HIPERFIT and SimCorp

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SimCorp History

12 Years Revenue Development

- 2007: SimCorp sells IT2
- 2003: SimCorp Dimension
- 2000: TMS2000 full STP product
- 1999: IT2 acquired to substitute TRACTS
- 1998: TMS2000 most important product
- 1997: Sale of Actuarial department

Official launch of TMS2000
- 1996: First TMS2000 implementations
- 1995: TMS2000 development intensified

Getting Focused
- 1991: Risk management modules
- 1990: Financial analytics and library
- 1985: Building society systems
- Money market systems
- Pricing models for derivatives
- Treasury systems

Customised software

SimCorp Dimension era
SimCorp at a glance

• Financial software solution to financial institutions
• Professional services

• European foothold – global outlook
• 160+ SimCorp Dimension clients
• Approximately 1,100 employees
• Listed on NASDAQ OMX Copenhagen
SimCorp Dimension summary

A multidimensional solution

• A fully integrated single database solution, it eliminates the need for middleware and the integration requirements that come with it.

• Completely modular, the system can be configured precisely for your functional needs, accounting rules and instrument handling requirements.

• Highly flexible, it also allows you to grow; new functions or financial instruments can be deployed simply by adding new modules, all of which are completely integrated with the same database.

• And as a truly integrated system SimCorp Dimension eliminates the operational risk and interfacing requirements inherent in multi-supplier solutions. In short, it allows you to concentrate on business rather than maintenance.
Selected functional features

- Straight-through processing
- Trading and order management
- Portfolio management and analytics
- Risk management
- Performance measurement and attribution
- Cash management
- Security and position administration
- Fund administration
- Compliance and regulatory reporting
- Accounting
- System administration and interfacing
Software Development
Development Process

- 6 month baselined development period
- 3 month release test period
- Release 2 times a year (February 1 and August 1)
- Clients upgrade once a year.

- Possible to patch every day
- Patch Approval Procedure
- Tons of automatic testing every night
Finance IT Competences at SimCorp

• IT competences:
  – Able to think in abstract terms and generic solutions
  – Knowing how to integrate various technologies (automatic wrappers etc.)
  – Scalability and Architecture
  – Different Programming Paradigms
  – Parallel programming

• Financial competences:
  – A wealth of financial instruments (Bonds, Swaptions, etc.)
  – Basic and advanced pricing of instruments
  – Workflow processes

• Many science subjects are relevant (Physics, Mathematics, IT, Finance)
Instruments are programmed in MLFi (Ocaml)

**INSTRUMENT MODELLING**

- Initially instrument modelling, testing and documentation is done by SimCorp iteratively with the customer.
- With the Developer Kit, the customers can do it themselves.

**SIMCORP DELIVERY TIME**

- First iteration in days, but it depends on instrument complexity.
XpressInstruments – Static Data

- User interface for contract terms and parameters
  - is generated automatically
  - for any XpressInstrument
  - with correct field types, etc.
  - on the basis of contract definition

- Tree List
  - Lists available XpressInstruments

- XpressInstrument Frame
  - Contract Data
  - Changes with Instrument Selection
HIPERFIT

• SimCorp provide cases.
• SimCorp can review and provide suggestions for the research and discuss problems. We have competences within pricing and programming languages.
• SimCorp has experience with DSLs for specifying contracts.
• Co-operation with LexiFi and their extensions to Ocaml.

• Expect solutions and proposals for compiling for parallel architectures.
• Expect HIPERFIT to utilize and bring math, finance, programming languages and parallel architectures to the next level.
• Expect to learn by participating in HIPERFIT

• SimCorp has the knowledge and expertise to realise research results.