

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

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MEMORANDUM

TO: PCGenesis System Administrators

FROM: Steven Roache, Senior Information Systems Manager

SUBJECT: Release 20.03.00 – Miscellaneous Changes / Conversion to PCGenesisDB

Database / Installation Instructions

This document contains the PCGenesis software release overview and installation instructions for *Release 20.03.00*.

PCGenesis supporting documentation is provided at:

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

September 2020 Payroll Completion Instructions

Install this release <u>after</u> completing the September 2020 payroll(s). Install this release <u>before</u> executing F4 – Calculate Payroll and Update YTD for the October 2020 payroll.

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!

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Section A: Overview of Release

A1. PCGenesis System Enhancements

A1.1. November PCGenesis Release Eliminated

In the past, the PCGenesis team has delivered a full PCGenesis release every year on November 30th. Going forward a full release will no longer be posted. Instead, the development team will post a single file which contains the new SHBP health premiums along with instructions for uploading the file into PCGenesis. This change will result in a streamlined release schedule for PCGenesis districts. Going forward, PCGenesis administrators can expect software releases once a quarter, on the following dates:

- March 31st
- June 30th
- September 30th
- December 31st

Additional releases will be distributed, if required, for legislative changes, or any other emergency.

A1.2. PCGenesis Reorganization Daily Task

The PCGenesis Reorganization job has been updated to rebuild the <code>FAR.RECEIPT_view_clone</code> and the <code>FAR.RECEIVE_view_clone</code> database tables. The <code>FAR.RECEIPT_view_clone</code> stores the receipt master records, concatenated with the receipt GL account detail records to create a full-record view of the receipts. The <code>FAR.RECEIVE_view_clone</code> stores the receivable master records, concatenated with the receivable GL account detail records and receipt detail records to create a full-record view of the receivables.

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:

 $\frac{https://www.gadoe.org/Technology-Services/PCGenesis/Pages/Technical-System-Operations-Guide.aspx}{Continuous}$

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	/31/20	20	C:\S	QLSYS	C:\SE	COND		WHI	ITE				_	ð	×
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							Dr	·Conor	-i.c s	ystem									
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ENTER	Enter=c	onti	.nue, F1	15=Se	t Us	er Col	or, F	31=Cl	nange	Pass	word,	F16=	Exit		F15	1		20.03	. 00
F16															. 13 . ₃₁ •••	_			

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.

A1.3. Conversion of Receivables, Receipts, Vendors, and Investments to PCGenesisDB SQL Server Database Tables

The GaDOE is happy to announce a major upgrade of PCGenesis. Release 20.03.00 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 20.03.00, the file K:\SECOND\FARDATA**RECEIVE** is converted into the *SQL Server* database table *FAR.Receivable*, *FAR.Receivable_Distribution*, *FAR.Receivable_Receipt*, and *FAR.RECEIVE_view_clone*. These tables store the receivable records for the PCGenesis system.

The file K:\SECOND\FARDATA**RECEIPT** is converted into the *SQL Server* database table *FAR.Receipt*, *FAR.Receipt_Detail*, and *FAR.RECEIPT_view_clone*. These tables store the receipt records for the PCGenesis system.

The file K:\SECOND\FARDATA**VENDOR** is converted into the *SQL Server* database table *FAR.Vendor*. The *FAR.Vendor* table stores the vendor records for the financial system expense subsystem.

The file K:\SECOND\FARDATA\INVEST is converted into the *SQL Server* database table *FAR.Invest*. The *FAR.Invest* table stores the investment records for the PCGenesis system.

The *SQL Server* database table *FAR.Chart_Of_Accounts* is being added. The *FAR.Chart_Of_Accounts* table stores <u>all</u> general ledger account codes, including budget, revenue, and balance account codes on one table.

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\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.

A1.4. 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 backup. One directory cannot be backed up without the other directory, and they must be maintained together. To create a complete 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 <u>stop</u> 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

<u>After</u> 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 <u>start</u> 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. Fix Bug in Update Budget Files with Current Pay

A problem with *Update Budget Files with Current Pay* (F2, F3, F14) has been corrected. The problem was caused by release 20.02.00. Before, the *Update Budget Files* process would freeze, and a deadlock situation would arise when the payroll system was required to create a new general ledger budget account on the fly during the first payroll of the fiscal year. This problem has been corrected.

