



DEUTSCHE BÖRSE
CASH MARKET

Migration of Trading Venue Xetra (XETR) Common Report Engine (CRE) - the standard solution for report retrieval



Driving forces for a report solution

Standardisation

- The decommissioning of VALUES API and MISS architecture is part of the overall access strategy
- Internet technology, standardisation and Internet-like access set the benchmark in the world of algorithmic trading and low-latency access

New trading architecture

- Common Report Engine is implemented based on a standardised, public and secure transfer protocol
- It allows for simple integration into existing participants' infrastructure

Common Report Engine - history, numbers and figures

- The common report engine (CRE) was introduced with Eurex Release 13.1 in April 2011
- The CRE was an additional offer until the introduction of Eurex Exchange's T7
- The CRE introduced a public area for common reports
- Common reports (high volume reports) were zipped in order to increase the overall performance
- In order to increase the overall performance all reports from all markets were zipped

The CRE delivers more than 560,000 reports each day...

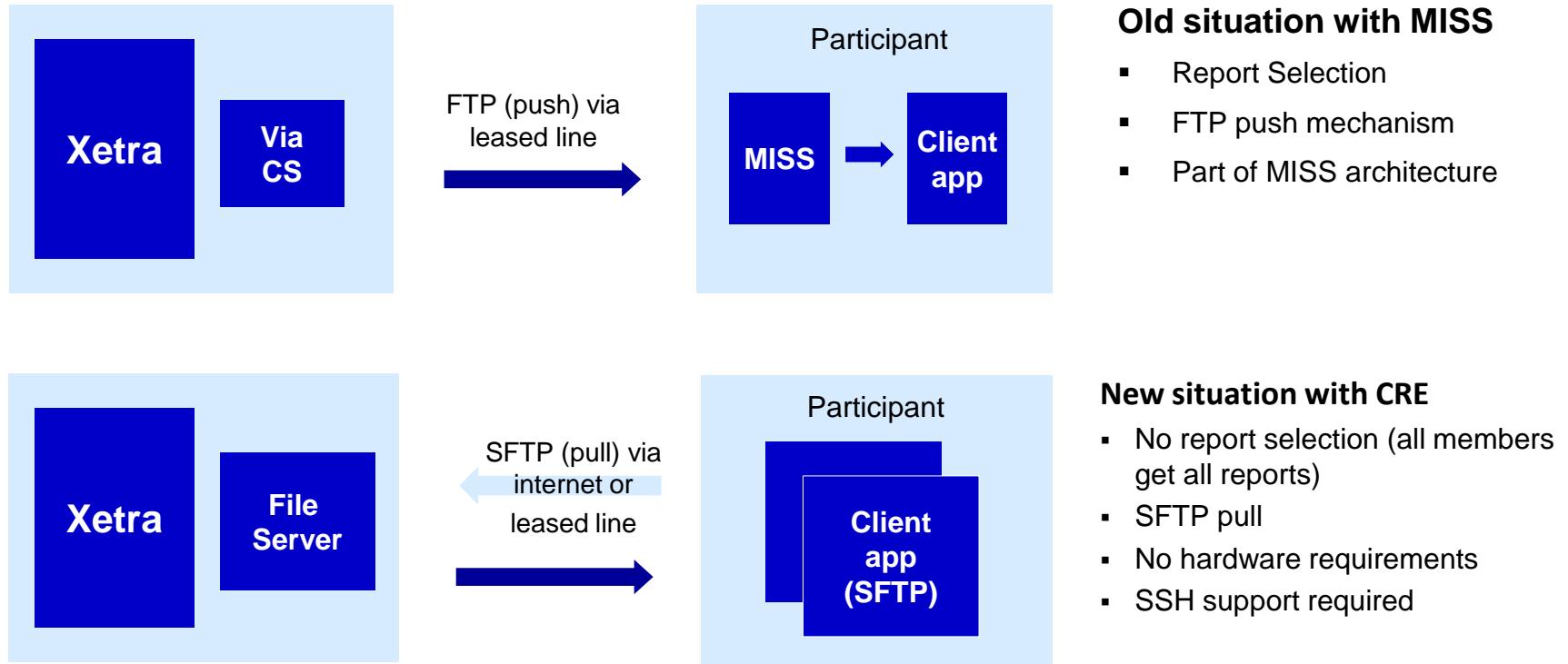
...in other words a lot of megabits each day.

