

CPR-250507 - Analysis Details - NTTD

This page must be filled out for each Change. Without Analysis no implementation will be started.

## **Business Context (mandatory):**

- All Outbound Tables related to oat21, oat21pre, obg21, och21, och21pre, ode21, ofr21, ofr21pre, ohr21 need to be compared
  - A monthly report is generated by a CSharp Application run on Windows Server **calc.phoenix.loc**, which is accessible via **ADM1 Sales Web User**
  - The report is send via Email to “**res FU1 Salesweb**” mailbox

### **Process (mandatory):**

- The DB comparission tool: **pharmos.tools.dbcomparer**

**Data Model/DB Tables (optional if DB is involved and/or to be changed):**

- The compared tables are send via Email for each comparison
    - CompareResults between ZDEV21 and PROD:  
[https://phoenixgroupicc.atlassian.net/wiki/download/attachments/5372018889/ComparerResult\\_ZDEV21\\_PROD.csv?api=v2](https://phoenixgroupicc.atlassian.net/wiki/download/attachments/5372018889/ComparerResult_ZDEV21_PROD.csv?api=v2)
    - CompareResults between ZDEV21 and ZQAS:  
[https://phoenixgroupicc.atlassian.net/wiki/download/attachments/5372018889/ComparerResult\\_ZDEV21\\_ZQAS21.csv?api=v2](https://phoenixgroupicc.atlassian.net/wiki/download/attachments/5372018889/ComparerResult_ZDEV21_ZQAS21.csv?api=v2)
    - CompareResults between ZDEV21 and ZTST:  
[https://phoenixgroupicc.atlassian.net/wiki/download/attachments/5372018889/ComparerResult\\_ZDEV21\\_ZTST21.csv?api=v2](https://phoenixgroupicc.atlassian.net/wiki/download/attachments/5372018889/ComparerResult_ZDEV21_ZTST21.csv?api=v2)
  - Activate the fix view for first row and first column, by selecting the field B2 → View → fix Window view
  - For each compared table and DB

- - Table does not exist
- x Table exists
- Optional additional row with Amount rows contains the number the of elements if only view data rows are contained and optional the use devuser in development systems and produser in productive system, if the the table has not been created in the context of informix.

Frontend - Windows/Citrix (optional if a Frontend is involved and/or to be changed):

- dbcomparer is a CSharp GUI to compare tables and databases, it is also possible to compare zdev21 tables from one country to another country
- additionally this tools can be used to evaluate differences in table definitions for additional or missing columns, or different column type definitions
- The report created can be copied to excel to be used for further evaluation

dbcomparer tool: Steps from Clone to Run

1. Clone the Repository:

- Ensure you have Git installed.
- Clone the phoenix.tools.dbcomparer repository to your local machine:

```
1 git clone <repository_url> C:\dev\comparer_tool\phoenix.tools.dbcomparer
```

2. Install Prerequisites

- Navigate to the cloned directory:

```
1 cd C:\dev\comparer_tool\phoenix.tools.dbcomparer
```

- Apache Ant and Ivy: Install and configure (ensure ant is in PATH).
- IBM.Data.DB2: install \\phdev\\shared\$\\cs\_tools\\install\\database\\informix\\IBM Data Server\\Runtime Client\\v11.5fp1\_ntx64\_rtcl\_EN.exe
- OpenSSL 1.0.2u (64-bit): Install to C:\\OpenSSL-Win64\\bin and copy DLLs:

```
1 copy "C:\\OpenSSL-Win64\\bin\\libeay32.dll" "C:\\bin\\IBM Informix Client SDK\\bin\\"  
2 copy "C:\\OpenSSL-Win64\\bin\\ssleay32.dll" "C:\\bin\\IBM Informix Client SDK\\bin\\"
```

- Java JRE v1.8
- NuGet under C:\\Tools\\NuGet
- 7-Zip: Install for zipping artifacts.

