

PL10972

Becoming a Master at Vault Administration

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Class summary

Whether you're planning your first installation or maintaining a global replicated network, this class will walk you through the implementation, configuration, maintenance, and migration of your Vault software implementation. Learn how to properly plan for the growth of your deployment and how to maintain your Vault software to match the evolving needs of your business. As your system grows over time, you will need to migrate from version to version of the product as well as of the SQL and the operating system. Class topics will include capacity planning, disaster recovery, system monitoring, and SQL optimization. Learn from the experts to ensure your Vault software success.

Key learning objectives

At the end of this class, you will be able to:

- Learn how to successfully implement Vault the first time
- Learn tips and tricks from the experts, from basic to advanced configurations
- Learn how to properly maintain your Vault infrastructure to ensure stability and optimize performance
- Learn how to plan and execute a successful migration

Vault Overview

Vault Product Line

- Vault Basic
- Vault Workgroup
- Vault Professional
- Vault Office



Vault Feature Comparison

Feature	Autodesk® Vault Basic	Autodesk® Vault Workgroup	Autodesk® Vault Professional
Autodesk CAD Integration	✓	✓	✓
File Management Tools	✓	✓	✓
Single Workgroup	✓	✓	✓
Fast Searching	✓	✓	✓
Data Reuse Tools	✓	✓	✓
File Revision Control and Lifecycles		✓	✓
Automatic File Naming		✓	✓
Access for Non-CAD Users		✓	✓
File and Folder Security		✓	✓
Reporting		✓	✓
Server Based DWF Publishing		✓	✓
Multi-Site Replication			✓
'Query, View, and Print' Web Client			✓
Custom Objects			✓
Bill of Material Management			✓
Engineering Change Management			✓
Coexist with Enterprise Business Systems			✓
3 rd Party CAD Integrations			✓
Vault Office Compatible		✓	✓

Vault 2016 Application Integrations



AutoCAD Products

- AutoCAD
- AutoCAD LT*
- AutoCAD Mechanical
- AutoCAD Electrical
- AutoCAD Architecture
- AutoCAD P&ID
- AutoCAD MEP
- AutoCAD Map 3D
- AutoCAD Plant 3D
- AutoCAD AUD

Digital Prototyping Products

- Alias Automotive, Design, Surface
- Autodesk Inventor, Professional, Publisher
- Inventor LT*
- Autodesk Simulation Mechanical, Mechanical WS, Multiphysics

- Autodesk Moldflow (Advisor, Synergy)

Media & Entertainment Products

- Autodesk 3DS Max
- Autodesk 3DS Max Design

BIM Products

- AutoCAD Civil 3D
- Autodesk Navisworks Simulate, Manage
- Revit Architecture**
- Revit MEP**
- Revit Structure**

3rd Party Products

- SolidWorks**
- Pro Engineer**
- Microsoft Office
- Microsoft Outlook*
- Microsoft SharePoint**
- MicroStation**

* - Vault Workgroup and Professional

** - Vault Professional only

Vault 2016 System Requirements

Server

- Windows Server 2012 & 2012 R2
- Microsoft SQL Server 2012 & 2014
- Window 7 & 8.1 (Vault Basic Only)

Not supported:

- Retired - Server 2008 or 2008 R2
- Retired - SQL 2008 R2

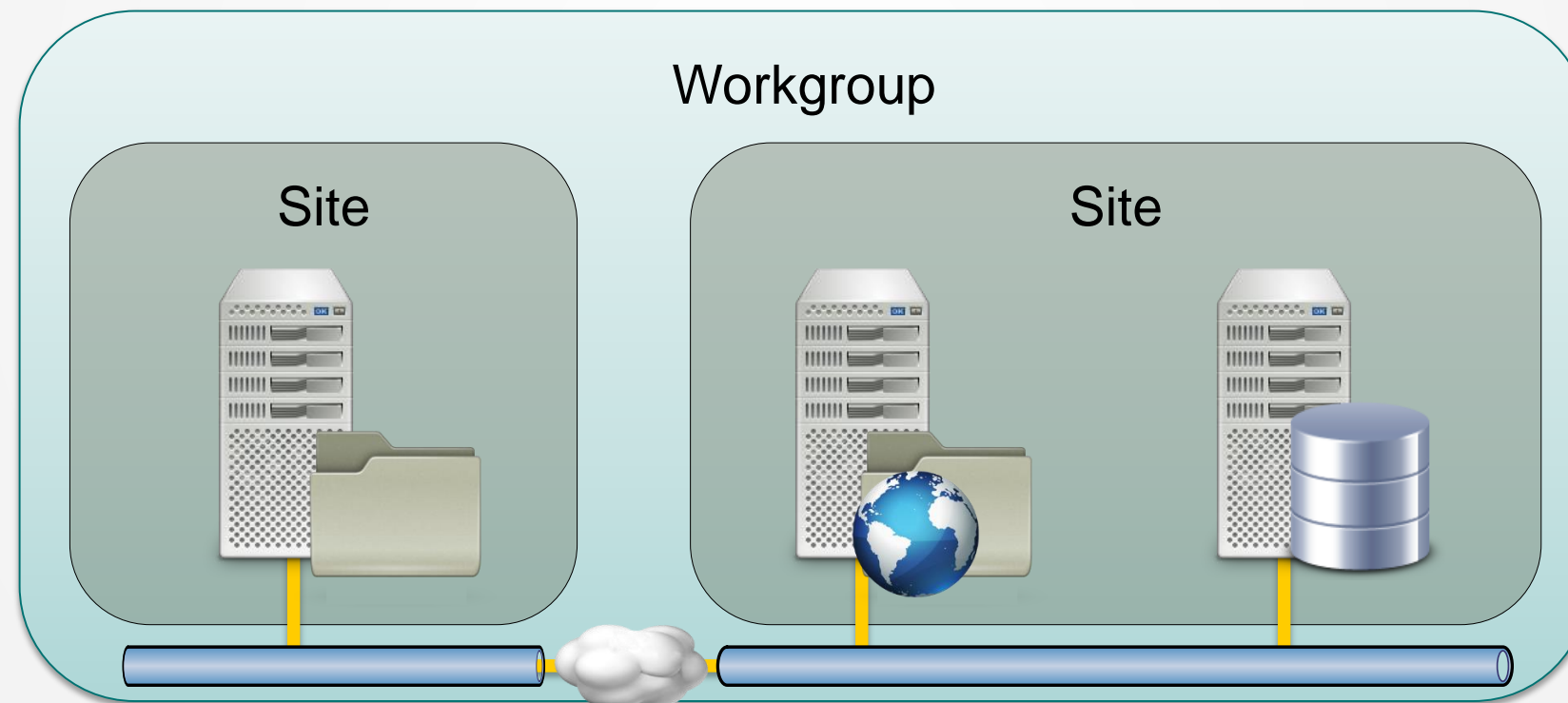
Basic Vault Configuration

- One physical server with all Vault components
- Multiple clients connected to share and store files



Vault server topologies

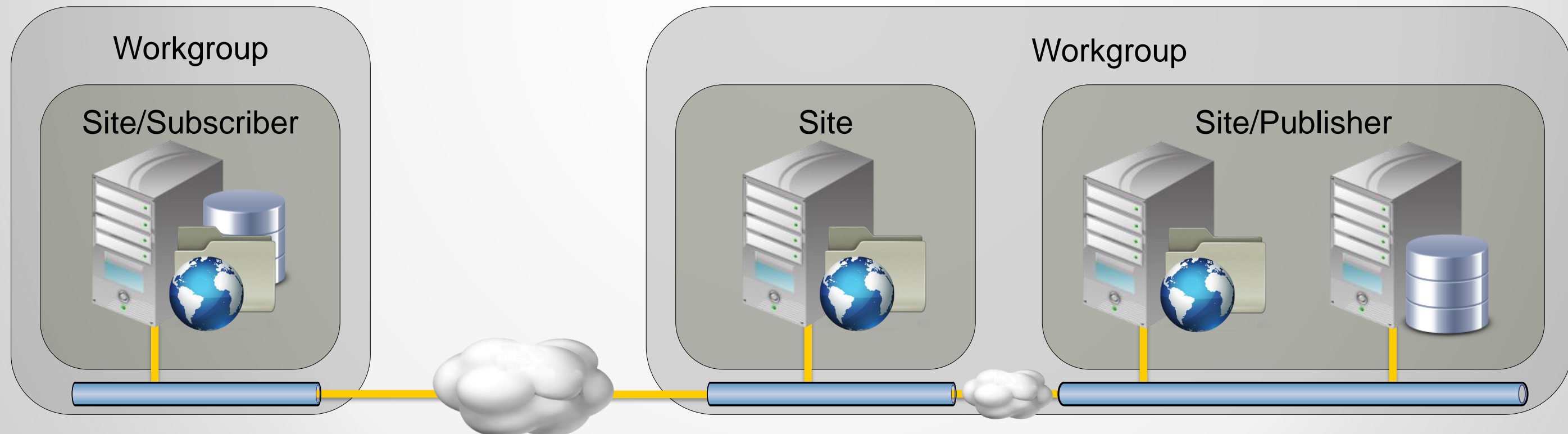
- Single Site – A location where the Vault server software is installed
- Workgroup – Sites connecting to the same SQL database



Vault server topologies

Connected Workgroups (Replication)

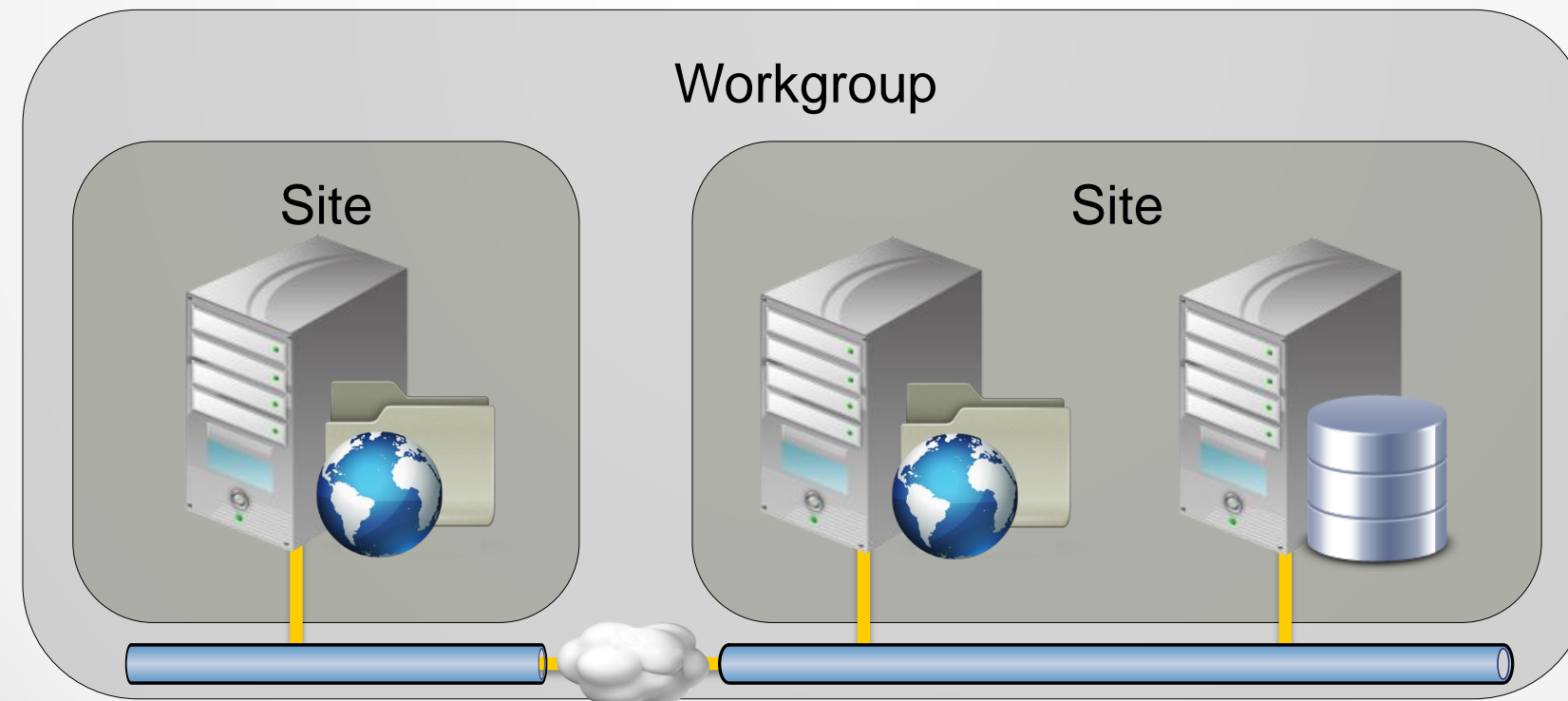
- Multiple SQL databases – 1 Publisher, 1 to many subscribers
- Publisher – the first SQL server configured
- Subscriber – SQL servers replicating to the Publisher



Vault server topologies

Autodesk Vault Filestore Server (AVFS)

- One main site with the Vault Server, SQL & File Store
- Remote locations with File Server



Implementation

Planning your Server Configuration

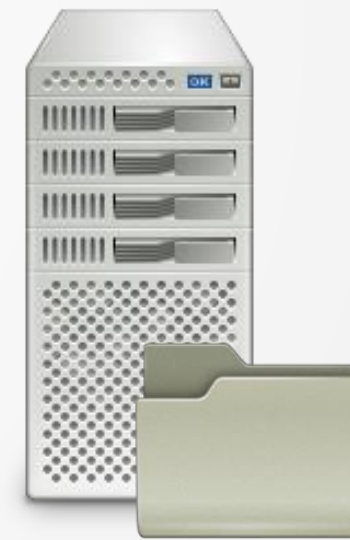
- Plan ahead for growth
 - IBM sizing guide available for guidance
 - Can be virtual, physical or cloud.



Database Server
(SQL Server)



Application Server
(ADMS and IIS)



File Server
(Raid, NAS, SAN)

Where is the Metadata?

Microsoft SQL Server – Single Site

- KnowledgeVaultMaster
 - Users
 - Directory
 - Configurations
- Vault databases
 - Metadata/Properties
 - File references
 - Items/BOMS
- Content libraries



Where is the Metadata?

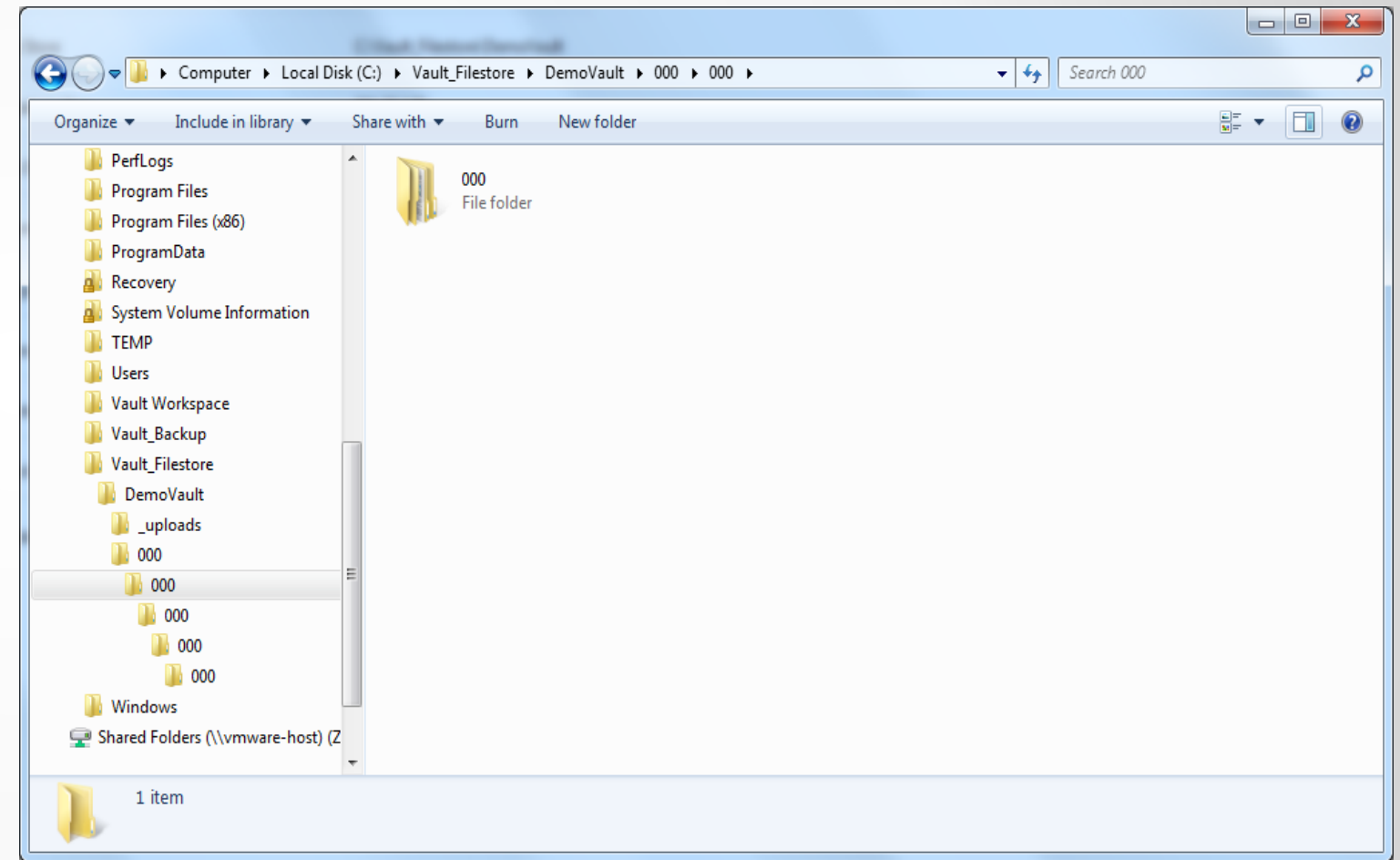
Microsoft SQL Server – Connected Workgroup

- KnowledgeVaultMaster
- Vault database
- Distributor
 - Ms_merge tables
- Master database
- Msdb database



Where are the files?

