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The Derivatives Library, DLIB <GO>, is a comprehensive platform to structure, price and risk manage derivatives, structured products and dynamic strategies. It has unlimited coverage from the vanilla to the most complex structures. It is not only aimed at the sellers and buyers of structured notes, but also risk managers, valuation and treasury groups who need to have an independent sophisticated tool capable of structuring, pricing and risk management of all deals.

Part of our Bloomberg Anywhere, the Derivatives Pricing Library offers cross-asset coverage using both pricing screens (Templates) and a simple yet powerful scripting language (BLAN). DLIB deals can be shared and sent to any of the Bloomberg Professional® service users.

It offers term sheet generation from templates, dual curve and OIS discounting for pricing. Life cycle management with audit trail is also available along with calibration and risk analytics. Users can perform cash flow analysis, scenario analysis and stress testing.

Market standard quant models have been integrated into its Monte Carlo engine. DLIB offers transparency from market data to calibration as well as flexibility in overriding model parameters.

DLIB is seamlessly integrated with BPS Data and solutions such as Desktop and Server API, Excel, our Multi Asset Risk System MARS <GO> and BVPM <GO> our portfolio functions that is part of our independent valuation services.

**FEATURES & BENEFITS**

**Cutting-edge Technology**
- Technology to build pricing templates fast
- Flexibility in contract creation using our simplified scripting language, BLAN
- Customized Trade sheet generation from templates
- Pricing outputs such as implied probabilities and projected cash flows

**Efficient & Transparent Work Flow**
- Transparency with regards to market data, calibration and pricing
- Minimal operational risk, leveraging life-cycle automatic generation
- Two-way integration with client data and pricing models

**Integration with Bloomberg Platforms**
- Seamless integration with BPS market Data and market conventions
- Integration with Desktop and Server API, Excel, Multi Asset Risk System MARS <GO> and Independent Valuation services for portfolio management BVPM <GO>
- Distribution of Trades and ideas on Bloomberg platform
We build a range of templates for our customers that offer maximum coverage thanks to our easy to use generic payoff component. Easy to use templates can be delivered to our customers fast to accompany the growth of their business.

Example of a Capital Protected Template

Thanks to our easy to use simplified scripting language (BLAN), our customers can have the full flexibility for idea generation and structuring.

Example of BLAN (Bloomberg Language) scripting
## 3. Contract parameters

### Deal Parameters

<table>
<thead>
<tr>
<th>Mode</th>
<th>Note</th>
<th>Direction</th>
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<th>Note</th>
<th>Maturity Date</th>
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<td></td>
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<td>Fixed</td>
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<table>
<thead>
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<th>Note</th>
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<table>
<thead>
<tr>
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<th>Note</th>
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<table>
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<th>Coupon Parameters</th>
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<td>Participation</td>
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<td>Performance Type</td>
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<td>Equal Weight</td>
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<thead>
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<th>Fixed Coupon Stream</th>
<th>Note</th>
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</thead>
<tbody>
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<td>Coupon Rate</td>
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<td>Frequency</td>
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<td>Request</td>
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### Generic Payoff

<table>
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<tr>
<th>Weight</th>
<th>Position</th>
<th>Option Type</th>
<th>Note</th>
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</thead>
<tbody>
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<td>Cash</td>
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<tr>
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### Basket

<table>
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</tr>
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<td>ATB</td>
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</table>

### Fixed Coupon Schedule

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<th>Payment Date</th>
<th>Notional</th>
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<td>5.00%</td>
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<tr>
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<tr>
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<td>5.00%</td>
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<tr>
<td>2015-05-11</td>
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<td>2015-05-11</td>
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<td>2016-07-11</td>
<td>100.00</td>
<td>5.00%</td>
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</tbody>
</table>

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DLIB platform can also be used for two-way customisation of deal as part of the trading process. Clients can incorporate their own market data, as well as underlying models, and use DLIB platform as a trade distribution, sharing mechanism incorporated in the workflow.

