

Server Update

For eRAD RIS
Version 2.0
Build 43
Update 43.0.3

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1. New Features

Insurance Eligibility

A summary of the Eligibility coverage is displayed when the mouse pointer is placed over the Eligibility icon. We also plan to show these details along with the calculated amount to collect in the scheduling information window.

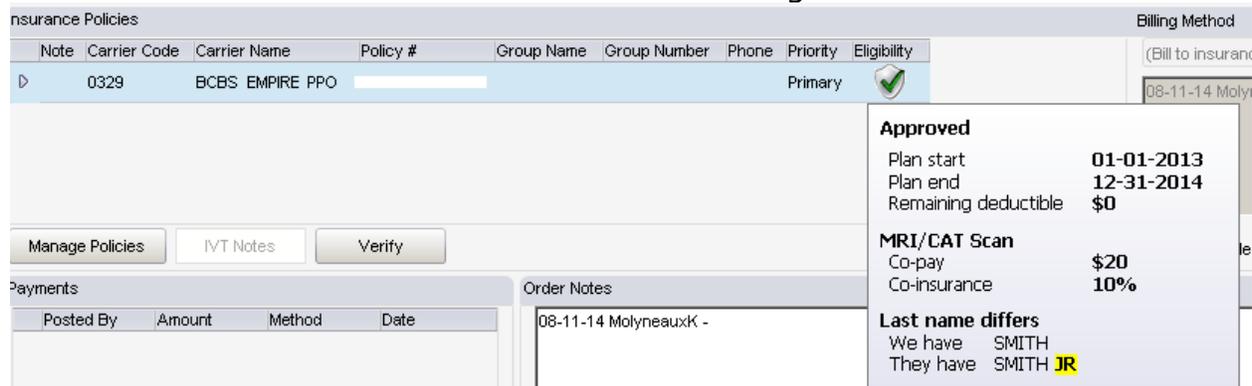


Figure 1.1 – Displaying eligibility summary

UI will auto initiate insurance check when all the required data has been entered. Starts after closing the manage policies grid or on “Verify” button.

The insurance check is automatically performed when scheduling or walking in a patient (the first time we get insurance information). Then a second check is automatically performed the first time we open the patients record on the date of service.

Before sending a request to Eligible, we query our previous requests for the current day. If we have an active coverage response from today, which used the same query parameters, we skip the call to Eligible and return the previous response saving us time and eliminating the issue where the user double clicks or missuses the “Verify” button. When we do this, a new root_eligibility_request_key is generated and passed to the eligibility check on the day of service.

The following information is required to start an eligibility request:

- Patient First Name
- Patient Last Name
- Patient DOB

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- Carrier (payer) name
- Subscriber name
- Subscriber ID

We re-validate when the service type (CT vs MRI) or time of exam change. Not all re-validations will require a second Eligible API query.

If patient insurance details change, another request will be made and the previous request will be terminated.

Although we will trigger this check automatically users have an option to manually request a new insurance check via a "Verify" button (previously "Reverify")

The eligibility check is asynchronous. When the check is in progress the icons for eligibility should display an image indicating that a request is in-progress.

When the results become available, the eligibility icons should update immediately.

If the RIS Screen is closed before the results were finalized or if there is an error in retrieving eligibility then the RIS will display an MS Outlook style notification message should be displayed (this is for when the user already closed the screen).

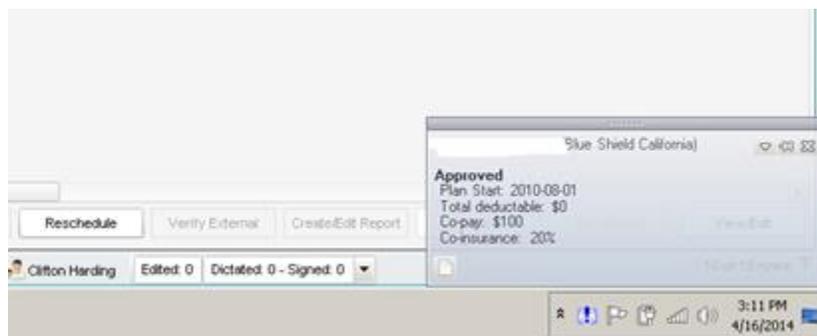


Figure 1.2 – Eligibility notification

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Icon in “Insurance Policies Grid” and WLs to display, IVT like shield icon combined with one of the status symbols.

-  → 1. Approved
-  → 2. Error
-  → 3. Warnings
-  → 4. Denied
-  → 5. in progress
-  → 6. Payer not responding

For the rare cases where the insurance response contains multiple possible co-pay or co-insurance values, then we will choose the highest value to collect.

We will use the individuals remaining deductible amount; however, if the family amount is less than the individuals we will use the family remaining deductible amount.

The complete details of the Eligibility response are available by clicking on the Eligibility Status icon and will be displayed using the Eligible API web browser scripts “coverage.js”. Clicking on  opens the following screen:

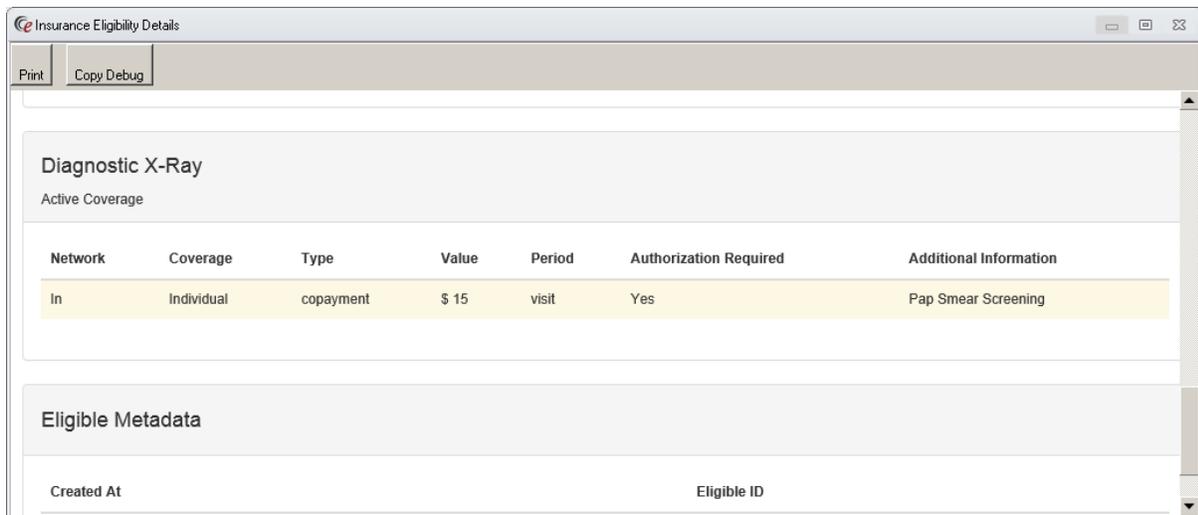


Figure 1.3 – Insurance Eligibility Details window

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The RIS will insert the values for the following fields, if they are 'blank':

- Patient address fields
- Patient middle_name

Patient name, gender and birth date are required for the query and will never be blank.

The RIS will insert or update the following RIS fields if they are different in the eligibility return so that we match the insurance company exactly

- Policy Number
- Group Name
- Group Number
- Subscriber's
 - Relation to patient
 - first_name,
 - last_name,
 - middle_name,
 - birth_date,
 - gender
 - Full address

Some fields like first name, last name and birth date might be correct in the RIS but wrong in the insurance database.

The screenshot shows a software interface with several tabs at the top: Patient, Patient Notes, Contacts / Demographics, Order, MU, Schedule, Image Request (0), Billing Codes, Review, and Co. The 'Patient' tab is active, displaying 'General Information' for a patient. Fields include Prefix (dropdown), MRN * (etest1031), First name * (ANNMARIE), Sex * (Female), Last name *, Middle, and a checkbox for Deceased. An 'Insurance Eligibility Details' window is open, showing a comparison of the patient's name and address with the insurance database. The insurance database entry shows 'ANN P...' with some redacted information. There are 'Print' and 'Copy Debug' buttons in the window.

Figure 1.4 – Comparing patient details

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In the above example, the patient goes by ANNMARIE, which is what is on her drivers licenses but on her insurance card her first name is just Ann. All other fields match last name, middle name and birthdate.

To make sure this is what the patient and doctors expect, we keep the value we have in RIS but also record the insurance returned values in the following fields, which will be used when communicating with billing:

- insurance_first_name
- insurance_last_name
- insurance_birth_date *see note below

If only one of the above is wrong, we will use the above logic to keep insurance fields for the billing. If two or more of the above fields do not match, we will flag the eligibility check as Questionable. The  status will display and the encounter will be referred to IVT. A user with IVT permissions will either need to fix the name or birth date in RIS or use the Eligibility Override feature to ignore the difference.

KM: In a later build, develop some more complex rules and use algorithms such as levenshtein distance (re: <http://www.antedes.com/blog/csharp/percentage-match-between-two-strings-levenshtein-distance>).

Note: if only one of these insurance field values is different we will allow a green check ; however, we will still mention the difference in the insurance summary text (the text displayed when we hover over the eligibility icon).

***We will also store the patient's insurance gender, middle name and address info.**

If the subscriber's relationship is self, we query with the patient's demographics such as first name, last name and birth date.

If the relationship is anything other than self, we will query with the policy holders name, birth_date, plus the patient's demographics as the dependent.

When the service type we are querying comes back as "contact the following entity for coverage info". It means that there is an additional insurance policy that must be checked manually. When this happens (less than 1% of

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cases tested to date) we will display a reference to the additional insurance policies in the summary text.

