GE Healthcare

Centricity™ *EMR v9.8.10*

Release Notes

Contents

Who should read these release notes?

This document describes the changes in the release and how to install it.

Before installing the release, read these release notes carefully and ensure that you have a verified backup.

Install SP10 with Problem Search Keywords Update

New problem search features in this service pack require the application of the **August 2015 Problem Search Keywords Update** which is released separately and can be downloaded from the Service Portal Knowledgbase page here:

https://engage.gehealthcare.com/community/en/emr/downloads#knowledgebase

This update is similar to a Knowledgebase update and will be included in the incremental KB update scheduled for release at the end of August. However, GE recommends you apply the update immediately with SP10 so users can take full advantage of Problem search improvements.

Without the keywords update, providers might encounter duplicate codes and search results might not be sufficiently precise necessitating scrolling or entering additional terms to refine results.

!!! **Important!** The installation process for this release has changed from previous service packs.

This release is a full upgrade, allowing you to upgrade directly from EMR v9.5.x, v9.6.x, or 9.8.x. The upgrade process is different depending on your software version and platform. See "Install the release" on page 19 for details.

Also, the installation process for JBoss and Service Layer has changed. During install and upgrade, a new **Server Configurator** utility automates the installation and configuration of your servers. See "Automated server configuration utility" on page 8.

If you are the System Administrator...

You will install this release and run any additional scripts that are necessary. You must be an experienced network administrator with the following:

- Ability to execute SQL queries
- Familiarity with Oracle files, programs, data structures, and transaction architecture
- Supervisor/administrative privileges on your network file server

GE Healthcare
540 W. Northwest Highway
Barrington, IL 60010 USA

If you are the EMR Manager...

You must determine how the changes in this release affect your functionality, setup, and workflows. Contact Centricity Services at 888.436.8491, option 2 if you have questions.

What's new in this release?

Problem search - enhanced usability with ICD-10 specificity support

This release provides enhanced problem content and search capability / usability. It includes enhanced synonym support for Smart List searching, more accurate and complete mappings, simplified search workflows, and the ability to identify and quickly select the most specific (billable) codes.

> A *billable* code contains enough specificity to be considered a valid diagnosis for billing. Factors such as clinical documentation, associated procedures, and individual payer requirements all affect the actual reimbursement of a specific diagnosis.

These changes address a variety of reported issues related to incorrect mappings and descriptions returned in search for ICD-9 and ICD10 codes. SPR 53769, SPR 53822, SPR 53823, SPR 54143, SPR 54975, SPR 59334, SPR 56429, SPR 59456, SPR 59579, SPR 59615, SPR 59796, SPR 59796, SPR 60121, SPR 60123, SPR 60125, SPR 61405, SPR 62002, SPR 62053, SPR 62142, SPR 62336, SPR 62238, SPR 62247, SPR 62259, SPR 62260, SPR 62336, SPR 62338, SPR 62415, SPR 62509, SPR 62510, SPR 62805, SPR 62930, SPR 63082, SPR 63173, SPR 62247, SPR 62930, SPR 63082, SPR 63173, SPR 63347.

- **Problem descriptions increased** from 27k to 97k in the database for richer code set.
- **Search algorithm enhanced** to increase precision and accuracy of the search.
- **Quick Search Problem Search only displays codes that are specific enough for billing.** *Specific* codes are defined as Active, within the Effective Date range, and with appropriate specificity (no child codes).

> Once a provider selects a diagnosis three times, it's added to their Smart List to speed up searching. Smart Lists are used in the Quick Search and Full Reference Problem Search features.
>
> Some codes added to a provider's Smart List might be invalid, incorrectly mapped, or lacking specificity. Now, however, only codes that are specific enough for billing are returned in a Smart List search.

- **Problem Custom Lists** - Codes that are not specific enough for billing purposes do not display in problem lists.

> You should review custom lists to remove/replace invalid codes with more specific codes and to assure accuracy in the mapped ICD-10 codes.
>
> See "Problem list cleanup" on page 4, for help identifying problem codes that should be updated.

- **Full Reference Search no longer displays the ICD-9 folder "drill down" hierarchy**. Instead, the search displays group level codes and more specific codes depending on the search. Show Inactive Codes check box is also removed from the search window.

- **Full Reference Search always searches both ICD-9 and ICD-10 codes** and retrieves codes based on clinical concept, so it is no longer necessary to choose a code type before searching. SPR 54777

- **Group codes or other codes not specific enough for billing display in *italic* in the results window and cannot be used**. Double-click these codes to drill down to related codes with greater specificity that can be used.

