

Richard Woods, Georgia's School Superintendent
"Educating Georgia's Future"

GEORGIA DEPARTMENT OF EDUCATION
OFFICE OF THE STATE SUPERINTENDENT OF SCHOOLS
TWIN TOWERS EAST
ATLANTA, GA 30034-5001

TELEPHONE: (800) 869 - 1011 FAX: (404) 651-5006

<http://www.gadoe.org/>

MEMORANDUM

TO: PCGenesis System Administrators

FROM: Steven Roache, Senior Information Systems Manager

SUBJECT: Release 21.02.00 – 2021 Fiscal Year-End Updates / Conversion to PCGenesisDB Database / Installation Instructions

This document contains the PCGenesis software release overview and installation instructions for Release 21.02.00.

PCGenesis supporting documentation is provided at:

<http://www.gadoe.org/Technology-Services/PCGenesis/Pages/default.aspx>

June, 2021 Payroll Completion Instructions

Install this release after completing the June 2021 payroll(s). Install this release before executing F4 – Calculate Payroll and Update YTD for the July 2021 payroll.

Please import the FY 2022 CPI Salary Schedule into PCGenesis. The 2022 CPI Salary Schedule is available on the PCGenesis documentation web page.

The Fiscal Year End Checklist is available on the PCGenesis documentation web page. Please follow the instructions for completing the fiscal year end closing in the order provided.

For users of the new Enhanced Substitute Pay and Employee Leave System, to begin a new leave plan year, 1) Run the Plan Year Rollover Processing (F3, F4, F2, F11) for ALL Leave Types first, and 2) Run the Advance Leave (F3, F4, F2, F10) second. The Create Original Leave of Absence File (F4, F9, F6) step can be run at any time since the leave data is pulled from the Leave History File.

For users of the Legacy Leave System, to begin a new leave plan year, 1) Create the Original Leave of Absence File (F4, F9, F6) first in order to capture FY 2021 leave totals for CPI reporting, and 2) Run the Automatic Leave Update (F3, F5, F3) second in order to clear the FY 2021 Fiscal Year leave totals.

A PCGenesis E-mail User List Is Available

The Georgia Department of Education has created an e-mail user list for PCGenesis. PCGenesis users can join the list by sending a blank e-mail to:

join-pcgenesis@list.doe.k12.ga.us

After joining the PCGenesis user list, users can take advantage of discussion forums by sending e-mails to:

pcgenesis@list.doe.k12.ga.us

An e-mail sent to pcgenesis@list.doe.k12.ga.us will broadcast the e-mail to all PCGenesis users enrolled in the group. Those PCGenesis districts and RESAs that join the user list will be able to share ideas, discuss problems, and have many more resources available for gaining insight into PCGenesis operations. Join today!

Mark Your Calendars!

PCGenesis Sessions and Training at GASBO 2021

The Georgia Department of Education is pleased to announce that the PCGenesis team will be attending GASBO 2021 this year in person. PCGenesis will be offering two full days of sessions and training at this year's GASBO conference in November. PCGenesis will have a dedicated room and will be offering eight sessions. So, mark your calendars and hopefully we can all celebrate a return to normal!

Table of Contents

Section A: Overview of Release	4
A1. PCGenesis System Enhancements	4
A1.1. Conversion of Jemaster, Wxfer and Chekmstr to PCGenesisDB SQL Server Database Tables	4
A1.2. Intermittent SQL Deadlock When Multiple Users Post at the Same Time	5
A1.3. Backup of PCGenesis Data	6
A2. Payroll System	8
A2.1. New Teachers Retirement System (TRS) Rates for FY 2022	8
A2.2. Employees' Retirement System (ERS) Rates for FY 2022	8
A3. Financial Accounting and Reporting (FAR) System	9
A3.1. Fiscal Year-End Processing Instructions	9
A3.2. JEMASTER File Converted to Database Table	9
A3.3. CHEKMSTR File Converted to Database Table	9
A3.4. WXFER File Converted to Database Table	10
A3.5. Account File Transaction Processing	10
A3.6. Display/Add Active Vendor Checks to Master	11
A3.7. Print All Purchase Orders	11
A3.8. Select/Deselect Payables for Payment - Vendor/All	11
A3.9. Budget Master – Account Activity Detail Report	12
A3.10. Vendor Reports for Any Period	12
A3.11. Deleting Budget, Revenue or GL Accounts	12
A3.12. Accounts Payable Archive	13
A4. Certified/Classified Personnel Information (CPI) System	17
A4.1. Upload the 2022 CPI State Salary Schedule	17
A4.2. FY2021 CPI Data Collection Data File Layout	17
Section B: Installation Instructions for Release 21.02.00 Software	19
B1. Perform a PCGenesis Full Backup	19
B2. Verify Windows Security Group GENUSEERS	20
B3. Install PCGenesis Release 21.02.00	21
B4. Verify Release 21.02.00 Was Successfully Installed	28
B5. Perform a PCGenesis Full Backup After Release 21.02.00 is Installed	29
Section C: After PCGenesis Release 21.02.00 Has Been Installed	30
C1. Verify Contents of the End-of-May Backup	30
Appendix A. Summary of PCGenesis Database Components	32

Section A: Overview of Release

A1. PCGenesis System Enhancements

A1.1. Conversion of Jemaster, Wxfer and Chekmstr to PCGenesisDB SQL Server Database Tables

The GaDOE is happy to announce a major upgrade of PCGenesis. Release 21.02.00 continues the conversion of PCGenesis Vision data into *SQL Server* database tables. The migration of PCGenesis to a *SQL Server* database platform is a major undertaking, but a step that it is imperative to take for the longevity of the product.

Today, the PCGenesis data is stored in VISION files which are indexed, flat files, and are proprietary to *MicroFocus*. Nothing other than *MicroFocus ACUCOBOL* can access the data from VISION files. VISION files represent very old technology. *SQL Server* is a relational database management system (RDBMS). Relational databases are faster, more efficient and more powerful than VISION files. The database updated in this release is named *PCGenesisDB*.

In release 21.02.00, the file K:\SECOND\FARDATA\JEMASTER is converted into the *SQL Server* database tables *FAR.Journal_Entry* and *FAR.Journal_Entry_Detail*. These tables store the general ledger master and detail journal records for the PCGenesis system.

The file K:\SECOND\FARDATA\CHEKMSTR is converted into the *SQL Server* database tables *FAR.Vendor_Check_Control* and *FAR.Vendor_Check_Control_Payable*. These tables store the vendor check master records associated with the accounts payable subsystem.

The file K:\SECOND\FARDATA\WXFER is converted into the *SQL Server* database tables *FAR.Wire_Transfer* and *FAR.Wire_Transfer_Payable*. These tables store the vendor wire transfer records associated with the accounts payable subsystem.

Converting PCGenesis to a relational database management system (RDBMS) is a very, very big project. We estimate that it may take several years to convert the software. During that timeframe, major enhancements to PCGenesis will be very limited. However, legislative requirements and ongoing maintenance will always be addressed even during the conversion process.

The PCGenesis database is in the following location for *Windows Server 2012, 2016 or 2019*:

- K:\PCGSQldb\MSSQL13.SQLEXPRESSPCG\MSSQL\DATA\ **PCGenesisDB.mdf**
- K:\PCGSQldb\MSSQL13.SQLEXPRESSPCG\MSSQL\DATA\ **PCGenesisDB_log.ldf**

Why go to all the trouble of converting the old VISION data files? First, updating the data files allows us to implement far better transaction processing. Today, we have problems with data reliability. Today, if a posting process is interrupted because of a power failure, or network hiccup, half of the PCGenesis data files may be updated (for instance the RECEIPT file) and half of the files may not be updated (for instance the AUDIT file). This requires a data repair!!

Second, we can modernize the PCGenesis data structures and allow access to the data from programs other than COBOL programs. This means that as COBOL programmers retire, the data will be accessible to more modern programming languages such as C#, Java, Crystal Reports, etc., and a new generation of programmers will more easily take over maintenance of the product.

The upgrade to *MicroFocus Extend 10* in September of 2016 came with the ability to execute SQL code from within PCGenesis COBOL programs. This feature is called **AcuSQL**. Having **AcuSQL** bundled in with the *MicroFocus Extend 10* runtime allows the Ga DOE to make use of database technology at no extra cost. Industry standard database support is now included in the *MicroFocus Extend 10 ACUCOBOL* runtime product.

A1.2. Intermittent SQL Deadlock When Multiple Users Post at the Same Time

An intermittent posting problem in PCGenesis has been resolved. This posting problem manifested as an *SQL Critical Deadlock* error when two people attempted to update or post data in PCGenesis at exactly the same time to exactly the same record. An *SQL Critical Deadlock* error was most likely to appear when one person was posting earnings history transfers and another person was posting a claim or receipt to the financial system.

This problem has been resolved by setting up two new database tables:

Transaction_Gatekeeper - Stores a single record which controls the financial system transaction postings, enforcing single-threaded processing for a multi-user system.

