CYBERTEC MIGRATOR

The easiest way from
Oracle to PostgreSQL

CYBERTEC
DATA SCIENCE & POSTGRESQL

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THE EASIEST WAY FROM ORACLE TO POSTGRESQL

CYBERTEC Migrator is an easy and user-friendly tool that helps you to organise and efficiently migrate multiple Oracle databases to PostgreSQL. In addition to migrating your data professionally and securely with minimum effort, CYBERTEC Migrator allows you to visually monitor and track the whole process at any time.

Commercial databases often come with an unpredictable price tag, as license audits can easily lead to unexpected, high costs. Therefore, many companies are moving from Oracle to PostgreSQL. Open Source software solves the problem of low flexibility, reduces costs, and stops vendors from locking you in. However, the process of migrating databases is still seen as a big hurdle: it is complex, time-consuming and you need qualified personnel. CYBERTEC Migrator revolutionizes this concept, as it enables migration that is simple, fast and comfortable. See for yourself!
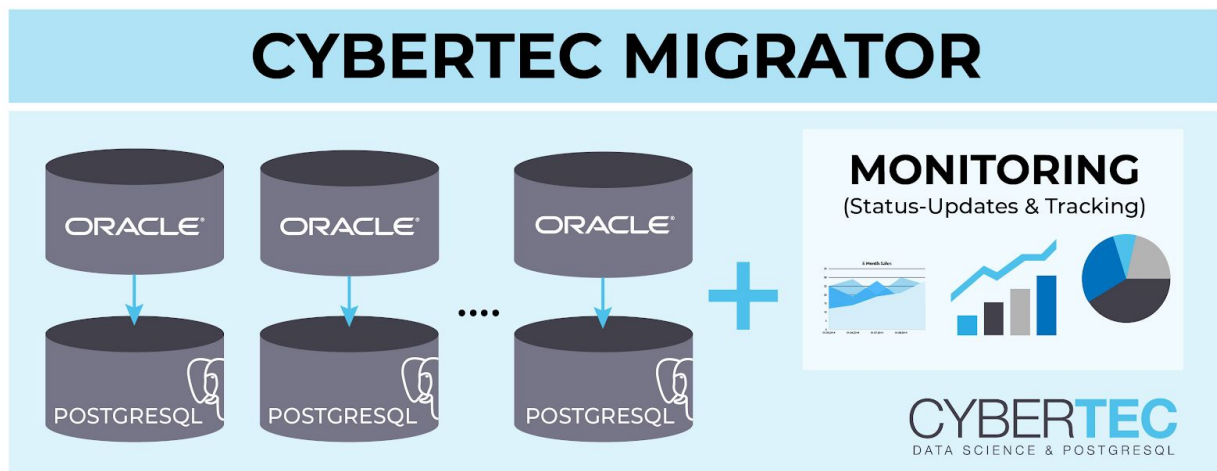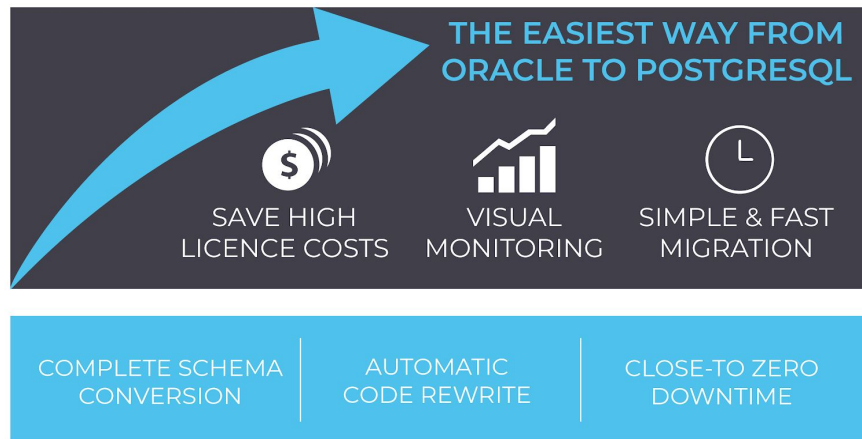
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1. WHAT IS CYBERTEC MIGRATOR?

The CYBERTEC Migrator is a powerful, but yet easy-to-use software product for fast database migration developed by CYBERTEC.