- **Insufficiently specific codes cannot be added to the patient's problem list**. When you select a code that is not specific enough for billing, the OK button is disabled and a warning displays.
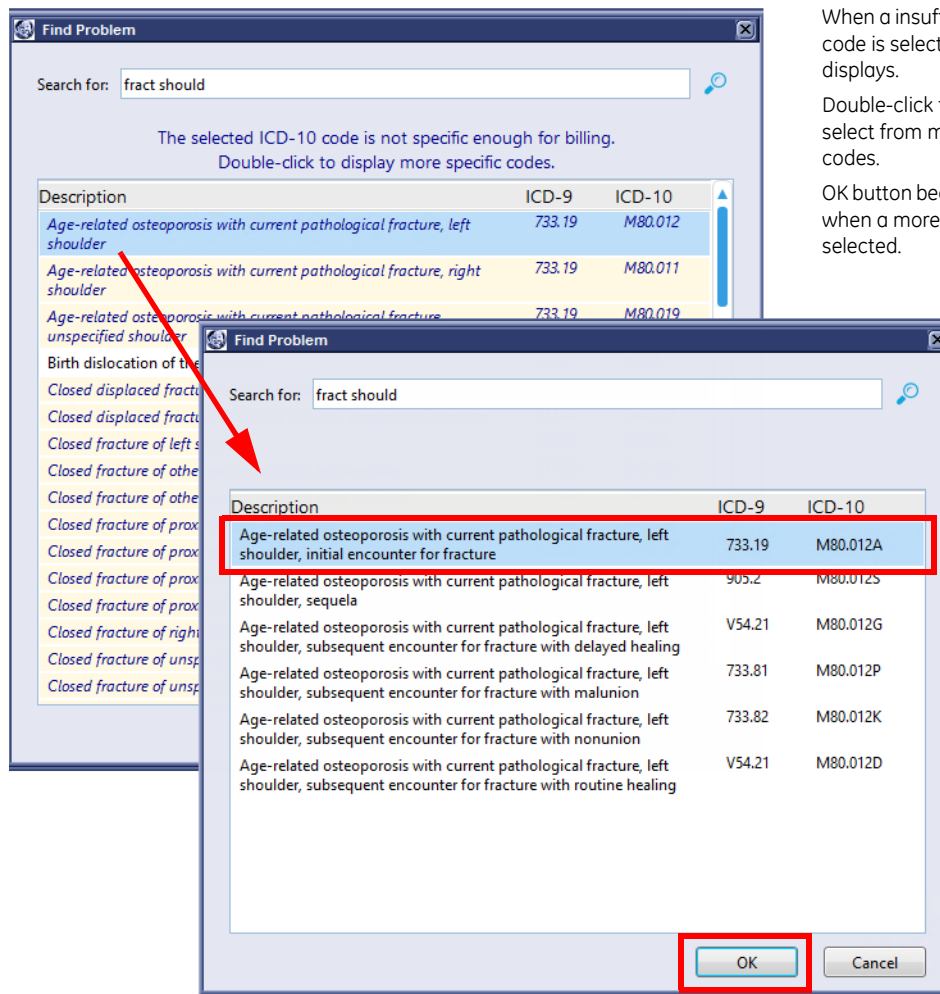
When a insufficiently specific code is selected, a warning displays.

Double-click the code to select from more specific codes.

OK button becomes available when a more specific code is selected.

Orders module - enhanced usability and ICD-10 specificity support

- **Orders module - ICD-10 specificity indicator -** When you select a diagnosis from the Orders **Potential Diagnoses** list, a code that is not sufficiently specific for ICD-10 displays in orange with an asterisk like this example: * BRONCHITIS and should not be associated with the order. The system will display a warning but will not prevent you from associating the code with an order.

To see more information associated with the code description, hover over the code to see the ICD-9 and mapped ICD-10 code. You must select another diagnosis code from the list for the order, or click **Change** and search for a more specific code (see below). This workflow preserves the history with the previous code.
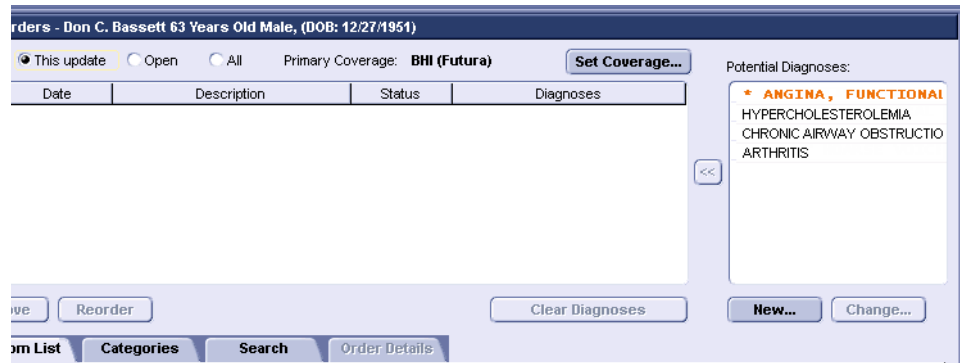
- **Orders module - Change diagnosis for an order in the Orders module -** To change a diagnosis in the **Potential Diagnoses** list, select it and then click **Change**. Then search for and change the diagnosis on the **Edit Problem** window.
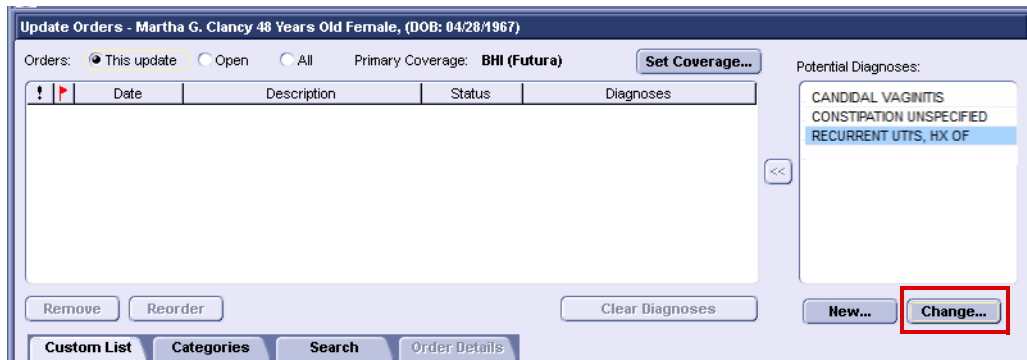
Problem list cleanup

With the transition from ICD-9 to ICD-10, it is necessary to review existing active problem lists for patients because they were originally coded with ICD-9 concepts and more specificity might be required. Custom problem lists should also be reviewed for accuracy in mapped ICD-10 codes or redesigned altogether to accommodate new coding concepts.

Existing problems in a patient chart may have codes that are not sufficiently specific for billing, so you can run *Non-Billable Diagnosis in Patient Records* (Crystal) report

to identify such problem codes for patients with past or future appointments and gradually update charts with more specific codes.

Additional ICD-10 planning and preparation resources are available on the Services Portal ICD-10 Web page. For details, see "ICD-10 planning and preparation resources on the Service Portal" on page 7.

Cloud-based advanced specificity problem search with clinical attributes options

Cloud-based **Advanced Specificity Problem Search** is available in limited release to select customers. If enabled for your organization, when you use the **Full Reference Search** in the **Chart**, you'll access the latest HLI ICD-9 and ICD-10 code database where you can quickly find and select the most specific diagnosis code for billing. This feature must be enabled by GE Support.

