Preparing ABELDent & ABELMed Environments

Supported Platforms

- Servers
  - Windows Server 2012 / 2012 R2
  - Windows Server 2008 R2
  - Windows Server 2008

- Clients

  - Windows 10
  - Windows 8/8.1
  - Windows 7
  - Windows Vista

  * When replacing stations be cautious of 32-bit only applications like older imaging packages. Ensure compatibility first. We do not support any home editions of operating systems.

Database Engines

- SQL Server 2014
- SQL Server 2012
- SQL Server 2008 R2
- SQL Server 2008 *minimum version required for ABEL portal
- SQL Server 2005 (being phased out) – does not work with Portal

Note – Always check Microsoft Technet to ensure Operating System & Database Engine compatibility. We do NOT support SQL Express.

Firewalls

Common ports to keep open inbound to the server

- 1433/TCP – Microsoft SQL Server
- 1434/UDP – Microsoft SQL Server Browser Service
- 1504/TCP – ABELDent Portal
- 1506/TCP – ABELMed Portal
- 4403/TCP – ABEL Remote Backup
- 5093/UDP – SentinelLM Licensing Service (for ABEL licensing)

Security Overview

- Workgroup – great for small offices with few workstations

- Domain – better for larger deployments (e.g. 5+ workstations) or when users want their own accounts to work on multiple computers.

- Group policies very powerful in making changes across all computers or users at once, instead of on each machine individually (security settings, password policies, audit policies etc).

- Separate account for each user recommended – this will be becoming increasingly important. In upcoming versions prescriptions and other such functionality will only be granted to certain roles/users. Separate accounts are needed for proper audit trails as privacy laws and college oversite become more stringent.

Audit Trails

- Security becoming much more important on the dental side in recent years. Enabling audit trails through Group Policy is very effective for tracking user actions, coupled with the built-in auditing within ABELDent/ABELMed.

Specific Policies
- Audit account logon events enabled for success/failure
- Audit account management enabled for success/failure
- Audit logon events enabled for success/failure
- Audit object access enabled for success/failure
- Audit policy change enabled for success/failure

* See setup conventions document for details on these policies.

SQL Installation Common Problems

- Another Instance already exists from another application, commonly imaging software or server runs SBS.
  Solution: Manual Install – refer to documentation

- Requirements not met, Microsoft .NET 3.5 is a prerequisite. Solution: .NET can be installed in add roles/features Wizard.

- System requires a reboot (will be mentioned in failed install logs, log can be found at C:\Program Files\Microsoft SQL Server\#VERSIONNUMBER#\Setup Bootstrap\Log).

100 = SQL Server 2008 R2

110 = SQL Server 2012

120 = SQL Server 2014

ABELDent Installation & Migration

- Environment files (ENVIRON.INI)

SQLSERVER=C09999

CONNECTIONSTRING=Provider=sqloledb;Server=C09999;Database=abel;Trusted_Connection=yes

- SQL Server 2005 Backward Compatibility (Maintenance Plans), not installed when performing manual SQL install. The MSI file SQLServer2005_BC_x64.msi is included on SQL disc below folder Standard\x64 64bit backward compt.

Maintenance Plans

- Default folder for backups C:\ABELDent\DATA\Backup

- Maintenance plan utility used to modify times of backups and how often (1hr or 4hr)

- Ensure only 8 copies are kept, backups still current

- BAK vs TRN, simple recovery vs full recovery model

- Batch file to keep folder under control, typically used when maintenance plans are not automatically deleting old copies of the database:

```
forfiles -p "C:\ABELDent\data\backup" -s -m *.bak -d -8 -c "cmd /c del @path"
forfiles -p " C:\ABELDent\data\backup " -s -m *.trn -d -8 -c "cmd /c del @path"
```
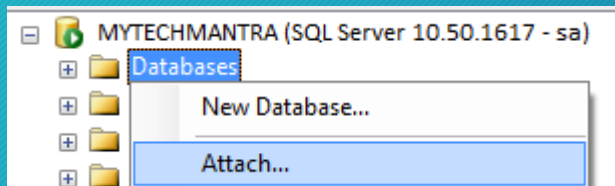
Moving databases to another drive

- Using SQL Server Management Studio, Right-click database, Tasks, Detatch.
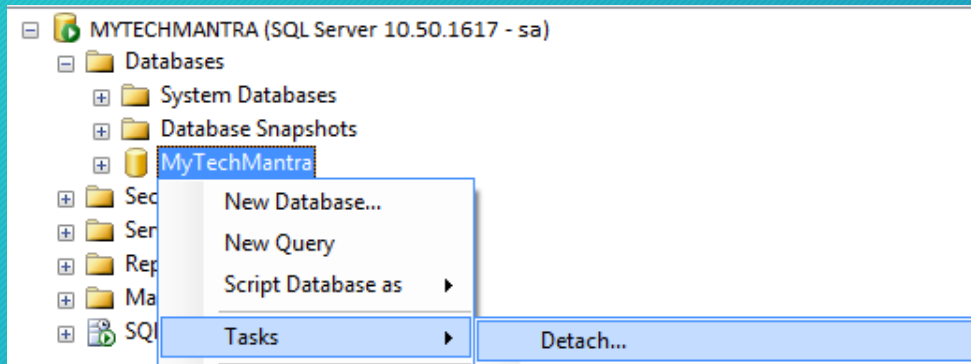
- Move Physical files.

- Right-click "databases" and select "Attach" to reattach, browse to file and confirm.

Backups

- Depending on the technology used for SQL backups, you may not want to backup the SQL *.BAK and *.TRN files (database dumps/transaction logs). You can then exclude the C:\ABELDent\Data\backup folder.

- Always ensure both the application folder, C:\ABELDent or C:\ABELMed for example, are backed up along with the SQL databases.

- ABEL recommends a minimum of 1 week retention for offsite backups (Internet-based or USB hard disk) – the more the better.

Backups continued…

- Sometimes human error isn't noticed for a number of weeks or months, the longer the retention schedule the better

- Grandfather, father, son is a good example of a backup retention schedule that allows a user to go back an entire month

Grandfather, Father, Son Backup

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 Father Backup	2 Son Backup	3 Son Backup	4 Son Backup	5 Son Backup	6
7	8 Father Backup	9 Son Backup	10 Son Backup	11 Son Backup	12 Son Backup	13
14	15 Father Backup	16 Son Backup	17 Son Backup	18 Son Backup	19 Son Backup	20
21	22 Father Backup	23 Son Backup	24 Son Backup	25 Son Backup	26 Son Backup	27
28	29 Father Backup	30 Son Backup	31 Son Backup	 Son Backup	 Grandfather Backup	

Scanning

- For customers using Terminal Services (more common in Medical) we have tested both RemoteScan and TSScan products.

- Both allow you to scan through a Terminal Services session directly into our program using a TWAIN-compatible scanner.

- ABEL only supports scanners compatible with the TWAIN standard. Scanners using proprietary drivers such as Fujitsu's ScanSnap Series are not supported.

Deployment Checklist

Continued in Word document...

Questions?