THE EASIEST WAY FROM ORACLE TO POSTGRESQL

SAVE HIGH LICENCE COSTS — VISUAL MONITORING — SIMPLE & FAST MIGRATION

COMPLETE SCHEMA CONVERSION | AUTOMATIC CODE REWRITE | CLOSE-TO ZERO DOWNTIME

Key features
- close-to zero downtime migration (change data capture, DB replication)
- fully automatic or tool-assisted code rewrite (packages, views, functions, …)
- Oracle Spatial to PostGIS

Complete schema conversion
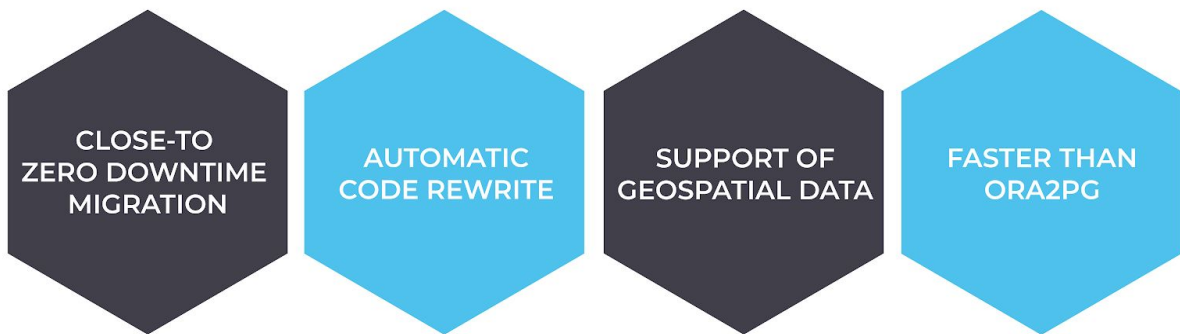CYBERTEC Migrator supports a wide range of data structures and Oracle concepts including:
- Tables
- Views, Materialized Views
- Sequences
- Indexes
- Unique, Check, Primary- & Foreign-Key Constraints
- All Oracle Partition Types (Hash, Range, List) including Subpartitions
- Packages, Functions
- Triggers
- Etc.

Handling complexity
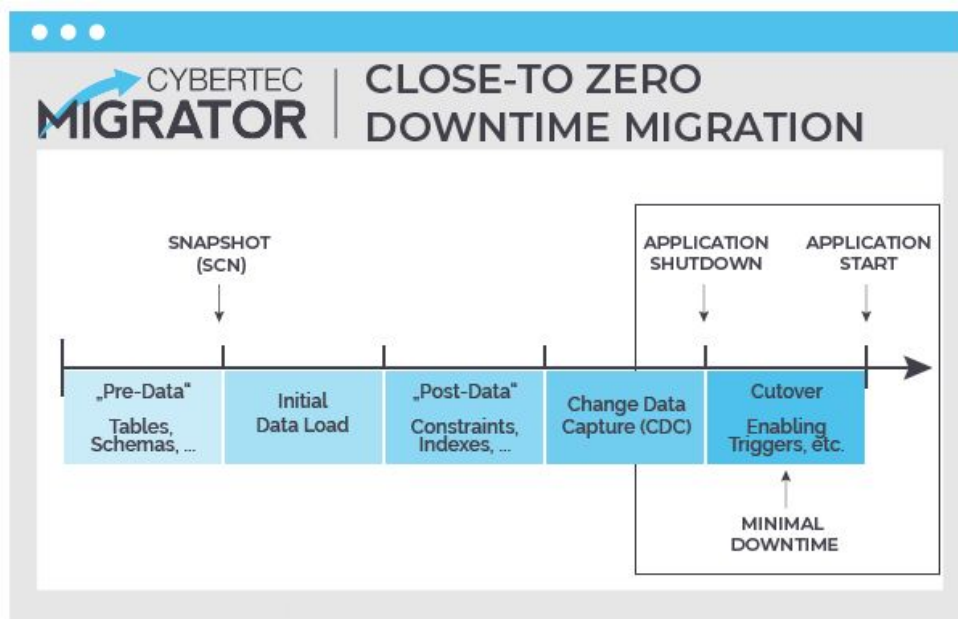No matter how complicated it might be, we've seen it all:
- On-prem PostgreSQL
- Virtual machines
- Kubernetes / OpenShift
- Cloud environment (Microsoft Azure, Amazon AWS, etc.)

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2. KEY FEATURES

2.1 CLOSE-TO ZERO DOWNTIME MIGRATION

CYBERTEC delivers state-of-the art data replication and change data capture capabilities. Massive parallelism and highly efficient data transformations enable initial load speeds up to **1 terabyte per hour!** After the initial load, the CYBERTEC Migrator *Change Data Capture* solution allows for easy replication of changes to PostgreSQL. After that, it is just a matter of seconds to switch the application.

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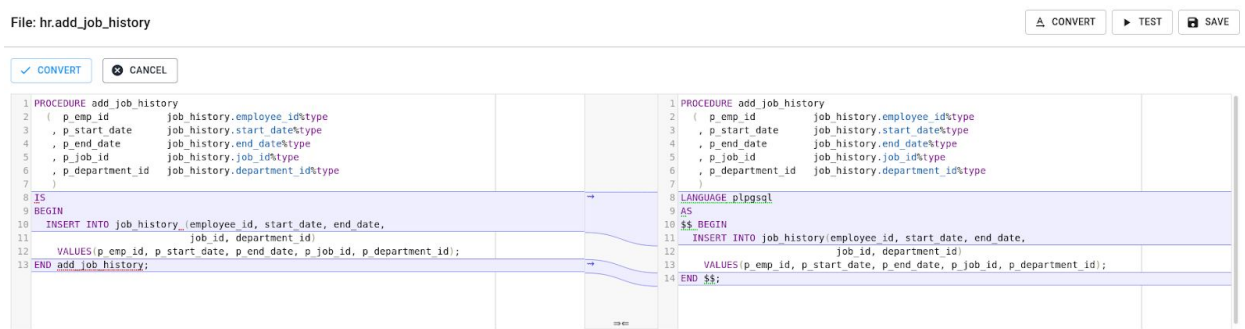
2.2 FULLY AUTOMATIC OR TOOL-ASSISTED CODE REWRITE

