

Autodesk Vault Upgrade Guide

© 2016 Autodesk, Inc. All Rights Reserved. Except where otherwise noted, this work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License that can be viewed online at <http://creativecommons.org/licenses/by-nc-sa/3.0/>. This license content, applicable as of 16 December 2014 to this software product, is reproduced here for offline users:

CREATIVE COMMONS CORPORATION IS NOT A LAW FIRM AND DOES NOT PROVIDE LEGAL SERVICES. DISTRIBUTION OF THIS LICENSE DOES NOT CREATE AN ATTORNEY-CLIENT RELATIONSHIP. CREATIVE COMMONS PROVIDES THIS INFORMATION ON AN "AS-IS" BASIS. CREATIVE COMMONS MAKES NO WARRANTIES REGARDING THE INFORMATION PROVIDED, AND DISCLAIMS LIABILITY FOR DAMAGES RESULTING FROM ITS USE.

License

THE WORK (AS DEFINED BELOW) IS PROVIDED UNDER THE TERMS OF THIS CREATIVE COMMONS PUBLIC LICENSE ("CCPL" OR "LICENSE"). THE WORK IS PROTECTED BY COPYRIGHT AND/OR OTHER APPLICABLE LAW. ANY USE OF THE WORK OTHER THAN AS AUTHORIZED UNDER THIS LICENSE OR COPYRIGHT LAW IS PROHIBITED.

BY EXERCISING ANY RIGHTS TO THE WORK PROVIDED HERE, YOU ACCEPT AND AGREE TO BE BOUND BY THE TERMS OF THIS LICENSE. TO THE EXTENT THIS LICENSE MAY BE CONSIDERED TO BE A CONTRACT, THE LICENSOR GRANTS YOU THE RIGHTS CONTAINED HERE IN CONSIDERATION OF YOUR ACCEPTANCE OF SUCH TERMS AND CONDITIONS.

1. Definitions

a. "**Adaptation**" means a work based upon the Work, or upon the Work and other pre-existing works, such as a translation, adaptation, derivative work, arrangement of music or other alterations of a literary or artistic work, or phonogram or performance and includes cinematographic adaptations or any other form in which the Work may be recast, transformed, or adapted including in any form recognizably derived from the original, except that a work that constitutes a Collection will not be considered an Adaptation for the purpose of this License. For the avoidance of doubt, where the Work is a musical work, performance or phonogram, the synchronization of the Work in timed-relation with a moving image ("synching") will be considered an Adaptation for the purpose of this License.

b. "**Collection**" means a collection of literary or artistic works, such as encyclopedias and anthologies, or performances, phonograms or broadcasts, or other works or subject matter other than works listed in Section 1(g) below, which, by reason of the selection and arrangement of their contents, constitute intellectual creations, in which the Work is included in its entirety in unmodified form along with one or more other contributions, each constituting separate and independent works in themselves, which together are assembled into a collective whole. A work that constitutes a Collection will not be considered an Adaptation (as defined above) for the purposes of this License.

c. "**Distribute**" means to make available to the public the original and copies of the Work or Adaptation, as appropriate, through sale or other transfer of ownership.

d. "**License Elements**" means the following high-level license attributes as selected by Licensor and indicated in the title of this License: Attribution, Noncommercial, ShareAlike.

e. "**Licensor**" means the individual, individuals, entity or entities that offer(s) the Work under the terms of this License.

f. "**Original Author**" means, in the case of a literary or artistic work, the individual, individuals, entity or entities who created the Work or if no individual or entity can be identified, the publisher; and in addition (i) in the case of a performance the actors, singers, musicians, dancers, and other persons who act, sing, deliver, declaim, play in, interpret or otherwise perform literary or artistic works or expressions of folklore; (ii) in the case of a phonogram the producer being the person or legal entity who first fixes the sounds of a performance or other sounds; and, (iii) in the case of broadcasts, the organization that transmits the broadcast.

g. "**Work**" means the literary and/or artistic work offered under the terms of this License including without limitation any production in the literary, scientific and artistic domain, whatever may be the mode or form of its expression including digital form, such as a book, pamphlet and other writing; a lecture, address, sermon or other work of the same nature; a dramatic or dramatico-musical work; a choreographic work or entertainment in dumb show; a musical composition with or without words; a cinematographic work to which are assimilated works expressed by a process analogous to cinematography; a work of drawing, painting, architecture, sculpture, engraving or lithography; a photographic work to which are assimilated works expressed by a process analogous to photography; a work of applied art; an illustration, map, plan, sketch or three-dimensional work relative to geography, topography, architecture or science; a performance; a broadcast; a phonogram; a compilation of data to the extent it is protected as a copyrightable work; or a work performed by a variety or circus performer to the extent it is not otherwise considered a literary or artistic work.

h. "**You**" means an individual or entity exercising rights under this License who has not previously violated the terms of this License with respect to the Work, or who has received express permission from the Licensor to exercise rights under this License despite a previous violation.

i. "**Publicly Perform**" means to perform public recitations of the Work and to communicate to the public those public recitations, by any means or process, including by wire or wireless means or public digital performances; to make available to the public Works in such a way that members of the public may access these Works from a place and at a place individually chosen by them; to perform the Work to the public by any means or process and the communication to the public of the performances of the Work, including by public digital performance; to broadcast and rebroadcast the Work by any means including signs, sounds or images.

j. "**Reproduce**" means to make copies of the Work by any means including without limitation by sound or visual recordings and the right of fixation and reproducing fixations of the Work, including storage of a protected performance or phonogram in digital form or other electronic medium.

2. Fair Dealing Rights. Nothing in this License is intended to reduce, limit, or restrict any uses free from copyright or rights arising from limitations or exceptions that are provided for in connection with the copyright protection under copyright law or other applicable laws.

3. License Grant. Subject to the terms and conditions of this License, Licensor hereby grants You a worldwide, royalty-free, non-exclusive, perpetual (for the duration of the applicable copyright) license to exercise the rights in the Work as stated below:

- a. to Reproduce the Work, to incorporate the Work into one or more Collections, and to Reproduce the Work as incorporated in the Collections;
- b. to create and Reproduce Adaptations provided that any such Adaptation, including any translation in any medium, takes reasonable steps to clearly label, demarcate or otherwise identify that changes were made to the original Work. For example, a translation could be marked "The original work was translated from English to Spanish," or a modification could indicate "The original work has been modified.";
- c. to Distribute and Publicly Perform the Work including as incorporated in Collections; and,
- d. to Distribute and Publicly Perform Adaptations.

The above rights may be exercised in all media and formats whether now known or hereafter devised. The above rights include the right to make such modifications as are technically necessary to exercise the rights in other media and formats. Subject to Section 8(f), all rights not expressly granted by Licensor are hereby reserved, including but not limited to the rights described in Section 4(e).

4. Restrictions. The license granted in Section 3 above is expressly made subject to and limited by the following restrictions:

- a. You may Distribute or Publicly Perform the Work only under the terms of this License. You must include a copy of, or the Uniform Resource Identifier (URI) for, this License with every copy of the Work You Distribute or Publicly Perform. You may not offer or impose any terms on the Work that restrict the terms of this License or the ability of the recipient of the Work to exercise the rights granted to that recipient under the terms of the License. You may not sublicense the Work. You must keep intact all notices that refer to this License and to the disclaimer of warranties with every copy of the Work You Distribute or Publicly Perform. When You Distribute or Publicly Perform the Work, You may not impose any effective technological measures on the Work that restrict the ability of a recipient of the Work from You to exercise the rights granted to that recipient under the terms of the License. This Section 4(a) applies to the Work as incorporated in a Collection, but this does not require the Collection apart from the Work itself to be made subject to the terms of this License. If You create a Collection, upon notice from any Licensor You must, to the extent practicable, remove from the Collection any credit as required by Section 4(d), as requested. If You create an Adaptation, upon notice from any Licensor You must, to the extent practicable, remove from the Adaptation any credit as required by Section 4(d), as requested.
- b. You may Distribute or Publicly Perform an Adaptation only under: (i) the terms of this License; (ii) a later version of this License with the same License Elements as this License; (iii) a Creative Commons jurisdiction license (either this or a later license version) that contains the same License Elements as this License (e.g., Attribution-NonCommercial-ShareAlike 3.0 US) ("Applicable License"). You must include a copy of, or the URI, for Applicable License with every copy of each Adaptation You Distribute or Publicly Perform. You may not offer or impose any terms on the Adaptation that restrict the terms of the Applicable License or the ability of the recipient of the Adaptation to exercise the rights granted to that recipient under the terms of the Applicable License. You must keep intact all notices that refer to the Applicable License and to the disclaimer of warranties with every copy of the Work as included in the Adaptation You Distribute or Publicly Perform. When You Distribute or Publicly Perform the Adaptation, You may not impose any effective technological measures on the Adaptation that restrict

the ability of a recipient of the Adaptation from You to exercise the rights granted to that recipient under the terms of the Applicable License. This Section 4(b) applies to the Adaptation as incorporated in a Collection, but this does not require the Collection apart from the Adaptation itself to be made subject to the terms of the Applicable License.