If the service type contains, "payer didn't give information for the service" and the service we are querying is not XRay we will attempt again with the XRay service type. If the service type is XRay we will attempt again with CT/MRI.

Worklists will display the eligibility status icon (* when integration with Eligibility API is configured for the site/carrier). Hovering over the icon in the worklist will query the visit information and display a summary of the eligibility results. Clicking on the icon will display the entire insurance details.

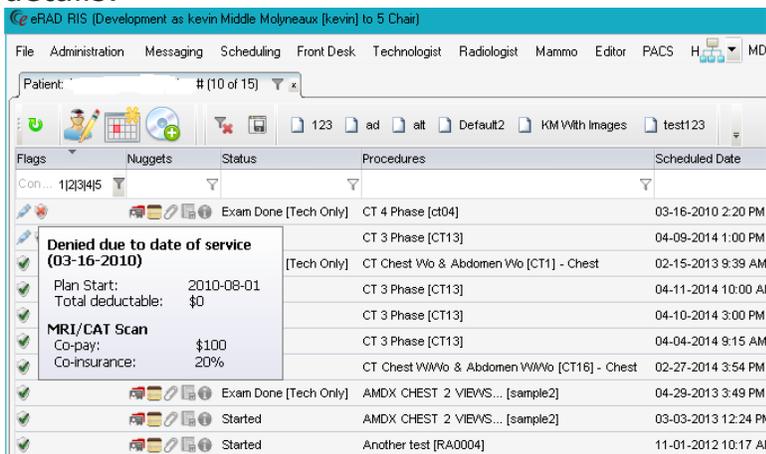


Figure 1.5 – Summary displayed from flag on patient folder

When the payer isn't responding, we use the previous result. For example, at the time of scheduling we verified their insurance, then on the day of service if the payer is not responding we allow things to continue with the previous eligibility response:

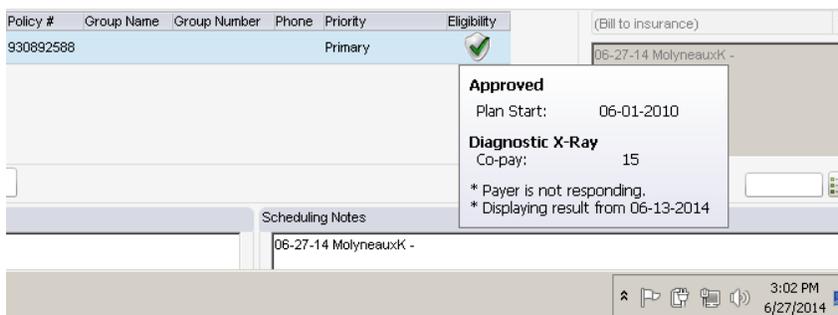


Figure 1.6 – Showing previous response

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If the payer isn't responding and we don't have a previous result, then we will display an empty shield icon for the Eligibility ICON, the study won't go to IVT and we will retry with Eligible API every 20 minutes. The `c_eligibility_response` table will keep a running count of the number of retries and each retry will be logged in the table `c_eligibility_retry`.

Integration with the National Payer Database (NPD)

We will integrate with the NPD, passing CPT codes, site information, date of service insurance type (from Eligible API response) and the payer to get the total cost of the visit.

The total cost of the visit will be calculated and stored in the amount to collect text field. The calculation is based on the Insurance Eligibility details and NPD price estimate.

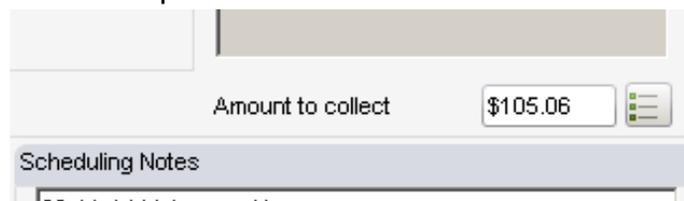


Figure 1.7 – Amount to collect field can be auto populated

When the price comes from the NPD, the amount to collect text field will be read-only. Otherwise, if we are using manual insurance verification then the amount to collect can be entered manually.

If we are processing a self-pay insurance, with the code '0100'. Then the price will come from the NPD and the total amount will be displayed in the amount to collect textbox.

If the NPD doesn't return a cost for a selected `cpt_code/site/carrier` then we will use the '0100' self-pay cost and log the fact that we couldn't find a price in the NPD. The log entry will be stored in the table `c_price_unavailable`.

To the right of the amount to collect text field, there is a "details" button. This button displays a screen, which explains how the amount to collect was calculated.

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| | | | |
|----------------------|----------|----------------------|----------|
| Estimated visit cost | \$480.00 | | |
| Co-pay | \$20 | Co-pay portion | 20.00 |
| Remaining Deductible | \$43.4 | Deductible portion | 43.40 |
| Co-insurance | 10% | Co-insurance portion | 41.66 |
| | | Amount to collect | \$105.06 |

Figure 1.8 – Amount to collect details

When we are in any of the scheduling/walking/registration or re-scheduling screens. Note this is only if we are using Auto Insurance Eligibility and NPD pricing.

Amount to collect: \$105.06

Figure 1.9 – Amount to collect can be seen on all tabs

Amount to collect:

- a. If there is a secondary insurance, NO COLLECTION WILL BE CALCULATED OR DISPLAYED
- b. NPD calculated visit cost is multiplied by the co-insurance % to derive a discrete dollar value to ONLY be displayed when the value of the remaining individual or family deductible is \$0 .
- c. NPD calculated visit cost will be subtracted from the individual remaining deductible. If this value is equal to or > 0 AND the remaining Family deductible has not been met, and the entire summed contract allowed amount is to be displayed in the RIS to be collected.

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- d. If the family deductible has been met or individual deductible amount has been met, collect \$0 for deductible. If the value is greater than 0, collect the remaining individual or family deductible amount, whichever is less. Copay, co-insurance, and remaining deductible will be summed and the value will be written into "total to be collected"

If the carrier's carrier_type_code is 'CAP', then we will not use the NPD price and instead only charge the co-pay amount.

At the end of the scheduling process there is now verbiage included in the "Patient Review" message explaining what the patient is expected to pay.

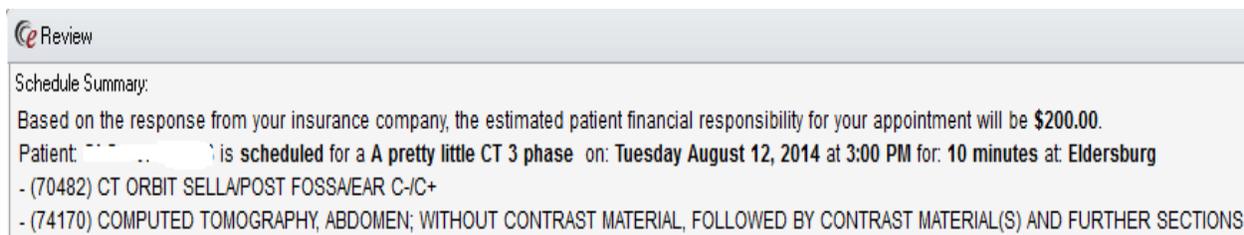


Figure 1.10 – Updated review window

IVT Workflow:

IVT workflow for pre-certs remains the same

If the payer isn't configured for automatic eligibility checking, then we revert to the manual IVT check (same as before).

If we are in the automatic insurance eligibility checking mode the control for manual intervention are not needed and therefore are not shown under the insurance policies as illustrated in the following:

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Insurance Policies

| Note | Carrier Code | Carrier Name | Policy # | Group Name | Group Number | Phone | Priority | Eligibility |
|------|--------------|-----------------|------------|------------|--------------|-------|----------|-------------|
| ▶ | 0329 | BCBS EMPIRE PPO | [REDACTED] | | | | Primary | |

Manage Policies IVT Notes Verify

Figure 1.11 – With and eligible insurance

Insurance Policies

| Note | Carrier Code | Carrier Name | Policy # | Group Name | Group Number | Phone | Priority | Eligibility |
|------|--------------|-----------------|------------|------------|--------------|-------|----------|-------------|
| ▶ | 0329 | BCBS EMPIRE PPO | [REDACTED] | | | | Primary | |

Manage Policies IVT Notes Verify **Verification REQUIRED** Insurance verified

Figure 1.12 – Without an eligible insurance

If we get the green check, the study will skip the IVT worklist.

If a patient's insurance is denied, contain errors or has significant warnings, it will be listed in the IVT worklist. The following example shows a case where both the first name and last name are different that the insurer's and therefore we flag this is a possible patient mismatch.

IVT WL (2 of 14845)

| Flags | Status | Procedures | Order Date | Scheduled Date | Referring |
|-------|-----------|-------------------|---------------------|---------------------|---------------------|
| | Scheduled | CT 3 Phase [CT13] | 04-10-2014 11:37 AM | 04-10-2014 3:00 PM | a, a |
| | Scheduled | CT 3 Phase [CT13] | 08-08-2014 4:03 PM | 02-11-2015 10:00 AM | Abbott, Aaron 55833 |

Warning

Plan start 08-11-2014
 Remaining deductible \$0

MRI/CAT Scan
 Co-insurance 20%

First name differs
 We have RICARDOA
 They have RICARDO

Last name differs
 We have VALDEZA
 They have VALDEZ PASOS

Figure 1.13 – Eligible insurance that is denied, contains error or warnings will go to IVT

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The user will get the option on the IVT screen to address the eligibility issue by

- Fixing the issue
 - Correct spelling of patient's name
 - Fix typo in policy number
 - Select the right carrier
 - Change payment to self-pay
- Overriding the eligibility result (admin only)

Right click on the eligibility icon and choose "Override Result".