- Vault Filestore
 - Contains all files
 - All versions
 - 1 for each Vault
 - Files in native format
 - Renamed for organization



Pre-Install SQL

Pre Install SQL Server

Best Practice

- Always use an instance named AUTODESKVAULT
- Do not install other database applications into the AutodeskVault instance Contact a Microsoft Licensing Specialist regarding SQL licensing questions
- Do not connect directly to the database with other programs
- Do not modify settings unless directed by the Advanced Configuration Guide or Autodesk Product Support

Advanced Configuration Guide

- 2014 Guide is the latest
 - Use for new installations and upgrades
- Use for pre-install and migrations

The screenshot shows the 'Instance Configuration' wizard in SQL Server Enterprise Setup. The title bar reads 'Instance Configuration' with a subtitle 'Specify the name and instance ID for the SQL Server instance.' The left sidebar contains a list of steps: 'Setup Support Rules', 'Feature Selection', 'Instance Configuration' (highlighted), 'Disk Space Requirements', 'Server Configuration', 'Database Engine Configuration', 'Error and Usage Reporting', 'Installation Rules', 'Ready to Install', 'Installation Progress', and 'Complete'. The main area shows configuration options for a 'Named instance' (selected over 'Default instance'). The 'Named instance' text box contains 'AutodeskVault'. Below, the 'Instance ID' text box also contains 'AutodeskVault'. The 'Instance root directory' text box contains 'C:\Program Files\Microsoft SQL Server\' with a browse button (...). The 'SQL Server directory' text box contains 'C:\Program Files\Microsoft SQL Server\MSSQL10.AutodeskVault'. At the bottom, there is a table titled 'Installed instances:' with columns 'Instance', 'Features', 'Edition', 'Version', and 'Instance ID'. The table is currently empty. At the very bottom of the wizard are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

Instance Configuration
Specify the name and instance ID for the SQL Server instance.

Setup Support Rules
Feature Selection
Instance Configuration
Disk Space Requirements
Server Configuration
Database Engine Configuration
Error and Usage Reporting
Installation Rules
Ready to Install
Installation Progress
Complete

☐ Default instance
☒ Named instance: AutodeskVault

Instance ID: AutodeskVault

Instance root directory: C:\Program Files\Microsoft SQL Server\ ...

SQL Server directory: C:\Program Files\Microsoft SQL Server\MSSQL10.AutodeskVault

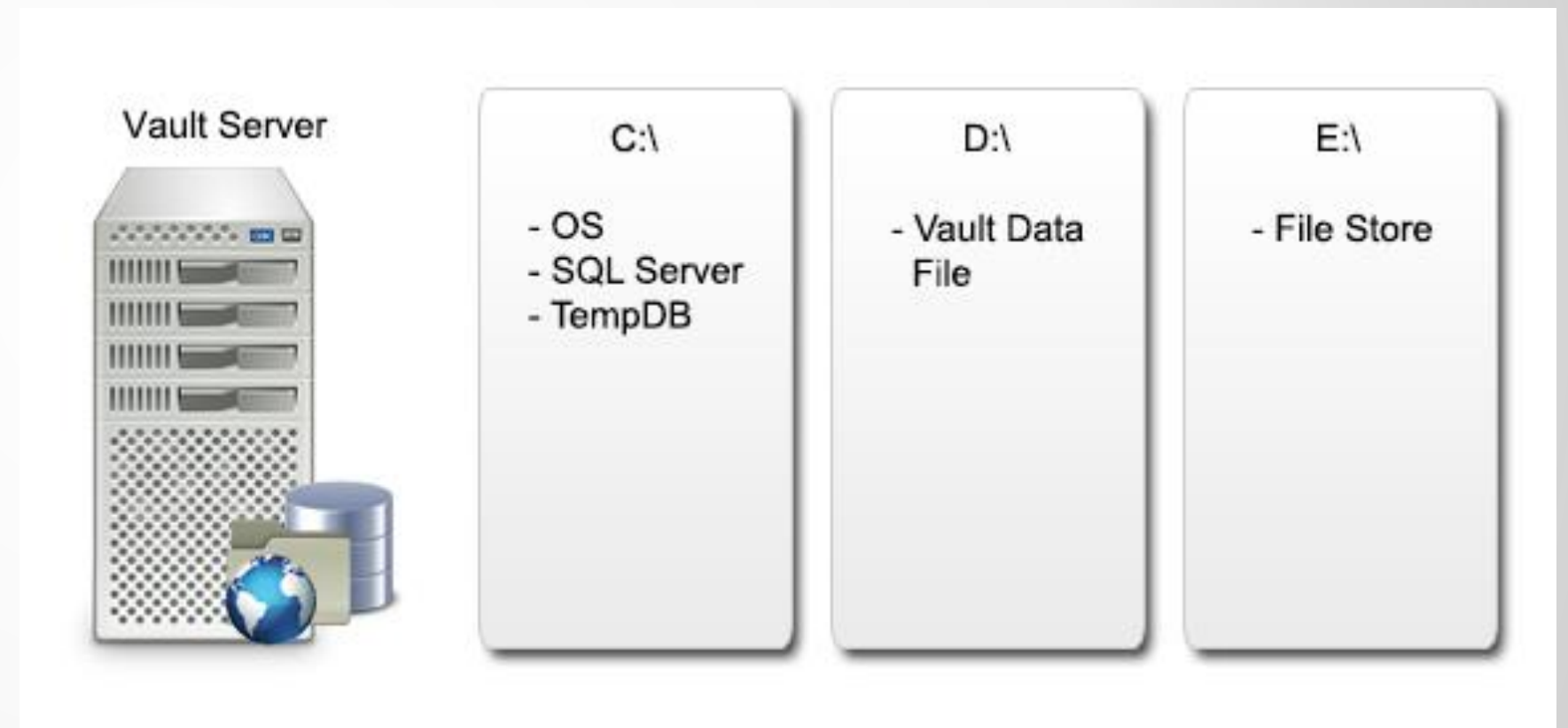
Installed instances:

Instance	Features	Edition	Version	Instance ID
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< Back Next > Cancel Help

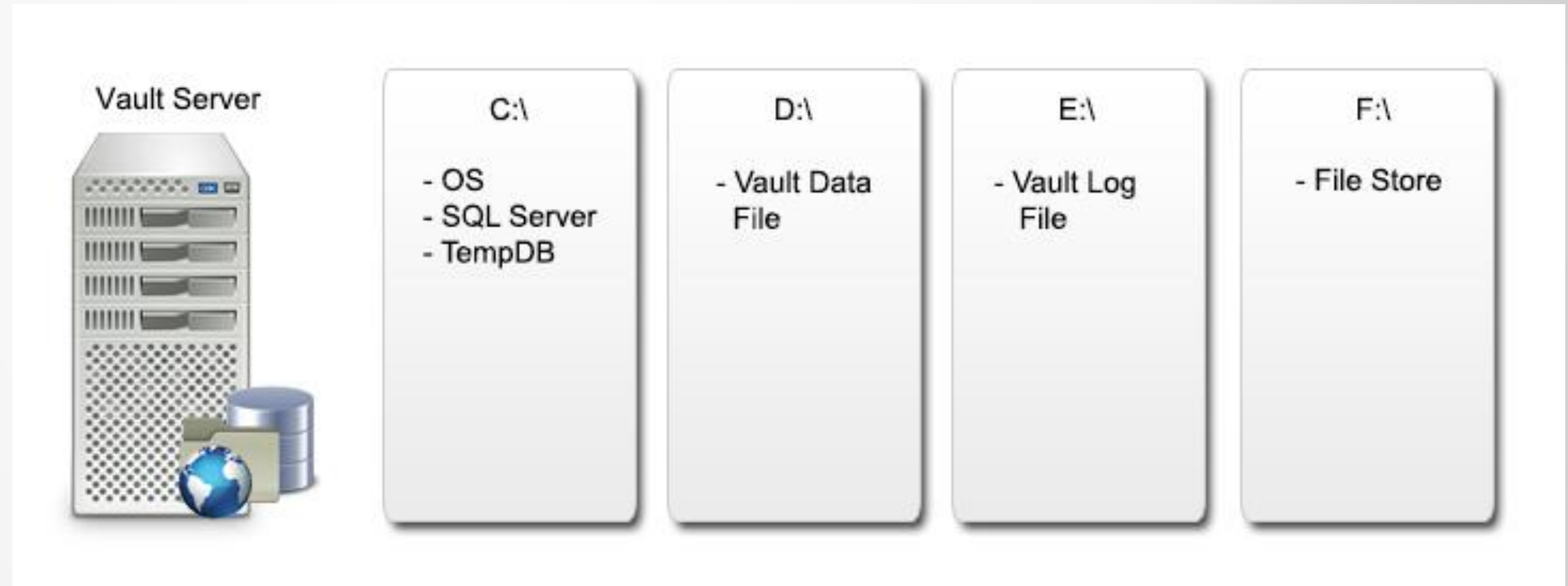
Multiple Drives

- Increase performance by splitting up I/O request



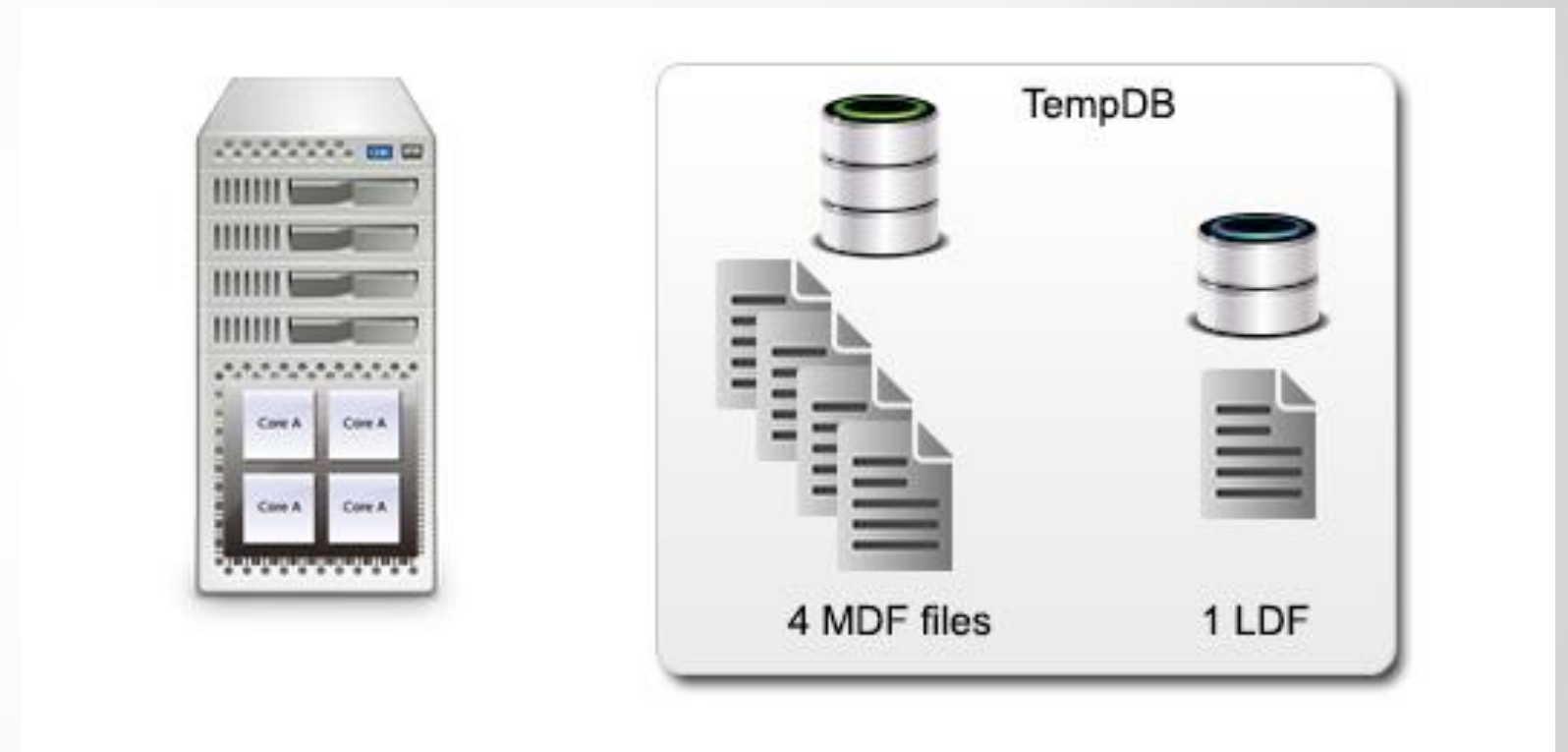
Splitting Database Files

- Split MDF & LDF files
- Performance for I/O request



Multiple TempDB Data Files

- Used for temporary transactions
- One file by default
- One file per CPU core

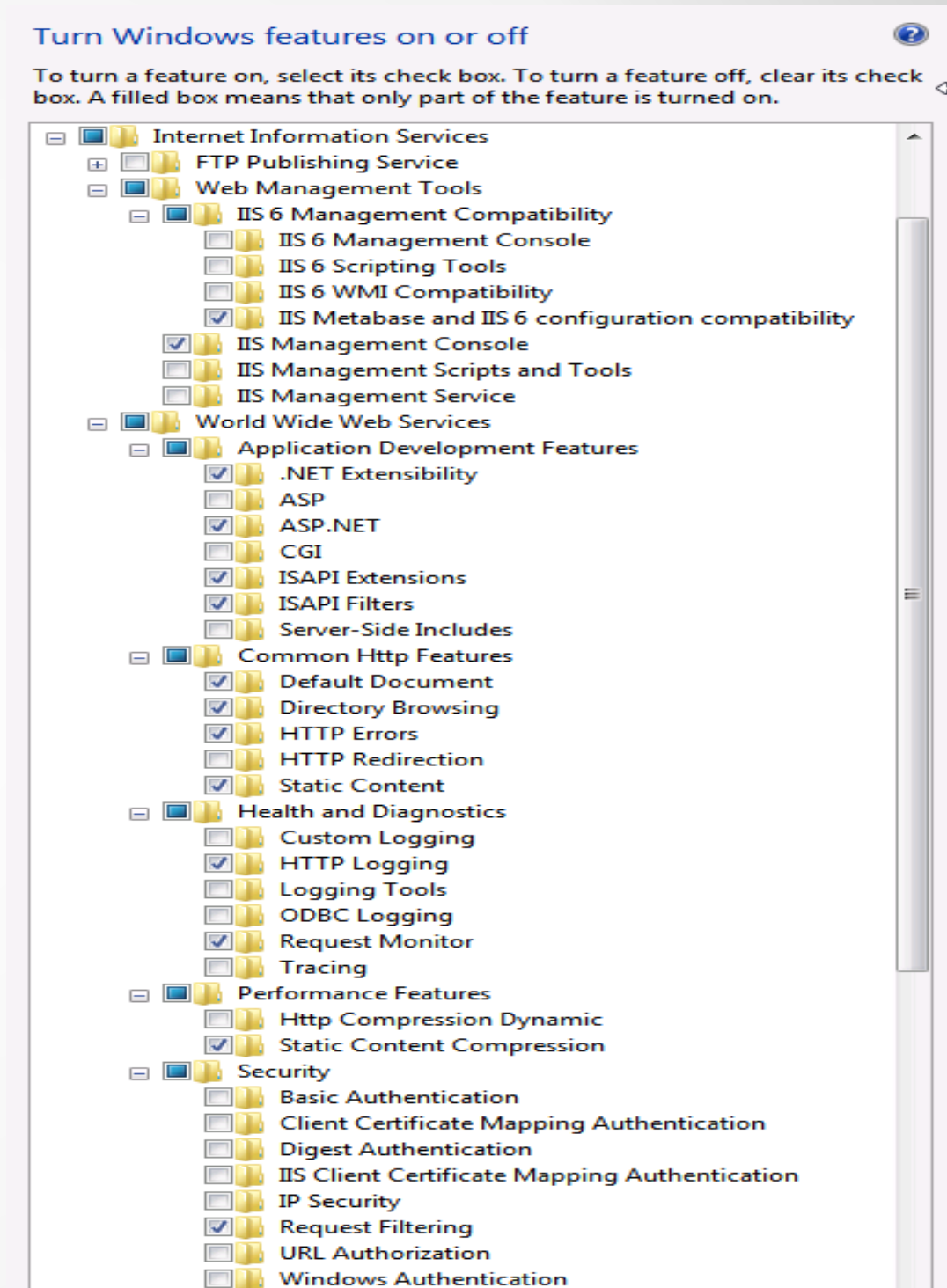


Pre-Install IIS

IIS configuration

- Manually add IIS
 - Use the documented configuration
 - Can also be used to verify post installation

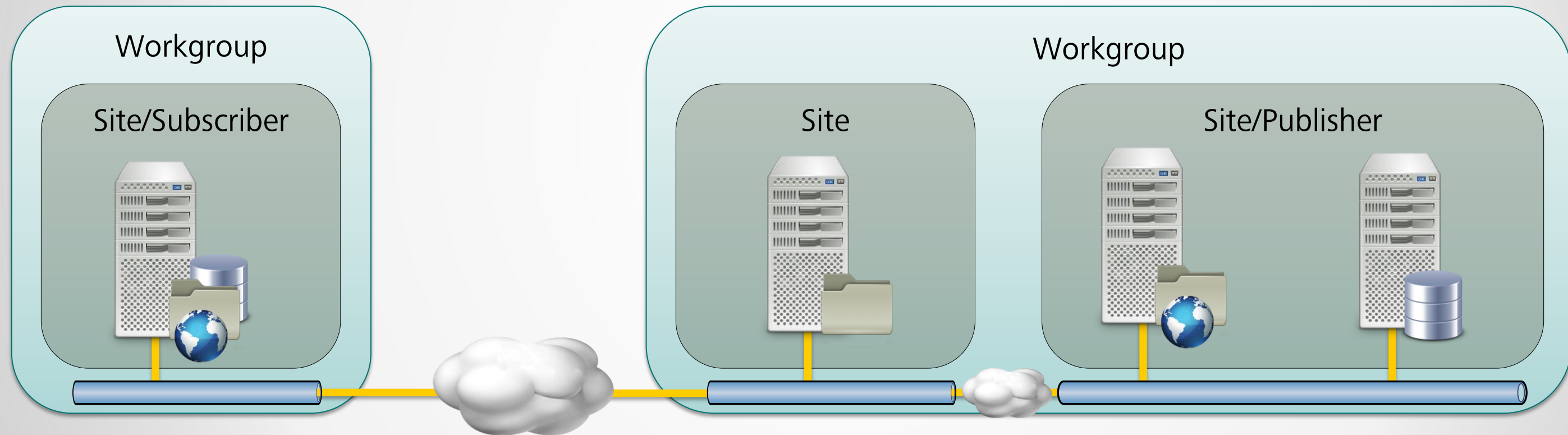
*script in the handout



Replication

Terminology

- Publisher – the first SQL server configured
- Subscriber – SQL servers replicating to the Publisher



Recommendations

- Servers should be in the same domain or two-way trusted domains.
- Servers should be assigned static IP address.
- Use 1 domain user account for replication and snapshot access.