■ **Enable cloud-based problem search** - If enabled for your organization, in **Go | Setup | Settings**, select **System > Search** and check E**nable Advanced Specificity Problem Search**.

Confirm your firewall permits workstation access to this URL: **https://ge1.healthlanguage.com/le-services-342/soap/query**

If your site loses Internet access, return to Setup and uncheck this option to switch to the on-premise version of problem search.
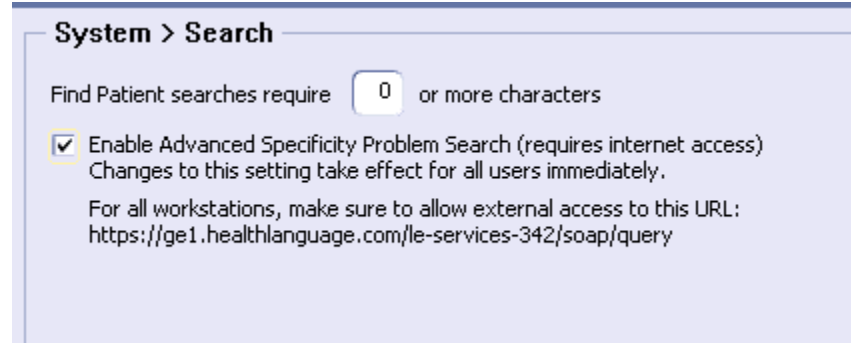
- **Search for and select the most specific code using Clinical Attributes** - From search results, select a term to review its level of specificity for ICD-10 billing. Where relevant, select additional Clinical Attributes for a more specific code, such as disease process, anatomical site, causative agent, episode of care, laterality, stage, healing, time course, fracture type, and so on.
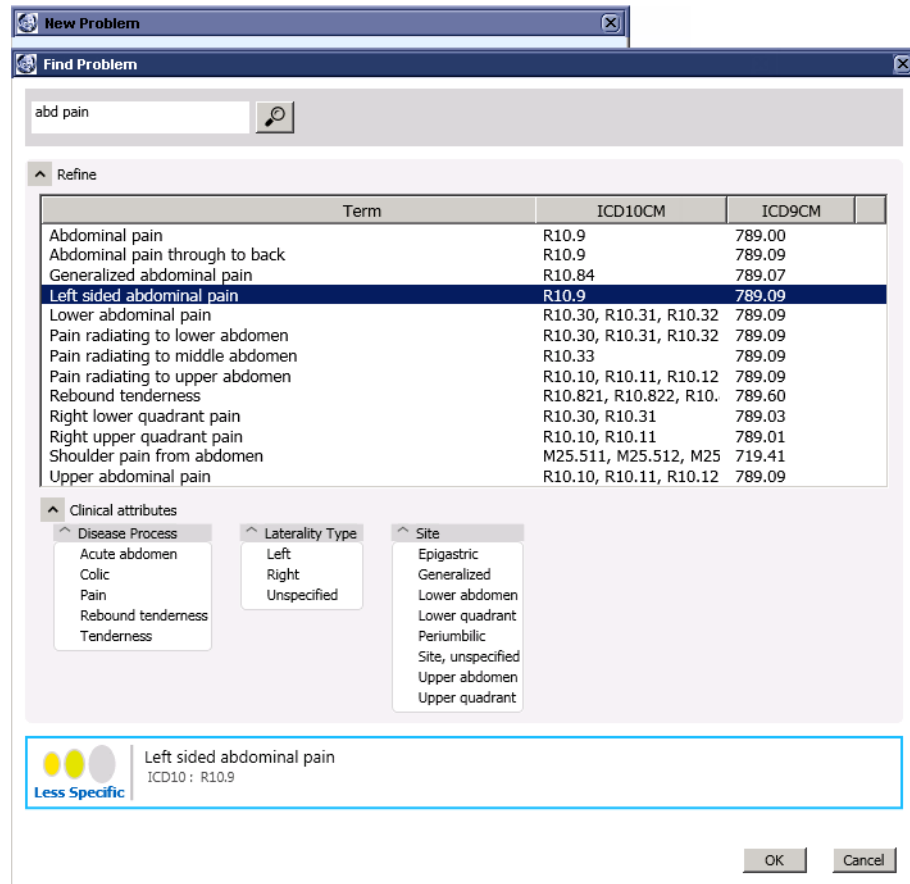
As you select attributes, icons indicate the level of specificity.

If you see this...	Do this...
Not Specific	This code is not sufficiently specific to be billable. Select another code or select additional clinical attributes.
Less Specific	This code is billable, but additional clinical attributes will make it more specific.
Most Specific	This code meets all specificity requirements.

New forms added to CCC Basic v1.2

- **Patient Education Form**: Added new demo form which recommends handouts based on the patients problems, medication and age. The user edit file CCCQE-User-Edit-Patient-Education.txt located in the CCC folder of the package contains information on how to customize and use this form.

- **Patient Education-WCC**: New form helps provide appropriate handouts based on the patient's age. Designed for pediatric specialty. The user edit file CCCQE-User-Edit-Patient-Education.txt located in the CCC folder of the package contains information on how to customize and use this form.

- **Referral Loop-CCC**: Can be used to review consultation reports. The form generates orders for the visit with appropriate SNOMED codes. Click "About" while in the form for full instructions.

ICD-10 planning and preparation resources on the Service Portal

- **ICD-10 portal community** - Go to this area on the Service Portal for ICD-10 planning and preparation tools, active discussion forum, Webinars, and other external resources.

  Go to https://engage.gehealthcare.com/community/en/emr/emr-icd-10

- **ICD-10 Webinar series -** numerous webinars presented over the past year provide detailed start-to-finish guidance for every aspect of your ICD-10 implementation. Find slides in PDF format and webinar Webex recordings on the ICD-10 community site.

- **Referral sources to outside vendors** offering coding training, auditing.