One of the key challenges in a migration project is migrating Oracle PL/SQL code to PostgreSQL. Manually rewriting code can be a cumbersome, slow and complicated process. Therefore we developed the CYBERTEC Migrator **Automatic Code Rewrite**.

> ## "Migrate complex business logic faster than ever before"

Our parser approach allows for a fully automatic or tool-assisted code rewrite. Everything that could not be migrated, will be presented to the user in an easy-to-understand worklog, which can be given to the developers or to our migration experts for rewriting.
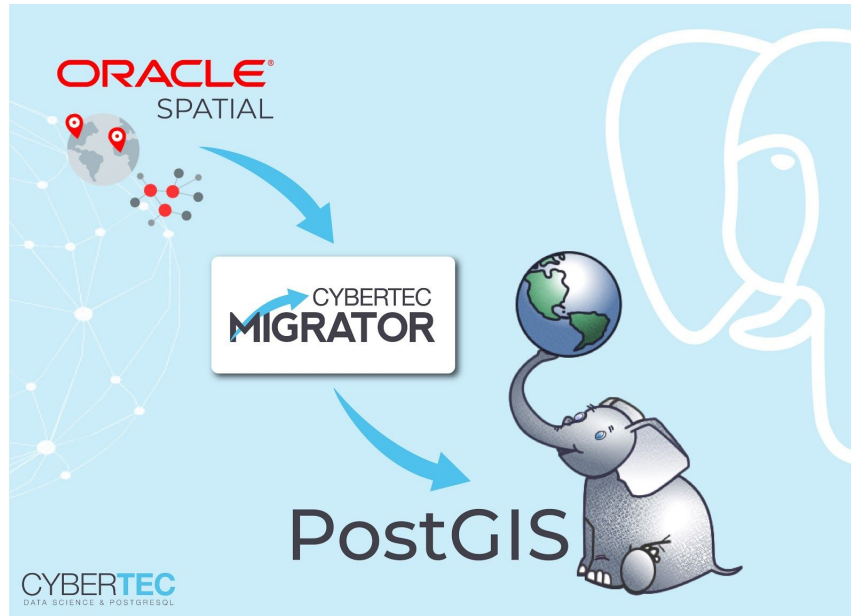

2.3 FASTER THAN ORA2PG

Why should you not use the ora2pg tool for your migration? It is quite simple: The CYBERTEC Migrator is a lot faster and easier to use. CYBERTEC Migrator finishes within 30 seconds, while ora2pg needs 3 minutes.

2.4 ORACLE SPATIAL TO POSTGIS

Our solution is not limited to simple data structures and trivial data sets. Geospatial data (GIS) has become more popular and started to be an important factor to consider. CYBERTEC Migrator allows for a smooth transition to the leading Open Source GIS plugin **PostGIS** and hence helps you to get rid of Oracle Spatial.

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With CYBERTEC Migrator standard GIS data can be moved to PostgreSQL seamlessly in the most efficient way possible.

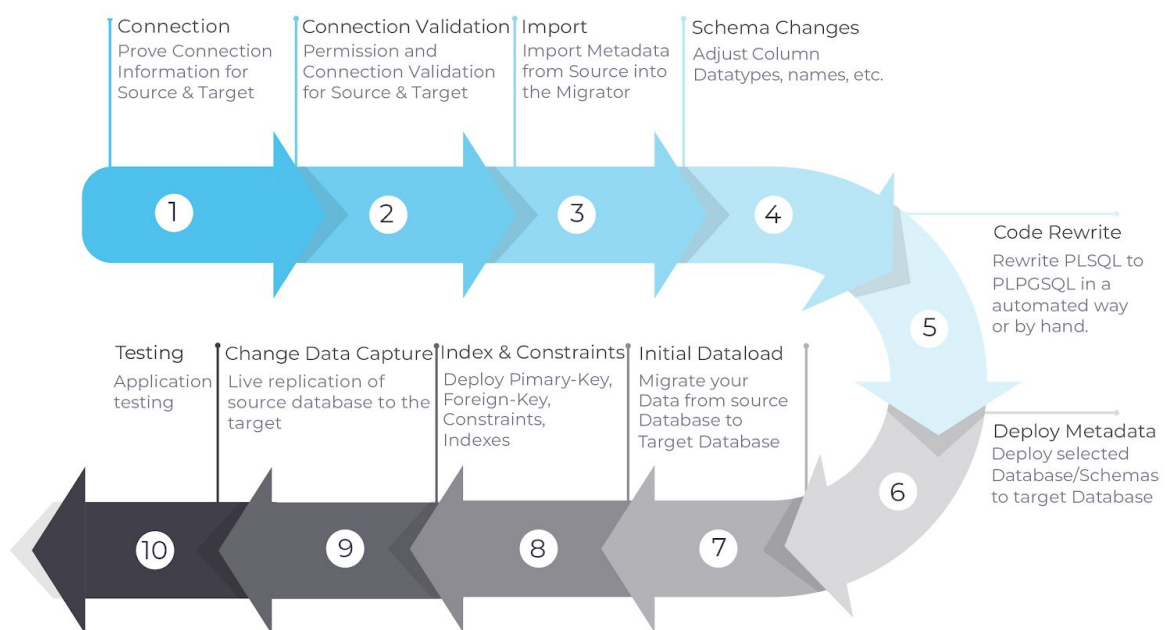"CYBERTEC Migrator - the ideal choice for migrating geo data"