- c. You may not exercise any of the rights granted to You in Section 3 above in any manner that is primarily intended for or directed toward commercial advantage or private monetary compensation. The exchange of the Work for other copyrighted works by means of digital file-sharing or otherwise shall not be considered to be intended for or directed toward commercial advantage or private monetary compensation, provided there is no payment of any monetary compensation in connection with the exchange of copyrighted works.
- d. If You Distribute, or Publicly Perform the Work or any Adaptations or Collections, You must, unless a request has been made pursuant to Section 4(a), keep intact all copyright notices for the Work and provide, reasonable to the medium or means You are utilizing: (i) the name of the Original Author (or pseudonym, if applicable) if supplied, and/or if the Original Author and/or Licensor designate another party or parties (e.g., a sponsor institute, publishing entity, journal) for attribution ("Attribution Parties") in Licensor's copyright notice, terms of service or by other reasonable means, the name of such party or parties; (ii) the title of the Work if supplied; (iii) to the extent reasonably practicable, the URI, if any, that Licensor specifies to be associated with the Work, unless such URI does not refer to the copyright notice or licensing information for the Work; and, (iv) consistent with Section 3(b), in the case of an Adaptation, a credit identifying the use of the Work in the Adaptation (e.g., "French translation of the Work by Original Author," or "Screenplay based on original Work by Original Author"). The credit required by this Section 4(d) may be implemented in any reasonable manner; provided, however, that in the case of a Adaptation or Collection, at a minimum such credit will appear, if a credit for all contributing authors of the Adaptation or Collection appears, then as part of these credits and in a manner at least as prominent as the credits for the other contributing authors. For the avoidance of doubt, You may only use the credit required by this Section for the purpose of attribution in the manner set out above and, by exercising Your rights under this License, You may not implicitly or explicitly assert or imply any connection with, sponsorship or endorsement by the Original Author, Licensor and/or Attribution Parties, as appropriate, of You or Your use of the Work, without the separate, express prior written permission of the Original Author, Licensor and/or Attribution Parties.
- e. For the avoidance of doubt:
 - i. Non-waivable Compulsory License Schemes. In those jurisdictions in which the right to collect royalties through any statutory or compulsory licensing scheme cannot be waived, the Licensor reserves the exclusive right to collect such royalties for any exercise by You of the rights granted under this License;
 - ii. Waivable Compulsory License Schemes. In those jurisdictions in which the right to collect royalties through any statutory or compulsory licensing scheme can be waived, the Licensor reserves the exclusive right to collect such royalties for any exercise by You of the rights granted under this License if Your exercise of such rights is for a purpose or use which is otherwise than noncommercial as permitted under Section 4(c) and otherwise waives the right to collect royalties through any statutory or compulsory licensing scheme; and,
 - iii. Voluntary License Schemes. The Licensor reserves the right to collect royalties, whether individually or, in the event that the Licensor is a member of a collecting society that administers voluntary licensing schemes, via that society, from any exercise by You of the rights granted under this License that is for a purpose or use which is otherwise than noncommercial as permitted under Section 4(c).

- f. Except as otherwise agreed in writing by the Licensor or as may be otherwise permitted by applicable law, if You Reproduce, Distribute or Publicly Perform the Work either by itself or as part of any Adaptations or Collections, You must not distort, mutilate, modify or take other derogatory action in relation to the Work which would be prejudicial to the Original Author's honor or reputation. Licensor agrees that in those jurisdictions (e.g. Japan), in which any exercise of the right granted in Section 3(b) of this License (the right to make Adaptations) would be deemed to be a distortion, mutilation, modification or other derogatory action prejudicial to the Original Author's honor and reputation, the Licensor will waive or not assert, as appropriate, this Section, to the fullest extent permitted by the applicable national law, to enable You to reasonably exercise Your right under Section 3(b) of this License (right to make Adaptations) but not otherwise.

5. Representations, Warranties and Disclaimer

UNLESS OTHERWISE MUTUALLY AGREED TO BY THE PARTIES IN WRITING AND TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, LICENSOR OFFERS THE WORK AS-IS AND MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND CONCERNING THE WORK, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF TITLE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT, OR THE ABSENCE OF LATENT OR OTHER DEFECTS, ACCURACY, OR THE PRESENCE OF ABSENCE OF ERRORS, WHETHER OR NOT DISCOVERABLE. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, SO THIS EXCLUSION MAY NOT APPLY TO YOU.

6. Limitation on Liability. EXCEPT TO THE EXTENT REQUIRED BY APPLICABLE LAW, IN NO EVENT WILL LICENSOR BE LIABLE TO YOU ON ANY LEGAL THEORY FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES ARISING OUT OF THIS LICENSE OR THE USE OF THE WORK, EVEN IF LICENSOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

7. Termination

- a. This License and the rights granted hereunder will terminate automatically upon any breach by You of the terms of this License. Individuals or entities who have received Adaptations or Collections from You under this License, however, will not have their licenses terminated provided such individuals or entities remain in full compliance with those licenses. Sections 1, 2, 5, 6, 7, and 8 will survive any termination of this License.
- b. Subject to the above terms and conditions, the license granted here is perpetual (for the duration of the applicable copyright in the Work). Notwithstanding the above, Licensor reserves the right to release the Work under different license terms or to stop distributing the Work at any time; provided, however that any such election will not serve to withdraw this License (or any other license that has been, or is required to be, granted under the terms of this License), and this License will continue in full force and effect unless terminated as stated above.

8. Miscellaneous

- a. Each time You Distribute or Publicly Perform the Work or a Collection, the Licensor offers to the recipient a license to the Work on the same terms and conditions as the license granted to You under this License.
- b. Each time You Distribute or Publicly Perform an Adaptation, Licensor offers to the recipient a license to the original Work on the same terms and conditions as the license granted to You under this License.
- c. If any provision of this License is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this License, and without further action

by the parties to this agreement, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.

- d. No term or provision of this License shall be deemed waived and no breach consented to unless such waiver or consent shall be in writing and signed by the party to be charged with such waiver or consent.
- e. This License constitutes the entire agreement between the parties with respect to the Work licensed here. There are no understandings, agreements or representations with respect to the Work not specified here. Licensor shall not be bound by any additional provisions that may appear in any communication from You. This License may not be modified without the mutual written agreement of the Licensor and You.
- f. The rights granted under, and the subject matter referenced, in this License were drafted utilizing the terminology of the Berne Convention for the Protection of Literary and Artistic Works (as amended on September 28, 1979), the Rome Convention of 1961, the WIPO Copyright Treaty of 1996, the WIPO Performances and Phonograms Treaty of 1996 and the Universal Copyright Convention (as revised on July 24, 1971). These rights and subject matter take effect in the relevant jurisdiction in which the License terms are sought to be enforced according to the corresponding provisions of the implementation of those treaty provisions in the applicable national law. If the standard suite of rights granted under applicable copyright law includes additional rights not granted under this License, such additional rights are deemed to be included in the License; this License is not intended to restrict the license of any rights under applicable law.

Creative Commons Notice

Creative Commons is not a party to this License, and makes no warranty whatsoever in connection with the Work. Creative Commons will not be liable to You or any party on any legal theory for any damages whatsoever, including without limitation any general, special, incidental or consequential damages arising in connection to this license. Notwithstanding the foregoing two (2) sentences, if Creative Commons has expressly identified itself as the Licensor hereunder, it shall have all rights and obligations of Licensor.

Except for the limited purpose of indicating to the public that the Work is licensed under the CCPL, Creative Commons does not authorize the use by either party of the trademark "Creative Commons" or any related trademark or logo of Creative Commons without the prior written consent of Creative Commons. Any permitted use will be in compliance with Creative Commons' then-current trademark usage guidelines, as may be published on its website or otherwise made available upon request from time to time. For the avoidance of doubt, this trademark restriction does not form part of this License.

Creative Commons may be contacted at <http://creativecommons.org/>.

Certain materials included in this publication are reprinted with the permission of the copyright holder.

Creative Commons FAQ

Autodesk's Creative Commons FAQ can be viewed online at <http://www.autodesk.com/company/creative-commons>, and is reproduced here for offline users.

In collaboration with Creative Commons, Autodesk invites you to share your knowledge with the rest of the world, inspiring others to learn, achieve goals, and ignite creativity. You can freely borrow from the Autodesk Help, Support and Video libraries to build a new learning experience for anyone with a particular need or interest.

What is Creative Commons?

Creative Commons (CC) is a nonprofit organization that offers a simple licensing model that frees digital content to enable anyone to modify, remix, and share creative works.

How do I know if Autodesk learning content and Autodesk University content is available under Creative Commons?

All Autodesk learning content and Autodesk University content released under Creative Commons is explicitly marked with a Creative Commons icon specifying what you can and cannot do. Always follow the terms of the stated license.