- **ICD-10 Tools** - See Webinars and Site Roadmap for details. Resources include:

    - **ICD-10 Readiness Assessment** - step through requirements for ICD-10

    - **ICD-10 Project Plan** - spreadsheet project planning tool

    - **ICD-10 Preload EMR Clinical Kit** - Review active problem lists in prep for the transition & flag reviewed charts as ready

    - **Crystal Reports for PM ICD-10 Prep** - Top carriers by charges & visits, Top procedures by charges & visits, and Top 100 diagnosis codes

    - **PM Only Setup & Workflow Guide** - A companion to the PM setup and workflow webinars

- **Problems CCC Editor** - Use this tool to assist in revamping your problems list
- **Provider Audit Guide** - Audit documentation through claims payment to identify areas of improvement
- **Specialty Specific Coding** - learn more about how to plan by specialty

Centricity Immunization Migration Wizard v1.51 available

This release includes the latest version of the Immunization Migration Wizard released earlier this year. The updated tool is located here:

*<install path_staging_directory>***DMImmunization\DMImmunization.exe.**

> **Important**. DO NOT run this tool without first reviewing the release notes and associated user guide *Migrating and Managing Immunization Data*.
>
> Download release notes and guide at
> https://engage.gehealthcare.com/community/en/emr/downloads

GE recommends re-running migration with the latest tool version

If you migrated data using an earlier version of the tool, GE recommends you re-run the migration to find and include partially recorded immunizations that were missed, clean up duplicates and Undetermined vaccines, and increase the accuracy of your records. Migrating again does not overwrite any previously migrated data or create duplicates. For information about how GE can help with your immunization migration process, contact inside.sales@med.ge.com.

Automated server configuration utility

The **Server Configurator** calculates, installs and deploys the recommended configuration for your site. You can add/remove servers to meet the recommended configuration, validate, and then automatically install JBoss to support the selected configuration.

The **Install JBoss**, **Install Service Layer**, and **Change App Logon** buttons have been removed from SetStage. You must use Server Configurator for these tasks.

Server Configurator is launched after you have installed or updated your database with SetStage. The Server Configurator button is located on the main SetStage menu.

Press **F1** after launching Server Configurator to access the online help.

Prerequisites

- Run this utility logged in with a domain account within the administrator group on all the servers. The servers should be on the same domain.
- Confirm or create an inbound rule on the database server for the firewall to allow the appropriate port to communicate with the database:

  Centricity Electronic Medical Record on Oracle: Port **1521**
- Confirm all servers have static IP addresses.
- Confirm the **Windows Firewall** service is running. The firewall can be turned off or on, but the service must be running (status=**Started**) for **netsh** commands to run.
- Run this utility from your Centricity staging folder on a Windows based server. Do not run this utility remotely from a mapped drive.
- Verify target servers are running **Windows Server 2012** or **Windows Server 2008 R2 Service Pack 1**.

- Verify JBoss servers have at least **10 GB** free disk space.
- Check the memory on your JBoss server. For servers with more than 64GB:
  a   RDP to the JBoss target deployment Server.
  b   Launch (right-click) **PowerShell ISE** (Integrated Scripting Environment) and select **Run ISE as Administrator**.
  c   Run this script in the PowerShell window:

```
winrm set winrm/config/winrs '@{MaxMemoryPerShellMB="5120"}'
Get-Item WSMan:\localhost\Shell\MaxMemoryPerShellMB
Set-Item WSMan:\localhost\Plugin\Microsoft.PowerShell\Quotas\MaxMemoryPerShellMB 3072
Get-Item WSMan:\localhost\Plugin\Microsoft.PowerShell\Quotas\MaxMemoryPerShellMB
Restart-Service winrm
```

  d   Verify there are no errors in the output window. If you see the following warning, restart the service.

  WARNING: The updated configuration is effective only if it is less than or equal to the value of global quota WSMan:\localhost\Shell\MaxMemoryPerShellMB. Verify the value for the global quota using the PowerShell cmdlet "Get-Item WSMan:\localhost\Shell\MaxMemoryPerShellMB". WARNING: The configuration changes you made will only be effective after the WinRM service is restarted. To restart the WinRM service, run the following command: 'Restart-Service winrm'

- Open a Command Prompt as administrator, and run the **WinRM quickconfig** command on all JBoss servers without generating any errors. For example:

  winrm qc

  Refer to the Troubleshooting tab of the Server Configurator online help for other useful WinRM commands and possible errors.

- Copy the **Datalink** directory (if used by your site) from *CentricityStaging*\Datalink to *CentricityStaging*\ServerConfigurator\ServiceLayer

- Install **Microsoft .NET Framework 4.5**. **(dotNetFx45_Full_setup.exe). Available here:** http://go.microsoft.com/fwlink/?LinkID=242919

- Install **PowerShell 3.0**. PowerShell is part of the Windows Management Framework. PowerShell is included in your Centricity Staging folder. Navigate to your staging folder and double click **Windows6.1-KB2506143-x64.msu**

- Ensure **Windows Management Instrumentation Service (WMI)** is running on the servers. For more information, see https://msdn.microsoft.com/en-us/library/aa394582%28v=vs.85%29.aspx

- Enable **Network Discovery** and **File and Printer Sharing** for **Windows Server 2012** systems.

- Ensure **Network Admin Shares** are enabled for **Windows Server 2008 R2 SP1**. Enabled is the default. To verify network shares are enabled:

  1 Log in as local administrator on the JBoss server (for example *JBoss_ServerName*).

  2 Verify you can browse to the deployment drive (for example *DeployDrive*):

    *JBoss_ServerName******DeployDrive*

  If you are unable to browse to the network share, perform the Enable Network Admin Shares procedure.

Enable Network Admin Shares

These steps are only required on Windows Server 2008 R2 SP1 if Network Admin Shares are been disabled.

