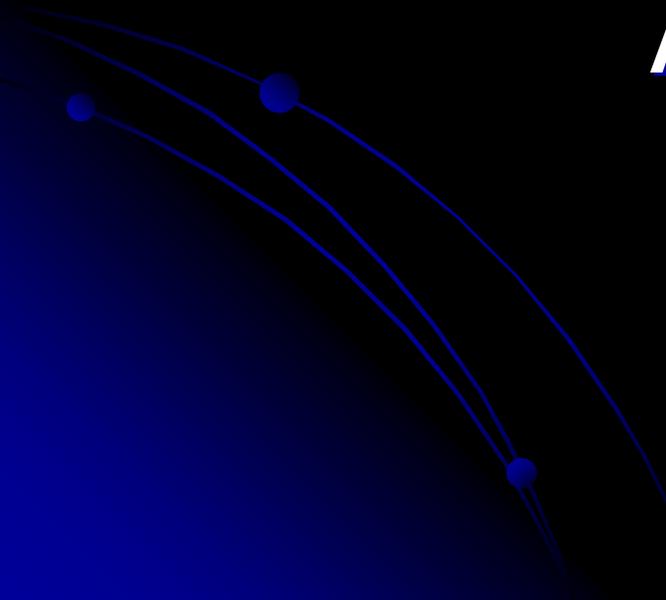


# Oracle Regression Testing

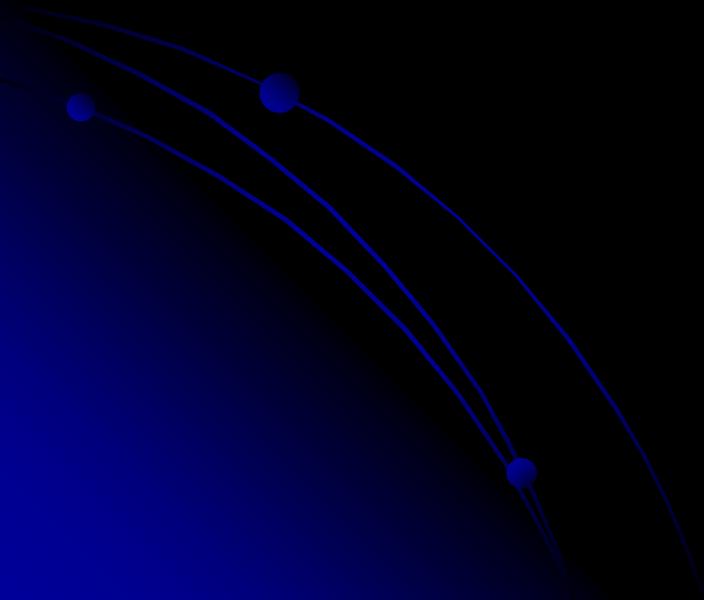
**Anton Topurov**  
**IT-DES**



# Contents

- **CERN and Oracle**
  - **EDH Regression Test**
  - **CASTOR Regression Test**
- 

# CERN and Oracle



# Joint Software Testing Programme

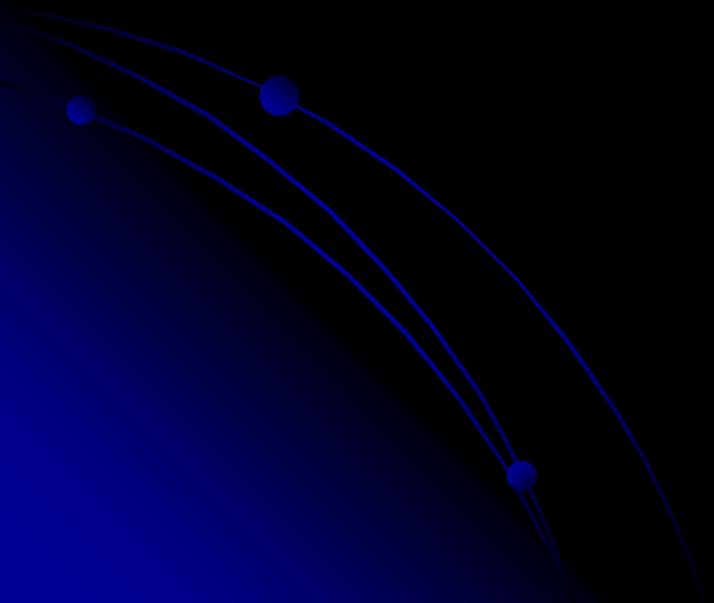
## Objectives of the programme:

