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 21.01.00 – Miscellaneous Updates / Conversion to PCGenesisDB Database / Installation Instructions**

This document contains the PCGenesis software release overview and installation instructions for *Release 21.01.00*.

PCGenesis supporting documentation is provided at:

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

March, 2021 Payroll Completion Instructions

Install this release after completing the March 2021 payroll(s). Install this release before executing F4 – Calculate Payroll and Update YTD for the April 2021 payroll. Be sure to close out any vendor / accounts payable check run prior to installing this release.

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!

Table of Contents

Section A: Overview of Release

A1. PCGenesis System Enhancements

A1.1. Conversion of Expenses and Purchase Orders to PCGenesisDB SQL Server Database Tables

The GaDOE is happy to announce a major upgrade of PCGenesis. Release 21.01.00 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 21.01.00, the file K:\SECOND\FARDATA**EXPENSE** is converted into the *SQL Server* database tables **FAR.Expense** and **FAR.Expense_Distribution**. These tables store the claim records for the PCGenesis system.

The file K:\SECOND\FARDATA**PO** is converted into the *SQL Server* database tables **FAR.Purchase_Order**, **FAR.Purchase_Order_Distribution**, and **FAR.Purchase_Order_Expense**. These tables store the purchase order records for the PCGenesis system.

The file K:\SECOND\FARDATA**POPRINT** is converted into the *SQL Server* database table **FAR.Purchase_Order_Print**. The **FAR.Purchase_Order_Print** table stores the purchase order inventory detail records associated with the purchase order master record.

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 or 2016*:

- K:\PCGSQLdb\MSSQL**13**.SQLEXPRESSPCG\MSSQL\DATA\ **PCGenesisDB.mdf**
- K:\PCGSQLdb\MSSQL**13**.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. Restore FARDATAQ Database Tables

A problem has been resolved with the *Restore PCGenesis Schema* function (F30, F12). Before, an error would occur when trying to restore the database tables associated with the **FARDATAQ** schema. Release 21.01.00 resolves this issue.
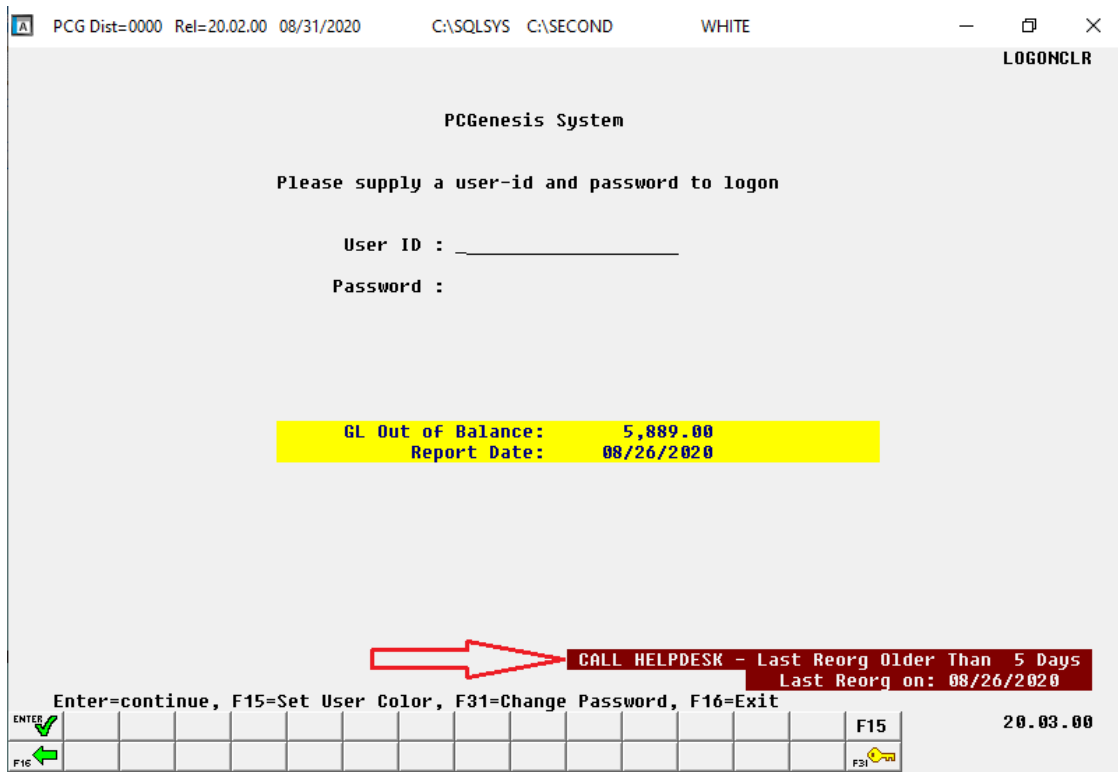
A1.3. PCGenesis Reorganization Daily Task

