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TRAINING + TECHNOLOGY
CONFERENCE

OCTOBER 2-3
MILWAUKEE, WI

Troubleshooting Basics For SOLIDWORKS PDM

Max Kent, PDM Applications Engineer, GSC

SOLIDWORKS PDM Is Like A Car

# SOLIDWORKS PDM Standard Components

- SolidNetWork License (SNL) Manager

- Database Server

- Archive Server

- Microsoft SQL Express

- File Explorer Clients

SOLIDWORKS PDM Professional Components

- SNL Manager

- Database Server

- Archive Server

- Microsoft SQL Standard or Enterprise

- Web and/or Web2 Server with Internet Information Services (IIS)

- File Explorer and/or Web Browser Clients

SolidNetWork License (SNL) Manager

- Responsible for hosting PDM client licensing

- Clients communicate with SNL over port 25734
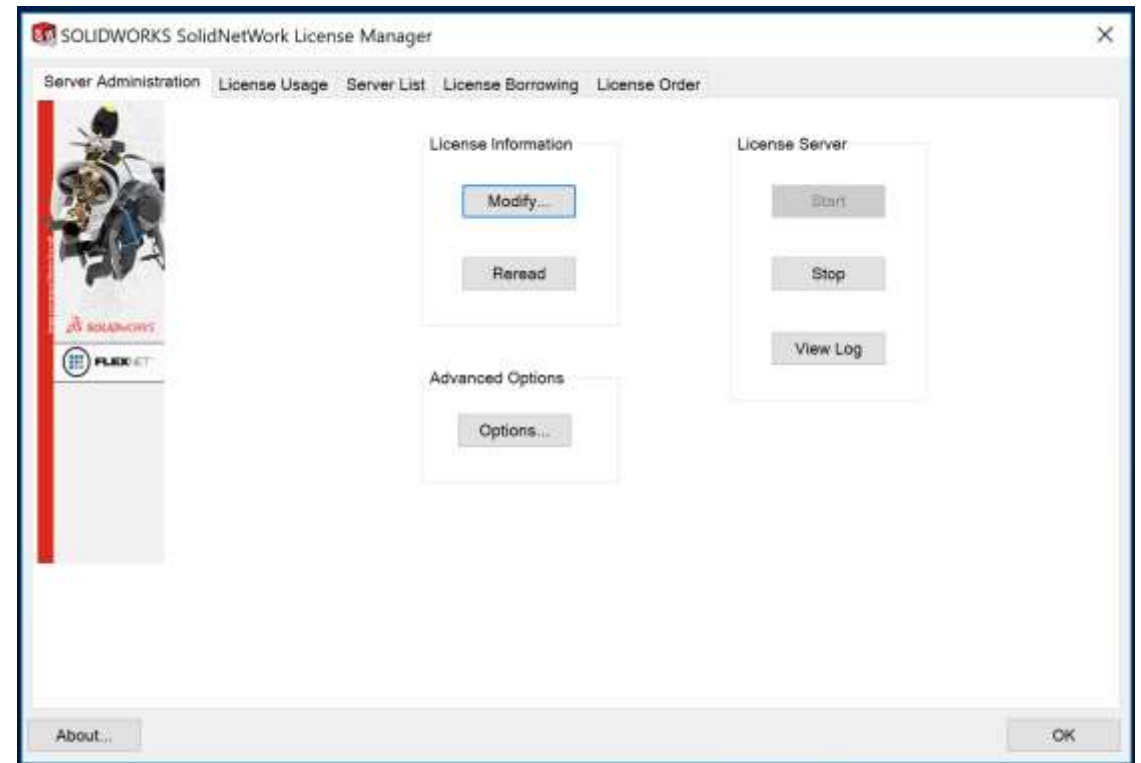
Database Server

- Two components tied together – database server service and SQL
- Service polls SQL database frequently
- SQL database hosts vault metadata
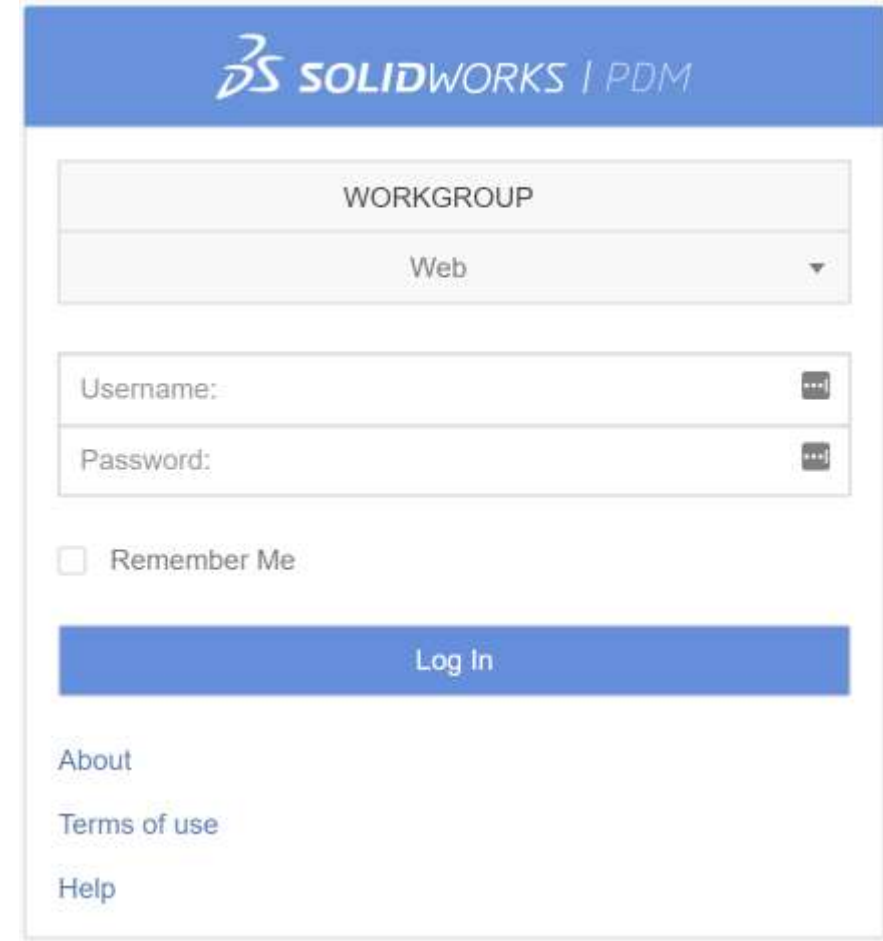- ConisioMasterDb hosts licensing information
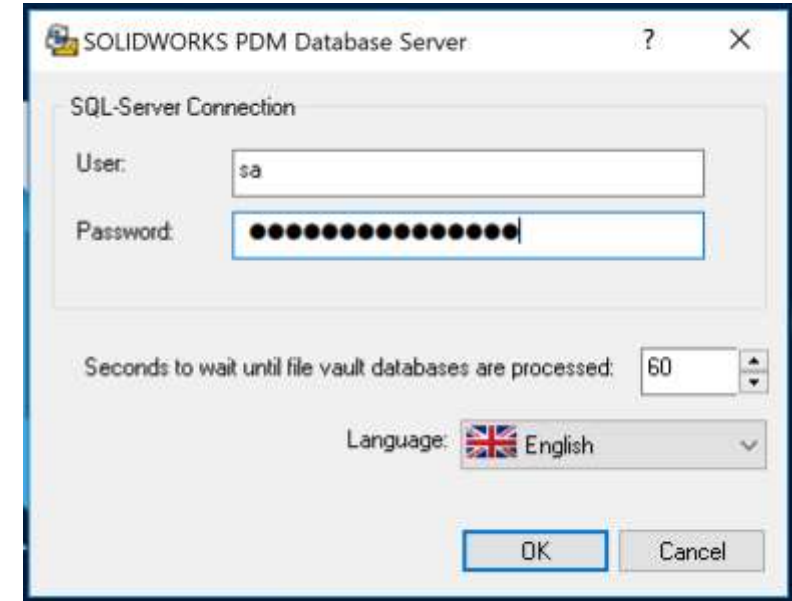
Archive Server