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3. HOW IT WORKS - MIGRATION PROCESS

To migrate your data from Oracle to PostgreSQL using the CYBERTEC Migrator, all you have to do is to follow the intuitive and user friendly migration process predefined by the CYBERTEC Migrator.

After a connection between source and target database has been made and validated, the metadata is imported into the CYBERTEC Migrator. Once this is done, the user can make schema changes and adjust things like columns, datatypes or names to their needs.
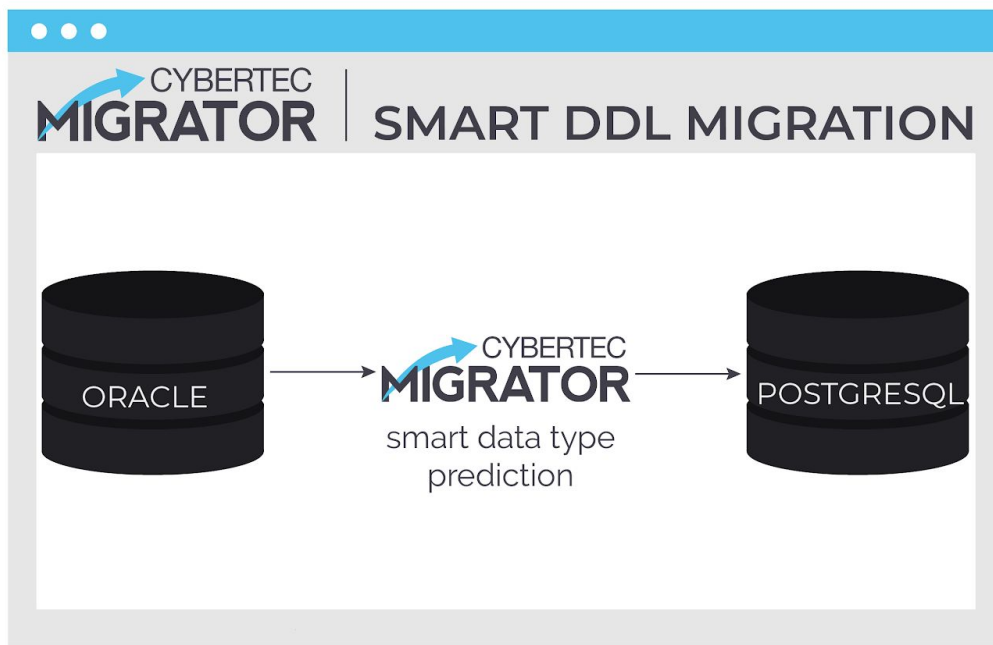
PLSQL is rewritten to PLPGSQL either automatically or by hand. After that, migration of the data is done, followed by deployment of indices and constraints and changes of data capture. Of course, application testing is possible at the end.

Connection
Prove Connection
Information for
Source & Target

Connection Validation
Permission and
Connection Validation
for Source & Target

Import
Import Metadata
from Source into
the Migrator

Schema Changes
Adjust Column
Datatypes, names, etc.

① ② ③ ④

Code Rewrite
Rewrite PLSQL to
PLPGSQL in a
automated way
or by hand.