Replication Requirements

- A shared folder on the Publisher where replication snapshots are stored and shared for remote SQL servers.
- A Windows account on the Publisher that has Read/Write permissions to the snapshot share.

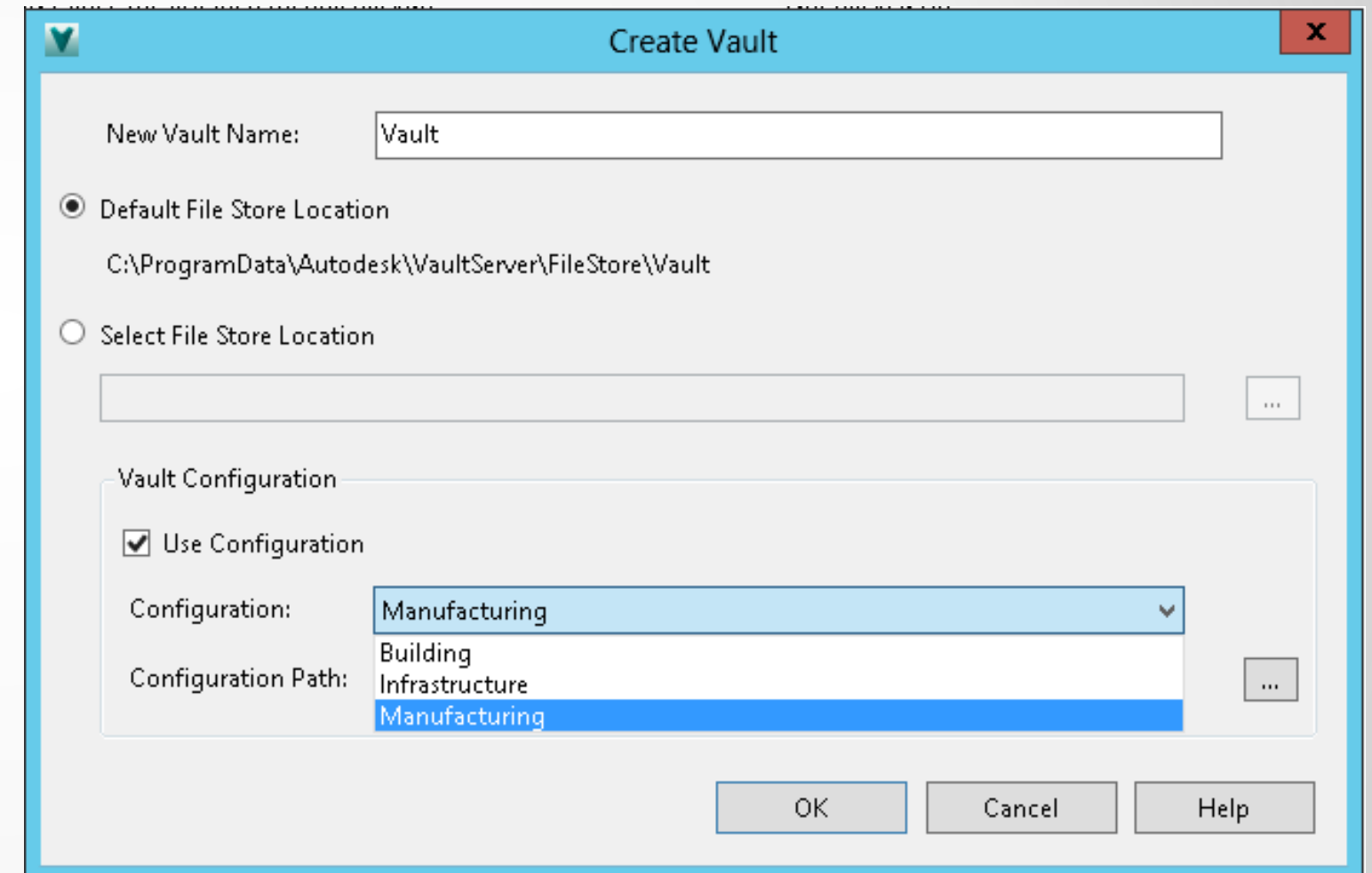
Replication Requirements

- Server participating in the replication environment must be able to resolve remote servers by NetBIOS name.
- SQL and http ports need to be open in firewalls for communication between servers.
 - HTTP protocol – TCP port 80 by default.
 - SQL Browser Service – UDP port 1434.
 - SQL Server – TCP (dynamic port).

Configuration XML

Vault Configuration Files

- Create a Vault with configuration File
 - Pre-defined Properties, lifecycles & categories



The screenshot shows the 'Create Vault' dialog box with the following fields and options:

- New Vault Name:** A text box containing 'Vault'.
- Default File Store Location:** A radio button that is selected, with the path 'C:\ProgramData\Autodesk\VaultServer\FileStore\Vault' displayed below it.
- Select File Store Location:** An unselected radio button with an empty text box and a browse button ('...') to its right.
- Vault Configuration:** A section containing:
 - Use Configuration:** A checked checkbox.
 - Configuration:** A dropdown menu with 'Manufacturing' selected.
 - Configuration Path:** A text box with a list of options: 'Building', 'Infrastructure', and 'Manufacturing' (which is highlighted in blue). A browse button ('...') is to the right.

At the bottom right are three buttons: 'OK', 'Cancel', and 'Help'.

Vault Configuration

- **Building** – Creates a vault with inherent properties for Architectural, Engineering, and Construction (AEC) design workflows.
- **Infrastructure** – Creates a vault with inherent properties for Engineering, Natural Resources, and Infrastructure (ENI) design workflows.
- **Manufacturing** – Creates a vault with inherent properties for Manufacturing (MFG) design workflows.
- **Custom** – Use a custom configuration file. Imported from a different Vault

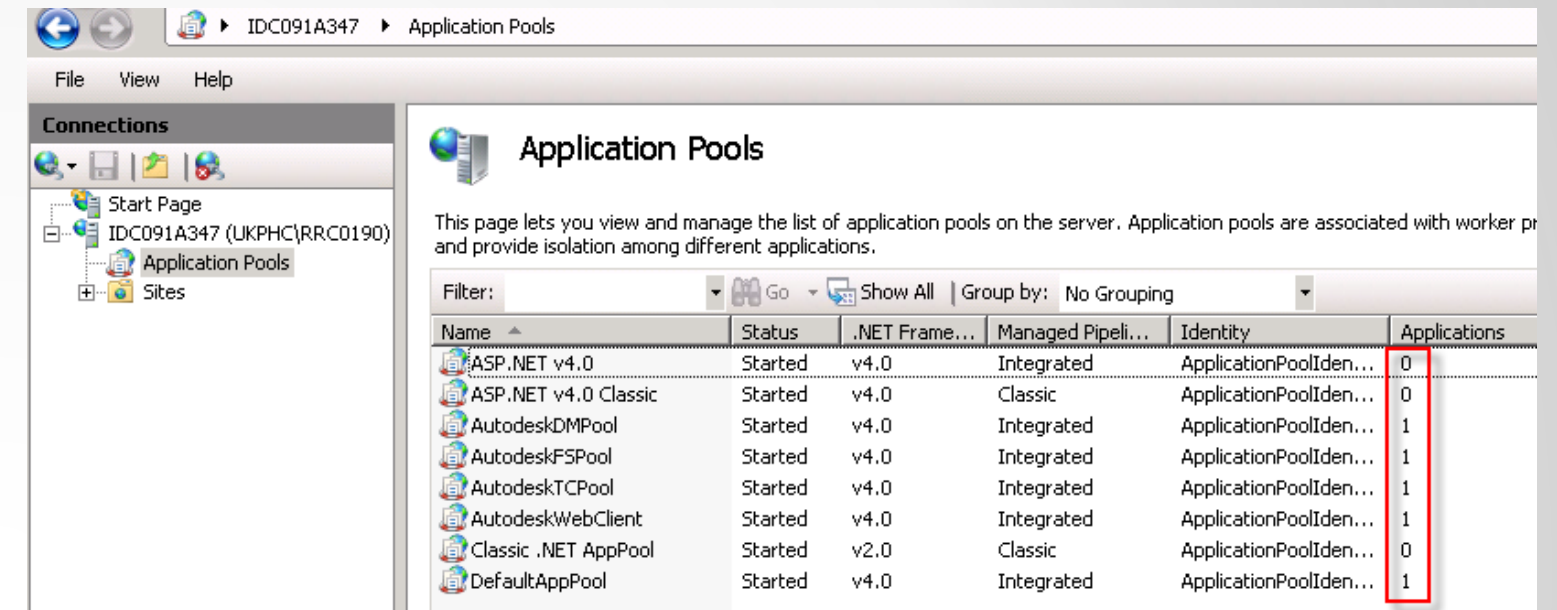
An aerial perspective of a cityscape. In the foreground, a multi-lane bridge with a rainbow-colored line along its edge spans a wide river. The bridge has a red car on it. To the right of the bridge is a green park area with trees and a blue oval-shaped feature. In the background, a large stadium with a circular roof is visible, surrounded by various city buildings and skyscrapers under a clear blue sky.

Advanced Configuration

IIS App Pool

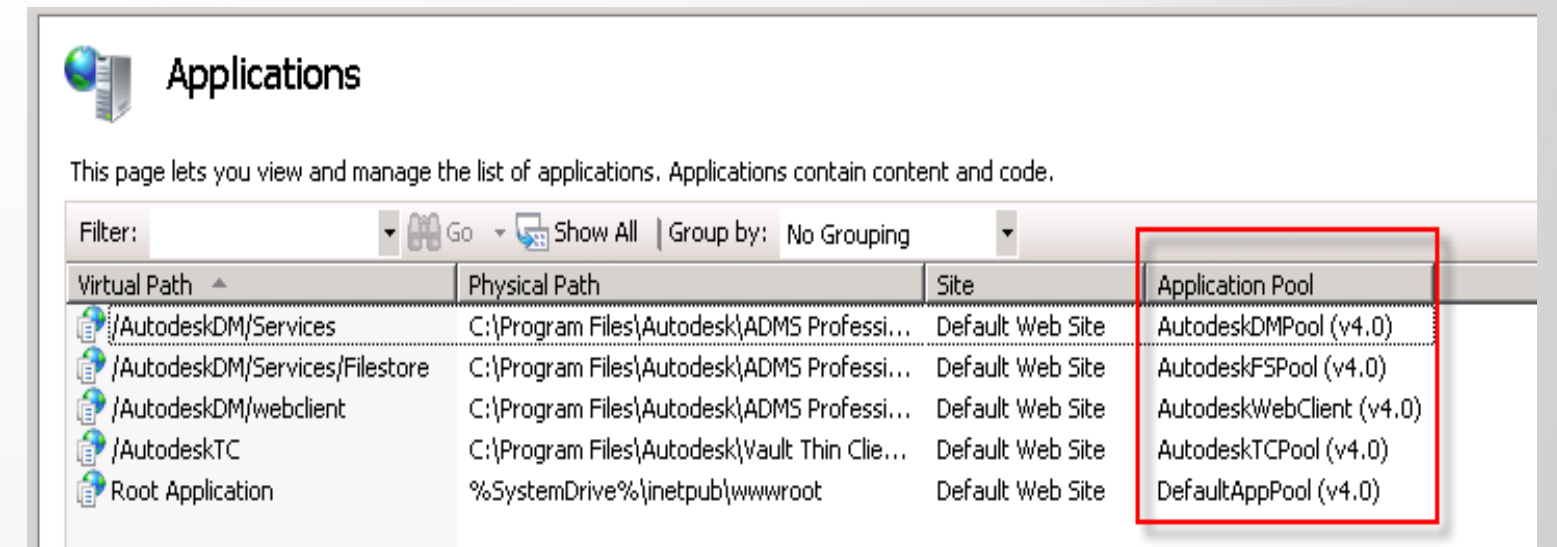
Configuring IIS App Pools

- Limit 1x Application to 1x App Pool
- Create and re-assign as needed



The screenshot shows the IIS Manager console with the 'Application Pools' page selected. The left-hand 'Connections' tree shows the path: Start Page > IDC091A347 (UKPHC\RR0190) > Application Pools. The main content area displays a table of application pools. A red box highlights the 'Applications' column, which shows the number of applications assigned to each pool.

Name	Status	.NET Framework	Managed Pipeline	Identity	Applications
ASP.NET v4.0	Started	v4.0	Integrated	ApplicationPoolIden...	0
ASP.NET v4.0 Classic	Started	v4.0	Classic	ApplicationPoolIden...	0
AutodeskDMPool	Started	v4.0	Integrated	ApplicationPoolIden...	1
AutodeskFSPool	Started	v4.0	Integrated	ApplicationPoolIden...	1
AutodeskTCPool	Started	v4.0	Integrated	ApplicationPoolIden...	1
AutodeskWebClient	Started	v4.0	Integrated	ApplicationPoolIden...	1
Classic .NET AppPool	Started	v2.0	Classic	ApplicationPoolIden...	0
DefaultAppPool	Started	v4.0	Integrated	ApplicationPoolIden...	1

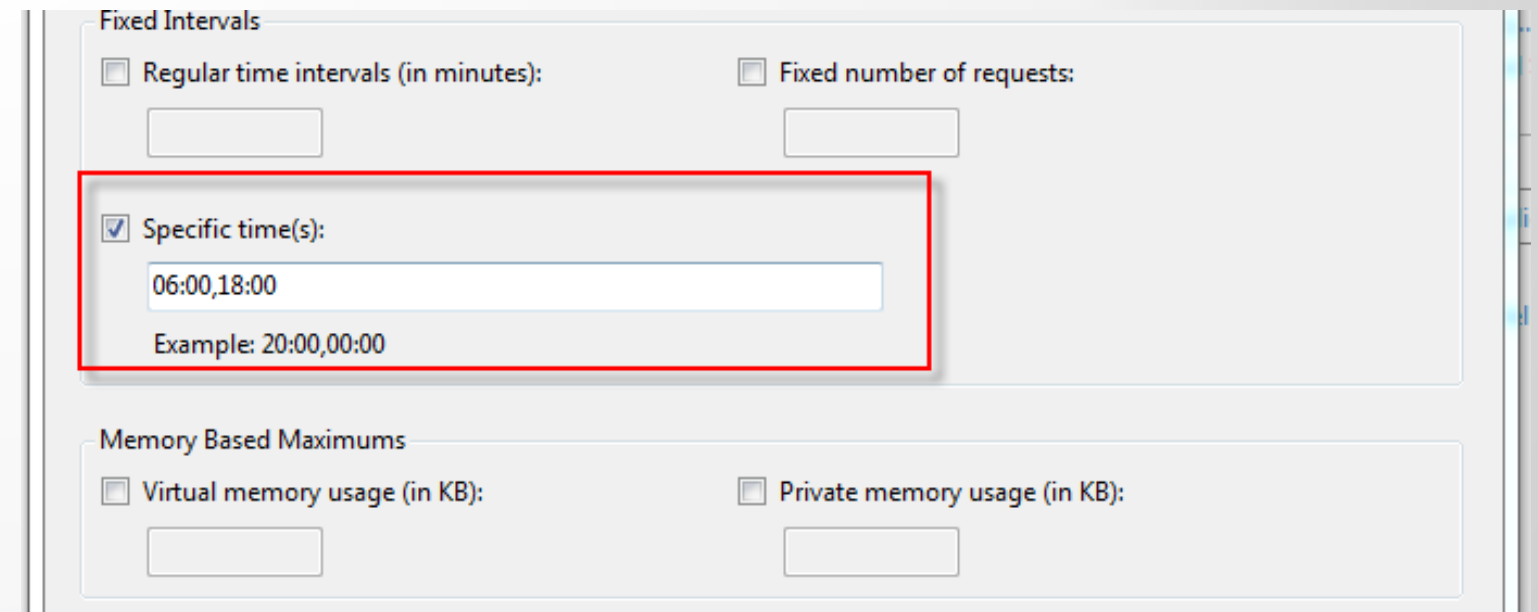
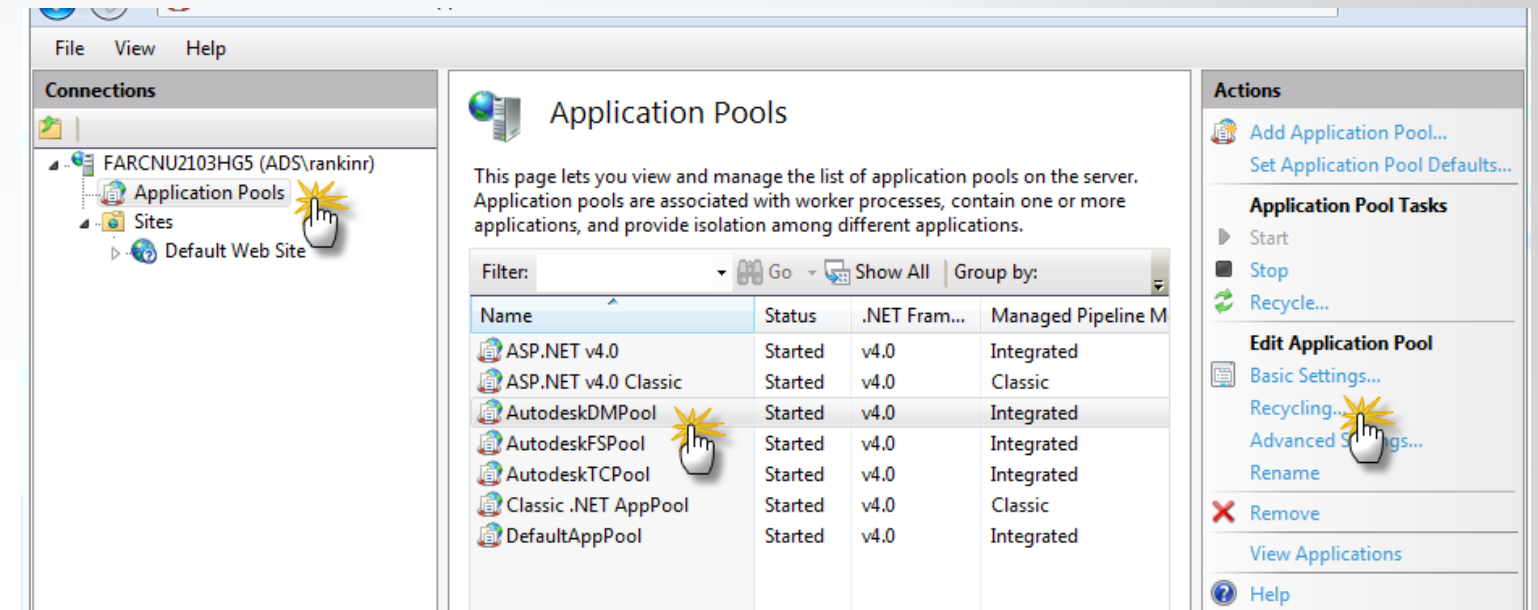


The screenshot shows the IIS Manager console with the 'Applications' page selected. The left-hand 'Connections' tree shows the path: Start Page > IDC091A347 (UKPHC\RR0190) > Applications. The main content area displays a table of applications. A red box highlights the 'Application Pool' column, which shows the pool assigned to each application.