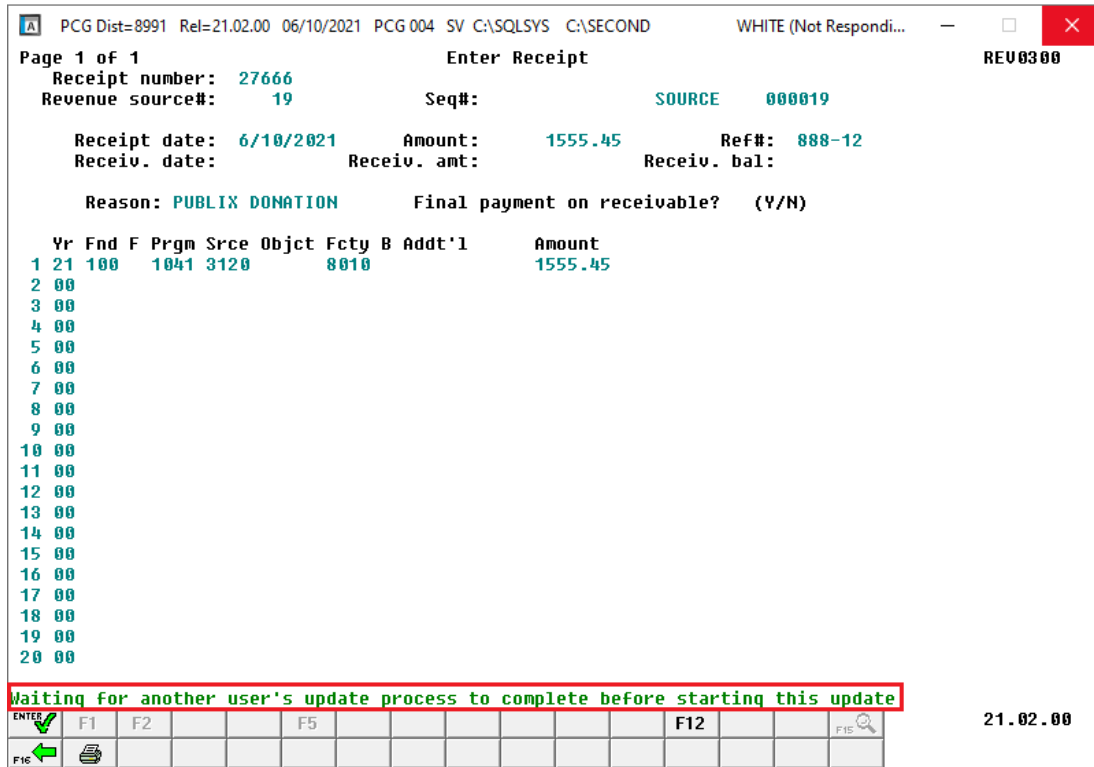
Transaction_Gatekeeper_Log - Stores a log of financial system transactions which includes the user id, transaction description, start and end times, and the transaction's final disposition.

The *Transaction_Gatekeeper* table contains one record which is used as a “gatekeeper” to allow only one PCGenesis session to post at a time. The gatekeeper record locks when the first session starts to update or post a financial transaction. If the gatekeeper record is already locked, the second posting process must wait, while the first posting process finishes. This allows the system to avoid a deadlock error for any financial posting process.

If the user's posting process must wait before starting to post, the following message will appear at the bottom of the user's screen:

“Waiting for another user's update process to complete before starting this update”

When this message is displayed, the user must not cancel or end their posting process, but instead wait until their process is allowed to complete after the first process finishes. When the first user’s process finishes, the second user’s process will complete automatically.



PCGenesis Screen Showing “Wait” Message

A1.3. Backup of PCGenesis Data

This information must be forwarded to your Technology Representative or you may not have everything you need for a successful restore of your PCGenesis production data.

Going forward, PCGenesis data will be split between files contained in the directory **K:\SECOND** and the new *SQL Server* database table located in **K:\PCGSQldb**. Therefore, it is very important to backup **K:\PCGSQldb** and **K:\SECOND** during the nightly data backup. One directory cannot be backed up without the other directory, and they must be maintained together. To create a complete data backup of the PCGenesis system, the two directories need to be backed up together.

Starting with release 19.04.00, K:\SECOND cannot be restored without also restoring the PCGenesisDB database. These two entities must be kept in sync, otherwise receipts, receivables, and investments will be lost.

The following directories are needed for disaster recovery:

- **K:\SECOND** – PCG payroll & financial data
- **K:\PCGSQLdb** – The *PCGenesisDB* database for the PCGenesis production data, and the *VQueueDB* database for the *VerraDyne* print queue data
- **K:\UCTARCHIVE** – Archived PCGenesis reports in pdf format
- **K:\UCTPRINT** – PCGenesis report files currently in the print queue

Prior to running a backup of the **K:\PCGSQLdb** directory...

- School districts must stop the *VerraDyne Queue Service* and the *SQL Express* services for the backup to successfully run to completion.
- The following commands should be entered in the command prompt for *Windows* or added to the backup bat file to stop the services:

NET STOP VQueueService

NET STOP MSSQL\$SQLEXPRESSPCG

After the **K:\PCGSQLdb** directory backup has completed – Start Services

- The following commands should be entered in the command prompt for *Windows* or added to the backup bat file to start the services:

NET START MSSQL\$SQLEXPRESSPCG

- (Make sure to **wait at least 2 minutes** for **SQLEXPRESSPCG** to start before trying to start **VQueueService**)

NET START VQueueService

A2. Payroll System

A2.1. New Teachers Retirement System (TRS) Rates for FY 2022

The TRS Board of Trustees has adopted the following changes to the employer and employee contribution rates effective July 1, 2021.

Fiscal Year 2022	
TRS	
Employer Rate:	19.81%
Employee Rate:	6.00%

This release automatically updates the TRS rates into PCGenesis.

A2.2. Employees' Retirement System (ERS) Rates for FY 2022

The ERS Board of Trustees has adopted the following changes to the employer and employee contribution rates effective July 1, 2021.

Fiscal Year 2022	
Old ERS	
Employer contribution:	19.88%
Pickup:	05.00 %
Total Employer Rate:	24.88%
Employee Rate:	1.5%

Fiscal Year 2022	
New ERS	
Employer Rate:	24.63%
Employee Rate:	1.5%

This release automatically updates the old and new ERS rates into PCGenesis.

A3. Financial Accounting and Reporting (FAR) System

A3.1. Fiscal Year-End Processing Instructions

The PCGenesis documentation website provides the *PCGenesis Fiscal Year-End Processing Checklist*, in the *Financial Accounting and Reporting (FAR) System Operations Guide*. The link is shown below:

<https://www.gadoe.org/Technology-Services/Enterprise-Systems-and-Applications/PCGenesis/Documents/FiscalYearClosingChecklist.pdf>

A3.2. JEMASTER File Converted to Database Table

Release 21.02.00 converts the VISION indexed file *K:\SECOND\FARDATA\JEMASTER* into the following PCGenesis database tables:

- *FAR.Journal_Entry*
- *FAR.Journal_Entry_Detail*

These tables store the general ledger master and detail journal records for the PCGenesis system.

With release 21.02.00, **K:\SECOND** must be restored with the PCGenesisDB database. These two entities must be kept in sync, otherwise journals will be lost which will result in reporting inconsistencies with the General Ledger. Call the help desk when any data needs to be restored.

A3.3. CHEKMSTR File Converted to Database Table

Release 21.02.00 converts the VISION indexed file *K:\SECOND\FARDATA\CHEKMSTR* into the following PCGenesis database tables:

- *FAR.Vendor_Check_Control*
- *FAR.Vendor_Check_Control_Payable*

These tables store the vendor check master records associated with the accounts payable subsystem.

With release 21.02.00, **K:\SECOND** must be restored with the PCGenesisDB database. These two entities must be kept in sync, otherwise vendor checks will be lost which will result in reporting inconsistencies with the General Ledger. Call the help desk when any data needs to be restored.

A3.4. WXFER File Converted to Database Table

Release 21.02.00 converts the VISION indexed file *K:\SECOND\FARDATA\WXFER* into the following PCGenesis database tables:

- *FAR.Wire_Transfer*
- *FAR.Wire_Transfer_Payable*

These tables store the vendor wire transfer records associated with the accounts payable subsystem.

With release 21.02.00, **K:\SECOND** must be restored with the PCGenesisDB database. These two entities must be kept in sync, otherwise wire transfer records will be lost which will result in reporting inconsistencies with the General Ledger. Call the help desk when any data needs to be restored.

A3.5. Account File Transaction Processing

With release 21.02.00, the PCGenesis system continues to add the logic for transaction processing. In a database management system, a transaction is a single unit of logic or work, sometimes made up of multiple operations. For example, when transferring money from one bank account to another, the complete transaction requires subtracting the amount to be transferred from one account and adding that same amount to the other. Transaction processing provides reliable units of work that allow correct recovery from failures and keeps a database consistent even in cases of system failure, when many operations upon a database remain uncompleted. Transaction processing commits all of the operations or none of the operations, keeping the database consistent.

