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### About us



### Escali is a software company

### We develop:

- Treasury Management Solutions
- Portfolio/Asset Management Solutions
- Leasing Software
- Liquidity and Cash Management Solutions
- All-in-one financial solutions delivered as SaaS (Online)





### Company summary

- Started in 2002.
- Privately owned, mainly by the employees.
- Head office in Scandinavia (Oslo / Bergen)
- Over 100 customers
- Cooperation with companies such as:
  - Integration partners. Bloomberg, Refinitiv, Infront, Nordic Trustee, Nordic Bond Pricing, DNB Markets, Central Bank of Norway, Fixrate, Nomentia (Trezone, OpusCapita) and ERPsystems.
  - Technical partners. Microsoft, Cloudsys,
     Nomentia, Infront, Secbase
- Strong financial situation

- Total staff: 18 (14 employees, 4 temporary)
- Delivers all software solutions in the Cloud (Software-as-a-Service)
- High user/customer satisfaction (User Survey December 2020)
  - 79% are very or extremely satisfied with Escali as a vendor. The rest is satisfied.
  - 90% thinks the response on support is quick, while 90% think the support team have very or extremely high competency.
  - 85% of the users think the system is userfriendly.



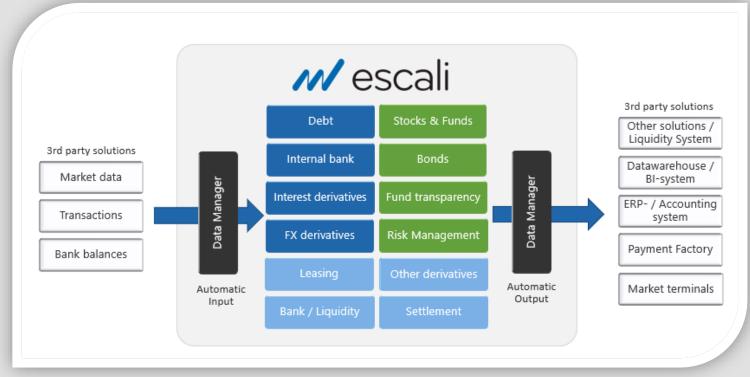
### Our systems and services

#### Escali Financials

Software solution for management of treasury operations, portfolios, financial instruments, leasing, cash & liquidity

#### Module based system:

- Debt
- Internal bank
- Interest derivatives
- FX derivatives
- Leasing
- Bank / Liquidity
- Other derivatives
- Settlement
- Stocks & Funds
- Bonds
- Fund transparency
- Risk Management





## Our systems and services

#### Escali Data Manager (Robotics)

Software solution (service) for automatic services, import and export of bank accounts, balances, market quotes, interest, accounts receivables and account payables, reference data and transactions.

#### Escali Reports

- Report generator (Dynamical dashboards)
- Power BI embedded (BI technology)
- Several model-reports, makes it easy to edit

#### Related services

- Outsourcing to cover illness, maternity leave and when key personnel quits.
- Project Management

- Installation and setup
- Workshops / Training
- Customisation
- Data import
- Reports in Excel and Power BI

All software solutions are delivered as Software-as-a-Service (Online)



### References

#### PENSION FUNDS AND INSURANCE CORP

- Bergen kommunale pensjonskasse (Bergen)
- Gabler (Oslo / Bergen)
- Trondheim kommunale pensjonskasse (Trondheim)
- Sparebank 1 SMN pensjonskasse (Trondheim)
- Boligbyggelagenes forsikringsselskap (Oslo)
- Møretrygd (Ålesund
- Havtrygd (Bergen)
- Norwegian Hull Club (Bergen)
- Den Norske Krigsforsikring for Skib (Oslo)
- Oslo pensjonsforsikring (Oslo)
- Oslo Forsikring (Oslo)
- INSR Insurance (Oslo)
- Nordlys forsikring (Bodø)
- Bud og Hustad forsikring (Molde)
- Tromstrygd (Tromsø)
- Telenor Pensjonskasse (Oslo)
- Haugesund kommunale pensjonskasse