Virtual Path	Physical Path	Site	Application Pool
/AutodeskDM/Services	C:\Program Files\Autodesk\ADMS Professi...	Default Web Site	AutodeskDMPool (v4.0)
/AutodeskDM/Services/Filestore	C:\Program Files\Autodesk\ADMS Professi...	Default Web Site	AutodeskFSPool (v4.0)
/AutodeskDM/webclient	C:\Program Files\Autodesk\ADMS Professi...	Default Web Site	AutodeskWebClient (v4.0)
/AutodeskTC	C:\Program Files\Autodesk\Vault Thin Clie...	Default Web Site	AutodeskTCPool (v4.0)
Root Application	%SystemDrive%\inetpub\wwwroot	Default Web Site	DefaultAppPool (v4.0)

App Pool Recycling

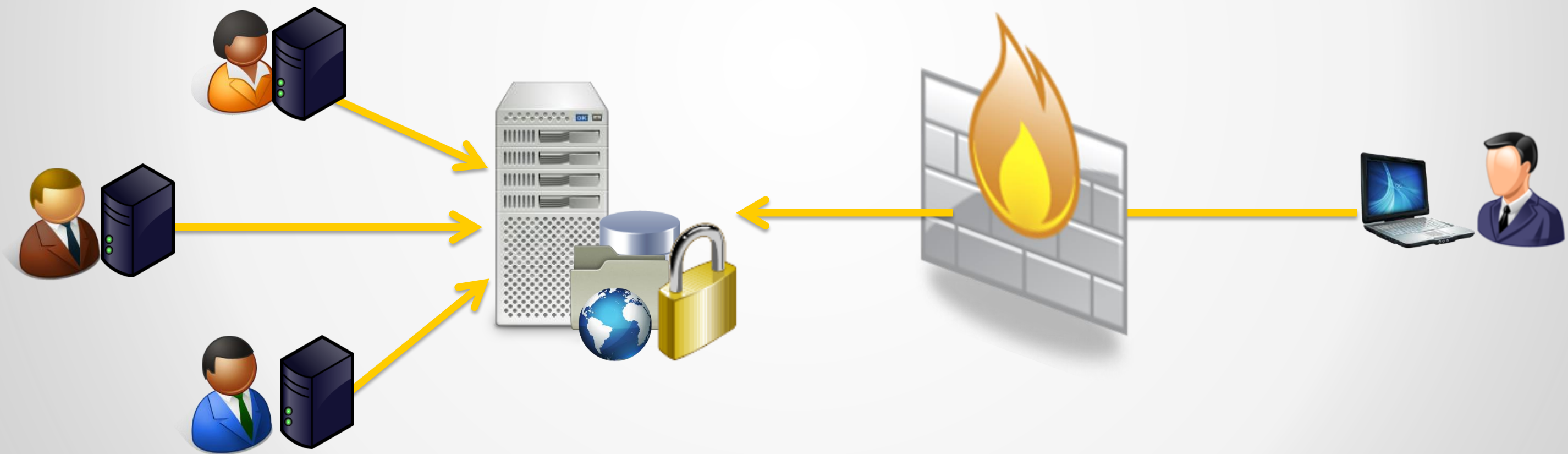
- Set the App Pool to recycle at regular intervals
 - Happens automatically so only adjust if needed
- Frees memory



SSL Configuration

SSL Configuration

- Secure Socket Layer (SSL) Certificate can be used to secure the connection

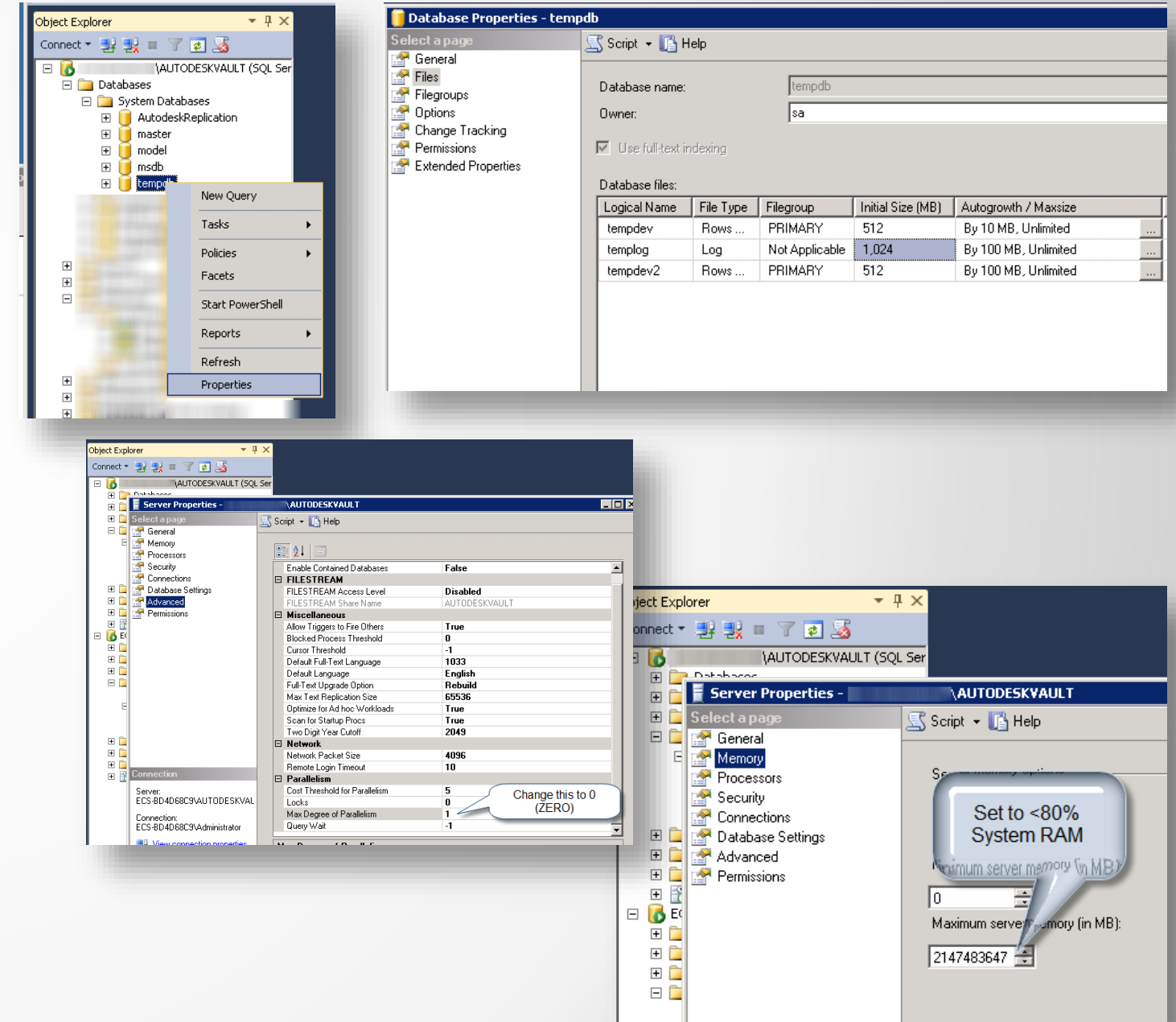


SQL Performance

SQL Configuration

SQL Performance

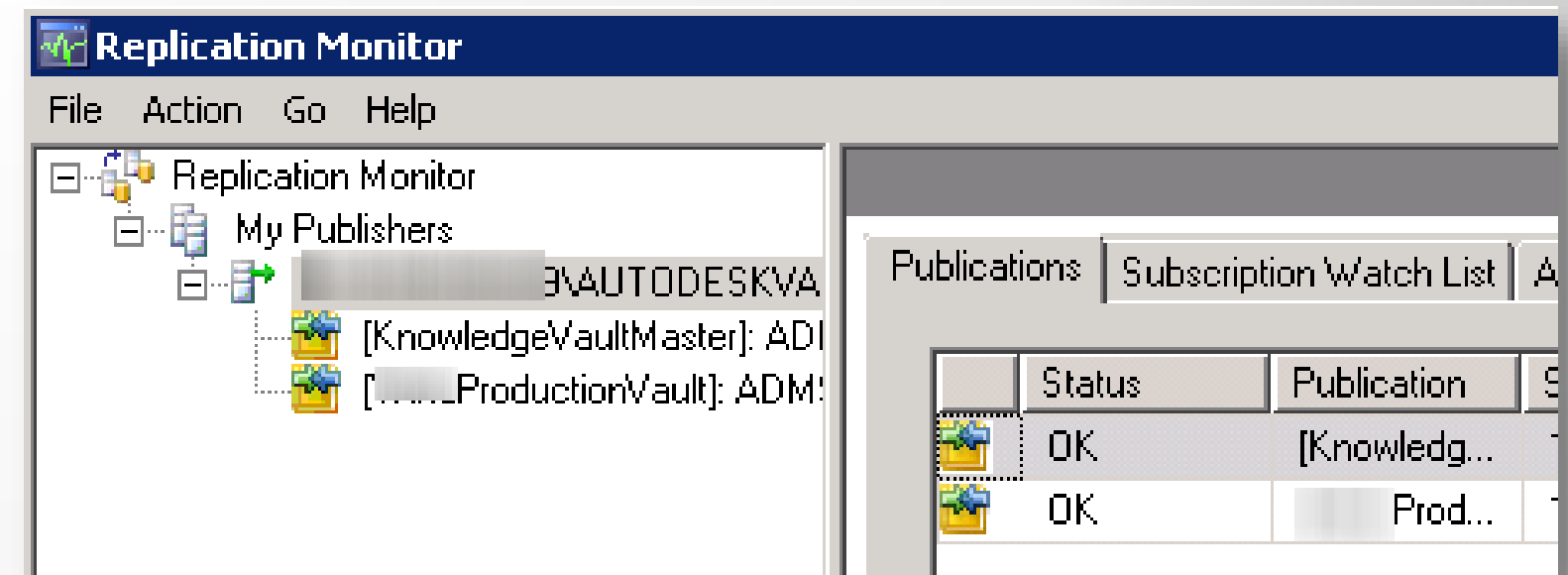
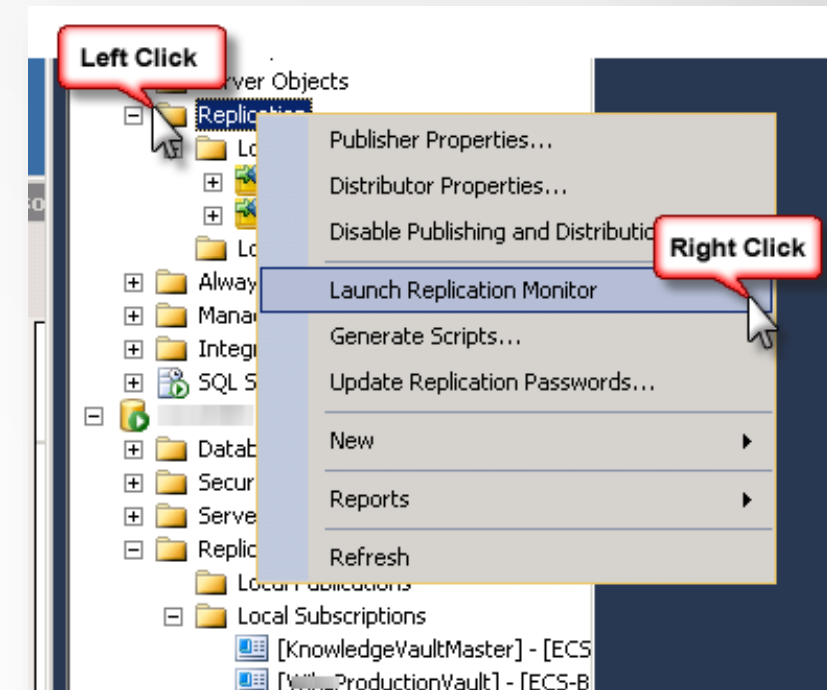
- Tempdb files
 - Tempdb files to equal half of the total processors on the server not to exceed 8 (eight)
 - Tempdb 512 or 1024 mb each
 - Templog needs to be the sum value of all tempdb files
 - Autogrowth 100mb (min)
- Other Settings
 - Max Degree of Parallelism
 - Set to 0
 - SQL Max Server Memory
 - Set to 50-80% the total available RAM of the server



SQL Configuration

SQL Replication

- Replication Monitor
 - Monitor will typically look like this.
 - Exceptions in a healthy state are when SQL transactions are occurring in a high latency environment, you may see an error.
 - Allow it time to clear
 - Check again
- If error, you have 14 days from initial error before data is no longer able to replicate
 - This means item, change order data and files may be lost from affected subscribers
 - Increase retention period
 - From publisher, subscribers and failed subscriber, 3rd party backup ADMS
 - Get all new data to local user workspace checked in by local users since replication failure



Database Optimization

Logical Name	Initial Size (MB)	Autogrowth
KnowledgeVaultMaster		By 10MB, unrestricted growth
KnowledgeVaultMaster_log		By 10 percent, unrestricted growth
<Vault >		By 100MB, unrestricted growth
<Vault>_log	500	By 10 percent, unrestricted growth
<Custom_Library>		By 25 MB, unrestricted growth
<Custom_Library>_log		By 10 percent, unrestricted growth
<Standard_Library>		By 25 MB, unrestricted growth
<Standard_Library>_log		By 10 percent, unrestricted growth

Note: A blank cell in the above table indicates that the default setting should not be changed. Grey cells, indicate default values and should be set to the above if they are different

Administration

Server Tasks

Task	Description
File Store Validation	Compares database metadata against the file store to determine if all of the files in the database exist in the file store.
File Store Replication Note: Vault Professional Only	Copies files that exist on one site's file store to another site's file store where the specific files do not exist. This process is scheduled by the user.
File Store Cleanup Note: Vault Professional Only	The file store cleanup process compares each file store against the SQL database and removes files which have been deleted from the data management environment.
Update Statistics	Runs Update Statistics on the SQL database. This process improves query performance, which in turn improves vault performance.
ECO Email Notification Note: Vault Professional Only	Sends email notifications that have been saved in a queue. Automatic Email notifications must be enabled.
ERP Packaging Note: Vault Professional Only	Communicates with an existing ERP system. ERP Integration must be enabled.
Property Re-indexing	Extracts properties from a bulk of files and updates the database with the new information. This operation can be started and stopped by the user. If the operation is stopped and restarted later, it will start with the last file processed.
Search Indexing	Takes properties from the database into the indexer for the first time. This indexing yields faster results when the user searches the database on specific properties.

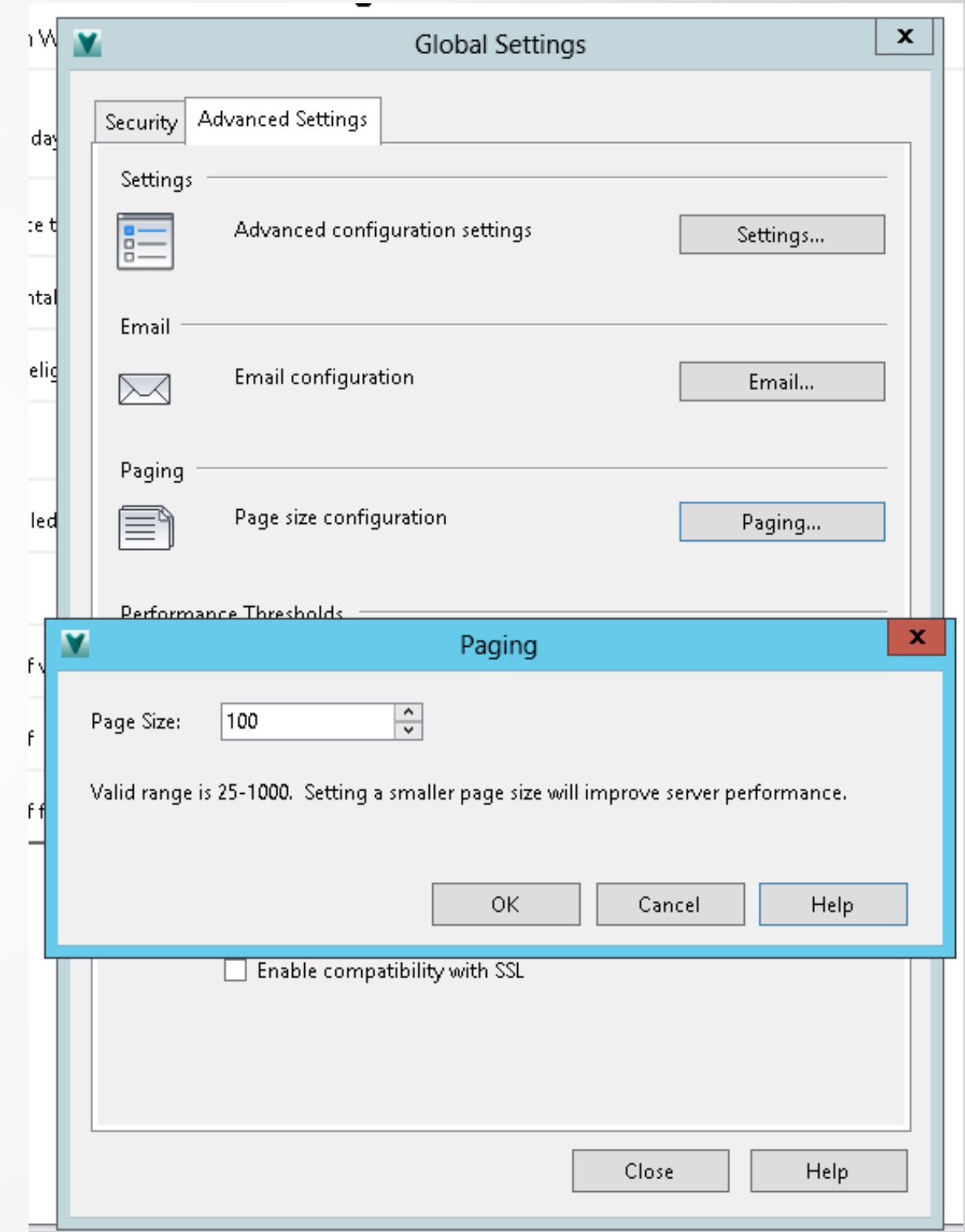
Server Tasks

Task	Description
Content Indexing Service	Extracts the full text contents from existing files in the vault, allowing full content searching. This process only runs if full-content searching is enabled.
Search Index Optimization	Updates the indexing engine which helps return search results quickly. When the process is running, the indexer is locked. This process runs during off hours to prevent user down time.
Content Indexing Service Update	Adds newly created and updated content to the vault server's search index. This process runs every twenty minutes once full content searching is enabled.
Item Lock Cleanup Note: Vault Professional Only	When the vault server and the SQL server perform different actions on the database, it will apply locks to prevent data collision.