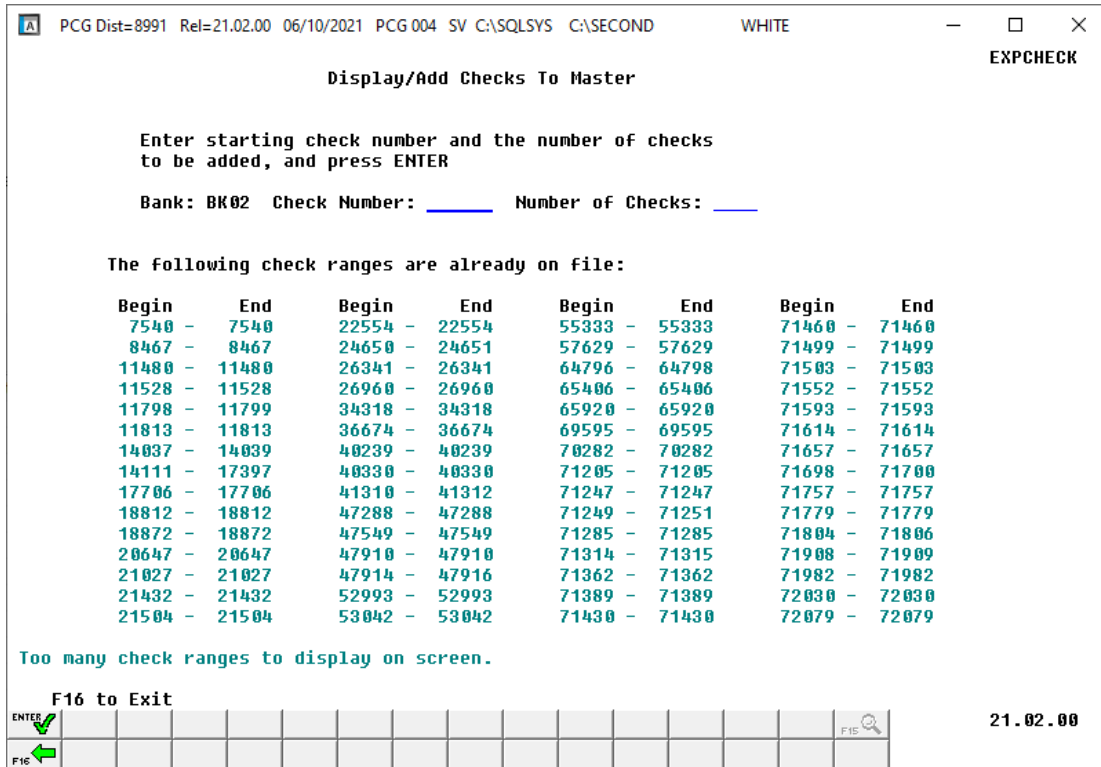
Any system programs that update journals, vendor checks or wire transfers in the database tables have been updated to support transaction processing. These programs update numerous PCGenesis data tables. As all the files in the PCGenesis system are converted to SQL Server database tables, transaction processing will prevent partial postings of financial data.

Today, if a posting process is interrupted because of a power failure, or network hiccup, half of the PCGenesis data files may be updated (for instance the BANK file) and half of the files may not be updated (for instance the AUDIT file). This requires a data repair!! In the future, this problem will be solved by not “committing” all the data to the database until the entire transaction is complete.

With release 21.02.00, most financial tables are now in the database and processed within a transaction. The PCGenesis development team anticipates that the final important financial file, the AUDIT file, will be converted in the next release, 21.03.00. Once the AUDIT file is converted, full transaction processing will be implemented and available for all financial transactions!

A3.6. Display/Add Active Vendor Checks to Master

The *Display/Add Active Checks to Master* function (F1, F4, F14) has been enhanced to make the process of assigning new vendor check numbers easier to understand. Before, the user was required to use **F1** to display one active vendor check range at a time. Now, previously assigned check number ranges are displayed on the screen all at once, as shown below. The *Display/Add Active Checks to Master* function has been changed so that all the vendor checks already in the database table are identified immediately at the beginning of the program and are displayed on the screen for the bank code entered by the user. This gives the user a clearer picture of the range of vendor check numbers already assigned in the system.



Display/Add Active Checks to Master

A3.7. Print All Purchase Orders

The performance for printing all purchase orders (F1, F2, F5) has been improved. Before, using **F1** to print all purchase orders could take up to 30 or 45 minutes. With release 21.02.00, using **F1** to print all purchase orders should take considerably less time.

A3.8. Select/Deselect Payables for Payment - Vendor/All

A problem has been corrected in the *Select/Deselect Payables for Payment – Vendor/All* (F1, F4, F2) module. Release 21.01.00 caused a critical SQL error, ‘Unknown Cursor’, when selecting or deselecting payables, in some cases. Release 21.02.00 resolves this problem.

A3.9. Budget Master – Account Activity Detail Report

A problem has been corrected in the *Budget Master – Account Activity Detail Report* (F1, F9, F3, F1) module. Release 21.01.00 caused a critical SQL error, ‘*Unknown Cursor*’, when selecting the account exclusion option of either *Non-expenditure (in-and-out items)* or *Expenditure (actual expenses)*. Release 21.02.00 resolves this problem.

A3.10. Vendor Reports for Any Period

A problem has been corrected when running the *Vendor Reports for Any Period* (F1, F9, F1, F1, F1) or (F1, F9, F1, F1, F2) or (F1, F9, F1, F1, F13) or (F1, F9, F1, F1, F14) or (F1, F9, F1, F1, F15). Release 21.01.00 caused a critical SQL error, ‘*Unknown Cursor*’, when running the *Vendor Reports for Any Period*. Release 21.02.00 resolves this problem.

A3.11. Deleting Budget, Revenue or GL Accounts

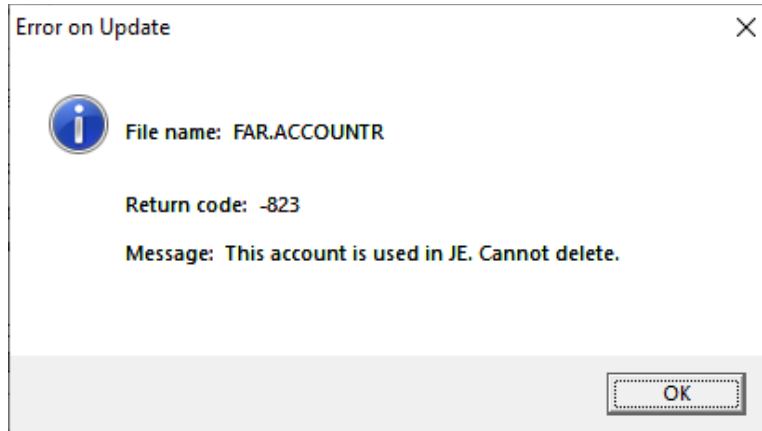
A problem has been corrected when deleting budget (F1, F1, F2), revenue (F1, F5, F2), or general ledger accounts (F1, F11, F2). Sometimes, when a user would attempt to delete an account, a critical SQL error with the message ‘*The DELETE statement conflicted with the REFERENCE constraint “FK_FARE”*’ would occur, as shown below.

```
PCG Dist=6021 Rel=21.01.00 04/27/2021 LLY 003 SV K:\SYSTEM K\SECOND GREEN IOERRSQL
Date: 04/27/2021 07:24
CRITICAL SQL ERROR ENCOUNTERED
Called By: ACCT0100
File name: FAR.ACCOUNT
SQL Server: PCGENESIS\SQLEXPRESSPCG;
SQL Database: PCGENESISDB
SQL Procedure: FAR.USP_ACCOUNT_MAINTENANCE
SQL Error Type: 23000
The DELETE statement conflicted with the REFERENCE constraint "FK_FARE"
Capture this screen and call the Help Desk. F16 = Exit
19.01.00_
```

Critical SQL Error Indicating a Foreign Key Reference Constraint

This error is due to the enforcement of PCGenesis database consistency standards on the data. It is not possible to delete a general ledger expense or revenue account which is referenced by any other database table (a “*reference constraint*”).

Before, this type of SQL error would cause the PCGenesis session to experience a hard abort and the session would terminate. With release 21.02.00 this error has been changed to be a “soft” error which will not make the program abort, but will instead return an error message to the screen, as shown below, and allow the session to continue.