Common Report Engine markets overview

| System | Environment | Included markets |
|-----------------------------|-------------------------------|----------------------------------|
| Xetra | Production and Simulation | Xetra |
| | | Eurex Bonds |
| | | Bulgarian Stock Exchange – Sofia |
| | | Malta Stock Exchange |
| | Cayman Islands Stock Exchange | |
| | Advanced Simulation | Xetra |
| Xetra FFM2 | Production and Simulation | Xetra FFM2 |
| | | Börse Frankfurt Zertifikate |
| CCP | Production and Simulation | CCP |
| | | Securities Lending |
| EUREX | Production and Simulation | Eurex |
| | | EEX Futures |
| | | EurexOTC Clear |
| Irish Stock Exchange | Production | Irish Stock Exchange* |

*Irish Stock Exchange simulation hosted in Xetra Simulation environment

Old versus new solution simplified



Old situation with MISS

- Report Selection
- FTP push mechanism
- Part of MISS architecture

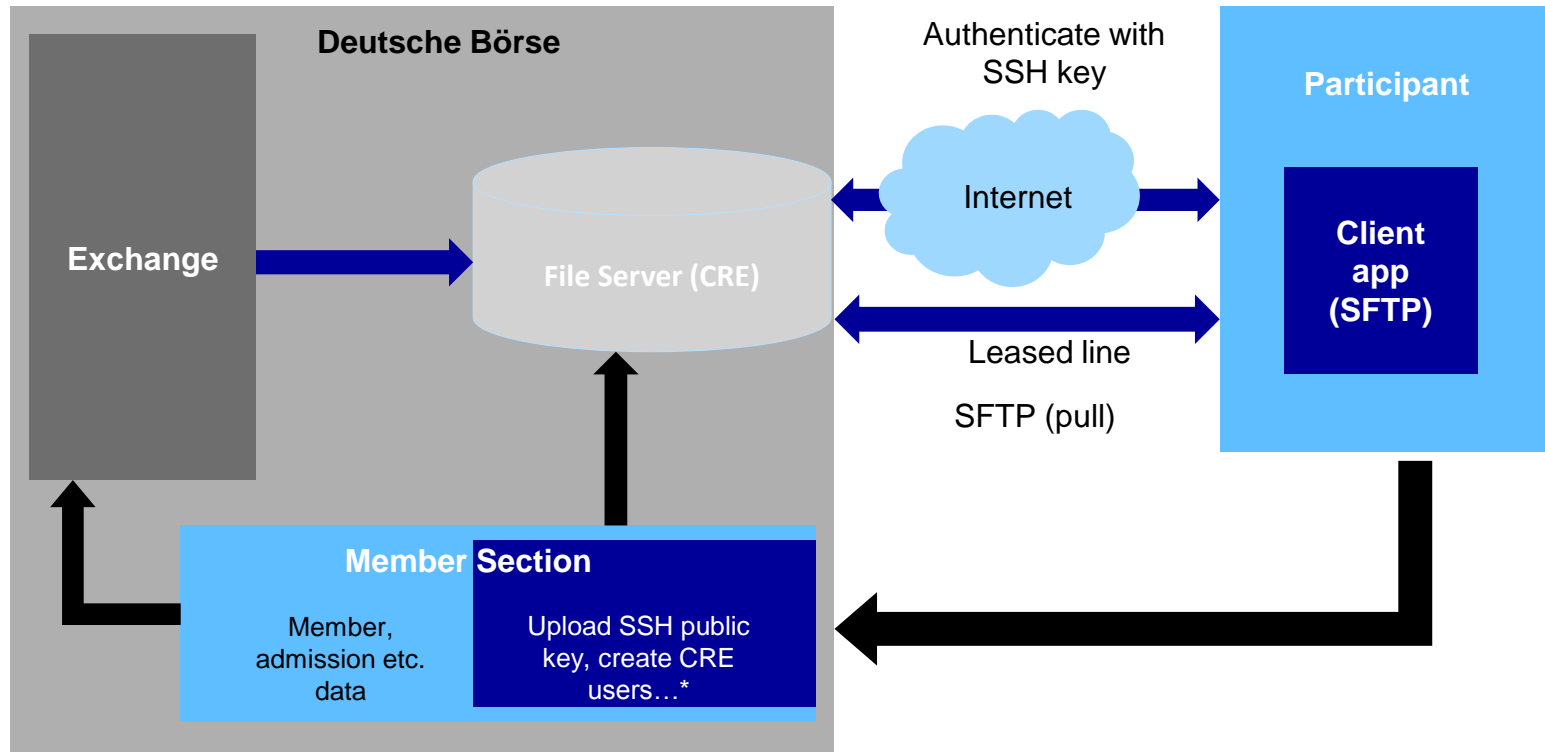
New situation with CRE

- No report selection (all members get all reports)
- SFTP pull
- No hardware requirements
- SSH support required

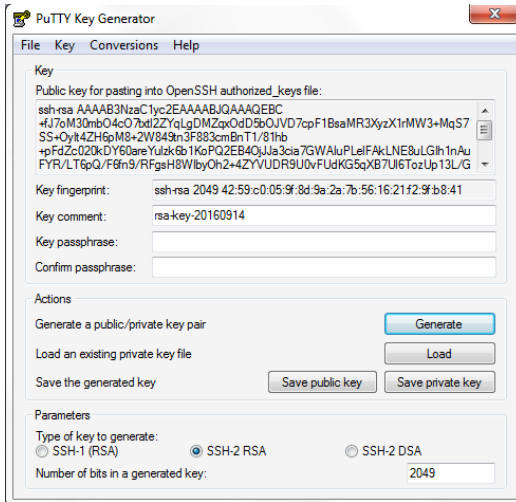
From November 2012 all Eurex trading and clearing reports were exclusively available via the Common Report Engine. Cash market reports are made available in parallel to the MISS based solution also via CRE.

Please note: The CRE does not archive the reports. Reports are available for a limited time of at least 10 business days (the MISS based solution provides five business days only).