1 Click **Start** and then click **Run**.

2 In the **Open** box, type **regedit** and click **OK**.

3 Locate, and then click the following registry subkey:

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\LanmanServer\Parameters\AutoShareServer

> The registry subkey **AutoShareServer** must be set as type **REG_DWORD**. When this value is set to **0** (zero), Windows does not automatically create administrative shares. Be aware that this does not apply to the IPC$ share or shares that you create manually.

4 On the **Edit** menu, click **Modify**.

5 Enter **1** for **Value data** and click **OK**.

6 Exit Registry Editor.

7 Stop and then start **Server** service:

  a Click **Start**, and then **Run**.

  b In the **Open** box, type **cmd** and click **OK**.

  c At the command prompt, type the following lines. Press Enter after each line:
  net stop server
  net start server

  d Type **exit** to close the Command Prompt window.

Basic workflow for Server Configurator

Here is the basic workflow for the Server Configurator.

1. Select Modify Connection Information

3. Calculate server configuration based on Concurrent Users.

2. Enter site information and Validate Database.
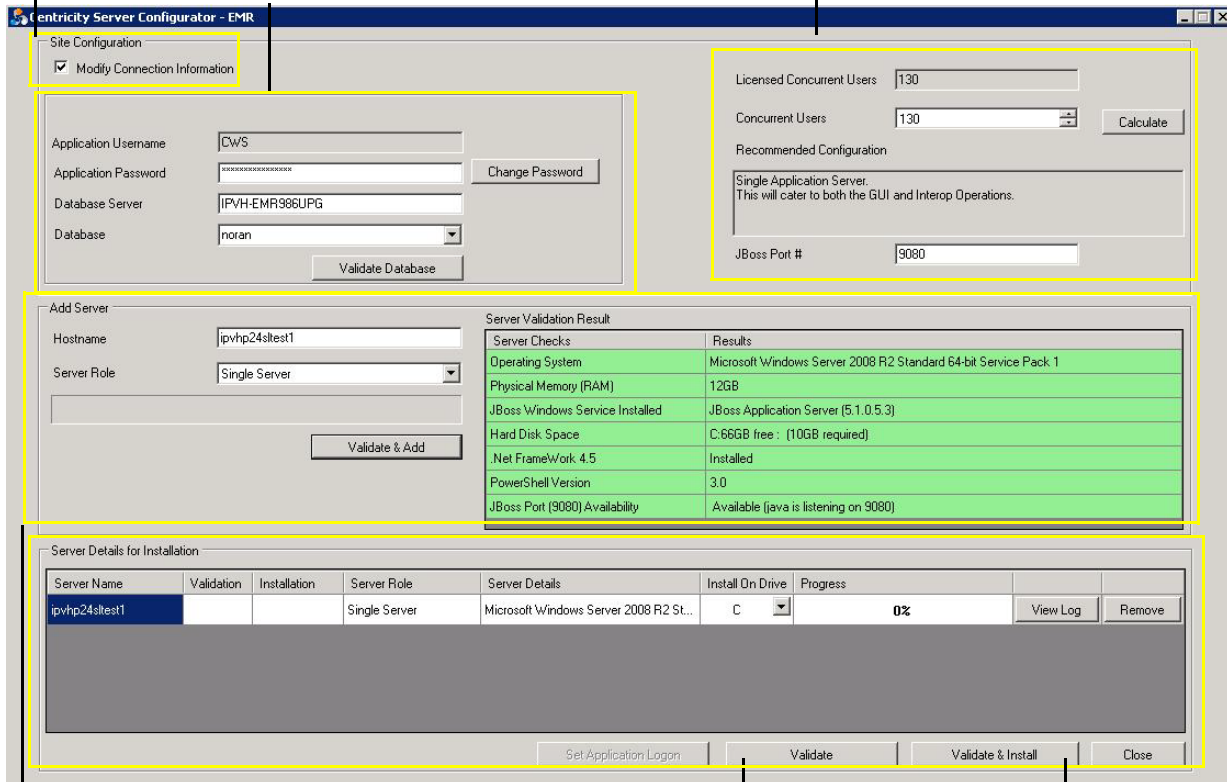
4. Validate & Add servers and roles. When successful, server is added to Server Details.

5. Validate entire configuration.

6. Ensure all users are logged off and start final Validate & Install.

Change password

The change password functionality has moved into the new Server Configurator tool. The button appears in the middle of the dialog.
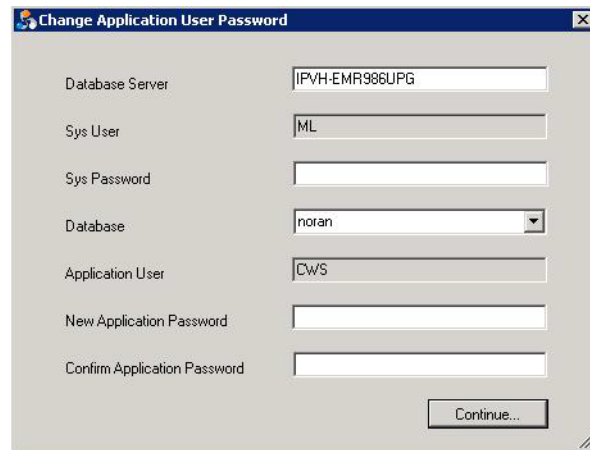
> The password is set during installation. It is not necessary to change the password as part of an upgrade. This procedure is only needed if you want to change the existing password.

Click **Change Password** and enter the following information:

- **Database Server** - enter the server name or database instance.
- **Sys User** - displays the user to log into the database. Cannot be modified.
- **Sys Password** - enter the password to log into the database.
- **Database** - enter the database name.
- **Application User** - pre-populated with the CWS user. Cannot be modified.
- **New Application Password** - enter the application password for the Service Layer.

■ **Confirm Application Password** - reenter the application password for the Service Layer.