- To test in the CERN environment Oracle products for performance and functionality
- To test the compatibility of CERN in-house built software with new Oracle products

CERN has a set of applications for which automatic regression testing is possible:

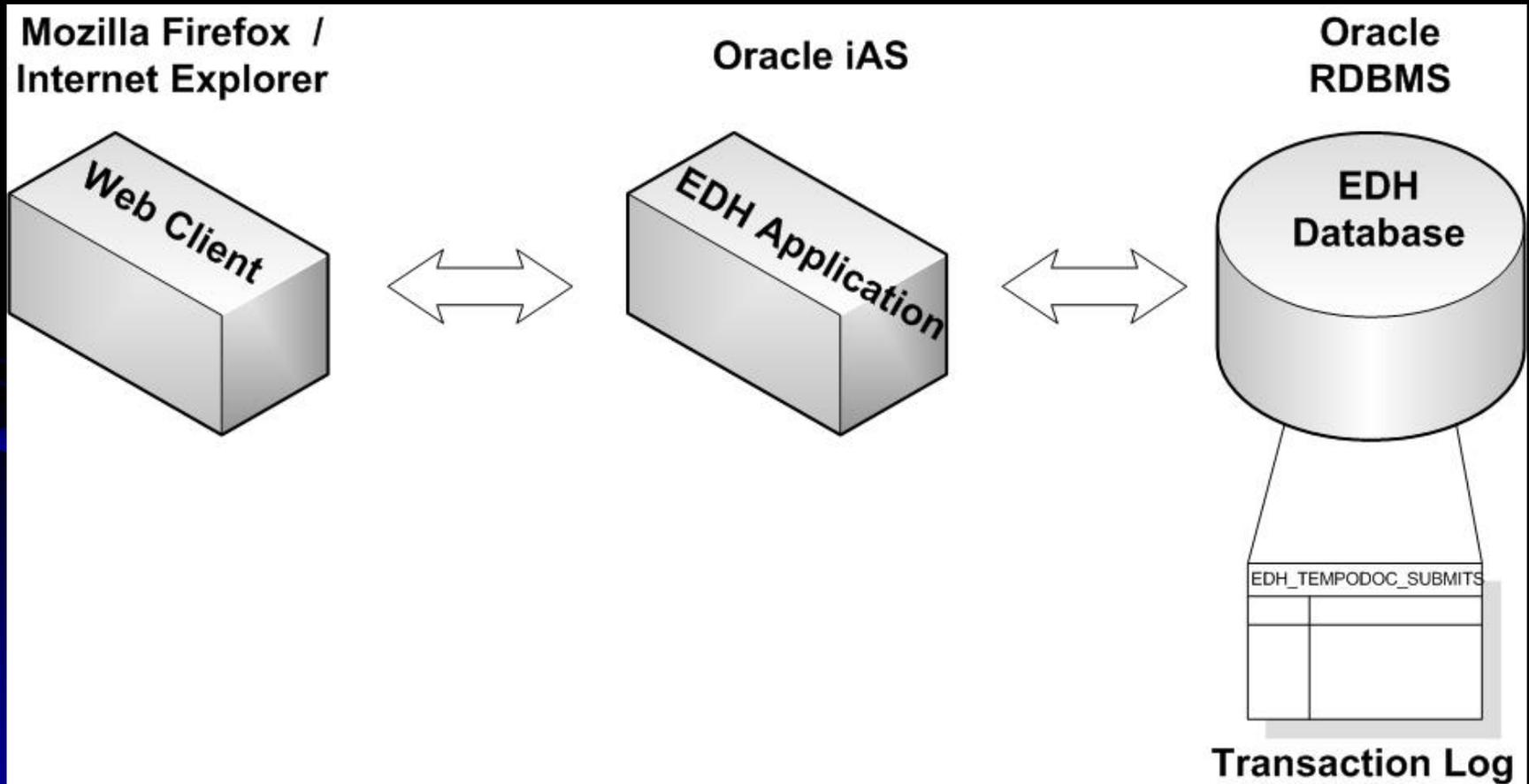
- EDH
- CASTOR
- HRT/CET

# EDH Regression Testing

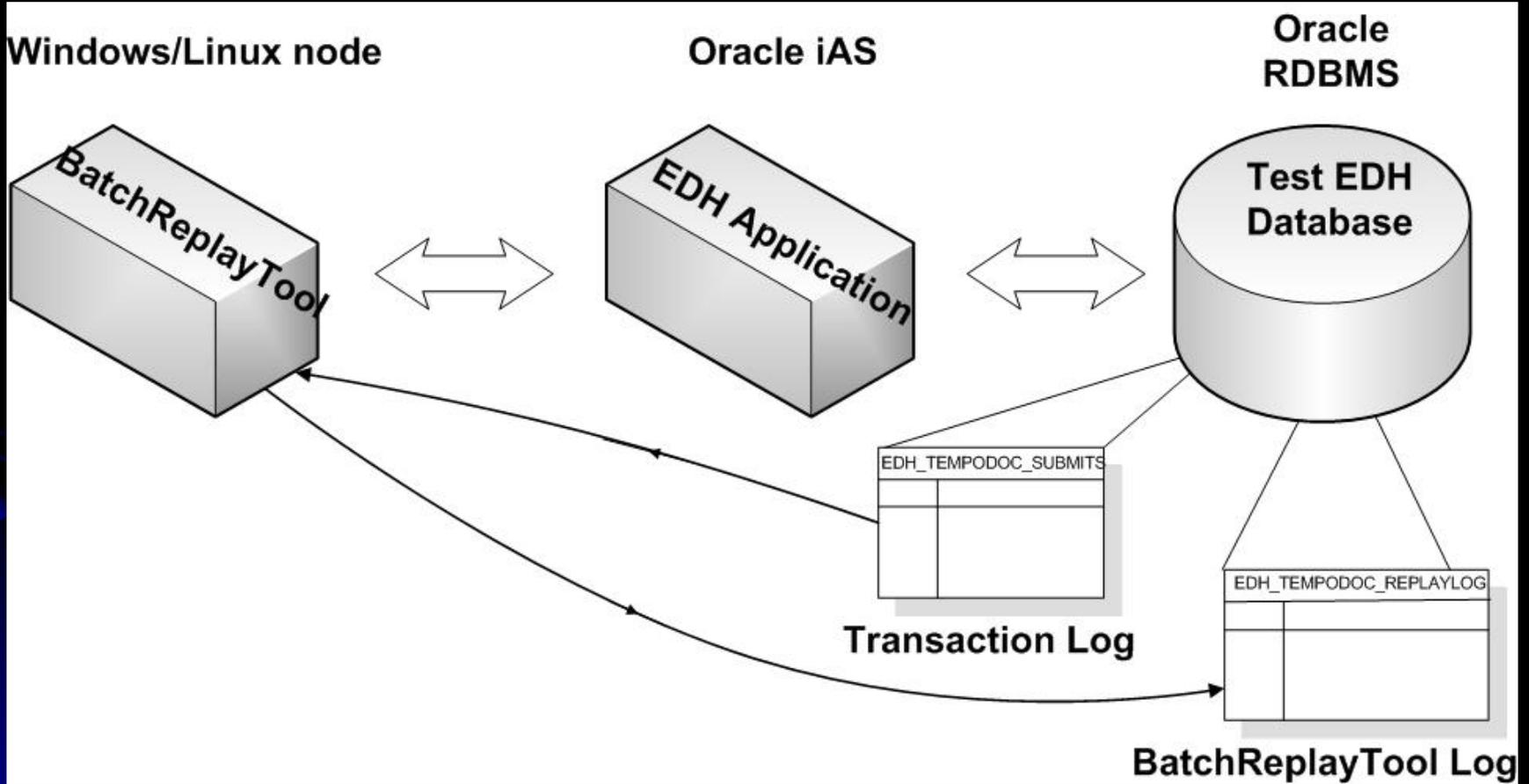


# Electronic Document Handling System

## EDH – Production Scheme



# EDH Testing Scheme



# EDH regression testing

## Objectives

### Three types of tests:

- Change of EDH Application Version
