388888888888888) [Server is serviced so you understand the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=8.333333333333334) [difference between hotfixes and Cumulative](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=10.5) [Updates and Service Packs. For a brand new](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=13) [instance of SQL Server, you should install](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=16.555555555555557) [the latest SQL Server 2012 Service Pack](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=19.277777777777782) [and the latest Cumulative Update for that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=22) [Service Pack. So, at the time of this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=23.75) [recording, that's SQL Server 2012 Service](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=25.75) [Pack 1 with Cumulative Update 1 on top of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=27.66666666666666) [that. You don't want to be running the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=30.66666666666665) [original RTM build in Production,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=33.5) [especially for SQL Server 2012 because](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=36) [there have been many many hotfixes in the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=39) [first batch of Cumulative Updates. It's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=42.631578947368425) [going to require some sort of an outage to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=44.5263157894737) [install these after you're in Production](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=47.36842105263161) [so you want to do it right after you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=49.41176470588235) [install SQL Server 2012. It's much better](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=52.58823529411763) [to install them now and fully test all of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=55.14285714285714) [your applications on that Service Pack in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=58.571428571428555) [CU level before you go into Production and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=61.23809523809521) [you might not be able to do it easily](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=63.63636363636364) [later, especially if you don't have any HA](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=66.09090909090905) [technology in place. Installing a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=68.47058823529412) [Cumulative Update or Service Pack without](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=70.8235294117647) [any HA technology in place means that the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=73.64705882352939) [SQL Server Service is going to go down for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=76.8181818181818) [probably at least 5 minutes and then you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=79.2727272727272) [might have to do a reboot, which might](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=81.45454545454533) [take anywhere from 5 minutes to 15-20](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=84.40000000000003) [minutes, so that's a fairly long outage](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=87.20000000000007) [that you can avoid, at least the first](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=90) [one, if you do it before you go in to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=91.68421052631584)[Production, get yourself up to the latest and greatest Cumulative Update.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=10&mode=live&start=93.78947368421063)

[Setting Instance Properties with SSMS](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live)

[Setting Instance Properties with SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=2) [Server Management Studio You can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=5.125) [right-click on the instance in Object](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=7.631578947368421) [Explorer in SQL Server Management Studio](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=9.526315789473685) [and after you do that, you want to select](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=11.421052631578949) [Properties. That's going to bring up the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=14.411764705882355) [Server Properties dialog for that instance](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=16.88235294117647) [and there's eight property pages that are](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=19) [shown in the left-hand pane. What I always](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=21.545454545454543) [like to do if I'm going to use this method](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=24.45454545454545) [is go in and make a change and then use](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=27.857142857142854) [the Script button rather than just](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=30.7142857142857) [clicking OK. This is much safer than](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=32.42857142857141) [clicking the OK button because you can see](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=34.499999999999986) [the T-SQL that's going to be generated. It](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=36.89999999999996) [will help you learn the T-SQL commands to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=39.333333333333336) [change these properties and it'll also](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=42.00000000000002) [save you the time and trouble of typing](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=44.000000000000036) [T-SQL code so that's going to prevent a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=46.736842105263165) [lot of syntax mistakes and generally be](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=49.68421052631582) [quicker than typing it yourself from](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=52.2631578947369) [scratch. So, this is what the Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=55.400000000000006)[Properties dialog looks like for Memory](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=57.5) [and you can see where you can set the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=59) [minimum server memory and the maximum](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=61.3125) [server memory and there's a few other](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=63.1875) [options here, but the one that's most](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=65.375) [important is the maximum server memory.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=67.8181818181818) [Next, you can see server properties for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=70) [the processors and this is where you can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=72.09999999999998) [go in and change the affinity for your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=74.49999999999996) [processors and you can do other things,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=76.99999999999999) [but generally I recommend that people](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=79.33333333333329) [leave this dialog alone unless you really](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=81.33333333333326) [know what you're doing and have a good](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=83.74999999999997) [reason to change one of these properties.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=86.54999999999993) [Next, you can see the Server Properties](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=89) [for Database Settings and this is where](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=91.66666666666666) [you can go in and turn on the default](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=94.33333333333331) [backup compression setting there in the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=97.66666666666666) [middle of the screen and you can also](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=99.66666666666663) [change the default database locations if](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=102.33333333333326) [you didn't set them in the initial setup.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=105) [Finally, in the Advanced Properties](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=109) [dialog, you can come in here and change](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=111.00000000000003) [things like Enabling Optimize for Ad hoc](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=114.20000000000007) [Workloads, that's something that I always turn on for my SQL Server instances.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=11&mode=live&start=120)

[Demo: Setting Instance Properties with SSMS](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live)