The PCGenesis Reorganization job has been updated to execute the SQL command ***UPDATE STATISTICS*** for all tables in the PCGenesis database. *SQL Server* statistics are essential for the query optimizer to prepare an optimized and cost-effective execution plan. These statistics provide distribution of column values to the query optimizer, and it helps *SQL Server* to estimate the number of rows (also known as cardinality). The query optimizer should be updated regularly. Improper statistics might mislead the query optimizer to choose costly operators such as index scan over index seek and it might cause high CPU, memory and IO issues in *SQL Server*. Improper statistics might also face blocking and deadlocks that eventually causes trouble to the underlying queries and resources.

Please refer your IT staff to *Section B: PCGenesis Backup / Reorganization / Restore, Topic 2: How To Schedule the PCGenesis Reorganization Job* at the following Ga DOE website for instructions on setting up the reorganization batch job:

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

The reorganization task is **K:\Backup\PCGREORG.BAT**. The PCGenesis reorganization task creates a copy of **K:\SECOND** as **K:\SECONDX** and reorganizes all indexed files. The reorganization task also creates a copy of the *SQL Server* PCGenesis database (**PCGenesisDB**) as **PCGenesisDBX.**BAK after rebuilding the receipt and receivable clone tables. The scheduled task creates a recap report which allows the user to verify that the reorganization process has completed successfully. The recap report is created in the **K:\UCTPRINT\#SPLPRT** directory with the filename ***REOGnnnn***. If the General Ledger is out of balance, an additional report is created with the filename ***GBALnnnn***.

If the reorganization batch job has not run successfully for at least three days, the logon screen will display an error message in red, as shown below. If this message appears on the PCGenesis logon screen, inform your IT staff immediately!

```
  A   PCG Dist=0000  Rel=20.02.00  08/31/2020      C:\SQLSYS  C:\SECOND        WHITE              —    ☐   ✕
                                                                                                LOGONCLR


                                      PCGenesis System

                         Please supply a user-id and password to logon


                              User ID : _____

                              Password :




                              GL Out of Balance:       5,889.00
                                   Report Date:      08/26/2020




                                              ⮕   CALL HELPDESK — Last Reorg Older Than  5 Days
                                                              Last Reorg on: 08/26/2020
                  Enter=continue, F15=Set User Color, F31=Change Password, F16=Exit
          ENTER ✓                                                      F15            20.03.00

           F16 ⬅                                                       F31 🔑
```

The PCGenesis administrator must ensure that the reorganization task runs successfully every day. Any failure that affects the integrity and availability of PCGenesis data is unacceptable. The PCGenesis reorganization task improves PCGenesis reliability and data integrity by reorganizing all PCGenesis indexed files. The reorganization task also creates a daily restore point that remains on the PCGenesis server for quick access. This restore point often provides the Ga DOE Helpdesk with a quick and easy way to recover from a data issue.

A1.4. 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. Employees Not Eligible for Rehire

The Update/Display Personnel Data screen (F2, F2) has been updated to prominently display when an employee is not eligible for rehire. When the **Elig for Rehire** field is set to '**N**', the message '*NOT ELIGIBLE FOR REHIRE*' will be displayed in red in the upper righthand corner of the screen, as shown below.

A3. Financial Accounting and Reporting (FAR) System

A3.1. EXPENSE File Converted to Database Table

Release 21.01.00 converts the VISION indexed file *K:\SECOND\FARDATA\EXPENSE* into the following PCGenesis database tables:

- *FAR.Expense*
- *FAR.Expense_Distribution*

These tables store the claim records for the PCGenesis system.

With release 21.01.00, **K:\SECOND** <u>must be restored with</u> the **PCGenesisDB** database. These two entities must be kept in sync, otherwise claims will be lost which will result in reporting inconsistencies with the General Ledger. Call the help desk when any data needs to be restored.

A3.2. PO File Converted to Database Table

Release 21.01.00 converts the VISION indexed file *K:\SECOND\FARDATA\PO* into the following PCGenesis database tables:

- *FAR.Purchase_Order*
- *FAR.Purchase_Order_Distribution*
- *FAR.Purchase_Order_Expense*

These tables store the purchase order records for the PCGenesis system.

