2017 User Conference

A Little Older, A Little Wiser

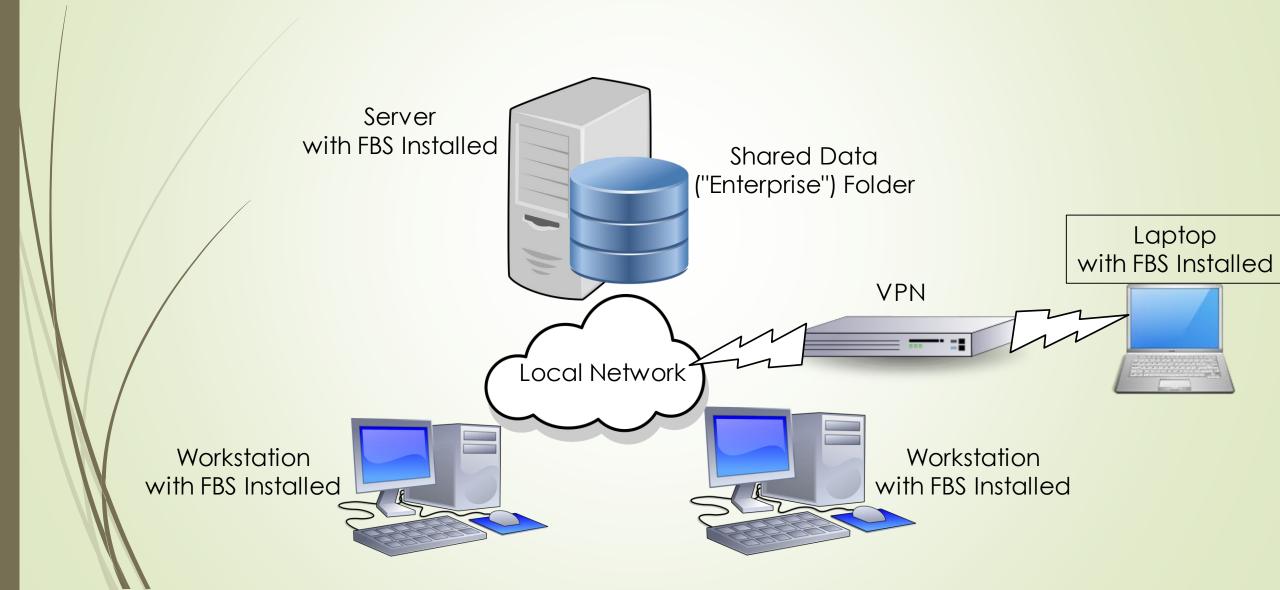
2017 New Features

- Veterinary Feed Directive (VFD)
- TransAction Plus Large Imports
 - Limit was 200 lines per transaction
 - ► For checks, new limit is 16K lines, automatically broken into multiple 200 line transactions
 - Uses Release 10.X (.Net) version instead of Release 8.x (VB6) version
- Scanner Support for Networked Scanners
 - Implemented on AgCompass
 - Part of Release 11.2 for other customers
- Reporting Performance
 - SmartFeeder Open Group Report
 - General 2X improvement
 - Additional 6X improvement for feed valuation from purchases
 - Release 11.2 will use the feed valuation improvement for all SmartFeeder reports

Operational Improvements

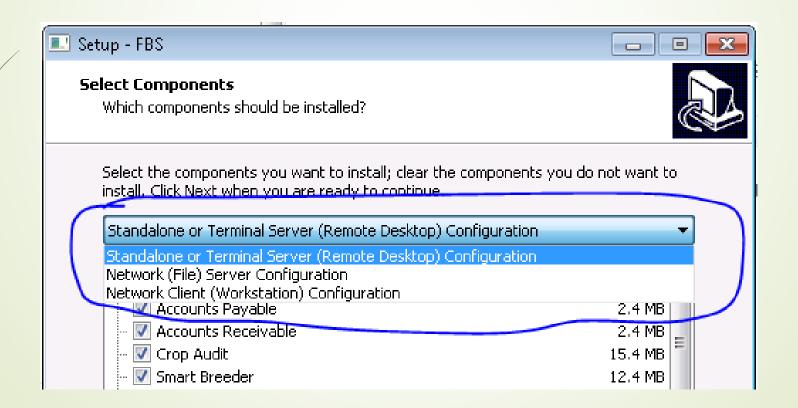
- Jet 4.0 Database Upgrade
 - If the conversion would run, it was successful
 - Several installations had a Windows issue which prevented them from upgrading
 - Resolved by applying Microsoft fix for Access (see https://support.microsoft.com/en-in/help/2019235/microsoft-office-access-error-in-loading-dll)
- Identified Microsoft's SMB 2.0/2.1/3.0 protocol as the source of strange file system behavior in Windows Server (see https://technet.microsoft.com/en-us/library/ff686200(v=ws.10).aspx)
 - Symptoms include: files disappearing, missing or delayed changes, and file corruption
 - A patch is available now for systems experiencing these problems and the patch will be included in Release 11.2
- Implement "Enterprise folder" configuration
 - ► FBS is now identified to Windows as a Vista/7/8.1/10 compatible application
 - ▶ Without this, in some cases, Users can only see a hidden, independent copy of a "shared" file
 - If C:\Users\<username>\AppData\Local\VirtualStore is not empty then this was happening to you
 - Implemented on AgCompass (delayed Release 11.1 implementation until it was added)
 - Starting with Release 11.2, new installations will use a separate "Enterprise folder" for data
 - Release 11.3 will support migrating existing installation's data to a separate "Enterprise folder"