⑤

Testing
Application
testing

Change Data Capture
Live replication of
source database to the
target

Index & Constraints
Deploy Pimary-Key,
Foreign-Key,
Constraints,
Indexes

Initial Dataload
Migrate your
Data from source
Database to
Target Database

Deploy Metadata
Deploy selected
Database/Schemas
to target Database

⑩ ⑨ ⑧ ⑦ ⑥

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3.1 INFLUENCE DECISIONS AT EVERY STEP OF THE WAY

The CYBERTEC Migrator offers **intelligent data type prediction**. It directly accesses the Oracle system catalog and intelligently extracts all relevant metadata to predict the desired data types on the PostgreSQL side.
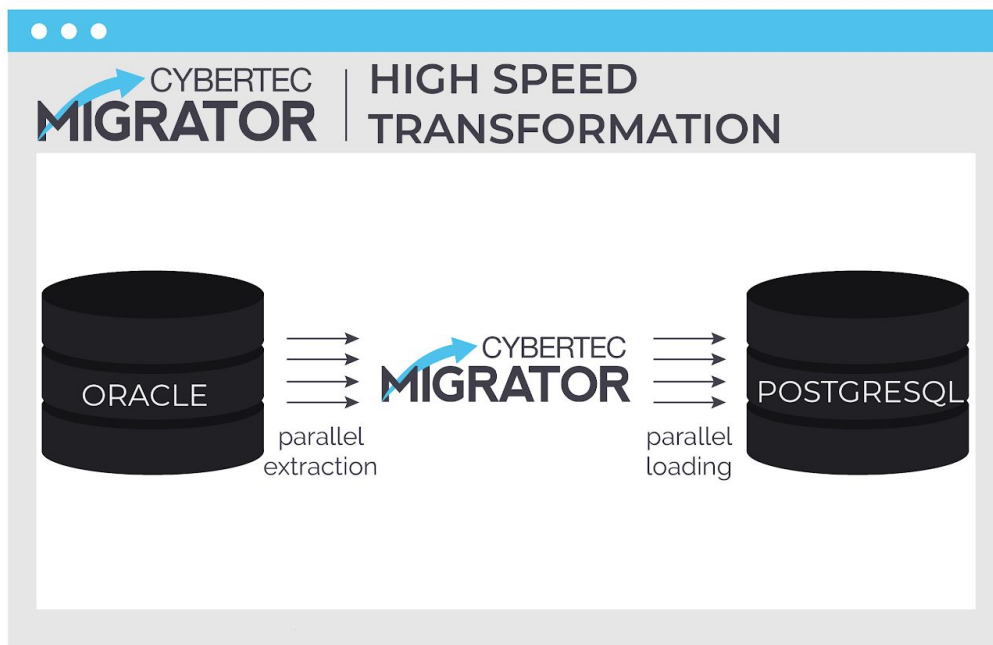
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"Fine tune your data structures to your needs to achieve maximum efficiency"

To ensure maximum flexibility end users can **influence** the **decisions** made by the migration engine at **every step of the way**.

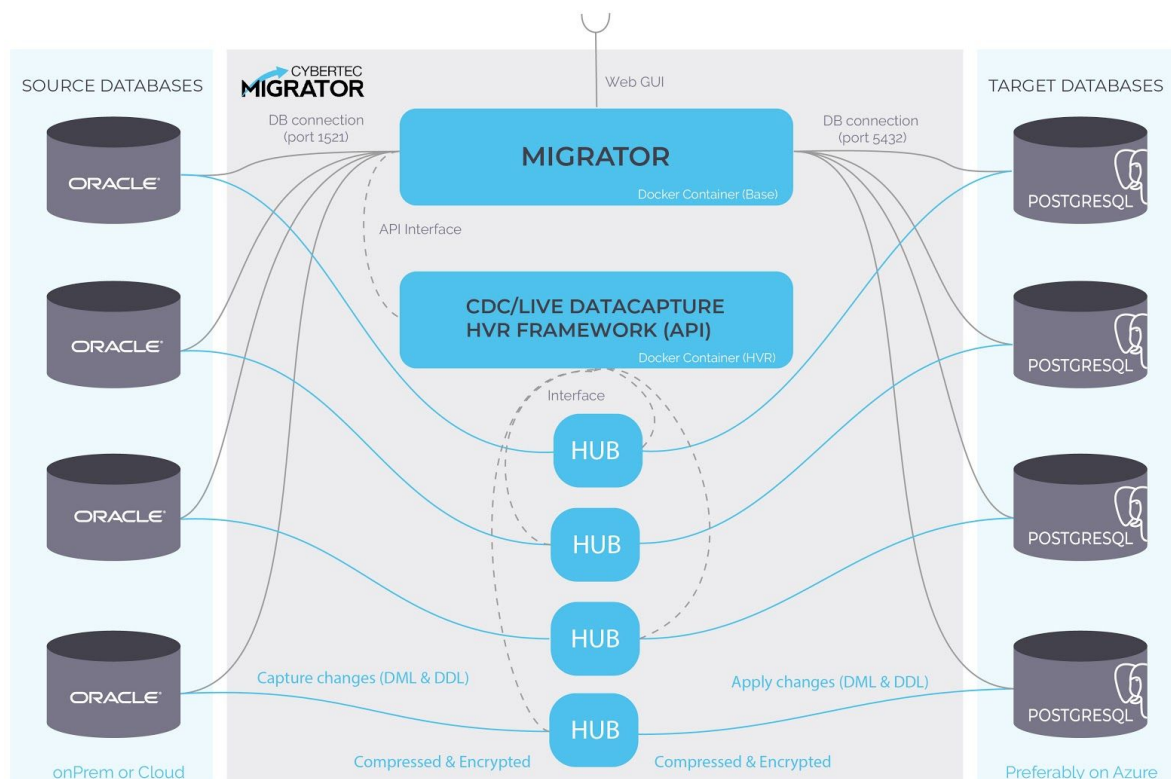## 3.2 QUICK AND EFFORTLESS DATA REPLICATION