With release 21.01.00, **K:\SECOND** <u>must be restored with</u> the **PCGenesisDB** database. These two entities must be kept in sync, otherwise purchase orders 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. POPRINT File Converted to Database Table

Release 21.01.00 converts the VISION indexed file *K:\SECOND\FARDATA\POPRINT* into a PCGenesis database table called *FAR.Purchase_Order_Print*. The *FAR.Purchase_Order_Print* table stores the purchase order inventory detail records associated with the purchase order master record.

With release 21.01.00, **K:\SECOND** <u>must be restored with</u> the **PCGenesisDB** database. These two entities must be kept in sync, otherwise purchase order inventory 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.

A3.4. Account File Transaction Processing

With release 21.01.00, 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. One example is a transfer 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 <u>all</u> of the operations or none of the operations, keeping the database consistent.

Any system programs that update expenses or purchase orders 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.

A3.5. Vendor Check Processing

A warning message has been added to the *Select/Deselect Payables for Payment - Vendor/All* (F1, F4, F2) and *Select/Deselect Payables for Payment – Individual* (F1, F4, F3) modules to prevent users from interfering in a vendor check cycle that has already been started.

<u>Before</u> <u>printing</u> the vendor checks, users may select and extract the payables as often as is needed. Once the payables have been extracted for processing, the user may decide to select or de-select additional or different claims for the check run. In this case, a dialog box is displayed warning the user that a vendor check run has already been started. This warning is intended to prevent one user or department from interfering with another user's or department's vendor check run. The user should carefully consider whether or not to continue with the select/de-select payables action when presented with this dialog box.
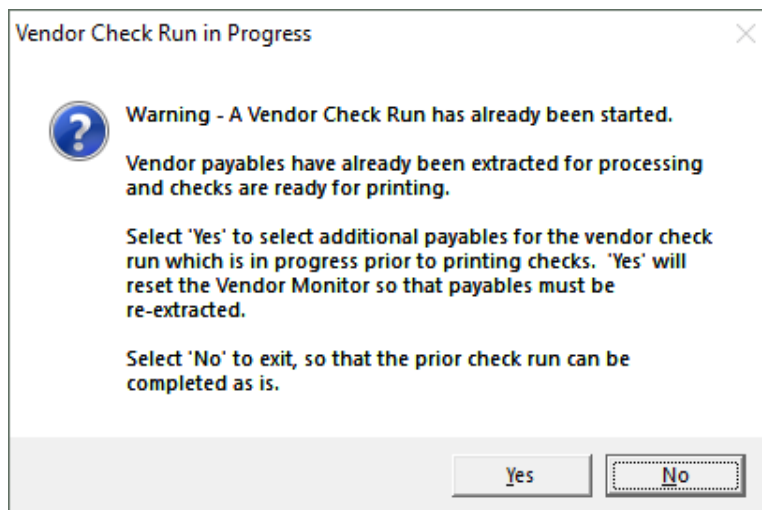
If the user selects '*Yes*' to select or de-select additional or different payables, the *Vendor Check Sequence Monitor* is reset so that the payables must be re-extracted. Selecting '*No*', allows the user to complete the existing check run as is.

Once the user has started to <u>print</u> vendor checks, the check cycle is locked down, and the user cannot select or de-select any additional or different claims until the rest of the steps in the vendor check cycle have been completed. If the user attempts to select or de-select claims after checks have started printing, the message "*Prior check cycle not complete – incorrect sequence*" is displayed.

A3.6. Deposit Receipts

A problem has been corrected when depositing multiple receipts one after the other (F1, F7, F8). Release 20.04.00 caused a deadlocking problem where the receipt table was locked when a user deposited one receipt, did not exit the program, and then circled back to deposit a second receipt causing the system to hang. Release 21.01.00 resolves this problem.

A4. Personnel System

A4.1. Enhanced Leave System – Import Leave Input Data From CSV

A problem has been corrected in the *Enhanced Leave and Substitute Pay System* when importing leave from a .csv file (F3, F4, F2, F2). The standback edit for checking negative leave balances did not work correctly when an import file contained leave for multiple reason codes within the same leave type code. In this case, the system did not properly add the totals for both reason codes when deciding if the resulting leave balance was negative. This could cause an employee's sick leave balance to go negative even if the leave system was configured to not allow negative balances. This problem has been corrected.