[In this demonstration, I'm going to show](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=1) [you how to set some instance-level](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=3.3333333333333335) [properties using SQL Server Management](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=5.333333333333332) [Studio. Pulling up Management Studio, by](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=9) [default on the left-hand side you'll have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=12.058823529411766) [Object Explorer and this show the instance](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=14.941176470588239) [name right here. So, if you right-click on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=17.77777777777778) [that and select Properties, then you'll](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=20.888888888888893) [get a Server Properties dialog that has](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=23.22222222222223) [several different pages over here on the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=26.142857142857135) [left-hand side. First place you want to go](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=29.142857142857125) [is to the Memory page and when you first](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=31.304347826086946) [open this up on a brand new installation](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=33.260869565217384) [of SQL Server 2012, you'll see that the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=35)[maximum server memory is set to this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=38.55555555555554) [extremely high value. That just basically](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=41.66666666666664) [means that max server memory is set to an](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=43.89999999999999) [unlimited amount and you want to change](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=46.599999999999966) [that to an appropriate value based on how](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=48.699999999999946) [much memory is in your server and what](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=51.66666666666666) [components are running on your server and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=54.714285714285694) [what else might be installed besides SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=57.22222222222222) [Server. So, if we assume that we only have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=58.77777777777777) [the Database Engine running and nothing](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=60.777777777777764) [else running on this server, this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=63.222222222222214) [particular server has 32GB of RAM and so](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=65.88888888888887) [I'm going to set this at 24, 000, which](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=69.4) [means 24GB is what max server memory is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=73.00000000000006) [set to, and you can vary this based on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=76.2000000000001) [several different factors, but I'm just](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=79.75) [picking this for the purposes of this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=82) [demonstration. So, once I enter in that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=84.625)[value, I could click OK or I could click](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=86.90909090909088) [the Script button and that would actually](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=89.7727272727272) [script out the T-SQL for that command and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=92) [I generally recommend that you do that as](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=95.04761904761904) [opposed to just clicking OK when you do](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=98.09523809523807) [things in Management Studio. It's much](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=100.8181818181818) [safer to take a look at the T-SQL that's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=102.4545454545454) [going to be generated and then decide](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=104.90909090909079) [whether you want to run it or not, plus](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=106.89999999999999) [that'll help you learn the commands to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=109.59999999999997) [actually change these values. So, you can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=111.69999999999995) [just script it out like that or you can go](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=113.82608695652172) [ahead and click OK for the demo. So, I'll](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=116.86956521739125) [do that and that changes the property](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=119.63157894736841) [immediately, you don't have to restart the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=121.84210526315785) [SQL Server Service for it to take effect.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=124.05263157894728) [So, if I right-click and go back to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=126.36363636363633) [Properties again, I can go back here and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=128.54545454545448) [there's memory and you can see it's set to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=130.72727272727272) [24, 000, which is again 24GB of RAM. The](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=133.55999999999995) [next place I want to check is Processors](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=136.43999999999988) [and really unless you know what you're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=139) [doing or have a very good reason, you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=141.66666666666666) [shouldn't change any of these values. You](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=144.7142857142857) [definitely should not turn on "Boost SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=147.5) [Server priority" or "Use Windows fibers",](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=151) [don't turn those on. So, going on, let's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=154) [go to where it says Database Settings and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=157.33333333333337) [this controls whether or not you want to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=160.0000000000001) [have Default backup compression enabled](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=162.66666666666686) [right here in the compressed backup, so I](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=164.55555555555554) [always like to turn that on. So, just hit](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=167.66666666666663) [that check box to turn that on and then](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=170.95454545454544) [down here are the database default](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=173.81818181818176) [locations and this is going to show](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=175.72727272727263) [whatever was entered in when you first](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=177.94736842105266)[installed SQL Server during the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=180.1578947368422) [installation and if you weren't paying](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=181.7368421052633) [attention and you blew right past that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=183.60000000000002) [screen, you're going to have a very long](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=185.7000000000001) [path here on your C: drive and on a real](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=188.1000000000002) [production server, that's not what you're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=191.625) [going to want. So, wherever you want your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=193.875) [data files to go by default, if you don't](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=196.5789473684211) [specify another location when you create](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=199.42105263157907) [the database, type that in here and the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=201.33333333333334) [same way for your log files and your SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=204.00000000000009)[Server backup directory, you can change](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=207.00000000000017) [all of those here and again, you can hit](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=208.85714285714283) [the Script button or you can just click](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=211.42857142857133) [OK. And then finally, if we go to the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=213.71428571428555) [Advanced tab, go along here and what I'm](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=216.66666666666674) [looking for right off the bat is this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=219.33333333333348) [Optimize for Ad hoc Workloads settings and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=222) [you can see its set to False here. I](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=223.90909090909096) [really think that should be set to True in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=226.3636363636365) [almost all cases and so I can change that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=229.00000000000003) [to True and I can script it out or just](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=232.0000000000001) [click OK. So, I'm going to click OK there](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=235.33333333333354) [and now I've set all the really important](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=238.88235294117644) [instance-level properties using the Management Studio GUI.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=12&mode=live&start=242.17647058823522)

[Setting Instance Properties with T-SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=13&mode=live)

[Setting Instance Properties with T-SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=13&mode=live&start=1) [Rather than using the SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=13&mode=live&start=6) [Management Studio GUI, you can actually](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=13&mode=live&start=7.894736842105264) [just run T-SQL code to change most](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=13&mode=live&start=9.789473684210527) [instance-level properties. So, here's an](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=13&mode=live&start=12) [example of the screenshot showing a query](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=13&mode=live&start=14.142857142857144) [window in SQL Server Management Studio.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=13&mode=live&start=17.142857142857142) [The query at the top shows how you can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=13&mode=live&start=19.263157894736835) [query to see what your instance-level](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=13&mode=live&start=22.105263157894715) [values are now and then below that are a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=13&mode=live&start=24) [few examples of how you would change these](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=13&mode=live&start=27.150000000000013) [properties with T-SQL. There'll be a demo](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=13&mode=live&start=29.950000000000024) [of this later on and you'll have the code for this yourself also.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=13&mode=live&start=35)

[Demo: Setting Instance Properties with T-SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live)

[In this demonstration, I'm going to show](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=2) [you how to use T-SQL to check and change](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=4.099999999999999) [some of your instance-level configuration](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=6.799999999999997) [options. So, what you can do is run this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=8.470588235294118) [query, the query is this configurations](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=12.705882352941178) [table, and see what your current](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=15.529411764705884) [instance-level settings are and you can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=17.818181818181817) [scroll up and down here and look at some](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=19.999999999999996) [of the more important ones. Some of the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=23.272727272727266) [ones that I always look at are, for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=25.9090909090909) [example, what max server memory is set to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=28.454545454545432) [right there and you can see that very high](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=31) [value means that it's the default, it's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=34.315789473684234) [never been changed. You can also look at](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=36.89473684210531) [Optimize for Ad hoc Workloads and see what](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=39.42857142857142) [that is and then you can look at backup](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=41.7142857142857) [compression default actually and you can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=44.3125) [see that that's not enabled. So, that's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=46.1875)[what's happening right now and if we go](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=48.375) [down here, you can see the actual T-SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=51.66666666666666) [commands and change these. So, let's say](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=55.2222222222222) [that you decided to set your max server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=58.04347826086957) [memory to 24, 000, which means 24, 000](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=60.826086956521756) [megabytes, well you can just run these](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=63.60869565217394) [three commands right here to change that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=66.14285714285714)[value. When I run that, you can see that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=68.8095238095238) [it changed from the default value to 24,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=72.23809523809521) [000 and you can also run this original](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=75.28571428571428) [query again to double-check and scroll](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=78.33333333333331) [down and find max server memory and we'll](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=80.61904761904759) [see that's set to 24, 000. So, it works](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=83.73913043478265) [the same way for these other changes. You](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=87.26086956521749) [can change Optimize for Ad hoc Workloads](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=90.35) [and enable that by running this command](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=92.79999999999995) [right here and you'll see the results](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=95.24999999999991) [here, that it was changed from 0 to 1, and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=97.6086956521739) [then we can do the same thing for backup](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=100.65217391304344) [compression default and, again, these are](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=103.39130434782602) [two settings right here that I always](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=105.26315789473682)[recommend that you enable on any instance](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=107.47368421052626) [from SQL Server. And then finally, if you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=109.6842105263157) [wanted to, you could actually change the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=113.15000000000002) [default location for the data files and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=116.30000000000004) [the log files and the backup files by](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=119.4) [using this extended stored procedure to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=122.60000000000005) [actually write to the registry and you've](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=125.00000000000009) [got to be careful here because this can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=127.57142857142858) [only work for the default instance of SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=129.85714285714283) [Server using this command here. If you had](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=132.14285714285705) [a named instance, you would have to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=134.74999999999997) [substitute that name in right here and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=137.19999999999993) [it's probably actually better just to go](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=139.6499999999999) [ahead and use the GUI if you need to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=141.30434782608688) [change this and, of course, if you follow](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=143.2608695652172) [my directions for how to install SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=145) [Server, these will be set correctly from](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=147.57894736842113) [the beginning so you shouldn't really have to use these three queries right here.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=14&mode=live&start=150.15789473684225)