What Autodesk learning content is currently available under Creative Commons?

Over time, Autodesk will release more and more learning content under the Creative Commons licenses.

Currently available learning content:

- Autodesk online help-Online help for many Autodesk products, including its embedded media such as images and help movies.
- Autodesk Learning Videos-A range of video-based learning content, including the video tutorials on the Autodesk YouTube™ Learning Channels and their associated iTunes® podcasts.
- Autodesk downloadable materials-Downloadable 3D assets, digital footage, and other files you can use to follow along on your own time.

Is Autodesk learning and support content copyrighted?

Yes. Creative Commons licensing does not replace copyright. Copyright remains with Autodesk or its suppliers, as applicable. But it makes the terms of use much more flexible.

What do the Autodesk Creative Commons licenses allow?

Autodesk makes some of its learning and support content available under two distinct Creative Commons licenses. The learning content is clearly marked with the applicable Creative Commons license. You must comply with the following conditions:

- **Attribution-NonCommercial-ShareAlike (CC BY-NC-SA)** This license lets you copy, distribute, display, remix, tweak, and build upon our work noncommercially, as long as you credit Autodesk and license your new creations under the identical terms.
- **Attribution-NonCommercial-No Derivative Works (CC BY-NC-ND)** This license lets you copy, distribute, and display only verbatim copies of our work as long as you credit us, but you cannot alter the learning content in any way or use it commercially.
- **Special permissions on content marked as No Derivative Works** For video-based learning content marked as No Derivative Works (ND), Autodesk grants you special permission to make modifications but only for the purpose of translating the video content into another language.

These conditions can be modified only by explicit permission of Autodesk, Inc. Send requests for modifications outside of these license terms to creativecommons@autodesk.com.

Can I get special permission to do something different with the learning content?

Unless otherwise stated, our Creative Commons conditions can be modified only by explicit permission of Autodesk, Inc. If you have any questions or requests for modifications outside of these license terms, email us at creativecommons@autodesk.com.

How do I attribute Autodesk learning content?

You must explicitly credit Autodesk, Inc., as the original source of the materials. This is a standard requirement of the Attribution (BY) term in all Creative Commons licenses. In some cases, such as for the Autodesk video learning content, we specify exactly how we would like to be attributed.

This is usually described on the video's end-plate. For the most part providing the title of the work, the URL where the work is hosted, and a credit to Autodesk, Inc., is quite acceptable. Also, remember to keep intact any copyright notice associated with the work. This may sound like a lot of information, but there is flexibility in the way you present it.

Here are some examples:

"This document contains content adapted from the Autodesk® Maya® Help, available under a Creative Commons Attribution-NonCommercial-Share Alike license. Copyright © Autodesk, Inc."

"This is a Finnish translation of a video created by the Autodesk Maya Learning Channel @ www.youtube.com/mayahowtos. Copyright © Autodesk, Inc."

"Special thanks to the Autodesk® 3ds Max® Learning Channel @ www.youtube.com/3dsmaxhowtos. Copyright © Autodesk, Inc."

Do I follow YouTube's standard license or Autodesk's Creative Commons license?

The videos of the Autodesk Learning Channels on YouTube are uploaded under YouTube's standard license policy. Nonetheless, these videos are released by Autodesk as Creative Commons Attribution-NonCommercial-No Derivative Works (CC BY-NC-ND) and are marked as such.

You are free to use our video learning content according to the Creative Commons license under which they are released.

Where can I easily download Autodesk learning videos?

Most of the Autodesk Learning Channels have an associated iTunes podcast from where you can download the same videos and watch them offline. When translating Autodesk learning videos, we recommend downloading the videos from the iTunes podcasts.

Can I translate Autodesk learning videos?

Yes. Even though our learning videos are licensed as No Derivative Works (ND), we grant everyone permission to translate the audio and subtitles into other languages. In fact, if you want to recapture the video tutorial as-is but show the user interface in another language, you are free to do so. Be sure to give proper attribution as indicated on the video's Creative Commons end-plate. This special permission only applies to translation projects. Requests for modifications outside of these license terms can be directed to creativecommons@autodesk.com.

How do I let others know that I have translated Autodesk learning content into another language?

Autodesk is happy to see its learning content translated into as many different languages as possible. If you translate our videos or any of our learning content into other languages, let us know. We can help

promote your contributions to our growing multilingual community. In fact, we encourage you to find creative ways to share our learning content with your friends, family, students, colleagues, and communities around the world. Contact us at creativecommons@autodesk.com.

I have translated Autodesk learning videos into other languages. Can I upload them to my own YouTube channel?

Yes, please do and let us know where to find them so that we can help promote your contributions to our growing multilingual Autodesk community. Contact us at creativecommons@autodesk.com.

Can I repost or republish Autodesk learning content on my site or blog?

Yes, you can make Autodesk learning material available on your site or blog as long as you follow the terms of the Creative Commons license under which the learning content is released. If you are simply referencing the learning content as-is, then we recommend that you link to it or embed it from where it is hosted by Autodesk. That way the content will always be fresh. If you have translated or remixed our learning content, then by all means you can host it yourself. Let us know about it, and we can help promote your contributions to our global learning community. Contact us at creativecommons@autodesk.com.

Can I show Autodesk learning content during my conference?

Yes, as long as it's within the scope of a noncommercial event, and as long as you comply with the terms of the Creative Commons license outlined above. In particular, the videos must be shown unedited with the exception of modifications for the purpose of translation. If you wish to use Autodesk learning content in a commercial context, contact us with a request for permission at creativecommons@autodesk.com.

Can I use Autodesk learning content in my classroom?

Yes, as long as you comply with the terms of the Creative Commons license under which the learning material is released. Many teachers use Autodesk learning content to stimulate discussions with students or to complement course materials, and we encourage you to do so as well.

Can I re-edit and remix Autodesk video learning content?

No, but for one exception. Our Creative Commons BY-NC-ND license clearly states that "derivative works" of any kind (edits, cuts, remixes, mashups, and so on) are not allowed without explicit permission from Autodesk. This is essential for preserving the integrity of our instructors' ideas. However, we do give you permission to modify our videos for the purpose of translating them into other languages.

Can I re-edit and remix Autodesk downloadable 3D assets and footage?

Yes. The Autodesk Learning Channels on YouTube provide downloadable 3D assets, footage, and other files for you to follow along with the video tutorials on your own time. This downloadable material is made available under a Creative Commons Attribution-NonCommercial-ShareAlike (CC BY-NC-SA) license. You can download these materials and experiment with them, but your remixes must give us credit as the original source of the content and be shared under the identical license terms.

Can I use content from Autodesk online help to create new materials for a specific audience?

Yes, if you want to help a specific audience learn how to optimize the use of their Autodesk software, there is no need to start from scratch. You can use, remix, or enrich the relevant help content and include it in your book, instructions, examples, or workflows you create, then Share-Alike with the community. Always be sure to comply with the terms of the Creative Commons license under which the learning content is released.

What are the best practices for marking content with Creative Commons Licenses?

When reusing a CC-licensed work (by sharing the original or a derivative based on the original), it is important to keep intact any copyright notice associated with the work, including the Creative Commons license being used. Make sure you abide by the license conditions provided by the licensor, in this case Autodesk, Inc.

Trademarks

The following are registered trademarks or trademarks of Autodesk, Inc., and/or its subsidiaries and/or affiliates in the USA and other countries: 123D, 3ds Max, Alias, ATC, AutoCAD LT, AutoCAD, Autodesk, the Autodesk logo, Autodesk 123D, Autodesk Homestyler, Autodesk Inventor, Autodesk MapGuide, Autodesk Streamline, AutoLISP, AutoSketch, AutoSnap, AutoTrack, Backburner, Backdraft, Beast, BIM 360, Burn, Buzzsaw, CADmep, CAiCE, CAMduct, Civil 3D, Combustion, Communication Specification, Configurator 360, Constructware, Content Explorer, Creative Bridge, Dancing Baby (image), DesignCenter, DesignKids, DesignStudio, Discreet, DWF, DWG, DWG (design/logo), DWG Extreme, DWG TrueConvert, DWG TrueView, DWGX, DXF, Ecotect, Ember, ESTmep, FABmep, Face Robot, FBX, Fempro, Fire, Flame, Flare, Flint, ForceEffect, FormIt 360, Freewheel, Fusion 360, Glue, Green Building Studio, Heidi, Homestyler, HumanIK, i-drop, ImageModeler, Incinerator, Inferno, InfraWorks, Instructables, Instructables (stylized robot design/logo), Inventor, Inventor HSM, Inventor LT, Lustre, Maya, Maya LT, MIMI, Mockup 360, Moldflow Plastics Advisers, Moldflow Plastics Insight, Moldflow, Moondust, MotionBuilder, Movimento, MPA (design/logo), MPA, MPI (design/logo), MPX (design/logo), MPX, Mudbox, Navisworks, ObjectARX, ObjectDBX, Opticore, P9, Pier 9, Pixlr, Pixlr-o-matic, Productstream, Publisher 360, RasterDWG, RealDWG, ReCap, ReCap 360, Remote, Revit LT, Revit, RiverCAD, Robot, Scaleform, Showcase, Showcase 360, SketchBook, Smoke, Socialcam, Softimage, Spark & Design, Spark Logo, Sparks, SteeringWheels, Stitcher, Stone, StormNET, TinkerBox, Tinkercad, Tinkerplay, ToolClip, Topobase, Toxik, TrustedDWG, T-Splines, ViewCube, Visual LISP, Visual, VRED, Wire, Wiretap, WiretapCentral, XSI.