#### **FUND/ASSET/ACCOUNTANTS**

- Mertoun Capital (Oslo)
- Holmen fondsforvaltning (Oslo)
- Amesto Accounthouse (Oslo)
- Horisont kapitalforvaltning (Oslo)
- Trond Mohn Stiftelse(Bergen)
- Eikos (Oslo)
- Axera Business Partner (Oslo)
- Kraft Finans (Sandnes)
- Econpartner (Oslo)
- Compler Accounting (Bergen)
- Advanced Asset Manager (Bergen)
- Statement (Oslo)
- Norne Securities (Bergen)
- Bergen Capital Management
- Elgar Kapital
- Permian
- Malling & Co Forvaltning

#### **INVESTMENT COMPANIES**

- Strawberry (Oslo)
- Toluma Regnskap (Oslo)
- Caiano (Haugesund)
- UMOE (Bærum)
- Anaxo Capital (Oslo)
- Ferncliff / Tycoon Industrier (Oslo)
- Mustad Industrier (Oslo)
- Rasmussengruppen (Kristiansand)
- Varner Equities (Oslo)
- Kistefos (Oslo)
- Skeie Capital (Kristiansand)
- H-Invest (Bergen)
- Nistad Gruppen (Bergen)
- AG Holding (Drammen)
- Spencer Holding (Oslo)
- Orakel (Oslo)
- Eidesvik Invest (Bømlo)
- Bjørgvin (Oslo)

- Middelborg Invest (Tønsberg)
- Solstad Family Office (Skudeneshavn)
- Vatne Capital (Oslo)
- GC Rieber (Bergen)
- Profond (Bergen)
- Ufi Capital (Oslo)
- Hatteland (Nedre Vats)
- Mostun Invest (Tromsø)
- Holta Invest (Oslo)



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### Modules



Debt	Stocks & Funds
Internal bank	Bonds
Interest derivatives	Fund transparency
FX derivatives	Risk Management
Leasing	Other derivatives (Equity, Energy, Materials)
Bank / Liquidity	Settlement



### Stocks and Funds

- Handles investments in stocks and funds such as:
  - Stocks
  - Private Equity & Limited Partnership units
  - Funds (Equity Funds, Combination Funds, Money Market funds, Hedge Funds, Bond Funds, Balanced Funds etc.)
  - Other objects (Real Estate, Art etc)
- Easy management of share dividends, stock splits, reverse stock splits, mergers and acquisitions, bonus issues, share repurchases and other corporate actions
- Handles fund dividends and interest
- Allows automatic import of quotes and stock / fund data (fund transparency)\*
- Ability to import trades\*
- Import of contract notes and A.I. technology to read them automatically\*
- Measurement of performance and risk
- Supports short trading
- Supports future obligations on limited partnerships and private equity investments



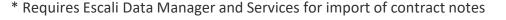


<sup>\*</sup> Requires Escali Data Manager, Services for import of contract notes and/or Fund Transparency module

### Bonds

- Possible to register and import\* master data
  - Interest calculation method
  - Maturity
  - Interest changes
  - Instalments
- Calculation of price (M2M), yield and duration
  - M2M methods: Discounted interest margin, net present value to re-pricing date, zero coupon pricing
  - Duration methods: Modified, Macaulay, Credit, ATM, ATR
- Automatic price updates\*
- Import of contract notes and A.I. technology to read them automatically\*
- Automatic calculation and book-keeping of interest, instalments, purchase and sale of interest and accruals
- Amortized cost of bond premium / discount (IFRS)







## **Equity derivatives**

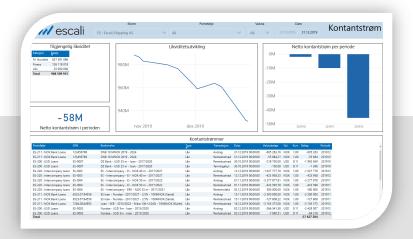
- Handles derivatives such as:
  - Options
  - Warrants
  - Forward / futures
  - Subscribtion Rights
- Handles Equity-, Freight-, Energy- and Commodity derivatives
- Pricing (M2M)
  - Black & Scholes (Options)
  - Net or Gross method on forwards
- Reporting related to derivatives including
  - Open derivatives
  - Maturity overview
  - Total exposure including option (Example: Samsung stock including options, Aluminium including options)
- Automatic calculation of profit/loss
- Automatic closing of derivatives
- Escali Financials follows the rules of accounting for options and forwards