Fixed issues

The following issues have been addressed in this release:

■ Performance and stability enhancements. SPR 59088, SPR 61585, SPR 61823, SPR 61825, SPR 63150, SPR 63152, SPR 63373, SPR 63426, SPR 63465, SPR 63471, SPR 63854

■ Users see the message "An Authorizing Provider is Missing for Order" when ordering more than one test in the Update Orders dialog via the checkboxes even though an authorized provider is listed. SPR 58966

■ Fixes an issue where a user was unable to discard a document with no changes in it when the Clinical List Changes box was checked. SPR 59114

■ Entering historical medications where the pharmacy's prescribing method is electronic and the user does not change the prescribing method to Historical no longer prompts the user that a quantity is needed. SPR 59569

■ Fixes various issues with formatting options in updates and letters not working correctly. SPR 59705, SPR 63068, SPR 63086

■ Fixes an issue where the application crashes while a prescription printing is in progress, when the user selects a different form from the form list pane. SPR 63584

■ Fixes an issue where the growth chart for 25-35 month olds showed the 0-24 month growth chart. SPR 60278

■ Addresses an issue where Functional Measure subscriptions were timing out while creating CCDAs, resulting in inaccurate CQR reports. SPR 60526

■ Fixes an issue where a patient's date of birth falls in the current year, on initial load of CQR Subscription, the CCDA is not generated for that patient. SPR 61611

■ Fixes an issue where a combo vaccine is put on hold, the user is unable to edit it, and it does not record the second part of the vaccine. SPR 62207

■ Addresses an issue where the scrollbar suddenly jumps to the top of the window during a refresh. SPR 62932

■ Fixes an issue where the application froze when adding problems from the orders window. SPR 63170

- Stability improvements during CCDA generation. SPR 63175

- Fixes an issue where the application would freeze when adding problems from the orders window. SPR 63168

- Addresses an issue where CCDA generation caused an error in the Allergy section. SPR 63180

- Fixes an issue where the Transition of Care box was not staying checked if there were on hold documents. SPR 63261

- Corrects the data symbol ADD_ATTACHMENT() to restore the ability to specify a UNC moniker path for an image attachment starting with \\. Now a moniker can either be a relative path name or a UNC (absolute) path name, beginning with \\ or a URL, or something like "E://…" Backslash in the path names followed by special characters such as \t, \n, \r are also supported and properly interpreted. For example, "C:\radiology\tumor images\normal_mam.bmp".

  See data symbols help for ADD_ATTACHMENT() for details and examples. SPR 63282

- Forms no longer blank out and lock the application when "Cancel" is clicked in the Orders window. SPR 60232/SPR 63311

- Information and error dialog boxes in the medications module no longer open behind other windows and cause locking and/or freezing. SPR 62485/SPR 63311

- Logging back in to Web Framework no longer generates the error "encountered an invalid argument". SPR 62486/SPR 63311

- The Print Patient Handout dialog no longer opens behind encounter forms. SPR 62968/SPR 63311

- Fixes an issue where the Eligible Professional (User) attributes Program, Stage - Stage Year, and Reporting Year drop-downs were blank after upgrading to EMR 9.8.5. SPR 62970/SPR 63311

- Registries created with LinkLogic Relationships now show on the Registry Tab and users can now control the Opt In and Out settings. SPR 62971/SPR 63311

- Opening a dialog from the CCC-Problems form no longer causes the screen to flicker. SPR 62972/SPR 63311

- The screen no longer disappears when clicking the "Problems" button and searching for a problem. SPR 62973/SPR 63311

- Fixes an issue where the message "Error Occurred in Class, Method Window:: event - WMsg = 273" appeared and the application crashed when users opened various CCC Basic and Orthopedic forms. SPR 63370

- Addresses an issue where one DTS appeared to be processing another DTS' messages when there were multiple DTS instances. SPR 63488

- Fixes an issue where, if a user uses the refill button and the NDC Number has changed due to a Knowledgebase update, the new prescription failed due to an NDC number mismatch. SPR 63514

- Addresses an issue where users were asked to override interactions that were already overwritten. SPR 63519

- The document type is now included in the CCDA. SPR 63525

- CCDA now sends authorized by provider instead of signing provider for encounters and procedures so the patient is included for Clinical Quality Measures reporting. This corrects a problem where patient was not included in

the CQM results even though a SNOMED code was appended to a qualifying office visit during the reporting period. SPR 63876

- Fixes an issue where entering two medications on the Medication Administration HTML form resulted in only the first text translation. SPR 63528

- The prescription report for New Jersey now prints one medication per page. SPR 63613

- Addresses an issue where DDIDs rolled over and were out of order, causing the application to crash. SPR 63628

- Updates to the Immunization Management HTML form to associate an allergy with an immunization adverse reaction. Users can now add, update, or remove an allergy (including criticality) to an immunization. The text translation has also been enhanced to translate criticality from an associated allergy and displays it in the chart note:
  - New data symbols:
    - MEL_ADD_ALLERGY_GET_GROUPID – Adds a new allergy or adverse reaction to the patient's allergy list and returns the reference (allergyGroupID) for an added allergy.
    - MEL_GET_ACTIVE_ALLERGY – Returns the latest active allergy detail associated with a given allergyGroupID for a patient.
    - MEL_GET_SDID() – Returns the current active document's SDID.
  - Updated data symbols:
    - IMMUN_ADD, IMMUN_UPDATE, IMMUN_GETLIST – AllergyGroupId added to values returned for an immunization SPR 63631

- Addresses an issue where refilling a prescription from the chart caused the error "Refill is either 0 or the prescribing method is fax or electronic". SPR 63211/SPR 63669

- Users can now use inquiries to find patients with Ethnicity or Race subcategories. SPR 63305

Issues addressed for GA release:

- Quick and full problem search results that are an exact match for text entered now appear at the top of the list of returned results. SPR 63967

- Corrected some keywords data content for problem search with incorrect associations. SPR 63808

- CPOE for Lab & Rad now calculating correctly in CQR if non-licensed staff enters the first in a series of orders for the patient. SPR 638686

- In the Advanced Specificity Problem Search if a user selects a valid but less specific code with multiple refinement options, the search now returns the parent code. Previously, it returned the more specific first code from the refinement list, which could result in an incorrect problem being added to the patient's chart. SPR 63999