- Override values for (co_pay, co_insurance, deductible, status)
- Checkbox for override to identify null / not null

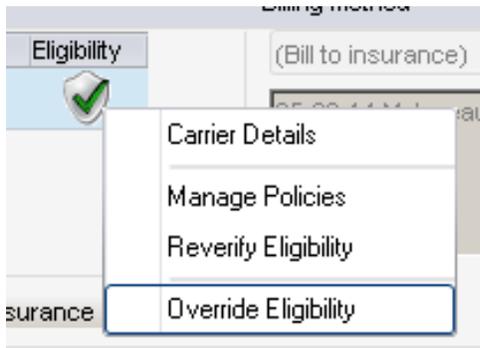


Figure 1.14 – Override

We expect this screen will only be accessible (via permissions) to IVT administrators.

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Override Eligibility

Eligibility status Warning was: Approved

Copay \$10.00 was: \$100

Coinsurance 20%

Remaining deductible \$0.00

Notes

Card owner claims that the copay is \$10 - Please verify with insurance co.

OK Cancel

Figure 1.15 – Override window

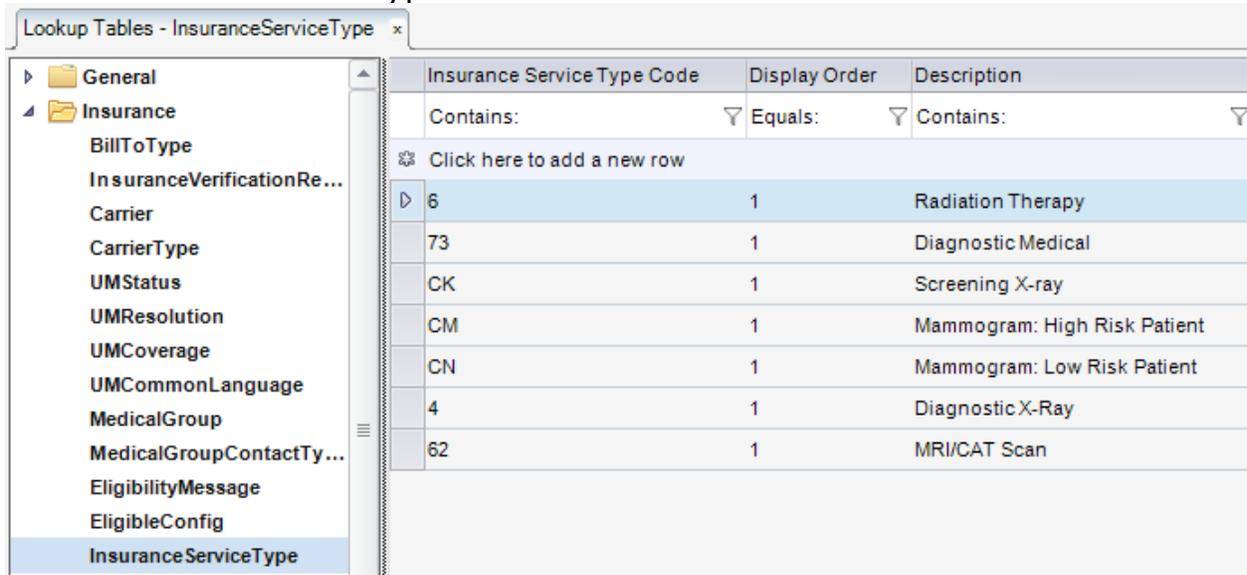
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Eligibility API Configuration:

When requesting insurance eligibility we need to know the service type for the patient's visit. For example, is the patient coming in for Consultation (type '3') or a Mammogram (type 'CN') or a MRI (type '62')? For a full list of service types refer to:

<https://www.eligibleapi.com/resources/service-codes.xml>

A new lookup table called InsuranceServiceType has been created to house the Insurance Service Type Codes



| Insurance Service Type Code | Display Order | Description |
|-----------------------------|---------------|------------------------------|
| Contains: | Equals: | Contains: |
| Click here to add a new row | | |
| 6 | 1 | Radiation Therapy |
| 73 | 1 | Diagnostic Medical |
| CK | 1 | Screening X-ray |
| CM | 1 | Mammogram: High Risk Patient |
| CN | 1 | Mammogram: Low Risk Patient |
| 4 | 1 | Diagnostic X-Ray |
| 62 | 1 | MRI/CAT Scan |

Figure 1.16 – Insurance Service Type lookup table

Service type codes are specified in two places:

1. ModalityType lookup
2. ProcedureCode lookup

Specifying a service type code at the modality type level makes it apply for all procedures scheduled on that type of modality, while the procedure code level will override the modality type's service type code.

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The screenshot shows a 'Lookup Tables - ModalityType' window. On the left is a tree view with 'ModalityType' selected. The main table has columns: Modality Type Code, Description, Display Order, Bloodwork Applicable Flag, Insurance Service Type Code, and Last Updated. A dropdown menu is open for the 'Insurance Service Type Code' column of the 'INTERNAL' row, showing options like '73 (Diagnostic Medical)', '4 (Diagnostic X-Ray)', 'CM (Mammogram: High Risk...', 'CN (Mammogram: Low Risk...', '62 (MRI/CAT Scan)', and '6 (Radiation Therapy)'.

| Modality Type Code | Description | Display Order | Bloodwork Applicable Flag | Insurance Service Type Code | Last Updated |
|--------------------|-----------------------------------------|---------------|---------------------------|------------------------------|--------------|
| RT | Radiation Therapy | 1 | N | 6 (Radiation Therapy) | 04-08-2014 |
| US | Ultrasound | 1 | N | 4 (Diagnostic X-Ray) | 04-08-2014 |
| XR | Plain Film/Xray/CR | 1 | N | 4 (Diagnostic X-Ray) | 04-08-2014 |
| MA | Mammography | 1 | N | CN (Mammogram: Low Risk P... | 04-08-2014 |
| CT | CT | 1 | Y | 62 (MRI/CAT Scan) | 04-08-2014 |
| MR | MRI | 1 | N | 62 (MRI/CAT Scan) | 04-08-2014 |
| PT | PET | 1 | N | 62 (MRI/CAT Scan) | 04-08-2014 |
| INTERNAL | Used for creating blank patients for... | 1 | N | 73 (Diagnostic Medical) | 01-02-2014 |
| AN | Angiography. | 1 | N | 4 (Diagnostic X-Ray) | 02-12-2013 |
| EN | Endoscopy | 1 | N | CM (Mammogram: High Ris... | 02-12-2013 |
| FL | Fluoroscopy | 1 | N | CN (Mammogram: Low Risk... | 02-12-2013 |
| NM | Nuclear Medicine | 1 | N | 62 (MRI/CAT Scan) | 02-12-2013 |
| testb40 | testb40 | 1 | N | 6 (Radiation Therapy) | 02-12-2013 |

Figure 1.17 – Modality Type – insurance service type code

The screenshot shows the 'eRAD RIS [Development as Kevin Middle Molyneaux [Kevin]]' application. The 'Lookup Tables - ProcedureCode' window is open, showing a tree view with 'ProcedureCode' selected. The main table has columns: Procedure Code, Description, and Insurance Service Type Code. A dropdown menu is open for the 'Insurance Service Type Code' column of the 'CT39' row, showing 'CK (Screening X-ray)'.

| Procedure Code | Description | Insurance Service Type Code |
|----------------|------------------------------------------|-----------------------------|
| CT39 | CT Screen Chest Wo | CK (Screening X-ray) |
| 70030 | XR ORBITS FOR FOREIGN BODY | 4 (Diagnostic X-Ray) |
| 70100 | XR Mandible 1-3 Views | 4 (Diagnostic X-Ray) |
| 70110 | XR MANDIBLE 4 VIEWS | 4 (Diagnostic X-Ray) |
| 70120 | XR Mastoid 1-2 View Ea Side | 4 (Diagnostic X-Ray) |
| 0000 | _procedure | |
| 0028T | DX Body Composition Study | |
| 151198VRA | VR XR PELVIS | |
| 20605 | FL Arthrocentesis Inject Intermediate Jt | |
| 379554757 | MA. SCR N MAMMO DIR DIGIT BILAT | |
| 70130 | XR MASTOID 3 VIEW EA SIDE | |
| 70134 | XR Internal Auditory Canals | |

Figure 1.18 – Procedure Code – insurance service type code

Next we need to map carriers in RIS to payers in EligibleAPI. The entire list of eligible api payers is at:

<https://www.eligibleapi.com/resources/payers/eligibility.xml>

Some payers require enrollment, which can be completed at:

https://www.eligibleapi.com/dashboard/enrollment_npis

The mapping for RIS carrier to EligibleAPI Payer is done in the carrier lookup via the "Eligibility Payer ID" column as shown in the following:

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The screenshot shows the eRAD RIS application interface. The top menu bar includes File, Administration, Messaging, Scheduling, Front Desk, Technologist, Radiologist, Mammo, Editor, and Help. The main window displays a 'Lookup Tables - Carrier' window. On the left is a tree view with folders for General, Insurance, BillToType, InsuranceVerificationRequired, Carrier (selected), CarrierType, UMStatus, UMRResolution, UMCoverage, and UMCCommonLanguage. The main table has the following columns: Carrier Code, Description, Eligibility Payer Id, Insurance Auto Check Flag, and Collect Deductible Flag. The table contains several rows, with the last row highlighted in blue:

| Carrier Code | Description | Eligibility Payer Id | Insurance Auto Check Flag | Collect Deductible Flag |
|--------------|------------------------|----------------------|---------------------------|-------------------------|
| mm | Maryland Medicare | 00431 | Y | Y |
| am | Alabama Medicare | 00431 | Y | Y |
| BSCal | Blue Shield California | 00361 | Y | Y |
| ZAZ8 | VANTAGE MEDICAL GROUP | | Y | Y |
| VANC | VANTAGE MED GROUP CAP | | Y | Y |

Figure 1.19 – Carrier lookup with new columns

The Carrier table also has configuration for “Insurance Auto Check Flag”, when this value is Y we will check insurance as soon as we have enough information to perform the insurance check, otherwise, insurance checks will be disabled for this insurance carrier.