## Bank & Liquidity

- Support bank accounts
  - Operating accounts, savings accounts, time deposits
  - Automatic calculation of interest including posting of ledger transactions
  - Automatic posting and book-keeping of withdrawal on time deposits
- Automatic balance monitoring (import of daily balances)
- Import of master data, interest rates and transactions from Fixrate
- All financial cash flows from other modules available
- Support operational cash flows
  - Registration of variable and fixed cash flows
  - Import via file or automatic link to e.g. Sales system, Excel, ERP system (e.g. accounts payable and receivable)
- Liquidity dashboards in Escali Reports or 3<sup>rd</sup> party solutions (Power BI, Nomentia/Trezone)
- Cash Forecasting
  - Scenario analysis based on Interest and FX scenarios
- Export of cash flows to other 3<sup>rd</sup> party Cash Management Systems (IFS/Nomentia/Trezone)







## Settlement and payments

- Settlement and payment of transactions directly in Escali Financials or export of payment data to other payment solution (ERP, Nomentia etc.)
- Handles the following formats:
  - DNB Markets
  - Danske Bank
  - Prime Brokerage (SEB)
  - BBS
  - Telepay
  - IFS
- Can supply our customers with Nomentia Payment Solutions
  - Handles all leading payment formats (SEPA, MT etc)





## Risk Manager Module



- Very flexible aggregation possibilities for modelling purposes
  - Makes it possible to follow up the most complex mandates and strategies
- Benchmarking including composite benchmarks
  - Can calculate the value of composite benchmarks (eg. 20% OSEBX, 60% MSCI World and 20% US Libor 3 months)
- Advanced strategy and mandate monitoring
- Modelreports / Dashboards
- Risk measurement (average, covariance, standard deviation, beta, alfa, information ratio, sharpe ratio, tracking error and coefficient of determination)
- Attribution analysis
- Allocation analysis

Escali Risk Manager	Fullversjon	Lite
Avanserte finansstrategier (fleksible aggregater)	v	V
Sammensatte benchmarks	V	V
Modellrapporter i Escali Reports	V	V
Risikotall (Standardavvik, beta, alfa, information ratio, sharpe ratio etc.)	V	V
Attribusjonsanalyse	v	V
Modul i Escali Financials	x	V
Stand-alone applikasjon med moderne grensesnitt	v	x
Automatisk knytning av nye instrumenter mot aggregater	V	х
Rapportgenerator bygget opp av rapportelementer (ca. 100 stykk)	V	х
Avansert rapportering av komplekse eierstrukturer inkl. indirekte eierskap	v	X
Value-at-Risk	v	x
Full-versjon av SQL Server	v	X
Overvåking av finansstrategier direkte i programvaren	v	х



## General investment functionality

- Calculation of realized gain / loss:
  - FIFO
  - Weighted average
- Based on GIPS (Global Investment Performance Standard)
- Performance measurement based on total return method
  - Direct return (Dividends, Interest)
  - Realised gain / loss
  - Unrealised gain / loss (changes in rate)
- Periodic performance measurement in line with modern financial theory
  - Time-Weighted return
  - Money-Weighted return (Modified Dietz and Hardy's formula)
  - Chained Modified Dietz
- Performance per instrument, portfolio, client or consolidated.