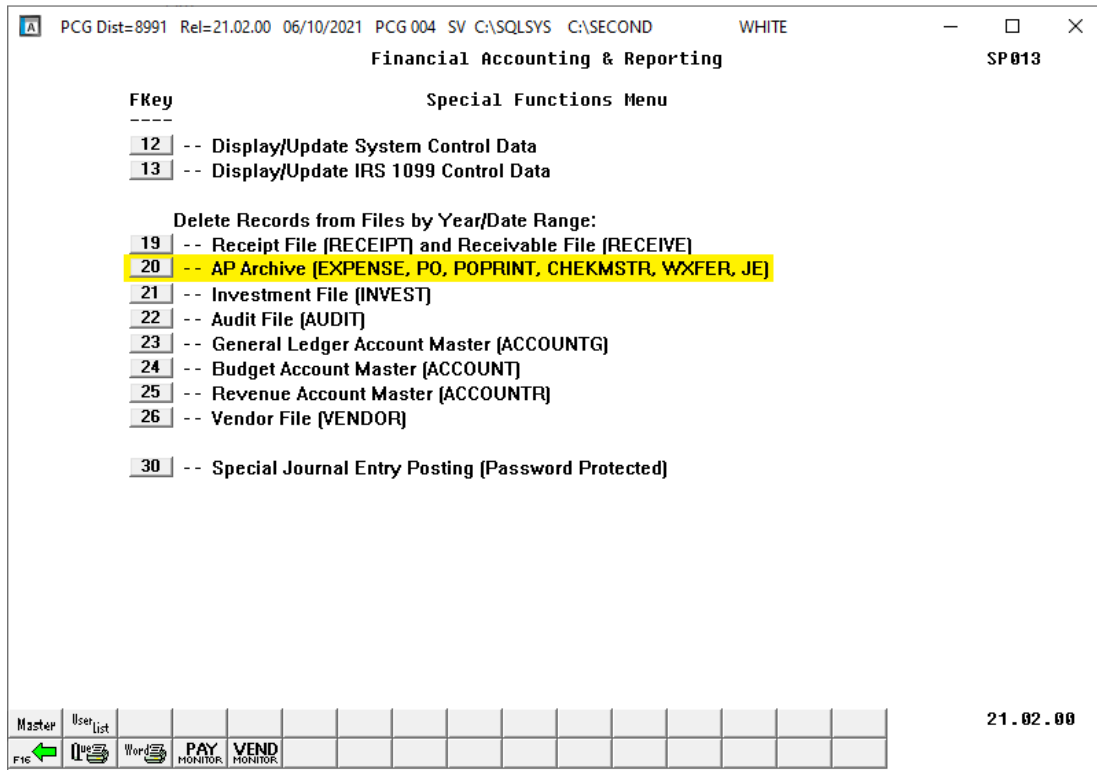


However, when a *reference constraint* exists, the user still will not be able to delete the account. Even if the account has a zero balance but there is another table that is using that account number, for example an in-out journal (JE), the user will not be able to delete the account. Accounts having a *reference constraint* cannot be deleted until all related data is archived, which typically cannot occur for another 7 years.

This same type of constraint exists for bank codes. Users may have noticed that as data is converted into the PCGenesis database, bank codes have been added. These bank codes are added because they are referenced somewhere in PCGenesis, perhaps in a claim, a receipt, or a journal. Bank codes having a *reference constraint* cannot be deleted until all related data is removed first, usually during an archive operation. Typically, financial data must be retained for at least 7 years.

A3.12. Accounts Payable Archive

The *Delete Records from Files by Year/Date Range* F-Key options have been rearranged so that database tables are archived in the correct order on the *Financial Accounts & Reporting Special Functions Menu* (F1, F13), as shown below. Because the PCGenesis database enforces “foreign key reference constraints”, data must be archived from the system so that “child” data is deleted before “parent” data can be deleted. For example, before a bank code can be deleted from the system, all journals, receipts, receivables, claims, purchase orders, etc. which utilize the bank code must be deleted first, before the bank code itself can be deleted.



Special Functions Menu, Delete Records from Files by Year/Date Range

To facilitate the archive process, an *Accounts Payable Archive* function (F1, F13, F20) is now available on the *Special Functions Menu*. This function consolidates the archive process for the accounts payable database tables listed in the table below.

Accounts Payable Archive	
Summary of PCGenesisDB Tables Archived	
Table Name	Purpose
FAR.Expense	Stores the claim/invoice master records.
FAR.Expense_Distribution	Stores the claim GL account detail records associated with the claim/invoice master record. A maximum of 20 GL account records are allowed per claim.
Journal_Entry	Stores the general ledger journal master records.
Journal_Entry_Detail	Stores the general ledger journal detail records associated with the journal master record. A maximum of 999 account detail lines are allowed per journal.
FAR.Purchase_Order	Stores the purchase order master records.
FAR.Purchase_Order_Distribution	Stores the purchase order GL account detail records associated with the purchase order master record. A maximum of 20 GL account records are allowed per purchase order.
FAR.Purchase_Order_Expense	Stores the purchase order claim detail records associated with the purchase order master record. A maximum of 24 claim/invoice records are allowed per purchase order.

Accounts Payable Archive Summary of PCGenesisDB Tables Archived	
Table Name	Purpose
FAR.Purchase_Order_Print	Stores the purchase order inventory detail records associated with the purchase order master record.
Vendor_Check_Control	Stores the vendor check master records associated with the accounts payable subsystem.
Vendor_Check_Control_Payable	Stores the claim/invoice records associated with the vendor check master record. A maximum of 13 claim records are allowed per vendor check.
Wire_Transfer	Stores the vendor wire transfer master records associated with the accounts payable subsystem.
Wire_Transfer_Payable	Stores the claim/invoice records associated with the vendor wire transfer master record. A maximum of 40 claim records are allowed per vendor wire transfer.

The *Accounts Payable Archive* will remove records from the tables listed if the date of the record is less than or equal to June 30 of the fiscal year entered by the user. The *Accounts Payable Archive* will create spreadsheet files of the archived records in the **K:\SECOND\FARyy** directory where **yy** is the archive fiscal year entered on the archive screen. The naming convention of the output spreadsheet files is shown below where **ccyy** is the fiscal year selected for the archive function and **ccyy-mm-dd hhmmss** is the date/time the archive was created.

- **Arccyy-mm-dd hhmmss CHKMSTR** to **ccyy-06-30**
- **Arccyy-mm-dd hhmmss Expense** to **ccyy-06-30**
- **Arccyy-mm-dd hhmmss JE** to **ccyy-06-30**
- **Arccyy-mm-dd hhmmss POP** to **ccyy-06-30**
- **Arccyy-mm-dd hhmmss Purchase_Order** to **ccyy-06-30**
- **Arccyy-mm-dd hhmmss WXFER** to **ccyy-06-30**

The *Accounts Payable Archive* function will also add entries to the *Conversion_LOG_Detail* table in the PCGenesis database, itemizing the number of rows that were deleted from each table during the archive process, as shown below.

Accounts Payable Archive Output Files Containing Archived Data	
conv_Log_detail_Comment	conv_Log_detail_DateTime
C:\SECOND\FAR09\Arc2021-06-10 125020 Purchase_Order to 2009-06-30.xls 971 rows copied. "C:\SECOND\FAR09\Arc2021-06-10 125020 Expense to 2009-06-30.xls" 7985 rows copied.	2021-06-10 12:50:23.860
- FAR.Expense_Distribution 20770 rows deleted.	2021-06-10 12:50:24.303
- FAR.Wire_Transfer_Payable 961 rows deleted.	2021-06-10 12:50:24.320
- FAR.Purchase_Order_Expense 1047 rows deleted.	2021-06-10 12:50:24.323
- FAR.Vendor_Check_Control_Payable 5829 rows deleted.	2021-06-10 12:50:24.360
- FAR.Expense 7984 rows deleted.	2021-06-10 12:50:24.597
- FAR.Purchase_Order_Distribution 1033 rows deleted.	2021-06-10 12:50:24.607
- FAR.Purchase_Order_Print 1950 rows deleted.	2021-06-10 12:50:24.613
- FAR.Purchase_Order_Expense 0 rows deleted.	2021-06-10 12:50:24.623
- FAR.Purchase_Order 970 rows deleted.	2021-06-10 12:50:24.780
- FAR.Vendor_Check_Control_Payable 0 rows deleted.	2021-06-10 12:50:24.837
- FAR.Vendor_Check_Control 3033 rows deleted.	2021-06-10 12:50:25.013
- FAR.Wire_Transfer_Payable 0 rows deleted.	2021-06-10 12:50:25.043
- FAR.Wire_Transfer 149 rows deleted.	2021-06-10 12:50:26.330
- FAR.Wire_Transfer 2232 rows deleted.	2021-06-10 12:50:26.350
- FAR.Journal_Entry 312 rows deleted.	2021-06-10 12:50:26.480

A4. Certified/Classified Personnel Information (CPI) System

A4.1. Upload the 2022 CPI State Salary Schedule

The PCGenesis documentation website provides the *PCGenesis CPI Salary Schedule.csv File – 2022*, in the *Certified/Classified Personnel Information (CPI) System Operations Guide*. The link is shown below:

<https://www.gadoe.org/Technology-Services/PCGenesis/Pages/CPI-System-Operations-Guide.aspx>

Supporting documentation on the webpage provides the corresponding instructions to import the salary schedule into PCGenesis.

A4.2. FY2021 CPI Data Collection Data File Layout

A new leave type for Covid-19 leave has been added to the ‘D’ record in the *CPI Transmission File* (F4, F9, F1). The Data Collections team at the Ga DOE is adding a new leave type for leave taken due to Covid-19. The leave type name is ‘COVID’. If your district recorded leave taken due to Covid-19, Data Collections requests that you please report those days in the CPI-3 data collection. This new leave type is reported on the ‘D’ record in CPI. The ‘D’ layout has been extended. The COVID leave type is in positions **45-47**.