- Change of Oracle RDBMS in view of upgrading
- Change of Oracle RDBMS for testing

### Tests include:

- Change of tuning parameters
- Transaction log replay

### Measuring of the effects:

- Automatic Workload Repository reports
- Statistics on the features used
- Validation of the created EDH documents

# Batch Replay Tool

Java application developed by *Istvan Kallai* (IT-AIS)

## Main Features:

- Uses EDH transaction log
- Generates requests as specified in the transaction log
- User-configurable:
  - To replay a time period
  - To replay the activities of (a) user(s)
  - To make a delay between two requests

\* One-thread tool, multi-threading replay is investigated

# Testing progress so far...

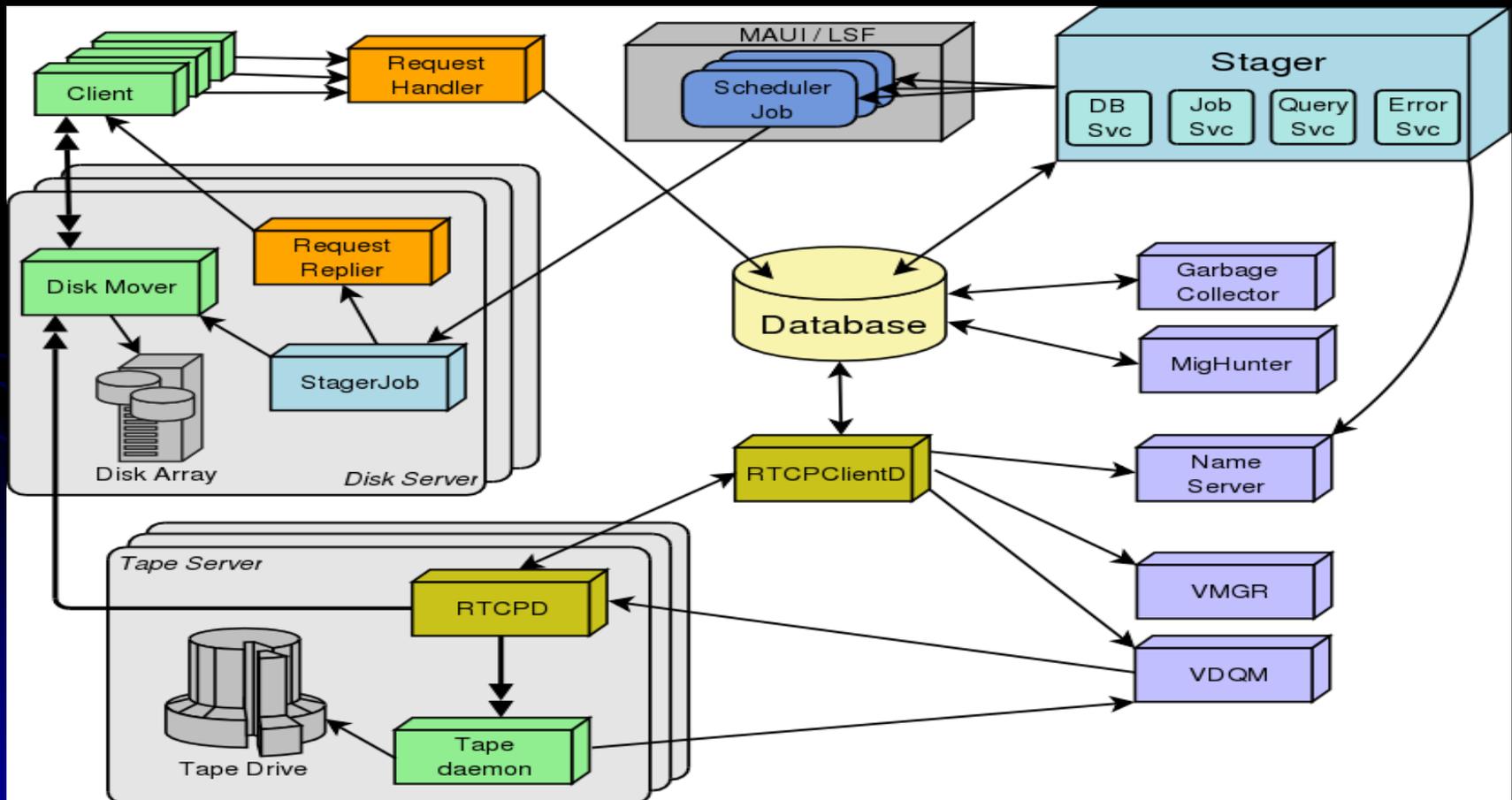
- First test environment set up
- Configuration problems in iAS/EDH/RDBMS fixed
- BatchReplayTool debugged, deployed and tested in the test environment
- First replays against test systems
- Setting up test env. for a different version of RDBMS