All other brand names, product names or trademarks belong to their respective holders.

Disclaimer

THIS PUBLICATION AND THE INFORMATION CONTAINED HEREIN IS MADE AVAILABLE BY AUTODESK, INC. "AS IS." AUTODESK, INC. DISCLAIMS ALL WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE REGARDING THESE MATERIALS.

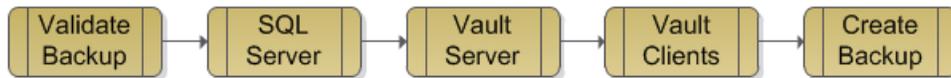
Contents

Chapter 1	Introduction to Upgrading Vault	1
	Phase 1–Validate Backup and Test Migration	1
	Phase 2–Upgrade SQL	5
	Upgrading Vault Server to Full SQL Server	6
	Upgrade Microsoft SQL Express to Microsoft SQL Standard or Higher	6
	Upgrade MS SQL 2012 to MS SQL 2014	7
	Upgrade MS SQL 2008 to MS SQL 2012	8
	Upgrade MS SQL Express 2008 R2 to Full MS SQL 2008 R2	9
	Upgrade MS SQL Express 2008 to Full MS SQL 2008	9
	Upgrade MS SQL Express 2008 to SQL Express 2008 R2	10
	Upgrade MS SQL 2005 to MS SQL 2008	11
	Upgrade MS SQL 2005 Express to Full MS SQL 2005	15
	Upgrade MS SQL 2005 Express SP2 or higher to full MS SQL Server 2005 SP3	16
	Phase 3–Upgrade the Vault Server	18
	Phase 4–Upgrade Vault Clients	26
	Phase 5–Create Backup	27

Introduction to Upgrading Vault

1

This upgrade process applies to all Autodesk Vault product editions. Details are provided for releases 2009 and higher, however the general process can be applied to all releases.



An upgrade may mean a newer release, a higher product edition, or both. When upgrading, upgrade to the highest release first and then upgrade the product edition.

For example, if moving from Vault Workgroup 2015 to Vault Professional 2017, first upgrade the release to Vault Workgroup 2017 and then upgrade the edition to Vault Professional 2017.

The migration process for an Autodesk Vault environment is composed of five stages: validate backup, upgrade SQL, upgrade Vault server, upgrade clients, and create backup. The number of steps within each stage varies depending on the existing Vault implementation.

The instructions in this document assume that you are familiar with common server administration tasks. At a minimum, you should be familiar with installing and uninstalling software on Microsoft Windows™.

Upgrade Assistance

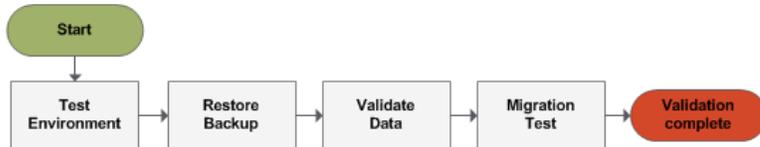
If there are concerns or additional complexities in the Autodesk Vault environment, the best practice is to involve your Value Added Reseller or Autodesk Consulting. This is especially important when using clustered SQL or business line integrations with Vault.

Phase 1—Validate Backup and Test Migration

Autodesk recommends that every Vault upgrade start with a validated backup.



The following procedure for testing the upgrade is the preferred method for validating a backup.



Test Environment

The best practice is to perform a test upgrade of the Vault server on a machine that is similar to the production server. A test upgrade provides confidence that the backup is valid and identifies potential pitfalls with no impact on the production environment. Following is an overview of test environment benefits.

Test Machine Settings	Benefits
Similar CPU, memory, disk space	Provides an estimate of how long the migration can take. Gives insight into migration settings, such as time-out values to be changed. Exposes other configuration settings that may require changes.
Database	Test machines that need access to a vault that is 2 GB or more also need a similar version of full Microsoft™ SQL server installed.
Other applications that are installed on the production server	Test for compatibility with various proxy clients, firewalls, anti-virus programs, etc.
Operating System, Service Packs, firewalls, etc.	Compatibility testing.

Test Machine Settings	Benefits
Microsoft® Windows® Administration settings	Check for compatibility with Windows Domain policies, login scripts, permissions, and other settings.

If a test environment similar to production is not attainable, a low cost alternative is virtual machines like VMWare or Virtual PC from Microsoft. Virtual machines lack many of the benefits outlined above but are far better than not performing a backup and migration validation.

Restore Backup

Use the Vault server application to restore the production backup in the test environment.

Migration Timeout

If the migration stops because of a timeout error, the following steps will help resolve the issue. In the ADMS Console look in the Console log for today's date and search for 'timeout'. If a timeout error is found, perform the following steps.

Look in the ADMS log file to determine if the cause is a timeout:

C:\ProgramData\Autodesk\VaultServer\Filestore\ADMSConsoleLog-YYYYMMDD.txt

Search the log file from the bottom up for 'timeout.' If a timeout error is found with a time stamp matching the time of the stopped migration, perform the following steps:

- 1 On the Vault server, open Windows Explorer and navigate to C:\Program Files\Autodesk\ADMS Product 20__\Server\Web\Services.
- 2 Create a backup copy of the Web.config file.
- 3 Open the Web.config file with Notepad and look for the following line:
<timeouts connection="120" defaultCommand="360" longCommand="1800" />

NOTE The values may be different from those shown.

- 4 Double the existing values for defaultcommand and longcommand.

NOTE If the defaultCommand value is set higher than 1000, increase the executionTimeout value to an equal or higher value. This is found on the following line: `<httpRuntime maxRequestLength="51200" executionTimeout="1000" />`.

- 5 Save the Web.config file.
- 6 Open the ADMS console.
- 7 Perform one of the following sets of tasks:
 - If a yellow bang symbol appears next to a Vault, right click the vault and select migrate.
 - If no yellow symbol appears, close ADMS console and perform a build-to-build migration with the following steps:
 - 1 Open a command prompt and navigate to the installed location of Connectivity.ADMSConsole.exe.
 - 2 Run ADMS b2bmigrate operation in command line mode:
Example: `Connectivity.ADMSConsole.Exe -Ob2bmigrate -VUadministrator -VPadmin_password -DBUsql_user -DBPsql_password Replace admin_password with the appropriate administrator password for the -VP switch.`
The last two command line parameters, `-DBU` and `-DBP`, are required only if the sa password is not the default password.

Validate Restored Data

Verify the filestore and databases are complete and that the restored environment is operational. Use a client to verify the content and the Vault server application to verify the configuration.

Migration Test

Apply the processes detailed in this paper to the test environment. Using the test environment provides a safe option to experience the migration process and discover unexpected hurdles. Although this process takes time it can, in the long run, save time and stress by avoiding impact to the production environment.

Phase 2–Upgrade SQL

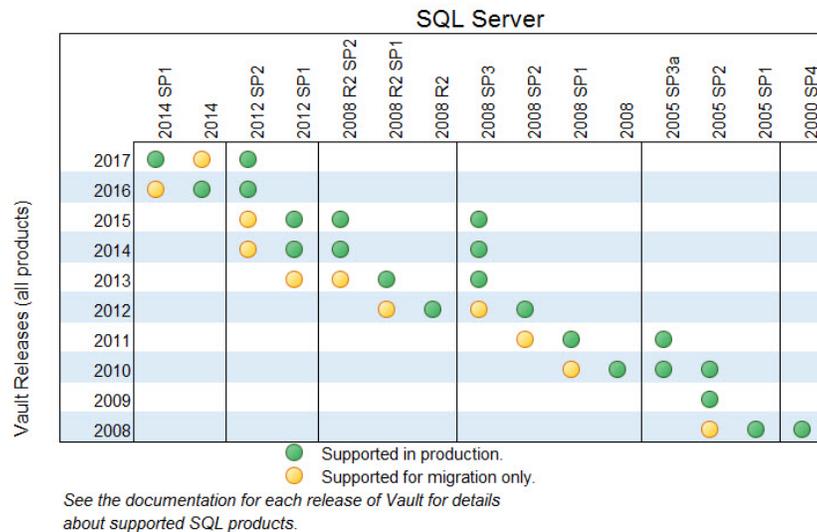
After you have validated your backup, upgrade your SQL to prepare for the Vault Server and Vault client upgrades.



