Federal Deposit Insurance Corporation

The table below identifies major changes incorporated into this document.

Date	Version	Description
7/8/2015	1.0	Initial Draft Version
7/13/2015	1.1	Added: KB3026376 requirement
7/20/2015	1.2	Removed KB2974335/6 since the new KB3026376 rollup has that specific patch included Minor details added to SQL Server, SQL CE, Crystal Reports and installation of ETS.
8/10/2015	1.3	Added: Appendix B – Laptop and Infrastructure Configuration of Port :5555
9/8/2015	1.4	Purpose: Updating to accommodate state users Updated links for SQL 2012 Added: full hard drive encryption and antivirus, state local firewall configurations,
9/17/2015	1.5	Reformatting and consolidating documents.
9/28/2015	1.6	Added Appendix D – renamed old Appendix D to Appendix E
3/4/2016	2.0	Modified installation checklist to include all ETS applications Updated formatting & Fixed dead links Added Table of Contents Reordered & consolidated appendices – Added ETS-ALERT/SQL 2012 workaround (new Appendix D)

9/8/2017	3.0	Updated ETS Prerequisites
		   1) Updated .NET Framework (4.5.2 → 4.5.2+)
		   2) Upgraded Crystal Reports (Service Pack 10 → Service Pack 18)
		   3) Removed all SQL 2008 references. Full migration to SQL Server 2012 (no backward compatibility needed due to ETS-ALERT retirement)
		Appendixes removed

6/25/2018	4.0	Updated ETS Prerequisites
		   1) Updated .NET Framework (4.5.2+ → 4.6.2+)
		   2) (Temporary) 2008 SQL Server Native Client

2/25/2021	5.0	Updated ETS Prerequisites
		   1) Updated .NET Framework (4.6.2+ → 4.8)
		   2) Updated SQL Server (SP2 → SP4)
		   3) Added MS VC++ redistributable 2013 for **NEW* TXT Control Used in ETS v4.0

2/14/2022	6.0	Updated Prerequisites:
		   1) Updated SQL Server Compatibility Level (2012 → 2019)
		      a. Revised installation steps using Configuration.ini file
		   2) Added SQL Server Management Studio Requirement
		   3) Added MSDTC Requirement
		   4) New Appendix A for 3rd Party Security Software Configurations
		   5) Old Appendix A Renamed to Appendix B
		   6) Old Appendix B Renamed to Appendix C

Table of Contents

Downloads

All ETS machines **must** have the following services enabled/running:

Full Hard Drive Encryption	All machines must have full-hard drive encryption enabled using Bitlocker or similar Digital Loss Prevention (DLP) software (e.g. Check Point).
Antivirus	All machines must have antivirus software installed and running in "active scan" mode.
Microsoft Distributed Transaction Coordinator	The MSDTC coordinates transactions that span multiple resource managers, such as databases, message queues, and file systems. If this service is stopped, these transactions will fail. If this service is disabled, any services that explicitly depend on it will fail to start.

The table below lists ETS prerequisites in **optimal installation order** and provides download information.

Table 1: ETS Prerequisites

#	Item	Version / Notes	Where it can be found
1.0	.NET 4.6.2+	All versions of .NET (4.6.2 and higher) are currently supported. Most Windows 10 Images are currently built with .NET 4.8 Framework, therefore you **do not need to install** 4.6.2 The ETS Maintenance team recommends using Windows v1909, which is built with .NET 4.8 automatically installed. https://versionsof.net/framework/4.8/	.NET 4.8 Download Link (offline installer)
2.0	SAP Crystal Reports for Visual Studio 2010 – **SP18**	Service Pack 18 – 64 bit Please note: ETS is **NOT** compatible with versions higher than SP18.	CR SP18 Download Link
3.0	PDFNet 1.0	1.0 – Driver that assists the library used in converting files to PDF	PDFNet Download Link
4.0	Microsoft Visual C++ 2013 Redistributable Package	This library is required by TXControl, bundled with ETS client to incorporate MS Word-like features to the application. To use TX Text Control's XML features, the Microsoft XML parser must be installed in the Windows system directory. https://docs.textcontrol.com/textcontrol/wpf/article.wpf.requirements.htm	2013VC++ Download Link
5.0	SQL Server 2019 Express (RTM)	Microsoft SQL Server 2019 Express (RTM) – 15.0.2000.5 Hardware and Software Requirements for Installing SQL Server 2019 **As of release 2/14/22, ETS v4.3 is now compatible with all SQL versions **up to** SQL 2019. **SQL2012 End of Life Support Expires July 2022.** Please plan your upgrades accordingly** SQL Server Build Information: https://sqlserverbuilds.blogspot.com/	SQL Server 2019 Express (RTM) Download Link Make sure to download the **Express Advanced** (796 MB) version (x64) **SQLEXPRADV_x64_ENU.exe**

		==**Do not include product updates during installation**==	
6.0	Microsoft SQL Server Management Tools v18.9.2	Microsoft SQL Server Management Tools v 18.9.2 Version 18.9.2 was released July 15, 2021 Release Notes	SSMS 18.9.2 Download Link SSMS-Setup-ENU.exe
7.0	URL / ACL Script for Collaboration	The URLACL is a configuration setting that allows the ETS application to host a web service for local network data collaboration.	Apply configurations via ETSFREDDY: https://ets.fdic.gov/ets-freddy/ or See Appendix B

Preferred Installation Order for ALL ETS Applications

Follow these steps to install all ETS applications (ETS, ETS Help Files, ETS-FREDDY and ETS-Training) and their required prerequisites on a new laptop. Consult this guide for detailed installation instructions.

**Please contact the Examiner Help Desk at ehelp@fdic.gov or 1-877-334-2999, then option 2 for additional support **

1 – ETS-FREDDY

1. Install ETS-FREDDY *(Detailed instructions available at* https://ets.fdic.gov/ets-freddy/)
    i. This application will help guide you through the installation steps below.
    ii. Verify each prerequisite after installation.

