Installing Production Database

1. Introduction

This document is created to help moving from development stage to the production stage. In this document the process is handled step by step.

2. Development stage

As the database is still in development stage, the database schema must be run to the point, that it won’t change anymore. Development stage is used to develop the database ready.

When the database will be in production stage, we have very limited ability of changing the database schema anymore. So, the application must be ready before going to production cluster.

3. Moving from Development to the Production

3.1 From Development to Integration

Preliminary testing of the application should be conducted by Totem personnel. Once the preliminary tests have finished and software has been properly debugged then CERN can provide Totem with an integration database which has almost identical configuration to the production one.

On the integration database you are obliged to install your application’s DB schema or ask CERN support to copy the contents from development DB and put there enough test data in order to simulate a real workload.

During workload simulation CERN DBA’s encourages you to consult CERN support and send information about when you are starting your simulation activity so a DBA can watch the load on the integration database and spot some potential performance problems and bottlenecks. This however can only be done if you prepare a representative workload that is high enough to resemble future production workload.

If CERN DBA’s see that the application is behaving well and not causing any performance problems that could affect other applications in a production cluster, CERN take the decision of moving the database into production.
3.2 Requesting the production database

When it comes to the stage to request production database, you should know and inform CERN with the following information:

- Maximum number of concurrent database connections
- Number of connections open per day
- Target account size
- Type of traffic generated by application
- Where the application has been developed (database, username)
- What tests has the application passed through

You can make the request via form found from CERN Database wiki.

3.3 Contact Information

CERN Database Wiki:

https://twiki.cern.ch/twiki/bin/view/PDBService/PhysicsDatabasesSection#PhyDB_support_non_emergency

CERN Database Support Email:

phydb.support@cern.ch