The stage Validate backup should be completed prior to starting Upgrade SQL.

SQL Releases

The following chart summarizes the compatible releases of Vault and SQL with green dots. The yellow dots are the recommended upgrade path. Refer to the Vault System Requirements for your Vault release to ensure compatibility between Vault and SQL product editions.



If a SQL upgrade is necessary, refer to the topic specific to your environment for a summary of the most common scenarios. Complete SQL documentation is available from Microsoft.

IMPORTANT Prior to upgrading SQL, review the next section in this document: [Upgrade Vault Server](#) (page 18).

Upgrading Vault Server to Full SQL Server

When upgrading to the full version of Microsoft SQL Server, you must have permissions for the server and client systems, as well as to allow periodic system restarts. You should perform the upgrade in a test environment prior to performing the upgrade on the production environment. The client side systems are needed to verify that the upgrade has been performed successfully.

The server upgrade can be performed at any time after Autodesk Vault Server has been installed. The server may need to be rebooted one or two times during the upgrade process.

During the upgrade, the SQL server instance and the Autodesk Vault Server Services are shut down. Anyone logged into the vault at the time is automatically disconnected. Make sure all users are logged out of the Autodesk Vault Server. The upgrade will not affect the state of checked out files, nor will it modify the database structure, state of the files, or parent child relationships.

Before upgrading the SQL server, perform a backup from the Autodesk Vault Server Console application. For more information on backing up data, see the Autodesk Vault Server console Help.

Upgrade Microsoft SQL Express to Microsoft SQL Standard or Higher

Upgrade a SQL Express installation to a full version of SQL using a media which does not include a service pack, or higher, using one of the following methods.

NOTE A server console backup is recommended before performing either of these methods

Method One

- 1 Run the full version of SQL setup application.
- 2 Select **Maintenance > Edition Upgrade**.
- 3 Select the AutodeskVault instance and start the upgrade.
- 4 After the upgrade is complete, apply the latest SQL service pack since this upgrade actually does not have on and it is not transferred from SQL Express.

Method Two

- 1 Create a full backup of your vault using the server console. Note: In later steps, you delete all your vault databases. Validate that you can restore this backup on a test server before proceeding. Do not continue if your test restore fails. Correct any problems you have with the backup before continuing these steps.
- 2 After the test restore is successful, open the ADMS Console and delete all vaults and libraries listed. Then select Detach Master Vault from the Tools menu.
- 3 Make sure that all users are logged out of the vault.
- 4 Completely uninstall SQL Express, including the following applications in this order:
 - Microsoft SQL Server 2XXX Note: If you have more than one instance of SQL Express installed, be sure to uninstall only the AutodeskVault instance. DO NOT uninstall any other part of SQL after this step is complete.
 - Microsoft SQL Server 20XX Browser
 - Microsoft SQL Server 20XX Native Client
 - Microsoft SQL Server 20XX Setup Support Files
 - Microsoft SQL Server VSS Writer
- 5 Delete the SQL Express folders from Program Files (including data files). If your Vault databases are located on a different drive, be sure to delete the files in this location as well.
- 6 Install the full version of SQL with an AUTODESKVAULT instance as in the "Pre-install Microsoft SQL Server" section.
- 7 Install the Microsoft SQL release for your Vault product.

NOTE Refer to the chart on [this page](#) (page 5) or see your Vault System Requirements for which SQL release you should install.
- 8 Restore the backup that you created in step one using ADMS Console.

Microsoft SQL Express, upgrading

Upgrade MS SQL 2012 to MS SQL 2014

Follow these steps to upgrade MS SQL 2012 to MS SQL 2014.

Upgrade from SQL 2012 to SQL 2014

- 1 Download SQL 2014 Express from <http://www.microsoft.com>.
- 2 Select Installation and begin the Upgrade from SQL Server 2005, SQL Server 2008, SQL Server 2008 R2, or SQL Server 2012.
- 3 Continue through the pre-installation process. Pre-request files and services are updated. Setup Support Rules are processed.
- 4 On the Select Instance screen, select the AutodeskVault instance to upgrade and confirm instance settings. Click Next.
- 5 Accept the default features on the Select Features screen by clicking Next.
- 6 On the Instance Configuration screen, click Next.
- 7 On the Ready to Upgrade screen, click Upgrade. Setup will complete and upgrade the AutodeskVault SQL instance to SQL 2014.

Upgrade MS SQL 2008 to MS SQL 2012

Follow these instructions to upgrade MS SQL 2008 to MS SQL 2012

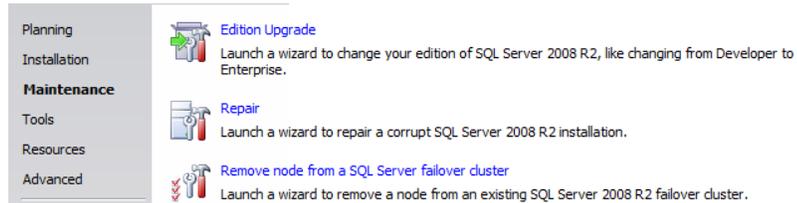
Upgrade from SQL 2008 to SQL 2012

- 1 Download SQL 2012 Express from <http://www.microsoft.com>, or insert your Vault installation media and go to <MEDIA>\Support\Sql2012Express.
- 2 Select Installation and begin the Upgrade from SQL Server 2005, SQL Server 2008, or SQL Server 2008 R2.
- 3 Continue through the pre-installation process. Pre-request files and services are updated. Setup Support Rules are processed.
- 4 On the Select Instance screen, select the AutodeskVault instance to upgrade and confirm instance settings. Click Next.
- 5 Accept the default features on the Select Features screen by clicking Next.
- 6 On the Instance Configuration screen, click Next.
- 7 On the Ready to Upgrade screen, click Upgrade. Setup will complete and upgrade the AutodeskVault SQL instance to SQL 2012.

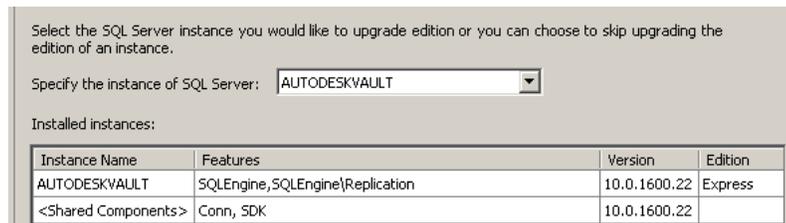
Upgrade MS SQL Express 2008 R2 to Full MS SQL 2008 R2

Follow these instructions to upgrade MS SQL Express 2008 R2 to full MS SQL 2008 R2.

- 1 Launch Setup from the Full SQL 2008 installation media. Select the Maintenance option, and begin the Edition Upgrade wizard.



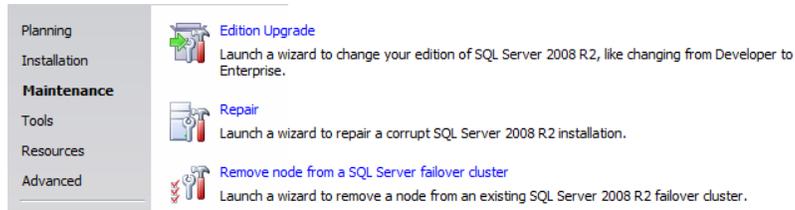
- 2 Verify version and or product key for Full SQL 2008. Proceed to the Select Instance window, and choose the AutodeskVault instance.



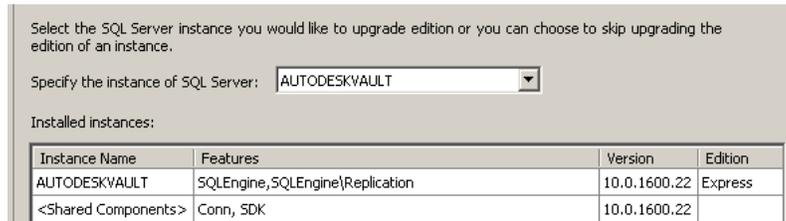
Upgrade MS SQL Express 2008 to Full MS SQL 2008

Follow these instructions to upgrade MS SQL Express 2008 to full MS SQL 2008.

- 1 Launch Setup from the Full SQL 2008 installation media. Select the Maintenance option, and begin the Edition Upgrade wizard.



- 2 Verify version and or product key for Full SQL 2008. Proceed to the Select Instance window and choose the AutodeskVault instance.



- 3 Upgrade the Instance. Once the instance has been upgraded, you can install the SQL Management Studio by returning to the "Installation" option and being the New SQL Server stand-alone installation or add features to an existing installation wizard.
- 4 Download and apply SQL 2008 SP2 if needed.