2 – ETS

1. Install .NET Framework 4.6.2 (if applicable)
    i. RESTART
2. Install Crystal Reports (SP18)
    i. RESTART
3. Install PDFNet 1.0
4. Install VC++ 2013 Redistributable package
5. Install SQL Server 2019 (RTM)
    i. Verify there are no pending restarts on the computer before beginning
    ii. Set up ETS instance: **FDIC2008** (rename from default: SQLEXPRESS)
6. Install SQL Server Management Tools (SSMS v18)
    i. Run **config.sql** file
7. Configure 3rd Party Security Software (See Appendix A)
    i. Add ETS.exe and FDIC.gov as trusted sites
    ii. Add active scan exceptions for **C:\Users\%LocalUser%\AppData\Local\Apps\2.0** directory where ETS is installed under the local user profile
8. Configure URL/ACL (See Appendix B)
9. Apply Firewall Configurations (local **AND** enterprise-wide exceptions may be required) – *See Appendix C*
    i. Incoming TCP 5555 – peer-to-peer communications (exception required)
    ii. Incoming/Outgoing TCP 443 – Central Peer communications (usually open by default)

      iii.   Incoming UDP 3702 – SOAP WS_Discovery protocol (exception required)

      iv.   Outgoing UDP 3702 – SOAP WS_Discovery protocol (exception required)

10. Install ETS (https://ets.fdic.gov/ets/)

      i.   5% of installations *may* fail on first installation. If an error message appears:

- ▪ Verify prerequisites via ETS-FREDDY
- ▪ Delete ETS database from SQL Server Management Studio
- ▪ Uninstall/Reinstall ETS
- ▪ See ETS Common Errors and Solutions for additional troubleshooting information

11. Have examiner log into ETS to activate their ETS user profile:

      i.   Username

      ii.   Password

      iii.   PIN (hard token)

- • Soft-token: PIN number required to obtain OTP

      iv.   One-Time Password (OTP)

3 – ETS Help Files

1. Navigate to https://ets.fdic.gov/ets/

      i.   Click on "Download Help Files."

      ii.   Run the installation.

      iii.   Click Yes to begin download.

Prerequisite Installations Guide

The steps outlined below, while applicable to most windows configuration, may vary on each machine based on an organization's environment variables. An IT representative should install these prerequisites. These are not in any specific order and are just for reference. Please see Preferred Installation Order above.

** If you have questions, please contact the Examiner Help Desk at ehelp@fdic.gov or 1-877-334-2999. Use option 2. **

1 – .NET Framework 4.6.2+

You **do not** need to install .NET Framework if you are using Windows 10 (Version 1909 or higher)

The .NET Framework is a key component and should not be changed without implicit instructions.

      I.   Begin *installation* (copy files locally rather than running from a network drive)
      II.   Select '*I have read and accept the license terms'*, then Install.
      III.   Installation should be quick (no more than 5 minutes)
      IV.   Installation is complete.
      V.   Verify installation from ETS-FREDDY or Programs and Features.
      VI.   **RESTART** the PC.

2 – SAP Crystal Reports (64-bit – Service Pack 18)

      I.   Double-click to begin installation.
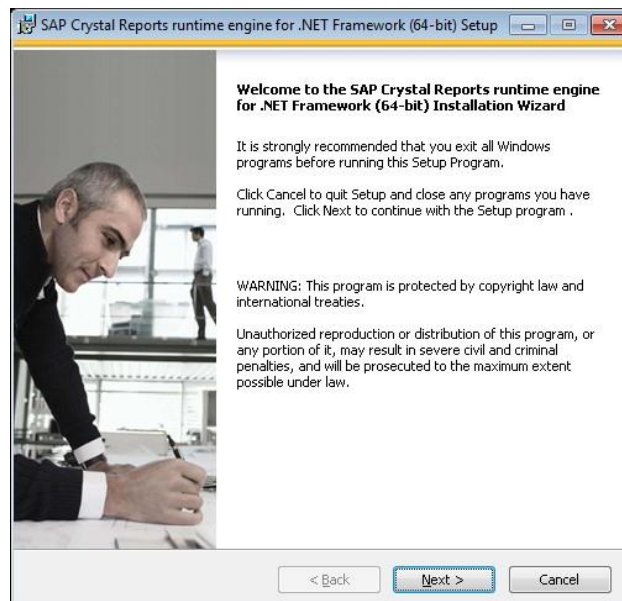

Figure 1: SAP Crystal Reports Installation Wizard
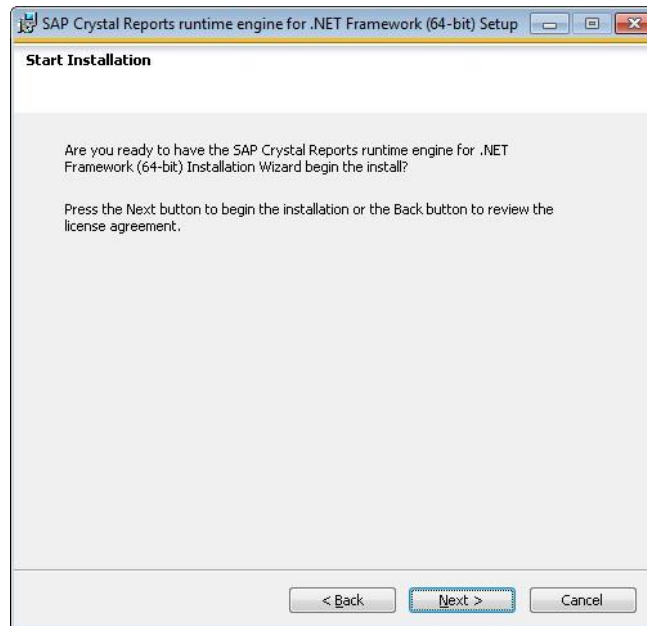
      II.   Click Next.

Figure 2: SAP Crystal Reports Installation

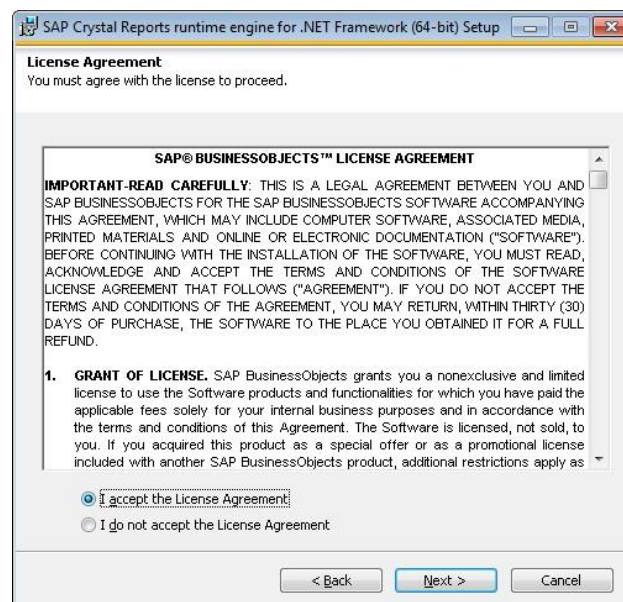III.   Select '*I* accept *the License Agreement'*, then Next.