- Client logins
- Replication tasks
- Cold Storage
- Cleaner service
- Compression
- Hexadecimal
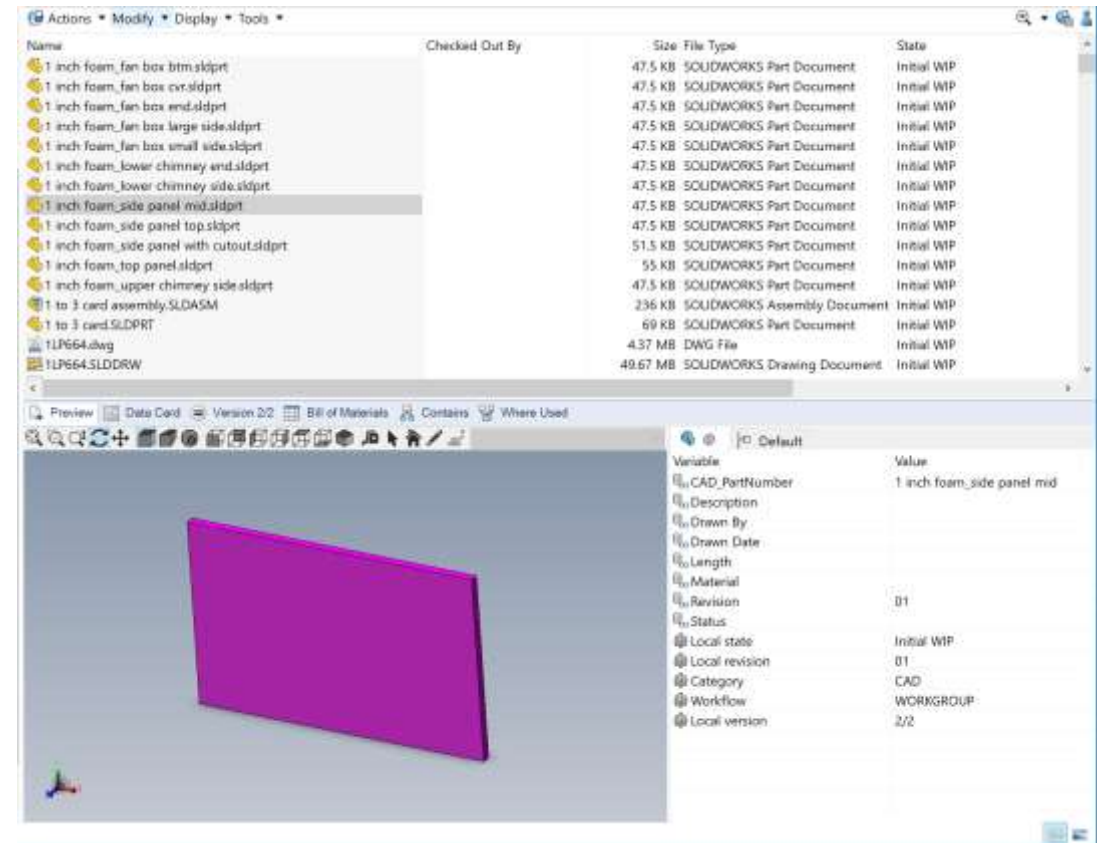- Index XML files
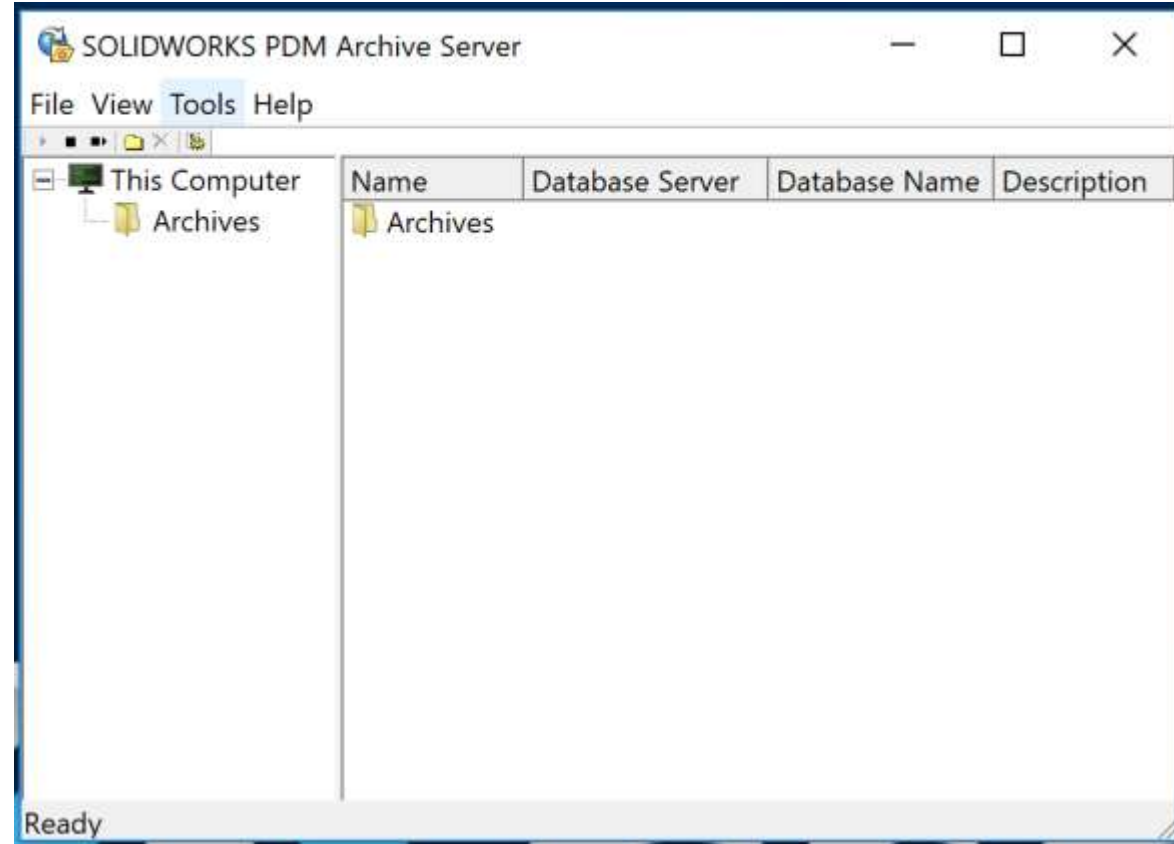
Web and Web2 Server

- Internet Information Services (IIS)
- Web2 Application

File Explorer Client

- Windows OS

- CAD add-in's

- Microsoft Office add-in's

- Vault is accessed locally via vault view in File Explorer

Web Browser Client

- Requires supported web browser such as Google Chrome, Apple Safari, Mozilla Firefox, Microsft Edge, etc