The CYBERTEC Migrator offers exactly what is required for **migrating terabytes of data**:

- Efficient data transformation
- Massive parallelism
- Low overhead

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Data is extracted and moved to PostgreSQL by using the **parallel transformation engine**. With the CYBERTEC Migrator several hundreds of Megabits per second are easily achievable, making the most efficient piece of software possible, while **maintaining transactional** integrity at all times.

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3.3 MIGRATING INDEXES, CONSTRAINTS AND FOREIGN KEYS

CYBERTEC Migrator will **automatically apply constraints found** on the source database on the target system.
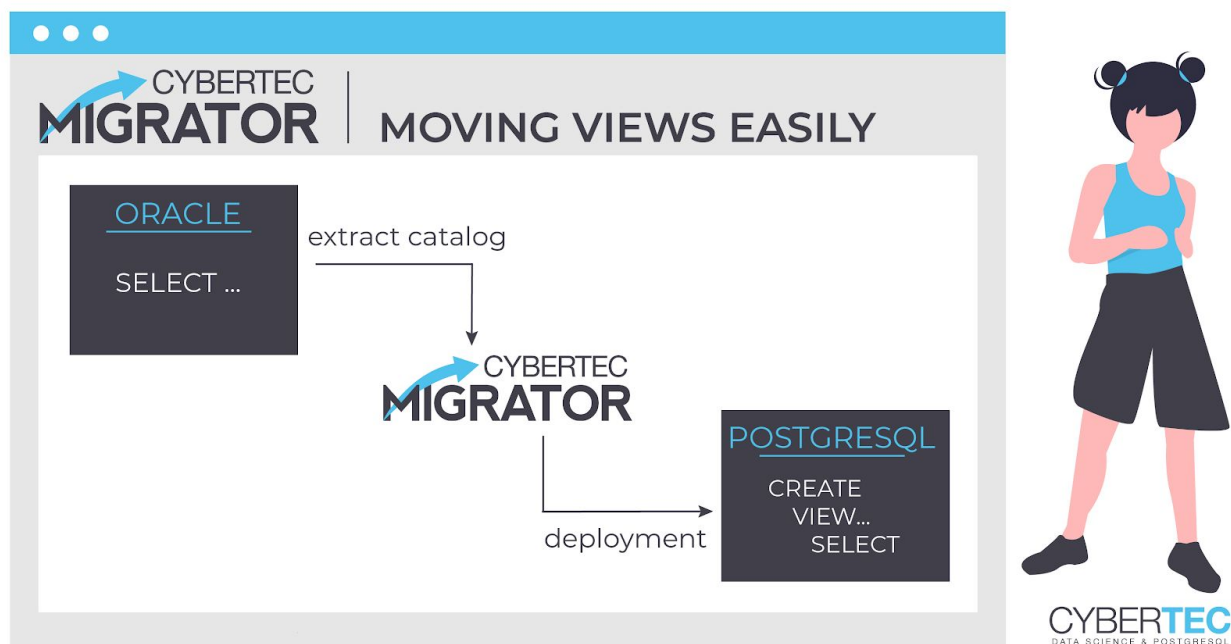
All important constraints are applied automatically:

- Migration of primary keys
- Extraction of foreign keys
- Application of CHECK-constraints
- Automatic index migration

Furthermore, you can post-process edit your constraints easily using our **graphical editor**.

