

# SYSTEM GALAXY ADDENDUM

## CardExchange<sup>®</sup> 7 (CEX-7)

Includes information on networked printers

JAN 2021 | System Galaxy 11.7.0 to Current

# SYSTEM GALAXY VERSION 11.X

## TECH NOTES

### for CardExchange® 7 Small Business Server

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2nd edition

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# Tech Notes: Card Exchange 7 for System Galaxy 10.x

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**Summary:** We have upgraded to CardExchange 7 in SG 10.3 (min version). CardExchange 7 includes a completely new designer and new scripting methods. We will also be offering a “Small Business Solution (SBS)” option for users that need to share templates between multiple workstations.

## Notable differences between CEX 6 and CEX 7

- 1) New badge designer
- 2) New options on the print server
- 3) Ability to share templates amongst multiple workstations (with license service)

## Notable differences with our integration with CEX 7

- 1) All default \*.dtd files have been reconfigured to connect to the ODBC source instead of the hard-coded SQL server name:
  - a) MainPhoto/PHOTO\_FILENAME is designated in the CEX 7 designer (See below).

## Notes regarding CEX template compatibility between CEX 6 and CEX 7 and installation notes

- 1) Template extensions/formats:
  - a) CEX 6 = .CED
  - b) CEX 7 = .CEDX
  - c) CEX 7 introduces a new format that is managed by a new editor. This format is identified by its extension: .CEDX
  - d) CEX 7 also includes the CEX 6 editor so users do **not** have to upgrade/migrate all of their templates.
  - e) You can create CEX 6 templates with CEX 7 by saving the template with a .CED extension.
- 2) SG 10.3 installer now creates a backup of the user's current data folder (default: C:\GCS\System Galaxy\CEX\Data) and stores it in the \CEX\ root folder. Inside of this folder will be a “RestoreCEX.bat” file that will copy the folder's contents and overwrite what is currently residing in the “Data” folder.
  - a) Note: This process will only occur if the user attempts to install 10.3 without uninstalling 10.2. Those users whom uninstall 10.2 properly before running 10.3 installer will not benefit from this procedure.
- 3) SG installer has always included preliminary files associated with CEX in anticipation of a CEX installation, and it would remove them on uninstall. Now in SG 10.3, if these files exist it will not overwrite, nor will it remove them when it's uninstalled.
- 4) You can quickly tell if a user has CEX 6 or 7 installed by checking to see if “Advanced options” is available in the Configuration menu of the print-server. If “Advanced options” is available it is a CEX 7 installation.
- 5) SG 10.2 will not work with CEX 7 and SG 10.3 will not work with CEX 6.

## Notes regarding sharing templates and locking mechanism

In a CEX 7 SBS installation, there are several nuances you must be aware of:

There is a locking mechanism in place that will only allow one print-server to edit templates at a time.

- This is necessary so that template changes will not be lost if multiple people are working on the same files at once.
- The first person to open a print server is allowed to edit templates; all other print servers are denied access to the “Show card manager” menu option.

Print servers cache the template directory when they load

- All of the print servers must be restarted to receive template changes after an edition is saved.

## Installing License Manager Service for CEX 7 SBS (network template-sharing) (Win7)

A third-party license service needs to be installed on the server. All of the print servers will be configured to authenticate with this license service. License traffic is heard on port 5093.