- Vault is accessed over web, files are downloaded locally to client
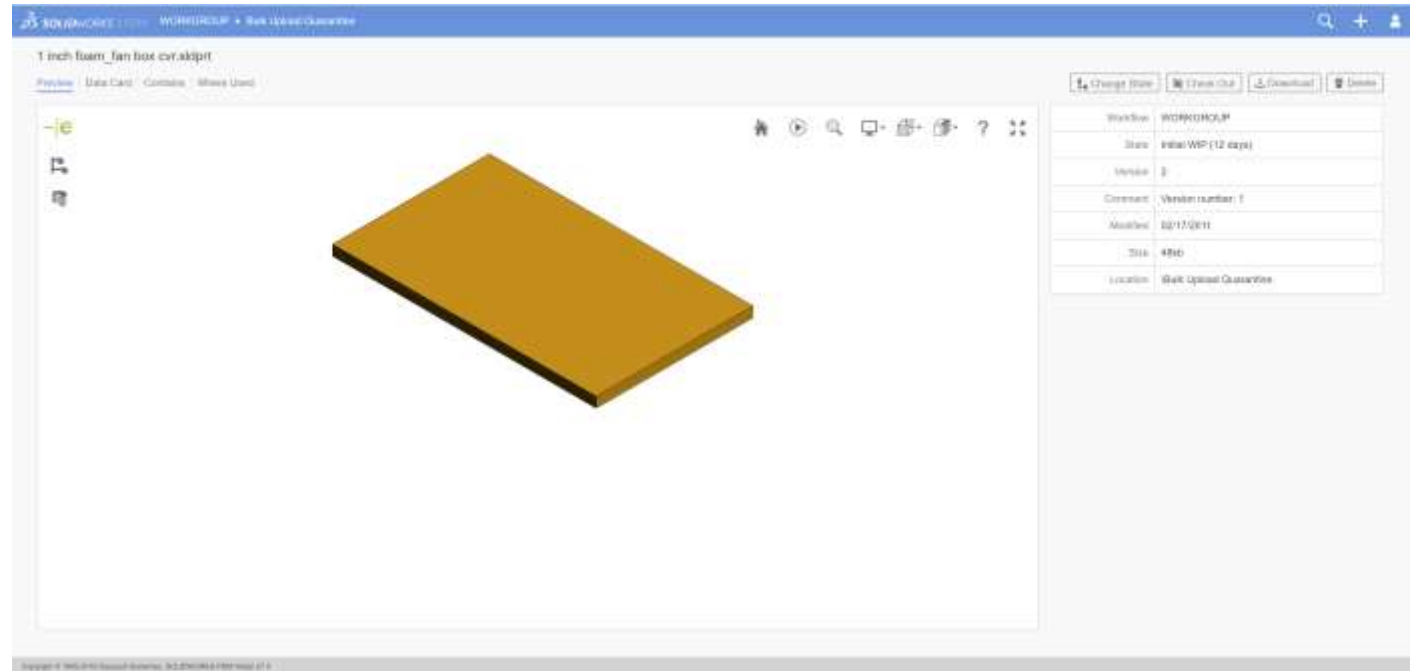
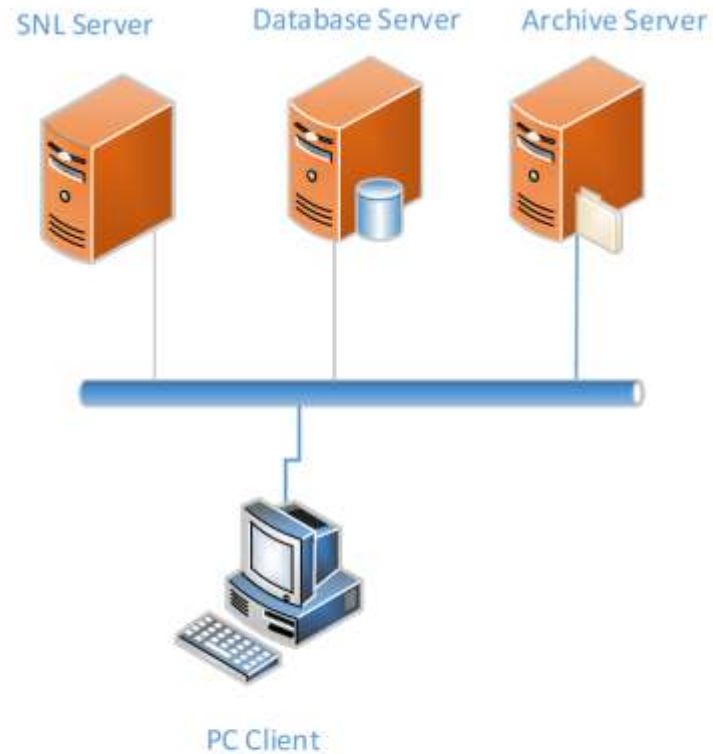# Basic SOLIDWORKS PDM Professional Setup

SNL Server   Database Server   Archive Server   Web Server

PC Client   CAD Client   Web Client
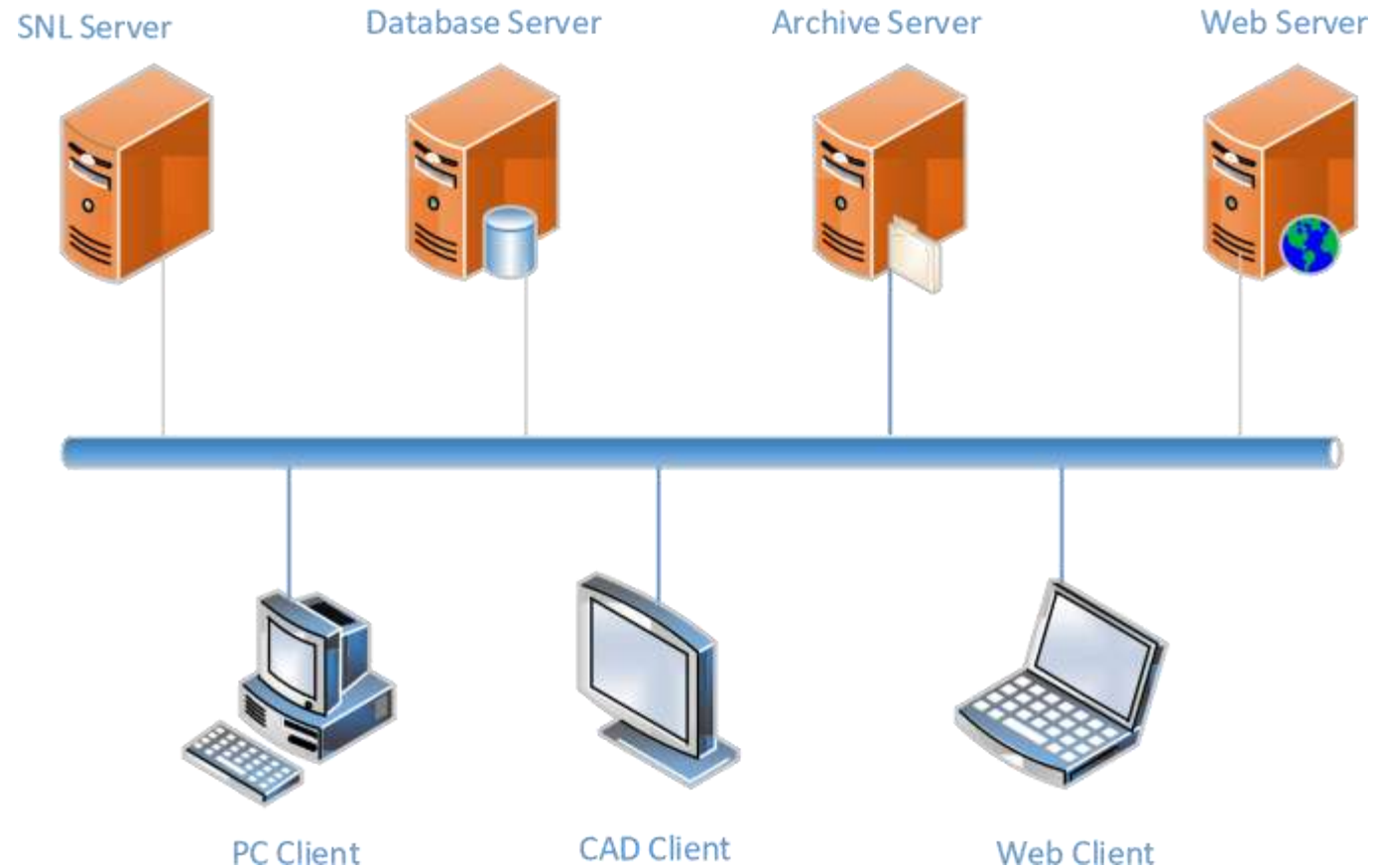
Getting Under The Hood