[Configuring tembdb Files](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live)

[Configuring tempdb Files. When you first](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=3) [install SQL Server 2012, it only has one](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=6.142857142857144) [very small tempdb data file and if you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=9.190476190476195) [aren't careful, it might be on your C:](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=12.238095238095246) [drive, which is not where you want it in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=14.749999999999996) [most cases. It's a common best practice to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=17.375) [create additional data files to reduce the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=19.708333333333343) [chances of seeing any PAGELATCH contention](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=23.428571428571438) [in tempdb. These additional data files can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=26.857142857142875) [all be on the same one as the original and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=29.739130434782616) [they should all be the same initial size.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=33.21739130434785) [A good starting point for the number of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=36) [tempdb data files is, if you have less](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=38.80000000000001" \t "psplayer) [than eight processor cores, then have the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=41.60000000000002) [number of data files equal the number of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=43.89999999999999) [cores; if you have more than eight](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=46.29999999999997) [processor cores, start with eight tempdb](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=48.39999999999995) [data files and then monitor to see if](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=50.81818181818181)[you're seeing any contention in tempdb and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=54.45454545454544) [if you do, add more tempdb files in groups](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=57.63636363636361) [of four if you see any contention. My](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=61.47058823529413) [Colleague, Jonathan Keheyias, has an](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=64.76470588235296) [excellent article that has more details on how you do this available at this URL.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=15&mode=live&start=68)

[Summary](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=16&mode=live)

[Summary So, what have we talked about in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=16&mode=live&start=2) [this module? Well, it's important to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=16&mode=live&start=5.722222222222224) [maintain your SQL Server instance. This](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=16&mode=live&start=8.055555555555559) [includes applying Service Packs and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=16&mode=live&start=10.38888888888889) [Cumulative Updates and Hotfixes if](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=16&mode=live&start=12.333333333333336) [necessary. This is all going to make your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=16&mode=live&start=14.277777777777782) [instance easier to maintain in the future](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=16&mode=live&start=17.35) [and make sure that you stay in a supported](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=16&mode=live&start=19.80000000000001) [state for Microsoft. There's also certain](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=16&mode=live&start=22.950000000000024) [instance-level settings that should be](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=16&mode=live&start=25.199999999999996) [changed for virtually every SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=16&mode=live&start=27.19999999999999)[instance. These include optimize for ad](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=16&mode=live&start=29.59999999999998) [hoc workloads, which should be enabled,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=16&mode=live&start=31.842105263157894) [max server memory, which should be set to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=16&mode=live&start=34.052631578947384) [an appropriate value, and default backup](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=16&mode=live&start=37) [compression, which should be turned on in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=16&mode=live&start=39.80000000000001) [most cases. You're also going to want to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=16&mode=live&start=43.06666666666669) [create additional tempdb data files in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=16&mode=live&start=46.142857142857125)[most cases. You can use my guidance for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=16&mode=live&start=48.28571428571425) [the number of data files to start out with.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=16&mode=live&start=55)

[What is Next?](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=17&mode=live)

[So, what is in the next module? Module 6](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=17&mode=live&start=1) [will cover automating common maintenance](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=17&mode=live&start=5.2631578947368425) [tasks for SQL Server 2012. It will also](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=17&mode=live&start=7.631578947368422) [show you how to do some things and make](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=17&mode=live&start=10.75) [sure that your instance is ready for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=17&mode=live&start=13) [production. These include confirming](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=17&mode=live&start=14.75) [network connectivity, confirming SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=17&mode=live&start=17.5) [Server connectivity, enabling Database](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=17&mode=live&start=20.83333333333333) [Mail, creating a new SQL Server operator,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=17&mode=live&start=24.166666666666657) [setting up SQL Server Agent Alerts, adding](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=17&mode=live&start=28.499999999999993) [Ola Hallengren's Maintenance Solution, and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=17&mode=live&start=33) [then configuring Ola Hallengren's Maintenance Solution.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m5-postinstall&clip=17&mode=live&start=38)

[Automating Common Maintenance Tasks](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=0&mode=live)

[Introduction](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=0&mode=live)

[This is Glenn Berry with SQLskills. com.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=0&mode=live&start=0) [I'm recording this course for Pluralsight.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=0&mode=live&start=3.7692307692307687) [This is SQL Server 2012: Installation and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=0&mode=live&start=7) [Configuration and this is Module 6:](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=0&mode=live&start=9.545454545454543) [Automating Common Maintenance Tasks for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=0&mode=live&start=12.399999999999999) [SQL Server 2012. In this module, I'll be](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=0&mode=live&start=15.899999999999995) [talking about some of the things you need](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=0&mode=live&start=18.909090909090917) [to do to make sure that your brand new](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=0&mode=live&start=20.363636363636385) [instance is actually ready for production.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=0&mode=live&start=22) [These include confirming network](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=0&mode=live&start=25.27272727272728) [connectivity, confirming SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=0&mode=live&start=27.454545454545467)[connectivity, enabling Database Mail,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=0&mode=live&start=30.25) [creating a new SQL operator, creating SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=0&mode=live&start=33.25) [Server Agent Alerts, using Ola](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=0&mode=live&start=38.400000000000006) [Hallengren's Maintenance Solution, and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=0&mode=live&start=41.90000000000002" \t "psplayer) [adding Schedules and Notifications to SQL Server Agent Jobs.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=0&mode=live&start=45)

[Confirming Network Connectivity](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live)

[Confirming Network Connectivity You need](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=2) [to confirm that other machines can connect](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=5.588235294117647) [to your SQL Server instance over the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=7.64705882352941) [network. You use the SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=9.70588235294118) [Configuration Manager tool to do this. You](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=12.352941176470589) [open up Configuration Manager and you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=15.647058823529413) [select the SQL Server Network](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=18.41176470588235) [Configuration and then there'll be a list](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=20.47058823529411) [of the protocols for Microsoft SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=23.35294117647057) [or your instance name. You want to ensure](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=26.33333333333333) [that the appropriate network protocols are](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=29.88888888888887) [enabled. Usually you're going to want](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=32.55555555555553) [TCP/IP to be enabled. It may already be](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=34.764705882352935) [enabled depending on what SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=37.58823529411763) [Edition you've installed, which you should](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=39.82352941176471) [always double-check to see whether or not](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=42.29411764705884) [it's enabled. If it's not enabled and you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=45.176470588235325) [change it from disabled to enabled,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=48.210526315789494) [changing that status is going to require a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=50.42105263157899) [restart of that instance of SQL Server for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=53.285714285714285) [the change to go into effect and you'll](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=55.57142857142856) [get a warning prompt to remind you of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=57.85714285714284) [this. You can also use Ping from a command](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=60.68421052631578) [prompt on another machine to confirm basic](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=64.47368421052629) [network connectivity. You might have to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=67.46153846153847) [open ports in your Windows firewalls. By](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=70.23076923076927) [default, Port 1433 and 1434 are the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=73.58823529411765) [default ports for a default instance of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=77.70588235294122) [SQL Server and this is what SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=81.82352941176478) [Configuration Manager looks like with the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=85.25) [SQL Server Network Configuration opened up](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=87.5) [to protocols and you can see here](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=90)[highlighted the TCP/IP is disabled. You're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=93.5) [going to probably want to enable that and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=96.22222222222223) [again, once you make that change, you'll](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=98.00000000000006) [get a warning prompt that says you have to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=99.55555555555566) [restart the SQL Server Service for this change to go into effect.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=1&mode=live&start=107)