Section B: Installation Instructions for Release 21.01.00 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 21.01.00"**.
    – 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 21.01.00"**.
5	<u>Start the SQL Express Service</u>: <mark>SQLEXPRESSPCG must be running before starting the release installation.</mark> If *SQL Server* is not running, the **PCGenesisDB** cannot be updated during the release installation. If you run a full backup prior to installing the release and *SQL Server* has been stopped, the following commands can be executed to restart **SQLEXPRESSPCG**. • 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**
6	Proceed to *B2. Verify Windows Security Group GENUSERS*.

B2. Verify Windows Security Group GENUSERS

The DOE is continuing the conversion of PCGenesis data tables into a *SQL Server* database in the 21.01.00 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 21.01.00*

<u>*FROM THE PCGENESIS SERVER*</u>
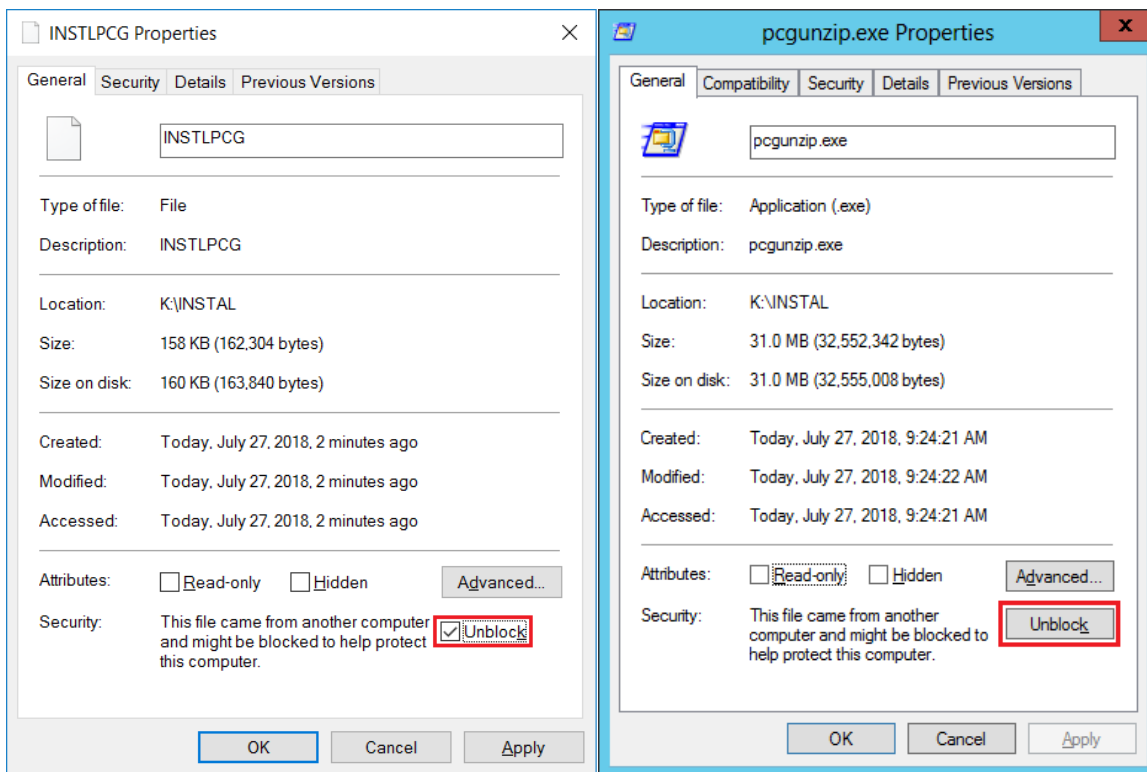
Important Note