- Client Login
- Getting Files and Previews
- Add Files
- Check-in File
- Check-out File

Client Login

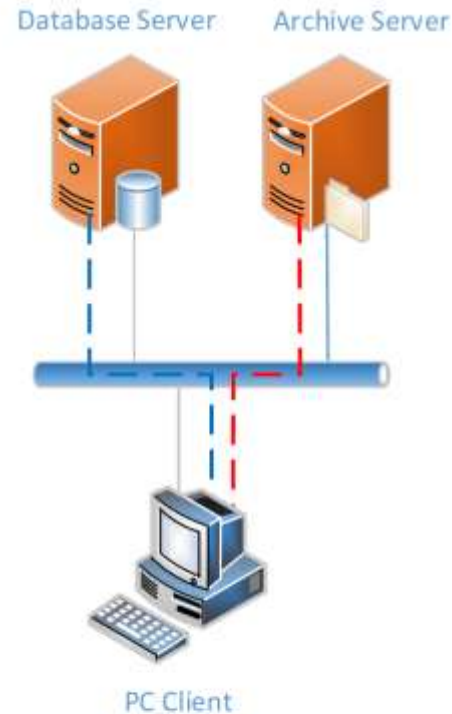| From	To	Description	Port
PC Client	Database Server	Metadata operations	1433
PC Client	Archive Server	Authentication	3030
PC Client	SNL Server	Obtain license	25734

Getting Files and Previews

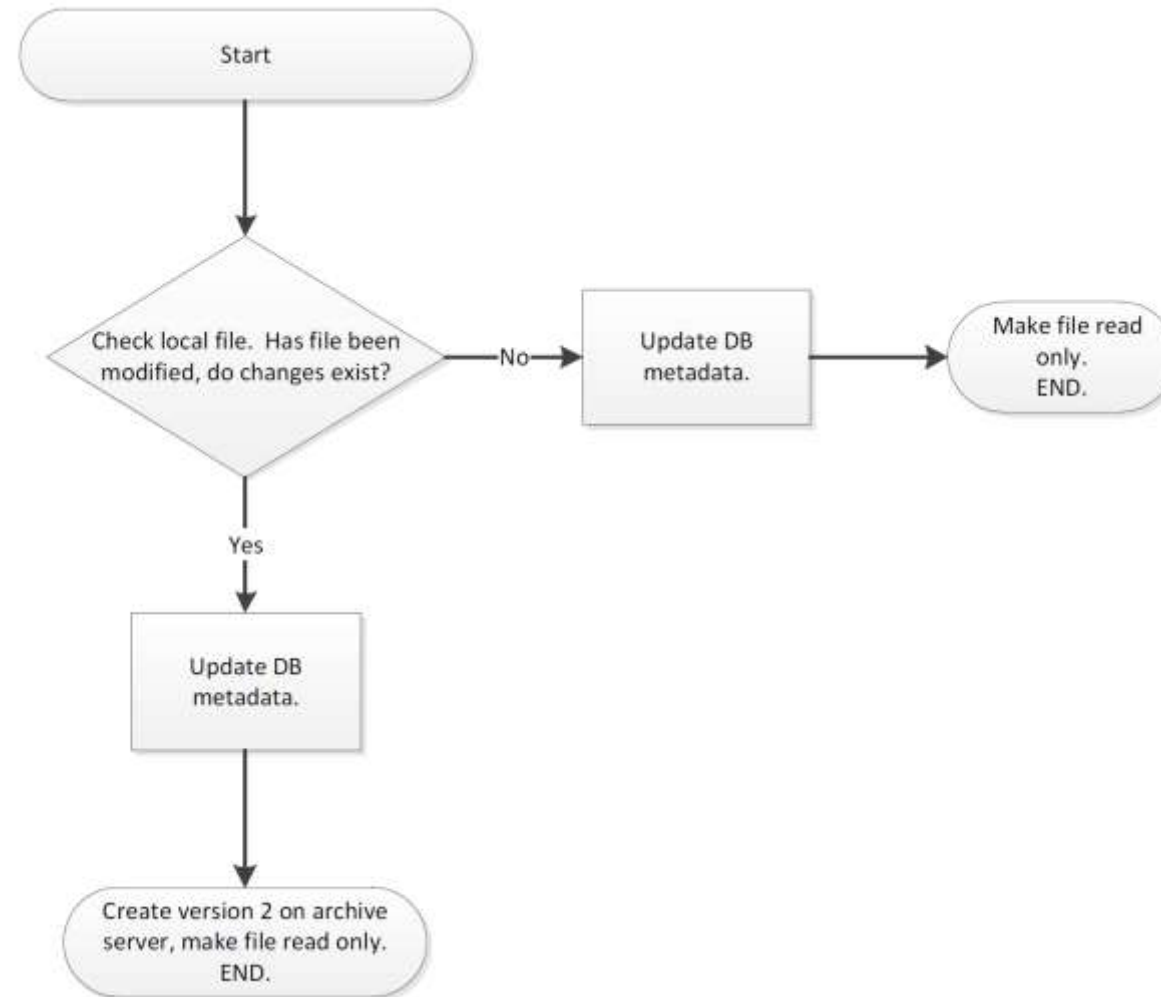| From	To	Description	Port
PC Client	Database Server	Metadata operations	1433
Database Server	PC Client	Provide DocumentID, UID and version	Random*
PC Client	Archive Server	Request file	3030
Archive Server	PC Client	Send file	Random*