[Demo: Using SQL Server Configuration Manager (1)](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live)

[In this demonstration, I'm going to show](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=1) [you how to use SQL Server Configuration](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=3.3333333333333335) [Manager. I've got a shortcut to it right](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=5.666666666666665) [here on my desktop so I'll go ahead and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=7.555555555555556) [fire it up and when you start it up, you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=9.55555555555555) [have the SQL Server Configuration Manager](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=11.777777777777764) [dialog here and then right here on the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=13.749999999999998) [top, on the left-hand pane, you have SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=16.549999999999997) [Server Services and this shows all the SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=19.444444444444443) [Server-related services that are running](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=22.999999999999986) [on this particular machine. So, in my](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=25.2222222222222) [case, I have the SQL Server Database](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=27.71428571428571) [Engine for the default instance, so it's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=29.380952380952372) [going to be called MSSQLSERVER and then I](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=31.047619047619033) [have the SQL Server Agent Service, which](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=33.33333333333334) [is also MSSQLSERVER, and you've got to pay](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=35.66666666666669) [attention here if you ever have a named](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=38.36842105263158) [instance installed because then the named](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=41.31578947368424) [instance name will be inside the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=43.526315789473735) [parentheses and when you're messing around](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=45.55555555555556) [with these services, you want to make sure](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=47.22222222222223) [you're dealing with the right instance and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=49.44444444444446) [the right service that you actually want](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=51.5625) [to change something on. So, under Services](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=53.75) [you can see that my Database Engine is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=56.00000000000001) [running and the Start Mode is Automatic](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=58.66666666666669) [and then the Log On Account is the SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=61.00000000000004) [Server Service and then there's the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=64.1818181818182) [Process ID, which is kind of nice to know](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=66.36363636363636) [sometimes. So, you can see the same thing](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=69.6363636363636) [for SQL Server Agent, its running and then](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=72.09999999999998) [the Start Mode is Automatic, which you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=74.49999999999996) [want in most cases. Now you can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=76.54545454545453) [right-click on here and you can see that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=78.4545454545454) [you can stop the service or pause the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=80.63636363636353) [service or restart the service and, of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=83.04999999999998) [course, if you restart the service, that's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=85.49999999999994) [going to drop everybody's connection and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=87.9499999999999) [kick everybody out of the server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=89.7894736842105)[essentially, so you don't want to do that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=91.36842105263152) [on a production server unless you have a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=93.4736842105262) [really good reason. On your own server it's not as bad.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=2&mode=live&start=100)

[Demo: Using SQL Server Configuration Manager (2)](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live)

[Now one of the main reasons you're going](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=2) [to want to use SQL Server Configuration](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=3.4545454545454533) [Manager is if you ever have to change any](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=4.727272727272725) [properties for these services. So, if you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=6.666666666666666) [want to change the Log On Account, for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=9) [example, you want to make sure you do it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=11.666666666666671) [here and not on the Windows Services](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=14.749999999999998)[applet because the Windows Services applet](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=17.200000000000003) [doesn't know about all the SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=19.30000000000001) [things that actually have to be changed in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=21.470588235294112) [the Registry, for example. So, for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=23.823529411764692) [example, if you wanted to come in here and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=25.52173913043478) [change the Log On Account for the SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=27.869565217391298) [Server Service, you could just type in the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=29.956521739130423)[new account here and then type in the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=32.33333333333333) [correct password and type it in twice and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=35.000000000000014) [then you hit Apply and then that'll let](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=37.6666666666667) [you change the account and make sure you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=40.39130434782609) [do it here as opposed to in the Windows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=43.17391304347828) [Services applet. The other thing you can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=46.30434782608699) [come in here and change and you should](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=48.31578947368421)[check no matter what is the SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=50.42105263157895) [Network Configuration and if you open that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=52.84210526315789) [up, you'll see the protocols for SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=55.789473684210506) [Server and you're looking at Shared](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=58.73684210526312) [Memory, which means memory access on the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=60.94736842105264) [same machine, that's going to be enabled](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=63.157894736842124) [by default, and then if you want to be](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=65.36842105263158) [able to come in remotely to this machine,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=67.47368421052636) [you have two choices. The older protocol,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=69.1578947368422) [which is not nearly as popular anymore, is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=70.99999999999999) [named Pipes and you very rarely have to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=73.66666666666661) [use that anymore, sometimes with named](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=76.33333333333324) [instances you might have to still use it.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=78.68421052631578) [What's much more common is TCP/IP and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=82.05263157894734)[depending on what edition of SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=85) [that you install, for example if you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=87.05882352941178) [install Enterprise Edition, TCP/IP should](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=89.11764705882356) [be enabled by default, but you should come](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=90.63636363636363) [in and double-check that and then if you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=93.18181818181813) [want to change it, you can just](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=95.72727272727263) [right-click on this and pick either](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=97.85714285714288) [Disable or Enable and when you do that,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=99.57142857142863) [it'll come up and give you this warning](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=101.85714285714296) [about OK I'll save the change, but it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=104.39999999999998) [won't take effect until you restart the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=107.19999999999993) [service and that is true. So, I can change](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=109.64999999999989) [that and it says Disabled, but it's not](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=112.78260869565213) [actually Disabled until I come in here and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=115.56521739130426) [actually restart SQL Server. So, if I](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=118.27272727272727)[restart SQL Server then it's going to come](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=120.18181818181813) [up and tell me that it's stopping the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=122.36363636363626) [service and, of course, you don't want to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=124.54545454545453) [do that on a production server unless you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=126.72727272727266) [have a very good reason because](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=128.90909090909085) [everybody's going to have their](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=130.77777777777777) [connections dropped and then, of course,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=132.7222222222222) [the buffer cache will be completely](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=135.05555555555551) [flushed out, so again that's a bad thing](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=137.27272727272728) [to do, but now if I come in here, I've](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=139.45454545454552) [actually got this disabled, which I don't](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=142.18181818181833) [really want for most production servers](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=144.8461538461538) [because then nobody can talk on this unless they're on the same machine.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=3&mode=live&start=147.61538461538453)

[Confirming SQL Server Connectivity](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live)