ADMS Console, select Tools > View Server Tasks

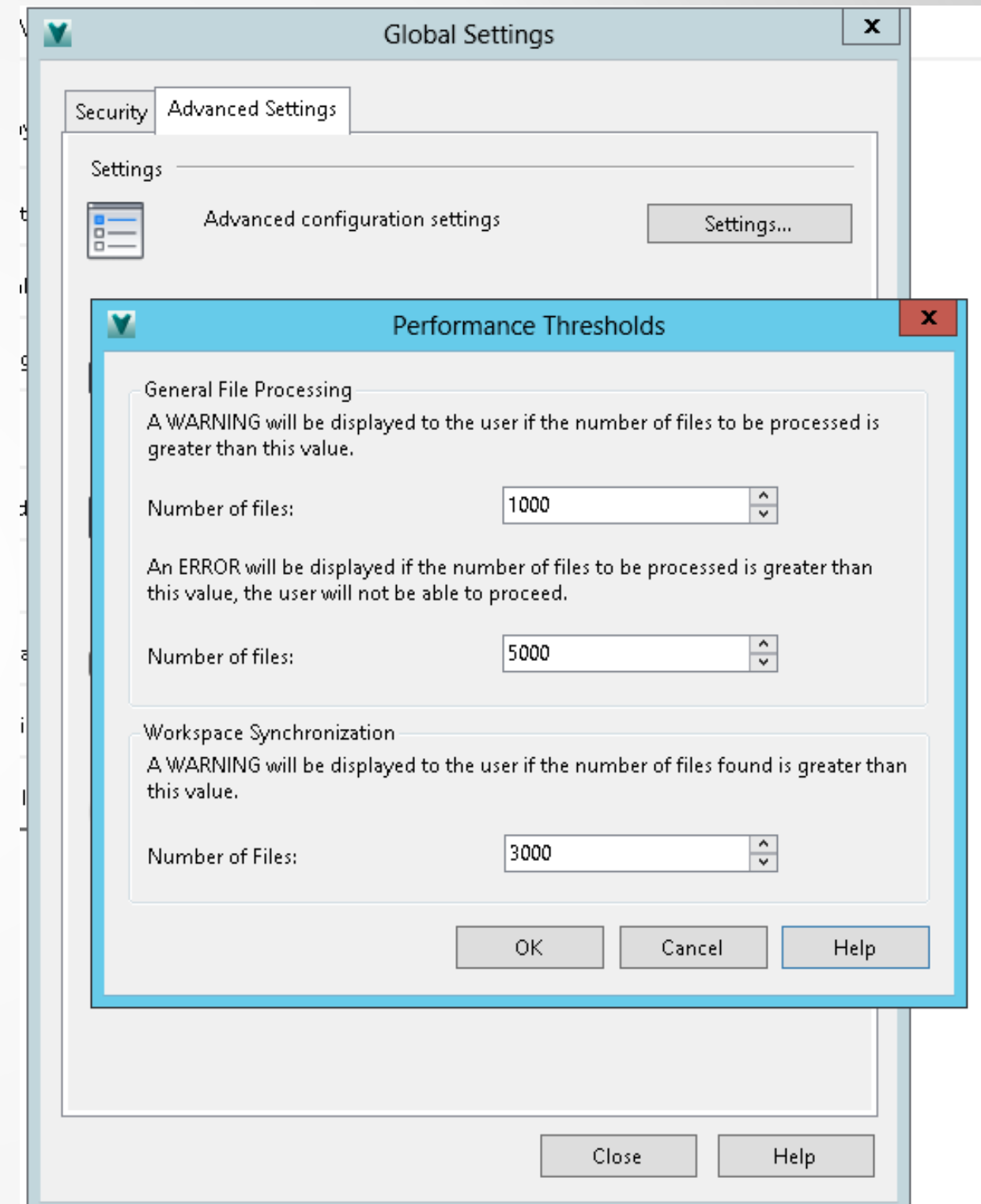
Paging Size

- Controls the number of rows of data displayed per page.
- Improve server and client performance



Performance Thresholds

- Warns user when working on large quantity of files
- Smaller number increases server performance



Properties And Indexing

Types of Indexing

- Property File Re-Indexing
- Search Indexes
- Full Content Indexing

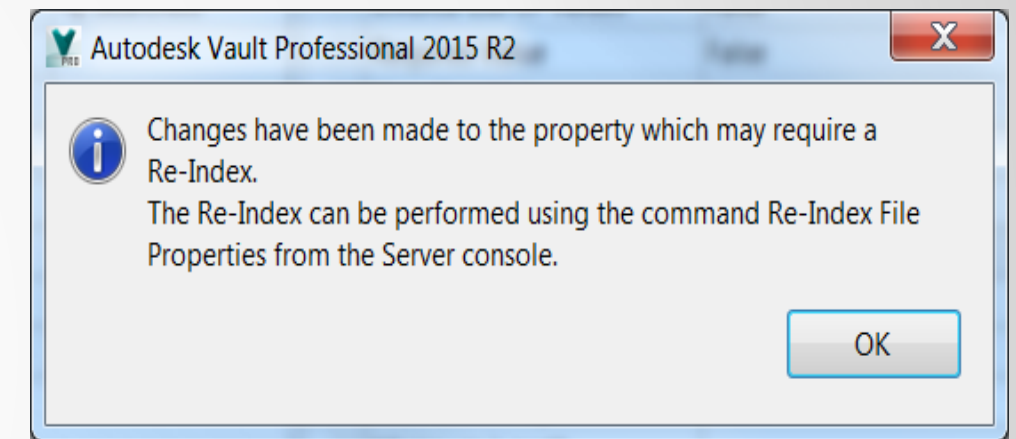
Property File Re-Index

When

- A Read Mapping has been added/modified to an existing UDP
- A property with Read Mappings has been re-enabled

These property changes queue a property Compliance check

- number of files can become non-compliant



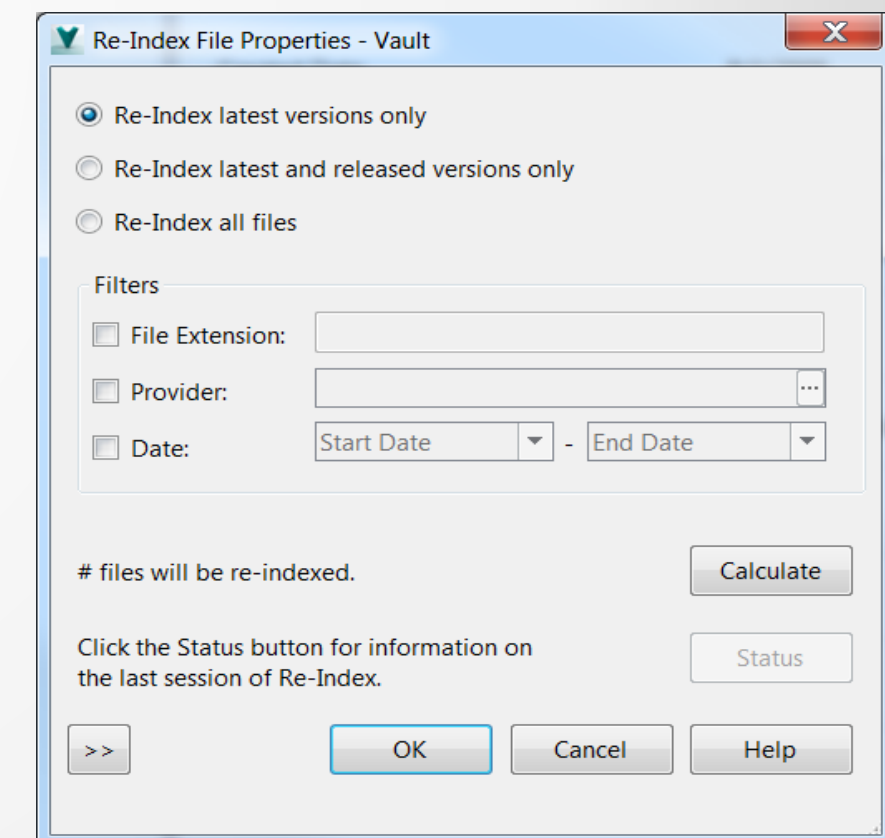
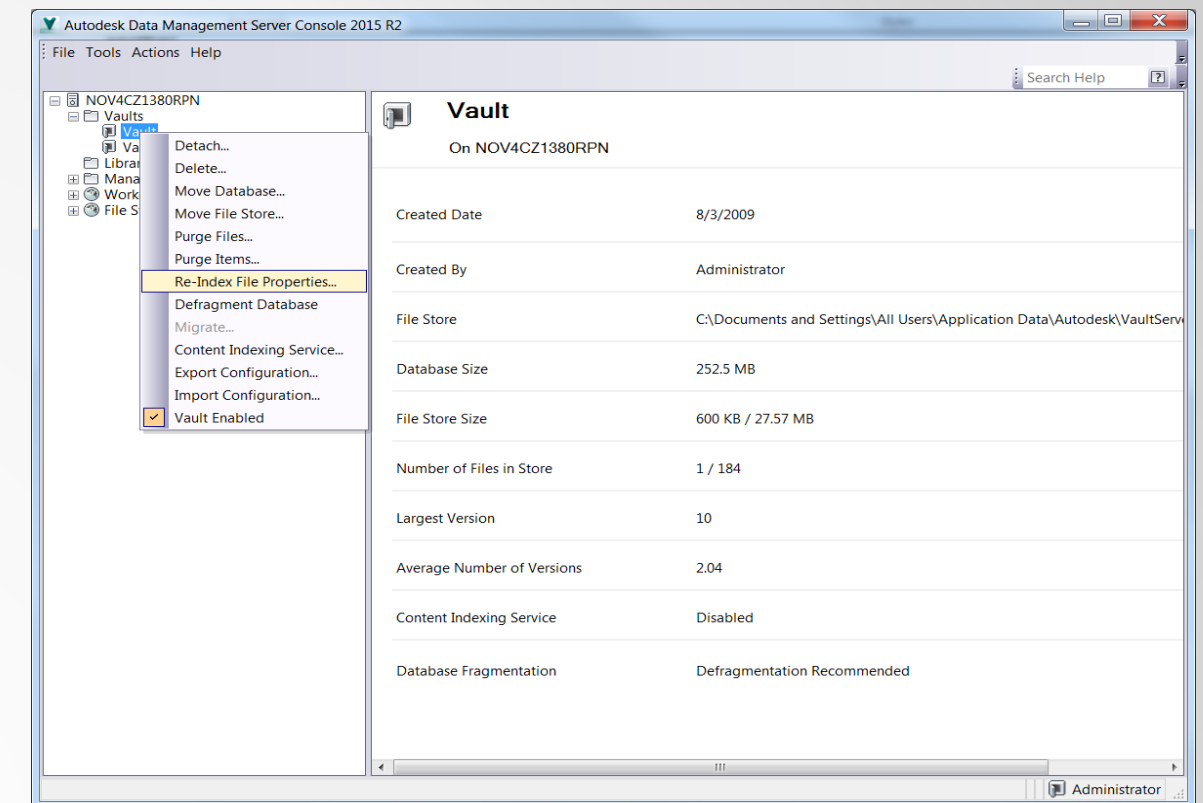
Property File Re-Index

Executed from within ADMS Console

What it Does

- Re-applies the Read Mappings and updates the UDP values for each file
- Updates existing versions of the files
- UDPs will become property compliant
- Search indexes built for the property values

A Property File Re-Index does **not** **add** newly created UDPs



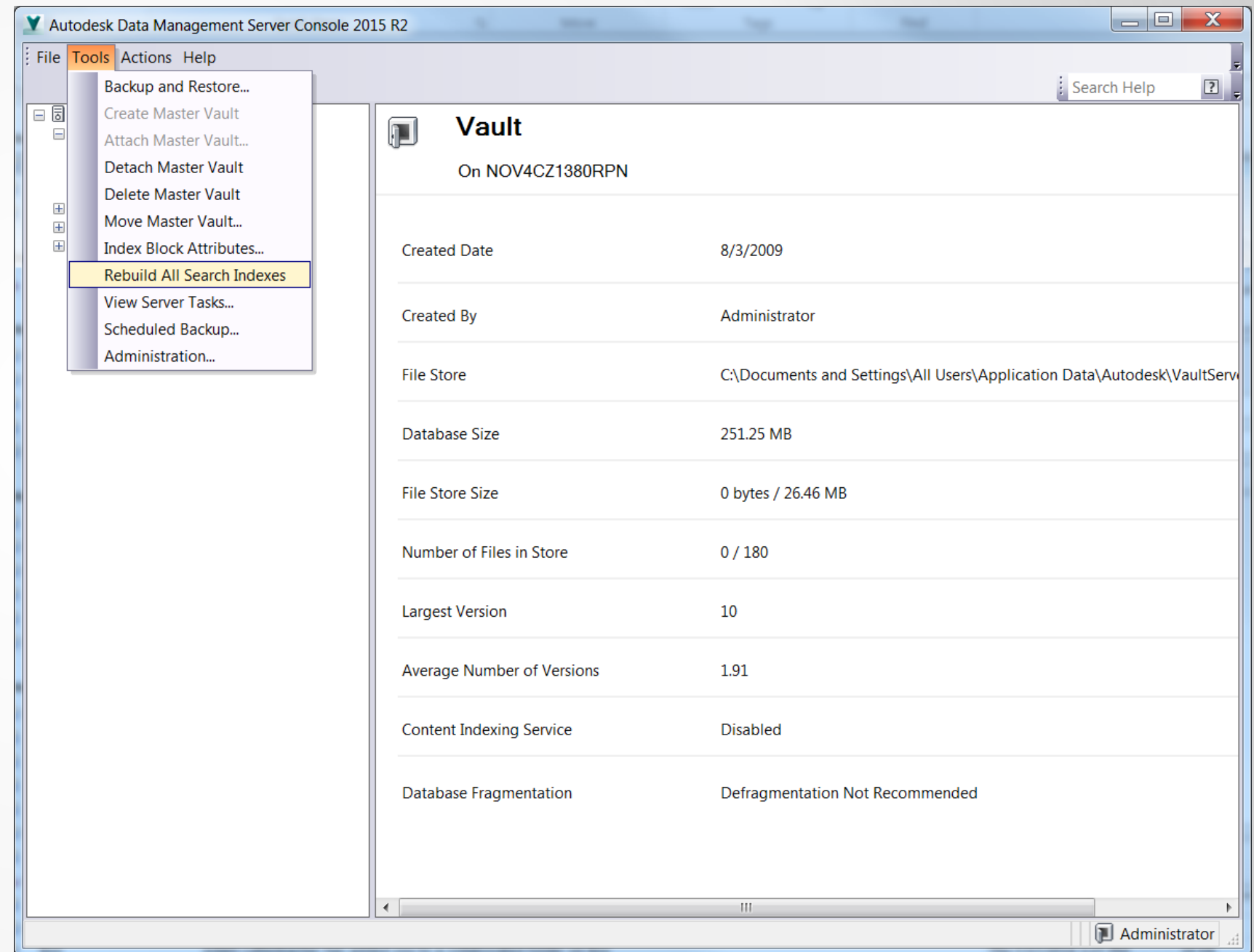
Search Indexes

- Properties extracted from the database
- Faster searching in Vault
- Token searches



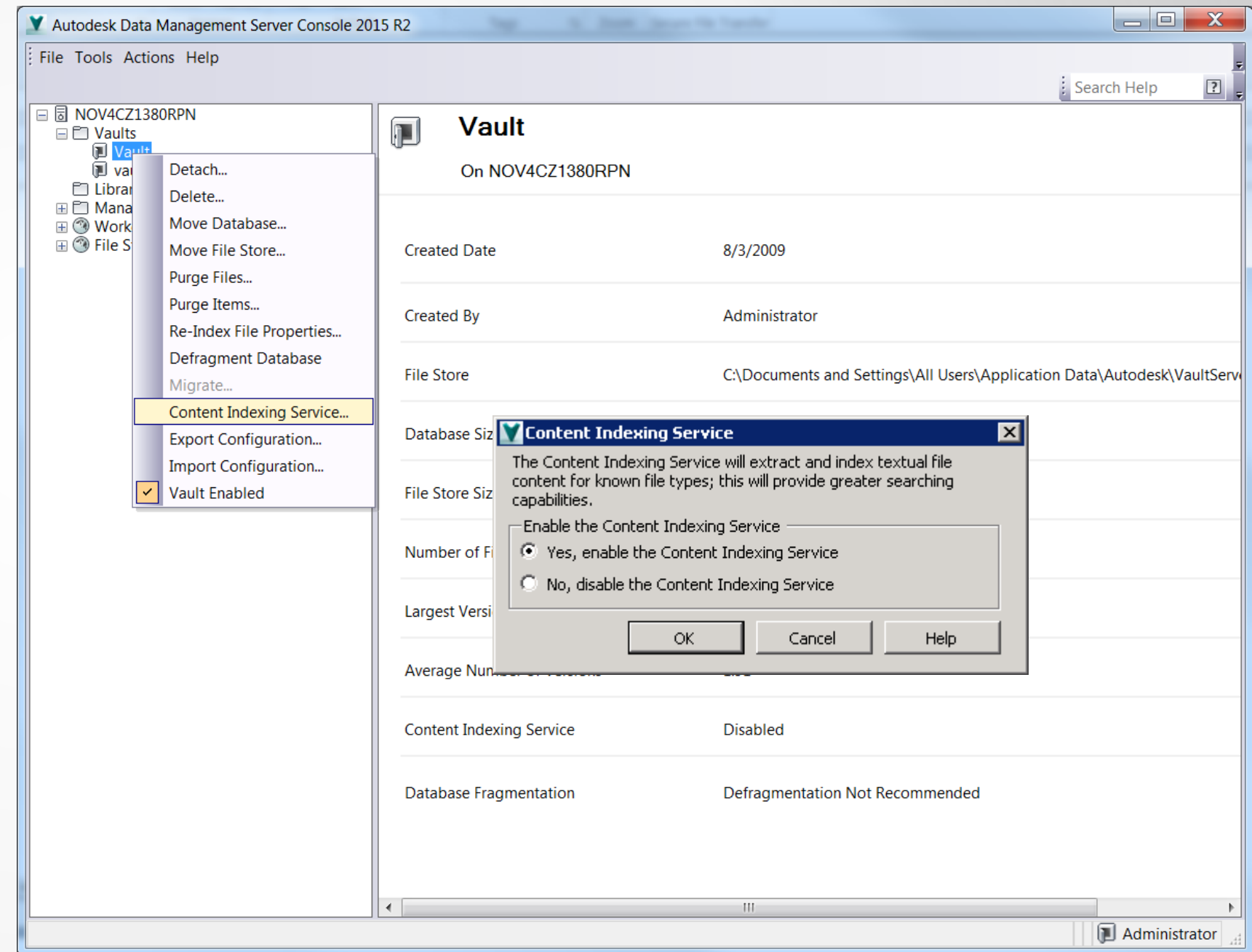
Rebuild Search Indexes

- Not the same as Rebuild Property Indexes
- Maintenance ran automatically
- Run per site basis