* SQL and archive servers can use any port from 49152 to 65535 for outgoing communication to client.
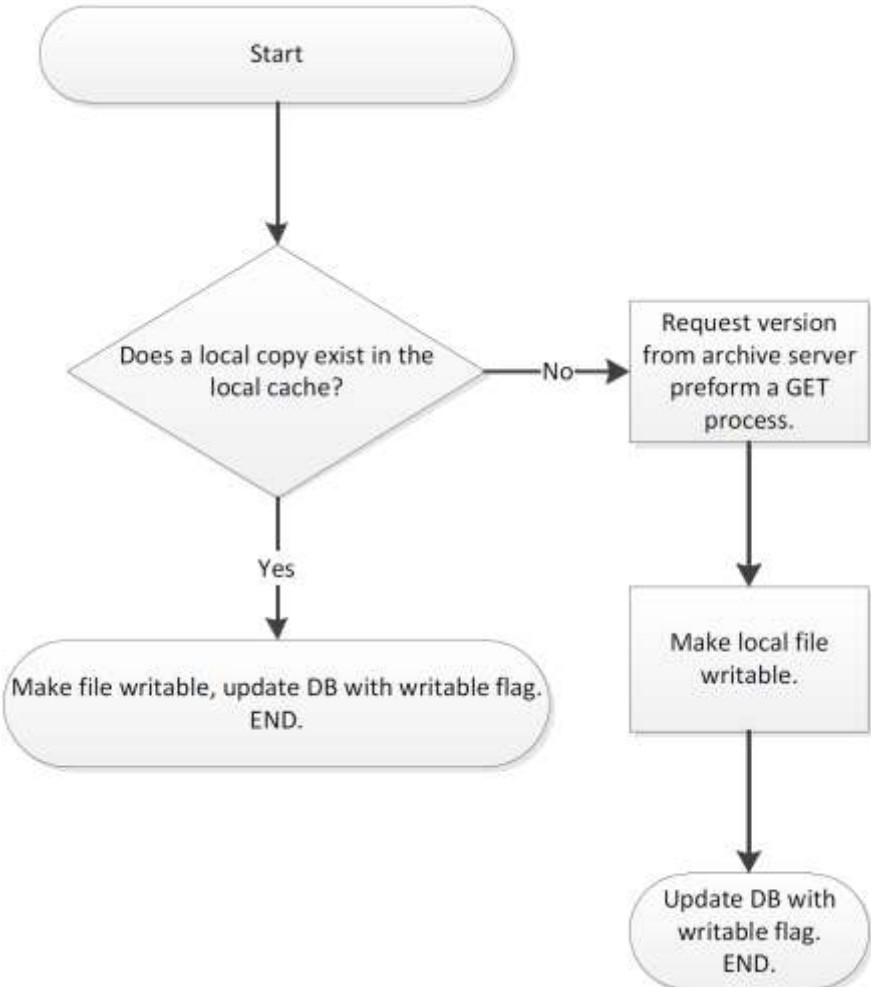
Add File
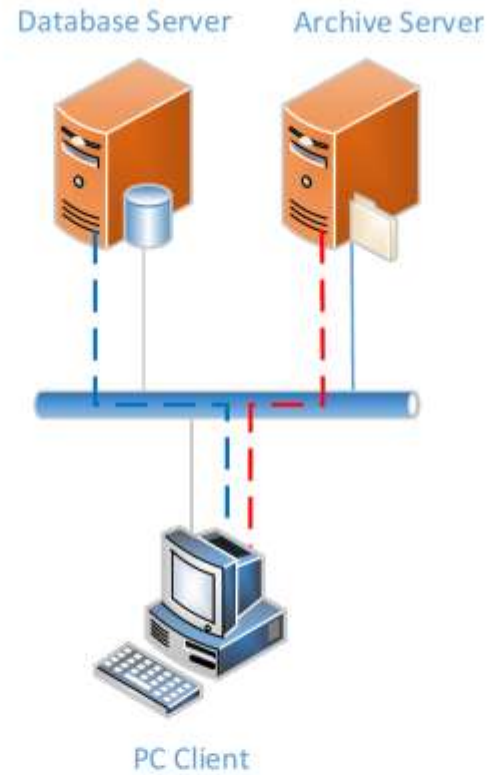
From	To	Description	Port
PC Client	PC Client	Add a file to the local cache.	N/A
PC Client	Archive Server	Add version 1 to the Archive Server.	3030