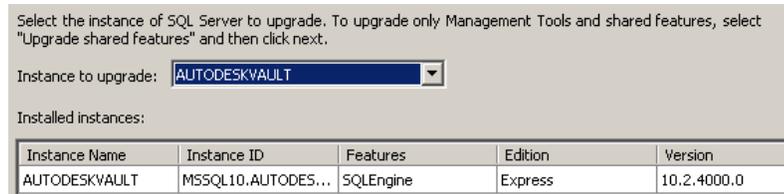
Upgrade MS SQL Express 2008 to SQL Express 2008 R2

Follow these steps to upgrade MS SQL Express 2007 to MS SQL Express 2008 R2.

- 1 Launch Setup from the SQL Express 2008 R2 installation media. Select the Installation option, and begin the Upgrade wizard.



- 2 Select the AutodeskVault SQL instance.



- 3 Upgrade the instance by completing the wizard.

Upgrade MS SQL 2005 to MS SQL 2008

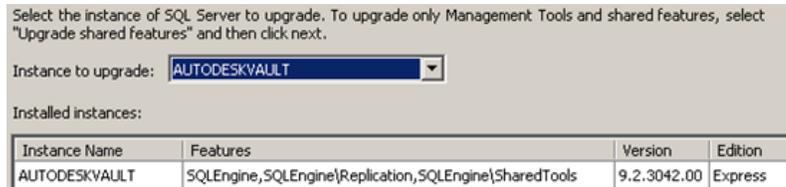
Follow these instructions to upgrade MS SQL 2005 to MS SQL 2008.

Upgrade from SQL 2005 Express to SQL 2008 Express

- 1 Download SQL 2008 Express from <http://www.microsoft.com>, or insert your SQL 2008 Express installation media. The SQL 2008 Express installer is located on the Vault installation media under <MEDIA>\x86\Support\Sql2008Express. It can be required to install Windows Installer 4.5 prior to SQL 2008 Express (KB942288).
- 2 Select the "Installation" option and begin the "Upgrade from SQL server 2000 or SQL Server 2005" Wizard.



- 3 Continue through the pre-installation process. Pre-request files and services are updated. Setup Support Rules are processed.
- 4 Select theAutodeskVault instance to upgrade, confirm instance settings.



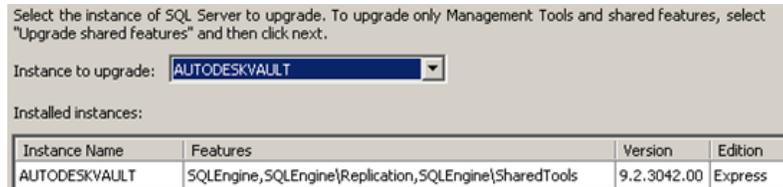
- 5 Continue through Disk Space requirements, Upgrade rules, and Upgrade Process. Setup will complete and upgrade the AutodeskVault SQL instance to SQL 2008 Express.
- 6 Verify that SQL 2008 SP1 is installed. If it is not, download and install it from <http://www.microsoft.com>.

Upgrade from SQL 2005 Express to Full SQL 2008

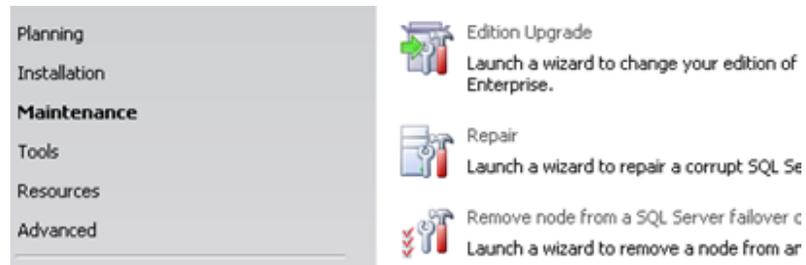
- 1 Download SQL 2008 Express from <http://www.microsoft.com>, or insert your SQL 2008 Express installation media. The SQL 2008 Express installer is located on the Vault 2011 installation media under <MEDIA>\x86\Support\Sql2008Express. Please note that you may be required to install Windows Installer 4.5 prior to SQL 2008 Express (KB942288).
- 2 Select the "Installation" option and begin the "Upgrade from SQL server 2000 or SQL Server 2005" Wizard.



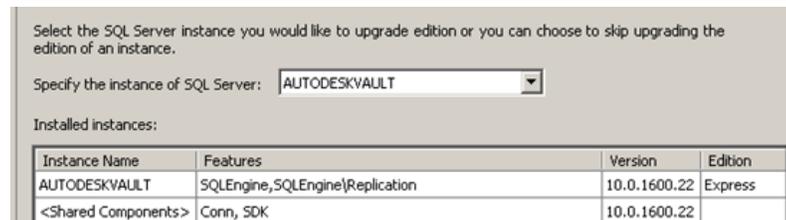
- 3 Continue through the pre-installation process. Pre-request files and services are updated. Setup Support Rules are processed.
- 4 Select theAutodeskVault instance to upgrade, confirm instance settings.



- Continue through Disk Space requirements, Upgrade rules, and Upgrade Process. Setup completes and upgrades the AutodeskVault SQL instance to SQL 2008 Express.
- Launch Setup.exe from the Full SQL 2008 installation media. Select the Maintenance option and being the Edition Upgrade wizard.



- Verify version and or product key for Full SQL 2008 and proceed to the Select Instance window and choose the AutodeskVault instance.



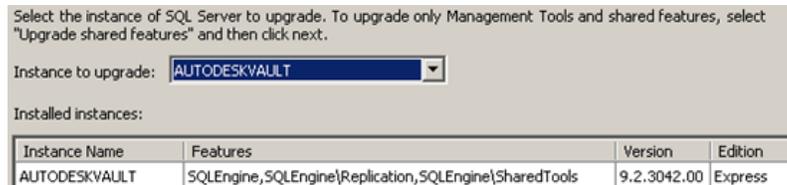
- Upgrade the Instance. Then, to install the SQL Management Studio, return to the "Installation" option, and be the "New SQL Server stand-alone installation, or add features to an existing installation" wizard.
- Verify that SQL 2008 SP1 is installed. If it is not, download and install it from <http://www.microsoft.com>.

Upgrade from Full SQL 2005 to Full SQL 2008

- 1 Select the Installation option and begin the Upgrade from SQL server 2000 or SQL Server 2005 Wizard.



- 2 Continue through the pre-installation process. Pre-request files and services are updated. Setup Support Rules are processed.
- 3 Select the AutodeskVault instance to upgrade, confirm instance settings.



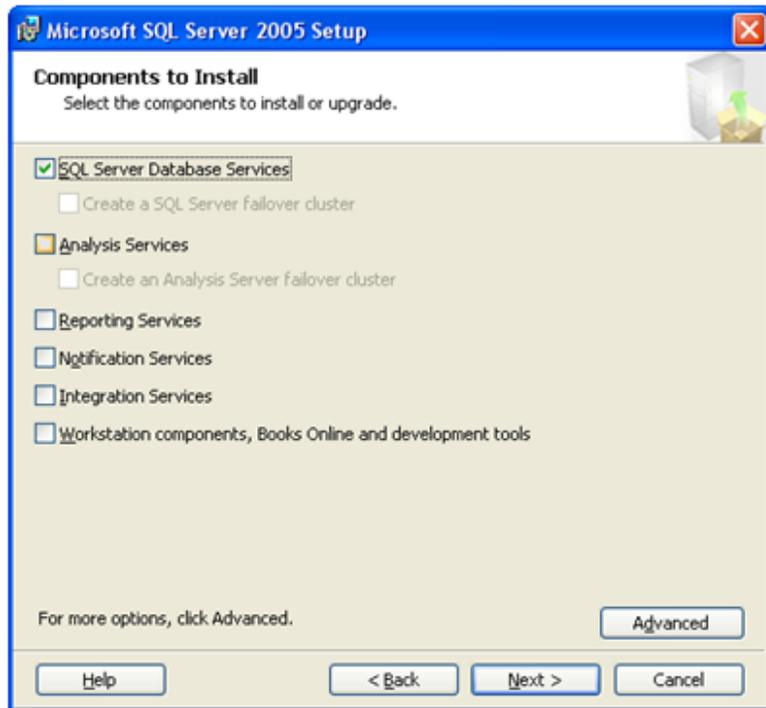
NOTE If you do not see the "Database Engine Services" listed as a component to be migrated, you are not following an accepted migration path. Acceptable migration paths are listed here <http://msdn.microsoft.com/en-us/library/ms143393.aspx>

- 4 Continue through Disk Space requirements, Upgrade rules, and Upgrade Process. Setup completes and upgrades the AutodeskVault SQL instance to Full SQL 2008.
- 5 Verify that SQL 2008 SP1 is installed. If it is not, download and install it from <http://www.microsoft.com>.

Upgrade MS SQL 2005 Express to Full MS SQL 2005

Follow these instructions to upgrade MS SQL 2005 Express to Full MS SQL 2005.