Figure 3: SAP Crystal Reports License Agreement'

Figure 4: SAP Crystal Reports Installation Progress Bar
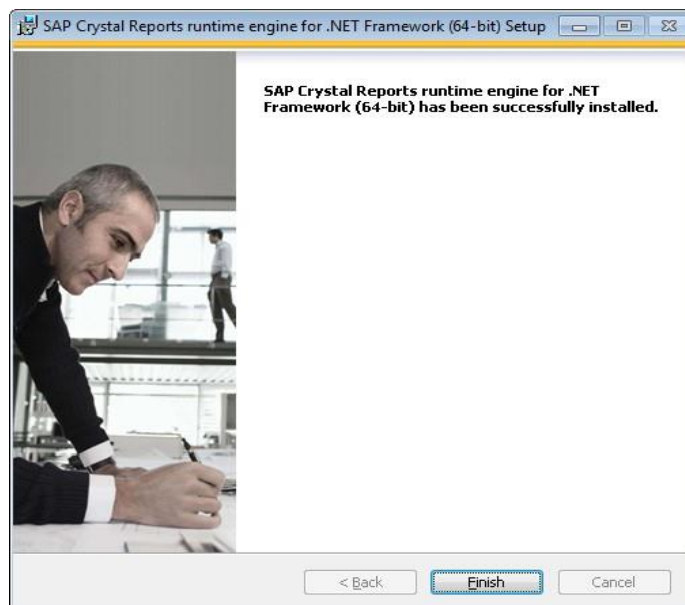
IV. Click Finish.

Figure 5: SAP Crystal Reports Installation Complete Confirmation

V. ****RESTART**** the PC.

3 – PDFNet Driver 1.0

PDFNet is a print driver that ETS uses to produce several reports.

I.   One way to install PDFNet is with ETS-FREDDY. While running as an administrator, navigate to the 'Tools' tab and select 'Install PDFNet 1.0.'
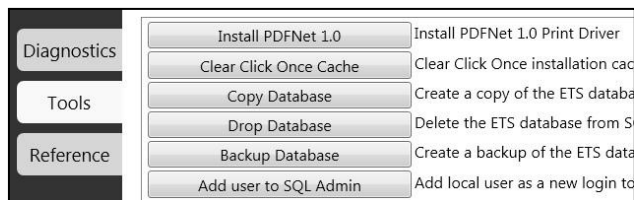
Figure 6 : ETS-FREDDY - Tools Tab

II.   Alternatively, download the PDFNet 1.0 Driver from http://pdftron.com/downloads/pdfnetDrivers.zip and begin installation.
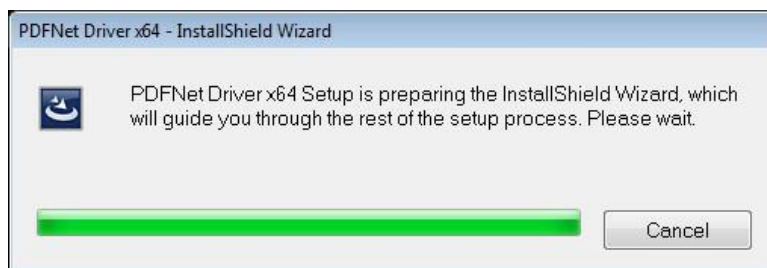
Figure 7: PDFNet 1.0 Driver Install Shield Wizard

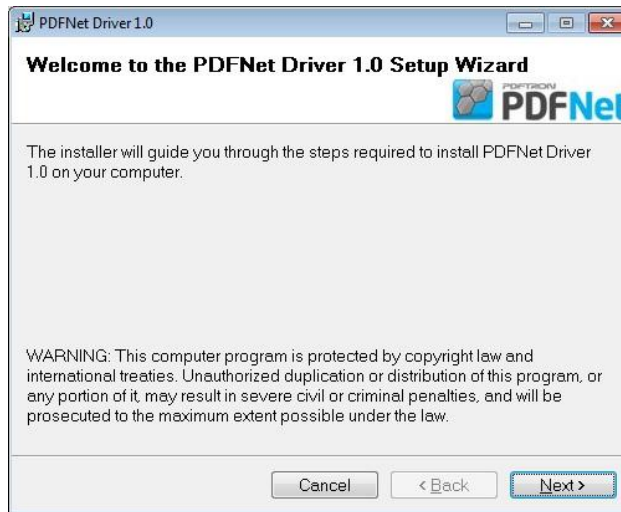III.   Follow the installation wizard:

Figure 8: PDFNet 1.0 Driver Wizard

IV.   Keep this file location, click Next.
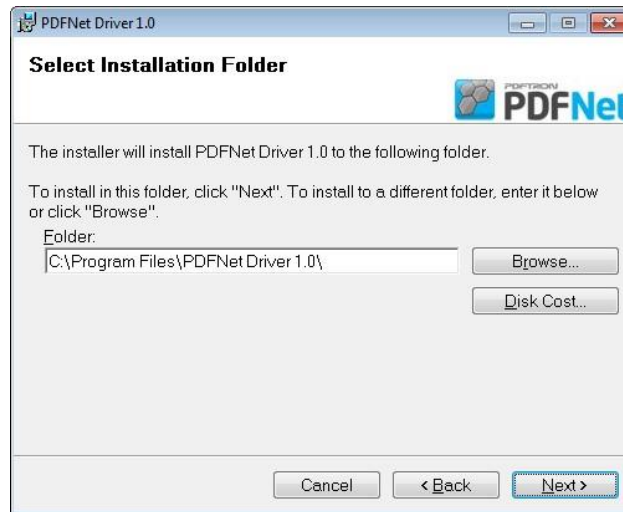
Figure 9: PDFNet 1.0 Driver Installation Folder