The solution - How to connect, authenticate and retrieve reports



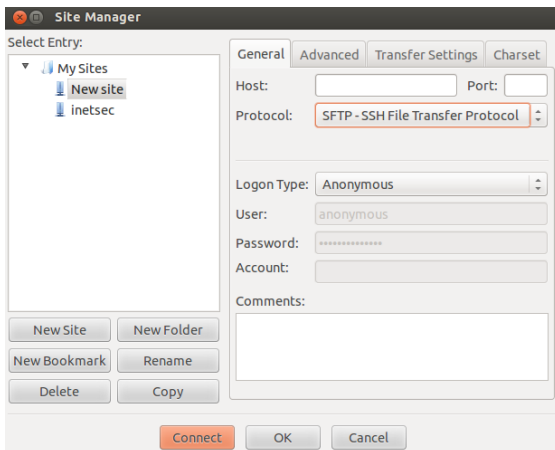
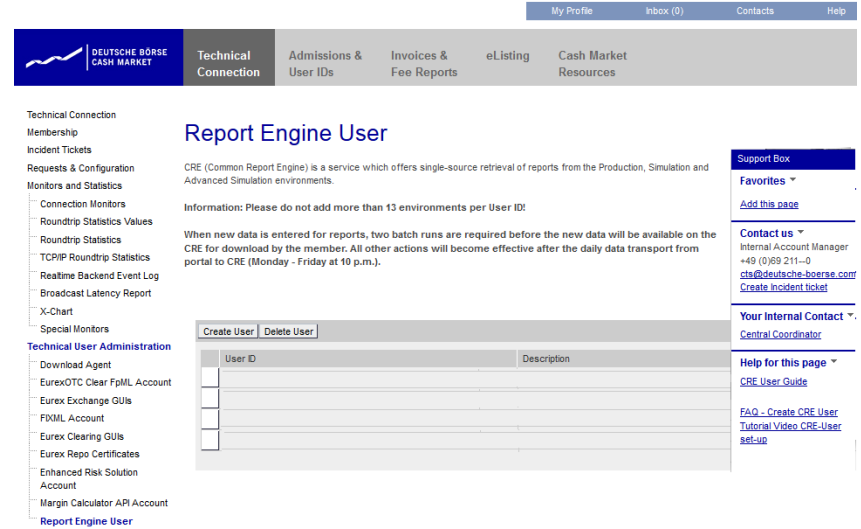
Client set-up - Key pair usage with CRE



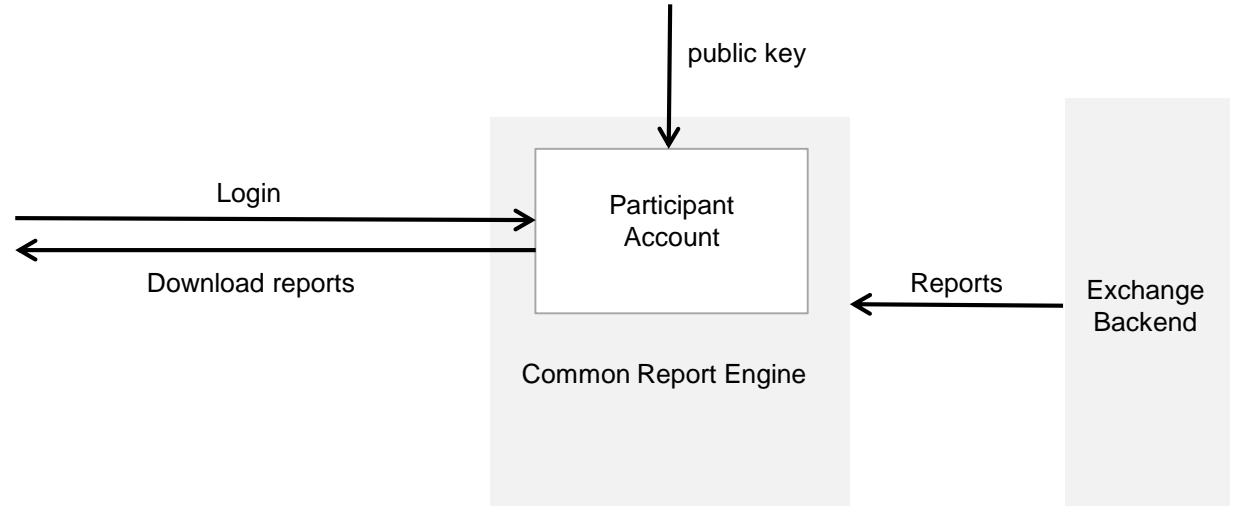
Participant generate public + private key