Trade sheets can be generated for idea generation and further communication with clients.
Bloomberg L.P. generates life cycle events from trade descriptions (Templates and BLAN scripts). Life cycle information that is generated on the fly is extremely useful to minimise operational risk and time to model trades in DLIB since it helps checking some details related to the economics of the trade.

We display payment dates, currency, and amount when known or formula where unknown. Finally, we confirm whether the payment is certain or not, as well as probabilities of event. A payment for instance that is conditional on a user exercising a Bermudan option is uncertain.

When appropriate, payoff formula can be generated for more transparency and quality assurance in relation to trade economics.
Past fixings are displayed and can be further customized. Audit trail for life cycle events at trade is also provided.

Corporate actions are handled automatically.
DLIB provide its users with many quantitative models used by the industry such as Black & Scholes, Local volatility, Heston, Hull & White 1&2 Factors and LMM with displaced diffusion. Over time, DLIB team will continue to add more models and asset classes.

DLIB is fully integrated with market data. Firms can upload and distribute their own market data on BPS to their privileged clients as well as their staff. This data flow through the DLIB platform seamlessly. Users can price intra-day or using custom data or snapshots.

DLIB provides also various methods to compute correlation used in its models.

In addition to prices and past realised cash flows, DLIB provide additional outputs and projected cash flows to help users understand and analyse the prices of their deals. BLAN offer very simple way to customise these projections. For instance, one could have access to the implied probabilities of early redemption, spot above barriers etc.
DLIB provides transparency around calibration errors in relation to input data and to the market quotes. Model parameters are displayed and can be overridden.

Users can customise the list of market instruments to which the model is calibrated.
Finally, users can override model parameters.

As an idea generation tool, DLIB can solve for specific trade parameters, such as strike, or funding level.
In addition to the Greeks provided by DLIB, users can shift market data such as spot and vols for equity and FX as well as rate curves and analyse the impact on price and Greeks.

Users can build custom Stress Scenario using SHOC <GO> and then apply them seamlessly on any deal. Bloomberg Stress testing Scenarios are also available. Firms can make their own regulatory Stress Scenarios available to be applied with a click on any deal.
DLIB is integrated with our independent valuation service, BVAL Derivatives and users can send deals to our financial engineers.

Whether deals are templates or scripted BLAN deals, users can add them into our Multi Asset Risk System.
DLIB is integrated with the Bloomberg Desktop and Server API supported on main platforms and programming Languages as shown on WAPI <GO>. A suite of simple functions is provided via the Bloomberg Excel Add-In is provided consistently with the API and the terminal.

User can integrate DLIB within their work flow and systems both from a desktop and enterprise perspective. Users can leverage DLIB to integrate various components such as trade details, life cycle information, pricing and risk numbers including projected cash flows etc.

Additionally, we offer to the sell side third party quant libraries to integrate into DLIB platform allowing for instance the buy side clients to access the sell side proprietary quant models to get indicative and firm trading prices.
ABOUT THE BLOOMBERG PROFESSIONAL SERVICE

The founding vision in 1982 was to create an information services, news and media company that provides business and financial professionals with the tools and data they need on a single, all-inclusive platform. The success of Bloomberg is due to the constant innovation of our products, unrivalled dedication to customer service and the unique way in which we constantly adapt to an ever-changing marketplace. The Bloomberg Professional service is a powerful and flexible tool for financial professionals—whatever their needs—in cash and derivatives markets as diverse as equities, currencies, commodities, money markets, government and municipal securities, mortgages, indices, insurance and legal information. The Bloomberg Professional service seamlessly integrates the very best in real-time data, news and analytics.

In addition, Bloomberg users benefit from on-demand multimedia content, extensive electronic trading capabilities and a superior communications platform. Bloomberg customers include influential decision makers in finance, business and government. Business and financial professionals recognize the Bloomberg Professional service as the definitive tool for achieving their goals because it offers unparalleled assistance and functionality on a single platform for a single price.