- Performance against benchmarks
- Automatic book-keeping including realised and unrealised profit and loss and brokerage fees
- Complete audit trail for all transactions
- Import of contract notes and A.I. technology to read them automatically
- Pre-registration windows (front office)
- Good visualised reports / dashboards
  - Performance
  - Board and management reports
  - Allocation





## General functionality



- Database (SQL Server)
  - Audit trail
  - All historical data are saved
- Available in the cloud (SaaS)
- Good reporting possibilities:
  - Over 200 predefined statically reports
  - Several dynamical reports / dashboards (Escali Reports)
  - Open interface to 3<sup>rd</sup> party solutions
- Possible to import / export data automatically via Escali Data Manager
  - Interest (Refinitiv, Bloomberg, Infront)
  - Currency rates (Central Bank of Norway, DNB Markets, Infront, Refinitiv, Bloomberg)
  - Market quotes (Refinitiv, Reuters, Bloomberg, Nordic Bond Pricing)
  - Transactions (Banqsoft, OpucCapita, Excel, contract notes)
  - Masterdata (Banqsoft, Nordic Trustee, Bloomberg)
  - Portfolio (Infront terminal + Bloomberg PORT)
- RF-1359
  - Export til Wolters Kluwer, Finale, Maestro and Cantor
- Multi-Client and multi-currency system

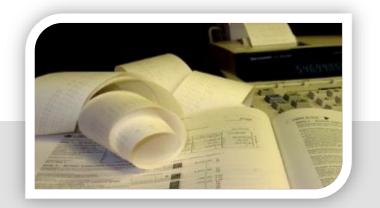
- Available in several languages
- Electronic documents / vouchers
- Fully integrated towards MS Office:
  - Export to Excel and Word
  - Import to Power BI, PowerPoint, Excel, Report Builder
  - Cut and paste functionality
- Access Control / Segregation of Duties:
  - Back/Middle/Front office
  - Clients
  - Tasks
  - Modules
- Easy-to-use / Familiar and user-friendly interface
- Easy access to database via Escali MasterViews:
  - Historical transactions
  - Future cash flows
  - Holdings and performance
  - Accounting transactions
  - Risk Measures



## Accounting

- Approximately 50 export formats of ledger transactions:
  - SAP, Agresso, Visma, ShipNet, MS
     Dynamics AX/NAV, IFS, Economa, Danaos, UniMicro, Xledger
- Automatic posting of all transactions
  - Based on your Chart of Account and accounting rules
- Automatic bookkeeping of:
  - Amortized cost
  - M2M (unrealised and realised gain)
  - Interest (accrued and actual)
  - Instalments
  - Maturity
  - Commitment fees
  - Agio / Disagio (unrealised and realised)
  - Current Portion of long-term debt (IFRS)

- Handles unlimited accounting dimensions, e.g. project, service, object, department
- Based on all leading accounting standards: IFRS, US Gaap, Norwegian Gaap
- Electronic vouchers
- Automatic export of ledger transactions
- Automatic reconciliation between Escali and the ERP-system
- Accounting reports
- Accounting notes





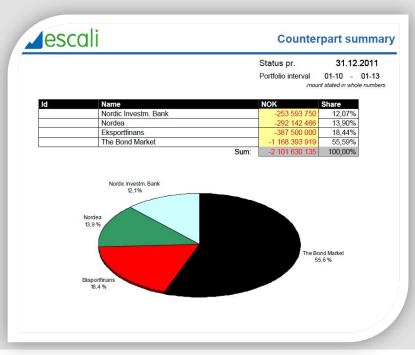


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### **Escali Financials**

- Over 200 statical reports
  - Can change logo, date and portfolio interval







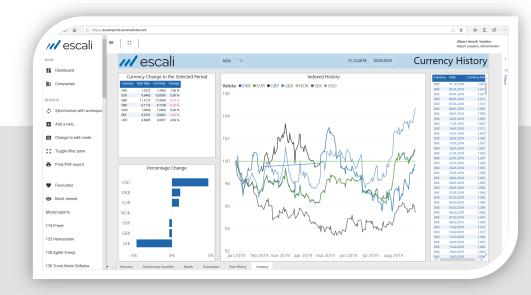
## 3rd party reporting systems

- Escali MasterViews makes it easy to get data to 3rd party solutions
  - Transactions
  - Accounting
  - Result/status
  - Risk Measures
- Customers use tools like
  - Excel
  - Power BI
  - Qlik
- We can customize reports in Power BI or Excel or help customers to gather data from the database to other solutions.