Figure 10: PDFNet 1.0 Driver Ready To Install

V.   Click 'Close' and verify that the installation was successful by running ETS-FREDDY checks again.
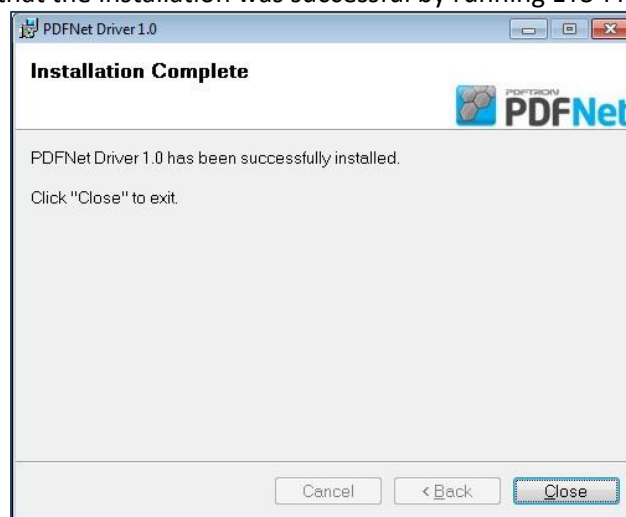

Figure 11: PDFNet 1.0 Driver Installation Complete Confirmation

4 - Microsoft Visual C++ 2013 Redistributable Package

Microsoft Visual C++ 2013 Redistributable is a requirement for the Text Tools Software being utilized within ETS currently, to more closely imitate Microsoft Word-like features, including Ribbon Bars and Banners. In most cases, this should automatically be installed with Windows 10, however we have discovered that several states require this separate installation. To use Text Control's XML features, the Microsoft XML parser must be installed in the Windows System Directory.

I.   Navigate to the 2013VC++ Download Link and verify that you download the appropriate Language Pack. For English, download https://download.microsoft.com/download/C/C/2/CC2DF5F8-4454-44B4-802D-5EA68D086676/vcredist_x64.exe

II.   Once downloaded, Right-click and **run as admin** on the downloaded file **vcredist_x64.exe**

III. Wait for download confirmation

IV.   ****Restart PC****

5 – Microsoft SQL Server Express 2019

Many Administrators prefer to silently install all ETS **prerequisites** using executable (.exe) files, however, the ETS **application** cannot. Each end user must go to the ETS website and download ETS under their own user profile. If ETS (setup.exe) is installed with elevated privileges, or under the Administrator's profile, the user will not be able to access and/or use ETS. Microsoft Click-Once installations don't require elevated privileges and are trusted with a signed certificate.

How to Silently Install SQL Server Express 2019 (Video)
Silent Installation Guide: https://silentinstallhq.com/microsoft-sql-server-2019-express-silent-install-how-to-guide/

Please note that the video above is ***only meant to be used as a guide* to silently install SQL Server with default configurations, and also show how to ***generate your own configuration file***. Please see Appendix D for more details**

Before beginning a **NEW** installation of SQL Server:

I.   Log in as an administrator.

II.   Reboot the machine. If the target machine has a reboot pending from any previous software installation, etc. (identified by checking registry key HKLM\SYSTEM\CurrentControlSet\Control\Session Manager), the machine must be rebooted prior to attempting to install SQL Server.

Installation Steps:

I.   **Navigate** to: https://www.microsoft.com/en-us/download/details.aspx?id=101064

II.   **Download & Copy** the **SQL2019-SSEI-Expr.exe** to a folder titled **SQLEXPRADV_2019** created at **C:\Downloads**

III. Open an **Elevated Command Prompt** by Right-Clicking on Command Prompt and select **Run as Administrator**

IV.   **Navigate** to the **C:\Downloads\SQLEXPRADV_2019** folder

V.   Enter the following command to **extract** the **SQLEXPRADV_x64_ENU.exe**:
- **SQL2019-SSEI-Expr.exe /ACTION=Download MEDIAPATH=C:\Downloads\SQLEXPRADV_2019 /MEDIATYPE=Advanced /QUIET**

VI.   Press **Enter**

VII. Enter the following command to **extract** the setup installation files:
- **SQLEXPRADV_x64_ENU.exe /q /x:C:\Downloads\SQLEXPRADV_2019**

VIII. **Copy** the **ConfigurationFile.ini** (Appendix D) to **C:\Downloads\SQLEXPRADV_2019**

IX.   Enter the following command to install SQL Server:
- **SETUP.EXE /ConfigurationFile=ConfigurationFile.ini**

Configuration.ini File

Brand new to SQL Server Express in 2019, the use of Configuration.ini files is now supported! This is a big breakthrough to help simplify the installation process. By following the full installation video above, you can create your own Configuration.ini file; however to simplify this process, we have provided a default Configuration File in Appendix D that can be modified as needed.

Modify the lines below, adding the local user or AD group for the targeted install. This will create a new login for the local user and add them to the SQLSysAdmin role.

; Windows account(s) to provision as SQL Server system administrators.

SQLSYSADMINACCOUNTS="DOMAIN\LocalUser" ← Change inside quotations to local user. E.g. "PROD\JZastudil"

6 – Microsoft SQL Server Management Tools

Beginning with SQL Server 2019, Microsoft elected to separate the core SQL Server database services from the Management tools, therefore in order to build/manage the ETS database, all ETS users must have the SQL Server Management Tools installed as well – most importantly SQL Server Management Studio.

Silent Installation Guide: https://silentinstallhq.com/sql-server-management-studio-silent-install-how-to-guide/

I.   Navigate to https://go.microsoft.com/fwlink/?linkid=2168063 (or most recent version available)
II.   Download SSMS-Setup-ENU.exe
III. Right-click to run as Admin
IV.   When the splash screen appears Choose Location (leave default) and click **Install**
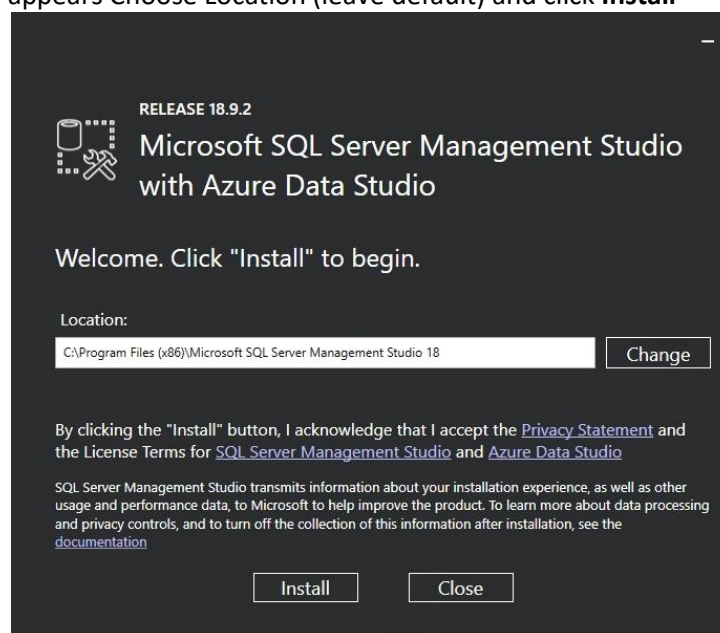
Figure 12: SSMS Installation Location Prompt