A2.2. Automatically Set Payroll Trial Registers to 'Requeue'

An enhancement has been made to the *Payroll Trial Register* reports (F2, F3, F3) so that these reports are <u>not</u> automatically deleted from the print queue after being spooled to the printer. Since it is very important to print these reports successfully, now these reports will be created in the *VerraDyne Print Queue* with the disposition '**REQUEUE**', allowing the reports to be spooled and respooled numerous times, if necessary. The old process created these reports with a disposition of '**SCRATCH**' and automatically deleted these reports from the print queue after printing. Before, if the *Trial Registers* were spooled but never printed for some reason, the reports couldn't be recreated after continuing with the payroll steps.

It is possible for the user to change the disposition of any PCGenesis report to be what the user desires by right-clicking on the disposition field for a report and selecting either **SCRATCH**, **KEEP**, or **REQUEUE**.

To change the Disposition of a print file:

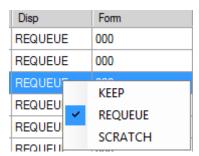
The disposition of a print file can be changed by **right clicking** on the disposition (**Disp**) field for the print file and selecting the desired option.

Disposition, valid values are:

SCRATCH - After printing or emailing, the document entry will be removed from the print queue and the file on the disk will be scratched.

KEEP - After printing or emailing, the document entry will be removed from the print queue. The document on the disk will not be scratched.

REQUEUE - After printing or emailing, the document entry will <u>remain</u> in the print queue in HOLD status and the file on the disk will be <u>not be scratched</u>. The entry status will be set back to HOLD after printing or emailing.



NOTE: Even though the selected reports will be sent to the *VerraDyne Print Manager* with a disposition of '**REQUEUE**', the reports will only remain in the print queue for <u>30 days</u> before being permanently deleted. The *VerraDyne Print Manager* constantly cleans up old files and will delete files from the print queue after 30 days regardless of the disposition of the file.

A3. Financial Accounting and Reporting (FAR) System

A3.1. RECEIVE File Converted to Database Table

Release 20.03.00 converts the VISION indexed file *K:\SECOND\FARDATA\RECEIVE* into the following PCGenesis database tables:

- FAR.Receivable
- FAR.Receivable_Distribution
- FAR.Receivable_Receipt
- FAR.RECEIVE_view_clone

These tables store the receivable records for the PCGenesis system.

With release 20.03.00, **K:\SECOND** must be restored with the **PCGenesisDB** database. These two entities must be kept in sync, otherwise receivables 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. RECEIPT File Converted to Database Table

Release 20.03.00 converts the VISION indexed file $K:\SECOND\FARDATA\RECEIPT$ into the following PCGenesis database tables:

- FAR.Receipt
- FAR.Receipt_Detail
- FAR.RECEIPT_view_clone

These tables store the receipt records for the PCGenesis system.

Also, the *SQL Server* database table *FAR.Chart_Of_Accounts* has been added. The *FAR.Chart_Of_Accounts* table stores <u>all</u> general ledger account codes, including budget, revenue, and balance account codes on one table. This allows general ledger account codes on a receipt record to be validated against either the revenue accounts, or the general ledger balance accounts when a receipt is created from an investment.

With release 20.03.00, **K:\SECOND** must be restored with the **PCGenesisDB** database. These two entities must be kept in sync, otherwise receipts 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. INVEST File Converted to Database Table

Release 20.03.00 converts the VISION indexed file *K:\SECOND\FARDATA\INVEST* into a PCGenesis database table called *FAR.Invest*. The *FAR.Invest* table stores the investment records for the PCGenesis system.

With release 20.03.00, **K:\SECOND** must be restored with the **PCGenesisDB** database. These two entities must be kept in sync, otherwise investments 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. VENDOR File Converted to Database Table

Release 20.03.00 converts the VISION indexed file $K:\ECOND\FARDATA\VENDOR$ into a PCGenesis database table called FAR.Vendor. The FAR.Vendor table stores the vendor records for the PCGenesis system.

With release 20.03.00, **K:\SECOND** must be restored with the **PCGenesisDB** database. These two entities must be kept in sync, otherwise vendor records will be lost. Call the help desk when any data needs to be restored.

A3.5. Account File Transaction Processing

With release 20.03.00, 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 all of the operations or none of the operations, keeping the database consistent.

Any system programs that update receivables, receipts, or investments 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.