3.4 MOVING VIEWS EASILY

No database migration is complete without views and materialized views. CYBERTEC Migrator will hook up to the Oracle system catalog and **extract the view definitions of your choice**.
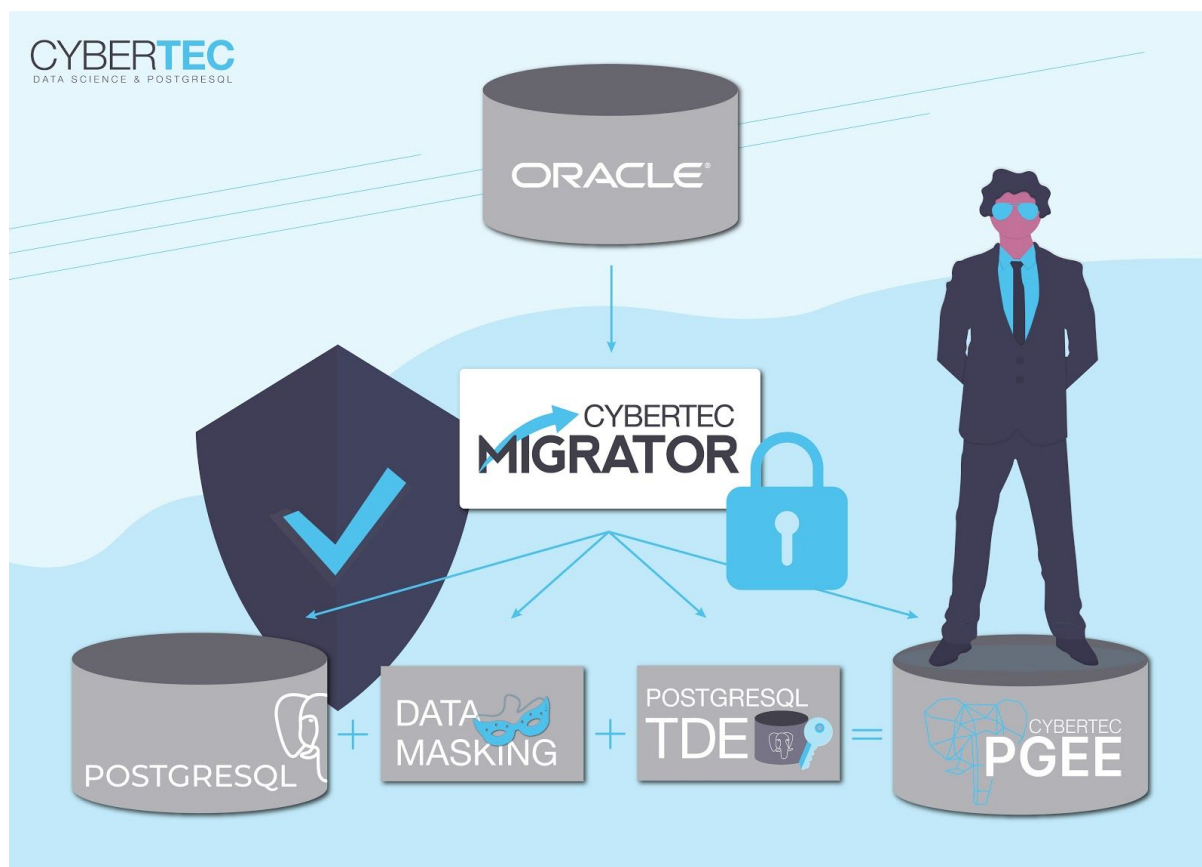

You may either make changes to your views or simply let CYBERTEC Migrator **deploy** these **views automatically** for you.

PostgreSQL does not know the concept of an "invalid view" so you can be assured that all views migrated are perfectly valid and instantly usable.

4. MAINTAINING SUPERIOR SECURITY

Security does matter - especially when you move from one database to another. It is important to achieve at least the same level of security as before. CYBERTEC Migrator allows you to replicate highly secure databases.

You can also use CYBERTEC Migrator to replicate to fully encrypted PostgreSQL systems using PostgreSQL TDE, Data Masking or CYBERTEC PGEE. Make use of our PostgreSQL Enterprise Edition to protect your data extensively and in the best way possible.

5. PRICING

CYBERTEC MIGRATOR	PRICE per core and month
CYBERTEC MIGRATOR	
software licence	€ 2.500,-
CYBERTEC MIGRATOR ALL-IN-ONE	
migration done by us	on request
CYBERTEC MIGRATOR PRO	
code rewrite	+ € 2.500,-
zero downtime	+ € 1.250,-

OPTIONAL

1. CYBERTEC Migrator
Purchase the tool and run the migrations on your own using the CYBERTEC Migrator.

2. CYBERTEC Migrator Pro
You run the migrations yourself using the CYBERTEC Migrator and either one, or both of its advance extensions. The CYBERTEC Migrator can be bought with fully automatic or tool-assisted code rewrite and if needed, with our Change Data Capture solution, which allows close to zero downtime migration.

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3. CYBERTEC Migrator All-in-one

Within the all-inclusive package, CYBERTEC experts run the whole database migration for you. Project plan, strategy, Proof of Concept, migration and evaluation – we do it all. You can lean back and watch the whole process. If needed, our experts will provide fully automatic or tool-assisted code rewrite and ensure close-to zero downtime. Our experts are also happy to assist you with any other questions that may arise during the migration.

Please contact us to find the right price for your individual database infrastructure and the level of help needed!