PC Client	Database Server	Update tables and add metadata.	1433

Check-in File

Start

Check local file. Has file been modified, do changes exist?

No → Update DB metadata. → Make file read only. END.

Yes

Update DB metadata.

Create version 2 on archive server, make file read only. END.
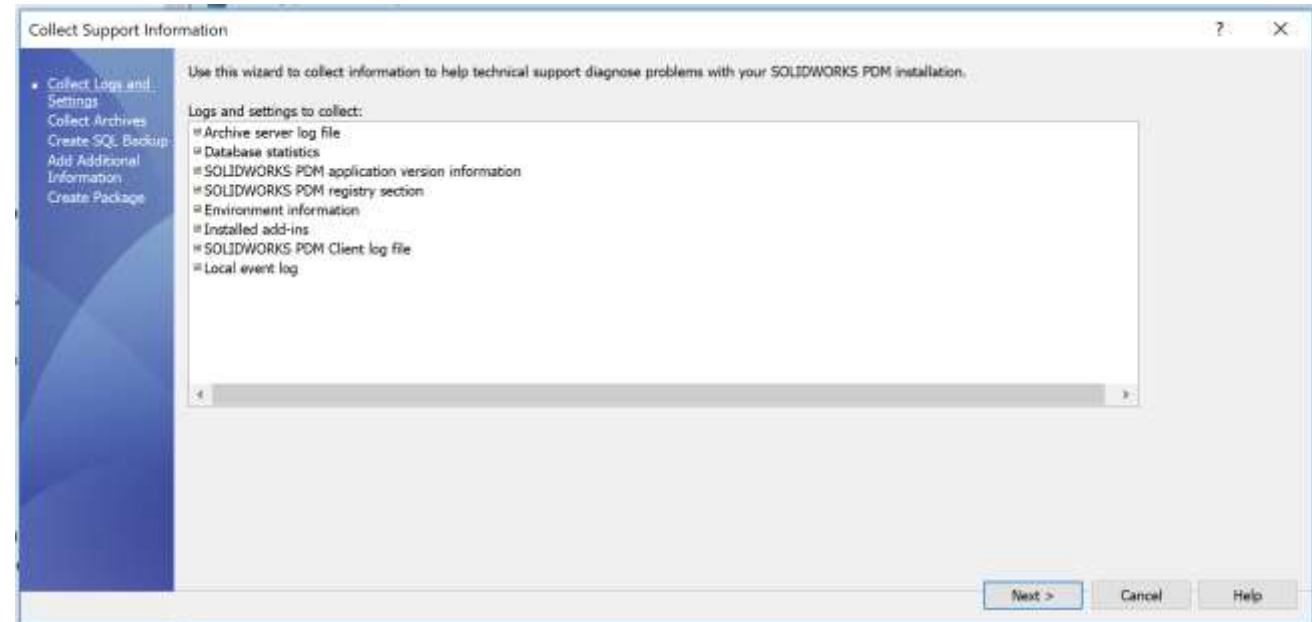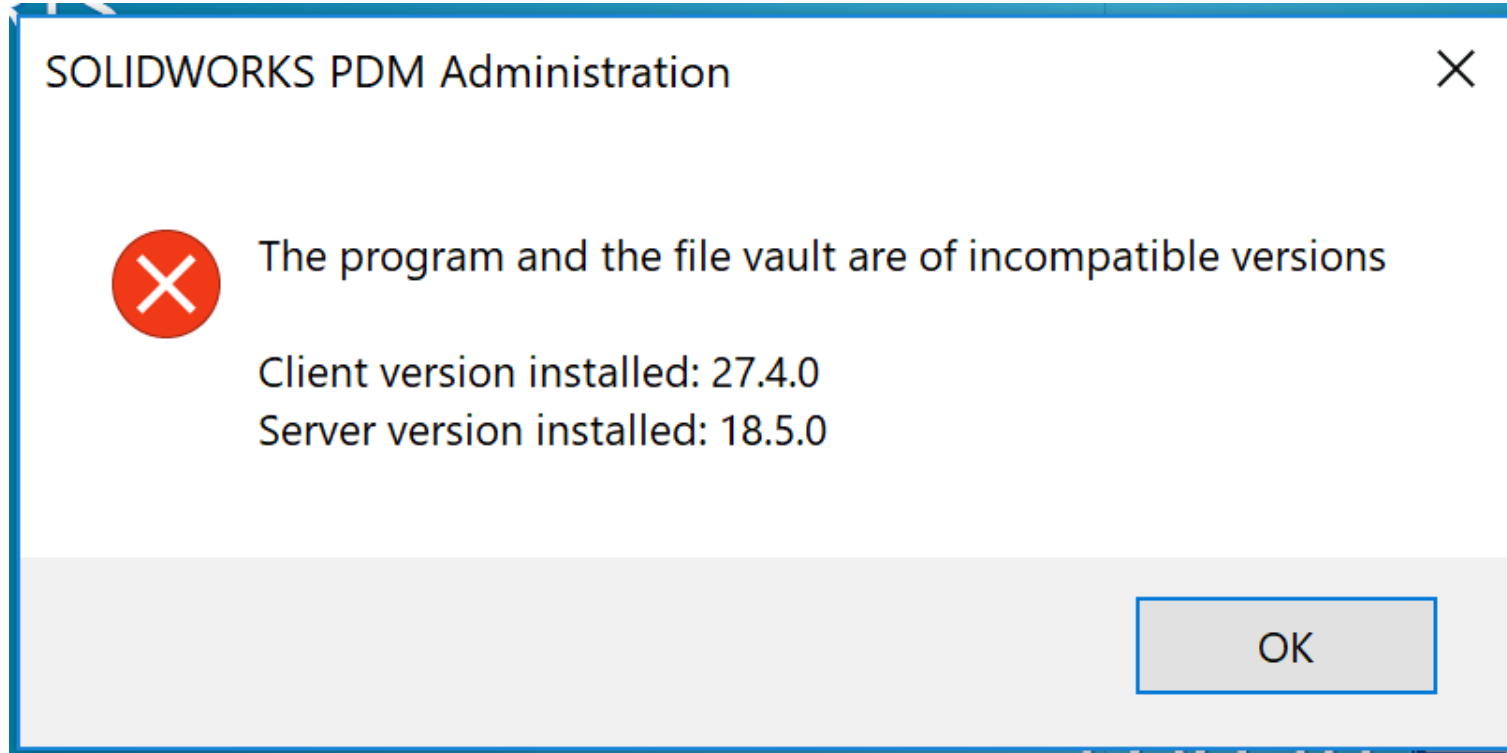
Check-out File