Finally, to enable Eligible API integration, we need to specify an NPI and Eligible API String for each site that will be Auto Insurance Eligibility enabled. If you specify a practice and omit the site, this setting will be used for all sites at the specified practice.

The screenshot shows the 'EligibleConfig' window. The table has the following columns: Practice Code, Site Code, Carrier Code, Eligible Api String, Group Npi, and Provider Pin. The table contains three rows:

| Practice Code | Site Code | Carrier Code | Eligible Api String | Group Npi | Provider Pin |
|--------------------|-----------------|------------------|--------------------------------------|------------|--------------|
| | | | | | |
| Borg/IDE | | | 21067474-0b3f-d4e7-190b-3f41396082ab | 123123333 | |
| Advanced Radiology | EL (Eldersburg) | | 21067474-0b3f-d4e7-190b-3f41396082ab | 1932167178 | |
| Advanced Radiology | FH (Fisher) | 1500 - MEDICAID, | 21067474-0b3f-d4e7-190b-3f41396082ab | 123123333 | 3123213 |

Figure 1.20 – Eligible config lookup table

The Eligible Config lookup (shown above) also allows you to specify an optional carrier code if for you want to use a NPI for a given carrier. If you specify a provider_pin you are required to also include a carrier_code. The provider_pin is for payers such as “California Medicaid”, which require extra account verification. See the following website for more information:

[http://www.dhcs.ca.gov/provgovpart/Pages/ProviderIdentificationNumber\(PIN\).aspx](http://www.dhcs.ca.gov/provgovpart/Pages/ProviderIdentificationNumber(PIN).aspx)

Automatic insurance verification has the following access strings:

- Clinical.Insurance.Verify – controls access for re-verifying insurance
- Clinical.Insurance.Override - controls access to override Eligibility/Eligible API results

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You can also control access to who can see the worklist eligibility flags via the following access strings:

- Flag.EligibilityApproved
- Flag.EligibilityDenied
- Flag.EligibilityError
- Flag.EligibilityInProgress
- Flag.EligibilityWarnings

NPD Configuration:

There are two lookup tables to edit for NPD integration. In the Organization lookup table you will need to map the following three fields: NPD client ID, NPD site code and the NPD hospital group

The screenshot displays the 'Lookup Tables - Organization' application window. On the left is a tree view with categories like General, Insurance, Mammography, MU, Procedure, Scheduling, and System. The 'Organization' category is selected. The main area shows a list of practices, with 'Advanced Radiology' selected. An 'Edit Site' dialog box is open, showing the following configuration:

- Region: Maryland
- Site code: LU
- Description: Lutherville
- Phone #: (410) 580-2240
- Fax #: (410) 580-2270
- PACS Child Server: (empty)
- NDP client ID: 100
- NDP site code: LU
- Report template path: (empty)
- Availability template: (empty)
- NDP hospital group: 49
- Active:
- Mammography Tracking Enabled:
- Disable BI-RADS Controls:
- Outside Read Location:
- MU Required:
- Insurance required:

Figure 1.20 – Site configuration for NPD

In the Carrier lookup table you will either need the first 4 digits of the carrier code to equal the NPD's Insurance_co_number or you will need to populate the carrier table's "npd_insurance_co_number" field.

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The table below shows the various Eligibility coverage status and error codes and how they are displayed to IVT.

| Coverage Status / Error Code | ICON | IVT Workflow |
|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Approved |  Approved | Skips the IVT WL for Insurance Verification |
| First name and last name are different between INS and RIS |  Warnings | Visit will appear in the IVT WL. Our staff will need to investigate and fix either the first or last name. |
| First name and birth date are different between INS and RIS |  Warnings | Visit will appear in the IVT WL. Our staff will need to investigate and fix either the first name or DOB. |
| Last name and birth date are different between INS and RIS |  Warnings | Visit will appear in the IVT WL. Our staff will need to investigate and fix either the last name or DOB. |
| Inactive |  Denied | Visit will appear in the IVT WL. We will need to use a different insurance or change payment to Self-pay. |
| Not Covered |  Denied | Visit will appear in the IVT WL. We will need to use a different insurance or change payment to Self-pay. |
| Not Covered due to DOS |  Denied | Visit will appear in the IVT WL. We will need to use a different insurance, change the DOS or change payment to Self-pay. |
| "42", "41", HTTP TIMEOUT Unable to Respond at Current Time Authorization/Access Restrictions |  Payer not responding | <p>The item will NOT appear in IVT while we are actively retrying. In this case we are either unable to connect to the payer or the payer isn't responding.</p> <p>We will re-try every 20 minutes until we receive a response. If the response is "Approved" it will skip the IVT worklist for Insurance Verification. If the response is "Denied", "Warning" or "Error" it will show in the IVT Worklist.</p> |

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| | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>“15”, “33”, “43”, “44”, “45”, “46”, “47”, “48”, “50-63”, “51”, “97”</p> <p>Required application data missing Input Errors Invalid/Missing Provider Identification Invalid/Missing Provider Name Invalid/Missing Provider Specialty Invalid/Missing Provider Phone Number Invalid/Missing Provider State Invalid/Missing Referring Provider Identification Number Provider Ineligible for Inquiries Provider Not on File Service Dates Not Within Provider Plan Enrollment Inquired Benefit Inconsistent with Provider Inappropriate Product/Service ID Qualifier Inappropriate Product/Service ID Inappropriate Date Missing Date(s) of Service Invalid or Missing Provider Address</p> |  Error | <p>Visit will appear in the IVT WL.</p> <p>These are errors that should never occur. These can be reported to help desk. Also our system administrators will be monitoring reports for these and will adjust configuration and communicate with Eligible API to have them resolved.</p> <p>An administrator can verify these manually and use the “Override Eligibility” to move them though the workflow. Or they can be ignored and they will fall off the IVT worklist when they are billed.</p> |
| <p>“64-79”</p> <p>Missing Patient ID Missing Patient Name Missing Patient Gender Code Patient Not Found Duplicate Patient ID Number Inconsistent with Patient’s Age Inconsistent with Patient’s Gender Patient Birth Date Does Not Match That for the Patient on the Database Subscriber Found, Patient Not Found Invalid/Missing Subscriber/Insured ID Invalid/Missing Subscriber/Insured Name Invalid/Missing Subscriber/Insured Gender Code Subscriber/Insured Not Found Duplicate Subscriber/Insured ID Number Subscriber/Insured Not in Group/Plan Identified Invalid Participant Identification</p> |  Error | <p>Visit will appear in the IVT WL.</p> <p>These are all because the patient information we entered was not found in the insurance company’s database.</p> <p>For example, in the case of “Duplicate Patient ID Number” we failed to match on the policy number and the patient name/dob matching returned more than one result.</p> <p>System administrators can use the Eligibility Message lookup table to customize the string that is displayed to the user.</p> |

Table 1.1

eRAD RIS Server Update

Management Reports:

We will also develop reports for:

1. Response time performance with Eligible API by payer
2. Requests that failed by carrier and type of error
3. Average number of requests per encounter by site.
4. Insurances that didn't go through eligibility by payer

These management reports will highlight inefficiencies in system performance, the quality of our user entered data and identify populate carriers that haven't been properly configured for Eligible API integration.

The Carriers not using insurance eligibility is useful when examining payers that we should consider contacting Eligible API for a connection with the insurance company. This report shows the number of exams that have gone through our system with a carrier that has not been mapped. If the carrier has the attorney flag set to 'Y' then it will be excluded from this report.

The following reports added for B43.0.3 and are contained in a new directory called Insurance Eligibility.

Carriers Not Using Insurance Eligibility management report

Practice(s): Advanced Radiology Site(s): Eldersburg, Fisher, Lutherville
From: 8/10/2014 To: 8/22/2014
Min. Occurrence: 1

1 of 1 | 100% | Find | Next

Carriers Not Using Insurance Eligibility

Practice(s): Advanced Radiology
Site(s): Eldersburg, Fisher, Lutherville
Description: This report lists the carriers not using insurance eligibility and their usage (count) grouped by practice and site. This report also excludes carriers where the carriers' value for self pay flag or the attorney flag is set to Y.
Min. occurrence represents the minimum number of times the carrier is referenced before it will be pulled into the report.

| Practice | Site | Carrier Code | Carrier Description | Count |
|--------------------|---------------|--------------|---------------------|----------|
| Advanced Radiology | | | | 8 |
| | ⊗ Eldersburg | | | 5 |
| | ⊗ Lutherville | | | 2 |
| | | 0140265 | KADISH & KADISH | 1 |
| | | 051104 | TRAVELERS | 1 |
| | ⊗ Fisher | | | 1 |
| Grand Total | | | | 8 |

Carriers Not Using Insurance Eligibility Confidential and Proprietary Date Run: 8/22/2014 2:53 PM

Figure 1.21 – Carriers Not Using Insurance Eligibility management report

eRAD RIS Server Update

Eligibility Failed Requests Management Report

Practice: **Advanced Radiology** Site(s): **Eldersburg, Fisher, Lutherville**
From: **7/22/2014** To: **8/21/2014**

1 of 1 100% Find | Next

Eligibility Failed Requests

Practice(s): Advanced Radiology
Site(s): Eldersburg, Fisher, Lutherville
Date Range: 7/22/2014 - 8/21/2014
Description: This report displays insurance eligibility carrier failed insurance requests.