The person installing the PCGenesis release must be a member of the <u>system administrator security group</u> on the PCGENESIS server!
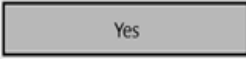
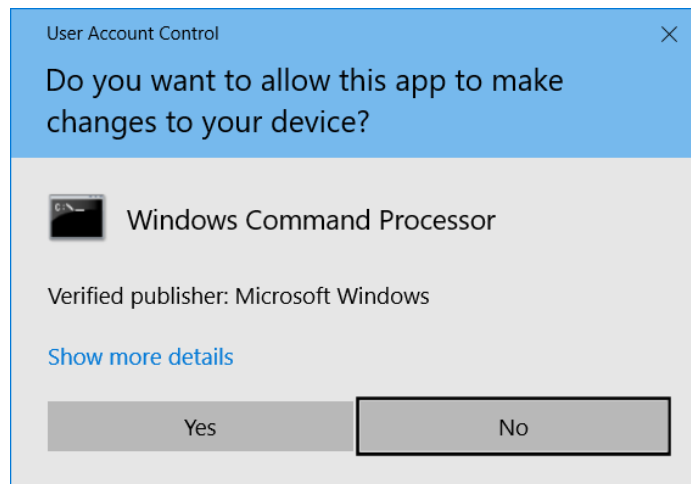| Step	Action
1	<u>**NOTE:**</u> The person installing the PCGenesis release must be a member of the system administrator security group on the PCGenesis server. This is required to properly install the *PCGenesisDB* database components contained in this release.
2	<u>**Start the SQL Express Service**</u>: **SQLEXPRESSPCG must be running before starting the release installation.** If *SQL Server* is not running, the **PCGenesisDB** 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. *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.*
7	***** ALERT ***** 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 operating system. 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! For each of the downloaded files in **K:\INSTAL**, right-click on the filename and select '*Properties*'.

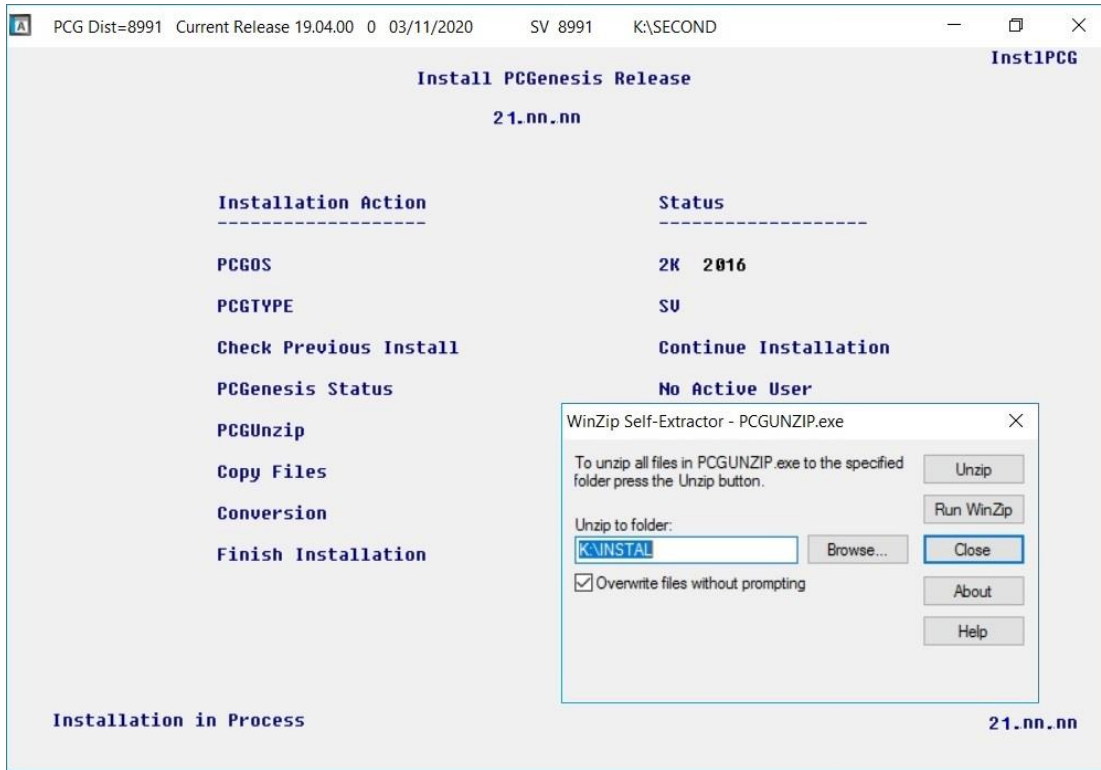After right-clicking on each file, select the '*Properties*' option:
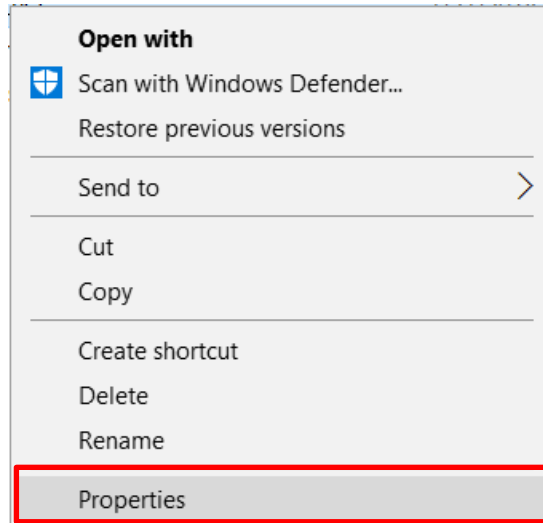
Depending on the version of the Windows operating system, the following screen displays:

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

User Account Control   ✕

Do you want to allow this app to make
changes to your device?