# CASTOR Regression Test

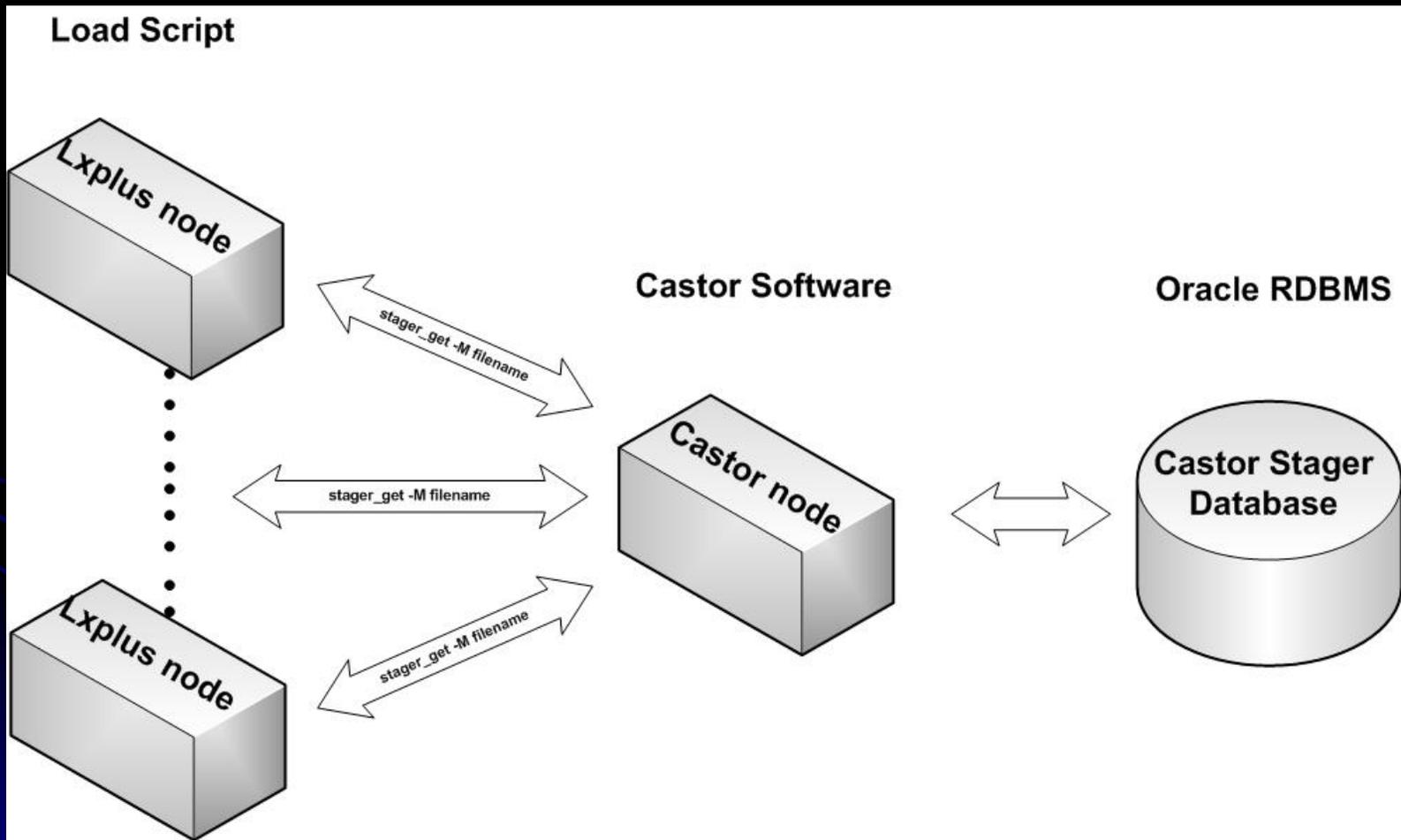


# CERN Advanced STORage manager

## CASTOR – Production Scheme



# CASTOR Test environment



# CASTOR regression testing

## Objectives

### Three types of tests:

- Change of CASTOR Application Version
- Change of Oracle RDBMS in view of upgrading
- Change of Oracle RDBMS for testing

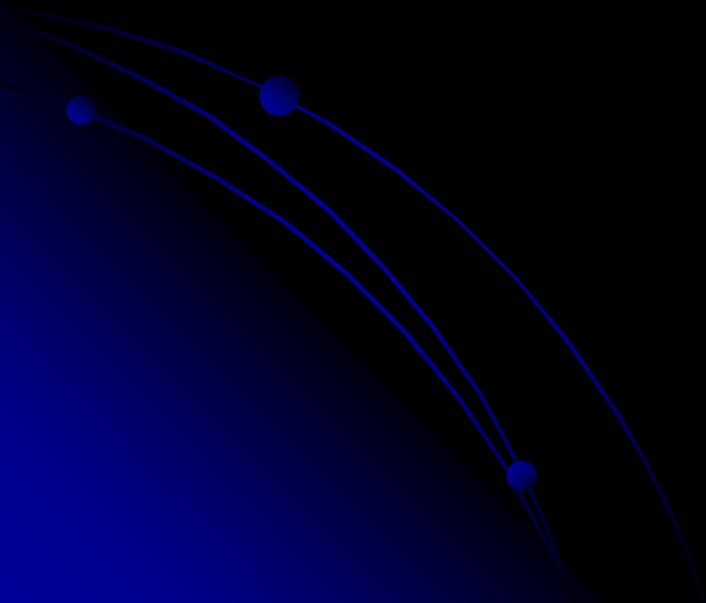
### Tests include:

- Compatibility check
- Functionality check
- Performance analysis

# Testing Results so far...

- First tests done by *Nilo Segura* and *Sebastien Ponce*
- Bug in the RDBMS software found:  
Bogus conversion between the char sets
- Test environment has been reset with reconfigured version of RDBMS
- CASTOR team works on the compatibility issues in the CASTOR software

# Q&A



Thank You!