Not fully convinced yet?
Contact our sales team to get a

PERSONAL DEMONSTRATION

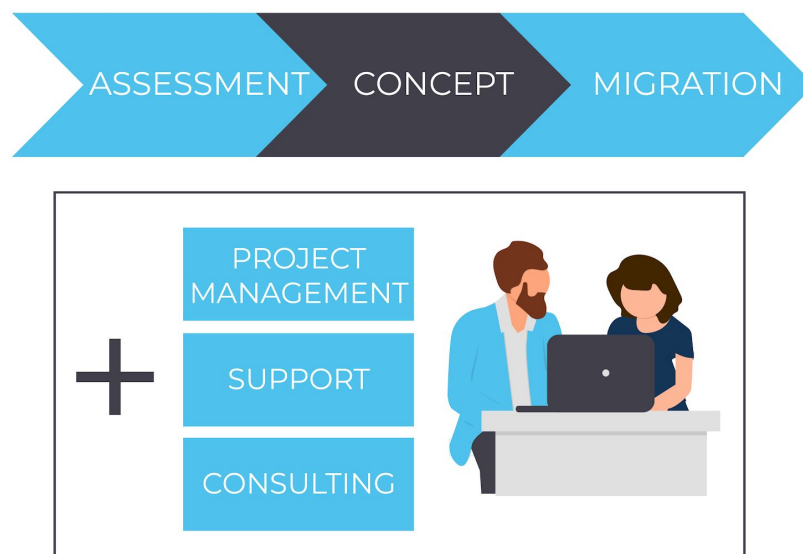of the CYBERTEC Migrator and its functionality!

>> sales@cybertec.at <<

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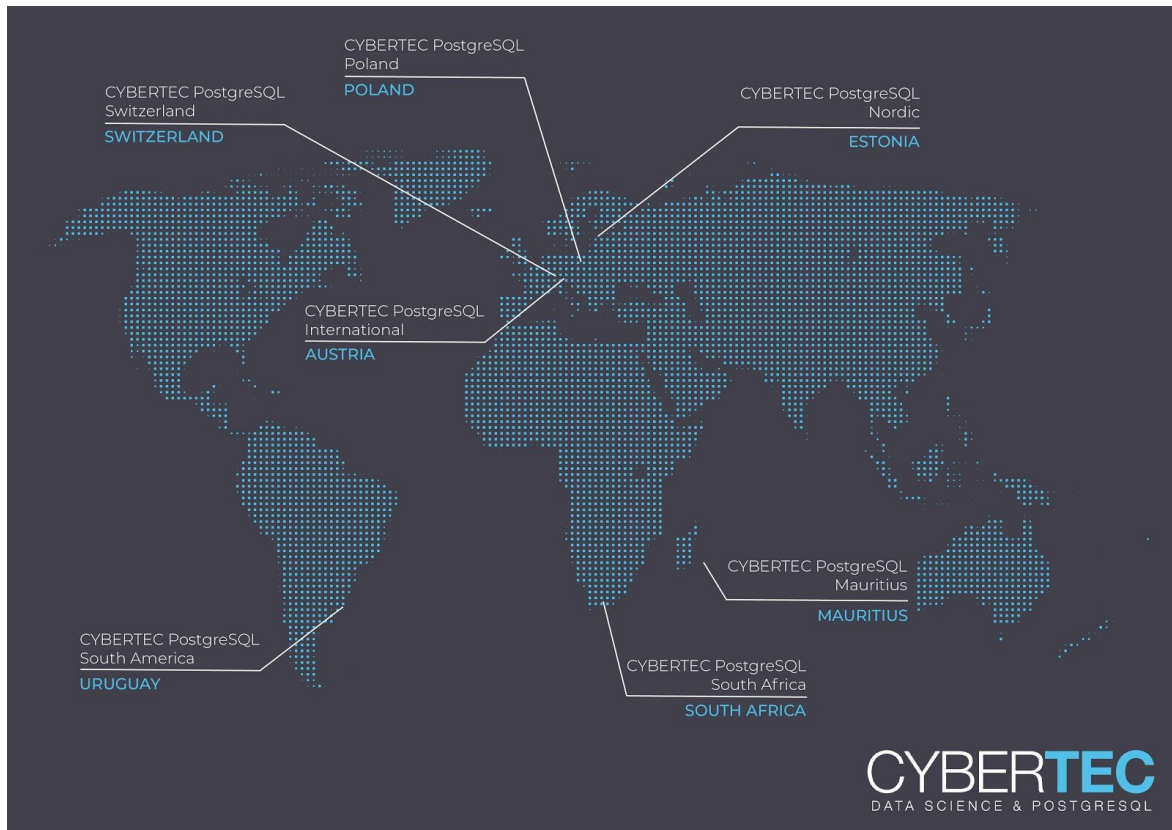
6. OUR MIGRATION SERVICES & TOOLCHAIN

CYBERTEC offers comprehensive migration services. We help customers to **facilitate the entire migration process in the fastest way possible** and provide everything that is needed to successfully conclude migration projects:

- migration assessment
- advanced planning
- comprehensive migration of
    - data structures
    - table content
    - indexes and constraints
- automatic stored procedure conversion
- close-to-zero downtime migration
- 24/7 support and consulting during migration

Our team will tune your target systems to maximum performance and handle database hardening.

ASSESSMENT CONCEPT MIGRATION

+ PROJECT MANAGEMENT

SUPPORT

CONSULTING

Start migrating today and save
ridiculously high licence costs for your business!
Contact our sales team at sales@cybertec.at

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