- 1 Insert your MS SQL 2005 installation disc into the drive and start the installation wizard. It installs the required pre-requisites first then begins the installation process.
- 2 Click Next. The wizard performs a system configuration check. Verify that all checks have a status of Success, and then click Next
- 3 In the Components to Install dialog, check the SQL Server Database Services and then click Next.



- 4 In the Instance Name dialog, select the Named instance radio button and enter AutodeskVault, or select Installed instances, select the AutodeskVault instance, and then click Next.

- 5 The Existing components dialog box lists the SQL Server Database Services that are going to upgrade. Check the box next to the SQL Server Database, and then click Next.
- 6 The Upgrade Logon Information dialog box prompts you for an account to use to perform the upgrade. It is required that your login an account has local Administrative privileges on the server. Select the Windows Authentication Mode, and then click Next.
- 7 In the Service Account dialog, select either a built-in System account or a domain user account to run the SQL Browser. Click Next.
NOTE If you were previously using a user account to run the SQL Server Service, select Use a domain user account, and fill in the required fields with that account.
- 8 The Error and Usage Report Settings dialog box displays optional settings that are not required by Autodesk.
- 9 On the Ready to Install dialog box, click Install to begin the upgrade process.
- 10 Download and install MS SQL 2005 SP3 from the Microsoft web site, if necessary.

NOTE For optimum performance, create a SQL Maintenance Plan after you perform this upgrade. Follow the steps in the Creating a SQL Maintenance Plan section.

Upgrade MS SQL 2005 Express SP2 or higher to full MS SQL Server 2005 SP3

To upgrade a SQL Express 2005 SP2 installation to a full version of SQL 2005, using a disc which does not include a service pack, SP2 or higher, you can use one of the following methods.

NOTE We recommend that before you perform either of these methods, you back up the Autodesk data management server console.

Method 1

- 1 Open a command prompt, and navigate to the directory where the full version of SQL setup is located.
- 2 Enter `SETUP.EXE SKUUPGRADE=1` (case sensitive).
- 3 Start the upgrade, and select the AutodeskVault instance.

- 4 After the upgrade is complete, apply SQL Service Pack 3.

Method 2

- 1 Create a full backup of your vault using the Autodesk data management server Console.

NOTE In later steps, you delete all of your vault databases. Before you proceed, validate that you can restore this backup on a test server. If your test restore fails, do not continue. Correct any problems you have with the backup before you continue these steps.

- 2 After the test restore is successful, open the Autodesk data management server Console and delete all vaults and libraries listed. Then, on the Tools menu, select Detach Master Vault.
- 3 Make sure all users are logged out of the vault.
- 4 Completely uninstall SQL 2005 Express, including the following applications, in this order:

- Microsoft SQL Server 2005

NOTE If you have more than one instance of SQL Express installed, uninstall only the AutodeskVault instance, and DO NOT uninstall any other part of SQL after this step is complete.

- MS SQL Server Native Client.
- MS SQL Server VSS Writer.
- MS SQL Server 2005 Backward Compatibility.
- MS SQL Server Setup Support Files.

- 5 Delete the SQL Express folders from Program Files (including data files). If your Vault databases are located on a different drive, delete the files in this location as well. **Do this ONLY if you are not using any other SQL Express instances.
- 6 Install the full version of SQL 2005 with an AUTODESKVAULT instance as in the Install MS SQL Server Prior to Installing Autodesk data management server section.
- 7 Install Microsoft SQL 2005 SP3.
- 8 Restore the backup that you created in step 1, using Autodesk data management server Console.

If you have difficulty removing the MS SQL Express instance, refer to Microsoft Knowledgebase article 909967 to help manually remove this instance.

NOTE For optimum performance, create a SQL Maintenance Plan after you perform this upgrade. Follow the steps in the Creating a SQL Maintenance Plan section.

Phase 3–Upgrade the Vault Server

After upgrading your SQL Server, you must upgrade your Vault Server. You can upgrade your Vault Server for Single Site or Multi-Site environments.

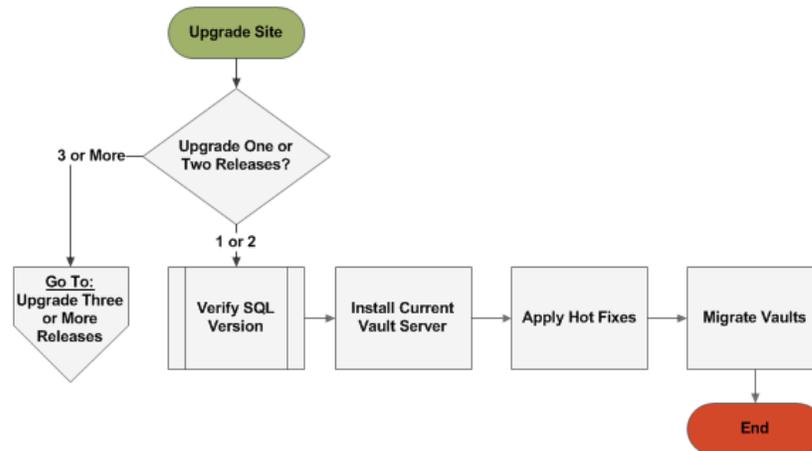


The best practice is to complete the Validate Backup stage and review the stage for Upgrade SQL prior to starting Upgrade Vault Server.

Refer to the topic for your environment for more information.

Single Site

Follow the instructions in this section for upgrading a Vault Server for a single site.



Upgrade One or Two Releases?

Upgrading one or two releases involves one installation of Vault server. Upgrading three or more releases requires intermediate installations of the Vault server.

For example, if upgrading from Vault Professional 2013 to Vault Professional 2017, use the '3 or More' migration path.

Verify SQL Version

Verify the existing version of SQL is compatible with the next Vault Release to be installed. If the existing SQL release requires an upgrade (See the preceding chapter in this paper Upgrade SQL) perform any necessary upgrades then return to this section.

Install Current Vault Server

Installing Vault server 2011 or a newer release supports automatic uninstall of Vault server 2010 or newer. Therefore, it is not necessary to uninstall Vault 2010 or a newer release.

During every installation of Vault server, enable the option to download and apply Service Packs.

At the end of the installation, you are prompted to start the Vault server application and migrate the Vaults. **Do not migrate the vaults at this time.**

Apply Hot Fixes

All hotfixes created after the final Service Pack should be manually installed at each site. Installing the hot fixes ensures that the latest updates are applied for proper migration.

Migrate Vaults

When Vault Server first launches, the administrator is prompted to migrate the vault and library databases. Users are not able to log into a vault until migration is complete. Do not migrate until all service packs and hot fixes have been applied.

If a service pack or hotfix is applied after migration, a build-to-build (b2b) migration is required. B2B migration is a command line option detailed in the section Migration Timeout and on the Autodesk Vault wiki.

Upgrade Three or More Releases

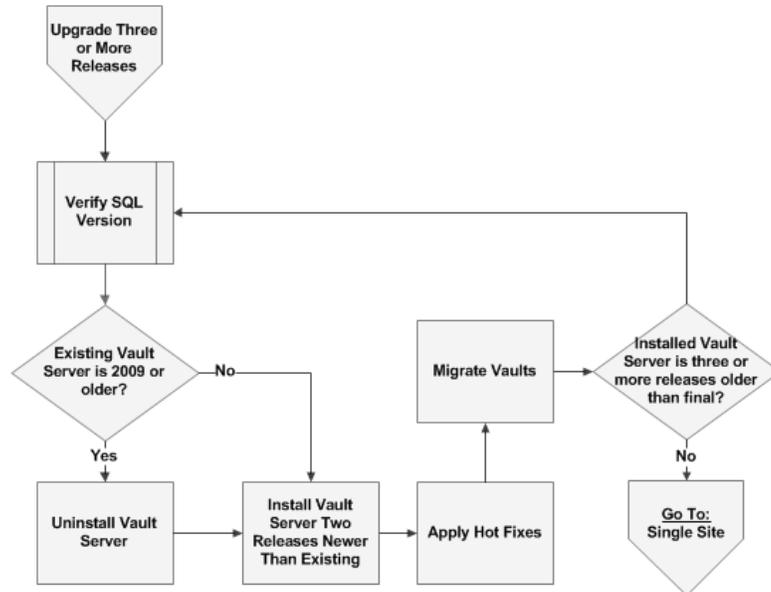
Follow the instructions in this section if your Vault Server is three or more releases older than the release to which you are upgrading.

Install Intermediate Releases

Each release of Autodesk Vault server supports migration from the previous two releases. When upgrading over three or more releases, it is necessary to migrate the SQL database through intermediate releases of Vault. This is done by installing every other release of the Vault server up to the final release.

For example: In order to migrate from 2013 to 2017, Vault 2015 must be installed as an intermediate step.

Release	Supports Migration From	
2017	2016	2015
2016	2015	2014
2015	2014	2013
2014	2013	2012
2013	2012	2011
2012	2011	2010
2011	2010	2009
...	...-1	...-2



Verify SQL Version

Verify that the existing version of SQL is compatible with the next Vault release to be installed. If the existing SQL release requires an upgrade (See the preceding chapter in this paper Upgrade SQL) perform any necessary upgrades then return to this section.