- Advanced Specificity Problem Search attribute filtering now functioning properly and returning all appropriate codes. Previously, clinical concepts that require a circumstance code in addition to a primary diagnosis could not be refined to select the circumstance code. SPR 64002

- Addressed performance and stability issues occurring at sites running more than 3 website/JBoss deployments. Now on Server Configurator you can choose configuration settings options for 2-4 or 5-8 web site deployments. See "Automated server configuration utility" on page 8. SPR 63974

- Now when opening Chart from Schedule for the very first time, the Chart module is in from of the schedule and not minimized. SPR 63969

- You can now preload PCV7 in Immunization Administration. Vaccine Pneumococcal PCV13 is renamed to PneumoPCV in the Imm_vaccinegroupname table. SPR 64039

  Important. This change requires the July 2015 or higher Knowledgebase update.

- Fixes an issue where a patient's preferred pharmacy was not appearing at the top of the pharmacy list. SPR 64043

- Fixes an issue where documents co-signed after the nightly JSON extract were not associated with the EP unless they were appended. SPR 63961

CCC Basic v1.2 includes the following fixes:

- You can now preload PCV7 in Immunization Administration. Vaccine Pneumococcal PCV13 is renamed to PneumoPCV in the Imm_vaccinegroupname table. SPR 64039

- The CPOE A&P-CCC Form now pulls in medications for all diagnosis codes. SPR 61951

- The Entry Form editor now opens the correct library file when "Open text file to edit" is clicked. SPR 63034

- Deleting a series in the middle of an immunization custom list no longer causes an error while loading the Immunization Management form. SPR 63444

- Fixes an issue where adding a problem in the CPOE A&P form resulted in an error during order generation. SPR 63315

- Fixes an issue in the Immunization Management form where, if the Amount Given field contained both a numeric value and a unit dose, the vaccination record would not save. SPR 62141

- The Problem- CCC form now correctly returns the mapped Problem Custom List. SPR 62202

- Fixes label in the Risk Factors-CCC form to read "Felt guilty about drinking:" SPR 62400

- ICD-10 codes now show in the CPOE A&P-CCC form in the Order Information message. SPR 62750

- The Entry-CCC form no longer adds MEL in the chart update. SPR 62866

- In the Urgent Care Management form, the drop-down values can now be cleared under the Reasons Not Performed tab. Data no longer shows in the chart note after the values are irrelevant. SPR 62751

- The Add/Update dialog now allows users to edit the details if there was a validation error in the data entered. SPR 62845

- NDC and CVX are now added to the immunization translation to chart note. SPR 63544

- Lot management fields are now cleared after deleting the lots. SPR 62836

- The correct Test Management form and editor are now included in the package. SPR 64033

Known issues

Unable to use ICD-10 problem custom lists immediately after importing clinical kit

After importing a custom Problem list that includes both ICD-9 and ICD-10 codes, the list name can be seen but is not accessible in Problem Quick Search because it takes time for re-indexing search-related resources in the database. Wait at least 15-20 minutes after import before attempting to search in the custom list. Otherwise the system may crash, you'll have to remove the list, and in some cases a JBoss restart is required. SPR 62949

> Re-indexing also happens after upgrade to this service pack. Wait at least 15-20 minutes after upgrade before testing problem search features.

Scrolling in Setup |Settings > Orders > Service Providers list limited to top 25 providers retrieved

In Setup, under Orders > Service Providers, for performance reasons, only the top 25 providers from retrieved results are now viewable in the list.

Workaround: Search for the service provider name you need. SPR 63880.

Startit.sql file is overwritten during upgrade

When you upgrade EMR, the existing *startit*.*sql* file is overwritten. As a result, the sys and ml passwords need to be added back to the file. Otherwise, they will have to be entered each time the database is started.

Network training database is replaced during upgrade

When you upgrade EMR, the existing network training database is overwritten. If you have to restore any setup data, export the data as a clinical kit then import it into the training database once you complete the upgrade. See "Prepare and export the Network Training database" in the upgrade guide for your platform. SPR 60645

Customized CCC forms are overwritten during upgrade

When you upgrade EMR, the clinical content folders are overwritten. If you have customized content, you should backup your data and redeploy it after the update. SPR 60652

EMR Client may not upgrade automatically

If the EMR Client does not upgrade automatically:

1   Add a user account in the Administrator's group for the domain or local machine.

2   Right-click the EMR application and select "Run as administrator".

Issues with the New Problem window under Centricity Framework and Internet Explorer 10

Under Internet Explorer 10 and Centricity Framework, the New Problem window disappears when searching for a problem or flickers.

Workaround: There are three possible workarounds:

- Minimize the Internet Explorer window, then restore it.
- Switch to another application and then back to Internet Explorer.
- Use a different version of Internet Explorer.

SPR 60319, 60320

Forms do not display correctly when opened in the Centricity Framework.

Forms will not display correctly if the Centricity EMR install location (default location is C:\Program Files (x86)\Centricity EMR 9.8) is not added to the PATH environment variable. To modify the PATH environment variable:

1 Open Windows Explorer.

2 Right-click **Computer** and select **Properties**.

3 Click **Advanced System Settings**.

4 Click **Environment Variables...**.

5 Under **System variables**, select **Path**, and then click **Edit**.

6 Add the EMR installation location to the end, and then click **OK**.

SPR 60175

The JBoss configuration files are not replaced when upgrading from one service pack to another

Workaround: Uninstall the **JBoss Application Server** manually via the Windows Programs and Features control panel. SPR 59058

PDF reader must be closed prior to opening a new patient chart

If a PDF is already open, users are unable to close a PDF in a patient chart when switching to another patient. SPR 21375

Interactions do not show up on all drug interaction icons within the chart

Only coded allergies can be screened against other coded allergies; the creation of uncoded allergies are useful for information/display only, they cannot be systematically screened. For an abstract allergy concept such as 'sulfa' to screen against the Sulfa class of drugs, it must be linked (coded) to a product in that class. SPR 61808

Medication Allergy calculations look at all Allergies not just medication allergies

Currently the application looks at both non allergy and NKA OBS. It should only count Medication Allergy and NKDA observations (no known drug allergy) for the numerator.

