

# expEDlum Medical Billing

v5.10

## Release Notes

Release Dates:  
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## expEDlum Medical Billing v5.10 Release Notes

This release note describes tickets that are enhancements, new features, or bug fixes. Some tickets may refer to other tickets from previous releases. These tickets are a combination of change requests from our partners, clients, and internally identified at iTech. A summary of tickets is provided in the last page of this release note. On request, we can provide any specific release note for any earlier release. This release note is also available from our website at <http://www.itechws.com/releasenote>.

We have a help server available at <https://help.expedium.net>. We have user manuals that cover all aspects of the expEDlum on the help server. Access to help server needs logon credentials. If you need one, please request for one at [support@itechws.com](mailto:support@itechws.com).

The main feature of expEDlum v5.10 is the database upgrade from the earlier PostgreSQL v9.3.5 to v10.15 mainly for improved performance across the board. This release has been tested with different load conditions and have proven to be faster. We have tried many of the “slow running” queries from the earlier versions to be faster on this version. This release note also documents the two hot patches, namely, v5.9.1 and v5.9.2.

### 1) [Ticket #4681] iTech: PostgreSQL Upgrade – 9.3.5 (64 bit) to 10.15 (64 bit)

expEDlum Medical Billing database is migrated from PostgreSQL v9.3.5 to v10.15 for better performance and new character set support.

As part of this database migration task, the following activities/changes are performed

- Installation of new PostgreSQL database as a separate service on a separate port 5433.
- Conversion of the current database from SQL\_ASCII encoding to UTF8
- Finding and correcting invalid UTF8 characters in the current SQL\_ASCII database to near-matching keyboard character so that the records containing these characters can continue to exist in UTF8 encoded database. We found these to be occurring mostly in our lookup tables.
- Backup and restoration of the SQL\_ASCII database in UTF8 format into PostgreSQL 10.15
- Change PostgreSQL JDBC Driver to the latest one and the respective changes in WildFly.
- Deployment of the application with the fixes/changes for handling migration compatibility issues
- Applying the tuned database configuration parameters.
- Scheduling and running compatible base backup and WAL backup scripts, together with other scripts which are changed due to the new PostgreSQL installation directory/port number changes
- Sanity, Regression and Stress Testing of the eMB v5.10 on PostgreSQL v10.15.

## 2) [Ticket #13585] iTech: PostgreSQL 10.15 Migration: Fixes - Application/SQL Compatibility Issues

A handful of database migration related issues were fixed in expEDlum v5.10. Please note there are NO feature changes, and no other tickets were fixed in this release. You should observe an all-around performance improvement.

## 3) [Ticket #13857] (Hot Patch=5.9.1) iTech: Records Per Page - NULL Exception in Posting Module Claim List

During the sanity testing of v5.9 post deployment, there was an issue reported in the claim list page in the posting module. The list was not coming as there was an error logged reporting null on Records Per Page. The backward compatibility to take the value of 10 by default if Records Per Page is not configured in feature settings, was not handled in this screen.

The feature settings of all accounts are updated to have the default as 10 with the JSON construct on the same day using an ad-hoc query.

The permanent solution of handling in the program is applied as a hot patch (v5.9.1) on all production servers.

## 4) [Ticket #13858] (Hot Patch=5.9.1) PH: Inmediata Clearinghouse - Puerto Rico Country Code PR invalid in N4 segment

In Subscriber (2010BA) and Dependent (2010CA) N4 segments, we are populating the country code as PR (Puerto Rico) in N404 element if state code (N402) is PR. And if the state code (N402) carries Canadian province codes, we populate CA in N404 as the country code. For US states, the county code is left empty as it is implicit.

Now, while doing EDI testing with the clearinghouse Inmediata, they reported error in their claim acknowledgement file that N404 is not expected when PR is the state code.

The 837P 5010 and 837I 5010 Outbound components are changed to have the logic to not populate country code if state code is PR. A hot patch (v5.9.1) was applied on all production servers.

This fix was done as we have a Puerto Rico based clinic and have linked up with Puerto Rico based Clearinghouse to connect to a handful of Puerto Rico based payers electronically. These payers are not covered by Office ally®.

## 5) [Ticket #13864] (Hot Patch=5.9.1) iTech: Database Exception: Patient Ledger Summary SOAP Web service

The Soap Web Service /eCPPatientLedgerSummaryListenerService was reporting error due to the changes done on a common program which gets the ledger list. This common program was enhanced to have custom record per page feature, and the backward compatibility handling to use the default 10 records per page was missed to be implemented in this web service.