[Confirming SQL Server Connectivity After](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=1) [you've confirmed basic network](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=3.2941176470588234) [connectivity, you're going to want to do](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=4.470588235294117) [something to confirm that other machines](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=6.5294117647058805) [can connect to SQL Server on your new](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=8.333333333333334) [instance. You can use a Microsoft Data](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=11.000000000000005) [Link to check SQL Server connectivity.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=13.333333333333343) [This doesn't require any special tools on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=15.352941176470589) [the remote machine, you don't need Visual](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=17.8235294117647) [Studio or SQL Server Management Studio](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=20.29411764705881) [installed. Any machine that has a recent](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=22.647058823529406) [version of Windows will have this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=25.529411764705866) [available and these are the steps that you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=28) [use to create and use a data link file to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=30.666666666666657) [check your connectivity. First, you're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=34) [going to go in and create a blank text](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=35.84210526315789) [file on the desktop of the remote machine.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=39.631578947368396) [Then you change the file extension from.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=43) [txt to. udl, udl stands for Universal Data](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=45.66666666666666) [Link, and you might have to go in and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=48.714285714285694) [unhide file extensions in Windows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=52.263157894736835) [Explorer, so you can see the file](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=54.36842105263156) [extension and change it. After you've done](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=57.31578947368418) [that, double-click on that new. udl file](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=60.235294117647065) [to open a Data Link Properties dialog.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=63.11764705882355) [Then you go in and enter the appropriate](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=66) [server name and logon information and then](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=69.11111111111109) [you click the "Test Connection" button and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=71.83333333333329) [you'll find out, just in a few seconds,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=74.4736842105263) [whether or not that remote machine can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=77.4210526315789) [connect to your instance of SQL Server.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=80) [This test will confirm several different](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=83.00000000000001) [items. First, it'll prove whether or not](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=85.5714285714286) [the SQL Server Service is running and a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=88.57142857142858) [network protocol such as TCP/IP is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=92.00000000000003) [enabled. That also will prove whether the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=94.57142857142861) [appropriate ports are open between the two](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=98) [machines. You'll also confirm that your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=101.5) [logon credentials can connect to that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=104.05882352941174) [instance and will finally confirm that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=106.52941176470583) [your credentials can connect to a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=109) [particular database that you choose to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=110.79999999999998) [connect to when you run this test and this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=112.59999999999997) [is what it looks like, the Data Link](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=115.29166666666667)[Properties, and you can see at the top you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=117.62500000000004) [can enter in a server name or can use an](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=120.25000000000009) [IP address and then you choose how to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=123.39999999999998) [authenticate whether it's a Windows NT](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=126.19999999999993) [Integrated Security using your logon](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=128.2999999999999) [credentials or a specific user name and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=130.26315789473688) [password with SQL Server authentication](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=133.2105263157896) [and then you can select the database on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=135.3157894736844) [the server and once you've entered in this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=138.42857142857144) [logon information, just hit the Test](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=141.28571428571433) [Connection button and it'll come back and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=143.0526315789474) [tell you whether you can connect or not.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=144.89473684210535) [This is very good for quickly troubleshooting remote machines.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=4&mode=live&start=147)

[Demo: Using a Microsoft Data Link File to Confirm Connectivity](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live)

[In this demonstration, I'm going to show](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=0) [you how to use a Microsoft Data Link file](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=2.1) [to test database connectivity to a remote](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=4.799999999999999) [database server. What you have to do is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=7.0434782608695645) [just create a blank text file on your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=9.826086956521737) [desktop and then change the three letter](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=12.608695652173909) [file extension from. txt to. udl. I've](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=14.947368421052632) [already done that here and once you have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=17.1578947368421) [that, you can double-click on this and it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=19.68421052631577) [opens up a Data Link Properties dialog and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=22.227272727272716) [for some reason it always opens on the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=24.77272727272725) [Connection tab, which actually I want to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=27.227272727272727) [go back to the Provider tab and look at](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=28.818181818181813) [the OLE DB Providers that you have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=30.863636363636353) [installed on that machine and since we](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=32.47619047619048) [want talk to the SQL Server, we'll go](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=34.14285714285717) [ahead and use this OLE DB Provider for SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=36.047619047619094) [Server. Then we switch back to the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=38.5909090909091) [Connection tab and you can put in the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=40.81818181818184) [server name that you want to connect to.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=43.3636363636364) [So, in this case, we're going to try](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=45.71428571428571) [testing or connecting to a server called](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=47.999999999999986)[LABDB04 and make sure you type in the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=50) [name, don't pull down the dropdown box](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=53.19999999999999) [because then you'll be waiting a long time](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=55.99999999999998) [while it pulls all the SQL Servers that it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=58.84) [can talk to. So, put in the server name](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=61.360000000000014) [and then you can use your own credentials](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=63.880000000000024) [if you have a domain login on that server,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=66.21739130434781) [but if you don't, if you just want to use](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=68.9565217391304) [SQL Server Mix Authentication, pick a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=72) [specific username and password. So, I'm](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=74.21052631578945) [going to be a bad person and type in sa](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=76.4210526315789) [here and the sa password just to see if I](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=79.99999999999999) [can connect to the server and then once I](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=83.33333333333327) [do that, then I can pull down the list of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=86.33333333333323) [available databases on that server and if](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=89.78260869565213) [I can connect to it, sooner or later I'll](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=92.21739130434774) [get a list of all the databases that are](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=95.22727272727273) [on that server and so I'll pick one and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=97.27272727272734)[then hit the Test Connection button and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=99.31818181818194) [that'll take a few seconds usually the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=101.26315789473682) [first time you do it, but hopefully it'll](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=103.47368421052626) [come back and say Test succeeded or, there](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=106) [you go, Test connection succeeded. So,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=108.79999999999995) [what happened here is that I proved that I](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=110.89999999999992) [can connect to this database server from a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=114.42105263157895)[different machine using these credentials](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=118.21052631578947) [and I have rights to connect to that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=120.57894736842104) [particular database. So, this is a really](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=123.94444444444443) [good quick and dirty troubleshooting tool](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=126.66666666666663) [you can use on application servers and web](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=129) [servers, for example, because very](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=132) [frequently as a database administrator](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=133.875) [you'll get complaints from the developers](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=135.75) [or the network admin-type people who claim](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=138) [that they can't connect to SQL Server, and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=140.625) [again you show them how to use this tool](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=143.2272727272727) [or do it yourself in just, you know, 30](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=146.090909090909) [seconds or 1 minute confirm that the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=149.00000000000003) [server is running and that there is no](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=151.33333333333343) [firewalls blocking your access and that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=154.00000000000017) [TCP/IP is enabled and that you have rights](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=156.05882352941174) [to connect to a particular database. So,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=158.88235294117638) [it's a really valuable little tool that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=161.33333333333334) [you can use and it doesn't require any](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=163.66666666666674) [special tools to be installed, like Visual](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=166.33333333333348) [Studio or SQL Server Management Studio so that's why it's so valuable.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=5&mode=live&start=170)

[Enabling Database Mail](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live)