| Carrier | Failed Requests | Total |
|---------------------------------------------------------------------|---------------------------------------------------------------|-----------|
| <input checked="" type="checkbox"/> AETNA | | 1 |
| <input checked="" type="checkbox"/> BC CA PPO | | 21 |
| | Insurance not found - birthdates do not match | 14 |
| | Invalid/Missing Subscriber/Insured ID | 5 |
| | Invalid/Missing Subscriber/Insured Name | 2 |
| <input checked="" type="checkbox"/> BCBS EMPIRE PPO | | 11 |
| <input checked="" type="checkbox"/> Medicare CA Southern | | 13 |
| <input checked="" type="checkbox"/> OXFORD HMO FREEDOM NETWORK | | 4 |
| <input checked="" type="checkbox"/> PROSPECT HEALTH NET CAP | | 4 |
| <input checked="" type="checkbox"/> PROSPECT MED GRP BLUE CROSS CAP | | 1 |
| Total | | 55 |

Eligibility Failed Requests Confidential and Proprietary Date Run: 8/22/2014 2:56 PM

Figure 1.22 – Eligibility Failed Requests management report

As you can see in the screenshot above, this report contains hyperlinks. Using “Insurance not found – birthdates do not match” as an example, selecting the link will open a sub report which again contains hyper links

Insurance Eligibility Details

BC CA PPO (0342)
Practice: ADV
Site(s): EL, FH, LU
Date Range: 7/22/2014 - 8/21/2014
Failed Requests: **Insurance not found - birthdates do not match**

| | | |
|----------------------------------------|--------------------------------------------------|----------------------------|
| eRAD KEY: 510 | Eligible_API_KEY: TQ5L6E478Y0C3 | Completed Date: 08-20-2014 |
| Member: klein, katheen | | DOB: 02-28-1944 |
| eRAD KEY: 511 | Eligible_API_KEY: 899JW67PJ2Z1BP | Completed Date: 08-20-2014 |
| Member: klein, katheen | | DOB: 02-28-1944 |

Figure 1.23 – Insurance Eligibility Details sub report

Selecting the Eligible_API_KEY will open the Insurance Eligibility Details window. Select the patient’s name hyperlink will input the patient’s first and last name as well as DOB into the patient search window.

eRAD RIS Server Update

Eligibility Time to Complete (seconds) Management Report

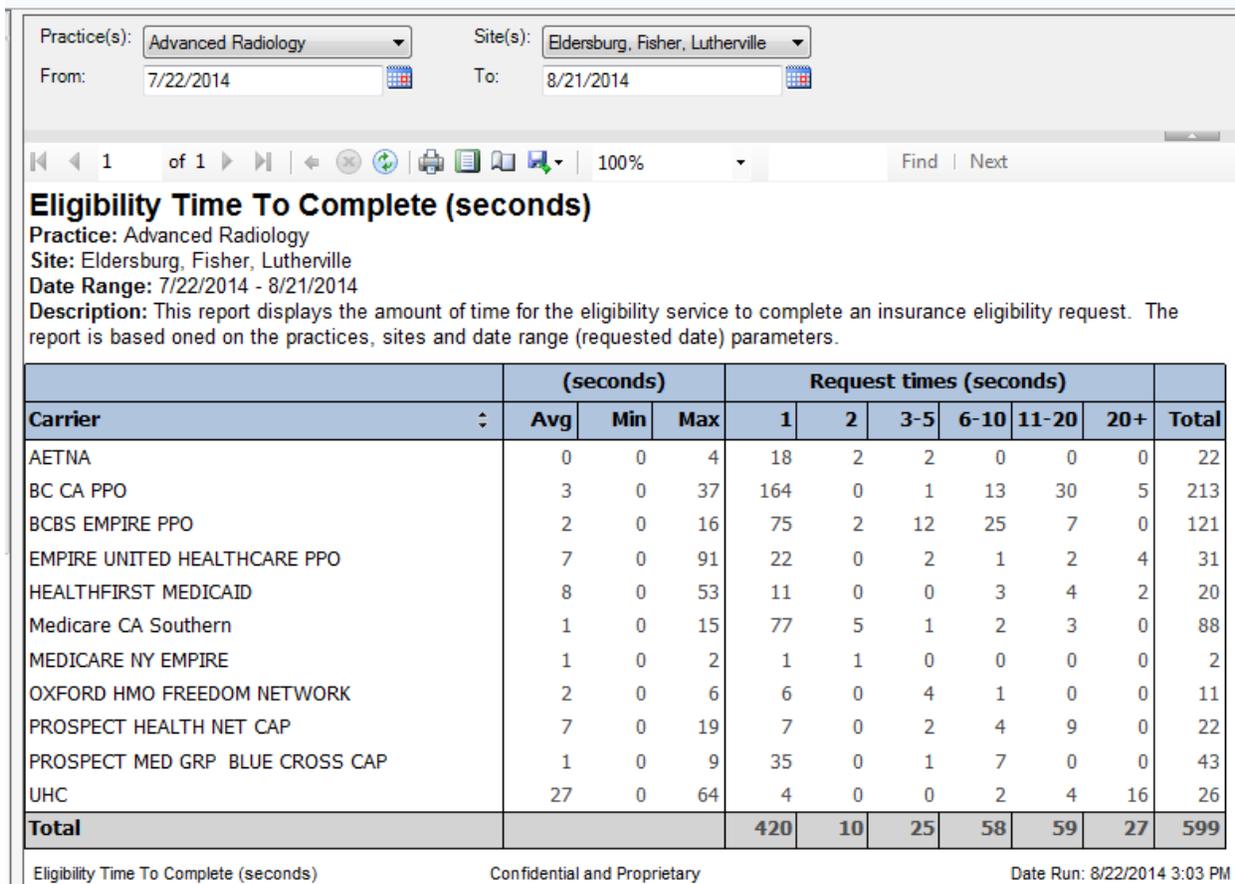


Figure 1.24 – Eligibility Time to Complete (seconds) management report

Insurance Eligibility Usage Management Report

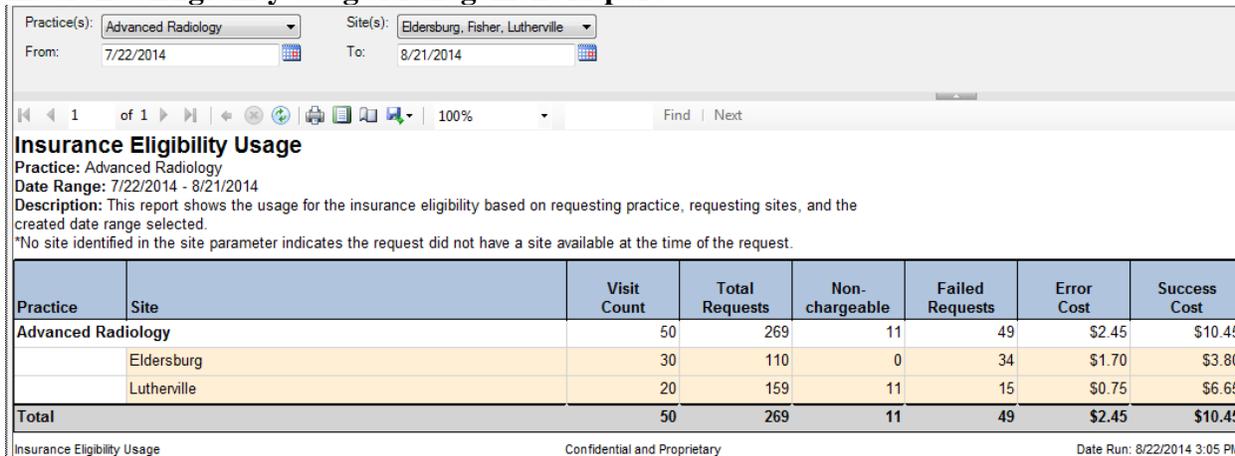


Figure 1.25 – Insurance Eligibility Usage management report

eRAD RIS Server Update

Unavailable Pricing Management Report

| | | | |
|-----------|--------------------|----------|---------------------------------|
| Practice: | Advanced Radiology | Site(s): | Eldersburg, Fisher, Lutherville |
| From: | 8/10/2014 | To: | 8/22/2014 |

1 of 4 | 100% | Find | Next

Unavailable Pricing
 Practice: Advanced Radiology
 Site(s): Eldersburg, Fisher, Lutherville
 Date Range: 8/10/2014 - 8/22/2014
 Description: This report displays the details where the pricing is unavailable at the time insurance eligibility check is made. Based on the practice/site and date range selected (on last updated).

| Site | Carrier | CPT | Self Pay Price Used |
|-------------------|-------------------------|------------------------------------------------------------------------------------------------|---------------------|
| Eldersburg | | | 37 |
| | BC CA PPO (0342) | | 16 |
| | | RADIOLOGIC EXAMINATION, SACRUM AND COCCYX, MINIMUM OF 2 VIEWS (72220) | \$80.00 |
| | | CT ORBIT SELLA/POST FOSSA/EAR C-/C+ (70482) | \$560.00 |
| | | CT ORBIT SELLA/POST FOSSA/EAR C-/C+ (70482) | \$560.00 |
| | | CT ORBIT SELLA/POST FOSSA/EAR C-/C+ (70482) | \$560.00 |
| | | RADIOLOGIC EXAMINATION, ABDOMEN; ANTEROPOSTERIOR AND ADDITIONAL OBLIQUE AND CONE VIEWS (74010) | \$76.00 |
| | | RADIOLOGIC EXAMINATION, ABDOMEN; SINGLE ANTEROPOSTERIOR VIEW (74000) | \$64.00 |
| | | CT ORBIT SELLA/POST FOSSA/EAR C-/C+ (70482) | \$560.00 |