This problem is resolved and a hot patch (v5.9.1) was applied on all production servers.

## 6) [Ticket #13865] (Hot Patch=5.9.1) iTech: Database Exception: Bulk Claim Close/Open

The option to open/close claims in bulk was not working when all claims are selected, and database errors were logged. The database function had a glitch as part of handling record per page functionality. This issue is fixed, and a hot patch (v5.9.1) was applied on all production servers.

## 7) [Ticket #13866] (Hot Patch=5.9.1) iTech: Database Exception: Posting Batch List Query carrying 1//null in mm/dd/yyyy

On posting batch search module, when user enters an invalid date in Created Date field under Batch/Claim Search accordion, the UI validation was happening and was reporting validation error, but the request was still getting submitted to the controller and database with this invalid date causing query error in database. There were sporadic error logs found in the server for this issue.

This issue is resolved and a hot patch (v5.9.1) is applied on all production servers.

## 8) [Ticket #13889] (Hot Patch=5.9.1) PH: Posting Module: Window to add SFS Adjustment is not coming up when clicked

On Posting Batch – Claim List screen, the button to open the Ledger Add Transaction window for adding SFS Adjustment transaction was not coming up when clicked. This issue was due to the “auto” width configuration. This is removed to fix the issue. A hot patch (v5.9.1) was applied on all production servers.

## 9) [Ticket #13927] (Hot Patch=5.9.2) PH: Slowness in Patient Statement Creation

On one of the production servers after v5.9 deployment, it was noticed that the patient statement creation on the first week of June is taking more time compared to the statements created in the months of May, Apr, Mar etc. While troubleshooting, we found that the newly added logic for Practice Tax ID/NPI based patient statements feature where backward compatibility logic added was having a bug. This was causing issue only when current month is chosen as the statement period for non-public health clinics.

This issue was resolved together with a couple of code cleanup and log enhancements.

A hot patch (v5.9.2) was applied on all production servers. The iTech support team also performed manual database vacuum on production servers to improve performance.

## **10) [Ticket #13929] (Hot Patch=5.9.2) PH: Duplicate records found in Cash Posting Report**

One of the clinics reported an issue on duplicate records getting displayed in the Cash Posting Report. This was caused by the feature of pairing transaction. When the transaction is paired, the transaction trail for pairing was getting saved wrongly with the action “Created” instead of “Updated”. This is fixed now in patient ledger claim ledger, debt set off module, and in the cash posting report.

A hot patch (v5.9.2) was applied on all production servers. A database script was also run to correct the trail entries which got saved wrongly.

## Bugzilla List of tickets

#	ID	Client	Ext. Ticket #	Summary	Version
1	4681	iTech	Internal	iTech: PostgreSQL Upgrade – 9.3.5 (64 bit) to 10.15 (64 bit)	V5.10
2	13585	iTech	Internal	iTech: PostgreSQL 10.15 Migration: Fixes - Application/SQL Compatibility Issues	V5.10
3	13857	iTech	Internal	(Hot Patch=5.9.1) iTech: Records Per Page - NULL Exception in Posting Module Claim List	V5.9.1
4	13858	PH	Email	(Hot Patch=5.9.1) PH: Inmediata Clearinghouse - Puerto Rico Country Code PR invalid in N4 segment	V5.9.1
5	13864	iTech	Internal	(Hot Patch=5.9.1) iTech: Database Exception: Patient Ledger Summary SOAP Web service	V5.9.1
6	13865	iTech	Internal	(Hot Patch=5.9.1) iTech: Database Exception: Bulk Claim Close/Open	V5.9.1
7	13866	iTech	Internal	(Hot Patch=5.9.1) iTech: Database Exception: Posting Batch List Query carrying 1//null in mm/dd/yyyy	V5.9.1
8	13889	PH	-	(Hot Patch=5.9.1) PH: Posting Module: Window to add SFS Adjustment is not coming up when clicked	V5.9.1
9	13927	iTech	Internal	(Hot Patch=5.9.2) PH: Slowness in Patient Statement Creation	V5.9.2
10	13929	iTech	902577	(Hot Patch=5.9.2) PH: Duplicate records found in Cash Posting Report	V5.9.2

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