Content Indexing

- Extracts the full text contents from existing files
- Added to Lucene
- Enabled per Vault



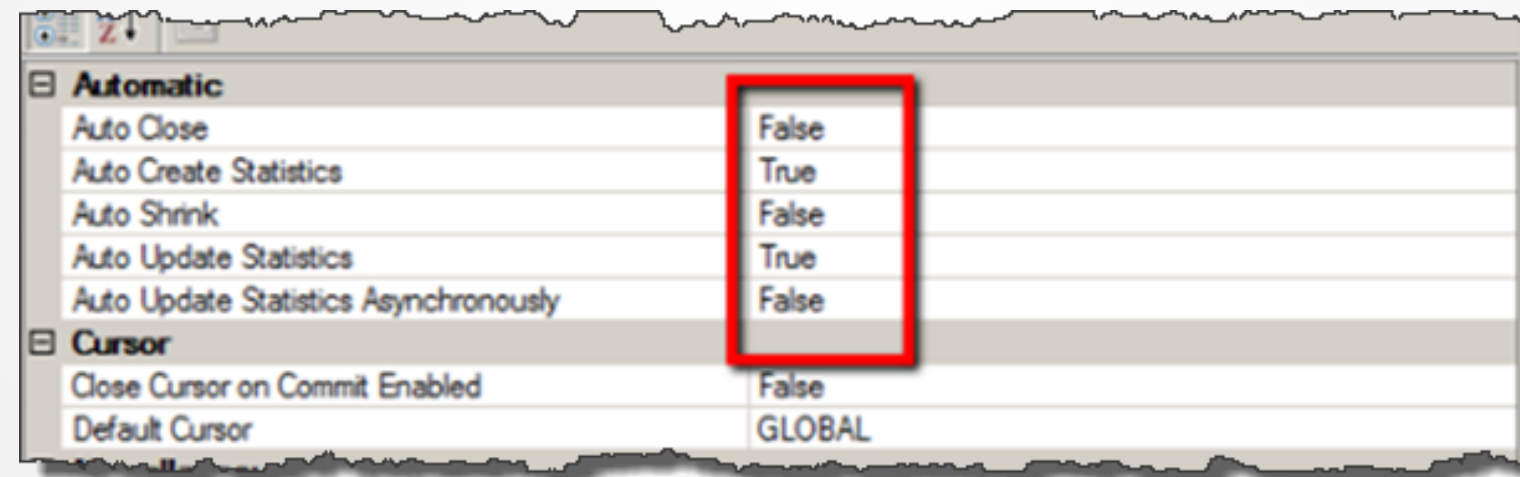
Maintenance

SQL Maintenance Plan

- Create a SQL Maintenance Plan (Advanced Configuration Guide)
 - Keeps the database healthy
 - Shrinks the database
 - Reorganizes and rebuilds indexes

SQL Maintenance Plan

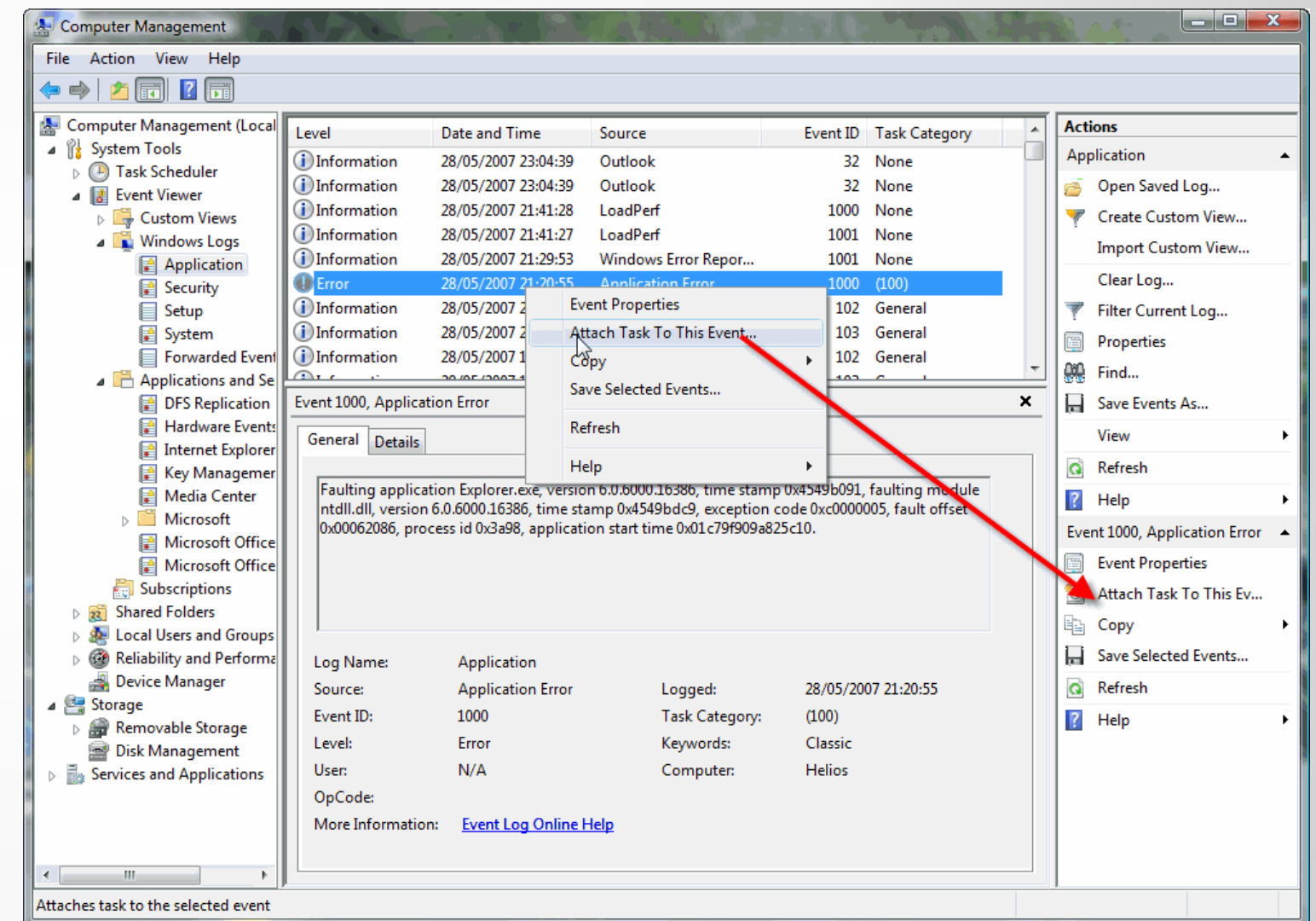
- Performed inside of SQL Management Studio
 - Recovery Model set to Simple
 - Compatibility Level set to SQL 2012 for Vault 2016
 - Also with SQL 2014



Monitoring

Built-in windows apps

- Event viewer
 - Configure to send email alerts on errors
- Performance monitor
 - Monitor system performance
 - CPU usage
 - Mem usage
 - Disk capacity
 - View trends over time



Built-in windows notifications

- Event Based notifications
 - Job Processor
 - Modify config file
 - Attach task to Event

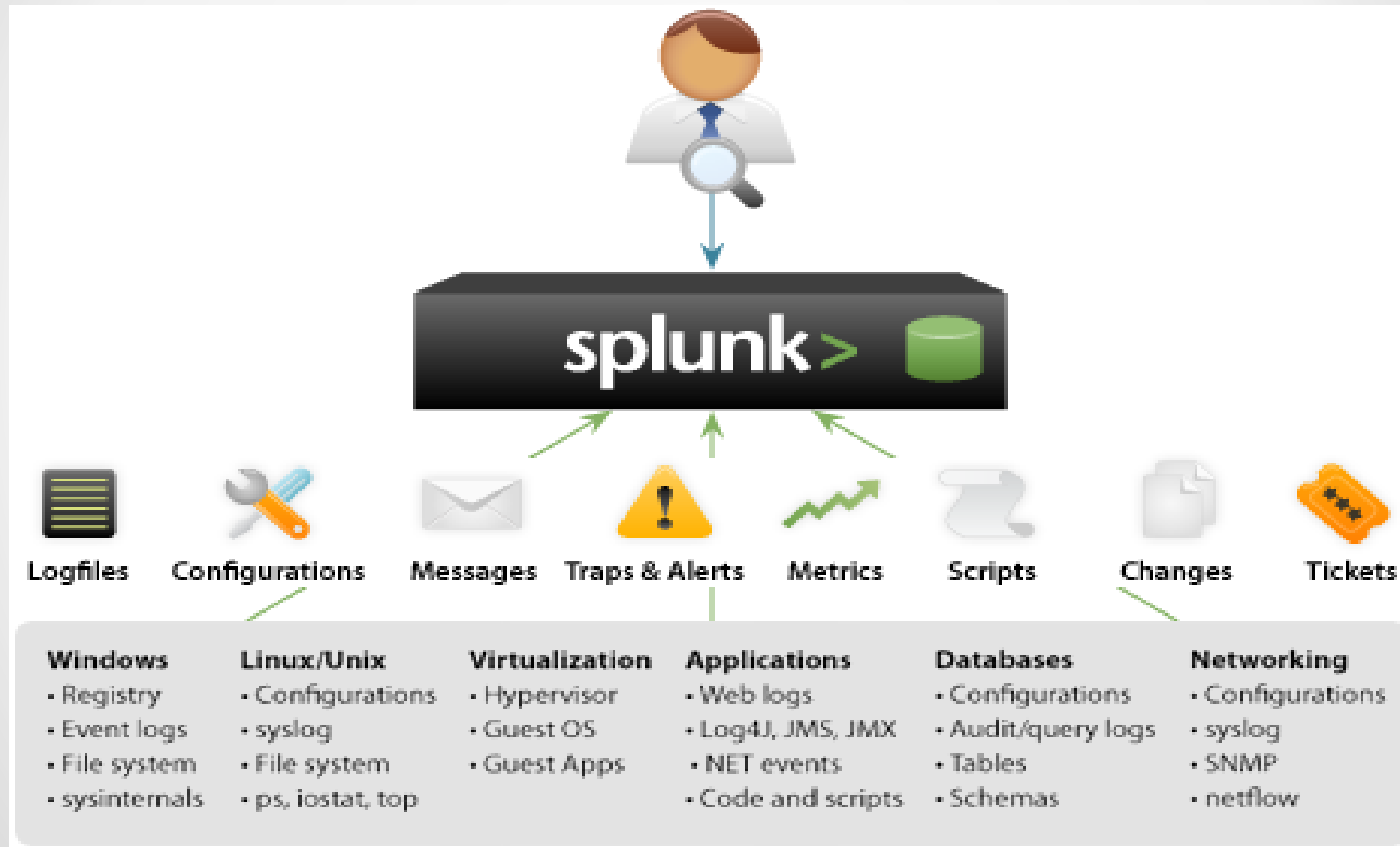


3rd Party tools

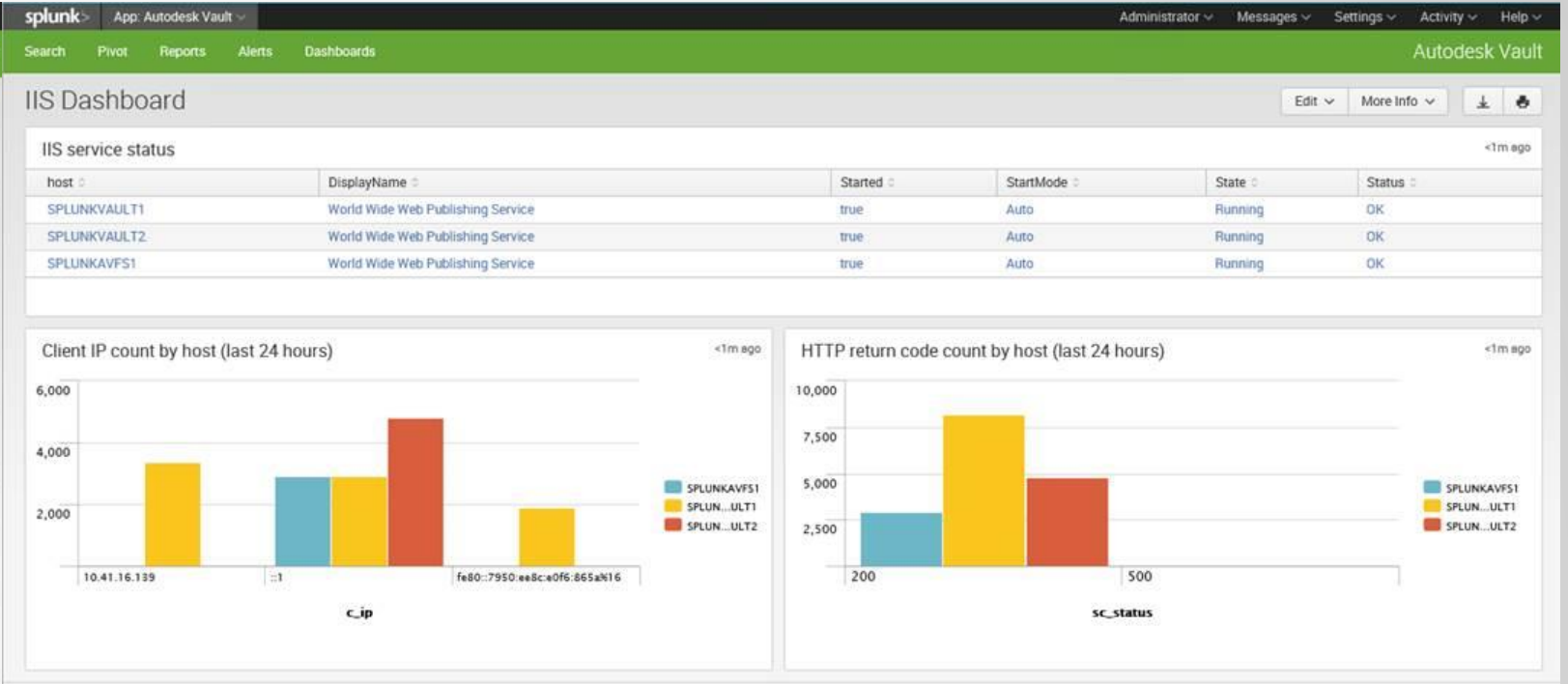
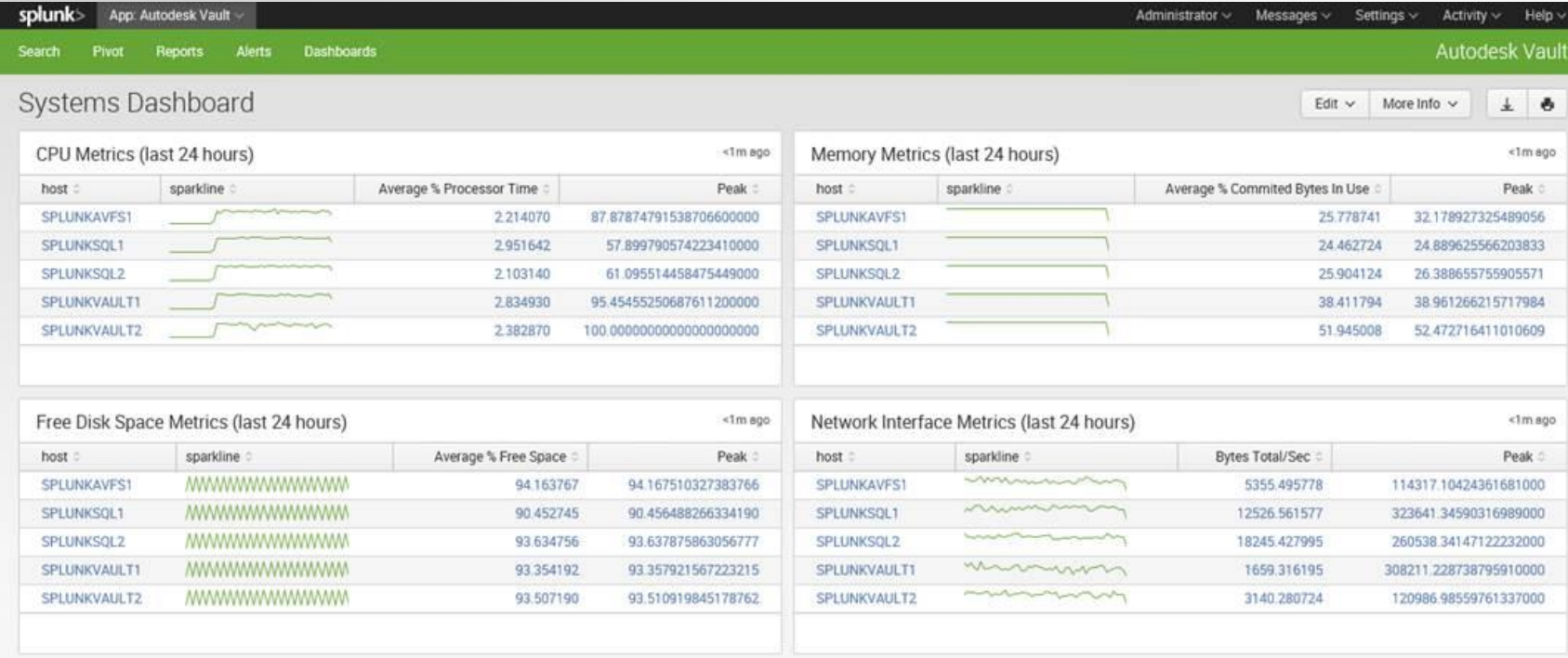
- Nagios
- PRTG
- HP SIM
- SCOM/MOM
- App Dynamics
- Splunk



Splunk for monitoring Vault



Dashboard View



splunk>App: Autodesk Vault

SearchPivotReportsAlertsDashboards

Alert IIS service stopped

Enabled: Yes. [Disable](#)