    Windows Command Processor

Verified publisher: Microsoft Windows

Show more details

| Yes | No |

A screen will display showing the progress of the installation:

For PCGenesis *Release 21.01.00* successful installations, the following message displays:

Step	Action
11	Select **Enter** to close the window.
12	**If the installation was successful:** Proceed to *B4. Verify Release 21.01.00 Was Successfully Installed.*
	If the installtion was unsuccessful: Proceed to *Step 13.*

A problem message displays if an error occurred:
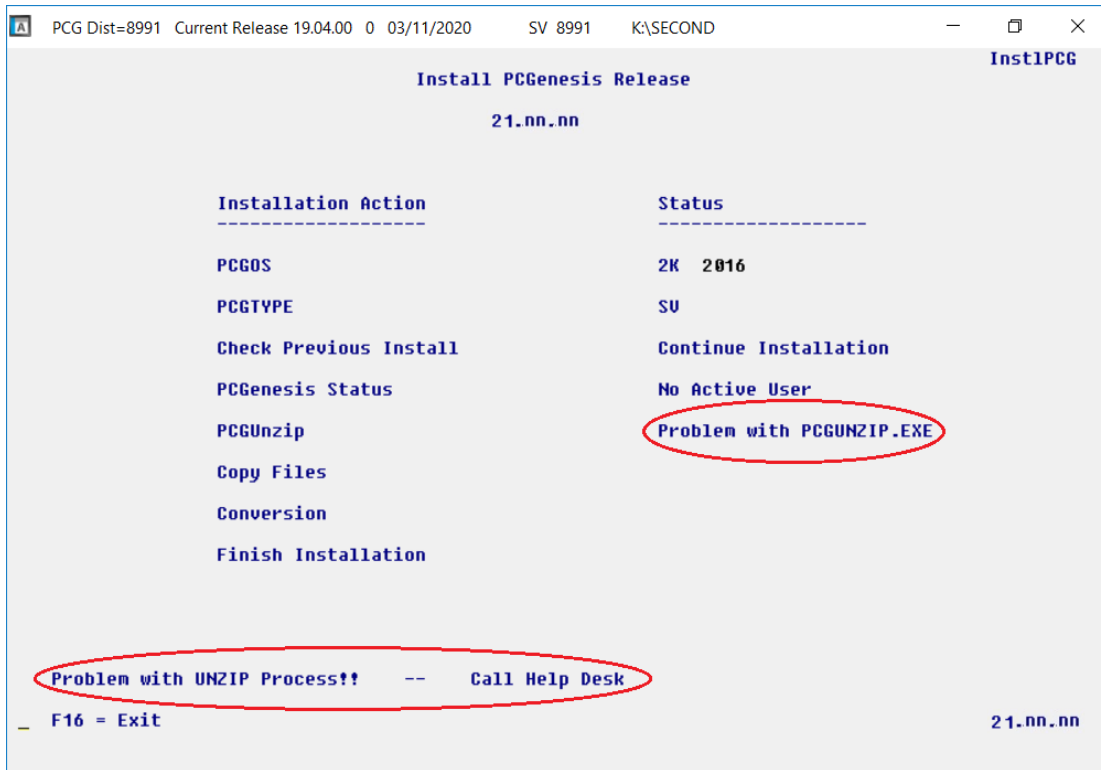
Step	Action
13	Select **F16** to close the window.
14	Return to the *MyGaDOE* Web portal, and detach the files again.
15	*Contact the Technology Management Customer Support Team for additional assistance if needed. A description of the error will display with instructions to call the Help Desk.*