[Enabling Database Mail This is required so](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=1) [that SQL Server can send mail and the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=4.120000000000001) [reason you want SQL Server to be able to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=6.360000000000003) [send mail is so you can use it for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=8.880000000000003) [notifications and alerts about certain](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=12.105263157894735) [types of errors and failed SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=14.210526315789469) [Agent Jobs. You need to follow these steps](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=17.157894736842103) [to enable Database Mail. First of all, you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=20.10000000000001) [have to enable the Database Mail Extended](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=22.90000000000002) [Stored procedures. Then you can use the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=25.333333333333332) [Database Mail Configuration Wizard to set](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=27.666666666666657) [the properties so you can use Database](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=29.66666666666665) [Mail. You have to create a Database Mail](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=32.04347826086957) [account and profile and you have to have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=34.826086956521756) [access to an e-mail server that supports](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=37.60869565217394) [SMTP. You're going to have to know your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=40.35000000000001) [outgoing mail server information in order](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=43.95000000000003) [to do this so you might need some](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=46.65000000000005) [assistance from a network administrator or](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=50.058823529411775) [server administrator that has that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=52.529411764705905) [information. Here's the Books Online Topic](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=54.58823529411768) [that walks through how to do this And this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=57.08333333333332) [is what the T-SQL looks like to actually](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=60.82352941176471) [enable the Database Mail Extended Stored](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=64.11764705882355) [Procedures. Finally, this is what the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=66.58823529411764)[Database Mail Configuration Wizard looks](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=68.31578947368418) [like when you first start it up and you're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=69.63157894736835) [going to select Set up Database Mail and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=72) [then walk through the steps of the Wizard to get this enabled.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=6&mode=live&start=80)

[Creating a New SQL Operator](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live)

[Creating a New SQL Operator You need to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=0) [create at least one SQL operator after you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=5.200000000000001) [install SQL Server 2012. Operators are](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=8.400000000000004) [aliases for people or groups that can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=10.800000000000006) [receive electronic notification generally](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=13.684210526315788) [in the form of an e-mail when jobs have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=15.368421052631575) [completed or they fail or when alerts have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=19.15789473684211) [been raised for certain sorts of errors.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=22.39999999999999) [The SQL Server Agent Service supports the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=25.19999999999998) [notification of administrators through](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=28) [these operators and operators enable the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=30.15384615384616) [notification and monitoring capabilities](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=33.3846153846154) [of SQL Server Agent. So, what this means](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=35.25) [in real life is that you're going to want](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=37.25) [somebody to create an e-mail group that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=39.5) [you can use as an e-mail address for this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=41.818181818181834) [operator and that way, if any of your SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=45.090909090909136) [Server Agent Jobs fail or if you have any](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=48.34782608695652) [sorts of errors that create a SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=51.47826086956523) [Agent alert, you can have an e-mail sent](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=54.26086956521742) [to this group instead of just one](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=57.22727272727272) [individual person who might not be](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=60.090909090909065) [available or who may have left the company](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=62.545454545454504) [and this is what the new operator dialog](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=65.5) [looks like so you need to come up with](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=67.5) [some sort of a meaningful name for the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=69.75) [group and then you have to have that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=71.85714285714288) [e-mail address for this operator and,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=74.14285714285721) [again, this shouldn't be just one](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=75.85714285714296)[individual person, it should be a group,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=77.69999999999999) [you know, an e-mail that you can send](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=80.14999999999995) [these e-mails to. You should also be aware](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=82.9499999999999) [that both Net send and Pager are](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=85.59090909090907) [deprecated in SQL Server 2012 so you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=87.81818181818176) [really shouldn't rely on those, you should](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=90.04545454545445) [use the e-mail name, and then you can set](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=92.33333333333331) [up things on your e-mail server so that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=95.33333333333327) [e-mail gets sent to somebody's phone, for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=97.9999999999999) [example. You can also set the pager on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=101) [duty schedule by day for this operator](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=105)[group. You can also create a new operator](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=108.5) [with T-SQL. This is a screenshot of a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=111.44999999999996) [query window in Management Studio showing](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=114.24999999999991) [the system stored procedure](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=116.33333333333333) [sp\_add\_operator that you can call to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=117.66666666666664" \t "psplayer) [actually create a new operator instead of going through the GUI.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=7&mode=live&start=119.66666666666661)

[Creating SQL Server Agent Alerts](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live)

[Creating SQL Server Agent Alerts You need](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=0) [to create SQL Server Agent alerts for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=4.8235294117647065) [certain critical errors. These include](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=7.705882352941179) [Severity 19 through Severity 25 errors and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=9.764705882352946) [then Error 825, which is a read-retry was](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=13) [required. You can read this Paul Randal](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=17) [blog post at this URL to get more details](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=20.5) [about this issue and why it's so](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=23.545454545454533) [important. You want to know about these](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=25.77272727272725) [errors as soon as possible. You want to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=28) [make sure to configure a response for each](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=30.80000000000001)[one of these alerts. A SQL Server Agent](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=33.60000000000002) [alert can trigger an e-mail, a net send or](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=36.39130434782609) [a page. An e-mail to a distribution group](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=39.5217391304348) [is a preferred method to notify somebody](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=42.30434782608699) [about this. Net send and paging are again](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=45.222222222222214) [deprecated in SQL Server 2012. This is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=48.77777777777776) [what the SQL Server Alert General](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=51.63636363636364) [Properties dialog looks like and you can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=53.54545454545456) [see where you can give it a name and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=55.7727272727273) [decide whether to enable it or not and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=58.58333333333333) [choose what sort of an alert it is and you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=60.91666666666664) [can filter it by database, usually you're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=63.833333333333286) [going to want to set it for all databases.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=65.99999999999999) [You can also choose whether to use a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=68.99999999999994) [specific error number or severity level or](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=71.66666666666657) [search for a certain message in the error](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=74.85714285714289) [text in the SQL Server error log. And then](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=78.66666666666674) [this is what the SQL Server Agent Alert](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=82.52173913043478)[Response Options look like and, again, you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=84.6086956521739) [have to go in and make sure that you have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=86.43478260869564) [a SQL operator configured first and now is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=89.68421052631578) [when you set it up so this operator is notified if this alert is ever triggered.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=8&mode=live&start=93.05263157894734)

[Demo: Creating SQL Server Agent Alerts with T-SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live)