Typical On-Site, 2 User Configuration



Release 11.2 Installation Options

- Standalone or Terminal Server (Remote Desktop) Configuration
- Network (File) Server Configuration
- Network Client (Workstation) Configuration



Drivers of Development Priorities

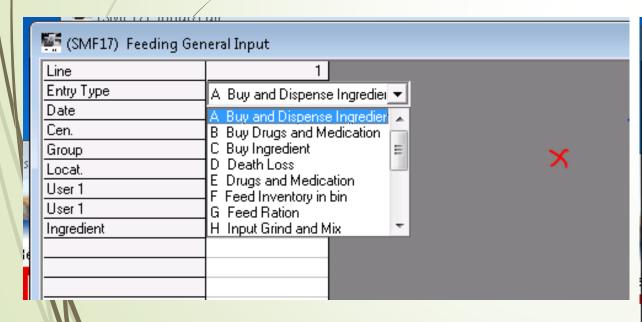
- Support resolving customer issues
- Sales many new features are a direct response to sales opportunities
- Customer Requests most new features are driven by customer needs for imports/exports, interfaces, reports, etc.
- Product Development some features address new opportunities in the market
- Maintenance modifications to support changes in Windows, changes in other third-party software, changes in existing interfaces, etc.

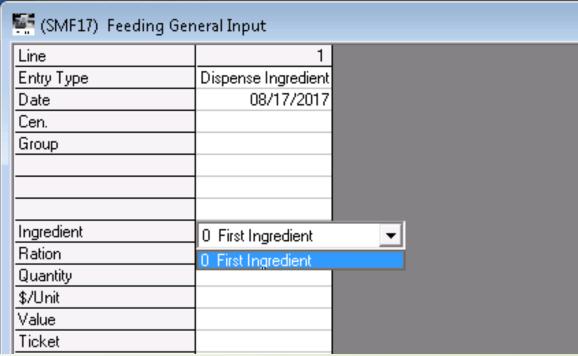
Current Development Priorities

- Server Stability (SMB Patch)
- Reporting Performance
 - Valuation from purchases
 - Date cash exchanged
- Importing from Newer Versions of Excel
- Web Dashboards
- Automatic Updates
- Move Setup Files into Access Databases
 - Simplifies reporting (and, with SQL Server, improves performance)
 - Potential sales opportunity for customer with a database only hosting need
- "Mouse Friendly" User Interface (Martin's pet peeve)

Martin's Pet Peeve

- ► FBS User Interface will continue to support efficient data entry from keyboard or keypad
- ► FBS UI will stop moving the focus away from where you click with the mouse!
- Clicking on the spot with the red X should dismiss the drop down without changing the selection; **not** select the drop down item and move the input focus to a different spot on the screen!





High Priority - Complete VB.Net Conversion

- Release 11.1 is composed primarily of Visual Basic 6 code from the 8.X series because the conversion to VB.Net in the 10.X series resulted in poor performance
 - On one benchmark the 10.X series is 3X slower than the 8.X series
 - Our new work on VB.Net is 2X faster than the 8.X series on the same benchmark
- Visual Basic 6 Ties Us to Jet 4.0 (database used in Access 2003)
 - VB.Net supports use of newer versions of Access or SQL Server
- Visual Basic 6 Ties Us to Old Versions of Excel
 - Microsoft supplies libraries for interfacing VB.Net to Excel 2007 and above
- Visual Basic 6 Limits the Improvement of Reporting Performance
 - ► We have a much faster version of User Defined Report By Group, which reduces time by using more memory, but Visual Basic 6 is limited to approximately ½ GB of memory.
 - ► 64-bit VB.Net programs are only limited by the amount of memory installed in the PC.
 - The speed ups in the Open Group Report are based on "custom objects" which take more effort to implement in Visual Basic 6 due its 20 old year design and lack of object-oriented features.

The Plan

- Visual Basic 6 code will gradually be replaced with VB.Net code in releases and updates over the next two years
- Release 11.2 (October 2017)
 - Feed valuation performance improvement for all Smart Feeder reports
 - SMB patch applied on all workstation and server installations
 - VB.Net Version of FBS main menu (FBS.exe)
 - Improved error reporting and diagnosis
 - VB.Net Version of "Check for Updates"
 - Ability to add new files during an update
- 2018 Updates
 - Support for newer versions of Excel in TransAction Plus Import
 - VB.Net Crop Audit reports

The Plan (continued)

- Release 11.3 (October 2018)
 - Migration of setup files into Jet 4.0 databases
 - Automatic updates
 - Support for conversion of existing installations to split program/data folders ("Enterprise" folder)
- Release 11.4 (October 2019)
 - Windows 7 or Windows Server 2008 R2 minimum
 - 100% 32-bit VB.Net
 - "Powered by Microsoft Office Access" 2010
- Release 12.1 (May 2020) limited to Windows versions on mainstream support
 - Windows 10 or Windows Server 2016 minimum
 - 100% 64-bit VB.Net
 - SQL Server 2016 Container