3. Open Developer Command Prompt

- Launch the Developer Command Prompt for Visual Studio to initialize the MSBuild environment:

```
1 "C:\Program Files\Microsoft Visual Studio\2022\Professional\Common7\Tools\VsDevCmd.bat"
```

#### 4. Set Environment Variables/Cache

- Check IBM.Data.DB2 installation

#### 5. Restore NuGet Packages

- Navigate to the source directory and restore dependencies:

```
1 cd C:\dev\comparer_tool\phoenix.tools.dbcomparer\dev\src\dbcomparer
2 nuget restore ..\dbcomparer.sln
```

**i** Note: if encountered “nuget” is not recognized..”, add C:\Tools\NuGet to System Variables-Path or temporary: set PATH=%PATH%;C:\Tools\NuGet

#### 6. Build the Solution

- Compile the project:

```
1 cd C:\dev\comparer_tool\phoenix.tools.dbcomparer\dev\src
2 msbuild dbcomparer.sln /p:Configuration=Release /p:Platform="Any CPU"
```

#### 7. Export the Package

- Generate the deployment package:

```
1 cd C:\dev\comparer_tool\phoenix.tools.dbcomparer\dev\src
2 ant export
```

#### 8. Verify Package Contents

- Check the exported package:

```
1 cd C:\dev\comparer_tool\phoenix.tools.dbcomparer\export\dbcomparer
2 7z l dbcomparer.zip
```

- Ensure dbcomparer.exe and required DLLs are included.

#### 9. Extract and Deploy the Package

- Extract the package to the deployment directory:

```
1 7z x dbcomparer.zip -oC:\dbcomparer
2 cd C:\dbcomparer
```

#### 10. Run the Application

```
1 cd C:\dbcomparer
2 .\dbcomparer.exe > log\output.txt 2>&1
```

- Open the UI, select two databases (e.g., oat21@zdev21 and oat21pre@zdev21), and click "Compare".
- Copy/Paste to an Excel sheet.

**Backend - AIX / Windows Webserver (optional if a Backend is involved and/or to be changed):**

- The database comparison tool "dbcomparer" generates Excel reports as attached in "Documents" highlighting structural differences between tables across servers. After analyzing the comparison results, we can take the following actions:

Tables/Views	Remarks	Suggested actions	Done on
<b>zartikel</b>	No longer needed , replaced by <u>artikelzentral</u>	Synonym can be deleted when <a href="#">CPR-240377</a> is completed	zdev21
<b>zartwg</b>	No longer needed , replaced by <u>loadtradegroup</u>	Synonym can be deleted when <a href="#">CPR-240377</a> is completed	zdev21
<b>zdkbtm</b>	No longer needed , replaced by <u>narcgroup</u>	Synonym can be deleted when <a href="#">CPR-240377</a> is completed	zdev21
<b>amcqbrancharticlequotaload</b>	<ul style="list-style-type: none"> <li>• amcq table are from an application called AMCQUOTA</li> <li>• Seems that the AMCQUOTA was never moved to production, only the tables are created in france</li> </ul>	Request on <a href="#">ofr21@zdev21</a> to remove the following tables as their <code>_remove</code> counterparts already exist: <ul style="list-style-type: none"> <li>• amcqbrancharticlequotaload,</li> <li>• amcqcalcparams,</li> <li>• amcqcalcresult</li> </ul>	zdev21 (add <code>_remove</code> to tablename)
<b>amcqcalcparams</b>		Ask the informix team to verify that : <ol style="list-style-type: none"> <li>1. No automated DB tool is recreating these tables, as applications should not be creating them directly.</li> <li>2. There are no active dependencies on these tables.</li> </ol>	zdev21 (add <code>_remove</code> to tablename)
<b>amcqcalcresult</b>		<p style="color: red;">⇒ objects deleted with 20250703KSC-amcq-</p>	zdev21 (add <code>_remove</code> to tablename)