[In this demonstration, I'm going to show](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=0) [you how to add SQL Agent alerts to a brand](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=2.6666666666666665) [new SQL Server instance. What you need to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=6.476190476190478) [do before you do this is make sure you add](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=8.799999999999997) [a SQL operator, so you see I have one here](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=10.79999999999999) [called SQLDBAGroup and this operator is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=12.799999999999983) [not tied to one specific person, it's a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=15.222222222222223) [whole distribution group giving multiple](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=18.777777777777768) [DBAs and other people who need to be](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=21) [notified if something occurs. So, you can](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=24.047619047619037) [see that I've got SQLDBAGroup in my T-SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=26.714285714285694) [script here and what this is going to do](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=29.842105263157897) [is call the system stored procedure called](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=33.631578947368425) [sp\_add\_category and then it's going to add](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=36.57894736842104" \t "psplayer) [several alerts here, sp\_add\_alerts and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=39.210526315789494) [here's the alerts that we're going to add.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=41.052631578947405) [We want to add alerts for Sev 19 through](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=44) [Sev 25 errors and also for Error 825 and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=47.239999999999995" \t "psplayer) [this script has a little bit of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=50.47999999999999) [intelligence because it automatically](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=53) [figures out the name of your instance and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=54.55555555555554) [adds that right here as the server name to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=57.66666666666663) [the name of this alert. So, again, just](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=61.10526315789475) [double-check that you've got this operator](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=64.0526315789474) [created first and then you can run this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=66.26315789473685) [script and it goes through and right here](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=68.90909090909088) [in the Alerts tab, if I refresh there,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=71.45454545454538) [then I should see all these brand new](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=74) [alerts and you can see they concatenated](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=76.39999999999998) [together the name of this instance](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=78.49999999999996) [GLENN2012 and then Alert and it talks](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=80.47368421052632) [about what it is. So, just by running this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=83.78947368421052) [T-SQL script, now we've got SQL Agent](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=88.05263157894736) [alerts and if any of these alerts actually](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=90.66666666666664) [happen, then we'll find out about it much more quickly than we otherwise would.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=9&mode=live&start=93.33333333333327)

[Checking SQL Server Service Properties](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live)

[Checking SQL Server Service Properties](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=1) [There's a new DMV that was added in SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=4) [Server 2008 SP1 called sys.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=8.5) [dm\_server\_services that's also available](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=11" \t "psplayer) [in SQL Server 2012 and I've got it up here](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=13) [on the query window in Management Studio](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=16.5) [in this screenshot. This lets you select](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=18.95000000000001) [the service names and the startup type](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=21.400000000000006) [description and then the status for each](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=23.850000000000016) [one of the services that's installed on](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=26.300000000000026) [your instance. So, you can run this query](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=28.500000000000004)[and find out whether or not you've got](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=30.90000000000001) [your SQL Server Services set up to start](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=33.36842105263158) [up automatically and whether or not](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=36.31578947368424) [they're running and also what service](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=38.526315789473735) [accounts they're using and the last time](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=40.44444444444444) [they started. So, this is all handy](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=41.99999999999999) [information to know and it's quicker to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=43.55555555555554) [run this query rather than opening up SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=46.105263157894726) [Server Configuration Manager to check](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=49.47368421052629) [this, but here's what it looks like in SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=51.57894736842101) [Server Configuration Manager and this is](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=54.10526315789474) [where you can check the Start Mode for any](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=55.684210526315795) [more of your SQL Server-related services.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=58.599999999999994) [So, in this case, you see that SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=60.999999999999986) [Agent is set to automatically start, which is what you want.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=10&mode=live&start=64.59999999999998)

[Ola Hallengren's Maintenance Solution](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live)

[Ola Hallengren's Maintenance Solution Ola](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=1) [Hallengren has developed and maintains an](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=4.466666666666667" \t "psplayer) [excellent script that's used to handle](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=7.2666666666666675) [database backups and a number of other](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=10.066666666666668) [things. On the database backup side, it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=12.944444444444446) [handles full, differential, and log](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=15.666666666666671) [backups for all of your user databases. It](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=17.611111111111118) [also handles full backups for your system](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=21.733333333333345) [databases. It does index maintenance. It](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=25.46666666666669) [uses an intelligent algorithm to decide](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=27.875) [whether to reorganize or rebuild your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=30.125)[indexes as necessary. It also does](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=32.53333333333333) [statistics maintenance. It does database](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=35.73333333333332) [integrity checks with DBCC CHECKDB for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=38.39999999999998) [your user databases and your system](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=41.875) [databases. It's very flexible and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=45.625) [configurable and it's in Production use](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=48.75) [with many organizations around the world.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=52) [It's a free download available at this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=55) [link and I think this is a far superior](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=58.5) [solution to using the built-in database](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=62.19999999999999) [maintenance plans that are a part of SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=64.6) [Server that have a lot of issues, I think this a far superior solution.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=11&mode=live&start=69)

[Implementing the Maintenance Solution Scripts and Agent Jobs](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live)

[Implementing the Maintenance Solution](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=0) [Scripts After you've gone to Ola](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=4) [Hallengren's website, you can download the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=7.142857142857144" \t "psplayer) [MaintenanceSolution. sql file. You're](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=9.714285714285717" \t "psplayer) [going to want to open that file in SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=11.3) [Server Management Studio and then you'll](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=14.000000000000007) [want to change this line in the script to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=15.800000000000011) [point to your default backup directory by](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=19.5) [replacing C:\Backup with a path to your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=23) [directory. So, if you followed my](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=26.5) [directions, it'll probably be your M:](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=28.66666666666666) [drive so you set it to whatever the drive](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=30.666666666666654) [and directory is for your SQL backups.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=33.66666666666666) [Then, you execute this script in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=37.176470588235304) [Management Studio and this'll create](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=40.35294117647061)[several new stored procedures and 11 new](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=43) [SQL Server Agent jobs. You want to run](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=46.33333333333332) [each job manually to verify that it's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=50.14285714285712) [working correctly. Then you'll go in and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=53.333333333333336) [create a job schedule for each one of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=55.666666666666686) [those SQL Server Agent jobs that were](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=58.33333333333337) [created and the job schedule is going to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=61) [depend on your RTO and RPO objectives and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=65) [your infrastructure. Finally, you're going](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=69) [to go in and add a notification for each](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=70.7894736842105) [one of these SQL Server Agent jobs.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=73.15789473684202) [This'll let you know when a job fails. So,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=75) [this is what it looks like in SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=78.27272727272724) [Management Studio in the GUI if you want](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=81.54545454545448) [to add a job schedule to a SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=84.45454545454544) [Agent job and, in this case, this is the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=87.72727272727268) [DatabaseBackup -- SYSTEM\_DATABASES -- FULL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=91" \t "psplayer) [job that's crated by Ola Hallengren's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=93.1875) [script and, in my case, I want this to run](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=95.8125) [every day at 12 a. m. with no set ending](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=99.9642857142857) [date, so this will just run every single](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=103.89285714285708) [day at 12 a. m. This is how you go in and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=107.03571428571419) [add a notification to an agent job. So,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=111.23999999999995) [again for this same job, I wanted to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=113.7999999999999) [e-mail a group, actually the operator](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=116.35999999999984) [called SQLDBAs when this job fails and I](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=118.4736842105263) [also want it to write to the Windows](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=121.4210526315789) [Application event log. And then, if you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=124.75) [don't have any strong or any set RPO/RTO](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=128.8947368421053) [goals from your business, here's a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=132.68421052631592) [suggested default maintenance job schedule](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=135.5263157894739) [for these Ola Hallengren created jobs and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=138.10526315789468) [so, based on what job it is, it's going to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=141.78947368421038) [run at a certain day at a certain time](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=146.43478260869563) [and, again, you would want to change this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=148.39130434782595) [if you had different RPO or RTO](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=150.13043478260846)[requirements, but this is a good starting](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=154) [point for setting up this job schedule for all those jobs.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=12&mode=live&start=161)