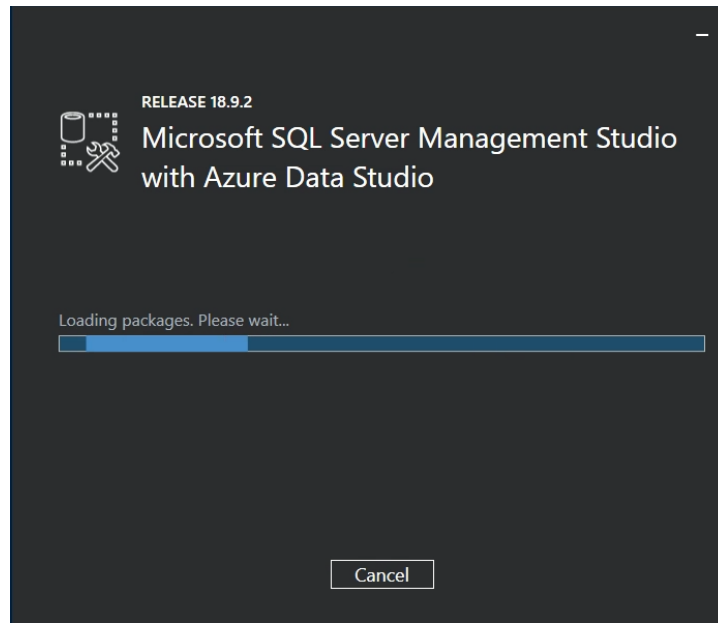V.   Wait for Install to complete (typically takes 5-10 minutes)

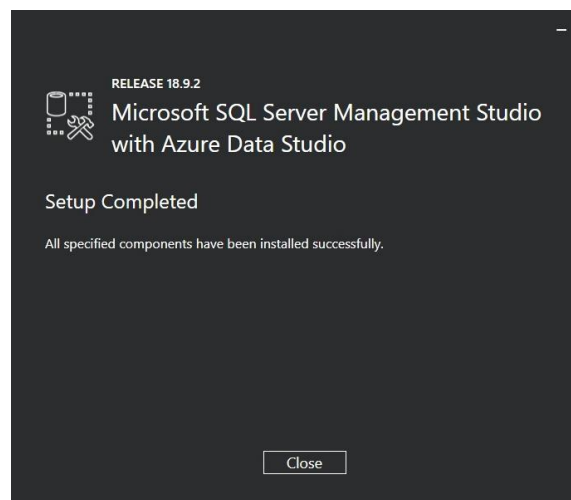**Figure 13: Loading Packages Screen**

Figure 14: Setup Complete

Post-Install - Config.sql

Once the SQL Server installation has finished, you will need to set additional SQL Server configurations for ETS use. Save the following lines into a Notepad text file, then save the file and name it **Config.sql**

```
go
exec sp_configure 'show advanced options', 1;
go
RECONFIGURE; go
exec sp_configure 'clr enabled', 1;
go
RECONFIGURE; go
EXEC sp_configure filestream_access_level, 2;
go
RECONFIGURE; go
```

How to execute the config.sql:

I. Open Microsoft SQL Server Management Studio and click "connect."
II. Once connected, click "open file…" from the "File" menu.
III. Navigate to the **config.sql** file. The text of the config.sql file should appear in the center pane. Once the text is displayed, click the "Execute" button (red exclamation point). The command should run and a successful indication should appear near the bottom of the screen.
IV. Exit Microsoft SQL Server Management Studio.

How to execute the config.sql via Command Prompt:

The config.sql script described above may be run via the command prompt. If so, add the text "exit" to the bottom of the script before running the script from the Command Prompt. Place config.sql in the following location: Drive:\program files\Microsoft SQL Server\Client SDK\ODBC\170\Tools\Binn. Once moved, run the following command from the command line:

Drive:\[location specific to your configuration]\sqlcmd.exe –S .\FDIC2008 –E –i "config.sql"

Appendix A: 3rd Party Security Software Configurations

While using ETS, it is important to understand how the application interacts with your environment and how 3rd party security software may need special configurations that are not listed in this document. Here are some general guidelines to help evaluate your environment:

I.   Click Once Installations

- Microsoft ClickOnce Installations have been the sole method of installation of ETS since its inception.
  - ▪ Local User profiles DO NOT need administrative rights to manage ETS installations. By going to the ETS website – https://ets.fdic.gov/ - local users are able to download and install the ETS application. *Assuming all of the prerequisites are installed properly*, users should be able to open and log into the application without Windows Administrative Rights.
  - ▪ Users also have the ability to Uninstall or Roll Back to a previous version of ETS. Make sure that you go to the Control Panel > Programs and Features to uninstall or roll back, as opposed to the "Apps" program which requires admin to uninstall.
  - ▪ *Ensure Setup.exe is not blocked and fdic.gov is a trusted domain*
  - ▪ Once successfully activated, a user will automatically download an "ETS_Local_Collaboration" certificate into the Personal Certificate Directory, which can be accessed from Internet Options > Content (Tab) > Certificates > Personal
- ETS application files are installed in various directories under the local user folder: C:\Users**%LocalUser%**\AppData\Local\Apps\2.0
  - ▪ *An exception may be required here*
  - ▪ If you require SHA256 values for the ETS application files, please contact the FDIC Examiner Help Desk and open an incident ticket. We can send you the files securely.
    - • **Please Note: SHA256 values will change with each release. Please plan accordingly and anticipate changes as necessary**

II. SQL Server Express 2019 – Hardware and Software Requirements for SQL Server 2019

- SQL Server Express is a lightweight, yet powerful database management system created by Microsoft, and is the foundation for the ETS application. We have migrated from SQL 2008 to 2012, and now to 2019; while there are challenges with a migration, preparation is the key. Please review the Hardware and Software requirements for SQL Server 2019 to ensure computers and software are compatible.
  - ▪ In some cases, *an exception may be required here.* SQL Server installs to **C:\ProgramFiles\Microsoft SQL Server** and since ETS uses FileStream to securely process data from Central Peer, some security scans may flag incoming/outgoing data.
  - ▪ See File Locations for Default and Named Instances of SQL Server for more information.