Figure 1.26 – Unavailable Pricing management report

eRAD RIS Server Update

2. Defects Resolved

| Redmine # | Tracker | Subject | Priority |
|-----------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 7406 | Bug | Hold codes - Studies that are changed to or from hold codes after scheduling but before completion of the exam will proceed to an incorrect final status. ie; ExamDone for Hold Codes and HoldCodeCompleted for non-hold codes | High |
| 7305 | Bug | DB view missing technologist flag | Normal |
| 7301 | Bug | Modality Closures are being applied to the wrong dates | Normal |

eRAD RIS Server Update

3. Changes to Configuration

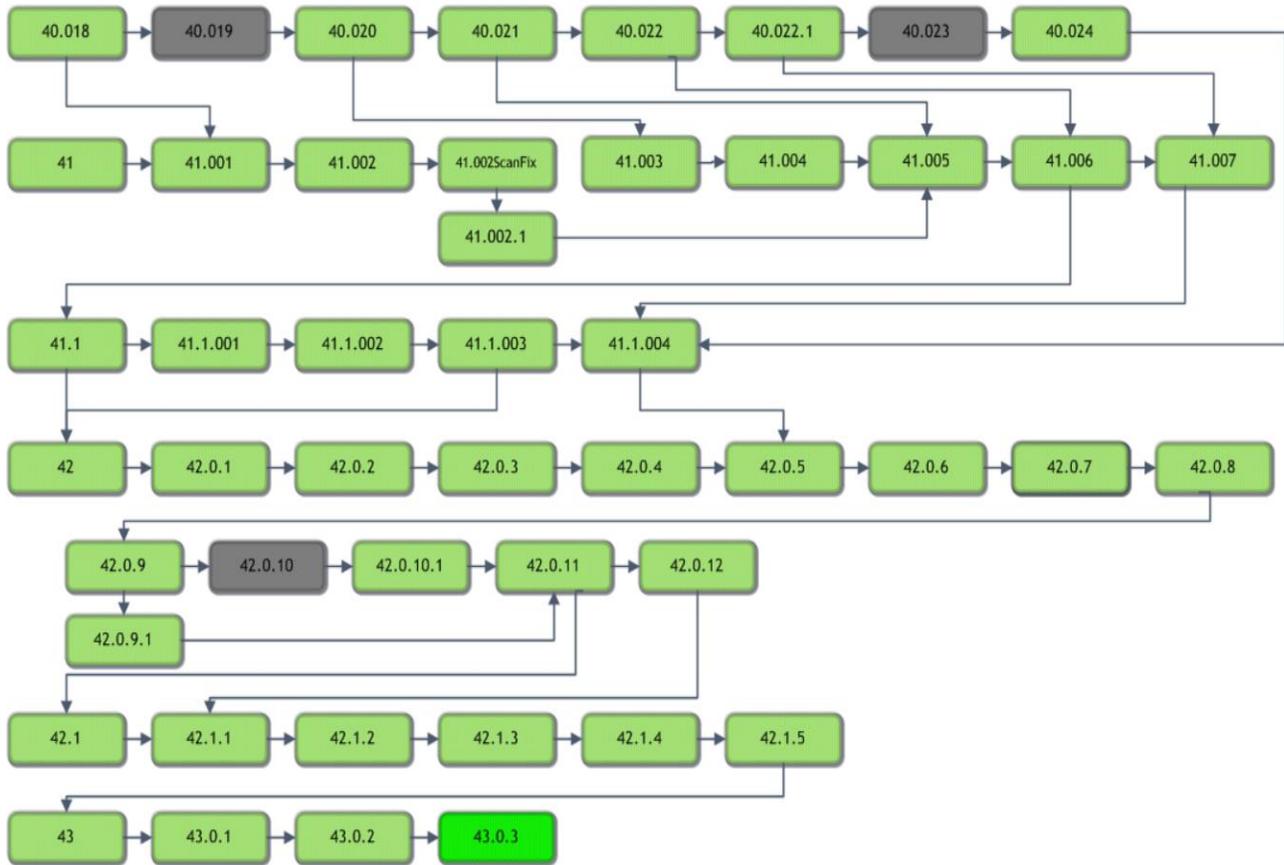
| Setting Placeholder | Setting | Default | Purpose / Controls Access to |
|-------------------------------------------|------------------------------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Access strings and User Group Permissions | Clinical.Insurance.Override | None | controls access to override Eligibility/Eligible API results |
| Access strings and User Group Permissions | Clinical.Insurance.Reverify | None | Controls access to the Reverify button in the Manage Insurance groupbox |
| Access strings and User Group Permissions | Flag.EligibilityWarnings | Full | Controls access to the flag displayed on the work list's flag column for Eligibility Warning |
| Access strings and User Group Permissions | Flag.EligibilityApproved | Full | Controls access to the flag displayed on the work list's flag column for Eligibility Approved |
| Access strings and User Group Permissions | Flag.EligibilityDenied | Full | Controls access to the flag displayed on the work list's flag column for Eligibility Denied |
| Access strings and User Group Permissions | Flag.EligibilityError | Full | Controls access to the flag displayed on the work list's flag column for Eligibility Error |
| Access strings and User Group Permissions | Flag.EligibilityInProgress | Full | Controls access to the flag displayed on the work list's flag column for Eligibility In Progress |
| Access strings and User Group Permissions | Config.LookupEditor.InsuranceServiceType | None | Controls access to the lookup table InsuranceServiceType |
| Access strings and User Group Permissions | Config.LookupEditor.EligibleConfig | None | Controls access to the lookup table EligibleConfig |
| SystemConfig | InsuranceEligibleAPIString | | Verification account for billing. |
| SystemConfig | InsuranceReVerifyInterval | 10 | Determines how often, in days, we will re-verify patients insurance before the study is performed. Note: we will also re-verify on the day of |

eRAD RIS Server Update

| | | | |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---------------------------------------------------------|
| | | | service |
| SystemConfig | InsuranceVerificationGroupNPI | | NPI for server initiated insurance eligibility requests |
| ApplicationSetting.config | StartInsuranceEligibilityService | False | Turns insurance eligibility checks on and off. |
| Ris.exe.config | <p>Before:</p> <pre><system.serviceModel> <bindings> <basicHttpBinding></pre> <p>After:</p> <pre><system.serviceModel> <bindings> <basicHttpBinding> <binding name="clsNPDSserviceSoap" /></pre> | | |
| Ris.exe.config | <p>Before:</p> <pre><client> <endpoint address="net.tcp://192.168.16.100:8091/rRIS/Domain/" binding="netTcpBinding" bindingConfiguration="NetTcpBinding_IStudyServiceDomain" contract="ServiceReference.IStudyService" name="NetTcpBinding_IStudyServiceDomain"/></pre> <p>After:</p> <pre><client></pre> <pre><endpoint address="http://10.10.1.186/NPDSservice/NPDSservice.asmx" binding="basicHttpBinding" bindingConfiguration="clsNPDSserviceSoap" contract="NPDSservice.clsNPDSserviceSoap" name="clsNPDSserviceSoap" /></pre> <pre><endpoint address="net.tcp://192.168.16.100:9091/rRIS/Domain/" binding="netTcpBinding" bindingConfiguration="NetTcpBinding_IStudyServiceDomain" contract="ServiceReference.IStudyService" name="NetTcpBinding_IStudyServiceDomain"/></pre> | | |

eRAD RIS Server Update

4. Code Stream eRAD RIS - Source Code Evolution



Legend:

Light Green = Released software

Gray = Will not be released

Bright Green = Current Release

eRAD RIS Server Update

5. Package Contents

Files included for this server update:

- 1) GUI ZIP Updates folder contains:
 - rRIS_1.3.43.0.3.24298.zip

- 2) RIS_Service_Updates contains:
 - ABCpdf.dll
 - ABCpdf9-32.dll
 - ABCpdf9-64.dll
 - Antlr3.Runtime.dll
 - CDSJobManager.dll
 - CDSJobManager.pdb
 - CdsLib.dll
 - CdsLib.xml
 - CdsLib.XmlSerializers.dll
 - CommonLib.dll
 - CommonLib.pdb
 - contents.txt
 - DDEngine.dll
 - DDEngine.pdb
 - DiffPlex.dll
 - Interop.ANYMODALCAPTURECTRLLib.dll
 - Interop.FAXCOMEXLib.dll
 - Microsoft.Practices.EnterpriseLibrary.Caching.dll
 - Microsoft.Practices.EnterpriseLibrary.Caching.pdb
 - Microsoft.Practices.EnterpriseLibrary.Common.dll
 - Microsoft.Practices.EnterpriseLibrary.Common.pdb
 - Microsoft.Practices.EnterpriseLibrary.Logging.dll
 - Microsoft.Practices.EnterpriseLibrary.Logging.pdb
 - Microsoft.Practices.ServiceLocation.dll
 - Microsoft.Practices.ServiceLocation.pdb
 - Microsoft.Practices.Unity.dll
 - Microsoft.Practices.Unity.Interception.dll
 - Microsoft.Practices.Unity.Interception.pdb
 - Microsoft.Practices.Unity.pdb
 - Microsoft.ReportViewer.Common.dll
 - Microsoft.ReportViewer.WinForms.dll
 - Microsoft.ReportViewer.WinForms.xml
 - Newtonsoft.Json.dll
 - Newtonsoft.Json.xml
 - NLog.dll
 - O2S.Components.PDFRender4NET.dll
 - PDFToImages.exe
 - Radar.Common.dll
 - Radar.Common.pdb
 - Radar.Common.WebClient.dll
 - Radar.Common.WebClient.pdb
 - Radar.DirectMessaging.Client.dll
 - Radar.DirectMessaging.Client.pdb
 - Radar.DirectMessaging.Model.dll
 - Radar.DirectMessaging.Model.pdb
 - rRISServices.exe
 - rRISServices.pdb
 - rRISServicesx64.exe
 - ScheduledTaskManager.dll
 - ScheduledTaskManager.pdb
 - ServicesConfigWizard.exe
 - ServicesConfigWizard.pdb
 - SignatureApprovalService.exe
 - SignatureApprovalService.pdb
 - System.Net.Http.dll
 - System.Net.Http.Formatting.dll
 - System.Net.Http.xml
 - System.Web.Http.dll
 - System.Web.Http.SelfHost.dll
 - System.Web.Http.SelfHost.xml
 - System.Web.Http.WebHost.dll
 - System.Web.Http.WebHost.xml
 - System.Web.Http.xml
 - System.Web.Mvc.dll
 - System.Web.Mvc.xml
 - System.Web.Optimization.dll
 - System.Web.Razor.dll
 - System.Web.Razor.xml
 - System.Web.WebPages.Deployment.dll
 - System.Web.WebPages.Deployment.xml
 - System.Web.WebPages.dll
 - System.Web.WebPages.Razor.dll
 - System.Web.WebPages.Razor.xml
 - System.Web.WebPages.xml
 - Tourreau.Gilles.FaxDotNet.dll
 - Tourreau.Gilles.FaxDotNet.pdb
 - Tourreau.Gilles.FaxDotNet.xml
 - WCFService.dll
 - WCFService.pdb
 - WCFServiceTests.dll
 - WCFServiceTests.pdb
 - WebApi.dll
 - WebApi.pdb
 - WebGrease.dll
 - Wedge.exe
 - Wedge.pdb