Administer accounts

Provide public key



Participant SFTP Client with private key



Walkthrough

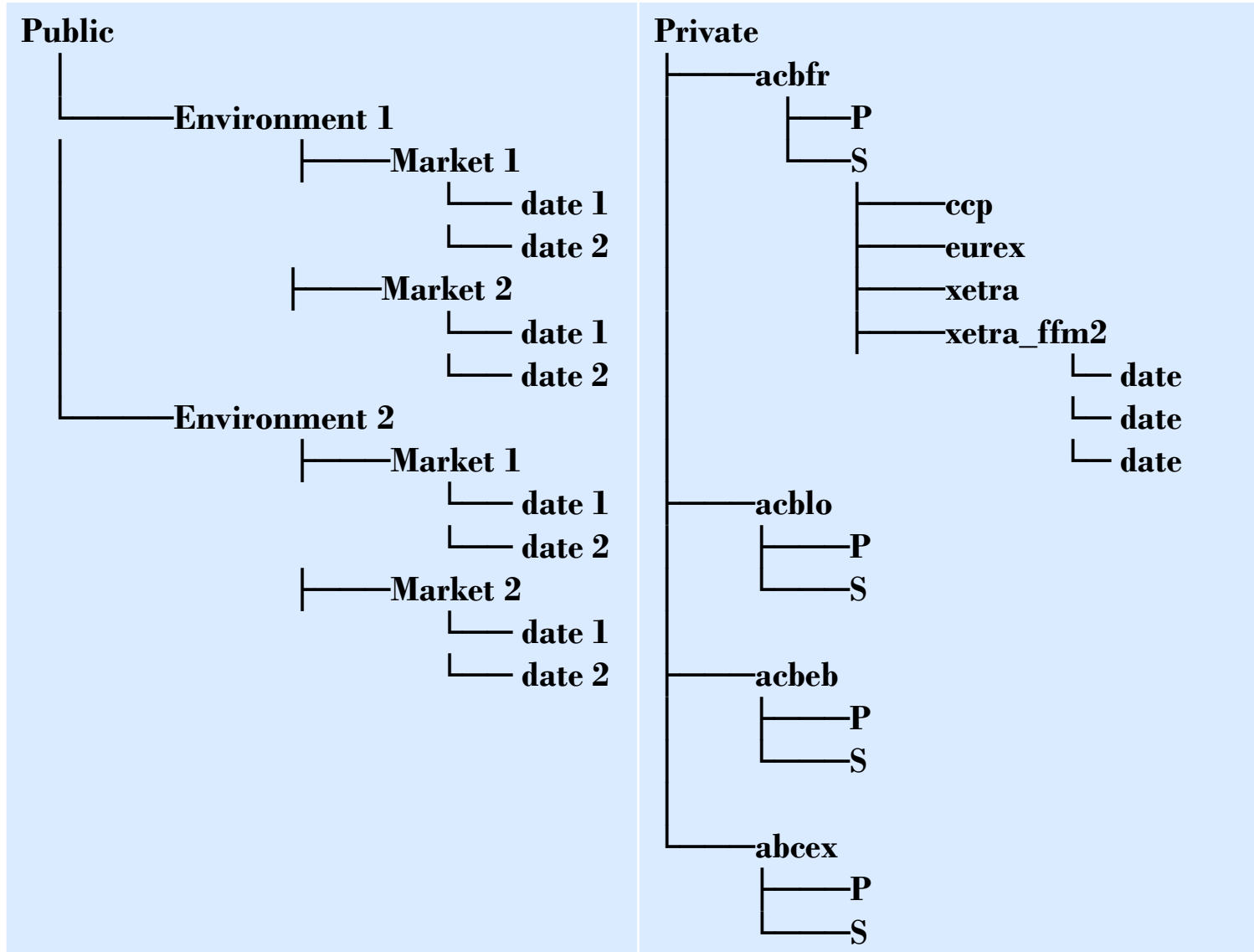
- Generate a key pair and save the public and private key
- Go to the member section
 - Create a Common Report Engine User
 - Upload the private key

When initially creating a CRE user, the information will be available after two night batches.

All subsequent changes to a CRE user become active after the next batch.

For further information download Common Report Engine (CRE) User Guide on the exchange website under Technology T7 or from the Member Sections Report Engine User section.

CRE markets - participant view and file structure





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Thank you for your attention!

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