Appendix B: Local Configuration of Port 5555

ETS has a unique method to allow direct, local communication within the application. In order to perform peer-to-peer collaboration, port 5555 needs to be configured locally on each machine. To configure this port, you'll need to run the following script as an administrator. Copy the information below into a text file – when saving the file, be sure to save it as a **.cmd** file.

```
@echo off set type=BUILTIN set group=USERS call :concat %type% %group% netsh http
del urlacl url=http://+:5555/ETSCollaboration > nul: netsh http add urlacl
url=http://+:5555/ETSCollaboration user="%fullGroupName%" > nul: if %ERRORLEVEL%
== 1 goto error
netsh http show urlacl
pause
goto end
:error
echo.
echo Error creating new url acl - are you running as
admin? echo. goto end :concat
set fullGroupName=%~1\%~2
:end
```

Appendix C: Firewall Configuration for URL/ACL

During local collaboration, ETS uses port 5555 for inbound TCP traffic and 3702 for inbound/outbound UDP traffic. Firewall rules must be in place that allows *both* inbound and outbound traffic. The screenshots and instructions below are for Windows Firewall, these configurations may vary if you use different Security software. ETS users should be unable to change these settings and will require Administrative assistance.

I. Open Windows Firewall with Advanced Settings.
   - Right-click on either *Inbound Rules* or *Outbound Rules* in the upper left corner and select *New Rule.*
   - Select the *Port* radio button and enter "5555" (or UDP for *Specific Local Ports,* then select *Next.)*
   - Select the *Allow the Connection* radio button, then select *Next.*
   - Check the boxes for *Domain, Private, Public* profiles, then select *Next.*
   - Name the new rule (for example "*TCP 5555"* but you may choose any name).
   - Click Finish.

II. Locate your new rule in the body of the screen.
   - Right click your new rule and select *Properties.*
   - Edit each tab in the *Properties* menu as follows:
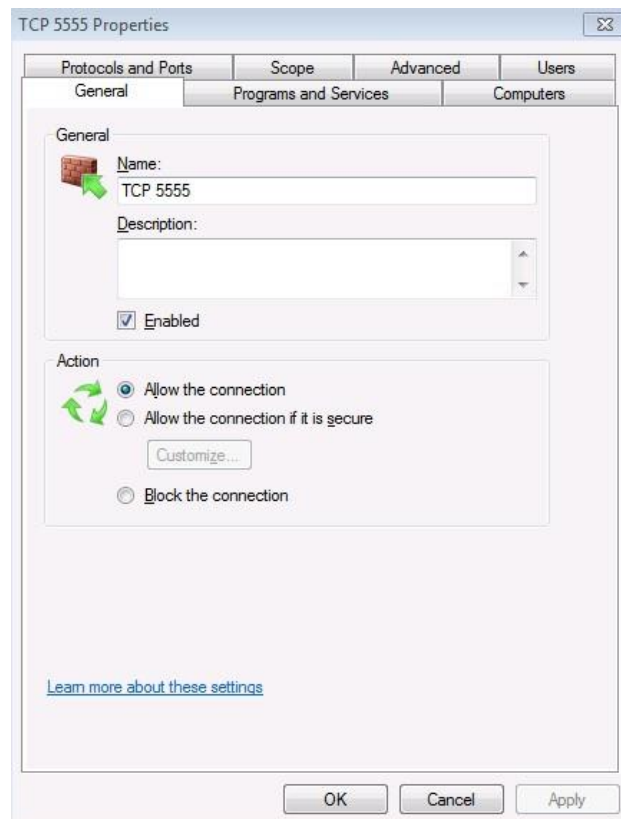
Figure 20: TCP Port Properties – General Tab

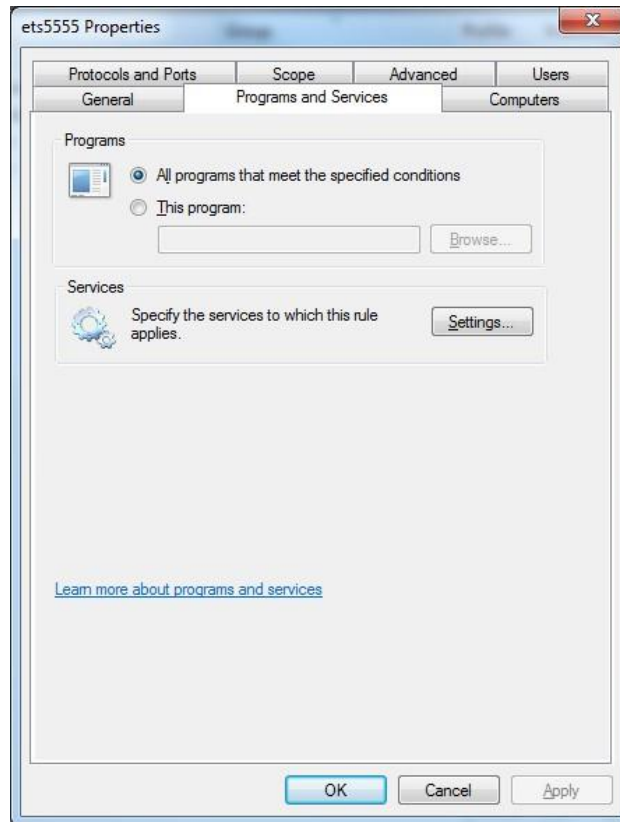Do not alter or change the document without permission by the FDIC

Figure 21: TCP Port Properties – Program and Services Tab
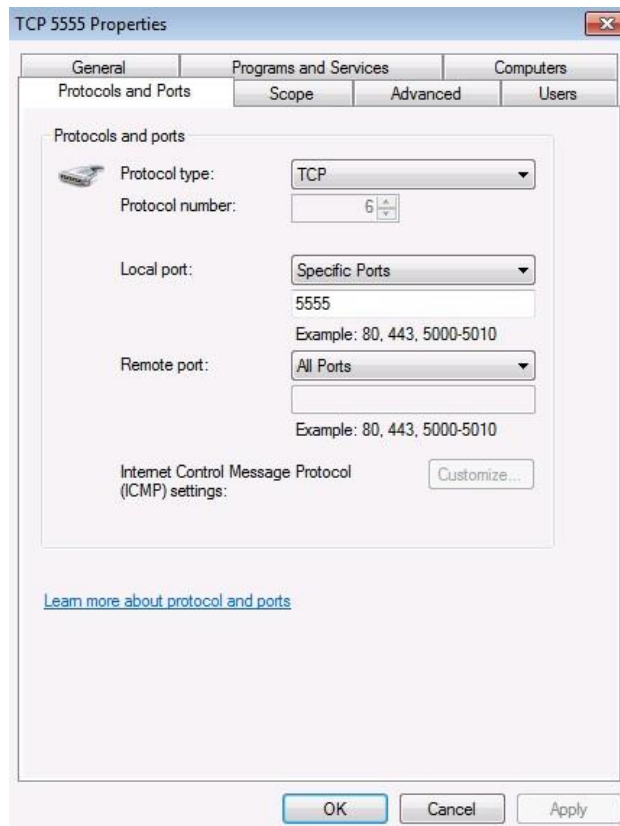