		<b>HBenAbdelaziz_10.74_10.75.sql</b> (request RITM0054895)	
<b>articlequotac onfig</b>	The table articlequotaconfig was initially planned for implementation under CPR-220856, but the CPR was halted. Since the table was only created in DEV and never deployed to PROD, it is now effectively <b>obsolete</b> .	Table can be deleted [ Only in ZDEV21 related to <a href="#">CPR-220856 - DE - AE Customer order management - PHARMOS CS - Confluence</a> ]	onhold (there is a new CPR to takeover this part)
<b>callbackcate ory</b>	No confirmed requirement for this table. (empty table, obsolete)	Table can be deleted [ Only in ZDEV21 probably related to <a href="#">CPR-240019 - AT - Extension Callback-Button Order Entry - PHARMOS CS - Confluence</a> ]	
<b>imexblockmo des</b>	No confirmed requirement for this table. (obsolete)	Only in ZDEV21 might be related to MDE Imex Monitor (Olaf Wasmuth) or ImEx (Inbound Leopold Fuchs)	
<b>bkp_paramete r_change_log ging, bkp1_msv3cst info</b>	Exist only in dev: ode21 ... No evidence on Unix (binaries, logs, scripts)	Table can be deleted	
<b>phcdc_check_ tab</b>	Exist only in prod: obg21 and ohr21	<p>dont delete it, to be clarified with DB Team (Bernd Schierhorn)</p> <p>Found evidence under: .informix/phcdc/</p> <p><b>1. Table Contents:</b></p> <ul style="list-style-type: none"> <li>◦ Contains repeated entries tracking enable/disable operations for full row logging</li> </ul>	

- Stores checkpoint or status information for the PHCDC application
- Potentially maintains temporary process results

**2. Functional Purpose:**

- Primary function appears to be monitoring and auditing
- Likely implements Change Data Capture (CDC) functionality
- Full row logging suggests either:
  - Data synchronization with external systems
  - Comprehensive audit trail requirements

**3. Technical Context:**

- Schema: obg21:informix
- Table name convention indicates checkpoint functionality
- Logging pattern suggests transactional behavior tracking

**4. Outstanding Questions:**

- What triggers PHCDC application execution?
- What is the retention policy for table entries?
- Are there downstream consumers of this data?
- What specific processes write to this table?

<b>tmpdocument</b>	Exist only in prod:	Need more informations (tmpdocument* and tmreportdate table could be docinfoarchive tool, ask Rolf Brahm-Vogelsanger)	
<b>archiveinfo,</b> <b>tmpdocument</b>	oat21 and ode21: No evidence in servers		
<b>archiveinfo05,</b> <b>tmpphatra,</b> <b>tmpphatra,</b> <b>tmpreportdate</b>			
<b>view:</b> <b>bld_registerend</b>	Exists only in prod: och21, ode21 and ofr21: No evidence in server	Need more informations (need to be checked with DB team (Bernd Schierhorn) as this relates to any systables)	
<b>view:</b> <b>bldi_provided</b>	Exists only in prod	Need more informations (need to be checked with DB team (Bernd Schierhorn) as this relates to any systables)	
<b>view:</b> <b>bldi_required</b>	Exists only in prod	Need more informations (need to be checked with DB team (Bernd Schierhorn) as this relates to any systables)	
<b>view:</b> <b>varticlequota</b>	Different between servers	Need more informations (could be used by BI (Adil El Houat))	
<b>view:</b> <b>vartikellokal</b>	Different between servers	Need more informations (could be used by BI (Adil El Houat))	
<b>view:</b> <b>vkdverbund</b>	Exists only in prod	Need more informations (could be used by BI (Adil El Houat))	
<b>view:</b> <b>vkdverbundpos</b>	Exists only in prod	Need more informations (could be used by BI (Adil El Houat))	
<b>view:</b> <b>vkndausku</b>	Exists only in prod	Need more informations (could be used by BI (Adil El Houat))	

Dependent department inputs (optional if any external department outside PHARMOS is involved):

- PINT
- Citrix
- Infrastructure Env
- Schedule/Batch
- BI
- GxP (in case of GxP relevance)

Documents (Analysis and Solution Specification):

File	Modified
› <a href="#">image-20250605-105313.png</a>	Jun 05, 2025 by <a href="#">Dirk Keller</a>
› <a href="#">Comparer_result_dev_prod-18-06-2025.xlsx</a>	Jun 18, 2025 by <a href="#">Haythem BEN ABDELAZIZ</a>
› <a href="#">Comparer_result_ztst_prod-19-06-2025.xlsx</a>	Jun 19, 2025 by <a href="#">Haythem BEN ABDELAZIZ</a>
› <a href="#">Comparer_result_zqas_prod-23-06-2025.xlsx</a>	Jun 23, 2025 by <a href="#">Haythem BEN ABDELAZIZ</a>

↑ Drag and drop to upload or [browse for files](#) \*

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