A3.6. Fix 'Unknown Cursor' Error in Budget and Revenue Account Inquiry

Several problems have been corrected with *Budget Account Inquiry* (F1, F1, F1) and *Revenue Account Inquiry* (F1, F5, F1). The problems were caused by release 20.02.00. Before, the account inquiry would abort intermittently with the error "*unknown cursor*" when scrolling back and forth between accounts using the F2 - scan accounts feature. Also, when non-alphabetic characters other than spaces were entered as part of the account key, the program would abort with the error message "*error converting varchar to int*" when scanning for partial account numbers. These problems have been corrected.

A3.7. Fix 'Unknown Cursor' Error in Budget and Revenue Account Activity Summary Lists

A problem has been corrected with *Budget Account Activity Summary List* (F1, F9, F3, F2) and *Revenue Account Activity Summary List* (F1, F9, F3, F9). The problem was caused by release 20.02.00. Before, if an 'X' was entered to exclude either non-expenditure or expenditure accounts, the report would abort with the error "*unknown cursor*". This problem has been corrected.

Section B: Installation Instructions for Release 20.03.00 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 was successful.
 - In addition to its current labeling, also label the prior evening's backup media as "Data Backup Prior to Release 20.03.00".
 - 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 K:\ PCGenesis disk drive or else the backup will not run to completion.					
	If the <i>Uspool</i> background task has not yet been removed from the from "All Users Starts close <i>Uspool</i> at the server. <i>Uspool</i> must be permanently removed and should no longe running on the server.					
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 20.03.00".					
5	Start the SQL Express Service: SQLEXPRESSPCG must be running before starting the release installation. 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 20.03.00 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.

 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 using the Help-dticket link on the left side of the MyGaDOE portal menu.

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

B3. Install PCGenesis Release 20.03.00

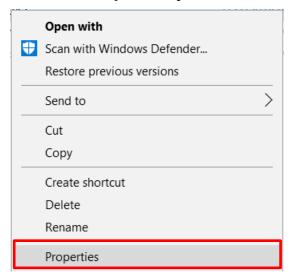
FROM THE PCGENESIS SERVER

Important Note

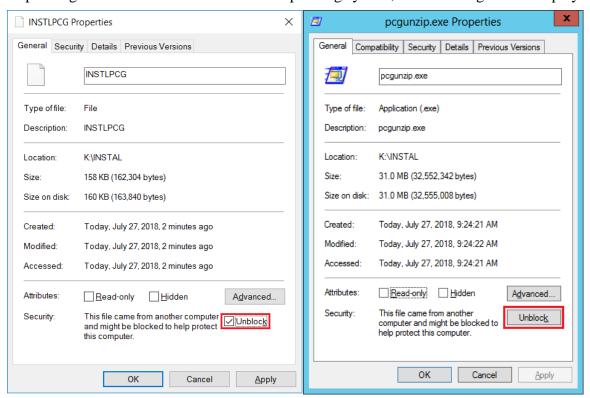
The person installing the PCGenesis release must be a member of the <u>system</u> administrator security group on the PCGENESIS server!

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 PCGenesisDB database components contained in this release.					
2	Start the SQL Express Service: 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'.					

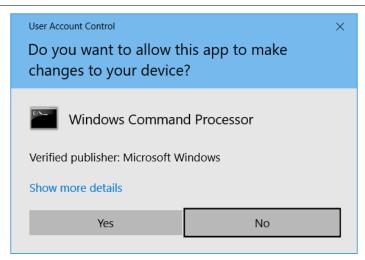
After right-clicking on each file, select the 'Properties' option:



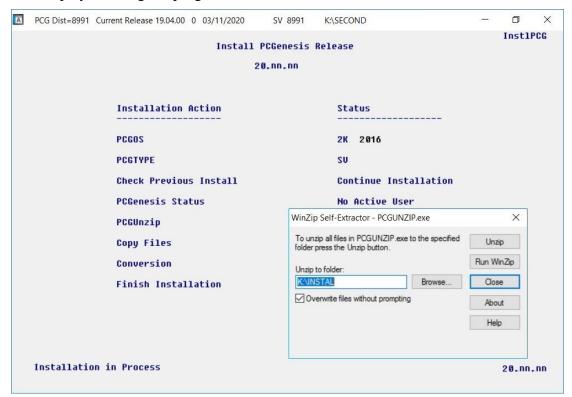
Depending on the version of the Windows operating system, the following screen displays:



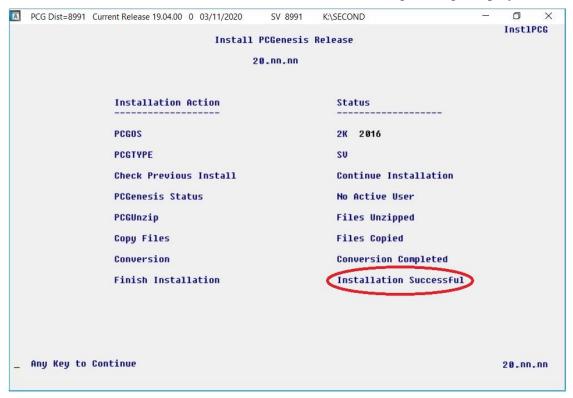
Step	Action						
8	Check the bottom of the ' <i>Properties</i> ' dialog box to see if the following security warning is displayed:						
	"This file came from another computer and might be blocked to help protect this computer."						
	If the option is presented, select Unblock (Unblock) or check the 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 <i>Run as administrator</i> 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.						



A screen will display showing the progress of the installation:

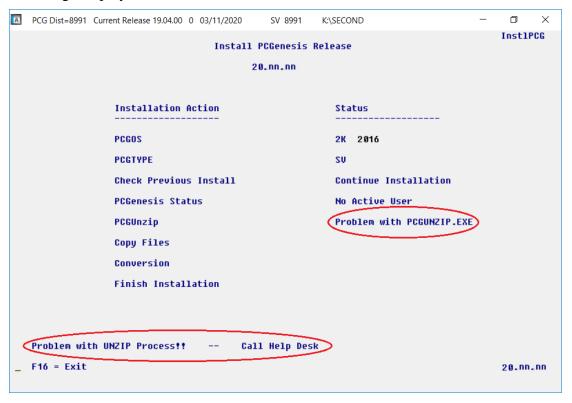


For PCGenesis *Release* 20.03.00 successful installations, the following message displays:



Step	Action
11	Select Enter to close the window.
12	If the installation was successful: Proceed to <i>B4</i> . Verify Release 20.03.00 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 Center 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:



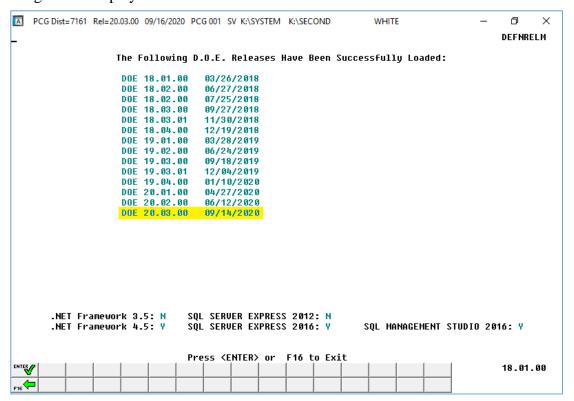
Release 20.03.00 – Miscellaneous Changes / Conversion to PCGenesisDB Database / Installation Instructions

Step	Action
16	Proceed to B4. Verify Release 20.03.00 Was Successfully Installed.

B4. Verify Release 20.03.00 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 20.03.00 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 20.03.00 displays. If Release 20.03.00 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 20.03.00 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 K:\ PCGenesis disk drive or else the backup will not run to completion.					
	If the <i>Uspool</i> background task has not yet been removed from the from "A <i>ll Users Startup</i> ", close <i>Uspool</i> at the server. <i>Uspool</i> must be permanently removed and should no longer be running on the server.					
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 20.03.00".					
5	Restart the SQL Express Service (SQLEXPRESSPCG). After waiting at least two minute restart the VQueueService in View local services (View local services).					

Section C: After PCGenesis Release 20.03.00 Has Been Installed

C1. Verify Contents of the End-of-August 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	Verify you have a weekly full backup of K: that you retain for at least 4 weeks.							
	Include a full backup of <i>K</i> :*.* in the site's standard server backup process Recommend full backup of <i>K</i> :*.* every night if possible							
	• Minimum of one full backup of K : *.* every week	(Required)						
	• Retain at least 4 weeks of K :*.*	(Required)						
2	Verify you have a daily backup of K:\SECOND*.* and K:\Po	CGSQLdb*.* that you retain						
	Daily backup of <i>K:</i> \ <i>SECOND</i> *.* and <i>K:</i> \ <i>PCGSQLdb</i> *.*	(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 <i>K:\SECOND*.*</i> and <i>K:\PCGS</i>	QLdb*.* for 4 weeks (Required)						
	 Retain one daily backup each month of K:\SECOND*. at least one year 	* and K:\PCGSQLdb*.* for (Required)						
3	Request your IT representative obtain the August 31 st backup of either the weekly full backup of K: or the daily backup of K: K:\PCGSQLdb*.* , but make sure it is the end-of- <u>August 202</u>	\SECOND*.* and						