Figure 22: TCP Port Properties – Protocols and Ports Tab
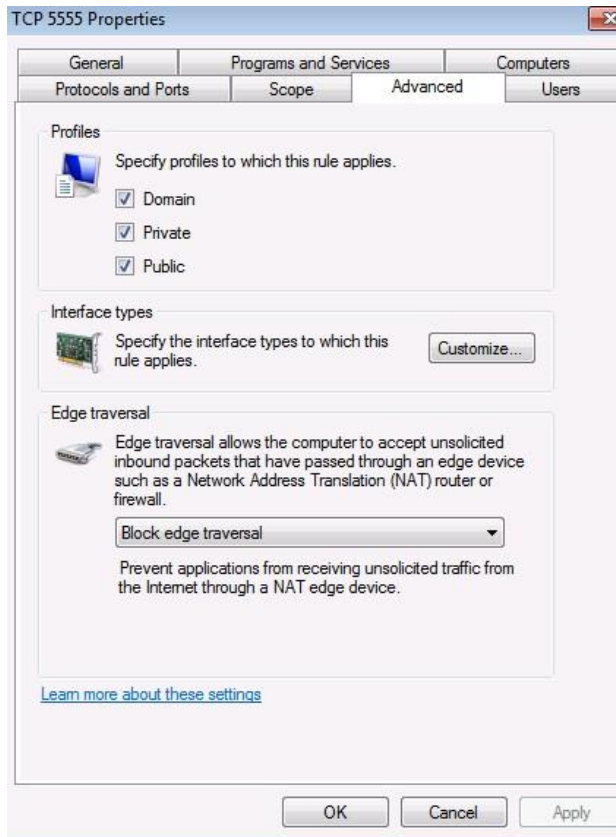
Figure 23: TCP Port Properties – Advance Tab
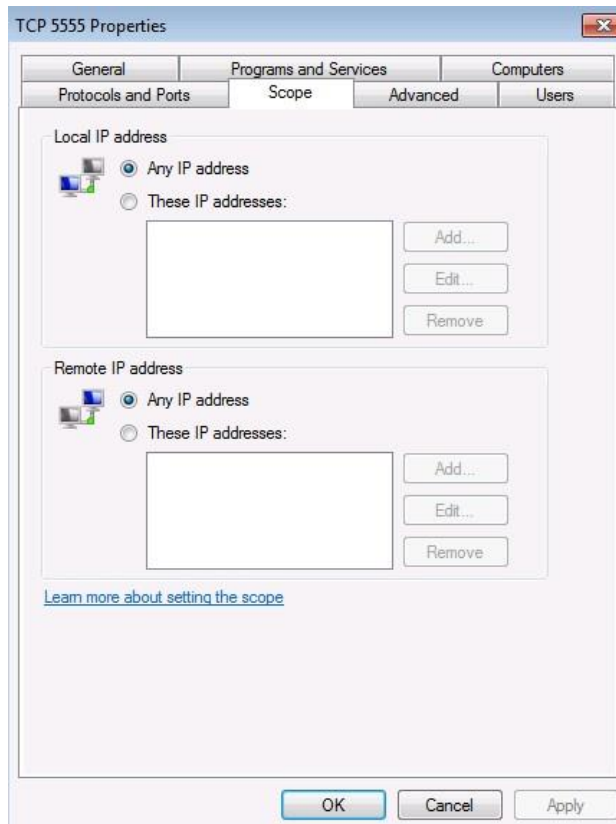
Figure 24: TCP Port Properties – Scope Tab

Note: Port 5555 only needs to be open for local non-routable IP addresses. This is required for peer-to-peer collaboration over an ARUBA (or another similar device).

III.   The settings options for the *Computers* and *Users* tabs can remain unchecked, which is how they default.

IV.   You can use these same instructions to set up the 3702 exception – just replace 5555 with 3702.

V.   Once you have changed the properties of your newly created rule to mirror the screenshots above on each tab (except *Computers* and *Users),* click *Apply.*

Appendix D: ConfigurationFile.ini

Below is the FDIC Configuration File for a <u>NEW</u> installation of ETS. The text in the grey box below must be copied into a text file, then saved with the file name as **Configuration.ini** and saved to: **C:\Downloads\SQLEXPRADV_2019** with the installation media, as defined in section <u>5 – Microsoft SQL Server Express 2019</u> of this document.

You can also create an <u>upgrade</u> Configuration File if you are upgrading from SQL 2012 to SQL 2019, or create an <u>uninstall</u> Configuration file to help expedite the uninstall process.

Modify the lines below, adding the local user or AD group for the targeted install. This will create a new login for the local user and add them to the SQLSysAdmin role.

; Windows account(s) to provision as SQL Server system administrators.