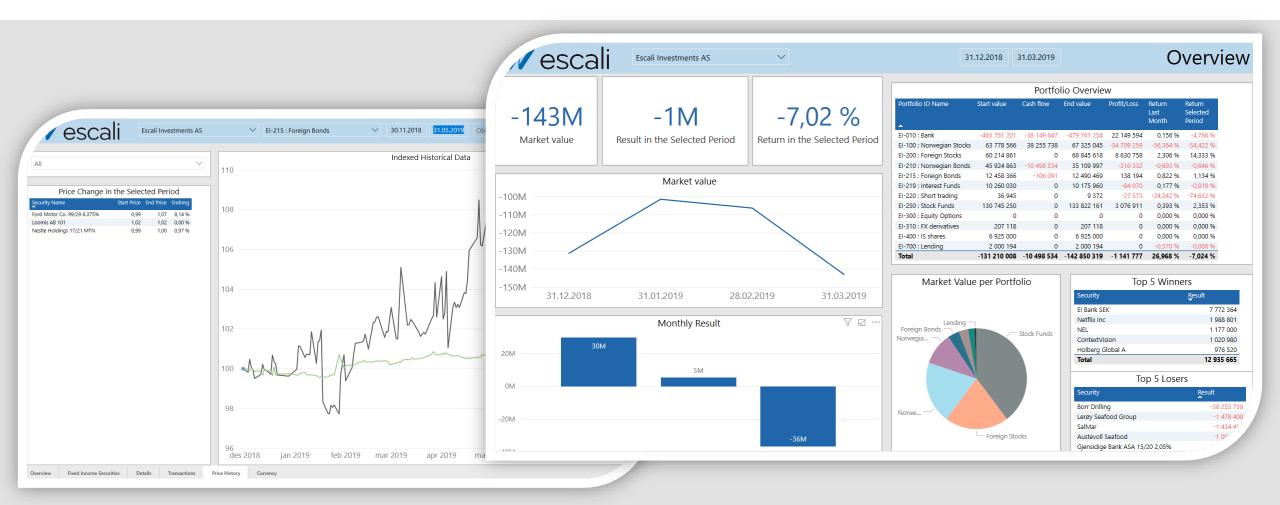
## Escali Reports

- Our own reporting tool online
- Dynamical reports with full drill-down functionality
- Gets data from the Escali Online environment
- Powered by Power BI embedded
- Delivered with model reports / dashboards:
  - Investments
  - Treasury
  - Risk Measures
  - Fund transparency & Ethical investments
  - IFRS Notes
  - Accounting
  - Leasing
- You can make your own reports or change the model reports





### Escali Reports – Investment reports





## Escali Reports – Risk Management reports





## Why Escali Financials?

- Continuous control and better overview
- More efficient use of resources to avoid:
  - Multiple filing of financial transactions
  - Manual calculations
  - Production of numerous reports for the board, management, accounting, regulators etc.
  - Developing your own reports
- Large number of excellent visual reports and dashboards
  - Better overview and control
- Easy intergration with other systems
  - Flexibility / open interfaces
- Responsive and flexible supplier
- Module based / high scalability
  - Pay only for the functionality that you use
  - Good cost-benefit ratio

#### Fewer error sources

- No need for individual dependent spreadsheet models with possible error sources
- Possible to import from data providers
- Good control mechanisms in the system
- Tested and used by leading companies

#### Ease of use

- Customised menus and other user friendly features
- All transactions are recorded via one screen (independent of module)
- Intuitive structure
- High customer satisfaction and solid references
  - Well tested by clients with comparable needs
- Software-as-a-Service
- Support and maintenance included





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### The Future

Our competitive advantage will primarily be:

- Handle regulatory requirements (IFRS, Solvency II, EMIR, Basel III)
- Automation, robotics and seamless integrations
- A flexible, reliable and dynamic supplier



We shall be:

"The Treasury function's autonomous car"



### What should we do?



New front-end





New engine (Business layer)