Troubleshooting - Logs

- S-070618 from the SOLIDWORKS Knowledge Base (KB)
- Archive Server
- Database Server
- Client
- Event Viewer Application Logs
- SQL Profile Traces

Troubleshooting – Support Tools

- PDM Connectivity Test Tool - S-069274

- Collect Support Information

- Archive Copy Tool - S-038121

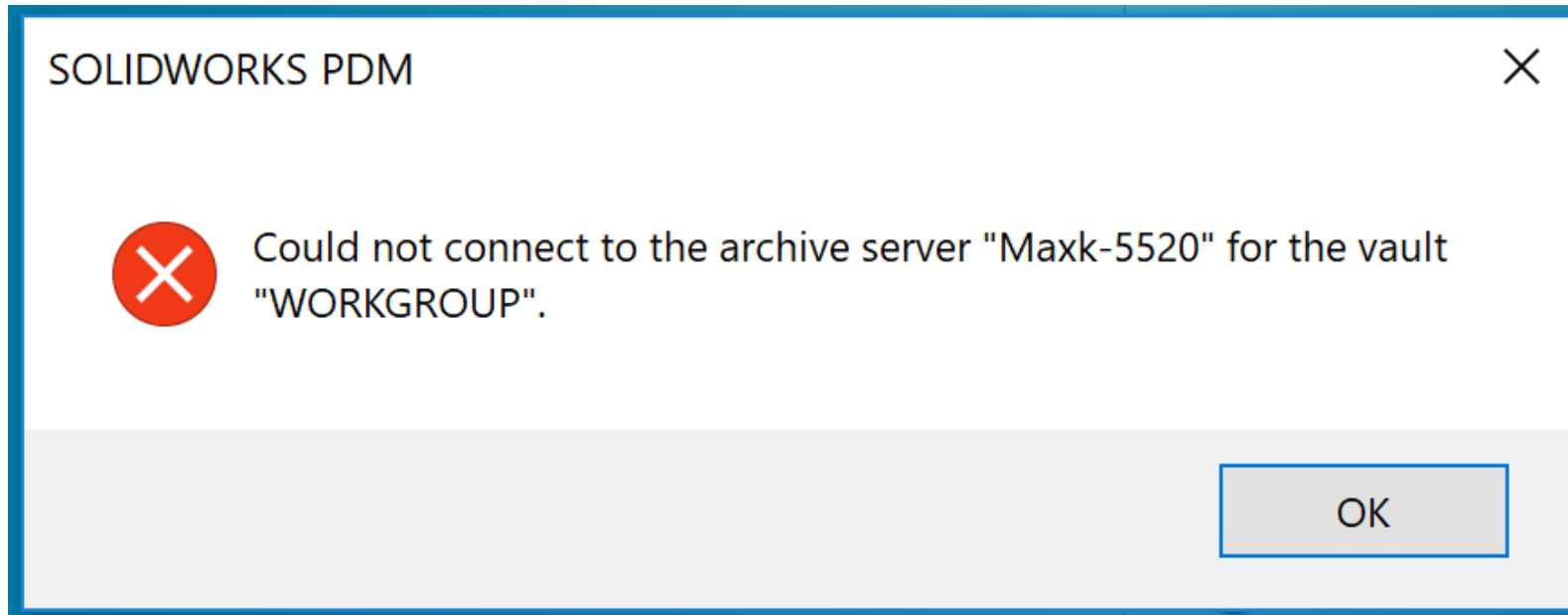- SOLIDWORKS PDM Help

Forgetting to Upgrade Database

SOLIDWORKS PDM Administration

The program and the file vault are of incompatible versions

Client version installed: 27.4.0
Server version installed: 18.5.0

OK

Forgetting to Upgrade Database

Documents > SOLIDWORKS Downloads > SOLIDWORKS 2019 SP04 > SWPDMServer > Upgrade

Name	Date modified	Type	Size
Unc_Ko.lan	8/16/2019 7:41 AM	LAN File	2 KB
Unc_pl.lan	8/16/2019 7:41 AM	LAN File	3 KB
Unc_Ptb.lan	8/16/2019 7:41 AM	LAN File	3 KB
Unc_Ru.lan	8/16/2019 7:41 AM	LAN File	2 KB
Unc_TR.lan	8/16/2019 7:41 AM	LAN File	2 KB
Unc_Zhs.lan	8/16/2019 7:41 AM	LAN File	2 KB
Unc_Zht.lan	8/16/2019 7:41 AM	LAN File	2 KB
Upgra_Cs.lan	8/16/2019 7:41 AM	LAN File	45 KB
Upgra_d.lan	8/16/2019 7:41 AM	LAN File	49 KB
Upgra_e.lan	8/16/2019 7:41 AM	LAN File	50 KB
Upgra_f.lan	8/16/2019 7:41 AM	LAN File	51 KB
Upgra_gb.lan	8/16/2019 7:41 AM	LAN File	44 KB
Upgra_i.lan	8/16/2019 7:41 AM	LAN File	47 KB
Upgra_j.lan	8/16/2019 7:41 AM	LAN File	35 KB
Upgra_Ko.lan	8/16/2019 7:41 AM	LAN File	32 KB
Upgra_PL.lan	8/16/2019 7:41 AM	LAN File	48 KB
Upgra_Ptb.lan	8/16/2019 7:41 AM	LAN File	49 KB
Upgra_Ru.lan	8/16/2019 7:41 AM	LAN File	47 KB
Upgra_TR.lan	8/16/2019 7:41 AM	LAN File	45 KB
Upgra_Zhs.lan	8/16/2019 7:41 AM	LAN File	27 KB
Upgra_Zht.lan	8/16/2019 7:41 AM	LAN File	28 KB
Upgrade.exe	8/16/2019 7:52 AM	Application	2,376 KB

Archive Server Service Shutdown

SOLIDWORKS PDM

Could not connect to the archive server "Maxk-5520" for the vault "WORKGROUP".
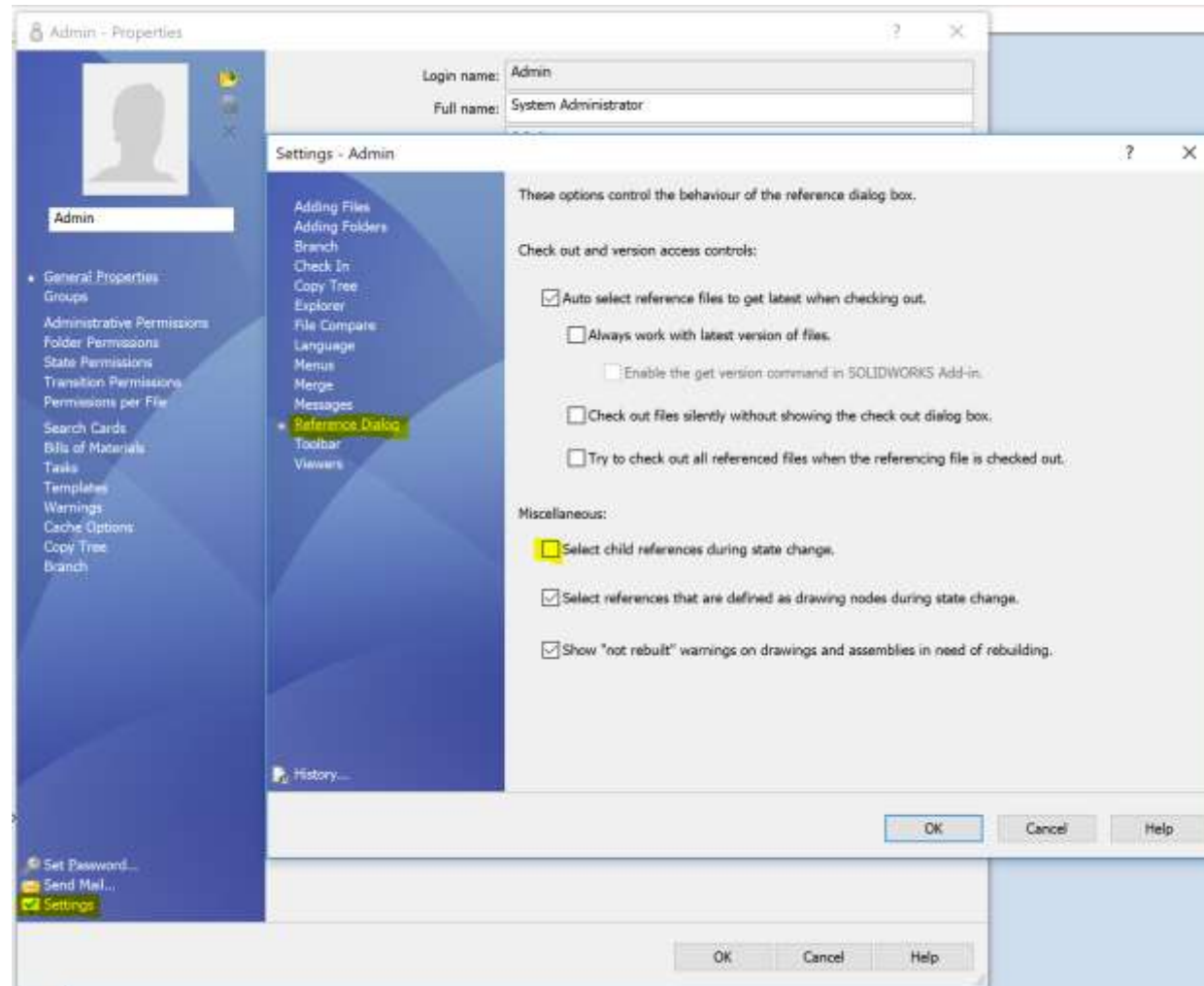
OK