Alert Type: Real-time. [Edit](#)

Trigger Condition: Custom. "search State=Stopped" in 1 minute. [Edit](#)

Actions: Send Email. [Edit](#)

App: adskvault

Permissions: Private. Owned by admin. [Edit](#)

IP Auditing

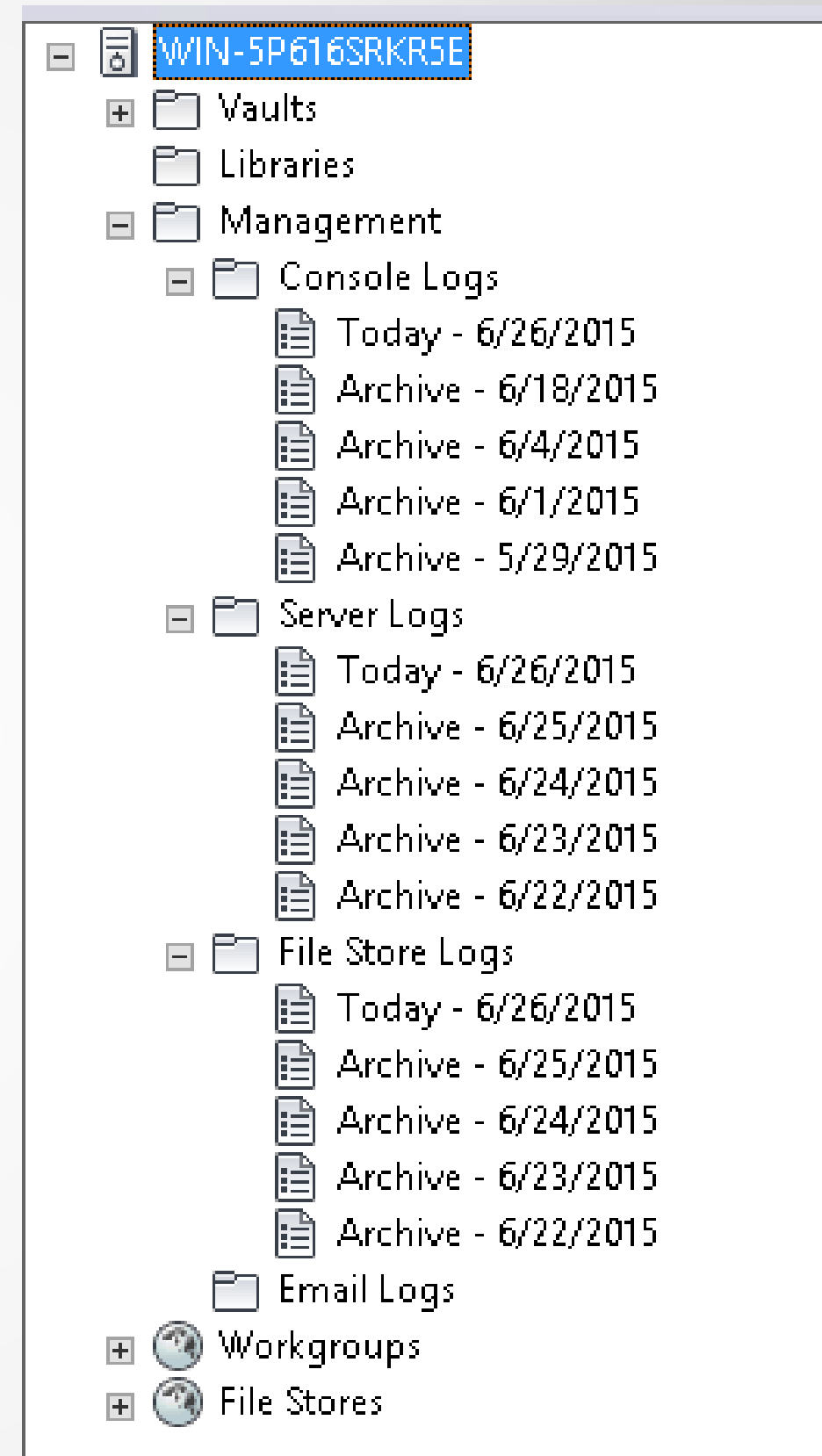
IP Auditing in ADMS

- Modification to web.config
 - Logs what files are deleted
 - Logs what files are downloaded = “Get”

```
237     </listeners>
238 </trace>
239 <!-- To receive general trace messages change the value to the
240      appropriate level. "1" gives error messages, "2" gives errors
241      and warnings, "3" gives more detailed error information, and
242      "4" gives verbose trace information -->
243 <switches>
244     <add name="ProcessingSwitch" value="1" />
245     <add name="ClientStackSwitch" value="1" />
246     <add name="ErrorCodeSwitch" value="3" />
247     <add name="WarningCodeSwitch" value="2" />
248     <add name="LibraryServiceSwitch" value="2" />
249     <add name="IndexerTraceSwitch" value="2" />
250     <add name="ReplicationResourceTraceSwitch" value="4" />
251     <add name="EventTraceSwitch" value="3" />
252     <add name="VacuumCleanerTraceSwitch" value="4" />
253     <add name="PurgeTraceSwitch" value="3" />
254     <add name="LicensingTraceSwitch" value="3" />
255     <add name="WorkgroupReplicationTraceSwitch" value="3" />
256     <add name="LogFileDeletesBooleanSwitch" value="1"/>
257     <add name="LogFileDownloadsBooleanSwitch" value="1"/>
258
259 </switches>
260 </system.diagnostics>
```

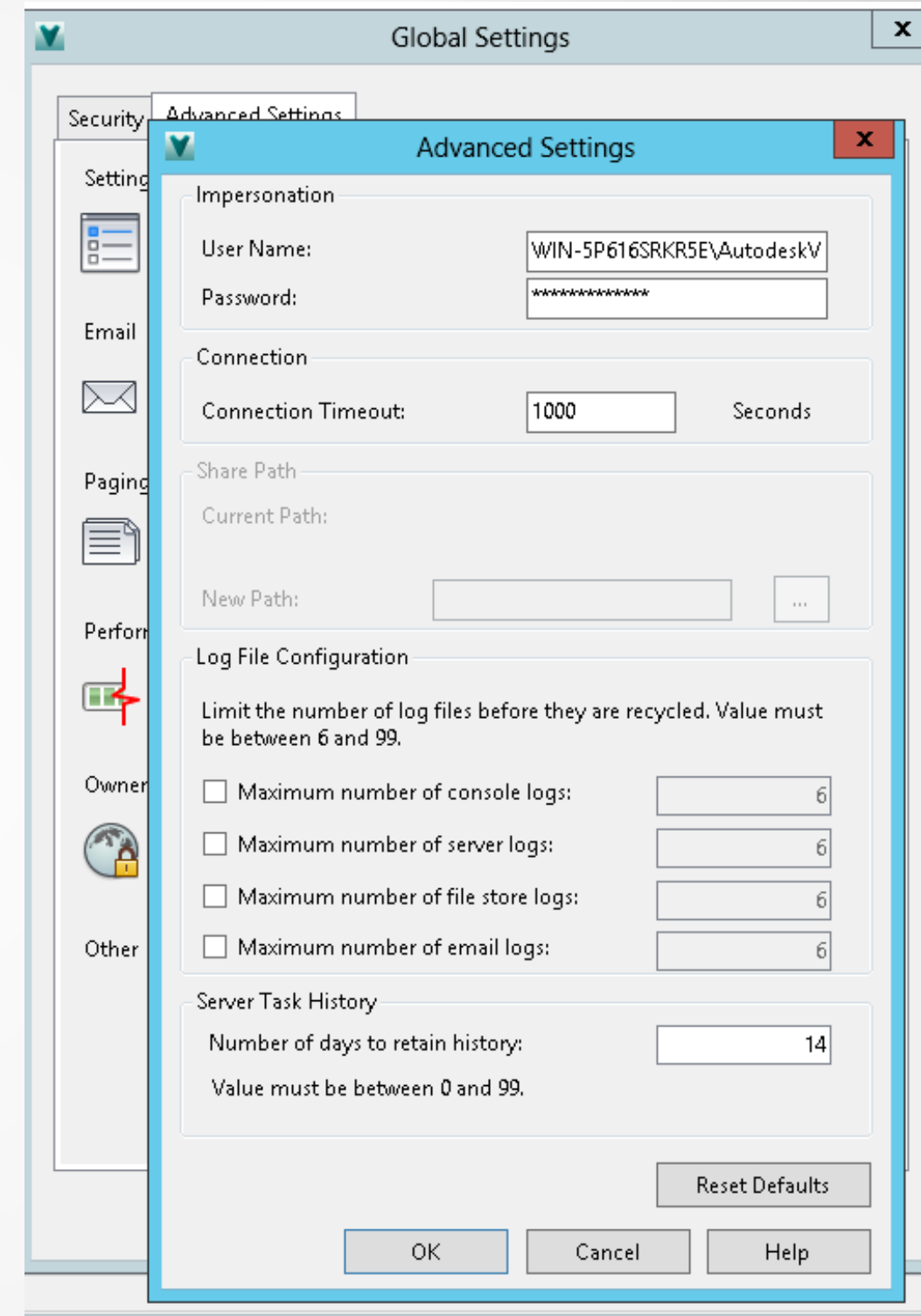
Log File Management

- In the ADMS Console
- New log every day
 - C:\ProgramData\Autodesk\Vault Server\FileStore
- Moved by editing the web.config file



Log File Management

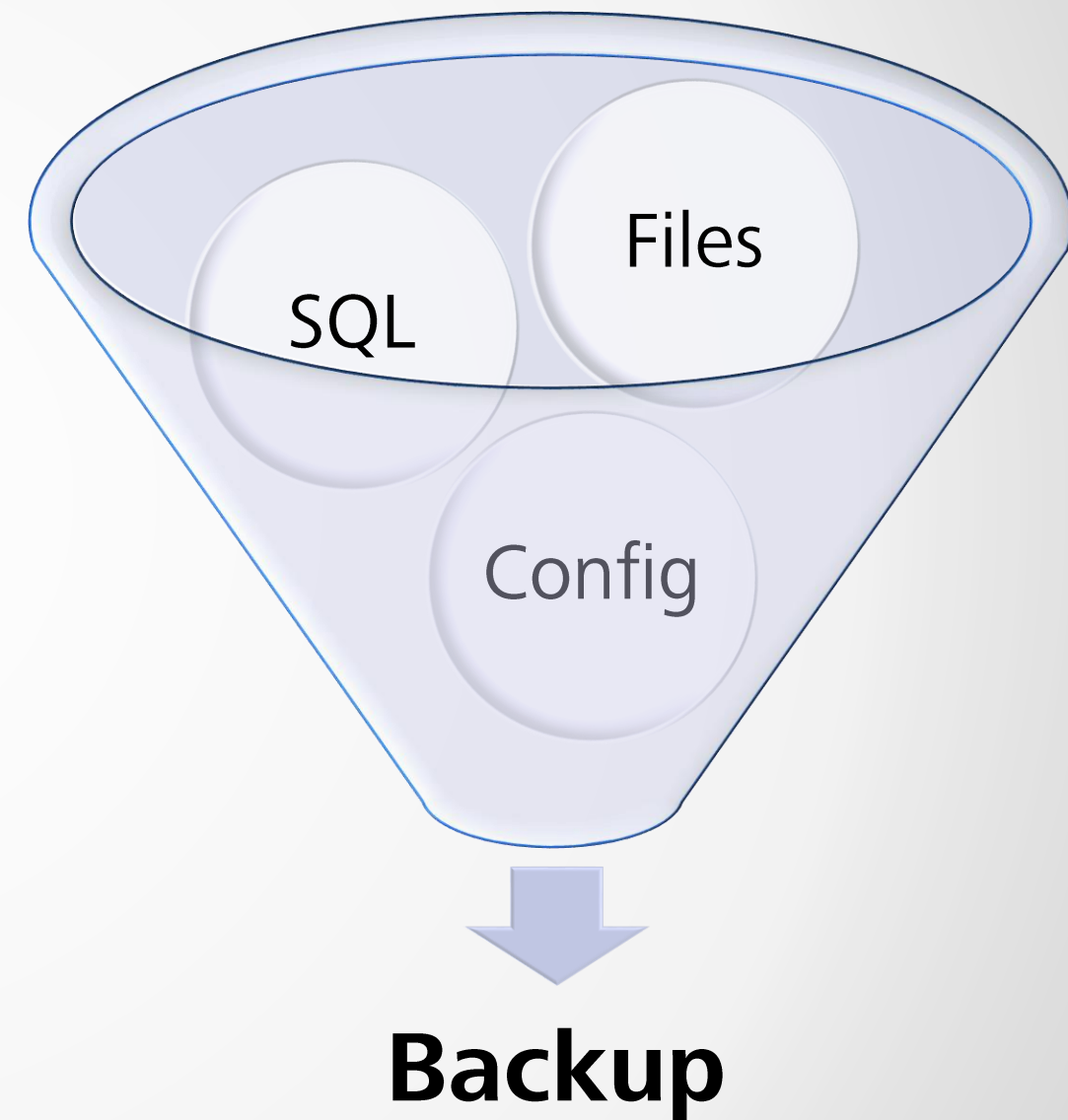
- No maximum number by default.
- Set maximum to save disc space



Backups

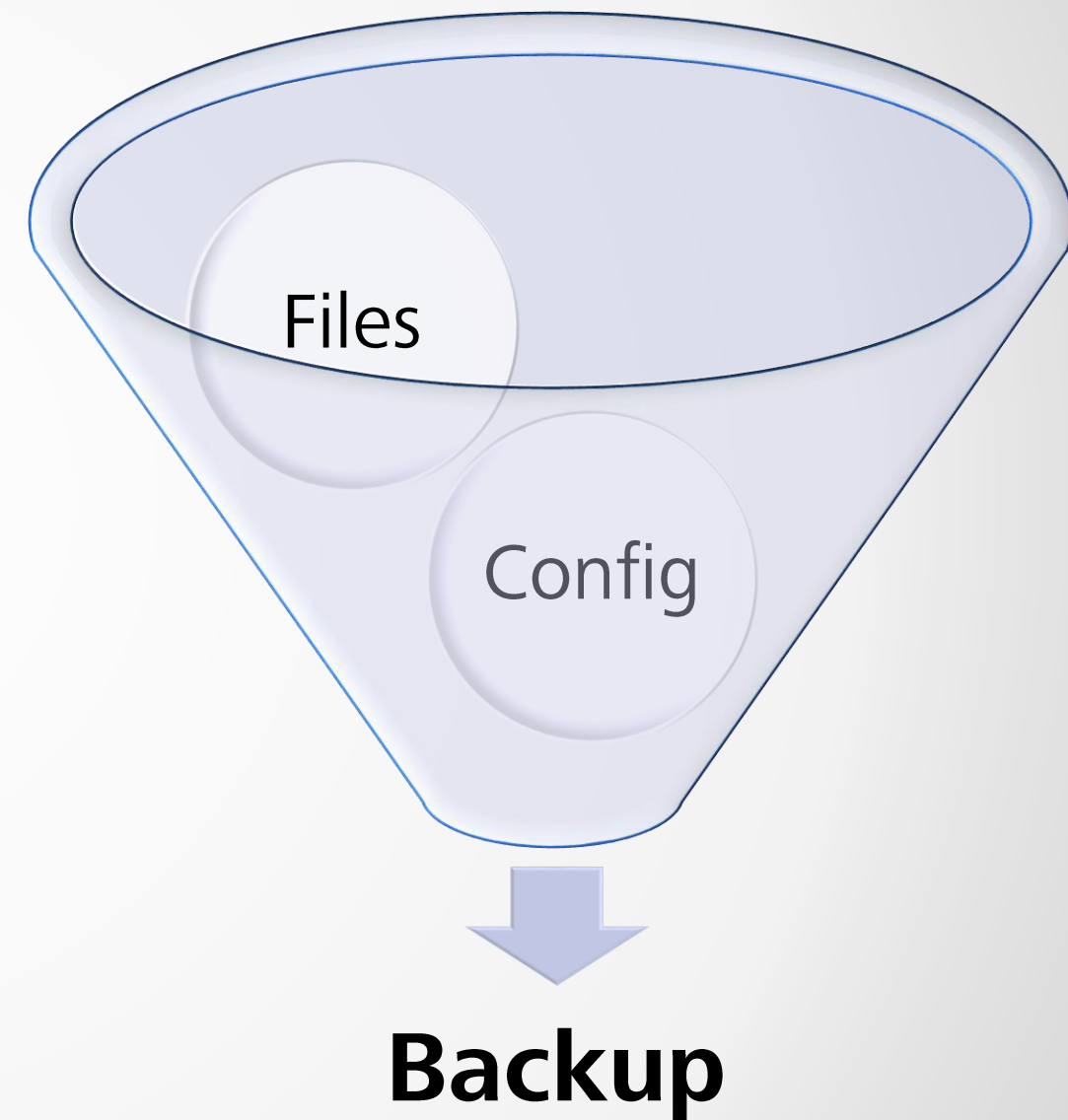
What to Backup – Single Site

- All Vault databases
 - KnowledgeVaultMaster
 - Vaults
 - Libraries
- FileStore
- **Optional:**
 - connectivity.ADMSConsole.exe.config
 - web.config



What to Backup – Multisite AVFS

- All Vault File Stores
 - Full backup of the entire filestore
- **Optional:**
 - Program Files
 - Config files



What to Backup - Connected Workgroup

Publisher

- All Vault databases (KnowledgeVaultMaster, Vaults and Libraries)
- The distribution database (AutodeskReplication)
- SQL Master and MSDB databases
- SQL Master Key
- Folder where the SQL Replication Snapshot is located

Optional:

- ADMS program files
- Vault filestore
- connectivity.ADMSConsole.exe.config and web.config

What to Backup - Connected Workgroup

Subscriber

- All Vault databases (KnowledgeVaultMaster, Vaults and Libraries)
- SQL Master and MSDB databases
- Folder where the SQL Replication Snapshot is located

Optional:

- ADMS program files
- Vault filestore
- connectivity.ADMSConsole.exe.config and web.config

3rd Party Backup

The software used for backup should have the following capabilities:

- A SQL server backup agent for backing up and restoring the databases.
- Restore the SQL Master and MSDB databases.
- Verify the backed up database or file.
- Work within a replicated SQL server environment.
- Send e-mail alerts to administrators. (Recommended, not required).
- Back up and restore the databases and file store with security settings.

For more information, see [Using 3rd Party Tools to Backup/Restore Autodesk Vault](#).