- 1) Navigate to the installation files on Disc 2 (... \CardExchange7x\SBSLicenseManager\License Manager\setup.exe)
- 2) Install the License Manager service
  - a) Run "setup.exe" in License Manager folder
  - b) Use default settings
- 3) Set a system variable for where you will be saving the license file using **one** of these methods:
  - a) Using Galaxy Utility:
    - i) Locate and "Run as Administrator"  
(... \CardExchange7x\SBSLicenseManager\Galaxy Utilities\LicenseServerConfigurationUtility.exe)
    - ii) Click the "Save" button
    - iii) There is no need to change the location of this license file
  - b) Manually:
    - i) System Properties >> Advanced System Settings >> Environment Variables >> (Under system) New..
    - ii) Variable name: **LSERVRC**, Variable value: <<enter complete path + filename of license file>> i.e.:  
C:\GCS\System Galaxy\CEX\License\GCSCEX.lic
- 4) Copy license manager tools to the server
  - a) There are several tools available to configure the server that are not installed with the service
  - b) Copy the "Tools" folder to the hard drive
    - i) Recommended location for these files: C:\GCS\System Galaxy\CEX\Tools
- 5) Obtain a license key/file
  - a) The License Manager software is registered through CardExchange
  - b) On Disc 2 you will find a folder named "MachineIDExchange"
  - c) Open the file MachineIDExchange.exe and record the number that is displayed
  - d) Obtain a license for CardExchange from Galaxy Control Systems
- 6) Install the license information
  - a) Run "WlmAdmin.exe" from the Tools folder on your system
  - b) Select "Preferences" in the Edit menu
    - i) Check the options: Discover subnet servers at startup AND Save these preferences to a file
    - ii) Press OK
  - c) Select "Defined Server List" in the Edit menu
    - i) Type "localhost" in the Server box and click Add + OK
  - d) Right click on the "localhost" node in the Defined Servers tree and select "Add Feature – From a File – To Server and its File"
    - i) Select the license code file supplied by CardExchange's registration and click Open
- 7) Share the Data directory on the server
  - a) The Data directory must be shared between all of the Print Servers
    - i) You can locate this directory anywhere you wish, it must be accessible by all Print Server
    - ii) Default data directory: C:\GCS\System Galaxy\CEX\Data
- 8) Now refer to next set of instructions to setup clients to connect with license server

**Important:** When print servers are configured to share templates they will also share the same database definition files. If the definition file is configured to use a database from an ODBC source on the local machine all of the print servers will attempt to do the same. Therefore, the database definition files should be reconfigured to connect to the SQL database using an IP address or UNC path.

# Configure CEX 7 Print Server:

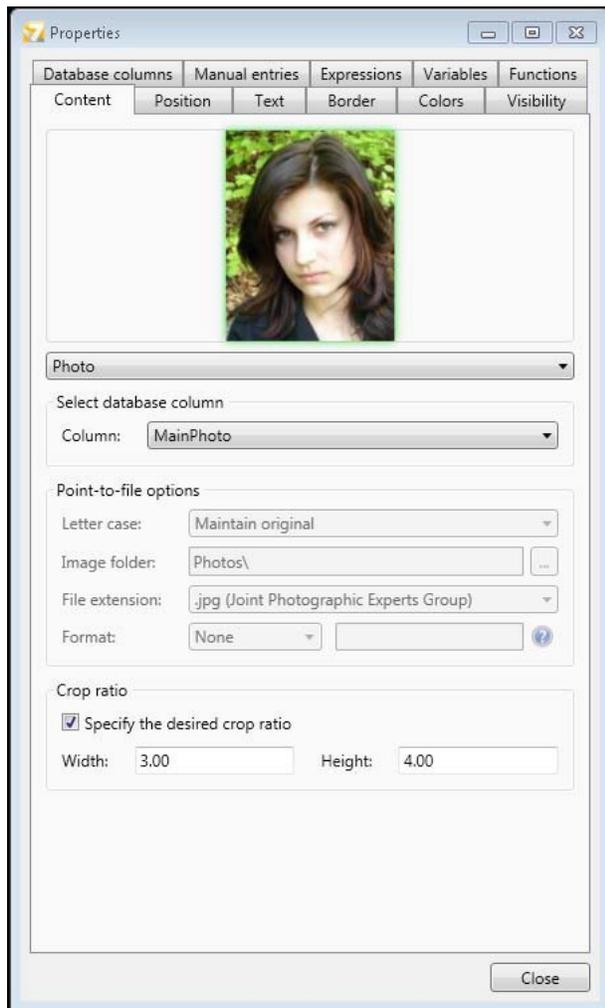
## Obtain License from License Manager Service (network template sharing) (Windows 7)

You will install CEX 7 on the client/server just as you would in a stand-alone situation; however, you will need to edit a configuration file to point the Print Server to the right location.