New output



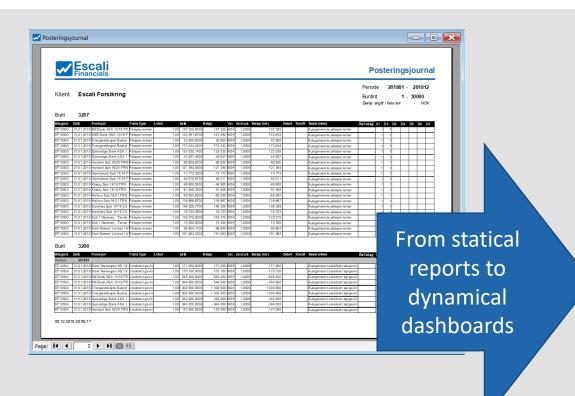


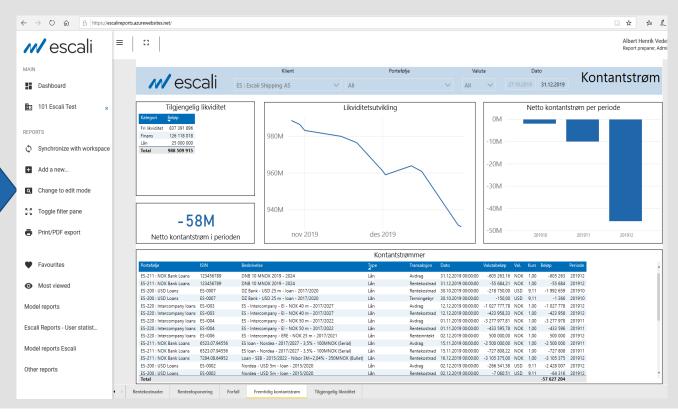
### Output



#### New output









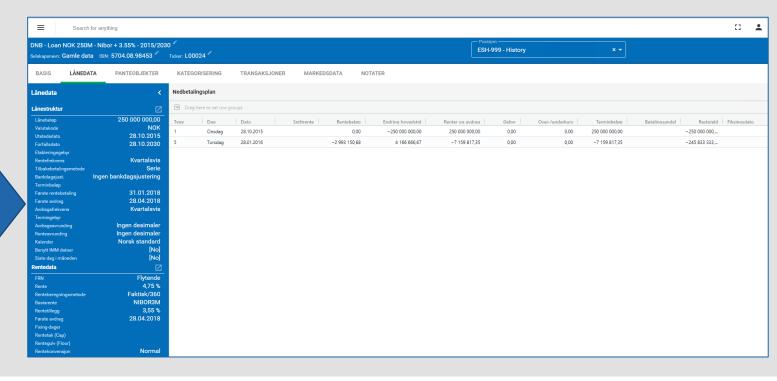
### New front-end



New front-end



enr: 13215464631 V	Beskrivelse: Repo lån - Nor Nedbetalingsplan Renter Avdrag	rdic Semiconductor (FI20) - :  Rentesatser Panteobjekter Katego	
Tilbakebetalingsmetode:	Bullet	Fast rente Gje	eldende rentesats: 2,779%
Rentebetalingsfrekvens:	Årlig		
Avdragsfrekvens:	Årlig	Flytende rente Gje	eldende rentesats: 2,779%
Opptrekksdato:	06.04.2017 Torsdag	Basisrente:	V
Forfallsdato:	06.07.2017 Torsdag	Rentemargin:	
Første avdrag:	06.07.2017 Torsdag	Varseldager:	0
Første rentebetaling:	31.01.2018 Onsdag		
Neste rentereguleringsdato:	06.07.2017 Torsdag	Benytt IMM datoer	Renteberegningsmetode
Fast periodeavdrag:		Siste dag i måneden	Faktisk/365
Avdragsmodell:	V	✓ Irregulær datostruktur	1
Bankdagsjustering:	Ingen bankdagsjustering 🔍	Kopier fra annet lån	
			From desktor
			•
			to web
			application





### Status

#### New business layer

- Automatic saved performance
- Automatic interest fixing
- Cash flows
- Amortisations
- Electronic vouchers