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:
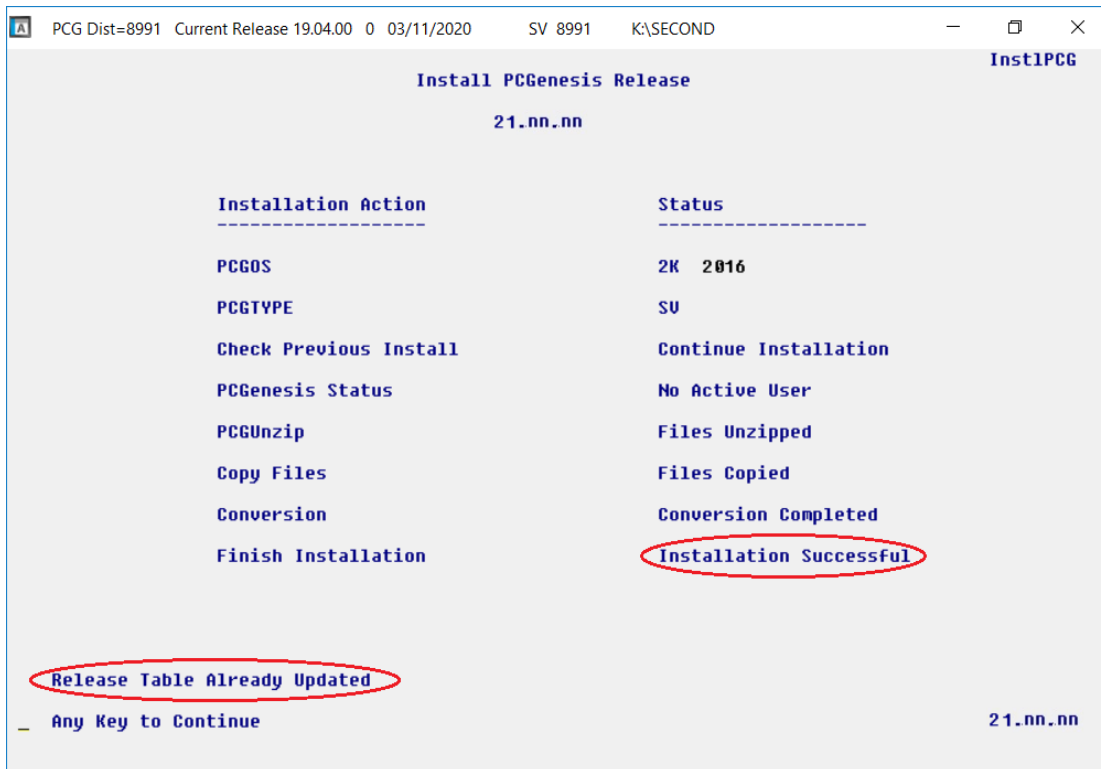
Step	Action
16	Proceed to *B4. Verify Release 21.01.00 Was Successfully Installed.*

B4. Verify Release 21.01.00 Was Successfully Installed

Step	Action
1	**Log into PCGenesis**.
2	From the *Business Applications Master Menu,* select __30__ (**F30** - System Utilities).
3	From the *System Utilities Menu*, select __17__ (**F17 -** Display Current Release Number).

The following screen displays:

Step	Action
4	Verify **Release 21.01.00** displays.
	*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 21.01.00** displays.*
	If Release 21.01.00 does not display, contact the Technology Management Customer Support Center *for assistance.*
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 21.01.00 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 21.01.00"**.
5	Restart the SQL Express Service (**SQLEXPRESSPCG**). After waiting <u>at least two minutes,</u> restart the **VQueueService** in (**View local services**).

Section C: After PCGenesis Release 21.01.00 Has Been Installed

C1. Verify Contents of the End-of-February 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 <u>database</u> 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	<mark>**Verify you have a <u>weekly</u> <u>full</u> <u>backup</u> of <u>K:</u> that you retain for at least 4 weeks.**</mark> Include a **full backup** of **K:*.*** in the site's standard server backup process ▸ Recommend **full backup** of **K:*.*** <u>every night</u> if possible • Minimum of one full backup of **K:*.*** every week **(Required)** • Retain at least 4 weeks of **K:*.*** **(Required)**
2	<mark>**Verify you have a <u>daily</u> data backup of *K:\SECOND*.** <u>and</u> *K:\PCGSQLdb*.** that you retain for at least 4 weeks**</mark> Daily data backup of ***K:\SECOND*.** <u>and</u> *K:\PCGSQLdb*.** **(Required)** • 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*.* and K:\PCGSQLdb*.* for at least one year **(Required)**
3	Request your IT representative obtain the February 28th 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>February 2021</u> backup.