As a result, when a patient has a food or environmental allergy and a signed NKA observation with a value of F, they will also need the NKDA observation with a value of T to get proper credit for the medication allergy measure. SPR 61253

Unable to discard a document after adding an MU Activity Log record with the ADD_MUACTIVITY_LOG data symbol

When the ADD_MUACTIVITY_LOG data symbol is used to add an MU Activity Log to a document, the document cannot be discarded.

Workaround: Sign the document and File in error. SPR 59418/SPR 60899

Upgrade considerations

Knowledgebase version

Before you upgrade from Centricity EMR v9.8.x, be sure that you have the latest Knowledgebase installed.

Back up customized clinical content

Before upgrading or installing Centricity EMR v9.8.10, verify that any clinical content you have customized (note templates, reports, or encounter forms) have been exported and backed up. Factory forms and reports and other clinical content will be overwritten. You can redeploy custom content to workstations after the update.

Supported upgrade paths

Direct upgrade path supported from v9.5, v 9.6, or v9.8. If you are on an earlier version, you must upgrade to one of these versions first prior to upgrading to Centricity EMR v9.8.10.

Compatible client versions include:

- **Remote Desktop Services/Citrix XenApp server**: Centricity EMR v9.8.10 and Centricity Practice Solution 12 client applications can be installed on the same server.
- **Standalone client workstation**: Centricity EMR v9.8.10 and Centricity Practice Solution 12 clients can be installed on the same workstation.

> **!!!** Install the Centricity EMR 9.8 client FIRST, then install the Centricity Practice Solution 12 (PM-only) client.

Supported platforms/software

See *Configuring Environments for Centricity Electronic Medical Record* for recommended software and hardware configurations to support Centricity EMR in a variety of computing environments.

Summary requirements include:

- **Database and general server operating system**: Microsoft® Windows Server 2012 SP1 Enterprise or Standard or Windows Server 2008 R2 64-bit SP1
- **Application Server (JBoss)**: JBoss v5.1 with 64-bit JVM
- **Data Exchange Server**: Microsoft Windows Server 2012 64-bit or Microsoft Windows Server 2008 R2 64-bit and supported Windows Client platforms for Data Transfer Station and Qvera Interface Engine (QIE).
- **Hyper-V**: Microsoft Hyper-V Server 2012 or Windows Server 2008 R2 64-bit
- **VMWare**: VMWare ESX 5.1, VMWare VMKernel (Linux)

- **Browser and Mobile Access**: Internet Explorer (IE) 9 or 10
- **Browser and Mobile Access device operating system**: iPhone iOS 6.x
- **Client operating systems**: Microsoft Windows 8 Professional (32-bit and 64-bit) or Microsoft Windows 7 Professional (32-bit and 64-bit SP1),

> **!!!** Microsoft Windows XP and Vista are no longer supported for the client. Internet Explorer v9 requires Microsoft Windows v7 or later.

- **Citrix® XenApp™ server**: XenApp 6.5 64-bit
- **Citrix XenApp client**: Online Client 12.1.44
- **Microsoft® Windows Remote Desktop Services (OS)**: Windows Server 2012 with RDP 8.0 or Windows 2008 Server R2 with RDP 7.1 or higher
- **Web browser**: Internet Explorer (IE) 9 or 10
- **Reports**: Crystal® Reports Professional XI R2 by SAP BusinessObjects

Support for interface engines

With this release, Qvera Interface Engine (QIE) is the preferred transport mechanism for Meaningful Use 2014 reporting. Qvera and GE offer and provide direct support for interfaces for all Meaningful Use messaging/reporting. Qvera and relevant interfaces are available directly from GE. Contact your sales representative for additional information.

If you are upgrading to this release and using an unsupported interface engine, contact Centricity Services for information about its compatibility with this release and for help transitioning your existing interfaces to Qvera.

Install the release

Upgrade instructions for FilesAnywhere downloads

For releases available via FilesAnywhere, the download and installation instructions are slightly different than usual:

1 Download the zip file and save it to your server's desktop or a workstation with access to the database server.

2 Right-click on the zip file and make sure it is not blocked. Click **Unblock** if necessary.

3 Extract the zipped contents to the root of your staging directory (such as C:\CentricityStage) on the server.

   Important. Never extract files across the network.

Follow the appropriate instructions for installing the application based on your current version:

- **Upgrade from v9.5.x or v9.6.x**: Detailed instructions for upgrading to Centricity EMR v9.8.10 from supported earlier versions are provided for your platform in your Centricity Documentation Library.

- *Upgrading to Centricity Electronic Medical Record on Microsoft Windows Servers*
- *Upgrading to Centricity Electronic Medical Record on UNIX Servers*

> Download the necessary documentation from engage.gehealthcare.com/community/en/emr/documentation.

- **Upgrade from v9.8.x**: If you are upgrading from another version of EMR 9.8.x, you will follow an abbreviated version of the full upgrade process. This process is detailed in the following guides, provided with this package:
  - *Upgrading Centricity EMR Service Packs on Microsoft Windows Servers*
  - *Upgrading Centricity EMR Service Packs on UNIX Servers*

Subscribe to Centricity Services mailing lists

To download service packs, monthly Knowledgebase updates, or factory observation terms, go to Centricity Services website. On the website, you'll also find release publications, contact information, and links to training and the Centricity Services User's Group.

To receive email announcements of new service packs, product alerts, maintenance reminders, tips and tricks, subscribe to the Centricity Services mailing list. All GE customers can receive this free Listserve. To sign up, send email to centricityemrservices@ge.com and place `listserve-subscribe` in the subject line. Include your name, your company name, address, and phone number in the body of the message. Requests will be processed within three working days, and you will receive a welcome message confirming your subscription.