If your school district could not or did not record leave taken due to Covid-19, you do not need to go back and pull out this information. The ‘COVID’ leave type is not required this year.

The CPI-3 data collection starts on July 8th and ends on July 22nd this year.

The PCGenesis *Leave of Absence File* has been updated to include a ‘COVID’ leave type as shown below. Covid-19 leave can be added on the *Leave of Absence File Maintenance* screen (F4, F9, F7), if desired. Any leave entered in the *Leave of Absence File* for the ‘COVID’ leave type will be included on the CPI Cycle 3 data collections transmission file on the ‘D’ record in positions **45-47**.

PCG Dist=6731 Rel=21.02.00 06/08/2021 PCG 003 SV C:\SQLSYS C:\SECOND WHITE

Leave of Absence File Maintenance PERHM02

Employee Number: **43** Absence Type: **PER1**
PER1, ELTON Total Days: **2.00**

<p>Absence Type & Description</p> <p>-----</p> <p>BERE = Bereavement/Relig. Leave COVI = COVID Leave FAM1 = Fam/Med Paid using Sk Lv FAM2 = Family/Med Leave w/o Pay FT01 = Field Trip FT02 = Field Trip w/o Pay JURY = Jury Duty MIL1 = Military Leave NONW = Non Worked Tracking PER1 = Personal Leave PER2 = Personal Leave w/o Pay PROF = Professional Dev/Planning SBCC = Sk Bk Cont frm Exc Cryour SBCCS = Sk Bk Cont frm Stnd Quota</p>	<p>Absence Type & Description</p> <p>-----</p> <p>SBLC = Sk Bk Leav frm Exc Cryour SBLS = Sk Bk Leav frm Stnd Quota SBUS = School Business SLEC = Sick Leave, Excess Cryour SLST = Sick Leave - Standard SLWP = Sick Leave w/o Pay STAF = Staff Development SUBP = Subpoena UAC1 = Vacation Pay UAC2 = Vacation w/o Pay WRC1 = Wrk Comp Paid using Sk Lv WRC2 = Wrk Comp w/o Pay frm Schl ZOT1 = Other Approved Leave ZOT2 = Other Leave w/o Pay</p>
---	--

** Display Mode **

F16-Find Mode F2-First F5-Next F9-Modify F18-Delete

ENTER	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F15
F16	F17	F18									Help		

21.02.00

Leave of Absence File Maintenance

Section B: Installation Instructions for Release 21.02.00 Software

B1. Perform a PCGenesis Full Backup

Proceed to section B2. *Verify Windows Security Group GENUSERS* in this document if these two conditions are met:

1. The prior evening’s full system backup of the entire **K:** drive was successful.
 - In addition to its current labeling, also label the prior evening’s backup media as “**Data Backup Prior to Release 21.02.00**”.
 - Continue to use the backup in the normal backup rotation.
2. No work has been done in PCGenesis since the prior backup.

Otherwise, continue with the instructions in section B1. *Perform a PCGenesis Full Backup* if these two conditions are not met.

Step	Action
1	Verify all users are logged out of PCGenesis.
2	Stop the VerraDyne Queue Service (VQueueService) and the SQL Express Service (SQLEXPRESSPCG) prior to running a full backup of the entire K: PCGenesis disk drive or else the backup will not run to completion.
3	Perform a PCG Full Backup to CD or DVD or USB.
4	When the PCGenesis backup completes, label the backup CD or DVD or USB “ Full System Backup Prior to Release 21.02.00 ”.
5	<p>Start the SQL Express Service: SQLEXPRESSPCG must be running before starting the release installation. If <i>SQL Server</i> is not running, the PCGenesisDB cannot be updated during the release installation. If you run a full backup prior to installing the release and <i>SQL Server</i> has been stopped, the following commands can be executed to restart SQLEXPRESSPCG.</p> <ul style="list-style-type: none"> • The following commands should be entered in the command prompt for <i>Windows</i> or added to the backup bat file to start the services. • NET START MSSQL\$SQLEXPRESSPCG
6	Proceed to B2. <i>Verify Windows Security Group GENUSERS</i> .

B2. Verify Windows Security Group GENUSERS

The DOE is continuing the conversion of PCGenesis data tables into a *SQL Server* database in the 21.02.00 release.

Operating System Requirements for the PCGenesis Database

1. Prior to release 19.01.00, the PCGenesis document *New Server Installation Checklist* recommended setting up **GENUSERS** as the Windows Server security group for all PCGenesis users, but this requirement was not enforced. Please refer to *Page 2, Step 4* in the following document:

http://www.gadoe.org/Technology-Services/PCGenesis/Documents/Tech_A1_New_Server_Install.pdf

Starting with release 19.01.00, the security user group GENUSERS is now required.

2. Please forward this notice to your IT support team and ask them to verify the setup of **GENUSERS** on your PCGenesis Windows Server. If **GENUSERS** is not the current security group for PCGenesis users, please have the IT staff set up **GENUSERS** as directed in the document referenced above.

If you have any questions or need further assistance, please contact the Technology Management Customer Support Team by logging into the MyGaDOE Portal and clicking on the Help Desk Portal link and entering your request there.

To Login to the MyGaDOE portal please follow this link: <https://portal.doe.k12.ga.us/Login.aspx>

B3. Install PCGenesis Release 21.02.00

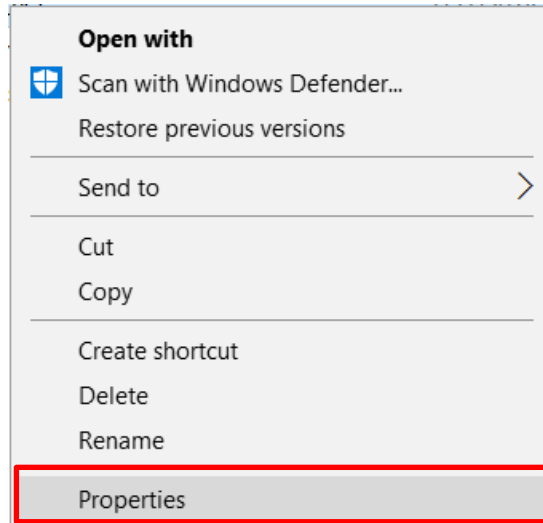
FROM THE PCGENESIS SERVER

Important Note

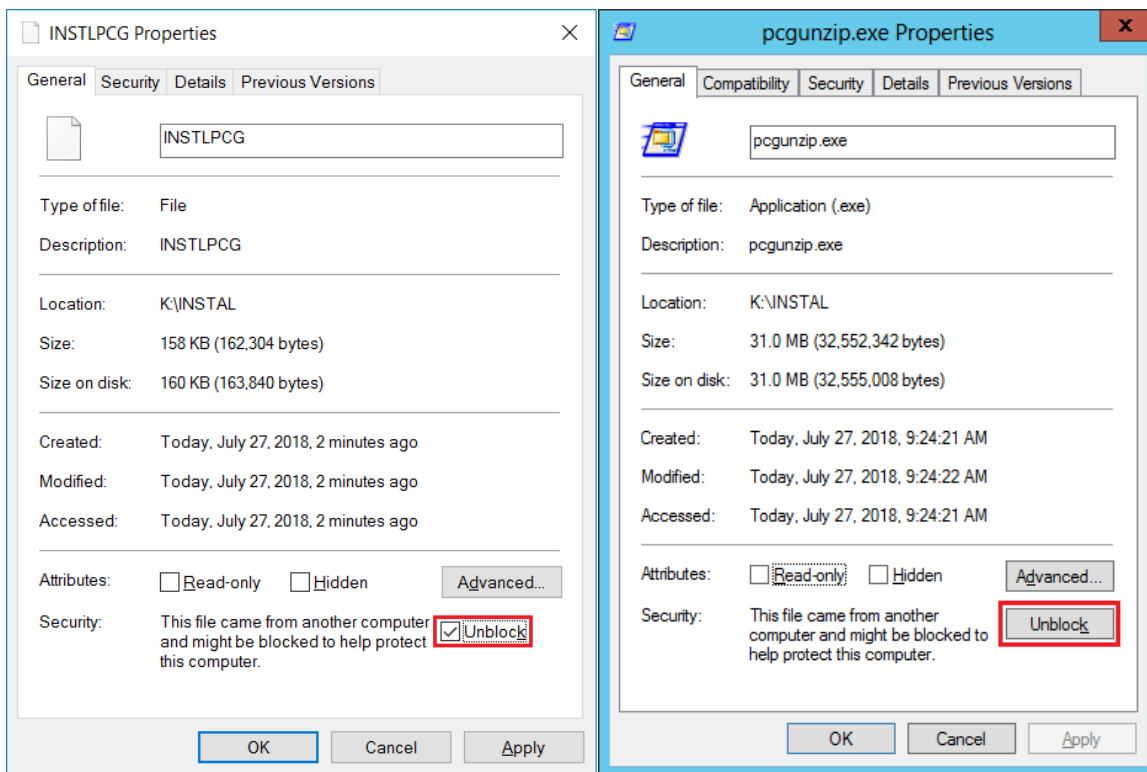
The person installing the PCGenesis release must be a member of the system administrator security group on the PCGENESIS server!