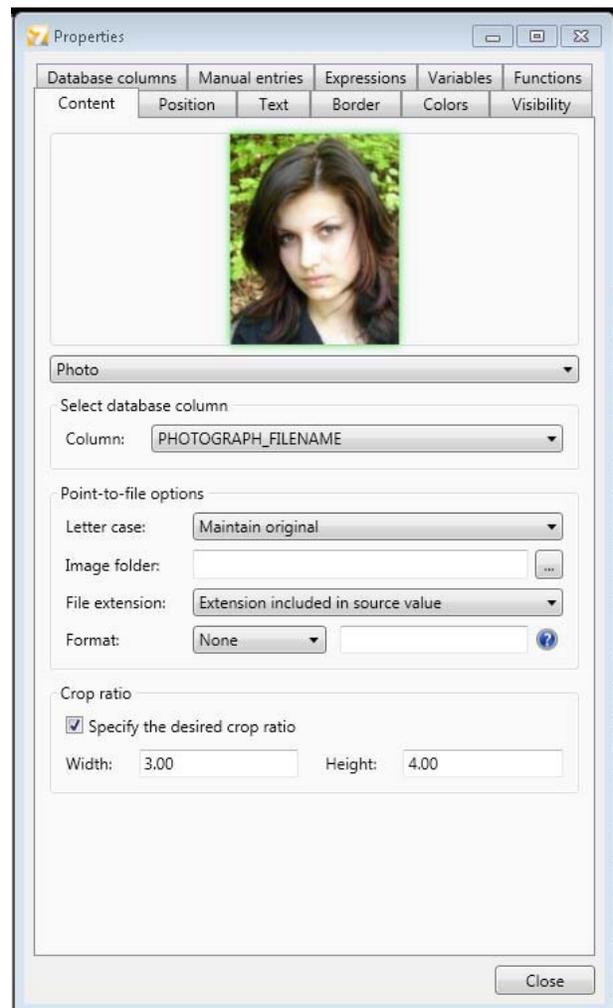
- 1) Navigate to your CEX folder (C:\GCS\System Galaxy\CEX\)
- 2) Use the following methods to point your print-server to the Sentinel License server:
  - a) Use Galaxy Utility:
    - i) Locate and execute "CEXPrintServerIniEditor.exe" (C:\GCS\System Galaxy\CEX\CEXPrintServerIniEditor.exe)
    - ii) Choose the INI file you would like to edit using the "Select INI File" button
      - (1) The INI file you are selecting should be located in the CEX folder (C:\GCS\System Galaxy\CEX\CardExchangePrintServer.ini)
    - iii) Select a License Mode:
      - (1) "Single Workstation License" – For a stand-alone system, does not communicate with license server
      - (2) "Multiple Workstation Server License" – For a networked system, a Sentinel server must be installed and configured
    - iv) Specify a Computer Name or IP Address of the License server:
      - (1) Must be a plain IP address or UNC path. Cannot contain slashes.
    - v) Specify the Local or Shared Data folder:
      - (1) If a network location, it must contain the proper slashes for a UNC/IP path (i.e. \\COMPUTER\Share)
    - vi) Save settings and restart the print server
  - b) Manually:
    - i) Locate "CardExchangePrintServer.ini"
      - (1) Make sure the print service is not running
      - (2) Note: If any of the following lines do not exist, create them
      - (3) Edit the following line:
        - (a) Find: LicensedByClient=True
        - (b) Change to: **LicensedByClient=False**
      - (4) Edit the following line:
        - (a) Find: LicenseServer=no-net
        - (b) Change to: LicenseServer=<<IP or Windows Path to License Server>>
      - (5) Edit the following line:
        - (a) Find: DataDirectory=...
        - (b) Change to: DataDirectory=<<Windows Path to Shared Data directory>>
      - (6) Restart the print server

**Important:** When print servers are configured to share templates they will also share the same database definition files. If the definition file is configured to use a database from an ODBC source on the local machine all of the print servers will attempt to do the same. Therefore, the database definition files should be reconfigured to connect to the SQL database using an IP address or UNC path.