Web2 Application Identity Post Upgrade

Database Server Service – Scheduled Events

- S-08226
- Scheduled Replication
- XML Import\Export
- Cold Storage
- Notifications
- SQL Generated Card Lists
- Restart ConisioDbServer.exe and check Local Event Viewer Application log where service is hosted
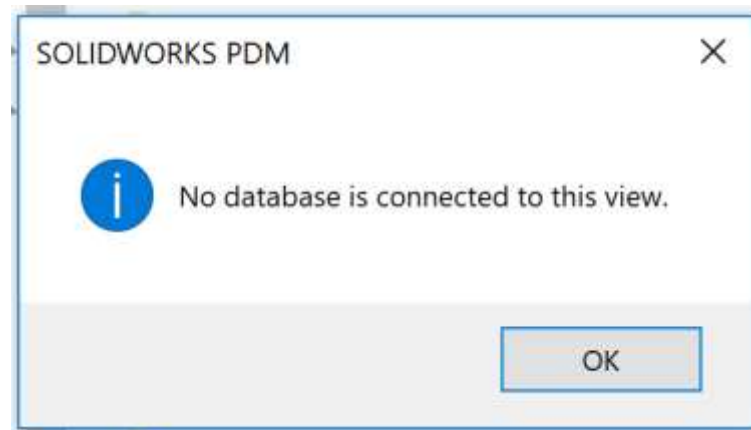
Local Read-Only Files
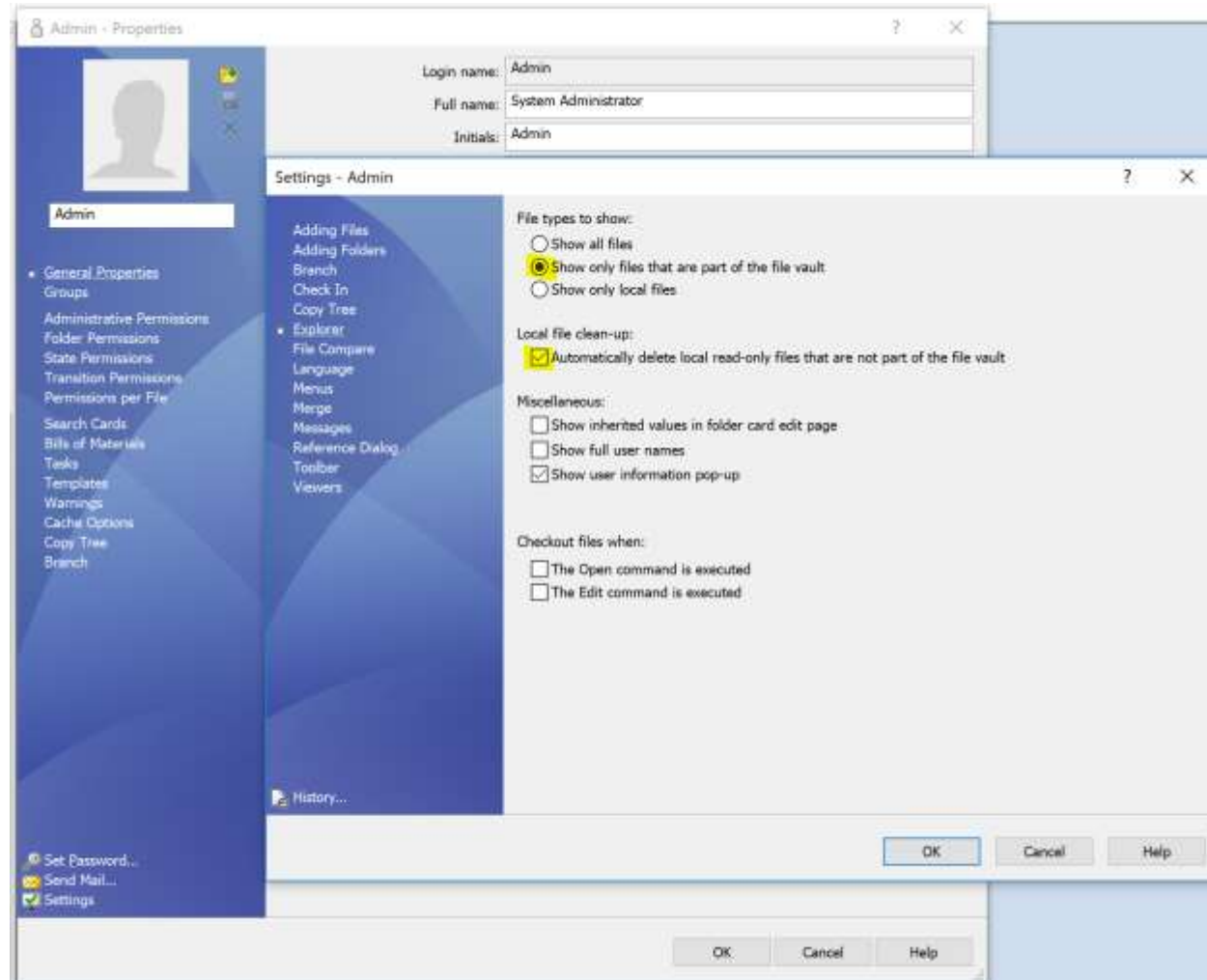
Change State and Children Selected

No Database Is Connected To This View

- S-020198
- Client Registry
- Undo Check Out
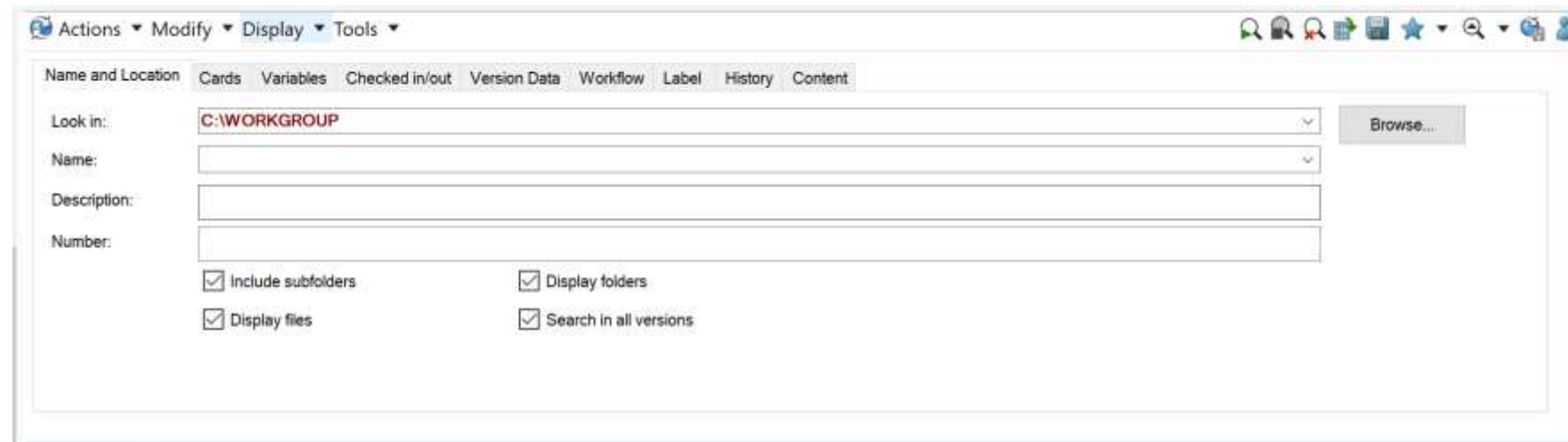
SQL - Enforce Password Policy

SQL – SA Password Change

- S-09681
- Password typically forgotten
- Archive Server Configuration
- Database Server Service
- SQL
- Card Lists (PDM Professional)
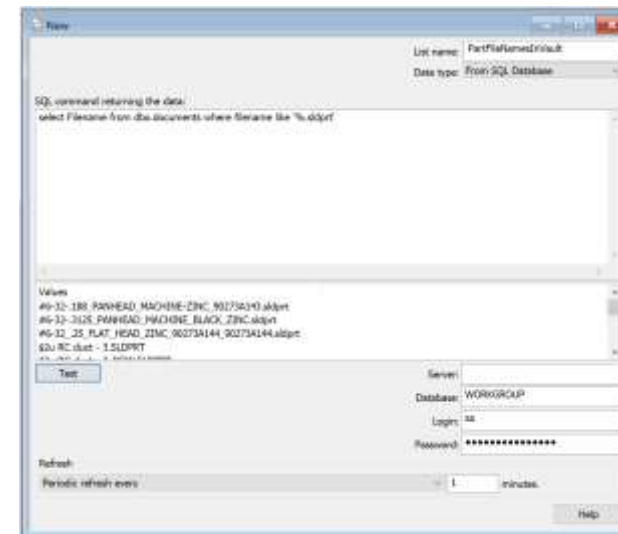
Searching Issues

- Search criteria
- Users\Groups
- Web case

Technical Support – Identify the Problem

- New files
- Migrated files
- Certain user and/or group
- Replicated site
- Specific operation

Technical Support – Submitting Web Case

- Local Event Viewer Application logs
- Client and/or archive server logs
- Specific archives to reproduce the issue
- Database backup from SQL
- SW Templates
- SW System Options
- Vault Export
- If reproducible issue, exact steps to reproduce the issue
- Severity level

Technical Support – Calling In

- Access to all server components and client components

- Local administrative rights

- PDM admin and SQL SA passwords

- What steps were already taken?

- Be as descriptive as possible

Questions