### New reports

- Escali.net Reports
- Model-reports

#### New front-end

- Loans
- Interest swaps
- Credit facilities
- Bank
- Dashboard
- Work lists















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### **Facts**



- Escali Data Manager is a service that supports multiple automatic imports, exports and tasks, also called robotics.
- Necessary to run Escali Reports and Electronic documents
- Escali Data Manager can run unlimited number of tasks
  - Import of master data from Nordic Trustee 08:04 a.m every morning
  - Import of rates from Bloomberg 06:00 p.m. and 06:00 a.m.
  - Import of balances from banks every day at 03:00 a.m.
  - Import of yield curves from Refinitiv every Friday at 08:45 p.m.
  - Export of portfolio data to Infront terminal every 6 hours every day.
  - Automated «Saved performance» every night at 02:00 a.m.
  - Automatic interest changes
  - Import of contract notes every minute between 09:00 a.m. and 09:00 p.m.



# What the solution supports today? W escali



#### Import of:

- Rates / Quotes
  - > Refinitiv\*, Bloomberg\*, Infront\*, Nordic Bond Pricing
- FX rates
  - Refinitiv\*, Bloomberg\*, Infront\*, DNB Markets, The Central Bank of Norway, IFS
- Interest and yield curve data
  - Refinitiv\*, Bloomberg\*, Infront\*, Escali (Nibor, Stibor, Euribor, USD Libor, Cibor, Nowa)
- Counterparty data
  - Bangsoft, Fixrate
- Master Data / Reference Data
  - Nordic Trustee (Bonds), Bloomberg(Bonds)\*, Bangsoft (Loans), Fixrate (Bank Accounts)
- Transactions and balances
  - Bangsoft
  - CSV and Excel
  - Nomentia, all major banks (balances)
  - Fixrate
  - Contract Notes

#### Export of:

- Cash Flows
  - OpusCapita, Trezone, IFS
- Portfolio data (cost, currency, volume)
  - > Infront terminal, Bloomberg terminal
- Transactions / Ledger transactions
  - Datawarehouse / BI solutions / Visma eAccounting / Visma.net / Visma Business / IFS / Agresso
- Payments
  - IFS
- FX rates
  - > CoreView, Visma Global, Visma.net, Visma Business
- IBOR and swap rates
  - CoreView
- Other data (sector codes, market data, industry codes, balances, transactions, master data / reference data) to:
  - Datawarehouse / BI systems

#### <u>Automated processes</u>

- Save and lock performance/result for a period
- Automatic interest fixing

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<sup>\*</sup>Requires "Bloomberg Data Licence", «Infront Data Licence EOD» or "Refinitiv Datascope Select".

# 



#### Import of:

- Bank Balances (transactions)
  - ERP systems
- Rates / Quotes
  - Morningstar, Factset
- Interest and yield curve data
  - Factset
- Rating
  - Nordic Trustee (premium)
- Transactions
  - > Infront, Bloomberg, eMarkets, FX All, FX360, OneTrader
- Accounts receivables / Accounts payables
  - > ERP systems

#### Export of:

- FX rates to new ERP systems
- Ledger transactions to new ERP systems

#### <u>Automated processes in Escali Financials:</u>

Auto-generate transactions



## Why Escali Data Manager? (1)



- Automates imports, exports and processes.
  - Saves time and resources as all processes take place automatically at given times
  - Does not depend on individuals' skills to enter data
  - Runs regardless of whether you are on vacation, leave, holidays etc.
  - Do not need to "Save result" which is necessary to run Escali Reports
  - Import of Ibor-rates makes it possible to automate interest changes
- Better data
  - Provides better decisions
  - Avoid entry errors
  - Continuous data provides a better basis for calculating risk figures (standard deviation, beta etc.)



## Why Escali Data Manager? (2)



- Flexible system
  - Can add new import and export on request
  - Can run multiple import / export / other processes in parallel in the background
  - Modular
- Possible to import historical data from for example Bloomberg and Infront.
- Possible to make ad-hoc imports and exports on the fly
- Well tested amongst our most professional customers
- Will automate far more processes in future releases
- A requirement to use Escali Reports and Electronical documents / vouchers in Escali Financials