Restore

Single Vault Site Backup\Restore

- Restore sequence
 - Install the Autodesk Vault server software
 - Install of the hot fixes and/or services packs that were installed on the original server
 - Restore the databases
 - Restore the file stores in there original file store location

Single Vault Site Backup\Restore

- Post restore steps
 - Open ADMS Console to verify all databases can be seen
 - Migrate databases if necessary
 - Open the command prompt to <installdir>\Autodesk\ADMS [Edition] 20XX\ADMS Console directory.
 - type: Connectivity.ADMSConsole.exe -VUsername -VPpassword -Ovalidatefilestore
 - Check console log file for results
 - Replace missing files from other backups

Restoring a Publisher

- Publisher Restore
 - Restore a server with the same name and SQL version as the original.
 - Install Vault Server and apply all service packs and hot fixes as the original server.
 - Create the SQL snapshot share and apply user permissions to the share.
 - Restore the Master and MSDB system databases.
 - Restore the vault and library databases.
 - Restore the distribution database and snap shot share location.
- The backup used for the restore should be no older than 14 days. If older than 14 days, all subscribers will need to be reinitialized and data will be lost.

Restoring a Subscriber


- Subscriber Restore
 - Restore a server with the same name and SQL version as the original.
 - Install Vault Server and apply all service packs and hot fixes as the original server.
 - Restore the Master and MSDB system databases.
 - Restore the vault databases and file store
 - Run a file store validation command. Restore any missing files from a previous backup.
- The backup used for the restore should be no older than 14 days. If older than 14 days, the subscriber will need to be reinitialized.

Migration





Planning


Vault Upgrade Guide

AUTODESK® VAULT®

OVERVIEWGETTING STARTEDLEARN & EXPLOREDOWNLOADS**TROUBLESHOOTING**

INTRODUCTION TO UPGRADING VAULT

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Oct 08 2015 | [In-Product View](#) 

Applies to Factory Design Suite 2016, Product Design Suite 2016, and Vault 2016

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.

Validate Backup

SQL Server

Vault Server

Vault Clients

Create Backup

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 2014 to Vault Professional 2016, first upgrade the release to Vault Workgroup 2016 and then upgrade the edition to Vault Professional 2016.

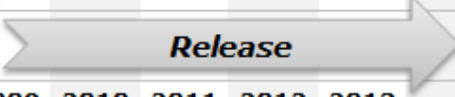
Autodesk Vault Professional

Autodesk Vault Collaboration (AEC)

Autodesk Vault Workgroup

Autodesk Vault Basic

Product

Release

...

2009


2010


2011

2012

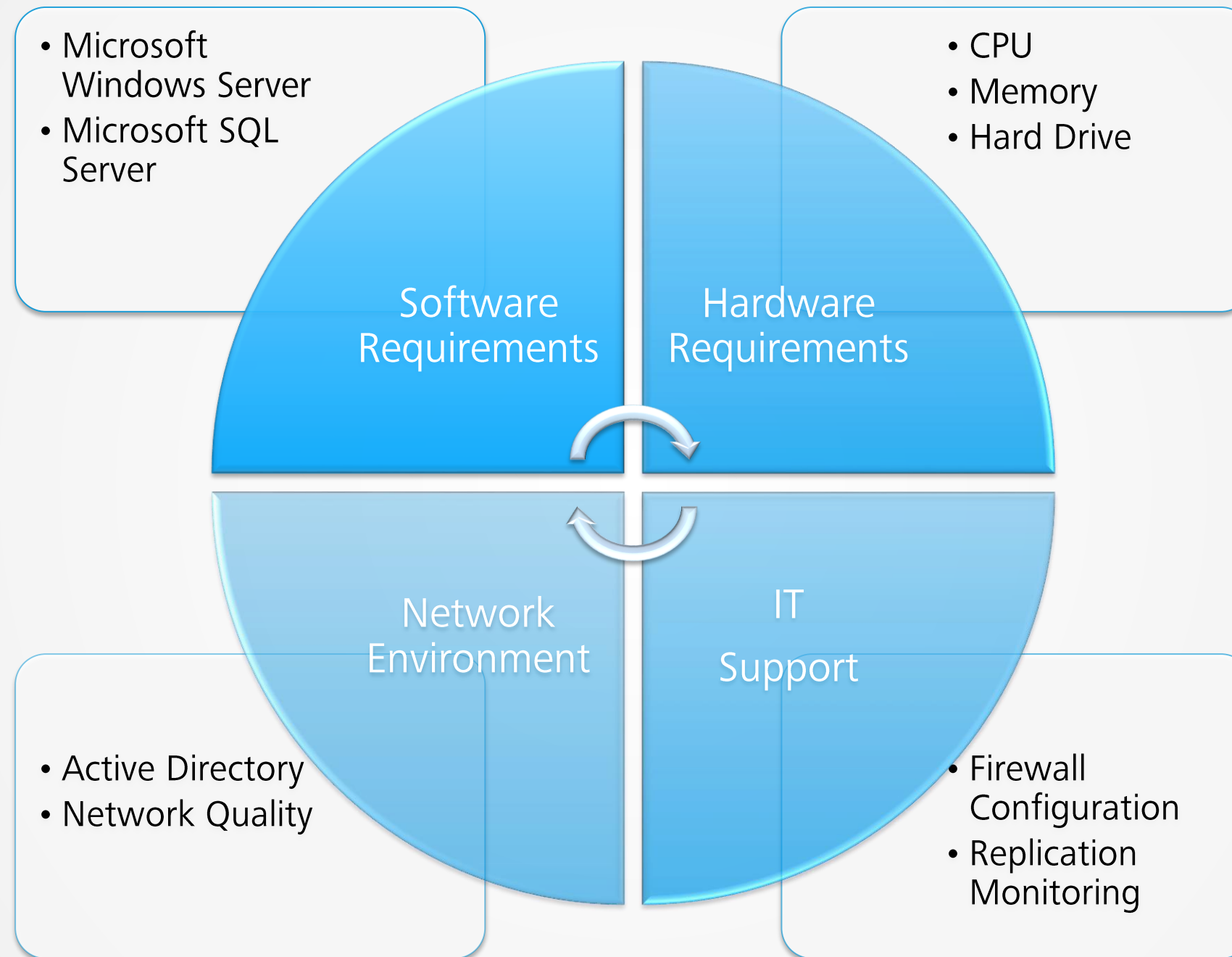
2013

...

 AUTODESK UNIVERSITY 2015

 AUTODESK®

Deployment Planning

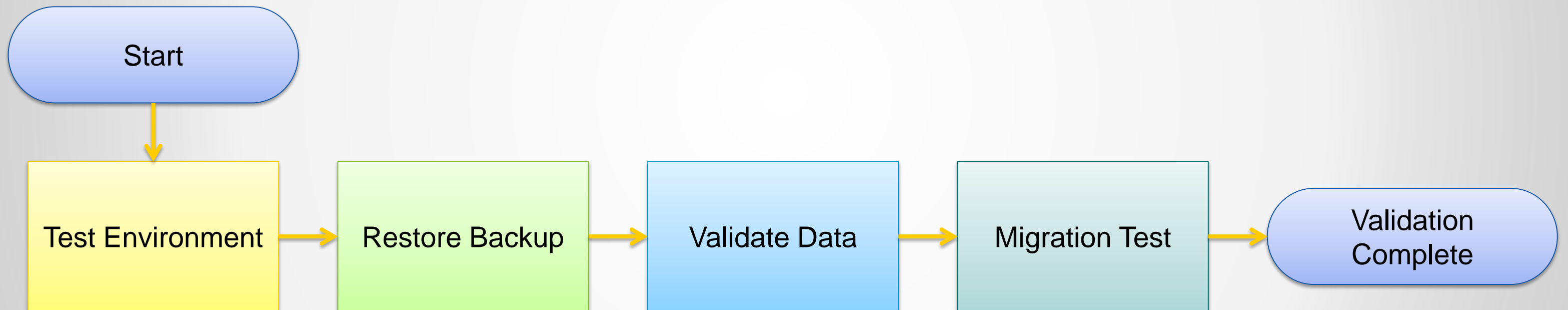


Process for Upgrading



Validate your process

- Very Important Stage
- Resolve problem before continuing



Test Environment

Test Environment

- Used to practice upgrade\migration
 - Upgrade timing
 - Migration timing
- Quality testing
 - Validate migration
 - Test new features
 - Test existing workflows

Test Environment

- Similar CPU, memory and disk space
- Operating system, service packs/updates & settings
- Same SQL Server edition & updates
- Other application

Migration and Upgrading

Upgrading SQL Server

- Migrate the AutodeskVault SQL instance
 - Follow process in the Advanced Configuration Guide
 - Update with latest supported hotfixes and service packs

Select the instance of SQL Server to upgrade. To upgrade only Management Tools and shared features, select "Upgrade shared features" and then click next.

Instance to upgrade:

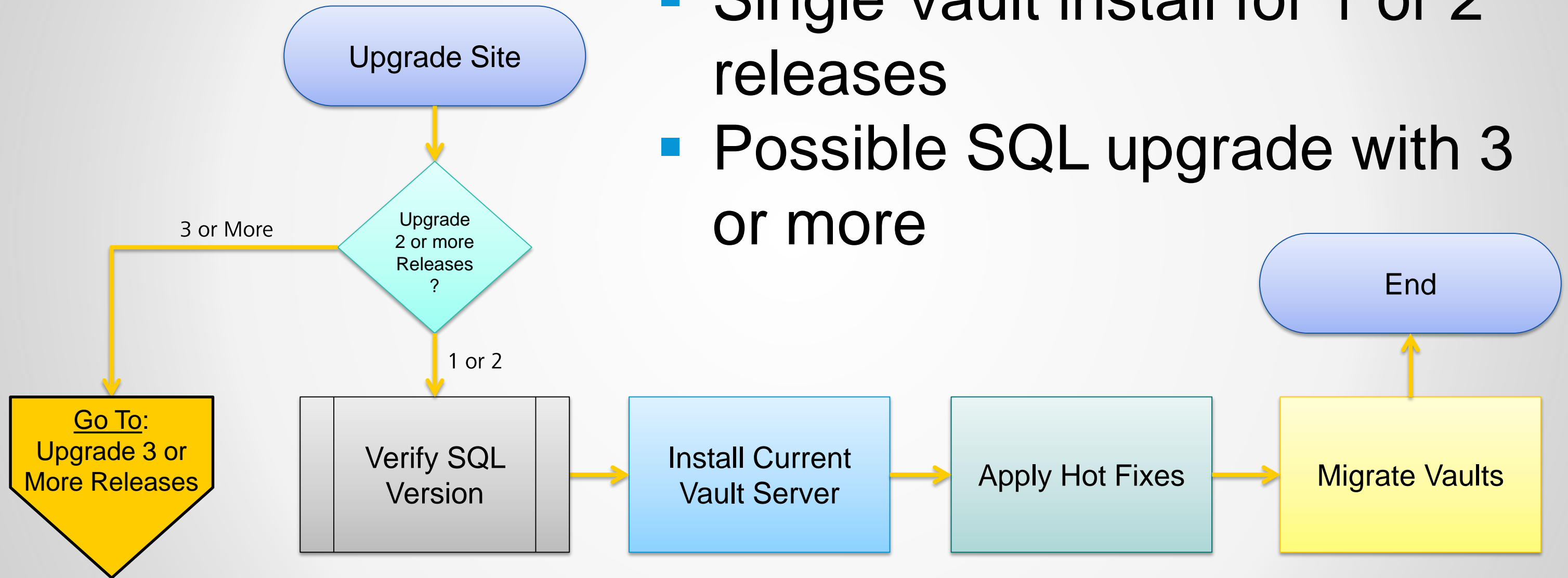
AUTODESKVAULT

Installed instances:

Instance Name	Instance ID	Features	Edition	Version
AUTODESKVAULT	MSSQL10.AUTODES...	SQLEngine	Express	10.2.4000.0

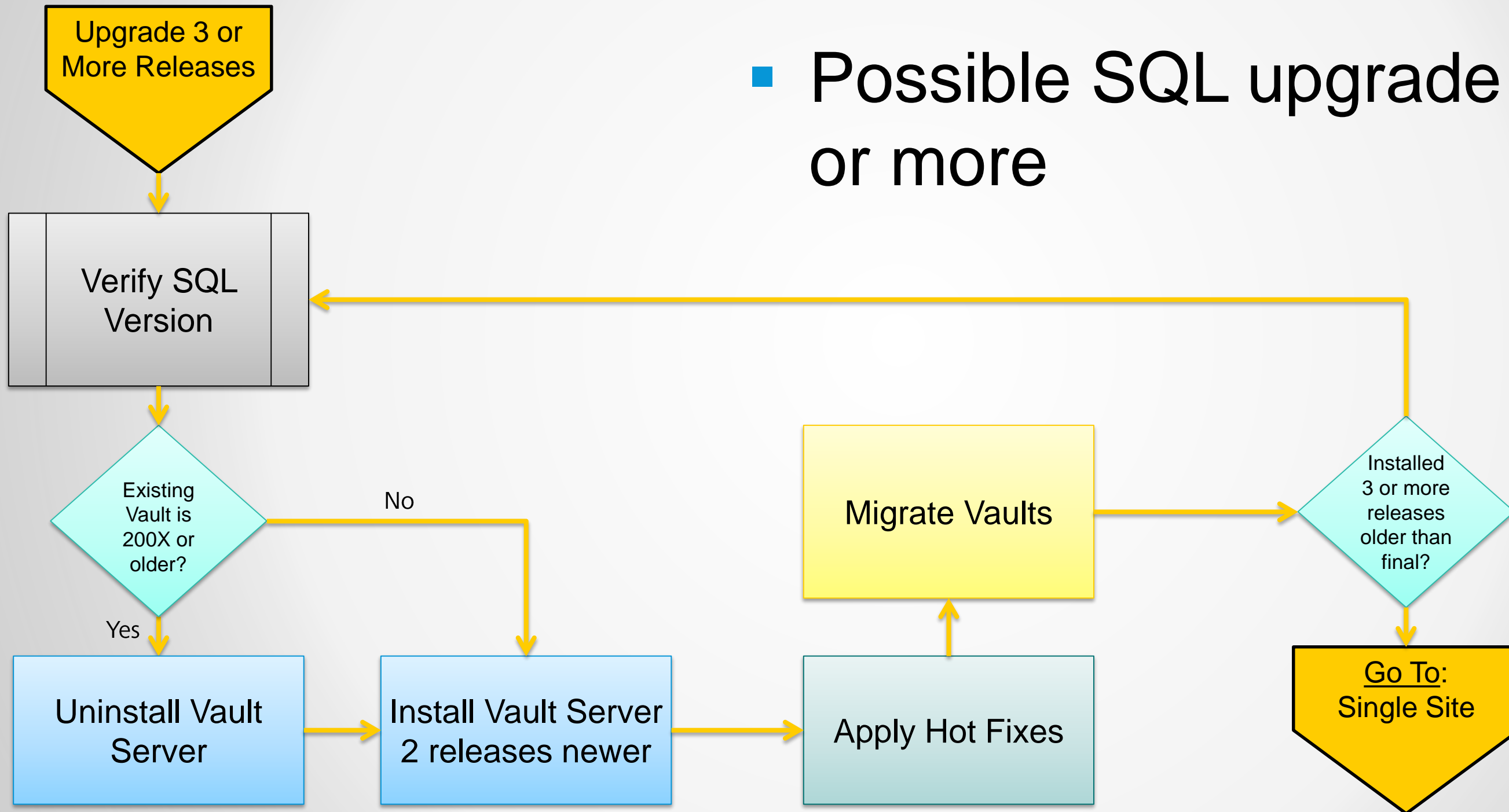
Vault Server

- Single Vault install for 1 or 2 releases
- Possible SQL upgrade with 3 or more



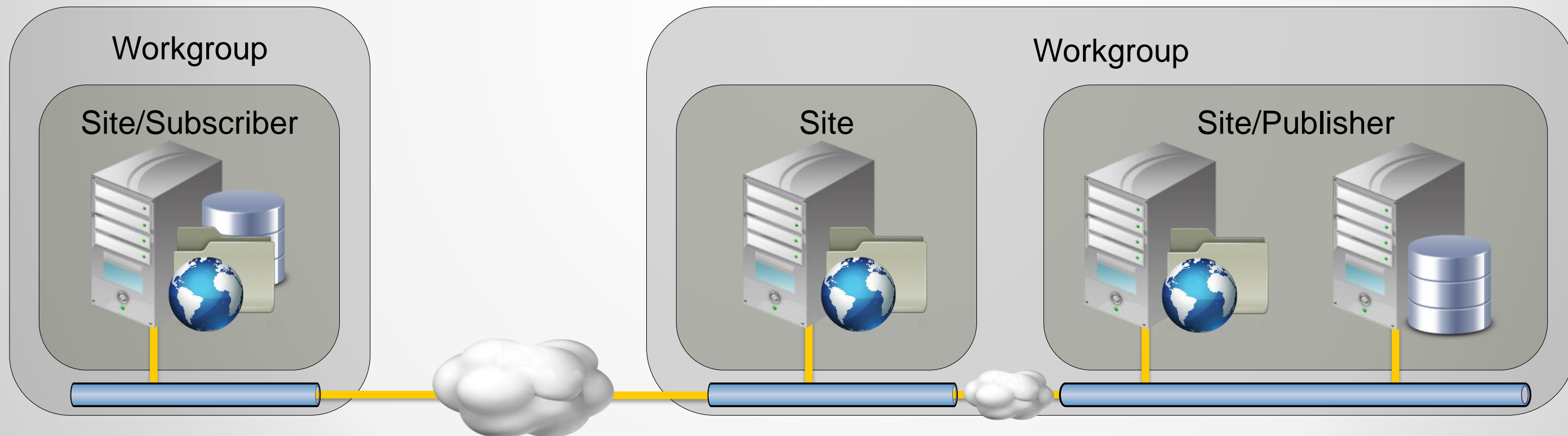
Vault Server

- Possible SQL upgrade with 3 or more



Upgrading Connected Workgroups

- All Subscribers must be online
- Publisher first
 - Site closest to SQL Server
- Other sites in any order



Migration Best Practice

Post Migration

- After the migration:
 - Run a SQL Maintenance Plan (Advanced Configuration Guide)
 - Run a backup
- Implement a weekly SQL Maintenance Plan
 - Reorganizes indexes, shrinks the database, etc.
- Implement a scripted backup (Advanced Configuration Guide, Implementation Guide)
 - Educate the customer on the importance of backing up using the ADMS Console vs. SQL Backup tools, copying directly, etc.

Migration Best Practice

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- PL5843-P: Vault GPS: Make All the Right Turns During Your Vault Upgrade
- PL5839-P: Don't Flirt with Disaster: Create a Vault Recovery Plan
- PL4700-V: The Nuts and Bolts of Autodesk® Vault Replication Setup