Step	Action
4	Verify that this file exists on the February 28th, 2021 backup: For Windows Server 2012, 2016, or 2019: K:\PCGSQLdb\MSSQL**13**.SQLEXPRESSPCG\MSSQL\DATA**PCGenesisDB.mdf** **If this file does not exist on your backup media, you will <u>not</u> be able to recover all your PCGenesis data!!!**
5	Verify that this directory exists on the February 28th, 2021 backup, including all subdirectories and files within this directory: K:\SECOND
6	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 *PCGenesis Technical System Operations Guide*: https://www.gadoe.org/Technology-Services/PCGenesis/Pages/Technical-System-Operations-Guide.aspx Review the information in *Section B: PCGenesis Backup / Reorganization / Restore*.
7	If your district's backup procedures needed to be remediated, create a new backup by following the instructions in *Step 6* and then start this procedure over again at *Step 1* to verify the backup.

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	**FAR.Account**	Stores the <u>budget</u> general ledger account codes.
	1.5	**FAR.AccountR**	Stores the <u>revenue</u> general ledger account codes.
	1.6	**FAR.AccountG**	Stores the general ledger <u>balance account</u> codes.
	1.7	**FAR.Bank_File**	Stores the bank codes.
	1.8	**FAR.Chart_Of_Accounts**	Stores <u>all</u> general ledger account codes, including budget, revenue, and balance account codes on one table.
	1.9	**FAR.Expense** *(New with this release)*	Stores the claim/invoice master records.
	1.10	**FAR.Expense_Distribution** *(New with this release)*	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.
	1.11	**FAR.Facility**	Stores the facility and building records for purchase order processing.
	1.12	**FAR.Invest**	Stores investment records.
	1.13	**FAR.Name_01_Fiscal_Year**	Stores the two-digit year description of the account number.
	1.14	**FAR.Name_02_Fund**	Stores the 3-digit fund description of the account number.
	1.15	**FAR.Name_03_FY_flag**	Stores the 1-digit fiscal year description of the account number. (Not used.)
	1.16	**FAR.Name_04_Program**	Stores the 4-digit program code description of the account number.
	1.17	**FAR.Name_05_Function**	Stores the 4-digit function code of the account number, for expense accounts.

		Table Name	Purpose
		SQL Server Databases and Tables for PCGenesis System - *continued*	
		PCGenesisDB - PCGenesis financial and payroll production data, continued.	
	1.18	**FAR.Name_07_Fac_Bldg**	Stores the 5-digit facility/building code description of the account number.
	1.19	**FAR.Name_06_Object**	Stores the 5-digit object code description of the account number.
	1.20	**FAR.Name_08_Additional**	Stores the 6-digit additional code description of the account number.
	1.21	**FAR.Name_09_Rev_Srce**	Stores the 4-digit source code description of the account number, for revenue accounts.
	1.22	**FAR.Name_10_BLNC_SHEET**	Stores the 4-digit balance sheet code description of the account number, for GL accounts.
	1.23	**FAR.Purchase_Order** *(New with this release)*	Stores the purchase order master records.
	1.24	**FAR.Purchase_Order_ Distribution** *(New with this release)*	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.
	1.25	**FAR.Purchase_Order_ Expense** *(New with this release)*	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.
	1.26	**FAR.Purchase_Order_Print** *(New with this release)*	Stores the purchase order inventory detail records associated with the purchase order master record.
	1.27	**FAR.Receipt**	Stores the receipt master records.
	1.28	**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.
	1.29	**FAR.Receivable**	Stores the receivable master records.
	1.30	**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.
	1.31	**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.
	1.32	**FAR.Revenue_Source**	Stores the Revenue Source records for the financial system revenue subsystem.

	SQL Server Databases and Tables for PCGenesis System - *continued*		
	PCGenesisDB - PCGenesis financial and payroll production data, continued.		
		Table Name	**Purpose**
	1.33	**FAR.Vendor**	Stores the vendor records for the financial system expense subsystem.
	1.34	**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 - *continued*		
3	**PCG_Q_DB** 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).	
	Table Name	**Purpose**
3.1	**PAY.***tablename*	**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 *Calculate Payroll & Update YTD (Final)* (F4). • Restore from **PAYDATAQ** if a problem occurs during check printing.
3.2	**FAR.***tablename*	**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). • 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** 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).	
	Table Name	**Purpose**
4.1	**PAY.***tablename*	**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. • 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 - *continued*		
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***	**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 *Budget SANDBOX* is created (F5, F1). • 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 *VerraDyne Print Manager* associated tables.