Existing Vault Server is 2009 or Older?

Vault 2009 and older releases require a manual uninstall before installing a newer release. Vault 2010 and newer releases do not require you to uninstall before installing a newer release.

Uninstall Vault Server

This step only applies to Vault 2009 or older releases. Be sure to copy the `.../server/web/services/web.config` and `connectivity.vaultmanager.exe.config` files prior to uninstalling Vault server 2009 or an older release. Uninstall Vault server only; do not remove SQL or the Vault database.

Install Vault Server Two Releases Newer than Existing

During installation enable the option to download and apply Service Packs. If prompted, do not migrate at the end of the installation.

Upgrade from Release 2008/2009 to 2010/2011

Custom values in the following configuration files must be manually copied into the new configuration files. Be mindful of typos, a mistake in these files can block proper operation of the server. Do not replace the new files with the older files, and do not change any settings outside this list. Older configuration files may not contain all the fields listed in the newer configuration files. The field names in the older configuration files may also vary slightly.

NOTE It is best to use Notepad for editing and not Wordpad because Wordpad can corrupt the file.

Web.config file:

```
<httpRuntime maxRequestLength="_____"
  executionTimeout="_____" />

<identity impersonate="true"
  userName="_____\"_____\" password="_____"
  />

<timeouts connection="____" defaultCommand="____"
  longCommand="____" />

<fragmentationCriteria minPageCount="____" minScanDensity="____"
  maxLogicalFrag="____" />

<remoteServer enabled="_____" protocol="tcp"
  transferLocation="" />

<creationParameters vaultSize="_____" vaultGrowth="_____"
  librarySize="____" libraryGrowth="____" />

<connectivity.settings>

<add key="EventRetryInterval" value="_____" />

<add key="IndexingSearchWakeupDelay" value="_____" />

<add key="IndexingUpdateWakeupDelay" value="_____" />

<add key="EcoNotificationProcessingDelay" value="_____"
/>
```

```

<add key="DatabaseStatisticsUpdateTime" value="_____" />
<add key="FilestoreVacuumTime" value="_____" />
<add key="OptimizeIndexesTime" value="_____" />
<add key="FullcontentIndexing" value="_____" />
<add key="LockVacuumTime" value="_____" />
<add key="EffectivityUpdateTime" value="_____" />
<add key="CacheObjectExpiration" value="_____" />
<add key="PageSizeMaximum" value="_____" />
<add key="PageSizeDefault" value="_____" />
  <add key="PageSizeIndexing" value="_____" />
</connectivity.settings>
<connectivity.web>
<server port="_" sslRequired="_____" />
</connectivity.web>
<smtpserver name="_____" port="_">
<authenticate enabled="_____" username="" password="" />
</smtpserver>
<maxLength value="_____" />
<server value="_____" />

```

- 1 Copy the following values from connectivity.vaultmanager.exe.config into ADMSConsole.config:

```

<add key="WebServiceTimeout" value="_____" />
<webServer>
<add key="SSL" value="_" />
<add key="PORT" value="_____" />
</webServer>

```

Apply Hot Fixes

All hotfixes created after the final Service Pack should be manually installed at each site. Installing the hotfixes ensures that the latest updates are applied for proper migration.

Migrate Vaults and Libraries

Do not migrate the vaults until all service packs and hot fixes have been applied. When ready, start the Vault server application. The administrator is prompted to migrate the vault and library databases. Accept the offer and migrate all vaults.

The vaults must be migrated to the installed release before the next release of Vault can be installed. If a service pack or hotfix is applied after migration, a build-to-build (B2B) migration is required. B2B migration is a *command line* option detailed in the Migrate Vault Data After Installing a Hot Fix or Update section of the Autodesk Vault Online Help.

If Installed Vault Server is Still Three or More Releases Older than the Final Release

If the installed release is three or more releases older than the final release, repeat the steps in Upgrade Three or More Releases.

Installed Vault Server is One or Two Releases Older than Final Release

If the installed release is one or two releases older than the final release, then no more intermediate releases are required. Go to the steps in Single Site.

Multiple Sites

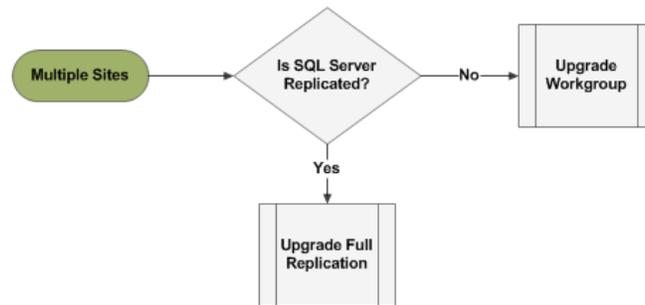
Autodesk Vault supports two styles of replicating data across multiple sites. First is a workgroup where there are multiple installations of the Vault server connecting to and sharing one SQL server. The second type is full replication where there are two or more replicated SQL servers. Further details are available on the Vault wiki.

Upgrade Three or More Vault Releases with Multi-Site or Replication

The concept of an intermediate installation is introduced in the section.

Upgrade Three or More Releases under Single Site within this document. The purpose of the intermediate installation is to ensure proper migration of the SQL database (this migration applies to the database not the content). In a

multi-site or replication environment, the first server upgraded migrates the SQL database. Therefore installation of intermediate Vault releases is only required for the first server upgraded. After the first site is migrated to the final release, all of the other sites can install the final release and skip intermediate releases of Vault server.



Upgrade Workgroup

In a workgroup any of the Vault servers may be the first to upgrade. The selected site will also migrate the SQL database. All other sites will be unable to access the SQL server until they are brought up to the same product, release, and service pack.

Best practice is to start with the site that has the fastest connection to the SQL server. When ready to perform the upgrade, follow the steps outlined in the section Single Site. Upgrade the selected server to the final release and service pack before moving onto other sites.

When the first site update is complete, install Vault server at the remaining sites. If upgrading from Vault server 2009 or older, uninstall the Vault server at all other sites. Then install the final release and service pack, skipping intermediate releases. The intermediate server releases are not required at the other workgroup sites.

Upgrade Connected Workgroups

Migration of a fully replicated environment must start with the Publisher workgroup. All subscriber workgroups must be online and available during migration of the publisher. As long as one Vault server and the SQL server are available from a workgroup, that workgroup is considered available. If a subscriber workgroup is offline and cannot be made available, postpone the migration.

Validate the replication status of all workgroups and databases prior to migration. If replication issues exist, they must be resolved before proceeding. Details about replication status are available on the Vault wiki under Administrator's Tasks/Manage Replication.

Migrate one site from the publisher workgroup following the steps in the section Single Site. Installing the Vault server automatically migrates the SQL database. The SQL database migration is automatically replicated to all subscriber databases. After installation of the Vault server at the first site is complete, install the final Vault release, service packs, and hot fixes at all other sites across all workgroups.

If intermediate server releases are required they are only necessary on the first server. All other Vault servers in all workgroups should install the final Vault server release, service packs, and hot fixes, skipping intermediate releases.

Phase 4–Upgrade Vault Clients

After you upgrade the Vault Server, you must upgrade your Vault Clients.



Vault 2013 and Forward Compatibility

Vault 2013 introduced the ability for the ADMS server to support the previous release client integrations. This provides Enterprise and SMB operators who need to stagger the client and server side roll out the flexibility to do so. The company's ADMS server can now be migrated to 2013 and commissioned without any need to upgrade or otherwise patch the numerous client machines connecting to the current 2012 server.

Upgrade Vault Clients

The Autodesk Vault clients are available with the product installation media as well as on the Autodesk Vault media.

The Autodesk Vault add-in for Microsoft® Office is shipped with your software. It can be used with one or more of the following Microsoft products when installed and registered on your machine.

- Word® 2003/2007/2010
- Excel® 2003/2007/2010

■ PowerPoint® 2003/2007/2010

To install the Autodesk Vault clients, you must have either Microsoft Windows administrator or power user privileges.

Install the Clients for an Autodesk Design Application

Insert the installation media for the Autodesk design application and follow the instructions for the installation wizard.

Install the Clients for a non-Autodesk Design Application

Insert the installation media for the application and follow the instructions to install the software.

Install clients from the Autodesk Vault Media

- 1 Insert the Autodesk Vault media.
- 2 Double-click setup.exe.
- 3 Follow the instructions in the installation wizard.

Add-in Integration

If a design application is on the computer before the clients are installed, the corresponding add-in clients automatically integrate with the design applications. However, if an application is installed after the Vault client, action is required. Go to the Control Panel and modify the Vault client installation to add the missing add-in.

Phase 5–Create Backup

The best practice is to create a backup of the vault as soon as the upgrade is complete.



Perform a validation of the backup using the process described in the first stage of this document.