eRAD RIS Server Update

The rRIS_Service_Updates also contains to subfolders:

- A. Deploy folder contains
 - a. Applicationsettings.config
 - b. ReleaseVersion-connectionstrings.config
 - c. rRISServices.exe.config
 - d. services.config

- B. XSL subfolder contains:
 - a. Subfolder titled “Stylesheets” which contains:
 - a. CDAToHTMLCompleteReport.xslt
 - b. CDAToHTMLCompleteReportDark.xslt
 - c. CDAToHTMLImpressionSection.xslt
 - d. CDAToRIS.xslt
 - e. CDAToTxt.xslt
 - f. DocumentModelReport.xslt
 - g. DocumentModelReportAsXml.xslt

 - b. CDA Subfolder contains
 - a. C-CDA.xsl
 - b. eRadStylesheet.xsl
 - c. generalTemplates.xsl
 - d. header.xsl
 - e. QRDA.xsl
 - f. QrdaLevel3_Cypress2.4.0.xsl
 - g. QrdaLevel3_ViewHtml.xsl
 - h. sectionAdministeredMedications.xsl
 - i. sectionAllergies.xsl
 - j. sectionEncounters.xsl
 - k. sectionFindings.xsl
 - l. sectionFuncCogStatus.xsl
 - m. sectionHospitalDischarge.xsl
 - n. sectionImmunizations.xsl
 - o. sectionInstructions.xsl
 - p. sectionMedications.xsl
 - q. sectionPlanOfCare.xsl
 - r. sectionProblemList.xsl
 - s. sectionProcedures.xsl
 - t. sectionQRDAMEasures.xsl
 - u. sectionQRDAPatientData.xsl
 - v. sectionQRDAREporting.xsl
 - w. sectionReasonForVisit.xsl
 - x. sectionResults.xsl
 - y. sectionSocialHistory.xsl
 - z. sectionVitalSigns.xsl

3) SQL Folder contains:

- B43.0.3.sql

4) **SSRSDeployment** folder contains 7 subfolders, a batch file for deploying the reports and a help file for deploying the reports.

4.1. **Backups** folder is empty

4.2. **Fonts** folder contains 4 files:

- 4.1.1. FRE3OF9X
- 4.1.2 FRE3OF9x_0
- 4.1.3 FREE3OF9
- 4.1.4 FREE3OF9_0

eRAD RIS Server Update

- 4.3. **ParentFolder** folder contains 7 subfolders
 - 4.3.1. **Chair** folder contains 1 .rdl file
 - 4.3.2. **Dashboards** folder contains 9 .rdl files
 - 4.3.3. **Forms folder** contains sub folder and 2 .rdl files
 - 4.3.3.1. **SubReports** contains 10 .rdl files
 - 4.3.4. **Management Reports** folder contains 9 sub folders, these subfolders contain the core management report files (.rdl) to be deployed.
 - 4.3.5. **Marketing** folder contains 5 .rdl files
 - 4.3.6. **Order Templates** contains 1 file (Default.rdl)
 - 4.3.7. **SubReports** contains 12.rdl files
 - 4.3.8. **Verbal Order** contains 4 .rdl files
- 4.4. **Scripts** folder contains 9 .rss files. These files are used with the DeployReports.bat utility to deploy the reports.
- 4.5. **Upload Custom Mangement Reports** is empty
- 4.6. **Upload Diagnostic Templates** folder contains 1 subfolder
 - 4.6.1. **SubReports** folder is empty
- 4.7. **Upload Forms** folder contains 1 subfolder.
 - 4.7.1. **SubReports** folder is empty
- 4.8. **eRADDeployReports.bat** - batch file for deploying reports to report server for eRAD customers
- 4.9. **RadnetDeployReports.bat** - batch file for deploying reports to report sever for RadNet
- 4.10. **Adding reports for Deployment.docx** document to assist in added a report to the install process when deploying the reports.

eRAD RIS Server Update

6. Intended Audience

This document is created by the RIS Development team for the RadNet/eRAD RIS Implementation teams.

7. Who is affected

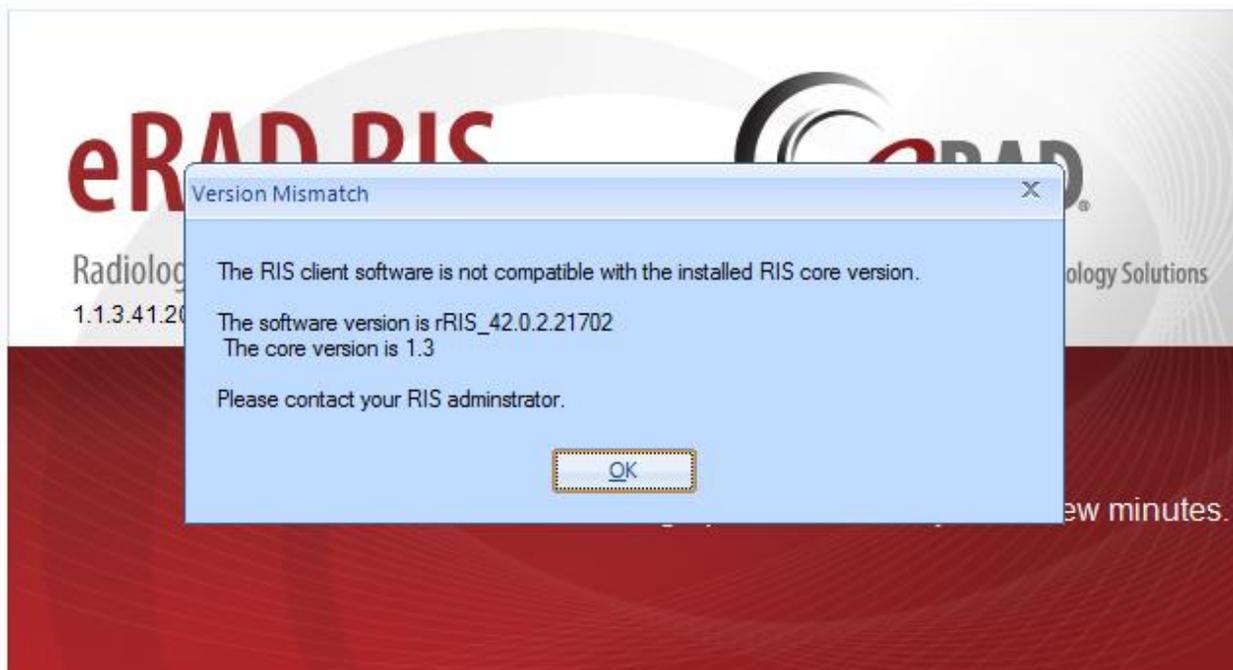
Build 43 installs. Server updates are not cumulative. This server update must be applied to 43.0.2