[Demo: Configuring the Maintenance Solution and Agent Jobs](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live)

[In this demo, I'm going to show you how to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=0) [use Ola Hallengren's Maintenance Solution](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=3.75) [script. I've already downloaded the latest](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=5.625) [version and I've got it loaded here in](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=7.315789473684212) [Management Studio in a query window. One](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=9.421052631578952) [thing you want to change before you run](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=11.31578947368421) [this script is down here where it says SET](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=13.842105263157896) [@BackupDirectory, you want to change that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=16.684210526315788) [to your backup root directory. So, in my](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=18.842105263157894) [case on my workstation here, it's](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=21.789473684210524) [C:\SQLBackups and make sure you change](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=24) [that before you run this script and what](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=26.10000000000001) [this script's going to do is create a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=28.90000000000002) [number of stored procedures in the Master](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=31.700000000000003)[Database and create 11 new SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=34.15000000000001) [Agent jobs that you'll have to go in and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=36.60000000000002) [add schedules to and a couple other things](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=39.499999999999986) [and after that the jobs are created. So,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=41.89999999999996) [I'll go ahead and run this script in and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=44.34782608695652) [it goes real quickly and if you refresh](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=47.47826086956523) [over here, you'll see that we have 11 new](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=50.26086956521742) [agent jobs and there's a number of new](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=53.33333333333334) [stored procedures in the Master Database.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=56.00000000000003) [So, once you've done that, we can go ahead](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=58) [and close this script and then we can take](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=60.16000000000002) [a look at some of these jobs and the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=62.320000000000036) [important thing that you want to do,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=64.45454545454547) [because they're not going to do anything](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=66.0454545454546) [until you actually go in and create run](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=67.63636363636374) [schedules for them. So, in this case,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=69.73684210526315) [let's take a look at SYSTEM\_DATABASES, the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=72.31578947368418) [FULL backup for SYSTEM\_DATABASES and if we](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=74.8947368421052) [right-click on that and pick Properties](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=77.55555555555554) [then this pulls up the dialog box for Job](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=79.88888888888886) [Properties and you want to come in here to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=83.36363636363636) [where it says Schedules and create a new](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=86.6363636363636) [schedule for this job and what I always do](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=89.54545454545448) [is, just to save myself some typing, is I](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=93.00000000000003) [copy the name right here of the job and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=96.60000000000008) [then when I go into Schedules and I Create](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=100.20000000000013) [New, then I just paste that in because I'm](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=102.82608695652173) [lazy and I don't like to type. So, I do](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=105.17391304347825) [that and I'm going to go ahead and have](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=107.95454545454544) [the SYSTEM\_DATABASES be backed up every](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=110.81818181818176) [night, so instead of weekly I'll change](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=112.72727272727263) [that to daily and I'm going to go ahead](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=114.71999999999998)[and do it at 12 a. m. and it'll start](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=116.87999999999994) [today and just go until I cancel this job,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=119.27999999999989) [so I can click OK and that'll create a new](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=122.85714285714289) [job schedule for this job. And then the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=127.6190476190477) [other thing that I want to do for each one](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=130.59999999999997) [of these is go back in to Properties and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=132.59999999999985) [go to where it says Notifications and by](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=134.39999999999975) [default, it's going to write to the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=136.74999999999997) [Windows Application event log when the job](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=139.19999999999993) [fails, but I actually want to know more,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=141.6499999999999) [you know, earlier than that without having](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=143.99999999999994) [to go to the Application event log. So,](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=145.9999999999999) [I'm going to click on E-mail and since I](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=148.22727272727272) [created an operator earlier, I'm going to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=150.2727272727272) [go ahead and pull down that operator so](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=151.86363636363623) [now the SQLDBAGroup will get an email](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=154.421052631579) [whenever this particular job fails and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=157.7368421052633) [that's just a good idea to do that so that](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=160.57894736842127) [way you'll know by your e-mail, which](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=163.99999999999994) [could be forwarded to your smartphone, for](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=165.9999999999999) [example, whenever this particular backup](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=168) [job fails and then I'll go ahead and click](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=169.4285714285714) [OK and then what you can do too before you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=171.9999999999999) [just leave this is go ahead and just](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=175.125) [manually run this job once to see that it](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=178.125) [works and it should go pretty quickly](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=181.5) [because we're just backing up the](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=184.125) [SYSTEM\_DATABASES and, again, that finished](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=186.375) [very quickly. So, again, that's how you](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=188.25) [take the Ola Hallengren Maintenance](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=191.22222222222229) [Solution, just modify where the backup](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=193.44444444444457) [directory is, and then go ahead and just](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=196.1111111111113) [run it in and then for each of these 11](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=198.61538461538464) [jobs you've got to go in and set your](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=201.30769230769238) [schedule and then set your notification](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=203.73076923076934) [properties so you'll find out when things are failing.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=13&mode=live&start=209)

[Course Summary](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=14&mode=live)

[Now it's time for the course summary.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=14&mode=live&start=1) [There are many steps to a complete SQL](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=14&mode=live&start=4.111111111111112) [Server 2012 installation. These include a](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=14&mode=live&start=7.666666666666669) [hardware configuration, operating system](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=14&mode=live&start=10.928571428571427) [configuration, and a proper SQL Server](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=14&mode=live&start=13.499999999999996) [installation. There are also a number of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=14&mode=live&start=17.35714285714285) [post-installation configuration tasks.](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=14&mode=live&start=20.571428571428562) [These include installing the latest](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=14&mode=live&start=21.857142857142843) [Service Pack and Cumulative Update and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=14&mode=live&start=24) [setting instance properties and](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=14&mode=live&start=28.000000000000007) [configuring tempdb. You're also going to](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=14&mode=live&start=30.66666666666668)[want to make sure that you take care of](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=14&mode=live&start=33.26315789473685) [these important alerting and maintenance](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=14&mode=live&start=36.10526315789476) [tasks. These include enabling Database](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=14&mode=live&start=37.68421052631582) [Mail, creating SQL Agent Alerts, and using](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=14&mode=live&start=40.66666666666666) [Ola Hallengren's Maintenance Solution. I](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=14&mode=live&start=45.33333333333331) [hope you've enjoyed listening to this](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=14&mode=live&start=49) [course as much as I've enjoyed recording it and thanks for watching!](https://app.pluralsight.com/player?course=sqlserver-2012ic&author=glenn-berry&name=sqlserver-2012ic-m6-maintenance&clip=14&mode=live&start=55)