## Choose BLOB/FILENAME Photo (CEX 7 Designer)



**Blob Method:** Simply select “MainPhoto” from the Column.



**Filename Method:** Select “PHOTOGRAPH\_FILENAME”. Clear the “Image Folder” text field. Select: “Extension included in source value” for File Extension.

# Migrate Templates from CEX 6 to CEX 7 (Win7)

If a user has a large amount of CEX 6 templates and they would prefer to use the new CEX 7 editor they can “migrate” those templates by using the CardExchange client. This client is **not** included in the Galaxy installation of CardExchange. A license is required to operate CardExchange; however, there is a 42 day trial available at first launch of the application. **Please read notes at end of instructions before proceeding.**

- 1) Install the CardExchange client
  - a) Launch “Programs and Features” from Windows (Start >> Control Panel >> Programs and Features)
  - b) Locate “CardExchange” on the list of programs, right click and select “Change”
  - c) Click “Next”, select “Modify”, click “Next”
  - d) Click on the “X” to the left of “CardExchange” and select “This feature will be installed on the local hard drive.”
  - e) Click “Next”, click “Install”, click “Finish”
- 2) Reconfigure CardExchange client to modify the active Data folder
  - a) Using the same methods defined in the above “How to configure CEX 7 Print Server to obtain license from License Manager Service” instruction, follow list item #2 (Method: a or b)
  - b) Select the location of the Data folder
- 3) Locate and launch the CardExchange.exe application in the default CEX installation folder
  - a) Default Directory: C:\GCS\System Galaxy\CEX\CardExchange.exe
  - b) Icon on desktop
- 4) A dialog will open informing you of the license. Select “Evaluate CardExchange”, Edition: “Professional” or “Ultimate”
  - a) Note: If the user selects “Entry” or “Premium” you will receive an error message noting that your license does not support ODBC connections. This message will not stop you from migrating, but it is a nuisance.
- 5) Close the “Add a new card..” wizard by pressing “Cancel”
- 6) Under the configuration tab, select “Advanced Options”
- 7) Check the box for “Show migrate button or menu” and click OK
- 8) Select the template you would like to migrate from the “Loaded Cards” bar on the left
- 9) Click the “Migrate version 6 layout”. A CEX 7 template will be created. This template will have “(migrated)” appended to the end of the template name.

**Notes about migrating:** The migrate feature is a way to quickly convert a template from 6 to 7. However, it does a poor job at accurately converting database columns. A number of fields must be edited by the user to ensure they are displaying the correct data; for example: the MainPhoto column must be corrected before it will work. Galaxy recommends recreating templates in CEX 7 manually.

## Upgrading from CEX 6 to CEX 7 (Windows 7)

- 1) During the installation process of System Galaxy 10.3, the installer will prompt you to uninstall 10.2. When this message is displayed, the installer will immediately perform a back up of the “C:\GCS\System Galaxy\CEX\Data” directory.
  - a) When the user presses the “Finish” button at the end of the 10.3 installation, the Data folder back up is restored.
- 2) Upgrade procedure:
  - a) Run the SG 10.3 installation.
  - b) Allow the SG 10.3 installer to uninstall 10.2.
  - c) Allow the SG 10.3 installer to complete its installation.
  - d) Navigate to “C:\GCS\System Galaxy\CEX\Install” and run the “Install.bat”.
    - i) The install.bat file will uninstall any previous installations of CEX and install CEX 7.2.3.
  - e) CEX 7.2.3 will not overwrite any existing files; therefore, any existing templates will remain.