Step	Action	
4	Verify that this file exists on the August 31st, 2020 backup:	
	For Windows Server 2012, 2016, or 2019:	
	$K: \label{lem:condition} K: \label{lem:condition} K: \label{lem:condition} K: \label{lem:condition} C: \label{lem:condition} K: \label{lem:condition} K: \label{lem:condition} C: \label{lem:condition} K: \label{lem:condition} K: \label{lem:condition} K: \label{lem:condition} C: \label{lem:condition} K: \label{lem:condition} C: \label{lem:condition} K: lem:condi$	
	If this file does not exist on your backup media, you will not be able to recover all your PCGenesis data!!!	
5	Verify that this directory exists on the August 31 st , 2020 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 <u>PCGenesis Technical System Operations Guide</u> :	
	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 following the instructions in <i>Step 6</i> and then start this procedure over again at <i>Step 1</i> to ve 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 balance account codes.
	1.7	FAR.Bank_File	Stores the bank codes.
	1.8	FAR.Chart_Of_Accounts (New with this release)	Stores <u>all</u> general ledger account codes, including budget, revenue, and balance account codes on one table.
	1.9	FAR.Facility	Stores the facility and building records for purchase order processing.
	1.10	FAR.Invest (New with this release)	Stores investment records.
	1.11	FAR.Name_01_Fiscal_Year	Stores the two-digit year description of the account number.
	1.12	FAR.Name_02_Fund	Stores the 3-digit fund description of the account number.
	1.13	FAR.Name_03_FY_flag	Stores the 1-digit fiscal year description of the account number. (Not used.)
	1.14	FAR.Name_04_Program	Stores the 4-digit program code description of the account number.
	1.15	FAR.Name_05_Function	Stores the 4-digit function code of the account number, for expense accounts.
	1.16	FAR.Name_06_Object	Stores the 5-digit object code description of the account number.
	1.17	FAR.Name_07_Fac_Bldg	Stores the 5-digit facility/building code 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_08_Additional	Stores the 6-digit additional code description of the account number.
1.19	FAR.Name_09_Rev_Srce	Stores the 4-digit source code description of the account number, for revenue accounts.
1.20	FAR.Name_10_BLNC_SHEET	Stores the 4-digit balance sheet code description of the account number, for GL accounts.
1.21	FAR.Receipt (New with this release)	Stores the receipt master records.
1.22	FAR.Receipt_Detail (New with this release)	Stores the receipt GL account detail records associated with the receipt master record. A maximum of 40 GL account records are allowed per receipt.
1.23	FAR.RECEIPT_view_clone (New with this release)	Stores the receipt master records, concatenated with the receipt GL account detail records to create a full-record view of the receipts.
1.24	FAR.Receivable (New with this release)	Stores the receivable master records.
1.25	FAR.Receivable_Distribution (New with this release)	Stores the receivable GL account detail records associate with the receivable master record. A maximum of 40 GI account records are allowed per receivable.
1.26	FAR.Receivable_Receipt (New with this release)	Stores the receivable receipt detail records associated wit the receivable master record. A maximum of 12 receipt records are allowed per receivable.
1.27	FAR.RECEIVE_view_clone (New with this release)	Stores the receivable master records, concatenated with the receivable GL account detail records and receipt deta records to create a full-record view of the receivables.
1.28	FAR.Revenue_Source	Stores the Revenue Source records for the financial system revenue subsystem.
1.29	FAR.Vendor (New with this release)	Stores the vendor records for the financial system expens subsystem.
1.30	T_lookup.GA_County	Stores the County codes for the Georgia counties.

Release 20.03.00 – Miscellaneous Changes / Conversion to PCGenesisDB Database / Installation Instructions

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 &	
	_	ate YTD (Final) (F4) or is a backu vendor check information (F5).	p of FARDATA that is made just before updating budget files
		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 <i>Budget SANDBOX</i> 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 <i>VerraDyne Print Manager</i> associated tables.		