Step	Action
1	NOTE: The person installing the PCGenesis release must be a member of the system administrator security group on the PCGenesis server. This is required to properly install the <i>PCGenesisDB</i> database components contained in this release.
2	Start the SQL Express Service: SQLEXPRESSPCG must be running before starting the release installation. If <i>SQL Server</i> is not running, the <i>PCGenesisDB</i> cannot be updated during the release installation.
3	Verify all users are logged out of PCGenesis.
4	Open Windows® Explorer .
5	Navigate to the K:\INSTAL directory.
6	Verify PCGUNZIP.EXE , RELINSTL.BAT , and INSTLPCG display. <i>If PCGUNZIP.EXE and RELINSTL.BAT and INSTLPCG do not display, return to the MyGaDOE Web portal, and detach the files from the Web portal again.</i>
7	<p style="text-align: center;">*** ALERT ***</p> <p>After downloading the files we need to make sure they are not blocked, otherwise when we unzip, ALL the files will all be blocked. This is a new security feature of the Windows Server 2012 / 2016 / 2019 operating system.</p> <p>To check whether the files have been blocked, right-click on each of the downloaded files and select Properties. If you see a security message at the bottom, as shown below, you will need to click the 'Unblock' button. This is a very important step!</p> <p>For each of the downloaded files in K:\INSTAL, right-click on the filename and select 'Properties'.</p>

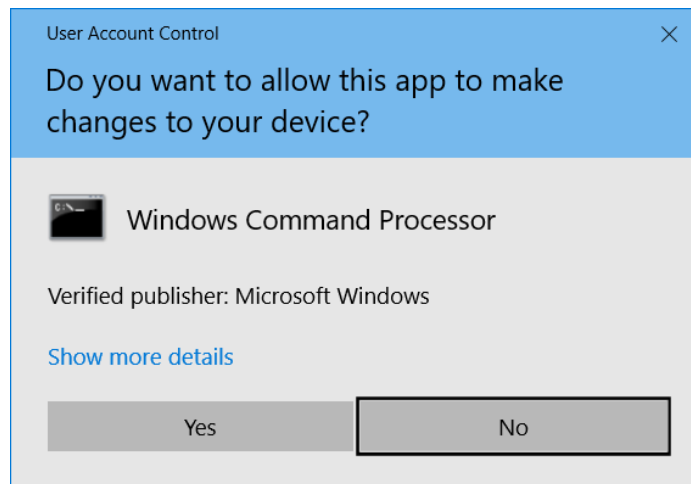
After right-clicking on each file, select the ‘Properties’ option:



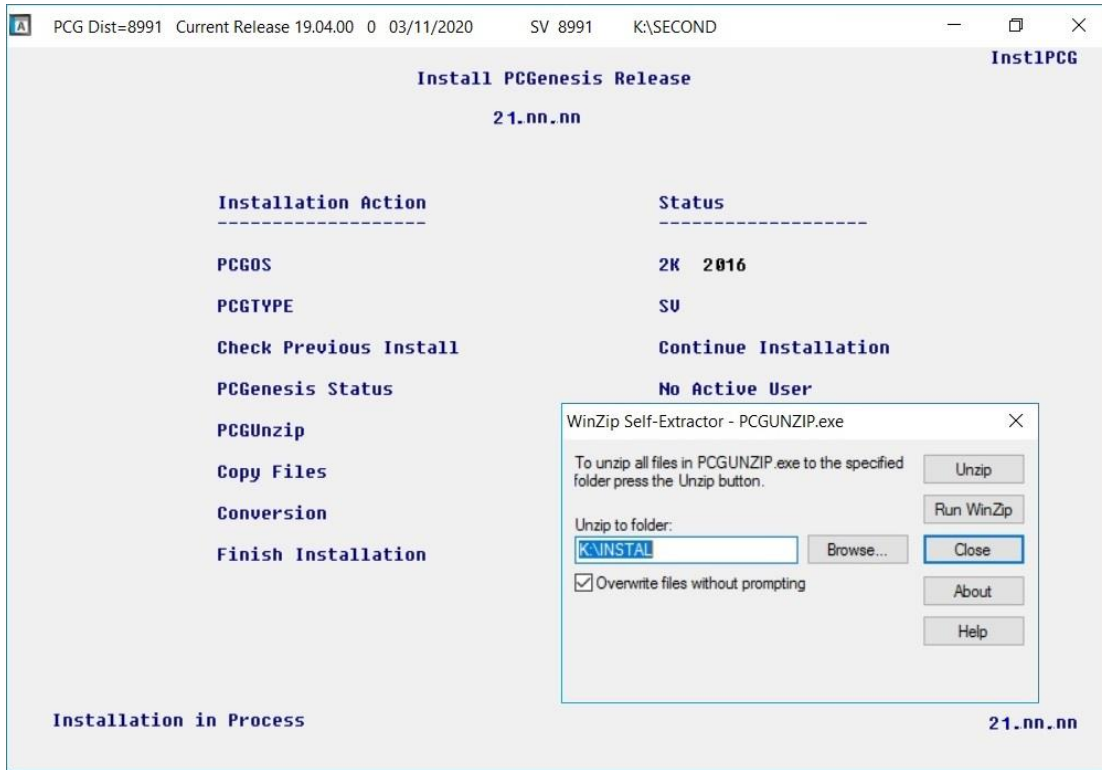
Depending on the version of the Windows operating system, the following screen displays:



Step	Action
<p>8</p>	<p>Check the bottom of the ‘<i>Properties</i>’ dialog box to see if the following security warning is displayed:</p> <p><i>“This file came from another computer and might be blocked to help protect this computer.”</i></p> <p>If the option is presented, select <input type="button" value="Unblock"/> (Unblock) or check <input checked="" type="checkbox"/> the box to the left of Unblock.</p> <p>Do this for each of the files in the K:\INSTAL directory.</p>
<p>9</p>	<p>Right-click RELINSTL.BAT and select Run as administrator to perform the installation.</p>
<p>10</p>	<p>If the message “<i>Do you want to allow this app to make changes to your device?</i>” is displayed, select <input type="button" value="Yes"/> (Yes) to continue.</p> <p><i>Next, a release installation status screen will display showing the release steps as they are completed.</i></p>



A screen will display showing the progress of the installation:

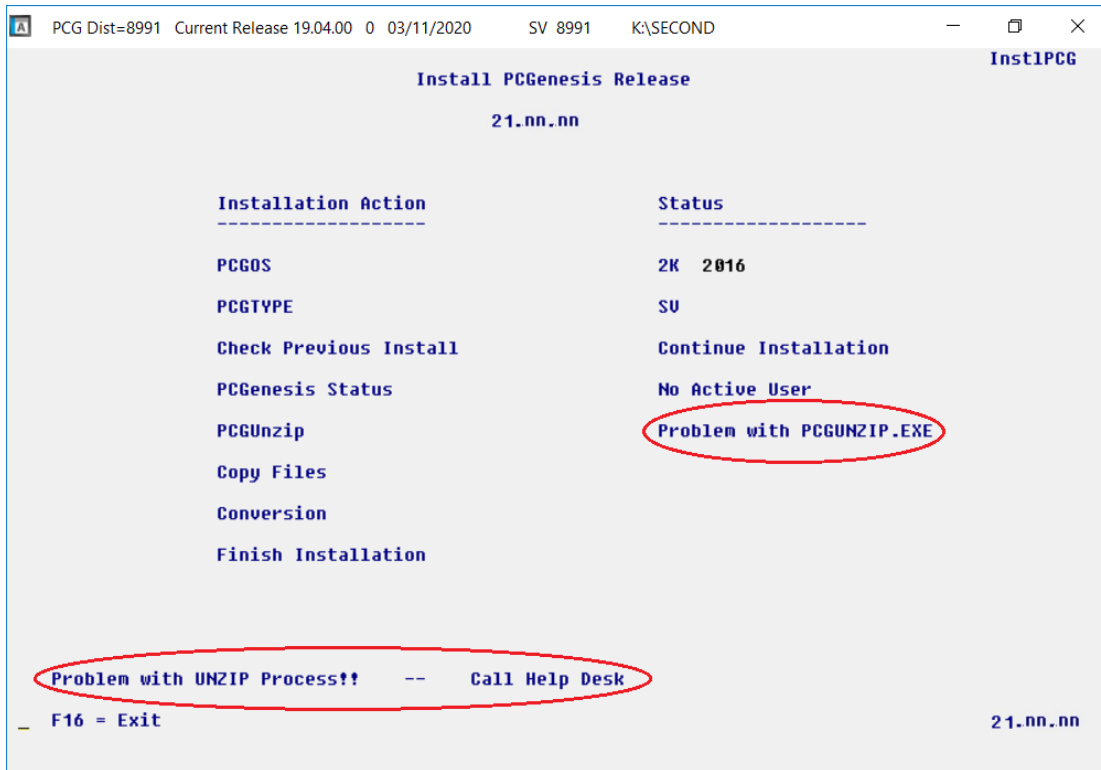


For PCGenesis Release 21.02.00 successful installations, the following message displays:



Step	Action
11	Select Enter to close the window.
12	<p>If the installation was successful: Proceed to B4. <i>Verify Release 21.02.00 Was Successfully Installed.</i></p> <p>If the installtion was unsuccessful: Proceed to <i>Step 13.</i></p>

A problem message displays if an error occurred:

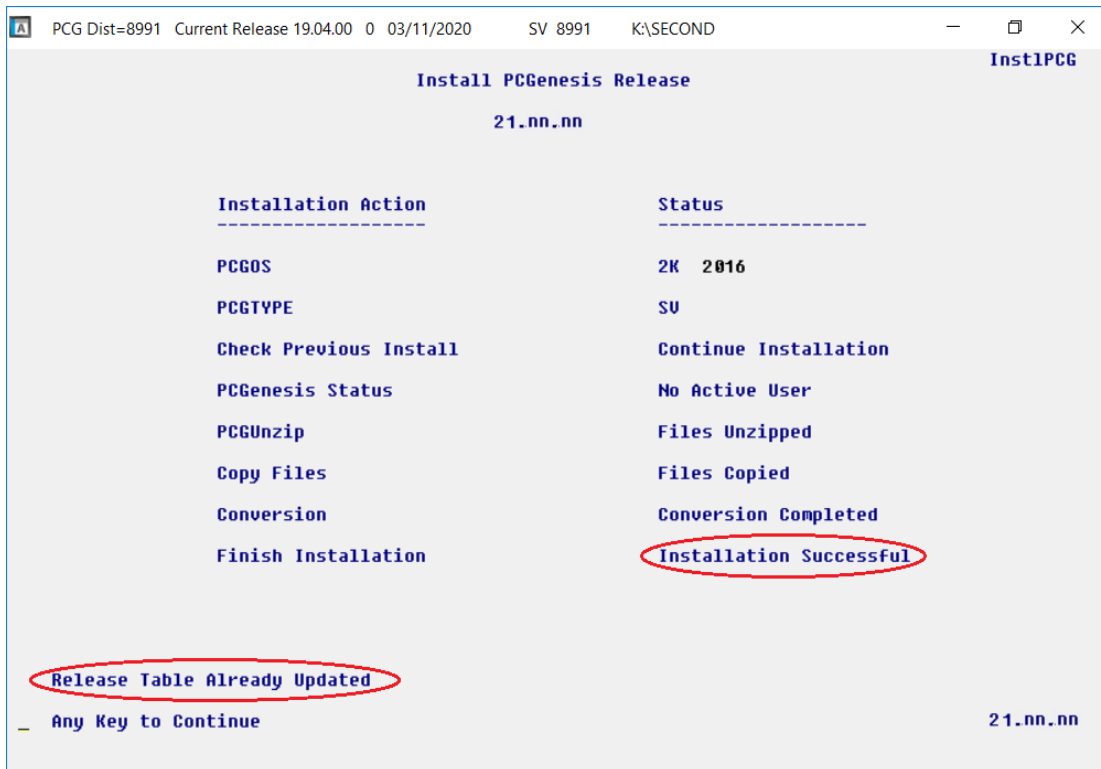


Step	Action
13	Select F16 to close the window.
14	Return to the <i>MyGaDOE</i> Web portal, and detach the files again.
15	<i>Contact the Technology Management Customer Support Team for additional assistance if needed. A description of the error will display with instructions to call the Help Desk.</i>

A warning message will display if the release installation is repeated:



A warning message will display if the release installation is repeated, but in this case, the installation is considered successful. In this instance, select any key to continue:



Step	Action
16	Proceed to <i>B4. Verify Release 21.02.00 Was Successfully Installed.</i>

B4. Verify Release 21.02.00 Was Successfully Installed

Step	Action
1	Log into PCGenesis.
2	From the <i>Business Applications Master Menu</i> , select 30 (F30 - System Utilities).
3	From the <i>System Utilities Menu</i> , select 17 (F17 - Display Current Release Number).

The following screen displays:

The screenshot shows a terminal window with the following content:

```

PCG Dist=6791 Rel=21.02.00 05/28/2021 PCG 002 SV C:\SQLSYS C:\SECOND WHITE
DEFNRELH


The Following D.O.E. Releases Have Been Successfully Loaded:

DOE 19.01.00 03/29/2019
DOE 19.02.00 06/28/2019
DOE 19.03.00 09/30/2019
DOE 19.03.01 11/27/2019
DOE 19.04.00 12/31/2019
DOE 20.01.00 03/31/2020
DOE 20.02.00 06/30/2020
DOE 20.03.00 09/30/2020
DOE 20.04.00 12/31/2020
DOE 21.01.00 03/31/2021
DOE 21.02.00 06/30/2021


.NET Framework 3.5: N SQL SERVER EXPRESS 2012: N
.NET Framework 4.5: Y SQL SERVER EXPRESS 2016: Y SQL MANAGEMENT STUDIO 2016: Y

Press <ENTER> or F16 to Exit

ENTER ✓
F16 ←
18.01.00
    
```

Step	Action
4	Verify Release 21.02.00 displays. <i>The number of releases and the release installation date displayed may not correspond with the preceding screenshot example. This is acceptable as long as DOE 21.02.00 displays. If Release 21.02.00 does not display, contact the Technology Management Customer Support Center for assistance.</i>
5	Select  (Enter).
6	Log off the PCGenesis server.
7	Verify users remain logged out of PCGenesis.

B5. Perform a PCGenesis Full Backup After Release 21.02.00 is Installed

Step	Action
1	Verify all users are logged out of PCGenesis.
2	Stop the VerraDyne Queue Service (VQueueService) and the SQL Express Service (SQLEXPRESSPCG) prior to running a full backup of the entire K: \ PCGenesis disk drive or else the backup will not run to completion.
3	Perform a PCG Full Backup to CD or DVD or USB.
4	When the PCGenesis backup completes, label the backup CD or DVD or USB “ Full System Backup After Release 21.02.00 ”.
5	Restart the SQL Express Service (SQLEXPRESSPCG). After waiting <u>at least two minutes</u> , restart the VQueueService in  View local services (View local services).

Section C: After PCGenesis Release 21.02.00 Has Been Installed

C1. Verify Contents of the End-of-May Backup

This step is very, very important! The PCGenesis development team wants to ensure that all school districts are creating a backup of the PCGenesis data, including the contents of the **PCGSQldb** database directories as well as the **SECOND** data. Our concern is that school districts do not have a good backup of the database data, in which case you may not realize that you have an incomplete backup and *a critical problem*. School districts are under increasing pressure from hackers and malware attacks and therefore, it is nothing short of imperative that you can recover your PCGenesis data in case of an attack, or other data center catastrophe. To that end, please follow the steps below.

Step	Action
1	<p>Verify you have a weekly full backup of K: that you retain for at least 4 weeks.</p> <p>Include a full backup of K:*.* in the site’s standard server backup process</p> <ul style="list-style-type: none"> ▶ Recommend full backup of K:*.* <u>every night</u> if possible <ul style="list-style-type: none"> • Minimum of one full backup of K:*.* every week (Required) • Retain at least 4 weeks of K:*.* (Required)
2	<p>Verify you have a daily data backup of K:\SECOND*.*, and K:\PCGSQldb*.*, that you retain for at least 4 weeks</p> <p>Daily data backup of K:\SECOND*.* <u>and</u> K:\PCGSQldb*.* (Required)</p> <ul style="list-style-type: none"> • Use of CD, DVD, or USB is recommended • Nightly backup following each work day • Nightly media may remain under control of PCG administrator • Proper security and offsite storage measures (Required) • Retain daily backups of K:\SECOND*.* <u>and</u> K:\PCGSQldb*.* for 4 weeks (Required) • Retain one daily backup each month of K:\SECOND*.* <u>and</u> K:\PCGSQldb*.* for at least one year (Required)
3	<p>Request your IT representative obtain the May 31st backup of PCGenesis data. Obtain either the weekly full backup of K: or the daily data backup of K:\SECOND*.* and K:\PCGSQldb*.*, but make sure it is the end-of-<u>May 2021</u> backup.</p>

Step	Action
4	<p>Verify that this file exists on the May 31st, 2021 backup: For Windows Server 2012, 2016, or 2019: K:\PCGSQldb\MSSQL13.SQLEXPRESSPCG\MSSQL\DATA\PCGenesisDB.mdf</p> <p>If this file does not exist on your backup media, you will <u>not</u> be able to recover all your PCGenesis data!!!</p>
5	<p>Verify that this directory exists on the May 31st, 2021 backup, including all subdirectories and files within this directory: K:\SECOND</p>
6	<p>If you do not have both PCGenesisDB.mdf and K:\SECOND, you will <u>not</u> be able to recover from a data center catastrophe! Make sure your IT team immediately corrects this situation. Follow this link to the <i>PCGenesis Technical System Operations Guide</i>: https://www.gadoe.org/Technology-Services/PCGenesis/Pages/Technical-System-Operations-Guide.aspx</p> <p>Review the information in <i>Section B: PCGenesis Backup / Reorganization / Restore</i>.</p>
7	<p>If your district’s backup procedures needed to be remediated, create a new backup by following the instructions in <i>Step 6</i> and then start this procedure over again at <i>Step 1</i> to verify the backup.</p>