8. eRAD RIS Release Version Numbers

| Build | Patch | UI Version | Core Version | WS Version | DB Version | Notes |
|-----------|----------|----------------------------|-----------------------|-----------------------|-----------------------|--------------------------------------------------------------------------|
| 41.1 | - | 1.3.41.20918(3GB) | 1.3.41.20791 | 1.3.41.20918 | 1.3.41.20739 | GUI.zip, Core install, Web Service and DB updates, Help files |
| 41.1 | 1 | 1.3.41.20987(3GB) | 1.3.41.20791 | 1.3.41.20918 | 1.3.41.20739 | GUI.zip |
| 41.1 | 2 | 1.3.41.21162(3GB) | 1.3.41.20791 | 1.3.41.21162 | 1.3.41.21150 | GUI.zip, Web Service and DB updates, |
| 41.1 | 3 | 1.3.41.21264(3GB) | 1.3.41.20791 | 1.3.41.21162 | 1.3.41.21150 | GUI.zip |
| 42 | - | 2.42.0.0.21261(3GB) | 2.42.0.0.21261 | 2.42.0.0.21261 | 2.42.0.0.21187 | Full version release |
| 42 | 1 | 2.42.0.1.21597 | 2.42.0.0.21261 | 2.42.0.1.21597 | 2.42.0.0.21187 | GUI and Web Service updates |
| 42 | 2 | 2.42.0.2.21702 | 2.42.0.0.21261 | 2.42.0.2.21702 | 2.42.0.0.21187 | GUI and Web Service updates |
| 42 | 3 | 2.42.0.2.21806 | 2.42.0.0.21261 | 2.42.0.2.21806 | 2.42.0.0.21187 | GUI and Web Service updates |
| 42 | 4 | 2.42.0.2.21862 | 2.42.0.0.21261 | 2.42.0.2.21806 | 2.42.0.4.21870 | GUI and Database updates |
| 42 | 5 | 2.42.0.5.21924 | 2.42.0.0.21261 | 2.42.0.2.21806 | 2.42.0.4.21870 | GUI |
| 42 | 6 | 2.42.0.5.22009 | 2.42.0.0.21261 | 2.42.0.5.22009 | 2.42.0.4.21870 | GUI and Web Service updates |
| 42 | 7 | 2.42.0.7.22090 | 2.42.0.0.21261 | 2.42.0.6.22009 | 2.42.0.4.21870 | GUI.zip updates |
| 42 | 8 | 2.42.0.7.22090 | 2.42.0.7.22150 | 2.42.0.6.22009 | 2.42.0.4.21870 | Web Service updates |
| 42 | 9 | 2.42.0.9.22203 | 2.42.0.0.21261 | 2.42.0.9.22203 | 2.42.0.4.21870 | GUI and Web Service updates |
| 42 | 9.1 | 2.42.0.9.22203 | 2.42.0.0.21261 | 2.42.0.9.22203 | 2.42.0.4.21870 | Web Service updates |
| 42 | 10 | 2.42.0.10.22232 | 2.42.0.0.21261 | 2.42.0.9.22203 | 2.42.0.4.21870 | GUI.zip |
| 42 | 10.1 | 2.42.0.10.22420 | 2.42.0.0.21261 | 2.42.0.9.22203 | 2.42.0.4.21870 | GUI.zip updates |
| 42 | 11 | 2.42.0.11.22495a | 2.42.0.0.21261 | 2.42.0.11.22471 | 2.42.0.11.22527 | GUI.zip, Web Service, Database updates. Management Report Deployment |
| 42 | 12 | 2.42.0.12.22982 | 2.42.0.0.21261 | 2.42.0.12.22982 | 2.42.0.12.22911 | GUI.zip, Web Service, Database updates. |
| 42.1 | - | 2.42.1.0.22744(3GB) | 2.42.0.0.21261 | 2.42.1.0.22744 | 2.42.1.0.22736 | GUI.zip, Web Service, DB updates and Management Report Deployment |
| 42.1 | 1 | 2.42.1.1.2296(3GB) | 2.42.0.0.21261 | 2.42.1.1.22963 | 2.42.1.1.22864 | GUI.zip, Web Service, DB updates |
| 42.1 | 2 | 2.42.1.2.23007(3GB) | 2.42.0.0.21261 | 2.42.1.2.23007 | 2.42.1.2.23007 | GUI.zip, Web Service, DB updates |
| 42.1 | 3 | 2.42.1.2.23237(3GB) | 2.42.0.0.21261 | 2.42.1.2.23237 | 2.42.1.2.23007 | GUI.zip, Web Services |
| 42.1 | 4 | 2.42.1.4.23348(3GB) | 2.42.0.0.21261 | 2.42.1.4.23348 | 2.42.1.2.23007 | GUI.zip, Web Services |
| 42.1 | 5 | 2.42.1.5.23406(3GB) | 2.42.0.0.21261 | 2.42.1.5.23406 | 2.42.1.2.23007 | GUI.zip, Web Services |
| 43 | - | 2.43.0.0.23715(3GB) | 2.43.0.0.23171 | 2.43.0.0.23715 | 2.43.0.0.23743 | Full Version Release |
| 43 | 1 | 2.43.0.1.23798(3GB) | 2.43.0.0.23171 | 2.43.0.1.23798 | 2.43.0.1.23770 | GUI.zip, Web Service, DB updates |
| 43 | 2 | 2.43.0.2.24017(3GB) | 2.43.0.0.23171 | 2.43.0.2.24017 | 2.43.0.2.24023 | GUI.zip, Web Service, DB updates and Management Report Deployment |
| 43 | 3 | 2.43.0.3.24298(3GB) | 2.43.0.0.23171 | 2.43.0.3.24298 | 2.43.0.3.24283 | GUI.zip, Web Service, DB updates and Management Report Deployment |

9. Installing

- 1) Copy and replace the current rRIS...zip file with the rRIS_1.3.43.0.3.24298.zip file provided with this release.
Be sure to make a backup of the ris.exe.config file contained within the current .zip folder.



If you receive the Version Mismatch error above the GUI.zip will need to be renamed to add 1.3. to it. The GUI.zip file name change is from rRIS_43.0..3.24298 → rRIS_1.3.43.0.3. 24298

NOTE: the GUI.zip included with this release has already been renamed to include 1.3.

This is required for installs that have not reached build 42. Because the software installed on your local workstation is a pre-42 build it detects a version mismatch in the software naming and won't allow the newest build to be launched (it is looking for 1.3. in the name). Once the workstation(s) have reached a build of 42 we will no longer need to add "1.3." to the GUI.zip name. Also note that a core install will not resolve this issue below.

NOTE: If your upgrade is coming from 40.016.1 or prior a core install will be required. Versions (builds) of 40.017 and greater do not require a core install as long as you are at least at 40.017 (Core Version 1.3.40.18756)

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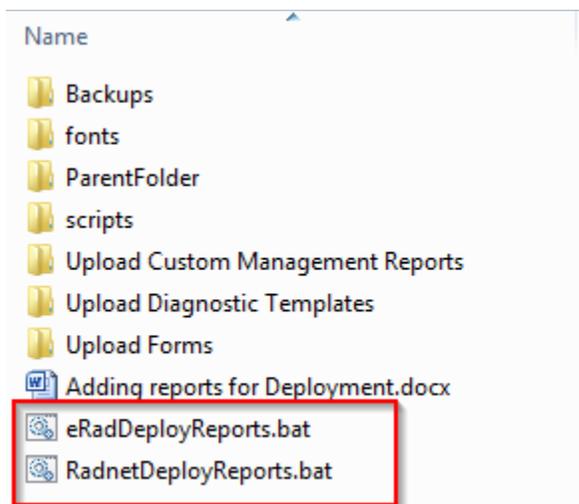
- 2) Stop each service listed below. Copy the files from the RIS Service Updates folder to the directory for each rRISService. Be sure to make backup of all files, but especially the rRISServices.exe.config and rRISServices.vshost.exe.config files.

rRISService directories include:

- a) *rRISService*
- b) *CDS rRISService*
- c) *Wedge rRISService*
- d) *DDE rRISService*

Restart each service.

- 3) Run the B43.0.3.sql file against the eRAD RIS database instance.
- 4) Management Reports Deployment / SSRSDeployment - There are 2 utilities called **RadnetDeployReports.bat** and **eRadDeployReports.bat** that will deploy the reports to a SQL Server Report Service. This utility is found in the **Build X\SSRSDeployment** folder. Below are the steps on how to use this utility. The purpose for the 2 .bat files are the RadNet one deploys a few extra reports specific to RadNet.



1. Launch the DeployReports.bat file.
2. **Enter report server name [default:<computer_name>]:**
 - a. A script will run against the server and return a list of all the root folders on that report server
**By Default this will pull the computer_name environmental variable from the machine running the script. I suggest running this from the report server for performance anyway.
3. **Enter root folder to deploy reports [default: production]:**

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- a. This will create a new root if the name you give doesn't exist, or it will simply publish below the root of the folder if it does already exist. We typically will use "production" for the installation folder. Note: The script forces the root name to be lowercase.
**Default is suggested to be production, but you may need to change it based on the environment you are deploying to. Ie: testserver might be called something else.
4. **Do you wish to create a backup of the existing reports?:**
 - a. This will create a file backup of the report directory specified in the same directory deploy.bat is being run from inside a folder called Backups where it will create a folder based on datetime of backup. Ie: 04172014_110605 (MMDDYYYY_HHMISS).
5. **Do you wish to deploy core management reports?**
 - a. If you enter "y", it will redeploy the core management reports
6. **Do you wish to upload Forms?**
 - a. If you enter "y", the script will deploy any .rdl files into the installations Forms folder that you have previously saved into the script folder called "Upload Forms" including the folder below it called SubReports.
7. **Do you wish to upload Diagnostic Templates?**
 - a. If you enter "y", the script will deploy any .rdl files into the installations Diagnostic Templates folder that you have previously saved into the script folder called "Upload Diagnostic Templates" including the folder below it called SubReports.
8. **Do you wish to upload Custom Management Reports?**
 - a. Entering "Y" will copy any .rdl files you've copied under the deployment folder called Upload Custom Management Reports onto the server under Management Reports\Custom\Uploads directory
9. **Do you wish to create a datasource?**
 - a. If you select "y" you will get prompted for more information about the datasource you wish to create. You only need to create a datasource, if this is a new installation. No need to do this if you are upgrading an existing installation. The datasource gets created in the root of the folder from step 3. The datasource will be called RISDataSource.

If you chose to create a datasource, the following steps will be requested to complete the connection string.

1. **Enter database server name:**
 - a. This is the name of the physical database server
ex. MYSERVER-1
 2. **Enter database name:**
 - a. This is the name of the database on the database server
ex. rRIS_Site
-

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3. **Enter report schema user name:** ex. The account that the datasource will use to connect to the database ie: SA. (For security reasons “sa” is not recommended)
4. **Enter report schema password:**

The results of deployment will be written to log.txt in the same folder as the DeployReports.bat file.