SQLSYSADMINACCOUNTS="`DOMAIN\LocalUser`" ← **Change inside quotations to local user. E.g. PROD\JZastudil**

```
;SQL Server 2019 Configuration File
[OPTIONS]

; By specifying this parameter and accepting Microsoft Python Open and Microsoft Python Server terms, you
acknowledge that you have read and understood the terms of use.

IACCEPTPYTHONLICENSETERMS="False"

; Specifies a Setup work flow, like INSTALL, UNINSTALL, or UPGRADE. This is a required parameter.

ACTION="Install"

; Setup roles install SQL Server in a predetermined configuration.

ROLE="AllFeatures_WithDefaults"

; By specifying this parameter and accepting Microsoft R Open and Microsoft R Server terms, you acknowledge that
you have read and understood the terms of use.

IACCEPTROPENLICENSETERMS="False"

; Specifies that SQL Server Setup should not display the privacy statement when ran from the command line.

SUPPRESSPRIVACYSTATEMENTNOTICE="False"

; Use the /ENU parameter to install the English version of SQL Server on your localized Windows operating system.

ENU="True"
```

```
; Setup will not display any user interface.

QUIET="True"

; Setup will display progress only, without any user interaction.

QUIETSIMPLE="False"

; Parameter that controls the user interface behavior. Valid values are Normal for the full UI,AutoAdvance for a
simplied UI, and EnableUIOnServerCore for bypassing Server Core setup GUI block.

;UIMODE="Normal"

; Specify whether SQL Server Setup should discover and include product updates. The valid values are True and False
or 1 and 0. By default SQL Server Setup will include updates that are found.

UpdateEnabled="False"

; If this parameter is provided, then this computer will use Microsoft Update to check for updates.

USEMICROSOFTUPDATE="False"

; Specifies that SQL Server Setup should not display the paid edition notice when ran from the command line.

SUPPRESSPAIDEDITIONNOTICE="False"

; Specify the location where SQL Server Setup will obtain product updates. The valid values are "MU" to search
Microsoft Update, a valid folder path, a relative path such as .\MyUpdates or a UNC share. By default SQL Server
Setup will search Microsoft Update or a Windows Update service through the Window Server Update Services.

UpdateSource="MU"

; Specifies features to install, uninstall, or upgrade. The list of top-level features include SQL, AS, IS, MDS, and Tools.
The SQL feature will install the Database Engine, Replication, Full-Text, and Data Quality Services (DQS) server. The
Tools feature will install shared components.

FEATURES=SQLENGINE,REPLICATION,FULLTEXT,CONN,BC,SDK,SNAC_SDK

; Displays the command line parameters usage.

HELP="False"

; Specifies that the detailed Setup log should be piped to the console.

INDICATEPROGRESS="False"
```

; Specifies that Setup should install into WOW64. This command line argument is not supported on an IA64 or a 32-bit system.

X86="False"

; Specify a default or named instance. MSSQLSERVER is the default instance for non-Express editions and SQLExpress for Express editions. This parameter is required when installing the SQL Server Database Engine (SQL), or Analysis Services (AS).

INSTANCENAME="FDIC2008"

; Specify the root installation directory for shared components. This directory remains unchanged after shared components are already installed.

INSTALLSHAREDDIR="C:\Program Files\Microsoft SQL Server"

; Specify the root installation directory for the WOW64 shared components. This directory remains unchanged after WOW64 shared components are already installed.

INSTALLSHAREDWOWDIR="C:\Program Files (x86)\Microsoft SQL Server"

; Specify the Instance ID for the SQL Server features you have specified. SQL Server directory structure, registry structure, and service names will incorporate the instance ID of the SQL Server instance.

INSTANCEID="FDIC2008"

; Account for SQL Server CEIP service: Domain\User or system account.

SQLTELSVCACCT="NT Service\SQLTELEMETRY$FDIC2008"

; Startup type for the SQL Server CEIP service.

SQLTELSVCSTARTUPTYPE="Automatic"

; Specify the installation directory.

INSTANCEDIR="C:\Program Files\Microsoft SQL Server"

; Agent account name

AGTSVCACCOUNT="NT AUTHORITY\NETWORK SERVICE"

; Auto-start service after installation.

AGTSVCSTARTUPTYPE="Disabled"

```
; CM brick TCP communication port

COMMFABRICPORT="0"

; How matrix will use private networks

COMMFABRICNETWORKLEVEL="0"

; How inter brick communication will be protected

COMMFABRICENCRYPTION="0"

; TCP port used by the CM brick

MATRIXCMBRICKCOMMPORT="0"

; Startup type for the SQL Server service.

SQLSVCSTARTUPTYPE="Automatic"

; Level to enable FILESTREAM feature at (0, 1, 2 or 3).

FILESTREAMLEVEL="3"

; Name of Windows share to be created for FILESTREAM File I/O.

FILESTREAMSHARENAME="FDIC2008"

; The max degree of parallelism (MAXDOP) server configuration option.

SQLMAXDOP="0"

; Set to "1" to enable RANU for SQL Server Express.

ENABLERANU="True"

; Specifies a Windows collation or an SQL collation to use for the Database Engine.

SQLCOLLATION="SQL_Latin1_General_CP1_CI_AS"

; Account for SQL Server service: Domain\User or system account.

SQLSVCACCOUNT="NT AUTHORITY\NETWORK SERVICE"
```

; Set to "True" to enable instant file initialization for SQL Server service. If enabled, Setup will grant Perform Volume Maintenance Task privilege to the Database Engine Service SID. This may lead to information disclosure as it could allow deleted content to be accessed by an unauthorized principal.

SQLSVCINSTANTFILEINIT="False"

; Windows account(s) to provision as SQL Server system administrators.

SQLSYSADMINACCOUNTS="DOMAIN\LocalUser"

; The number of Database Engine TempDB files.

SQLTEMPDBFILECOUNT="1"

; Specifies the initial size of a Database Engine TempDB data file in MB.

SQLTEMPDBFILESIZE="8"

; Specifies the automatic growth increment of each Database Engine TempDB data file in MB.

SQLTEMPDBFILEGROWTH="64"

; Specifies the initial size of the Database Engine TempDB log file in MB.

SQLTEMPDBLOGFILESIZE="8"

; Specifies the automatic growth increment of the Database Engine TempDB log file in MB.

SQLTEMPDBLOGFILEGROWTH="64"

; Provision current user as a Database Engine system administrator for SQL Server 2019 Express.

ADDCURRENTUSERASSQLADMIN="True"

; Specify 0 to disable or 1 to enable the TCP/IP protocol.

TCPENABLED="0"

; Specify 0 to disable or 1 to enable the Named Pipes protocol.

NPENABLED="0"

; Startup type for Browser Service.

BROWSERSVCSTARTUPTYPE="Automatic"

```
; User account for Full-text Filter Daemon Host.

FTSVCACCOUNT="NT Service\MSSQLFDLauncher$FDIC2008"

; Use SQLMAXMEMORY to minimize the risk of the OS experiencing detrimental memory pressure.

SQLMAXMEMORY="2147483647"

; Use SQLMINMEMORY to reserve a minimum amount of memory available to the SQL Server Memory Manager.

SQLMINMEMORY="0"

; Accept the SQL Server License Terms

IACCEPTSQLSERVERLICENSETERMS="True"
```