Appendix A. Summary of PCGenesis Database Components

SQL Server Databases and Tables for PCGenesis System			
1	PCGenesisDB - PCGenesis financial and payroll production data.		
	Table Name	Purpose	
1.1	Conversion_LOG	Conversion Log shows successful or unsuccessful conversion of a VISION file to a SQL Server table.	
1.2	Conversion_LOG_Detail	Conversion Log Detail shows the total number of rows imported for each database table.	
1.3	Conversion_LOG_Error	Conversion Error Log shows any errors encountered during the conversion of a VISION file to a SQL Server table.	
1.4	Transaction_Gatekeeper <i>(New with this release)</i>	Stores a single record which controls the financial system transaction postings, enforcing single-threaded processing for a multi-user system.	
1.5	Transaction_Gatekeeper_Log <i>(New with this release)</i>	Stores a log of financial system transactions which includes the user id, transaction description, start and end times, and the transaction's final disposition.	
1.6	FAR.Account	Stores the <u>budget</u> general ledger account codes.	
1.7	FAR.AccountR	Stores the <u>revenue</u> general ledger account codes.	
1.8	FAR.AccountG	Stores the general ledger <u>balance account</u> codes.	
1.9	FAR.Bank_File	Stores the bank codes.	
1.10	FAR.Chart_Of_Accounts	Stores <u>all</u> general ledger account codes, including budget, revenue, and balance account codes on one table.	
1.11	FAR.Expense	Stores the claim/invoice master records.	
1.12	FAR.Expense_Distribution	Stores the claim GL account detail records associated with the claim/invoice master record. A maximum of 20 GL account records are allowed per claim.	
1.13	FAR.Facility	Stores the facility and building records for purchase order processing.	
1.14	FAR.Invest	Stores investment records.	
1.15	FAR.Journal_Entry <i>(New with this release)</i>	Stores the general ledger journal master records.	
1.16	FAR.Journal_Entry_Detail <i>(New with this release)</i>	Stores the general ledger journal detail records associated with the journal master record. A maximum of 999 account detail lines are allowed per journal.	
1.17	FAR.Name_01_Fiscal_Year	Stores the two-digit year description of the account number.	

SQL Server Databases and Tables for PCGenesis System - continued		
PCGenesisDB - PCGenesis financial and payroll production data, continued.		
	Table Name	Purpose
1.18	FAR.Name_02_Fund	Stores the 3-digit fund description of the account number.
1.19	FAR.Name_03_FY_flag	Stores the 1-digit fiscal year description of the account number. (Not used.)
1.20	FAR.Name_04_Program	Stores the 4-digit program code description of the account number.
1.21	FAR.Name_05_Function	Stores the 4-digit function code of the account number, for expense accounts.
1.22	FAR.Name_07_Fac_Bldg	Stores the 5-digit facility/building code description of the account number.
1.23	FAR.Name_06_Object	Stores the 5-digit object code description of the account number.
1.24	FAR.Name_08_Additional	Stores the 6-digit additional code description of the account number.
1.25	FAR.Name_09_Rev_Srce	Stores the 4-digit source code description of the account number, for revenue accounts.
1.26	FAR.Name_10_BLNC_SHEET	Stores the 4-digit balance sheet code description of the account number, for GL accounts.
1.27	FAR.Purchase_Order	Stores the purchase order master records.
1.28	FAR.Purchase_Order_Distribution	Stores the purchase order GL account detail records associated with the purchase order master record. A maximum of 20 GL account records are allowed per purchase order.
1.29	FAR.Purchase_Order_Expense	Stores the purchase order claim detail records associated with the purchase order master record. A maximum of 24 claim/invoice records are allowed per purchase order.
1.30	FAR.Purchase_Order_Print	Stores the purchase order inventory detail records associated with the purchase order master record.
1.31	FAR.Receipt	Stores the receipt master records.
1.32	FAR.Receipt_Detail	Stores the receipt GL account detail records associated with the receipt master record. A maximum of 40 GL account records are allowed per receipt.
1.33	FAR.Receivable	Stores the receivable master records.

SQL Server Databases and Tables for PCGenesis System - <i>continued</i>		
PCGenesisDB - PCGenesis financial and payroll production data, continued.		
	Table Name	Purpose
1.34	FAR.Receivable_Distribution	Stores the receivable GL account detail records associated with the receivable master record. A maximum of 40 GL account records are allowed per receivable.
1.35	FAR.Receivable_Receipt	Stores the receivable receipt detail records associated with the receivable master record. A maximum of 12 receipt records are allowed per receivable.
1.36	FAR.Revenue_Source	Stores the Revenue Source records for the financial system revenue subsystem.
1.37	FAR.Vendor	Stores the vendor records for the financial system expense subsystem.
1.38	FAR.Vendor_Check_Control <i>(New with this release)</i>	Stores the vendor check master records associated with the accounts payable subsystem.
1.39	FAR.Vendor_Check_Control_Payable <i>(New with this release)</i>	Stores the claim/invoice records associated with the vendor check master record. A maximum of 13 claim records are allowed per vendor check.
1.40	FAR.Wire_Transfer <i>(New with this release)</i>	Stores the vendor wire transfer master records associated with the accounts payable subsystem.
1.41	FAR.Wire_Transfer_Payable <i>(New with this release)</i>	Stores the claim/invoice records associated with the vendor wire transfer master record. A maximum of 40 claim records are allowed per vendor wire transfer.
1.42	T_lookup.GA_County	Stores the County codes for the Georgia counties.

2	PCG_Master - PCGenesis backup and restore logs.	
	Table Name	Purpose
2.1	PCG_Backup_LOG	Backup log shows successful or unsuccessful completion of a PCGenesis backup operation.
2.2	PCG_Backup_LOG_Message	The system messages associated with the backup operation.
2.3	PCG_Information	Stores the location of the SQL Server database backup directory.
2.4	PCG_Restore_LOG	Restore log shows successful or unsuccessful completion of a PCGenesis restore operation.
2.5	PCG_Restore_LOG_Message	The system messages associated with the restore operation.
2.6	PCG_Runtime_Errors	Stores PCGenesis runtime errors that occur during a backup or restore operation.

SQL Server Databases and Tables for PCGenesis System - <i>continued</i>		
3	PCG_Q_DB	
	<p>The PCG_Q_DB database is a backup of PAYDATA that is made just before Calculate Payroll & Update YTD (Final) (F4) or is a backup of FARDATA that is made just before updating budget files with vendor check information (F5).</p>	
	Table Name	Purpose
3.1	PAY.tablename	<p>PAYDATAQ and PCG_Q_DB database tables: The PAYDATAQ directory (inside of the SECOND directory) is a backup of PAYDATA that is made just before <i>Calculate Payroll & Update YTD (Final)</i> (F4).</p> <ul style="list-style-type: none"> Restore from PAYDATAQ if a problem occurs during check printing.
3.2	FAR.tablename	<p>FARDATAQ and PCG_Q_DB database tables: The FARDATAQ directory (inside of the SECOND directory) is a backup of FARDATA that is made just before updating budget files with vendor check information (F5).</p> <ul style="list-style-type: none"> Restore from FARDATAQ if a problem occurs with posting to budget files. Also restore from FARDATAQ if a problem occurs in financial data after posting but before the nightly backup is processed. FARDATAQ should not be restored if any interaction from payroll has occurred (posting payroll or processing an earnings history record gross data transfer). When both financial and payroll records are affected, all of SECOND should be restored.
4	PCG_D_DB	
	<p>The PCG_D_DB database is a backup of PAYDATA that is made after printing payroll checks, but just before printing payroll direct deposits (F2, F3, F5).</p>	
	Table Name	Purpose
4.1	PAY.tablename	<p>PAYDATAD and PCG_D_DB database tables: The PAYDATAD directory (inside of the SECOND directory) is a backup of PAYDATA that is made just after checks print (F5) and before direct deposits print.</p> <ul style="list-style-type: none"> Restore from PAYDATAD if a problem occurs during or after printing direct deposits but before posting to payroll earnings history (F13).

SQL Server Databases and Tables for PCGenesis System - <i>continued</i>		
5	PCG_SANDBOX	
	The PCG_SANDBOX database is a backup of SANDBOX that is made just before creating the budget SANDBOX (F5, F1).	
	Table Name	Purpose
5.1	SAND.tablename	<p>SANDBOXQ and PCG_SANDBOX database tables: The SANDBOXQ directory (inside of the SECOND directory) is a backup of SANDBOX that is made just before a new <i>Budget SANDBOX</i> is created (F5, F1).</p> <ul style="list-style-type: none"> Restore from SANDBOXQ if it is desired to return to a prior iteration of the budget forecasting parameters.
6	VQueueDB	
	The VQueueDB database contains the <i>VerraDyne Print Manager</i> associated tables.	